The challenge of recreation architecture
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Recreation architecture has double edges either of which can leave significant marks on the environment. One edge is the total freedom of fantasy escaping from the conventional and challenging the imagination to create an illusion either romantically familiar or fashionably new. The other edge combines the impermanence of fad, the cliche' of pop or tradition, and the pitfalls of undesigned commercialism. The architect's goal is the first edge, without being marked by the second.

We define recreational architecture as the architecture of buildings and spaces which provide for amusement, relaxation and either participation or spectator recreation; as opposed to building types which are for exhibition or display.

Recreational architecture falls into three categories: private, commercial and public. Private recreational architecture is generally limited to the vacation or weekend home. Commercial activity covers a far wider range — from resort hotels and lodges, to giant amusement parks. Public activity involves mainly arenas, stadiums and park buildings such as zoos and shelters.

With more dollars being spent on amusement and recreation than at any other time it's not surprising that architects are doing an increasing volume of recreational projects.

The trend toward shorter working weeks has added to the demand, especially for cabins and resort hotel complexes. A new building type for semi-private recreation which has developed is the luxury apartment clubhouse which contains some of the functions of country clubs.

Growth and change of professional athletics in the past decade and the expansion of amateur athletic facilities is the obvious result of new interest and money spent for spectator sports. And sports isn't all spectator oriented. Golf courses, swimming pools and similar constructions are being designed and built in all sorts and sizes of communities, many times combined with other public activity. Private indoor tennis courts and ice rinks are gaining in popularity.

Private amusement parks now are, rather than permanent carnivals, total environments of escape and illusion combining limited retailing and fantasy with rides.

Public parks, despite fiscal problems, are building new shelter facilities, boat docks and zoo buildings in new or existing park lands. If any group of public, park-oriented, buildings has not prospered in the last decade it has been the cultural, rather than the recreational, reflecting the nature of the boom of recreational facilities.

How much longer we continue to seek recreation as the outlet for our "future-shock" lives is conjecture. Likewise, how much longer will our value priorities permit the amounts of money being expended for such buildings? One thing is certain. The buildings for recreation being built today are generally of high quality and imagination. They should be able to serve our needs for a long time to come, even after the current emphasis may diminish.

edward j. wimmer, editor: kansas city
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the cover

creating a stark, futuristic yet functional design against the skyline are the adjustable, re-useable forms at Kansas City’s Arrowhead Stadium used to pour concrete for bents that support the upper level seats.

midwest architect
volume 1, no. 4

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The Kansas City Chiefs' Arrowhead Stadium which opened this month is the first in a new generation of stadiums specifically designed for professional football.

Prior to the 1967 announcement of plans for the dual stadium Harry S. Truman Sports Complex in suburban Kansas City — and indeed until last year — professional football was still being played in baseball stadiums or newer multi-purpose facilities adapted to both football and baseball.

Just as the 1960's saw professional football really come into its own as a fan attraction, the 1970's are witnessing the creation of separate stadiums for the sport.

The Kansas City opening was delayed for one year because of a long and costly construction strike, but last year the New England Patriots and the Dallas Cowboys did occupy new 65,000 seat football stadiums. The Buffalo Bills are scheduled to move into a new 80,000 seat football stadium next year. Planning is under way for 80,000 seat football stadiums for the New York Giants and the Detroit Lions.

Our firm is involved in the new Buffalo, New York and Detroit projects, in addition to serving as project architects for Kansas City's side-by-side stadiums for the Chiefs and the baseball Royals.

We probably will continue to see some new multi-purpose stadium concepts as well, including the Superdome planned for New Orleans, but the era of the separate stadium for professional football definitely is here.

"The newer dual purpose stadiums encircle, or almost encircle, the field in an attempt to provide something for everybody. The result is a compromise: about half the seats are really ideal and the others are second class."

In the same article, the architects for the new Cincinnati multi-purpose stadium were quoted as saying:

"The multi-purpose stadiums are getting so complicated in section they're coming close to the Roman Colosseum. Shifting from one configuration to another is costly, time consuming and traumatic. We may have reached the point at which two single purpose stadiums could be built as inexpensively as one multi-purpose one."

Kansas City's twin stadium project will cost approximately $51.5 million, or about $6 million less than the estimated $57.5 million Cincinnati paid for a single, multi-purpose stadium. For its money, Kansas City got a 77,800 seat football stadium and a 42,000 seat baseball stadium, while Cincinnati has a 60,000 seat stadium that must be adapted to both football and baseball.

Kansas City is also the only stadium project financed by public-approved general obligation bonds in which it was not necessary to go back to the voters for more money, despite the fact the project was delayed by a 196-day construction strike. Cincinnati did have to go back to the voters for more money, as did Pittsburgh and Houston.

By Billy D. Wunsch, A.I.A.
Kivett and Myers, Architects/Planners

Advantages of Separate Stadiums

The principal advantage that the Kansas City Chiefs and the Sports Authority sought in creating separate stadiums was simply to place more...
This view of the model of Arrowhead Stadium, new home of the Kansas City Chiefs, clearly shows the circular ramps at each corner, wider than a residential street, that will provide access to two of the three stadium levels.

fans closer to the action and properly oriented to the game being played.

For those who have experienced one of the Chiefs' pre-season games, the advantages of a separate stadium for football are now evident:

**BETTER VIEWS.** More than 50,000 seats at Arrowhead Stadium are along the sidelines, the highest number for any professional football stadium. The maximum distance from the field to the sideline stands is only 45 ft. It is 142 ft. from the field to the first row of the club level and 160 ft. from the field to the first row of the upper level seats.

The distance from the farthest seat to the field is only 292 ft., or less than the length of the field. This maximum distance from the field is the same as in the dual-purpose Busch Stadium in St. Louis, where there are only 50,000 seats instead of the 77,800 seats in Kansas City's Arrowhead Stadium.

**GREATER COMFORT.** The theater-style seats — all of them with arm rests — are wider and have more leg room (32 inches) than Kansas City's Municipal Stadium.

There are no cross or horizontal aisles in Arrowhead, eliminating the nuisance of late-comers and commuters blocking the view of the action. Because the field is 50 ft. lower than the grade level outside, walking up and down ramps is greatly reduced.

**INTIMACY.** It may sound strange to describe a 77,800 seat arena as intimate, but that is another reaction of people who have seen a game at Arrowhead Stadium. By being so close to the action, fans now experience an intimacy with the contest previously found only in college stadiums.

**Development of the Concept**

The Jackson County Sports Complex Authority was appointed in September, 1966, by Governor Warren E. Hearnes, with Dutton Brookfield as chairman. He was later succeeded by William E. Clarkson, still chairman and one of the original members of the Sports Authority. Judge Charles C. Curry of the Jackson County Court was later succeeded by George E. Lehr, who continues today as presiding judge.

The Sports Authority determined that the original concept of a domed, multi-purpose stadium in the downtown Kansas City area was impractical.

The Kansas City Chiefs, who pioneered and pushed the idea for separate stadiums, were willing to sign a long-term lease on a new football stadium of 75,000 to 80,000 seats. They pointed out the dissimilarities between football and baseball (which required only 40,000 to 45,000 seats) and the advantages of separate facilities for the individual sports.

The Sports Authority was frustrated in its planning for baseball because Charles Finley, then owner of the baseball team, was trying to move his franchise, and the new franchise of Ewing Kauffman had not yet been created. The Authority decided to proceed with twin stadiums at the present 370-acre site, eight miles from continued to page 8
Arrowhead
continued from page 7

downtown Kansas City and at the intersection of two interstate highways.
Kivett and Myers were retained as project architects, with Charles Deaton, architect, as design associate. In June, 1967, the twin stadium concept was approved by the voters of Jackson County as part of a $102 million county improvement program.

The Design Solution

Thus, the design solution for Arrowhead Stadium, and the entire sports complex, began with the decision by the Sports Authority to build side by side football and baseball stadiums.

Members of our firm studied every new stadium in the United States, prior to and during the design phases of our project, to determine both functional and construction problems. We talked with owners, general managers, stadium operators, concessionaires, architects, engineers and contractors, and studied the stadiums on game days and when not in use.

Cooperation within the architectural profession has been excellent. As we started out on the Kansas City project, we found architects for other stadiums did not hesitate to talk with us and share their experience.

Our research confirmed that football and baseball are not only dissimilar in field layouts, but also seating requirements and spectator facilities. The decision for separate stadiums enabled us to tailor each facility to the individual needs of the sport being played in it, and for the fans watching it.

In studies of existing stadiums, we found that football is the most penalized in a multi-purpose stadium. A baseball field requires about 150,000 sq. ft. and a football field about 90,000 sq. ft. When you design a multi-purpose stadium, you must accommodate the baseball playing field. When football is played there, the 60,000 sq. ft. difference in area is nothing more than unused space between the spectators and the field of play.

The time, expense and inadequacy of providing temporary seating is well-known in Kansas City's experience with Municipal Stadium, and in other cities with multi-purpose stadiums. There is also the period of overlap in the late baseball and early football seasons (from mid-August to mid-October) when both teams are using the same stadium and it is not possible to add the extra seats needed for football.

Beyond the difference in playing areas of the fields and the seating requirements (most baseball teams want 40,000 to 45,000 seats and most football teams from 70,000 to 80,000 seats), we found some interesting variations that dictated varying design solutions in the facilities.

Each game has its own pace, of course — baseball more leisurely, football with continuous action. That makes spectator service facilities different for each sport. In baseball you have about 18 breaks in the action which provide an opportunity for utilization of the concession and restroom facilities. In football, all of that is concentrated at the quarters and primarily halftime.

For football, therefore, you need fast food service with a limited menu to serve the concentrated activity; while baseball allows for steady service and a greater number of choices. Sales in the seating areas are greater at football games and consequently more vending facilities are needed.

Orientation of the playing fields to the sun was another critical factor, particularly under the requirement that the fields be placed side by side. The end zone to end zone axis of the football field is on a line running from northwest to southeast. This produces the most favorable sunlight angle.

Form Follows Function

From an architectural standpoint, the problem was very functional. It was quantitative first, and then the qualitative elements were worked in. It was truly a matter of form follows function.

The basic seating arrangements pretty much determined the geometry of each stadium. Football required 50,000 seats along the sidelines, and baseball would not have any outfield seats.

The 50,000 sideline seats for football determined the number of rows and they in turn set the elevations for the concourses. Various levels within the stadium were then worked with the facilities that serve them (such as concessions and restrooms) so we would have the right amount and location of services, as well as access to and from them.

A major effort was made to get the maximum number of seats on grade, to minimize construction costs and reduce the amount of walking by spectators. The topography was very irregular but we took advantage of it by placing the two stadiums in natural depressions.

The football stadium does have 34,000 seats on grade, 40 rows all the continued to page 10
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Arrowhead

way around. Cost of seats on superstructure (as compared with on grade) is 2.5 times as expensive. Of the remaining seats, 10,000 are on the intermediate level and 33,800 on the upper level. On the ground level concourse are the administrative offices, press facilities and the Arrowhead Club; and on the lowest level are the team rooms, and storage areas. Concessions and rest rooms are on all levels.

The ramps leading to the two of the three stadium levels are wider than a residential street. Fans enter the football stadium through 80 turnstiles located at six gates. Arrowhead Stadium shares an adjoining 15,000 vehicle parking area with the baseball stadium. Also shared is the underground central service facility which places functions common to both stadiums in a central location, connected by tunnels. These include concession storage, lockers for ushers and vendors, stadium maintenance, central receiving and trash removal. The plaza above the central service area is used for parking and can also be utilized for outdoor displays and exhibitions.

Materials and Construction

The football and baseball stadiums are built of reinforced concrete. There are 100,000 cubic yards of concrete in the two stadiums and the underground central service facility between them. That amount of concrete, if poured in place on the football field, would rise 47 ft. in height and cover the entire field and end zones.

The Author

Billy D. Wunsch, AIA, is a vice-president and trustee with Kivett and Meyers which maintains offices in Kansas City, Mo., Shawnee Mission, Kan., and Munich, West Germany. Prior to serving as project manager for the Harry S. Truman Sports Complex, he was project manager for the First National Bank of Lawrence and for several manufacturing plants for Hallmark Cards, Inc. He is a graduate of Kansas State University and joined Kivett and Myers in 1965.

The sports complex is totally electric. The order for 119,800 seats for the two stadiums was the largest seating contract of any type in history. If placed side by side, in a single row, the seats would stretch for 37 miles.

Various structural materials were investigated — steel, precast concrete and the poured in place concrete that proved to offer the best design result and the greatest economy.

Adjustable, reusable forms were employed most effectively for pouring the 65-ft. long bents that support the rows of seats. It was possible to use one configuration for all the bents and several forms were made so that construction could be sequenced without delay. Each form was adjustable to allow for variation in span and cantilever.

Here is an aerial view of the Harry S. Truman Sports Complex showing the nearly completed Chiefs Arrowhead stadium and the baseball stadium that will be used for the first time next April.

The opening for the Friends of Art of the Nelson Gallery that evening is sponsored by the Kansas City Chapter of the AIA. The opening is by invitation. Following the opening, the exhibition will be open to the public for six weeks...

The exhibits showing at the Gallery is made possible by a grant from the Carrie J. Loose fund of the Kansas City Association of Trust and Foundations, the Society of Fellows of the Nelson Gallery Foundation, and the Kansas City AIA Chapter. Archibald Rogers, FAIA, the first vice-president of the AIA, has been invited to attend the opening.

The exhibition was first opened in 1970 at the Metropolitan Museum of Modern Art in New York to celebrate the 100th anniversary of the museum. Photographs of the most important buildings of the nineteenth century, combined with some original plans and drawings, depicts the development of what may be the most important period in the evolution of American architecture. Included in the exhibition are three-dimensional samples of architectural ornament. The exhibition was conceived and directed by Mr. Edgar Kaufman Jr. of New York.

On Sunday, September 17, the theme of the exhibit will be topic of a lecture by Prof. James Marston Fitch of Columbia University.

June author identified

The author of You’ll “Drive to Your Gate” at K.C.I. published in the June, 1972, issue of MIDWEST ARCHITECT, Hanan A. Kivett, is the director of transportation facilities planning for Kivett and Meyers, Architects and Planners of Kansas City. Mr. Kivett holds his Masters of Architecture from Washington University, St. Louis, as well as his B.S. in Architectural Sciences. He currently is involved as Facilities Planning Consultant to the Planning Department of the Munich (Germany) Airport Authority, for Phase IB planning of the new Munich II Airport. He has also been involved in planning of numerous other airport and transportation facilities in the United States and abroad. Mr. Kivett has had papers and reports related to Airport Planning published by several public and private agencies. He has authored a chapter for a forthcoming revised edition of Professor Robert Horonjeff’s book on Airport Planning and Design to be published by McGraw Hill.
Mr. Architect

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The Warren E. Hearnes Multi-purpose Building recently completed for Missouri University in Columbia is one of the largest and certainly one of the most versatile structures in the state. The $10,750,000 building is located just east of the football stadium and covers 4.4 acres.

The project has always been referred to as a multipurpose building since planning began in 1967, and the philosophy of designing for many functions has been a paramount concern. That the architects-engineers, Sverdrup & Parcel and Associates of St Louis, succeeded in their aim is proven by a casual trip through the approximately 350,000 sq. ft. building. This is not only a basketball arena, a field house, a teaching center, or an amphitheater for stage events; it is all of these and more. The design reflects the awareness that public money spent for state buildings must respond to the new social society, be many things to many people, and be available for beneficial use on a year-round basis.

The building consists of two primary areas, the auditorium and field house, which are separated by offices and support facilities. All areas are under one 546 by 352 ft. roof. The auditorium has 13,600 fixed seats, and there is space for 1,000 temporary seats. The auditorium is rectangular, and the sight-lines are appropriate for viewing the Tartan-covered activity area which is sized for basketball. A larger area for ice shows, gymnastics, variety, and animal shows can be made by moving bleacher-type seating back under the seating stands. Some of the platform-type seats on the south side can also be compacted and moved under the stands, exposing an area through which movable stages can be brought onto the floor. The stages can take several conformations, the largest being 58 x 34 ft. in size. The lighting and sound systems in the auditorium are suitable for a variety of events, stage productions, and musicals.

The 13,600 fixed-seats, which are appropriate for larger crowd events such as basketball games, are more than are needed for most activities in the space. Accordingly, the upper tier of seats can be screened to reduce the main seating to about 8,000, creating a much more pleasing space for events with smaller audiences. The corner parts of the upper tier have double use; they are each lecture halls with 443 seats, some with tablet arms. Movable, sound-controlling partitions have been used to screen these lecture halls, in which continuing-education lectures and other school and community functions can take place while the auditorium is used for other purposes. The sight-lines and sound systems in these lecture halls are appropriate for both lecture use and inclusion of the area as part of the total auditorium.

The 175 by 352-ft. field house is larger than a football field. The flooring is of textured Tartan, a material suitable for a great variety of sports activities; track, tennis, volleyball, football, and for display activities. A 144 by 116-ft. section of artificial grass, ideal for baseball and football practice in bad weather, can be rolled over the Tartan to further increase the area versatility. A 1/8th-mile track
This is the new $10,750,000 Warren E. Hearnes Multipurpose Building recently completed at the University of Missouri.

Here is a general view of the Missouri U multipurpose area as it will be set up for basketball. The dark-colored seats at left fold and swing under the stands to clear the floor area and permit the removable stage to be brought in. The sliding partitions are in place at the upper level in the background, closing off two of the continuing-education lecture areas.
new raytown shrine home

The Shriners of North America have announced plans for a new $1,200,000 Ararat Shrine temple to be built on 11 acres of land in Raytown, Mo., overlooking I-435 on the west and 51st street on the south. The land, which cost $100,000, has been paid for. Members are in the midst of a building fund raising program.

The new building will be on two levels. The exterior will be of red brick with pre-cast longed concrete arches. An Arabic pyramid made of golden mirrors in the middle of the slightly peaked roof will further carry out the Moorish influence. Plans call for 21,816 square feet on the main floor and 17,586 on the ground floor.

Herman A. Scharhag is the architect.

new school for concordia

An option on some 20 acres of land in the Sunset Hills subdivision on the northwest edge of the city has been taken by the Concordia, Mo., R-2 Board of Education as the site for a new elementary school building.

The site selected was one of the top four sites recommended by an evaluation by architects Tognascioli and Associates of Kansas City. Facilities on the new site eventually will be expanded to house the kindergarten and the first eight grades of the R-2 district. Originally it would house only kindergarten and grades one through three.

WORKING DRAWINGS are underway for a new $725,000 Immanuel Lutheran Church for Perryville, Mo. The church will be located on a 5-acre tract on West Street across from Perry County Memorial Hospital. Maximum seating capacity will be 750. Architects are Hanner-Breitweiser-McLaughlin of Chester, Ill.

MISS HEIDI HOMBS, has joined the interior design department of The Drake Partnership, Architects of St. Louis. An art major at the University of Missouri, Columbia, Miss Hombs previously was design consultant in the contract services department of Sherwood Medical Industries, Inc.

CONSTRUCTION BIDS are expected early this fall for two South Harrison, Mo., school buildings that will be financed by $1,280,000 in bonds. Carrol Hutchens, Grandivew, Mo., is the architect.

Fieldhouse continued from page 12

is also in this area, as are a long-jumping pit, and high-jumping and pole-vaulting areas. Temporary bleachers will be placed in the field house for spectator events.

The five-level central section of the building housing the administrative and support areas separates the auditorium and the field house. The lowest level (at the playing court elevation) houses the team locker rooms and changing rooms for basketball, wrestling, and stage events. Mechanical rooms and storage areas are on the next level—the lower concourse. The building administration offices, ticket offices, locker rooms, equipment and training areas (complete with a sauna) are at the main concourse, or third level. The fourth level, the upper concourse, houses the athletic department offices, the continuing-education offices and, around the auditorium, meeting rooms and display spaces. A full-size practice basketball gymnasium, wrestling areas, and space for future handball courts are at the highest level.

The building can be entered at several levels. Ramps and stairs make the main concourse and the upper concourse equally accessible. Spectators will typically use the entrances at the main concourse level. People involved in courses, lectures, and meetings, which are primarily located on the upper concourse, will enter at this higher level. There are on-grade entries on the south side to the field house. Parking areas surround the building on three sides to minimize spectator's travel distances.

The building rests on 412 three-ft.-diameter poured-concrete piers keyed into bed rock. Over 20,000 cubic yards of concrete were poured at the site. The roof system is comprised of steel parallel-chord trusses with sway frames; the largest trusses span 360-ft. and are 22-ft. deep. Over 3,000 tons of structural steel and 1,600 tons of reinforcing steel were used in the building. The enclosing walls are pre-stressed, pre-cast concrete with exposed aggregate. The overhanging fascia is metal finished with Florupon. The exterior walls are lined with acoustic metal-panels, and many of the interior partitions are also of perforated metal backed with acoustic material. All of the seat forms are of pre-cast concrete. The main concourse has a terrazzo floor and acoustic plaster ceiling. Movable, ceiling-high partitions are typical for office areas. Toilet areas have ceramic-tile floors and structural-glazed tile walls. The main auditorium has a low-velocity-air heating and cooling system; all office spaces are air conditioned. Two thousand tons of air conditioning are provided. The lighting level of the activity area in the auditorium is 200 foot-candles, which is adequate for color-TV coverage.

The building cost was about $32 a square foot, one indication of the relatively restrictive budget. The emphasis in spending the construction money was on improvements for the users—proper lighting, a good sound system, activity surfaces, and facilities took precedence over expenditures for exterior embellishment. The exterior, however, is a strong statement relying for its esthetic quality upon large masses, disciplined detail, and relationship with the terrain.

The building took three years to construct and has been anxiously awaited by the administration, faculty, and students of the University. If it lives up to their high expectations and the designer's intent, it will be one of the finest university activities buildings in the country.●
recreation houses offer intriguing challenges

In the last 15 years we have done recreational houses in a variety of locations. We have four summer-winter houses in Michigan that are used for water sports in cool weather and in the summer and skiing in the winter. We have done a geometrically clean-lined contemporary for a Missouri lake and have done recreational houses at Lake Saint Louis, near O'Fallon, that range in price from $28,000 up to over $100,000. The houses, as originally designed for speculation at Lake Saint Louis, were a second house concept, but in every case the speculative houses as well as the custom homes have become permanent residences for these families in an environment of leisure activities.

We did a lake house in St. Louis County several years ago that was published in a national magazine. This resulted in a duplication of this house (in some cases with changes) in 13 locations in the United States and an inquiry as far as New Zealand.

For the architect, recreational houses are intriguing as they give him an unusual opportunity for creative expression. Most are designed to be used for entertainment and as "fun" houses. The spaces are open, wider, higher, deeper, and in general exciting. The owner wants the architect to use freedom in his solution, to give the home a character possibly never before used and to depart from tradition.

In planning the recreational house all of the usual utilitarian programs have to be solved. Some of the unusual requirements for these homes are extra sleeping areas for the visiting children and grandchildren, boat storage, and dividing the home into various rental arrangements with sleeping, kitchen and bath facilities, keeping private quarters for the owner's use. Other considerations are locked storage of good size for the owner's

continued to page 21
efficiency, recreation combined in new zoo buildings

By S. Terrence Stone

Zoos are living museums.
The educational qualities of a zoo are masked by the carefree, recreational atmosphere which surrounds them. This atmosphere, and the hidden educational value, may be part of the success of zoos in the last decade, both in the midwest and across the nation. The location of zoo exhibit buildings in parks makes the transition from picnics and games to the viewing of exhibits easy.

As more money is available from admissions or subsidies, zoos are able to provide entertaining rides for the public to move from one exhibit to another. The development of "petting zoos", where children can be in contact with the animals has a great entertainment value, and removes the visual barriers between people and animals.

The objective of zoo directors and planners for years has been to only separate animals from people by hidden barriers, such as moats, except for animals such as cats. The setting for the animal was planned to be as close to the natural habitat as possible, and to provide the animal with as much choice and freedom within the environment of the exhibit enclosure as possible. The public viewing area is planned for several types of viewing, as unobstructed as possible, without interrupting the "natural setting". In some conflict with these objectives is the constant need for service access to the animals and the obvious sanitation problems associated with animals.

An example of a solution to these design and technical problems is the new Feline Exhibit at the Kansas City Zoo in Swope Park designed by Lin-scott-Haylett and Associates architects. The site selected is a densely wooded area gently sloping towards a large ravine and creek. To maintain as much of the woods as possible was desired, so that the Feline Exhibits would have the appearance of setting among the trees. Therefore, the feeling of an actual building would be minimized. The public would be able to sit around the trees and to walk among them while viewing the exhibits. Where possible the viewer should not be aware of most of the structures which house the felines. Preferably, the people would always view the animals essentially from the outside of the structure.

Schematically, the design contains two areas — an exhibit area and a service area. Each exhibit area contains an indoor area and an outdoor area. Viewers should be able to see both exhibits from the same vantage point. These two areas are interconnected so the animals have a freedom of choice.

The exhibits for large felines are specifically designed for the individual species: Indian Tiger, Lion and Cheetah. The size of the exhibit area for medium cats, like the American Puma, and the small, like the African Cervil and American Ocelot, are the same. There are no moats for the cats because of their ability to jump. Interior exhibit areas provide a secure, den-like, appearance. That is, a feeling of a place within which the cat feels safe and can live. The cubbing-den is ac-
ually the interior viewing area; capable of being closed completely from the viewing area. Well machined and designed doors permit the safe movement of animals within the interior service passages so they can be transferred, or isolated. When cubbing occurs, the male is either locked outside or shifted to a reserve cage.

All exhibits of the Felines are easily viewed by a three-foot high child. The guard rail is no closer than five feet to the nearest point of the exhibit. One-inch thick laminated, tempered glass permits viewing into the interior exhibit area.

Exhibits are serviced from the rear of the cages. When the area is serviced, the presence of the keeper is not known to the public, because their passage is not visible. Earthen berms mound over the service passages and camouflage them, thus, integrating the exhibit building into the site as well. An additional advantage to the earth berms is the way that the mound of earth permits exhibits to be seen from above.

The Feline Exhibit is divided into multiple, modular units which can be built as funds and demand require. The individual exhibit module is easier to integrate with the site as well. The connecting walks for people further permit exhibit viewing from several sides and angles. Generally the exhibit is more enjoyable and that from a recreational standpoint, the viewer either can see the exhibit as part of a walk or a ride in a zoo train.

The Parks and Recreation Department is concerned with the safety and welfare of the animals exhibited, the safety and enjoyment of the viewing, visiting public, and the safety and efficiency of the keepers and other support personnel. The ease of maintenance of the exhibit and the problems of sanitation are likewise a concern. With these problems in mind, the architects chose natural materials, steel and concrete, for the primary building materials. Plumbing and ventilation designs minimize the objectionable odors usually associated with zoos.

The Feline Exhibit, as a unit of the total Kansas City Zoo complex, points a direction in further planning; the development of the Zoo as a total part of the park and recreational environment.

S. Terrence Stone, AIA, is an associate with Linscott-Haylett and Associates. He is a graduate of the University of Kansas School of Architecture.
Kansas City's Worlds of Fun is probably more like a small city than anything else.

Now under construction seven miles northeast of downtown Kansas City, the $20.5 million theme park requires architectural skills in designing everything from large-scale water filtration to first-aid stations. And, as in a city, just about every type of construction is required, from large masonry buildings to small frame ones. Add rides to this package, and you generate some unique design problems.

But unlike a city — and this points up the very special challenge the architect faces — this community must be appealing. It must appeal to old and young, teenagers and the middle aged. It must attract every possible ethnic, educational and income group. "We're dead", says Project Architect Albert Lambinon, "if people don't like what we do. We compete with every form of recreation — if we don't have something special to offer they won't come".

Putting the pieces together to ensure a successful amusement park is a familiar story for the park's architects, R. Duell and Associates. Ranked among the 30 largest purely architectural firms in the U.S., they have been responsible for the design of dozens of amusement facilities, including the "Six Flags" (Georgia and Texas); Magic Mountain in California, and Opryland USA, in Nashville.

Founder and President of the firm (the practice is incorporated) is Randall Duell, a native of Kansas. He served for 25 years as an art director at Metro-Goldwyn Mayer Studios, a background that he feels makes him particularly sensitive to the entertainment value of architecture.

When Worlds of Fun opens in April, 1973, the park facilities will include approximately 140 acres. Future development of the additional 360 acres in the site will provide motels, restaurants, service stations, and other themed commercial facilities for visitors, with additional family recreation facilities projected for later phases of the complex. The theme park will offer a wide choice of rides, shows, and attractions, all included in a single admission price. All of these elements are interwoven in a park-like setting designed to present visual excitement at every turn.

Attendance for the park, as projected by Economic Research Associates of Los Angeles will be 1,380,000 in the first year of operation, increasing to 1,920,000 by the 10th year.

The master plan for Worlds of Fun includes five major sections, each with its own architectural character. The plan evolved from an inspection of the site that Randy Duell made three years ago. "We walked through the forest...
A Worlds of Fun artist presents this mock aerial (above) view of how the new recreation area north of downtown Kansas City will look when completed next spring.

Another Worlds of Fun ship will be the "S.S. Henrietta" (below) the famed steamship of Jules Vern's "Around the World in 80 Days" now being rebuilt. In the background is the Americana section and in partial stages of construction are the Front Street Dry Goods & Electric Co., a shopping emporium; the Sky Hi ride; and the Catch-All, a merchandise outlet.
Fun City
continued from page 18
that one morning, and we came onto
a most beautiful circle of trees — the
park kind of grew around them. It's an
absolutely beautiful site, and we've
worked hard to preserve it.”

The firm has won national recogni-
tion for its efforts to preserve and even
to enhance a park’s site. Over half a
million dollars is being spent at Worlds
of Fun for specimen trees and other
planting. Every possible existing tree
is being saved. All utilities are under-
ground. Fuels are “clean” — propane
gas and electricity. Backwash from the
filtration system is pumped into the
city sewer.

A lot of the design work is in ex-
cess of code requirements, says Pro-
ject Architect Al Lambinon. “The owner
thinks we are building a monument,
but we know from experience the
extra loads and incredible abuse that
a park gets”. We have to use special
hangars to hang the lavatories or they’ll
be pulled right off the walls. The foot
bridges are designed to handle the
16.5 kip rear axle load of a fire truck.
"Those", says Lambinon, “are just
a couple of the things we have to keep
in mind. — when the job's finished
we hope we've remembered them all.”

credits:
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This is the “Cotton Blossom” (left), the of
movie fame, that was purchased at a movie
Lamar Hunt. It is being rebuilt to be a prime Hil
of Fun.
Rec. Houses

continued from page 15

possessions if the home is entirely rented, fire and smoke alarms for remote areas, and automatic supplementary electrical source during power failures at times when the family is away.

Usually the site for the home is sloping down to a lake or on a hillside which results in a multi-level solution. A solution which is more difficult to live in, but more interesting and dominant in exterior appearance. The interior can also be developed into an interlocking of vertical spaces as well as the usual horizontal space connections.

Materials can be simple, natural and of local origin. Cabinetry can be simplified and wood finishes can be allowed to weather, but these savings are offset by lack of experienced local help and higher shipping costs for appliances, hardware, plumbing, electrical and heating, et cetera.

As a result, recreational houses are not necessarily cheaper to build. The actual cost in our experience has been very much like the construction cost in town. The square foot cost will vary, of course, depending upon the quality of materials and finishes specified. Financing can be obtained for 7 1/2 percent interest, a 20-year loan, and one third down. Rental income, during season or off-season periods, can turn the second home into a real estate investment, capable of being depreciated and used as a tax aid during the owner's income-earning years, and as a home after retirement.

In all cases, we have found the recreational house to be more interesting work than the traditional homes. The forms are new or different, the freedoms are greater, and the structures and interiors more challenging.

The Author

Author of this look into the concept, problems, and challenges of designing and building recreational houses is Ralph A. Fournier, AIA, who is president of Fournier, Inc., architects, 2249 South Brentwood Boulevard, St. Louis, Mo.
From the south banks of the Missouri River led the Kansas City, Missouri Parks and Recreation Department to its study, River Reach. This study, completed in 1971, is intended to focus interest in the Riverfront and serve as a guide for more detailed planning. "The basic tenets of the study were to enable the people to reach the river, and to develop that river to its fullest," says John See, staff architect for the Kansas City Parks and Recreation Department.

Though flexible, the recommendations made have a basic theme, the blending of industry, commerce, recreation and residences to make the River areas viable on a 24-hour basis, a departure from past trends of dividing a city into workrooms, playrooms and bedrooms. The study offers guide-
This is an overall drawing of the Levee Park plan which now is generally undeveloped land with a sand dredging operation and a police tow-in car lot utilizing the space between the ASB and Paseo Bridges.

lines to both public and private developers, and emphasizes the preservation and use of our great heritage, the Missouri River.

Levee Park is an example. A large public park for general recreation, and in its confines, an international trade center and commercial development above which would be pyramided private residences with their own yards, streets and convenience services. Along the south border is an industrial park. Along the north, separated by a scenic river front drive, would be a marina, connected to the park by pedestrian overpasses. Further east is river front park which, although still under development, is open to the public.

Other features of the levee park include swimming meet facilities with changing rooms, concessions and viewing stand, a large sand dune playground with picnic areas, an outdoor amphitheater, and a large parking garage. An inner city retreat containing guest rooms, dining facilities and areas for public functions and entertainment, levee lodge, is suggested adjacent to the levee park.

Preservation of the river heritage, creating a mix of work and play facilities, and private development without wholesale removal of businesses and people form the keystone of River Reach.

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Two exams scheduled under new architectural testing procedures

At its recent June annual conference held in Seattle the NCARB approved Resolution Number 5 calling for a revision to our architectural examination procedures, a move that has been considered for several years.

Let's consider the background, effects of and future ramifications of this move.

There was a time when the individual states developed and administered their own registration laws with little regard for similar laws in other states. Certain states were considered to be more stringent than others in their requirements for registration.

Eventually the concept of uniformity entered the registration picture and continuing efforts were made by many interested Boards to work toward the end of national uniformity of examinations. Thus, the Missouri Registration Board now conducts a uniform examination similar to all other jurisdictions. The 4-day, 36-hour, 7-subject examination is common to all states and jurisdictions. It has been the experience of the Missouri Board that its applicants have agreed that although the examination is difficult it is fair and should insure that those who pass it are capable of designing structures which are safe for public use.

Uniformity of examinations has another purpose in that over the years more and more commercial and industrial enterprises have become national in scope. It is no longer an unusual matter for one architect to have licenses in many states. We have graduated from that period of insular state practice to national practice and now international practice.

So let's look at the event which took place in Seattle last June and touch upon items of interest to the architectural profession and especially those who are preparing for registration.

There will be two examinations. One examination called the "Equivalency Test" must be taken by all non-graduate candidates. The second examination will be known as the "Professional Examination" and will be taken by all candidates for registration. It is proposed that the graduate student be excused from taking the "Equivalency Test". The assumption is that a degree in architecture is sufficient basis for assuming that the graduate applicant need only have the required post-graduate practical experience before admission to the Professional Examination.

As of the end of the convention in Seattle, all Boards were not fully agreed upon the minimum amount of time required for experience prior to the taking of the Professional Examination. Some regions indicated they would require that college graduates take the Equivalency Examination, at least for a few years. It was observed that college graduates do flunk such subjects as would be given in the Equivalency Test. For example, it is a matter of record that graduates do flunk site planning and design.

Furthermore, the Professional Examination, a sample of which was presented at the convention indicates minimum of three years practical experience should be mandatory regardless of whether or not a man has been five or six or even more years in school.

A Professional Examination actually takes the candidate through a complete project. He is given a "Test Information Package", consisting of project description, a question book, and answer sheet. The project description consists of four parts. Part I is
"The Environmental Analysis", and concerns itself largely with site selection and area background analysis. In the sample given to all Board members for review a specific existing project was selected and four potential sites were offered for consideration. As might be expected each site had certain advantages and certain disadvantages. Although the sample test given the Board members for review contained only 25 questions pertinent to this particular part, the ultimate examination to be given to the candidates in the future will have 100 questions and take four hours.

Part II of the Project Description is "Programming". In this section detailed information concerning the background of the project, the people to be served, the type of surroundings, transportation facilities, program objectives, space requirements and budget figures were indicated. The sample test involved the design and construction of a mental health and retardation center. The gross budget was approximately $10 million. Again, the actual examination given to the applicant would involve 100 questions and four hours of time.

Part III of the Project Description is entitled "Design Technology". In this section schematics are reviewed and documented in detail. Possible structural systems, interior and exterior finishes, specialities, electrical, mechanical and plumbing facilities are reviewed. Possible cost figures covering all of the various elements are listed. Possible plans, sections and space distribution schemes are presented with structural engineering schedules and formulae.

Part IV is entitled "Construction Administration". In this particular area building construction details are presented to show conditions in selected areas. Also, construction management questions are asked.

If this examination may be described in a few words they might be, "a test of the candidate's architectural judgement". Presumably the answers to all of the questions are contained within the data submitted or the candidate's interpretation of that data. Although there are some questions of doubtful merit it was argued that the sample examination is only a beginning upon which we can continue to build and improve techniques for extracting that necessary knowledge from the candidate which will guarantee, as far as humanly possible, that the man so licensed will not endanger public health, safety and welfare.

The above described Professional Examination is a 4-part—2-day—16-hour examination.

The non-graduate is required to take a second examination of 20 hours duration. That is, the Equivalency Examination requires 10 hours each day for two days. Generally speaking it parallels the type of examination currently given with no notable difference. The Design and Site Planning examination will be combined for a 1-day, 10-hour test.

It must always be remembered that each state governs within its own borders and that NCARB itself does not license anybody.

As far as Missouri is concerned the first order of business is to secure a revision to our Law to accommodate the new procedures.

At the convention, it was decided that the target date for the first Equivalency Examination would be June, 1973, and the target date for the first Professional Examination would be December, 1973. The Missouri Board will have its Law changed, hopefully, in 1973. If we are successful (and we should be) then the first use of the new testing system in Missouri would occur in 1974.

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GROUND BREAKING AT TIFFANY CENTRO

Ground was broken recently for the Tiffany Centro Bank Building, a 28,500-square-foot bank/office building on 2.5 acres at Tiffany Centro, an 80-acre planned business community three miles south of the Kansas City International Airport. In this rendering the new building is shown in the foreground with a proposed office complex in the right background. Occupancy is set for spring, 1973. The building is to be constructed of masonry, with generous use of reflective bronze solar glass. Architects are Marshall & Brown of Kansas City.

entry deadline set for awards program

Deadline for entries in the 1972 Kansas City chapter Honor Awards Program has been set at September 5.

The competition, designed to encourage excellence in architecture to afford recognition of exceptional merit in the design of buildings and to bring to public attention the variety, scope and value of architectural services, is open to all licensed architects, in private practice, who are members of the Kansas City chapter of AIA.

Projects may have been executed anywhere and must have been substantially completed during the period of July 1, 1970, through July 1, 1972. A maximum of five entries per firm will be accepted. It is open to architectural projects of all classifications, including related groups of buildings executed as a single project.

A registration fee of $30 for each entry submitted shall be included with the entry slip. No entry fee will be refunded for entries which do not materialize. Entries must be received in the chapter office, 816A Commerce Bank Building, 922 Walnut, Kansas City, Mo., on or before September 5, 1972.

JAMES R. BROWN has joined the architectural firm of E. Allen Roth, located in the suburban Johnson County, Kansas, area of Kansas City.

aia creates new department

A new Department of Environment and Design has been created by the American Institute of Architects. The administrator of the new department is Michael B. Barker, AIA.

At the same time, the AIA announced that James C. Donald will head the new re-structured Department of Government Affairs.

Barker, who also serves as the staff executive to the National Policy Task Force, formerly directed AIA’s urban programs. Donald is the former director of liaison with federal agencies.

The new Department of Environment and Design has absorbed the design and international relations programs, which were part of the Department of Professional Services and the housing and urban programs which were in the Department of Government Relations. The Government Affairs Department now will include the state government affairs program and a new public campaign to be financed by a special assessment of the membership.

NEW QUARTERS have been occupied by Wedemeyer, Cernik, Corrubia, Inc., Architects of St. Louis. Their new quarters are at 1770 Railway Exchange Building, 611 Olive, St. Louis.
downtown ironon rebuilds

Phase Two of a project designed to revitalize Main Street in Ironton, Mo., is well under way.

Work is continuing on a 2-story building facing Main Street that will contain three shops. The north shop will extend 60 feet, the middle, 36 feet, and the south shop will be 24 x 24 with a mezzanine balcony comprising an additional 12 x 24 floor area. Each shop will have its individual entrance. Immediately behind the new building will be an open courtyard, separating the building from four individual offices which were remodeled from former Lone Pine motel units.

The first phase of the downtown remodeling contractor was accomplished last winter when two of the northernmost offices were formed by repainting the entire structure, installing cedar shake roofs, carpeting the floors and putting in new doors and windows.

Architect on the Phase Two is John Boardman of Arcadia, Mo.

bell to build

Plans have been announced for a new $1.7 million structure in Independence on the north side of 32nd street east of Noland Road that will house a new concept of long distance telephone service. The first of its kind in Southwestern Bell’s 5-state territory, it is designed to solely accommodate electronic operator’s positions which permit customers to dial their own person-to-person, collect, credit card and bill-to-third number calls from either coin or non-coin phones.

The new building will be a one-story, 121 x 161 foot building with pre-cast concrete walls. It is expected to be finished in late summer, 1973. Architect is Tognascioli and Associates, Reiz-Morris Construction Co. the general contractor.

plan senior citizen complex

A new senior citizens home is being planned for the O’Fallon, Mo., area on McMenamy Road near the junction of the Saint Peters and Cottleville Roads. Ground breaking will be this fall.

Facilities for the 30 one-bedroom apartment and recreation-office-storage area will include laundry facilities, recreational area with kitchen, individual or community gardens, health service program and transportation.

The contract for design and building has been awarded to Ronald Edwards, Research Planning and Design, St. Louis.
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BOTANICAL GARDEN VISITED

The Missouri Botanical Garden with its world-famed Climatron and the John S. Lehmann Library recently was visited by more than 3,400 persons who participated in a recent St. Louis Architects' Sunday tour, a project of the St. Louis Chapter of the American Institute of Architects. Here Robert Dingwall (second from left) chief horticulturist of the Garden, accepts the Architects' Sunday plaque from D. Robert Downey, Harry Richman and Joseph D. Murphy.

seligson/eggen boost five

Five men have been promoted by Seligson/Eggen, Inc., architects and planners of Kansas City. They are Robert J. Claybaugh and Melvin A. Solomon who have been named associated principals and will assume administrative and project responsibilities for the firm. New associates of the firm are Cary C. Goodman, Charles E. Pike and Eugene Young.

Theodore H. Seligson is general principal in the firm. The other, John A. Eggen, Jr., has become an inactive principal to assume a position as vice-president of planning and research with International Hallmark Industries, Inc.

new butler development

Plans for a new development to be located on 140 acres at the southeast corner of the intersection of highways 71 and 52 at Butler has been announced by Dale Crockett, president of Butler Development Corporation.

The area, to be called Westgate, will include a shopping center, motel, an industrial park, residential areas and other commercial facilities.

L. George Mills, Lake Lotawana, Mo., is the architect for the complete development.

THE WAYNESVILLE, MO., Board of Education has named Allgeier, Martin & Associates, Joplin, Mo., as its architects for an addition to the school's present vocational building. The vocational addition is expected to cost about $250,000.

DEDICATION SERVICES were held recently for the New Hope Baptist Church located southwest of Turnback Creek on Route 2, Ash Grove, Mo. Billy Marshall of Jefferson City was architect for the project.

A conference designed to teach architects how to participate effectively in HUD-assisted housing programs for low and moderate income families will be sponsored by the American Institute of Architects on October 5-6 in Washington, D.C.

During the 2-day intensive work sessions at the Mayflower Hotel, architects will hear housing experts explain thoroughly the HUD-assisted programs. The presentations of HUD rules, regulations and policies will be directed toward the preparation of a typical housing application. Using the actual HUD forms, participants will prepare a sample application and follow it through the various channels of HUD processing.

The sessions will be chaired by Charles L. Edson, a former HUD official.

firm changes name

The St. Louis firm of Schwarz & Henmi, architects, has changed its name to Schwarz, Henmi & Zobel, architects and planners. It also announced the appointment of Richard G. Wiedemann and Norman S. Fott as associates of the firm.

Partners in the organization are Richard T. Henmi and Heinz E. Zobel.
The State of Preservation in Missouri

By Gerhardt Kramer, FAIA, AIA-State Preservation Coordinator

Many attempts have been made within recent years in the major cities of Missouri to rehabilitate historic neighborhoods or districts, but none have succeeded in "getting off the ground." These projects, some design to be financed with public funds and some by private means, have given great promise of blending the remaining significant structures in our historic districts with compatible new construction and making the areas respectable once again.

In the meantime, time and elements continue to take their toll through "demolition by neglect" — the result of vandalism and apathy.

In the following article, Toni Flannery, a Special Correspondent of the St. Louis Post-Dispatch, reviews some of these efforts in St. Louis. Ms. Flannery has done a great deal of research and written many articles on this and related subjects.

Urban Renewal Tends to Clash With Preservation Efforts

Urban renewal often means urban disposal to the preservationist. Many structurally sound buildings, historically and architecturally valuable to the character of a neighborhood are demolished to make way for modern construction that calls for high-rise apartments, multiple family low-rise units and mini-sized single family dwellings — all requiring an open tract development plan that can be interspersed with small parks and playgrounds.

Other valuable structures often are demolished by neglect in the interim between planning, financing and actual rehabilitation.

Lafayette Square is one of St. Louis nitty-gritty restoration trouble spots. In the 1960s ambitious young people started buying up properties to restore. Lack of funds (particularly reluctance for making loans from banks) has held much of the work in abeyance. Disagreements between various neighborhood organizations also have arisen, along with varied opinions on the feasibility and desirability of a proposed highway interchange and a lot of static from the city building commissioner's office dampened the restoration efforts. This all despite a City Plan Commission report that the area should be preserved and a recent bill signed by Mayor Alfonso J. Cervantes designating it a historic district.

A proposed Turnkey-like development in an area facing Lafayette Square Park that would throw an overpopulation into already crowded school and play areas has contributed to recent second thoughts about rehabilitation. The Soulard area, one of the city's oldest intact neighborhoods, is even more precarious. Few young families have moved in, and the older population is anxious about its future. There is talk of a high-rise development to replace existing homes, but there is no confirmation from a developer. Demolition crews work regularly — selling the old hand-made bricks and any other salvageable material. One new restaurant has been successful enough to encourage the prospects of others, and students from area colleges are studying restoration possibilities. Heritage/St. Louis has a team of experts examining the area in view of publishing a report.

In the LaSalle Park district, an urban renewal project that includes construction of low and middle income housing units, along with light industrial structures, is caught in the federal funding tangle. Preservationists are trying to keep at least two blocks of the area intact, one of them in the path of the proposed development site. The other block is near the St. Vincent de Paul Church complex where there is an additional threat from the planned widening of Highway I-55. The Landmarks and Urban Design Commission has urged the Highway Department to revise its plans, in order to spare the church, a designated city landmark.

An ambitious renovation plan at Laclede's Landing on the riverfront recently collapsed because its developers lacked sufficient funds, and failed to meet a construction deadline. Property owners subsequently met with representatives of the School of Architecture at Washington University to devise a workable plan for restoring the historic warehouses, some of the last surviving iron-front structures in the city. University students will study the area to determine its potential, and a State Historical Survey representative is compiling a report.
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new visiting professor

A new visiting professor at the School of Architecture, Washington University, St. Louis, is Aulis Blomstedt of Helsinki, Finland, whose appointment is from September to December.

Mr. Blomstedt has been professor of civic architecture at the Institute of Technology in Helsinki and now is practicing architecture in Tapiola. He has been editor of the Finnish architectural review Arkkitehti and founder and editor in chief of the international architectural review Le carre' bleu.

He has built private residences, apartments and row houses in Turku and Tapiola as well as institutional buildings in Helsinki. He has lectured on architecture and city planning in Sweden, Denmark, Norway, the Soviet Union, France, Japan and Venezuela.

new professional building

Construction has begun on a new 5-story professional building in Independence just north of the Independence Sanitarium and Hospital. The $3 million structure will offer 83,000 square feet of rentable space.

Ground level will be available for medically-related enterprises. The second floor will provide for a 40-bed maternity unit and the third, fourth and fifth floor will provide medical office suites for the 16 doctors who will operate the building.

Hewitt and Royer, Kansas City, is the architect. Universal Construction the contractor.

WORK HAS BEGUN for the Pemiscot County, Mo., Nursing Home at Hayti, Mo. Architect for the $775,000 project is Drew and Jablonski of Popular Bluff, Mo.

ARCHITECT HONORED

William Conrad (left), Kansas City Architect, is shown as he accepted the president's gavel of Greater Kansas City People-To-People from outgoing President C. F. "Chuck" Nelson. People-To-People is an international friendship organization established by General Dwight Eisenhower and financed by Joyce Hall to develop international understanding between people of all countries, through hosting, travel and person-to-person diplomacy.

new school for wheaton

Residents of the Wheaton R-3 School District have approved a $110,000 bond issue for the construction of an elementary school addition.

The new building will provide a kitchen-cafeteria, two regular classrooms, music room convertible to two more classrooms, special education classroom and kindergarten classroom using the old cafeteria area and restroom facilities for both boys and girls.

Architect for the new addition is Ball & Engel, Springfield.

dean to switzerland

Dean George Anselevicius of the School of Architecture, Washington University, St. Louis, Mo., will be visiting academician at the School of Architecture, the E.T.H. in Zurich, Switzerland from November to February. Dean Anselevicius will study, evaluate and discuss teaching methods and opportunities in comparison with those in the U.S.A.

THE SHAVER PARTNERSHIP of Salina, Kan., has been appointed architect for the Richmond, Mo., R-XVI board of education. The board hopes to begin active planning soon on a new high school in the southeast part of the community.

JAMES A. MATTHEWS has left the St. Louis firm of Lorenz, Sorkin & Matthews to establish his own business in the recreational field. The firm's name has been changed to Lorenz and Sorkin, Architects.