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housing health care services . . .

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# *MEDICAL MACHINE, OR . . .?*

At this time of rapid improvements in the techniques of the medical art and sciences, increasing life expectancy, developing government sponsored health care programs, and ever growing population, the need for health care services and programs to train medical and paramedical personnel are increasing dramatically.

Succeeding the family physician and the general hospital, we have seen the development of a vast army of research scientists, and sophisticated and intricate technical equipment housed in highly specialized treatment facilities and operated by intensively trained medical specialists.

Extensive programs of preventive medicine inaugurated at both the community and national levels are changing the nature of medical needs and are requiring new types of facilities to serve these new programs. Medical services relating to housing for the elderly are opening the door to a complex, new and important area of health care. Obviously, then, the future will require greatly expanded and innovative facilities to house these diverse services.

What is the architect's role in the development of these facilities? Of what can he be sure? Probably his only certainty is that the future is largely unpredictable.

Efforts to provide sufficient flexibility to meet the unknown future have produced a variety of solutions ranging from the development of prototype rooms so intricately laced with built-in services that they resemble space capsules (and which probably are as costly to modify when any component becomes obsolete) to ultra flexible building systems of which no elements except the basic structure are fixed and entire floors are devoted to supporting services. Countering these efforts are the skyrocketing costs of construction and uncertainty on the part of many hospital administrators and their architects as to whether the need for total flexibility justifies the staggering cost.

Perhaps the one viable common denominator of the myriad technical, economic and physical problems of providing health care that should be foremost in the minds of administrators and architects alike is that those services and the facilities housing them only succeed to the degree that they meet the needs of suffering human beings. Too often in the pursuit of the perfect "medical machine" the psychological pressures of serious illness or disability are overlooked or sacrificed to economics or technology.

The real challenge to the architect is to produce health care service buildings which, while serving the technical requirements of our time and providing the necessary expansion and modification capability to meet the changing needs of the future, are conceived with compassion for the patient. These facilities should not be aesthetically sterile, but should possess warmth and human scale, meeting the practical needs of the staff efficiently, but in addition providing for the patients' physical and psychological comfort and easing the anxieties of those who must spend long and often troubled hours waiting the outcome of life and death struggles.

While technical information can be obtained through experience and the contributions of qualified staff and consultants, a truly great building can result only when these factors are combined with understanding of the problems of the patients whom it serves and a genuine concern for their welfare.

This issue attempts to explore some of the many types of health care facilities currently being planned by Missouri architects or presently under construction, and to draw upon the experience of these architects to examine some of the problems and challenges of housing health care services.

**Ted Wofford, AIA, Editor St. Louis**

"THE ORIGINAL LIGHTWEIGHT AGGREGATE"

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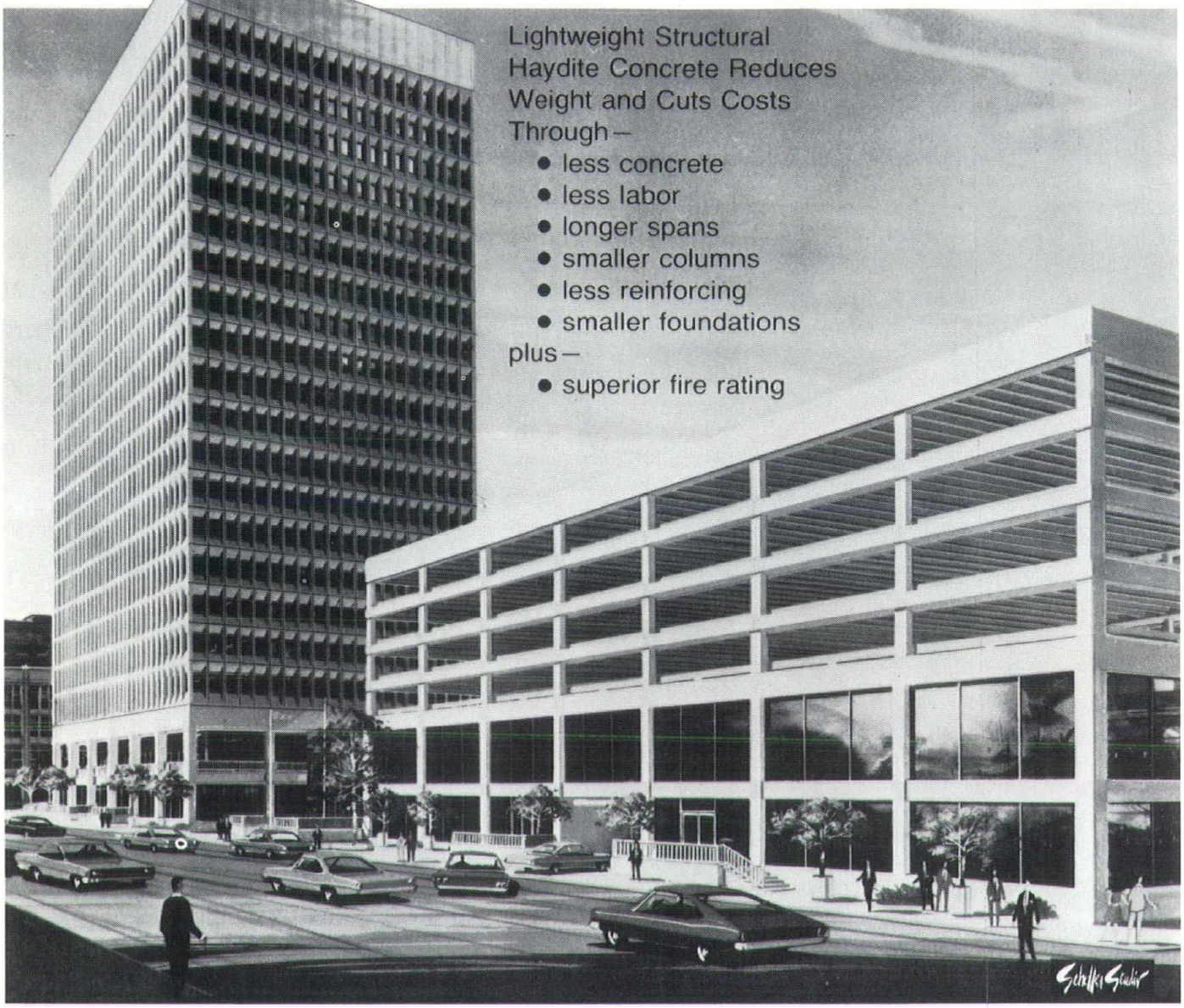


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# the government's role in architectural preservation

**by gerhardt kramer, faia**
**state preservation coordinator**

Prior to 1966, the Congress of the United States acted sporadically in the preservation field. It passed the Antiquities Act of 1906 which gave the President authority to establish monuments on government owned land. It created the National Park Service in 1916, enacted the Historic Sites Act of 1935, established the National Trust for Historic Preservation in 1949 and, under the Housing Acts of 1961 and 1965, authorized the expenditure of federal monies in urban renewal for preservation purposes.

The resources and prestige of the federal government were dramatically pledged to the landmarks preservation movement in 1966 when it passed the Historic Preservation Act of 1966, which set forth its role in the national preservation movement in these words: "Although the major burdens of historic preservation have been borne and major efforts initiated by private agencies and individuals, and both should continue to play a vital role, it is nevertheless necessary and appropriate for the federal government to accelerate its historic preservation programs and activities, to give maximum encouragement to agencies and individuals undertaking preservation by private means, and to assist state and local governments and the National Trust for Historic Preservation in the United States to expand and accelerate their historic preservation programs and activities." Congress declared the then existing programs of government and private organizations as "inadequate to insure future generations a genuine opportunity to appreciate and enjoy the rich heritage of our nation."

In effect this Act expanded the preservation concept to historic places of state and local significance. It pledged federal matching grants for historic preservation, authorized an expanded national register of historic properties worthy of preservation, and provided a measure of legal protection for registered properties.

The National Survey of Historic Sites and Buildings is the program for studying and identifying prospective National Historic Landmarks. It is a cooperative program in which state and local agencies and professional historians, architects, and archeologists share their knowledge with the professional staff of the National Park Service.

The review of potential landmarks also is a cooperative process. Eminent experts in the pertinent disciplines contribute their judgment in order that only qualified properties will be declared eligible for designation.

Landmark recognition calls public attention to

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volume1, no.5


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# staff




Midwest Architect is the official publication of the Missouri Council of Architects, Inc., a state organization of the American Institute of Architects. It is published in February, April, June, August, October and December by Fan Publications, Inc., 912 Baltimore, Kansas City, Mo., 64105. Telephone 816-474-4440. Subscriptions for A.I.A. members are included with A.I.A. memberships. Subscriptions for non-members, $3.00 per year; $8.00 for three years. Single copies 75¢. Opinions expressed herein are those of the publisher and contributing editors and the appearance of products or services, names or pictures in either advertising or editorial copy does not necessarily constitute endorsement of the product by the Missouri Council of Architects. Advertising in Midwest Architect is subject to the approval of the Editorial Committee, Missouri Council of Architects, Inc.

# hospital design: flexibility for expansion, change

**By Adolph H. Felder, A.I.A.**

*About The Author*

*Adolph H. Felder, AIA, is a principal in the firm of Kenneth E. Wischmeyer and Partners, and was the partner-in-charge for both the Barnes East Pavilion and St. Luke's Hospital-West projects in St. Louis planned and directed by his firm.*

In designing any building today, an architect must be equipped with an adeptness in crystal ball - gazing in order to intelligently incorporate flexibility in the project to provide for future changes and expansion. Out-guessing the future is especially difficult in hospital design where unusually accelerated obsolescence is brought about by day-to-day advances, as well as changes of approach to medical care.

Furthermore, one must temper his sightings into the future by compromising with the practicality of today. One must function within the cost limitations as imposed by the client.

Adaptation to the site as well as site limitations are factors in determining future expansion directions. But primarily, it is the individual hospital's requisites and modus operandi, coupled with a thorough study of the needs of the community the hospital is to serve, which the architect must carefully and fully comprehend in order to determine present, as well as future requirements and manners of expansion.

Proceeding on an immediate project without benefit of long-range planning can lead only to disastrous results. The client must be impressed with the importance of a master plan as the initial step in the approach to hospital design. In our office, we have found that a set of single-line schematics, accompanied by perspective renderings of the various phases, will generally suffice. Then, as the project progresses, the schematics are updated and refined, and new renderings are furnished to the client.

Although we have been involved in hospital design for 22 years, it would be extremely presumptuous to claim to be experts in this field. In our experience no two hospitals are alike. No two hospitals function in the exact same manner. Therefore, no two hospitals are likely to expand in the same manner.

We have made numerous studies of hypothetical hospital projects using a completely theoretical approach in an attempt to arrive at a suitable modular unit—square, rectangular, circular, hexagonal—which would offer a flexible "parti," but have abandoned them all as futile.

A modular unit might conceivably be adaptable to a particular, highly individualized project. But a modular unit with universal hospital application, thus far, has proved to be very elusive.

Although voluminous pearls of wisdom have been published on hospital planning, there are no magic empirical formulae or proverbial rule-of-thumb principles.

One of our most recent project, St. Luke's Hospital-West, a 300-

**This view from the northeast of St. Luke's Hospital, West, first phase, illustrates the advantage derived from the sloping site in creating access to three different levels—hospital services, medical services, patient services and administration.**

bed (ultimate 500-bed) hospital on which construction began three months ago, followed closely on the heels of a new wing for Barnes Hospital, the East Pavilion, ready for full occupancy sometime in November. These two projects, both in the St. Louis area, are similar in total area and total number of beds, but there the similarity ends. The East Pavilion is a new wing addition to a 15-building hospital complex. Barnes is a teaching hospital (associated with Washington University School of Medicine) and in its total installation is virtually an acknowledged regional medical center. St. Luke's is a church-related, short-term general community hospital presently situated in the inner city, which existing facility will remain in operation in addition to the new hospital. Barnes East Pavilion is a high-rise tower structure built on a restricted urban site. St. Luke's-West, being built on a 64-acre, gently rolling, wooded, suburban site, complete with creeks, is a low-rise building appropriately fitted into, and taking advantage of, a hillside.

The East Pavilion can expand laterally in one direction only for a distance of 180 feet (tentatively identified as the West Pavilion), and is structurally designed for six additional stories. St. Luke's-West, with the capability of expanding laterally in at least three directions, is structurally designed for three additional stories, although only two additional stories are contemplated in the foreseeable future.

These two factors enumerated above would, of course, in themselves dictate two entirely dissimilar hospitals. Notwithstanding, even design approaches to areas within the two hospitals were widely divergent.

St. Luke's, blessed with the good fortune of wide latitude of site, has a broad lower platform with one story containing all supportive services such as receiving, laundry, housekeeping, dietary, and central sterile supply; the story above containing all medical ancillaries such as admitting, surgery, delivery, emergency, radiology, diagnostic laboratories, and outpatient services. A centrally-located vertical transportation tower and lateral distribution within the platform base facilitated design of the material handling system and pedestrian traffic. The central tower contains shafts for future lifts. The lateral network is designed for future extensions.

At Barnes, where most of the services and departments listed above are on separate floors and even in separate buildings, the restrictive site, as well as consideration for existing adjacent buildings forced the employment of two vertical transportation towers, one at each end of the East Pavilion, with a third tower to be built at the west end of the West Pavilion addition in the future. Over-extension of services and long travel distances dictated the incorporation of facilities for a horizontal-vertical computer-operated car conveyor system capable of hurdling or burrowing below existing buildings.

In St. Luke's, all surgery, including GYN is in one grouping. Furthermore, delivery and surgery, taking modified cluster plan profiles, are adjacent to each other for possible interchange of personnel in the future. Labs, delivery, surgery, and radiology can expand without impedance. At Barnes, surgery and delivery are on separate floors. Expansion of these two departments, as well as labs and radiology, will have to be accommodated in the West Pavilion as well as renovated areas in existing buildings.

At Barnes, each type of surgery is in a separate location - eye, ENT, neurosurgery, GYN, thoracic, plastic, etc. This is due to Barnes' approach to surgery design as well as to the building site limitations. Expansion schemes, therefore are much more complicated, being broken into many units.

The T-shaped plan of St. Luke's contains an integrated intensive care unit in the stem of the Tee-medical, surgical, coronary. As the future may require, an additional intensive care floor may be added above with the possibility of devoting an entire story to coronary. At Barnes, each nursing floor has its own 8-bed intensive care unit. These floors, catering to special types of nursing care, because of the self-contained intensive care units will have to be shuffled in the future.

St. Luke's, having freedom of site, is designed as a dual-duct total all-air system for greater infection control. Air-handling units will be contained within the building in an upper story devoted entirely to mechanical equipment, completely sound and vibration isolated from the structure. Boilers, chillers, fire pumps, hot water generators, and emergency generators will be located in a separate power plant building. The mechanical floor within the hospital building contains space to accommodate additional air handling units. The power plant is

**continued to page 8**

# hospital design

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an expandable structure, designed for the addition of future chillers, boilers, pumps, and generators. In order to circumvent the difficulty of installing future ductwork, all future duct risers within the shafts as well as future main horizontal distribution feeders will be installed in the initial phase.

At Barnes East Pavilion, the restrictive site and the low story heights which were made necessary in order to meet existing floor levels, forced us into a 4-pipe fan coil heating-cooling system for perimeter areas, with an all-air system reserved for interior areas only. From the standpoint of asepsis, this system is not as desirable as the one described for St. Luke's, but circumstances prevented doing otherwise. Boilers, hot water generators, and fire pumps are contained in an underground story. Air handling units, chillers, and emergency generators are in a top-level mechanical equipment floor, sound and vibration-isolated from the structure. Duct shafts therefore contain only those ducts and pipes for down feeding. Additional stories will be served by extending existing shafts. The underground story contains space for future boilers, water generators, and pumps. When the West Pavilion is added, the two mechanical floors are planned to expand laterally to the west.

Both hospitals are equipped with central control consoles monitoring all mechanical equipment, with built-in capabilities of read-outs for additional remote sensors and other devices. In addition, the central control console at St. Luke's will be wired to monitor fire alarm and security. With the advent of newly-improved, high-capacity feeder cables, the possibilities for electronic control are limitless, regardless of the future growth of the hospital.

Patient monitoring potential is a built-in feature in both hospitals. Patient wall consoles contain several blanked outlets, and empty conduit runs extend from patient rooms, labor rooms, delivery rooms, intensive care units, and operating rooms, to respective nurse's stations and other control points.

The communications system is designed for unlimited future expansion thanks to computerized solid state memory banks. With the gradual acceptance of CRT equipment for transmission, storage, and processing of material and cost information, data transmitting capabilities will also be virtually limitless.

All of the above, when intelligently designed and properly coordinated and accommodated in the initial project phase add only a minimal cost to the basic system.

Justification to the client for the inclusion in his project of built-in expansion and updating potentialities will depend upon the architect's ability ts discern his client's needs for the foreseeable future as well as the present, and must be accompanied by assurances that the project will not exceed the budget.●

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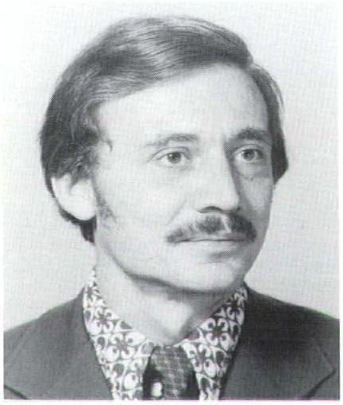
# new medical school for individual needs

*The University of Missouri-Kansas City School of Medicine represents a thoughtful departure from the conventional, through an innovative educational program that is aimed at the core of individual academic achievement. The architectural design to house the school is intended to provide the proper environmental and functional relationships to achieve this ambitious educational program. This six-story, 250,000 square foot Medical School now is under construction. It is scheduled to open in 1974 and will house 400 students when it is operating at full capacity.*

**By Theodore F. Knapp**



## The Author

*Theodore F. Knapp, a Kansas State University graduate, has been involved with educational and health care projects during seven years with Kivett and Myers, architects-planners of Kansas City. He has performed key design and production responsibilities on five major elementary and secondary school projects and has served as project architect on the Kenneth A. Spencer Chemistry Building and Biological Science Building, University of Missouri Kansas City, and the School of Medicine for UMKC. Additionally, he served as facilities planner on the University of Kansas Medical Center Master Planning Project.*

Although countless individuals from a wide variety of institutions have contributed to the present status of the new Medical School, the main thrust of the educational program was brought to focus by Dr. E. Grey Dimond, M.D., provost for health sciences, and Dr. Richardson K. Noback, M.D., dean.

The program is specifically geared to the individual student and his personal academic growth. Elements of the educational plan include immediate and direct exposure to his chosen profession with planned but flexible curriculum, and direct interaction with students, faculty and supportive individuals functioning at all levels of health care.

The student becomes a member of a total team involved in the delivery of health care. This team, because of its organization, represents a self-sufficient scholastic unit and the student's identity will not change regardless of the total enrollment of the school. Each individual student's curriculum may be modified based on the student's exposure and his level of demonstrated and tested competence and interest.

To supplement the student's curriculum, there is the full range of supportive facilities including elements of school administration, traditional library, and complete television, computer and audio-visual services, along with the necessary exposure to research. Appropriate attention to television production facilities is made, including studio theatres for recording, and storing or live broadcasting of educational and research presentations to further enhance the student's academic flexibility.

In order to draw a clear perspective of the educational goals of the new Medical School, the following condensed objectives developed by the Medical School staff are offered:

### Educational Goals

**To individualize the educational process for medical students by providing continuing contact between scholars at all levels and by facilitating the access of those scholars to all necessary sources of information.**

**To expedite and maximize the use of precious educational hours.**

**To educate the student in a prototype setting of his future office and practice relationships.**

**To develop a model of university-community cooperation, where each component provides those programs of special concern and interest to it.**

**To provide the student with a relevant clinician or basic science model with which he can identify and to which he can aspire.**

**The new University of Missouri-Kansas City School of Medicine, a six-story, 250,000 square foot structure, is scheduled to open in 1974. Floor plan, University of Missouri-Kansas City School of Medicine.**

In light of these goals, the Medical School program has been designed to meet the following operational conditions:

### Students

**Students will be grouped in sections of 12 or 13 with students from each class in the group. A specific relation will be established between each first year student with a second year, third year, and fourth year student.**

**A close working relationship will be developed with students immediately out of high school who are studying at the collegiate level and who wish to enter any one of the several health fields.**

### Faculty

**An appropriate group of experienced clinical faculty members, called "docents", will be related geographically and educationally to each group of 12 students. The senior docent will be selected for his special educational and professional interests. In addition to the classical or customary short term courses of continuing medical education, "in residence" longer-term experience for practicing physicians is planned. The value of these men for the overall teaching program should be considerable, returning as they will be from practice. The visiting teacher-learner program will be a major resource of teaching talent and will be designed so that the continuing education program will be coordinated with the Medical School curriculum.**

### Curriculum

The student's first year will be spent almost entirely in the Medical School setting which contains his office, those of his fellow students, and the docents. In this setting he will develop:

**A perspective of the health care system from the patient's point of view as a member of the community.**

**A solid and useful relationship to the sources of knowledge necessary for application to the needs of the patient. This knowledge may be drawn from University departments, clinical disciplines, and a variety of information resources.**

**A true appreciation of the relationship of research to the above mentioned knowledge and its importance to the advancement of knowledge. Hopefully, many students will develop a continuing relationship and activity in an area of research.**

**A specific profile for his further education based upon his fund of information, his capacity for learning, and a general understanding of his role as a professional.**

The curriculum will relate heavily to the community, with opportunities provided for learning in such nearby facilities as community hospitals, neighborhood health centers and the main campus of the University in Kansas City.

### Information Resources

This program will draw heavily upon organized research at the University-wide level in information science, "teaching at a distance", and automated factual resources. The development of a computerized union catalogue of all University library holdings is an example of the work being done at a University-wide level which will be of direct benefit to the type of curriculum and instruction envisioned in this school.

Every known and approved method of communication will be utilized to make available to the student-practitioner (at whatever level of education) all needed information on an individualized and immediately available basis. Included are such techniques as the "brief case computerized library," electronic video recording, closed circuit television consultations, "dial-a-consult," computerized fact banks, simulation models (such as SIM-1) educational games, didactors, and similar new information devices. The system will be designed to take advantage of the newest communication devices and place a premium upon their incorporation into the program.

Since many of these devices will be the basic information modalities used by physicians for their continuing education, it seems appropriate to introduce students to this method of learning as early in their professional education as possible.

The responsibility to respond architecturally to this fresh educational approach was placed with the design firm of Kivett and Myers, Architects and Planners of Kansas City. Although the final facility reflects striking clarity, the design was slowly and carefully developed by the total team efforts of educator and architect. Only through dedicated persistence by both groups was the total efficiency of environmental relationships achieved. Not only was it required to completely understand conventional medical centers and educational facilities, but the modifications to reflect this innovative educational program needed to be established as well.

Each major design decision was carefully tested and evaluated more than once for appropriate response to the philosophy of individual student growth while maintaining the traditional elements necessary to the total success of the program.

The project represents the core academic facility or nucleus of an educational concept which extends into not only the proposed teaching hospital but expands

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# umkc school

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into health care units throughout the greater Kansas City Area and the main University of Missouri-Kansas City Campus. For this reason, it was essential to provide an operating home base for each student. Equally important was the concept that cooperative individuals supplementing the student's education would be coming to the core facility to deliver presentations requiring direct and clear circulation, along with appropriate presentation space within the context of the educational environment.

Some of the major methods and facilities used to create an educational environment conducive to individual growth are enumerated as follows:

**1.Each student is provided with his permanent home base or study office. This office was deliberately designed to serve as his proper study space,and to introduce him to an environment similar to his future professional setting.**

**2.Each group of twelve students, along with its docent, is clustered within a defined territorial domain. Direct visual and movement relationships exist between all of the offices to induce direct and continual interaction. Facilities provided to each group include an open discussion area, enclosed interview or discussion space and laboratory facilities. The open discussion space can be used in a wide variety of ways ranging from formal class presentations to informal study groups. Facilities for verbal interaction with presentations in the studio theatres are provided, as well as television receiving, computer access, communications and television camera capabilities. An enclosed space is provided each group for use as an intimate discussion area, which will often be used also to promote interaction with individuals affected by the delivery of professional services by the docent team.**

**3.Office and support space for each docent team is organized within a specified area. Support space for these four instructors and their associated fifty students includes laboratory research space, interlab facilities, secretarial-file-work-material distribution space, area for jointly shared electronic testing and evaluation equipment, and office space for visiting docents who will be supplementing the educational and professional activities of the docent team. Four docent teams are located on each student floor and share supportive space which serves as conference rooms and laboratory facilities for specialized functions.**

**4.The student floors are horizontally related to the patient floors of the proposed teaching hospital, where the major health care thrust of the docent team will occur.**

**5.Centrally located on the third floor are all the required support spaces to service laboratory facilities on the student floors as well as some 30 supportive faculty and research facilities.**

**6.The design configuration of facility and research laboratories was carefully studied to provide maximum effectiveness of research space and support facilities to be assigned on a priority basis. Specialty functions representing high cost investments were developed on sharing concepts.**

**7.Animal facilities were developed to provide maximum flexibility of educational presentation and research investigations. These shared, highly efficient facilities are incorporated adjacent to research and educational support functions.**

**8.All facilities required for a total on-site information system were incorporated into a single floor - the information sciences floor. This includes traditional library and reading areas (with space for 40,000 volumes),**

continued to page 26

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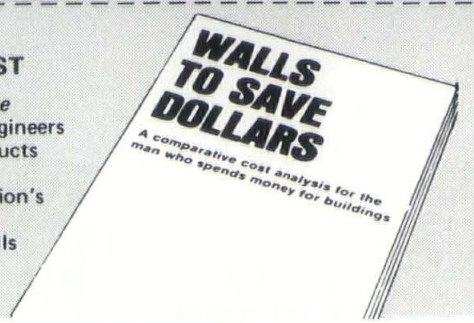


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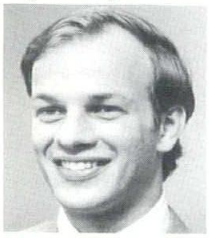
# a unique design challenge in ambulatory health care

**By Ralph J. Nagel**



**The Author**

*Ralph J. Nagel is a vice president with Cohen Nagel Associates, St. Louis, Mo. He is an architect and planner with master degrees from both Washington University and the Univer sity of Pennsylvania. He was architect-planner for Temple University's G.Y.N. & O.B. clinics and West Philadelphia Mental Health Consortium Planning Study. Prior to forming this office he was with Harry Weese in Chicago and David A. Crane in Philadelphia.*

Little interest has been shown in the evaluation and research of new types of community facilities for ambulatory services, community health centers, and group practice. They are often summarily described as standard physicans' offices in triplicate, miniature clinics, or glorified emergency departments. However, they do present a unique design challenge.

These facilities focus on health, not sickness; on comprehensive family-oriented care, not on categorical disease. Here the nurse practitioner, social worker or paramedic functions as the principal link to the patient while group education, counseling and preventive care provides the focus for services.

**Criteria to Evaluate Ambulatory Care Programs**

Criteria can be established that is useful in identifying generic issues, possible opportunities, and alternate strategies in developing health and facility programs that meet their users expectations and needs. These can be derived from cyclical re-evaluation of existing programs and facilities and from research studies.

The chart, as originally developed for the West Philadelphia Mental Health Consortium, identified eight major areas where characteristics of the facility or the health service component could limit the acceptability of the health program to users and non-users alike. Qualitative measures pertinent to ambulatory care can be related to each criteria and specific areas where architects and planners can make a significant contribution can be seen.

## Criteria to Evaluate Ambulatory Care Programs

| | |
|---|---|
| Quality of Services | hours available |
| | price structure |
| | adequacy of services |
| | atmosphere |
| | method of delivery |
| | personal acceptability |
| Accessibility | distance |
| | safety and convenience |
| | time |
| | travel costs |
| Economic Efficiency | capital cost |
| | operational costs |
| | maintenance costs |
| Supply and Demand | governmental standards |
| | professional standards |
| Environmental Infringement | visual-audio intrusions |
| | suitability to natural features |
| Community Infringement | loss of residential privacy |
| | disruption and incompatability |
| | polarization of non-users |
| | activity pattern disruption |
| Adaptability | accommodation of change of use |
| | acceptance of new technologies |
| | acceptance of new activities |
| | pattern and value shifts |
| Aesthetic Quality | compatability to context |
| | imaginability |
| | cognitive association |

**Ambulatory Care Network**

At the community scale, broad concepts that recognize the cognitive values of the users and the contextual factors fo the environment are essential to effectively locating community health resources. Just as the fragmented reponse of the health field and allied professionals continues to limit the "appropriateness, availability, and acceptability" of health care, so, too, do old planning theories that rely solely on location economics and service area concepts prove insufficient to resolve locational issues. Rather, spatial distribution must balance the forces of accessibility and acceptability.

From a planning point of view, then, the approach must incorporate a higher degree of connectivity between the elements of health care and their users' normal activity patterns. The alternate pattern will give greater attention to the inter-related network of private and public agencies, home settings, schools and work places. This is accomplished by permitting greater functional interaction; by exploiting joint structural response to environmental determinents; through co-operation in meeting development process restraints; and in location association.

In this way, preventive care, the essence of ambulatory care, will become another daily, but unobtrusive detail of living and so, more acceptable.

**Symbiotic Activity Opportunity**

As evidence that a better integration with normal user activities is possible is a facility designed for the comprehensive care of children. Grounded on the premise that a child's normal pattern of living demands health, the facility takes responsibility not only to provide a stimulating play and learning environment that is safe but also supplies preventive and emergency health care.

The children who attend the center on a daily basis will be able to have their normal check-ups without interruption of their daily routine, extraneous cost, or unfamiliar surroundings. When ill and requiring more extensive care, the child's record is complete and available without the need for unnecessary testing and repetitive interviews. The parents benefit from the convenience of a one-stop facility where the resource personnel encourage them to observe and participate in every phase of their child's well-being. Confidence in their ability to do so is reinforced through follow-up counseling and instruction. Being located within the same space shelter, the doctor, pediatric practioner, nurse, social worker, and teacher are better able to understand their respective roles and thus, how to better co-ordinate their efforts on behalf of the particular child.

To foster community integration, the facility is open to all children within a particular geographical radius. While being primarily a resource for preventive care to this area, it is designed to accommodate sporadic emergency care that is inappropriate for large hospital emergency wards. Follow-up care essential to total recovery, becomes much more realistic, thus successful. The care can be related directly to the particular environment to which the child returns, thus removing much of the mental stress associated with medical treatment programs.

**Ambulatory Facility Design**

Besides a more responsive and integrated approach to its consumers' activity patterns, ambulatory care facilities require spaces that accept advances in manpower utilization, in management, in audiovisual and information retrieval systems, and in diagnostic techniques. To accomplish this degree of adap-

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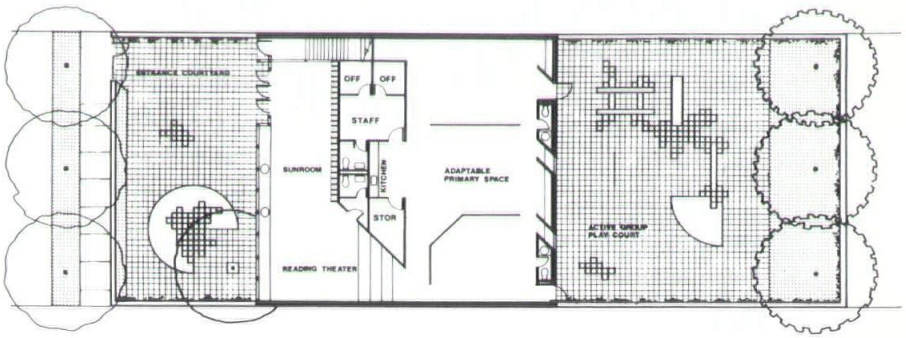
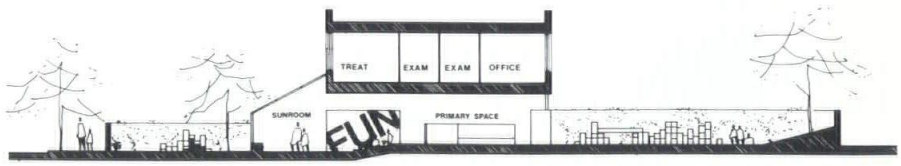
SECOND FLOOR PLAN




FIRST FLOOR PLAN




SECTION

**A Center for the Comprehensive Care of Children**

# challenge

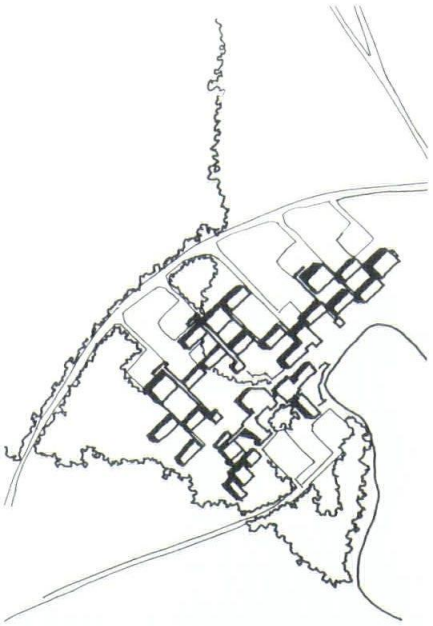
continued from page 15

tability without any compromise of the integrity of the structure two design approaches are possible.

STRUCTURAL VARIANCE is premised on the belief that often flexible space is space that is only vague. The failure to define structure or allocation both in functional and building systems shifts responsibility for decisions to other individuals, or more regretfully, to the play of circumstances. As often as not, this failure to decide opens the door to a multitude of small decisions and to a scattered exploitation of resources.

Structural variance offers the needed differentiated network of structure and utility so that those areas to be considered permanent investments in space can be equated with mechanical efficiency on a long term basis while the more fluid spaces accommodate change.

The goal is adaptability, not flexibility without form. The means to it is reasonable concentration



**A Residential Treatment Center**

of structure; avoidance of narrow adaptation, low intensity, and over capacity; and a neutral, well-distributed communication system.

As in the Center for the Comprehensive Care of Children, the first floor has a choice of environments to meet the child's initiative at all levels with quiet corners, light and dark places, open and protected nooks. The kitchen, utility and washrooms define an area of permanence that will not adapt beyond its present use. Likewise, upstairs and immediately above the lower core space, X-ray, pharmacy and laboratory unit by nature of equipment and specialized utilities, are designed to be permanent, creating a vertical zone of permanent structure. The surrounding spaces allocated to examining rooms, offices and waiting areas are comparable to the areas of less dense activity below, providing for maximum adjustment to future needs. By this subtle structural variance, decisions critical to the planning process are made realistically, both in a present and future sense.

ADDITIVE STRUCTURE is another type of structure which seems to have value for some types of community facilities that shelter ambulatory care services. While the previous approach might be characterized as a fixed general framework, within which minor features are changeable, here, the details are less important, the total pattern is accented and left unspecified. Such are the bricks that can make infinite house shapes, the cage construction of a skyscraper, a child's set of blocks. Adaptation lies in the myriad ways in which the constellation of units, both unique and standardized, may be patterned and in the interchangeability of parts. Thus the units, while linked together in a set way, create an overall variable pattern that is able to respond naturally to environmental constraints and functional connectivity. In this way, as shown in the Residential Treatment Center, the constantly evolving pressure to grow and change in response to new service opportunities is effectively channeled.

**Cost Factor**

Any discussion of environmental adaptation is understandably qualified by "if economically feasible" or "as far as present function will allow." This conflict between future adaptability and present cost is not easily resolved.

In the rapidly changing field of ambulatory services, however, long range efficiency can justify an increase in present cost. The initial cost bonus of modular standardization, separation of centers, and avoidance of space specialization becomes incidential in light of the choice of future obsolescence.

It is the architect who ultimately establishes this credibility for adaptation of space. He does this by maximizing features available in the immediate situation at little or no cost thus allowing new, more complex forms to appear reasonable, not mere looseness of fit. In this way, present efficiency will assume its necessary balance with future concerns.

**Conclusion**

Ambulatory care facilities must be more than ad lib hospitals. They must be conscious, extroverted responses to their users' values and activity patterns. When integrated into the community in this way, health care could be the norm and changing technologies more than just a vague hope.●

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# multidisciplinary labs featured in new mc donnell building

*The following is excerpted from descriptive material prepared by the School of Medicine of Washington University, St. Louis, Mo., on the occasion of the dedication of the McDonnell Medical Sciences Building in October, 1970. Architects of the building were the St. Louis firm of Murphy and Mackey succeeded by Murphy Downey Wofford & Richmon. The facility was the subject of a St. Louis "Architects Sunday" tour.*

Research in the medical sciences is the search for scientific understanding. This understanding forms the basis for both the art and the science of medicine.

The art of medicine lies in the application of knowledge for the purpose of improving the health and well-being of mankind. The science of medicine lies in the understanding of life, especially human life, in its various conditions and modes. It is because science has made inroads into the unknown that the art of medicine has advanced rapidly in recent decades. For example, diabetes can be treated because physicians understand the process of sugar metabolism. Diseases of the thyroid can be controlled because how thyroid gland works is known. Insights originating in the study of physiology and bacteriology have made surgery safe. Vaccines for poliomyelitis and rubella have come from modern virology. The list could go on and on.

Washington University has a tradition of strength in the medical sciences, in probing the unknown and nurturing the advances essential to progress. Some of the world's greatest scientists have works here. Joseph Erlanger and Herbert S. Gasser were awarded the Nobel Prize for their study of nerve impulses; Professors Carl and Gerty Cori clarified mechanisms of carbohydrate metabolism; Arthur Kornberg manufactured in the laboratory deoxyribonucleic acid (DNA)—the substance that carries genetic information from generation to generation. Many other researchers, past and present, have made important contributions. Their solutions to biologic mysteries have contributed significantly to our scientific heritage.

While much has been accomplished in the past, much remains to be done. Many questions are left unanswered. For example:

*How does a cancer cell differ from a normal cell?*

*Why does cancer behave the way it does and how can it be treated?*

How and why do living organisms age?

What causes narrowing and hardening of the arteries?

How can these changes be prevented?

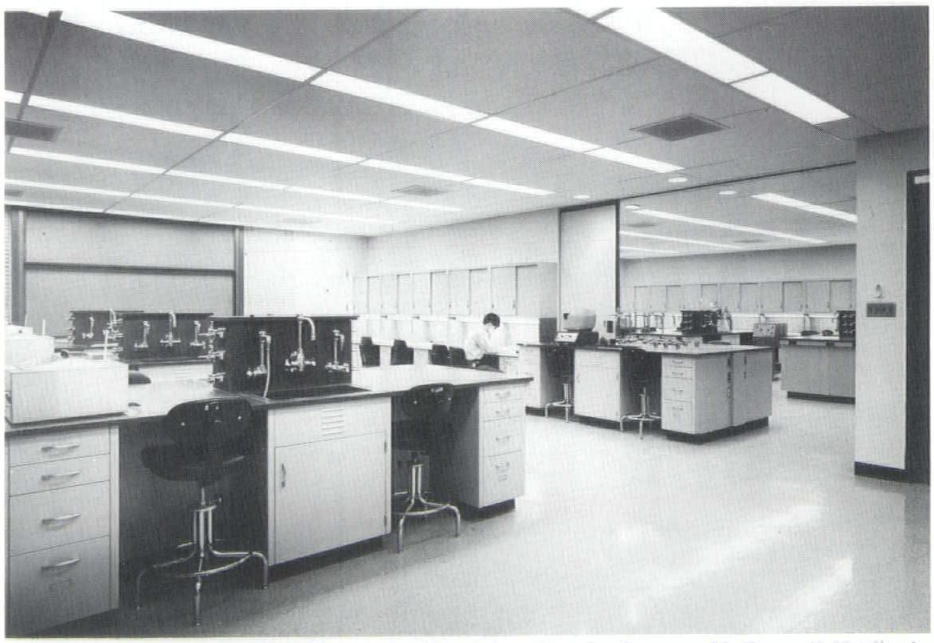
What is memory? Can learning capacity be altered?

Man will explore these and many other questions, and he will find answers. The challenge of biomedical research is greater now than ever before.

Teaching the Medical Sciences

Students who entered medical school in the fall of 1970 will graduate in 1975. Most will practice their profession until about 2015. No one knows what medicine will be like in the

**This is a view of the east elevation of the McDonnell Medical Sciences Building. The building is a major addition to the Washington University School of Medicine and serves as the new center for the school's expanded teaching and research activities.**



**Here is a typical multi-disciplinary teaching laboratory in the new McDonnell Medical Sciences Building for the Washington University School of Medicine. The teaching laboratory provides a home base for student study and experimental work during the preclinical years of medical school.**

Twenty-first Century, but certainly it will be different from what it is today.

There is no body of medical knowledge to be learned once and for all. The curriculum at Washington University is designed to help the student develop facility in the understanding and use of several related technical languages, and gain some experience with the ways in which medical knowledge is acquired and evaluated.

The medical sciences are taught by persons who are themselves actively working in the various fields. Classes are small enough that students can know and be known by leading scientists. The school's goal is to help the student develop the enthusiasm and the tools for a lifelong course of learning.

The early academic building of the Washington University School of medicine were built more than 50 years ago. During the latter part of this century, as enrollments have grown, research programs multiplied; and teaching and research techniques become more sophisticated, the need for a new structure to house the preclinical departments and to serve as a focus for the work of first and second-year students has become increasingly urgent. The new McDonnell Medical Sciences Building meets this need.

In the initial years of their medical-school careers, students study the sciences basic to the practice of medicine. Today the sum of medical knowledge is far too extensive for any individual to master. Therefore, the student is expected to acquire a core of fundamental information from lectures and reading and, in his laboratory work, to become acquainted with the way in which facts are gathered and evaluated. The McDonnell Building serves to unify departmental instructional activities in one setting.

A prominent aspect of the building is the multidiscipline laboratory. Traditionally, each preclinical department has maintained its own teaching laboratory. In contrast, multidisciplinary laboratories in the

continued to page 20

# mc donnell building

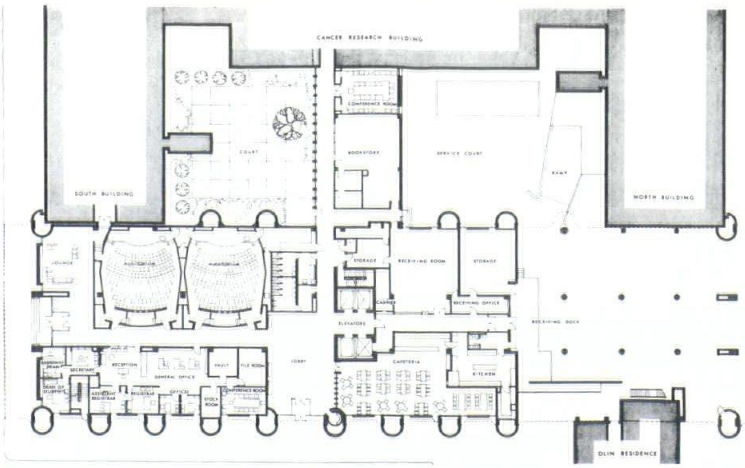
continued from page 19

McDonnell Building enable the departments to bring their instruction to the students in this central location, thus facilitating faculty collaboration and reinforcing the interplay between the medical sciences. At the same time, the multidisciplinary laboratories, which are available day and night, provide a home base for the student, allowing more flexibility in the use of his time.

The advantages of multidisciplinary laboratories are not limited to teaching, however. They offer considerable benefits in terms of use of space, equipment, and funds. The core facility permits a minimum investment to serve a maximum number of students and faculty. Departments no longer need to devote valuable space to teaching laboratories, which often stand idle part of each academic year. Many laboratory instruments can be shared in the multidisciplinary labs, eliminating the necessity for expensive duplication of equipment. The laboratories are thus both efficient and economical.

The McDonnell Building also provides additional office space and specially designed research laboratories for the preclinical departments of anatomy, biological chemistry, microbiology, pharmacology, and physiology and biophysics. Served by a broad range of utilities of sufficient capacity for present and future research needs. The new Department of Genetics will take its place in this facility alongside the existing departments. The Department of Pathology, which bridges the preclinical and clinical disciplines, is located in the West Building. Of particular significance is the provision of space for future departments. Three shell floors included in the McDonnell Building to accommodate developing disciplines and expanding research needs insure that the school can offer the broadest spectrum of study in the medical sciences.

These facilities will contribute directly to the nation's supply of physicians and medical scientists and to the advancement of research. In 1966, when the proposed construction was still a dream on the drawing boards, enrollment of M.D. and Ph.D. candidates totaled 364. With the McDonnell Building, the school can accommodate as many as 480 students, an increase of 32 per cent. Similarly, the new facilities will permit an increase in the size of the preclinical faculty and in the number of postdoctoral scholars. Reinforced in the way, the departments can expand their research activities and also offer broader experience to students.●




**Entrances to the first floor are on the south and from parking on the east through a spacious lobby leading to elevators, two auditoriums, administrative offices and conference room. On this floor are cafeteria, book store, and student lounge. To reach the Cancer Research Building, one passes through a generous corridor opening out onto a garden court to the south.**

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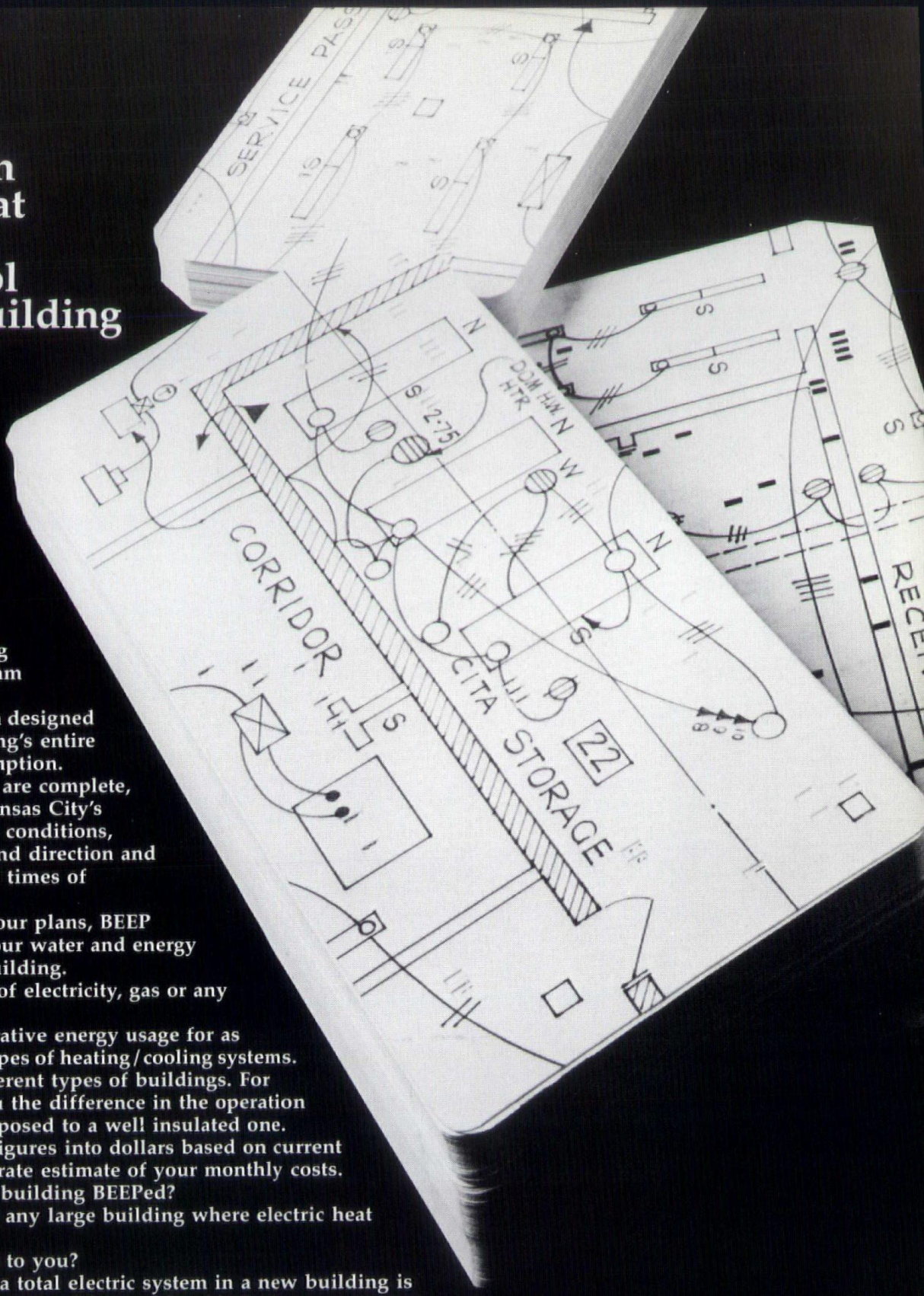


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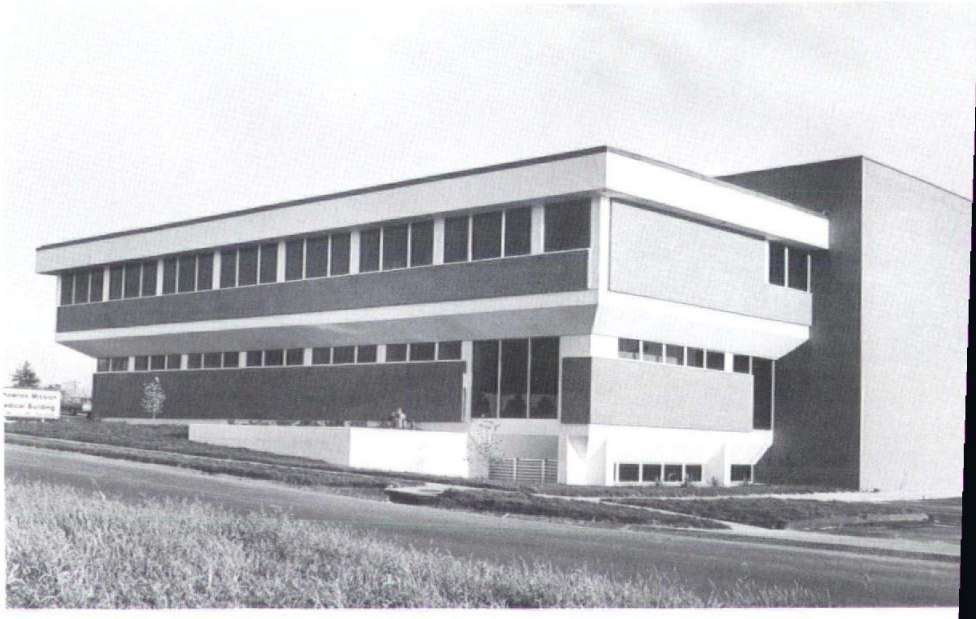
# growing need for hospital-connected medical office buildings



This is the Shawnee Mission, Kan., Medical Building in Merriam, Kan. It is opposite the Shawnee Mission hospital.

Stanton Medical Building in El Paso, Tex., is connected to the Holet Pleu Hospital, seen in the background across the street, by an under-the-street tunnel.

Strong forces, working since World War II, continue to motivate hospital administrators and the medical profession to the construction of medical office buildings adjacent to hospitals.

The trend is strong near most U.S. hospitals, reports Richard L. Pearce, but is especially marked in suburban areas. Pearce is president of Pearce Corporation, St. Louis (formerly Pearce and Pearce, Inc., Architects and Engineers).

Within the next 10 years, it is expected that 40 per cent of the nation's hospitals will have medical office buildings next to them.

Advantages to administrators and patients alike include "one stop" service and more comprehensive health care, with the emphasis upon health maintenance.

Advantages, e.g. in reduced driving time, also accrue to the increasingly specialized medical professional who daily finds himself (a) inside the hospital more than inside his office and (b) concentrating his practice more and more toward that one hospital where other specialists are similarly gathered.

For Pearce Corporation, a firm that for over 40 years had largely specialized in schools and other large institutional-type buildings, the pressures for hospital-connected medical office buildings have resulted in challenges as well as opportunities.

First, the firm's geographical scope, previously limited to eastern Missouri and southwestern Illinois, has expanded recently to include Michigan, Indiana, Kansas, Texas and California. The firm has responded by forming project task forces. Time and budget controls are stronger than ever, but departmentalization according to function has been largely discarded.

Second, the scope of practice has expanded, and now includes economic feasibility determinations; assistance in the ascertainment and resolution of tax, legal and zoning problems, and a much more active role in construction management. The change of the firm's corporate name is, at least in part, to reflect this expanded scope.

Finally, Pearce Corporation has changed, and continues to change, its procedures and approaches to specific jobs. The "Fast Track" idea, pioneered by Pearce Corporation in connection with construction close-outs, is now in its fourth generation, complete with computer-generated Critical Path Network Scheduling and separated bidding for site preparation, structural elements and numerous other factors that can be handled separately and simultaneously (rather than sequentially) so as to accelerate every phase of the project from program to occupancy.●

# continued research, evaluation need in health facilities planning

**By Merlin E. Lickhalter, AIA**

About the Author

Merlin E. Lickhalter, a partner of the Drake Partnership, Architects, Inc., is chairman of the Central States Regional Committee on Architecture for Health of the American Institute of Architects.

Lickhalter also is a member of the A.I.A.'s National Committee on Architecture for Health and chairman of its new subcommittee to investigate the impact that HMOs (Health Maintenance Organizations) and group practices will have on health care facilities planning. In addition, he is a member of the Committee's ongoing subcommittee on National Health Programs.

It is an accepted fact that numerous changes are taking place in the delivery of health care.

Because of the constantly changing system of health service in the country, the planning of health care facilities is generally considered to be more complicated than any other type of project. Rarely is anything planned for a hospital today in exactly the same manner as it was done five or six years ago.

Furthermore, considerable emphasis is being placed on accelerating changes in the present system to meet more effectively the varied requirements of the consumer. The demand for speedier change, which has been greatly influenced by increasing government involvement during recent years, has substantially reinforced The Drake Partnership, Architects' philosophy that comprehensive planning of health care facilities must be conducted by professionals who understand and can respond to the fluctuations and complexities peculiar to this institutional field.

Health care facilities planning poses special problems that require a continuing process of research and evaluation of technological and sociological progress if the architect is to provide his client with facilities which are not obsolete or face early obsolescence soon after they are constructed.

Many factors including, but not limited to, population growth patterns, utilization trends, national health insurance programs, emphasis on ambulatory care and HMO's, automation, and future technological advances and practices are only a few considerations that affect the long range planning of health oriented facilities.

The architect, therefore, must have the ability to avoid a static approach to institutional planning and must develop facilities which relate not only to present community needs but also to the many advances being fostered in the delivery of health care services.

Although it is essential that the requisites which are to be incorporated into a facility be discussed with the client and require extensive interviews with the administrator, trustees, physicians, nurses, paramedical personnel, agencies, and other responsible individuals or groups, the architect should not rely solely on the information gathered from these sources for solutions to problems. Far too often there is a wide divergence of opinion as to who is best qualified to plan a facility or department.

For example, influential staff members can succeed in having their personal desires affect the planning process which could increase both the planning time and construction costs. In many cases, those who exert the most influence leave to go elsewhere

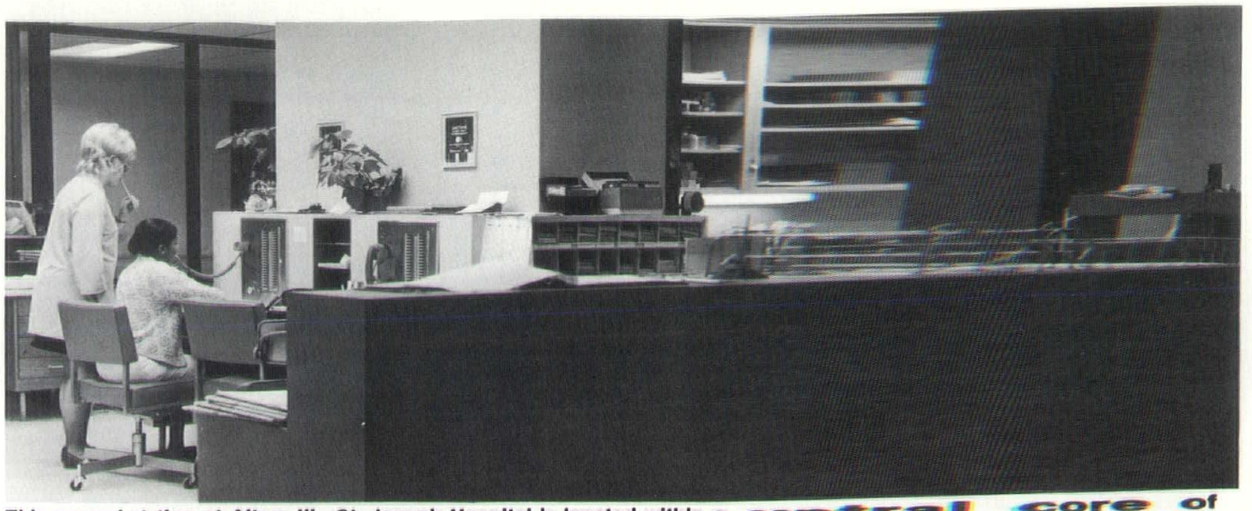
either after the plans have been developed or the facility has been constructed. Because of this mobility of staff members, the planning of departmental areas to suit an individual's personal demands might not be the best arrangement to satisfy the requirements of new staff members who assume vacated positions.

Therefore, heavy reliance on the inclinations of influential individuals during the architectural development phases of a project could prove to be a disadvantage and have an adverse affect on the future effective utilization of the facilities.

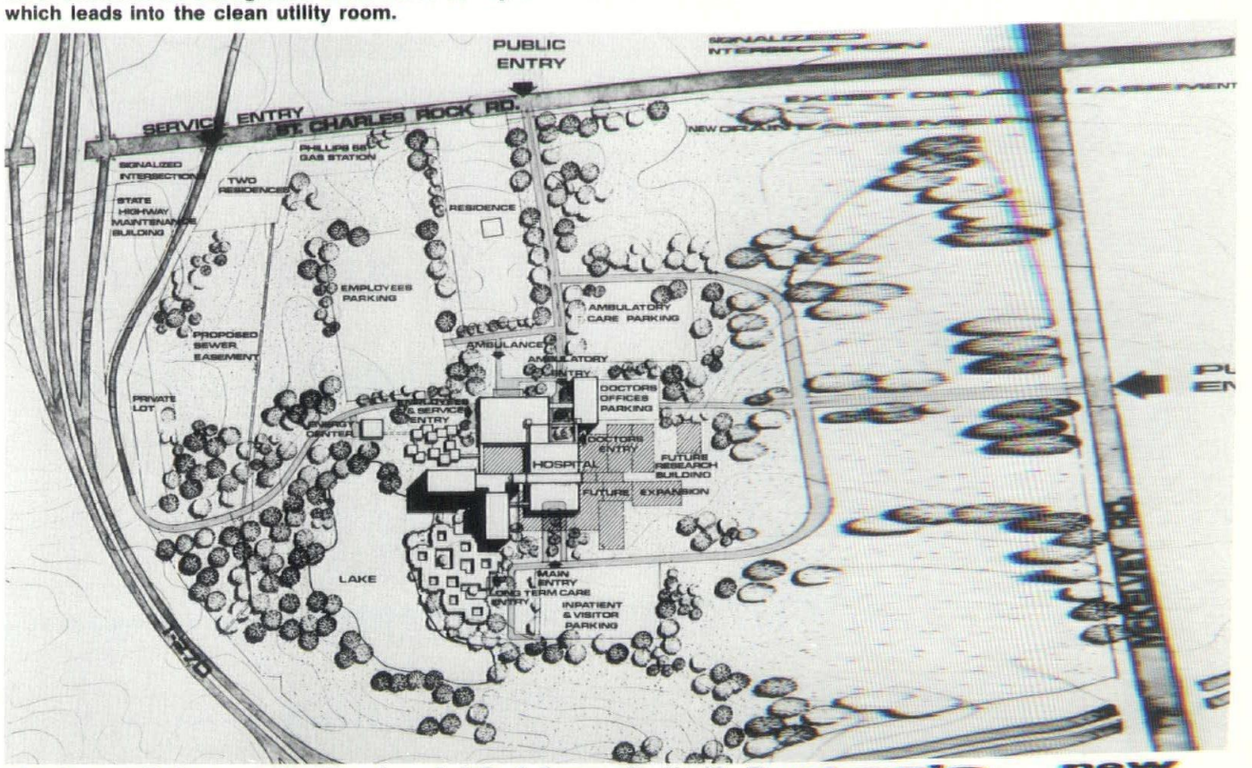
Although all planning should allow for flexibility, with departments designed so they can be adaptable to satisfy changing needs, change for the sake of change to placate individual preferences can create an unnecessary expense.

The solution to the problem lies in the architect's ability to draw upon his own (or a consultant's) broad background of experience, which is sustained by the input of a variety of information and knowledge to achieve client confidence of his competence in planning a facility that will be functional to actually meet the present and future needs of both the provider and consumer of health care. TDP has specialized in the development of health care and biomedical research facilities for over a decade and is recognized nationally for its planning of these uniquely complex facilities. The firm has had projects in more than 10 states.

A few present major developments include the $41 million building program for the dePaul Community Health Center's new St. Louis County comprehensive health center and renovation of existing facilities in the City of St. Louis; the $11 million addition to St. Mary's Hospital Medical Center, in Madison, Wis.; the completely new $12.5 million Flower Hospital in Sylvania, O.; the $18 million addition to and renovation of Saint Louis University Medical Center; and the $10.9 million St. Peter's General Hospital, New Brunswick, N.J.



**This nurses' station at Alton, Ill., St. Joseph Hospital is located within a central core of support facilities which is encircled by a corridor. Patient rooms flank each side of the core. Shown in the background is the nurse call system and the medicine storage room which leads into the clean utility room.**




**This is a preliminary master site plan of dePaul Community Health Center's new comprehensive health care campus, to be located on a 148-acre tract in St. Louis County.**

Since most architectural firms maintain generalized practices involving a variety of building types, there is a growing demand for engaging the knowledge of a hospital consultant for economical and practical reasons when these firms are commissioned to develop a health care facility. To provide this service, TDP formed TDP2/Consultants, Inc. as a separate firm to fulfill the essential health care planning efforts which are distinguished from the general architectural practice.

TDP2 offers such services as role studies/community surveys, existing facilities and site analysis, functional programming, master space programming, long range master planning, comprehensive value analysis, project management, and assistance in developing sources for funding capital programs. ●

# umkc school

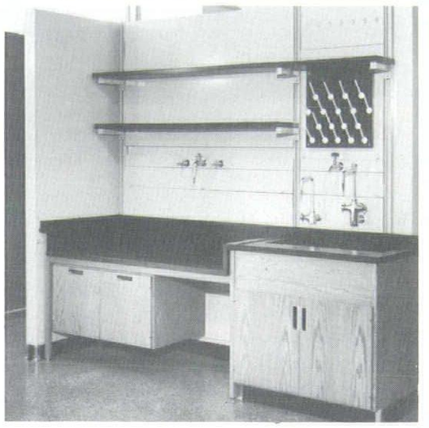
continued from page 12

facilities for the production of teaching, research and study in several media including TV, Audio-Visual, graphic aids, and three dimensional models. Appropriate sound, television and motion picture studios are located on this floor. These facilities are carefully related to a cluster of instructional theatres below them. Two of these theatres have full facilities for recording and broadcasting presentations. The full range of multi media capabilities are incorporated into these studio theatres, including such specialized equipment as heart sound apparatus for monitoring by each student involved in the presentation.

9. Administration and business functions are located on the first floor, with such required university services as receiving, housekeeping, maintenance, security and storage.

10. Elements of structural, mechanical and electrical design were difficult to establish because of the wide variety of requirements. The final design does, however, reflect high organization of these elements. For example, four vertical shafts for electronic distribution feed a network of horizontal cable trays which literally tie the building into a total flexible network of television, communication, computer and power distribution.

11. The exterior design of the building is a direct expression of interior functions and a statement of the educational program. A deliberate cluster of student learning areas on the upper floors is supported by a base of activities that serve the learning processes: Library, research, administration. The setbacks on the lower levels are a direct consideration of space requirements on each floor.



This is a mock up of a laboratory system designed to meet the needs of new medical education. The system allows complete interchange of five foot standing and sit down work stations. Laboratory services, including waste receptors, are mounted to an accessible laboratory wall which avoids necessity of working top or case work modification. Tops and casework are easily demountable when necessary to utilize wall sections for investigations requiring distillation apparatus.

The total design, resulting from the sincere dedication of educator and architect working together, demonstrates a high degree of efficiency. The stage has been set in meeting the environmental conditions to achieve high levels of individual academic achievement.

The final test is yet to come—with University occupancy in 1974 and growth of the Medical School in the years ahead. Much will depend on the attitudes brought forth by the participants. Those of us who were involved with the planning and design efforts are confident the new Medical School will become not only a significant model for medical education, but that the attention given the individual student will be beneficially studied and applied by other educational pursuits as well. ●

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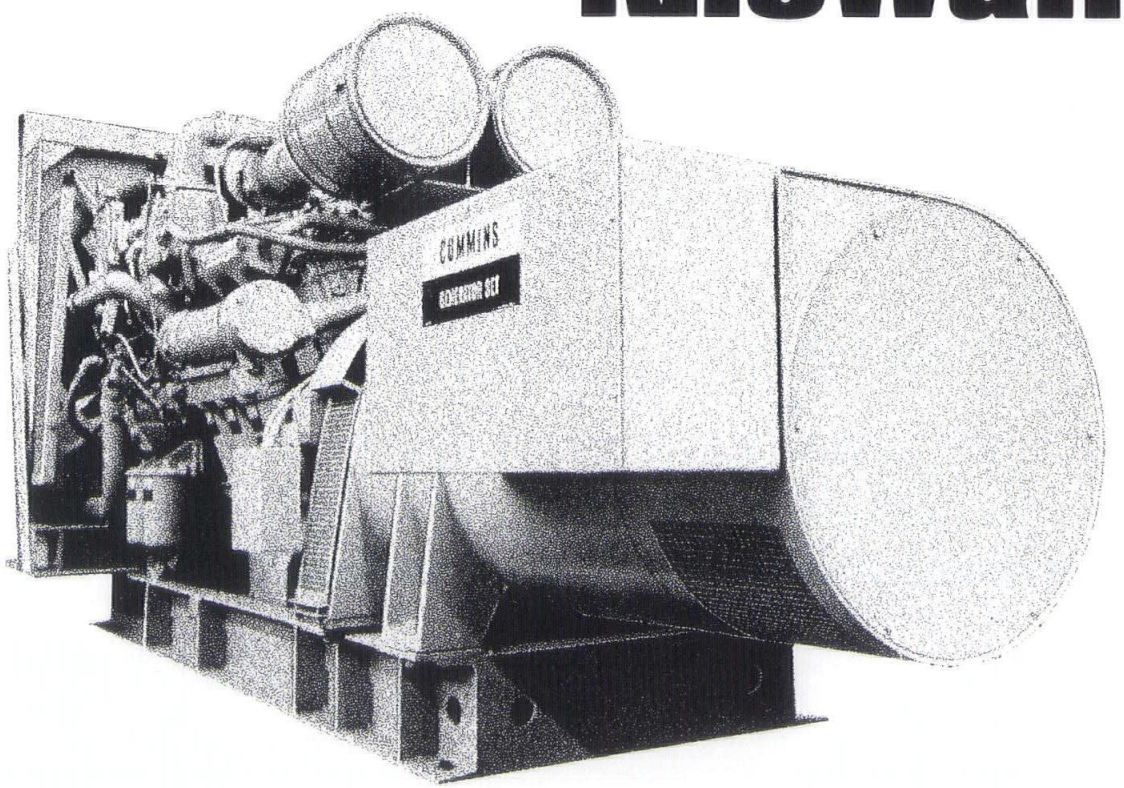


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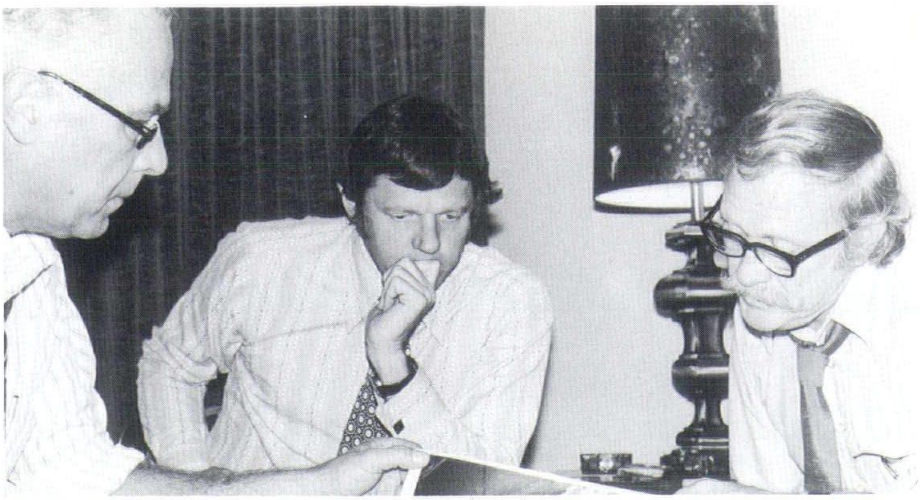
# in the news



**Judges for the biennial Outstanding Design Competition sponsored by the Kansas City chapter of the American Institute of Architects were (l to r) Archibald C. Rogers, Baltimore, president-elect of the A.I.A.; Gene R. Summers, C. F. Murphy and Co., Chicago; and Ralph R. Rapson, dean of the School of Architecture, University of Minnesota.**

## kansas city chapter selects annual design award winners

Design award winners of the annual Kansas City chapter competition were announced recently at a Dinner meeting held in a candle-lite atmosphere in an unfinished area of Crown Center.

Awards were presented to:

MEDAL AWARDS—Grove Swimming Pool Bathhouse, Grove Park, Kansas City, Mo., Architect—Seligson/Eggen, Inc.; Temple Hall Science Center, Southwest Missouri State University, Springfield, Mo., Architect—Kivett and Myers; Westinghouse Underground Distribution Transformer Plant, Jefferson City, Mo., Architect—Kivett and Myers; Brush Creek Tower Apartments, Kansas City, Mo., Architect—John Lawrence Daw and Associates.

HONOR AWARDS—Feline Exhibit, Swope Park Zoo, Kansas

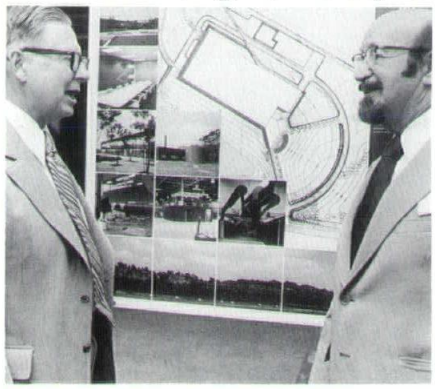
### mca annual meeting program set

Program for the annual Missouri Council of Architects annual meeting scheduled for December 6 at the Ramada Inn in Jefferson City has been announced by meeting planners. The schedule of events is:

Registration ..... 8:30-10 a.m.
Business meeting, election of directors ..... 10-11:30 a.m.
Board meeting ..... 11:30-12
Open time ..... 12-12:30 p.m.
Luncheon with Speakers (wives invited) ..... 12:30-2 p.m.
Open time ..... 2-2:30 p.m.
Program—Legislation & Government Relations
MCA Minute Man Program ..... 2:30-4:30 p.m.
Open time ..... 4:30-5:30 p.m.
Cocktail social, hosting state senators and representatives government officials and department heads ..... 5:30-7

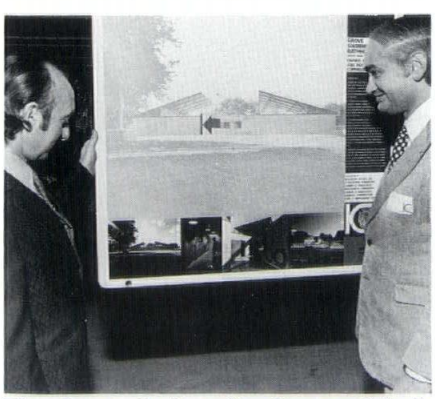
All activities will take place at the Ramada Inn, 1510 Jefferson, telephone No. 314-635-7171. Other suggested motels are Downtown Holiday Inn., 422 Monroe, 636-5101; South Holiday Inn, 1937 Christly Lane, 635-4175; and Rodeway Inn, 319 W. Miller, 636-5231

City, Mo., Architect—Linscott-Haylett & Associates; Irene Nunemaker College Within a College, University of Kansas, Lawrence, Kan., Architect—Kivett and Myers; and Kenneth A. Spencer Chemistry and Biological Science Building, University of Missouri at Kansas City, architect—Kivett and Myers.



**Two of three top awards were won by Kivett & Myers. Here Clarence Kivett, (r) appears in front of the design for the Westinghouse underground distribution transformer plant in Jefferson City. With him is Leonard Wright, a Westinghouse division manager. Kivett & Myers also was honored for the Temple Hall Science Center at Southwest Missouri State University.**

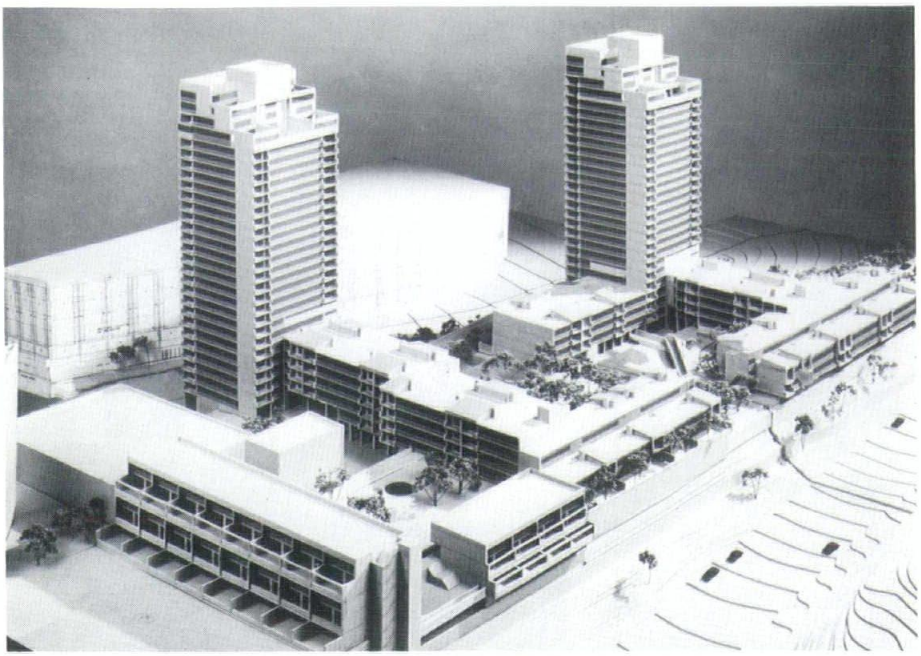
Judges were Archibald C. Rogers, AIA president-elect, Baltimore, Md., Ralph R. Rapson, Minneapolis, Minn.; and Gene R. Summers, Chicago, Ill.



**The Grove Park swimming pool bath house design by Seligson-Eggen, Inc., also won top honors. Inspecting the display is Robert Lobdell, (l) assistant director of Parks and Recreation for Kansas City, Mo., with Ted Seligson, Seligson-Eggen.**

Awards Committee members were: Ralph E. Kiene, Jr., chairman; Ronald W. Aarons, Stuart M. Hutchison, James A. Pettijohn, Donald R. Philo, and Leslie J. Wood.

## crown center apartments



**This is a model of the first phase apartments at Hallmark Cards, Inc., Crown Center for which ground recently was broken. The two 27-story towers and nine low-rise structures will be built on a main street bluff overlooking Liberty Memorial Park. The 450-unit complex will extend southward from the Crown Center Hotel (corner extreme left) between Main Street and Grand Avenue. The white structure in the background represents the Grand Avenue building of Hallmark Cards. Architects are the Architects Collaborative, Cambridge, Mass. Eldridge & Son, Kansas City, Mo., is the general contractor.**

## area men aia directors

Herbert E. Duncan, Jr., Kansas City, was elected a regional director of the American Institute of Architects from Region Five at the recent regional meeting in Des Moines.

Continuing as an AIA director is Floyd Wolfenbarger, Manhattan, Kan., who previously had served a 3-year term. Wolfenbarger was chosen to a 1-year term under new national rules approved at the Houston convention last May allocating a second regional director in each area.

## crown center scheduled

Several thousand persons are expected to participate in the Kansas City chapter's Sunday architectural tour series on October 29 when chapter members will help escort visitors through the Hallmark Crown Center project.

Tour hours are from 2 p.m. until 5 p.m.

## gra conference scheduled

Changes occurring in religious worship patterns will be explored through lectures, discussions, photos and slides at a day-long conference sponsored October 28 by the Guild for Religious Architecture, an AIA affiliate, at Christ Church Cathedral in St. Louis.

Morning speakers will include Kurt Landberg, Burks and Landberg, who is conference chairman; the Very Rev. Thom W. Blair, dean of Christ Church Cathedral; the Rev. Robert Cuthill, consultant in suburban and non-metropolitan mission development; and Verner I. Burks, chairman of the Landmarks and Urban Design Commission of St. Louis.

Following luncheon there will be a multi-media presentation in the nave of The Flexible Cathedral (Christ Church Cathedral) including the Ronald Arnatt Chorale; brass ensemble from the St. Louis Symphony, Allan & Joanna Nichols theater group, the Southern Illinois University Dance Theater. Ronald Arnatt, organist, is director of the program that starts at 2 p.m. which includes music of four centuries.

The day-long activities will conclude with a cocktail colloquy at the office of Burks and Landberg, 1221 Locust.

## november architects' tour

The St. Louis County Government Center at 7900 Forsyth Boulevard, Clayton, Mo., will be the site for the November St. Louis Architects' Sunday Tour. Time is 2-5 p.m.

Murphy, Downey, Wofford & Richman were architects for this project.

## herbert e. duncan, sr.

Herbert E. Duncan, Sr., died of apparent heart failure in a Kansas City hospital on September 15. A member of the Kansas City chapter for more than 30 years and father of Herbert E. Duncan, Jr., newly-named Central Region AIA director, Mr. Duncan had served as minister of the Westminister Congregational Church the past 10 years.

## new buildex engineer

Andrew F. Mackie has joined Buildex, Inc., of Ottawa, Kan., as its control and service engineer.

For the past three summers, Mr. Mackie has been engaged in laboratory research and development for Buildex. He is a graduate of Southern Methodist University with a B. S. in engineering. In his new position, he will be responsible for the design and quality control of concrete and concrete products using Buildex lightweight aggregate.

JOSEPH P. CHEESEBROUGH and Associates of North Kansas City, Mo., has been selected as the architect for the Happy Homes Manor senior citizen project to be built at Higbee, Mo. The new home will be built at the end of Library Street, facing Short Street and will be within easy walking distance from Main Street.

# m.c.a. task force reports on goals, future direction

The Executive Committee, on April 14, 1972, at the Missouri Council of Architects Board of Directors Meeting, recommended that a Task Force should be established to determine the direction that M.C.A. should take. The following motion was made by Nolan Stinson and seconded by Theodor M. Hoener and Gerhardt Kramer:

> "It is moved that the recommendation of the Executive Committee be adopted and that a Task Force be appointed with the request that the Task Force members obtain from their Chapters recommendations for M.C.A. goals and that they make a report to the Board of Directors at the Annual Meeting."

The motion was unanimously approved.

The following members were appointed to the Task Force: David S. Brey-Kansas City Chapter, Chairman; David W. Pearce-St. Louis Chapter; Hal Hawkins-Springfield Chapter; Seth Evans-Mid-Missouri Chapter.

**Recommendations**

To facilitate increased effectiveness in accomplishing the mission of M.C.A. and to promote greater efficiency in conducting the Council's programs and functions, the Task Force recommends the implementation of the following, thereby assisting the architects of Missouri in handling problems of mutual interest to all members of the profession.

1. That the mission of M.C.A. is to influence public policy and affect public opinion as it relates to architecture in its broadest sense and therefore should direct its attention and interest to matters related to state concerns, and should not attempt to compete or to duplicate the efforts of the local chapters and/or national office.
2. That M.C.A. should have and make an effort to establish a philosophy of public concern, in the area of public affairs, delineating a position or posture on issues affecting the public, as well as those related specifically to the profession.
3. (a) That M.C.A. should retain its headquarters in Jefferson City, Mo., with an executive director in responsible charge of the Council's programs and functions with response and control residing in the Board of Directors.

   (b) That the qualifications for the position of executive director should include a working knowledge if not background experience in public relations, governmental affairs, lobbying and the problems of professional groups.
4. That improved intra-professional liaison and appropriate response be established with other professions, especially the engineering profession and the construction industry.
5. That M.C.A. should investigate and work for educational programs such as a State School of Architectre, architectural technician training, continuing educational programs and curriculum review in higher educational institutions.
6. That M.C.A. should support, assist, and coordinate the efforts of local chapters in matters of mutual interest such as liaison with the State Board of Registration and promoting concern on standards for the professional.
7. That leadership in M.C.A. legislative programs should include monitoring, proposing, opposing and

reinforcing legislation pretaining to the architectural profession and construction industries.

8. That an effort should be made to strive for quality in the publication of information. Externally this would concern the "Midwest Architect" and internally in communication with members of the Association, influential members of the Legislature, State Agencies and the public at large.

9 That M.C.A. must concern itself with the quality of the environment in the State of Missouri, including but not restricted to specific concerns such as population philosophy, pollution and transportation.

10. That M.C.A. should take a positive step and establish a program of Historic Architectural Preservation for the entire state.

## webb city reviews plans

A proposed 5-year-old comprehensive plan for the city of Webb City, Mo., prepared by Allgeier-Martin and Associates of Joplin, is receiving new consideration by the city's Zoning and Planning Commission.

The plans proposed the renovation of city hall, extension of sewer service to areas not now served and extension of water lines. However, the commission is considering altering the proposal to include the building of a new city hall complex rather than renovation of the present facility.

## kahoka plans housing

Plans are underway for a new 28-apartment senior citizens housing project at Kahoka, Mo. Buller and Sammons of Sedalia, Mo., are the architects.

Site selected for the project is south of the Clark County Nursing Home and west of state highway 81. Total cost of the project is an estimated $290,000.

KENNETH E. WISCHMEYER & PARTNERS of St. Louis have been selected as the architects to design a new county building at Washington, Mo., that will house a jail and several courtrooms.

## school work begun

Construction work by Wentzville Construction Co. on a new vocational school in Eolia, Mo., to serve Pike and Lincoln counties has begun. J. Kay Cleavinger of Moberly is the architect.

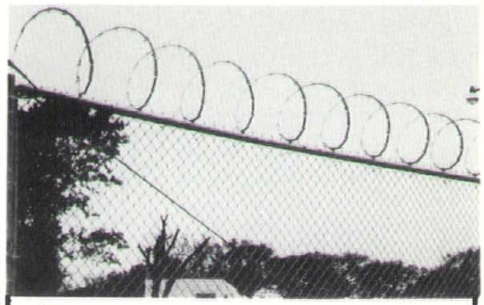
Scheduled for a fall term, 1973, opening, the new school will have initial offerings of auto mechanics, agriculture, building trades, health occupations, business and office education, auto body, heating, air conditioning and electricity.

## book service expanded

An expanded number of books on architecture and subjects related to the profession now are on display in the office of the St. Louis chapter at 107 N. Seventh. Members are invited to inspect the books in the display for their specific needs and purchase them at the special AIA member discount.

A new display rack recently was completed and installed on the east wall of the office by chapter member Kenneth M. Schaefer.





# services

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SCHWARZ & HENMI, architects of St. Louis, has changed its name to Schwarz, Henmi & Zobel. The firm also has announced the naming of Richard G. Wiedemann and Norman S. Fott as associates. Principals in the firm are Richard T. Henmi, senior partner, and Heinz E. Zobel, partner. Other associates are Charles S. Hutt, W. Evans Campbell and Jack Rausch.

# preservation

**continued from page 5**

historic places judged to have exceptional value to the nation as a whole rather than to a particular state or locality. It recognizes and encourages the preservation efforts of state, local, and private agencies and groups. It engages the owners of landmark properties to observe simple preservation precepts. And it offers the technical advice and assistance of federal preservation experts in attaining this end.

Following announcement of a site's eligibility by the Secretary of the Interior, the owner is invited to apply for landmark designation. This takes the form of a certificate signed by the Secretary of the Interior and the Director of the National Park Service together with a bronze plaque attesting to the significance of the site. Both are provided without charge and presented at appropriate ceremonies if the owner desires.

Since nothing can be preserved unless it is known to exist, surveying is the essential first step to a preservation program. This has led to the concept of a total historic and architectural survey of the United States with the National Register of Historic Places serving as an index to the most important districts, sites, buildings, structures and objects described in state and local surveys and approved by the Secretary of the Interior. State surveys will be the principal local sources of information. The state surveys, in turn, draw upon local and specialized surveys.

All historical areas in the National Park System, together with those properties eligible for designation as National Historic Landmarks, are of national significance and thus qualify automatically for the National Register. Properties of State or local significance may be nominated by the states and will be placed in the Register on approval of the National Park Service.

The National Historic Preservation Act authorizes federal grants-in-aid to the states and to the National Trust for Historic Preservation on a matching basis. The grants may be used for statewide surveys, the preparation of statewide historic preservation plans, and the acquisition and restoration of individual properties. Grants for individual preservation projects may be made through the States to other eligible public or private recipients.

To qualify for aid, properties must be listed in the National Register, be consistent with a statewide historic preservation plan approved by the Secretary of the Interior, and need financial assistance or be owned by the National Trust for Historic Preservation.

Encouraged by the promise of financial assistance from the federal government, many states have inaugurated active preservation programs. To administer the state surveys each state has a representative appointed by the governor, called the state liaison officer. Following the passage of the National Historic Preservation Act, Governor Warren E. Hearnes appointed Joseph Jeager, Jr., director of the Missouri State Park Board, to serve as S.L.O. for the implementation of the act in Missouri.

A professional staff comprising the State Historical Survey and Planning Office, with headquarters in Columbia, Mo., conducts the statewide survey in Missouri and reports its findings to a professional review committee operating under the title "Advisory Council on Historic Sites and Buildings to the Missouri State Park Board." Buford L. Pickens, FAIA, of St. Louis, and Kenneth Coombs, AIA, of Kansas City, represent the architectural profession on this advisory council. If the council determines that the property meets National Register criteria, it recommends it for nomination to the National Park Service.

To provide professional guidance and leadership in local, state and regional programs of historic preservation the American Institute of Architects has established a network of qualified architects, one per state, called State Preservation Coordinators. They, in turn, are aided locally by the Preservation Officer of the various AIA Chapters.

Gerhardt Kramer, FAIA, is presently serving as AIA State Preservation Coordinator in Missouri, having succeeded Buford Pickens, FAIA, on completion of his two-year term in 1970.

In the first three years of the program, the State Survey Office staff researched and catalogued over 3,500 properties, of which 130 were studied in detail and nominated to the National Register of Historic Places.

Only recently, the Missouri Council of Architects resolved to take a positive step and establish a program of Historic Architectural Preservation for the entire State. The method of implementing these intentions is now being studied.

The State of Missouri has done a commendable job in implementing the National Historic Preservation Act of 1966, but because the means and activities of a state agency are necessarily restricted by law, a private statewide organization, which could speak as one body for the many private groups, agencies and individuals interested in preservation throughout the State, is needed in Missouri. Can the Missouri Council of Architects serve as the catalyst for such an organization? ●

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