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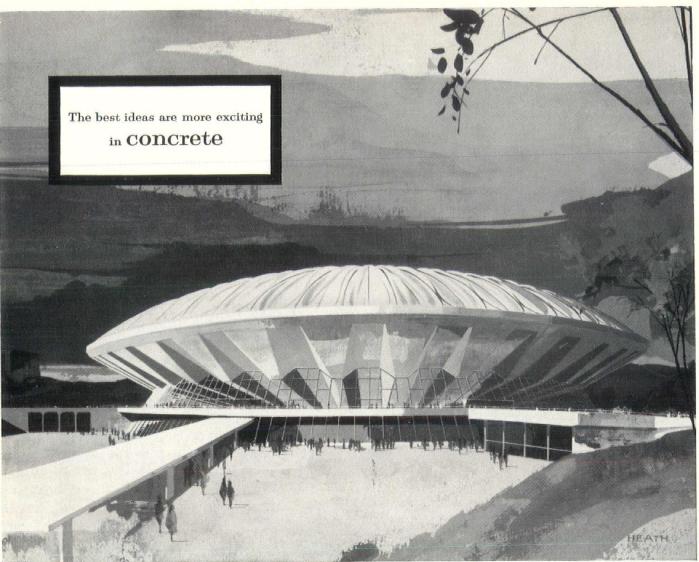
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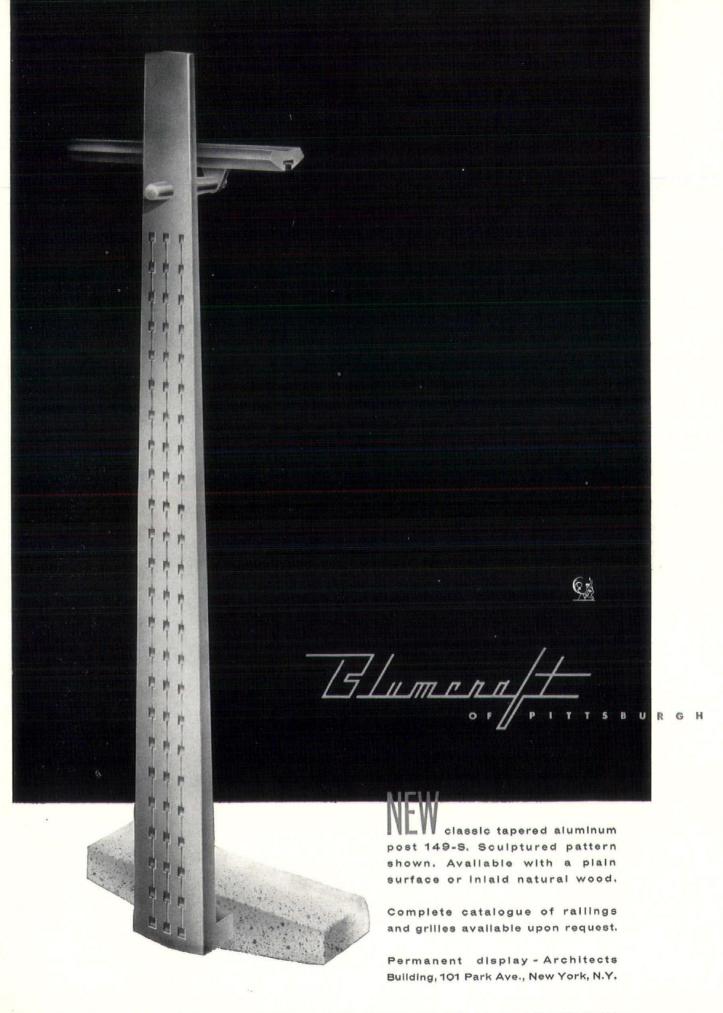
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SEPTEMBER 1963

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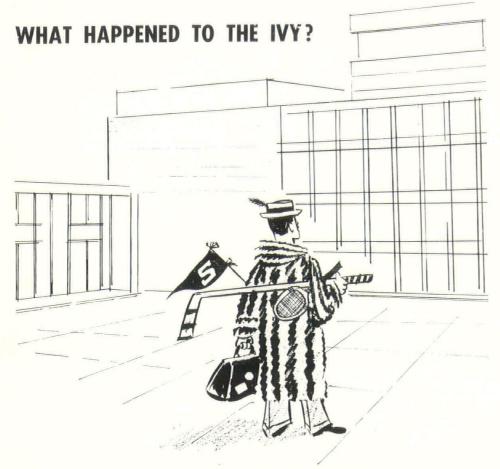
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By Donald H. Sites, A.I.A. University Architect, University of Wisconsin.

What happened to the Ivy?

This often asked question, so eloquently expressed by the illustration, in a way symbolizes the changing patterns of the contemporary state university. To ask "What happened to the ivy?" is really more than a botanical question. It really is a question of "What has happened to the University since I was a student?" — and for this there is not a simple, easy answer.

To understand the University of Wisconsin in 1963, or to understand what it will be in 1973, you must reflect on what it has been for over 100 years. When the University of Wisconsin was created by law on 26 July 1848, the State of Wisconsin had a population of approximately 300,000 people engaged primarily in farming and use of the forests. The early history of the University of Wisconsin was one of extreme difficulty in obtaining funds for either buildings or faculty; history even discloses that in 1952 the University was mortgaged for the magnificent sum of \$5,000. The first campus plan was prepared by J. F. Rague, described as "an accomplished architect in the City of Milwaukee," in 1850 and contained plans for the construction of "a main edifice," (called Central Hall and later Bascom Hall), four dormitories to house two hundred

and fifty-six students (two of which were built, the present North and South Halls), and an avenue from the main edifice toward the east bordered by trees (the present Bascom Hall Mall). The construction of Central Hall was started and finished under very adverse financial conditions and was the center of much controversy. In answer to this, the building was described as: "upon the whole, the best building for educational purposes that has yet been erected in the West; and that it is a structure, not for this year, nor the next, nor mainly for this generation, but is fitted to be what it was designed to be, the central point of educational interest in Wisconsin for generations yet to come." It is of interest to note that the original campus buildings were estimated to cost "\$70,000 nearly," by Mr. Rague. By 1865 the University had a "beautiful campus, three buildings, various apparatus and books, and a student body of 300."

Nearly 100 years later, the University still has a beautiful campus and the three original buildings, but from there on things have changed. The University of Wisconsin still has the original campus in Madison, but to it has been added a campus in Milwaukee, active two-year centers in Marathon County, Green Bay, Fox Valley, Manitowoc, Sheboygan,

Racine, Kenosha and Marinette, a proposed center in Wood County, as well as numerous farms and stations throughout the State. The Madison campus had 300 students in 1865, 22,000 in 1962, and expects 35,000 by 1970. The replacement value of the Madison buildings was \$70 thousand in 1865, \$120 million in 1962, and estimated at about \$280 million in 1970. During the first 10 years of its existence the University spent on the Madison campus approximately thousand for buildings, from 1951-61 it spent approximately \$60 million, from 1961-63 \$60 million, and during the next 6 years it needs to spend \$200 million for buildings.

The growth of the faculty and employes has been equally astounding. There were 5 faculty members at Madison in 1860, 2,200 in 1962, and it is estimated that there will be 3,600 in 1970. It is doubtful if the University had many employes other than the faculty in 1860, but it employed 4,500 in 1962, and it is estimated that there will be 6,000 employes in Madison in 1970. This phenomenal growth can be traced to two factors - the baby boom that has sent enrollments soaring in the elementary and secondary schools and the rapid advancement in knowledge. The effect of the growth in population is just beginning to reach the college level; in Madison the enrollment of first grade students is more than twice the enrollment of the twelfth grade. Not only are there more children in the lower grades, but the number of high school graduates attending college has risen steadily. In 1930 only 12% of the graduates attended college; in 1960 this had risen to 35%. These figures are national averages and will be higher for the State of Wisconsin. With the rapid growth in knowledge, more and more students are continuing their education as graduate students to work toward advanced degrees. At the present time there are 4,862 graduate students in school at Madison.

What happened to the ivy?

Perhaps it has been buried by the rush of 22,000 students in their search for knowledge and the 6,700 faculty members and employes intent on helping them. Perhaps it has been buried by the surge of construction during the past few years. Or, more realistically, perhaps it has disappeared because it no longer mirrors the image of education in 1963. It wasn't so long ago that ivy was a symbol of college - and this is what most old grads carry in their minds when they return to their alma maters. The college of our dreams has been a quiet, shaded campus with large expanses of lawns between the low, sprawling ivy covered "Collegiate Gothic" buildings. On the lawns a few relaxing students discussed the big game to come on Saturday; across the way the old



Residence Halls, Southeast Dormitory area, University of Wisconsin, Madison Campus.

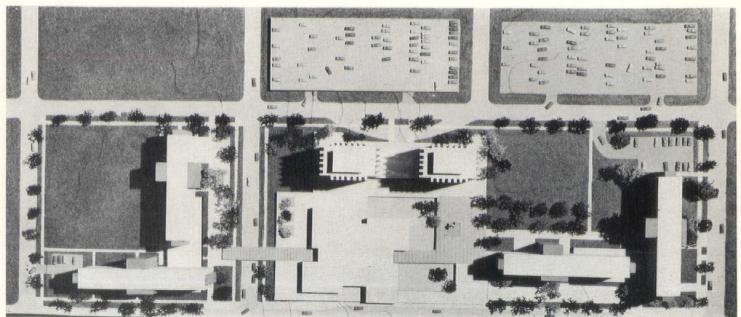
professor, attired in baggy tweeds and smoking his pipe, eyes transfixed in deep contemplation, strolled home. Life was easy, relaxed — Ivory Towered.

While this image may still be alive at some colleges, it can no longer be used to describe the University of Wisconsin. It seems evident that as the State of Wisconsin evolves from a predominantly agrarian society to a predominantly urban society, its State University should reflect this change. There can be no doubt that the campuses at Madison and Milwaukee will be urban campuses. This

is not to suggest that the campuses will be ugly or unpleasant — only that they will be quite different from the ivy campus. With the press of rising enrollments and the need for larger and better buildings and with only limited land available at relatively high cost, it has become essential to make greater use of each square foot of the campus.

This will result in buildings being taller and placed closer together with a resulting change in scale. The relative importance of an individual building as a separate entity will diminish; its importance as a member of a group of buildings and its relationship with its neighbors will be greatly increased. This is a change in concept that has been difficult for the architect to comprehend. He can no longer design as if his structure existed in its own world — each building is but a piece in a broader concept. The land between the buildings also takes on increased importance. You will see mall type developments that will make maximum utilization of each foot of land; they will be designed for large numbers of people to pass from class to

Model of Southeast Dormitory area by J. & G. Daverman Company, architects.





Cancer Research Building, Madison Campus, Schutte, Phillips, Mochon — Architecture, Planning, Engineering.



Tower of Edward Burr van Vleck Mathematics Building. John J. Flad & Associates, architects. Photograph by William Wollin Studio.

class and yet provide the landscaping necessary for our link to nature.

Buildings have become increasingly complex as knowledge has expanded. While a few years ago a university building provided little more than shelter, today it is a special device capable of providing a vast array of services for the teacher or researcher to carry on his complicated work. This might take the form of laboratories for cancer research, a nuclear reactor, areas for complex computer equipment, the study of molecular biology, controlled environmental chambers, space studies, research in psychology, or a thousand other varied and special activities each requiring its own solution. Such unique

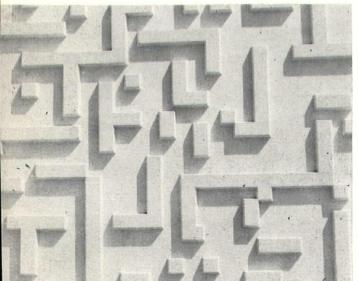
requirements will reflect in the design of the campus; the architect is faced with the difficult task of designing a building for a unique activity and yet capable of contributing to the overall unity of the campus. To add to his woes, the architect must not only design for each unique activity, but must also design for flexibility to provide for the ever changing requirements. If there is one truth in the design of university buildings, it must be that change is as inevitable as rain — and nearly as frequent.

But the highest calling of all for the architect must still be his ability to aesthetically structure our environment. Just as the university should be the cen-

ter of educational and cultural activity in the state, so its aesthetic qualities should demonstrate the ability of a society to live in beauty, harmony, vitality, etc. To deny the value of aesthetics in the design of the university would be to deny the cultural heritage of the State of Wisconsin.

The truth is, we can no more build a contemporary university in the image of the ivy college than we can turn the clock back to the Middle Ages. Since we are unalterably committed to the building of a contemporary university, let us proceed with all the knowledge, skill, judgment and enlightenment we can muster.

Portion of sculptured concrete panel, Cancer Research Building.



Social Studies Building. Law, Law, Potter & Nystrom, architects, photography by William Wollin Studio.



\$38,000,000

A Future for the Marquette Campus



S. J. HELFER Project planner

Population explosion — need for more education — fulfillment of cultural goals, all are factors adding up to the strain being put on the physical plants of our colleges and universities today. It is with this in mind, as well as achieving maximum use of the capital improvement dollar and the operating dollar, that educational administrators and planners must build a campus for today and tomorrow.

In order to establish a Master Plan for the orderly development of a campus, certain facts must be established and some projections must be assumed. These guidelines or "ground rules" will set the general pattern of a campus plan. In addition, the general plan must be long range and flexible, but not conclusive to the degree that it will stifle the imagination and progressive thinking necessary to realize the final goal.

For example, the guidelines which were used at Marquette University took into account present enrollment, makeup of the student body, anticipated programs and the necessary faculty, projected enrollment increase, teaching loads, spatial requirements, land use and density, present facilities, geographic restrictions and economic ability. There were many other considerations, but these were of major importance.

The present enrollment at Marquette University is approximately 12,000 men and women students. This student body had to be categorized as to full-time and part-time student, as well as commuter and out-of-town student. Each group, because of varying space and facility requirements, necessitated individual consideration in the final plan. Based on past records of the geographic origin of the student body and considering the population and economic growth of the prevailing areas, the projected enrollment was forecast at 18,500.

After evaluating the present and anticipated academic programs and related teaching loads, the spatial requirements of buildings can be determined. It is at this point that a decision must be made regarding the form and function of academic buildings. In planning the expansion of an existing university, the planner must take into account the space available in the present plant. Studies must be made to determine the usefulness and condition of existing space, as well as its relative location to other facilities.

At Marquette University there is more than 1,145,000 square feet of academic

floor space. However, only 900,000 square feet can be considered as proper, permanent teaching space. The balance is of the type found in converted residences and obsolete buildings. Continued use of such facilities is not desirable from the standpoint of educational environment or operational cost. It is obvious then that the final plan must provide additional building space for the projected enrollment increase as well as replacement of obsolete quarters. In Marquette's final analysis, it was determined that more than 1,800,000 square feet of academic space was required.

Proper planning not only encompasses the judicious use of floor space, but also the proper grouping of these buildings in order to attain a cohesive arrangement and an aesthetically acceptable appearance. This is an important phase of planning, especially in an urban university where land values are high and certain community density standards are established. The Marquette Plan is based on a land use density factor of 25 percent in the Academic Zone. Even with this intense use of the land, a most pleasant and exciting campus is possible. Strategically placed green spots and park-like walkways can be woven throughout the campus area to achieve a restful setting, as well as a compatible surrounding for well designed buildings.

In a university's Master Plan, further consideration must be given to other related facilities, e.g., housing, parking and recreation. These separate zones must serve their own function and collectively must be integrated in order that the overall result will be a well planned entity.

Planning a university campus or any other site location must also take into consideration the peripheral area as it might effect the subject area. The basic factors that must be considered a revehicular movement, street patterns, community facilities, zoning, area standard, neighborhood environment, public utilities and others. These are some of the conditions that will effect the aspirations of any plan. How these factors are considered, plus the professional judgment and knowledge of the planner and architect, will spell out the acceptance and success of a project.

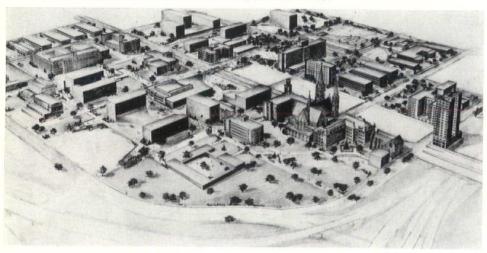
With these criteria, the Marquette University Campus Plan can be further cited. The University is located in an urban environment close to downtown Milwaukee and has been in this location

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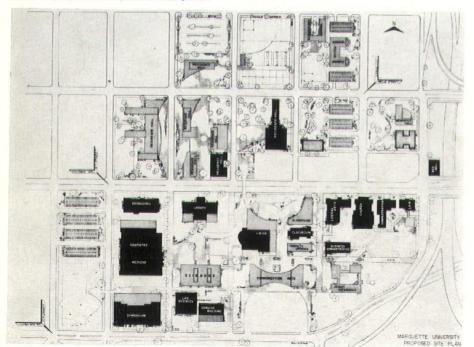


Aerial photograph of existing Marquette University.

Below: Sketch of proposed Master Plan for Marquette University.



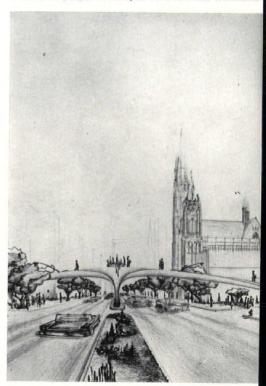
Plan of proposed campus for Marquette.



for some 56 years. Land values are extremely high (\$100,000-\$250,000 per acre) and sometimes not available for expansion purposes. It was decided that the University would remain in its present area and expand on a planned basis. Marquette today has approximately 27 acres of land in the area. Much of this land area consists of scattered, isolated parcels that were purchased as the University needed it or as individual lots were available. In the last 10 years, some \$3,000,000 was spent on land acquisition and approximately \$11,000,000 on major construction and renovation projects. This is one indication that Marquette has been actively engaged in a constant battle to maintain a high level of excellence in the academic pursuits and to develop a cultural center for Milwaukee.

Comprehensive projection studies at Marquette indicated the rate of growth would be at an accelerated pace. To provide adequate facilities for such growth on a piecemeal acquisition basis would be ineffective and costly. The Federal Government also became aware that this crisis existed throughout the nation at all urban universities and passed legislation commonly called Section 112 of the Housing Act as amended. This tool provided a procedure in which the Federal Government, the local government and the university combined efforts to make land available to the university for expansion purposes at a writedown cost. Marquette requested and received the cooperation of the City of Milwaukee in applying for funds for a university oriented urban renewal proj-

Portion of proposed campus viewed from Wisconsin



ect. Subsequently the request was honored and funds of approximately \$5,500,000 have been allocated to achieve this goal.

Documentation of the preliminary phase of the Master Campus Plan as it is related to the University's growth, as well as to Milwaukee's overall planning program, has been completed. The various studies required for the renewal application clearly established the need for a cooperative effort between the City of Milwaukee and Marquette University for a planned development program in the area. When completed, such a program will be of considerable value to the University as well as the City of Milwaukee.

As stated in the Survey and Planning application for the proposed Marquette Urban Renewal Project - "nearly all of the land in the immediate vicinity of the present campus is built up in a pattern of diverse uses and fractionated ownerships, and is characterized by differing degrees of blight." The contemplated area of expansion for university purposes not only includes various land uses but is bounded on the South by an expressway and the industrial Valley, on the East by an expressway and the central business district, on the West and North by various health institutions and residential properties. The designated planning area therefore, was selected on the basis of need to fulfill the physical objectives of the University, eliminate incompatible land uses and blighting influences in the area as well as to establish a stable area which will have mutually beneficial influences with abutting developments.

These factors were combined to implement community objectives as well as the national purpose expressed in the special university provisions of Section 112 of the Housing Act.

An illustrative site plan was prepared to show the ultimate campus area. This plan was prepared on the basis of the Proposed Land Use of the area, existing permanent University buildings and proper street and utility facilities in the area, required buildings and amenities to adequately complement the educational objectives of the University and the development objectives of the community. Consideration was given also to stimulate further a proper and practical solution to a continued effort of maintaining a culturally and economically sound area in the community.

As depicted on the Proposed Site Plan, the area bounded by Wisconsin Avenue and Clybourn Street and 11th and 16th Street, is to be developed for educational and related facilities. It is in this area that the present permanent academic buildings are located and where the necessary proposed buildings are to be built. Various functions of the academic area and their relationship to each other determined the location of certain buildings. Also taken into consideration was the anticipated pedestrian movement, topography of the area, vehicular access for emergency and service operations and other planning norms.

To this was added the required housing facilities in an area and location that could be developed for the anticipated needs of the resident student. Consideration was given to the sleeping, din-

ing and recreation needs of the student as well as providing proper access between the housing and academic zones.

The contemplated Physical Education Zone was located in an area that is relatively easily accessible to the present gymnasium so that the ultimate use of this function is attainable.

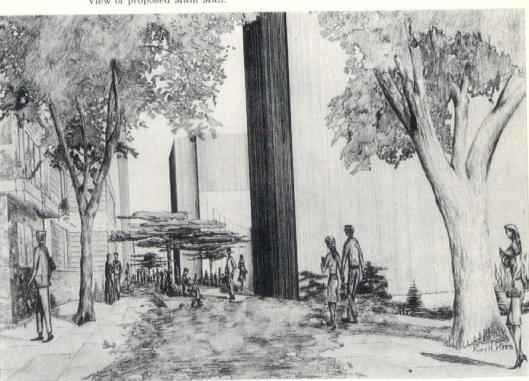
Parking for the students, faculty, staff and visitors is planned in the peripheral area of the campus core. This eliminates the conflict of pedestrian and vehicle movement in the academic area, yet provides proper parking at strategic spots to accommodate the origination and/or destination of the automobile user. Further, it takes into consideration the pattern of vehicle movement in the area as it pertains to primary and secondary city streets as well as the ingress and egress to the complex expressway system surrounding the campus area.

No plan is effective unless the proposed concept is programmed for execution. Likewise it is imperative to accept the fact that long range planning concepts must be constantly reviewed so that a functional and satisfying plan will be assured over the years.

The impact of the Marquette Plan will be profound to the area both in economics and aesthetics. Anticipated monies to be spent in the campus area will total approximately \$38,000,000 for land and buildings. With proper planning and design, a development of this magnitude will be a catalyst for other improvements in the neighborhood as well as a civic asset near the downtown area of the City of Milwaukee.

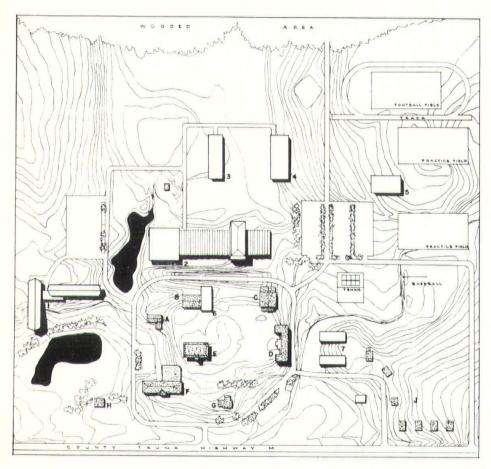
View of proposed Main Mall.





Master Plan for Lakeland College





NEW BUILDINGS

EXISTING BUILDINGS

SCHUTTE • PHILLIPS • MOCHON architecture • planning • engineering

Lakeland College, Sheboygan, a privately owned institution with a present approximate enrollment of 450 students, does not share the otherwise common problem of landlocked campuses. Landacquisition and the possibility to physically expand are not of major concern.

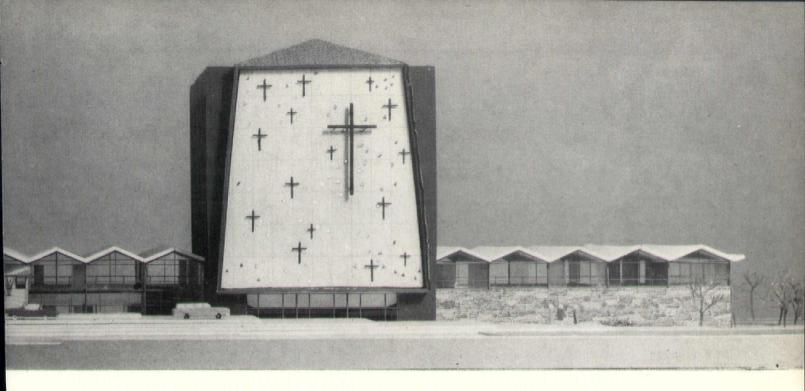
However, Lakeland College shares the awareness and concern of other colleges on how to be prepared for the boom in enrollment and the explosion in knowledge.

The firm of Schutte, Phillips and Mochon, Milwaukee, was retained to develop the campus master plan with a span of 10 years in mind.

"Architecture and college site planning is synonymous to me in that one cannot be properly designed or oriented without a comprehensive and detailed study of the other," says Clint Mochon, AIA, member of the firm in charge of the project. Clint Mochon also emphasizes that the College Master Plan was arrived at through a strong team effort on the part of Dr. John Morland, President, the Board of Trustees and the educational consultant, Frank Noffke, cooperating with Schutte, Phillips and Mochon.

In a program of this scope, involving the future of a complete college, all the facts relative to the college assembled by knowledgeable individuals who a re able to project and apply creative thinking to give direction to the organization and the anticipated growth are of vital importance.

A campus conducive to study and an environment evoking enjoyment of living was envisioned, "I believe that the art of architecture has a great deal to do with the creation of this feeling that will stimulate an individual to become



responsive to learning," comments Clint Mochon.

Prior to developing the Lakeland College Master Plan, Schutte, Phillips and Mochon in cooperation with Dr. Morland and Mr. Noffke prepared the following surveys:

Survey of existing educational program. It presented a complete analysis of the educational program, space requirements as they exist, listing the number of square feet of actual floor area available to various departments and a relationship of space to educational programs. It contained a study of student enrollment and trends based upon past years up to the present. When completed, this survey presented an upto-date record of existing space and an indication of the overcrowded areas with the greatest need for expansion plus the approximate amount of space required.

The architectural and engineering survey of existing facilities presented a complete picture of the physical facilities of the college. It contained a listing of all buildings, the year each was built, conditions of the structure relative to lighting, heating, ventilating, air conditioning, acoustics, etc.; and the amount of floor area in each structure together with a breakdown indicating the amount of use each space receives during the school year.

Completing the preparatory groundwork, a utility analysis, site survey and landscape plan were made.

The college campus master plan was prepared in using graphic chart presentations on all phases of development, along with a model of the ultimate campus.

The master plan concept required the following considerations:

Enrollment projection based on past growth and other influencing factors. A decision on a specific building construction program, formulated so that the college expansion shall keep abreast of the increasing enrollment; each step logically planned from the standpoint of education, architecture, site development, timing and budget. This program was based on an overall comprehensive long-range approach but was broken down into a year by year planned program for growth.

Five important components were taken into account:

- 1: Are existing facilities being efficiently used? Is it possible that by some modifications or relatively simple remodeling, or through use of folding partitions, etc. a more efficient use can be made of available space which in turn means a saving of money.
- 2: Is the financing program practical and realistic to carry out a year to year program based on the master plan?
- 3: Every consideration should be given to the carrying out of the master plan in such a way so that as funds become available and projects are carried out there is no need for expensive remodeling or relocation of utilities, etc. in the future.
- 4: Does the utility master plan tie in with the college campus master plan for buildings, site development, etc.
- 5: The maintenance program if this area is not considered properly and tied in with the building and site maintenance, much money can be wasted.

Each step of the master plan was drawn up based on a practical budget plan to support the proposed expansion.

As the master plan emerged, Dr. Mor-

land, the board of Trustees and the faculty had a clear picture on how the college was to develop in the future over a long-range period as well as a year by year development.

Clint Mochon is quick to emphasize that a master plan should merely serve as a guide stating the basic objectives. That it should serve to give direction to growth based on facts and logical planning at the time and that it should be always subject to change and continual review.

True to his earlier statement, Clint Mochon also is convinced that specific architectural consideration must include the relationship of existing buildings to new ones and the striving for architectural unity throughout the entire campus is of major concern to him. "This is often accomplished by proper landscaping, road designs, walks, control perspectives of outdoor spaces and buildings. A building built in 1976 will probably, and should be different and superior to a building built in 1963, which in turn was different from the building constructed in 1932. A master plan should serve as a tool giving direction toward an ultimate college after certain goals are agreed upon by the college president, board of trustees and the faculty."

With two buildings proposed to go up in the very near future, Lakeland College should be well on its way to realize the envisioned plan Schutte, Phillips and Mochon have prepared: "An environment into which young men and women may come to be exposed to the thinking of the past, the present and the future; an environment in which they consciously or subconsciously enjoy to live and prepare for their social and intellectual development."

"A well above average city motel," was the verdict of the jurors in awarding to the Madison Inn one of the five highly valued Honor Awards given at the 1963 Honor Awards Programs for distinguished accomplishment in architecture.

The Madison Inn was designed by Tannenbaum & Koehnen, architects and engineers, of Milwaukee. It is located at N. Frances and Langdon Streets, just off the University of Wisconsin campus in Madison and in the direction of the downtown-capitol building area.

The motel was conceived by four realestate developers as a facility to serve individuals attending functions at the new Wisconsin Center one-half block away as well as parents and friends of UW students. The developers are George Bockl, Ernest W. Lane and Gustav Wand, all of Milwaukee, and Seymour Logan of Chicago. General contractor for the building was the J. H. Findorff Co., Madison.

The Honor Award jury, Ralph Rapson, AIA, Alfred Shaw, FAIA, and Harry Weese, FAIA, also said of the design:

"An orderly and powerful solution to the urban motel problem contained within strong overall discipline. A simple and logical use of structure and materials with good balance of horizontal and vertical elements."

"The jury admired the solution for its straightforwardness on a confined and limited urban site."

"The building design was, in fact, greatly complicated by the restrictions of the site, says A. A. Tannenbaum, partner in charge of the project.

The program required parking for 60 cars on the 91 by 132 foot site. This was



THE MADISON INN
Tannenbaum & Koehnen,
Architects





accomplished by devoting the basement to parking. The basement was extended under a landscaped terrace outside the building's main entrance and under the sidewalk at one side of the site to get the maximum amount of space.

The main floor of the motel has in addition to the lobby, a coffee shop and meeting rooms. The main entrance is reached from a driveway set under the upper floors to protect arriving and departing guests during bad weather.

Once registered, guests can go directly from their cars to their rooms via elevators from the underground parking area.

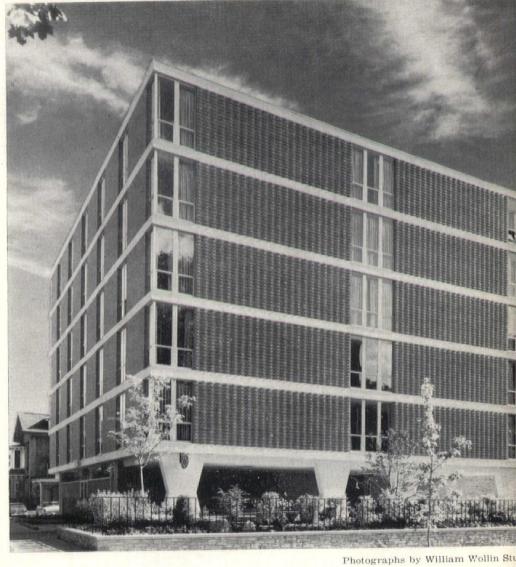
Most of the guest rooms in the Madison Inn have a unique plan, according to Tannenbaum. The rooms have been laid out in pairs, with the entrance to each of the two rooms located in an alcove off the main corridor.

This arrangement prevents the corridors from looking like tunnels and takes guests out of the corridor traffic when they are locking and unlocking the doors to their rooms.

The structural skeleton of the building is reinforced concrete. Exterior walls are brick. Windows extend from the floor to the ceiling. Bands of white concrete define each floor level.

Because the basement is used for automobile parking, the building's boiler was placed in a penthouse. This location also eliminated a chimney, which would have used valuable space on each floor.

The roof also was designed for future development as a recreation area if the client so desired.







Wisconsin Architect - September 1963

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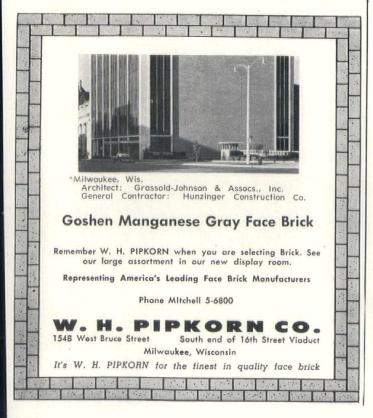
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"What can we do to assist you?" That simple phrase has become the password to success for one of Milwaukee Gas Light Company's smallest and least heralded departments. You'd have to look close, and often, to find the two men who handle the Company's relations with Milwaukee area architects and consulting engineers, because they are seldom at their desks in the sales office. The vast majority of their time is spent in conference with designers and all others who, in any way are connected with the planning, designing and construction of everything from shopping centers to zoos.

Headed by Kurt Aleithe, and assisted by Jerry Igielski, the department has developed a program of regular and constant contact with all firms involved in new construction of a commercial or industrial nature. The two report to John McIsaac, manager of Commercial Sales, who assisted them in developing a well coordinated program designed to know in advance every major undertaking contemplated in the Company's service area.

Information, to stay ahead of the game, is obtained in a variety of ways. First of all, a check-off list of all contacts is maintained in a running file which enables the two men to know dayby-day the regular calls which should be made. In addition, personal chats with friends in the field, plus a close study of all building permits and business publications, provide additional clues.

The sale of natural gas and good service are the two items the men stress in all of their approaches. They attempt to get one point across, according to Aleithe:

"We do not attempt to tell anyone how to design or build a structure. We simply make sure architects realize that gas can be used for a variety of uses in the building and that certain specifications must be included in the design, if gas is to be used. We discuss costs, or prepare proposals on possible contracts, help with problems involving gas service and meter locations and space requirements for equipment that would be needed."

That the two have been successful is evident from the long and growing list of new apartment buildings, shopping centers, churches, schools, libraries, hospitals and other institutions which presently - or soon will - employ gas for heating, air conditioning, water heating, commercial cooking, incineration and drying.

Some of the newer projects include the Coach House Inn, Hilton Inn, Milwaukee Public Library Branch at South 35th Street and West Oklahoma Avenue, the 400 West Shopping Center, the 1626 North Prospect Apartment Building (which will be the state's tallest when completed), Doctor's Hospital, Annunciation Greek Orthodox Church, and, of course, the new Milwaukee County Zoo. These are but a few. The complete list would look like a Who's Who in Milwaukee Area Redevelopment.

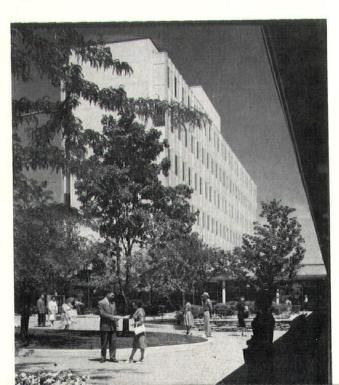
Convincing architects and engineering consultants to use gas is but the first step. The two men follow every project to completion to insure maximum assistance when called upon. Problems are solved as rapidly as they arise.

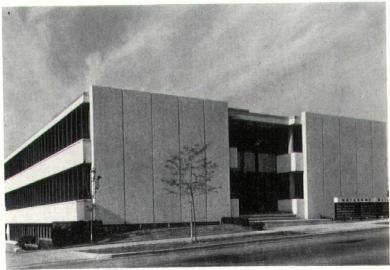
More important, the two act as liaison between the architect, the contractor and the Gas Company. This means quicker, surer action with a minimum of delay when consultations are required or changes needed at any given point in construction.

The men never make recommendations concerning the types of equipment to use, leaving that to the architects and contractors who may, and usually do, have their own preferences based on costs or other factors.

Service becomes the vital factor once the structure has been completed. First of all, the Company's Commercial Service Department assigns service experts to inspect all gas burning equipment to insure efficient and safe operation at all times. In addition, follow-up service, a must in any new construction where problems may arise, is another part of the commercial service program.

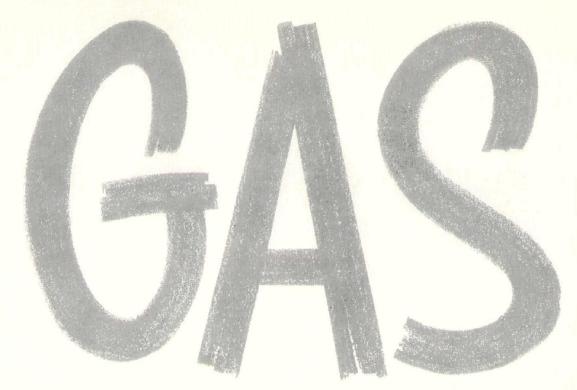
The last, but not the least of the tasks performed by Aleithe and Igielski, is continued contact with the architects and engineers after the project has been completed, since continued watchfulness pays off in guaranteeing dependable service and assistance, not only in existing buildings but in those contemplated for the future.





Above: Maycourt Building. Milwaukee. Jordan Miller and George Waltz, architects.

Left: Mayfair Shopping Center, Milwaukee Perkins & Will, architects and engineers; Grassold-Johnson, associate architects. Photograph by Hedrich-Blessing.



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THE REVOLUTIONARY PRE-PACKAGED COAL BURNING PLANT

"The bituminous coal industry, historically one of the mainstays of America's economy, is fighting its way to a more promising future after several years of disappointment in demand," according to the National Coal Association's 1962 Report.

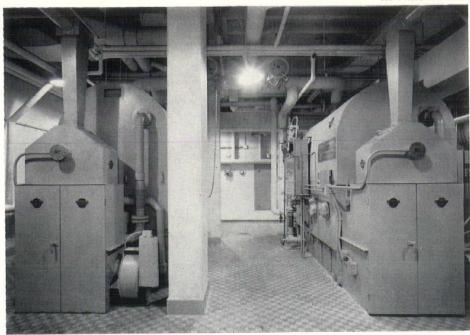
Coal has been one of the main sources of America's energy for 200 years. As late as 1943 it supplied more than half the energy consumed in the United States. However, after World War II, the coal industry lost some of its principal markets. The spread of natural gas pipelines and increasing imports of residual fuel oils had their impact.

In an effort to regain one among the various markets, Bituminous Coal Research, Inc., an affiliate of the National Coal Association, pioneered the development of a completely coal-fired steam or hot water generator that is factory assembled, shipped intact to a plant under a single manufacturer's responsibility, and put on the line after a few simple service connections.

This pushbutton and completely automatic plant operation, first developed in large industrial and electric utility plants - where both sheer size and the need for economy dictated better-thanhuman control - is now available for smaller plants as well.

Automation is a dominant characteristic of modern coal use. The technological advances have led to a labor-free operation of smaller plants. Today, schools, hospitals, apartment buildings, factories and office buildings have automatic operation through three steps in coal utilization - coal feed, combustion and ash removal. In many cases, that kind of operation comes in a package a single unit consisting of stoker, boiler, combustion controls, coal conveyor and ash-removal system. These prepacked coal burning plants have a two thousand through fifty thousand pounds of steam per hour generating capacity.

The equipment as such is not new, but the concept of combining all equipment into one pre-engineered design has resulted in high efficiency. Bituminous Coal Research, Inc. has licensed two versions of the package boiler. The Coal-



Boiler room, National Coal Association Building, Washington, D.C.

Pak Automatic, utilizing a vibratinggrate stoker and watertube boiler made by The International Boiler Works, Inc. and the Powr-Matic, combining a pulsating-grate stoker with a firetube boiler, made by Canton Stoker Corporation.

Coal-fired package boilers have posted excellent records for combustion efficiency and operating economy. They are initially more expensive to install but usually pay their extra cost within five years through fuel savings.

The increasing efficiency and economy of coal burning is matched by a rising standard of cleanliness. Bituminous coal is burned in all types of equipment, in plants with the most rigid requirements for air sanitation - hospitals, food-processing plants, in residential as well as manufacturing areas. In all cases coal can meet the stringent requirements of air pollution control agencies, if properly burned in the right equipment.

The modern sparkling boiler room under virtual pushbutton control is a revelation of clean, streamlined efficiency. Coal burned the modern way satisfies the esthetic demands of the architect, the efficiency requirements of the engineer and, most important in the competitive world of business, the consumer's ideal of reliable power at a reasonable price.

Prior to deciding on an automatic coalfired heating plant for the Franklin Junior-Senior High School in Pennsylvania, the officials of that school district made a thorough study of fuel availability and the latest developments in modern fuelburning systems for heating this new building.

Modern Junior-Senior High School at Franklin is equipped with two 250 hp automatic coal-fired hot water generators. The Units are Powr-Matics supplied by the Canton Stoker Corporation. The boilers (steel firebox type) were manufactured for 15 pounds working pressure. The vibrating type, continuous ash-discharge stokers were manufactured by Canton, with the boilers, stokers, control fans, coal- and ash-handling conveyors all assembled by Canton into a complete package unit. The two units will burn approximately 700 tons of Pennsylvania bituminous coal annually. Franklin Junior-Senior High School is but one of the many schools equipped with automatic coal-fired package boilers, operated at very low cost, an extremely important factor.

"Cooling with Coal" by linking the Coal-Paks to the cooling system in the headquarters of the National Coal Association in Washington puts the boiler operation on an economical basis throughout the year. Although fuel selection in this case may appear to have been purely a promotional reflex the NCA engineers in the preliminary stages of the boiler room design practiced what they preach to building management across the country. They made an economic analysis of all types of fuel available in the Washington area. According to calculations in terms of owning and operating costs over the life of the plant, coal won out over its competitors. The stoker-boiler units are versatile as to size and characteristics of coals; they can burn any coal available to the Washington area.

Considering that a properly designed modern boiler plant can be "automatic," smokefree, and efficient, regardless of the fuel chosen, the coal industry has promising prospects for winning back a bigger share of the market it almost considered lost for some time.

did they locate the Boiler Room?



MODERN COAL HEAT

has eliminated giant stacks, ash heaps, dirty boiler rooms, unsightly fly ash and

extra labor costs

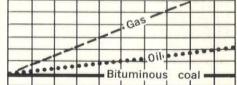
New developments in the manufacture of packaged coal burning plants has encouraged today's architect to again appraise the relative merits of modern coal burning equipment, including complete boiler, stoker, coal and ash handling in an integrated design from 2000 through 50,000 pounds of steam per hour generating capacity.

ECONOMICAL OPERATION: The efficiencies of modern coal burning plants meet, or in most cases exceed, those plants designed around competitive fuels.

AUTOMATIC OPERATION: There is no more attention required than in the operation of any other type of automatic equipment. Go from bank to full load to bank without attention.

COMPLIANCE: These units comply with all ASTM air pollution standards.

PRE-DESIGNED: The combining of all equipment into an integrated, pre-engineered design has resulted in high efficiency, dust-free operation and the elimination of tall stacks.



STABLE PRICES: A 10-year record of prices indicates that Bituminous coal (at the mine) is about the same as it was 10 years ago. Gas (at the well) shows an 82% increase and oil (at the well) a 20% increase.

COAL RESERVES: U. S. Bureau of Mines reports that at present rate of use, coal reserves will last 2,000 years.

SUPPLY ON DOCKS: Huge inventories are maintained in Wisconsin by not one, but many reputable dock companies.

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(Continued from Page 22)

While at the University of Illinois, he had part-time employment with Atkins, Barrow & Graham, Architects at Urbana. He finally graduated from the University in June with a B+ average. At one time he was eligible for the American Academy in Rome. During his final year of training, he was an assistant councilor, the only undergraduate to have had this distinction. His present whereabouts have not been learned, other than that he was heading West for some job experience, eventually to settle in Wisconsin.

In order to qualify for tuition aid, a Wisconsin student must have two or more years of training in an accredited college of architecture. He must have a high grade point average and be in actual need of financial assistance. Recommendation by the Dean of the college attended in regard to ability and performance is requisite.

WISCONSIN ARCHITECTS
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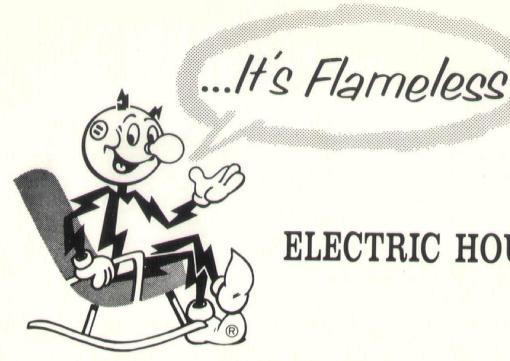
4685 N. Wilshire Road Milwaukee 11, Wisconsin

Three Future Dates To Remember:

• Tuesday, September 24, 1963 the PRODUCERS' COUNCIL will hold its Annual Golf Outing at the Tuckaway Country Club.

 Monday, November 11, 1963 a seminar "Critical Path for Design and Construction" is planned to be held at the Wisconsin Center Building in Madison.

• The 1964 Convention of the Wisconsin Chapter, AIA, will be held at Lake Lawn Lodge in Delavan, Wis., from April 27 through May 1.

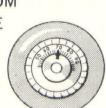


ELECTRIC HOUSE HEATING

CLEANLINESS AND SAFETY



ROOM-BY-ROOM **TEMPERATURE** CONTROL





CONVENIENCE AND COMFORT

Interest in electric space heating has gathered momentum slowly but surely in this area. At the end of 1962, more than 500 homes in the southeastern Wisconsin operating area of Wisconsin Electric Power Company were using electricity as the sole means of heating. In addition, about 80 customers in the commercial classification now rely on electric heating for their entire space heating requirements. These include installations such as motels, churches, outdoor theaters, service stations and office buildings.

While the Electric Co. looks to the residential market as the major area for future growth in electric heating, there are important possibilities for this type of heating in apartment buildings, school and industrial buildings.

A major concern of the company is the proper installation of electric heat to assure satisfaction of the customer. Each installation must be considered by itself and should fit the needs of the building. Proper insulation is especially important in residential installations. To help assure satisfactory installations the company has provided training courses for about 500 persons including electrical contractors, wholesalers and suppliers. They are taught how to calculate heat losses and estimate operating costs. Although Electric Co. personnel are specially trained to check estimates of total operating costs with architects, contractors or customers, they do not design heating systems or calculate installation costs.

The Electric Co. also maintains a

complete display of electric heating equipment available in this area. Electrical contractors or customers can look over the units, obtain manufacturers' literature and find out where the unit they choose can be obtained.

Although the number of customers using electric heat as a supplement to conventional heating systems cannot be counted, the company believes there has been a substantial growth in this category. Many homeowners use portable electric heaters in hard-to-heat areas or as an extra supply of heat in the bathroom.

The use of electric units for the complete heating of remodeled attics or add-on rooms is also popular. Supplemental electric heat is also being used by commercial customers to a greater extent. For example, one 40-unit motel heated with a conventional fuel system has electric heaters in all the bathrooms.

Its Home Show display booth also featured electric heating as one of the requirements necessary for a home to earn an all-electric Gold Medallion.

The company late in 1959 modified its residential electric service rate to include a special low step which makes the rate advantageous to customers who heat their homes electrically. For homes heated principally by electricity, a budget billing plan is available for the convenience of customers who desire it. The plan spreads the cost of electric service - including heating over an entire year's bills.

chapter notes

The Executive Committee of the Wisconsin Chapter, A.I.A. met on August 16, 1963 at the Oshkosh Country Club, Oshkosh with the following present: Allen Strang, Leonard Reinke, Mark A. Pfaller, Lawrence Bray, Joseph Durrant, Paul Graven, Roger Herbst, Emil Korenic, Robert G. Sauter, Al. Seitz and A. A. Tannenbaum.

Section Directors reported for their respective groups. Most of the Sections have been inactive during the summer. Programs have been developed for September in the Western and Southeast Sections.

The recommendation of the AIA-AGC Liaison Committee on Temporary Electrical Installations and Unit Cost Checklists were reconsidered. Recommendations to the membership will be forthcoming.

The inclusion of a major medical plan clause to the present Chapter Hospital and Health Insurance was approved. This new clause will greatly increase the benefits of the existing program. The increase in cost is relatively nominal.

Approval was given to the Professional Practice Committee to proceed with the

technical aspects of its work with the assistance of the Chapter Counsel, Gerald Rice. The Committee and Mr. Rice will develop recommendations involving Architects liability, definition of supervision and will consider a model Wisconsin contract.

Mr. Pfaller, Executive Committee liaison to the Convention Committee, reported on progress of the 1964 convention. The dates have been affirmed as April 27 through May 1, 1964 and the location is established at Lake Lawn Lodge, Delavan. Speakers are being considered. Special emphasis will be placed on new products and construction methods at the convention.

The Chapter will sponsor a one day seminar on the Critical Path Method of Construction in November. The entire program will be directed toward the Architect. One half of the day will be spent on office organization and the balance on construction procedures.

No new candidates for Fellowship will be nominated by the Wisconsin Chapter this year.

In accordance with the statutes of

this state, The Executive Committee nominated candidates to the Wisconsin Registration Board of Architects and Professional Engineers.

Formation of a new Wisconsin Chapter, A.I.A. Section was discussed at length. The area considered will include Eau Claire, Chippewa Falls, Wausau, Wisconsin Rapids, Nekoosa, Stevens Point and Marshfield. This would necessitate splitting both the Western Section and the Northeast Section. However, it would be advantageous for these remote areas to have smaller geographical distances to cover to attend meetings. If the response from the members in these areas is favorable, a new Northwest Section will be formed and forwarded for approval immediately.

The Wisconsin Chapter, A.I.A. will exhibit at the Wisconsin Association of School Boards Convention in Milwaukee in January, 1964.

The Chapter will undertake both an Honor Awards Program and a Draftsmen's Competition late this year.

The meeting was adjourned at 4:40 p.m.



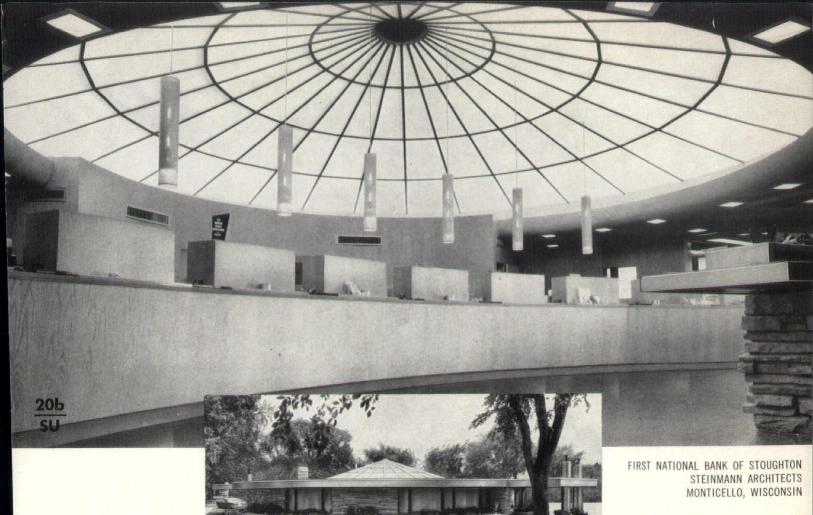
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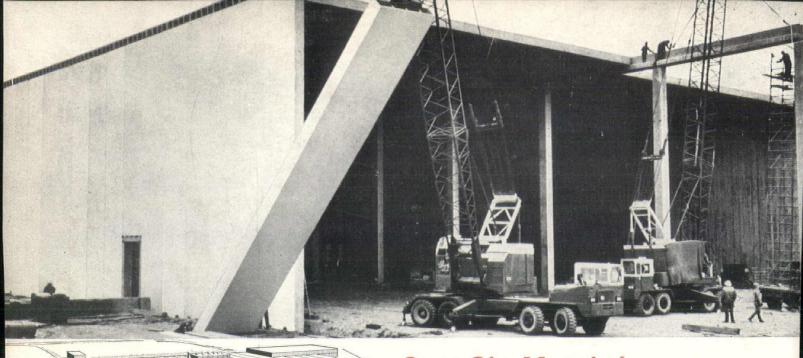
Let Super Sky's engineers help you plan your next project from drawing board to completion. From *your* plans we will design, fabricate and erect the skylight . . . and even *guarantee* it! Standard domes to 30 ft., as well as custom units, are available. Write for detailed drawings, engineering data, estimates and suggestions. No obligation, of course.

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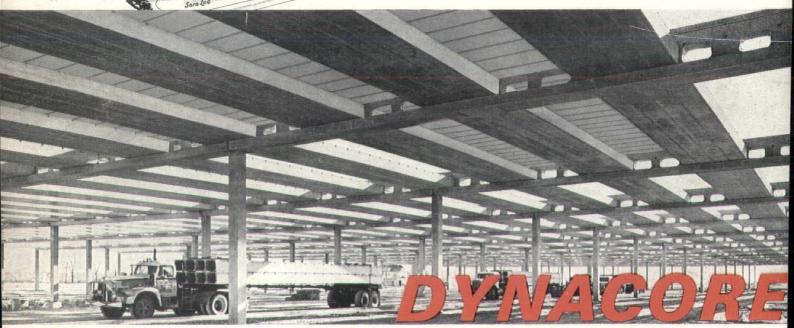
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