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Leading correctional experts are calling for a halt in jail and prison construction and as the clamors get louder, design professionals are beginning to realize the implications.

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Wisconsin Correctional Institution For Youthful Offenders

Shoshone County Public Safety Facility, Idaho

Manitoba Youth Center, Canada

New York City Metropolitan Correctional Center

North Carolina Federal Center For Correctional Research

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By Michale D. Sullivan, from Black Star.

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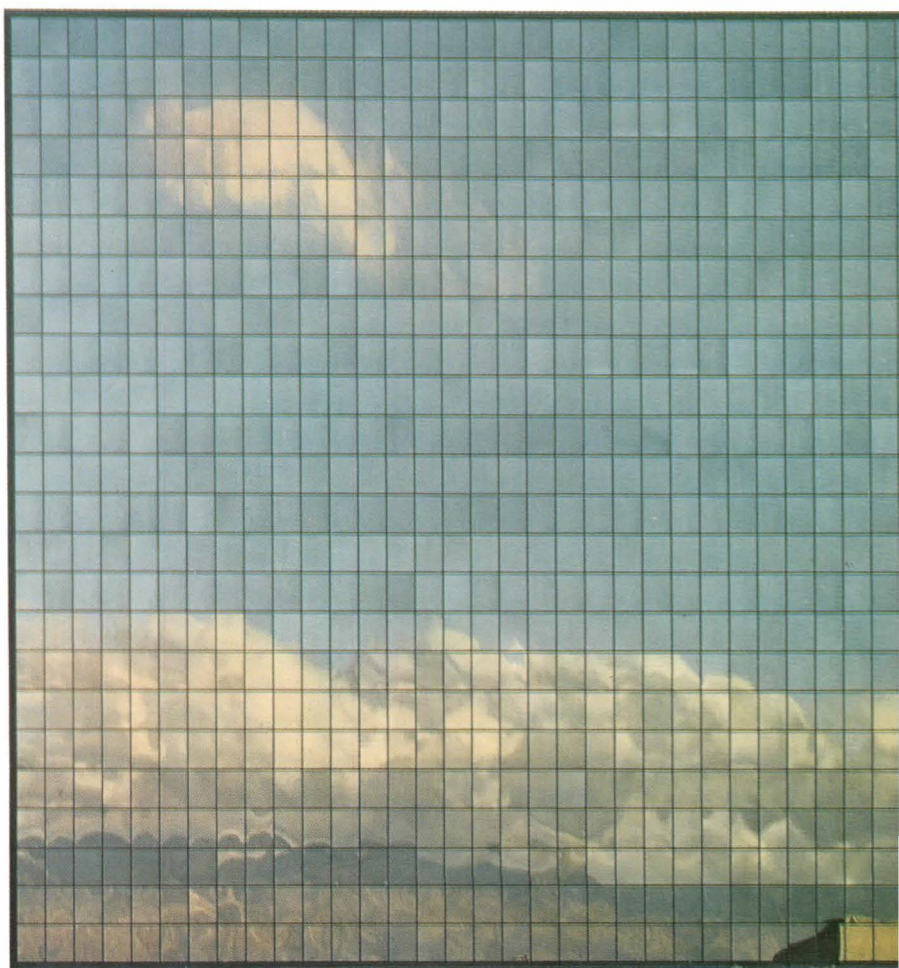
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LETTERS

CHICAGO LANDMARKS

FORUM: M. W. Newman's article on one of Chicago's finest preservation "victories" (November '72) clearly documents how a landmark may be retained as a viable, functioning structure. Indeed such "living" landmarks give vitality to the neighborhoods and cities they occupy.

The struggle for the survival of landmarks is inseparable from the struggle for the survival of center city. Careless destruction of important buildings, whole neighborhoods, and public open space (in the name of urban renewal or other forms of "progress") has ejected countless people from the city. Without people the city has no rejuvenating spirit—no concern for its tradition of creativity.

To arrest and reverse this trend, what is required is a method of reducing the real estate pressures that threaten landmark buildings and their urban environs, perhaps through a transferring of "zoning premiums." Architects and educators must join with lawyers and legislators to develop an enduring, comprehensive implement for preservation which speaks the language of city hall and the bank. We have just begun this process in Chicago. Preservation must become economically attractive or it will forever remain the elusive goal of a small body of urban patrons.

ROBERT I. SELBY, AIA
Chairman, Committee on Preservation
Chicago, Illinois Chicago Chapter AIA

SHARDS

FORUM: What bittersweet pleasure to see the fine Glessner article cheek by jowl with the Old Stock Exchange mementoes.

Somehow our major material donor, Cold Springs Granite who furnished all the stone for the court, failed to get mentioned.

Chicago, Ill. DANIEL BRENNER

FORUM: On page 29 of your November issue, you are too kind to the slavering jackals who tore down the Chicago Stock Exchange. They bought the building with the sole intent of

tearing it down, and then had the crust to complain about their rights. Perpetual burning would be too good for them.

EDWARD H. BENNETT, JR., AIA
Chicago, Illinois

22K0RT2 TNERREFFID

FORUM: It seems that page 63 of the Leonardo Da Vinci article (November '72) was printed in reverse.

I write you reluctantly of this error, but it was a good reason also to let you know I sincerely enjoy your magazine.

DOHN ARMON
Ojai, California Architect

The page is printed correctly. Leonardo practised mirror-writing.

A TREE GROWS IN CHASE PLAZA

FORUM: I have read the Dubuffet quotation about his trees (November '72), but his word doesn't help a little bit. Thank you, though, for printing them.

I am a New York born architect who lives in Virginia where trees mean a great deal to me. I would have been so much happier if Mr. Rockefeller had planted almost any suitable living trees than to have given into such "febrility".

J. RUSSELL BAILEY, AIA
Orange, Va.

CENTRAL PARK MALL

FORUM: A report in your November issue under FORUM states that at the Olmsted Exhibition in New York pickets gathered to protest a "proposed sunken theater" in plans for rehabilitation of the Central Park Mall. It refers again to a "circular theater" as part of the project. May I set the record straight? There is not and never was any proposal for a theater of any kind.

The restoration scheme included a ten inch change in pavement level to limit and accommodate the movable benches in front of the existing bandstand. (In the revised plan, approved by the New York City Art Commission, the same change in level is accomplished by a 3 per cent grade rather than a single step.)

The charges of constructing a "theatre" were maliciously promoted by a small group. Whatever excuse for ignorance they might have had was removed by a clear statement of fact published in the New York Times before the opening of the Olm-

sted Exhibition.

It is regrettable to see FORUM repeating the error. The project was conceived from the beginning as a restoration of the Mall to something like its former elegance, as closely as possible according to original Olmsted plans.

AUGUST HECKSCHER
New York, N.Y.

At the news conference held to announce the project, Mr. Heckscher, as reported by The New York Times, "foresaw use of the sunken arena for dance recitals, chamber music, solo recitals, story-telling for children and other 'intimate entertainments' or 'just a big conversation pit.'" Mrs. Phyllis Robinson, Deputy Commissioner of Cultural Affairs, was quoted in the same article as saying: "The programming possibilities are delightful—I'm very much excited." Contacted by telephone, Mrs. Robinson further stated the project was best described as a "program area." With all these descriptions and activities in mind, it is difficult not to describe the "program area" as a theatre. It is certainly not a "restoration" for it is impossible to restore something that never existed. But the point remains, there is more at (the surveyors') stake than semantics. Obviously, the project is another encroachment, or modification, if you will, on Frederick Law Olmsted's original design and the money generously donated for this project can best be used to preserve Central Park from further deterioration.—Ed.

PUBLIC HOUSING

FORUM: A Rebuttal of your editorial re: High-Rise Public Housing a la St. Louis' Pruitt-Igoe Project, November 1972 issue.

It is high time that those who do know the subject come out of their corners and help set the records straight, now that it has become fashionable by one and all (especially and mostly without exception by those critics who are without basic background for the subject) to pontificate.

It is much like current concept-attitudes of The Missile Program and the 8 year effort on Vietnam basic principles and concepts have not just been lost sight of, they have been brain-washed out of the minds of too many people to a degree that the future of the USA is at issue. And, housing is one of the future props for any country.

As to St. Louis' Pruitt-Igoe, there is no question that high-rise housing, for any stratum of society, is not the best solution. High income people who can afford the amenities and security

that high-rise living requires, can be said to be the only ones who should try to live thusly, inasmuch as the main attraction is the pseudoism of fashionable-ness.

But, even granting that the Housing Planners of the Pruitt-Igoe era tried to reduce development costs by herding a maximum of substandard families on a minimum of land, they reckoned without knowing that their anticipations of certain supplementary provisions would not be met by the local Housing Authority and the Congress in Washington, D. C. By that I mean that Public Housing has always been based on a basic premise that just to house the substandard families properly is only part of the solution.

The other part of the problem of housing low-income families has always been, and still is, the social management endeavor to help educate the families to their project and neighbor and community responsibilities, which was and is to compensate for the virtual gift of being allowed to enjoy the advantages of stimulating environment and community life at minimum rents.

This social management was completely successful at the start of the American Housing (Public) Program in 1935, and for a considerable time afterward, until the New Deal opposition started rolling enough strength in Congress to start biting into the financial details of the Program, reducing here and there moneys available for proper personnel, maintenance and the referred-to social management of the projects, coast to coast.

This Congressional and local Housing Authority "penny saved is a dollar of successful project-result loss" gradually and doggedly started not only the decline of the physical projects, but also developed a negative public image that soon resulted in Public Housing being regarded as a complete failure.

Then, the local Public Housing Authorities themselves, both big city and small town, which supposedly consisted of the leading local citizen guardians of their townsmen, started to backtrack under the opposition to the concept of Public Housing.

If the local Housing Authorities had continued the under-

(continued on page 8)

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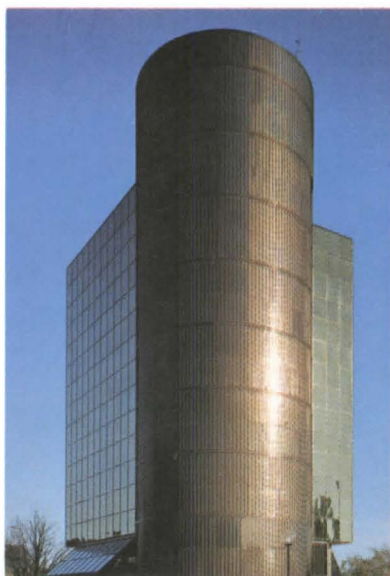
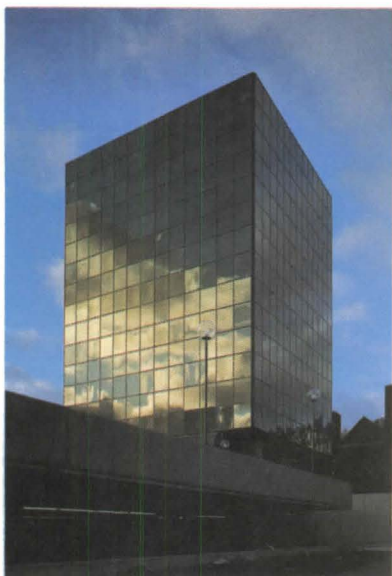
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LOF

LETTERS

(continued from page 4)

standing and co-operation and enthusiasm and strength they had evinced at the start of the Program, when they were begging for that mighty psychological and economic shot in the arm their communities needed and received so quickly and completely, if they had, the downgrade of Public Housing would not have occurred.

This local Housing Authority "caving in" to local anti-Public Housing pressure groups from coast to coast (not a local majority action but, as usual, the action of the potent economic group of each locality), snowballed and "house-dominoed" to the point where it took on other sharpshooting tactics to destroy the Program, i.e., allowing local public employees of ample and steady income such as policemen, firemen, and families to start filtering into the projects and thereby preventing a maximum of the real needy from receiving the originally planned benefits.

Further, the original Public Slum Clearance Program of 1935 was restricted to the humane planning concept of non-elevator apartments, and patterned its management accordingly. When the later Program planners turned to high-rise elevator type methodology, spurred and encouraged by the ill-fated Chicago Land Clearance (Urban Renewal) and other major city counterparts towers operated by certain leading insurance companies, the trouble started.

If, if, if the local Housing Authorities had left well enough alone and continued their projects on a non-elevator type basis with the originally conceived and successful social management operation, the past and present era of Public Housing violence-chaos would never have occurred.

So, hew to the line and let the chips fall where they may—a lot of people are entering the act of being Ruskins and/or Mumfords and causing a lot of particular misdirected hell and confusion in all directions, with John Doe becoming more and

more confused-misdirected.

If HUD would get rational and practical and unafraid, instead of letting Romney run around the country feeding his personal build-up thru the news-media by shouting that all public housing projects should be opened to the general public to achieve "better mix and stability as the British do . . .", instead of such—to have HUD re-assess the now known faults of the elevator-type apartments of public housing—and then apply the correct antidote of proper social management, public housing projects could be salvaged not only in terms of money, but more importantly in terms of the human tenants involved.

But, unfortunately, fellow-man has already proven traitor to his own people. The local Housing Authorities of today are steered by so-called leading citizens who are mostly not only ill-qualified, but are of the ilk identified by the word AFRAID.

CARL JOHN STERNER
Los Angeles Architect

PLAYGROUNDS AND PARKS

FORUM: The article by Nanine Clay, "Landscapes for Urban Play" (October '72), left me with a number of conflicting thoughts. As a designer of a number of the type of playground referred to in her article as "showcase playgrounds . . . built of concrete, stone, brick and steel" (left out of her description were the sand, water, wood, grass, trees and shrubs also present in these playgrounds), I felt her article created a rather biased comparison which only creates a credibility gap regarding the rest of the article—most of which is well intentioned and valuable.

My most severe gripe is her tendency to simplify a rather complex problem by creating a false polarity between "showcase" playgrounds which she labels "bad", and pictures of persons making things, having fantasies, and playing in the mud, which is, obviously, "good". This is another way of saying that process is good, product is bad—a distortion of reality that has produced its share of unfulfilled promises for child development.

No sane person could disagree that the "playing" (process) is more important than the "playground" (product). A child

plays all the time, and playgrounds are only one of many places where this process occurs. The main value of a playground is its ability to provide the kinds of play experiences not available, *safely*, anywhere else. City kids do swing from fire escapes, play in the street, turn on fire hydrants, etc.—many of them also hurt themselves in the process. I've yet to meet a parent—low or high income—who preferred that their kids play in the street.

I admire the European Adventure Playgrounds and hope that more can be implemented here, but most communities seem to feel that their kids have had sufficient play experiences with the junk around them, and they request more structured environments. Ironically, the poorer the area, the less chance for a "junk" playground—since the junk quota of the residents has long since been oversubscribed.

A good playground can combine the "generalized simple forms and spaces" mentioned in the article, with the opportunities of building with available materials, mixing sand and water, etc. The Adventure Playground in Central Park is an example of such a facility, designed with the community, and staffed by trained supervisors, paid by funds raised annually by the community. The reason that few similar examples exist, as Ms. Clay points out, is that construction funds are more readily available than funds for maintenance or staffing.

As a country we tend to believe that things—products—will solve our problems. Ms. Clay is right to criticize the vast expenditures for equipment which serve mainly the fantasies of the adults who buy them, and not the children who will use them. But there has recently been a trend to eulogize "process" to the point where process has become the new product—with the same unrealistic hopes and superficial analysis formerly expended on things.

The problem is that there are not enough Karl Linns, and they don't hang around for long enough. I've observed and participated in a number of events such as the ones described in the article. They are great as long as they last—the community gets involved, people meet each other, everyone takes

everyone else's picture, a neighborhood is truly created, temporarily. But then the professionals leave to publish their experiences or to initiate similar events elsewhere, the materials and tools get used up, the kids go back to the street, everything is back as it was. Except maybe for the disappointment and bitterness of a community which has been used and abandoned, again. The empty playgrounds shown in the article are no worse than the empty promises that the "process" would make everything good.

Sure, piles of concrete are not enough. But what, exactly, are "networks of deliberately under-designed, loosened up areas?" That is a description so vague that the playground equipment salesmen could use it to make a sale. Who will build, pay for, staff and maintain them? What will happen there?

In this messy world, product and process are interrelated. Just as a product imposed from afar by an insensitive bureaucracy can be harmful, so can a superficial and temporary process which does not involve some lasting product. Playgrounds can fill a spectrum of needs and take a variety of forms, none of them a final or perfect solution. (A well-off neighborhood is a good place for a junk playground where the kids can get dirty and create their own world out of reach of overprotective and overproductive parents. A slum neighborhood with a fragmented population and an environment of little more than junk would probably profit from a highly structured, challenging facility with large numbers of trained staff who could furnish role models for kids raised largely in the street.)

For all our talk about how well we treat kids in this country, we do a pretty rotten job of providing for their healthy growth and development. Between the millions of hungry kids who lack the basic necessities, and their opposite numbers who are overfed on a diet of television violence and sterile affluence, we're doing some job on our "most precious possessions."

One small step in ameliorating the situation would be for professionals to avoid oversimplifying it.

RICHARD DATTNER
New York, N.Y. Architect

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FOCUS



HIGH ON SKY

Bryant College, which occupied several buildings in downtown Providence for over one hundred years, has moved to its new 220 acre farmland campus nearby. The \$17 million complex (\$1 million under the first budget) by J. Robert Hillier Architects/Planners accommodates 1200 residents and 1000 commuters.

After the program and master plan were established each section of the project was put to bid as soon as it was designed so completion took only 26 months. One time saver was the realization that the dormitories would need so many of the available masons that the central structure would have to be of steel with curtain walls.

The main building (above), at

the crest of the hill, is composed of two squares joined at two corners by a large domed area (below right) which is the center of the school where people mill around, demonstrate, have concerts and theater in the round, and, eventually, graduate. It has been called "a college square under glass."

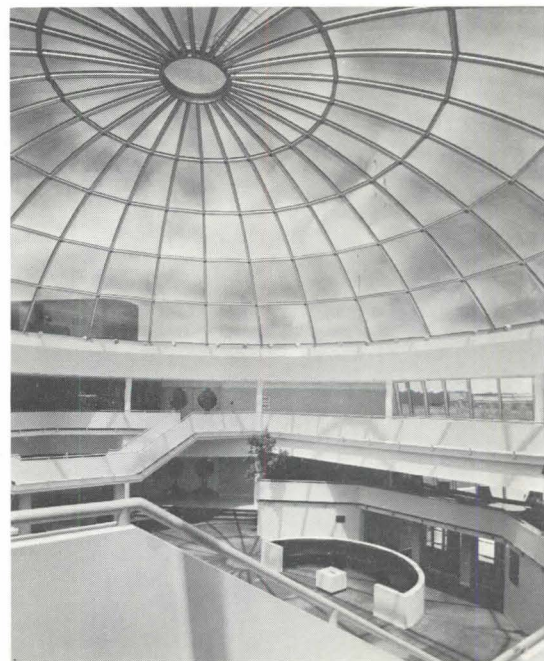
The eastern square houses all student center activities and administrative offices. The dining room, on the southern corner, is three stories high, flanked by balconies of game rooms, snack bar and the faculty dining room. All of these areas share in the 20-mile view down the valley. The swimming pool was put in this square, rather than in the gymnasium, as it was felt that

swimming was more a social than an athletic activity. Along with a bank and post office there is a beauty parlor and barber shop.

The western square houses all academic activities with classrooms and faculty offices surrounding the central auditorium and library (below left).

The bronze tinted mirror glass walls are tilted so that they reflect only the sky which makes the building more of than on the landscape. The tilt is also supposed to make the windows self-washing.

The parking lots are screened from the buildings by earth berms and located to assure a pedestrian ambience throughout the campus.



(continued on page 16)



ENERGY

"Architecture creates its own world—literally. A building is more than a space enclosure; it is a sealed life support system. A high rise building is artificially lighted, heated, ventilated and cooled. Think about that. Think about it in terms of Playing with the environment. Think of it in terms of the *energy crisis*. And polluting side effects. And the multiplication of power needed for every commercial or institutional building in a city."

Ada Louise Huxtable
The New York Times
July 16, 1972

**The FORUM'S editors have thought
about that...AND TAKEN ACTION...**

The Architectural Forum

announces a special July-August issue
devoted to the coming crisis in

ENERGY

This publishing event will itself be
a source of energy—*creative* energy for
the architectural profession at a time
when energy was never needed more.

The bad news...and the good news...

Something new in architecture must happen—and soon. Only recently have architects begun to think about design in terms of the ominous news that between now and the year 2,000, the USA will consume more energy than it has in its entire history . . . that our demands for energy by then will have doubled . . . that in the perspective of history the era of fossil fuels (coal, oil, gas) will be a short-lived interlude . . . that within a generation, the depletion of our fuel reserves may be in sight . . .

. . . and that in terms of this energy crisis, that glistening achievement of twentieth century design, the glass box, has been, as Ada Louise Huxtable called it, "an invitation to disaster."

Both industry and the design professions have recognized the problem. And industry—either out of enlightened self-interest, social conscience or both—has taken the initiative in developing materials, especially glass products, with superior screening and insulation properties. For it is now understood that even the finest new buildings in our cities are squandering energy. Their sealed glass walls have invited floods of solar heat to invade their interiors—as their air conditioning systems devour huge supplies of energy to do battle with the sun. Their structural engineering may be designed to save *human* energy in minimized construction labor, but the office building grid is eminently wasteful of steel, and the energy needed to produce it. Their efficiencies in heating and lighting could be vastly improved—as they must and will be as the fuel shortage nears the point of crisis expected near 1985.

Architects must now think of energy consumption as a design standard and search for a new esthetic. Looking three decades ahead, they can entertain happier visions of the coming nuclear age and the promise of energy that is almost limitless.

By the turn of the century, breeder reactors will be producing vast supplies of low-cost energy. The controlled fusion process has a similar potential and is, beyond that, pollutionless. Fusion scientists may have a controlled reaction running in their laboratories by the end of this decade, an operating power plant late in the

1980's and plans that are economically attractive by the end of the century. When this reality arrives, our unsightly networks of electrical wiring may be torn down, and, conceivably, large office buildings may gain all their power from a self-generating plant in the basement that is hardly larger than a suitcase.

Impact of Energy on Tomorrow's Design

How will the energy crisis change the face of architecture? The FORUM's editors are gathering some fascinating answers. They will offer readers an absorbing insight into new energy economies for the building industry which influences our energy use more than any other industry except transportation and the military. The FORUM will draw on the insights of professional activists like Richard G. Stein who has lately become an architect-of-the hour for his research into the energy problem and its influence on design.

Stein has pointed out that in office buildings, heating and air conditioning needs can be cut 19% by eliminating sealed windows, and using untreated outdoor air during temperate seasons. He claims that energy used for lighting could be cut 50%—and still satisfy the occupants' visual and psychological needs. He has shown how redesign of steel beams could save a tremendous outlay of energy in steel production. In the July-August issue, the findings of Stein and other thinkers will bridge the practical and the poetic, the scientific and the esthetic, showing how the energy crisis will influence architecture and environmental design.

New Directions in Research

The FORUM will also cover the full spectrum of expertise in energy research. The editors will report on what's being done to develop synthetic fuels from coal and shale oil . . . to reduce pollutants in petroleum fuels . . . to tap the earth for developing geo-thermal energy . . . to

return (at least in theory) to the windmill and harness the air currents, also the tides, also the ocean temperature gradients to develop the strange new science called magnetohydrodynamics.

The FORUM will also appraise the design of the latest nuclear plants, including their tourist and educational facilities. Reports will also appear on progress toward workable breeder reactors and controlled fusion—a possibility so potent that fusion energy from a cubic kilometer of seawater corresponds to the energy equivalent of 2,000 billion barrels of oil—or roughly the world's oil reserves!

Publishing Events in 1973-4

The July-August ENERGY issue will be a major landmark in a series of important publications, including most recently the January-February 1973 issue about Philip Johnson. Future issues this year will take readers to Boston for an assessment of I. M. Pei's new Hancock Tower and his Christian Science Center . . . to Manhattan for a fresh look at that controversial landmark, Grand Central Station . . . to Chicago for the story behind the story of that city's stunning architectural progress . . . around the Pacific perimeter to view the new architecture of Australia, Singapore and Japan . . . to China (in a special January-February 1974 issue) for a first look at the architectural and planning scene in that vigorous society . . . to sites all over the USA and abroad for a hard look at the situation in housing, labor, building codes, zoning practices and the tax structure.

Throughout this handsome editorial series, the better instincts of both architects and the industries which serve them will be brought to light, as will the momentous social and technological trends which influence us all.

The attention of everyone concerned with architecture's evaluation will focus on the FORUM as the ENERGY issue appears next summer. As Richard G. Stein has said, "We architects can either reinforce the rapid acceleration of energy use or dramatically reduce its rate of consumption, and, in fact, can help reclaim a significant part of our present capacity."

THE ARCHITECTURAL FORUM agrees and has laid its editorial policy on the line.



A lot has been happening on the way to the FORUM

William Marlin, Editor of THE ARCHITECTURAL FORUM, has received the 19th Annual Jesse H. Neal Editorial Achievement Award, given by The American Business Press for the Best Special Issue of 1972.

Eighteen months ago, William Marlin joined the FORUM as the Guest Editor of its 80th Anniversary Issue, "The World of Buckminster Fuller," focusing on the scientist-philosopher whose architectural projects and other appointments propel him around the earth at a rate of 100,000 miles a year.

To keep pace with Fuller might seem to be a race with the impossible. But Marlin has followed the globe-trotting genius for years and he assembled a report for the January-February issue of the FORUM that was so incisive and informative that The American Business Press has given Marlin an award which is virtually the "Pulitzer Prize" of its field.

Today, William Marlin is no longer Guest Editor, but Editor of the FORUM, a magazine for which he has ambitious plans. Starting in 1973 is a special January-February issue about Architect Philip Johnson. This will be followed by another special event, a July-August issue on ENERGY and its impact on architecture. Powerful plans are already underway for a January-February 1974 issue which will assess the architectural and planning programs in China.

A lot has been happening on the way to the FORUM where a new Editor is enhancing the magazine's reputation, eight decades old, as architecture's most articulate spokesman.

Charles E. Whitney
Publisher

THE ARCHITECTURAL FORUM

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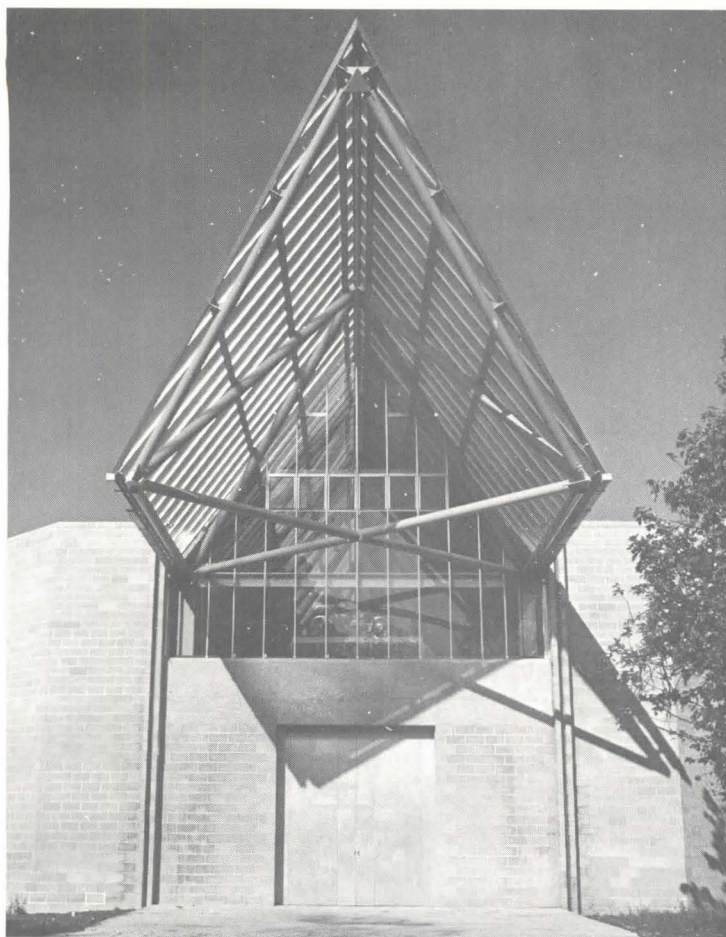
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URBAN FIELD

Boston College has a new and shapely fieldhouse which was underwritten by the students to the tune of a \$25 annual recreation fee. The \$1.5 million building, which consists of three main sections covered by a hyperbolic paraboloid wood roof system, was designed by engineer-architect Daniel Tully. It is as big as a football field and required a clear span of 42,240 sq. ft., making the roof one of the largest clear span wood shells in existence. Each roof section rises to a peak of 45 ft. and is fastened together by a tensile connection method patented by Tully. Stresses are transferred to the long glulam edge members of each square section and are ultimately absorbed by concrete abutments around the perimeter of the building. The roof shells are made of three layers of $\frac{1}{2}$ inch structural plywood and glue-nailed together over a specially constructed form. Pine boards glue-nailed to the underside form the finished ceiling. Finished roof members were trucked to the site, erected

by crane and fastened to the glulam beams. The roof deck carries a heavy timber fire rating. It is covered with asphalt shingles over one inch polystyrene insulation. The non-load bearing walls are prefabricated panels with an aggregate surface on the exterior.

The 325 x 130 ft. fieldhouse contains basketball, tennis, badminton and volleyball courts, a batting and golfing cage, a 220 yard oval track with long jump, pole vault and high jump aprons, and areas for weightlifting, judo, karate, pool and ping-pong. Lacrosse, rugby and soccer can also be played in the center. One wall of the olympic sized pool is portable and opens in the summer onto a patio and food concession area.

Ceiling to floor nets can be lowered and raised to divide the fieldhouse into four sections so various sports can be played simultaneously without interruption or confusion. Other projected uses are dances, graduations, exhibitions and fairs.

The building cost less than \$20 a finished sq. ft.

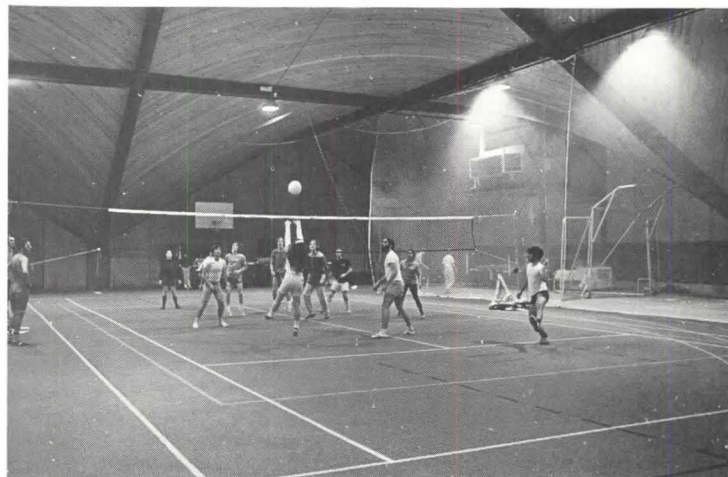
SOME GARAGE

Britain's National Motor Museum in Beaulieu, Hampshire, is part of a complex built on a 7500 acre estate which includes farms, vineyards, woods, a river, a pair of villages, a ruined Cistercian abbey and a "none too stately" home. A visit to Beaulieu used to be an orgy of queuing. You queued to get into the car park; queued to enter the museum; queued to go round the house; queued for fish and chips; queued to go home. It got to be too much even for the British, who, according to a countryman, expect their "pleasures to be spiced with hardship."

Leonard Manasseh and Partners worked with Elizabeth Chesterton on the master plan and designed all the new buildings. Now the traffic is out of the village which couldn't handle it and the new museum building disperses the crowd so there is no queuing for the up to 8000 visitors per day. The building is a 70,000 sq. ft. square, steel framed structure, lit on its diagonals by pitched skylights of solar resistant glass. These skylights project at the corners

as shown in the photo above. An elevated monorail passes through the central aisle of the museum.

The centerpiece of the museum is its collection of land speed record cars which occupy a trough beneath the glazed crossing. There are also models, mascots and a collection of mementos of Lord Montagu's father who was booked for exceeding the speed limit of 12 mph and later was instrumental in getting a bill through Parliament raising the speed limit to 35 mph. Along the central aisle are educational, commercial displays donated by manufacturers.



(continued on page 18)

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Pacific Design Center... the 725,000 square foot showroom and exhibit mart for the Contract, Interior Design, Decoration and Furnishings Trades in the Western Market. The theme of the new Pacific Design Center is excellence of design and attention to the special needs of quality showroom displays. Situated on nineteen acres of land at the intersection of Melrose Avenue and San Vicente Boulevard, it is in the heart of the well established trade center at Beverly-Robertson in Los Angeles, California.

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BANNER BROTHERS

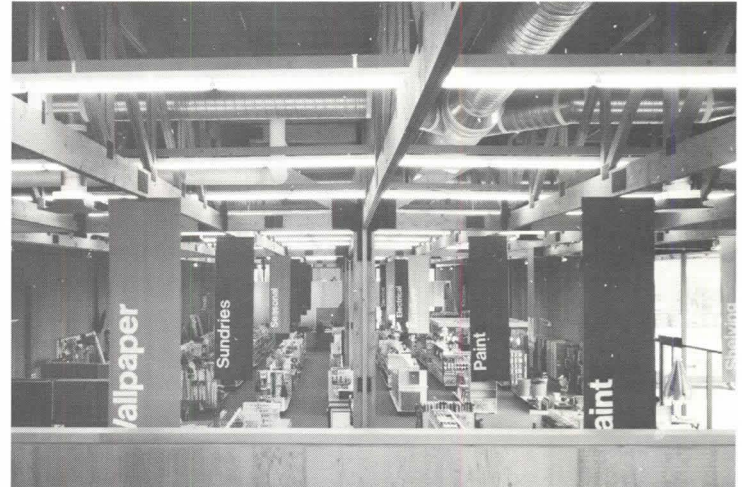
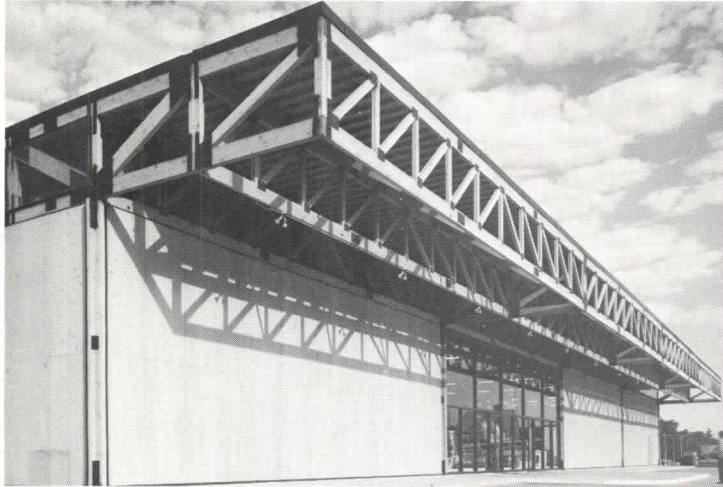
Nagle Lumber Company in Iowa City has a superb new warehouse and sales building designed by Booth & Nagle. (The client is the architect's brother.) The building is made completely from prefabricated lumber com-

ponents—trusses, wall panels and roof panels—designed by the architects and made by a component plant near the site.

All the wood has a natural finish. The framing members are Douglas fir and the panels are cedar plywood. The metal

connectors are painted black. The store front is black anodized aluminum and clear plate glass. There is clerestory glass at the truss level around the entire structure and the warehouse area is skylit. All mechanical equipment — ducts, lighting,

etcetera—is exposed. The resulting height is 17 ft. to the underside of the 6 ft. deep open trusses. Colored banners by John Greiner Designs, designate the sales areas. The sales floor has a bright green carpet. Fixtures are white with metal trim.



NEIGHBORLY MENTAL HEALTH CENTER

The Marathon County Health Care Center in Wausau, Wisconsin by Brust & Brust, Inc. has won a state AIA Honor Award. The project required replacement of an existing center without disturbing the housing, food service or therapy while the new facilities were under construction. Afterwards the old buildings were to be removed.

The 200 bed center operates with the intention of returning patients to the community. With this in mind, and the wish to help the community in understanding mental health problems, the design was closely related to its residential neighborhood. The main entrance and outpatient therapy areas were faced toward the community.

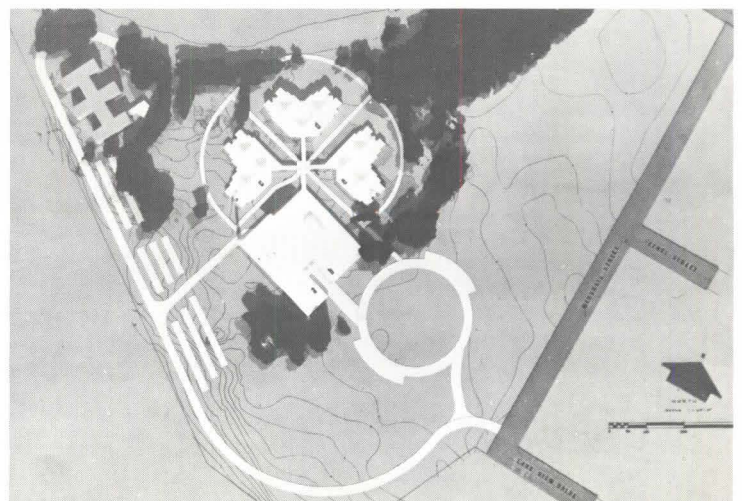
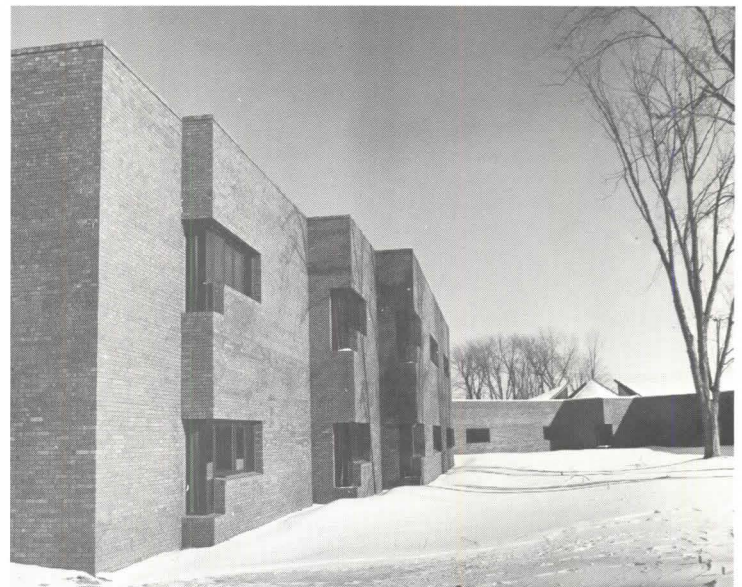
By virtue of careful site planning only five of 800 trees were removed. The living units are oriented towards a 40 ft. bluff overlooking a river whose shores will become rehabilitation

activity areas. A small airport on the south was buffered from the complex by earth berms, landscaping and parking. Connection to the existing hospital at the southwest corner was made underground to allow maximum utilization of the site for activities and visual therapy.

In the living units the sleeping modules are arranged around the dayroom areas. A variety of scale is achieved through changes in ceiling levels and wall heights. Openings are directed toward the major views.

The jury found this to be a fine non-institutional environment, with an outstanding exterior and expert use of materials, color and artwork. They were especially pleased with the way natural light reinforced the quality of the spaces, and the use of brick which gives an inviting and unified character.

PHOTOGRAPHS: Page 10, Otto Baitz. Page 16, (left, top and bottom) Sam Lambert; (right) Dan Natchek. Page 18, (top, left and right) Philip A. Turner; (bottom, left and right) Wollin Studios.



(continued on page 20)



Owner: Moore-Business Forms, Inc., Glenview, Ill., Architects/Engineers: A. M. Kinney Associates, Inc., Skokie, Ill., General Contractor: Chell & Anderson, Inc., Chicago, Ill., Steel Fabricator: Wendnagel & Co., Inc., Chicago, Ill.

Flame-shielding: a new way to fireprotect exposed steel.

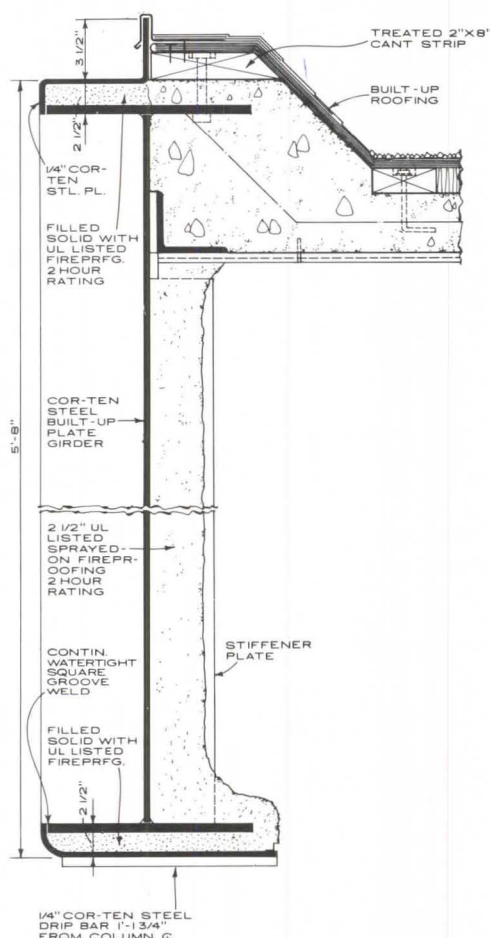
By any standards—esthetic or practical—the new headquarters building for Moore Business Forms, in Glenview, Illinois, is a success.

This deceptively simple structure of bare USS COR-TEN steel, bronze-colored glass and brick is a striking example of the honest, straightforward expression of structure.

It's also a showcase for a new concept in fire resistance—a concept, developed by U.S. Steel, which eliminates the need to cover exposed surfaces of load-carrying members with fireproofing materials.

We call it the "flame-shielding" system.

The exposed spandrels and roof fascia shown here—of unpainted USS COR-TEN steel—are protected by shields attached to the flanges of the perimeter girders. Should a fire



occur, the shields deflect the flames outward, moving the heat away from the exposed steel surfaces. The interior surfaces of the

steel girders are protected with spray-on fireproofing.

In tests conducted on a full-scale mock-up for another structure that employed this new technique, flames beneath the shielded girder reached temperatures over 1900° F. On the exposed web of the load-carrying spandrels, however, temperatures never exceeded 650° F.—well within limits normally permitted by building codes.

For more details on flame-shielding—and on applications of bare USS COR-TEN steel—contact a USS Construction Marketing Representative through your nearest USS Sales Office. Or write to United States Steel, Box 86, Pittsburgh, Pa. 15230.

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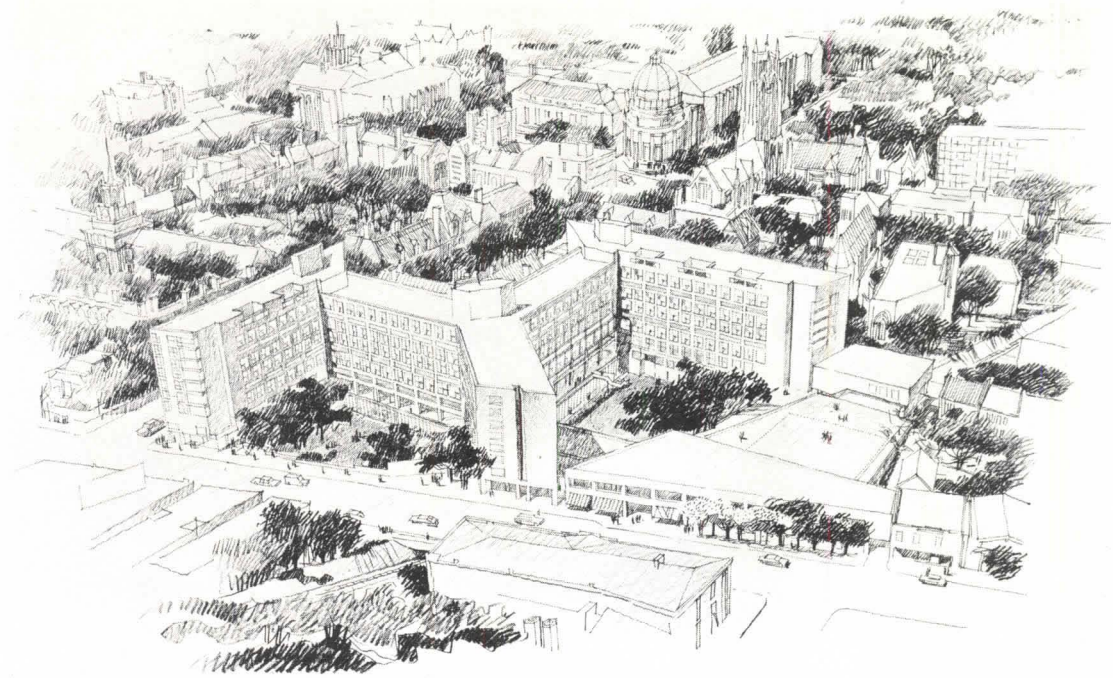
USS Cor-Ten Steel

NEW HAVENS AT YALE

Mitchell/Giurgola's colleges for Yale, to be completed in 1975, are at the midpoint of the eastern boundary between campus and community. The architects helped choose the site and have met the challenge they set themselves — creating a building which expresses Yale's current efforts to relate more openly and cooperatively with New Haven.

At pedestrian level the building is predominantly a modulated, open gateway instead of the usual Yale fortress, cloister or medieval village. Whether entering from the campus around St. Elmo's, or directly into the arcade from Whitney Avenue, it will be like slipping into an alley and discovering oneself in a forest with a clearing on either side. The central approach, which the architects describe as "filtering," will be gentle, gradual, exploratory, and then straight to the heart, as with a good friend. The psychology of this plan is exquisite both in terms of students never having to face big, empty "where-am-I?" lobbies, and townies never having to feel kept out by whiffs from whiffenpoof inner sanctums.

This building has more in common with Kahn's art gallery



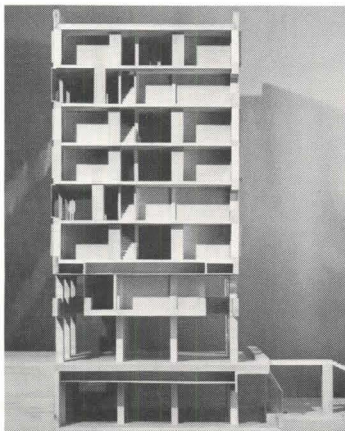
than any other new Yale buildings. It is an architecture of allowances rather than impositions. It is a servant to sensibilities. In some ways it has the good manners of neutrality; but in others it is not only more than receptive background, it has elegant personality. The concern for approach is evident throughout the building. Private and public spaces are sym-

metically graduated to accommodate different numbers of people at appropriate scales. And there is an assertion of individuality in the rhythmical distinctions of function on the facade.

The social, emotional and thereby aesthetic range of this building is rare. It is nowhere hung up on itself. It has no *idees fixes*. It carries a thought through, but not beyond its use-

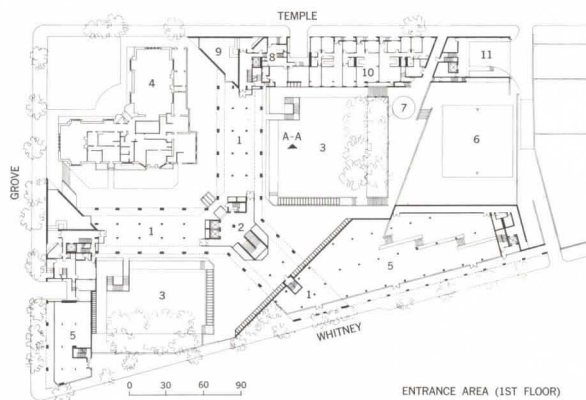
fulness. It is complex but has arrived at the simplicities which are always waiting to be found and felt within complexity.

This building filters students out to their needs and destinations; it filters them in to the sight and activity of the community; it filters the community, at least visually, into the University. It seems to be a thoroughly informed building.

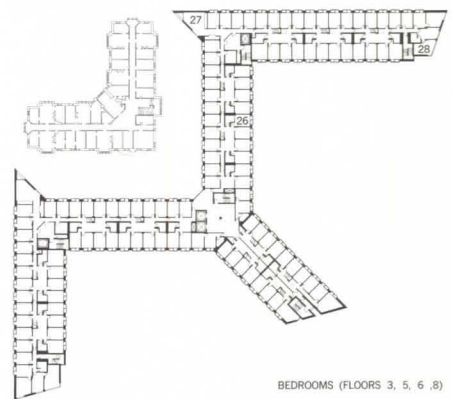


Section A-A

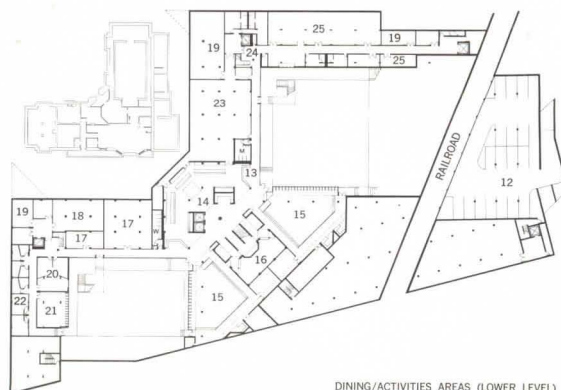
- | | |
|-------------------|--------------------|
| 1 arcade | 17 recreation |
| 2 lobby | 18 dramatics |
| 3 courtyard | 19 storage |
| 4 St. Elmo | 20 music |
| 5 commercial | 21 arts and crafts |
| 6 sports | 22 darkroom |
| 7 children's play | 23 kitchen |
| 8 master's house | 24 staff |
| 9 living room | 25 mechanical |
| 10 fellows room | 26 bedroom |
| 11 loading area | 27 6 person suite |
| 12 parking | 28 2 person suite |
| 13 mailboxes | 29 living room |
| 14 serving | 30 vending |
| 15 dining | 31 laundry |
| 16 dishwashing | 32 counselor suite |



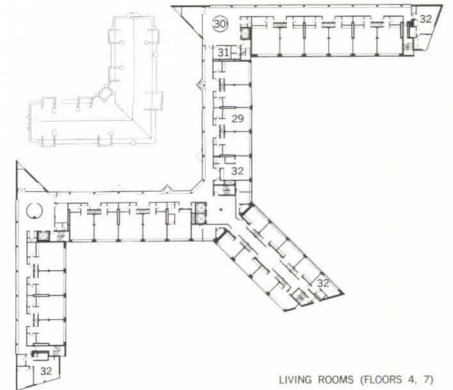
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BOOKS

THE CLASSIC TRADITION IN JAPANESE ARCHITECTURE: Modern Versions of the Sukiya Style. Text by Teiji Itoh. Photographs by Yukio Futagawa. Published by Weatherhill/Tankosha, New York. 279 pages. \$35.00.

REVIEWED BY ROBERT WEMISCHNER

In the architecture of Japan, form and function constitute two inseparable elements of a seamless aesthetic vocabulary. The sukiya, or tea-house style, developed in the sixteenth century in Japan, and the subject of a new book by the masterful pair of Teiji Itoh and Yukio Futagawa, is a nearly perfect example of this truism.

In an eminently readable text, Itoh explores the roots of the sukiya style and the reasons for its durability down to the present day. Itself eclectic, the sukiya style of architecture has a strongly spiritual foundation and the rustic simplicity and implied serenity of the sukiya-style room or building were perfectly appropriate to the ritual acts of the tea ceremony performed there since the great teamaster Sen no Rikyu prescribed the ground rules for it. The author relates that, "the tastes for the refined and the subtle—in a word, *wabi*—came to permeate residential architecture and the architecture of such places of entertainment as restaurants, inns, and public tea-houses," only during the period of Sen no Rikyu's aesthetic ascendancy. And in applying other than tea-ceremony associations to the aesthetic term, *wabi*, Rikyu "opened limitless avenues for its (*wabi*'s) expression." Most importantly, as the Shogun's advisor on aesthetic matters, Rikyu was empowered to apply his own aesthetic preferences to architecture and brought that art into the realm of creative activity with the design for a room in his house in 1587.

One of Rikyu's disciples,

Furuta Oribe, and his disciple, Kōbō Enshū advanced the sukiya style by emphasizing the sensual and colorful aspects of form which Rikyu had single-handedly tried to suppress. And it is the legacy of Enshū and Oribe which has captured the imaginations of the five modern Japanese architects whose works are examined in photographs and plans in Itoh and Futagawa's book.

The book is neatly divided into four main parts which in turn discuss and illustrate the background of the modern sukiya style: its evolution from traditional aesthetic principles, four modern applications of the style from the late fifties, sixties and early seventies, signatory elements of the style, and finally, examples of the style in complex, urban, multi-story buildings.

There is a problem, though, in assigning these kinds of divisions to a thorough pictorial and textural examination of a style. That is, the overlapping of details from photograph to photograph necessitates constant cross-referencing (and hence, continuous page-turning) in tracking down a particular illustration of a particular detail as exemplified in more than one building, in more than one part of the book. Even though page numbers are provided at the top of the page where the initial plan of a building appears, the reader is forced to turn to preceding pages to find the photographs which are meant to illuminate that particular architectural feature. Alternately, he must turn *ahead* to refer to photographs which supplement those already viewed. A certain measure of confusion and frustration due to discontinuity of thought results. The "Commentaries on the Photographs," which fall at the back of the book, refer to the photographs in detail and would have been more useful had they been printed on the pages where the photographs themselves appear.

The functions of the rooms in the buildings illustrated in the book are varied (or can be changed due to the flexibility of removable walls or partitions) while the forms remain constant. There are exquisite photographs of restaurant rooms, living rooms, exhibition rooms of a museum, all-purpose rooms, and even the rooms of an insurance

company, all of which are faithful in spirit, if not in detail, to the essentially intuitive canon of sukiya aesthetics.

Futagawa's photographs which number 161 in black-and-white gravure, and 8 in color, are stunning examples of the photographic art and telling evocations of the spatiality, airiness and integration of exterior nature with interior spaces which inform so much of Japanese architecture. And the emptiness of architectural spaces is hinted at as well. While photographs of rooms or architectural spaces devoid of people may be instructive in illustrating Itoh's contention that "all traditional Japanese architectural spaces are empty," these photographs do not contribute to the reader's sense of room scale, ceiling height, or general human orientation to the spaces.

The architectural drawings which fill 37 pages of the book are clean and spare, ranging from simple elevation plans to cross-sectional views of the essential traditional features of the sukiya style (the *tokonoma*, or sacred niche, the translucent *shoji* or opaque *fusuma* partitions), to ceiling plans for concealed lighting fixtures. There is an obvious balance between strictly architectural, technical detail and the simple, layman-oriented illustrations which partially clarify what the photographs do not. The book would rest comfortably anywhere between a coffee table and a drafting board.

The written accompaniment not only sets the sukiya style in a historical context but also provides some cautions to the Westerner who, once beguiled by many of its visual felicities, would fall head-over-heels in love with owning and living in a sukiya-style home. Itoh warns candidly: "Today only very rich people or exclusive restaurants and hotels can afford to construct and maintain buildings in the sukiya style," a statement which has a ring of dramatic irony to it, considering that many of the sukiya details derive from the urban commoner's or rural farmer's dwellings.

The author continues in the same vein: "As if this were not enough to dissuade the prospective client, it must be noted that the sukiya style building is structurally a good deal less than sturdy. Since

it is built of wood, it is of course a considerable fire hazard, but, more than that, it is prone to be adversely affected by vibrations, either from heavy traffic in adjacent streets or from such interior equipment as electric refrigerators and air-conditioning units, and by artificially created indoor temperatures, with the result that joints may open and structural members may crack. The edges and corners of the wooden posts are easily damaged, and children scampering through the rooms can play havoc with the tatami (straw-woven) mats. To prevent harm to a sukiya-style house, the owner must be willing to lead a slow-paced life of the kind dictated by the etiquette and ceremony of tea."

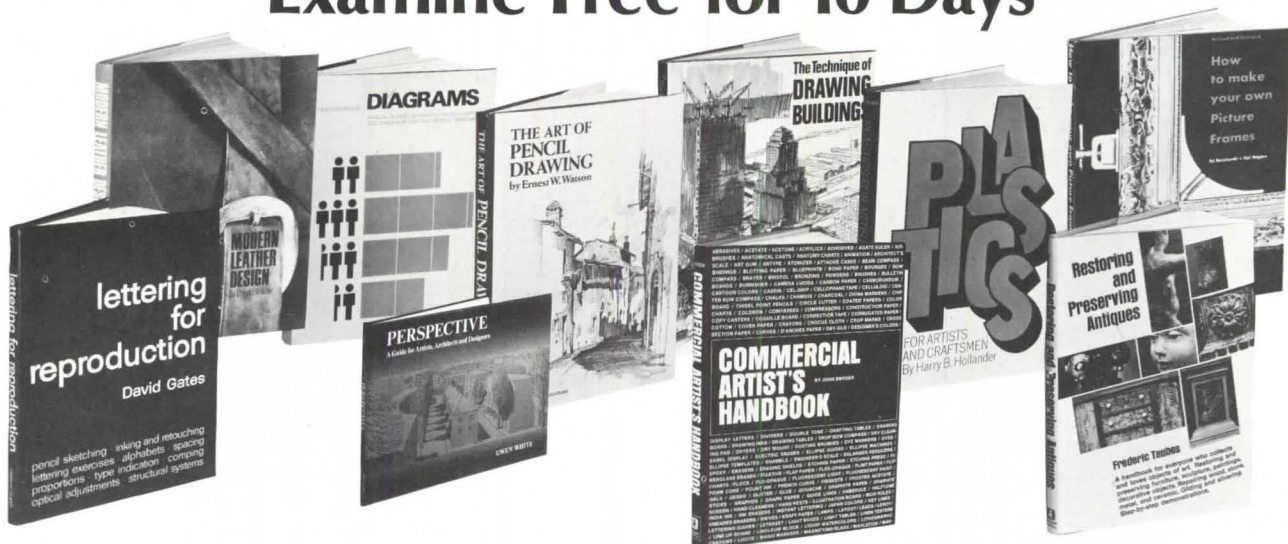
And in another place, the author states more directly: "When it is forced to shelter people who know nothing of traditional education or the tea ceremony, the sukiya-style house is immediately coarsened and robbed of its beauty. For this reason it must ultimately be a residence restricted to the elite in terms of Japanese culture." Yet, in contradiction to this sentiment, the author reminds us that, by some feat of cultural transitivity, the sukiya style is enjoyed by all Japanese in their daily-life environment through the tea ceremony, a "true art of daily life."

In still another statement, the author concludes that, "the major appeal of the sukiya style lies in all the trouble it causes." Perhaps his comment is an indication of the financial and emotional expense the Japanese are willing to endure in the cause of aesthetic fulfillment. In Itoh's opinion, architects persist in building sukiya-style structures and clients persist in wanting to have them built due to a manifest interest in the elevation of the human spirit through the most consummate form of art. As Itoh asserts, "it is precisely because it is old-fashioned and requires premodern methods and tools that the sukiya style continues to live." Architects feel a certain intensity of involvement in the process of keeping cultural traditions alive, an intimacy with the client and the carpenter, which allows them "to pursue the essential nature of architecture." And Japanese architecture has been the richer for it.

Mr. Wemischner is a student of cultural history with a special interest in Japanese art and architecture.

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PRESERVATION

ELBOW ROOM

The Flemish-Gothic Delaware and Hudson Railroad in Albany, N. Y. (1914-1918) was designed by Architect Marcus T. Reynolds as a copy of the Cloth Guild Hall in Ypres, Belgium. It is to become the headquarters of the central administration of the State University of New York, the world's largest university system with 72 campuses. The administration has been in various temporary offices since 1948.

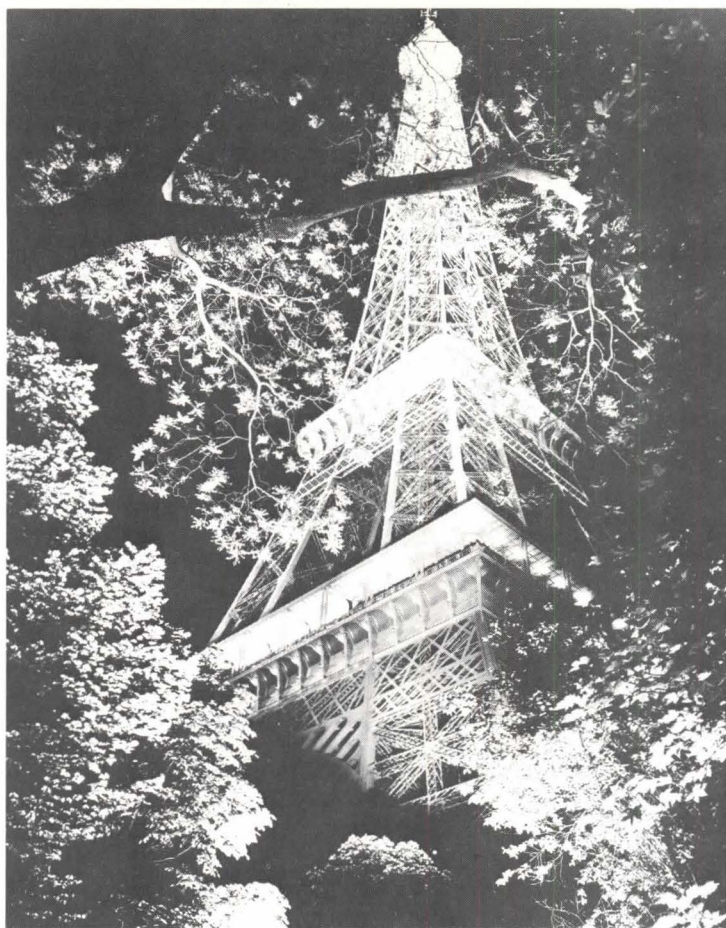
The D & H building and the adjoining Albany Journal Building, which will also be part of the headquarters, are on the National Registry of Historic Places. This entitles them to federal funds to help underwrite costs of acquisition and exterior renovation. The complex has often been mistaken for the State Capitol.

The two buildings will provide over 100,000 square feet of usable space for offices. Adaptive designs being done by William A. Hall and Associates, will take about a year. Rehabilitation will take two more.

The traffic turnaround in the elbow of the complex will be closed off and developed into an expanded park which will enrich the experience of being in what is, otherwise, a rather dismal downtown.



Aerial of Albany's D & H Station.



Structural tracy being replaced.

OLD AGE

The 84 year old Eiffel Tower is feeling it, corrosion that is, and the company that operates the tower under a contract with the city is running up a \$2.5 million repair bill (three times the cost of razing the structure). There is something to be said for being a landmark, especially a famous one. It is not only possible to be fixed up and spared that last legs feeling; people are

willing and eager to do it.

Adjacent sides of the original iron box columns are being cut away and replaced with steel sections which are bolted into the original bolt holes. The new triangular sections, 0.4 in. thick or 20% thicker than the original iron sections, are reinforced by 2.8 in. deep ribs running along the edges. Triangular iron diaphragms within the columns are also being replaced with steel.



Albany turnaround to become a park.

RAILROAD RUSH

As mentioned in our Jan./Feb. issue, Hardy Holzman Pfeiffer Associates are preparing a report on adaptive use of existing railroad stations throughout the country. The report is intended to support proposed legislation which would provide seed money for feasibility studies about stations being considered for conversion. The report will give case histories of stations already saved, outline procedures and pitfalls inherent in the acquisition and conversion process, and propose new approaches to the problem, especially in the area of financing.

Because of the limited time schedule for the report, Hardy Holzman Pfeiffer will be grateful if examples of successful or potential conversions are brought to their attention. Their address is 257 Park Avenue South, New York, N.Y. 10010; phone 212 OR-76030.

COMPETITIONS

AT THE END OF THE RAINBOW

The Canadian-U.S. competition for the design of Rainbow Center Plaza in Niagara Falls produced a winning design which is truly equal to the site, having met the challenge of both architecture and nature.

The design by Abraham Geller, Raimund Abraham and Giuliano Fiorenzoli achieves quite remarkable things. The 5.1 acre plaza, while remaining open and accessible as a plaza should, is an entity in itself. This was essential as developers have not yet been found for two sides of the plaza, and Gordon Bunschaft's Carborundum Center on the north is surrounded by a plaza. By not sloshing over into the surroundings, and by scooping into the rock to become a substantial three-dimensional form, the winning design stands up to Philip Johnson and John Burgee's Convention Center (FORUM Jan./Feb., 73) which forms one side of the plaza and could easily have overpowered most designs.

The Convention Center terminates the extensive mall at the center of Niagara Falls' central business district. At the foot of the mall are the famous falls. An aerial view of the model shows that the winning plaza

design is not in the least intimidated by the magnificence of the falls. The design is an intimation of their ambience. It has picked up the island and rock forms and reiterated them in condensed fashion, turning them to the purposes of the program with grace and ingenuity.

The plaza is intended as an extension of the Convention Center for parades, speeches, concerts, displays of boats, and automobiles. It also will provide for year round activities. The design provides open and closed exhibit areas both at the lower level of the plaza and on top of the islands; an ice skating course which goes all the way around the southern island; restaurants; snack bars; maintenance and exhibit storage areas; and a 3000-seat amphitheater.

One of the more interesting aspects of the program was the requirement of a pedestrian connection from the second story of the proposed mall to the Convention Center. However, since this part of the plan is only in the development stage, and is therefore highly conjectural, a design for the pedestrian connection had to demonstrate

that it could function well on its own, without the second level of the enclosed mall, or be removed without significantly destroying the concept and design of the plaza. That's a big thumb to pull unnoticeably out of a rather big pie, but the Geller - Abraham - Fiorenzoli design seems to have achieved it. The cut-out concept gives *raison d'être* to the bridge which will be enjoyable no matter what happens on one end of it.

The distinguished jury included Pietro Belluschi, R.T. Affleck, M. Paul Friedberg, R.T. Schnadelbach, Benjamin Thompson, Seymour H. Knox (Chairman of the New York State Council on the Arts and President of the board of the Albright Knox Gallery) and three natives of Niagara Falls.

The first prize was \$20,000 plus the contract for construction documents and supervision, with the prize money being included in the fee structure. The second prize of \$10,000 went to Dean Abbott. The third prize of \$7,500 went to Tarapata, MacMahon, Paulsen Corp. The six honorable mentions were: Clampitt, Lesser, Roman; Cun-

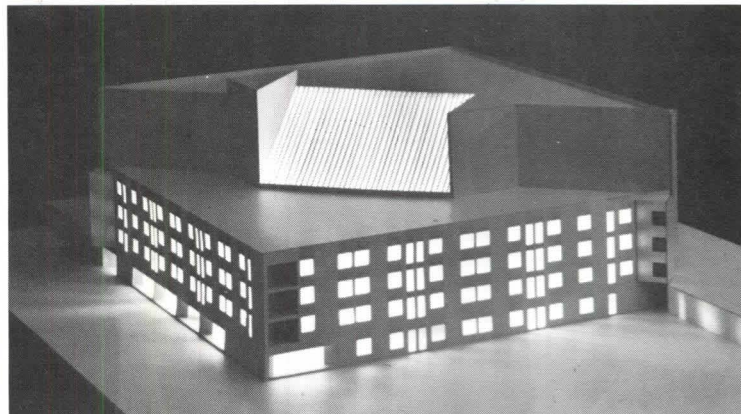
ingham, Richter, Savoie; Gerald Englar; The Hodne/Stageberg Partners, Inc.; Steve Holl; and Lantzius, Walgamuth and Rogers.

ARCHITECTS AS DEVELOPERS

Last fall the New York State Association of Architects formed what is thought to be the first development corporation to be set up by any U.S. architectural

association. Their objective is to sponsor non-profit low and moderate income housing.

With the site chosen, a statewide design competition was announced. It achieved its major objectives, including flushing out some hidden talent. The winners (photos), announced in February, are: G. Kent Hawks and John S. Garment, First Prize, \$2000 and the contract;



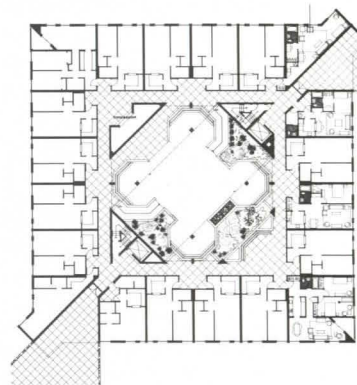
Model photo of Hawks and Garment's Utica winner.

association. Their objective is to sponsor non-profit low and moderate income housing.

(This is in line with the trend toward architect involvement as developers which is documented in a new AIA book by C.W. Griffin called "Development Building: the Team Approach," distributed by Halsted Press Division, John Wiley & Sons, Inc., New York.)

The non-profit corporation is entirely dependent on public funds for financing. They are counting on funds from the state's Mitchell-Lama program, administered by the New York State Division of Housing and Community Renewal, and the now jeopardized Section 236 of the Federal Housing Act of 1968, administered by HUD.

Since urban renewal property was going to be the best buy for such a corporation, the Association circularized all the local renewal agencies in the state and had responses from 12. A site in Utica seemed most advantageous. It was clear and available, owned by the city's renewal agency, well located near the main business district, and adjacent to a new shopping mall. It had good views of the Mohawk Valley, hills beyond, and a nearby park. And, perhaps most important, Utica's Mayor Michael R. Caruso and urban renewal

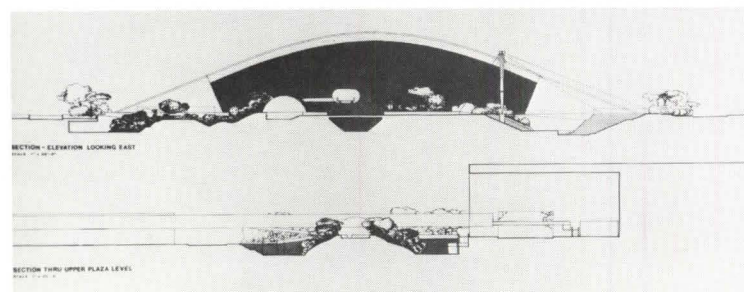
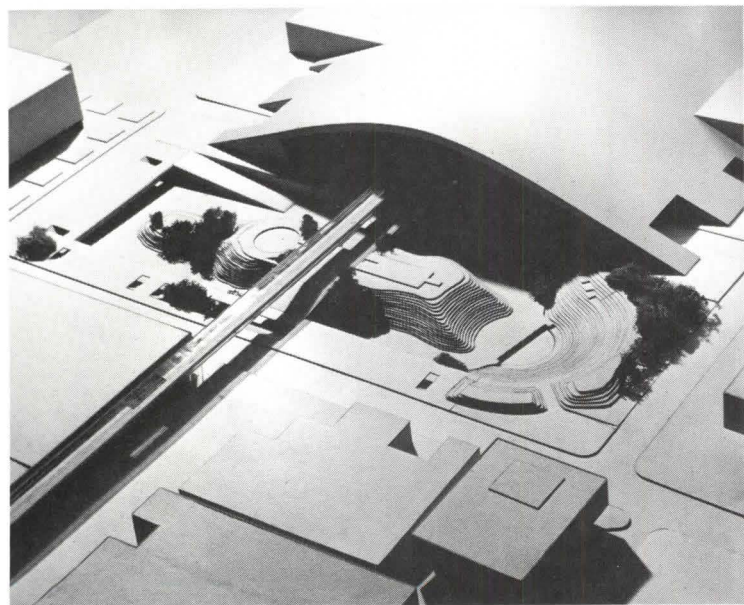


First floor plan of the winner.

director Joseph Pacito were ex-Claude Samton and Henry Korman (with Don Richardson, landscape architect), Second Prize, \$1000; Howard Cohen, Third Prize, \$500. Honorable mention went to Werner Seligman, Anton J. Egner, and Henry Liu. Most are 35 years old or under.

The professional advisor for the competition was Dickson McKenna. The architects on the jury were: John Fisher, Dean of Architecture at Syracuse University; Patrick Quinn, Dean of Architecture at Rensselaer; and David Todd. Engineer Joseph Stein, Commissioner of the New York City Department of Buildings, served, as did planner DeForest Winfield, director of planning for Utica.

(continued on page 71)



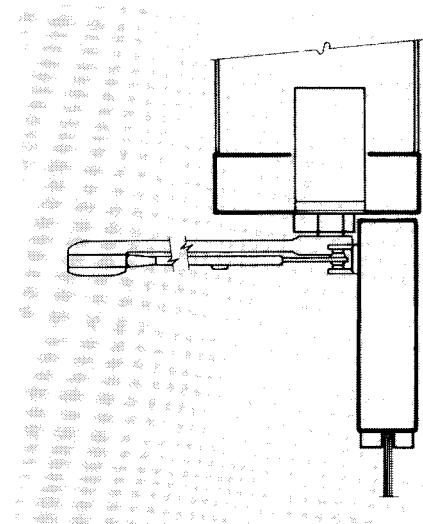
Rainbow Center Plaza winner, model photo and sections.



Aloha High School, Portland, Oregon
Architects: Hewlett, Jamison & Atkinson, Portland

DOORWAY NOTES . . .

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"Cut 'n Run" is Frank Deford's novel about pro football's impact on the average American family. It is also one of President Nixon's favorite metaphors, and aptly describes his administration's attitude toward 35 years of housing legislation.

Several reasons have been given for this latest play. One is to keep the lid on inflation. Another is that the department of housing and urban development has been riddled with scandal and, in 1972, with 28 indictments for a variety of fraud and conspiracy charges. Still another reason is the mounting evidence of mismanagement of federal housing funds on the local level. But the real reason goes beyond all of these—housing programs simply have not worked, not economically, not managerially, certainly not in terms of human or community values. There are exceptions, of course, and they *could* be the rule if the 18 month moratorium on construction of low and middle income housing, announced by outgoing HUD Secretary Romney on Jan. 8, is properly used to reassess and realign housing programs.

Since Jan. 8, however, there are unsettling signs that nothing of the kind is going to occur during this critical period. James Lynn, the Cleveland lawyer who succeeded Mr. Romney, has said something about getting our feet on the ground and deciding where we want to go, all of which implies some discussion or debate. The thing is, there is no debate at HUD, not anymore. The discussion about ending debate began long ago—at the White House, and the *a priori* axe being wielded is that of revenue sharing programs. While general revenue sharing is already law, the administration's special community development revenue sharing proposals are headed for stormy seas, where an irate congress, feeling its own housing shibboleths going under, seems determined to grab onto and submerge the only thing left afloat—which is, at this point, the President's own shibboleths.

You cannot sweep the mistakes of the past under a flying carpet, even one like community development revenue sharing, which would, if approved, consolidate such aid programs as water and sewage grants, urban renewal and model cities, along with the now dormant sub-city measures. With around 5 million housing units without plumbing in this country, and around 3 million characterized as overcrowded, 18 months of "benign neglect" is a puritanical tactic, demoralizing the poor, not housing them.

Ironically, the administration's favorite alternative to subsidizing the producers of housing is to subsidize the consumers of housing, by means of family housing allowances. There is little evidence that rerouting the dole would improve access to, or the amount of, housing. In contrast, there is a good deal of evidence that housing allowances would throw the housing market wide open resulting in

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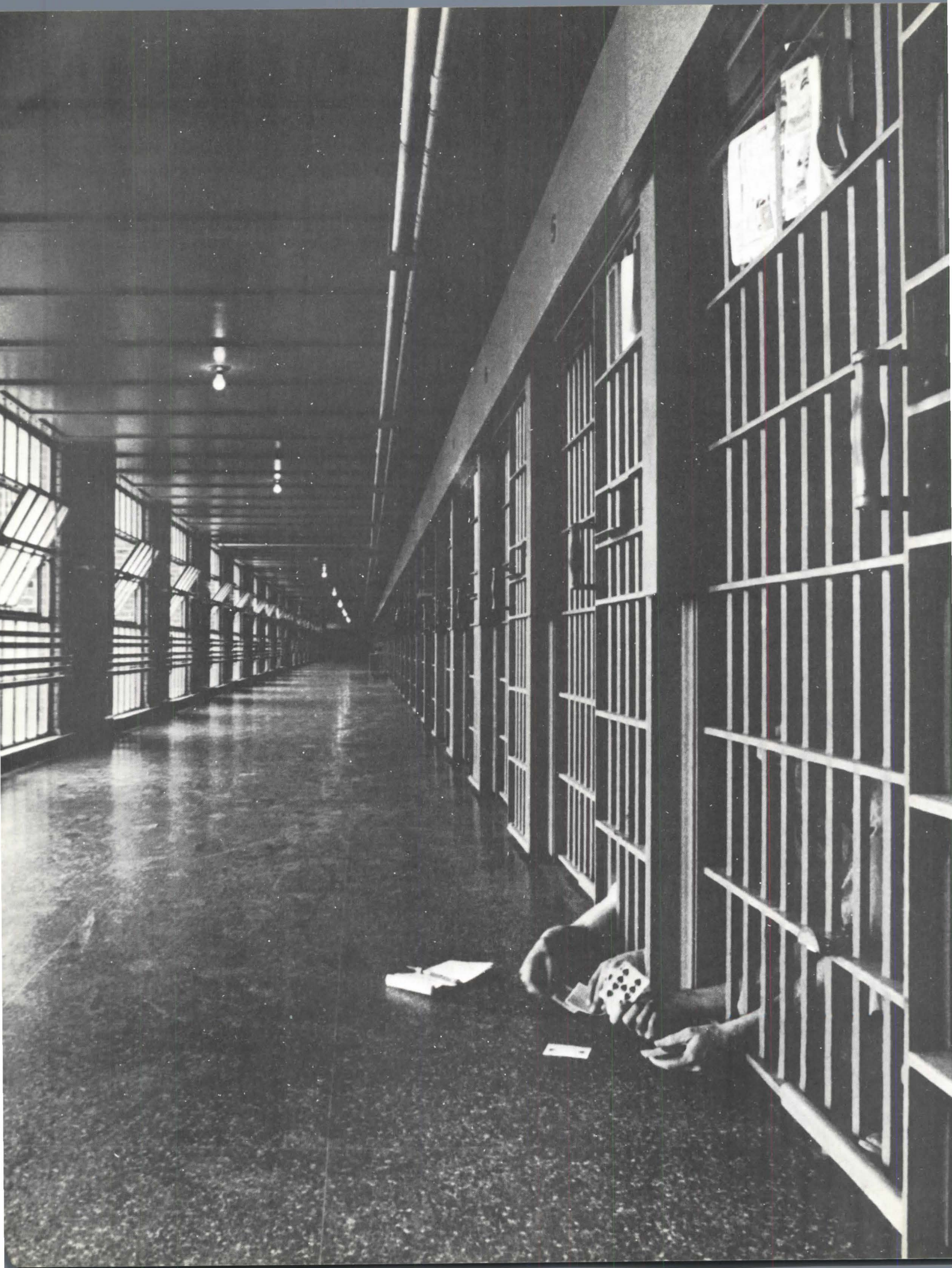
higher inflation, which was one of the President's chief concerns in ordering the housing cuts.

Nobody debates the need for housing reform—especially those who need housing most. Yet these are the citizens who are being alienated, not consulted. The flying carpet which is supposed to return money, power, and decision making to the people has flown way over our heads.

Who is to say that the frustrating nearsightedness of federal housing officials, operating out of Washington, won't be replaced with the myopia of local officials? If lots of dollars encouraged corruption at the federal level, where things are supposed to be so well supervised, who will be supervising those dollars locally?

The next question has to do with the human dimension of housing. One feels, somehow, that you cannot replace the moral neutrality of a bewildered federal bureaucrat with the moral neutrality of local politicians and pretend that the people will fare better. Neither can you replace federal mismanagement with local mismanagement, and merely justify it, or forgive it, as New Federalism.

Unless Secretary Lynn does get his feet on the ground, the next 18 months will end up replacing one set of complexities with another, one set of good intentions with another, and one set of bad safeguards with practically no safeguards at all. Besides frustrating an already confused society, the end result of this housing cut could well be that the only place we will have to run is for cover, and not for that roof over everyone's head which most of us were taught to believe in, and work for.—WILLIAM MARLIN



During the last three years, the Federal government, under the auspices of the newly-created Law Enforcement Assistance Administration, has sunk a total of \$251 million into construction programs for correctional facilities. This sudden escalation of funding has spurred an understandable architectural interest in a once unfashionable building type. Yet aside from visions of seven percent commissions in the recession/depression years, architects have been taking an erstwhile interest in the psychological and sociological implications of correctional facilities. And now correctional experts are appealing to the government to halt all construction of jails and prisons, even the enlightened sort produced by architects dedicated to a physical environment supportive and responsive to rehabilitative programs.

The basic problem seems to be that correctional and penological philosophies are in a state of rapid metamorphosis; a metamorphosis that underscores the costliness of buildings which neither get built overnight, adapt easily to different programs, nor are readily torn down. (The first penitentiary in the United States, for example, Eastern Pen in Pennsylvania, was built in 1829, closed in 1966, but has yet to be torn down because of high razing costs.)

But the anti-construction forces are closely tied with a growing movement to revolutionize the entire criminal justice system, in which all aspects of the criminal process are being criticized, from arrest to imprisonment. A significant

protest against imprisonment was heard last June when 54 distinguished lawyers and criminologists convened at a meeting sponsored by the Roscoe Pound American Trial Lawyers Foundation. The lawyers and criminologists concurred that imprisonment as a criminal sanction be sharply curtailed, and solely used as a last resort. Not only should and could the majority of offenders be released and undergo correctional rehabilitation through community-based programs and services, but nearly "half of the present potential jail and prison population could be placed outside of the criminal justice system by decriminalizing behavior which does not involve (1) the threat or use of force against another person, (2) fraud, (3) wanton destruction of property, or (4) violent attacks against the government." Gerhard Mueller, in the conference report of the meeting ("A Program for Prison Reform"), explained that "imprisonment means the caging of human beings either singly or in pairs or groups. . . . If there were the slightest scientific proof that the placement of human beings into boxes or cages for any length of time, even overnight, had the slightest beneficial effect, perhaps such a system might be justifiable."

A few months later another group echoed the same convictions, but with more direct reference to the new construction of correctional facilities. In September, a policy statement issued by the National Council on Crime and Delinquency called for a "halt on the construction of all prisons, jails, juvenile training schools and detention

homes until the maximum funding, staffing and utilization of noninstitutional corrections have been provided for." The NCCD, a non-profit citizen and professional organization that seeks to improve the effectiveness of criminal justice measures, cites the American Correctional Association's estimates that less than 15% of the persons in prisons need maximum security; they point out that 52% of the 250,000 daily jail population are pre-trial detainees—most of them detained because they can't afford to raise bail or qualify for release on recognizance. The NCCD also agrees with the Roscoe Pound Trial Lawyers conference that such victimless crimes as alcoholism, drug addiction and vice be stricken from the criminal codes and referred to other forms of treatment.

Despite the Federal Bureau of Prison's pursuit of innovative building programs in the last few years (pages 40 to 45), the NCCD feels that federal institutions duplicate functions that could be answered on state and local levels—particularly since many federal offenses only differ from normal crimes by virtue of the fact that the offender crossed state lines to perpetrate his deed. They aver that federal institutions do not have a better rehabilitation record than state facilities, despite their master plan to build 66 new institutions by 1978 at a cost of \$700 million. (Chief Architect for the Department of Facilities Planning and Development in the Bureau, Gary Mote, claims that the master plan only projects 35 new buildings in the next decade.) For these various

reasons the NCCD urges the disestablishment of the Federal Bureau of Prisons and its possible replacement by a Federal Corrections Agency that would give "technical assistance, program guidelines, and research designs to state and local governments."

Perhaps the most publicized action involving a strong recommendation to cease construction of correctional facilities occurred during the January meeting of the First National Conference on Criminal Justice. The conference convened to discuss the task force report of the Presidentially-appointed commission, the National Advisory Commission on Criminal Justice Standards and Goals. The Commission, created in October 1971, and funded by the Law Enforcement Assistance Administration, baldly advises that "no new major institutions for juveniles be built under any circumstances," and "no new institutions for adults be built unless an analysis of the total criminal justice system and adult corrections system produces a clear finding that no alternative is possible." As for jails, the report flatly advocates that no state and local jurisdiction should be allowed to build a structure for pre-trial detention and no funds be appropriated until the whole area of pre-trial detention has been reorganized and alternate means fully implemented and evaluated, with requirements and types of facilities fully examined. Yet they add, "This standard, in urging that construction be delayed pending intelligent planning, should not be construed as a recommendation that substand-

PUSHING PRISONS ASIDE

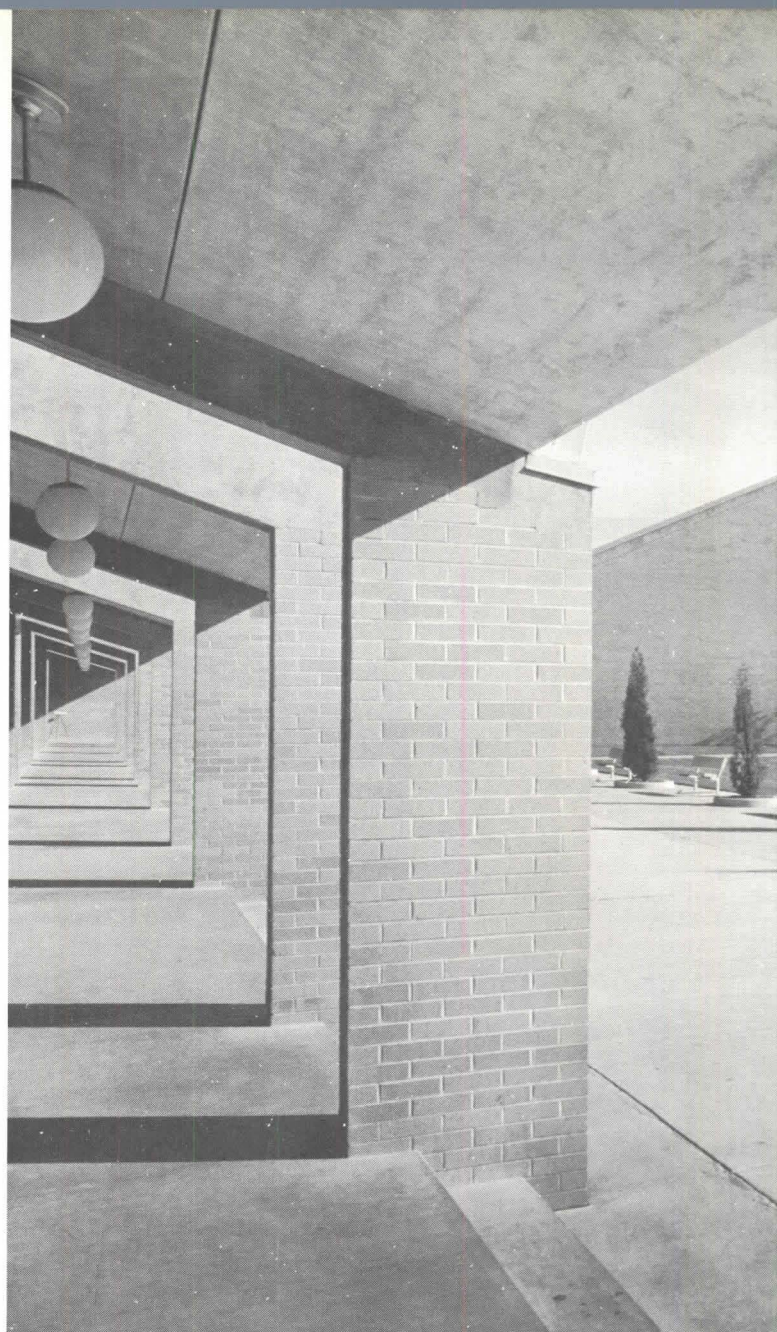
Leading correctional experts are calling for a halt in jail and prison construction—as the clamor gets louder, design professionals are beginning to realize the implications.

STATE OF THE ART

About 50% of the buildings shown in the following pages should be characterized as "contemporary history," for half, if measured strictly by current reform thinking, are already out of date. The strongest taboos are against size of inmate population (not over 300 for prisons, 150 for jails and juvenile detention homes) and the isolation of the facility. In addition, many of these facilities would still have to be defined as jails and prisons in the conventional sense: In other words, they represent exactly the type of correctional facility that would be axed if the moratorium were called tomorrow.

Yet these projects are not being shown just because they might become historical examples of a correctional architecture fast disappearing from the face of the earth. Despite the fact that only two could be defined as community correctional centers in Fred Moyer's definition (and thus have Part E funding), and only four others were selected by the Federal Bureau of Prisons' advisory panel, each of these embodies certain features that could be applied to the new correctional facilities of the future, even according to the latest thinking.

Each incorporates elements of a humane physical environment that will be as much a part of tomorrow's needs (even if for a smaller percentage of the population) as they are today. All acknowledge the prisoner as a person, in need of varying activity spaces, natural light, visual stimulation, privacy, territoriality, and personalized space. All seek to reinforce his personal identity and self-image through a permissive and supportive physical setting. Some of the facilities included present other ideas for more extended application—such as a warehouse converted to a jail that does not require a large investment in a new permanent structure during this period of transition. Others show what you can do to transform existing facilities. While the following examples only touch on a few of the features and elements recommended by correction professionals, a more complete catalogue of ideas, approaches and components can be found in the National Clearinghouse's Guidelines for the Planning and Design of Regional and Community Correctional Centers for Adults," Part I and II of Robert Sommer's LEAA study "Research Priorities in Correctional Architecture," The Management and Behavioral Science Center at University of Pennsylvania's "Planning and Designing for Juvenile Justice," and architect Doug Rand's "Social Criteria for the Design of Imprisonment Facilities in Montana."



ard facilities be perpetuated indefinitely. The standard is intended to address the evil of detention itself, whether in an antiquated, insecure and unsafe facility or in a modern, sanitary one."

This month, a book called *The New Red Barn* is being published by Walker and Co. Author William Nagel, a former deputy warden who is director of the American Foundation's Institute of Corrections, selected the title because of his mentor Austin McCormick's assertion that "given quality staff, he could run a good prison in an old red barn." Nagel documents his quest for a "new red barn" in the book, but ends up calling for a moratorium on

all prison and jail construction until 1978. In the meantime, he explains, the whole system of criminal justice, including courts, police, the criminal code itself, and types of facilities needed in the future could be assessed.

Obviously these recommendations, which would affect the planning, design and construction of new facilities, are part of an emerging criminal justice system in which heretofore autonomous systems of courts, law enforcement and corrections would be revamped and coordinated. Physical plants would of necessity continue to have some sort of place in this system, but the link that has been so direct between an improved

program and a new complex to house it, may be broken. The above recommendations certainly imply a reduced role of the physical plant in correctional reform, at least temporarily.

Progressive Disillusionment

The formula of a rehabilitation program plus a supportive environment has been the most favored axiom of correctional administrators and architects over the last two decades.

William Nagel explains that his progressive disillusionment with the effectiveness of the physical environment in rehabilitating inmates came from his "state of the art" search. Nagel had, with Alfred Gilbert of Mitchell/Giurgola, and Dr.

Stanley Felzer, a psychologist with the consulting firm of Harry Woehr Associates, undertaken an informal study of 103 jails and prisons, at the request of the LEAA. He had deliberately sought representation from an architectural firm not involved with correctional facilities, but one that designed what he considered to be particularly humane environments. While the team did not use the gamut of behavioral science techniques in their observations and interviews, they nevertheless felt their visits revealed some valid truths.

Jails in particular, on both county and local levels, represented the most outrageous examples of negative environ-



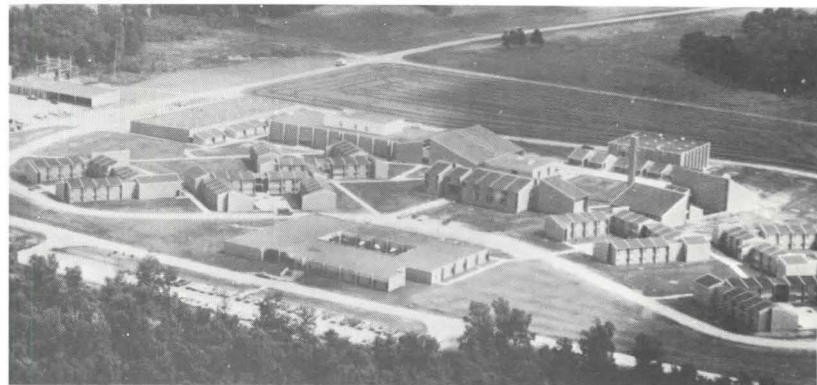
Vienna Correctional Facility

Vienna's basic problem, as Commissioner of Minnesota's Department of Corrections David Fogel has stated is, "It's only 18 minutes from Chicago — by telephone". In other words, this minimum security facility is too isolated to be able to help the offender achieve reintegration with his community, according to current correctional thinking. Vienna also exceeds the mandatory maximum of 400 population for LEAA funding. The population is now 600 and will eventually total 1200. Nevertheless Curtis and Davis' design embodies concepts of "new towns" and goes far in creating a non-institutional environment.

The entire complex is divided into two clusters of residential buildings, like neighborhoods, placed around a town square of central activity buildings (photo below). Each of the two neighborhoods is comprised of three irregularly formed U-shaped

buildings housing 100 men in each one and enclosing their own outdoor recreational areas. These U-shaped buildings are subdivided into four separate wings containing 24 single rooms each. Rooms are arranged in two-story walk-up fashion, much like garden apartments. Security is played down as well; for the inmates each have keys to their rooms, and can wander around freely in that particular neighborhood.

At the "town center" (below), a 74,048 sq. ft. dining hall is located consisting of two rooms, each accommodating 300 inmates. Nearby at the center is the 2-story 10,000 sq. ft. library, a community college (31,000 sq. ft.), two chapels (photo left), plus smaller facilities for barber shop, commissary and music school, and to the rear of that, the gym. The structural system is reinforced concrete frame with brick cavity walls.



ments. Although jails house only pre-trial detainees and sentenced misdemeanants, the amenities found in prisons that house convicted felons, were non-existent in jails. Recreation spaces, classrooms, outdoor courts or walks, and separate rooms for inmates were deemed too expensive by local and county governments. According to the 1970 Jail Census conducted by the LEAA, half of the nation's jails are without medical facilities, more than 85% without recreational facilities, and nearly 90% without educational services. Yet over half of those jailed as pre-trial detainees might await trial for as long as a year (even though 40% of them, according

to the NCCD, are not convicted when tried).

Other conditions Nagel points to are the intolerably high noise levels resulting from metal bars subdividing spaces, tile walls, and high cement ceilings, plus the lack of privacy with the double or multiple-occupancy cells. (A cell is distinguished from a room by the fact that it has a metal grill front wall, while rooms have solid doors with panes of glass.)

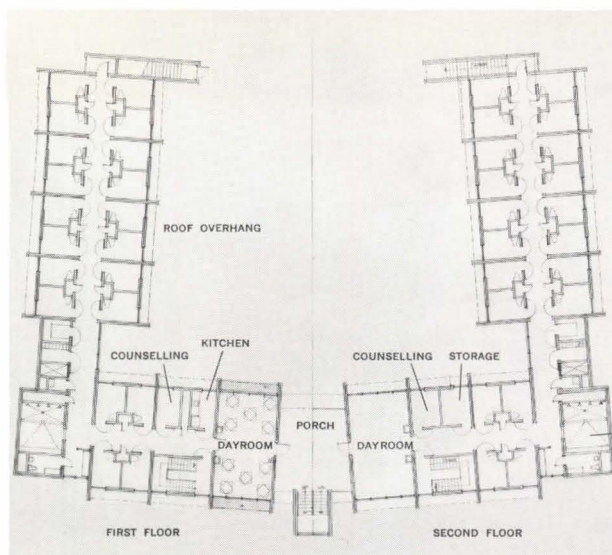
Yet the team's findings revealed that even the newest jails—and prisons—are still being built according to correctional thinking of the 'thirties and 'forties. The most common practice with new jails in particular is to wrap them in a

handsome exterior, install them in a public service complex, but retain the ambience and conditions inside favored in the more punitive Victorian Age.

Nagel's group also looked at recent innovative correctional design where security was played down by the use of ornamental grills and hollow concrete blocks instead of bars, glazed interior walls, long corridors given serpentine plans, and landscaped lawns and courts made accessible to inmates. Yet, "in all our conversations and observations, we heard and saw the old preoccupation: control. We also observed deep mutual suspicion, great cynicism, and pervasive hypocrisy as the kept and the keepers played old

games with each other while using the new sophisticated language of today's behavioral sciences. . . The prison experience is corrosive for those who guard and those who are guarded. This reality is not essentially the product of good and bad architecture."

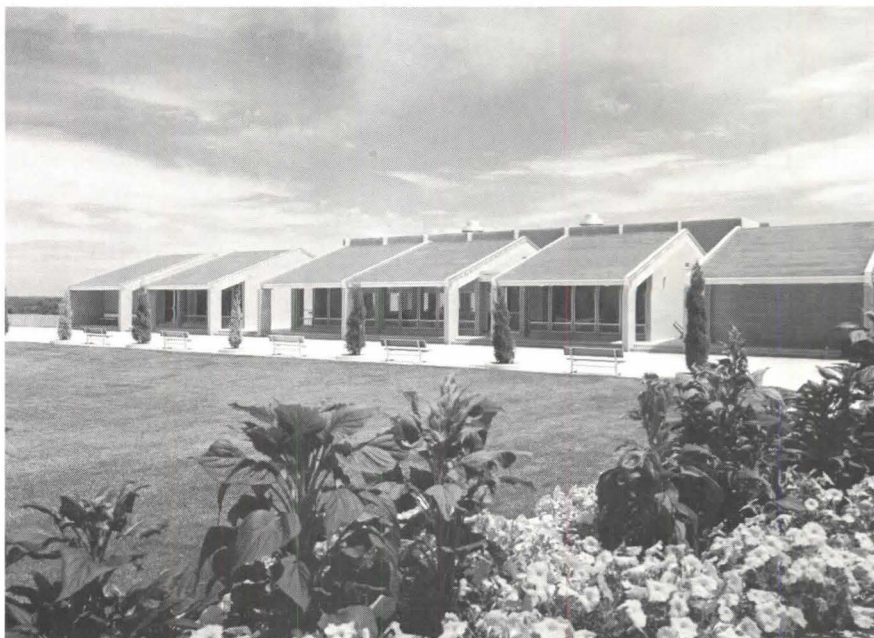
The reason he urges a construction moratorium, Nagel explains, is "So long as we build we will have neither the pressures nor the will to develop more productive answers." Secondly, he argues, jails and prisons are permanent. "If we were to replace only those cells in American jails and prisons that were built more than 50 years ago, the price would exceed \$1,500,000,000."



Inmates live in two-story walk-ups organized in a U-shaped arrangement (right top, plan above). Near the "town center", single-story cottage units house barber shop, commissary and music school like a small shopping center.

FACTS AND FIGURES

Vienna Correctional Center, Vienna, Illinois. Owners: Dept. of Public Works. Architect: Curtis & Davis. Project Architect: Sidney Folsie, Jr. AIA. Contractors: F.M. Wilson Co. (general); Blaise, Inc. (mechanical); Sachs Electric (electrical). Building area: 340,219 sq. ft. Land and Site Development and Construction Cost: \$12,000,000.00. PHOTOGRAPHS: Frank Lotz Miller Inc.



The National Council on Crime and Delinquency testifies to various reasons for their admonition not to build, although "Since projected construction of prisons, jails and juvenile facilities totals nearly two billion dollars, many state and local governments apparently believe we need them." Regarding the need for facilities to remove the dangerous criminals from the streets, the NCCD asserts that 95% of the inmate population eventually returns to the streets anyway. And studies such as the Assembly Commission on Criminal Procedure in the California Legislature's "Deterrent Effects of Criminal Sanctions" (Sacramento, 1968) indicate that often the "prison

experience contributes to crime rather than deterring it." Nagel suggests the reason is "because it's the thing you have the most time to learn how to do."

The study by the California Assembly Committee on Criminal Procedure also questions effects of rehabilitation: For any sizable state, they find, despite the varying length of stays, 35% paroled from state prisons return in a few years and an extra 15% are hauled in for minor offenses. Moreover, shorter sentences don't indicate that return to prison is more likely; in fact, shorter sentences sometimes correlate positively with low recidivism rates.

In juvenile cases, the NCCD looks to a recent study of 19

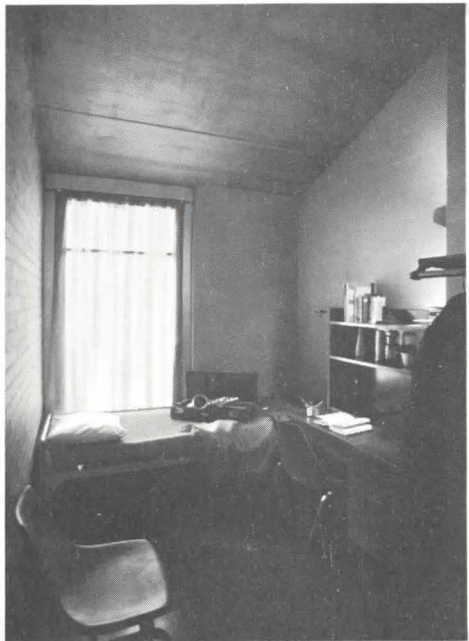
major cities that found 40-50% of the residents of juvenile correctional institutions are there for offenses for which adults would not be incarcerated, such as truancy. Furthermore, they emphasize, administrators of juvenile detention homes have testified in Senate Juvenile Delinquent Subcommittee hearings of 1969 that delinquents deteriorate rather than mend their ways under state custody.

Role of Physical Environment

The recent protests to continued construction of prisons or jails of any kind question the implicit assumption commonly held by design professionals that a physical plant is *a priori* part of the correctional

solution. Although rehabilitation has been the prime objective of correctional institution programs for the last hundred years, only recently has correctional architecture begun to come into its own as a significant aspect of rehabilitative efforts. Enlightened programs have been viewed as impossible to effect without a humane environment, and vice versa. And somehow the twin needs of rehabilitation with security could be achieved by virtue of the architectural design.

The call for a halt in construction would seem to imply that old rundown prisons and jails are acceptable, that the environment has no significant impact one way or the other.



Interiors of Vienna indicate a non-institutional quality in a minimum-security situation. Each inmate has his own cell, 7 ft., 6 inches by 9 ft. 2 inches (left bottom). A one directional steeply pitched roof of laminated beams and decking in the chapel gains height without sacrificing human scale (left, top) as does the dining room (above), though it is by current correctional standards too large.

On the contrary, correctional experts are unanimous in their agreement on the negative influences of inhumane prison conditions. Alfred Gilbert, who accompanied William Nagel on his tour of jails and prisons, points out that two conditions can destroy the fulfillment of a human being in any kind of environment: "over determination and removal of referents." "Over determination," he explains, is the narrow definition of choices, space, movement and responsibility: a physical setting that is limited and monotonous, with a highly explicit context, through which movement is predictable and regimented. By "removal of referents," Gilbert means the cutting

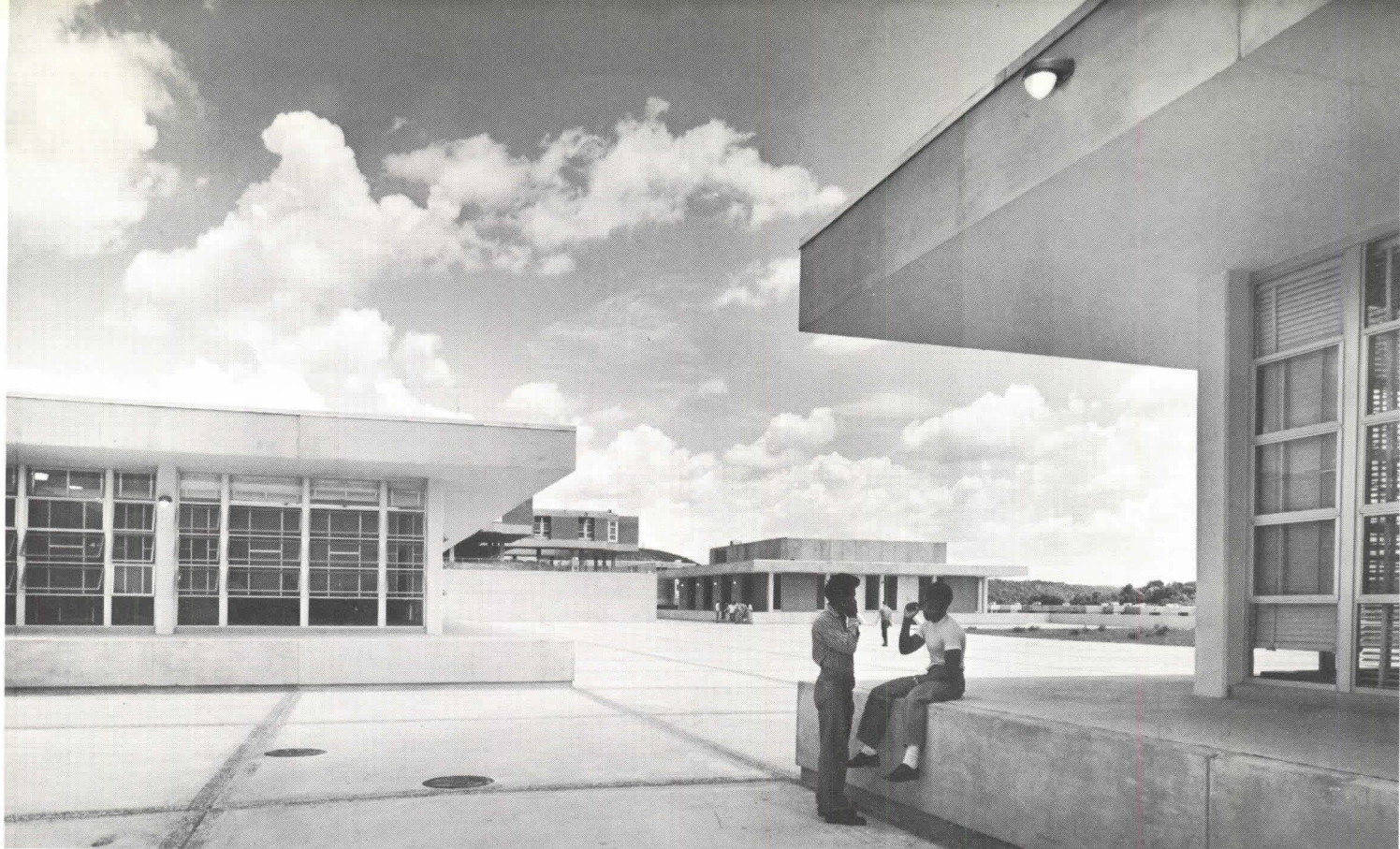
off of ties with the past by reducing contacts with people, places, activities, ideas.

Former prisoner Eddie Harrison, now head of the Pre-Trial Intervention Project in Baltimore, Maryland, corroborates this theory from a personal level: "The prison system has become a means for physically and psychologically containing, controlling, and programming inmates. In the process one's individuality, independence, sensitivity and responsibility for self are systematically assaulted. It is a system that denies human expression and demands universal conformity and passive acceptance. A natural response . . . is to resist and undermine the system in every

way possible."

Psychologist Robert Sommer points out that most of the information available on the effect of prison life and the physical environment on prisoners has come from autobiographical accounts such as Harrison's. Sommer argues for additional scientific data. In a study he conducted for the LEAA in 1971, "Research Priorities in Correctional Architecture," Sommer emphasizes that adequate amounts of space are necessary in correctional environments, as well as a reasonable amount of privacy. Privacy, he finds, becomes more important in a prison than, for example, in military barracks, because of the greater likelihood of assault, homosex-

uality, and inmate exploitation. Remarking on the stimulus deprivation experiments that show people confined in barren surroundings for a long time lose the ability to concentrate and experience disorientation, Sommer suggests that prison complaints about noise and odors might indicate a side effect of lack of visual stimulation—an increased potency of olfactory and auditory senses. Another area of research Sommer endorses involves the experience of time. Time in confinement, he explains, is very different from time outside: it must be understood and examined as a "space-time" rather than simply time or space experienced apart in isolation. More scientific



data testing all these variables, Sommer believes, "will strengthen the arguments for alternatives to incarceration."

In 1958, Gresham Sykes wrote in *Society of Captives, A Study of Maximum Security Prisons* (Princeton University Press) that besides meaning loss of freedom, the whole system presents a constant threat to the inmate's identity and self-concept, and the criminal must find a way of "rejecting his rejectors" if he is to endure psychologically. Eddie Harrison endorses this view: "The greatest percentage of rehabilitated ex-offenders are those who fought the system and succeeded in spite of, not because of it. . . . By contrast, prisoners who adapt

their life style and thinking to the system, find it difficult to structure their own lives, make their own decisions, or respond with human compassion to their environment on returning to society." Nagel agrees, remarking that the required conformity to prison values and standards would produce a person unable to adapt to the modus operandi of the outside world.

Fred Moyer, AIA, Director of the LEAA-founded National Clearinghouse for Correctional Programming and Architecture (page 51), describes four levels of impact of the physical environment: At the most elementary is the provision of space for program activities—for example, if the correctional

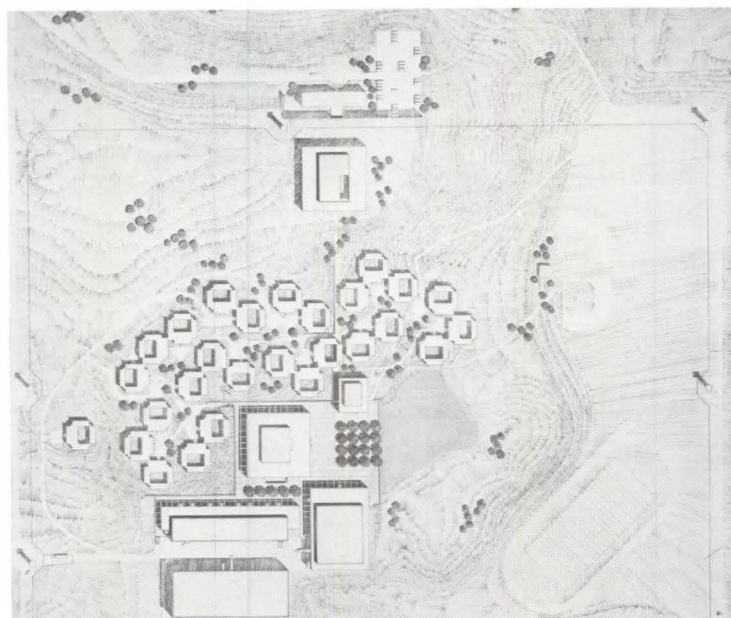
program calls for visitation rights for inmates, there has got to be an ample amount of space allotted to support this activity. Kinds of spaces and their treatment are important too, Moyer contends, because the inmates are denied access to other environments and therefore would have a greater need for a variety of environmental conditions behind bars. On a second level, architecture fosters activity patterns of new programs. The third level of architectural influence involves the way in which the physical environment structures relationships between people, both inside the facility between inmates and staff, as well as the one outside, between the prison and the community.

The fourth level of architectural impact relates to architecture as a communications system. Since the environment is composed of signals that give socio-psychological clues to events taking place in the entire situation, Moyer propounds, "Hostile physical environments tend to carry over the message into other activities, and may well impede the rehabilitative process."

Unfortunately, the lack of scientific data in this area prevents any comprehensive conclusions regarding the effect of negative or for that matter positive environments on inmate attitudes. Relying on inmate testimonies can be limited, since many testimonies refer directly to prison conditions of a very

Turney Home for Youthful Offenders

This complex of brick wall and concrete frame buildings in Hickman County, Tennessee, again violates the size and location taboos of correctional experts. The 600-man medium-security facility for boys 17 to 25 is about 80 miles west and south of Nashville. Nevertheless, on the isolated site architects Curtis & Davis of New Orleans, working with Nashville architects Howard, Nielsen, Lyne, Batey and O'Brien, Inc. have wisely organized residences around a town center. Twenty-six housing units accommodate 22 inmates each, with each unit completely enclosing its own courtyard. The housing units are clustered around a large town square containing dining, school, chapel and recreational facilities (left, top). A structural system of precast sixteen foot square slabs on concrete columns not only retained the hilly terrain contours by lifting the units off the ground on stilts (left, bottom) but permitted speedier erection, without much terracing required.



The residential unit plan (above) illustrates the human scale apparent in the living quarters: Each inmate has an individual cell, with only 22 men per unit to share common day-room spaces and outdoor court. A walk (left, top) extends from the town center's plaza under one of the residence units supported on concrete columns, and terminates at the medical and social services building (site plan, left).

FACTS AND FIGURES

Turney Home for Youthful Offenders, Hickman Co., Tennessee. Owners: Board of Hickman Co. Commissioners. Architects: Howard, Nielsen, Lyne, Batey and O'Brien, Inc., Nashville. Curtis and Davis. Chief Project Architect: Sidney Folse, Jr., Curtis & Davis. Landscape Architect: Howard, Nielsen, Lyne, Batey and O'Brien. Building area: 275,021 sq. ft. Land and Site Development Cost: \$1,063,135. Construction Cost: \$8,822,890. PHOTOGRAPHS: Frank Lotz Miller, Inc.

conscious level: bad food, hostile guards, overcrowding, rats and roaches, lack of sanitary conditions, lack of ventilation. Sommer puts the blame of the paucity of behavioral studies partially on administrators of prisons who are much more recalcitrant than hospital administrators, educators and the like to have their domains investigated. Also, he mentions the public desire for the prison environment to be punitive, without recognition that an angry person in the hostile environment will not return to society a redeemed man. Despite lack of scientific data, the most common agreement among the majority of correctional experts regarding physical environments

would be that in all probability the prison experience will not leave the prisoner the same man as when he entered: It will make him worse. Then, too, many correctional experts feel that the inhumane environments are simply immoral; that any person has the right to decent physical surroundings while he is being incarcerated.

The issue of whether a positive environment will seriously affect inmate attitudes is even stickier, because in a sense it suggests that the better the environment (and more costly), the better the chance that the inmate's attitudes will be so affected by the rehabilitative program that he will leave prison a law-abiding citizen. This think-

ing is "balderdash" asserts Tom Gilmore, an architect with the Management and Behavioral Science Center at the University of Pennsylvania, which undertook the study, "Planning and Design for Juvenile Justice," for the LEAA. Nevertheless, this implicit assumption is one in which most architects have some degree of investment. The efficacy of the actual programs with or without consideration of the physical environment has become crucial, for even that too is in doubt. Roger Martinson, a sociologist with the City College of New York, has culled through hundreds of studies that were carried out between 1945 and 1967. After tossing out all but 231 for faulty methodology,

Martinson concluded that rehabilitation did not work. In other words, measured against the only index of rehabilitation's effectiveness—the rate of recidivism—the attempt to change prisoners to law-abiding citizens through education, work programs, recreation opportunities, visiting rights, etc., had no distinct results.

While none of the studies specifically dealt with the physical environment as a factor affecting rehabilitation programs and recidivism, Martinson suggests that the best a humane environment will do is further "institutional adjustment." A prisoner may return to crime once out on the streets, but while he is locked up in a hu-

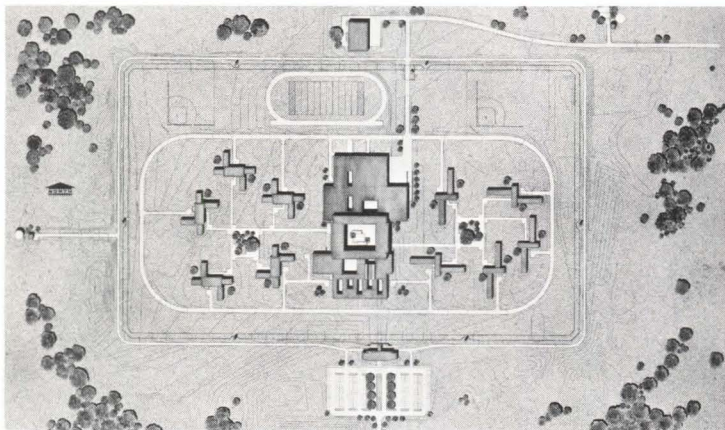
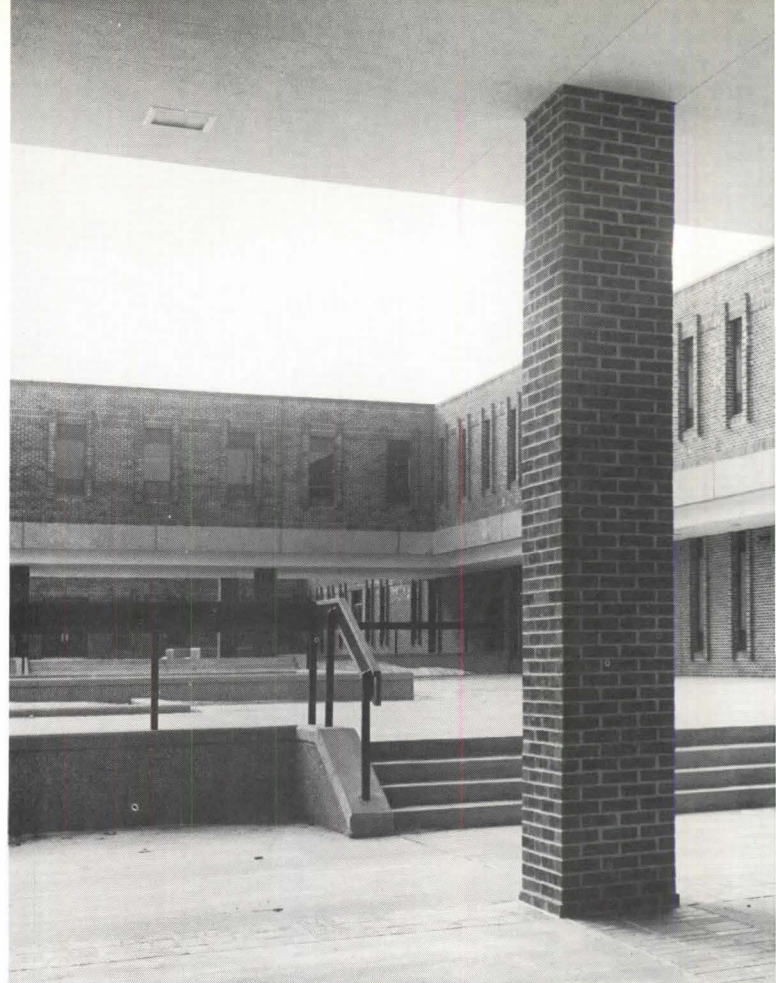
Wisconsin Correctional Institution for Youthful Offenders

Since the 1973 National Advisory Commission on Criminal Justice Standards and Goals recommended that: "No new major institutions for juveniles be built under any circumstances" and "all major institutions for juveniles should be phased out over the next five year period", by their standards, this institution for 16 to 21 year olds is obsolete. And it hasn't even opened yet. There are also the usual location and population problems.

With luck, Adams County could

be converted to a maximum security institution for adult hard-core criminals outside of the community corrections system, should youth correction centers go. For that possibility, Adams County would provide a humane environment with nine separate one-story units each housing 56 inmates in single rooms. A town square enclosed by dining, library and shopping services building for academic (right bottom), is embedded in a matrix of facilities for other activities such as the gymnasium to the north (site plan below) or the administration, visiting and infirmary facilities to the south.

Small interior courtyards punctuate this 218,880 sq. ft. complex of buildings, all linked to the main square through free ground level space of the two-story central building (right, top). Covered walkways on either side of the small courtyards, provide further protection to the pedestrians.



mane atmosphere, there is less likelihood that he will riot or show hostile, aggressive behavior.

It may seem strange that prisoners treated like human beings and given back their sense of identity, individuality, and territoriality, wouldn't become more like human beings when released. One factor, of course, is the nature of the criminal mind itself. Another factor William Nagel poses would be the condition of confinement. As he writes in the *New Red Barn*, "It is our view after thoughtful and painful observation that confinement, even in the Taj Mahal, is counterproductive." There are other factors that conceivably could interfere with

the effects of architecture on prisoner attitudes—the program, inmate subculture, and the relationship to the guards.

Because of the presence of these complex variables and their interrelationship, the prison situation, from the point of view of the inmates, will always be difficult to test. Of course there is another group that comes to mind, not as readily affected by intermediary variables—the guards. While they are unconfined in the evenings, are not restricted to relating only to inmates or other guards, or being subjected to any number of psychological constraints, they are still "doing time" eight hours a day. The physical environment may have some ef-

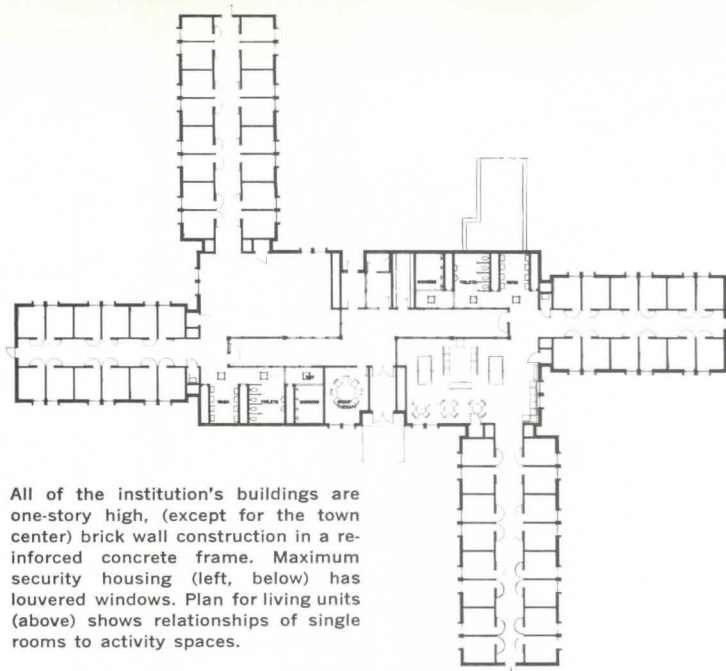
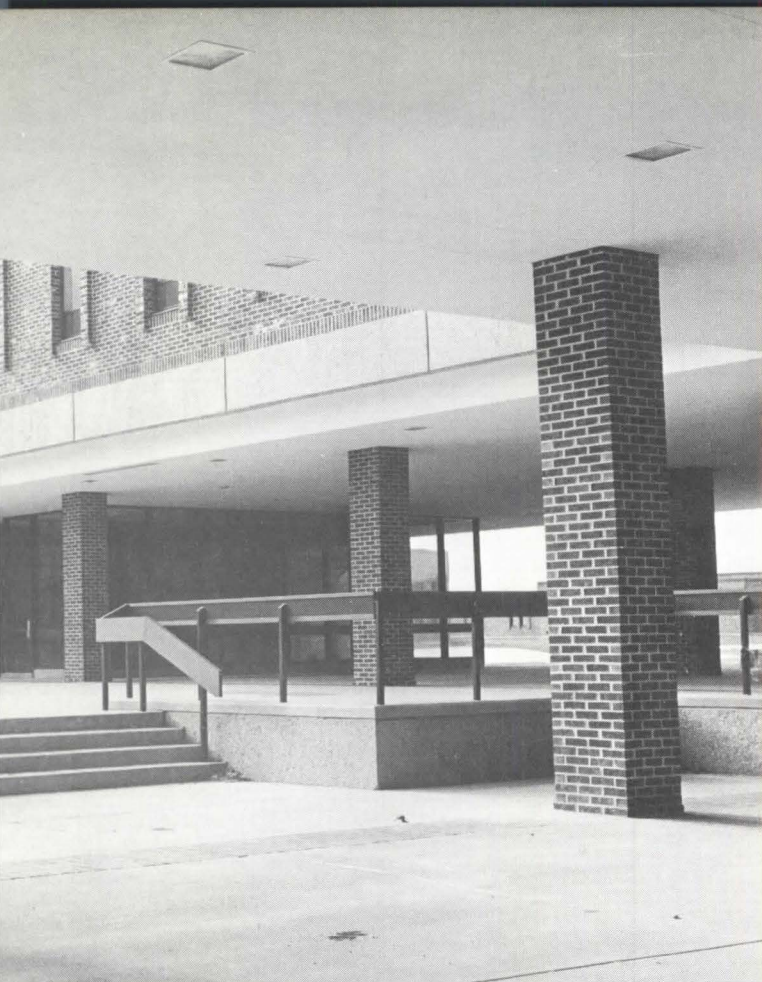
fect on their attitudes, and what they do and do not do to inmates. For example, the ample use of large panes of glass at New Jersey State Penitentiary in Leesburg (Gruzen & Partners) is widely considered to be a factor in the guards' improved relationships toward the inmates, due to the possibility that any burst of anger would result in shattered glass.

In Lieu of the Perfect Prison

In the current phraseology of correctional reform, "reintegration" and "community-based corrections" rank highest in usage and popularity. The complete overhaul of the criminal justice system recommended by the National Advisory Commission on

Criminal Justice Standards and Goals of 1973 focuses on the community correction concept as a method for dealing with a potential 85% of the present prison population. A good proportion of this 85% would not even qualify as correctional cases, since the Advisory Commission also argues that victimless offenses be removed from the criminal code.

The National Advisory Commission describes community-based corrections programs as depending on "diversion from confinement, referral activities, intake services and a broad scope of activities." Local correctional facilities should offer work and study release, home furloughs, and offender involve-



All of the institution's buildings are one-story high, (except for the town center) brick wall construction in a reinforced concrete frame. Maximum security housing (left, below) has louvered windows. Plan for living units (above) shows relationships of single rooms to activity spaces.

FACTS AND FIGURES

Wisconsin Correctional Institution for Youthful Offenders, Adams County, Wisconsin. Owners: Board of Adams County Commissioners. Architect: Durrant/Deininger/Dommer/Kramer & Gordon. Curtis & Davis. Associates-in-Charge: Sidney Folse, Fritz Suchke. Landscape Architect: Bruce Construction Co., Hugh Dega and Associates. Contractors: Hoffman Co. (general); Superior - Hutaneier (mechanical); Westphal (electrical). Building area: 366,637 sq. ft. Land and Site Development Cost: \$1,500,875. Construction Cost: \$5,455,715. (For a listing of key products used in this building, see p. 77.)

PHOTOGRAPHS: Image Studios, Inc.

ment in community programs. Three underlying factors explain the rationale for community-based corrections: The humanitarian belief that no one should be subjected to more control than he requires; the restorative belief of helping the offender achieve a position in the community in which he does not violate the laws; and the managerial need to protect the general public. Institutions such as the prison or jail as we know them, the Commission concludes, should eventually be completely abolished. Acknowledging that some types of offenders must be isolated from society now, the Commission indicates that prisons of the maximum security type will have to

exist for a while. Nevertheless, they contend that the number already in existence could be modified and improved, without additional major institutions being built: there are 350 major adult correctional institutions and 200 major juvenile institutions in the U.S. already. Costs for constructing new facilities run as high as \$30,000 to \$45,000 per inmate.

Director Fred Moyer and Associate Director Edith Flynn of the National Clearinghouse for Correctional Programming and Architecture have devised various plans and models to illustrate the ways in which community-based corrections could be implemented. Their ideas, well documented in the newly

produced Correctional Master Plan for Hawaii, emphasize diversions and alternatives to incarceration depending on an exhaustive profile of the offender, his problems and needs. In designing a correctional system, they espouse an "open system" approach, a programming methodology that can identify correctional problems of an area, inventory current detention practices, and assess alternative programs and community resources.

The alternatives and diversion include a host of programs that would deal with potential offenders, as well as those already arrested. Who is handled in the system and how he is handled, would depend on the offenses, and sophisticated classification

techniques. For example, alcoholics would be treated in detoxification centers and in residential treatment programs, drug addicts in medical programs, and sex-related offenses, depending on the type, in psychological programs. Misdemeanants could be placed in intensive probationary programs before trial and after conviction, and convicted felons could be housed in halfway houses, etc. Moyer also acknowledges that the dangerous intractable criminals wouldn't be eligible for this community-based program.

In the Hawaii master plan, Moyer and Flynn describe two institutional types of community facilities that will replace the jail and the prison. The first is

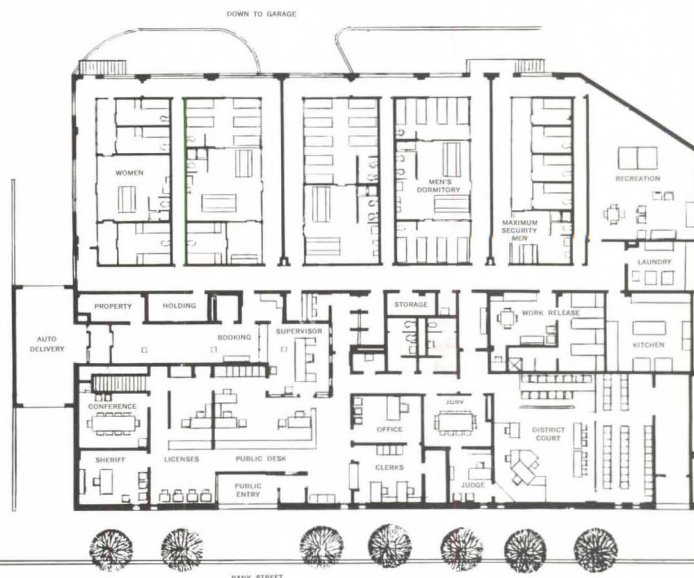
Shoshone County Public Safety Facility

The renovation of old buildings such as this car repair shop (photo below) in Wallace, Idaho, can solve current needs for a correctional facility without the financial investment and permanence of a new complex. The conversion cost for the masonry and concrete structure was \$700,000, of which 36% was paid for by LEAA funding for renovations (Part C, Omnibus Crime Control Act). In National Clearinghouse terms, (pages 37-40) however, the holding facility would still qualify as a jail in the traditional sense: detainees are housed in dormitory cell blocks on the interior of the building with metal grill partitions (plan, right). Recreation and visiting spaces are at a minimum; other recommended educational, medical counselling services non-existent. Architects Walker, McGough, Foltz, Lyerla, cite costs in the trimmed amenities for the 62 person facility, as well as the need to provide space for sheriff, deputies, prosecutor.



FACTS AND FIGURES

Shoshone County Public Safety Facility, Wallace, Idaho. Owner: Board of Shoshone County Commissioners. Architect: Walker / McGough / Foltz / Lyerla. Spokane, Wash. Associate-in-Charge: Gordon E. Ruehl. Engineer: J. M. Doyle (electrical). Contractors: Construction Development Corporation (general); Warren, Little, Lund (mechanical); Mott Electric Inc. (electrical). Building area: 16,958 (12,500 unfinished garage) sq. ft. Land site development cost: \$6500. Construction Cost: \$667,848. Furnishings and equipment cost: \$46,990. (For a listing of key products used in this building, see p. 74.)



an Intake Service Center that would screen, classify and make recommendations for diversions of pre-trial offenders. Generally, most alleged offenders could be screened within 24 hours, yet for more complicated cases, other measures would be necessary. Nevertheless, the screening and pre-sentence report would require at the most 14 days.

The primary facility type that characterizes the community corrections program is the Community Corrections Center. The CCC is an intensive treatment facility for a maximum of 300 pre-trial and convicted offenders unable or not ready to be released to any of the host of non-institutional community

programs. While the offenders would be restricted to the center the entire duration of their stay (ideally only 35 days), medical, educational, and social services could be made easily available to them by virtue of the center's location. And a CCC would be more convenient to the inmate's family and friends, and be able to provide vocational counseling and training of a more realistic nature. Even pre-trial felons and misdemeanants requiring prolonged security while waiting trial would have programs and services available on a voluntary basis.

Because of shared community resources, the operating costs of such a facility could be drastically reduced. As O. J. Keller,

Director of Florida's Division of Youth Services, has pointed out, the problem with an isolated institution is that it must operate like a small city, with its own power plant, laundry facilities, food preparation and in-house services. Because of these factors, he estimates a community-based center could cut operating costs by a third.

A smaller type of facility supplementing the Community Corrections Center would be the Residential Treatment Center, much like a half-way house. Whereas at the community center the inmate is still confined, the half-way house or RTC would allow the offender to be released during the day to work in the community. Since the

RTC's would have a small resident population of thirty, some could be specialized for certain offenders, such as narcotics addicts. Other after-care services and counseling would be developed to support the network of residential facilities, and ease the offenders' reintegration into community life.

For rural areas another type of facility would be needed—a Regional Correctional Center. While the regional center would serve the same types of offenders as the community correctional center, all the resources would have to be provided from within, since they would not likely be available in the surrounding small towns.

To further explain how the

Manitoba Youth Center

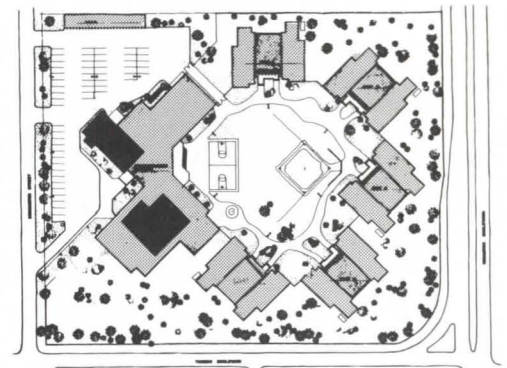
This facility for 150 youthful offenders is located in a residential part of Winnipeg — two pluses in its favor if correctional experts weren't recommending phasing out this kind of facility completely. Nevertheless the different kinds of spaces allotted for various types of interaction among inmates is unique: five housing units for 30 youths each surround an outdoor recreation area (plan, far right). Inside each unit a hierarchy of private to public spaces is found (plan, right) based on the recommendations of pre-design consulting architect Kenneth McReynolds (page 49) to architects Pratt, Lindgren, Snider, Tomcej. Buildings have brick-load bearing walls with poured in-place concrete floor and ceiling systems. Interior partitions are masonry and concrete block.



FACTS AND FIGURES

Manitoba Youth Center, Winnipeg, Canada. Owner: Department of Health and Social Development. Architects: Pratt, Lindgren, Snider, Tomcej and Associates. Project Architect: Ken Snider. Engineers: Crosier, Greenberg (structural); Scouten, Mitchell, Sigurdson (mechanical). Contractor: Taubensee Construction (general); Master Plumbing and Heating (mechanical); Raber Electric (electrical). Building area: 78,000 sq. ft. Land Development and Construction Costs: \$2.7 million.

PHOTOGRAPHS: Glen Robinson.



The main building (approximately 36,000 sq. ft.) houses administration, admission, dining in three separate areas, education, indoor recreation (photo, top). In each of the living units (8,475 sq. ft.) two wings (left) have their own "inactive recreation" space, carpeted to permit casual sitting. Supervisory station is also located here.

new system would work according to the Hawaii model, Moyer describes a few of the possible alternatives for four hypothetical offenders: Joe, Sam, Bill and Peter.

Joe is suspected of murder and rape. After arraignment he would go to the Intake Service Center for screening and classification, but because the crime precludes eligibility for release in the pre-trial period, he would go on to the Community Corrections Center to await adjudication. The CCC he would be sent to would have to have high security provisions; if it were located in an urban area where there was a great demand for high security centers and there were other CCC's,

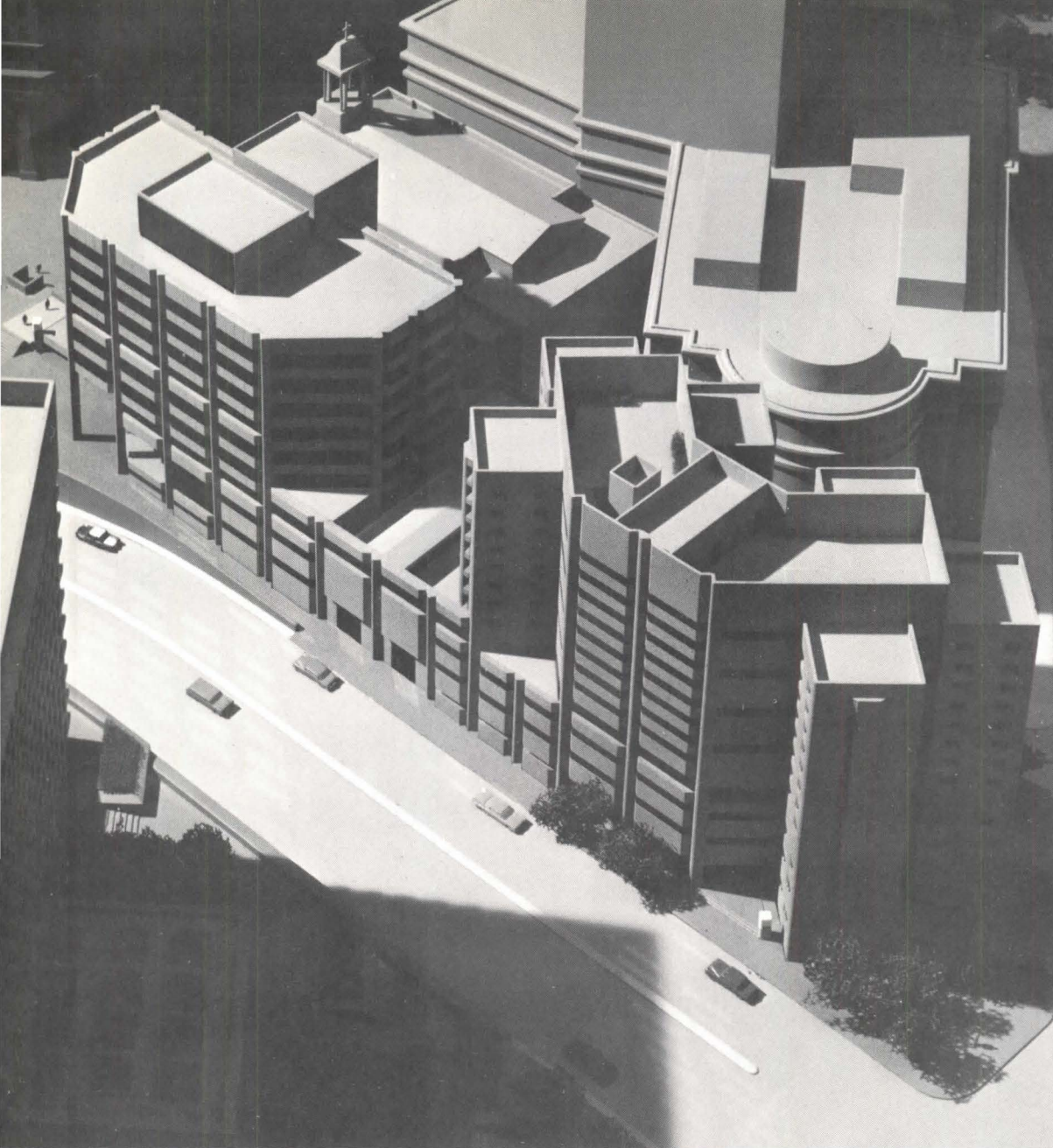
Joe's center might be entirely designed for high security. If Joe were found guilty and classified as high-risk (depending on various factors), he would then go to a prison, the type common now. Since not enough is known about Joe (the hard-core or dangerous criminal), he would have to serve time in an isolated maximum-security prison while other environments are investigated and developed.

Sam is arrested for armed robbery, a felony. After initial screening at the ISC, he is shifted to the Community Corrections Center, where he would be incarcerated, because evidence pointed to the likelihood that he would not appear at his trial. Between the time he is

found guilty and the time he is sentenced, a pre-sentence report is made; he may even return to the ISC for a week to facilitate this measure. The report would, according to his make-up and past, etc., provide recommendations for his treatment following sentence. Because he is a first-time felon, he might have a whole range of options, although in the case of Sam, who has a record of minor arrests, it is decided to send him to the CCC for 30 days, before he is permitted to undergo the supervised work-release program operating out of the Residential Treatment Center.

Bill is caught stealing less than \$150 worth of goods. Since this offense is a misdemeanor,

he would go to the ISC for a day or two to be screened, and a report made up. Then he is released while awaiting his trial. (There are all kinds of release programs, in this case Bill is asked to report in once a day to the Center.) When Bill, a third-time offender, is found guilty, the ISC recommends that he have some close supervision following conviction. But instead of going to the CCC they decide it might be more beneficial for him to go into the Residential Treatment Center, where he would be allowed to work during the day, but receive counseling. After a month or two, it is felt that Bill can be allowed out at night, too, although the corrections officials will contin-



Metropolitan Correctional Center, New York City

The Federal Bureau of Prisons plans to construct five metropolitan correctional centers in Philadelphia, San Diego, San Francisco, Chicago, and New York. All these MCC's represent current concepts the Federal Bureau endorses for detention of pre-trial detainees.

The New York MCC, designed by Gruzen & Partners will replace the West Street jail, and be part of the Foley Square Courthouse Annex along with an office building for court attorneys (left). Both occupy a narrow 60,000 sq. ft. site immediately adjacent to the Federal Courthouse.

The program for the detention center recognized that the 400 detainees to be housed there are presumed innocent until adjudication, and are only detained to ensure appearance at trial. The MCC will engage in pre-trial observation and study reports on sentencing or disposition following trial. Those convicted offenders not suitable for probation, yet not requiring extended prison terms, would also be housed for short-term care. Another aspect of the MCC's program is a Community Treatment Center for inmates returning from prison on work-release programs.

ue to provide after-care services and keep track of him for about two years.

Peter, a rural resident, is arrested on charges for stealing more than \$150 worth of valuables and therefore categorized as a felon. Since the local community in which he lives is too small to have Intake Service Centers and Community Correctional Centers, he goes first to the local holding facility, the jail. He would be evaluated by a mobile classification team there, and then transferred within a few days to a Regional Correctional Center to await trial, or be released on some kind of alternate program. (Incidentally, Moyer inserts, Baton Rouge has the first mobile classification

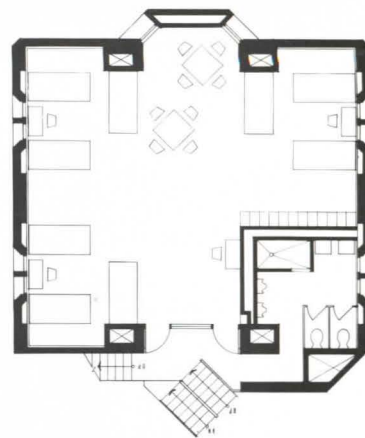
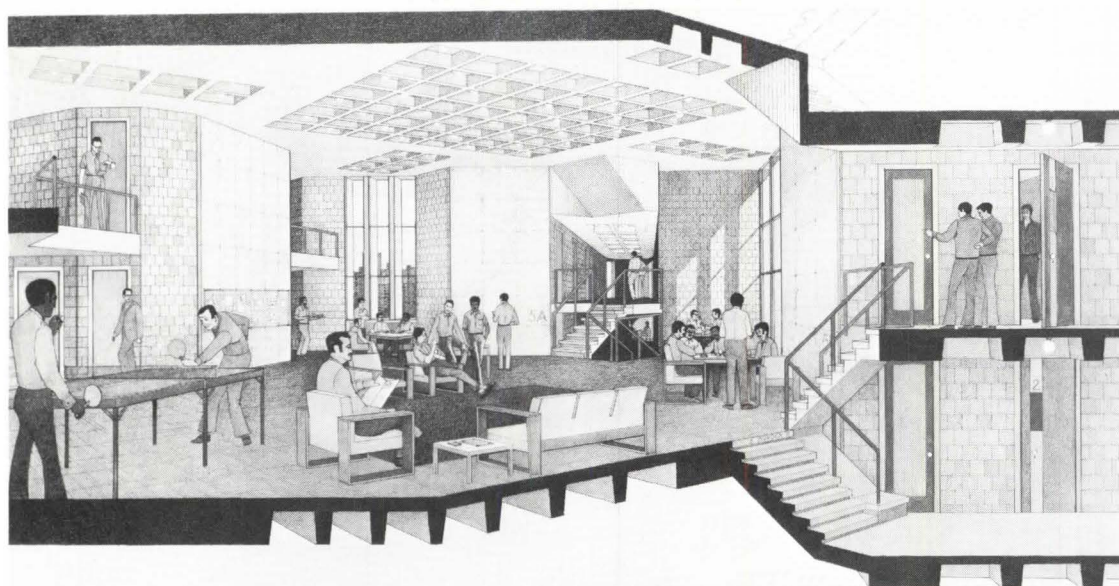
service. Called Community Correctional Research Center Inc., it was funded with a LEAA grant to serve five rural counties. It provides pre-sentence investigating, psychological and educational testing.) In Peter's case, the testing service suggested he be given an alternate program of "conditional release with deferred adjudication." In this instance an offender is brought to trial but the actual trial procedure is deferred for a time to judge the offender's performance as a released person. Adjudication may be deferred as long as a year, depending on his behavior. At the trial charges may be dropped, Peter may receive a lighter sentence, or he may be kept at the RCC for a

short period of time. At the RCC he can get specialized training in such things as road-building or welding, plus vocational and educational guidance. After his stay there, he may be diverted to a pre-release center if it exists in one of the towns, or a specially-established rooming house with a correctional program.

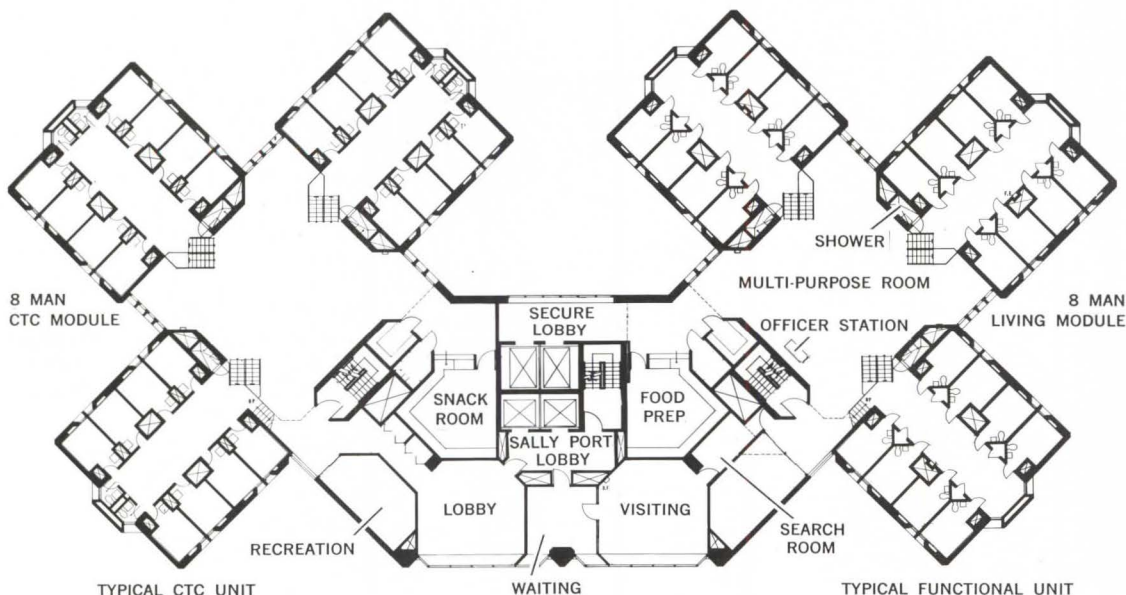
Architectural Treatment of New Facility Types

The three institutional models that emerge from these recommendations are the Intake Service Center, the Community Corrections Center, and the Residential Treatment Center. Of these three, only the Intake Service Center, Community Cor-

rections Center and its rural counterpart, the Regional Corrections Center, would most apparently dictate new facilities. And these would be of a small scale, small capacity type. In fact, Moyer suggests that even Intake Service Centers could be housed in C.C.C.'s. Residential Treatment Centers could more or less fit into old existing houses; as O.J. Keller suggests, often a white elephant can be bought on the market for as little as \$25,000 to be converted into a half-way house. Both Keller and Norval Morris, Professor of Law and Criminology at the University of Chicago, urge that community treatment centers be as anonymous as possible in their architectural han-



The architects have created "Functional Living Units" from the fourth to eleventh floors of the building. Each floor is divided into two wings of three residential modules surrounding a multi-purpose room. The multi-purpose room is double-height (18 ft.) so that it may serve two levels of the eight single-room modules (left, bottom) or dormitory modules (top). In addition, multi-purpose rooms have been stacked a half-level up from the inmate rooms; thus visibility on both levels is afforded from the central room (left, top). The central core area has a mezzanine level containing classrooms and offices.



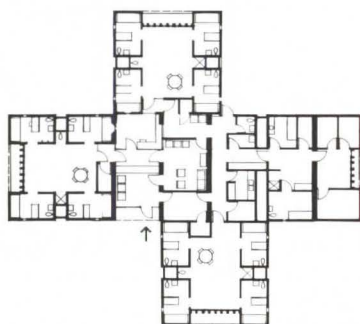
PROJECT DATA

Metropolitan Correctional Center, New York, N.Y. Client: The GSA and Federal Bureau of Prisons. Architects: Gruzen & Partners. Partners in charge: Jordan Gruzen and Lloyd Fleishman. Site: Approximately 60,000 sq. ft. on Park Row behind Federal Court House on Foley Square. Building Area: 210,000 sq. ft. Structure and Materials: Poured reinforced concrete construction; masonry block interior walls; metal pan coffered floor slabs. Engineers: Strobel & Rongved (structural); Cosentini Associates (mechanical). Landscape Architect: Friedberg Assoc. PHOTOGRAPHS: Louis Checkman.

ding, fit closely in with the neighborhood fabric and not give any unnecessary indication of their function.

Adaptability and flexibility are key elements in the new facilities, but not only for the usual reasons of meeting changing needs of the program. As Moyer explains, problem crime areas may be shifting; this consideration, coupled with the probability that the dimensions of the crime problem are likely to expand and contract in any given area, would call for a physical structure with some mobility. Moyer has been investigating an industrialized building system composed of modular concrete boxes for application in community correc-

tional centers and small holding facilities in rural areas. When the need arises, these boxes can be relocated with only the foundations left behind. This type of structure also can be easily adapted to "infill" construction on scattered urban



Modular system application.

sites, or to expansion of existing facilities.

New York Architect Ken Ricci proposes an "adaptive building design approach": The structure and various subsystems would have predetermined life spans, and subsystems in particular would be designed for easy installation and removal.

Many of the same design considerations would pertain that are applied to the most humane prison and jail design. The only difference is that these considerations, outlined in the National Clearinghouse's "Guidelines for the Planning and Design Regional and Community Correctional Centers for Adults," would be creating physical environments for the right people and

in the appropriate place.

Getting from Here to There

That is the question. The National Advisory Commission has expressed the hope that the new criminal justice system will be implemented under coordinated state-administered programs by 1982. They also urge that all local jurisdictions begin formulating diversion programs for pre-trial offenders by 1975. Yet transition tends to be rocky, especially when the complete transformation of an entire system is called for. For this reason the Commission wants to divert as much energy and money available into the transitional programmatic changes—and not into new buildings.

Federal Center for Correctional Research, North Carolina

An unusual research facility is being planned for Butner, North Carolina, by the Federal Bureau of Prisons. Under the directorship of psychiatrist Dr. Martin Groder, the Center will house 144 short-term mentally ill patients and 200 others who will be in an experimental rehabilitation program. The latter group is in what has been called "behavioral modification", thus provoking criticism from correction professionals who envision the sort of treatment that knocked the "yarbles" out of Alex in *Clockwork Orange*. Dr. Groder stresses that the experimental rehabilitation techniques are still being evaluated, but will not be dehumanizing.

Architects Middleton, Wilkerson McMillan have organized residential units in relation to a "town center" comprised of cafeteria, shops, educational facilities, and infirmary around a "community green", bordered by a colonnade-type walkway. In the middle of the green stands a small chapel and auditorium

building. Visitors entering the Center are directed to the green (top) through a triangular courtyard and portal carved out of one corner to the main activities building.

Residential units are divided into two neighborhoods: One, a cluster of three trefoil-shaped buildings for the mentally ill, will house 64 adult men in the largest unit and 40 inmates in each of the two smaller buildings (one for adolescent males, the other for women). Most inmates are housed in single rooms with their own windows in the folded 45 degree angle walls.

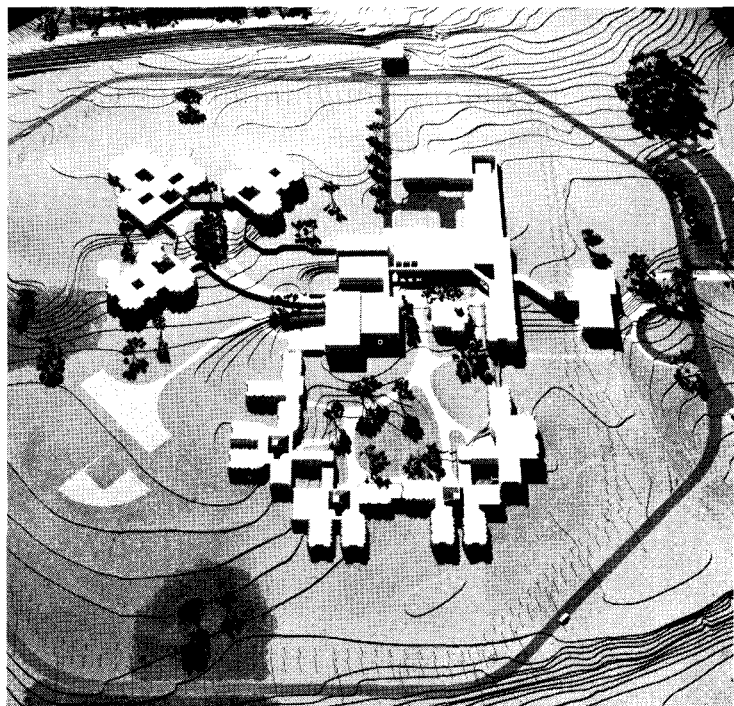
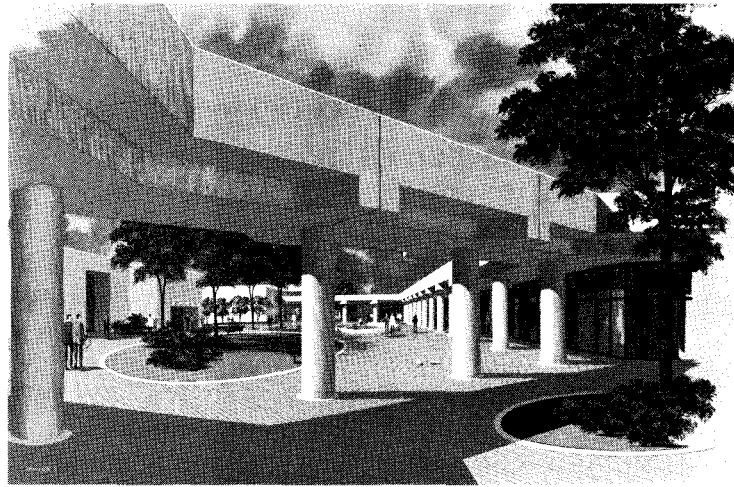
The other neighborhood, a grouping of rectangular units for the experimental rehabilitation program, will accommodate 50 prisoners in each of the four units. Most will have single rooms except for three dormitory spaces in three of the units.

Buildings are all single story except for the double height glass pyramidal skylights covering the main 764 sq. ft. activity areas in each of the residential structures.

PROJECT DATA

Federal Center for Correctional Research, Butner, North Carolina. Client: FBP and GSA. Architects: Middleton, Wilkerson, McMillan. Project Architect: Donald Touchstone. Site: 42 acres in a rural area. Building area: 256,000 sq. ft. Structure and Materials: Primarily precast concrete frame and precast panels with raked finishes. Poured in place concrete construction used for slab walls and canopies. Glazing, polycarbonate sheet.

PHOTOGRAPHS: Gordon Schenks Jr.



Programs already underway will provide some kind of impetus and encouragement regarding the efficacy of certain alternatives and methods for making them more effective.

Half-way houses, the present counterpart of the Residential Treatment Center, have been gaining wide acceptance in both the U.S. and Canada. Last year 16% of all the Federal penitentiary convicts released went through half-way house programs—three times as many as in 1966, a figure that indicates the Federal government's growing interest in this kind of program. Unfortunately the effect of half-way house programs on the rate of recidivism hasn't been easy to assess, because

programs vary from good to bad, and selection processes tend to weed out the hardened criminals. Advocates of half-way houses claim that they are very successful, with a recidivism rate of 20% as compared with the purported 60% recidivism rate of prisons. Gerald Collins, a Federal Bureau of Prisons official, claims that recidivism has only been reduced by about 5 to 10 percent through half-way house programs, with results more encouraging for older men. But Collins remains optimistic about a community-based program that, instead of dealing with offenders on an in-house basis, would divert them outside the facility to help them solve social, psychological, and economic

problems that exist in that community. Tadeusz Grygier, Director of the University of Ottawa's Center of Criminology, conducted a study of half-way houses in Canada in 1970 and found that while half-way houses are less expensive than maintaining the same offender in prison, they are nevertheless costly. Because small size is necessary for treatment, Grygier observes, the house become expensive to run. Collins estimates that costs could run up to \$6000 a year for a half-way house resident, slightly higher than confinement costs in an institution. (Of course if it works it is less expensive for society in the long run.)

One of the problems cur-

rently confronting half-way houses, and a sure-fire obstacle to future community-based facilities, is the community opposition to such intrusions into their neighborhoods. Residential communities from which the offenders came are considered optimal locations, but zoning measures may keep the half-way houses out.

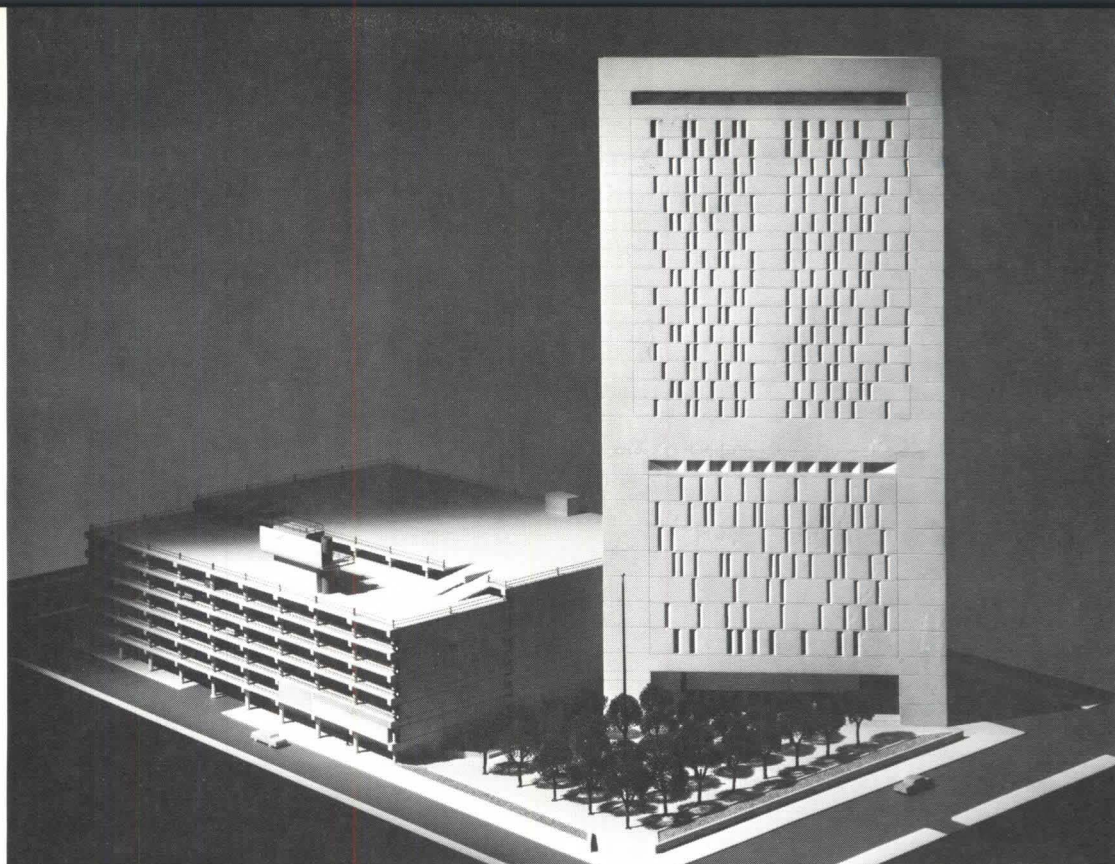
The NCCD has been directing various community-based programs, including the Community Integration Project in Glendon Brough, Pa., sponsored by the Department of Labor. The program provides a complete alternative to imprisonment—in other words, a selected group of offenders serve time in a supervised community residence, and

Metropolitan Correction Center, Chicago

This triangular tower for downtown Chicago will accommodate 250 federal detainees awaiting trial and 88 convicted prisoners who receive light sentences. Considering the inmate population, the five-inch wide slit windows that block light and views, seem unnecessary.

The plan itself for the 27-story has many sensible features. Inmates are housed in 22 single rooms around the perimeter of the building on every floor. Furniture in the rooms will be built-in with carpeting throughout for acoustical treatment. Every two levels shares a double height dayroom defined by six columns at the core of the structure (plans far right). Dayrooms are stacked and pulled a half level above the two levels of inmate rooms (section, middle) to allow for surveillance. Residual space at the interior of the triangle on each floor permits smaller areas for activities so that every floor is self-contained — a mandatory requirement to prevent overloaded elevators.

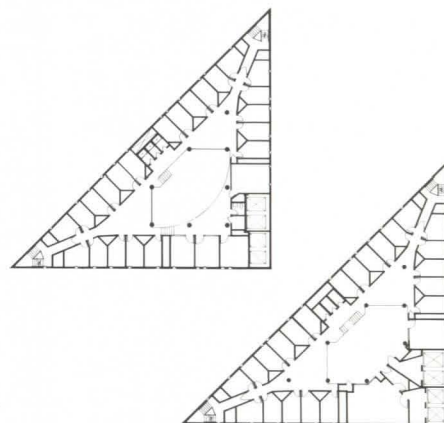
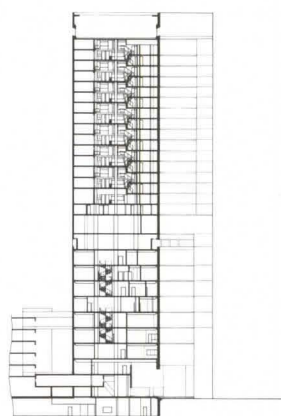
The tower shares a site with an eight-level garage 319,000 sq. ft. that uses a 25 ft. 6 inch by 60 ft., 6 inch structural bay for long clear spans, and thus accommodates 865 cars.



PROJECT DATA

Metropolitan Correction Center, U.S. Courthouse Annex, Chicago, Illinois. Client: Federal Bureau of Prisons, GSA. Architects: Harry Weese & Associates. Engineers: Severud & Associates (structural); Nachman, Urage & Associates (mechanical & electrical). Site: 78,000 sq. ft. Building Area: 175,000 sq. ft. Structure and materials: Reinforced, poured in place concrete construction, bronze-tinted glass windows.

PHOTOGRAPHS: Hedrich-Blessing.



work in the steel factories nearby. The results of the program will be compared with prison statistics, and thus serve as an important experimental laboratory. All the participants must be employed, at minimum wage levels, so that they will be able to pay room and board and support the family. The NCCD has reported the cost of running the 30-man facility to be \$100,000 per year, as compared with the \$270,000 it would cost in Pennsylvania prisons. In 1970 in Des Moines, Iowa, the NCCD also initiated a pre-trial release program for offenders who could either post bail or had the credentials to be released on recognizance. Every day they reported to counselors and could be

required to attend classes on social, educational, medical problems. Files were kept on the offenders and issued prior to sentencing if the offender was found guilty. NCCD findings with the project showed that 98% of the offenders appeared at trial, that the new offense rate during release was the same as those out on bail (17.5%).

The Manhattan Bowery Project, run by the Vera Institute of Justice which first initiated the pioneering Release-on-Recognizance program in 1961 in New York, already illustrates the actions being taken to divert certain cases from the criminal justice system. A 50-bed detoxification center takes in drunks for examination, medication, and

sedation. After treatment they are deferred either to a residential camp upstate, to aftercare in state hospitals, or to the project's own aftercare clinic.

In Baltimore, ex-con Eddie Harris has formed the Pre-Trial Intervention project for early diversion of selected juvenile offenders. Instead of being adjudicated, the alleged offender spends ninety days in the center, during which time he is provided with education, counseling and general guidance. After this time he is released without a police record.

Finally, another current program of note is the American Bar Association's efforts in encouraging the establishment of statewide inspection and stand-

ards systems for jails, and the adoption of necessary legislation and procedures for compliance. The ABA has undertaken this effort in response to the deplorable condition in jails nationwide, since only eleven states have comprehensive legislation for jails and juvenile home inspection, definitive standards and procedures for action.

Dilemma for Architects

A question remains in the face of loud cries for a moratorium, the emphasis on community programs that often make use of existing facilities, and that far off day when jails and minimum and medium security prisons have been replaced with smaller

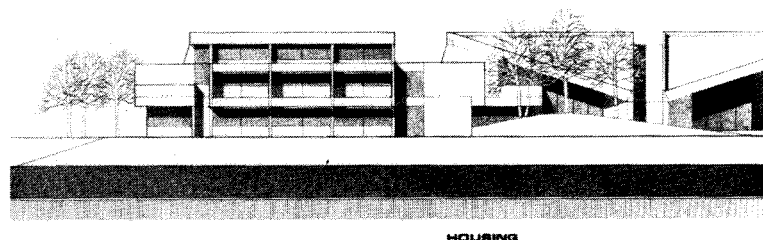
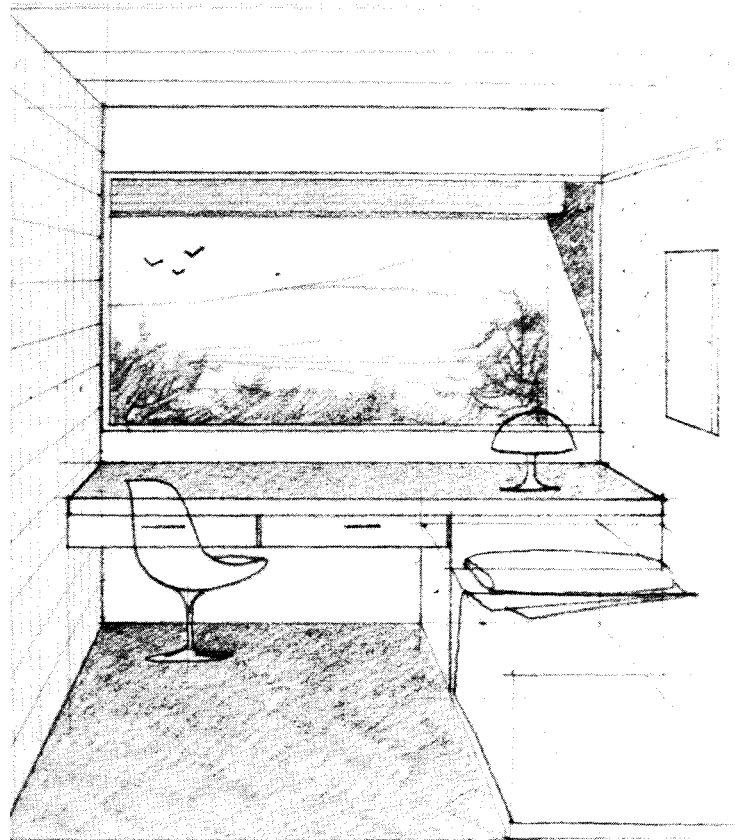
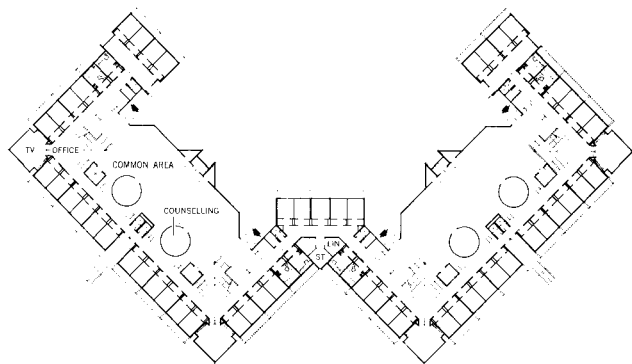
Federal Youth Center, California

This project will be the first of five youth centers the Federal Bureau of Prisons plans as part of a West Coast Regional Youth Rehabilitation Program. Each of the centers will have their rehabilitation programs tied closely into metropolitan areas nearby. This center is 30 miles east of San Francisco.

In designing this community-like complex for a rural site, architects Frank L. Hope & Associates acknowledged the current premise that the seriousness of the crime does not necessarily correspond to the security needed for the offender; that only 20% of the offenders actually need maximum-medium security. Thus security precautions only include a fence with an electronic alarm system.

Four housing complexes com-

prise residential living, arranged in pairs on either side of a town center of core facilities and services. Each housing complex has two or three levels (site section, below). Each level contains one unit of 16 single rooms and one of 12 single rooms, both organized around separate dayroom spaces. The housing complexes are joined at one corner to enclose a common court (plan). All rooms have a large 7 ft. 8 inch x 4 ft. 6 inch window wall of polycarbonate material with views directed away from the rest of the center (right). Core facilities around the manmade lake include recreation/dining in one building, vocational training, education and administration in another, plus medical, multi-purpose and other services in separate buildings around the lake.



HOUSING

budget facilities: what is left for the architect?

John Conrad, former Chief of Crime Prevention and Rehabilitation of the National Institute of Law Enforcement and Criminal Justice, and now a Senior Fellow at the Academy of Contemporary Problems, comments "Too often architects have unquestioningly accepted the specifications of their correctional clients."

This remark raises the oft-asked question of to what degree architects should be involved in influencing the type of facility they are asked to design, even to the extent of questioning the validity of constructing a facility at all. The dilemma facing the architectural profession at this

particular moment is revealed by brief case histories of three architects known for their correctional facility design.

Responses of Three Architects

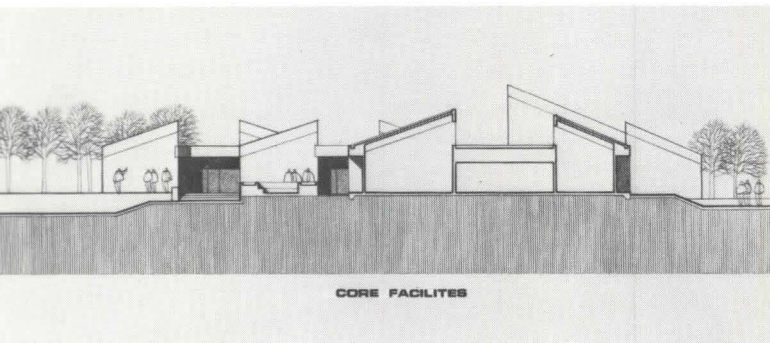
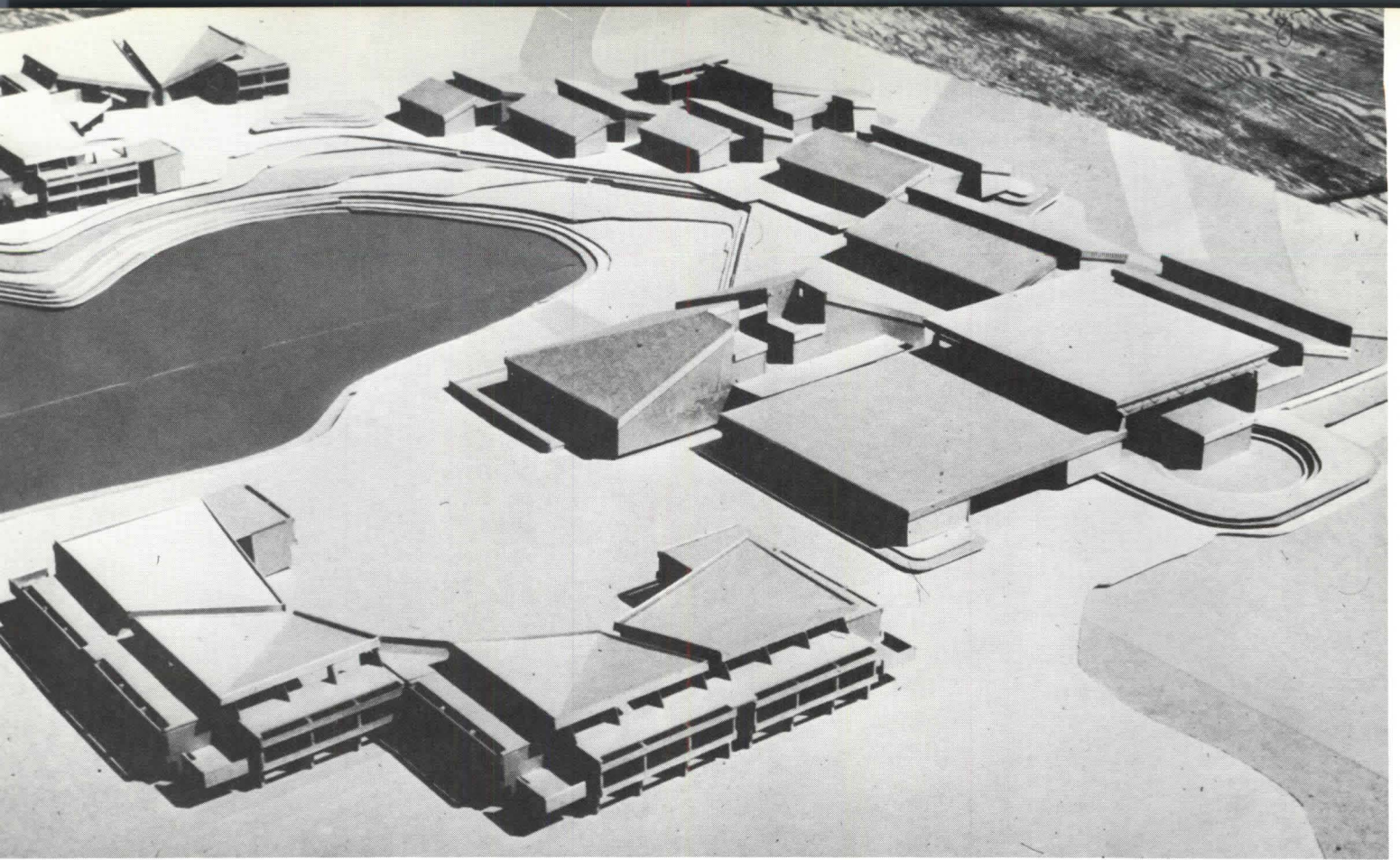
Orange County Jail, built in 1971, presents an anachronism to William Nagel, and exemplifies the type of design that has led him and Fred Moyer to back the moratorium on conventional jails and prisons. It is a large structure housing 1335 persons in a 4-story men's jail and 2-story women's center, and located in the Santa Ana, Cal. public service complex. The exterior, a series of cubic masses, embossed with bands of geometric fret work, recalls the Mayan Moderne of L.A. municipal build-

ings of the thirties, but rests on a precast column and beam structure more sixties in its technological allusions. Timeframes are melded inside too: The interior is frankly thirties-correctional combined with a security system out of 2000. Long tunnel corridors are separated from grilled cells by sheets of glass. Thus, the guards, as Alfred Gilbert, member of the Nagel team remarks, do not have to breathe the same air as the pre-trial detainees and sentenced misdemeanants. Guards talk to prisoners through one-way intercom devices and monitor their movements on closed circuit television. When the inmates move, cell doors slide open electronically; as they



Guard corridor, Orange County Jail.

approach other areas they enter sallyports again through electronically sliding doors, synchronized not to open at the same moment. Guards do patrol the cells, on mezzanine-like



PROJECT DATA

Federal Youth Center, Pleasanton, California. Client: United States Department of Justice, Bureau of Prisons. Administered by: General Services Administration. Architects: Frank L. Hope & Associates. Principal in Charge: J.M. Thornton. Project Manager: Edward J. Gee. Project Designer: Austris J. Vitols. Engineers: Frank L. Hope & Associates (structural); Marion, Cerbatos & Tomasi (mechanical & electrical); Creggan & D'Angelo (civil). Landscape Architects: Michael Painter & Associates. Construction Manager: Perini Corporation. Site: 87

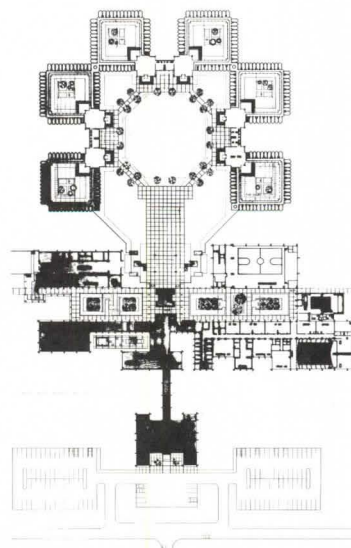
acres 30 miles east of San Francisco. Building Area: 122,000 sq. ft. Structure and materials: Housing units are precast concrete walls and precast floor and roof planks. Exterior wall infill panels are finished with wood. Core facilities are wood frame with laminated beam and deck roofing. Exterior wall finish is vertical redwood boards, roofs, seam metal. Building cost including site work: \$4,941,800.

walks half way between the double rows of cells, to have visibility on both levels. As Nagel reasons, the detainee who may be innocent, probably has a dozen questions each time he sees the guard, but can only get his attention by rattling his bars or shouting. Because of all the metal, the noise level is high, and since windows are only 5 inches wide, the interior is primarily suffused with a fluorescent aura.

When asked his reasons for building this maximum security facility, Miles Perlis, the project architect for the firm of Albert C. Martin Associates, explained that the program required a high-security facility for pre-trial detainees, some of whom

could prove dangerous to the surrounding community. He also felt that as an architect he should try to satisfy the client's (the warden) needs of maximum security with the most efficiency and economy possible.

The New Jersey State Prison at Leesburg has been often cited as an example of the best kind of correctional design existing. At the 500 man complex, designed by Gruzen & Partners of New York, six two-story high units, each with garden courts carved out of their centers border three sides of an extensive open landscaped green. On the fourth side of the green is a dining hall elevated above a plaza-type congregating level. The dining hall's glass window



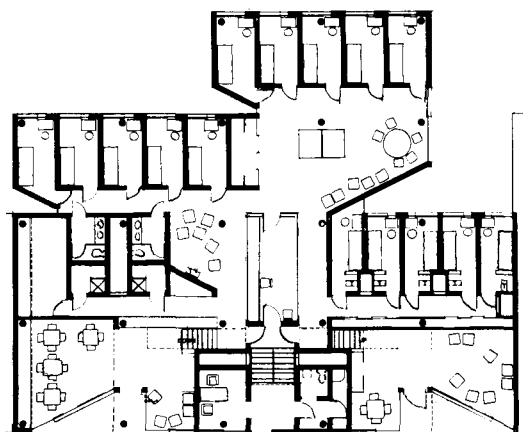
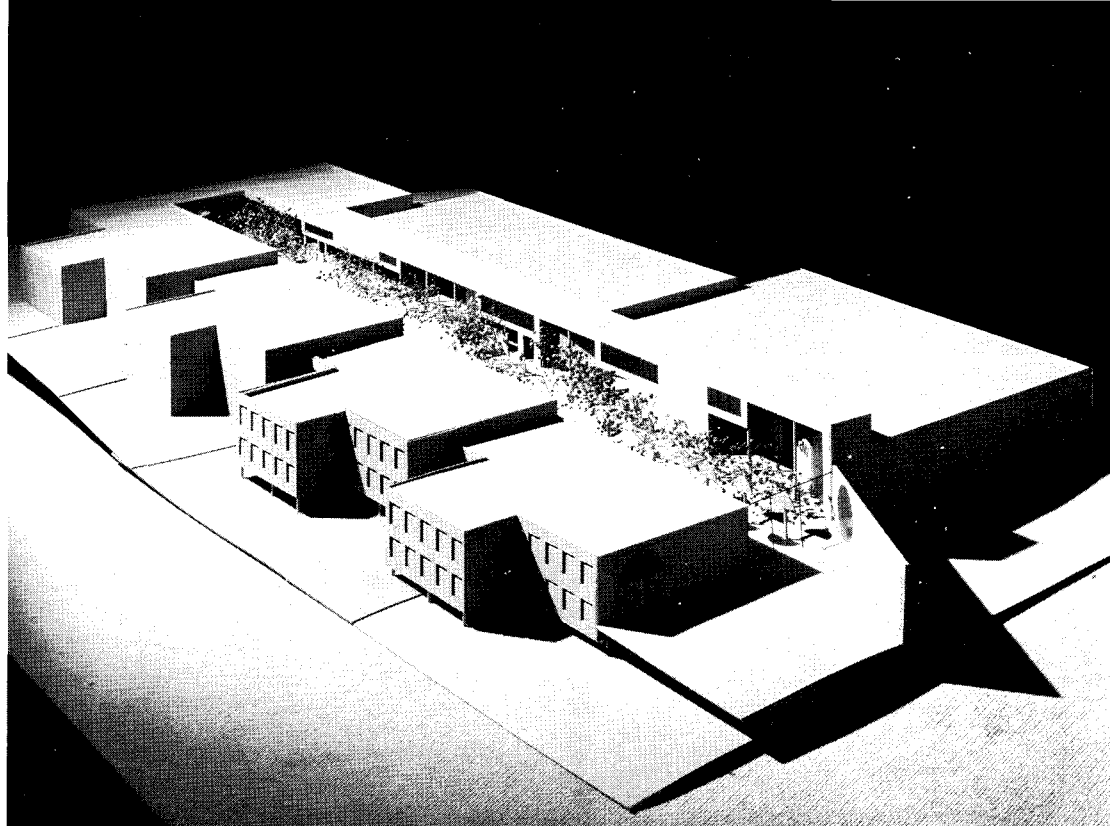
Plan, Leesburg Prison.

wall offers a non-barred view of the central court and the residential complexes. Adjoining the hall on a lateral axis are other facilities such as educational, recreational, religious spaces, also facing into courtyards, plus administrative offices. Vocational buildings are placed nearby.

The architectural elements at Leesburg form a catalogue of the requirements for a humane environment. Living units are small; there are only 42 one-man cells on each floor; and the individual courts (70' x 70') are easily accessible from the cells arranged on single loaded corridors facing the courts. Glass abounds and even each cell has natural light with an exterior

New Receiving Home for Children Washington, D. C.

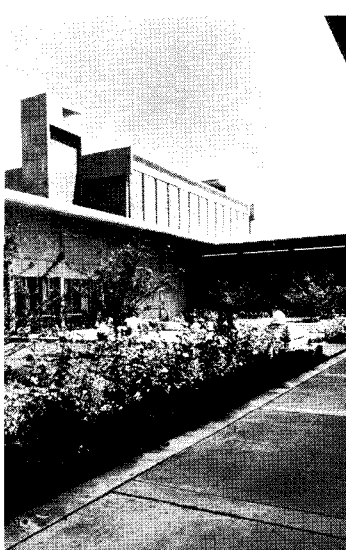
A 300-ft. long by 40 ft. wide street acts as the principle organizing element for this juvenile home. The home, to be built in a residential section of Washington, D.C., will accommodate 125 juveniles in private rooms arranged row-house style along this activity corridor. Across the street the other services—counselling, educational, visiting, administration (top)—plus recreational and arts and crafts will be located in a parallel structure. Living and dining areas (plan, right), are positioned halfway between the first and second bedroom levels so that one group of boys entering the unit from the street (plan, right) would descend a half-flight to bedrooms and dayrooms, while the other group would ascend a half-level.



PROJECT DATA

New Receiving Home for Children, Washington, D.C. Architects: Curtis and Davis, New York Office; Reg Griffith Associates. Partner in Charge of Design: Walter Rooney, Curtis and Davis. Project Architect: David Ziskin. Engineers: Ames & Seinick (structural); Joseph R. Loring (mechanical). Site: 22 acres in Blue Plains section of Washington, D.C. Building area: 85,000 sq. ft. Structure and Materials: Poured, reinforced concrete frame, with concrete block exterior and interior walls. Cost: \$5,115,000.

window, not to mention the glazed walls separating cells from courtyards. Each cell is designed for one man. Doors and windows of the rooms have no bars and rooms are painted bright colors. Day-rooms are located in each residential complex, but inmates can walk outside to other activities and to the dining hall, thereby making the sense of confinement less acute. Custody in this medium-security prison is facilitated through the inner-directed plan so that residential units form their own exterior wall. Cornices project with deep overhangs to prevent easy access to the roof and possible escape. (And just to make sure, a cyclone fence surrounds the outer regions of



Classroom courtyard, Leesburg.

the entire site.)

Nevertheless, correctional experts such as William Nagel find fault even with Leesburg. The major problem is the isolated location, in the most rural part of southern New Jersey, far from the inmate's families and friends in Newark and Jersey City, far from realistic work opportunities (the prison has a license plate industry), from educational resources, from urban areas where it would be possible to hire other than the white rural guards to man the mostly black population. The dining room too, despite an impressive view, has received some criticism: Recommended in the Guidelines and other correctional architecture reports are din-

ing rooms for small groups of inmates; a large dining hall is generally felt to convey too institutional an impression to inmates. Nagel acknowledges the reasons for placing Leesburg in a rural location: to provide employment; because states tend to own tracts of land in isolated spots; because citizens fight correctional facilities in urban neighborhoods; correctional administrators find rural staffs more desirable; because of the still existing belief in the "curative virtues of bucolic settings." Nevertheless he feels that "even a Leesburg" is doomed to failure because of this major flaw in its program.

Architect for the project, Jordan Gruzen, explains that

Community Corrections Center, New Haven

This Community Correctional Center for New Haven bears the mark of National Clearinghouse recommendations for advanced corrections programs (pages 37-40) despite the fact that the project did not receive LEAA funding.

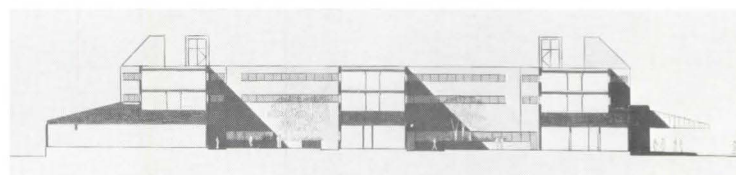
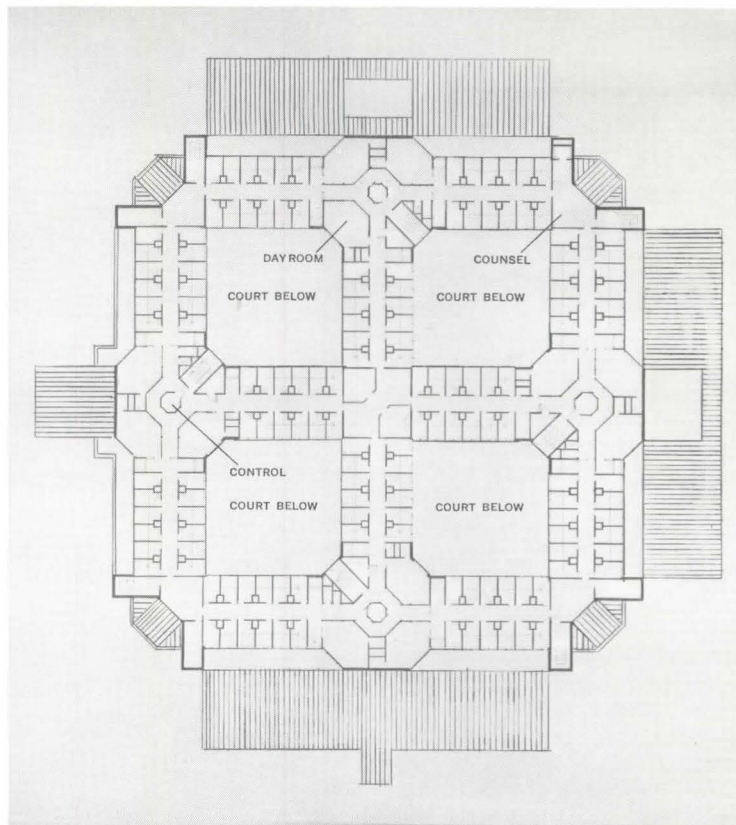
The three-story center provides single room accommodations for 168 male and female pre-trial detainees, 60 work-release inmates, 12 pre-release inmates, and 24 sentenced inmates — a total population of 264. The pre-trial detainees are provided with a battery of services uncommon in jails today: diagnostic for initial screening; treatment, research and social services counseling, plus educational and vocational training.

Architects Antinozzi Associates, with Curtis and Davis, have designed the building so that visitors entering the center are directed down to a lower level to a double height visiting room, with an adjoining outdoor court. The court comprises one of the four courtyards that penetrate the buildings (section, bottom right), the rest of which are used for recreation. Services and activities are all located at ground level with housing on the two levels above. Inmates' rooms

either overlook the courts or face out to the streets, through expansive window walls of laminated glass and plastic. Various wings are designated for different types of patients: work and pre-release are assigned to the wings that intersect the dayroom on the left (plan, right); sentenced offenders occupy the three wings that intersect at the dayroom on the opposite side, and pre-trial offenders occupy the central spine and top and bottom wings. Glass partitions divide dayrooms into smaller spaces, suitable for recreational and dining purposes. The women's dayroom occupies one-half of a small one-story wing on the Hudson Street side (elevation, middle). The wing is bounded by a small court and perimeter wall, and covered with a copper shed roof. A small court inside the wall separates this dayroom from the counselor's area. On the top floor an unfinished section allows for easy expansion.

PROJECT DATA

New Haven Community Correctional Center. New Haven, Connecticut. Client: State of Connecticut Department of Public Works, Department of Corrections. Architects: Antinozzi Associates. Associate Architects: Curtis and Davis Associates. Project Manager: Edoardo Leoncavallo; Curtis and Davis. Site: 90,000 sq. ft. Building Area: 100,000 sq. ft. Structure and materials: Precast load bearing panel and floor plank system made by Bison; ground floor will be poured-in place construction. Building Cost: \$5,000,000.00.



the site for the prison was determined long ago: The prison design was spurred by riots of 1952; the firm received the initial commission in 1958, and this design as now realized was initially conceived in 1962. Ten years ago, Gruzen explains, the architect accepted the program as dictated by the administrators. To get this particular scheme passed by all involved was a personal crusade, since the original program called for a telephone pole plan (page 51). Today, Gruzen adds, an architect is given more leverage to help formulate the initial program. About the dining room, Gruzen admits that his firm would not design one of that size today.

But despite Gruzen's claim that architects shape the program, his submission to the Washington, D.C. Department of Corrections Lorton Reservation, seems to belie this avowed influence. The D.C. officials have come under heavy criticism for the decision to double the population of Lorton with a new \$67 million complex of buildings for 2,000 men. Opponents insist that the location is too isolated and the population much too large for any concern other than custody to ever make itself felt. Gruzen Partner's submission implicitly accepts this added 2000 population as given, while modifying the institutional implications of such a scheme by parceling the popu-

lation into seven 200-400 man complexes of small residential units strung along enclosed streets, or spines.

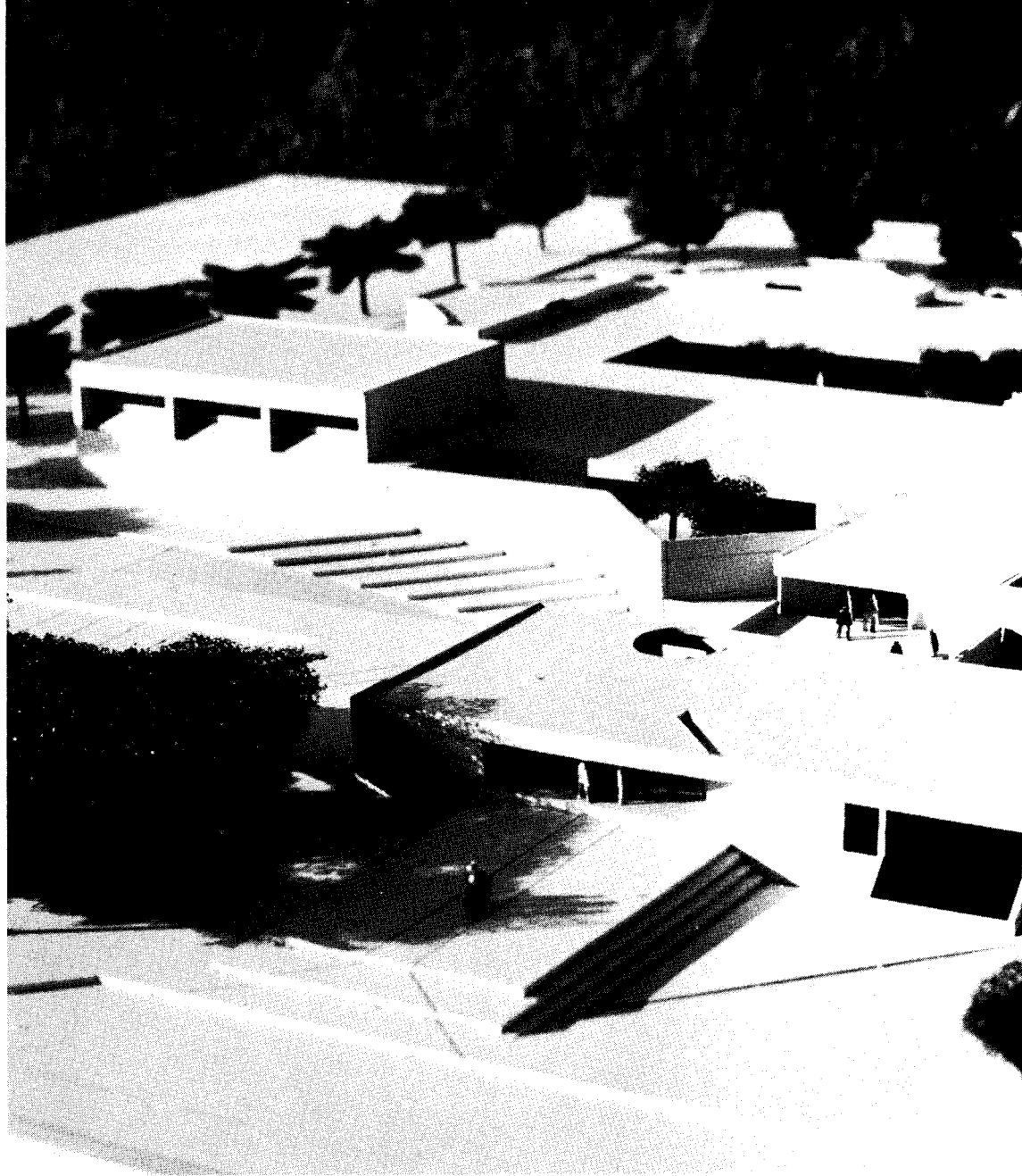
The New York State Prison in Clinton, is a 129 year old maximum-security penitentiary in the hinterlands of upstate. Last summer Clinton was one of the 19 correctional facilities studied by architects to make recommendations for future improvements. Kaplan & McLaughlin of San Francisco in partnership with Morris Ketchum and Associates of New York completed the report on Clinton. Kaplan & McLaughlin flatly recommended tearing it down without replacing it, and even went so far as to hire Louis Lowenstein Associates, special-

ists in analyzing the economics of developing urban areas, to advise the state how the community could revive itself if Clinton should go. One feature of the place, the "courts," an outdoor barriadas set up in the large open court where men are allowed to socialize for an hour and a half each day, K & M found fascinating. In the large outdoor yard, inmates have formed over 100 little clubs, using old pieces of furniture, such as desks and bureaus to partition off their own small pieces of turf. When an inmate arrives at Clinton he "rushes" the clubs, which have a membership of about two to 16 men each. Then during the free period outside, he goes to his

Kane County Corrections Complex, Illinois

This correctional facility combines both the program and the physical features the National Clearinghouse for Criminal Justice Planning and Architecture endorses. Thus this project has received the National Clearinghouse approval and LEAA funding (Part E). Since Kane County serves a rural area, this complex would be defined as "Regional Corrections Center"—the counterpart of a Community Corrections Center (pages 37-40).

First phase of a twenty-year construction program will include the sheriff's administration building, the detention facility, a diagnostic unit, a youth treatment facility plus an existing youth home that occupies a far corner of the site. Spaces are designed to accommodate different types of offenders with individual needs. In accordance with recommendations for detention facilities, treatment facilities are provided for educational, vocational, crafts, programs. The treatment wing adjoins residential areas, which are in turn organized around an outdoor recreational yard for maximum security inmates. The sheriff's offices are actually detached from the main unit and linked to it by an elevated passerelle.



little club to play poker, cook or eat, or just to talk. With sociologist Ronald Roizen, Kaplan & McLaughlin studied the design implications for the courts. They found the idea of a large focal space which could be subdivided into small groupings with multiple activity options, an important aspect of Clinton that should be applied elsewhere. Warehouse buildings with their high skylighted ceilings, long clear spaces and urban location are suggested as strong possibilities for successful conversion. At the core of such a space another "court" could be created, using found furniture and objects.

The Department of Corrections officials found Kaplan &

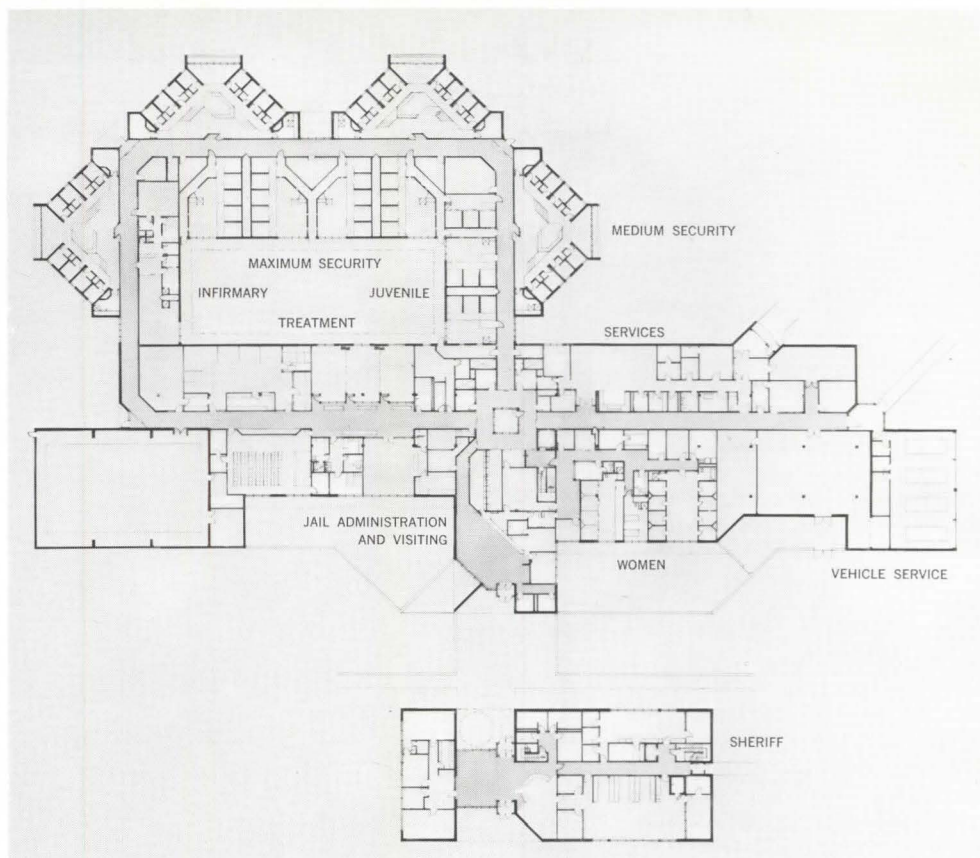


The "Courts," Clinton Prison.

McLaughlin's suggestions quite interesting, but asked them if they would simply submit a report telling them how the 1200-man prison at Clinton might be renovated—which they did. Herb McLaughlin insists, however, that if anything were to happen with these studies (no official decision has been made yet) that his firm would drop out, leaving the commission solely with Ketchum.

McLaughlin explains that his firm is increasingly involving itself with research programming, master planning and design studies of correctional facilities "all directed towards drastically reducing the number, size and character of correctional institutions." The firm

Photographer: Joshua Feiwald



The entire complex is single story except for the medium security housing, which is separated from the other housing units by a concrete block wall corridor. In the medium security housing two levels of exterior rooms share a double height dayroom; the lower level is dropped three feet below grade, so that inmates climb up stairs to the dayroom. The upper level overlooks the dayroom from a mezzanine-like corridor. The corners of the dayroom's exterior walls are truncated and glazed the full two stories so that natural light enters all levels (above).

PROJECT DATA

Kane County Corrections Complex, Kane County, Illinois. Client: Board of County Commissioners. Architects: Mall, Prisco & Duffy. Engineers: The Engineers Collaborative. General Contractor: Wil-freds, Inc. Building area: 73,803 sq. ft. Construction Cost: \$3,179,394.00. Site Work: \$300,000.00. Structural system: Reinforced concrete, pan slab floors and roof, board form poured concrete walls, tinted security glass. Site: 30 acres.

has recently been discussing the possibility of its acting as correctional facilities consultant to a major Eastern city.

A New Architectural Role

McLaughlin has no objection to performing consultation work for various corrections officials, only to actual building of any new correctional facilities at this time. While at first hearing it might seem as if he is either bluffing or batty, McLaughlin isn't alone. An architect from Montana, Doug Rand, concluded, after preparing a report on the Montana State Prisons, that "since the area of corrections is changing so rapidly and current programs being phased out before facilities can be devel-

oped" he should try to block the Governor's plan to build a new prison on an isolated ranch in Montana, home of the present facility.

Two Canadian architects, Kenneth McReynolds of Ontario and Graham Brawn of Vancouver, find their practices more and more devoted to pre-design planning. This phase, a form of "design specification" as Brawn calls it, includes working with the users (the inmates) to determine their needs and functions that have to be performed; the type of facilities that could respond to them; and environmental criteria to be adhered to. Brawn's staff includes architects, urban geographers, and psychologists and recrea-

tion people on a consultant basis. In any of their analyses, Brawn reserves the right to recommend not to build, and to propose alternatives to the physical facility. Ken McReynolds describes his role as a "designer writing a program for a designer." He finds that architects have more objectivity in a pre-design assessment role, and their input at this stage can define and describe necessary spaces that in turn help create a better correctional program that, the architect declares, must go deeper than the physical form. He must question the parameters of the project, the purpose and intent of the facility, as well as the validity of how and what he, as an archi-

tect, is perpetuating.

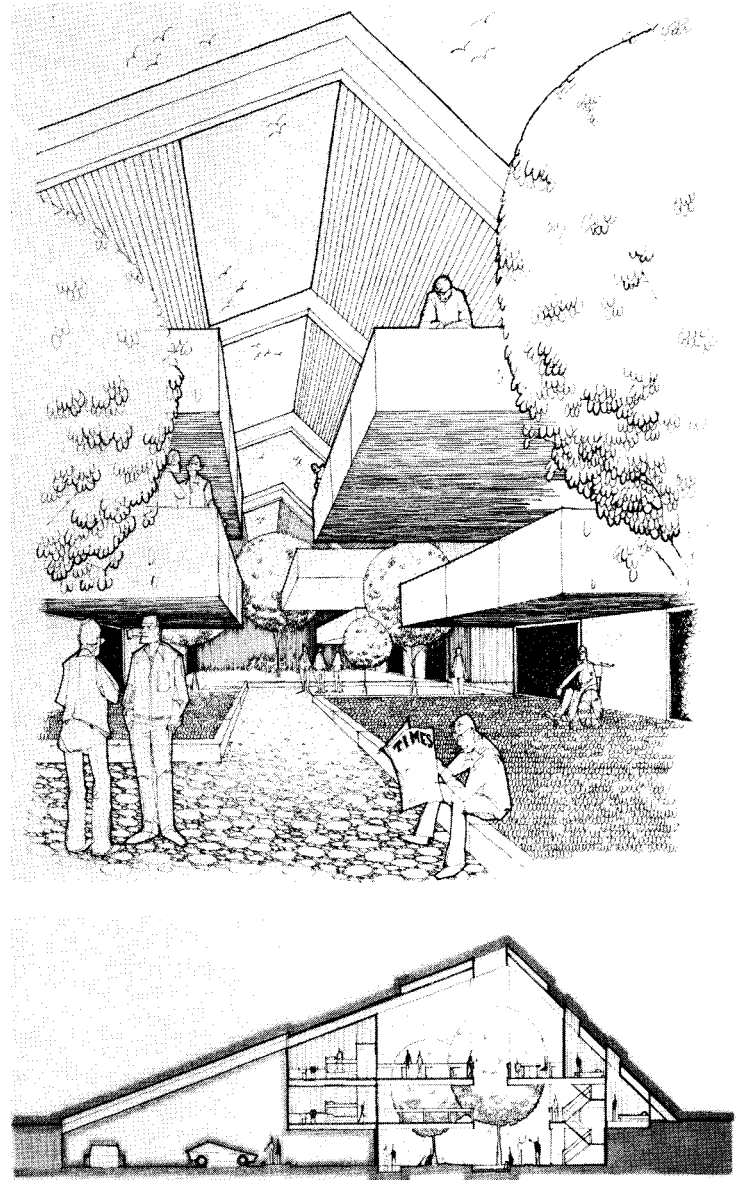
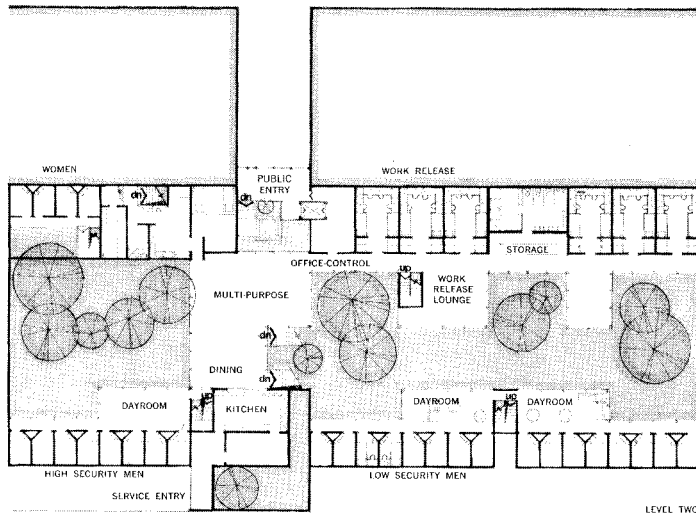
The Perfect Solution

From these comments, it would seem as if the de-institutionalization of the criminal justice system will lead to the de-materialization of the architect's role. At any rate, if the correctional experts have any say, there will be a decided slowing down of construction for prisons and jails as they are presently defined, and a replacement with smaller, non-institutional, and less-expensive facilities, based in communities. Architects who find themselves rather distant from program formulation now, may find themselves without an active role in future correctional facility de-

Demonstration Facility, Dade County, Florida

The National Clearinghouse, under the direction of Fred Moyer designed this demonstration facility as a model for Dade County Florida's new decentralized approach to county corrections. This facility would be one of five outlying centers in Dade County to accommodate Intake Service Center functions, including police-lock-up and screening, (page 38) and a work-release program for inmates of local communities. Thus the building would operate as first point and last point of contact of persons going through the correctional system. Space is also reserved for leasing space to referral social service agencies.

Actual design of the 30,000 sq. ft. demonstration project takes advantage of a warm climate to create a greenhouse within the central interior space: On the main floor community treatment programs and services edge a main corridor, that closely approximates an outdoor street, including trees and grass. On the two levels, dayrooms occupy the spaces provided by the cantilevered balconies (section, bottom right), and adjoin single rooms for inmates along the exterior walls (plan, below). A deck bridges the open space for dining and multipurpose activities. (Preliminary drawings do not indicate windows.)



sign. But the transition to the final achievement of this model could be rather slow, and some think that may not be all that bad. Psychologist Robert Sommer warns of vogue phrases like "community corrections center" and suggests that these be implemented slowly and cautiously, say about three a year, so that testing could be done. He is afraid that a model offered by the National Clearinghouse such as the Hawaii Plan, will be adopted on a widespread level without any consideration for a particular context or milieu, despite Moyer's and Flynn's admonitions in the report. Dr. Martin Groder, a psychiatrist and the new Director of the Federal Center for

Correctional Research in Butner, N. C. (page 42), is skeptical about community-based corrections, since not enough is known about rehabilitation per se for convicted men to be released into the community. Others too have questioned the probability of success in re-integrating an offender into the very community containing the pathological conditions that forced the offender to commit the crime in the first place.

Norval Morris contends anti-construction people such as the NCCD (of which he is a trustee) and William Nagel are overstating their case, if they include community-based facilities in that category. Fred Moyer responds, however, to

this allegation, that the exhortations for a moratorium are not directed at LEAA funded community and regional corrections centers—only "jails and prisons as we know them". Nevertheless he admits to the basic problem of definition: many local jurisdictions are already changing the name of jails and prisons to "community correction" and "regional correction centers", without changing anything else.

And at a farther end of the spectrum, representative of the architectural community, Alfred Gilbert, asserts that the moratorium demands don't go far enough. Moreover he adds neither do the National Clearinghouse and National Advisory Commission community-based

proposals, because they permit maximum-security facilities to remain. "This is the fatal flaw of the system", Gilbert declares "for as long as we have a reasonable number of maximum security prisons, there will always be people to fill them; they will continue to be relied upon as a 'last resort', instead of society's attempting to treat these criminals in a more comprehensive way". Despite all the conflicting views among the professionals in this field, one thing is clear, this is a period of rapid transition—one which requires more scientific research and post-implementation evaluation, one in which imagination, nerve and perspicacity are needed by design professionals.

THE SAGA OF THE AMERICAN GAOL

The book, "The Human Cage: A Brief History of Prison Architecture" by Norman Johnson (Walker and Co., 1973), presents a concise account of the architectural development of jails and prisons. Presented here are a few highlights.

While the concept of imprisonment traces back to Greece and Rome, it was not until the Middle Ages that confinement was used as a punitive end in itself. The Church was the first institution to authorize confinement for penitence. Later rehabilitation as a correctional goal appeared in the 16th Century, in the form of the workhouse. As workhouses and other houses of correction deteriorated in the later half of the 18th Century, prison reform as an identifiable movement took shape. Originating in England, the movement owes much to John Howard and his horror stories in "State of Prisons" published in 1771.

Meanwhile in America, the penal system had been rather rudimentary, based as it was on corporal punishment. Holding facilities for the accused awaiting trial were the only form of incarceration, and as in earlier times, prisoners were mixed indiscriminately and had to pay for food. The Pennsylvania Quakers pushed for confinement as punishment, and influenced the two basic schools of prison philosophy that emerged in the next 30 years.

The Pennsylvania system was established at Eastern Penitentiary in Philadelphia, opened in 1829. The prison, designed by architect John Haviland, used the popular English radial plan. Penitence was the primary objective, and the inmates were confined to their solitary cells to work the entire day.

Meanwhile, in 1816, Warden Elam Lynds established the famous Auburn System of discipline at the State Prison in

Auburn, New York, designed by John Gray. The Auburn philosophy allowed prisoners to work and dine together, in complete silence. Whereas at Eastern prisoners had cells with exterior walls, at Auburn, the cells were inside, back-to-back.

In the latter part of the 19th century the telephone pole plan, still seen in new buildings today, emerged. All movement occurred along a central spine for easy surveillance. Wings for housing and other services intersected the corridor at right angles. Meanwhile, the characteristics of the Pennsylvania and Auburn programs—hard labor, non-communication, bare essentials, regimentation—continued to exist for the next hundred years.

Contemporary History: The LEAA and the FBP

Federal interest in criminal justice has, not so surprisingly, gained considerable headway under the Nixon Administration. The measures adopted have spurred on the most progressive thinking to affect corrections in several decades. As a result of task force study on criminal justice initiated by Lyndon Johnson, the Omnibus Crime Control and Safe Streets Act was passed in 1968. The legislation created the Law Enforcement Assistance Administration to aid state and local jurisdictions with their corrections systems. The LEAA's parent agency is the Department of Justice, which also spawned the Federal Bureau of Prisons in 1930 to administer institutions and programs for federal prisoners.

Ensuing 1970 legislation, the Omnibus Crime Control Act, provided the LEAA with funding. One amendment, Part E, was earmarked specifically for advanced corrections programs and facilities. Part E received \$49 million in 1970, \$99 million in '71, \$113 million in '72, and will receive another \$113 million in '73. Total funding allotted for all of LEAA programs was \$750 million for 1972 and will be \$850 million for '73. Funds from Part E specifically support planning design and construction on a 50-50% matching basis with the Federal government supplying the larger portion. In order to see that states and local jurisdictions use this money to advance correctional practices the

LEAA has devised guidelines or special conditions the project must adhere to before any money is passed around. To evaluate the intentions and goals of jurisdictions seeking LEAA funds under Part E, the National Clearinghouse for Correctional Programming and Architecture was established under LEAA contract at the University of Illinois' Architecture Department in 1971. The Clearinghouse, directed by architect Fred Moyer and sociologist Edith Flynn, also provides technical assistance to corrections administrators merely seeking advice, as well as assistance on planning and development to LEAA grantees. The Clearinghouse staff now numbers about 45, with eight architects, five sociologists, three lawyers, two survey researchers and other computer specialists, transportation and urban planners.

In the first year of their operation, Moyer and Flynn, with architects Fred Power and Michael Plantz, produced the voluminous "Guidelines for the Planning and Design of Regional and Community Correctional Centers for Adults" that has become the cornerstone of their standards for measuring projects' suitability to Part E funding. Since then they have produced a number of studies and reports, including environmental impact analyses and "the Correctional Master Plan for the State of Hawaii." In the two years of functioning, the Clearinghouse has reviewed an estimated 370 projects but recommended a fraction for funding so far. Their review process assesses the objectives of the proposed facility, its scope, and how it meets the needs of potential users and categorizes offenders. The Clearinghouse also closely analyzes the functional program to determine whether there is a need for such a facility, and whether other routes are being investigated.

According to Fred Moyer, the National Clearinghouse has not approved a single prison or jail or "large correctional facility." As Moyer explains, LEAA money not only goes to facilities that are described differently (i.e. community corrections centers), but that are intended to function differently.

The same year that LEAA funded the National Clearinghouse for its Guidelines project,

it also funded two other programs. One was a complementary "guidelines" for facilities for youthful offenders, conducted by the Management and Behavioral Science Center at the University of Pennsylvania under the direction of Russell Ackoff in collaboration with Wallace, McHarg, Roberts & Todd with David C.S. Polk, Consultant. The other study, conducted by Robert Sommer under the auspices of the Psychology Department at the University of California at Davis, focused on "Research Priorities in Correctional Architecture."

A fourth study, a state of the art examination of correctional facilities, the LEAA requested the American Foundation to conduct, but did not fund. The results of the study, led by Director for the Foundation's Institute of Corrections William Nagel, are described on pages 30-32.

Thus the LEAA's recent history is rather impressive. As its role in implementing recommendations of the National Advisory Commission on Criminal Justice Standards and Goals for 1973 becomes clearer, it most likely will play a strong role in the comprehensive reform of criminal justice. One area of confusion remains, however, and that is the LEAA's relationship with the Federal Bureau of Prisons. While the two are sibling agencies under the Department of Justice, they are virtually autonomous, one taking care of state and local correctional facilities, the other, federal facilities. The Federal Bureau of Prisons, with alleged 66 institutions being built over the next ten years at a cost of \$700 million, even has its own design review board to advise Gary Mote, Chief of the Facilities Development Division. Despite their good intentions, it would seem that there would be an overlap in both LEAA's and the Bureau's plans, and that there should be some strong coordination of two for a uniformity in goals and standards for corrections in the future.

At present, however, the Federal Bureau's policies, when they converge with LEAA standards for corrections, present a visible model at a federal level of many of the reforms the LEAA and National Clearinghouse hope to implement on state and local levels.—SUZANNE STEPHENS

THE SAVING GRACE

The Boston Five Cents Savings Bank
builds interest in the historic Hub

BY JANE HOLTZ KAY

In this world of ordinary places and extraordinary building extravaganzas—of rundown street-scapes and overblown, overhigh structures—to turn the corner of Boston's historic School Street and find a new There there is remarkable.

Where the Old South Meeting House, the Old Corner Bookstore and some solidly serviceable 19th century office buildings once met at a squeezed right angle, now stands the sudden triangle of a small plaza, walled as it were, by the new Boston Five Cents Savings Bank by Architects Kallmann and McKinnell.

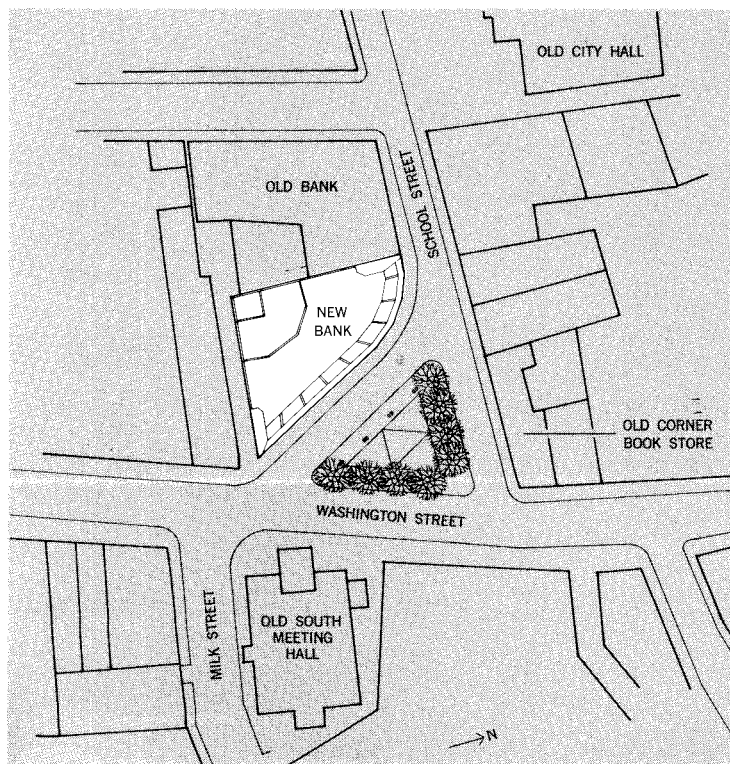
Not that the \$3-million bank that shapes the new "place" is secondary or diminutive. Hardly. There is nothing reductive about the work of the men who built Boston's assertive new City Hall. The bank building

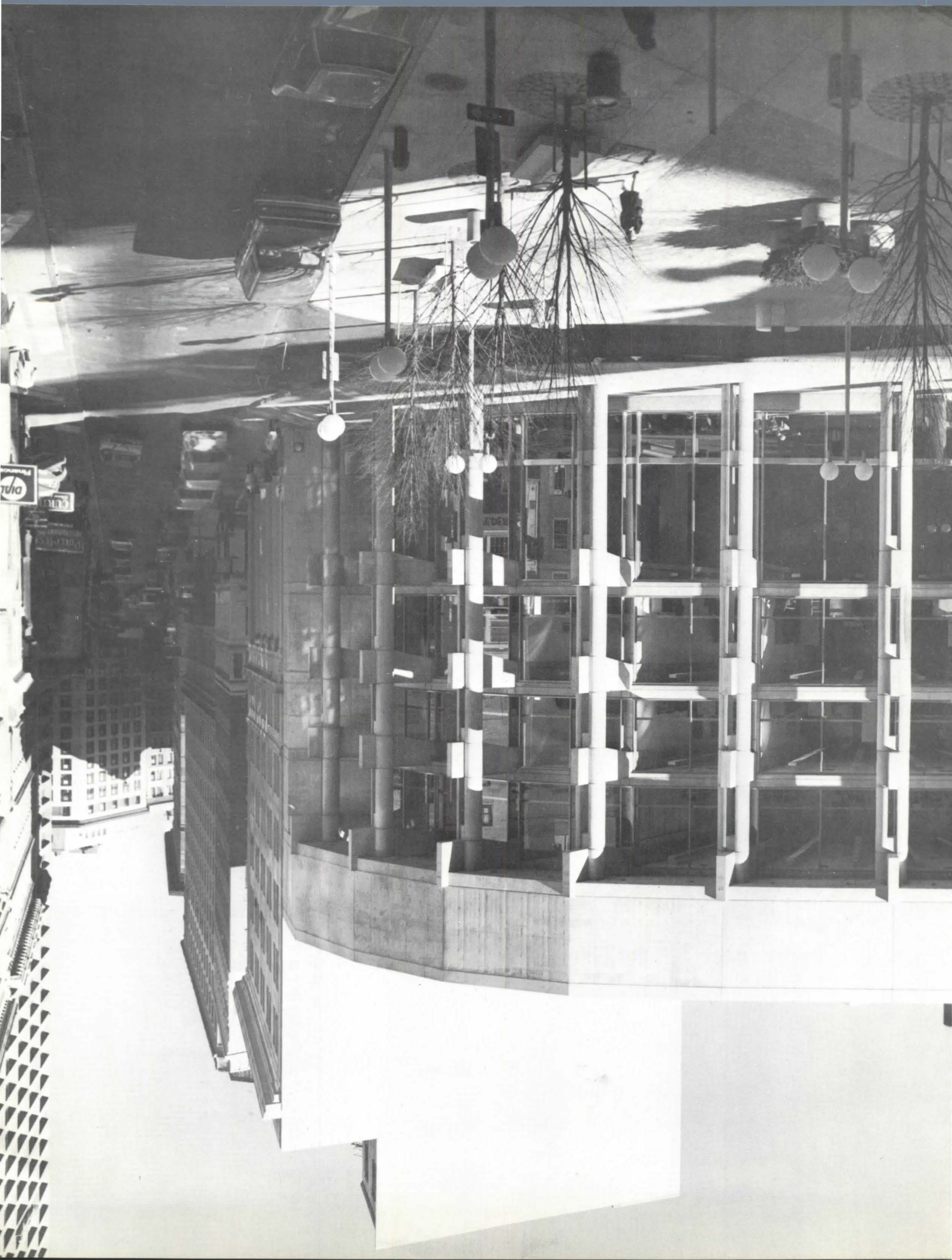
is imposing, elegant, vigorous, all the praiseworthy and, yes, less praiseworthy qualities that go into a client's demands for "a noble space in the city for their banking hall."

Such a search for nobility—or notice, if you will—has led to several notorious architectural trademarks around the city. As Boston's big banks and insurance companies (the John Hancock, the Prudential, the First National) jostle to be the most prominent or peculiar, urban environment takes the hindmost.

At this latest corner, however, the effort is informed by a sense of history and city life. If the new bank on the landscape takes a sovereign stance in its large-scale exterior, it manages dominance without disdain. Its architectural ideals seem civic as well as grandiose in the architects' skill at engaging the street in a dialogue and in their ability to find a graceful solution to the taxing problem of a

Jane Holtz Kay writes architectural criticism for the Boston Globe.





pie-wedge site.

This old triangular serving of city land was originally dished out by the Boston Redevelopment Authority. It emerged as a corollary to the city's worthy if now-muddled downtown renewal recipe to block off traffic on Washington Street, the city's main shopping route. To do so, the BRA curved a new road down School Street and across Washington. This curved road turned the corner site into the outer rim of a pie. That left a plot of something less than streamlined contours for private development on one side of School and a scrap of a triangle (100 x 110 x 90 feet) for city use on the other. Eventually, the uneasy site became the bank, and the leftover triangle became the complicated private-public enterprise of the plaza.

Before that, though, the city was fortunate to find a buyer in the Boston Five Cent Savings Bank. Not only was the Boston Five headquartered next door to the pie plot, but, twice-blessed, the bank boasted a chairman of the board of unusual architectural concern. Chairman Robert M. Morgan had helped secure the new City Hall and cared enough for architectural quality to stage an invited competition for the proposed bank under a highly pedigreed jury. That jury chose Kallmann and McKinnell.

The bank handed the young architectural firm a relatively simple set of demands to fit within the complex corner outline. They wanted that "noble bank hall" mentioned, of course; plus the ability to use the new quarters with or without the 50-year-old building next door. "The brief," say the architects, "resulted from the turn in the street and the requirements of the client himself. What attracted us was that it was a very busy corner in the city and there was a chance to establish a place."

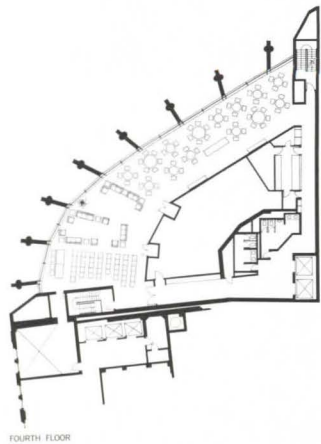
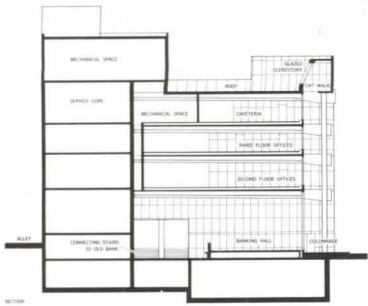
The strange shape dictated the need for an unobstructed interior columns streetside—"a solution would call for eight exterior columns streetside—"a colonnade," the architects call it—held by cast-in-place columns which receive post-tension beams spanning as much as 76 feet from the concrete core at the apex of the triangle. Glass would then enclose and open the space from the large hall to the topmost floor.

In more formal terms, the beams radiating from the core to the columns, like spokes of a wheel section, define the building inside and out as one. Outside, they shape a rhythmically varied space along the sidewalk. Inside, they determine the layout of offices. Here, inevitably, the oddly-sliced angles lead to



At the Boston Five Cents Savings Bank, cast-in-place columns, receiving post-tension beams, comprise a seven-ft.-wide, 65-ft.-high colonnade (above) which shelters pedestrians, protecting the north-oriented glass facade. The colonnade frames office views of such landmarks as Old South Meeting House (left and opposite). The spoke-like beams taper in depth from five to two-and-one-half feet, spanning a variable from 66 to 76 feet.





The cityscape and officescape flow together (above), emphasizing the Bank's function as an urban element and its public orientation.

quirky rooms. But the views from the hub, so to speak, through the glass windows to the strongly articulated columns outside, plus the delightful vista of the new School Street Plaza below, dispel any confusion within the overall clarity.

Kallmann and McKinnell have deliberately reinforced that clarity through order and solidity: inside, the Great Hall's fluorescent lights follow the radiating lines of the beams; outside, joints are underscored and columns split for the high visibility which is the firm's trademark. "Our architecture is a very rigorous expression of structure and construction," the architects say. "It reinforces a feeling of stability in a world that's shabbily made." As if to underscore that stability, Gerhard Kallmann hits rounded fist to rounded fist to emphasize how a beam bumps into the column in "a comfortable way of making clear or celebrating the joint."

Despite the high visibility of their bank, what might be tour de force muscle-flexing is tempered through attention to other elements: the skylight above the colonnade, say, or the fanning out of columns near the entry. Compared to the earthbound cube of their landmark Boston City Hall, the Boston Five has a rugged airiness best appreciated at night when glass and lights and stainless steel dazzle from the Washington-School Street corner and relieve any muscularity of form or the heavy historicism implied by the concept of a "colonnade."

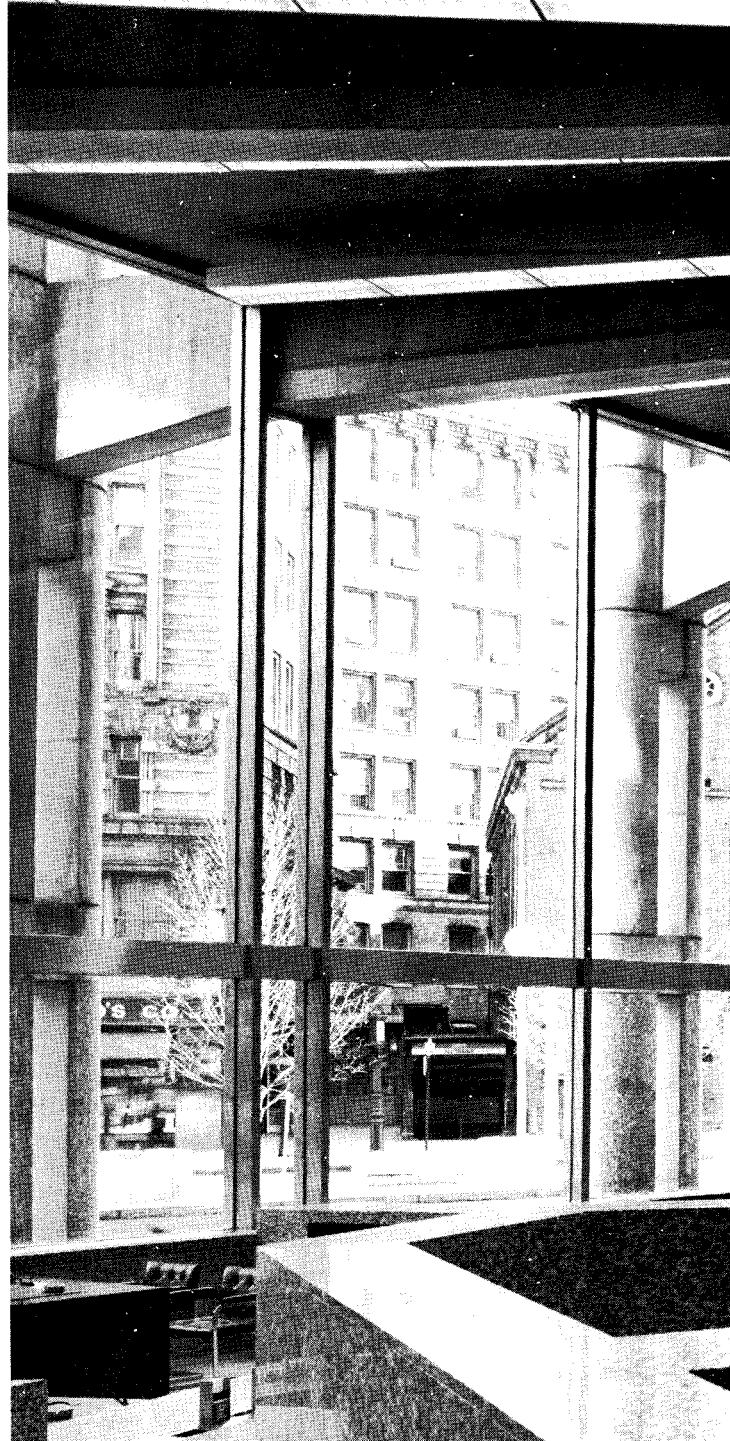
Warm but low-keyed colors and materials throughout are well-integrated. The furnishings

and furniture by ISD Incorporated of New York are attractive. The granite facing used inside and out by the architects covers all surfaces on a level with the user, from walls to desk banks in the main hall. This leads to some lack of resolution where granite meets concrete on the exterior columns but it is a tactile and handsome surface.

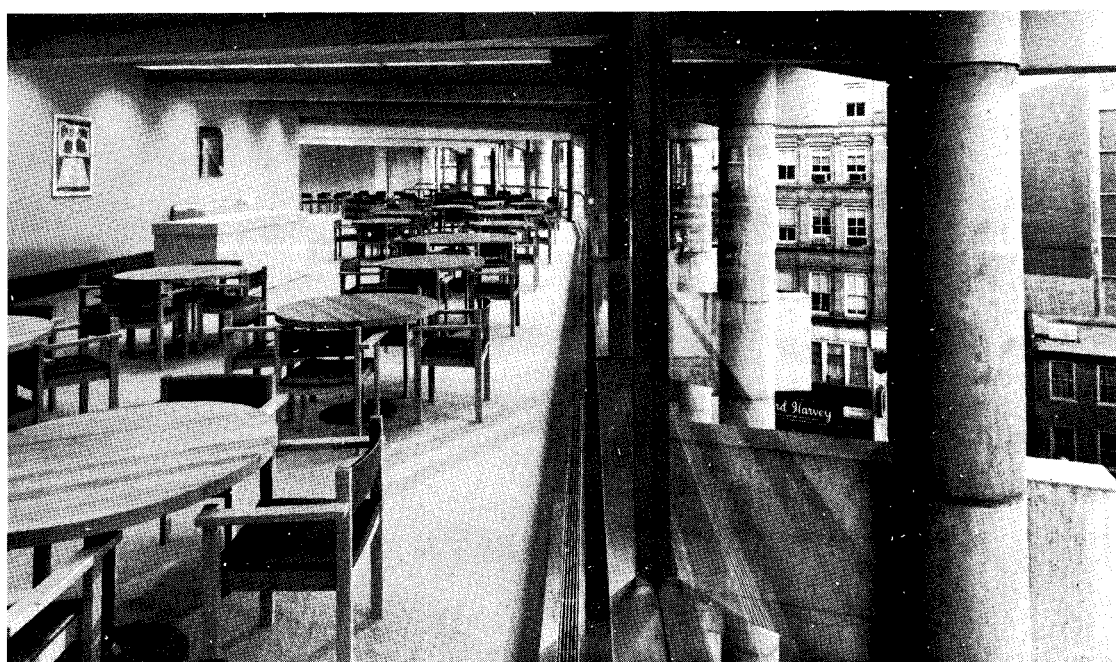
The mini-park across from the bank replays these elements and materials—granite cobbles around trees, even granite wastebaskets. The Plaza's arrangement which the architects designed and the bank bought in behalf of the hardpressed city (a \$90,000 contribution in lieu of the city's required one per cent art budget), simply follows the outer perimeter of the triangle. Eight Little Leaf Lindens and four double benches provide a pleasant spot for lunchgoers and office workers.

It is this use and this place within a city of historic places that the architects mention more than the building. "This is not just a bank," they insist. "This is a corner to celebrate the role of pedestrian movement in the city." From many such corners would come the complete city for pedestrians—for people—built in time and the richness of varied styles, a "series of oriental rugs," Kallmann calls it, an eventual dialogue between man and his environment.

As for here and now . . . if the new dialogue gives a louder voice to the bank than to the people beneath it, at least the architects bother to address the streetscape with a civil and eloquent tongue.



The banking hall (above, opposite) is 27-ft. high, 100-ft. long, and lined with light grey granite. Above this are three floors, the topmost containing cafeteria, lounge and assembly space (near right, below opposite).





FACTS AND FIGURES

The Boston Five Cents Savings Bank. 10 School Street, Boston, Massachusetts. Owner: The Boston Five Cents Savings Bank. Architect: Kallman & McKinnell. Supervising Architect: John R. Coburn. Engineers: Albert Goldberg & Assoc., Inc. (structural); E. Traum (designing); Francis Associates, Inc. (mechanical & electrical). Interior designer: I.S.D. Inc. Consultants: Bolt, Beranek & Newman (acoustics). Contractors: George A. Fuller Co. Inc.; Lappin Brothers, Inc. (mechanical); M.B. Foster Electric Co. (electrical); Trio Inds. (window walls); Bloom, South & Gurney (vener stone). Building area: 45,000 sq. ft. Cost: \$3,000,000 (contract price only). PHOTOGRAPHS: Ezra Stoller (For a listing of key products used in this building, see p. 77.)

HITTING HOME

You can't make a silk purse
out of suburbia

BY ADELE CHATFIELD-TAYLOR

"Architecture is, next to men, the most oppressive force in our society; obsolete architecture is one of the things that is holding us back," one female conscience, recently raised, proclaims.

How does residential architecture affect the woman tied to the home? Does current architectural design have anything to do with Women's Liberation?

These are only a few questions asked to determine if architecture reflects significantly a system now censored for its contribution to the oppression of women, and whether it can be re-constructed in such a way to respond to women's changing self-concept. Sometimes the questions elicit anger; to many women, architecture is a lost cause.

When new feminists are asked how architecture relates to them, they often answer that they cannot be concerned with its implicit esthetic function until the original architectural problem is resolved: to provide reasonable places to live in. "My kitchen is a windowless cage," says a Washington, D. C. housewife. "It is the center of my house because it is where I do the cooking, washing, telephoning and thinking. It is where I work and where I monitor the machines that work for me. And since I spend so much time here I think it should be a light tower or a garden through which I can connect with the outside world; instead it is an isolated, surrealistic space that actually prevents me from knowing what is going on outside. I see no sunshine or shadows, feel no change in temperature, smell no blossoms in a new season. I don't hear real noises, just machines humming and telephones ringing and timers going off. These are sounds that have nothing to do with what is happening or what I am doing."

The suburban housewife has another set of problems, just beginning to surface: "I don't think that anyone who has a relatively easy time in the suburbs takes Women's Liberation very seriously. It has caught on as a fad—it is chic to belong to a consciousness-raising group and have an interest like painting to demonstrate your independence. But that's as far as it goes. Architecture? Liberated architecture is a house with the right props: this year *The Female Eunuch* in the bookcase and an easel in the closet. Although we can all testify about oppression, none of us would dream of giving up our modern convenience-ridden kitchens to figure out what kind of house would be better, or allow for liberation of any kind. The only liberation a suburban woman can think of is to be thin and rich.

"I chose this house *because* of the architecture, but I wouldn't call it liberated. It is basically one

room with sleeping cubbyholes attached—kitchen, dining room and living room are one enormous space. What I chose was a prison, especially designed by the architect to make me believe that the new architectural openness meant independence and a new role for me. But there's nothing new about this. I still have to do all the cooking, cleaning, supervising and screaming. Having to do it in plain view of my family is the only thing that's new. I have to clean up the kitchen constantly because messing up the kitchen means messing up the dining room and living room too. It's a new kind of tyranny developed by a male architect not only to perpetuate my role as an all-purpose servant, but to eliminate my privacy."

When did women begin to have a change of heart about the home? In *The Second Sex*, Simone de Beauvoir writes: "The ideal happiness has always taken material form in the house, whether cottage or castle; it stands for permanence and separation from the world. Within its walls the family is established as a direct cell or unit group and maintains its identity as generations come and go; the past, preserved in the form of furnishings and ancestral portraits, gives promise of a secure future . . . In every civilization based on landed property an ample literature sings the poetry of hearth and homes . . . summing up all middle-class values: fidelity to the past, patience, economy, foresight, love of family and the native soil, and so on."

A change of heart came with the Industrial Revolution. Before that there was the homestead, a permanent, ongoing architectural form invented by the people who wanted to stay in one place. It was part of the patriarchal system, under which everyone worked, all day long. The homesteader found or formed the materials out of which the "architecture" was made. Clearing fields to graze stock or plant crops meant cutting timber or taking up stone—materials which went into the building. The family and the farm formed quite a self-sufficient organism. Services were separated because somebody had to be available to the children, and it made sense that this should be their mother. Divorce and other dispersals of the family were impractical and therefore unthinkable. There was no choice.

All romance aside, the routine was a grueling but workable system, and it gave rise to an architecture that was building for human use. It was the product of a difficult life that sustained most people who had to support themselves, until the Industrial Revolution gave them a choice. Then, for those who moved to the cities, the point of reference was no longer the homestead, but the factory. Money, which had been an extra, became an essential, because it was necessary to provide what the homestead had yielded as a matter of course. The labor force absorbed not only the men who provided raw materials for the agrarian system but the women who turned these into house, home and future, and the children who made it all necessary and worthwhile. Home then stopped being a way of life and became a place to live.

The Industrial Revolution is not over, but the early spoils have changed every woman's life in

Where is the 19th
Amendment Architecture
that should have come with
the first feminist push?

Ms. Chatfield-Taylor is a free-lance writer
and architectural historian.

two ways. She now has the technology to "free" herself from the endless, overlapping chores that once kept the house running; and therefore she has the leisure to educate herself and accept some responsibility for the world beyond her own household.

It is precisely this combination that hasn't worked. She *does* have machines, but they are designed in such a way that she still has to be there to mind them—to fill them full of permanent-press bluejeans, turn them on, wait, turn them off, transfer to another machine, watch, wait, and do the same thing all over again the next day. She may opt for a TV dinner instead of a six-course creation that has cost her an afternoon, but she is still expected to have it on the table at the appointed hour. While she is freed from doing many of the difficult jobs, she is still in charge of getting them done, and her leisure is therefore conditional.

An article in the maiden issue of *Ms.* stated casually that since the Industrial Revolution "virtually every change in social pattern has registered its attendant sociological response, so that the whole American landscape is littered with a physical record of our social development." If this is so, it describes the lack of significant social change that has occurred since then. If it is not, it suggests either that architecture is slow to absorb change in social associations, or that the national Women's Liberation Issue—which has been rocking back and forth for more than a century (the Seneca Falls convention was in 1848)—has not been given architectural equal time.

Certainly, changes have been made: plans for middle class housing have been somewhat altered—butlers' pantries and maids' quarters have gone the way of the servants. Suburbs have been invented as an alternative to uncomfortable city life. There have been certain changes in style. Revolutionary technological improvements have been made. But where is the 19th Amendment Architecture that should have come with the first feminist push?

Rebecca Reyher, who was secretary of the Feminist Alliance in 1914, recalls that she and her colleagues *did* work for architectural change. They asked for nurseries on the roofs of all new apartment buildings, for kitchens built for usefulness rather than maids, and for rounded corners without moldings on the interiors (to cut down on cleaning). The emphasis was on amenities for professional women of the privileged classes, with the idea that the experiments would be extended to lower orders later. There was little cooperation, but she remembers one success: an architect-interior designer team (the architect was a man, the interior designer a woman) who "created entrances for apartment buildings that made them look like homes." It could be argued that such a success was insignificant and even insulting, but Mrs. Reyher reminds us that the first feminists were concerned mostly with getting the vote, and any architectural adjustment helping to liberate women from the humdrum aspects of housekeeping was considered a triumph. The first feminist was always concerned with other causes—emancipation, better factory conditions, peace

—so in one sense, all she had to do at home was maintain the status quo (even if she were living in an apartment building she would make it look as if it were not one), while she slipped in a little liberation on the side.

World War I redirected much feminist energy, but in spite of this, and the letdown after the suffragette successes, it looked as though things were changing and women would never look back. In 1920, Dr. Abraham Myerson wrote the *Nervous Housewife*, in which he analyzed the then new phenomenon in terms of the conditions that produced it. About architectural improvements to be expected and encouraged, he said,

"There has been a trend away from individual homes, completely segregated and individualized, to [apartment] houses where at least part of the housework is eliminated, in a sense was cooperative. . . . This cooperation is increasing. . . . In the highest class of apartment living the trend is toward permanent hotel life, with the exception that individualized housekeeping is possible. . . . A larger cooperation, at least in the cities, will come. Buildings must be built so that a deal of individual labor disappears. Just as cooperative stores, community kitchens organized for service would be a great benefit. Especially for the poor, without servants. . . . That the home needs labor-saving devices in order that much of the disagreeable work may be eliminated is unquestioned. Inventive genius has only given fragmentary attention to the problems of the housewife."

Dr. Myerson did not foresee the Depression, the next war, or the revival of what Betty Friedan calls the Feminine Mystique. Nothing reversed the urban cooperative trends more than the 1950's exodus to the suburbs.

Most feminists agree that when America went to the suburbs, the women's movement went to pieces: to live in an unpretentious but precious little house with its own lawn and children was the highest possible good; to be pregnant, overworked and understaffed was to be sporting, feminine and patriotic beyond a woman's wildest dreams. Love and prosperity were substantiated by the addition of new machines to an already awesome arsenal of Studebakers, toasters and television sets. Prestige, glamour and domestic bliss.

And now in the second wave of feminism? "Our kitchens get glossier, and our wall-to-wall carpeting more plush, but we are using up all that industrial inventiveness to refine an anti-social type of architecture that no longer solves the problems of the twentieth century" one housewife contends. "It takes all my energy to keep it going, and for what? This is an inbetween kind of house that can't be made into a palace, no matter how hard I try; and it can't be used as a springboard to my independence because to live in it is to commit myself to maintaining it. It demands attention because it is actually made up of things like single-purpose machines that have to be used to justify their purchase, and extravagant useless spaces that need to be polished and admired. For a long time this meant having *me* admired. I used to go along with it, because *having* things used to mean *being* someone. But I am not a

When America went into the suburbs, the women's movement went to pieces.

**The first thing we have to get rid of is this horrible independent little misery called the suburban home.
—Margaret Mead.**

Whereas public education is accepted as a tenet of American civilization, housing is still considered a commodity.
—Jane Benedict

Retreat into the mindless wilderness of an anti-industrial life merely avoids the problem.

house. I am no longer moved by a new gadget and giddy curtains. You can't make a silk purse out of suburbia."

"The first thing we have to get rid of is this horrible independent little misery called the suburban home," says Margaret Mead. "It is using up an unprecedented amount of hardware, creating an unprecedented amount of pollution, and producing unhappy people."

Then how about the honest-to-goodness country? Will this suffice for the woman who wants her vegetable garden back, the one who wants to sit by the fire and watch the bread rise in an earthy, old-fashioned environment? Will it liberate her and give back to her house the meaning she hears it once had?

Some women think so. The trend is both understandable and popular (abandoned barns and deserted 18th century farmhouses are a sellout), but to hardline radical feminists it is an unacceptable answer. First of all, it is a luxury. The early American pioneer revival is not available to all women, depending as it usually does on help or income from the outside (alimony or trust fund). Women who are supporting a family simply do not have time to pretend they can't run around the corner for a loaf of bread.

Opponents also consider it a bum steer, because it mistakes the natural texture of another era for a truth that (if it can only be retrieved) will prove timeless. It is a dangerous denial of the present technological world, which has offered an artificial and ugly alternative to that homespun one, but it is a world that must be confronted and exploited if there is to be widespread architectural change for women. Retreat into the mindless wilderness of an anti-industrial life merely avoids the problem.

"We refuse to invent machines and systems that could *really* relieve woman of her traditional role," claims one ardent feminist, "just as we refuse to admit that we have the power to blow up every earthing seven times. So we reduce things to the manageable and familiar—like country kitchens and guerilla warfare. And, all the time, we are ignoring the discovery we have made over and over again. That is, when we have developed a weapon that makes the very question of war academic, we cease warring and turn technology to something else. And when it becomes clear that women are capable of being educated and liberated to the point where staying home and baking is absurd, we cease to define her according to the historical and biological accidents that once determined what she was, and see what she can be."

"We have to begin to realize that 'liberation' is not an end in itself any more than a machine is an end in itself. The question is what are we liberated *for*? Moving back to those wonderful leaky houses is not liberation; it is reviving architectural problems that have already been solved, and choosing an anti-technological life that doesn't make sense anymore."

There are plenty of women who do not have to wrestle with the moral side of the question because they cannot live in the suburbs or the country even if they want to. They are the new

proletariat, the wage earners who have no property and no security: women on welfare, women who live alone and support themselves, working women who live with their children, and married women with limited financial resources.

According to Jane Benedict of the New York Metropolitan Council on Housing, architecturally, the cities offer no choice at all. "Housing is a fundamental right, like education. But whereas the concept of public education is accepted as a basic tenet of American civilization, housing is still considered a commodity. You can say what you want about the importance of architecture, but it's a luxury. If the roof doesn't leak, there are no rats, and it works otherwise, that is all we can hope for. Architecture is the last concern of a woman who needs a place to live. The outrage is that we have the ability to build housing that is functional and plentiful *and* beautiful, which would provide real choice, but we don't because there isn't enough profit to be made."

If this situation continues, no practical, political or philosophical objections are going to persuade women to move, because there is nowhere to go. By default, they join women who feel that their liberation will not be enhanced by architecture anyway.

A spokeswoman for the LADDER, a radical feminist publication in Kansas City, states that "a society in which women were liberated through their environment would be a maleless or woman-powered society, and would have little to do with architecture."

Revolution-oriented feminists feel that if the architecture is ineffective, it will be destroyed or will fall of its own obsolescence, like any other unsatisfactory part of the system. An old rule of the New Left is not to plan ahead, lest the plan be influenced by existing misguided institutions; minds must remain open to insure that the new will not be institutionalized before it is instituted; we must await the revolution-made vacuum to see a new architectural order emerge.

A totally different problem arises when architects are asked about architecture for women. Many architecture students feel that the very question of architecture for women is a red herring because it cannot liberate women unless it liberates people.

Ada Karmi, a critic at the Columbia School of Architecture, doubts whether change will come from this generation of new architects: "In school everybody, men and women, has become socially oriented. I am cynical about that, because it is all in the mind. There is an enormous difference between deciding to be socially conscious and therefore including building elements that weren't there before, and *actually being* socially conscious. This is a gap that maybe only the next generation will bridge.

On a more encouraging note, the Alliance of Women in Architecture in New York revealed recently in a spot survey that, if a program were agreed upon, it would not necessarily require a woman for its design.

One woman willing to venture some ideas on that program was Margaret Mead, who also sees new architecture for women in the context of

new architecture for people. "Architecture is exceedingly important because unless we have town planning and sensible design we will not be able to provide enough closely adjacent apartments of different economic levels and different sizes to have a complete community. People ought to live in clusters. That is, higher density, with common facilities and possibilities for collective eating. We don't want communes, or a communal arrangement, but collectives, closer to small villages before people had automobiles.

"But this would be all new because we would use all new facilities: TV, frozen foods vended as in an automat, but in a place where you don't have to drive 15 miles to the supermarket. We need to build the cities and the suburbs into one daily system in which there is plenty of green and water and small wildernesses that are accessible, and in which you have first class transportation."

There would be places for all ages, and older people would have a purpose, taking an indispensable part in the raising of children. "A sandpile with four old people around it is quite good enough daycare for little children." This would free mothers, without expense, to work or do whatever they wanted.

Dr. Mead believes that the big problems are creating places to escape from the noise (special soundproofing for adolescents and their music), places where people can easily find one another (collective dining rooms, clubs), places where adults can escape, alone or together and be able to depend on uninterrupted privacy, places for children, and places for guests to come and visit.

Germaine Greer describes another "village" for the extended or organic family, whose prototype already exists in Italy. An ideal version would have few maintenance problems: houses with no window panes to wash, furniture that required no polishing, walls, floors, and ceilings that could be hosed down, exterior surfaces that could be whitewashed occasionally and quickly. In the cities, she feels, the village system could be easily superimposed in modified form, with one building operating as a vertical village. "New York brownstones are perfect," she said, "but we need to open up the spaces and stop being afraid of each other." The present form of apartment building is socially brutalizing, people are isolated because of the unrelenting separations between apartments and floors. "Giving people nuclear cells like in the Marseilles Block is bound to turn them into white mice. The nuclear family that inhabits those places is the most anti-social yet. If we'd begun with it, we would have no society today.

In *The Dialectic of Sex: The Case For Feminist Revolution*, Shulamith Firestone offers a post-revolutionary scheme to accommodate the "household", a revolutionary replacement for the family. It connotes no biological ties, being "a large group of people living together for an unspecified time, with no specific set of interpersonal relationships."

City planning, architecture and furnishings would reflect the new social structure. The trend toward mass-produced housing would probably continue, but the housing might be designed and even built (perhaps out of prefabricated components) by the people living there to suit their

own needs and tastes. Privacy could be built in: either through private rooms in every household, or with 'retreats' within the larger city to be shared by the people of other households, or both. The whole might form a complex the size of a small town or a large campus. . . . We could have small units of self-determined housing—prefabricated component parts set up or dismantled easily and quickly to suit the needs of the limited contract as well as central permanent buildings to fill the needs of the community as a whole, i.e. . . . a large computer bank, a modern communications center, a computerized library and film center, learning centers devoted to various specialized interests, and whatever else might be necessary in a cybernetic community."

Another plan, close to this one, is the "Camp-site" system, which has been billed as "individual architecture". In this case the family is dissolved in favor of the "liberated community", which will build on the sites of our present suburbs. "The new community provides every man, woman and child with a private bedroom and study, connected by a hallway to a private kitchen and bath . . . beyond the age of six or seven, each member of the community is autonomous. A man and woman who wish to live together might rent adjacent rooms and wall off the area between them making a private house beyond the corridor. Three or four men, women, and children can do the same."

As for the all-women commune, Germaine Greer warns, "It is in no way different from the medieval convents where women who revolted against their social and biological roles could achieve intellectual and moral fulfillment from which they exerted no pressure on the status quo at all."

However, New York architect Phyllis Birkby worked on plans for an all-women building that had "a movable focus which was people and not space." Enthusiasm for the project faltered, she feels, because it was hard to visualize as a new and unrestricted form.

It is difficult to evaluate the liberated woman's ideas for new architecture because although her objections are specific, her plans for the future are necessarily vague at this beginning stage. It is a help to know what she does not want. She seldom speaks of wanting more freedom to choose an oven or a color or a chair. But she does want to be able to choose an architecture that complements her education, career and daycare needs, and she desires flexibility. She needs architectural options that will support her life choice, so that she can have an education, career and babies, if she wishes.

The woman who blames architecture for her oppression may be saying more about her own personal problems than she is about the house she lives in. But she should be heard. It does not help her to have to live in a machine that is hygienic and technically correct if it is without humor or the slightest suggestion of the life going on inside. Doing it by the book, be it Sweet's Catalogue or *Maison et Jardin*, is not desirable if it forces on her an accompanying life style that allows for no change or choice.

Architecture for women is a red herring because it cannot liberate women unless it liberates people.

The woman who blames architecture for her oppression may be saying more about her own personal problems than she is about the house she lives in.

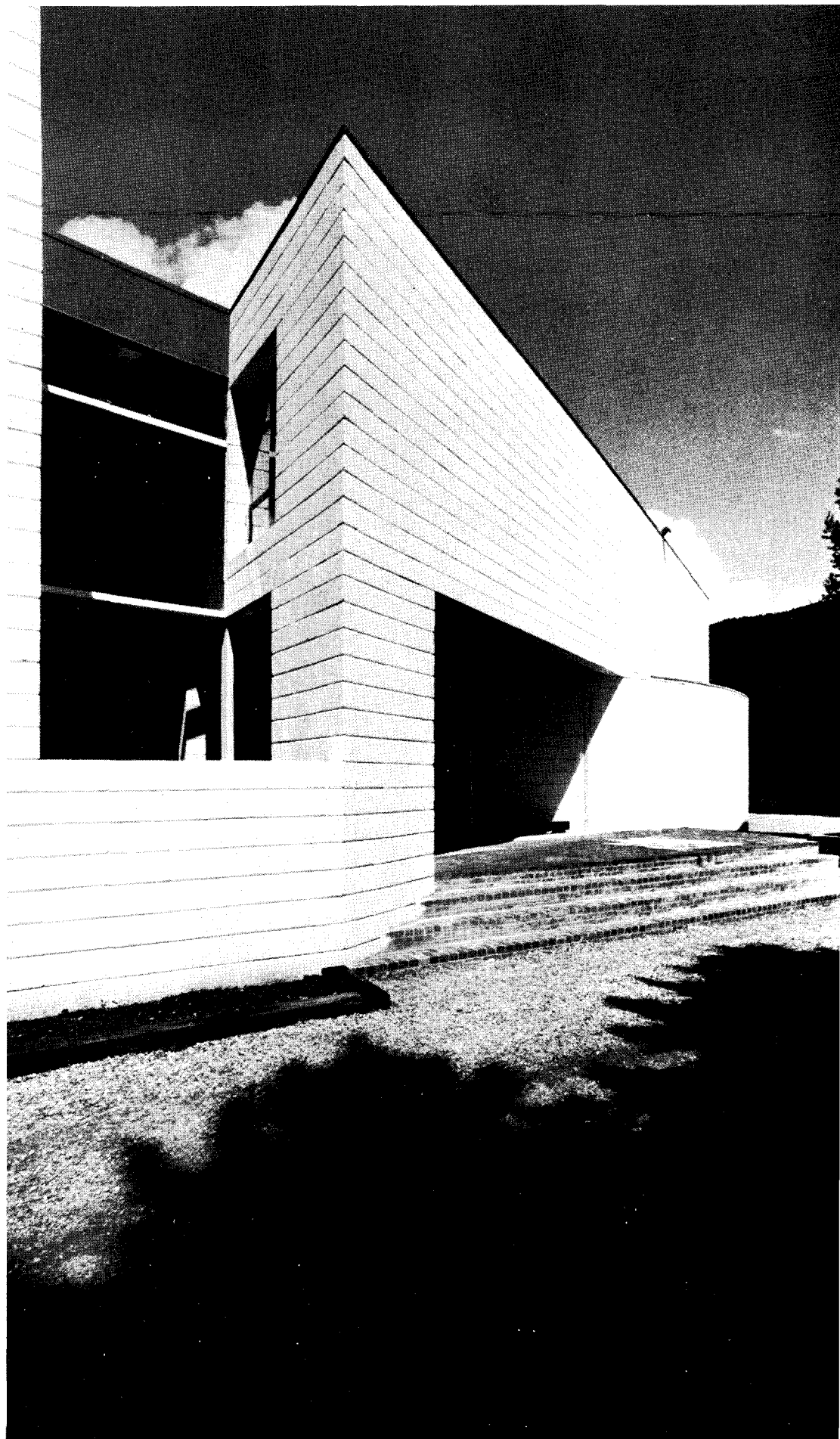
PLAYFUL RIGOR

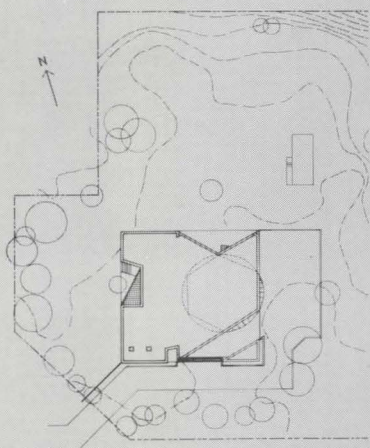
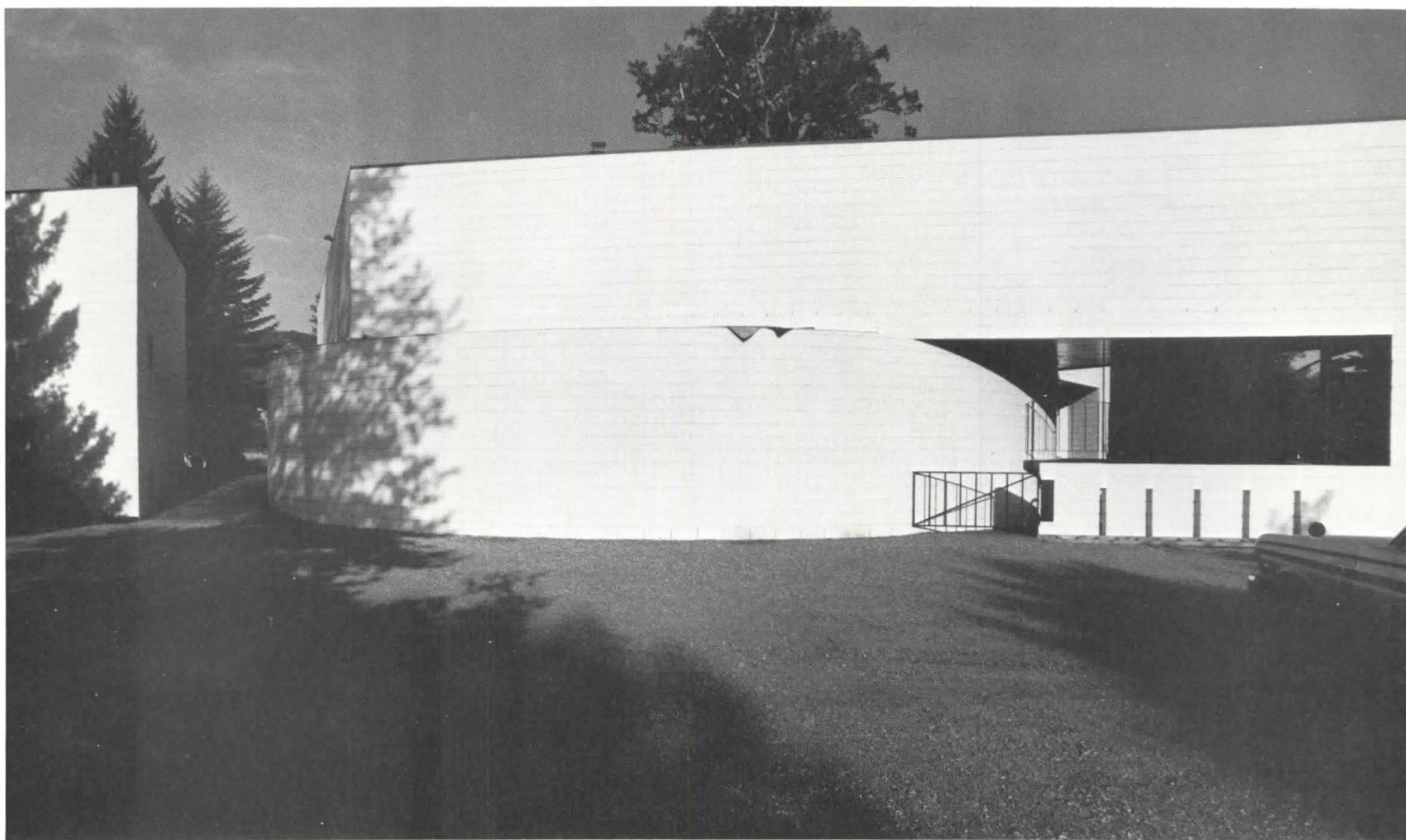
Geometry toys with nature in this small conference building

The land for The Given Institute of Pathobiology in Aspen was donated to the University of Colorado by Mrs. Walter P. Paepcke whose late husband founded the famed Aspen Conference. Mrs. Paepcke had strong interest in maintaining the grounds, and her Chicago friend, Architect Harry Weese, agreed. He describes the site as "almost a botanic garden." Little wonder. There are firs and spruces, some 50 to 60 feet high. Only one tree was removed during construction of the Institute, and a deep bow was made to the cottonwood on the west. The building embraces this garden and looks north to a pond which is part of an ecological preserve. On the south and east, the building extends into the landscape by way of fences (not yet complete). One wall will extend diagonally from the southwest corner; the other from the northeast corner towards a creek. This will make the building a gateway to the garden.

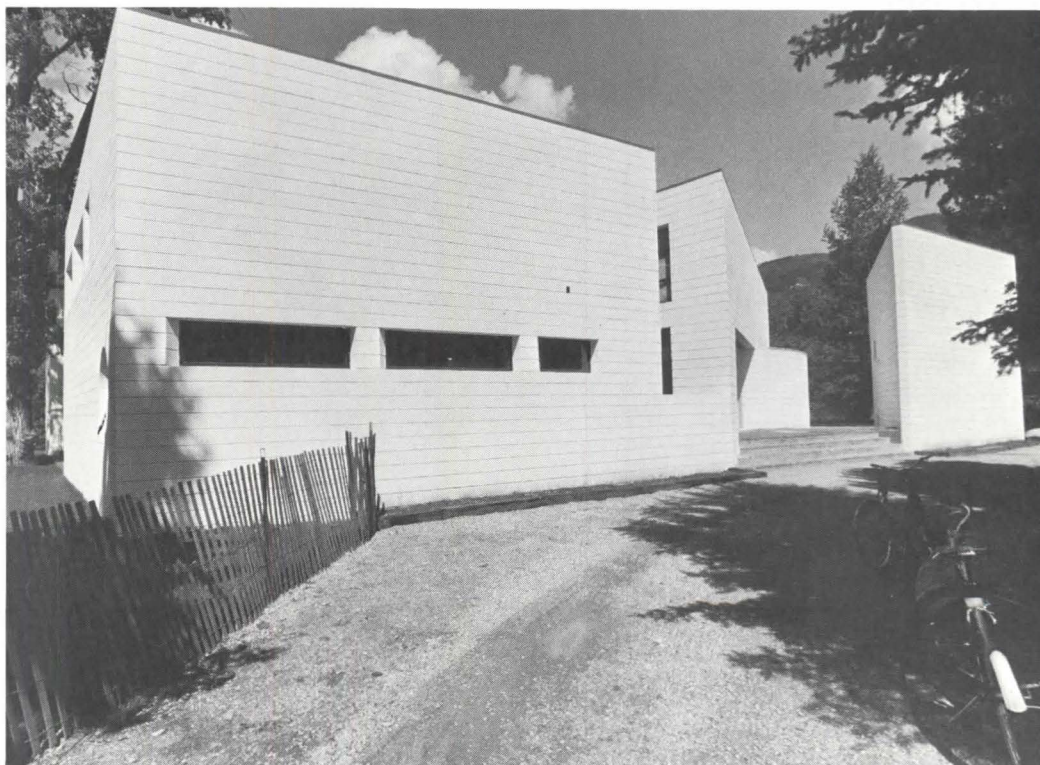
The geometry of the building has a playful rigor. The circular seminar room seats 50 in concentric circles of desks and has a hexagon superimposed at the second level by three dual-purpose conference rooms and the bridge. This bridge, which at first appears to be wildly free-form, and could have been since it is suspended from above, is actually tamed by the circle and hexagon. The basic square of the plan is maintained by brick terracing.

But the dominance of the full circle can be enjoyed from at least three sides. As Harry Weese puts it, they "extracted as much from the three-dimensional possibilities" as they could, especially by nudging the circle a little beyond the boundaries of the square. The port-hole windows are reminders of the circle where it is least apparent. One gives a special view of the cottonwood from the

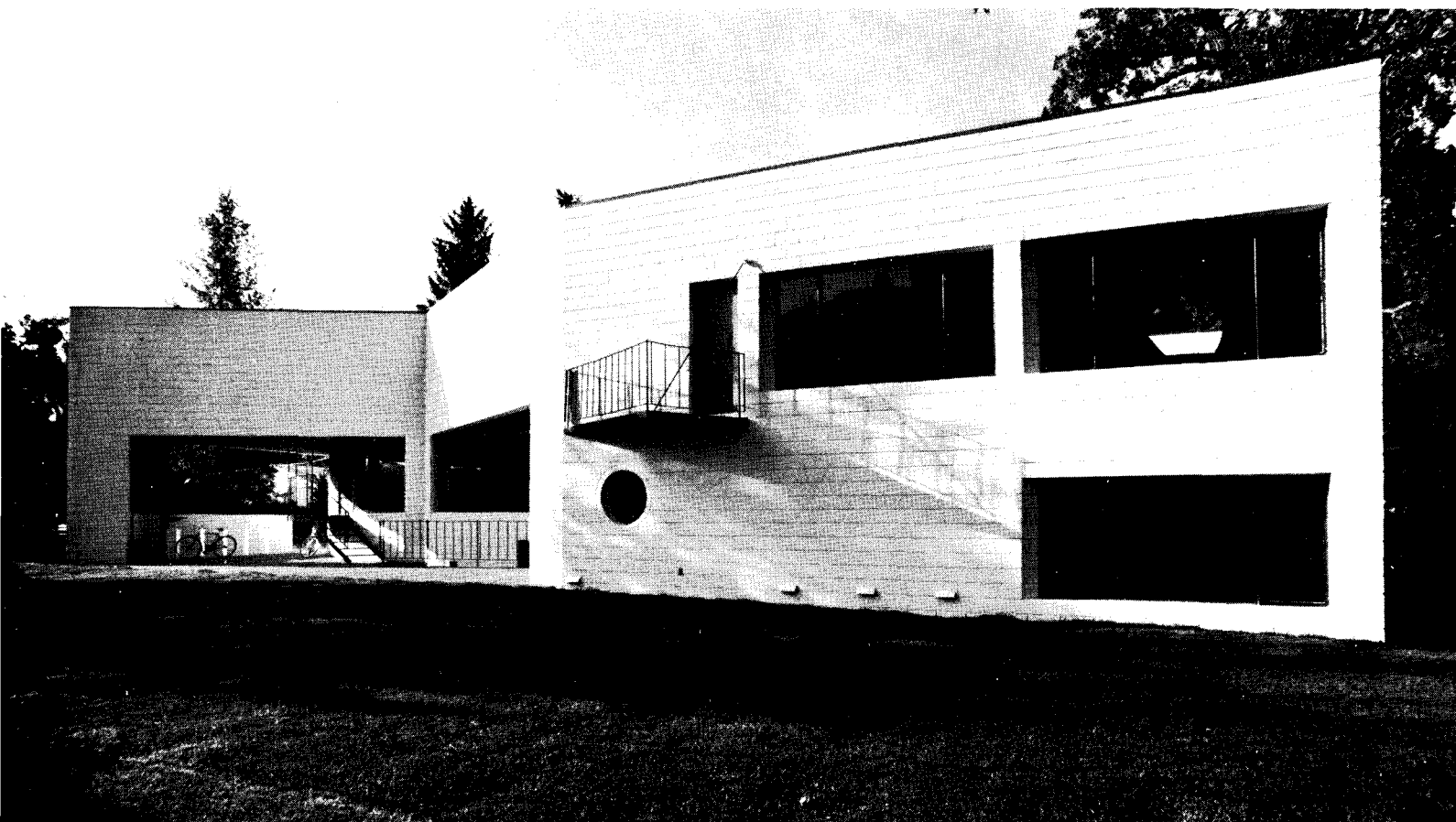




The Given Institute is in a spacious residential area and makes inviting gestures towards its neighbors while deliberately fencing off its garden. The existing utility shed at the top of the plot plan (above) is reminiscent of mining era buildings and will be remodeled to serve as a caretaker's house.



The notch to the left of the entrance (opposite and above) brings light into the lobby and second floor rooms and emphasizes the geometry by separating the circular and triangular volumes from the rest which complete the square. The eastern facade (top) is the most sculptural. Slots in the wall at right are for bikes.



library; others illuminate the first floor hall and kitchen.

The other windows are likewise emphatic. The first floor conference room windows, planned from a sitting point-of-view, look right out into the grass; the library windows above, on the north, give a full view of the pond and mountains beyond; and, on the west, low slit windows draw attention to the flower beds.

This painted white block building with black mullions and railings is crisp in its setting of greens and barks. White interior walls and a green carpet on all but laboratory and service floors bring the basic color scheme inside. The walls span as much as 30 feet over openings, using no structural steel; reliance is on regular reinforcing rods. The horizontal joints of the block are raked; vertical joints are flush.

Under the direction of Dr. Donald King, the University of Colorado gives 13 summer courses at the Institute for professors and students of biology and related fields. Receptions and catered lunches for the week-long conferences are held on the terrace just outside the kitchen.

Dr. King hopes to have public lectures one night a week with chamber music concerts. The seminar room desks can be taken up in about an hour, leaving carpeted risers as seating in the round. When the building is not being used by the Institute, it can be rented for small lectures or concerts.

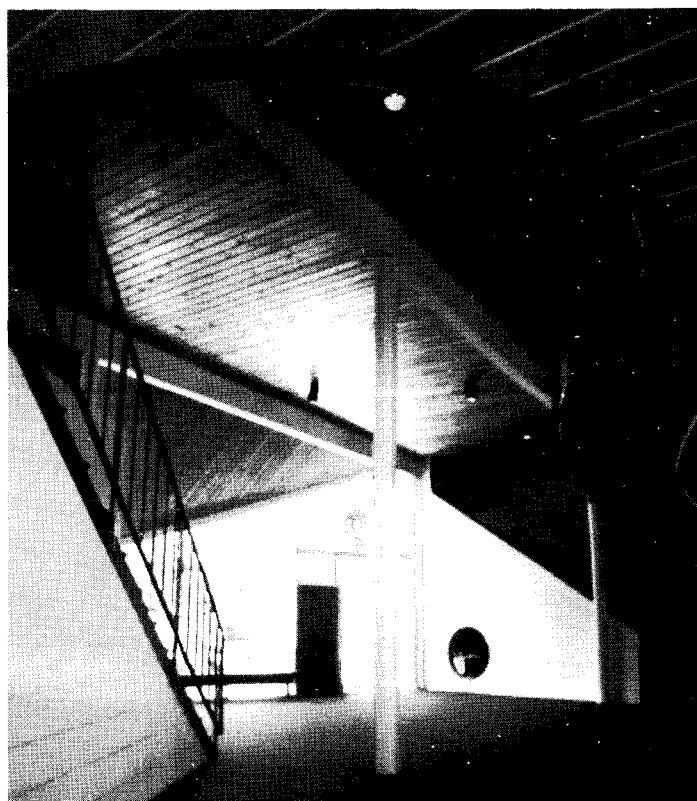
The building is equipped with open conduits for telephone lines to computer terminals and for closed-circuit TV connection with University branches. The laboratory, with centrifuges, an electron microscope and darkroom, is equipped for five-day demonstration experiments.

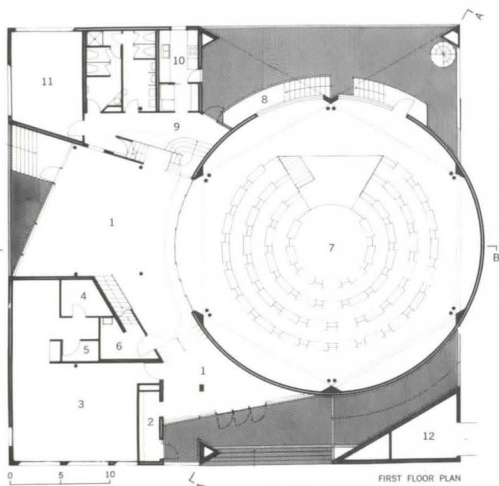
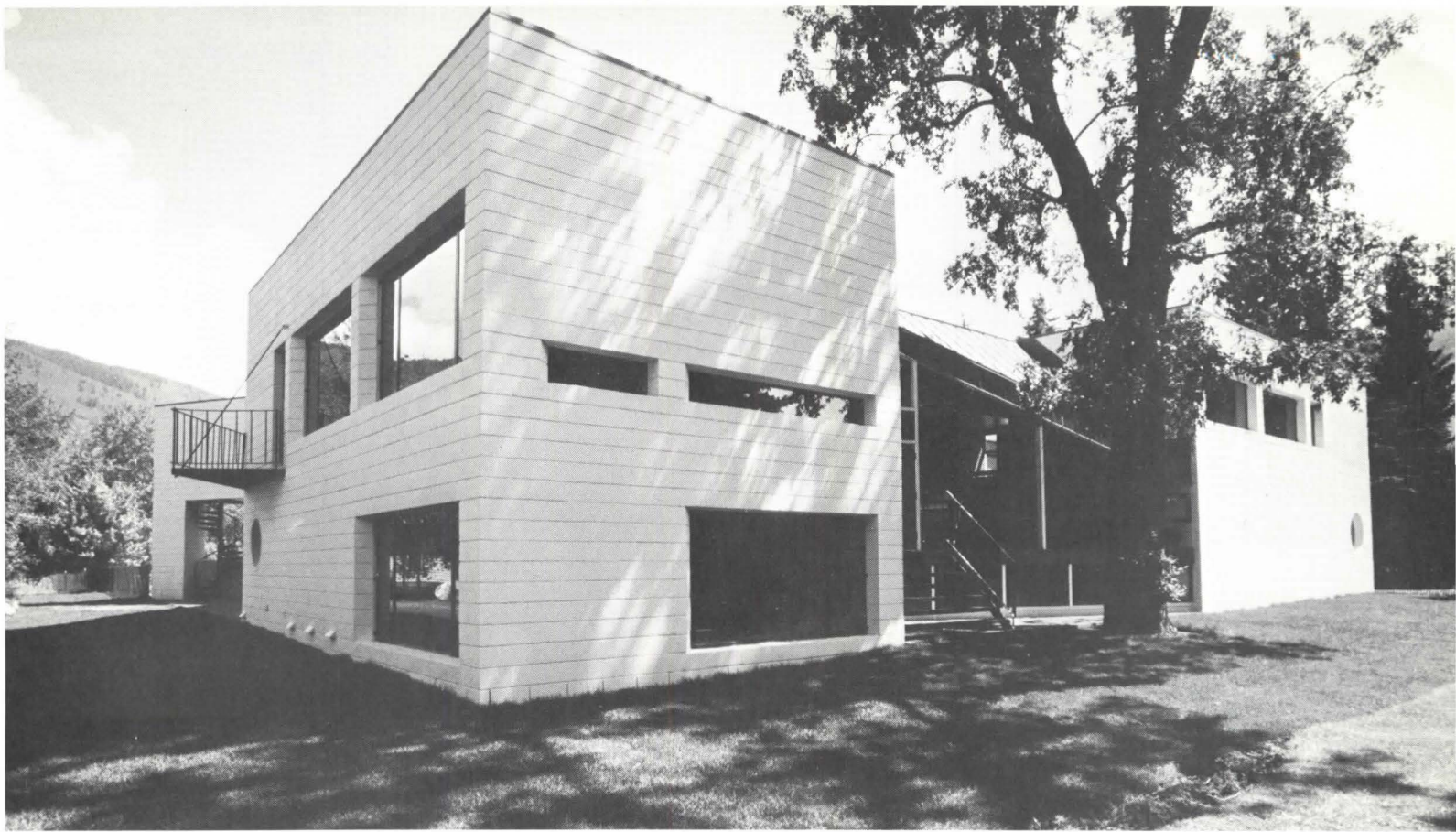
The seminar room desks have microphones and individual recording machines which enable conferees to tape just what they need of a session. This room also has rear and front screen projection; the glass walls above are adaptable as screens.

Satisfying acoustics have resulted from isolating the mechanical equipment in a building of its own and the hexagonal form of the second level.

Harry Weese says this building is light hearted—after all, it's 8,000 feet above sea level. We think it would be welcome at any altitude.—JANET BLOOM

The northern facade (above) is the most open. The library balcony facing the pond (seen only from the second floor) gives readers a chance for a pleasant breather. From the main entrance (below) one feels the building's openness and can enjoy the contrasts within its geometry as well as with nature. From the northwest (right) one sees how variously the building responds to its site with rooms quite different in feeling because of the fenestration.

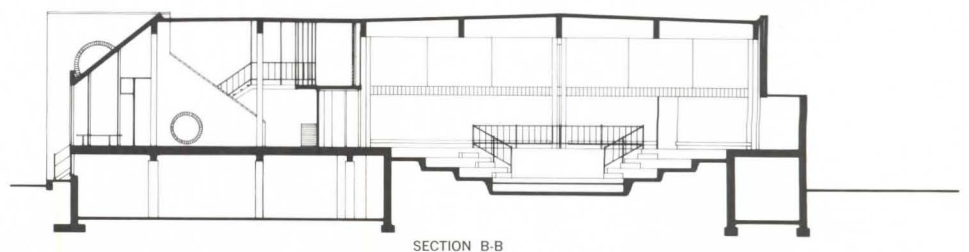
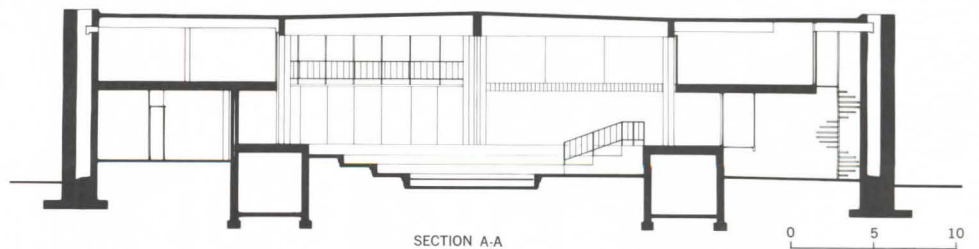
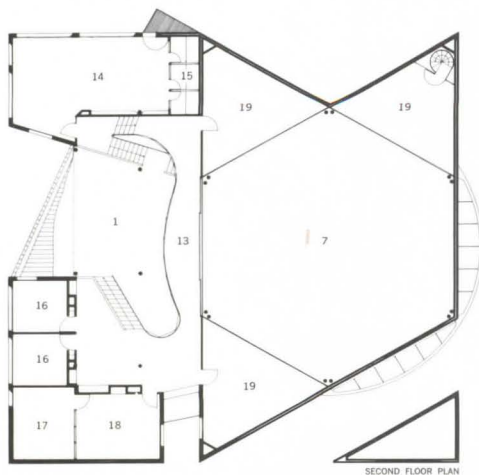




- 1 LOBBY
- 2 COAT ROOM
- 3 DEMONSTRATION LABORATORY
- 4 DARKROOM
- 5 COUNTING ROOM
- 6 JANITOR'S CLOSET
- 7 SEMINAR ROOM
- 8 FOYER
- 9 HALL
- 10 KITCHEN
- 11 CONFERENCE ROOM
- 12 MECHANICAL ROOM
- 13 BRIDGE
- 14 LIBRARY
- 15 CARRELS
- 16 OFFICE
- 17 SUPPLY ROOM
- 18 REPRODUCTION ROOM
- 19 CONFERENCE-PROJECTION ROOM

FACTS AND FIGURES

The Given Institute of Pathobiology. 100 E. Francis St., Aspen, Colo. Owner: University of Colorado. Architect: Harry Weese & Associates. Project Manager: William Bauhs. Job Captain: Philip Prince. Engineers: The Engineers Collaborative (structural); James Burke & Assoc. (mechanical & electrical). Interior Designer: HWA. Contractor: H.E. Anderson, Inc. Building area: 12,800 sq. ft. Construction cost: \$400,000.00. (For a listing of key products used in this building, see p. 77.)



DREARY DEADLOCK REVISITED

Public housing programs are being reappraised and redirected. But to what end?

BY AL HIRSHEN AND RICHARD LeGATES

*Strange lot, in which the goal displaces itself,
And being nowhere may be anywhere!
In which Man, whose hope never flags, goes always
Running like a madman in search of rest!*

Charles Baudelaire,
"The Voyage"

Sixteen years ago, Catherine Bauer wrote a seminal article in FORUM. She charged that the American public housing program was in a "dreary deadlock"—with no prospect for reversing the trend toward large unsightly projects, inefficiently produced and harshly managed. In a subsequent issue, eleven nationally known housing reformers responded to her request for sharp rethinking of the program.

Sixteen years after the "dreary deadlock" articles, a reappraisal of developments in the public housing program, many of them influenced by those writers, is in order.

Public housing in America has continued aberrant from what Catherine Bauer called the normal pattern of reform movements in modern democratic countries. Today, as in 1957, it has neither died nor been widely embraced—notwithstanding legislative adoption of most of the ideas suggested by the reformers. Now is the time to acknowledge that public housing will never become a popular and accepted program.

It is now argued that a "housing allowance" system, based on the recognition that housing problems are poverty problems, may ultimately be a more effective solution to the housing problems of the poor than the public housing program. Until it becomes clear, however, that a national system of housing allowances will be established, serving the needs of those least able to pay, public housing remains the only program with a subsidy deep enough to reach the very poor.

Since 1957 the total number of public housing units under management in the United States has doubled. Each year the number of new units placed under construction or rehabilitation has increased. By the end of 1970, public housing authorities had been created in more than 4,000 localities distributed throughout all 50 states.

Despite all this, fewer public housing units have been constructed in the 23 years since the 1949 Act was signed into law than that act called for in the first six years. Although the public housing program has made modest gains by concentrating on units for the elderly, the increase in the number of units for families (increasingly a non-white population) has been almost nonexistent.

Recent spectacular public conflicts over location of family public housing in middle-class neighborhoods such as Forest Hills, New York, underline the fact that the program has not gained broad public popularity. Moreover, a survey of public housing commissioners in major housing

Mr. Hirshen is Director of the Housing Law Section of the National Housing and Economic Development Law Project at the Earl Warren Legal Institute, University of California, Berkeley. Mr. LeGates has been Staff Attorney for the Project, Assistant Professor in the Urban Studies Program at San Francisco State College, and an Acting Instructor in the Department of City and Regional Planning at Berkeley. They are co-authors of the "Handbook on Housing Law." Their article is based on research done under a grant from the Office of Economic Opportunity, Washington, D.C., and was prepared with the assistance of Thomas Cleaver and Vivian N. Brown.

authorities found that fully one-quarter opposed construction of any additional public housing.*

The overriding theme which runs through the comments of the "dreary deadlock" writers is that public housing must be made largely indistinguishable from private housing before it will be accepted. To this end, the reformers put forward a range of proposals. Legislators and administrators in the past fifteen years have adopted most of the commentators' ideas. Unfortunately, the reforms have not been widely implemented because of inadequate federal funding and local apathy or mistrust.

Catherine Bauer attacked public housing projects for being "very large" and "designed as islands" with an "institutional quality" resulting from their highly standardized format. She concluded that we must have no more projects. This sentiment was echoed by others such as Vernon deMarres, a California architect, who stated, "The projects (I hesitate even to use the word) should be relatively small and scattered throughout the community."

The chapter on site selection of the *Low Rent Housing Handbook* and HUD's "Project Selection Criteria" clearly delineate a policy favoring scattered units. Nonetheless, less than one-fifth of the housing authorities, responding to the Hartmann-Carr 1969 survey, indicated that they had scattered site construction in use. The reasons for this failure are essentially twofold. Scatteration costs more than dense projects (with resultant savings in per unit cost of land and economies of scale in construction) and allowable maximum cost limits have not been substantially increased. Even if the federal government were to provide the necessary funds, scatteration would not take place rapidly. Three out of five of the commissioners interviewed in the Hartmann-Carr study reported that they did not know enough about "new programs" such as scatteration to utilize them.

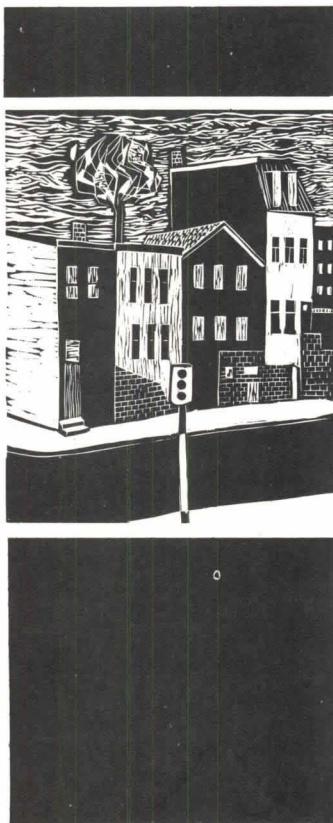
A second technique to make public housing less distinguishable from private housing, urged by both the late Charles Abrams and builder James Rouse, was a homeownership program.

Sale of public housing to tenants under certain circumstances became legally possible as early as 1964. Three years later, in 1967, the first HUD Secretary, Robert C. Weaver, created the "Turnkey III" program of public housing homeownership and funded a major pilot program in North Gulfport, Mississippi. The program as currently designed has major defects. Typically, a tenant will build up his equity by providing all routine repair and maintenance of the home ("sweat equity"). If he leaves the project before obtaining title, he does not receive any of his accumulated "equity." Tenants of public housing will, by definition, not have enough income to pay off a loan and acquire ownership for many years (Turnkey III bonds have a twenty-five year term). Thus many tenants may, in effect, provide for free maintenance to the authority for periods of several decades in exchange for nothing of value should they leave the project, stop making payments towards homeownership, or die. While homeownership in public housing may be useful in extraordinary situations such as North Gulfport, Mississippi, it is not a broad-scale solution

*Hartman-Carr, "Housing Authorities Reconsidered," 35 American Institute of Planners Journal 10 (January 1969).



©Woodcuts 1967 by Bronislaw M. and Hedi Bak.



to the needs of the millions of America's urban poor. Elderly and handicapped tenants, as well as some female-headed households, may not be able to provide "sweat equity." The mobile and the aged will necessarily depart before they can take advantage of the accumulated equity. In dense urban areas, physical design problems will often prohibit homeownership except in the form of cooperatives and condominiums—ownership forms which have often created problems for middle and upper income city dwellers.

Another technique suggested to assure that public housing types would not be distinguished from private housing was the purchase of existing private units. Lee Johnson of the National Housing Conference and Dorothy S. Montgomery pressed for this solution. Mrs. Montgomery, the managing director of the Philadelphia Housing Association, concluded that this would be both feasible and desirable in Philadelphia. One year after her proposal was published, Philadelphia did initiate a "used house" program on a modest scale.

A 1971 GAO audit of the Philadelphia "used house" program noted that 33,000 dwelling units, about 20 percent of the city's public housing stock, had been purchased and rehabilitated at an estimated cost of 44 million dollars. However, the massive physical and social deterioration in Philadelphia's core, where many of the used housing units are located, has made the Philadelphia program almost unworkable. A similar program in Baltimore appears to be more successful—but only, it is claimed, because of careful tenant screening procedures and selection of buildings in less blighted neighborhoods, both of which raise serious questions about the possibility of broad application of such a program without limiting eligibility to the "cream" of tenants and buildings.

A related idea—also put into effect since the 1957 articles—is the leasing of units by a local authority in existing private housing. The Section 23 leasing program was adopted in the Housing Act of 1965. In essence, it authorizes a local housing authority to pay a private landlord the market rent for a unit and then sublet it to a low-income tenant at a level comparable to that charged in conventional public housing. By the end of 1970, more than 75,000 Section 23 units were under management nationally. As legal scholar Lawrence Friedman and other writers have noted, the Section 23 leasing program offers hope of ending *de facto* and *de jure* income and race segregation by making possible an economic and social mix among subsidized and unsubsidized tenants. This hope apparently has not been fulfilled.* The program is aimed at addressing the deeper problems raised by the earlier reformers, as a leased private unit will be physically indistinguishable from surrounding units, and the broad diffusion of tenants into areas which previously had no public housing can be achieved with a minimum of visibility and conflict. Both a recent GAO report and the Hartman-Carr study indicate that local housing authorities have been slow to capitalize on this program

because of bureaucratic rigidities and local apathy. Nonetheless, the Section 23 program has been a modest success in a field of notable disasters and provides an instructive model.

The housing allowance approach is conceptually related to Section 23 leasing. By permitting lower-income families and individuals to occupy units in the existing stock, it would eliminate altogether the physical and social distinctiveness of public housing "projects." Use of existing housing may mitigate middle-class opposition to public expenditures to give the poor new housing perceived as or actually better than the homes which they themselves occupy. It is contended that such an approach could respond to urban housing problems on a mass basis without extensive time lags associated with new construction.

In addition to reforms directed at making the public housing program more acceptable to the public at large, several writers focused on the public housing production process from the point of view of building and real estate interests. In order to achieve a program which would be both more efficient and have a broader coalition of influential local interests behind it, Ellen Lurie, a New York community worker, suggested that private builders should be enticed into the low-income housing field.

Former HUD Secretary Weaver in January of 1966 established the administrative framework for a program of "Turnkey" public housing. Under this program, a local housing authority may contract for public housing to be produced by a private developer with payments made only when the developer "turns over the keys" of the finished project to the authority. It was hoped that such a system would reduce red tape and delays, provide for more efficient production of public housing (with resultant lower costs), and mobilize a larger sector of private market builders.

By the end of 1970, about 54,000 Turnkey units had been completed and were under management. Nearly three times that many were under annual contribution contract and in construction or pre-construction stages. The evidence suggests that the Turnkey process speeds up production, but neither significantly reduces costs nor greatly expands the number of prime and subcontractors who engage in public housing construction.

Another principal focus of the "dreary deadlock" commentators was upon management reforms of the public housing program to make it more acceptable to tenants. Catherine Bauer noted that local authority landlords tend to be "paternalistic" and "rigid and heavy-handed, with all kinds of rules and regulations unknown in ordinary private rental management and unthinkable in a pattern of individual ownership." Elizabeth Wood cited housing authorities' welfare investigation procedures as repugnant to normal families and unendurable when they interfered with the family's right to earn as much as it could.

Since that article appeared, court decisions and administrative changes have reordered the ground rules in public housing management. Thus, welfare investigations such as searches for an unauthorized "man in the house" are now prohibited both by case law and HEW regulations. Residency requirements for admission to projects have been held unconstitutional. Cases have established

*F. DeLeeuw and S.H. Leaman, "The Section 23 Leased Housing Program," Urban Institute, Working Paper 716-1 Nov. 1971; S.H. Leaman, "The Leased Housing Program: A Statistical Review," Urban Institute, Working Paper 112-30, March 1971; R.G. Palmer, "Section 23 Housing: Low-Rent Housing in Private Accommodations," 48 Journal of Urban Law 255 (1970).

tenants' constitutional rights to fair and orderly admissions and eviction procedures which comply with conventional standards of procedural due process.

In 1971, HUD Circulars established mandatory minimum lease standards and mandatory grievance procedures which further humanize the public housing management process. At the time of this writing, a Federal Court of Appeals has upheld HUD's power to issue such Circulars. A petition for a writ of certiorari to the Supreme Court to review the case is pending.

Some commentators, notably Roger Starr, in an article in *The Public Interest*, have argued that the growing due process restrictions on the discretion of authorities to admit and evict tenants "may threaten the very existence of [authorities'] projects." Mr. Starr argues that the authorities must be left free to admit the working poor with their superior "set of attitudes towards work and life and different patterns of behavior" rather than the non-working poor (particularly AFDC families). He further argues that management must have broad discretion to carry out evictions in accordance with procedures which may not meet constitutional standards of procedural fairness in order to protect the fiscal integrity of the projects. Others argue that a balance can and must be struck which will protect the fiscal viability of the housing project and also protect the rights of tenants to fair procedures.*

Another specific grievance of tenants identified by planners William Wheaton and Carl Feiss was the eviction of families for being over-income. Since 1957, the bases upon which a tenant can be evicted for over-income status have been steadily eroded. Legislation introduced in 1972 called for total elimination of that provision.

Two other significant problems from the point of view of the tenants that were not broadly discussed in the earlier article have emerged during the last fifteen years and have provoked legislative reform. Urban Institute studies have shown that as many of the earliest public housing projects have aged, and as price and wage inflation has raised management costs, many authorities have been forced to the brink of bankruptcy. This has often led to unfortunate curtailment of necessary minimum management services.

Two significant responses have been of great importance to tenants. The 1968 Modernization Program had, by mid-1971, provided \$585 million for basic "modernization" of 350,000 units with an average age of nineteen years. Particularly significant in the Modernization Program is the requirement for tenant participation in the setting of priorities for use of the funds.**

A second major change in response to the perceived fiscal crisis in public housing was passage of the Brooke Amendments to the 1969 Housing Act which, among other things, limited the rent of public housing tenants to no more than twenty-five percent of their income and provided additional subsidy funds to make up the gap between rental receipts and operating costs in those cases where rents had to be reduced. A 1971 evaluation of the impact of the Brooke Amendment showed that 28% of all families in

occupancy at the time of the survey experienced rent reductions and that the median rental reduction for families was close to \$100 a year. Total annual savings to tenants was slightly over \$20 million annually. The underlying concept advanced in the Brooke Amendment, crippled by HUD regulations but subsequently clarified by a "Second Brooke Amendment," is that federal subsidy funds should be extended to cover necessary operating costs as well as initial construction costs of public housing.

A counter movement, however, has unfortunately begun with respect to federal subsidy funds. HUD has refused to spend Congressionally authorized and appropriated monies for needed operating expenses. The effect of this action has been to seriously undermine the program's ability to provide "decent, safe, and sanitary housing within the reach of low-income families." On November 28, 1972, HUD issued regulations, in the form of a HUD Circular, spelling out an operating subsidy formula which assures that local housing authorities will continue to face financial crises. Indeed, a primary purpose of the Circular is to establish "a limitation upon the extent to which the Federal government will assume financial responsibility for Housing Authority management operations." The Circular adopts a formula based on past budgets, which do not necessarily reflect deferred maintenance, neglected tenant services or adoption of Brooke Amendment limitations. HUD recognizes the inadequacy of the formula, but simply states that "arrangements be made to absorb the cost of expanded services through more efficient management operation, increased rental income, and development of local funding resources." Reference to "increased rental income" obviously is intended to add to the pressure on housing authorities to implement HUD's so-called "income mix" Circular. The purpose of this Circular is to reduce the tenancy of the "very lowest income families," the very group the Housing Act was designed to serve.

Thus, the Brooke Amendments, which provided a long-overdue response to the fiscal problems of public housing, appear to be largely negated by HUD's recent actions.

Perhaps the most exciting management development in public housing—with implications well beyond the program itself—is the increasing involvement of tenants in management of projects. A number of states have adopted laws requiring that one or more tenants sit on the Boards of Commissioners which run the authorities. Congress and HUD have encouraged the concept of tenant commissioners. In the Modernization Program, a high level of tenant involvement in determining how to allocate supplemental funds to modernize older projects is required. This process of democratizing public housing management has been slow and often tumultuous. Whether or not it is ultimately successful will have a very substantial impact on whether the new urban poor will be successfully incorporated into the American mainstream or remain frustrated and alienated.*

Another reform espoused by the "dreary deadlock" reformers was a change in the relationship of housing authorities to political jurisdictions

*Hirshen and Brown, "Too Poor for Public Housing: Roger Starr's Poverty Preferences," *Social Policy* (May-June, 1972).

**See Hirshen, "The HUD Modernization Program (NLADA Monograph Series No. 4, 1970).

*On the issue of tenant participation, see Hirshen and Brown, "Public Housing's Neglected Resources: The Tenants," *City*, Fall 1972.





located beyond the limited geographical boundary of the core cities in which they were authorized to operate. Catherine Bauer noted the rigorous limitation of the territorial jurisdiction of municipal housing authorities and Charles Abrams called specifically for the formation of more statewide authorities to help build in outlying areas. With the creation of regional associations of government—albeit weak ones—most current thinking on expansion of housing authority jurisdictions now calls for *metropolitan* rather than statewide agencies. A number of metropolitan housing development corporations funded by the U.S. Office of Economic Opportunity are already in existence. Proposed legislation, introduced in 1972, calls for more emphasis on metropolitan-wide housing authorities. If entities of this kind could be created (particularly with broad-scale use of Section 23 leasing to minimize community resistance), tenants could be offered a broad geographical choice of units which would make the program significantly more attractive to them.

Yet another aspect of the public housing program discussed by the reformers was the fragmentation of administration of public housing at all levels. Noting the “proliferation of special purpose local agencies concerned with slums and housing with no responsibility anywhere to view the housing picture as a whole,” Catherine Bauer proposed a reorganization and consolidation both of the national and regional level. Similarly, architect Henry Churchill called for abolition of “separate housing empires” at the local level and their merger with a municipal department of physical control that will deal with *all* phases of physical change.

Since 1957, the history of efforts to achieve “coordination” among the federal programs related to housing and urban development has not been a happy one. James L. Sundquist in his excellent book, *Making Federalism Work*, has chronicled the programs, instituted during the 1960’s, which aimed at achieving the desired federal coordination; it is a chronicle of failure. As of this writing, special revenue sharing legislation for “Community Development,” which would broadly consolidate housing and urban development functions, is still pending.

In view of the broad-scale reforms which have been accomplished in public housing, and the subsequent failure of these reforms to fully “take” or for the program to gain popularity, it is now time for a careful examination of the most thoroughgoing proposal put forward by the “dreary deadlock” reformers. Lee Johnson suggested abandoning the public housing approach altogether in favor of a program of subsidies flowing directly to the family rather than to the physical structure.

A careful analysis of the underlying rationale for the proposals in the FORUM articles will clarify the conceptual framework of this theory. A growing interest in this concept, underscored by recent activities of the Nixon Administration, makes it particularly opportune to comment on the standards such a program would need to be at all successful.

Read together, the reformers were saying that for low-income housing to become broadly popular, it would have to cease being “public housing.” Rather, it would have to become housing physically indistinguishable from the rest of the stock produced by the private sector, without traditional

public housing management patterns. Only Lee Johnson stated directly what was suggested by the other commentators—the “best” solution to the program’s problems would be to replace it altogether.

A system of “housing allowances” granted directly to the family would permit utilization of housing totally indistinguishable from the rest of the stock; there would be no more projects. Nor would there be institutionalized management, as the subsidized family would be free to select a unit managed on a decentralized basis. Older housing units available on the private market could be used if sufficient subsidy monies were made available for rehabilitation to meet minimum standards of health and safety and if there were rent regulation provisions to ensure their availability to low-income persons. Making use of this sector of the housing stock could greatly reduce the broad opposition to public housing from those who feel new construction is “too good” for the poor. Amounts of housing subsidy money could be evenly distributed in proportion to need rather than being inequitably allocated in large amounts to the few who get into public housing.

For these and other reasons, scholars such as Professor Ira Lowry of U.C.L.A., Frank DeLeeuw of the Urban Institute, and professionals at the New York City RAND Institute have become increasingly attracted to the “housing allowance” model. Demonstration projects authorized by Congress to test out the idea began late last year. Very recently, major figures in the housing field, including former HUD Secretary George Romney, have spoken in its favor.

While a “housing allowance” system may ultimately be more workable than the existing public housing program, there are many pitfalls in the achievement of a workable housing allowance program. Without the safeguards of rent control, strict code enforcement, enforcement of anti-discrimination laws, tenants rights protection, and capital funds for needed rehabilitation, a housing allowance program would almost certainly lead to inflated rents, shoddy maintenance and arbitrary treatment of tenants. Excessively thin subsidies will be a step backward. Yet the unfortunate history of the current Administration’s Family Assistance Plan for welfare reform shows that the political price of obtaining a more rational system for public welfare expenditures is often reduction of benefits to inadequate levels or endless study.

The lesson of proposed welfare reform suggests that the “dreary deadlock” which so vexed the reformers of the last generation cannot be “broken” as a wrestler breaks the hold of his opponent. Rather, this deadlock is part of the paralysis of this nation’s will to meet the housing needs of its poorest citizens, as well as their needs in other social areas. Without a new national commitment, the next generation of housing reformers will surely be as vexed as we are. Without it, the poor will continue to be victimized. Without it, all Americans, even those who are well-housed, will pay heavily for badly conceived, badly coordinated programs. It would be a national disgrace if, a decade from now, we found it necessary to revisit the “dreary deadlock” which has been discussed here. The struggle to break it must not be declined.

FACETS

(continued from page 25)

David Todd. Engineer Joseph Stein, Commissioner of the New York City Department of Buildings, served, as did planner DeForest Winfield, director of planning for Utica.

By running a competition the Corporation benefits from the concentrated thinking of not only the entrants but of the jury which wrote an exceptionally lucid and useful evaluation of the winning projects, making suggestions which, hopefully, the winner will be able to incorporate in design development.

The basic concept of the winning design is a square doughnut, cut on the diagonal into three-story and six-story segments, enclosing a 65 sq. ft. garden covered with a 70 x 30-ft. sloping skylight. The garden provides a little bit of Florida in upstate New York and gives the residents a place to be host to the community for exhibits, performances or parties. It is hoped that a residents' association will decide what goes into the garden and what takes place in it as well as being involved in its maintenance.

The jury felt this winter garden concept was an excellent response to the Utica climate and provided a pleasant opportunity for community interaction and a strong sense of place. Although they liked the spatial relationships between the interior court, the peripheral balconies, the corridor recesses and the small entry vestibules, they felt that sharp corners in these areas will need modification to reduce hazards. They found the exterior of the building "possibly formidable" to the adjoining community and suggested opening the ground floor units to small walled gardens. This, however, might not be practical climatically or desirable because of the adjacent arterial road and nature of the community. The jury felt the compactness and directness of this scheme made it the most realistic economically.

The program called for approximately 100 units, 20% efficiencies, 70% one bedroom units and 10% two bedroom units. The construction cost, without contractor's fee or sales tax, was not to exceed \$22,000 per unit. Construction is scheduled to begin in September 1973.

It is hoped that architectural associations across the country will be inspired enough by this project to try their own. It is

one way of peeling off the restraints which hamper the fully informed and effective exercise of professional skills. Thomas Galvin, the president of NYSAA and the New York City AIA said, "What we have done is to design a client." That's beginning at the beginning. How many architects, how many times, have wished the same? It can't be said that it's the only way, but it looks like an exciting alternative.

ALUMINUM CONTEST

The Architectural Aluminum Manufacturers Association and the Aluminum Association are launching a national design competition for lowrise buildings using architectural aluminum. Architects and builders or contractors will compete on an equal basis in two divisions, new construction and rehabilitation.

Any lowrise project (five stories or less) will be eligible if it has been completed in the 24 month period preceding July 31, 1973, and incorporates commercially available architectural aluminum building products.

The national winner in each division will receive \$1000 plus a plaque. Plaques will go to second and third place winners.

Entries must be received at the AAMA headquarters by August 1, 1973. Winners will be announced in October. Those interested in participating should contact the Architectural Aluminum Manufacturers Association, 410 North Michigan Avenue, Chicago, Illinois 60611.

AWARDS

The Edward C. Kemper Award of the AIA, which is given annually to a member who has contributed significantly to the Institute and the profession, will be given this May to Bernard B. Rothschild, FAIA, of Finch Alexander Barnes Rothschild and Paschal in Atlanta. Rothschild has been an AIA member since 1947. He has held every office in the North Georgia chapter and in 1972 was president of the Georgia Association. Among his many other AIA activities is his membership on the Documents Board of which he was chairman 1969-71. He played a key role in the development and updating of the contracts and guides to practice and is currently writing

an insurance guide for architects for the Documents Board. He is a member of the AIA Editorial Advisory Committee on Architectural Graphic Standards serving as its chairman in 1973.

ACADEME

FREE FORM SCHOOL

Last spring about 70 students and seven faculty members of California State Polytechnic University at Pomona rose up when the President dismissed the chairman of the architectural department, Raymond Kappe. They formed The New School which opened last fall in a 20,000 sq. ft. industrial building in Santa Monica. The faculty and students worked together in space planning the facility.

From what we hear of The New School, also known as SCI-ARC (Southern California Institute of Architecture), it sounds like the Bennington of architecture schools. College-without-walls concepts are an important part of the program. Field trips and cooperative ties with local professionals involve students in the realities of southern California; and a further emphasis on community exists within the school because classes are not physically divided up by year. Essentially it has a six-year professional degree program but students can progress at their own pace and complete their work in less time if they are able. There is a two-year graduate program leading to a masters of architecture, urban design, building science or architectural administration. Instead of letter grades, a student builds up a portfolio of detailed evaluations and samples of his work. A statement from the college says, "The school does not recognize failure, but instead encourages that projects be repeated and improved upon until a successful conclusion is reached, or the student is re-directed."

An essential part of the format of the school is interdisciplinary seminars with educators and community leaders from all areas of study being brought to the school. There is also a more structured program for those who desire it.

The Director of the school is Raymond Kappe (of Kahn Kap-

(continued on page 72)



Second Prize for Utica by Samton and Korman.



Third Prize for Utica by Howard Cohen.

FACETS

(continued from page 71)

pe Lotery) who founded and chaired the architecture school at Cal Poly where he initiated a project called Community '72. This is being carried over to The New School. The objectives are to develop a three-module-high building system utilizing new land-use techniques, evolving new ways of obtaining power, incorporating all aspects of environmental design and ultimately allowing for behavioral studies.

There is such interest in The New School that a recent California AIA conference passed a



Student designed modular system at SCI-ARC.

resolution endorsing its philosophy, and commending those dedicated to its formation and operation.

There seems plenty of cause for such excitement when a catalogue can say, "If a particular problem area turns you on, or if you are able to relate to one instructor in a special way, the opportunity to pursue your individual work will be made available to you."

CONFABS

● The University of Pennsylvania has won a \$25,000 grant from the PPG Industries Foundation to prepare courses and a comprehensive text entitled "Energy Conservation In Buildings" which will introduce energy and energy conservation concepts into architectural education. Architects and engineers and other members of the Penn faculty will work on the project

along with the University's National Center for Energy Management and Power. The resulting material should be useful to the architectural and engineering professions as a whole. The work is to be completed by July 1974, which is not a moment too soon.

● The College of Architecture at the University of Kentucky is looking for a chairman. Nominations with supporting vitae should be sent to Professor Herb Greene, Chairman, Search Committee, College of Architecture, University of Kentucky, Lexington, Kentucky 40506.

● The College of Engineering and the Division of Continuing Education at the University of Arizona are offering a five day course in Interactive Computer Graphics in Engineering Analysis and Design, March 26-30. This is an expanded form of the successful course given last March, and each attendant will spend more time with the new PDP-15/20 graphics computer. Inquiries should be directed to: Director, Conferences and Institutes, Division of Continuing Education, University of Arizona, Tucson, Arizona 85721.

● Joseph L. Muscarelle (whose contracting firm is doing more than \$15 million worth of buildings for the State University of New York at Purchase) has given Fairleigh Dickinson University \$1,000,000 to construct and equip a Center of Building Construction Studies at the Teaneck-Hackensack campus. Mr. Muscarelle, in conjunction with the university and the New Jersey AIA, will sponsor a competition for the design of the building. The Muscarelle firm will supervise and construct the Center at cost. The four year program offered by the Center will blend technical and humanities courses leading to a Bachelor of Science in Engineering Technology-Construction Option. Later on, there will be seminars, conferences, continuing education and re-training programs, graduate level training and product testing facilities. Mr. Muscarelle intends his gift as an incentive for labor and industry-wide support for the Center.

● Professor Steen Eiler Rasmussen says The Danish Institute's Summer Seminars are "a form of enlightenment marked by honesty and intelligence." They include seminars in English on Scandinavian architecture and

landscape architecture running from June 13-17, touring Helsinki, Stockholm, Oslo, Aalborg, and Copenhagen. Others are about Danish gardens, July 8-18; Danish design, August 5-18 and August 18-25; Scandinavian libraries and education; a comparison of Scandinavian and American educational systems; and social welfare in Denmark. Details and programs can be obtained from Det danske Selskab, Kultorvet 2, DK-1175 Copenhagen K, Denmark.

● The 1973 Annual Meeting and Foreign Tour of The Society of Architectural Historians will take place August 15-27 at Cambridge University, England and London. Sessions announced so far include: Town and Landscape Design to 1750; Photogrammetry Applied to the History of City and Landscape Design; Town and Landscape Design in England and the United States, 1750-1920; and Post-War Urbanism.

● The Third National Conference For The Building Team, which will focus on the owner, will be held in Chicago April 11-13 at the venerable Drake Hotel which, due to the pressure of a number of potential owners, may be demolished in the next few years. Program and registration information can be obtained from Francis X. Brown, Producers' Council, Inc., 1717 Massachusetts Ave., N.W., Washington, D.C. 20036 (202) 667-8727.

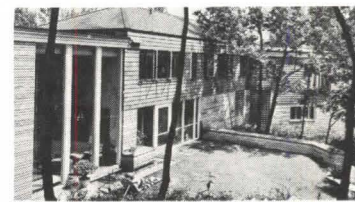
● The Second Conference on "How To Plan A Mall For Your Downtown," run by the Downtown Research and Development Center, will be held at the Warwick Hotel in New York on March 19 and 20. It is designed to give city officials, businessmen, planners and architects the full picture on logical, sequential mall development. Conferees are invited to bring their own plans for review. For registration information contact Jane Newman, Conference Coordinator, Downtown Research and Development Center, 555 Madison Ave., New York, N.Y. 10022. (212) 980-3840.

● A national week-long conference on the designs of systems for construction will be conducted by the American Institute of Architects and the Consulting Engineers Council December 11-18, with the opening sessions at the University of Miami and at Disney World.

Other sessions will be held aboard a cruise ship bound for Puerto Rico where a tour of several systems will take place. Speakers will include government officials, architects, engineers and manufacturers representatives. A major focus will be the problem of overcoming obstacles that prevent the use of new systems and subsystems. For further information write Professor Ralph Warburton, Department of Architecture and Architectural Engineering, School of Engineering and Environmental Design, P.O. Box 8294, University of Miami, Coral Gables, Florida, 33124, or call (305) 284-3438. For preliminary registration contact Mr. Wayne Schiffelbein at the AIA Headquarters, 1785 Massachusetts Ave., N.W., Washington, D.C.

PEOPLE

John Lloyd Wright, son of Frank Lloyd Wright, died in December at age 80. A fellow of the Society of American Registered Architects and a member of the AIA, he had a largely residential practice mostly in Southern California. He supervised the construction of his father's Imperial Hotel in Tokyo, and invented Lincoln Logs, frontier versions of the Froebel "toys" he and his father had played with as children. A professor of art



Welsh Residence, Long Beach, Ind.

and modern architecture, he taught at the University of California in San Diego. In his warm but objective book about his famous father entitled "My Father Who Is On Earth," John Lloyd Wright recalled his parent's legendary self-confidence. With the intention of nurturing his son's interest in architecture, Wright presented him with two volumes of Viollet-le-Duc and commented, "the rest you can learn from me."

PHOTOGRAPHS: D & H Station, Lee Newbury; Eiffel Tower, French Government Tourist Office; Rainbow Center Plaza, John Veltri; NYSA winner, Eli Finer of Crest Photographers.

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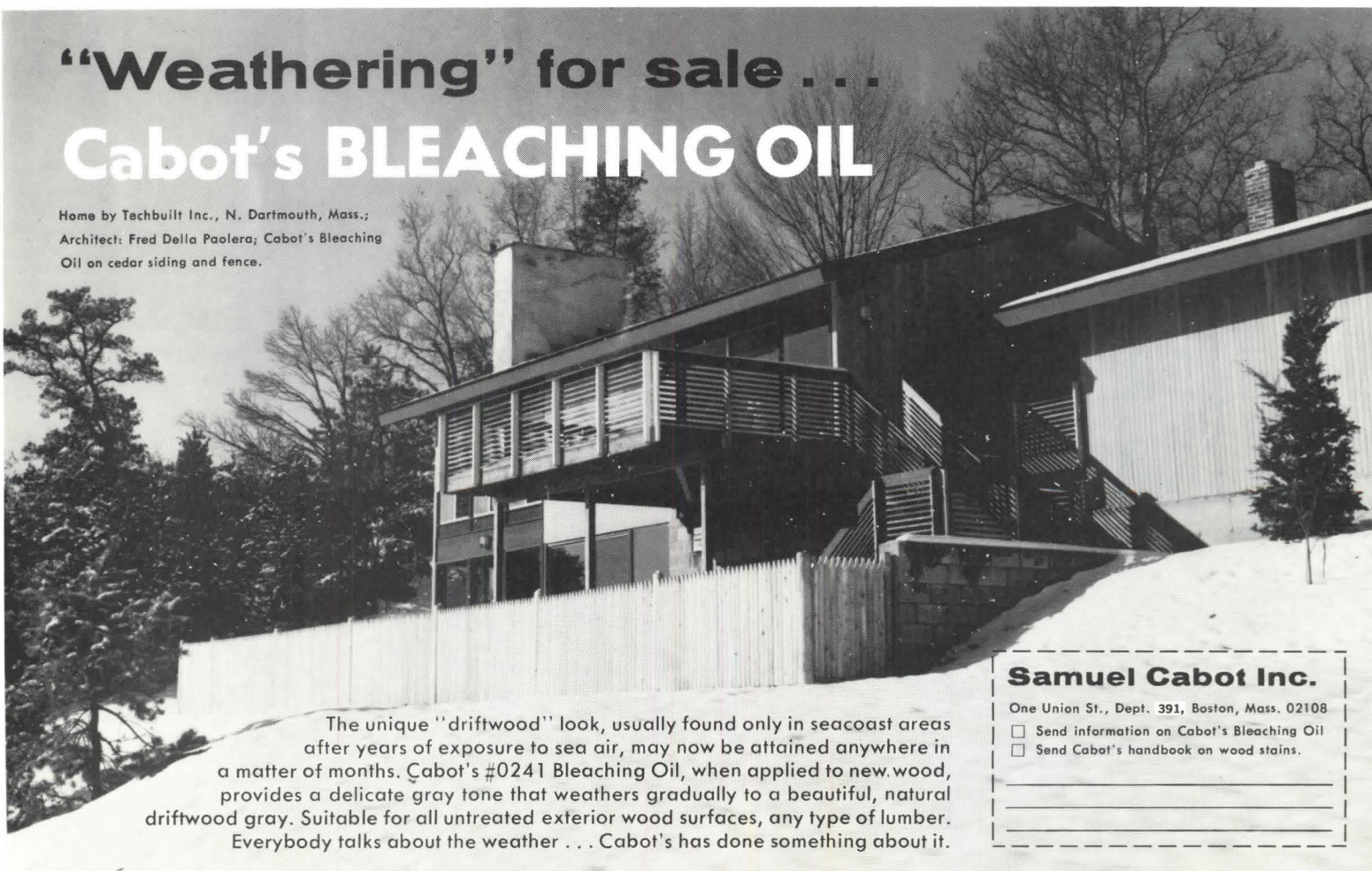
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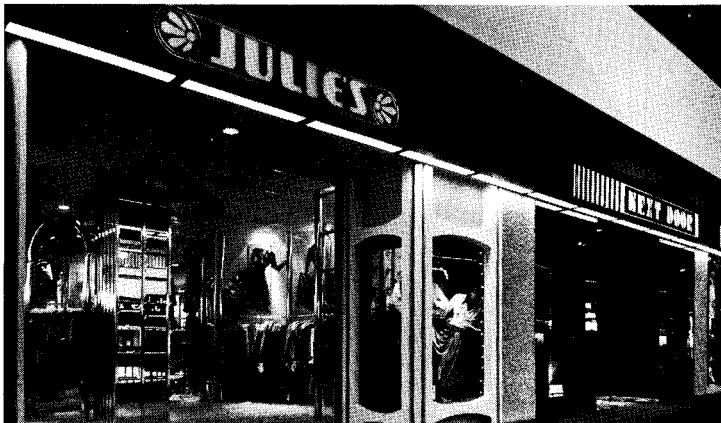
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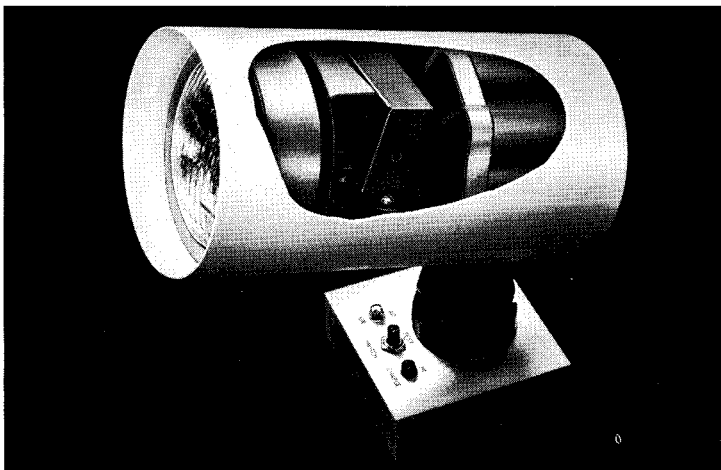


SIGN-ON

A method of interior lighting and signing has been introduced by the Benjamin Products Group of Thomas Industries Inc. The design, called Lighting Graphics System, provides low level interior illumination for the arcade or lobby of the structure and projects a wall wash of light on the exterior of the structure.

The system is composed of a series of adjustable metal light boxes mounted continuously in 4 and 8 foot sections with 4 fluorescent lamps in each. The sign graphics are mounted in front of a white opal plexiglass diffusing element which is adjustable to accommodate dimensional signing.

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DELITES

The Dual-Lite Co., a division of Sound-Scriber Corporation, has introduced a line of battery-powered emergency lighting fixtures called "Delites". The units operate with either 6 or 12 volt sealed beam or DC bayonet lamps, and come in single and two-head versions in black, white or spun aluminum. Fixtures are self-contained with batteries,

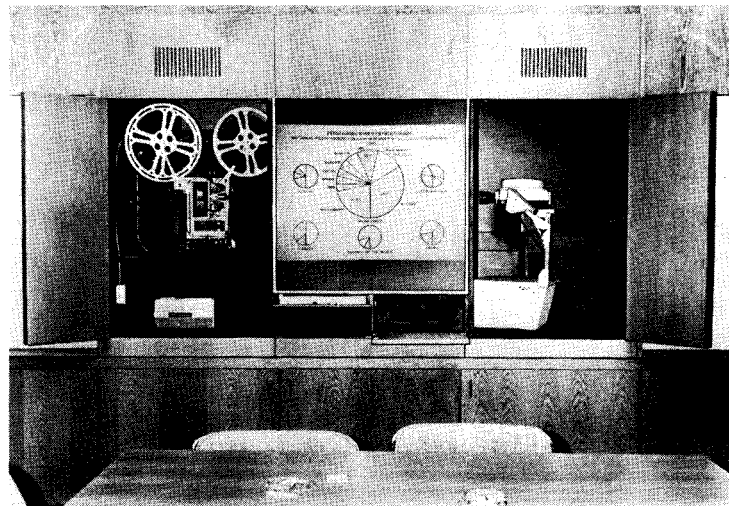
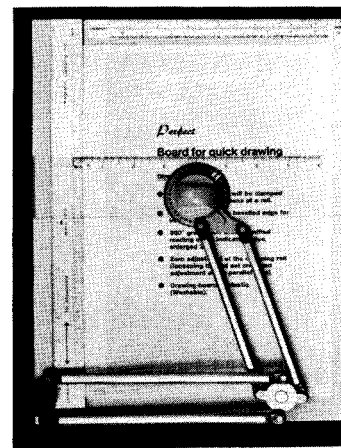
charger, supervisory and monitoring systems and controls built into the cylindrical housing system along with the lamp. Emergency lighting can be provided for a maximum of four hours and is activated automatically when AC power fails. When a brownout situation arises the emergency lighting is likewise activated.

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SCALED DOWN

Hunter Associates has announced the Model 400 "Miniature" portable drawing board which measures 10 x 13 inches. Features include an integral parallelogram-type drafting machine which incorporates a protractor with magnifying indicator and quick-setting snap action detents at 15 degree increments. Magnetic paper clamps are included. All scales on the board are graduated in both inches and millimeters. So now there's no excuse for not being prepared at all times for quick calculations. A carrying case is also available.

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MULTI-MEDIA

The Jerome Menell Company has introduced a multi-media audio-visual presentation system self-contained in a cabinet. Called AV-COM, it is prefabricated to be installed as furniture, against a wall, or in a shelf arrangement, and can be operated by one person using standard

outlets. With front access to projectors and mirror positioner, it has a patented optical system including preset front surface mirror and projector positions. The system functions from a drop door control panel. Dual image models for side-by-side projection are available.

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PLANULA

Giovanni Carini is the designer of a sleek group of stackable chairs called "Planula 10", which is distributed by Vecta Contract Co. The frames of the chairs are of chrome or white baked enamel. Seats and backs, depending on the model, are of full black or natural color belting leather, plasticized fabric or top grain leather. The design is based on sprung seat and back suspension construction. And it's comfortable: we know because we've tried it.

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PRODUCTS

(continued from page 74)

terior) Weyerhaeuser (interior). HARDWARE: Schlage (locksets); Lawrence (hinges); LCN (closers). INTERIOR MATERIAL: Sears & Roebuck Co. (tile). PAINT: Pratt & Lambert. ELECTRICAL DUCTS AND WIRING: National-Jones & Laughlin. ELECTRICAL EQUIPMENT: ITE Imperial (switches). STANDBY EMERGENCY POWER: Holgar. LIGHTING FIXTURES, LAMPS: Prescolite—Sylvania. PLUMBING FIXTURES: American Standard, Sloane valves, Super-Secure ware. PIPING: National. HEATING BOILERS: Iron Fireman, Dunham-Bush Inc. UNIT HEATERS: McQuay. UNIT VENTILATORS, RADIATORS, CONVECTORS: Air Therm. HEATING VALVES, PIPING, CONTROLS: Robertshaw Control, Sarco. AIR CONDITIONING COMPRESSOR, FAN UNIT: Trane. DIFFUSERS: Universal. PUMPS: Taco. SPECIAL FANS: National. VENTILATORS: Greenheck Jennair. INTERCOM SYSTEMS: Rauland. RADIO AND TV SYSTEMS: Javelin. AUDIO VISUAL EQUIPMENT: Rauland. SPRINKLER SYSTEM AND FIRE PROTECTION EQUIPMENT: Reliable. KITCHEN, LAUNDRY, LABORATORY EQUIPMENT: General Electric, Hobart. FINISH FLOORING AND CARPETING: Sears & Roebuck Co. FURNITURE AND SEATING: Kershaw. DETENTION EQUIPMENT: Southern Steel.

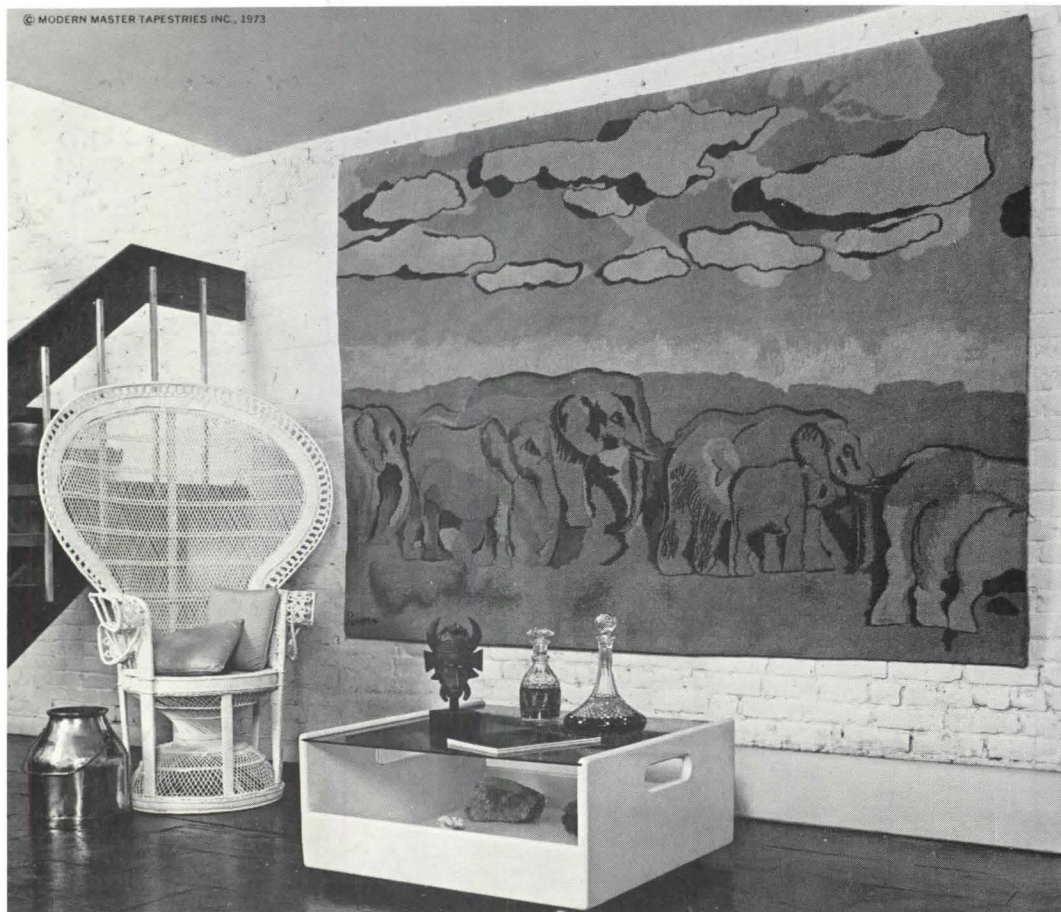
WISCONSIN CORRECTIONAL INSTITUTION FOR YOUTH. ARCHITECTS: Durrant Deininger Dommer Kramer Gordon, P.C. (Materials and Manufacturers as submitted by the architect.) WATERPROOFING: B.F. Goodrich, Carey. CONCRETE AND CEMENT: Hawatha Concrete, Verona Corp. STRUCTURAL STEEL: Bradley Iron. FLOOR AND DECK SYSTEMS: Connor, Kentile, VPI, Wheeling. ROOF MATERIALS: Blake. THERMAL INSULATION: Dow/Dorvon. CAULKING AND SEALING: Iranco. ACOUSTICAL MATERIALS: Conwed-Wood Products. FENESTRATION: Pittsburgh Plate Glass. GLASS: Pittsburgh Plate Glass. ELEVATORS AND ELECTRIC STAIRWAYS: Keickhefer. DOORS: (special) Pella; (vault doors) Diebold; (overhead doors) Barcol. HARDWARE: Weyerhaeuser, Russwin, Butts-Hager Co. INTERIOR MATERIAL: American Olean. PAINT: Sherwin-Williams. ELECTRICAL EQUIPMENT: (switches) G. & W. Co., S. & C. Switch & Gear. STANDBY EMERGENCY POWER: Kurz & Root. LIGHTING FIXTURES, LAMPS: Litecraft. PLUMBING FIXTURES: Elkay, Bradley. PIPING: Curries. HEATING BOILERS: Cleaver Brooks. UNIT HEATERS: Trane. HEATING VALVES, PIPING, CONTROLS: Jenkins, Bell & Gossett. UNIT AIR CONDITIONERS: Nesbitt. DIFFUSERS, DUCTS, PUMPS: Peerless, Bell & Gossett. SOUND: Strom Equipment. AUDIO VISUAL: Picker. SPRINKLER SYSTEM AND FIRE PROTECTION EQUIP.: American-La France, Simplex. CEILING MATERIALS: Conwed-Wood Prods. WATER COOLERS: Halsey Taylor. KITCHEN,

LAUNDRY, LABORATORY EQUIPMENT: Hobart, Middleby & Marshall, Groen, Precision, Ametex/Troy. CARPETING: Lee. SECURITY FENCING: Cyclone-U.S. Steel. FLAG POLE: American Flag Pole Co. PLAQUE: Wonderly Co.

THE BOSTON FIVE CENTS SAVINGS BANK. ARCHITECTS: Kallmann & McKinnell. (Materials and Manufacturers as submitted by the architects.) FOUNDATION WATERPROOFING: Webtex. WATERPROOFING: Thio Deck, Webtex. CONCRETE AND CEMENT: Boston Sand & Gravel, Dragon. BRICK, BLOCK AND STONE: Plastercrete, Colonna & Co., Inc. CURTAIN-WALL: Trio Inds. FLOOR AND DECK SYSTEMS: Granco. ROOF MATERIALS (ROOFING, GUTTER): Koppers. THERMAL INSULATION: Owens Corning. ACOUSTICAL MATERIALS: National Gypsum. FENESTRATION: Trio Inds. GLASS: P.P.G. and Glaverbel. INTERIOR PARTITIONS: Gypsum Drymass. ELEVATORS AND ELECTRIC STAIRWAYS: Payne Elevator Co. DOORS (EXTERIOR AND INTERIOR): Pioneer, U. S. Plywood. HARDWARE (LOCKSETS, HINGES, CLOSERS): Ross-win, Stanley, Rixson. INTERIOR MATERIALS (TILE, PLASTIC): Mosaic, Heatherbrown. PAINT: Martin Senour, Zolatone. ELECTRICAL DUCTS AND WIRING: ITE. ELECTRICAL EQUIP. (SWITCHES, BREAKERS): ITE. STANDBY EMERGENCY POWER: Kohler. LIGHTING FIXTURES, LAMPS: Edison Price. PLUMBING FIXTURES, TOILET SEATS: Kohler. UNIT HEATERS: Airtherm. UNIT VENTILATORS, RADIATORS, CONVECTORS: Airtherm, Dun-

ham Bush. HEATING VALVES, PIPING, CONTROLS: Jenkins. AIR CONDITIONING COMPRESSOR, FAN UNIT: York, Buffalo Forge, McQuay. UNIT AIR CONDITIONERS: McQuay. DIFFUSERS, DUCTS, PUMPS, ETC.: Agitair, Titus, Weinman. SPECIAL FANS AND VENTILATORS: Buffalo Forge. SPRINKLER SYSTEM AND FIRE PROTECTION EQUIP.: Viking, Allenco. CEILING MATERIALS: National Gypsum. WATER COOLERS: Halsey Taylor. MOVABLE PARTITIONS: Modernfold. MAIL BOXES AND CHUTES: Cutler. VERTICAL BLINDS AND SHADES: Louverdrape, Inc. KITCHEN, LAUNDRY, LABORATORY EQUIP.: Bastion-Blessing. FINISH FLOORING AND CARPETING: Flintkote, Philadelphia Carpet. FURNITURE AND SEATING: Shaw-Walker, Brickel Assoc., CI Design. FABRICS (UPHOLSTERY AND DRAPERIES): Knoll Fabrics, Isabel Scott, Middletown Leather. ADDITIONAL FURNISHINGS: Stendig, Doffman.

GIVEN INSTITUTE OF PATHOBIOLOGY. ARCHITECTS: Harry Weese & Assocs. (Materials and Manufacturers as submitted by the architects.) BRICK, BLOCK, AND STONE: Brick, Inc. STRUCTURAL STEEL: Grand Junction Steel Co. FENESTRATION: Hopes Windows. HARDWARE (LOCKSETS, HINGES, CLOSERS): Yale. PAINT: Pratt & Lambert. ELECTRICAL EQUIP. (SWITCHES, BREAKERS): Square D. LIGHTING FIXTURES, LAMPS: Lightolier. HEATING BOILERS: Kewanee. AIR CONDITIONING COMPRESSOR, FAN UNIT: Lennox. CARPETING: Mohawk. SEATING: Stendig and G/F.



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PRODUCT LITERATURE

To order any of the literature described, circle the indicated number on the self-addressed Reader Service Card on page 75.

BUILT-UP ROOFS

A revised specification manual for built-up roofing and roof insulation has been prepared by Johns-Manville, to assist the architect and engineer in selecting the appropriate materials for a total roofing system. The 194-page loose-leaf manual covers a wide range of bondable roofs for many different roof inclines and many different types of roof deck such as steel, concrete, wood, gypsum, etc. Specifications are also included for certain limited-service roofs and for special-service roofs which are not bondable. Application tables and charts complete the recommendation. On Reader Service Card, circle 200.

CEILING SYSTEMS

A new 4-color catalog outlining a complete line of integrated ceiling systems is available from National Ceiling Systems. The catalog shows photographs of installations and isometric drawings of the various ceiling systems available. The brochure illustrates five different systems: the 1000 through 5000 series. Some systems use vaulted modules with mineral board and some have vaulted modules with perforated metal coffers. The various systems provide extreme design and installation flexibility. On Reader Service Card, circle 201.

LIGHT TABLES

Foster Manufacturing Company's light tables are designed to fit any need. They're permanent, portable or adjustable, depending upon the user. All light tables have cool fluorescent lighting, perfect adjustable straight edges for alignment with T-squares, all steel bodies and rugged construction, and durable baked-on enamel. The standard adjustable model is perfect for stand-up or sit-down work, depending upon angle of tilt, and comes with adjustable leg levellers. Two glass-top sizes are available. The multipurpose light table is built into a deluxe steel cabinet body, with three convenient half-shelves to leave leg room, yet provide storage space. The portable light tables are available with slope or flat top in four popular glass-top sizes. On Reader Service Card, circle 202.

GLASS

CE Glass has a 16-page brochure which describes their various glass products. Included in this brochure are characteristics and technical data on the various products. Descriptive photographs are also included. There is also a special section for the Mississippi patterns. On Reader Service Card, circle 203.

INSULATIONS

W.R. Grace Construction Product Division has issued an 8-page brochure describing Zonolite insulations, ma-

sonry fill, polystyrene foam, and thermostat system. In addition to photographs, the brochure includes various technical and specification product data. On Reader Service Card, circle 204.

FLOOR SURFACER

Stonhard Company has made available a new six-page brochure which describes and illustrates the use of Stonclad floor surfacer in meat rooms. This brochure draws particular emphasis on the application in supermarket meat rooms. Stonclad, a special blend of high-performance polymer resins and hardeners, is formulated to harden quickly to form a durable, seamless floor surface. It meets the sanitary and safety requirements including Federal and State health and safety standards. A Stonclad floor is extremely resistant to damage from acidic food spillages as well as harsh cleaners. On Reader Service Card, circle 205.

REMODELING DOOR UNITS

A new 8-page brochure on the new foam core steel remodeling door units for professional builders is available from Ever/Strait Div., Pease Company. This informative brochure provides the reader with thorough background information on the remodeling door units and their installation. It includes a series of "before-after" photos and detailed, easy-to-follow installation instructions and photographs. Ever/Strait warp-free remodeling door units come factory complete with threshold, frame system, and the screws. On Reader Service Card, circle 206.

WATER COOLERS

More than 45 different models of pressure and bottled water coolers are described in the 1973 Oasis water cooler catalog released by Ebco Manufacturing. Of particular interest is Oasis' popular "Selector Guide" that allows specifiers to identify the correct cooler for virtually any need. On Reader Service Card, circle 207.

ROOF DRAINAGE SYSTEM

An 8-page brochure describes a revolutionary roof drainage system by Finnovationoy. This is reported to be the only system which allows no air to pass through the drainage pipes, and therefore greatly increases the flow of water through the system. The UV Nomogram in the brochure makes it possible to get an exact calculation of the flow of water and the required number and diameter of pipes. Technical details are explained in the brochure. On Reader Service Card, circle 208.

FLOOR COVERING SYSTEM

A new flooring system called Aggressi-Grip Floor Covering is among

seven 3M Company seamless flooring systems described in a new 8-page brochure. Aggressi-Grip Covering is an aggressive, anti-slip, urethane-aggregate combination which can be installed quickly over most substrates. It is designed for shower rooms, material handling areas, and wet or slippery work stations. Six of the seven flooring systems feature quick-curing, high-solids, two-part urethane formulas which provide the unusual combination of resiliency and extreme durability. One or several of them are ideal for almost any type of industrial application. The seventh, Venazzo flooring, is an aggregate system using thin-set terrazzo application procedures to create a durable, lightweight replica of an expensive Venetian terrazzo. On Reader Service Card, circle 209.

PORTABLE PARTITIONS

A new brochure available from Richards-Wilcox Manufacturing Co. describes numerous installations of the company's operable walls and Air Wall portable partitions. Included in the selection of examples are hotels, motels, clubs, convention centers, municipal buildings and restaurants. Provided are brief, general descriptions of the features of R-W operable walls and Air Wall portable partitions. Both types of walls are designed to provide the user with greatly increased flexibility and profitability by permitting simultaneous meetings and banquets of different sizes. Both feature full perimeter seals that shut out sound and light interference between the partitioned areas. There is an unlimited selection of surface treatments, which permits the walls to be fully integrated into existing decorating schemes. On Reader Service Card, circle 210.

HAND RAILINGS

Vinyl Plastics, Inc. has a new color catalog showing the colors available in Vinyl-Rail solid vinyl hand rail covering. This lends itself to creative and imaginative railing designs, since it provides an attractive color accent, has a safe, firm grip and requires little maintenance. Installation can be on the job or in the shop. On Reader Service Card, circle 211.

SECURITY AND DIRECTION SYSTEMS

Alvarado Manufacturing Co., Inc. has a brochure of its 1973 line featuring "directional access control systems"—electric or manual turnstiles, posts, railings, gates, grilles and a variety of accessories. The catalog covers the entire directional control field, from personnel gravity-return gates to sophisticated electric turnstiles outfitted for pilferage detection devices, and electric counters, used in libraries, theaters and security areas. Also available in the same brochure is a 4-page price list. On Reader Service Card, circle 212.

WOOD LOOK

Western Wood Products Association has a brochure entitled "The New Look in Low-Rise Non-Residential Buildings." This brochure features the "wood look" in non-residential construction. A dozen striking examples are depicted in this brochure. A variety of projects are shown, including medical clinics, a shopping mall, and various public buildings. On Reader Service Card, circle 213.

SILICONE PROTECTIVE COATINGS

General Electric's Silicone Products Department has issued a new data book which provides a convenient reference source on the utilization of silicone resins for protective coatings. The illustrated publication includes an introduction to the new silicone resin line, and covers types of resins, pigmentation, catalysts, processing and baking. Protective coatings that utilize these G.E. silicone resins are used for high temperature industrial equipment, aerospace hardware, building panels, fabricated metal components, marine and industrial maintenance applications where resistance to heat and/or weathering is required. On Reader Service Card, circle 214.

FLASHING SYSTEMS

A new 8-page illustrated brochure on Tremline™ fascia and flashing systems is available from the Tremco Manufacturing Company. The brochure is fully illustrated and describes the unique features of Tremline™ fascia and flashing—free-floating to accommodate movement in any direction; built-in venting; simple, modular, self-locking installation; and attractive, clean-line architectural appearance with no exposed fasteners. Also included are design ideas, detailed application drawings, performance specifications, and installation drawings and instructions, for both fascia and flashing systems. On Reader Service Card, circle 215.

ILLUMINATED CEILING SYSTEMS

Neo-Ray Lighting Systems, Inc. offers a new 16-page illuminated-ceiling handbook for architects, interior designers, engineers and building owners. The new Trilogy™ manual describes and illustrates a time-saving three-phase approach to illuminated ceiling design avoiding trial and error, backtracking, and redesign. Architectural considerations deal with ceiling areas that are square, round and irregular; suspension systems which create modular, parallel or unbroken visual effects; and perimeter terminations that are wall-to-wall, soffit-to-soffit, or floating. Additional pages include specification information covering shielding elements, twelve different "major profile" suspension moldings and six perimeter moldings. Engineering drawings give installation details. On Reader Service Card, circle 216.

VENTILATOR FANS

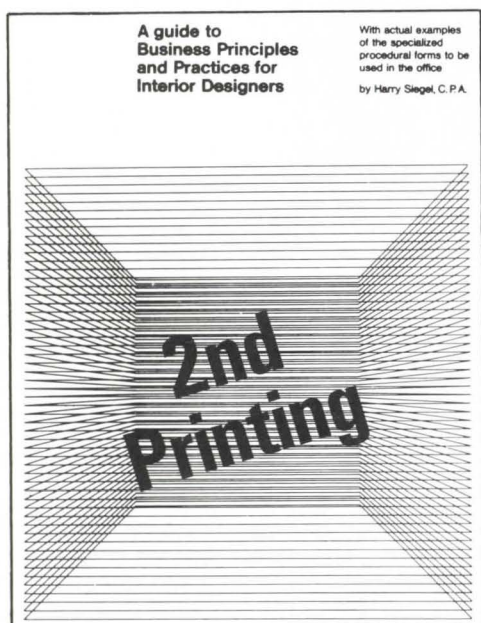
Airmaster Division of The Howard Corporation offers a 4-page catalog presenting their new line of Atti-cooler automatic ventilator fans. These units are roof-mounted and are used to quickly ventilate the attic of a home or small commercial building, preventing superheating of attic air and consequent heating of living or working areas below. These automatic ventilators are thermostatically controlled to turn on at 100° and off at 85°. They cool through air intakes in the eaves without drawing dust or pollen through the living area. Photos and drawings show how the fan ventilates an attic to cool the living area as much as 15° lower than outside temperatures. The catalog also details an optional automatic humidistat which controls excessive moisture, protecting buildings from the dangers of frost, ice and water damage. On Reader Service Card, circle 217.

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Other Job Factors in Setting Fees
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Estimation and Control of the Budget
Purchase Orders
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Billing and Collecting
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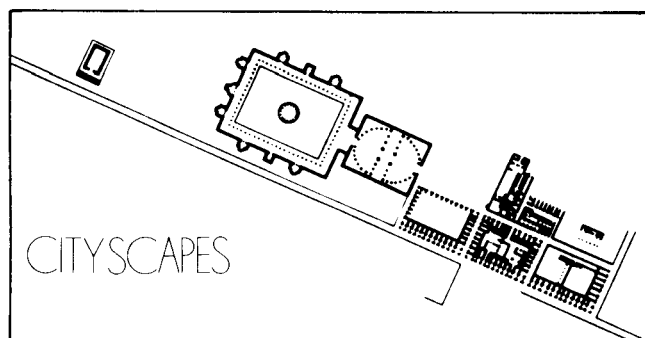
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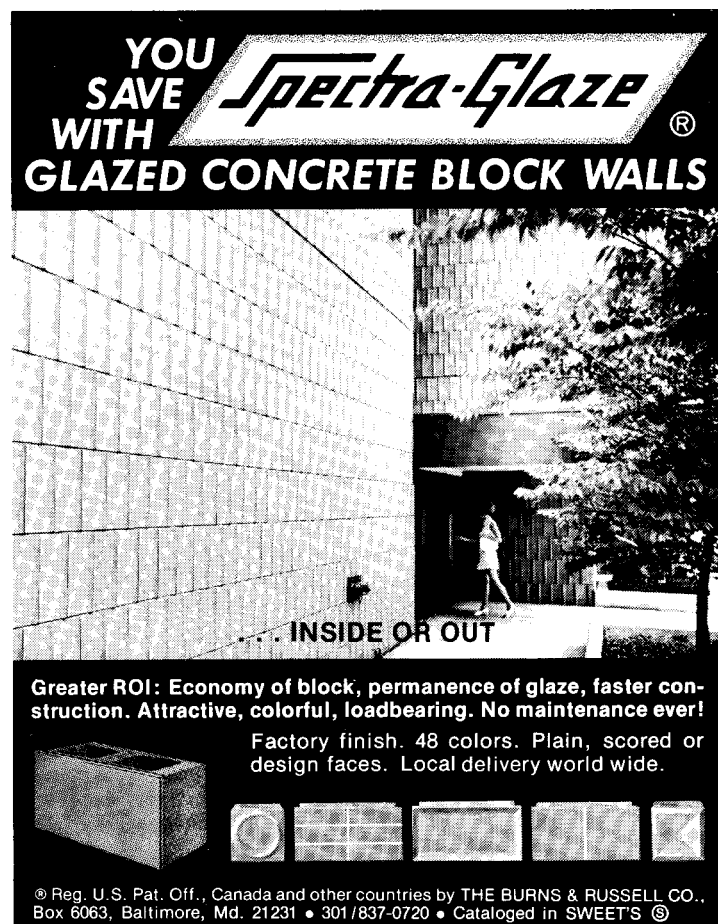
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Swedcast® acrylic is one of the most durable, color stable and weather resistant plastics currently known to man. Its application then, as the surface for bathroom appliances such as the bathing cove shown, is beautifully perfect!

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Headquarters: Garden Grove, Cal. 92645
Swedlow Plastics, Ltd., 3640 Weston Rd.,
Unit 2, Weston, Ontario, Canada

CAFETERIA

| SANDWICHES | |
|----------------|-----|
| BACON | 70 |
| ROAST PORK | 90 |
| SARDINE | 80 |
| SALMON | 70 |
| EGG SALAD | 90 |
| HAM EGG | 90 |
| LOX EGG | 80 |
| ROAST BEEF | 100 |
| CORNER BEEF | 80 |
| SWISS CHEESE | 60 |
| CREAM CHEESE | 40 |
| HAM CHEESE | 90 |
| CHICKEN SALAD | 80 |
| BACON TOMATO | 60 |
| SMOKED SALMON | 70 |
| LETTUCE TOMATO | 60 |

Tongue-and-groove joints fit perfectly.

Gold Lace resists grease and stains.

| SPECIAL TODAY | |
|-------------------|------------|
| CHICKEN SOUP | 35 |
| GREEN PEAS | 35 |
| FRIED COD FISH | 55 |
| BAKED HALIBUT | 65 |
| ROAST CHICKEN | 95 |
| LIVER & BACON | 80 |
| ROAST LEG OF LAMB | 170 |
| ROAST MEAT LOAF | 55 |
| ROAST PORK CHOPS | 175 |
| ROAST LAMB CHOPS | 180 |
| ST LOUIS PORK | 85 |
| GREEN ALA KING | 65 |
| RIBS & BEEF | 65 |
| BURGER STEAK | 60 |
| VEGETABLES | WITH BROWN |

Chapel Oak Design
—feel the rich texture.

Another special place for Marlite Planks: where walls have to pass inspection.

From fast-food cafeteria to gourmet restaurant, there's one must for every eating establishment.

A spotless reputation.

That's why Marlite paneling is such a natural for the food-service area. Its wash-and-wear finish resists heat, moisture and

grease. Comes clean with just a damp-cloth wiping. So Marlite stays fresh and spotless—even in the busiest places.

But Marlite doesn't look like your typical "heavy-traffic" wall. It comes in a handsome collection of textures, woodgrain re-

productions, colors and designs. So you can find the bright idea you need to make any eating spot look special.

We've used two Marlite ideas in this cafeteria. Chapel Oak Design Planks—only 16" wide for fast installation. With contrasting

Gold Lace Planks in the kitchen.

See what Marlite can do for your special places. Send for color literature and professional samples to Marlite Division of Masonite Corporation, Dept. 307, Dover, Ohio 44622.

Marlite®
We make walls
for special places.

On Reader Service Card, Circle 303

Marlite paneling is hardboard with man-made finish.

For professional samples of Chapel Oak Design and Gold Lace, write Marlite, Dover, Ohio 44622.