

LONG RANGE DEVELOPMENT PLAN
SANGAMON STATE UNIVERSITY

SPRINGFIELD ILLINOIS





SANGAMON STATE UNIVERSITY
LONG RANGE DEVELOPMENT
PLAN - TOTAL CAMPUS
740 ACRES

Scale: 1 Inch = 400 Feet
0 400 800

A



THE HONORABLE RICHARD B. OGILVIE
GOVERNOR
STATE OF ILLINOIS

BOARD OF REGENTS

DR. GORDON H. MILLAR
CHAIRMAN

MR. J. ROBERT BARR	DR. KENNETH LUND
MR. GUY E. CORNWELL	MRS. THOMAS D. MASTERS
DR. PERCY L. JULIAN	HON. RAY PAGE
DR. A. L. KNOBLAUCH	MR. LOREN M. SMITH
MR. ANTHONY VARESE	

DR. JAMES B. HOLDERMAN
EXECUTIVE DIRECTOR - BOARD OF HIGHER EDUCATION

DR. FRANKLIN G. MATSLER
EXECUTIVE DIRECTOR - BOARD OF REGENTS

DR. ROBERT C. SPENCER
PRESIDENT - SANGAMON STATE UNIVERSITY

MURPHY, DOWNEY, WOFFORD & RICHMAN / ARCHITECTS
6124 ENRIGHT AVENUE | ST. LOUIS, MISSOURI 63112 | (314) 726-6082

8 December 70

Dr. Gordon H. Millar,
Chairman
Board of Regents
909 Myers Building
Springfield, Illinois 62701

LONG RANGE DEVELOPMENT PLAN
FOR
SANGAMON STATE UNIVERSITY
SPRINGFIELD, ILLINOIS

Dear Dr. Millar:

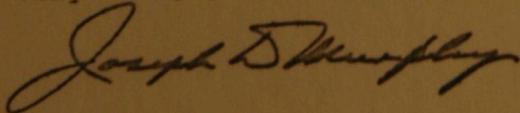
On behalf of all who shared in the design of this new senior university for the State of Illinois, I take pleasure in presenting to you the accompanying document, the "Long Range Development Plan - Sangamon State University - Springfield, Illinois".

Since August 1969 the architects and their consultants, in a most earnest collaboration with President Robert Spencer, the administration, the faculty and student representatives of this and other schools, have developed this plan.

Following periodic reviews, the plan was adopted, in principle, at the meeting of the Board of Regents in July 1970. The construction of interim facilities for 600 students, integrated in the plan during its development, was completed in September 1970.

We are most grateful to the Board of Regents for the trust they have placed in us. We have sincerely tried to give expression to the aspirations of the board as we understood them. For the students and teachers of years to come, we hope that this design will prove to be functional, efficient and flexible, safe, comfortable and economical, and above all, beautiful. We hope that it will contribute significantly to the educational objectives of the State of Illinois.

Very truly yours,



Joseph D. Murphy

JDM:mca

LONG RANGE DEVELOPMENT PLAN
for
SANGAMON STATE UNIVERSITY
SPRINGFIELD, ILLINOIS
1970

CONTENTS

TEXT	ILLUSTRATIONS
PART I THE NEED AND THE CHALLENGE	
A. Background of Reasons for Being	Photos: New Salem on the Sangamon Old Capitol Present Capitol House by F. L. Wright
B. New and Expanded Campuses in Illinois	
PART II THE PROGRAM AND THE LAND	
A. The Academic and Space Program	Photo on the Site
B. Summary of Academic Space Requirements	
C. The Land	Map - City of Springfield
PART III THE LONG RANGE DEVELOPMENT PLAN	
A. Planning Objectives and Design Solution	Air Photo of Site Perspective - Ring Road Photo of Model
B. Use of the Land	Plan - Land Use 1" = 1200'

TEXT

ILLUSTRATIONS

PART III THE LONG RANGE
DEVELOPMENT PLAN
(continued)

C. Central Plaza, Level 2	Photo of Model Section	
	Perspective - Plaza	
	Plan - Plaza Level	
Concourse, Level 1	Perspective - Amphitheater	
	Plan - Concourse Level	
	Perspective - Concourse	
D. Vehicular Circulation & Parking	Plan - Major Roads	1" = 800'
	Section	
	Plan - Emergency Roads	1" = 800'
E. Pedestrian and Bicycle Circulation	Plan - Walking & Bicycle Routes	1" = 800'
F. Sight and Sound	Perspective - View Toward Capitol	
	Plan - Open Views	1" = 800'
G. Construction and Materials		
H. Utilities and Power	Plan - Major Lines	1" = 800'
I. Landscaping and Plant	Perspective - toward Central Plaza	
	Plan - Plant Materials Section	

PART IV STAGES OF DEVELOPMENT

A. Interim Construction	Air Photo of Site	
1st Part - Completed 1970	Plan	1" = 800'
2nd Part - Target 1971		
B. Permanent Construction		
PHASE I	Plan	1" = 800'
PHASE II	Plan	1" = 800'
PHASE III	Plan	1" = 800'
PHASE IV	Plan	1" = 800'
PHASE V	Plan	1" = 800'
FUTURE GROWTH	Plan	1" = 800'

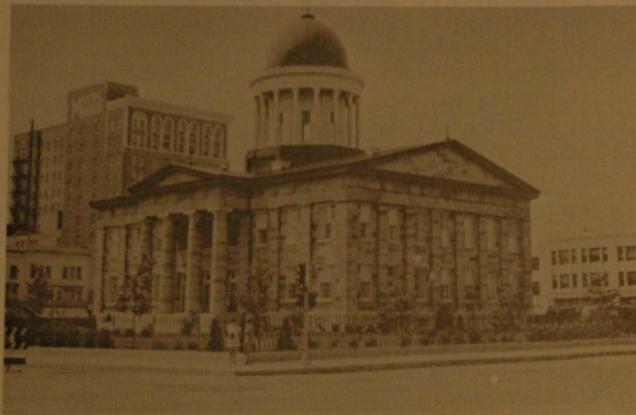
PART V SUPPLEMENTARY INFORMATION

- A. Appendix 1 Summary of Program
Appendix 2 Qualities Determining the Type of
Trees Proposed
- B. Supplementary Reports, Drawings and Other Pertinent
Material
- C. The Planning Consultants

Folded inside front cover Plan A at 1" = 400' showing
THE LONG RANGE DEVELOPMENT PLAN - TOTAL CAMPUS - 740 ACRES.

Folded inside back cover Plan B at 1" = 200 showing
THE LONG RANGE DEVELOPMENT PLAN - ACADEMIC CAMPUS - WITHIN
THE RING ROAD. Other plans, sections and drawings are
composed with the text, principally under PARTS III and IV.

New Salem, on the
Sangamon River
1835



Old Capitol
Springfield 1837



New Capitol
Springfield 1876

House by
Frank Lloyd Wright
Springfield 1903



PART I - A.

In the summer of 1969 the Board of Regents selected Dr. Robert Spencer, Dean of the Graduate School at the University of Rhode Island, as the founding President of Sangamon State University. President Spencer assumed his duties September 1, 1969, and immediately began recruiting staff members and developing an academic program.

Sangamon State University was opened in the interim facilities in September 1970, on a 740-acre tract west of Lake Springfield, in Woodside Township, Sangamon County. Lincoln Land Community College was opened in the fall of 1969 in temporary buildings on a small leased tract near U.S. Highway 66 south of Springfield. Its permanent site will be 360 acres bordering the University property on the south.

Sangamon State University is governed by the Board of Regents of the State of Illinois. This Regency University System also includes Illinois State University, at Normal, and Northern Illinois University at DeKalb. Decisions by the Board of Regents in the areas of operating and capital budget, academic program and long-range planning also require approval by the Illinois Board of Higher Education.

Authority for the internal organization of Sangamon State University is vested in the office of the President, with appropriate responsibilities delegated to the Vice President for Academic Affairs, the Dean of Student Services, the Vice President for Business Affairs, and the Director of University Relations.

PART I - THE NEED AND THE CHALLENGE

B. NEW AND EXPANDED CAMPUSES IN ILLINOIS

The rapidly growing college-age population, with its claims for access to higher learning, has confronted the American educational system with unprecedented challenges to develop new kinds of teaching facilities and ideas. In Illinois the special conditions of campus design range from the high-density institution on confined urban space to the outlying tract with its greater freedom for dispersed layout. Development programming has been especially affected by the emergence of the commuter student.

A large number of commuter students imposes the requisite for parking lots or structures, with a proportionate reduction in residential buildings. Aside from the matter of housing the student or storing his vehicle, the development program has to consider the more subjective need of incorporating into the physical design and student activities a sense of identity that contributes to the feeling of "belonging". The state universities of Illinois, some expanded from existing institutions and others founded on new sites, have responded to these needs with a variety of design innovations, each growing out of its particular circumstances.

Two of the new universities, at Chicago and at Edwardsville, were planned as commuter institutions, with no resident housing on either campus. Construction at both sites was begun in 1963, following voter approval in 1960 of the universities bond issue referendum.

THE UNIVERSITY OF ILLINOIS AT CHICAGO CIRCLE

This new commuter campus, first occupied in 1965, serves Illinois residents in the Chicago area. Its 106-acre campus is just eight blocks west of the Loop area. The 18 buildings in the 40-acre academic core and the campus itself were designed by Skidmore, Owings and Merrill. With enrollment expected to exceed 25,000 by 1974, this is necessarily a high-density campus. University Hall, the staff and administration building, has 28 stories and basement,

PART I - B.

and one unit of the Chicago Circle Center building for educational, recreational and service functions, has eight stories and basement. To relieve congestion between buildings, a two-level walkway crosses the campus from north to south. Classrooms are in three-story buildings grouped at the heart of the campus. Because of the need to keep the movements of thousands of students at the minimum between classes, this circulation is relatively confined, and it is the instructors who walk the longer distance between classes, from their offices in University Hall to the lecture and class rooms.

The highly urbanized character of the Chicago Circle campus is emphasized by the fact that the university was named after a traffic interchange. It is at the intersection of the east-west Dwight D. Eisenhower (formerly Congress) and the north-south Dan Ryan expressways. This is the site proposed by Chicago's great planner, Daniel H. Burnham, for a civic center. Both students and faculty commute, by Chicago Transit Authority trains (a special station was constructed by CTA at the north edge of the campus), by five bus routes and by automobile. The campus has six parking lots around its perimeter.

To reduce maintenance costs of the highly exposed elevated walkway, it was constructed of Minnesota granite, flame-cut in 17-ton slabs. At midpoint across the campus, the upper level of this walk opens into a Great Court with open amphitheater and four exedrae, all of granite, that provide outdoor forum facilities and lounging places. The granite paving slabs serve as the roof of the ground-floor lecture halls. Concrete is the prevalent building material elsewhere.

Chicago Circle is the outgrowth of the University of Illinois Chicago Undergraduate Division, opened on the Navy Pier in 1946 as a temporary facility to accommodate the need of returning World War II veterans for college education. This was in operation for 20 years, until the new campus was ready.

PART I - B.

SOUTHERN ILLINOIS UNIVERSITY, Edwardsville

This new campus, 20 miles northeast of St. Louis, Mo., serves a student body that commutes within a radius of about 50 miles, with some enrollments from Missouri.

The university came into being in 1957 in two urban locations--the former Shurleff College at Alton, which it leased when the college was obliged to close, and in an old senior high school building at East St. Louis. Both are still in use. In 1963, the first buildings were started on the new campus, a site of 2600 acres of woodland and former farm tracts just southwest of Edwardsville. Architects Hellmuth, Obata and Kassabaum designed the nucleus cluster of six buildings around a landscaped plaza near the center of this area, with abundant space for expansion in all directions. Parking is on a fan-shaped layout of eight surface lots a short distance northeast of the cluster, on University Drive, an internal highway with access at both ends via Illinois Route 157.

EXPANDED CAMPUSES

The phenomenal growth of Illinois State University, at Normal, and Southern Illinois University, at Carbondale, from regional teachers' colleges has demonstrated the need to provide for outgrowth and flexibility in campus design. In both instances, the older parts of the campus lent themselves only in limited ways to adaptive modification, but the landmark quality of the buildings and campus spaces was recognized and used to advantage.

Both these universities have extended their campuses onto new land, either into open country or into nearby neighborhoods for redevelopment, and have made judicious additions within the original clusters. At Normal, a new campus is proposed by architects Leo A. Daly Company to adjoin the original cluster on the north. The plan calls for a somewhat tighter but more casual arrangement of academic structures in the new area, with separate pedestrian and vehicular circulation, and for new parking structures of up to five levels. Seven new residence halls would be attached to garage structures at the north end of the campus.



PART II - THE PROGRAM AND THE LAND

A. THE ACADEMIC AND SPACE PROGRAM

A surveyor's stake, standing in the furrowed ground of an Illinois prairie, announces that the co-ordinates of plan upon plan, meeting upon meeting, drawing upon drawing, and survey upon survey have focussed on this as the point around which all the activities of a new university will revolve.

The length of pine 2x2, with a scrap of colored plastic tied to its tip for visibility at a distance, stands for Sangamon State University even when the institution exists only as a legal entity and an educational concept. It signalizes that commitments to certain teaching procedures and learning experiences have been adopted as convictions, and are about to be carried out. In physical terms, it implies a paved plaza in the immediate area, a Library-Learning Resource Center a short distance to the northeast, Administration to the south, Auditorium to the northwest, and all the facilities to be used by 12,500 students at specified sites at various distances from this marker, with more than 500 first-year enrollees in interim facilities.

Since the campus design of a university has but one purpose, to serve the educational design, it follows that the master plan for the academic program must establish determinants of the structure and character of the environmental setting.

The genesis of the University's intellectual spirit is in its educational master plan. It is the architects' obligation to recognize the explicit guidelines and the implications of this plan, and to build an environment that will further the program, participate in the diverse life of the campus, respond readily to future needs to expand and modify the physical plant, and contribute to the institution's identity.

The educational design objective, fully described in the 57-page Academic Plan of July 1970, need be summarized here only in terms of the reference points that it establishes for the construction and space program. Its goals are concisely stated by President Spencer:

PART II - A.

"The primary commitment at Sangamon State University is to teaching, to education in public affairs, and to creating an environment in which vocational objectives may be pursued in a manner consistent with liberal learning ... We feel the need of a quality of intimacy, of concern for the dignity of the individual, and natural, easy and attractive means of sharing with a few or many, the intellectual resources of this community."

"We intend to build a teaching institution, an institution in which the style of inquiry, dialogue with students, the style and method of addressing problems and seeking answers, is productive of the three ends of humane learning, literacy and culture ... This means we shall ask our students to combine their pursuit of the sciences, the social sciences and the humanities with direct concern about where this knowledge will lead them, and what its implications are for personal growth and community and human welfare ... The University is as concerned with the quest for knowledge and wisdom as it is with finding answers."

The Academic Plan emphasizes the concept of the new campus as "a community of learning" and "an educational city". It defines the student-faculty relationship as one of working together, "the former contributing primarily energy, idealism and a questioning spirit, the latter adding maturity and perspective to the tasks of learning". It calls for an outreach from the campus into the public world. This means more than the familiar instance of faculty members serving as consultants to government and industry, or of students being assigned to project laboratory work under the auspices of special grants. The program sets up a degree requirement to expose all students "to the examination and study of problems facing the public", which includes a requisite of off-campus, full-time employment or involvement in "teaching, business, government or community service or any other activity that contributes to the student's education".

PART II - A.

Because Sangamon State University is established for the culminating years of undergraduate work and for the early years of graduate programs, its student body will have a level of experience that permits a more mature relationship with the faculty than usually is experienced in the preceding years of study. At this stage, casual, spontaneous contacts outside the classroom and conference room have particular value for the interchange of questions and ideas. This is consistent with the position that the arrangement of books, periodicals and other learning resources in the library, too, should be open to casual, spontaneous contacts in spacious, well-lighted quarters that encourage browsing and discovery.

Also appropriate to the University's programs is a similar kind of interchange between the campus and the Illinois Capitol and Sangamon County Seat, only a few minutes away with its resources of government, politics, community affairs, landmark architecture, environmental problems and historical associations. This calls for circulation of students into the city, and of Springfield area residents into the campus for mutually stimulating activities.

All these features of the Academic Plan support its description of the Sangamon State University campus as an "educational city", with street circulation, architecture, landscaping and activities as much as possible like those of a well-conceived town. It moves positively away, in both program and physical plan, from the tradition of the academic realm cloistered from the outside world.

This conception of a university campus plan addressed to the needs of good community life takes note of an obvious shortcoming of the conventional campus cluster of academic buildings, which relies on an unpredictable and too often an unstable combination of Providence and Private Enterprise to move into the fringe areas with coffee shops, eating places, recreation and convenience shopping appropriate to an environment of higher education. The plan takes exception to this haphazard condition, and also to the more recent attempt to meet these needs within the campus by putting them

PART II - A.

all into one building and calling this a "student union". The segregation of these communal activities in one building requires a complicated structure isolated from other academic and educational traffic, and so large that it tends to institutionalize the simple amenities of bowling, buying a book, getting a cup of coffee or sitting for a haircut. The most cursory exploration of a campus with such a facility finds students seeking out the same activities off the campus, and it could be argued that they are thus renewing associations with the kind of community life that they miss in the campus confines.

With these values in mind, this plan states that there will be no student union building at Sangamon State University. The facilities usually concentrated there will be dispersed in town-like variety, convenience and scale at various places about the academic center and in other areas of the campus. The educationally sound purpose of this is to encourage informal associations of students and teachers, impromptu conversation while the iron is still hot from classroom discussion, and constructive inter-disciplinary mixes.

The automobile is very explicitly to be reckoned with in the planning of a campus to which a large proportion of students will travel each day in their own cars or by public transportation, and which plans active programs of continuing education. The problem is not only to lay out trafficways and parking lots to accommodate the vehicles, but to provide commuting students with a sense of physical place on the campus. The long, often desolate hours between widely spaced class sessions, when the commuting student has no place to go but to his automobile for study and rest, drain his energy and zeal. Quiet places for uninterrupted concentration are provided throughout the campus to meet the need for working facilities, and the scattered coffee shops and recreation rooms offer agreeable diversion from study and laboratory.

PART II - A.

Although the University's service in its early years must be primarily to the Springfield area, its subsequent reputation will depend on its attractiveness to outstanding faculty, students and staff from farther afield in Illinois and throughout the country. The quality of the working environment is important to all the campus population, and standards of housing will be crucial inducements to those who would come as residents. There are possibilities that a substantial portion of the University's housing needs may be served by private developments in the vicinity of the campus, but hardly to the extent that eventually will be necessary. Estimates are that housing may be required by some 8,000 persons.

See Part V, "Supplementary Information".

PART II - THE PROGRAM AND THE LAND

B. SUMMARY OF ACADEMIC SPACE REQUIREMENTS

Below is a schedule summarizing requirements of the ten major activities needing space in the permanent academic buildings, as shown on page 36 of the Program.

The net and gross space requirements for Sangamon State University in the 1982-83 academic year are shown. Net to gross ratios used for these conversions are as follows: classrooms - 1:1.5, laboratory and research - 1:1.64, faculty offices - 1:1.5, learning resource center - 1:1.32, decentralized study facilities - 1:1.5, theater and lecture facilities - 1:1.67, administrative offices - 1:1.5, student services - 1:1.70, physical education - 1:1.42, and plant maintenance facilities - 1:1.33.

	Square Feet	
	Net	Gross
1. Classrooms	64,300	96,450
2. Laboratories & Research	390,380	640,225
3. Faculty Offices	182,578	273,875
4. Learning Resource Center	187,975	248,200
5. Decentralized Study Facilities	36,000	54,000
6. Auditorium & Lecture Facilities	49,325	82,375
7. Administrative Offices	94,200	141,150
8. Student Services	102,796	174,750
9. Physical Education	66,350	94,200
10. Plant Maintenance Facilities	60,765	80,700
Grand Total	1,234,579	1,885,925

Note a) The above Summary of Academic Space Requirements is for permanent buildings and does not include the Interim Buildings, comprising approximately 112,000 gross square feet, nor does it include residential buildings.

Note b) See Part V, "Supplementary Information" for a summary of each of the ten major items of academic requirements.

PART II - THE PROGRAM AND THE LAND

C. THE LAND

Most of the Sangamon State University campus acreage has been under cultivation for many years. The highly productive soil is part of the Illinois prairie, a generally flat terrain with occasional shallow ravines that are natural drainage channels. Most rural tree growth of this area is along the ravines, bordering creeks, rivers and lakes, and in farm yards.

The ancient ice sheet that passed over this region laid down a considerable thickness of glacial till, densely packed by the weight of the ice and overlaid by shale deposited as the ice sheet withdrew. Bedrock in this area is usually sandstone and limestone, with occasional coal seams and layers of clay. The top soil stratum is loess, which eons of wind deposits built up to a thickness of about 10 feet. In upland areas, such as the campus site, the depth to bedrock is about 30 feet. Ground water is rather close to the surface.

The flatness of the land and the looseness of the upper soil layers impose structural conditions, while also offering exceptional design opportunities.

The soil conditions are limiting factors on building height and structure. The loess layer will support lightly loaded buildings, tolerant of minor earth movements, on spread footings or slabs. Pilings driven into the dense stratum of till or down to bedrock are necessary for tall buildings. These general conditions were found in a pattern of borings in the central campus area. Additional borings can determine the support characteristics of each site.

Qualities inherent in the site provide design opportunities, inviting sensitive architectural response to the gently rolling prairie, to the nearness of Lake Springfield, and to the long established pattern of farm life in the area. The prairie has its regional character, just as do the mountain ranges, the forests,

PART II - C.

the deserts, the lakes and the dunes of other parts of the country. The character of the natural landscape contributes inimitably to the identification of a place as distinct from other places. Buildings and related structures, and the campus layout itself, should be not only harmonious with each other in form, proportions and materials, but should be composed gracefully and functionally with the landscape.

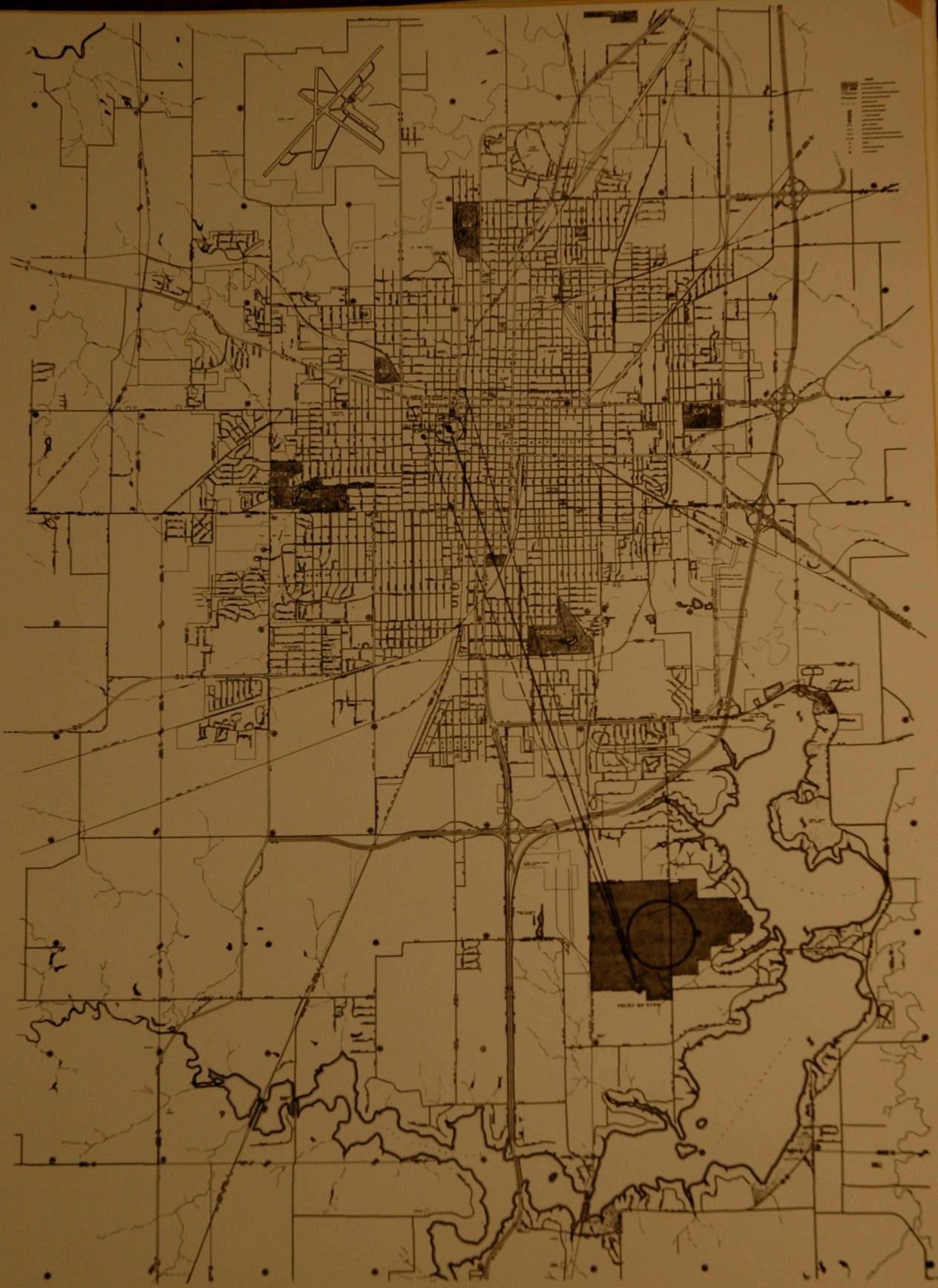
Even a low structure stands out prominently on this nearly level terrain, and a tall building can be almost startling in its interruption of the horizontals that extend themselves along the surface of the land, penetrating as it would the rows of tree-tops and the broad skyline.

All these features support the recommendation that buildings be of an average height of four stories, of materials that are harmonious with the earth and natural colors of this area, and with a prevalence of pitched roofs for variety on the skyline and interplay with tree forms.

A further advantage of the flat site with its bounty of rich soil is the use that can be made of excavated material to build hillocks and berms to subdue noise from highway and parking areas, as well as to introduce landscape features. A berm that is only three or four feet high, built up in an almost imperceptible swelling of the natural lay of the land, can have the same effect as a much more pronounced elevation in hilly conditions.

The nearness of Lake Springfield, with an inlet that reaches toward the campus site, suggests that this inlet be extended to connect with a small lake excavated inside the ring road. This would provide a valuable amenity both for recreation and for visual variety within the campus development.

See Part V, "Supplementary Information".





PART III - THE LONG RANGE DEVELOPMENT PLAN

A. PLANNING OBJECTIVES - DESIGN SOLUTION

PLANNING OBJECTIVES

In the design of a new university, after the academic program is stated and the literal space requirements are set forth, the urgent question is: What physical form should this new university take, what form of buildings and grounds will contribute to, and not get in the way of the ultimate aim - to learn? With noble and high hopes, a fine program, and a beautiful site, ideally, what form should be aspired to?

1. The design objective is to create a university environment that achieves, as nearly as possible, the close-contact conditions of that familiar basic teaching and learning situation -- a log with a teacher at one end and a student at the other. To keep distractions, inconveniences and discomforts at the minimum is to fortify concentration on the work in which the student makes so great an investment. At the same time, the student is deprived of valuable experience in working and developing his individuality under the actual conditions of life if he is too securely insulated from them in his learning years. The provisions in the educational program of Sangamon State University for course work off the campus have encouraged the planning consultants to think of the University as a place of specialized effort, where every possible means is offered for intensive study, and for the exchange and enlargement of ideas. The kinship of the campus plan with town layout maintains references to urban life, but on a level that proposes certain ideals of urbanity, as the academic disciplines propose scholarly ideals.

The architects believe that the architecture of Sangamon State University will succeed in proportion to its response to human as well as to functional needs. The architectural composition and detailing should be of high quality, which does not mean

PART III - A.

that it need be physically dominant. Rather, the planning consultants strongly favor an integration of structures and landscaping with analogies to good conversation -- well-modulated, stimulating and varied from one individual to the next. The result by 1982 should be a physical environment that gives the impression of being at home in its site and climate, and of being appropriate to the aspirations of the University.

2. To approximate this objective, in the reality of changing seasons, weather, cars, numbers, noise, physical needs and myriad other conditions, is the task of those responsible for developing these plans.

3. The design sought for is essentially a close grouping of low rise buildings, academic and residential, among masses of high trees in an arrangement conducive to a non-formal but orderly composition, permitting a variety of landscaped courts, and giving precedence to the convenience and pleasure of the individual.

4. The effect of informality in the disposition of buildings requires an underlying discipline in the site plan that will make for clear orientation. Within the cluster of academic and related buildings, this can be achieved through the combination of building design and circulation system -- certain buildings of landmark character distinguishing their area of the campus from other areas, and a composition of walks and bicycle paths clearly relating to the central plaza and other nodal points. The internal order of main axes and tributaries needs to be structured within a still stronger approach system of main roads, pedestrian ways and bicycle paths that defines the traffic patterns and imposes a sense of overall rational design.

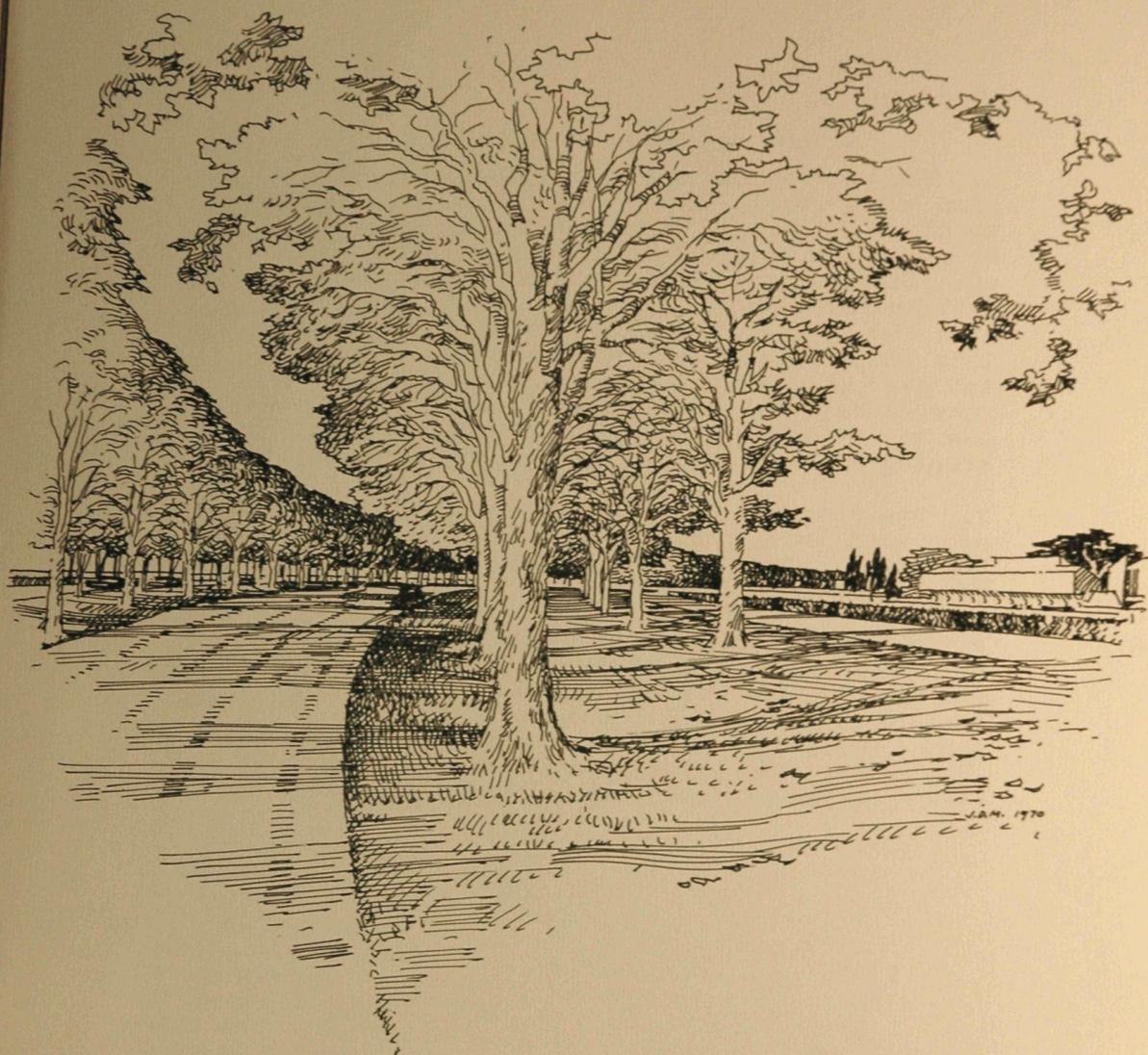
5. Within the total campus, free of the car, the pedestrian's convenience, comfort, safety and pleasure is a prime design consideration.

PART III - A.

6. The program for the long-range development plan calls for an urban campus in an open setting, so planned that all parts are easily accessible by walking or bicycling, free of conflict with auto circulation; that the auto circulation and parking are direct, convenient and unobtrusive; that the academic buildings are modular, flexible and compactly organized for ease of change and ease of communication among all disciplines; that educational resources and student services are centrally located, and that trees and landscaping are an integral part of the total design.

7. The program also requires that this campus shall open with facilities for over 500 FTE students by September 1970, and that it shall provide for 12,500 FTE students by 1982.

8. While the program logically does not require planning for more than 12,500 FTE students, there is the possibility that future educational needs might require facilities for many more students. This has been seriously considered, and the plans can accommodate a much greater population without loss of the conveniences and amenities of the basic plan.



View from the Ring Road looking toward
the gymnasium - swimming pool building.
Planting obscures most of the parking.

PART III - A.

DESIGN SOLUTION

The uses of a long-range development plan for the new university that is to come into being on 740 acres of open farm land are:

- a) To construct a vision.
- b) To construct a physical plant that gives form to the vision.
- c) To establish educational and architectural reference points for the future.
- d) To provide flexibility for future planning under new circumstances.

1. The circular plan of Sangamon State University grew out of the circumstances that this "community for learning" has in common with a town. The community concept suggested a stimulating mix of activities for students, faculty and visitors at the core, and an agreeably urbane approach by way of a ring road.

2. The most formal element in the design is the ring road and the impressive avenues of trees composed with it. In addition to the thoroughly functional value of bringing the students and faculty most directly to their destinations, the ring road serves to define the academic heart of the campus without restricting it, to provide a magnificent approach to all parts of the campus, inside and outside the ring, and to mark in a distinctive way this particular campus on this particular site. This formal element is powerfully defined by seven rows of trees that flank the lanes of a divided highway, with a bicycle trail along its perimeter. The outermost ring is 1650 feet from the center of the campus. All other trees on the site are informally grouped.

3. Turnoffs into the academic campus lead directly into parking lots with space for 6000 cars, each within a short walk from the buildings it serves. From here, traffic into the

PART III - A.

core is by pedestrian ways up to the central plaza. Parking capacity can be doubled by adding one deck to the ground-level space, or practically doubled on grade, should compact cars become common.

4. All academic buildings for 12,500 FTE students are within 700 feet of the campus center, or three minutes walking time, and all buildings are within six minutes of one another.

5. The modular concept of the learning program, which permits innovations in class organization and facilitates the spontaneous creation of courses in public affairs, is reflected in the architecture. The buildings are arranged on the geometric site plan of 30-60 degree angles inherent in the hexagon. The buildings, in general, are rectangular in form using a basic module of five feet and a structural module of 20x30 feet spacing between columns. Within these disciplines are many possibilities for informality of arrangement, for variety, interest and surprise. It is proposed that, except for buildings of special design such as the auditorium and gymnasium, all buildings be modular and of skeleton frame with no bearing walls, to allow for flexibility of use and easy, economical expansion.

6. It is recommended that buildings be of brick in medium to dark russet tones, of warm-colored concrete or stone, with pitched roofs of either fine clay tile or copper, and in average heights of four stories. It can be seen from the section drawings that such a composition of shape, texture and color would allow a gracious inter-play with tree forms -- the trees inside the ring being informally disposed among building clusters.

7. The center plaza is an important focal point of academic and other activities. The most prominent architectural features are the Library-Learning Resources Center, Administration Building, Auditorium and the space itself, which is given a sculptural quality by pavement patterns, generous steps, ramps and other gradients, landscaping, and a sunken outdoor garden assembly area.

PART III - A.

8. Campus lighting is by high-stem units among the trees of the ring road and the parking lots, with lower and more numerous standards that also serve as decorative elements along the pedestrian ways and bike paths. An increased intensity for gaiety and sparkle is provided in the plaza. The ceremonial road to the auditorium, administration building and center plaza and concourse will be illuminated by low lights with minimum emphasis on the source.

9. Services usually termed "non-academic" -- coffee shops, eating places, lounges, movies, art galleries, recreation facilities -- are expected to contribute to the learning experience at Sangamon by encouraging a congenial inter-mix of students and faculty at many points in the walkways, arcades, concourse and in off-corridor spaces. These are generously provided for in the plaza area, the upper level; in the concourse area, the lower level; and also within the more specialized outlying building clusters.

10. A system of tunnels connecting all major buildings is an important feature of the circulation system. The tunnels will serve as broad concourses for internal pedestrian circulation, with escalators to the campus level and elevators to upper floors of the higher buildings.

11. The same tunnels will carry gas, electric and telephone lines and power lines for heating and ventilating -- with capacity beyond the 1982 anticipated campus, all easily accessible for low-cost maintenance. Supplies will be distributed through the same tunnels from a central receiving station, and waste materials, compressed and packaged, will be removed through the tunnels on carts. Garbage will be disposed of through the sewers. The major walks will be used for emergency access by automobile, ambulance or fire trucks, or special-handling delivery such as for laboratory equipment.

12. Noise will be kept to a minimum by placing cooling towers on three strategically placed roofs, one near each end of the concourse and one above the library, walled in with acoustical material.

PART III - A.

Berms and buildings will serve as acoustical barriers to sound from the parking lots and the more distant and faster ring road traffic.

13. Heavy equipment and the plant nursery will be at the corporation yard, outside the ring road. In other exterior areas provision is made for playing fields, residential developments in low housing clusters, and campus expansion, when necessary.

14. This plan is designed to provide for 12,500 FTE students by 1982, but it should be noted that it actually provides for a much larger population. Part-time students, faculty, staff, families and support personnel can enlarge this number to 20,000 persons or more. Should the University need to expand for a larger student body and corresponding increase in other personnel, the plan provides land reservations within and outside the ring road for additional construction, and it allows for enlargement of some buildings within the central cluster.

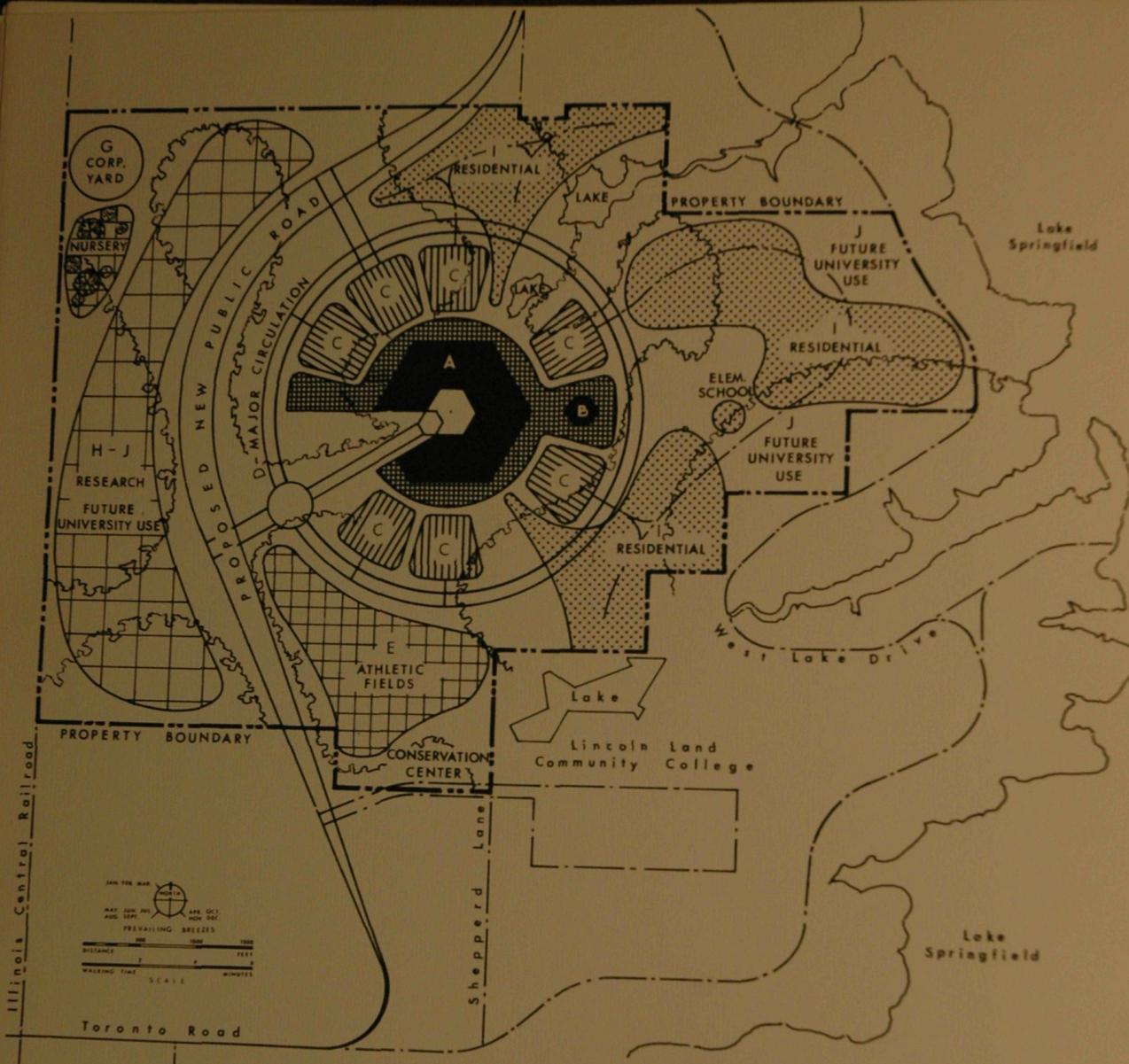
A development master plan is detailed in its provisions for immediate needs and for those of the foreseeable future. For the more distant future, it offers design concepts intended as guidance for long-range growth in harmony with the basic scheme, even when future facilities may need to be quite different from those now envisioned. The planning consultants have directed their efforts at a Long Range Development Plan of both conceptual soundness and flexibility. They recommend that it be subjected to periodic scrutiny, so that the broad directions of the plan may be maintained. They recommend that the development plan be kept readily available to all those who may be involved in planning the University's activities and programs.

Plans: Within the front cover of this report and easily opened out, Plan A at 1" = 400', shows the LONG RANGE DEVELOPMENT PLAN - TOTAL CAMPUS - 740 ACRES.

Within the back cover, Plan B at 1" = 200', shows the LONG RANGE DEVELOPMENT PLAN - ACADEMIC CAMPUS - WITHIN THE RING ROAD.

See Part V, "Supplementary Information".





PART III - THE LONG RANGE DEVELOPMENT PLAN

B. USE OF THE LAND

In accord with planning guidelines and facility space requirements noted in the Program, assumptions have been made concerning the land use requirements for the new campus. Land use implications for academic purposes are based upon development of an average of three to four story buildings and the use of 34 percent land coverage, resulting in a fairly compact campus center possessing physical relationships of an urban scale. Further assumptions have been made concerning the residential facilities, which presume a low rise walk-up type of housing rather than a high rise dormitory configuration. Other assumptions were made concerning the requirements for athletic fields, continuing education center, conservation or landmark area, research space, and other suggested land uses.

A general assignment of land use by acres follows:

Key	Description	Acres
A	Academic and academically related buildings.	50
B	Future Expansion of academic areas	40
C	Parking for 6,000 cars on grade serving the academic areas - future expansion to 12,000 cars by adding average of one deck	50
D	Major circulation and related open space	100
E	Athletic fields, parks and recreation areas	60
F	Continuing Education Center Conservation Center and related parking	20

Key	Description	Acres
G	Physical Plant Services, Corporation Yard	10
H	Research and Plant Materials Nursery	70
I	Residential Facilities and related parking	240
J	Reserved for Future University Use	100
Total Acres		740

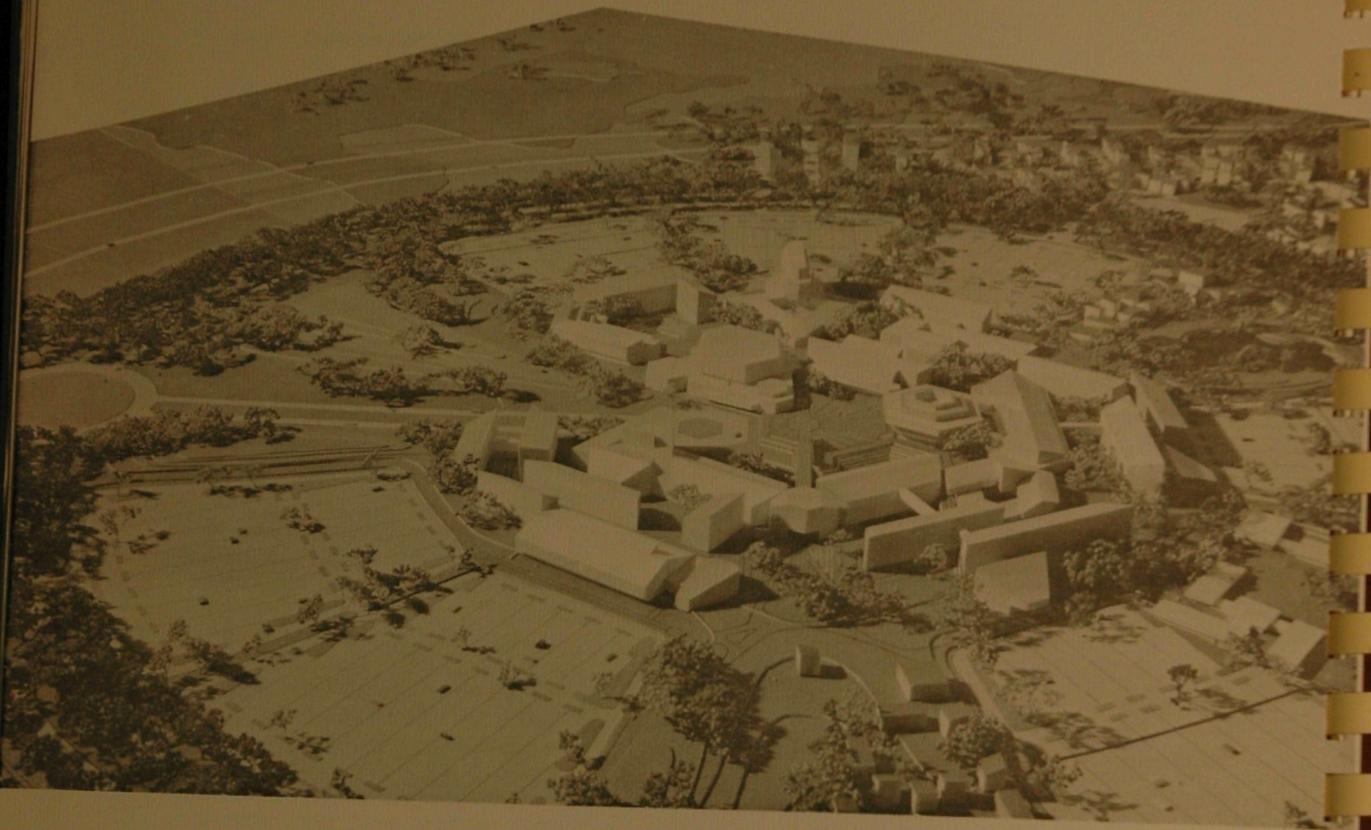
The diagrammatic plan @ 1" = 1200' attached under this section shows the general distribution of these areas. The large plan A and B within the front and back covers of this report show in detail the development of these areas.

In the area noted on the Plan as "Research" and "Future Use" such ideas as an ecological research institute, a space studies institute, a nine-hole golf course and an air landing strip were considered.

In the area noted on the plan as Academic (A), there are two major levels. One, the Central Plaza Level at elevation 596 is about eight feet above the present grade at the center point. The other, the Concourse Level at elevation 582, is about six feet below the present grade at the center point.

The ring road and parking areas are approximately at the present grade throughout. See Part III - I "Landscaping and Plant Materials".

See Part V, "Supplementary Information".

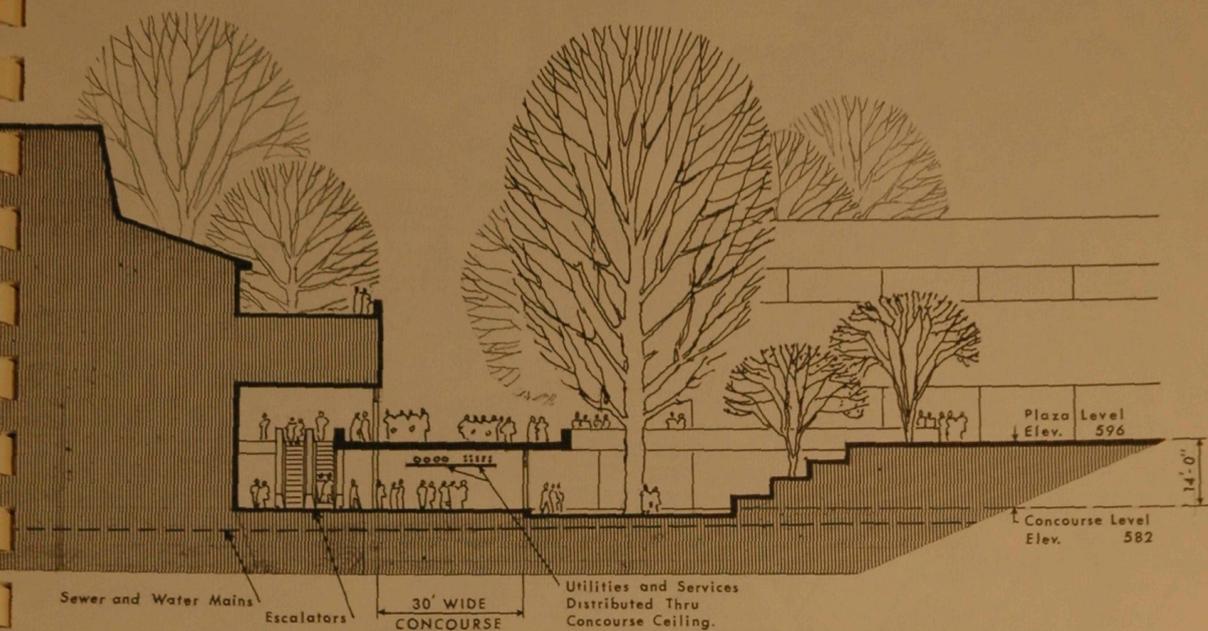


PART III - THE LONG RANGE DEVELOPMENT PLAN

- C. CENTRAL PLAZA, LEVEL 2 (Elevation 596)
and CONCOURSE, LEVEL 1 (Elevation 582)

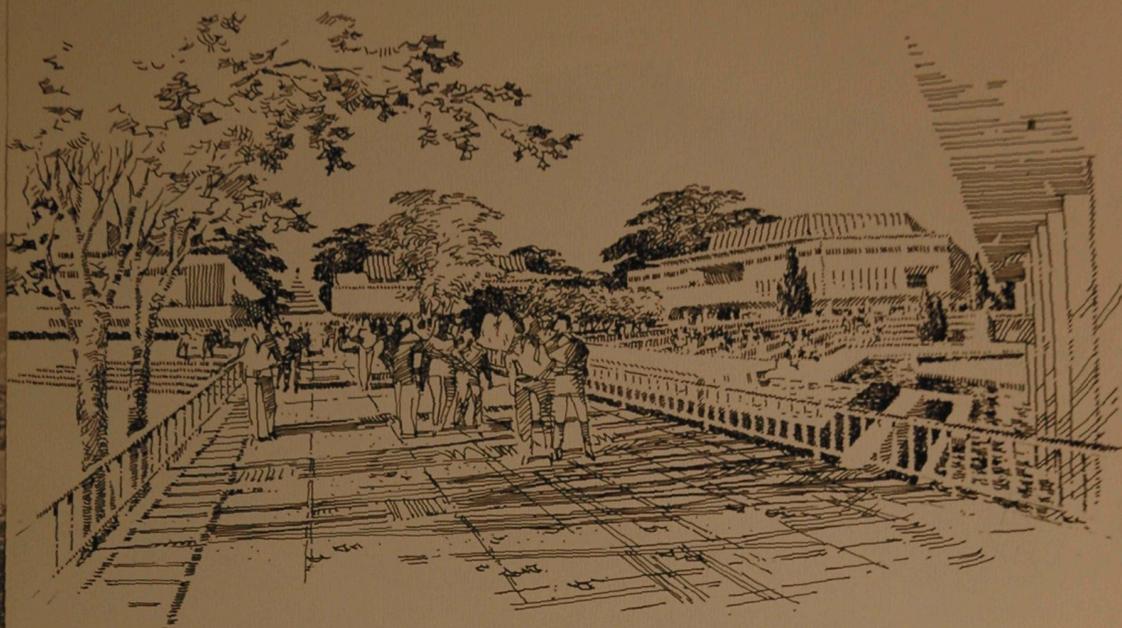
The Central Plaza Level, Elevation 596, corresponds with Level 2, the main floor level of all the buildings.

The Concourse Level, Elevation 582, corresponds with Level 1 of all the buildings.



Both of these levels are connected vertically by escalators, stairs and elevators at two strategic points in the Concourse, and at numerous other points, inside and out.

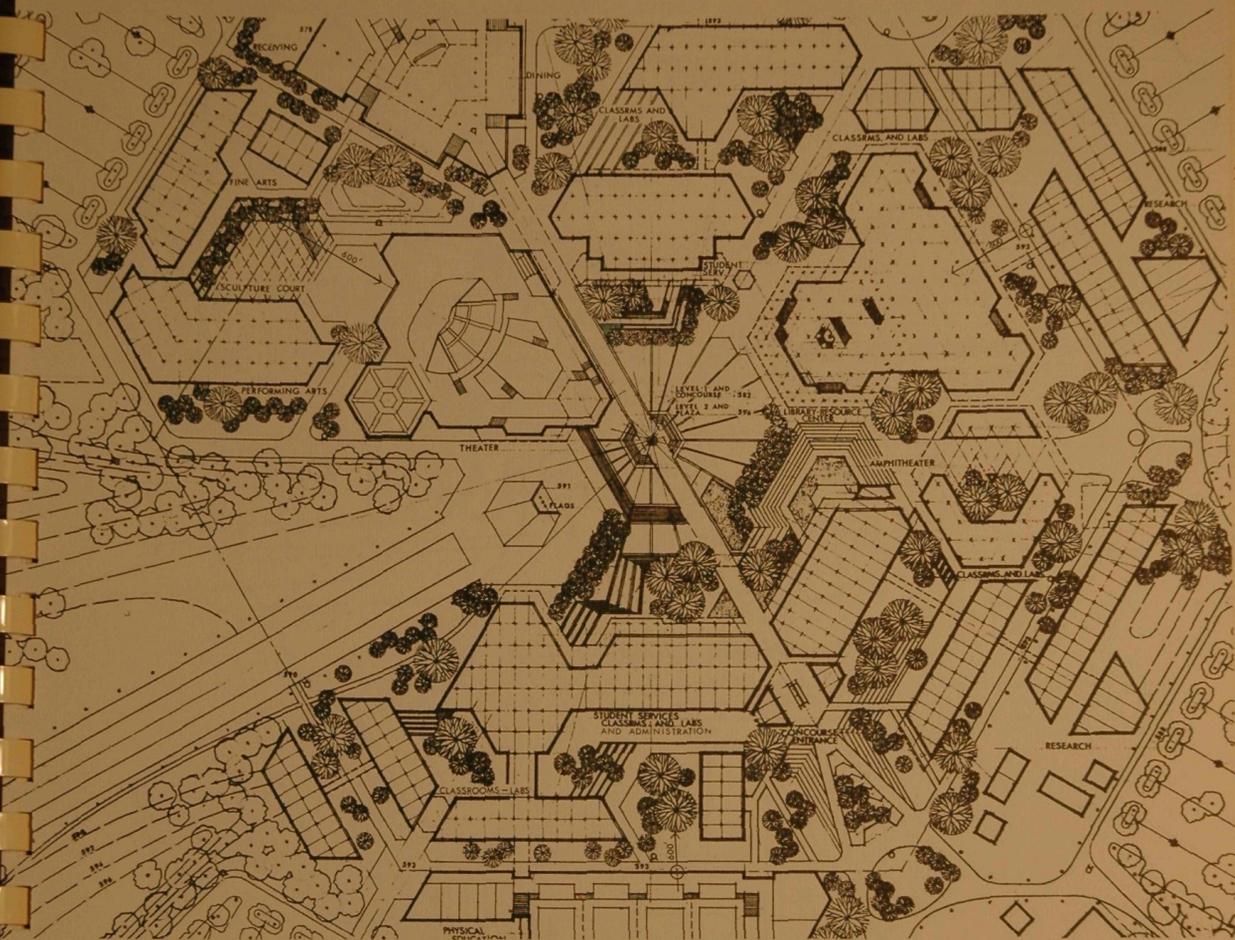
The combination of Central Plaza and Concourse and the closely related community facilities such as library, auditorium, and student services are intended to group the most general needs of the greatest numbers in such a way that the center of the campus may be a most intensively used, vital and attractive community space, where the paths of students, teachers and visitors most frequently cross.



View of the Central Plaza from the south east corner above the Concourse. The auditorium is to the left, the Library to the right and a class room building between them. In the right foreground is the terraced outdoor amphitheater and cascades.

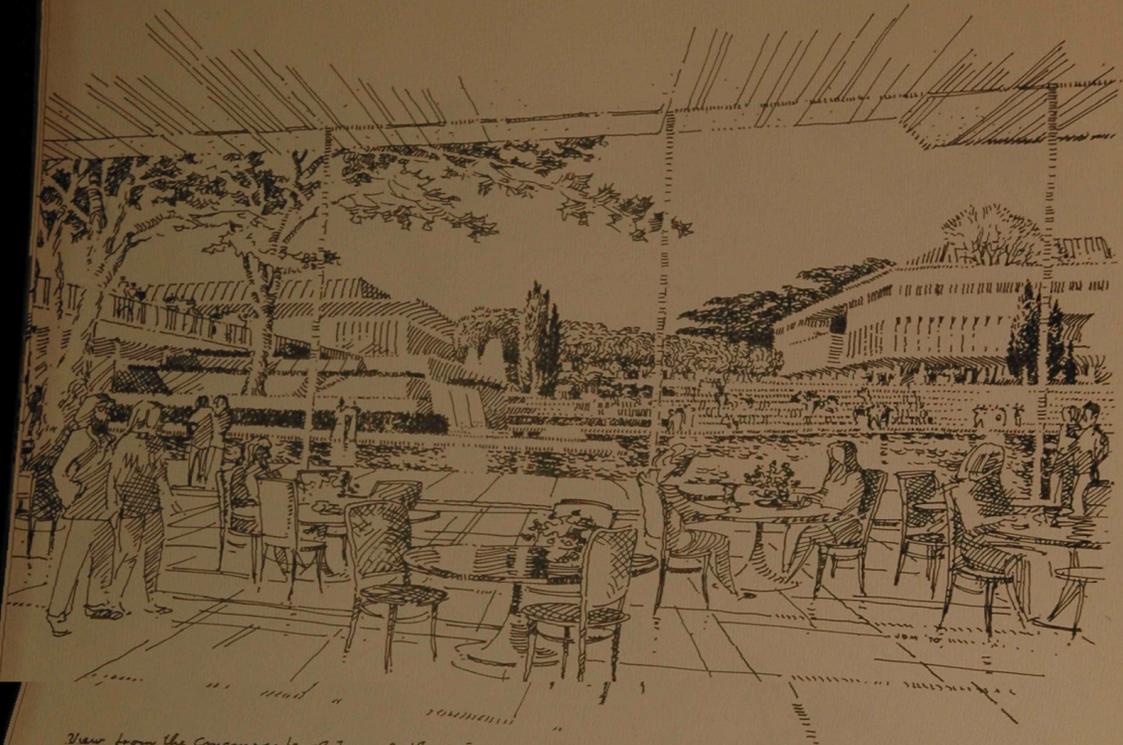
The form of the campus within the ring road is best visualized on the large Plan B within the back cover, at 1" = 200', which shows the roofs of the buildings, and the major tree masses or groupings. The sections at 1" = 64' indicate the heights of the buildings, the mature trees and the differences of elevation between the Plaza Level 596, and the Concourse Level 582.

The form of the academic campus within the parking areas is, in principle, hexagonal and so planned that the buildings may develop from the center outward, that they may be free standing at the upper (Plaza) level and connected at the lower (Concourse) level, and that the open spaces between the buildings may be attractively varied in form and proportion.



THE PLAZA LEVEL ELEVATION 596

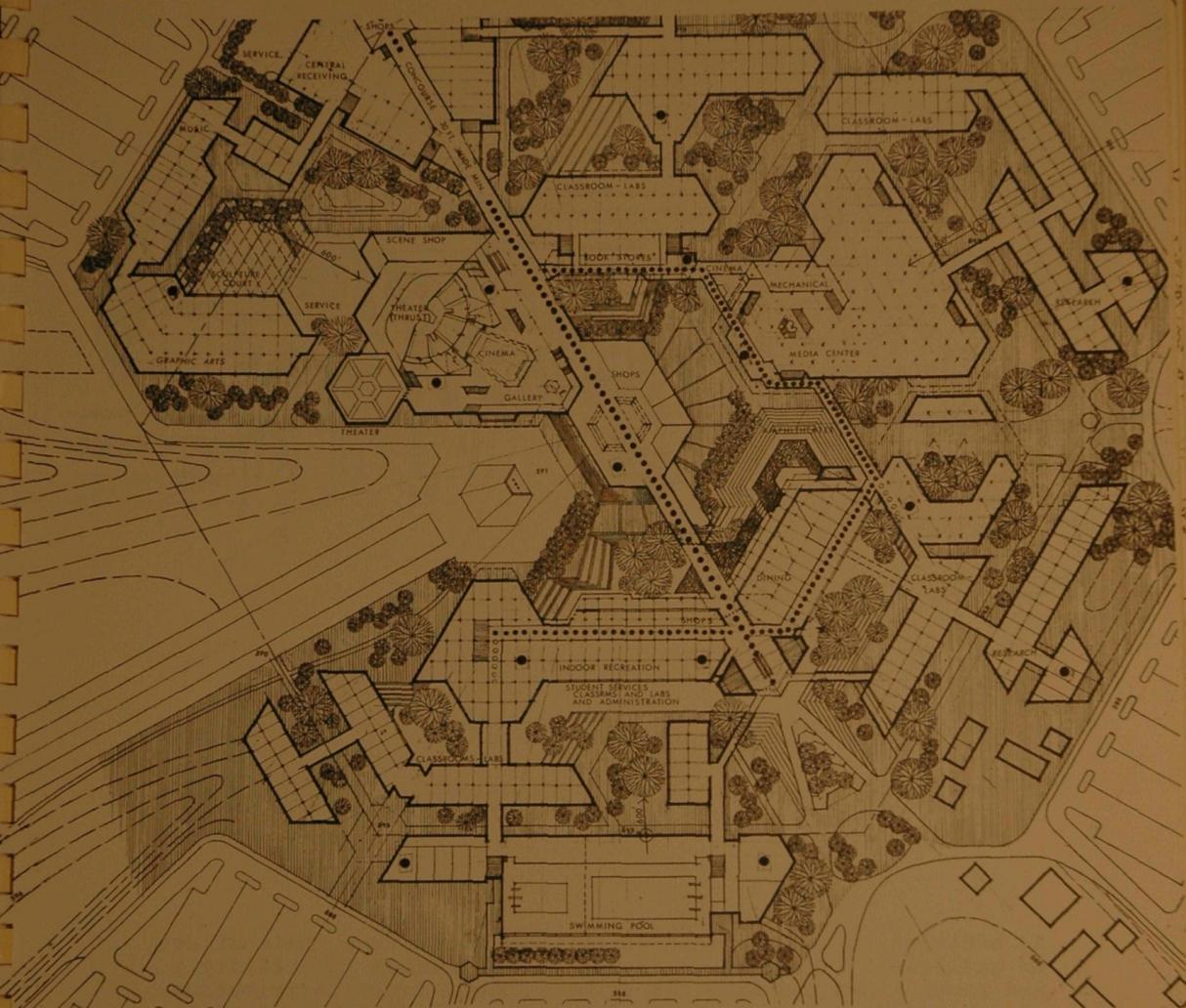
The Plaza Level Plan above, at 1" = 200', shows the form of the buildings at this level, the arcades around the Central Plaza, the major walks around and through the buildings, the modular structure of the buildings, the escalators and stairs connecting this level with the concourse level and the relation of the landscaping to the buildings at this Level, 596. The major dining area, a major lounge area, the upper gradients of the outdoor assembly area and many other student services are planned at this level.



View from the Concourse level toward the Central Plaza with the cascade and outdoor Amphitheater in the middle ground and the Auditorium to the left and the Library to the right.

THE CONCOURSE LEVEL ELEVATION 582

The Concourse Level Plan at 1" = 200', on the opposite page, shows the 30' wide Concourse running diagonally from north-west to south-east, the expanded area beneath the center of the plaza, the connecting, enclosed walkways to most buildings at this Level, 582, the terraced gardens, pools, and landscaping at this level.



The major recreation facilities, swimming pools, book store, movies, shops, small dining rooms, snack bars and many other student services are planned at this level.

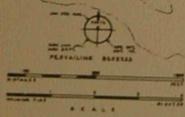
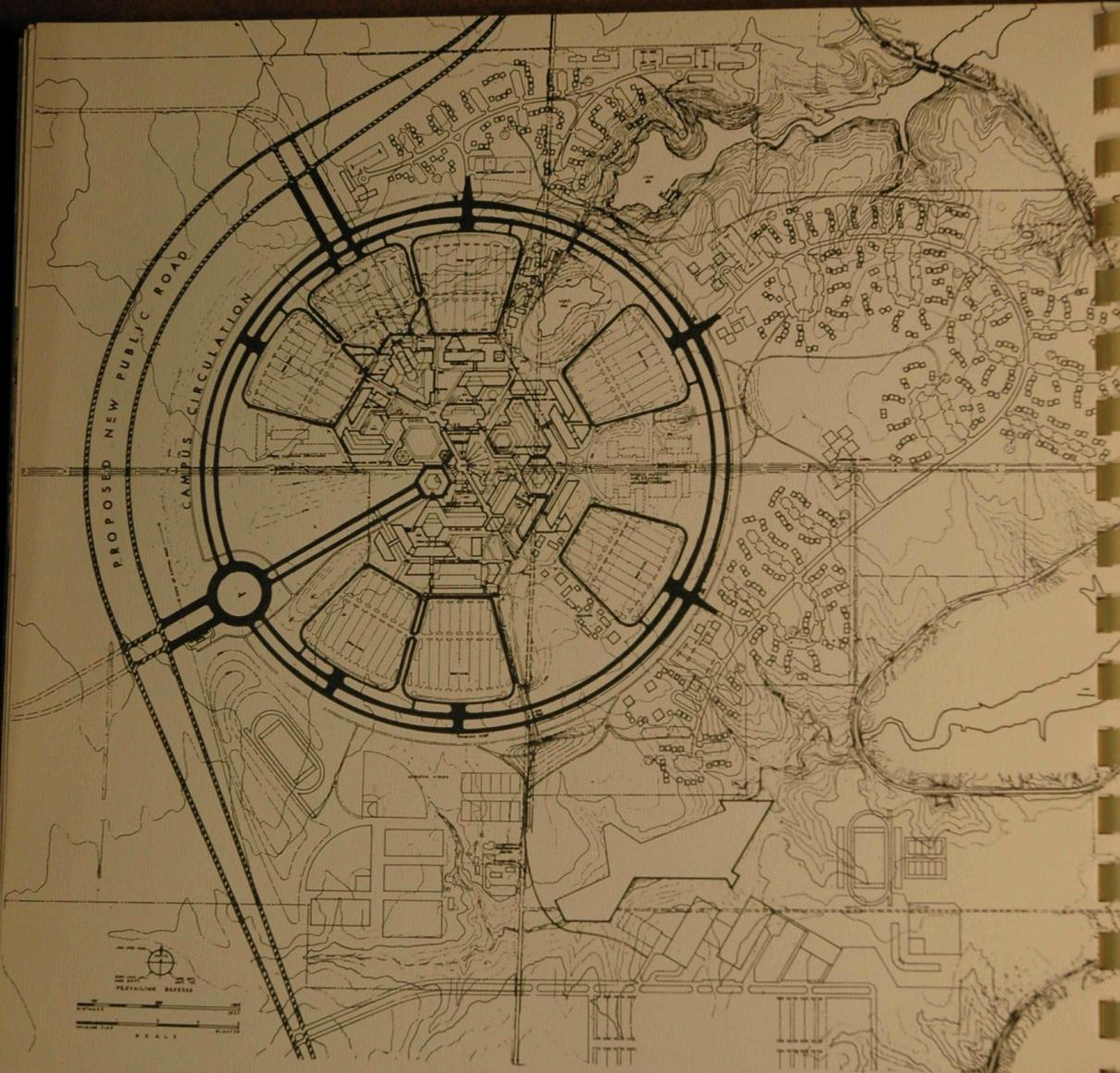
Above the northwest entrance to this concourse, a future conference center is possible.



*Concourse looking toward escalators
and main entrance at the south end*

In addition to the function of this concourse as a "main street or galleria," it serves as an accessible conduit for utility and power lines and also for in-house small truck distribution of equipment, supplies, and mail and for the disposal of trash. See Part III - H "Utilities and Power" for distribution within the academic campus.

See Part V, "Supplementary Information".



PART III - THE LONG RANGE DEVELOPMENT PLAN

D. VEHICULAR CIRCULATION AND PARKING

Public Roads within the Sangamon State University Property:

- 1) A dual pavement with two or more lanes of traffic in each direction is to replace the existing Shepherd Road which runs, in general, from north to south as noted on the plans. This will require major improvements to Shepherd Road, both north and south of the Sangamon State University property.
- 2) Two other public access roads can be provided to implement access to the campus area, one from the northwest corner of the Sangamon State University property and one from the west side of the property. These are noted on the drawings. To minimize traffic concentration solely on Shepherd Road it is recommended that these routes be planned for improvement as traffic volumes increase during the growth of the university.

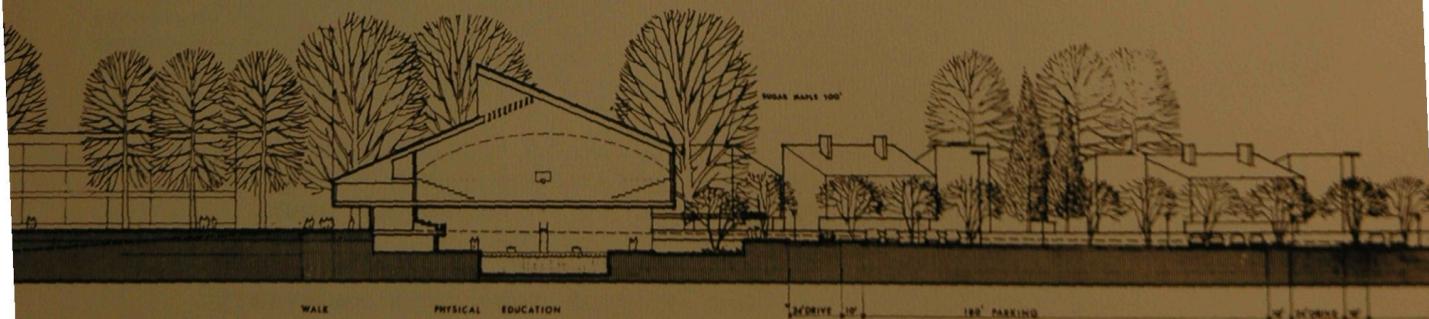
Campus Roads and Parking are proposed as follows:

- 3) The academic and administrative functions of the university are primarily located in a circular area having a diameter of 3,200 feet. Major vehicular access to this academic core is to be provided by a dual pavement "ring road" having an outside radius of 1,650 feet from the center of the campus, which is planned as a handsomely landscaped "boulevard". This road is purposefully apart from Shepherd Road to keep internal campus traffic separate from through traffic on Shepherd Road. Combining these two roads at the western side of the campus would intermix traffic movements and volumes that should not be combined.

The circumferential distance of the outside lanes of the "ring road" is approximately two miles, or four minutes driving time at 30 miles per hour. A 60-foot spacing between the dual pavements permits the addition of one driving lane in each direction, if traffic volumes make this necessary.

PART III - D.

- 4) Within the major circle, or "ring road", all academic facilities and related parking can be provided for a minimum of 12,500 students.
- 5) Outside the "ring road" other roads and parking for an on-campus residential population of as many as 8,000 persons can be provided.
- 6) One major entrance to the southwest of the campus center connects the public roads with the campus "ring road" by way of a rotary. The workability of a rotary should be reviewed in terms of new traffic projections to determine whether or not it will accommodate the expected traffic volumes. A campus information office is located near this major entrance, as noted on the plans.
- 7) One secondary entrance to the northwest of the campus center connects the public roads with the campus "ring road".
- 8) Future consideration should be given, as required, to one or two other access roads, possibly to the east.
- 9) One ceremonial or VIP drive provides a direct route to the central plaza of the campus.



PART III - D.

Parking:

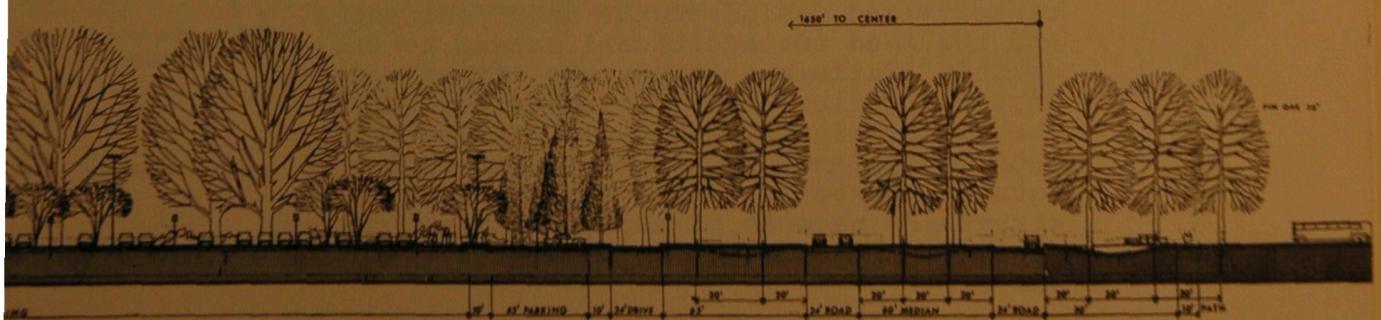
- 10) Academic parking within the "ring road" provides for 6,000 cars on grade, adequate for the projected enrollment of 12,500 students.
- 11) The parking areas to be handsomely landscaped and lighted as indicated on the plans.

Campus Emergency Roads:

- 12) Within the academic campus fire, ambulance and other emergency equipment will utilize wide heavy-duty walks to be provided about 600 feet from the center of the campus and accessible from all parking areas. Fire hydrants are coordinated with these walks as are the proposed entrances to most buildings and access to the center of the campus.

Service Access:

- 13) While the "ring road" can provide for service trucks, etc., provision by way of the access road on the northwest side of the campus has been made for service traffic to connect directly to the major receiving and storage building near the northwest entrance to the pedestrian concourse.



PART III - D.

Public Transportation:

- 14) On the "ring road" and on the perimeter of each parking area, bus transportation can be conveniently accommodated to serve the academic core of the campus. The residential area of the campus could be equally well served. One road, the ceremonial drive, also provides direct access for the buses to the center of the circular core of the campus. Shelters are indicated on the "ring road" and in the parking areas.

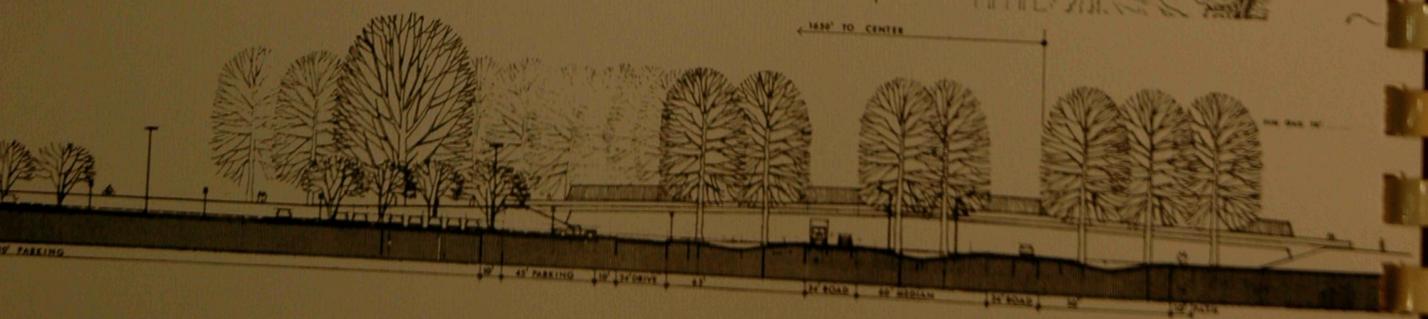
Coordination of Roads and Parking with Campus Development:

- 15) Prior to the preparation of construction plans for buildings, roads and parking, detailed traffic studies should be completed to specifically determine the roadway pavement location and configuration, and the types of traffic controls and number of travel lanes that should be furnished at key intersections. Such specific determinations are essential to (a) proper coordination of underground utilities and surface drainage, and (b) phase construction of buildings, roads and parking that will each be constructed in stages. These studies are most important to provide realistic estimates of traffic volumes based on the present plan. Such detailed traffic studies are critical with respect to determining the number of lanes to be needed at full development, the practicability or impracticability of a traffic rotary, the capacity and design of the major entrances, and the need for additional access to the campus. Failure to study the effects of projected traffic volumes on these key parts of the circulation system could seriously limit their efficiency and cause considerable future expense if roads, utilities or other structures have to be adjusted to accommodate future volumes. (See paragraphs 3, 6, 7 and 8).

See Part V, "Supplementary Information".



----- EMERGENCY VEHICLE ACCESS TO ACADEMIC CAMPUS



PART III - THE LONG RANGE DEVELOPMENT PLAN

E. PEDESTRIAN AND BICYCLE CIRCULATION

Pedestrian and Bicycle Circulation has been planned in such a way that most areas of the campus, approximately 500 acres east of the principal public road are accessible one to another on foot or by bicycle, free of any vehicular traffic.

- 1) Within the ring road, an area of approximately 175 acres, all areas of the academic campus, are accessible to the pedestrian without crossing any vehicular road. Bicycle lanes parallel most walks and are an added width to the walks. The walking time at 250' per minute, from Ring Road to Campus Center is 6-1/2 minutes.
- 2) Outside the ring road, areas totaling approximately 325 acres plus the Lincoln Land College are accessible one to another and to the academic heart of the campus, free of auto traffic, by means of two pedestrian and bicycle overpasses and one pedestrian and bicycle underpass.
- 3) Space for parking bicycles near all academic buildings is provided, some beneath shelter and some in the open.
- 4) At the plaza level (Level 2) Elevation 596, deep arcades or cantilevered upper floors are provided for all buildings framing the plaza. These sheltered walks can enhance the comfort and pleasure of the central plaza.
- 5) All walks, from parking lots to buildings, are of gentle slopes.
- 6) The main floor of all buildings, Level 2, Elevation 596, is accessible either at the grade of the walks or with easy ramps from the walks.

PART III - E.

- 7) The lower, or first floor of all buildings Level 1, Elevation 582, is accessible by means of an enclosed major concourse 30 feet wide, and secondary enclosed connections. This major concourse connects at the northwest end directly with and on a level with an auto drive and three parking areas; at the southeast end, the entrance opens toward two parking areas, each within 450 feet.
- 8) A bicycle route parallel with the ring road is planned between the outer two rows of trees. Since this route closely approximates 2 miles in circumference and is practically level, it might also be used for track or jogging.
- 9) Pedestrian and possibly row boat access to Springfield Lake by way of the inlet in the northeast corner of the university property could be an added amenity.

See Part V, "Supplementary Information".



View from the new Shepherd Lane looking toward the dome of the State Capital Building

PART III - THE LONG RANGE DEVELOPMENT PLAN

F. SIGHT AND SOUND

- 1) Views: Within the areas defined by the angles noted and designated as VIEW A, VIEW B, VIEW C and VIEW D it is recommended that open views, unobstructed by buildings, be considered a permanent part of the campus plan.

View A, looking toward the dome of the State Capitol Building from the public approach road to Sangamon State University can form a dramatic and appropriate symbol of the objectives of Sangamon State University. Within an angle of 5° at this point of view (A), no buildings should be constructed on the campus property, and no buildings over 50 feet high should be constructed between the campus and the dome of the Capitol.

View B, the campus area contained within an angle of 38° comprising the view westward from the central plaza, and the view inward from the main entrance, should be permanently free of buildings, except the very small campus information center at the main entrance. From the exact center of the campus looking westward, within this angle, views of the setting sun can be seen from September 22 to March 22. On December 22 the sun sets at the southernmost point, almost on a direct line between the center point of the campus and Main Entrance (center of rotary) to the campus. Within this angle, west of the campus to South 2nd Street Road, no building should be constructed over 50' high.

View C, within a 30° angle looking northeast toward the new lakes and the inlet to Lake Springfield, comprises a large grove of beautiful trees and a skyline that, due to present land use and zoning, is not likely to be changed in the future. No building should be constructed on the campus within this angle of view noted on the plans.

PART III - F.

View D, within a 30° angle looking south-east comprises broad landscaped areas, gently rising knolls to receive the pedestrian overpass and, in the distance, the proposed lake and new buildings of Lincoln Land College.

- 2) Lighting: In principle, the campus lighting is designed to accent the central plaza with the brightest or gayest lighting; then, in slightly diminishing brightness, to illuminate the pedestrian walks within the academic campus and out to the parking; then to move to the different and wider spaced high stem lighting necessary for the ring road and other roads.
 - a) On the ring road the high stem standards are accurately placed on the planting strip between the two roads as noted on the plans and sections. At the intersections, a brighter density is proposed.
 - b) In the parking areas, the type and spacing of lighting as noted on the plans and sections.
 - c) On the walks around the parking areas and leading into the center of the campus, the lighting standards are lower and more closely spaced to serve the pedestrian.
 - d) In the Central Plaza, a variety of lighting is proposed to achieve a certain sparkle and flexibility, summer and winter. Lighting on the trees, the fountain, cascade and pool, the area for outdoor concerts, plays and lectures is possible to enhance the liveliness and inviting quality of this central open space.
 - e) On the ceremonial drive leading to the Central Plaza, low (near the ground) lights are recommended to contrast with and enhance the brightness of the Central Plaza.

PART III - F.

- 3) Acoustics: In principle, the sound level diminishes from the ring road to the heart, the center point of the campus.
 - a) For acoustical reasons, it is recommended that cooling towers for all buildings be centralized at only three locations and that the towers be surrounded on all sides (not the top) by highly absorbent material.
 - b) Careful consideration must be given in the design of all buildings to adequately mask the exterior and interior noises.
 - c) Buildings and berms should be arranged as noted in the plans, in such a way as to mask the sounds on the parking area, even though these sounds are relatively minor.
 - d) A general low level of pleasant sound, such as in fountains, and foliage and background music is maintained in the central plaza and in secondary courts.
- 4) Graphics: All directions, titles, numbers, letters, colors, lighting and sizes shall be proportioned to the need of the viewer and shall be simple, clear and brief.
 - a) For vehicular circulation - numbers and letters shall be white on dark brown background; major signs to be lighted to accent only the numbers or letters, and all signs to be clearly visible.
 - b) For the pedestrian on campus walks, plazas, etc. - signs, titles of buildings, etc., shall be composed closely with buildings and shall be in proportion to the need of the viewer and the scale of the building; numbers and letters to be white on dark brown background.
 - c) For the general directions and information, there shall be at a few strategic points such as the information kiosk at the main entrance to the campus, the lobby of the administration building

PART III - F.

and the entrances to the concourse, a directory plan of the entire campus, placed horizontally and oriented with the campus.

d) For information within buildings - in the principal lobby or lobbies of each building, there shall be a directory plan of the building placed horizontally and oriented with the building. On a wall immediately adjacent to this plan and keyed with it, there shall be a complete directory of the building.

e) For most rooms, numbers, titles, names, etc., shall be uniform throughout and shall be easily maintained and changed.

5) Other Considerations:

The comfort, safety and convenience requires, among many other things, places to sit alone or in groups, drinking fountains, shelters from rain and sun, good lighting, public phones, convenient access to snack bars, convenient trash disposal, attractive design of all these things plus the paving materials, walks, landscaping and plant materials. These things should be considered a part of each phase of construction.

See Part V, "Supplementary Information".



PART III - THE LONG RANGE DEVELOPMENT PLAN

G. CONSTRUCTION AND MATERIALS

While the plan of the academic campus is developed on the basic geometry of a hexagon, it should be noted that most of the buildings, the classroom - laboratory buildings in particular, are essentially rectangular and that the basic structural module in all of these buildings is 5'-0", with the column spacing in general 20' x 30' or 20' x 60' or multiples thereof. Non-typical buildings of special functions such as the auditorium, gymnasium and library may be different in construction.

Recommended:

- 1) For flexibility, permanence and low maintenance the basic construction of all buildings shall be of skeleton construction in reinforced concrete or fireproofed steel. Buildings of fairly typical space needs are to be loft type with provision for partitions and lighting and ACHV at 5' intervals.
- 2) For ease of expansion, all buildings shall provide for some vertical growth.
- 3) For harmony, exterior wall surfaces are to be essentially in masonry, that is, exposed structural concrete or precast concrete, or stone in warm colors and brick of medium to dark russet tones.
- 4) All roofs, excepting those where special design conditions may dictate flat roofs, are to be sloped to a minimum angle of 22° from the horizontal; and the roof materials are to be in fine clay tile or copper.
- 5) Window and door frames are to be anodized aluminum or bronze in dark bronze finish.
- 6) All roads and access drives to parking areas and curbs to same, where necessary, shall be of reinforced concrete.

PART III - G.

- 7) All parking areas on grade shall be black top with curbs and dividers in concrete.
- 8) All pedestrian walks, plazas, ramps, steps, gradients, etc., shall be in reinforced concrete with carefully studied finishes, scoring, etc., or in special cases, brick, stone, exposed aggregate or other fine materials over reinforced concrete.
- 9) Land Coverage with buildings averaging 3.5 floors within a radius of 700' from the campus center. (700 feet squared) x 3.1416 = 1,540,000 sq. ft. of land (approximately 35 acres).
*1,850,000 gross sq. ft. of floor space required by Program for buildings ÷ 3.5 floors = 528,000 sq. ft. of land coverage, or approximately 34% land coverage.

This provides generous open spaces between buildings and, depending upon the height and form of buildings, can provide handsomely proportioned landscaped areas.

- 10) In this recommended criteria for construction and materials the convenience, efficiency, safety and comfort of the student and teacher is the basic design consideration.

The modular design of most of the buildings lends itself to a systems approach and contributes to a low construction cost and speed of erection, and versatility of use.

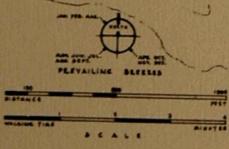
The permanence of the structures, the ease with which they may accommodate the changing needs of the future, and the centralized power and efficient and flexible distribution of it, contribute to low upkeep and maintenance costs.

*Please note Part IV - B.

See Part V, "Supplementary Information".

SANITARY SEWER
 WATER - FIRE PROTECTION
 ELECTRIC POWER
 TELEPHONE
 GAS
 LEGEND OF MAJOR
 UTILITY LINES

CONCOURSE



PART III - THE LONG RANGE DEVELOPMENT PLAN

H. UTILITIES AND POWER

One of the most important design objectives is that all utility and power lines be out of sight, that is, underground or within accessible areas of buildings.

SITE UTILITIES:

- 1) The sanitary sewer is provided within a 50' easement running from west to east through the center of the campus and an easement running north and south near the railroad tracks as noted on the plans.
- 2) Water and gas lines run from west to east across the property and are provided for within the above noted 50' easement.
- 3) For fire protection, the water line circles the campus about 600 feet from the center; branches move inward. Fire hydrant locations noted on the plans, are subject to change as the campus develops.
- 4) The present gas line enters from the east. The future major gas line will enter from the west and terminate at the power plant as noted on the plans.
- 5) Electricity will continue to enter the campus from the south, along the present Shepherd Road, and be supplemented in the future by a major line from the northwest, terminating at the power plant.
- 6) From the power plant, the electricity will be distributed through the main concourse and connected to the electrical distribution center located in Building No. 2.
- 7) Heating - in Phase I of Construction: small temporary boilers will be provided in the space which will ultimately be occupied by the cooling center in the library. As the power plant is constructed in sections, these boilers will be phased out.

PART III - H.

- 8) The telephone lines will continue to enter the campus from north and south along Shepherd Road, but in the future will follow the alignment of the outer ring road to the east, as noted on the plans, and enter the Central Academic area from the north.

Power Plant and Distribution:

- 9) The Power Plant is located near the northwest end of the pedestrian Concourse and from this location all internal circulation of heating and gas will emanate.
- 10) The control of all heating, ventilating and air cooling will be accomplished at the plant.
- 11) The main channel of these internal utilities to most academic buildings will be the easily accessible ceilings of the Concourse. The ceilings of the secondary pedestrian routes within the buildings will carry the utilities from the main channel.
- 12) It is planned that three cooling centers will provide cooling for the entire campus. These three centers are planned so that their associated cooling towers will be in elevated enclosed locations, properly screened and acoustically treated. These cooling centers will be of a sectionalized design so that they may expand as additional areas of the campus are constructed.

Sanitary Sewers and Trash Disposal:

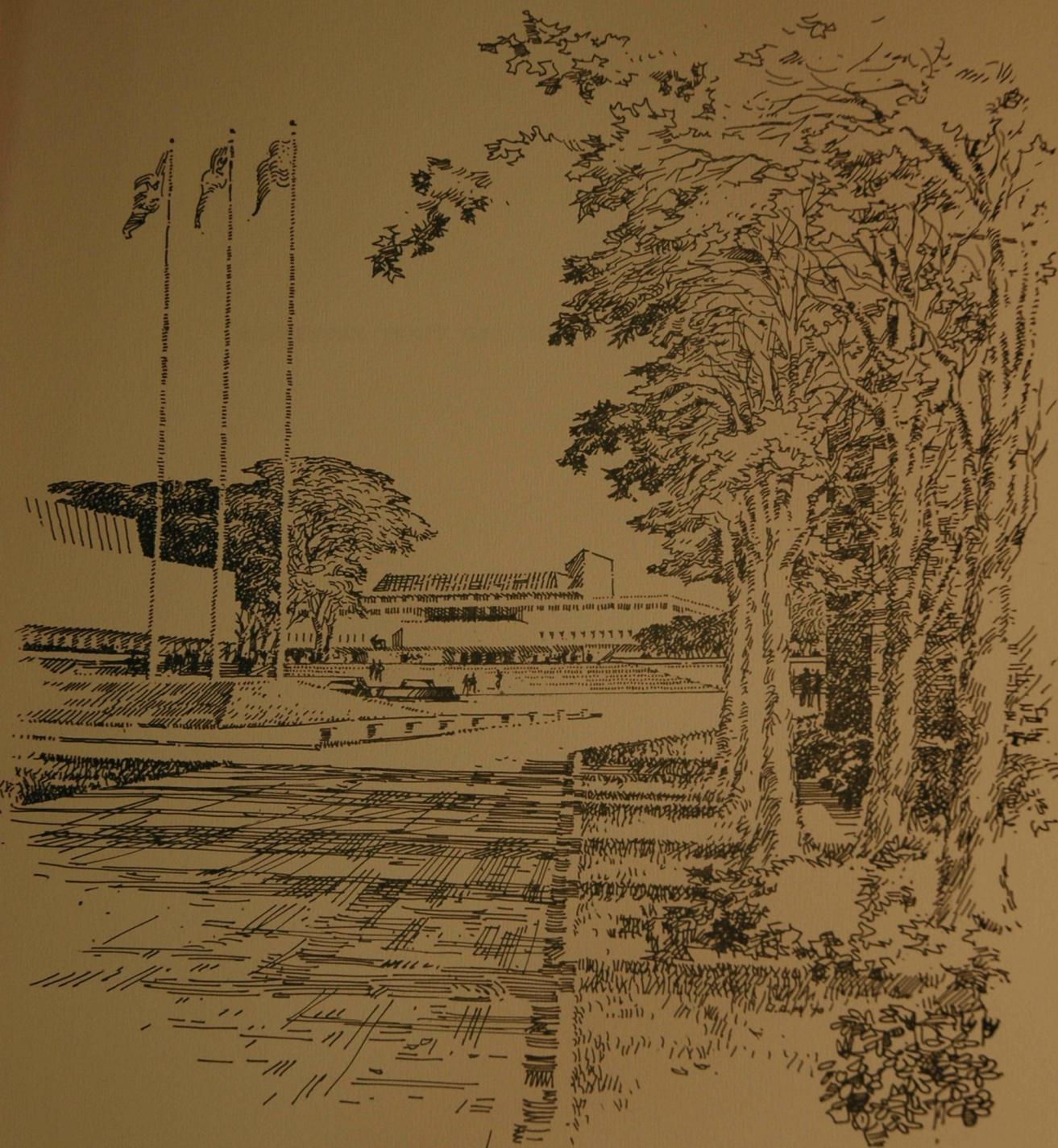
- 13) Sanitary sewers will carry all normal waste including garbage disposal.
- 14) Compaction of all trash at several convenient locations, and off-site disposal, are recommended.

PART III - H.

Storm Water and Surface Drainage:

- 15) A new small lake within the ring road and another just outside the ring road and leading into the inlet from Lake Springfield are considered for the storage of this water. The irrigation of the central campus area from these small lakes is recommended. A small retention pond will be incorporated into the storm drainage system, to reduce pollutants from parking lot drainage before the water enters the lakes.

See Part V, "Supplementary Information".



View looking east from the approach road toward the Central Dining Library in the distance. Auditorium to the left. Administration to the right.

PART III - THE LONG RANGE DEVELOPMENT PLAN

I. LANDSCAPING AND PLANT MATERIALS

The flat and fertile site suggests unique design possibilities such as the dramatic contrast of the horizontal plane with masses of tall trees, 70' to 100' in height, the graceful integration of the trees with buildings averaging 45' in height, and the masking of large parking areas by low berms with low trees and shrubs.

1) Grading

All roads and parking areas will be at or very near to existing grades. The Central Plaza, Level 2 of all buildings, will be at Elevation 596, approximately eight feet above the existing grade. The Concourse Level, Level 1 of all buildings, and the level of many sunken gardens and courts will be at Elevation 582, approximately six feet below the existing grade at the center.

2) Ring Road

The academic campus and the related parking areas will be surrounded by a handsomely landscaped circular avenue, described under Section III - D "Vehicular Circulation and Parking". It is recommended that the seven rows of trees planned for this Ring Road be Pin Oak trees. Other trees considered were the Hackberry and the Tulip.

3) Tree Placement

The Ring Road trees will be formally placed, as shown on the plans, to provide a strong and discernible campus frame at ground level or as viewed from the air. Most other trees on the campus will be informally planted and composed with the buildings, courts and walks. Large numbers of trees will be planted within and around the parking areas to relieve the monotony of vast paved areas and to serve as windbreaks.

4) Lake Springfield Connection

Two new lakes are planned in the northeast sector, one within the ring road and one

PART III - I.

outside it. From the latter, a continuous waterway connection to Lake Springfield is possible. A new boat clearance culvert under the existing east shoreline road will be necessary. These lakes will provide a source of irrigation water for the central campus. See "Storm Water and Surface Drainage" under section III - H.

5) Irrigation

A fully automatic system is recommended for the ring road and the entire inner campus. Native grasses or mowed turf areas outside the ring road need only be provided with hose bib connections for exceptionally dry months. First phase irrigation is recommended for the ring road.

6) Wind Protection

The northwest campus area shall be buffered outside the ring road by masses of evergreens (Austrian Pine, White Pine and Scotch Pine). Understory evergreens shall also be planted (Yew, Arborvitae and Mugho Pine) to reduce ground level winds. A continuous berm is suggested outside the ring road in this northwest quadrant.

- 7) A campus nursery located in the far northwest corner of the property is recommended for growing large size replacement trees, and plants of limited availability. Some campus trees of several years growth will inevitably need replacement due to insect and disease problems which to some degree affect almost every large shade tree used in Illinois. The nursery need only be a minimal installation until the campus matures. Major trees planted on the campus to unify buildings and provide shade should be a mixture of types from the Dominant Tree List, rather than the heavy planting of one tree.

8) Campus Furniture

Campus "furniture" is a visual common denominator, including landscaping, seating, lighting, bicycle racks, drinking fountains, trash receptacles, exterior building and paving materials, signs and related items. These objects deserve

PART III - I.

careful attention because of their constant personal use by students and staff; they can clutter the grounds inordinately, and discourage campus pride, or they can provide an undertone of general campus order if coordinated and thoughtfully placed. Strategically placed information kiosks, supplementing the one at the main entrance, designed with an over-all graphic system will convey orientation and direction on campus.

9) Tree Sizes and Landscape Priority

Immediate planting of trees is recommended for the ring road

1-1/2 inch diameter deciduous trees -
approximately 500 trees

1 inch diameter deciduous trees -
approximately 1,800 trees

Tree planting should also begin along the west property line to screen future industry

West Property Line Buffer: small size
deciduous and pine trees

The wind screen planting of pines along the outer northwest ring road section should also begin

Small size pine trees

10) Tree Groups

Dominant trees are to be planted in the greatest quantities and are to provide shade and structure to the campus.

Secondary trees are to be planted in smaller quantities and are of specimen interest.

Under Part V, "Supplementary Information" there is included under the title "Important Physical Qualities Determining the Type of Trees Proposed" a value scale and lists of the dominant and secondary trees proposed for this campus.

See Part V, "Supplementary Information".



NURSERY

WEST PROPERTY LINE SCREEN

25% White Pine
Austrian Pine
Norway Spruce

75% Sugar Maple
Red Oak
London Plane Tree
American Sweet Gum
Improved Silver Maple
Pin Oak

PINE WINDSCREEN

White Pine
Austrian Pine
Scotch Pine

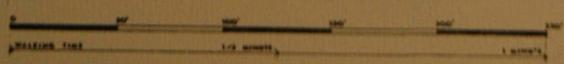
RING ROAD TREES

Huckberry
Pin Oak
Tulip Tree
Red Maple
Linden
Norway Maple

TYPICAL BETWEEN PARKING LOTS

Norway Maple
Red Maple

**SECTION THRU CENTER
LOOKING EAST**



CONCOURSE
CENTER POINT OF CAMPUS

LAKE AREA TREES

Red Maple River Birch
Sweet Gum Tupelo
Willow Bald Cypress
Swamp White Oak
European Larch

MEADOW AREA TREES

Copper Beech White Pine
Sugar Maple Norway Maple
Scotch Pine Coffee Tree
Improved Silver Maple

ACADEMIC CAMPUS TREES

B - Beech O - Pin Oak
C - Copper Beech P - London Plane Tree
H - Hackberry R - Red Oak
L - Honey Locust S - Sugar Maple
M - Red Maple T - Tulip Tree
N - Norway Maple W - White Pine

RESIDENTIAL AREA TREES

- ADJACENT TO HOUSING
Tulip Tree Dogwood Birch
Hawthorn Sweet Gum Ginko
Red Bud Honey Locust
- ADJACENT TO ROADS
AND PARKING AREAS
Pin Oak Hackberry
Red Maple Linden
London Plane Tree
Norway Maple



PLAN AND SECTION SHOWING
DOMINANT AND SECONDARY TREES
PROPOSED FOR THE CAMPUS

STUDENT SERVICES CLASSROOMS LABS

WALK

PHYSICAL EDUCATION

1951



PART IV - STAGES OF DEVELOPMENT

Sangamon State University must construct approximately 1,960,000 G.S.F. (gross square feet) of academic and academically related space between 1970 and 1982, to serve an enrollment of 12,500 FTE students by 1982. The following schedule for the construction of this space attempts to efficiently relate enrollment projections, corresponding space requirements, and feasible stages of building construction. It includes two parts of INTERIM CONSTRUCTION and five phases of PERMANENT CONSTRUCTION.

A. INTERIM CONSTRUCTION - 112,000 gross sq. ft.

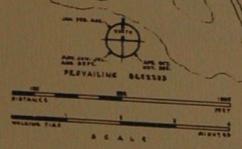
Part 1 Approximately 72,000 gsf completed in October 1970.

Part 2 Approximately 40,000 gsf to be completed in September 1971.

B. PERMANENT CONSTRUCTION - 1,850,000 gross sq. ft.

The schedule at the end of this PART IV sets forth the summary, the five phases of permanent construction, the principal or unique building to be constructed in each phase, the building numbers keyed with the plans, the approximate number of floors in each building, the approximate total gross square feet in each building, and the approximate total gross square footage for each phase of construction, and the proposed date of completion of each phase.

It should be noted that the grand total of 1,850,000 gross square feet of permanent academic construction shown on the schedule, corresponds closely with the 1,851,830 G.S.F. totaled under the "Projected Phasing of Construction", page 45 of the Program. Also note that the total gross square footage and certain priorities in each phase of construction shown on the schedule differ somewhat from that shown in the Program. This will probably continue to occur in the future, depending upon budgets, changing needs, priorities, numbers of students and many other unforeseeable factors.



INTERIM CONSTRUCTION. Part 1 - This first part of the construction of Sangamon State University was programmed in the spring of 1970 to accommodate 500 students by September 1970. 72,000 gross square feet of space, well planned and well constructed in steel space-frame and coordinated with the Long Range Development Plan was completed on time, within three months. Over 600 FTE students were registered.

■ PART 1

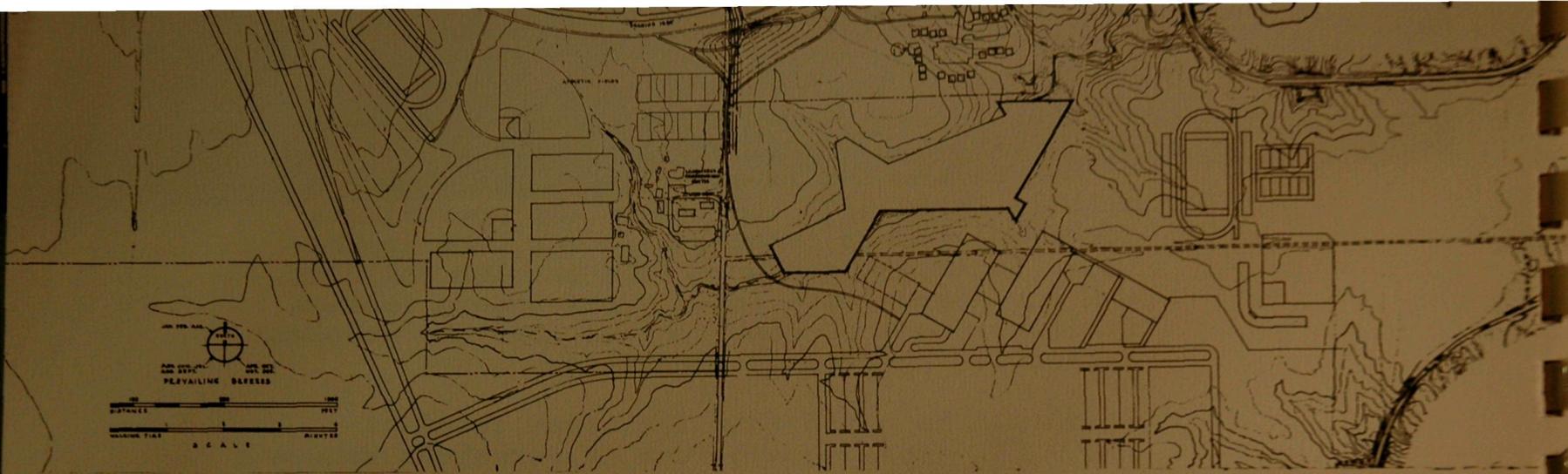
Part 2 - This second part of the interim construction, comprising approximately 40,000 gross square feet will be completed by September 1971, making a total of approximately 112,000 ± gross square feet of Interim Construction.

▨ PART 2



PHASE I. The University's first permanent building totaling approximately 200,000 gross sq. ft. will be constructed in Phase I, scheduled for completion in September 1973. This building will house the first stage of the Library-Learning Resource Center. Until the Library-Learning Resource Center grows to its maximum projected size of 600,000 volumes by 1978 a large portion of this building will be assigned to classrooms, offices and mechanically unsophisticated laboratory space which will be gradually relocated. This Phase I will include the roads and parking noted on the above plan.

 PREVIOUS CONSTRUCTION
 PROPOSED CONSTRUCTION

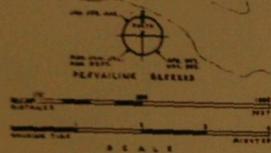


INTERIM CONSTRUCTION. Part 1 - This first part of the construction of Sangamon State University was programmed in the spring of 1970 to accommodate 500 students by September 1970. 72,000 gross square feet of space, well planned and well constructed in steel space-frame and coordinated with the Long Range Development Plan was completed on time, within three months. Over 600 FTE students were registered.

■ PART 1

Part 2 - This second part of the interim construction, comprising approximately 40,000 gross square feet will be completed by September 1971, making a total of approximately 112,000 ± gross square feet of Interim Construction.

▨ PART 2



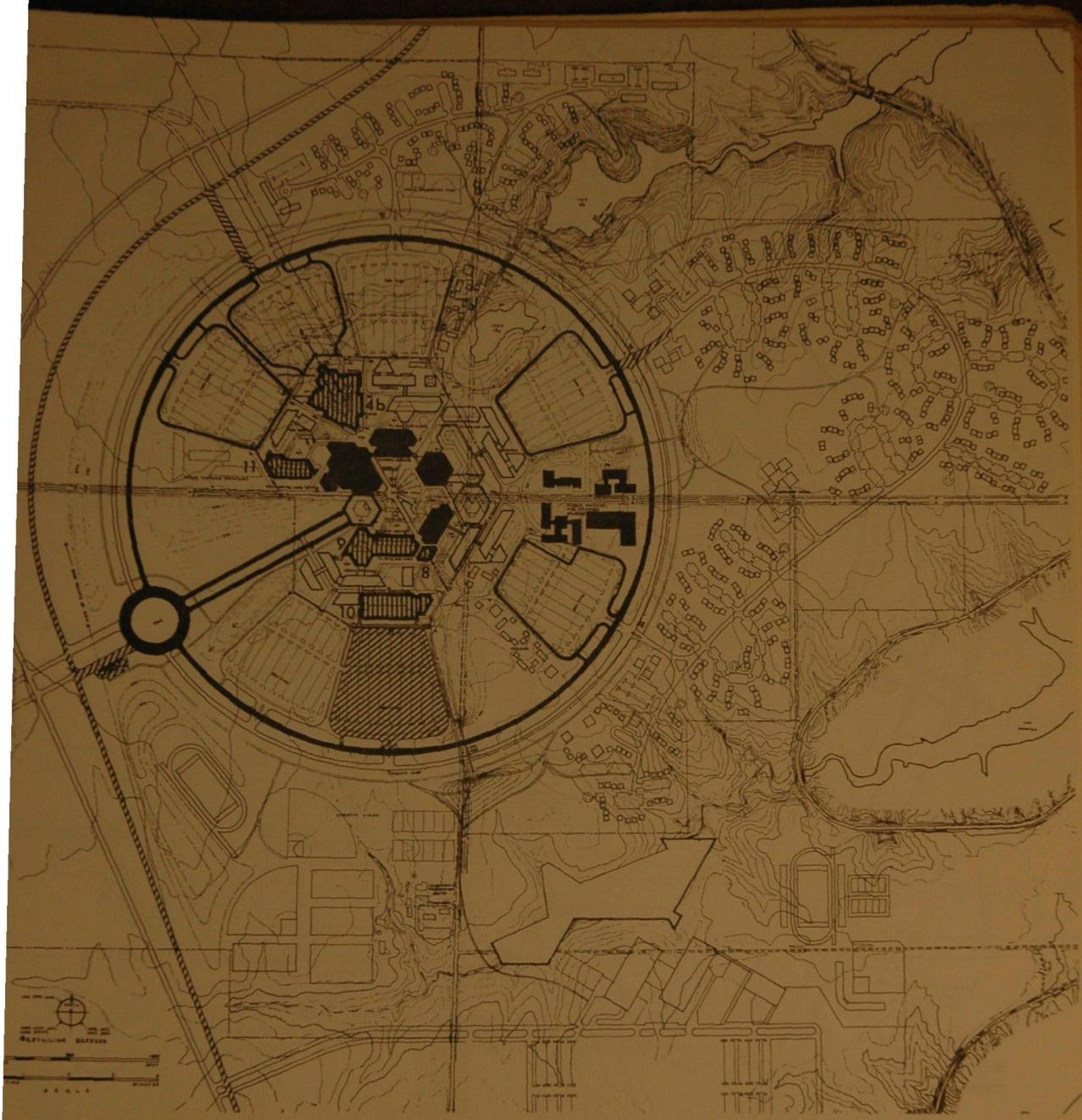
PHASE I. The University's first permanent building totaling approximately 200,000 gross sq. ft. will be constructed in Phase I, scheduled for completion in September 1973. This building will house the first stage of the Library-Learning Resource Center. Until the Library-Learning Resource Center grows to its maximum projected size of 600,000 volumes by 1978 a large portion of this building will be assigned to classrooms, offices and mechanically unsophisticated laboratory space which will be gradually relocated. This Phase I will include the roads and parking noted on the above plan.

- PREVIOUS CONSTRUCTION
- ▨ PROPOSED CONSTRUCTION



PHASE II construction totaling approximately 520,000 gross sq. ft. to be completed by September 1974, will include the University's auditorium facility, a large portion of faculty offices, partial completion of a major dining area, power plant and receiving facilities and many student services along with an even mixture of classroom, laboratory, research and maintenance space. Also included will be the roads and parking as noted on the Plan of Phase II.

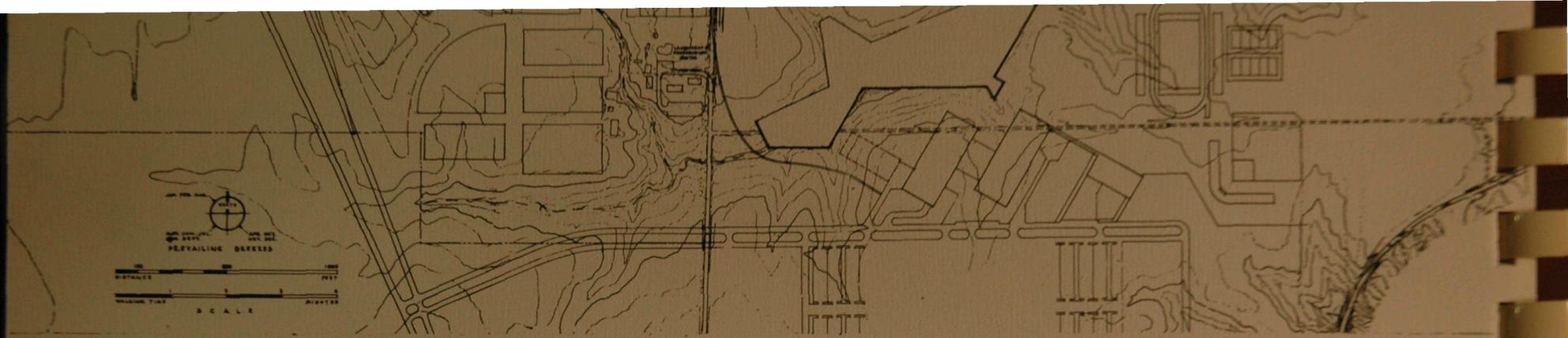
- PREVIOUS CONSTRUCTION
- PROPOSED CONSTRUCTION



PHASE III of construction totaling approximately 470,000
 sq. ft. to be completed by September 1976, will
 include the physical education facilities, the completion
 of the power plant, receiving facilities and central
 dining area, and greatly expanded areas for laboratory,
 research, faculty and administrative office space and student
 services. Also included will be the roads and parking as
 indicated on the Plan of Phase III.

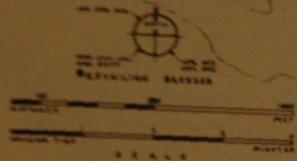
- PREVIOUS
 CONSTRUCTION

- PROPOSED
 CONSTRUCTION



PHASE II construction totaling approximately 520,000 gross sq. ft. to be completed by September 1974, will include the University's auditorium facility, a large portion of faculty offices, partial completion of a major dining area, power plant and receiving facilities and many student services along with an even mixture of classroom, laboratory, research and maintenance space. Also included will be the roads and parking as noted on the Plan of Phase II.

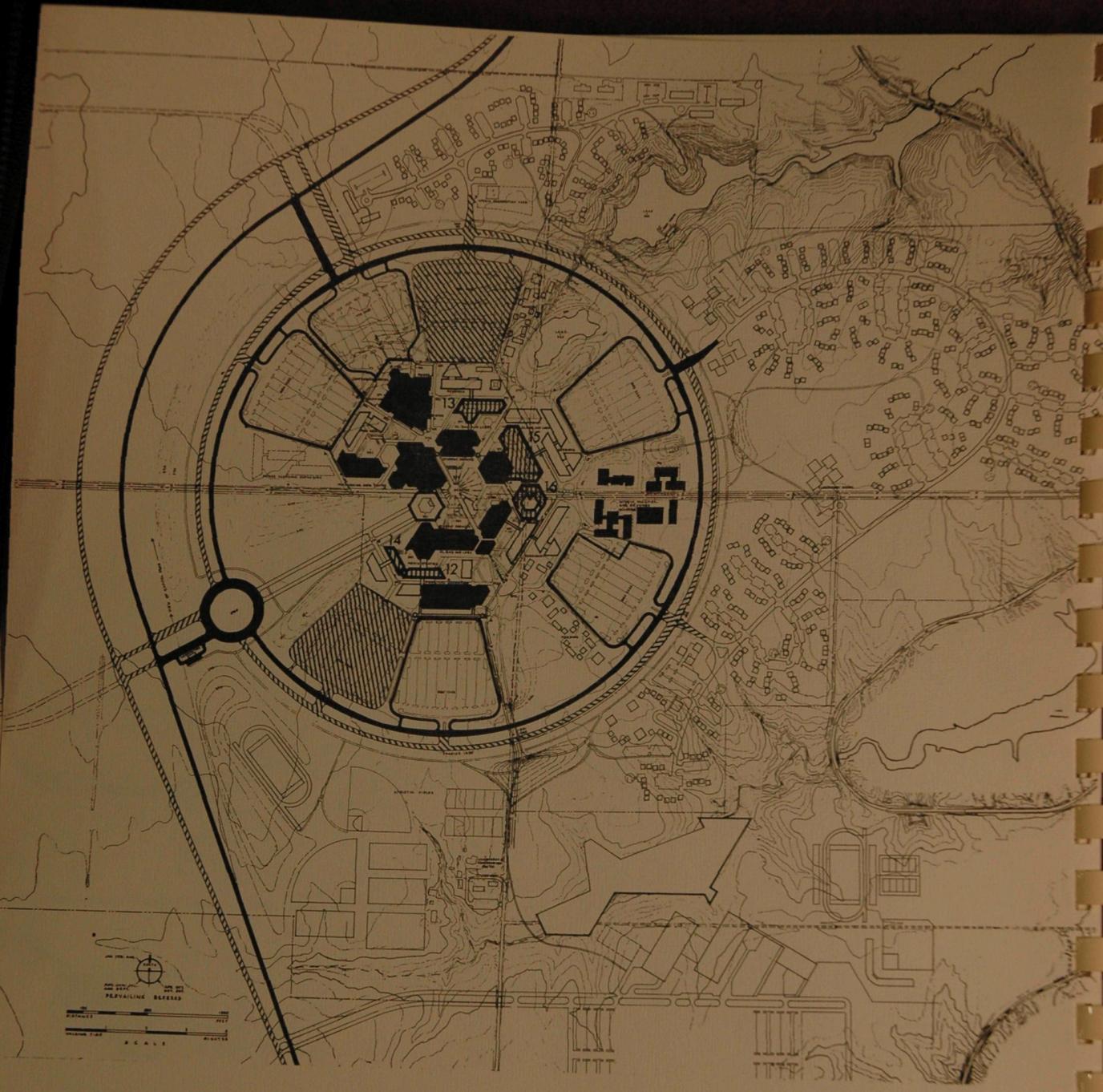
- PREVIOUS CONSTRUCTION
- ▨ PROPOSED CONSTRUCTION



PHASE III of construction totaling approximately 470,000 gross sq. ft. to be completed by September 1976, will include the physical education facilities, the completion of the power plant, receiving facilities and central dining area, and greatly expanded areas for laboratory, research, faculty and administrative office space and student services. Also included will be the roads and parking as noted on the Plan of Phase III.

■ PREVIOUS
CONSTRUCTION

▨ PROPOSED
CONSTRUCTION



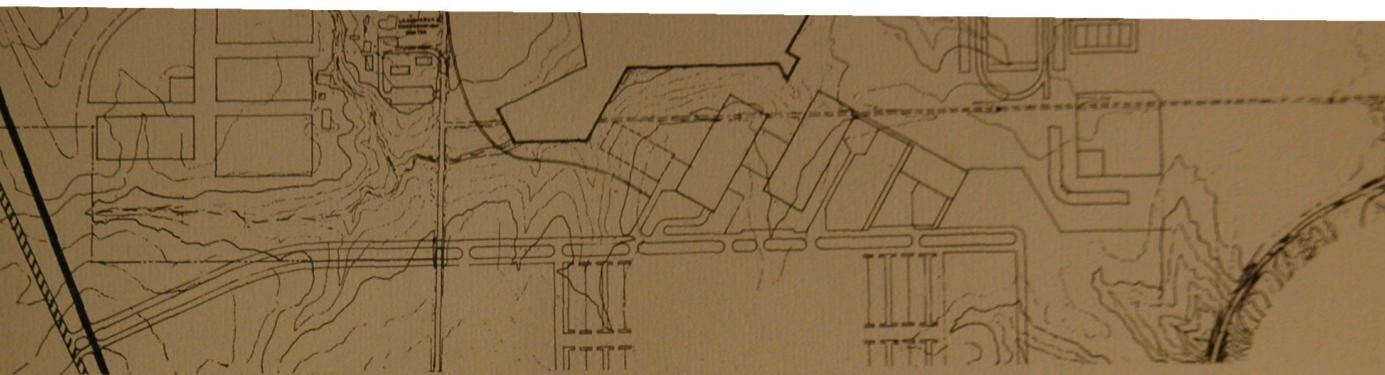
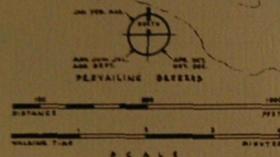
PHASE IV of construction to be completed by September 1978, will include the major addition to the Library-Learning Resource Center and expanded facilities for academic laboratory and research space, office space and student services totaling approximately 416,000 gross sq. ft. Also included will be the roads and parking as noted on the Plan of Phase IV.

- PREVIOUS CONSTRUCTION
- ▨ PROPOSED CONSTRUCTION



PHASE V of construction totaling approximately 245,000 gross sq. ft. to be completed by September 1981, will contain all those elements needed to complete the space requirements for 12,500 F.T.E. students, as set forth in the Program. Also included will be the roads and parking as noted on the Plan of Phase V.

- PREVIOUS CONSTRUCTION
- ▨ PROPOSED CONSTRUCTION



PHASE IV of construction to be completed by September 1978, will include the major addition to the Library-Learning Resource Center and expanded facilities for academic laboratory and research space, office space and student services totaling approximately 416,000 gross sq. ft. Also included will be the roads and parking as noted on the Plan of Phase IV.

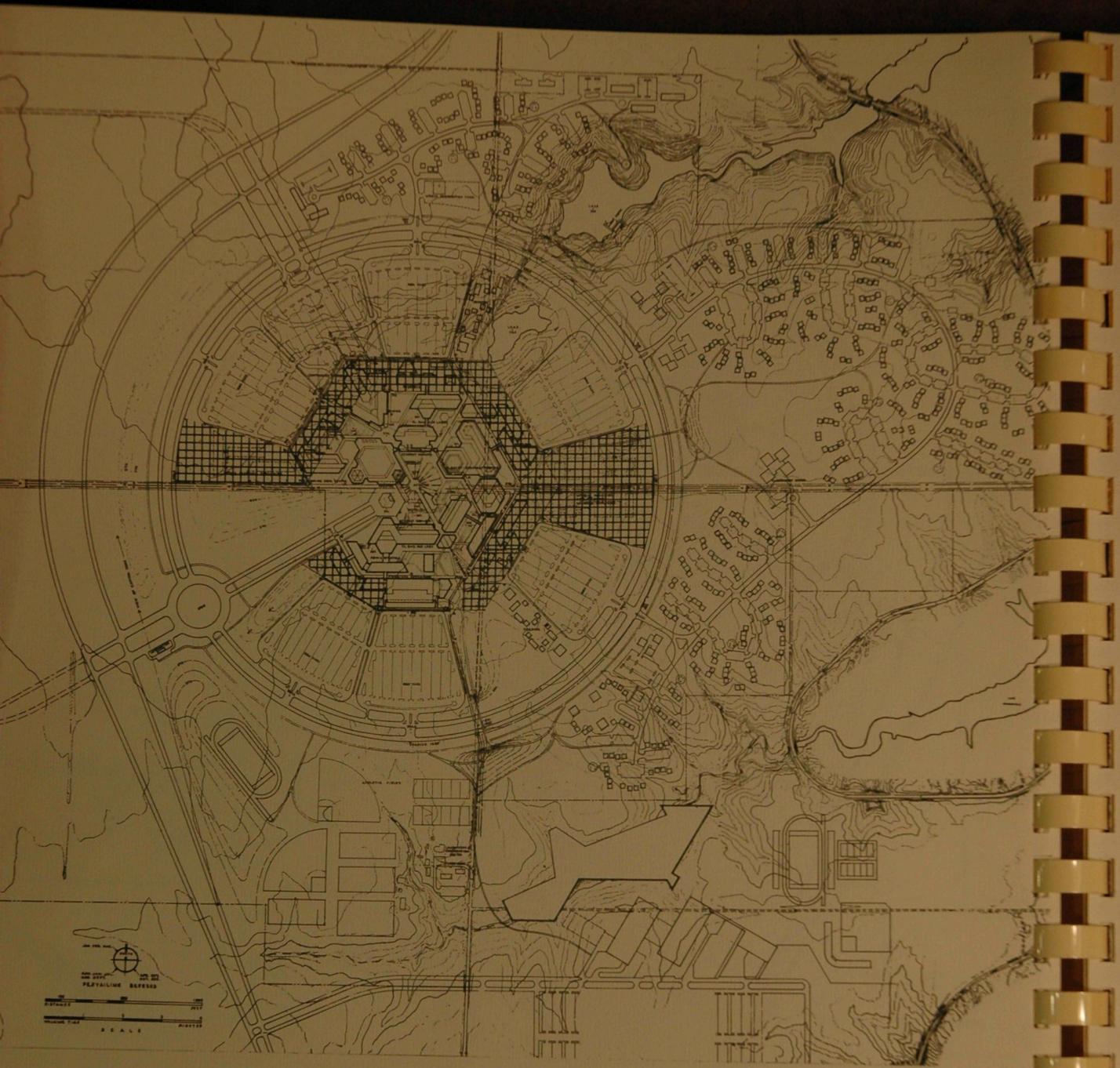
-  PREVIOUS CONSTRUCTION
-  PROPOSED CONSTRUCTION



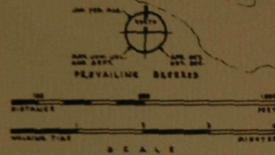
PHASE V of construction totaling approximately 245,000 gross sq. ft. to be completed by September 1981, will contain all those elements needed to complete the space requirements for 12,500 F.T.E. students, as set forth in the Program. Also included will be the roads and parking as noted on the Plan of Phase V.

■ PREVIOUS
CONSTRUCTION

▨ PROPOSED
CONSTRUCTION



FUTURE GROWTH of the Academic Campus has been anticipated in this plan. Note that nearly all of the academic space requirements for 12,500 students are included within approximately 700' of the center of the campus. Between this and the parking areas is a space approximately 100' wide in which future buildings are indicated. This space plus the area used for the Interim Facilities will provide for greatly expanded academic facilities, should they be required in the future.



FUTURE GROWTH of the Academic Campus has been anticipated in this plan. Note that nearly all of the academic space requirements for 12,500 students are included within approximately 700' of the center of the campus. Between this and the parking areas is a space approximately 100' wide in which future buildings are indicated. This space plus the area used for the Interim Facilities will provide for greatly expanded academic facilities, should they be required in the future.

SCHEDULE OF PERMANENT
ACADEMIC CONSTRUCTION

(Areas in thousands of sq. ft.)

Bldg No.	Levels (floors)					Tot. GSF	
	1	2	3	4	5		
PHASE I - by September 1973							
Library - Learning Resource Center, Assignable Academic Space & Mechanical	1	40	48	50	50	12	200
TOTAL						200	

PHASE II - by September 1974

Classrooms, Fac. Off., Student Service	2,3	24	24	24	17		89
Part 1-Central Dining, Receiving and Power	4a	70	12				82
Auditorium, Exhibition, Etc.	5	75	62	37	28	1	203
Concourse & Student Service	6	55					55
Classrooms, Labs, Fac. Off.	7	26	24	23	16		89
TOTAL							518

PHASE III - by September 1976

Part 2 - Central Dining Receiving and Power	4b		55	10			65
Concourse Entry, Fac. Off., Student Services	8	10			10		20
Administration, Classroom, Labs	9	51	49	51	39		190
Physical Education	10	51	54	5			110
Performing Arts, Fine Arts, Faculty Studios	11	35	29	22			86
TOTAL							471

PHASE IV - by September 1978

Classrooms, Labs, Fac. Off.	12	17	17	8			42
" " " "	13	34	33	33	10		110
" " " "	14	11	9				20
Expansion of Library-Learning Resource Center	15	51	50	42	28		171
Classrooms, Labs, Fac. Off.	16	18	18	17	20		73
TOTAL							416

Phase V - by September 1981

Classrooms, Labs, Fac. Off.	17	19	15	18			52
" " " "	18	19	18	19			56
" " " "	19	19	13	13	5		50
" " " "	20	21	19	15			55
Fine Arts, Faculty Studios	21	11	10	11			32
Classrooms, Fac. Offices	TOTAL						245

SCHEDULE OF PERMANENT
ACADEMIC CONSTRUCTION
continued

GRAND TOTAL 1,850,000 GSF of PERMANENT ACADEMIC CONSTRUCTION
not including residential construction nor 112,000 GSF of
interim construction.

The five phases of permanent construction will be divided into
yearly stages as may be necessary to meet the needs of enroll-
ment.

PART V - SUPPLEMENTARY INFORMATION

A. APPENDIX 1. SUMMARY OF PROGRAM

SUMMARY OF EACH OF THE TEN MAJOR ITEMS OF
ACADEMIC SPACE REQUIREMENTS

Gross Sq. Ft.

a) CLASSROOMS:

81 @ 300	NASF
60 @ 400	"
20 @ 500	"
10 @ 600	"
<hr/>	

Total Classroom Space 64,300 NASF or 96,450 GSF

b) LABORATORIES AND RESEARCH:

Social Science	21,580	NASF
Natural Science	87,100	"
Humanities	21,580	"
Professional & Technical Studies	69,720	"
<hr/>		

Total Research
Space 199,980

Total Instruc-
tional Space 190,400

Total Laboratory Space ...390,380 NASF or 640,225 GSF

c) FACULTY OFFICES:

Enclosed Faculty Offices		
1095 @ 100 NASF =	109,500	NASF
Shared Conference Rooms		
110 @ 225 NASF =	24,750	"
General Office Space	21,478	"
<hr/>		
Total	155,728	"
Access Space	26,850	"
<hr/>		

Total Faculty Offices.... 182,578 NASF or 273,875 GSF

PART V - A. APPENDIX 1 (continued)

h) STUDENT SERVICES:

Fast Food Services 8	16,800	NASF
Cafeterias 2	11,184	"
Vending 5	8,000	"
Table Service	3,300	"
Pre-Prep Kitchen	12,360	"
Student Offices	6,000	"
Staff Offices	4,250	"
Banquet-Ballroom	4,500	"
Book Store	14,400	"
Shops	11,000	"
Lounge	11,000	"

Total Student Services..102,796 NASF or 174,750 GSF

i) PHYSICAL EDUCATION:

Gymnasium	25,000	NASF
Swimming	10,000	"
Gymnastics, Handball, Squash, etc.	11,350	"
Support Facilities	20,000	"

Total Physical Education..... 66,350 NASF or 94,200 GSF

j) PLANT MAINTENANCE

Power Plant	5,000	NASF
Receiving and Warehouse	23,350	"
Garage, Workshop & related areas	16,000	"
Offices, Access, etc.	16,325	"

Total Plant Maintenance 60,675 NASF or 80,700 GSF

Grand Total of Academic Space Requirements by 1982 1,234,579 NASF or 1,885,925 GSF

PART V - A. APPENDIX 1 (continued)

d) LIBRARY-LEARNING RESOURCES:

Reader/Study Stations	97,800	NASF
Collections	55,475	"
Media Center	10,900	"
Staff & Public Areas	23,800	"

Total Library-Learning Resources187,975 NASF or 248,200 GSF

e) DECENTRALIZED STUDY FACILITIES 36,000 NASF or 54,000 GSF

f) AUDITORIUM AND LECTURE FACILITIES:

Auditorium - Seating 1300		
Stage & Lobby	30,800	NASF
Support Facilities	7,025	"
Workshop, Rehearsals, Etc.		
Lecture Halls		
1 for 300, 1 for 200,		
2 for 150 each	11,500	"

Total Auditorium & Lecture Facilities 49,325 NASF or 82,375 GSF

g) ADMINISTRATIVE OFFICES:

300 admin. staff		
@ 135 NASF =	40,500	NASF
400 support staff		
@ 60 NASF =	24,000	"
Special Office Space	18,000	"

Total 82,500 "

Access Space 11,700 "

Total Administrative Offices 94,200 NASF or 141,150 GSF

PART V - A. APPENDIX 2.

APPENDIX 2. Important physical qualities determining the types of trees proposed have been assigned relative numerical values. Trees with the lowest scores are considered most valuable.

a) VALUE SCALE

Height 1 - 50 to 100 feet high
 2 - 30 to 50 feet high
 3 - 12 to 30 feet high

Growth Rate 1 - rapid 18 to 24 inches/year
 2 - moderate 12 to 18 inches/year
 3 - slow 4 to 12 inches/year

Life Span 1 - long 100 years plus
 2 - average 50 to 100 years
 3 - short 20 to 50 years

Insect & Disease Tolerance 1 - relatively free / some maintenance
 2 - hardy / seasonal maintenance
 3 - not hardy / regular maintenance

Wood Strength 1 - strong wood / low storm damage
 2 - average wood / minor storm damage
 3 - weak wood / high storm damage

Cleanliness 1 - relatively clean
 2 - moderately clean
 3 - above average litter problem

PART V - A. APPENDIX 2 (continued)

b) DOMINANT TREE LIST
Deciduous

Plant Name	Height	Growth Rate	Life Span	Insect/Disease Tolerance	Wood Strength	Cleanliness	Total
Gleditsia Triacanthos Moraine	1	1	2	1	1.5	1	7.5
Honey Locust							
Acer Rubrum Red Maple	2	2	2	2	2	1	11
Acer Saccharum Sugar Maple	1	2.5	1.5	2	1.5	1	9.5
Quercus Borealis Maxima Northern Red Oak	1	1.5	1	2	1.5	1.5	8.5
Quercus Bicolor Swamp White Oak	1	2.5	1	1.5	1.5	1	8.5
Quercus Palustris Pin Oak	1	1	1.5	1.5	2	1	8.0
Ginkgo Biloba Ginkgo	1	3	1	1	1	1	8.0
Gymnocladus Dioicus Kentucky Coffee Tree	1	2.5	2	1	1.5	1	9.0
Celtis Occidentalis Hackberry	1.5	1	2	1	1.5	1	8.0
Juglans Nigra Black Walnut	1	2	1	2.5	1.5	2	10.0
Liriodendron Tulipifera Tulip Tree	1	2	1	1.5	2	1	8.5
Liquidambar Styraciflua American Sweetgum	1.5	2.5	1	2	1	1	9.0
Platanus Acerifolia London Plane Tree	1	1	1	2	2	1	8.0
Phellodendrom Amurense Amur Cork Tree	2	1.5	2	1.5	2	1	10.0
Magnolia Acuminata Cucumber Tree	1.5	2	2	1	2	1	9.5

PART V - A. APPENDIX 2 (continued)

c) DOMINANT TREE LIST

Pine / Evergreen / Other

Plant Name	Height	Growth Rate	Life Span	Insect/Disease Tolerance	Wood Strength	Cleanliness	Total
Pinus Nigra							
Austrian Pine	1	1	1	1.5	1	1	6.5
Pinus Ponderosa							
Yellow Pine	1	1.5	1	1.5	1	1	7.0
Pinus Strobus							
White Pine	1	1.5	1.5	1.5	1	1.5	8.0
Pinus Sylvestris							
Scotch Pine	1.5	1	1.5	1.5	1	1	7.5
Pinus Thunbergii							
Japanese Black Pine	1.5	1	2	1	1	1	7.5
Picea Abies Excelsa							
Norway Spruce	1	1	2.5	1.5	1	1	8.0
Larix Pseudu							
European Larch	1	1	2	2	2	1	9.0
Taxodium Distichum							
Bald Cypress	1	2	1	2	1	1	8.0
Pseudotsuga Taxifolia							
Douglas Fir	1	1	1	1	1.5	1	6.5

PART V - A. APPENDIX 2 (continued)

d) SECONDARY TREE LIST

Plant Name	Height	Growth Rate	Life Span	Insect/Disease Tolerance	Wood Strength	Cleanliness	Total
Alnus Glutinose Black Alder	2	1.5	3	1	3	1	11.5
Amelanchier Laevis Allegheny Service- berry	2	1	3	1	1.5	1	9.5
Amelanchier Canadensis Shadblow Service- berry	2	1	2	1	1.5	1	8.5
Malvs/Varieties Crab	3	2	2	2	1	2	12.0
Betula Papyrifera Canoe Birch	2	1	3	2.5	2.5	2	13.0
Betula Nigra River Birch	1.5	1	2.5	1.5	2	1	9.5
Fagus Sylvatica Purpurea Copper Beech	1	3	2	1	1	1	9.0
Fagus Sylvatica European Green Beech	1	3	2	1	1	1	9.0
Juglans Nigra Black Walnut	1	2	1	2.5	1.5	2	10.0
Tilia Cordata Little Leaf Linden	1	2	2	1.5	1	1.5	9.0
Cladrastis Lutea American Yellowwood	2	3	2	1	1	1	10.0
Quercus Robur Fastigata Fastigate English Oak	1	3	1	1.5	1	1	8.5
Quercus Coccinea Scarlet Oak	1	2	1	1.5	1	1	7.5
Cercidiphyllum Japonicum Katsura Tree	3	1.5	2	1	2	1	10.5
Carya Ovata Shagbark Hickory	1	3	1	1	2.5	2	10.5
Carpinus Caroliniana American Hornbeam	3	3	1	1	1	1	10.0
Nyssa Sylvatica Tupelo	1.5	2.5	2	1.5	1	1	9.5

PART V - A. APPENDIX 2 (continued)

d) SECONDARY TREE LIST - continued

Plant Name	Height	Growth Rate	Life Span	Insect/Disease Tolerance	Wood Strength	Cleanliness	Total
<i>Ostrya Virginiana</i>							
Ironwood	3	3	2	1	1	1	11.0
<i>Acer Saccharinum Pyramidale</i>							
Improved Silver Maple	1	1	1	1	2.5	2	8.5
<i>Crateagus / Vaneties</i>							
Hawthorn	2.5	1.5	1.5	1	1	1	8.5
<i>Cornus / Varieties</i>							
Dogwood	3	3	2	1.5	1.5	1.5	12.5
<i>Magnolia Soulvageana</i>							
Saucer Magnolia	3	2	2	1.5	1	1	10.5
<i>Magnolia Stellata</i>							
Star Magnolia	3	3	2	2	2	1	13.0
<i>Acer Palmatum Atropurpureum</i>							
Red Japanese Maple	3	3	2	2	1.5	1.5	13.0
<i>Prunus / Varieties</i>							
Plum	3	1	2	2	1	2	11.0
<i>Cercis Canapensis / Alba</i>							
Redbud / White Bud	2.5	2	2	1.5	2	1	10.0
<i>Metasequoia Glyptostro-</i> <i>boides</i>							
Dawn Redwood	1	1	1	1	2	1	7.0
<i>Elaeagnus Angustifolia</i>							
Russian Olive	3	1	2.5	1.5	1	1	10.0
<i>Rhus Lancinata / Typhina</i>							
Sumac	3	1	2	1	1	1	9.0
<i>Salix Blanda</i>							
Niobe Weeping Willow	1.5	1	3	2	3	2	12.5
<i>Salix Matsudana Tortuosa</i>							
Corkscrew Willow	3	1	3	2	3	2	14.0

PART V - B.

Supplementary Reports, Drawings and other material relating to the design of the Long Range Development Plan.

The following Supplementary Information is on file in the office of the President of Sangamon State University, in the office of The Board of Regents, and in the Architect's office:

- a) "Governing Policy for the Regency Universities of the State of Illinois" - By-Laws of the Board of Regents in effect May 4, 1969)
- b) President's "Report to the Board of Regents" to date.
- c) "Long Range Development Plan" I. Academic Plan for S.S.U., II. Projected Enrollment at S.S.U., July 1970, by Office of Institutional Research, S.S.U.
- d) Program, titled "Master Plan Report", July 1970, by Becker and Becker, Inc.
- e) "Landscape Development Report", July 1970, by Royston, Hanamoto, Beck & Abey.
- f) "Preliminary Foundation Engineering Appraisal", Proposed Site of Sangamon State University, July 1970, by Walter E. Hanson Company.
- g) "Site Utilities Report" including a report on trash disposal, by Collins and Rice, Inc.
- h) "Heating, Ventilating and Air Conditioning Report", and "Comparative Heating and Cooling Costs", May 1970, by Brown, Davis and Mullins, Associates.
- i) "Land Development Study in the Vicinity of Sangamon State University and Lincoln Land College", March 1970, by Sangamon County Regional Planning Commission.

PART V - B.

- j) Sangamon County Zoning Ordinance 1969.
- k) 1966 Zoning Ordinances - City of Springfield.
- l) "Environmental Zoning and Traffic Access Study", April 1969, by Barton-Aschman Associates, Inc.
- m) "Parking Analysis Report", June 1970, by Office of the Campus Architect of S.S.U.
- n) "Lighting Concept for S.S.U.", July 1970 by Peter Sargent.
- o) Samples of face brick, finished concrete, roofing tile and copper, and metal trim and glass.
- p) Prints of Plans and photo of model, as follows:

Sheet No.	Description	Scale
1	Photo of Model (original)	1" = 100'
2	Basic Plan	1" = 200'
3	Architectural & Landscape Plan - Total Campus 740 Acres	1" = 200'
4	Pedestrian & Bicycle Routes	1" = 200'
5	Architectural & Landscape Plan - Academic Campus within the Ring Road	1" = 100'
6	Plaza Level Plan	1" = 100'
7	Concourse Level Plan	1" = 100'
8	Sections through Campus	1" = 32'-0"

Appendix 3 to Part V Supplementary Information

Long Range Development Plan

ANNEXATION OF SANGAMON STATE UNIVERSITY PROPERTY

Office of Planning and Development
A staff report prepared by
Richard R. Williams
Environmental and Capital Planner
Sangamon State University
February 17, 1971

LONG RANGE DEVELOPMENT PLAN

PART V SUPPLEMENTARY INFORMATION

Appendix 3 - Annexation of Sangamon State University Property

The establishment of Sangamon State University in the Springfield urban area has an important effect on the community and its neighboring governmental jurisdictions.

- 1) Established as a public affairs institution in accordance with the statewide Master Plan developed by the State of Illinois Board of Higher Education, Sangamon State's mandate calls for an innovative teaching institution with a public affairs orientation granting liberal arts degrees. Thus particular consideration must be given to the impact of annexing this institution to the various governmental units, as well as the effect on taxing districts within which it is already located; a tax-exempt public institution in need of urban services could become a burden on local taxpayers. This paper presents an analysis of this impact.
- 2) It is expected that Sangamon State University and Lincoln Land Community College will bring to the Springfield area a steady demand for rapid growth in housing and community services over the next two decades. Though the campus sites are of rural character at present, they are located on Springfield's urban fringe and will inevitably generate and stimulate urban growth on adjacent lands. In a report of the Sangamon County Regional Planning Commission, it is estimated that the population of the Springfield metropolitan area will increase by 48,000 by 1985. This projected increase is more than four times the amount of growth experienced during the past 12 to 15 years.
- 3) The City of Springfield has grown in size, reputation and community spirit over the past several years. Many civic improvements have been made including: Restoration of the Old State Capitol and Lincoln Home Area and revitalization of the downtown area. During 1970 the city was one of eleven "All-America Cities" designated by the National League of Cities. Location of the two new institutions in Springfield is expected to cause further revitalization and expansion of the community's business and industrial economy. Generally accepted economic multiplying factors made available by the Illinois State Chamber of Commerce indicate for every 100 new employees in a community, 3 new retail stores are established, 65 other workers are employed, approximately \$229,000 more bank deposits are made, and the total annual retail sales are increased by

approximately \$330,000. Sangamon State is expected to be a major employer in the community, employing more than 2,000 people by 1982.

Since the fall of 1969, a cooperative effort of private developers, planning agencies and governmental bodies led by Sangamon State University and Lincoln Land Community College has been developing an environmental plan.

- 1) A concern for the type of an environment to be created in the area surrounding the two new institutions during this period of rapid growth, the planning leadership in the University, college and community met with representatives of governmental jurisdictions and owners of nearby undeveloped tracts to discuss and assess the future development of the area. Landowners formed the College Area Owners Association, assessed themselves on a per acre basis and hired a planning consultant to work with the public sector. The public sector formed a committee composed of representatives of the City of Springfield, Sangamon County, School Districts No. 5 and 186, the Springfield-Sangamon County Regional Planning Commission, Lincoln Land Community College and Sangamon State University. These agencies collaborated in hiring a planning consultant to work with the Owners Association consultant and the various technical staffs in preparing a concept plan, the result of which is contained in the brochure entitled Development Concept Southeast Sector, Springfield, Illinois (September 17, 1970).

In a subsequent action, the two groups unanimously approved the concept plan. This spirit of cooperation and extensive coordination in the development of the plan is the basis for proposing definitive development plans and implementation procedures.

In years to come, the significance of this planning effort, which offers individual landowners a unique opportunity to develop a "new town-in town" with the college and university as the nucleus, will be better understood. Property can then be developed separately by individuals or groups of individuals in an orderly fashion according to a single development plan.

- 2) During the development of the concept plan, it was generally agreed by landowners, as in proper accord with city water extension policy and the best interest of the city, that property would be annexed to the City of Springfield as it is developed.

Local jurisdiction interest in the annexation of campus property.

- 1) In 1955 the City Council passed a resolution establishing a policy that no new water service would be extended outside of the city limits, a policy which has been very successful in expanding the

city limits over the past several years. The refusal of water extensions is about the only way the City has to encourage annexation to build the tax base.

Since it is the policy of the City that a water extension will only be made if the property is annexed, in July of 1970, a promise was made to the Mayor and City Council that Sangamon State University would initiate annexation proceedings in order to get the City to agree to extend water lines to the interim campus. An exception was made for Sangamon with the explicit understanding that the campus property would be annexed as soon as possible.

- 2) The primary reason a taxing body such as the City or Park District would desire to have the campus property annexed is so that adjacent land with rapid development potential can become contiguous. If land cannot become contiguous, it cannot be annexed.
- 3) Governments are formed with the principle purpose of providing services. The alternative of not annexing would necessitate a duplication of those services by Sangamon State University or another governmental unit. Should the University provide its own services, it would be much like establishing a new, independent city within a city, thus adding to the already enormous problem of proliferating governmental units and single purpose districts, each duplicating municipal services.

Presently there are 135 separate taxing units of government within Sangamon County distributed as follows:

- 27 Townships
- 26 Road and Bridge Districts
- 25 Corporate Units
- 26 Fire Districts
- 25 School Districts
- 6 Special Districts

The campus property, or a portion thereof, is presently within nine (9) taxing districts including:

- Sangamon County
- Woodside Township
- Woodside Road and Bridge District
- School District #5 (Ball-Chatham)
- Junior College District #526
- Springfield Auditorium and Exposition Authority
- Springfield Mass Transit District
- City of Springfield

Effect on local governmental units if campus property were exempt from tax.

- 1) Land used for educational purposes is granted a tax-exempt status by the assessor. Since campus property leased for agricultural purposes is not tax-exempt, the Board of Regents must pay taxes thereon. To understand the maximum impact, the effect of removing all campus property from the tax roles must be considered.

The latest assessed value of the campus property as determined by the office of the Sangamon County Supervisor of Assessments is tabulated below:

SANGAMON STATE UNIVERSITY - CAMPUS PROPERTY-ASSESSED VALUE

Parcel Description	Number of Acres	1970 Assessed Value
1. SW $\frac{1}{2}$ 23-15-5	160	\$34,800
2. SE $\frac{1}{4}$ SE $\frac{1}{4}$ 23-15-5	40	6,000
3. PT. E $\frac{1}{2}$ SE $\frac{1}{4}$ 23-15-5	1.03	5,440
4. PT. E $\frac{1}{2}$ SE $\frac{1}{4}$ 23-15-5	28	4,200
5. PT. NE $\frac{1}{4}$ of SE $\frac{1}{4}$ 23-15-5	10	1,500
6. NW $\frac{1}{4}$ SE $\frac{1}{4}$ 23-15-5	40	15,245
7. SW $\frac{1}{4}$ SE $\frac{1}{4}$ 23-15-5	40	12,850
8. EX. Lake Land SW $\frac{1}{4}$ 24-15-5	83.43	22,385
9. W25A N $\frac{1}{2}$ NW $\frac{1}{4}$ 25-15-5	25	3,750
10. SW $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ 25-15-5	10	1,500
11. N.320' of W.625' of E $\frac{1}{2}$ NE $\frac{1}{4}$ 26-15-5	4.59	18,910
12. PT. of N3/4 of E $\frac{1}{2}$ NE $\frac{1}{4}$ 26-15-5	55.41	8,410
13. W $\frac{1}{2}$ NE $\frac{1}{4}$ EX. N 1551' thereof 26-15-5	33	11,355
14. N. 775 $\frac{1}{2}$ ' of W $\frac{1}{2}$ of NE $\frac{1}{4}$ 26-15-5	23.50	4,525
15. S. 775 $\frac{1}{2}$ ' of N. 1551' of W $\frac{1}{2}$ of NE $\frac{1}{4}$ 26-15-5	23.50	4,525
16. E $\frac{1}{2}$ NW $\frac{1}{4}$ EX. N 1551' thereof 26-15-5	33	6,355
17. N 775 $\frac{1}{2}$ ' of E $\frac{1}{2}$ of NW $\frac{1}{4}$ 26-15-5	23.50	4,525
18. S 775 $\frac{1}{2}$ ' of N 1551' of E $\frac{1}{2}$ of NW $\frac{1}{4}$ 26-15-5	23.50	4,525
19. S $\frac{1}{2}$ W $\frac{1}{2}$ NW $\frac{1}{4}$ 26-15-5	40	8,000
20. N $\frac{1}{2}$ W $\frac{1}{2}$ NW $\frac{1}{4}$ 26-15-5	40	8,000
21. N 8 ac. of W $\frac{1}{2}$ SE $\frac{1}{4}$ 26-15-5	<u>8.00</u>	<u>1,540</u>
TOTAL	745.46	\$188,340

- 2) The latest assessed valuation of all campus property totals \$188,340. If this amount were removed from each taxing district's tax base, the effect would be as shown on the table on the following page.

Generally, there is very little effect on the tax base if Sangamon State University property is made tax-exempt. The tax base of most districts is affected less than one tenth of one percent; the tax base most affected is reduced by only fifty-five hundredths of one percent.

- 3) The least affected is Junior College District #526, Sangamon County and the Auditorium Authority. The most affected is the Ball-Chatham School District, Woodside Township and Woodside Township Road and Bridge District. The tax base of the City of Springfield and the Springfield Park District would not be affected by annexation since the campus property was purchased before any of it was within those district limits.
- 4) The tax base of Ball-Chatham School District would be affected by slightly more than one half of one percent if all the campus land were exempt from tax. The exemption of this amount, together with the Lincoln Land Community College campus which could be made exempt, and the proposed Lake Springfield II to be owned by the City of Springfield and exempt from tax, could have a combined significant impact on the tax base of the School District. The impact will be lessened, however, since the properties will become exempt in staggered increments over a period of many years, and because the proposed improvements will cause new development to occur.
- 5) Both the Ball-Chatham and Springfield School Districts can receive additional State funding if children of State employees (including Sangamon State employees) attend schools in the respective districts. The State Impaction Law allows the School District to be paid additional State funds for each child of a State employee, based upon the per capita local cost of last year's school program. This year District No. 186 expects to receive \$235.00 per child of a State employee attending school under the Impaction Act.

Annexation merely changes the district boundaries within which Sangamon is exempt.

- 1) If the entire campus property were annexed to the City of Springfield, then it would no longer be within Woodside Township or within the Woodside Township Road and Bridge District. The annexation would automatically cause the property to be within Capital Township which is coterminous with the City of Springfield.

EFFECT ON GOVERNMENTAL UNITS IF SSU
CAMPUS PROPERTY WERE EXEMPT FROM TAX

Taxing District	1969 Assessed Value of All Property in District	Assessed Value of SSU Property	1969 Tax Rate Per \$100 Payable in 1969	Total Possible Income from Taxing Districts	Amount of Income Lost if Campus Were Exempt from Tax	Percent Affected if Entire Campus Were Exempt from Tax
Sangamon County	\$673,212,390	\$188,340	.3084	\$2,076,187	\$581	0.028%
Woodside Township	72,454,715	188,340	None	0	0	0.260%
Woodside Township Road and Bridge	72,454,715	188,340	.3028	219,393	570	0.260%
School District #5 (Ball-Chatham)	34,035,389	188,340	2.8597	973,310	5,386	0.550%
Junior College District #526	912,792,473	188,340	.1552	1,416,654	292	0.002%
Auditorium Authority	673,212,390	188,340	.0491	330,547	92	0.028%
Mass Transit District	470,882,335	188,340	.0500	235,441	94	0.040%
Sanitary District	457,252,945	188,340	.1613	737,549	304	0.041%
*City of Springfield	367,417,867	188,340	1.1303	4,152,924	0	0
**Springfield Park District	436,780,348	188,340	.2357	1,029,491	0	0

*Only a portion of the campus property is presently within the city of Springfield. (None at time of purchase)
 **No portion of the campus property is presently within the Springfield Park District.

- 2) Annexation to the City of Springfield does not affect annexation to the Springfield School District or the Springfield Park District. A separate annexation petition would be necessary to accomplish this. In the case of the School District, a petition would be necessary to separate from the Ball-Chatham District, and a petition to annex to the Springfield District would have to be prepared. The County Board of School Trustees would then hold a hearing on the matter and make the decision.

The extent of the tax burden on the City.

- 1) The services to be provided by the City are primarily aimed at protecting the health, safety, and general welfare of the people on campus, the majority of whom are taxpaying community members.
- 2) The majority of the Sangamon State campus is not annexed to the City and not within any fire district. If it were annexed to the City of Springfield, it would automatically fall within the Springfield Fire District.

Both Northern Illinois University and Illinois State University contract out of their annual operating budgets with the respective local communities for fire protection. The formula is \$4.00 per student based upon the FTE enrollment of the previous fall. Maximum payment is limited to 1/3 of the operating budget for the local fire department. Similar arrangements by Sangamon State University would minimize the annexation impact.

- 3) Sangamon State University plans to provide its own security police force minimizing the City of Springfield police service.
- 4) Because the campus presently has only one access road, new roadway construction is imminent. However, it is anticipated that the City will finance only a portion of the cost of new roadway, with the State and Federal Government paying the major portion of the cost.

Many of the services provided by the City of Springfield would not be needed by the University.

The City income from real estate taxes is distributed by the percentage listed below and used by the City for the purposes noted:

*General Purpose	22%
Streets and Bridges	9%
Public Benefit	4%
Library Tax	16%
Playgrounds	8%
Firemen's Pension	10%

(continued)

Policemen's Pension	7%
Municipal Band	1%
Fire Prevention	9%
Municipal Retirement	8%
Judgments	.5%
Civil Defense	.5%
City Hall Rentals	<u>5%</u>
TOTAL	100%

*General Purposes (22%) is further distributed to the following:

Mayor Executive	Civil Service Department
Liquor Commission	Police Department
Human Relations Commission	Traffic Engineering Dept.
Fair Housing Board	City Coordinator
Municipal Choir	Election Commission
Zoning	Snow Removal
Historical Sites Commission	General City Administration
International Visitors Commission	Finance Dept. Executive
Industrial Development Commission	Purchasing Department
Tourism & Convention Commission	Treasurer's Department
Animal Shelter and Dog Warden	Comptrollers Department
Planning Commission	Public Health and Safety Executive
Traffic and Safety Council	Weights & Measures Department
Garbage Study	Fire Department
Commission for Senior Citizens	Health Department
Economic Opportunity Committee	Building Department
Youth Commission	Housing Code Enforcement
Legal Department	Special Assessments Department
Municipal Building Maintenance	City Clerk Department

Annexation of the Sangamon State University campus property to the Springfield Park District.

- 1) It is likely that the Springfield Park District will request that Sangamon State University annex to the District. Once again, the primary reason for the request is so that adjacent land with rapid development potential can become contiguous, and thus be eligible for annexation.
- 2) Annexation to the Park District would enlarge the District's tax base by a very small amount until all of the campus property becomes exempt.

In summary, Sangamon State should annex their property to both the City of Springfield and the Springfield Park District.

- 1) The tax bases would be affected very little once a portion of the

services to be provided by the City could be paid for in part by Sangamon State University. Most important, the adjacent lands surrounding the campus which have rapid development potential can become contiguous so that they can be annexed as they develop.

- 2) Not annexing does not solve or improve the problem of public institution's requirements for urban services without contributions to the community tax base. Therefore, it is more advantageous to the people of the community if the property is annexed.

THE PLANNING CONSULTANTS

Architects: Murphy, Downey, Wofford & Richman
St. Louis, Missouri

Landscape Architects and Planners:
Royston, Hanamoto, Beck and Abey
San Francisco, California

Program Consultants:
Becker and Becker, Inc.
New York City, New York

Civil Engineering and Site Utilities:
Collins and Rice
Springfield, Illinois

Mechanical and Electrical Engineering:
Brown, Davis, Mullins and Associates
Champaign, Illinois

Structural Engineering:
Walter E. Hanson and Company
Springfield, Illinois

Acoustical Consultant:
Bolt, Beranek & Newman
Cambridge, Massachusetts and
Chicago, Illinois

Traffic Consultants:
Harland Bartholomew & Associates
St. Louis, Missouri and
Chicago, Illinois

Editorial Consultant:
George McCue
St. Louis, Missouri