

Wisconsin Architect



Correctional/Computer Graphics ● September 1983

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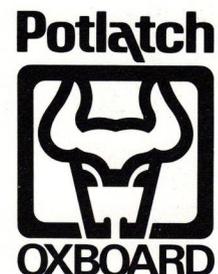
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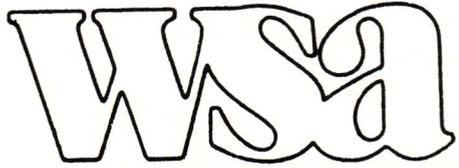
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1/2"	Sheathing—span index	32/16	24/16
	Max. roof span/no clips	28	24
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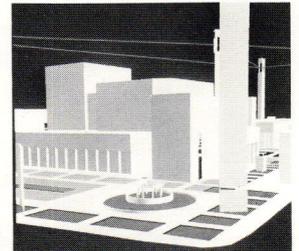
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SEPTEMBER 1983

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COVER CREDIT:
Computer Generated Perspective
By Design Professionals, Inc.
Architects, Milwaukee, Wisconsin



PROLOGUE:

Due to the response for more information about COMPUTER AIDED DESIGN AND DRAFTING (CADD) systems, it was decided to continue educating architects about this growing industry. Last month's issue on energy presented an example of computer application in architecture. Within this issue, we continue the story of its affect on the architectural profession and its growing use within our offices.

WSA Office Building — Almost A Reality

After over one year of negotiations, Madison Newspapers, Inc., has made a gift of the 128-year-old Joseph Stoner House to the Wisconsin Architects Foundation (WAF). The WAF, the non-profit, educational arm of the WSA, will undertake extensive exterior and interior renovation of the house and then enter into a long term lease in order that the WSA may utilize the building for its permanent offices.

The Stoner House is an official Madison Landmark, as well as being listed on the National Register of Historic Places. The Italianate building, built between 1855 and 1858, is currently located on a triangular parcel of land approximately two blocks from the State Capitol. In accepting the gift of the building, the WAF has agreed to move the building approximately 150 feet north on the lot to a more prominent position closer to the State Capitol.

The budget for this project is currently estimated at \$170,000. Of that amount, the City of Madison has provided \$47,000 in Community Development Block Grant funding to assist in relocation costs. The State Historical Society has provided an additional \$60,000 in grants to assist in restoration costs. The balance of the funding, approximately \$60,000, will be raised through contributions from interested individuals and organizations, including the WAF and the WSA.

In undertaking this very substantial effort, the WSA Board of Directors felt that this project would be a valuable tool in promoting public awareness as to the value of quality architecture. Additionally, cost figures associated with restoration and continued operation of this project are not expected to increase current costs associated with housing operations for the WSA and WAF.



While it took in excess of one year to put together the package of funding and consents necessary to undertake this project, the biggest hurdle crossed to date has been selecting an architect for the project. The Executive Committee of the WSA spent substantial time on this matter and after much deliberation approached Nat Sample, FAIA, who recently retired from the practice of architecture and is an Emeritus member of both WSA and AIA. Nat has agreed to come out of retirement to provide architectural services for this project.

Current plans are to complete moving the building by December 1, 1983 with restoration efforts completed by the summer of 1984. Moving the 400 ton sandstone structure will be no easy task. Costs as-

sociated with physically moving the building approximately 150 feet are approximately \$20,000. In addition to these costs, there will be substantial additional expenditures associated with moving the building and new utility service, and providing a new foundation for the structure.

When the building is completed it will be open for public inspection on an ongoing basis. Both the WAF and WSA are hopeful that portions of the building will be utilized as a museum for architectural materials and artifacts. Individuals who have such artifacts which might be appropriate for display (two dimensional or three dimensional) should contact Eric Englund at the WSA office.



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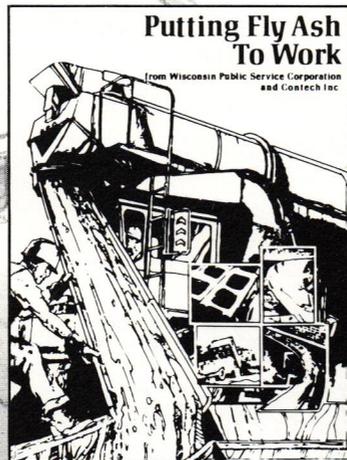
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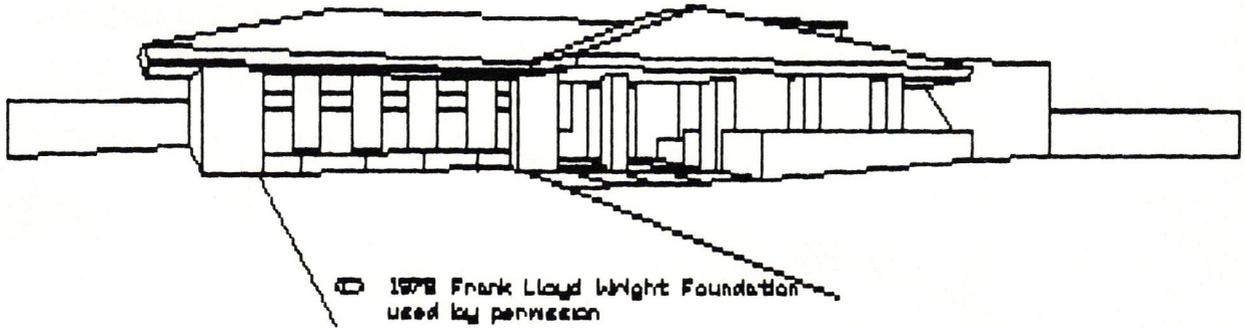
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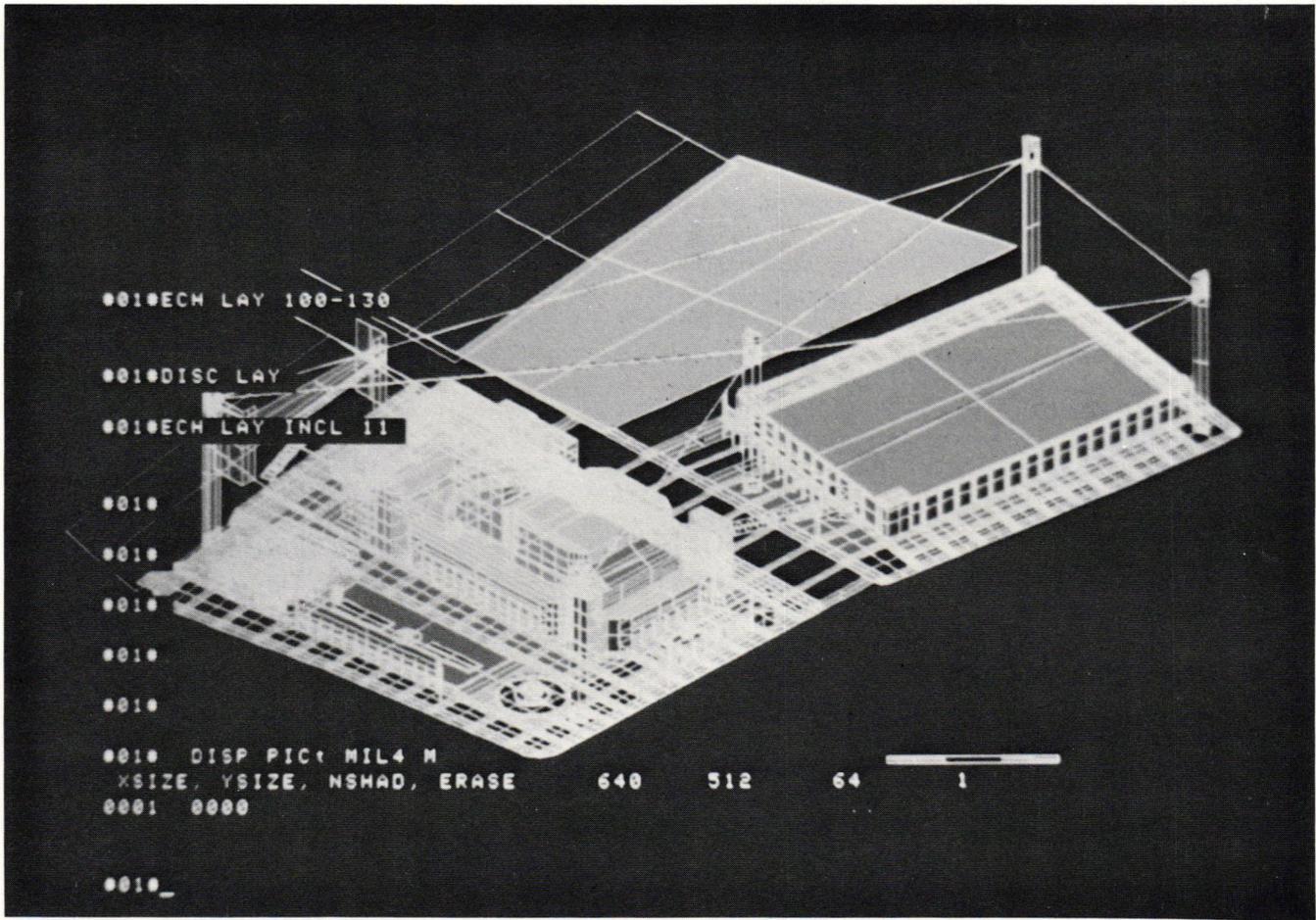
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Monitor photo showing project scope and superimposed entry data.

A New Design Tool

Computer Graphics on the P.A.C. Competition

By Jerry Rubin, RA, IBD and Harry J. Wirth, AIA, Ed. IBD

INTRODUCTION:

It is apparent the architectural profession is lethargically adapting to modern technology. Designers in architecture, commercial interiors, and environmental graphics are finally becoming aware of the technological advances in computers because of the demand dictated by the clients. Firms are already being asked by clients in some parts of the country, if they have computer equipment. As prices for these systems become more affordable, their use will become synonymous with the mechanical pencil.

The role of the architect and the commercial interior designer has deteriorated greatly during the present century. Reasons for this decline are stated **Ver Une Architecture**, by LeCorbusier:

wisconsin architect/september 1983

"There exists in France a great national school of architecture, and there are, in every country, architectural schools of various kinds, to mystify young minds and teach them the obsequiousness of the today.

"Our engineers are healthy and virile, active and useful, balanced and happy in their work. Our architects are disillusioned and unemployed, boastful or peevish.

"Architects, emerging from the schools, ... enter in the town in the spirit of a milkman who should, as it were, sell his milk mixed with vitriol or poison."

The split between the professions of engineering and architecture occurred in 1750, the reasons were

due to the example of the engineers rational approach of emerging scientific studies and technological advancements. Peter Collin's in **Changing Ideas in Modern Architecture** notes:

"the architectural profession was overwhelmed by a sense of inferiority-if not by a sense of inadequacy- into seeking a closer alliance with their separated brethren, hoping that by closer co-operation they might share with them some of the glory they had shared in the past."

"Before 1750 no one would have questioned the advisability of appointing architects to design bridges, or suggested that the design of bridges was the responsibility of any other type of person."

As we become more artistically inclined rather than general practitioners, we will continue to lose control over the scope of our profession. The reason being the general unwillingness of architects and designers to accept the current technologies. The profession feels computer technology will hamper the creative aspects of design. There is also a natural fear that their jobs will become obsolete because of the equipment. However, if we are not involved with the development of the design software, we will always be dependent on the programs developed by non-architectural people.

USES OF COMPUTERS:

Presently, the major use of computers in architecture is word processing. This aspect helps eliminate the difficulties and repetitive work of specification writing, letter writing and invoicing. Some uses beyond word processing have been directed at cost estimation, product evaluation, energy efficiency, structural, mechanical, and electrical analysis. Computer cost estimation is predominantly controlled by the construction trades, while the computer engineering analysis is mostly completed by consulting engineers. Although all of these roles are part of the architectural practice, few recognize the disappearance of these functions from the profession. This leaves the architectural profession with the image of only arts; therefore, reducing our function to frivolity for the elite who desire a special image.

OUR COMMITMENT:

Our firm, Design Professionals, Inc. architects and interior designers in Milwaukee, believes the use of computers will give us the control needed to properly complete design projects. We made a commitment to use computers to our greatest advantage in our daily activities. We currently use computers in our administrative work, specification writing, cost projections, feasibility studies, life cycle costing and energy studies. Recently we entered the realm of computer aided design and drafting (CADD). Our major involvement was through our recent entry for the Milwaukee Performing Arts

Center competition. Although we had previous experience with computer graphic systems, this project enabled us to complete an entire design and presentation scheme by utilizing the computer.

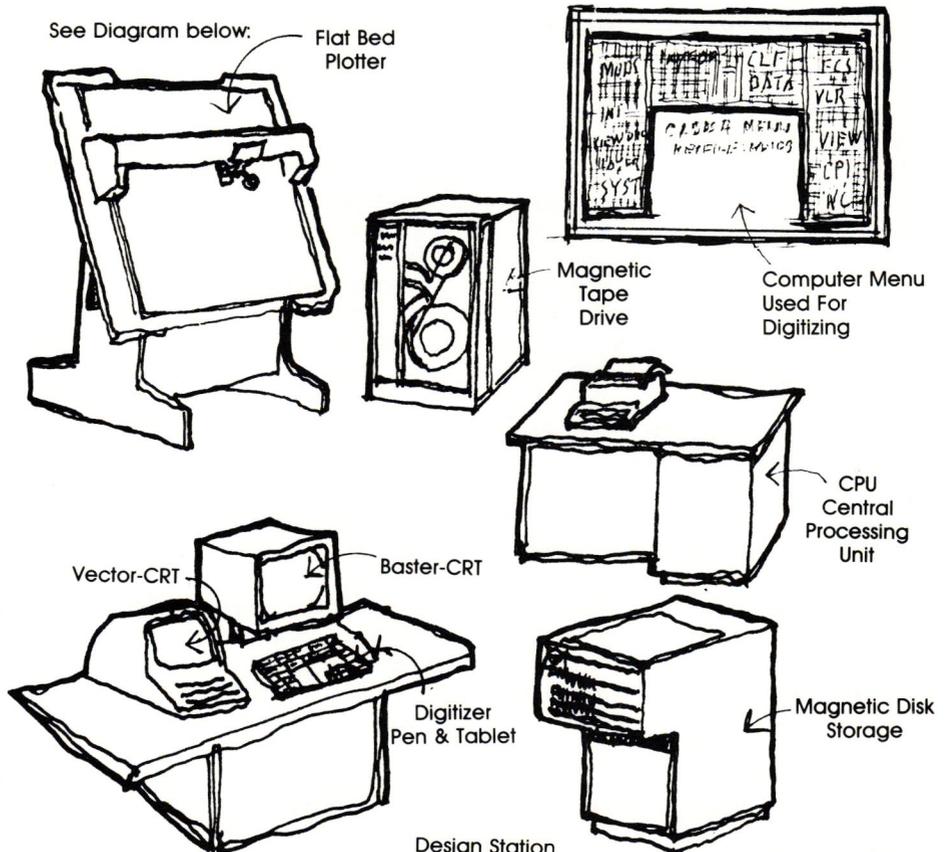
CADD IN GENERAL:

Computer aided design is a tool that can make the design concepts a 'reality' without making conventional time consuming models and perspectives. From our experience we want to emphasize that the computer is a viable tool for conceptual design as well as drafting. Many designers feel the physical drawing process is a means to their final design concept; the media of pencil rendering techniques helps them conceptualize their solutions. This presently is true, but the computer can take that original thumbnail sketch (see image A) and help visualize these concepts in a more complete three dimensional form. From the initial implementation of the first line, the computer is orthographically generating, top, bottom, left, right, rear, front views, as well as providing auxiliary axonometrics and perspectives views. Conceptually, the computer is a complete design tool.

The computer is an organizer of vast quantities of information. It can manipulate data at tremendous speeds. The information stored, namely entities, is entered into the machine by way of a lightpen, menu or keyboard. These entries are algebraic algorithms previously programmed to accomplish the simple insertion of lines, arcs, circles, or the newer generation of wall types, doors, and ceiling grids. The storage into the data base is so precise that there is no comparison when evaluating the system with conventional drawing methods. In addition to being located on the "X" and "Y" axes, the data is stored in the "Z" direction. The accuracy is to any tolerance defined, + - .000001 of an inch.

COMPUTER DRAFTING:

As stated before, the data entries are through various commands. These commands such as inserting lines, circles, translating whole objects, zooming in on details, viewing multiple angles of the same part simultaneously, creating surfaces, or calculating amounts of doors, wall surfaces, and ceiling tile, etc. are all part of the original software design. These software design packages are written algorithms



which interact with the hardware, (the number crunching portion of the computer). The entities are stored on hard or floppy disks. The drawings shown on the monitor can be transferred to hard copies, via a plotter or photograph (see image B).

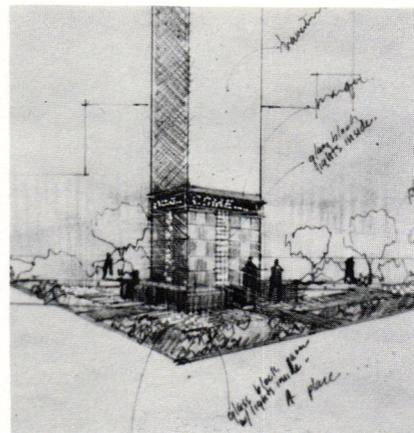
The variety of computers on the market are numerous and there are a wide range of prices. Purchasing a CADD system is similar to buying a stereo. There are component parts- design work station - monitor, digitizing tablet (alterable menus), and keyboard, central processing unit (cpu), magnetic disk storage, magnetic tape drive, and a plotter, (see drawings below) providing interchangeability to satisfy the particular user's needs. Important aspects in purchasing a system are having a demonstration of the software package, expandability of the storage capacity and reliability of the company. It takes time to become acquainted with the system and accumulate data for reuse. The owner should anticipate 'down time', (computer failures) periodically. However, these frustrations will wain as one becomes more accustomed to the system.

THE COMPETITION:

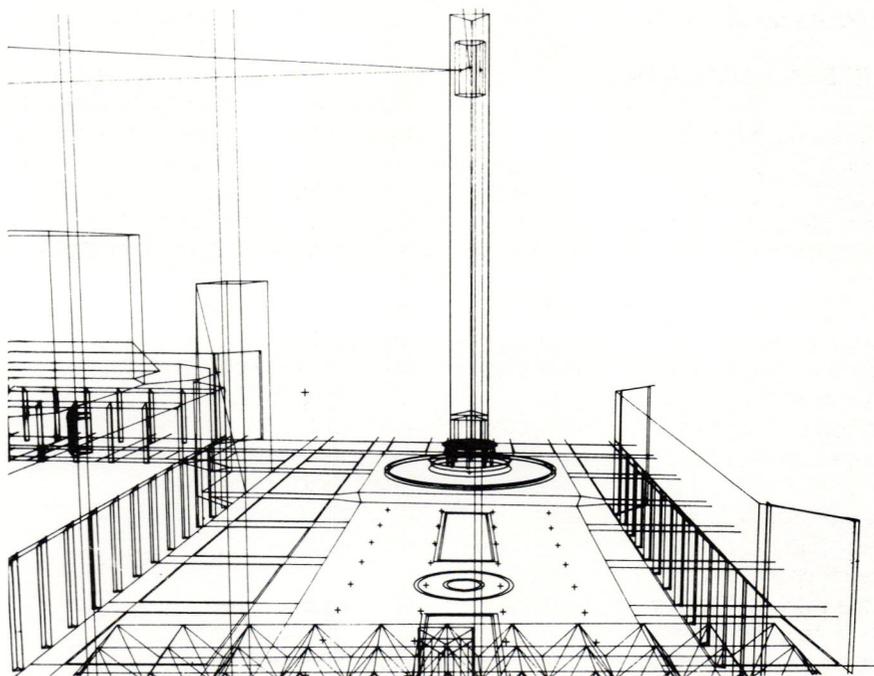
For our competition entry, we chose the Computervision system for two major reasons. First was its availability; second was the advanced capabilities of the system. Located at the Milwaukee Area Technical College (MATC) is the most advanced computer graphics equipment in a college system in Wisconsin. It represents the state of the art in computer graphics known as CADD/CAM (Computer Aided Design and Drafting/Computer Aided Manufacturing). It renders the designs from the data base into manufactured products via machinery and technologically advanced robotics. Thanks to Director Victor Langer and his staff at MATC, and Ralph Schubert, Vice President of Computervision, Bedford, Massachusetts, we presented our ideas as realistic three dimensional colored models.

The computer as a vehicle of design expressed the massing, simplicity of detail, and repetition of elements associated with the wisconsin architect/september 1983

Milwaukee Performing Arts Center grounds. Items of the original design created by the architect. Harry Weese and Assoc. of Chicago, in 1969 were easily duplicated, mirrored, and modeled. The data entry of the existing PAC, Peck Pavilion, Conrad Fountain, parking structure, and site amenities on the computer was relatively simple. Greater difficulties arose only in the paving, due to the irregularity of street patterns-Water Street, State Street, and Kilbourn Avenue, and our inexperience with the system (see image C).



A "Thumbnail" concept sketch.



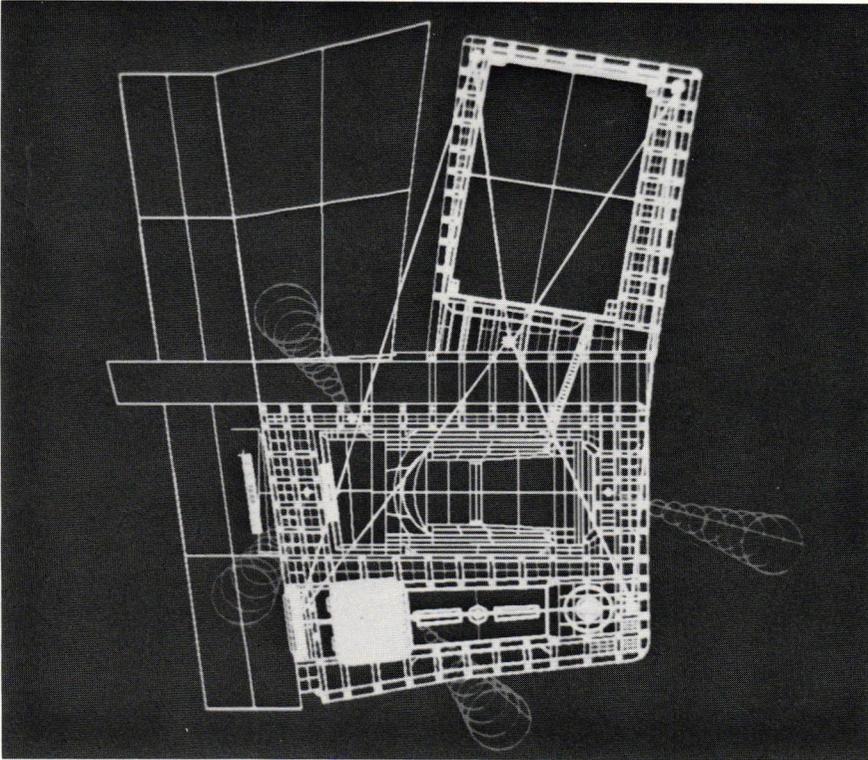
B. Preliminary plotter drawing used for determining perspective sketches.

We obtained reproduction drawings of the PAC grounds from the City of Milwaukee to provide the accuracy and back-up material needed. A three dimensional model was established of all existing architectural features. From these models we were able to fully visualize the existing massings and site features. We developed various schemes in sketch form which were inserted into the data base. Evaluating the massing, scale, size and texture, we were able to solidify the development of our design. Accuracy is the most beneficial aspect of the computer. The computer allowed us to clearly evaluate the heights of the laser towers part of our competition scheme by adjusting them many times until it was finally approved by our design team. Time was also a major factor in using the computer. For example,

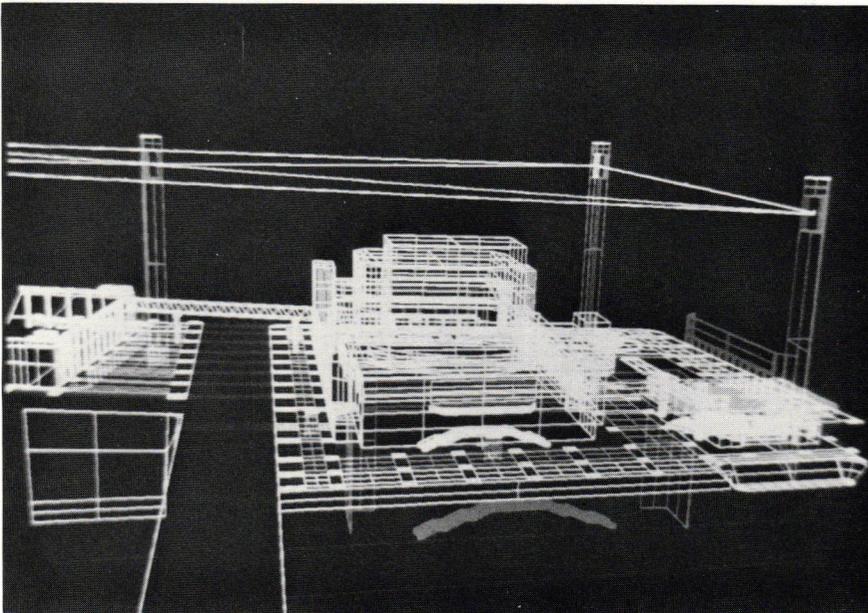
the space frame roof truss on the Peck Pavilion was created in less than 6 minutes. We were then able to look at the space frame from various angles in perspective, from an aerial to a ground view without reconstructing the initial input (see image D).

SUMMARY OF PAC DESIGN CONCEPTS:

Our intent was to incorporate the various features of the site into a homogeneous effect, giving the site integrity and scale. The existing elements of the site have strength individually. Precedence established in Islamic architecture provided the means of assimilating the various strong existing elements. We incorporated this philosophy with present technological adaptations.



C. Plan view, extent of site and laser marquees concept. Monitor photo.



D. Perspective view from river. Monitor photo.

"Space itself can assume strongly marked attributes. In Islamic architecture devices were developed for delimiting space as a positive (and often religious) element. The minarets about the mosque establish a transparent cube of space infused with the spirit of the mosques."

by Edmund N. Bacon Design of Cities.

DESIGN FEATURES:

Laser minarets and marquees light-10

ing, the gateway entrances, reflection pools, gardening, lighting, and detailing of the archways were all incorporated to enhance the Performing Arts Center site (see images E and F).

CONTINUED CADD IMPLIMENTATION:

These concepts were manipulated and enhanced with various massings and colors until we felt the strength of the design. A variety of

perspective images were stored in memory. We reproduced multiple perspectives on paper via the plotter. The data was then taken to Bedford, Mass. - the home office of Computervision where the surfaces were shaded at various sun angles. This was then captured on film from the monitors and mounted on the competition's required boards. Unfortunately, what we could see dynamically, was now statically represented based on traditional presentation requirements.

CADD CONCLUSION:

If our scheme had been chosen either in part or in whole, it would have been easy to construct the various elements and details into architectural contract documents (also see discussion on working drawings article). With the existing data already on tape, automatic dimensioning and material callouts could be entered and noted on the drawings. Sections and details can be easily manipulated from the original by the same means of inserting parts. We originally used this method to create the master plan. Refinements based on the owner's needs could be corrected with no eraser filings left on the floor for sweeping up.

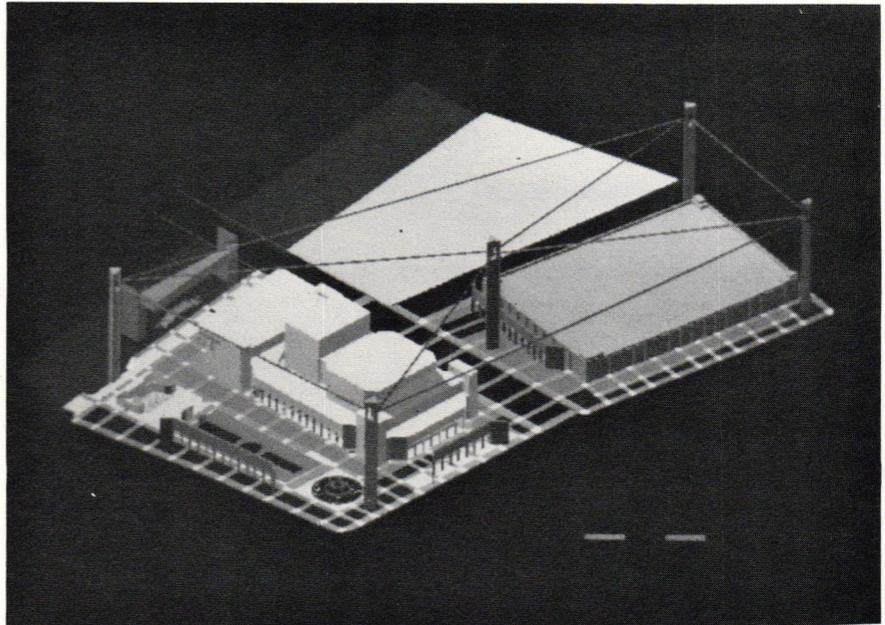
THE FUTURE DATA:

We offered this data for review to the Performing Arts Centers committee. The PAC committee can implement and evaluate any proposal submitted to them by altering the existing data base, a small process. This data could be stored and would again be shown in perspective from any vantage point. The committee can also look at various schemes simultaneously on the same screen, thus allowing the committee to make sound judgments before considering any construction on the grounds. Any changes approved by the committee and architectural staff can be stored on tape separately, re-evaluated the next day, or at any other time.

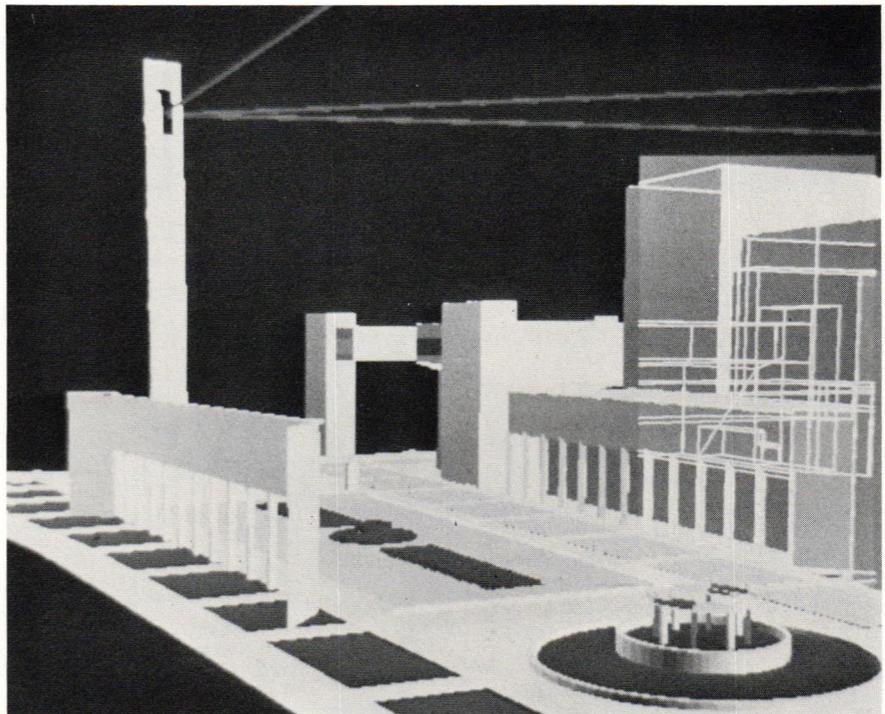
The committee responded to our letter and shall be previewing the data while this article is under production.

EDITORIAL CONCLUSION:

The solutions are not for every architectural firm to invest in expensive equipment today, then pay for private programming personnel to streamline the available software for our individual office needs. Our commitment should be to support our educational facilities by becoming active in the classroom studies of the computer. Learn the language, the equipment and help add the input necessary for the coming tool.



E. Shaded site axonometric showing laser minarets tying existing grounds together. Monitor photo.



F. Zoomed shaded image of mirrored archway at south end of site. Monitor photo.

CREDITS:

Ken Cheng, IBD, design team member
Michael Hosale, student, assisted with data entry

Victor Langer, MATC director of computer graphics department
MATC Staff: Caroline Mensink

Ralph Schubert, Vice President Computervision
Computervision Staff: John Willis, Jeff Johnson, Randy Pedersen, Pat Brochu

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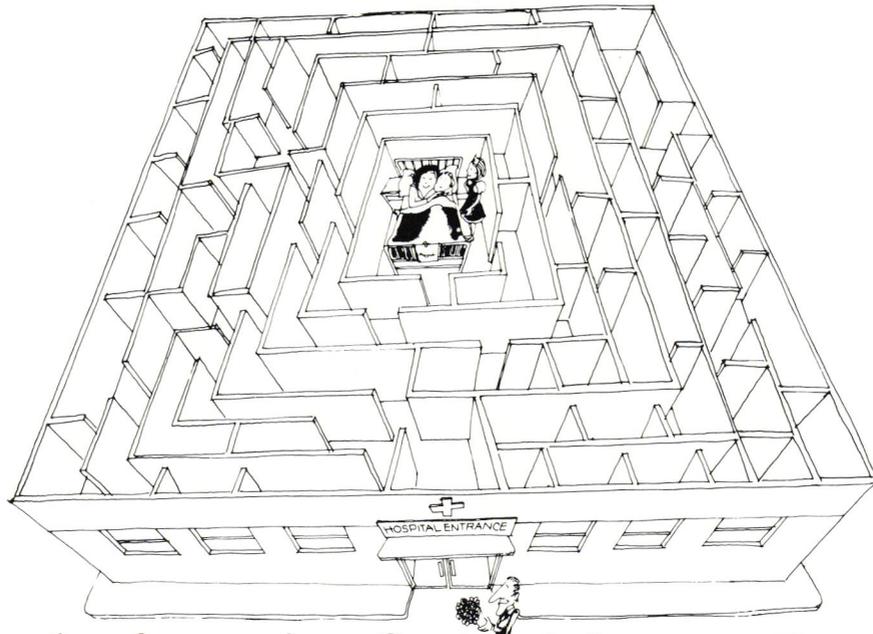
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CADDS A Technology Coming Of Age:

By James Piwoni, Karen T. Guenther, IBD, and John Cain, Architect

With a desire to explore computer aided drafting systems, three of us took advantage of a course offered at the Milwaukee Area Technical College. Basic fundamentals of using the Computervision System (see photograph) were presented in a lecture and lab format.

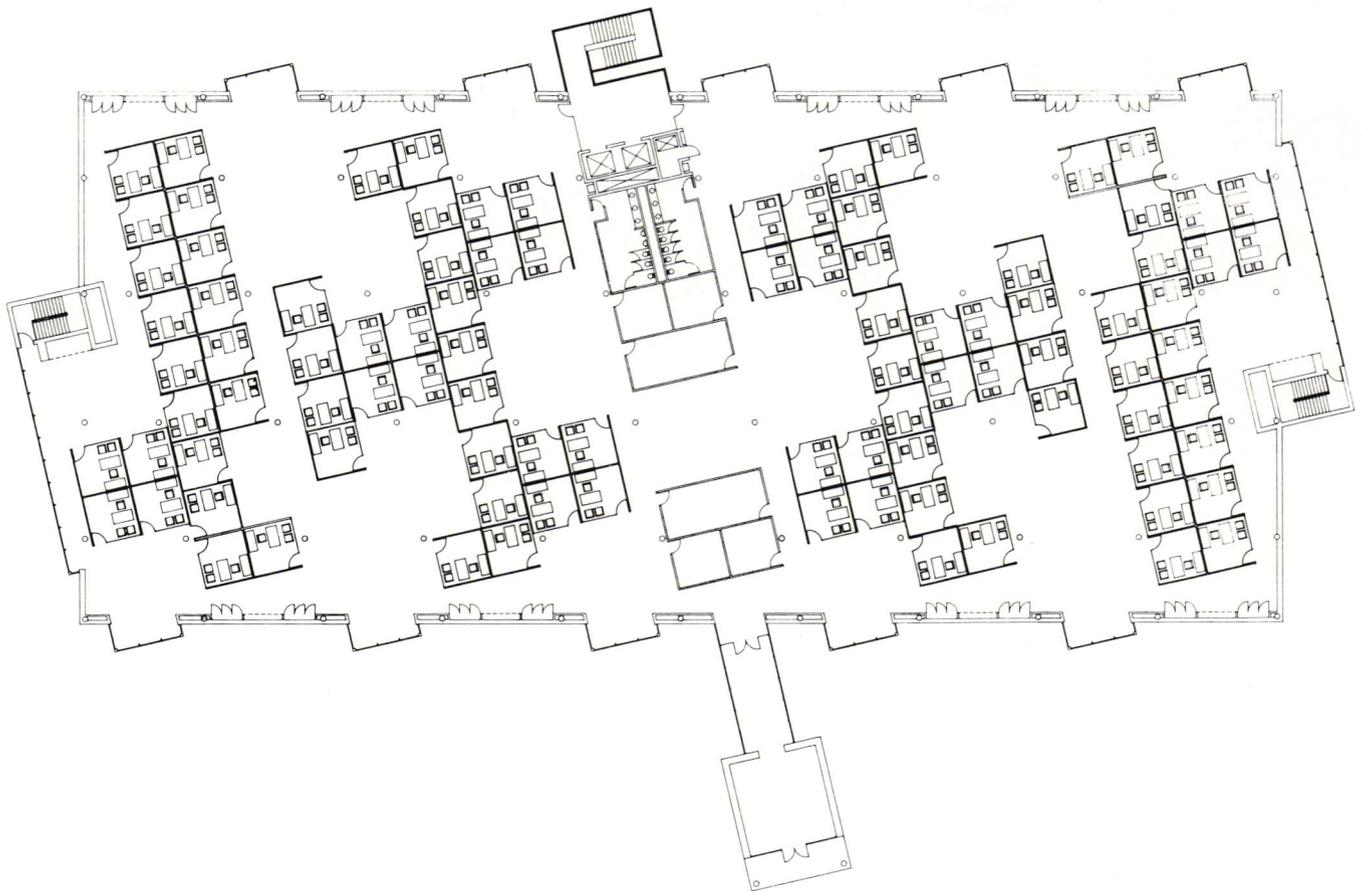
Our project, a corporate office facility, takes advantage of the system's specific capabilities. The building, already designed, was selected because of the various repetitive elements; projecting bay windows, exterior wall/closet sections, and individual private offices. A basic modular furniture scheme was derived and inserted in a similar fashion. Each element was inserted once and then through special computer functions, including translating, rotating and copying, were used to position the elements

in their proper location. For example, the left half of the plan was drawn and then copied and rotated to complete the right half of the plan. The core, elevators and toilets were drawn on separate layers; layering is similar to overlay drafting. These elements were then moved on the drawing to their appropriate place.

It is said that despite technological changes around us, architects continue to use the basic tools developed over a thousand years ago in designing and drawing buildings. CADDS perhaps presents a revolution in the architectural process of producing designs and contract documents for buildings. We felt that it was our responsibility as architects and designers to explore this new technology.



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● Corporation Office Facilities

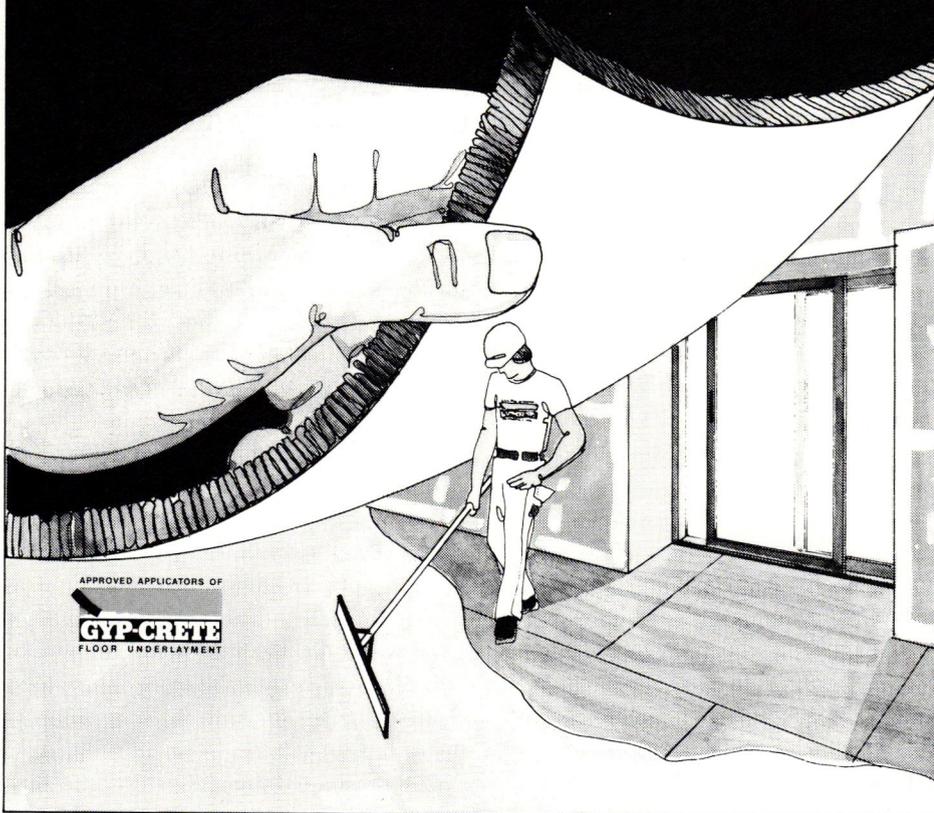
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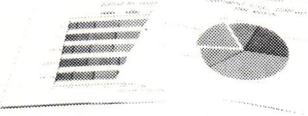
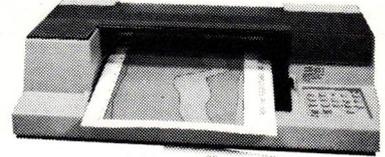
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Computer Aided Drafting

By Jerry Rubin, AIA, IBD

Working drawings created with Computer Aided Design and Drafting (CADD) systems are not only beneficial but soon will be the norm. The benefits are in the accessing and reuse of stored data, accuracy of the information, translating completed parts and the automatic dimensioning of the system.

CONSTRUCTION DOCUMENTS: tradition method

The example drawings chosen were completed on a fresh sheet of paper within a 40 hour work week by referencing much of the data from the original contract documents (as built were not available). The documents could have been masked and reproduced on erasable mylar or vellum, but even this method was not used typically at that time. The tedious task of redrawing fine lines for page composition, dimensioning, labeling and poché'ing materials, and finally rendering heavier lines for readability was all part of the process.

CONSTRUCTION DOCUMENT: new technological tool

These wall sections were my first attempt at computer aided drafting. During my time of involvement, I was able to accept the role of the computer as a tool in doing construction documents. Actually, it was not until after weeks of working with the system that the system showed signs of competition with the typical methods of drafting.

The first computer generated wall section was completed by constructing a single line segment. This line was then repeated incrementally by the computer. For example, one block course was created then copied until the desired height of coursing was accomplished. Other lines were introduced by paralleling existing lines. Window, blocking and brick details were then moved as needed to complete the section. All arrowheads, leader lines and dimensions were automatically part of the data base; I

needed only to say where I wanted them shown. All notes were added to the drawing by typing the information into the computer. Various lettering styles (fonts) and sizes could be entered on the drawing. Once entered, the fonts and height and width of the letters can be altered without retyping the notation. After completing the first section, translation was again used to create the second section. Minor changes in this section were finished, thus completing the second drawing in one and one-half hours, approximately $\frac{1}{10}$ the time of the first. Information contained in the wall sections were then given separate part names. These later became the roofing and window details with additional adjustments. While the system was translating lines, parts and whole details, I was able to assess the construction of the next detail and verify the completed section for accuracy.

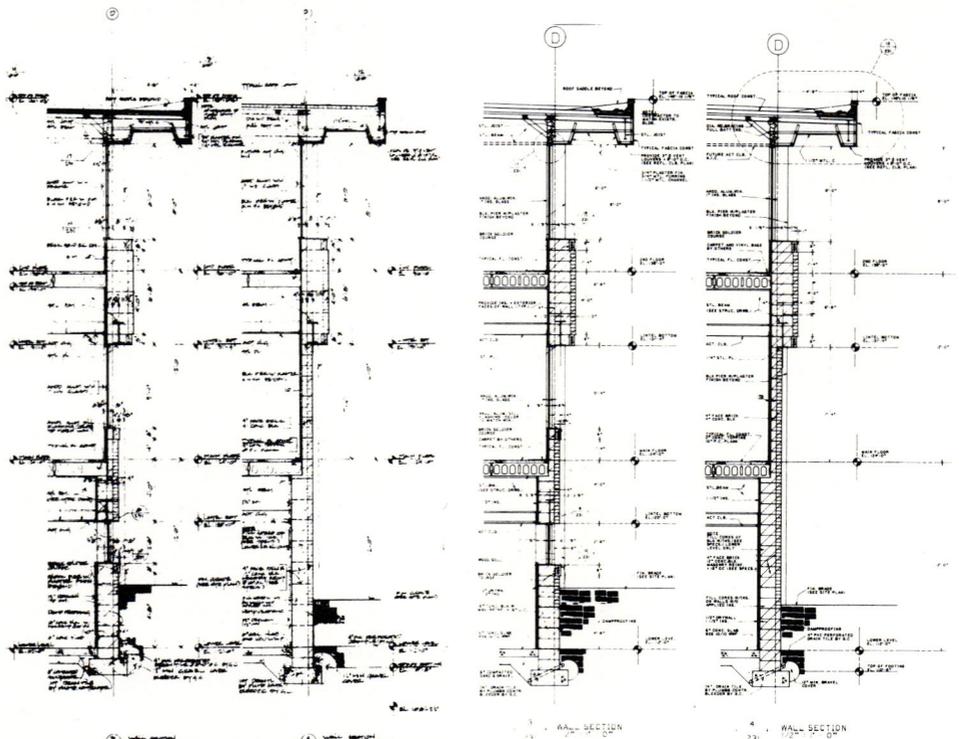
The reproduction of the computer drawing on this page does not show the original three colors. The dimension and material notes were created on a separate layer as

well as the elevation symbols, thus allowing me to use multiple colored pens when plotted. This reproduced well even on a blue line print.

EPILOGUE:

Although cross hatching is an asset of the existing systems software, efficiency is having the availability of inserting 8", 12" or 16" concrete block, a typical footing, steel beams and columns, etc. as part of the data base. While layering provides a means of visualizing conflicts of architectural, mechanical and plumbing details (seen in color on the monitor), the existing software lacked the second generation of displaying door and room finish schedules or area take-offs. As this second generation becomes more complete, a third generation will come of age. This third generation will free the architects even further by allowing them to manufacturer products not yet in existing catalogues.

Any future generation is part of our imagination process in becoming one with this new technology.



● Conventional Method

● Computerized Drawing

Correctional

ARCHITECT

Kenton Peters and Associates, Inc.
Madison, WI

OWNER

Winnebago County/City of Oshkosh
County Courthouse

GENERAL CONTRACTOR

Fluor Bros. Construction Co., Inc.
Oshkosh, WI

PROJECT

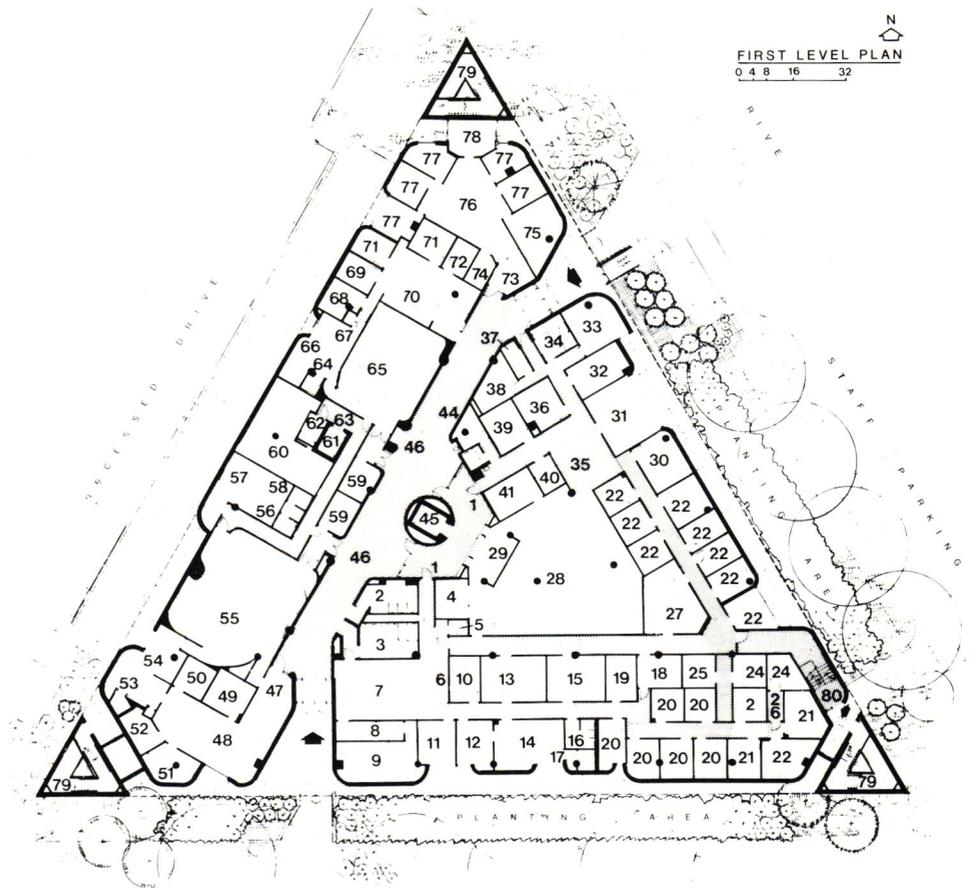
Oshkosh Public Safety Building
Oshkosh, WI

CONSULTANTS

Orput Associates, Inc.

PHOTOGRAPHER'S CREDIT

Eric Oxendorf



PROGRAM

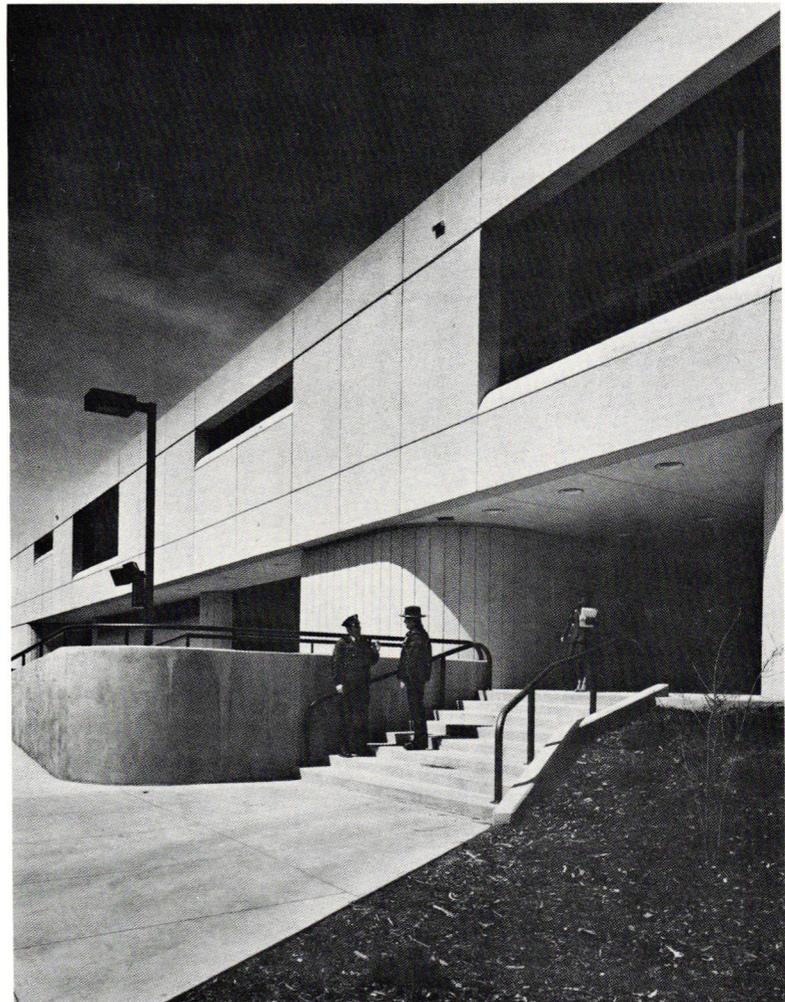
The Oshkosh Public Safety Building is a joint Winnebago County Sheriff's Department and City of Oshkosh Police Department facility. The 84,746 square foot facility will house all of the functions of the Sheriff's and Police Departments. In addition, the building will also house two branch courts, including judge's chambers and office area, and Winnebago County District Attorney offices.

SOLUTION

The new building is located across a busy street from the existing courthouse. The selected site is roughly triangular in shape, and had a great influence on the shape of the building plan.

In order to gain several economies, the first floor was elevated approximately 5'0" above grade. This minimized ramping required for the lower level sallyport and garage. It also minimized excavation depth, eliminating the need for rock excavation. The earth berms were incorporated for their aesthetic value, as well as for the protection factor required for the lower level emergency government spaces.

The building has three levels. The lower level is a basement area with garage and sallyport facilities on the exposed grade side. The locker rooms, training rooms, pistol range, radio communications, storage rooms, and Emergency Operations Center are the remaining portion of the lower level. The first floor is devoted to the Sheriff and Police Department offices, the two court areas, and the District Attorney offices. In addition, the main public entryway is located at the first floor area. The second floor is devoted entirely to the jail offices and the jail detention area.



Correctional

ARCHITECT

The Durrant Group Inc.
Madison, Wisconsin

OWNER

Sheboygan County, Wisconsin
Sheboygan, Wisconsin

CONSTRUCTION MANAGER

Bray and Associates
Sheboygan, Wisconsin

PROJECT

Sheboygan County Law Enforcement
Center
Sheboygan, Wisconsin

PHOTOGRAPHER'S CREDIT

Skot Weidemann, Photographer



This Law Enforcement Center shares the site of the existing County Courthouse. A center for county government has developed as old and new facilities for serving the public have been linked together.

The county's primary objective was to obtain a contemporary facility for detention: a humane environment, secure and efficiently supervised and administered.

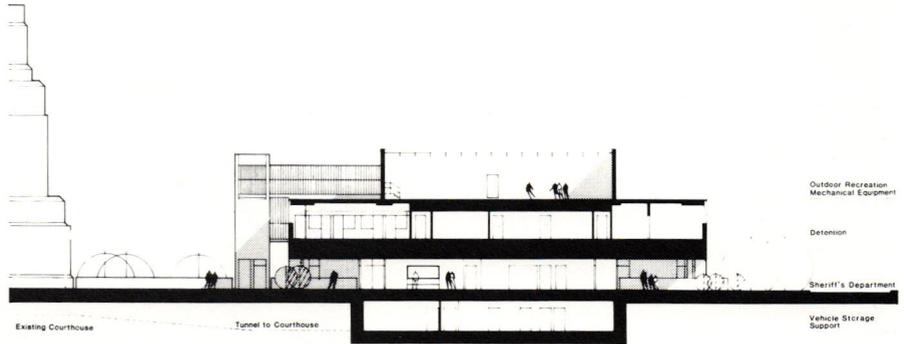
Spaces required included detention facilities for 92, offices for the Sheriff's Department, and support functions.

The Law Enforcement Center's three floors divide the functional program into three distinct parts. Vehicle storage and support spaces are on the ground level. A sloping site allows access to the vehicle area from the exterior parking at the east end of the site, while keeping functions such as the firing range and mechanical equipment below grade.

The first floor accommodates offices for the Sheriff's Department. A public lobby connects a south entry and parking with the courthouses entry and green space to the north.

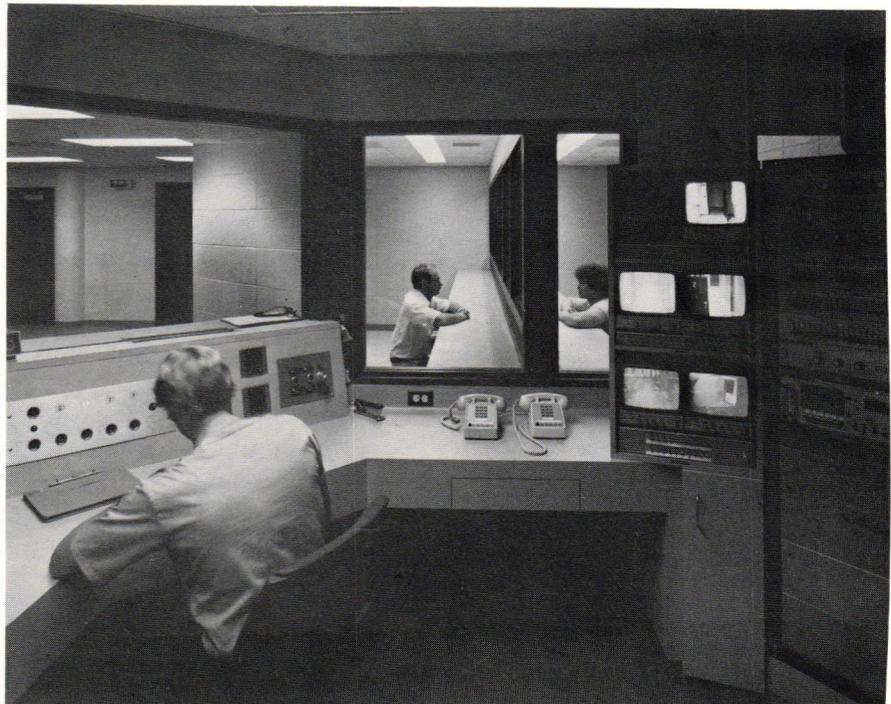
All detention functions are housed on the second floor. Cell/dayroom modules and work release dorms occupy the perimeter. A perimeter guard corridor provides the maximum in monitoring capabilities and security. With this layout, no cells are distant from daylight.

A penthouse contains mechanical equipment and an outdoor recreation area.



Building Section

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On The Boards

ARCHITECTS:

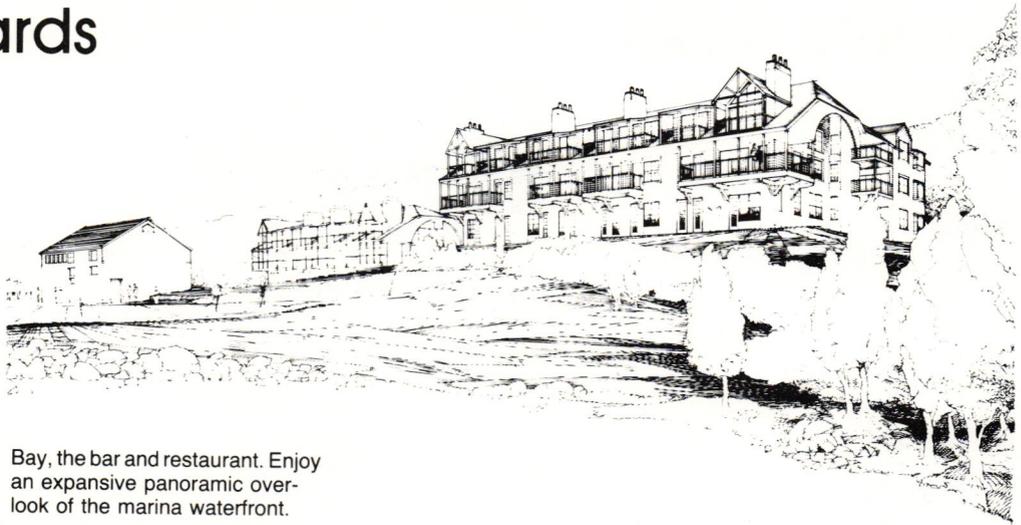
Kubala Washatko Architects
Cedarburg, Wisconsin

PROJECT:

Sister Bay Resort and Yacht Club
Sister Bay, Wisconsin

DESCRIPTION:

The adjoining drawing depicts two of 3 buildings housing condominium apartments and an existing building (to be substantially repaired) that will function as a conference center independent of the 50 room hotel. (Not shown in sketch). All of the hotel rooms and condo units have views of Sister



Bay, the bar and restaurant. Enjoy an expansive panoramic overlook of the marina waterfront.

ARCHITECT:

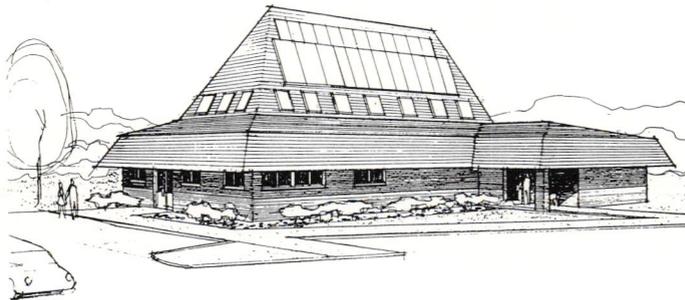
E. John Knapp, AIA
Architect Planner
Madison, Wisconsin

PROJECT:

Emergency Veterinary Clinic
Newport News, VA

BACKGROUND:

A new concept in veterinary service will be built in the York County Peninsula Area in Virginia. A



group of 26 veterinarians have formed an association to construct an emergency hospital to be available at all hours of the day and night and over weekends.

Solar heat will be used for 100% of their hot water needs and 40% of their heating needs, backed up with heat pumps. The contemporary roof form will use split cedar shakes and prefab roof trusses.

ARCHITECT:

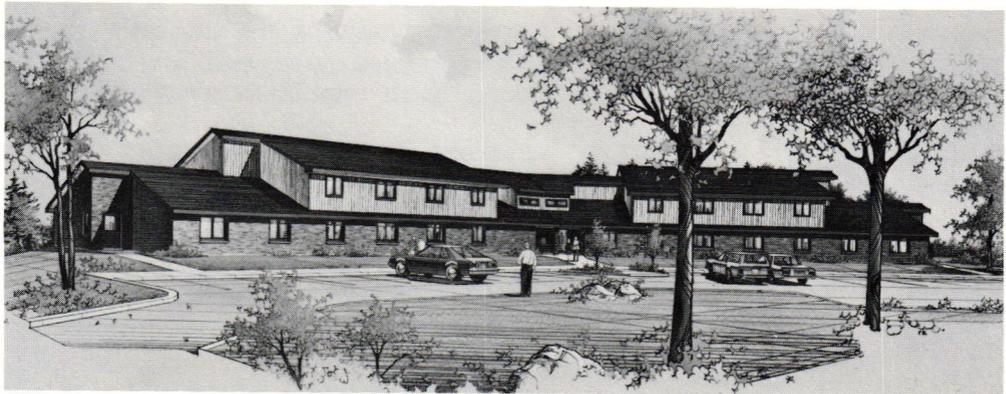
Douthitt Associates, Inc.
Madison, Wisconsin

PROJECT:

Gazebo Apartments
Boscobel, Wisconsin

BACKGROUND:

This 20 unit elderly apartment building is a portion of a 36 unit HUD project for the Boscobel Housing Authority. The site is level at the building and parking areas and then slopes to Sanders Creek, on the east. The apartment wings pivot around a two level commons area with a sculptural



stairway connecting the two levels. The entire site of 2.1 acres will

be developed into a park-like area and will contain a gazebo, which

was donated by a local businessman.

Your project could be Here!
Call Karen at the WSA office to obtain the necessary form for submitting your project.

The Wisconsin Architect will publish forthcoming projects that are "On The Boards" using the format shown. If you have a project for publication, please submit the appropriate heading, copy, and graphics. Call the WSA office for further information.

Society News

BIDDING FOR A/E SERVICES

Bidding for A/E services is inconsistent and incompatible with providing professional services. The WSA opposes the selection of architects on the basis of low bid for a large number of reasons . . . which will not be set forth in this article.

The bigger question is what to do about bidding.

The WSA undertakes constant efforts to educate both public and private owners as to why the selection of architects on the basis of low bid is contrary to the best interests of the owners. Regardless of these efforts . . . some clients utilize price as the sole or primary criteria for selecting design teams. Architecture is a profession that historically has not established a financial worth meritorious of its impact and responsibilities. The "somebody-will-always-do-it-cheaper" mentality continues to crop up and further reduce the worth of the profession. We can sit around and blame external factors (owners, developers, contractors, consultants, the recession, our professional schools, etc.) or we can take a long hard look at the problem and come up with some answers.

What might those answers be? Here's some thoughts:

1) **PUBLISH BID RESULTS.** If architects are going to bid for their services . . . let's see what those bids look like. The *WISCONSIN ARCHITECT* will be pleased to publish bid results, as well as any associated definition of the scope of services or program that was provided at the time the bid was requested.

2) **EDUCATE OURSELVES.** If we're going to bid for work . . . let's learn to do it the right way . . . like the contractors do.

3) **EDUCATE OWNERS.** The WSA and its individual members must further seek to educate owners as to why bidding is the original "penny wise and pound foolish" method for selecting architects.

What else can we do? There's got to be more. This is an issue that has significant impact on the future of architecture, both economically and in terms of the changing definition of the scope of service that architects provide. Think about it for five minutes or more. Reflect on the issue with your peers, colleagues, and competitors. As you come up with bright ideas, call Eric at the WSA office. Your professional organization is concerned about this issue and needs your involvement in order to better define the solutions.

FREE ARCHITECTS AND ENGINEERS PROFESSIONAL LIABILITY COMPARISON AVAILABLE

This document briefly summarizes the primary claims provisions for eight major A/E Professional Liability carriers. It also provides a grid which visually displays 55 common exclusions and the companies who do and who do not incorporate these exclusions.

For a free copy of this comparison, please contact Michael Holle or Jennifer DeRienzo at (714) 833-0673 collect (Association Administrators & Consultants, Inc.).

FALL WORKSHOP

Mark your calendar for the WSA's annual Fall Workshop to be held Friday, October 21, 1983. Under the chairmanship of Noble Rose, AIA, this year's Fall Workshop has been planned as a day of peer interaction. The workshop will be held on the grounds of the American Baptist Assembly in Green Lake, Wisconsin. Program information has been sent to all WSA members. For further information call the WSA office.

**AIA-AGC
LIAISON
COMMITTEE**

Formed in 1956 by a group of AIA members and AGC members, this committee has met continuously for the purpose of discussing mutual problems involved in Division One of the specifications and resolving these problems through mutual agreement. Since 1956 this committee has published a manual and distributed the manual to all AIA/AGC members. Continuous revisions have been offered where necessary.

This committee is in the process of editing, revising and updating the AIA-AGC Recommended Practice Manual. This will be the second published edition. The manuals will be available at the end of 1983. To order this manual contact the WSA office in Madison.

AIA/AGC Committee: (left to right) Clarence Hueftenrauch, AIA; Matt Goebel, AIA; Gerald Vanselow, AIA; Tom Eschweiler, AIA; Dave Koscielniak, AIA; Les Seubert, AIA; Rae Reuss, AIA; Gale Guenther, co-chairman; Jack Rose, AIA; Robert Leick; Rupert Kotze. Not pictured: Curt Hastings; James DeCoster; Ray Camosy; John Hoepfner; Wolf Korndoerfer; Gil Coluccy; Donna Conant; Rich Lynch; Leroy Tislau; Larry Kassens, AIA; Jim Luterbach; and John Marino.



**PEOPLE
AND
PLACES**



Emma Macari, AIA



Noble Rose, AIA



Jim Potter, AIA

EMMA MACARI, AIA has taken a position as Architect - Coordinator of Physical Planning-Capital Budgeting with UW Systems Administration. Emma was previously employed as a staff architect with the University of Wisconsin-Madison Department of Planning and Construction. Emma's new phone number is (608) 263-4404.

NOBLE ROSE, AIA, has been elected President of the Beloit Rotary Club for the coming year. Noble has been an architect in Beloit, Rockford and Madison areas since his graduation from the University of Illinois in 1952. Now in its 64th year, the Beloit Rotary Club has 115 members.

JIM POTTER, AIA of Madison has become Chairman of the Architecture Committee of the Wisconsin Historic Preservation Review Board. Congratulations Jim.

OWEN AYRES & ASSOCIATES, INC. have changed their firm name. They are now AYRES ASSOCIATES. Their address and phone number stay the same.

**MEMBERSHIP
ACTIONS**

DE BUSK, THOMAS L., was approved for Associate Membership in the Southwest Wisconsin Chapter.

GRIFFIN, ANTHONY J., was approved for AIA Membership in the Southwest Wisconsin Chapter.

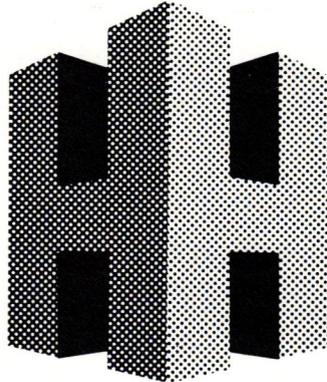
KEENAN, KERRY A., was approved for AIA Membership in the Southwest Wisconsin Chapter.

SAN JUAN, GABRIEL G., was approved for Associate Membership in the Southeast Wisconsin Chapter.

SAZAMA, CHARLES E., was approved for AIA Membership in the Southeast Wisconsin Chapter.

KOWALSKI, RUSSELL K., was approved for AIA Membership in the Southwest Wisconsin Chapter.

SCHNUCK, KATHERINE A., was approved for Associate Membership in the Southeast Wisconsin Chapter.



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Diamond Tower Condominium

Architect:

Plunkett, Keymar, Reginato (PKR)
Milwaukee, WI

Owner:

Hutter Construction Company
Milwaukee, WI

General Contractor:

Hutter Construction Company
Milwaukee, WI

Most authorities agree that the philosophers have been right all along. It is not how long we live that counts but how well we live. This concept is the basis for the development of Diamond Towers Condominium of Milwaukee's east side. Diamond Towers is a 22 story, 112 unit residential project developed and built by Hutter Construction Company. The Architect's of Record for this unique approach to residential design is Plunkett, Keymar, Reginato (PKR) Architects of Milwaukee. PKR's work was based on a conceptual design by consultant John Abendroth. Diamond Tower has been provided with an emotional quality that will help reinforce an improved quality of life.

Visual excitement, both outside and from within is one of Diamond Towers greatest attributes; the exterior design features a rectangle intersected by a square, thereby forming a diamond. The variety of angled walls provide the advantages of wind protection for balconies and a sense of privacy from neighboring high rise buildings.

The visual senses are further stimulated with a dramatic panorama view of Lake Michigan and the city scape from each unit's prow-shaped corner living room window. The entry of each unit to the windows at the farthest corner of the living room is 75 feet. This large expanse is created by setting the individual units on a diagonal providing the impression of openness. The building's multi-faceted geometry provides a variety of exposure and orientation from all living room units, unlike the confining claustrophobic single orientation common to conventional apartment blocks. Essentially providing all corner units, Diamond Towers design uniquely furnishes a more marketable living unit.

The building foundation which includes a two story underground parking garage was sprayed in place. A gunite concrete foundation system was used because of

the tight site restrictions. This system allowed foundations to be placed close to property boundaries without disturbing neighboring building foundations.

The building skin was developed of a lightweight exterior membrane over 2 layers of rigid insulation board, set in a metal stud frame filled with fiberglass insulation. Panels were built in an off site assembly facility during the winter which allowed the construction schedule to be maintained. This exterior wall system provides a composite resistance of over an R24 value. The building's energy conservation strategy will provide significant efficiency in energy use.



sign uniquely furnishes a more marketable living unit.

Diamond Tower is built around a central core for elevators, stair and mechanical space. The apartment units radiate out from this center hub eliminating long linear hallways. The maximum walking distance from elevator to individual unit is only 24 feet. The angled wall reduces the dullness of visual length and increases unit entry privacy.

The building foundation which includes a two story underground parking garage was sprayed in place. A gunite concrete foundation system was used because of

the tight site restrictions. This system allowed foundations to be placed close to property boundaries without disturbing neighboring building foundations.

The building skin was developed of a lightweight exterior membrane over 2 layers of rigid insulation board, set in a metal stud frame filled with fiberglass insulation. Panels were built in an off site assembly facility during the winter which allowed the construction schedule to be maintained. This exterior wall system provides a composite resistance of over an R24 value. The building's energy conservation strategy will provide significant efficiency in energy use.

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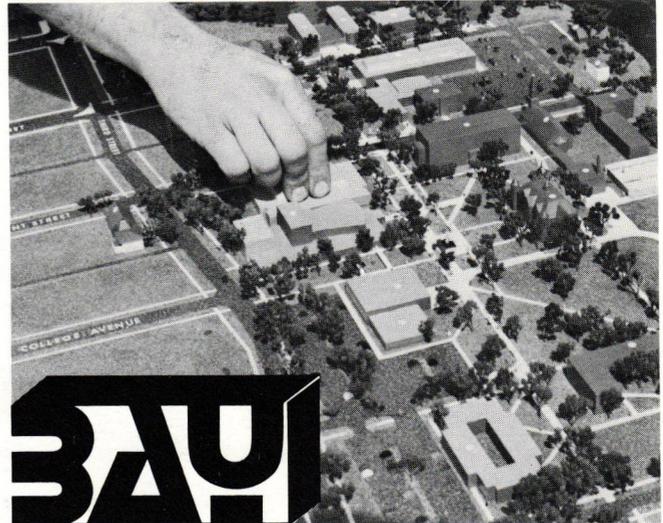
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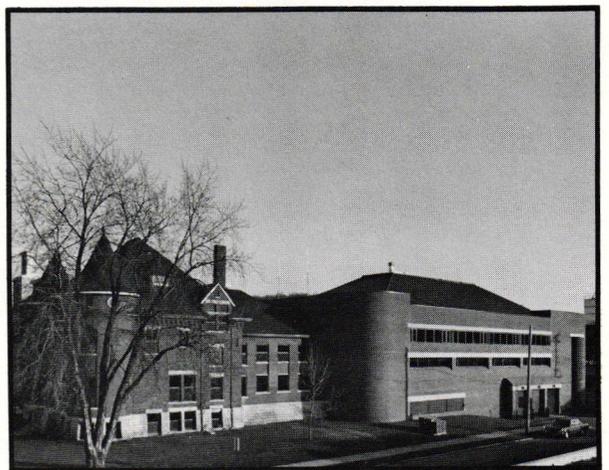
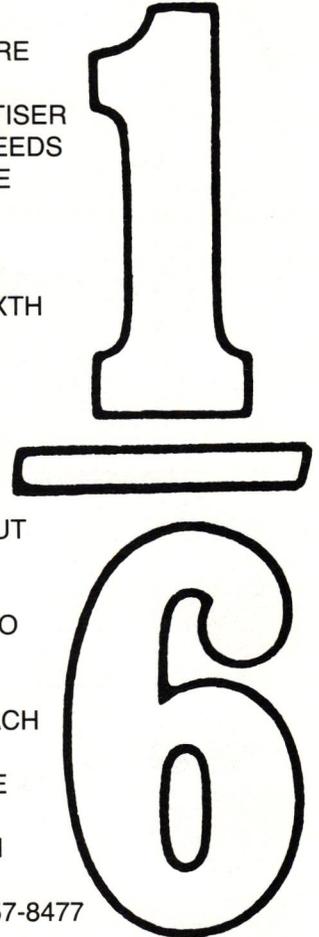
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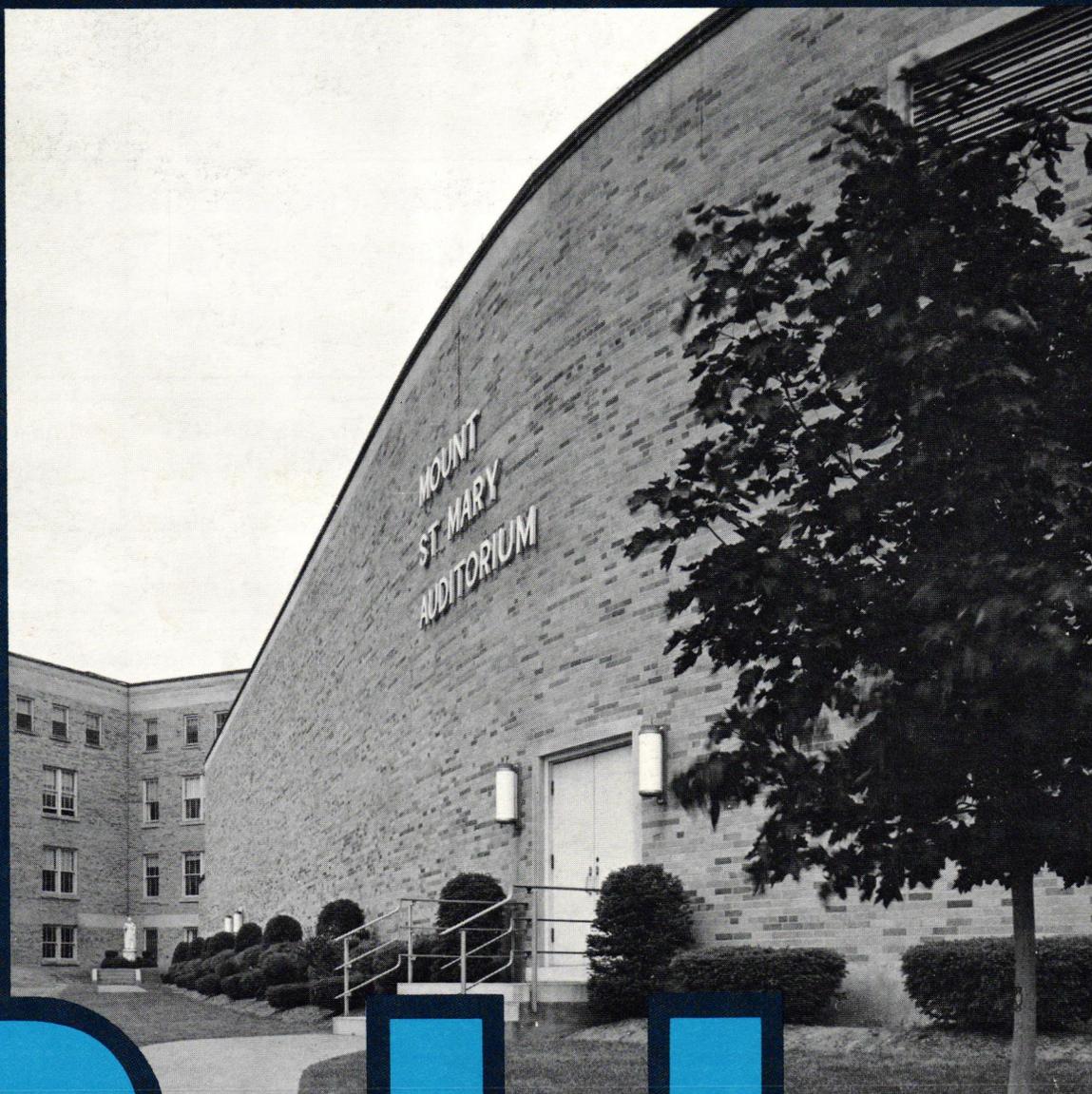
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