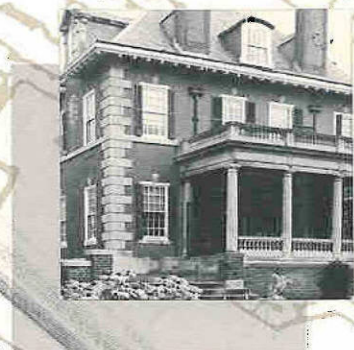
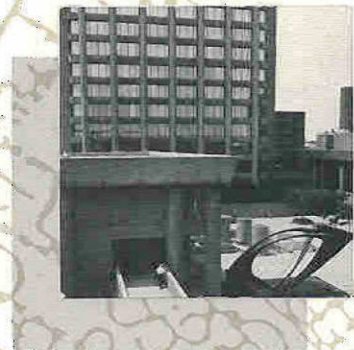
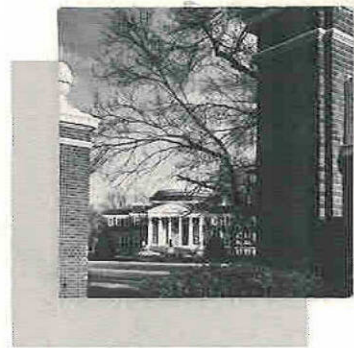


1985 Revision
of the
Long Range
Development
Plan

UNIVERSITY
of LOUISVILLE



1985 Revision of the Long Range Development Plan

Jasper Ward Architect
Robert L. Douglas, Project Manager
Johnson/Romanowitz/Architects

Consultants:

Johnson, Johnson and Roy,
Campus Planners

E. R. Ronald & Associates,
Electrical Engineers

Schimpeler-Corradino Associates,
Traffic Engineers

**Belknap
Campus**



**Health Sciences
Campus**



**Gardencourt
Campus**

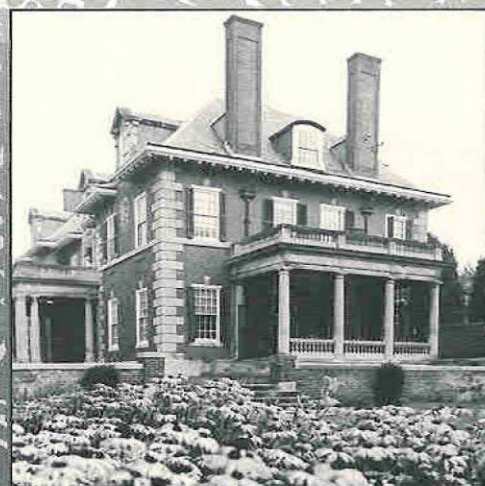


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Introduction

In the Spring of 1985 the document *University-wide Strategic Directions* for the University of Louisville was released. The document was the culmination of an intensive study by the institution and outlines the goals to be pursued vigorously over the next five years and beyond. The planning document was formulated with wide campus involvement and participation. With the completion of the strategic plan, the firms of Jasper Ward Architect and Johnson/Romanowitz/Architects were selected as external consultants to update the master plans for three of the campuses of the University.

In updating the master plans, the task was to both develop a plan that reflected the new *University-wide Strategic Directions* and build upon the Long Range Development Plans formulated in 1975. The Belknap, Health Sciences, and Gardencourt campuses were included in the planning project. The Shelby Campus has been excluded from this process but will be considered by others in a separate planning effort.

Following are the steps that were taken in the planning process:

- **Step 1—Data Gathering**
The external consultants identified planning data needs for all three campuses. The administrative staff of the University then gathered the appropriate data.
- **Step 2—Data Review and Summary Preparation**
The external consultants took the data and prepared a summary document for use by the planning group.
- **Step 3—Planning Charrettes**
A planning group including external consultants and representative University faculty and staff met in two, 2-day planning sessions. In these working sessions the campus plans were essentially developed.
- **Step 4—Document Preparation**
Following the charrettes, the external consultants produced narrative, sketches, and maps to describe the new campus master plans.
- **Step 5—Presentation to University**
The master plans for each of the three campuses were presented to the planning team, Board of Trustees and others for reaction.
- **Step 6—Integration with Strategic Unit Plans**
While the campus master plans were being developed, specific unit plans to implement the University-wide Strategic Directions were also being prepared. The campus master plans were reviewed to be sure they were not in conflict with any unit plan.
- **Step 7—Final Document Preparation**
This document describing the three campuses for the next five years and beyond was prepared.

Critical to the planning process was the participation of the planning team representatives of the University. Team members were:

Tom Crawford
Ed Dusch
Ed Hammond
David Lee
Larry Mehlbauer
Joe Musacchia
Ray Nystrand
Larry Owsley
Kathleen McDaniel Smith
Dick Swigart

In addition to Jasper Ward Architect and Johnson/Romanowitz/Architects, three other external consultants assisted with the planning effort:

E. R. Ronald and Associates, Inc.
campus engineering and utilities;
Schimpeler Corradino Associates, Inc.
transportation and parking
Johnson/Johnson and Roy, Inc.
landscape planning and campus planning

The product of the planning effort is best viewed as a joint effort of the planning group including the external consultants and the University participants.

Planning Issues and Guidelines

Following are five major planning issues and guidelines developed by the planning team which shaped the planning effort.

- **Enrollments**

Over the next five years enrollments are expected to remain essentially unchanged. In fact, estimates for the year 2000 indicate a shift of less than five percent. The master plans were developed based on an assumed continuing enrollment of approximately 20,000 students.

- **Landscaping**

It is important to continue and expand the landscape plan. This is an important aspect of the image of the institution and serves to provide an appropriate atmosphere in the urban setting.

- **Traffic and Parking**

Located in an urban environment and with a large commuter population, vehicular access to campuses and parking on the campuses will continue to be major concerns. As part of traffic considerations, efforts are already underway to develop entry points to the campus and a signage program.

- **Building Sites**

While enrollment growth will not demand extensive new facilities, the continuing evolution of the institution and upgrading of teaching, research, and service efforts will require the addition of new facilities. Given the limited space available, care must be taken in identifying future building sites.

- **Housing**

The University of Louisville is not on a par with similar benchmark institutions concerning student housing. The University annually experiences a shortage of units. In addition, there is considerable need for specialized housing on the campus to meet specific student interests and situations.

- **Athletics**

The University's athletic facilities are inadequate in several regards. They are scattered in several locations making coordination and organization difficult. Several are inadequate in terms of size. Many are not up to contemporary standards for a major institution.

In addition to identifying these major planning issues and guidelines, the planning team concluded that developing a campus master plan that looked ahead for five years was not practical. A more useful approach was to plan for the future and then identify which elements should be pursued over the next five years.

The University

Kentucky's largest city is the location of its second largest university—the University of Louisville. The relationship between Louisville and its University can be traced to 1798, when Kentucky's General Assembly chartered the Jefferson Seminary. The seminary occupied land in downtown Louisville.

In 1830, Kentucky's legislature chartered the Louisville Collegiate Institute. The Louisville Medical Institute received its charter from the state in 1833. Both of these additional U of L predecessors began holding classes in 1837, again, within the city limits.

Kentucky legislators expanded U of L in 1846 to include academic and law departments. These departments operated in downtown Louisville until the University purchased the Louisville Industrial School of Reform property in 1925.

Belknap Campus

Named Belknap Campus after Louisville businessman William R. Belknap, the location has witnessed U of L's growth from a student population of 1,000 to over 20,000, and academic growth from three departments to colleges of Arts and Sciences and Urban and Public Affairs and schools of Business, Education, Law, Music, and engineering (Speed Scientific).

Health Sciences Center

Until 1970, U of L's schools of Dentistry and Medicine occupied buildings that were architecturally and historically significant, but were educationally inadequate. The completion of the Health Sciences Center in 1970 provided both schools with first-class facilities near U of L's School of Nursing and in the heart of Louisville's medical center.

Gardencourt

This 20-room, three story Georgian mansion was built in 1906 by the Norton family. Located on Alta Vista Road near Cherokee Park, Gardencourt is named for its impressive grounds, which were designed by Olmstead of Cleveland. The mansion was bequeathed to U of L in 1947 by the heirs of Miss Marie Norton, the last member of the immediate family of George Washington Norton, a Louisville financier. Gardencourt was home to the School of Music from 1947 to 1969. Today, it houses the Urban Studies Center and the Kentucky Opera Association.

Belknap Campus



The Belknap Campus includes almost 100 structures on more than 150 acres immediately south of the Old Louisville Preservation District. As shown on the Belknap Campus Existing Conditions Plan, the campus is located between a major railroad corridor and Interstate 65 only a short distance south of the central city area. This campus, purchased in the 1920's, today houses the major academic programs of the institution other than those that are medically related.

Long Range Plan

The Long Range Development Plan of the Belknap Campus illustrates the anticipated changes for this campus.

Land Acquisitions

The general campus boundaries for the Belknap Campus are Cardinal Boulevard on the north, the railroad corridor on the west and south, and Interstate 65 on the east. Eventually all property within these somewhat natural boundaries should be acquired by the institution. In addition to these, the St. Joseph's property located within a few blocks east of the campus should continue to be developed as a housing area.

It should be noted that these boundaries include minimum acreage for an institution of the anticipated enrollment. Given the size of the campus it will be necessary to pursue directions that maximize the use of the available land. For example, parking garages will be needed when existing surface parking lots are required for other uses. It will likely continue to be desirable to play major spectator sports in off campus facilities such as Freedom Hall and Cardinal Stadium.

One critical piece of property within the proposed campus is Stansbury Park. It should be acquired through negotiations with the Parks Department, likely involving a trade of acreage. The park is not ideally suited for public use, and the tennis courts, the major activity in the park, are already reserved for University use much of the time. Property in another location would better serve Park Department needs. The park parcel is a valuable asset for the University.

Building Sites

The acquisition of property to the boundaries indicated will not add a large number of building sites. The property east of the railroad corridor that bisects the campus (running north and south) is best allocated for athletic uses. Athletic activities encompass academic programs such as physical education, unstructured recreation, organized recreation, and interscholastic athletics. The current athletic areas are undersized, poorly developed, and scattered about the campus. Allocating this defined area will greatly enhance athletic programs.

The first element in the athletic area will be the east portion of the Student Activities Center. The east portion will include indoor courts, jogging track, weight room, handball courts, locker rooms, and some interscholastic team areas. Other elements on the athletic area of the campus will eventually include a baseball stadium, new field house, aquatics center, tennis complex, track, and playing fields for soccer and field hockey. The institution should investigate shared use of athletic facilities with the Jefferson County Public Schools.

The consolidation of athletic facilities will free two major building sites. The area south of Eastern Parkway (now the baseball stadium, track and fields) can be developed into an area of research and engineering facilities. Sufficient space will exist for the two small Speed School expansions now underway as well as three major new buildings that can be developed around a small commons, quadrangle, or plaza.

The acquisition of Stansbury Park coupled with development of a major tennis complex in the athletic zone will create a second major building site with promi-

nence to Third Street and in proximity to the academic center of the campus. This would be an appropriate location for the College of Urban and Public Affairs (CUPA).

Other building sites include:

Current Parking South of Red Barn

This site south of the Red Barn and on both sides of the railroad is designated for the Student Activities Center. The schematic plans for the building have been completed and the planned footprint is shown.

Cardinal Boulevard North of Red Barn

This small site (currently surface parking) can serve best for some future specialized housing.

Block West of Red Barn

This block of land now contains a collection of commercial buildings converted to University use. They do not serve the University effectively. These building sites are ideally suited for University housing.

Intersection of Cardinal Boulevard and Third

This building site (now parking) between the schools of Music and Business could better serve an academic program.

Greek Housing

Sufficient space exists just west of the current Greek housing to develop an additional four or five houses.

West of Fourth

This area is appropriate for consideration as a building site for additional residence halls.

Other expansions within the campus can be accommodated by small additions to existing structures.

New Buildings

Over the foreseeable future a number of new structures and facilities are envisioned. Following is a listing of these.

Student Activities Center

This facility will house a wide variety of student centered activities and services such as food service, bookstore, lounges, conference/meeting rooms, career guidance, placement, and athletic recreation. It will be located near the residence halls and Red Barn in the northeast zone of campus.

Field House

This building would house a variety of track and field activities as well as traditional outside activities during bad weather such as football, baseball, and tennis. This facility should be located in the athletic zone east of Floyd Street.

Aquatic Center

This building, located east of Floyd Street, would be a new intercollegiate swimming and diving area as well as teaching and recreation pools.

Research Building

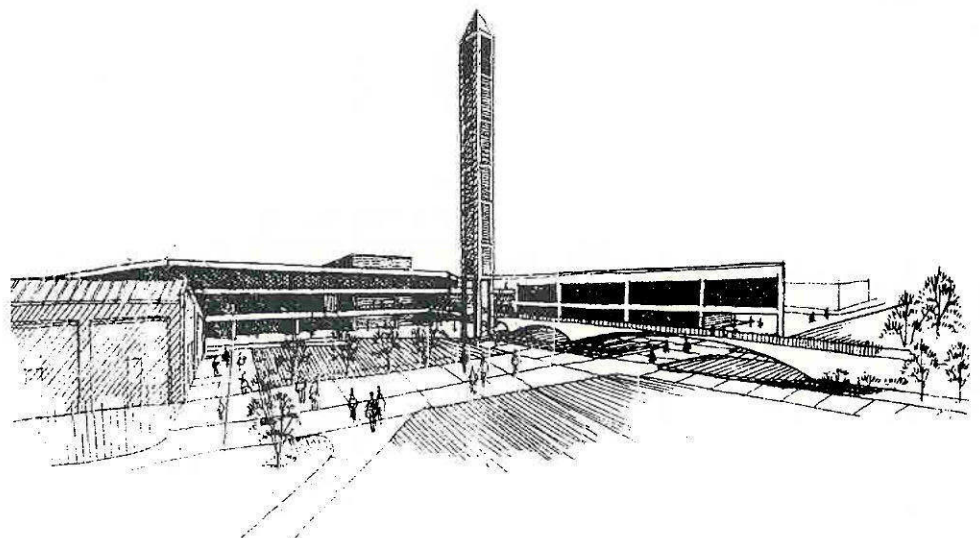
A building to house selected advanced research activities can be located on the former baseball field site south of Eastern Parkway.

Speed School Buildings

Adjacent to the proposed research building, it is possible to locate two additional engineering buildings to accommodate expected programs of the Speed School.

College of Urban and Public Affairs

This college has been housed in several settings and currently occupies several buildings. It would be a more effective program if it could be consolidated into a single structure. One possible site as noted earlier is the Stansbury Park site west of the "Oval."



Proposed Student Activities Center

Climatorium

The campus needs a climatorium and live animal care facility. Current facilities are inadequate. This structure might best be located just east of the Life Sciences Building.

Housing

Specified kinds of housing are needed. These might include traditional residence halls, special residence halls for selected populations such as athletics, married students, etc., or special interest groups such as foreign languages, academically talented, music, or computer science students, or Greek houses.

Small Additions

From time to time it will be desirable to develop small additions to existing buildings. Three have been proposed: an addition to Sackett Hall for computer aided design and computer aided manufacturing, an addition to Speed School Library, and an addition to Crawford Gymnasium. It will be important to consider such small additions carefully in order to insure that they do not intrude upon essential open spaces of the campus.

In cases where a particular size or configuration of building footprint is important on a given site, it has been shown.

Building Renovations

Six major building renovations are proposed within the foreseeable future. These are also shown on the Long Range Development Plan.

Student Center Building

This building will be largely vacated when the new Student Activities Center is completed. It seems well suited for the University as well as a focus of student services such as registration, admissions and financial aid.

Schneider Hall

This renovation is currently underway for the Fine Arts Department.

Belknap Gymnasium

The old gym building should be renovated or razed to make way for a building site. If renovation is feasible, one possible use could be a home for Theatre Arts. Given the historical importance of the building, renovation opportunities should be thoroughly considered.

Reynolds Building

This complex includes a historic manufacturing building (the Ford Motor Company), which was designed by renowned architect Albert Kahn, as well as a number of unattractive and insignificant additions. The original building seems ideally suited for renovation to house a "business incubator" or innovative practices center. It is close enough to campus to allow interaction but sufficiently separate to provide identity. Portions other than the original historic structure should be cleared to provide parking.

Faculty/Staff Development Center

The old Fine Arts building additions should be cleared except for the one substantial element at the west end of the grouping. The building could be renovated as a continuing education and professional development center.

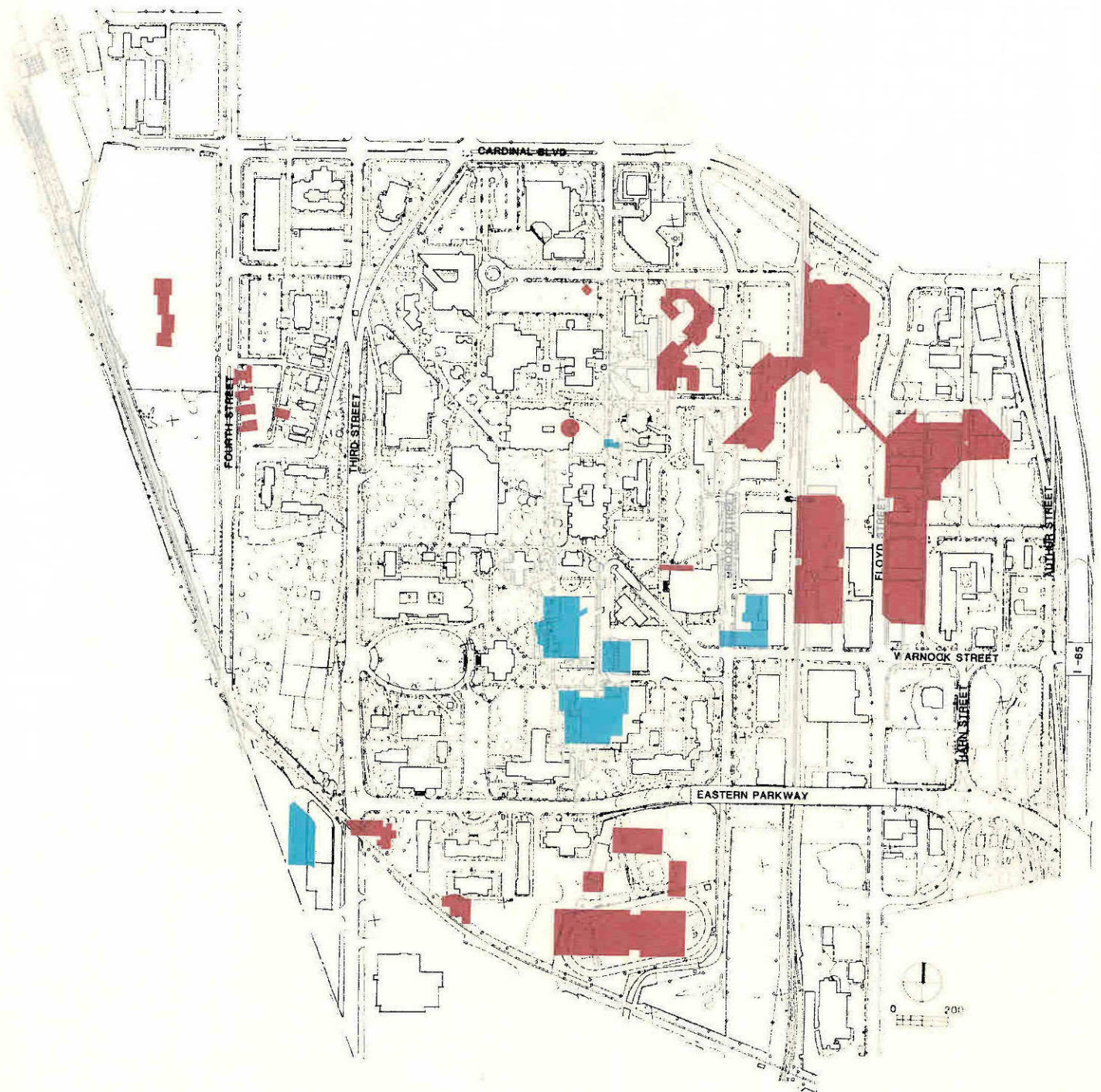
Physical Plant

The facility currently houses Physical Plant offices and services (located at Warnock and Floyd Streets). Renovations can enhance the proposed eastern entrance to campus.

Belknap

Campus

Existing Plan



Long
Range
Plan

Renovation



New Construction



Landscaping

The Landscape Development Plan for Belknap Campus illustrates a conceptual landscape plan. Appendix "A" is a more detailed description of the suggested landscape treatment. It is best to view the landscaping of the campus in terms of five zones.

North Entrance

This newest area of the campus needs landscape enrichment—canopy trees, evergreens and shrub masses to screen parking—so as to eventually compare to the mature central areas immediately to the south.

Athletic Complex

As these properties are acquired (east of the railroad along Floyd) perimeter canopy trees should be planted to define the campus and relieve the size of facilities such as the field house and parking deck.

Speed School/Research Complex

The area south of Eastern Parkway, similarly to the north zone, needs landscape development to tie it to the older areas of the campus across the Parkway.

New Parking Area

The new surface parking areas west of Fourth Street will require perimeter canopy trees to define pedestrian access ways as well as shrub plants to screen the large parking areas.

Campus Core

The campus core is mature and an invaluable landscape zone. Maintenance is proposed to preserve the integrity of this zone.

Within these five zones are several important landscape features

Walks

The north-south, east-west pattern of primary walks is excellent and needs to be built upon as new facilities are developed. At the same time a system of smaller secondary walkways needs to be created to accommodate diagonal pedestrian routes throughout the campus.

Quadrangles

Quadrangles, which group buildings and are apparent on the central campus zone, need to be continued.

Walls

Low stone walls should be added on Eastern Parkway and Third Street. These walls should be similar to the walls in front of the Speed Museum. They will help to direct pedestrian movement to intended crossing points. Crossing major roadways is difficult and dangerous, but the conditions can be improved by delineation of pedestrian crosswalk areas.

These landscape proposals shown on the Landscape Plan are discussed in Appendix A. Three sketches (included in this report) illustrate how these landscape elements might look when fully developed.

Belknap Campus

Landscape

Development Plan

A—New Parking Area

The large parking area proposed west of Fourth Street should be screened using shrubs or a low wall combined with shrubs. East-west pedestrian linkages are of primary importance. These linkages traverse both Third and Fourth Streets. Sidewalks should be added or widened at the three points shown. Canopy trees along these walks will help to visually define their locations. A low wall is proposed along the west edge of Third Street to direct pedestrians to designated crosswalks.

B—North Entrance

This area is the location for the more recently built facilities on the Belknap Campus. As such, it is in need of landscape enrichment using canopy trees, evergreens and shrub masses to screen parking. This landscape emphasis should be a priority so as to blend this area more harmoniously with the rich Central Commons area to the south.

C—Athletic Complex

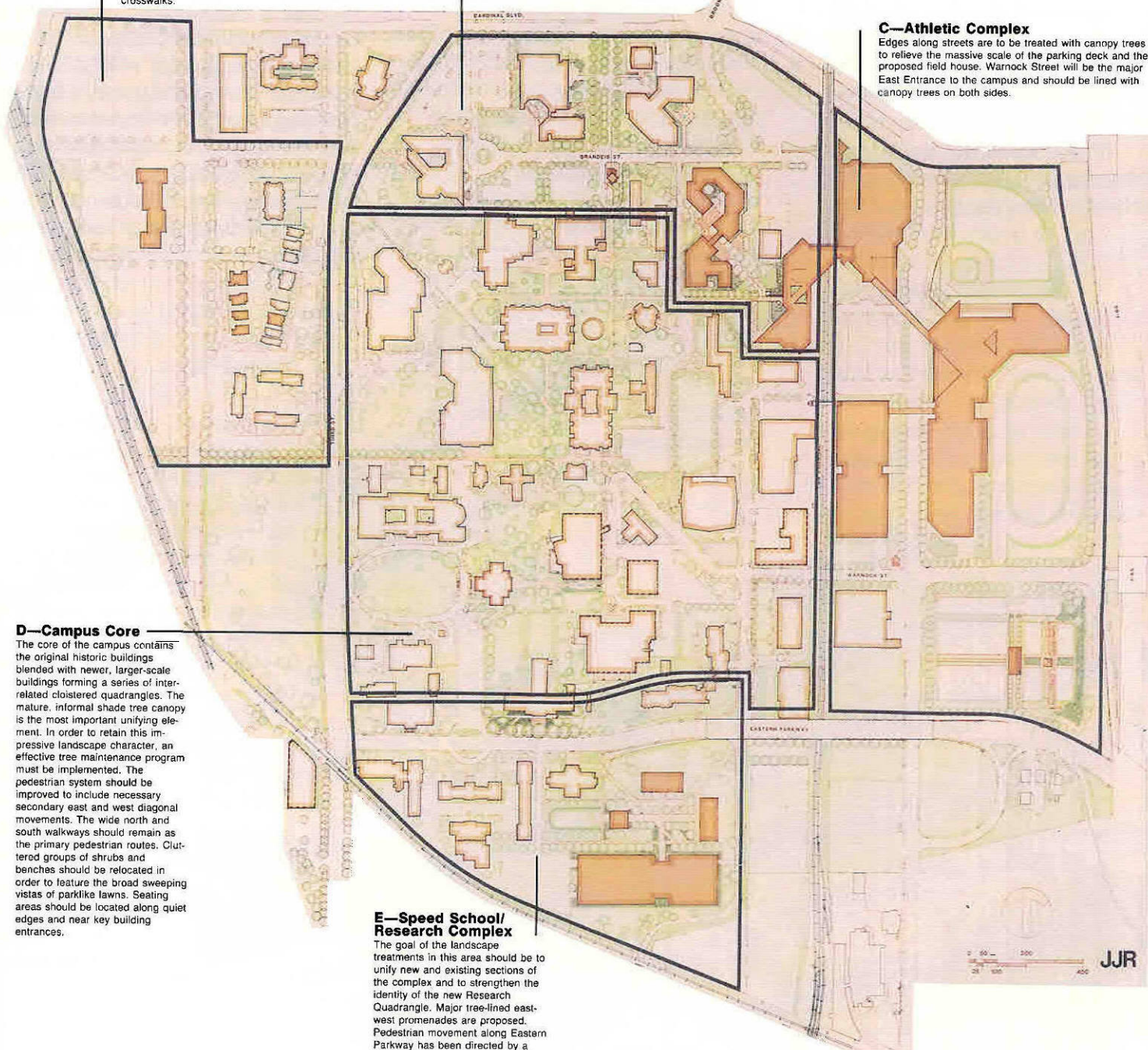
Edges along streets are to be treated with canopy trees to relieve the massive scale of the parking deck and the proposed field house. Warnock Street will be the major East Entrance to the campus and should be lined with canopy trees on both sides.

D—Campus Core

The core of the campus contains the original historic buildings blended with newer, larger-scale buildings forming a series of inter-related cloistered quadrangles. The mature, informal shade tree canopy is the most important unifying element. In order to retain this impressive landscape character, an effective tree maintenance program must be implemented. The pedestrian system should be improved to include necessary secondary east and west diagonal movements. The wide north and south walkways should remain as the primary pedestrian routes. Clustered groups of shrubs and benches should be relocated in order to feature the broad sweeping vistas of parklike lawns. Seating areas should be located along quiet edges and near key building entrances.

E—Speed School/ Research Complex

The goal of the landscape treatments in this area should be to unify new and existing sections of the complex and to strengthen the identity of the new Research Quadrangle. Major tree-lined east-west promenades are proposed. Pedestrian movement along Eastern Parkway has been directed by a low wall to force pedestrian traffic to cross at the existing traffic light or pedestrian tunnel. A walk running between the Natural Science building and the Chemistry building will foster pedestrian movement to the east under the Parkway Bridge.



Entrances

Three major points of formal entrance to the campus are envisioned. The traditional west entrance at the "Oval" off Third Street should be maintained. A second north entrance is under construction off Cardinal Boulevard at First Street. A third entrance should be developed near the intersection of Warnock and Floyd Streets on the eastern side of campus. These three entrances require signage, information, and visitor parking.

These three entrances are shown on the Campus Plan for Belknap Campus.

Pedestrian Access to Campus

As the campus is further developed it will be desirable to improve the pedestrian access points to the central campus from the perimeter parking areas.

From the Major Parking West of Fourth Street

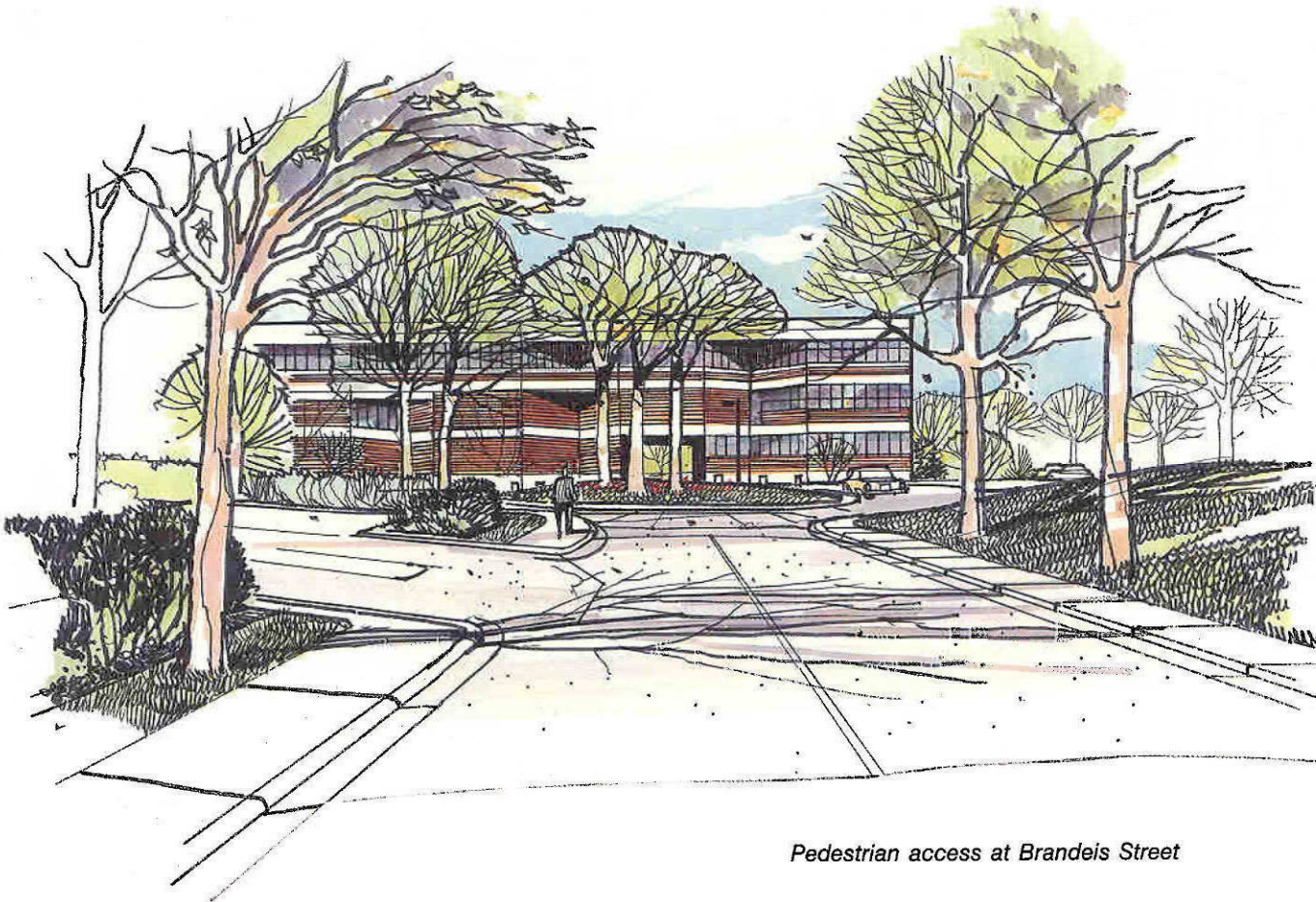
Three major pedestrian routes are anticipated. One will be along Cardinal Boulevard. A second will be beside the Confederate Monument and through the new School of Business to tie into the existing major east-west walkway. The third will be at the south end of the parking area tying in with the major sidewalk running between the Law School and the Library. Cardinal Boulevard and Confederate Monument crossings are already signal controlled crossings. Moving the signals from the Oval to the third pedestrian crossing location may be advisable.

From the Speed School Research Complex

A walkway serving the west half of the Speed School/Research Complex already exists under Eastern Parkway. As the east area is developed, an attractive pedestrian way under the overpass at the current Brook Street location will be added.

From the Athletic Complex

A northern crossing point over the railroad is planned as part of the Student Activities Center. It will tie into major walkways west of the building. The existing overhead crossing should be incorporated into the proposed parking structure shown between Floyd Street and the railroad. The third point of access will be a grade level crossing of the railroad at Warnock.



Pedestrian access at Brandeis Street

Vehicular Access and Parking

Appendix B of this document gives in some detail suggestions for vehicular access and parking. Given the commuter population important to the Belknap Campus, vehicular access and parking is critical. It is important for the University to continue the direction it established in the 1975 plan of locating parking on the perimeter of campus. The new plan suggests location of a major surface parking lot on the western edge of campus, and in large parking structures on the east and south. Existing central zone parking within the campus should be maintained. This surface parking is especially appropriate for handicapped students and for faculty and staff. Students' parking needs may best be served in the perimeter lots and structures.

The Belknap Campus enrollment requires approximately 7,000 parking spaces. As surface lots are used for new building sites, it will become necessary to develop parking structures. While the cost of construction of such facilities is significant, these facilities will be essential if any open green spaces are to be maintained on the Belknap Campus. The parking areas and structures shown on the Campus Plan will accommodate the needed parking places. With no change in enrollment or student population, the only factor that might influence the number of spaces required would be an effective rapid transit system. Such a system is not likely within the foreseeable future.

Vehicular access to the campus by way of surface streets is well defined and not likely to be altered. A major vehicular access way is Interstate 65. It is suggested that the University consider improving the campus access from this highway by the following:

- allowing left turns from north-bound I-65 exit to Warnock;
- redoing signs off I-65 to the campus;
- closing of Hahn Street;
- reopening of Arthur Street to Eastern Parkway to keep traffic on the perimeter of the campus;
- developing an exit ramp from Eastern Parkway to Floyd Street for access to the campus;
- creating the Warnock/Floyd intersection as the primary entry point to the central campus from the Interstate, Eastern Parkway, and the east side of campus generally.

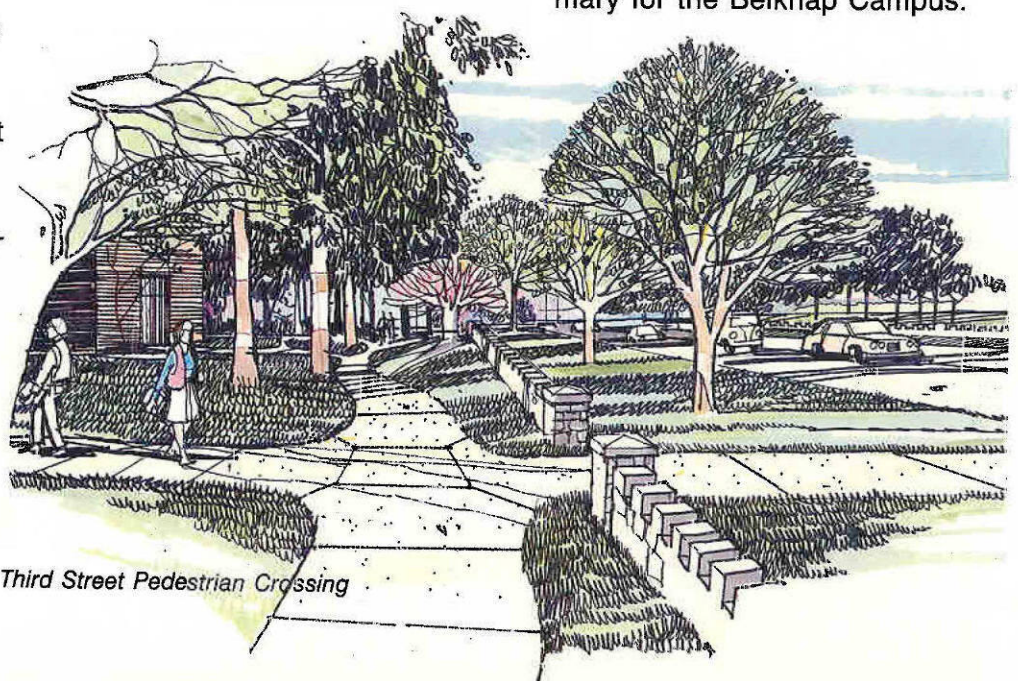
These parking and traffic issues are addressed more fully in Appendix "B" which includes a Traffic Plan.

Utility Systems

Appendix C is a detailed treatment of the conceptual plan for the utility systems on the campus. Following are the major utility considerations:

- sanitary and storm sewers need to be separated in the older sections of campus;
- the gas distribution system is maintained by the Louisville Gas and Electric; as new areas are developed, easements for expansion and upgrading of gas service will be needed;
- the chilled water and steam production and loop system will need expansion as new facilities are added to the operation;
- electricity is distributed overhead and underground and has capacity for expansion as needed. New services are to be underground.
- telephone, security, and automation systems are included in the underground conduit that parallels the electrical distribution system and utility tunnels. As other utilities are extended, these will need extension as well.

Appendix D is a statistical summary for the Belknap Campus.



Third Street Pedestrian Crossing

Five Year Plan

While previous sections have dealt with the Belknap Campus in a more long range view, this Five Year Plan section and the accompanying maps address what should be undertaken in the immediate future.

Land Acquisition

The University should begin to acquire property for the northern end of the athletic complex. This area can be easily acquired and will allow other elements of the short range plan to occur. Any property within the eventual campus limits should be acquired immediately, if possible.

New Structures and Additions

Two small additions to the Speed School are underway. The next priority for new construction is the Student Activities Center. Highest priority with athletic funds might be a small addition to Crawford Gymnasium and a baseball stadium. The baseball facility will make way for another priority facility, the Research Building, to be located just south of Eastern Parkway on the existing field. The highest priority for housing facilities will be the first half of the residence facilities to be located just west of the Red Barn and new Student Activities Center. With external funding some Greek housing may be added within the five year plan.

A last facility to be added within the immediate future is the Climatorium and Vivarium for live animal care. Program accreditation, federal funds, and the like may force this project to be done almost immediately.

Building Renovations

The Schneider Hall Renovation is already underway. The next priority will likely be a reworking of the existing Student Center when its present uses are moved to new facilities. Within the short range it may also be possible to renovate the Reynolds Building and Physical Plant Building as well as the Faculty-Staff Development Center. A part of the short range plan will also be the razing of Robbins Hall.

Landscaping

First priority must be the maintenance of the central campus. A second priority should be the planting of canopy trees since these will take many years to mature. For safety reasons it would be desirable to implement the wall projects along Third Street and Eastern Parkway. Other landscaping should be included as parking lots and building projects occur and as funds permit.

Pedestrian Access to Campus

As adjacent sites are developed, these pedestrian access ways will be needed. Those across Third and Fourth are the highest priority.

Vehicular Access and Parking

Additional parking west of Fourth Street is needed immediately. The approval process for the vehicular access from I-65 will take some effort and time. It would be wise to begin the study and review process now so that changes can be implemented more quickly when circumstances require.

Utility Systems

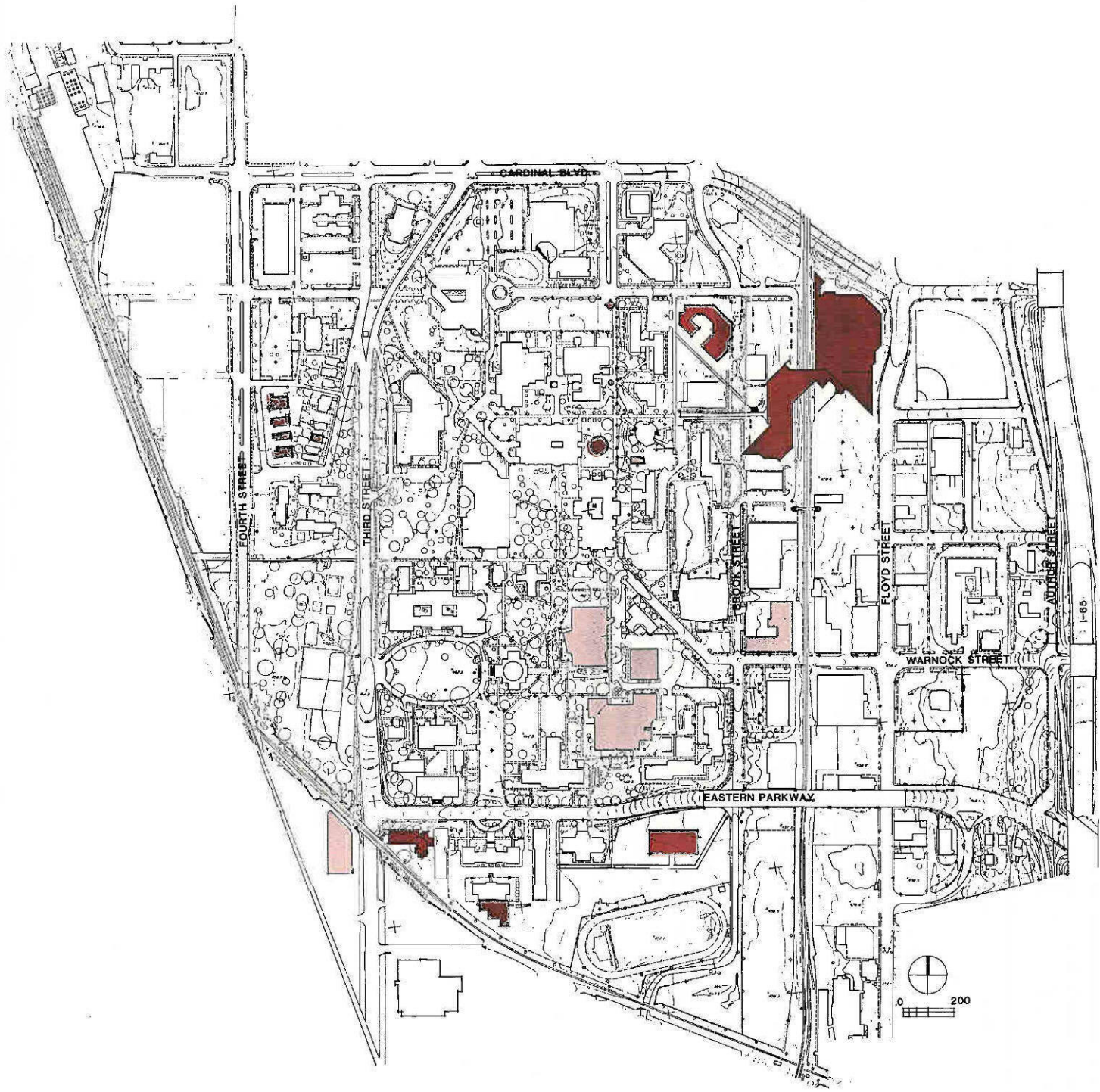
The utilities systems serving the campus will need to be upgraded and expanded but only as new facilities are brought into operation on the campus.



Belknap

Campus

Five Year Plan

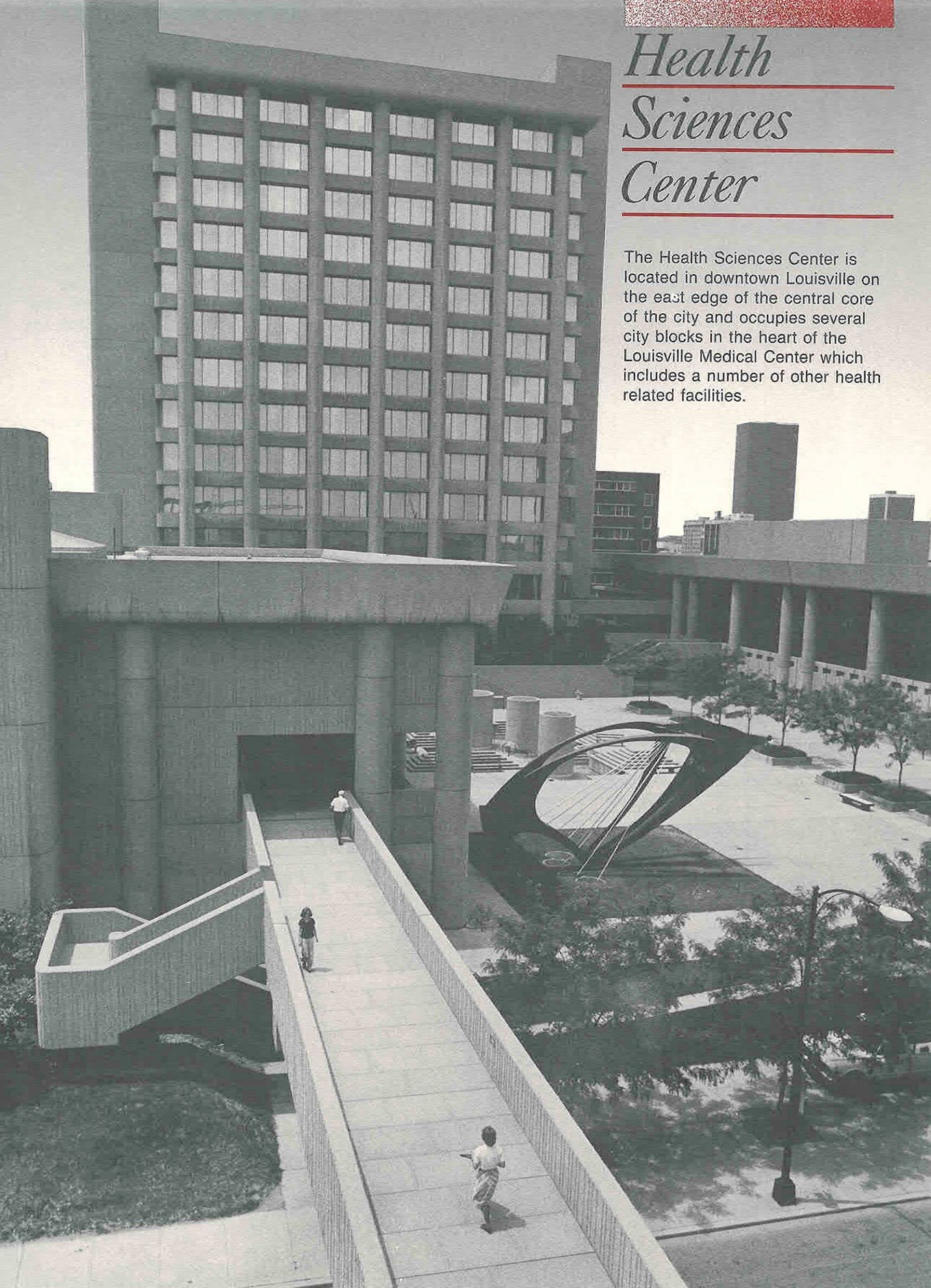


Renovation



New Construction





Health Sciences Center

The Health Sciences Center is located in downtown Louisville on the east edge of the central core of the city and occupies several city blocks in the heart of the Louisville Medical Center which includes a number of other health related facilities.

Long Range Plan

The Long Range Development Plan illustrates the long-range goals for this campus.

Land Acquisitions

Most of the surrounding properties are developed and campus expansion will require purchase. This property acquisition will require action when parcels become available. Without acquisition of additional contiguous land, the University's growth will be severely hampered.

Building Sites

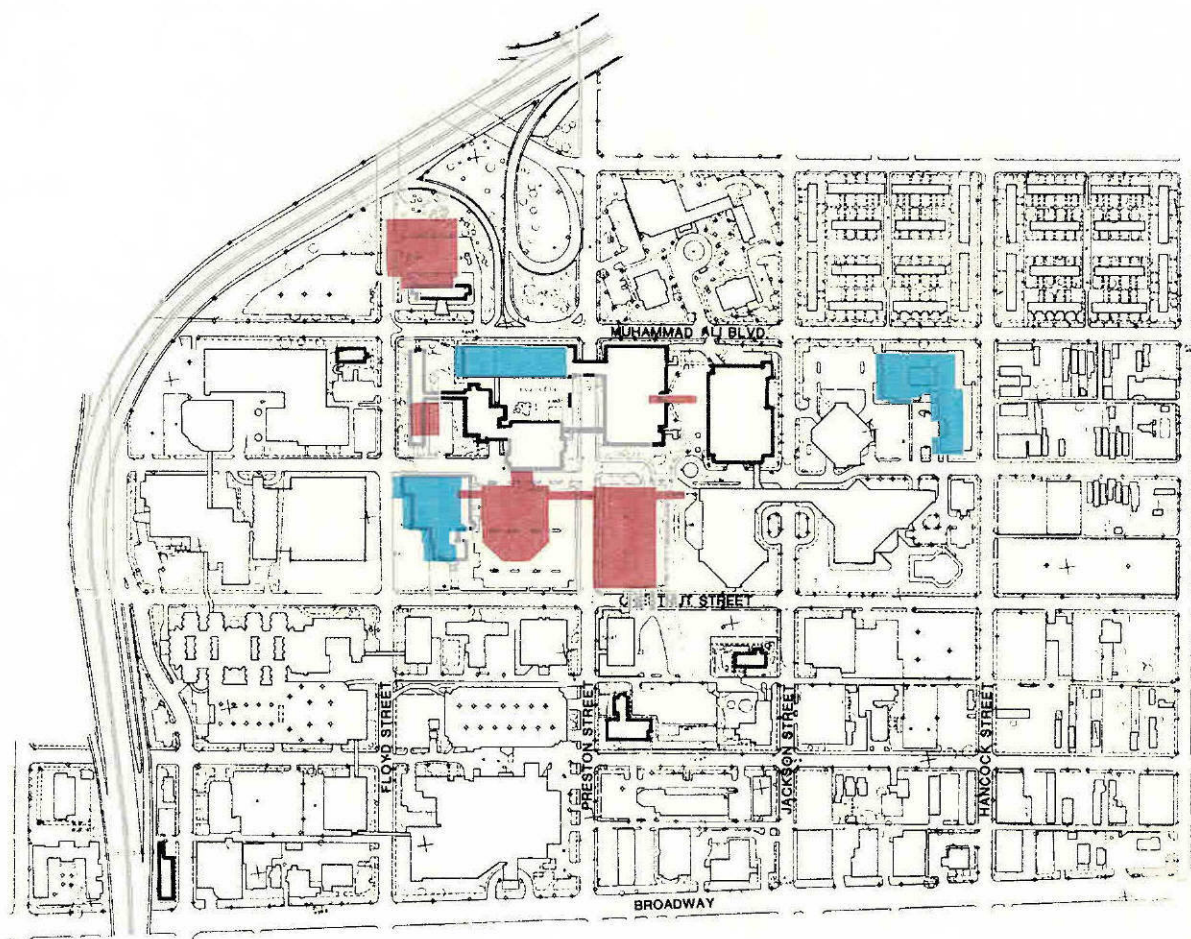
There are several surface parking lots that can be used to accommodate future facility needs.

New Structures and Additions

Four new structures or additions are contemplated for the Health Sciences Center. The smallest structure would be an animal care facility possibly located adjacent to the side of the Medical-Dental Research Building. This site should receive thorough study as other options are examined. A second project would be a major high rise building located just south of the library and east of remaining wings of the old General Hospital building. The structure could house a faculty-staff development center, student center functions, library and media expansion, and Allied Health programs. A third new structure might be an expansion of the Kentucky Lions Eye Research Institute on Muhammad Ali Boulevard and Floyd Streets. The expansion could include institute facilities and a parking structure. Such a project would obviously need to be undertaken as an eye institute effort or a joint University/eye institute development. The last structure would be a major parking deck (possibly 800 cars) on Preston Street to replace surface lots used for new construction. Locations and a possible footprint of these facilities are shown on the Long Range Development Plan.

Health Sciences Center

Existing Plan

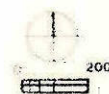


Long
Range
Plan

Rénovation



New Construction



Building Renovations

Three major renovation projects seem desirable. The equivalent of one floor of the Institutional Building should be renovated into research space. The K, C, and G wings of the General Hospital building need rehabilitation to serve medical and institutional purposes. The oldest and historic portion of General Hospital might well serve as the administrative center for the entire campus. The third renovation effort should be directed at the Carmichael School building to house the School of Nursing. Thorough evaluation may reveal that this facility should be razed rather than renovated. This site could then serve for a new School of Nursing building.

Landscaping

The landscape scheme proposed is a continuation of the patterns suggested in the 1975 plan. The current task is to strengthen and develop specific areas in an overall comprehensive scheme that relates to both vehicular and pedestrian movements within the Medical Center. Setback zones allowing landscaping along the traffic lanes also provide opportunities for visual penetration into the interiors of building groupings within each block. The planting of street trees (6" diameter and larger) should be continued as a means of softening the edges of major traffic arteries and will be used to direct people to building entrances. Other plant materials can be used to screen service areas and surface parking lots. Both active and passive landscaped zones are available and need to be enhanced for relaxation and extemporaneous sport activities. The balance of space established in the 1975 plan should be retained as the Health Sciences Campus is developed and expanded. These concepts are illustrated on the Health Sciences Landscape Development Plan.

Parking and Access

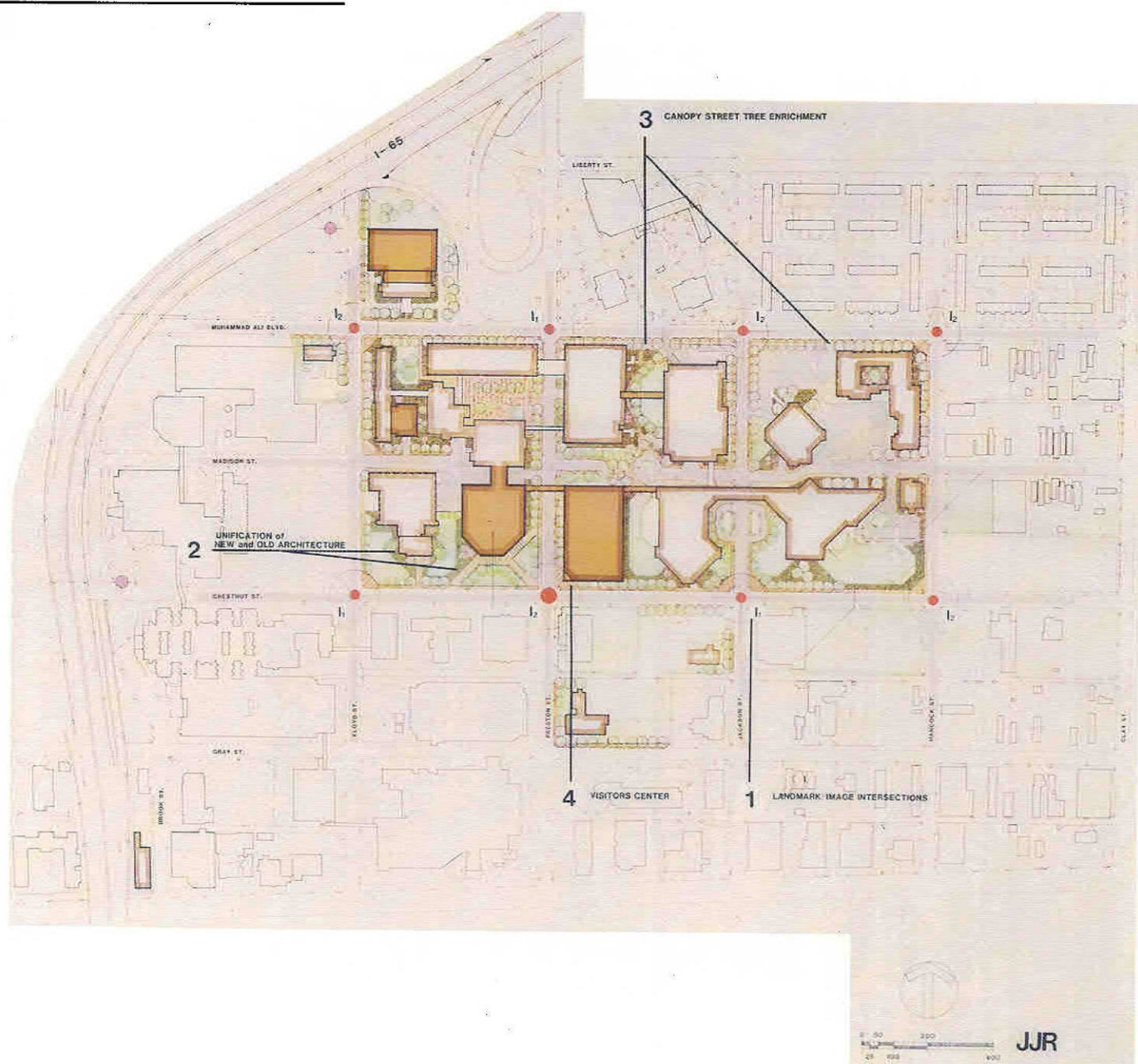
Parking for this campus will necessitate the three parking structures shown. Eventually, limited surface parking, perhaps for visitors, will be maintained. As parking structures and other buildings are developed or renovated, it will be desirable to extend the sky bridge system for pedestrian access. Eventually, the sky bridge system may provide much of the pedestrian movement between buildings.

Appendix E provides more detailed commentary on parking. Appendix F reviews utility systems.

Signage and Identification

The identification of the University's campus within the downtown setting is very difficult. An initial step would be cooperation with the Medical Center to implement a program of identification including signage to define the Medical Center complex. Within this complex the University Health Sciences Campus must also be labeled for identification.

Health Sciences Center Landscape Development Plan



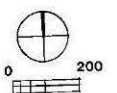
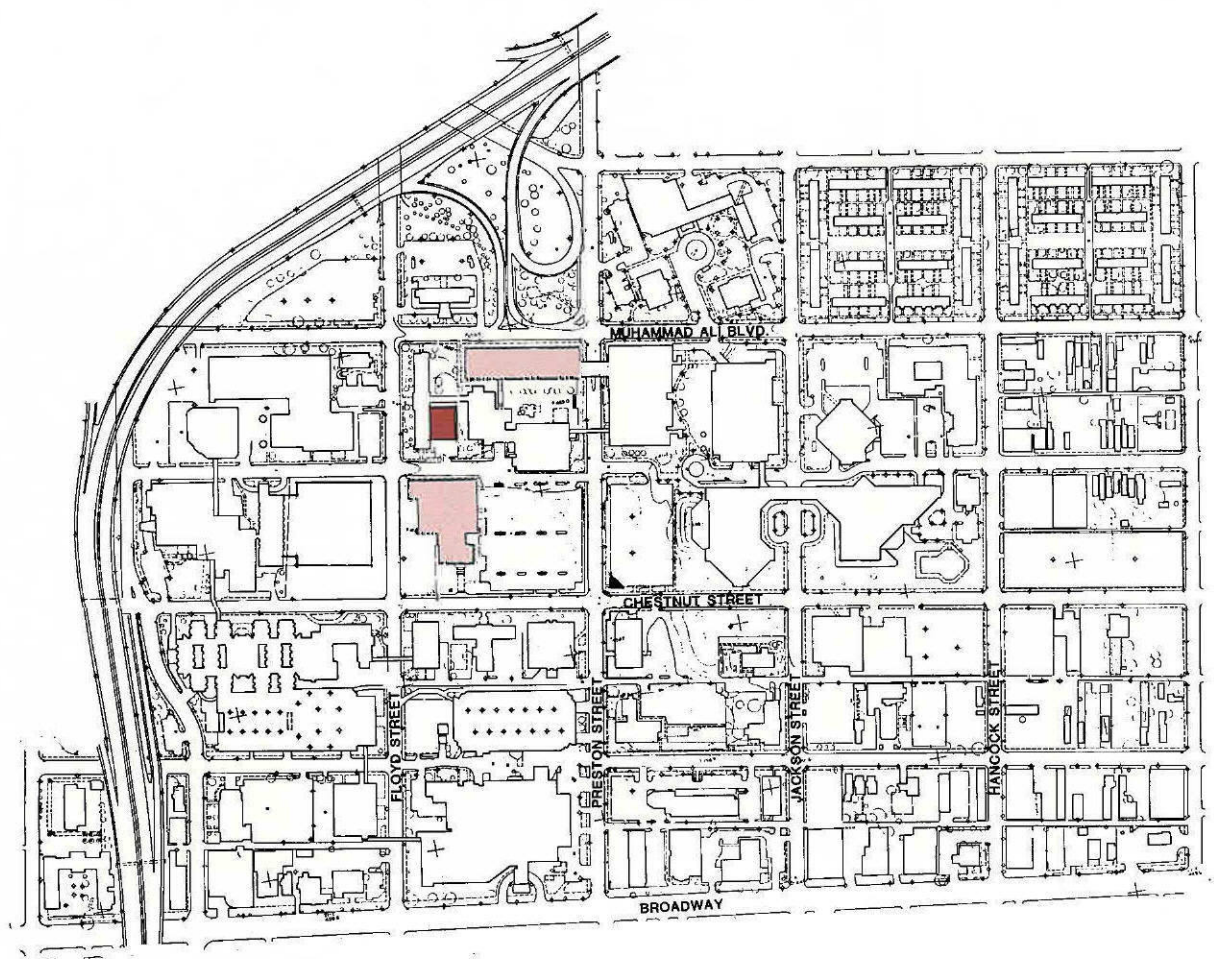
Five Year Plan

The Five Year Plan depicts current and proposed programs. Site acquisition should be pursued whenever a parcel is placed on the market. The most pressing construction need may be for a live animal care facility. The next construction priority would likely be renovation of existing spaces, including the work outlined for the Instructional Building.

The signage project should be coordinated with Medical Center, Inc. at this time. Once resolved, it would be desirable to consider identification of individual University buildings.

In the immediate future it is possible to continue landscape treatment of developed areas. Sky bridges and utility systems expansion can best be addressed when buildings are constructed or renovated. An information center is recommended for the immediate future.

Appendix G is a statistical summary for the Health Sciences Campus.



Renovation



New Construction



Gardencourt Campus



Gardencourt Campus

The Gardencourt campus includes a beautiful and historic mansion located on nearly 14 acres on Alta Vista Road and adjoining Cherokee Park. The existing plan of this campus follows.

Gardencourt is an interesting campus that must be addressed on two levels. The initial issue is simply whether or not the University should retain the campus or dispose of it. If the campus is to be a permanent part of the University, an initial investment must be made to stabilize the mansion. Without a considerable fusion of dollars, the building and grounds will suffer major deterioration and damage in the near future.

If the facility is to be retained by the University, three options for use are suggested. It could serve as a university club offering an array of social opportunities for faculty, staff, and friends of the institution. A second option would be to develop Gardencourt as a conference center. It would be especially well suited for intense workshops of less than 100 participants where the quiet, isolated, and beautiful setting would be an asset. A conference center could be developed using available housing in the community, or the facility could be expanded to include sleeping rooms. The Long Range Development Plan for Gardencourt illustrates a conference center usage with up to 20 sleeping rooms in a two-story addition. The third option for use would be a facility serving as both a university club and a conference center.

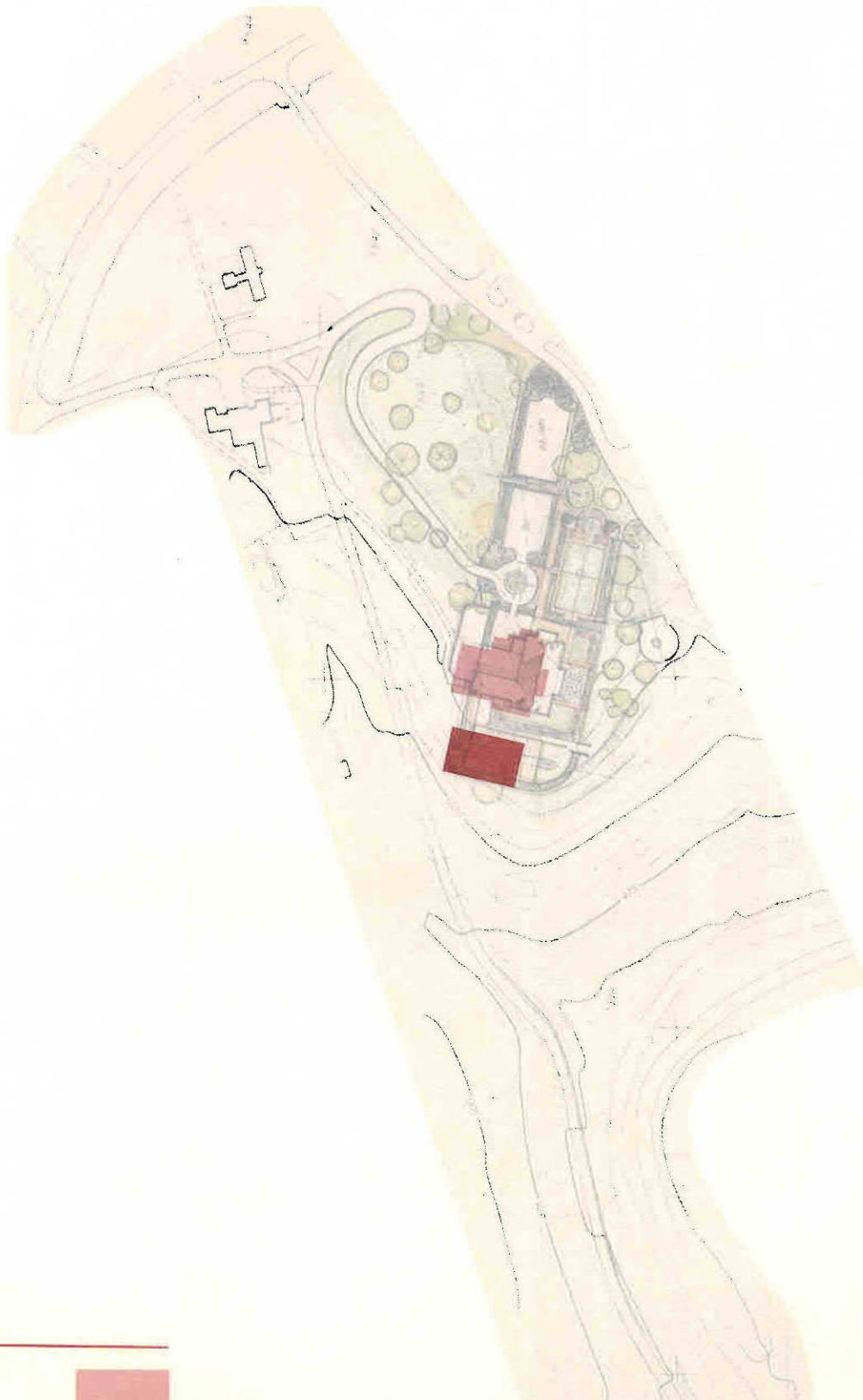
If interest exists in any of these possible uses, a starting point might be a thorough feasibility study. Such an analysis is beyond the scope of this planning effort.

There is general agreement that this campus is too isolated to serve as the permanent home of an academic unit of the University. There is also consensus that regular University funds should not be used to develop the campus for any of the proposed uses. Private funding is recommended.

Appendix H is a statistical summary for the Gardencourt Campus.

Gardencourt Campus

1985 Update



Renovation



New Construction



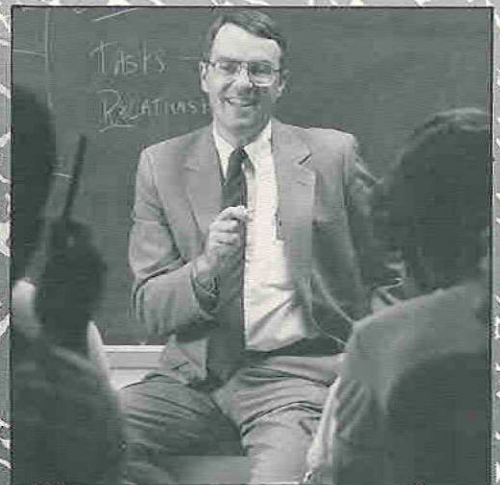
Some Closing Thoughts

It should be noted that the purpose of this planning effort was to update the 1975 Long Range Development Plan. The major planning directions of the earlier study are still appropriate. The plan allowed adjustment for the developments of the intervening decade as well as a more specific statement for the foreseeable and immediate futures.

It should be emphasized that the 1985 update plan is intended to be conceptual. It was developed to set directions and focus for future developments.

The University should be recognized and congratulated for its commitment to the master plan. In the decade since 1975, planning concepts have been followed. When the next planning effort is undertaken, it is hoped that the planning team will be able to look back to these materials and draw the same conclusion.

Appendices



Appendix

A*

Additional Comments on Belknap Campus Landscaping

Overview

In general, the Belknap Campus presents a very positive visual image with the classical emphasis of the Oval in front of Administration Building and the park-like Central Quadrangle. The area bounded on the south by Eastern Parkway and on the north by Strickler and Davidson Hall is the historic "Campus Green" of the University of Louisville. This historic area should set the visual image and quality for the more recent development to its northern boundary, Cardinal Boulevard. The need for continued maintenance and grooming of this area should be a priority for the University in order to preserve the ambience of this part of the campus.

Zone A

New Parking Area: The large parking area proposed west of Fourth Street should be screened using shrubs or a low wall combined with shrubs. East-west pedestrian linkages are of primary importance. These linkages traverse both Third and Fourth Streets. Sidewalks should be added or widened at the three points shown. Canopy trees along these walks will help to visually define their locations. A low wall is proposed along the west edge of Third Street to direct pedestrians to designated crosswalks.

Zone B

North Entrance: This area is the location for the more recently built facilities on the Belknap Campus. As such, it is in need of landscape enrichment using canopy trees, evergreens, and shrub masses to screen parking. This landscape emphasis should be a priority in order to blend this area with the rich Central Commons area to the south.

Zone C

Athletics Complex: Edges along streets are to be treated with canopy trees to soften and relieve the massive scale of a parking deck and the proposed field house. Warnock Street will be a major east entrance to the campus and should be lined with canopy trees on both sides.

Zone D

Campus Core: The core of the campus contains the original historic buildings blended with newer, larger scale buildings, which form a series of interrelated, cloistered quadrangles. The mature, informal shade tree canopy is the most important unifying element. In order to retain this impressive landscape character, an effective tree maintenance program must be implemented. The pedestrian system should be improved to include necessary secondary east and west diagonal movements. The wide north and south walkways should remain as the primary pedestrian routes. Cluttered groups of shrubs and benches should be relocated in order to feature the broad sweeping vistas of park-like lawns. Seating areas should be located along quiet edges and near key building entrances.

Zone E

The goal of the landscape treatments in this area should be to unify new and existing sections of the complex and to strengthen the identity of the new research quadrangle. Major tree-lined, east-west promenades are proposed. Pedestrian movement along Eastern Parkway will be directed by a low wall to force pedestrian traffic to cross at the existing traffic light or pedestrian tunnel. A walk running past the Chemistry Building will foster pedestrian movement to the east under the parkway bridge and to the upgraded pedestrian access way to the Speed School Complex.

While both unified signage and lighting for the Belknap Campus are in place, other elements need to be thought about and selected as an interrelated system to achieve visual harmony. These campus furniture elements include: benches, plant containers, kiosks, bollards, and trash containers. Specifically, the most incongruous element on the campus is the variety of different kinds of trash containers. A simple, easy to maintain, system of trash containers should be incorporated. It is important that the trash containers be easy to find while harmonizing with the surrounding environment.

*This section prepared by Johnson, Johnson and Roy.

Appendix

B*

Additional Comments on Belknap Campus Parking and Access

Issue—Left Turn from Northbound I-65 Ramp to Warnock

During the recent (1982–83) reconstruction of I-65, the City of Louisville attempted to include surface street improvements in reconstruction plans. These improvements would have included, among other things, left turns from the northbound I-65 off-ramp that ends at Warnock. The I-65 reconstruction was primarily intended to widen bridges and lengthen ramps to improve safety and to accommodate surface street improvements.

Allowance of left turns at Warnock would make access to major University parking areas considerably more direct, resulting in travel time and energy savings and a slight reduction in air pollution in the area.

Implementation of the left turn can only be accomplished by offering a convincing argument to the Kentucky Department of Highways that the benefits of such a project justify its cost. An analysis of the change would have to be prepared. At a minimum, the analysis would have to determine:

- The potential volume of cars that would turn left today and in some defined horizon year (2005). This would probably require a license plate matchup survey that tracked vehicles exiting the ramp and later entering campus from Eastern Parkway on Hahn Street, the Speed School driveway, or the entrance into the parking lot on the north side of Eastern Parkway west of the Natural Sciences Building, or from Third Street on University Circle.
- The impact this traffic movement would have on the operation of the traffic signal at Warnock and Arthur, and on Warnock east of this intersection.
- Whether the ramp would have to be widened to accommodate storage of left turn vehicles.
- Whether left turning vehicles would back up the ramp and cause safety problems.
- Whether Warnock would have to be widened under the I-65 bridge.
- What the cost of the required improvements would be.

This engineering analysis would have to be prepared and forwarded to the Kentucky Department of Highways for evaluation. It would also have to be programmed (if the feasibility of the project were accepted) into the Transportation Improvement Program, which is updated annually by the Kentuckiana Regional Planning and Development Agency. The feasibility of the project would be improved in the eyes of the Department of Highways if the University were to participate in the funding of the project.

Issue: Restriping of Warnock Street and Left Turn to I-65 North

Warnock Street beneath the I-65 overpass is approximately 27 feet wide today and is striped as two lanes, one in each direction. To facilitate the left turn movements onto the northbound and southbound I-65 ramps, and to improve storage for westbound traffic at the approach to the Arthur Street signal, a center left-turn lane could be striped. This would allow through traffic to proceed past left turning vehicles rather than forcing them to wait until vehicles have made their turn. The resulting nine foot lane widths would be substandard, but improved traffic flow would result.

The idea of prohibiting left turns by trucks onto the northbound I-65 ramp was explored. Heavy trucks attempting this turn regularly run over the curb because the turning radius is insufficient for this maneuver. Prohibiting left turns at this location is complicated because of the agreement between the University and a truck remanufacturing business located south of the Speed School that guarantees the latter access to the interstate through the University. This guarantee would appear to prevent the University from promoting prohibition of such turns. Prohibition of the left turn would have the effect of eliminating a substantial volume of heavy truck traffic that now moves through the area. Trucks from the south Floyd Street area have alternative access to I-65 via Eastern Parkway and Crittenden Drive.

*This section prepared by Schimpeler-Corradino Associates.

Issue: Pedestrian Crossings on Third and Fourth Streets

Near-term development of almost 1,000 additional parking spaces west of Fourth Street will substantially increase pedestrian traffic across Third and Fourth Streets. This will increase the potential for vehicle/pedestrian conflicts and accidents. Whereas jaywalking is illegal in the downtown, it is not illegal outside of downtown. Vehicles, however, not pedestrians, have the right-of-way.

To facilitate pedestrian movements, the development of pedestrian ways is proposed to focus crossings of Fourth and Third Streets at specified locations. Three locations are proposed across Fourth Street: at Brandeis, at the north edge of Stansbury Park, and at a point a little north of midway between these points. The Brandeis crossing would require signals to facilitate traffic flow into and out of the expanded parking lot. This would allow safe crossing by pedestrians at this location. Traffic controls to protect pedestrians at the two other locations on Fourth Street would require further study after parking is implemented to determine if flashing warning lights or full stop controls are warranted.

Two controlled crossings are proposed for Third Street, with traffic being brought to a complete stop to provide safe crossings for pedestrians. At Brandeis, signals could be installed that tie into the traffic signal timings of Second and Third Streets. Existing pedestrian counts performed by the City of Louisville Engineering Department indicate that signals are warranted today at Brandeis. Adaptation of signal timings to the existing progression would appear to serve pedestrians as well, based on the walk distances involved. The pedestrian atmosphere of the Brandeis thoroughfare would be enhanced by clos-

ing Brandeis Street to traffic in the half block west of Third Street to the alley. It would be further enhanced by extending the sidewalk paralleling the east side of Third Street further south and then angling it southeast so that pedestrian flow across Third Street is lined up with the old Shipp Street alignment behind the Speed Museum.

A second crossing of Third Street is now being implemented. This crossing will be located at the north edge of Stansbury Park aligning with the sidewalk east of Third Street that penetrates the campus along the south side of the library. Although warrants for signalization are not met today, a combination of circumstances makes signalization justifiable. If a wall were built along the west side of Third Street between the north end of Confederate Place and the north edge of Stansbury Park, existing pedestrian traffic would be forced north to the Brandeis crossing or south to this proposed crossing.

Traffic signalization is being studied with the city.

Issue: Access to Reynolds Building and Parking Lot South of the Norfolk Southern Railway Tracks.

Pedestrian access across the railway tracks south of the Speed School is now accomplished at two principal locations. From the Lugo's Pizza parking lot, pedestrians cross to the rear of the Speed School Library directly across the railroad tracks through a gap between a row of trees and a single strand cable fence, both along the south side of the track. There is no fence along the north side of the track.

From the Reynolds Building, pedestrians walk across the railroad bridge that spans Third Street. They either walk within the trackway itself or on a narrow sidewalk on the north side of the bridge. In either case, the tracks are crossed at grade. There are barricade railings located at the top of staircases that lead up to the bridge from the Third Street sidewalk. The staircases allow crossing of Third Street on the railroad bridge by a narrow sidewalk along the south edge of the bridge. The barricade at the top of the stairs on the east side of Third Street is intact, but the barricade at the west end of the railroad bridge has been broken down. The absence of this barricade allows at-grade crossing of the railroad tracks at the Reynolds Building and access to the walkway along the north edge of the bridge.

Because the walkways on the railroad bridge appear to have been designed to allow crossing of Third Street, and not the railroad tracks, and because railroads like to avoid liability in the event of an accident with a pedestrian, it is recommended that no action be taken to improve access from these two areas to the Speed School area. Any discussion or negotiation with the railroad could easily result in reduced rather than improved access. At the same time, it is recommended that any activities planned for the Reynolds Building be of the type that can exist in isolation and not require pedestrian interaction with the rest of the campus. Such a use may be the Business Incubator.

Further, a long term goal would be to develop sufficient parking north of the railroad tracks to satisfy demand. If the railroad were to take action to close pedestrian activity across its track, pedestrians would have to walk around the tracks via the Third Street and Eastern Parkway sidewalks.

Issue: Bus Shelters on Belknap Campus

The Belknap Campus is now served by a number of Transit Authority of River City (TARC) routes. The route name and numbers are listed below with a brief description of service.

Route 2—Second Street. The portion of this route south of the campus is split, with runs alternating on Floyd Street and Crittenden Drive. Headways (time between buses) are forty minutes on each leg during the morning and afternoon peak periods (roughly 6:30 to 8:30 a.m. and 3:30–5:30 p.m.) and 60 minutes during the midday period. The two legs of the route join at Cardinal Boulevard and Floyd Street. Northbound buses operate west on Cardinal Boulevard and then north on Second Street, and southbound buses operate south on Brook Street then east on Cardinal Boulevard. Combining the two southern legs of the route results in peak headways of twenty minutes and midday headways of 30 minutes.

Route 4—Fourth Street. Fourth Street has very good service. Peak hour headways are about eight minutes with midday service about every ten minutes.

Route 29—Eastern Parkway. This is an important crosstown route; however, crosstown routes customarily have low ridership and cannot support high frequency service. This is the case with Eastern Parkway service. It now has headways of twenty minutes during peak periods and 25 minutes during the midday period.

Route 37—Fourth Street Express. This and the next two routes listed are express routes operating on Third Street. These routes pick up passengers in outlying areas and stop only at the Belknap Campus on their way downtown. The Fourth Street express makes six inbound runs each weekday morning and six outbound runs in the afternoon. Buses run about every twenty minutes.

Route 38—Sixth Street Express.

This route makes six inbound runs each weekday morning and afternoon. Buses run about every 20 minutes.

Route 48—Fairdale Express. This route makes two inbound runs on weekday mornings about 45 minutes apart and two outbound runs in the afternoon about 30 minutes apart.

The University has proposed to develop distinctive bus shelters for placement at major stops on campus. In reviewing potential locations for such shelters several points are germane.

- There are no known changes planned in bus service to the University.
- Student ridership on the Second Street route is probably not sufficient to warrant development of shelters.
- Development of pedestrian ways across Third and Fourth Streets will provide for safer crossings at defined locations. Bus shelters should be placed near these locations.

Based on these premises, eight proposed bus shelter locations are shown on the Long Range Traffic Plan. These site recommendations reflect the heavy boardings on Eastern Parkway, the frequency of service of the Fourth Street route and the opportunity for service by the express routes on Third Street. They do not reflect an analysis of boardings or any cost effectiveness analysis. The Division of Planning at TARC has additional information on boardings. Coordination with TARC will be required to ensure proper placement of the shelters. Their experience with shelter design and maintenance may also be helpful.

Issue: Closing of Hahn Street

There is a volume of traffic that accesses parts of Louisville to the south and west of the Belknap Campus by exiting I-65 at Arthur Street, turning right on Warnock, then left immediately on Hahn Street to Eastern Parkway. A recent traffic count made on a Tuesday during summer session found that 76 percent of the southbound traffic at Warnock turned right in the morning peak hours. Of this more than half turned left immediately at Hahn Street. These maneuvers require a merge to the right from the southbound I-65 exit ramp to make the first right turn, then a merge left across two lanes of traffic to make the left turn at Hahn. Hahn Street serves as the access point to the Belknap Campus from Eastern Parkway. It forms a "T" intersection with Warnock and is controlled by a stop sign. Warnock traffic has the right-of-way. The heavy left turn movement from westbound Warnock to southbound Hahn conflicts with the left turn from Hahn to Warnock. This causes traffic on Hahn to back up. Observation during the summer session indicated traffic on Hahn wishing to turn left was being delayed well over a minute in some cases. During regular class sessions, this situation is presumed to be considerably worse.

A relatively simple solution to these interlocking left turns is proposed. If Arthur Street were reopened to Eastern Parkway (it is now closed in a cul-de-sac) and made one-way southbound between Warnock and Eastern Parkway, the travel to Eastern Parkway and points south and west could be maintained with a much simpler maneuver. At the same time, Hahn Street would be completely closed and a new slip ramp would be constructed parallel to Eastern Parkway connecting it to Floyd Street. This would maintain access to the campus directly from Eastern Parkway. Traffic volumes on Floyd Street are light enough that the ramp traffic from Eastern Parkway could be controlled by a stop sign.

A number of advantages would result from the proposed changes.

- Commuters would benefit from a more direct connection to Eastern Parkway.
- Hahn Street could be permanently closed, giving the University a larger parcel of land to develop, and increasing the flexibility of the parcel's potential use.
- Traffic would be reduced within the expanded campus area.
- The uphill acceleration from southbound Hahn to westbound Eastern Parkway would be eliminated. This uphill acceleration holds the potential for rear end collisions.
- The weave to the right from the southbound off-ramp on I-65 to make the right turn at Warnock would be eliminated and storage in the two southbound lanes approaching Warnock would become even.

The only known disadvantages of such a design would be the cost of the project and the potential weaving conflicts as vehicles turning right from Arthur Street at Eastern Parkway conflicted with vehicles exiting Eastern Parkway via the slip ramp. Preliminary analysis indicates that if traffic southbound on Arthur Street were brought to a stop at a stop sign, rather than merging from a ramp, then the weaving problem would not occur. Those proceeding from the stop sign would be forced to wait for an acceptable gap in traffic. The sight distance at this location is good.

It is recommended that a more thorough analysis, including an accurate cost estimate, be prepared for presentation to the city and the Kentucky Department of Highways. Arthur Street is included within state right-of-way and Eastern Parkway is part of the state highway system. The analysis would review potential traffic volumes and movements, define whether geometric requirements could be met, and determine the best way to address the potential weaving problem.

Issue: Directional Signing

A revised directional signage system is needed to guide visitors to the newly designated Belknap Campus entry points from I-65 and the arterial street system around the campus. A directional signage system for the Medical Center Campus is being developed in a separate study under the auspices of Medical Center, Inc. University facilities would be identified as part of this large signing system.

Perhaps most critical is providing direction to those coming to the University from distant locations via I-65. Presently southbound traffic is directed to the Arthur Street exit. A sign on Arthur Street at Warnock directs motorists to turn right. Because the new north entrance will have a manned information booth, it appears to be more desirable to route visitors from southbound I-65 to the ramp serving Cardinal Boulevard and thence via Cardinal Boulevard to the north entrance. Sign changes would include:

- Changing street signs which now show Cardinal Boulevard ending at Brook so that it is described as Cardinal Boulevard east to Arthur Street. It is now called Brandeis between Brook and Arthur Streets.
- Changing two signs on southbound I-65. The one now saying "Exit 134 Brandeis" should be changed to "Exit 134 Cardinal Boulevard" with the "University of Louisville" added at the bottom. The existing sign showing "University of Louisville Next Exit" should be removed.
- Signs should be added at the base of the ramp to Cardinal Boulevard directing people to turn right. Another sign would be desirable west of the Seaboard Rail Line viaduct to direct people straight through the Brook Street intersection to the north entrance.
- The visibility of the north entrance sign itself should be improved by judicious use of landscaping. Existing trees block the view of the recently installed sign.

For traffic access to the Belknap Campus from points south of Louisville, the most desirable situation would be to continue to direct traffic to the "second exit" for Eastern Parkway. This ramp ends at Warnock Street. Presently all traffic must turn right (east). Those going to the University turn right again at Crittenden and at Eastern Parkway. At this point, directional signing now ends, leaving the visitor somewhat stranded. In the very near term it would be desirable to add a sign "University of Louisville Information" with a directional arrow for westbound traffic on Eastern Parkway approaching Third, and another for northbound traffic on Third just prior to University Circle will direct visitors to the existing information booth. These signs would continue to be useful in the long-term as well as providing guidance in the short-term.

The most desirable situation for guiding visitors to the University would be to allow them to turn left at the end of the northbound ramp to Warnock Street, and then head directly west on Warnock to the information kiosk to be developed at the east entrance. This left turn is now illegal. The issue of allowing the left turn is discussed elsewhere. For the time being, signing will have to continue to direct visitors to the University via Crittenden Drive and Eastern Parkway. This signing would change as soon as the east information kiosk is developed so that visitors are directed to the nearest information point rather than the more distant west entrance. Signing would also change slightly when Hahn Street is closed and a new slip ramp from Eastern Parkway to Floyd is developed under the Five-Year Plan.

Regarding directional signing on the surface network, several other locations would benefit from the addition of signs.

- A sign would be helpful on the west-bound approach of Eastern Parkway to Crittenden Drive. This sign could direct people straight ahead where they would penetrate the campus via the new slip ramp to Floyd Street where a sign would also be required at the foot of this ramp.
- On northbound Third Street approaching Eastern Parkway a sign could direct people straight ahead to the west entrance.
- On southbound Third Street approaching Cardinal Boulevard a sign could direct people straight ahead to the west entrance.

The above may seem like a good deal of signage, but it must be remembered that a broken link in the chain of signage can get someone in unfamiliar surroundings thoroughly lost. Similarly precise placement of signs for visibility is important. When signs are placed, each approach should be driven to ensure that the signs carry one to one's destination without confusion.

Issue: North Entrance

The planned north entrance at First Street (extended) would form a "T" intersection with Cardinal Boulevard. This would serve as the primary entrance on the north side of the Belknap Campus for visitors seeking information. Visitor parking would be provided. Access would also be gained to three parking lots. Together access would be provided to about 400 parking spaces via this entrance. Primary entrance to surface parking on the northeast quadrant of campus would be gained from Brook Street. The Brook Street entrance would primarily serve faculty, staff, students, and deliveries, while the north entrance would be designed to serve visitors.

The newly defined entrance forms a "T" intersection with Cardinal Boulevard. It is anticipated that identification of this entrance and placement of an information center near Brandeis will not affect the volume of traffic at the Cardinal Boulevard intersection. If this were to occur it would most likely result from traffic generated by surface lots along Brook Street to the east. Measures could be taken to discourage Brook Street traffic from using the newly designated north entrance.

It would be desirable to improve the identity of the north entrance by restricting curb parking on either side of the entrance for some distance. This would have the added benefit of improving site distance at this location.

Landscaping efforts at the southeast corner of Brook Street and Cardinal Boulevard should consider the maintenance of sight distance for southbound vehicles turning left from Brook Street to Cardinal Boulevard. This maneuver requires observance of northbound vehicles emerging from campus on Brook. A line of sight must be maintained as northbound vehicles pass through the curve in Brook Street on the south.

Issue: Parking on Belknap Campus

Today there are approximately 5,475 parking spaces on the Belknap campus split by use as follows: red—faculty and staff reserved, 375; blue—faculty and staff unreserved, 525; green—student, 3,755; yellow—student resident, 450; visitors, 320; handicap, 50. With a stable student population projected, a parking need of 6,500 to 7,000 spaces has been projected. This split of parking by permit type is not expected to change, except that a new permit category coded brown would be created. Brown permits would allow cheaper parking in peripheral lots.

The University has land available upon which parking can be developed with minimal effort and expense in the very short term (1985). If all this parking were to be developed, total available parking on Belknap Campus would increase from a total of about 5,475 spaces today to about 7,225 spaces. Some of these spaces would be developed on a permanent basis; others would be temporary prior to site development. The apparent surplus of parking would be in anticipation of the loss of about 620 spaces resulting from development of the new Student Center. Lots planned for the very short term are:

- West of Arthur Street a block north of Warnock (Atwood Street) about 250 spaces could be developed. These would be maintained in the Five Year Plan, but would be eliminated in the Long Range Plan.
- East of Hahn Street between Warnock and Eastern Parkway about 450 spaces would be added. These spaces would be eliminated by development of tennis facilities under the Five Year Plan.

Under the Five Year Plan, a number of changes would occur that would affect parking. Together, these changes would drop the parking total from the potential 7,225 near term spaces to about 5,700 spaces. The changes would be:

- About 140 spaces would be lost as fraternities and sororities are developed between the existing units on Confederate Place and Fourth Street.
- An estimated 25 additional spaces might be developed as the Reynolds Building is renovated, and as structures attached to the original core building are removed.
- About 30 roadside spaces should be removed along Cardinal Boulevard at the new north campus entrance. This would improve sight distance at the entrance both for safety and for the aesthetics of the entrance. (These are not University controlled spaces, but are used by students.)
- The 450 temporary spaces east of Hahn Street between Warnock and Eastern Parkway would be eliminated as tennis facilities are developed.
- The 160 existing spaces south of Frisch's restaurant between Floyd and Hahn Street south of Warnock would also be eliminated as tennis facilities are developed.
- About 180 spaces would be lost near the Red Barn when the new Student Center is developed.
- About 620 spaces would be lost on the west side of Floyd Street south of Cardinal Boulevard when the new Student Center is developed.

Under the Long Range Plan allowance has been made for conversion of surface lots to more intensive development. In some cases, specific uses have been designated. Increasing intensity of land use will require the development of parking structures on the Belknap Campus. Sufficient land will not be available for surface parking within a reasonable walking distance. The size of structures will depend on the desired parking supply. If two 1,000 space garages were constructed, the total parking supply under the Long Range Plan would increase from the Five Year Plan total of 5,700 to about 6,580 or about 1,100 spaces more than that available today. If a reduced parking supply were deemed acceptable, or if some surface parking were not converted to more intensive use, parking structure size could be reduced.

Parking changes in the Long Range Plan subsequent to the first five years are described below by area:

- In the core area of campus, the surface lots associated with the business and music buildings have been designated as future potential building sites. These lots now provide about 210 and 240 spaces, respectively. East of Floyd Street, virtually all remaining parking would be eliminated with the development of sports facilities. This would include the 250 space temporary lot soon to be developed at Atwood and Arthur and about another twenty miscellaneous spaces.
- A proposed 1,000 space parking garage between Floyd Street and the railroad tracks south of Warnock would reduce surface parking by about 210 spaces. The net increase in parking would hence be about 790 spaces.

- South of Eastern Parkway, much of the surface parking interspersed among the Speed School buildings and to the north and west of the running track would be eliminated. Note that this would have the additional advantage of eliminating the drive-ways accessing Eastern Parkway that exacerbate congestion on that roadway. A new 1,000 space garage would be constructed to provide a net increase of about 570 spaces. Other large existing lots would be retained and a new lot with a capacity of about 240 spaces would be developed on what is now the more southerly soccer/hockey practice field.

The changes in parking for the near term, Five Year Plan and Long Range Plan are summarized by campus area in the following Table.

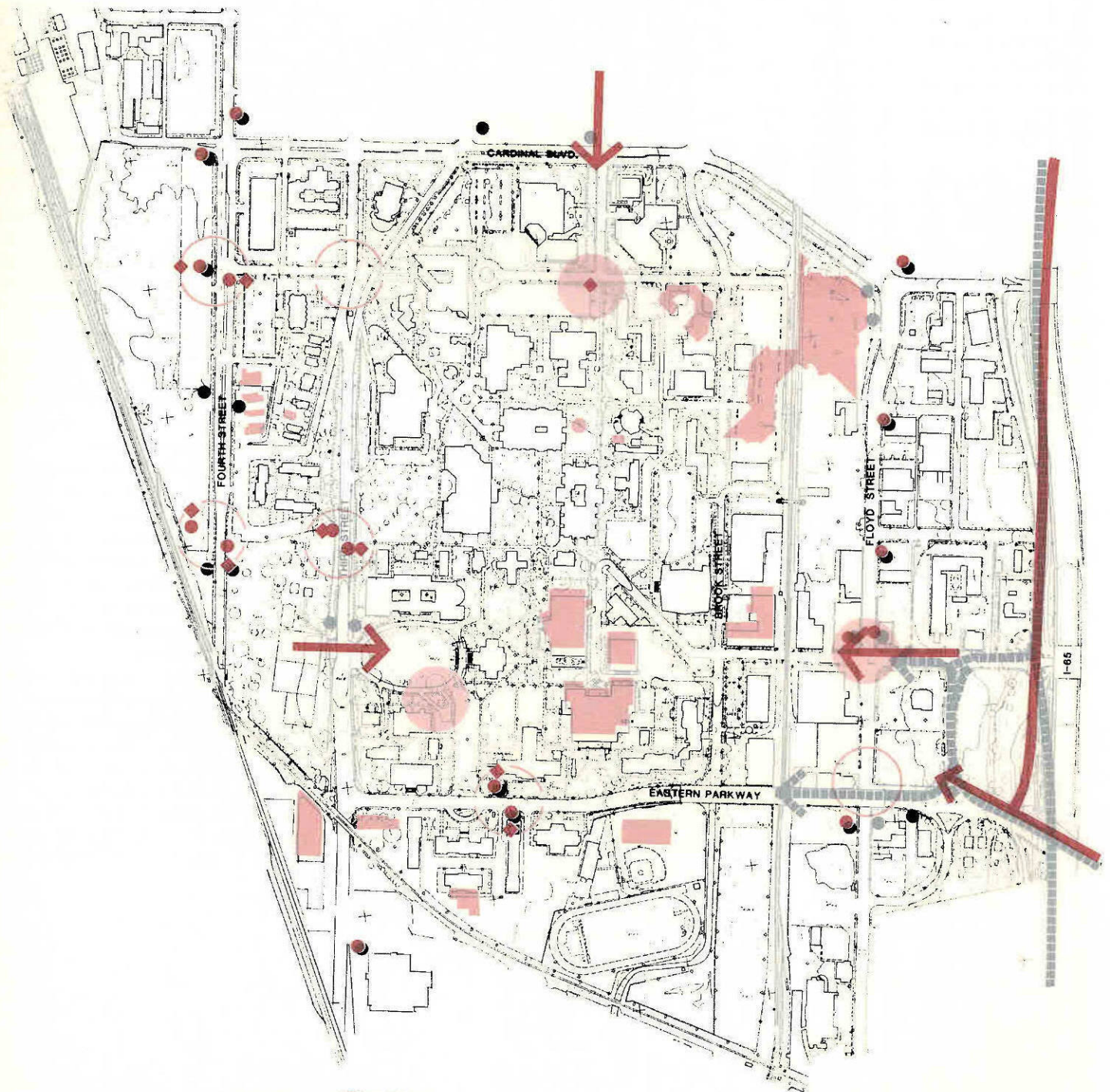
Summary of Parking Changes on Belknap Campus

	Today	Possible On Available Land	Five Year Plan	Long Range Plan
West of Third Street	1,465	2,415	2,300	2,300
Campus Core	1,850	1,850	1,670	1,220
South of Eastern Parkway	880	980	980	1,775
East of the Railroad Tracks	1,280	1,980	750	1,285
TOTALS	5,475	7,225	5,700	6,580

Belknap

Campus

Traffic Plan



Existing Plan	Five Year Plan
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Bus Shelters



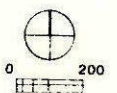
I-65 Traffic Conflict



Bus Stops



Planned Renovation and Construction



Appendix

C*

Additional Comments on Belknap Campus Utilities

Utility Systems

This utility report has been compiled as an integral part of the Long Range Development Plan for the Belknap Campus of the University of Louisville.

The following utility data are contained herein. The data listed was not established from actual field surveys and therefore cannot be considered totally accurate. However, it should be sufficient to serve the purpose of the Long Range Development Plan.

As previously stated, recommendations are based on the proposed campus development plan, existing facilities, utility data, and availability of fuels. A major factor considered in making these recommendations was the expansion of campus facilities to approximately 4,476,000 square feet over a rather short period of time. The completion of these additional buildings will provide campus facilities exceeding 2.5 times the present floor area.

The existing campus is presently served with water, sanitary sewers, storm sewers, gas, electricity, television, and telephone systems. Heating and cooling systems vary. Some have individual heating and/or cooling systems, and some have no cooling systems at all.

Water

The water system supplying the campus is owned and operated by the Louisville Water Company, a city owned utility. Adequate supply and pressure is normally maintained. Pressure at street level in this area normally exceeds seventy pounds per square inch and frequently runs as much as eighty-five pounds per square inch.

The piping system serving the campus is a loop system of cast iron water mains varying in size from four inches to forty-eight inches in diameter. Pressure is normally sufficient to supply both the domestic and fire protection requirements of the campus. Certain high rise facilities may require the use of pressure pumps for both domestic and fire protection systems.

The campus expansion program and some of the proposed facilities encompass areas containing both City and University owned water mains. In order to properly follow the campus expansion program it will be necessary for the University to grant special utility easements for some of these mains and to relocate others.

Sewers

The sewer system is owned and operated by the Metropolitan Sewer District. The network of sewers carries the sanitary waste to a sewage treatment plant and then to the Ohio River. The Metropolitan sewer system serving the Campus is a conglomerate of systems, storm, sanitary, and combination, all of which have undergone continuous changes and updating in recent years.

The private distribution system owned and operated by the University is also a conglomerate of systems. The older sewers are normally a combination of storm and sanitary systems, whereas facilities built within the past 17 years are serviced by separate storm and sanitary sewer systems.

The Metropolitan Sewer Distribution System, located within and bounding the Campus, range in size from 18" to 122". The larger of these sewers, the Southern-Outfall, serves a very large area south, east, and west of the campus. It is believed that the present system will be properly maintained and that it is adequate to handle both the present facilities as well as any future facilities.

It is anticipated that in the interest of ecology, that the Metropolitan Sewer District will require the separation of storm and sanitary sewers. The separation of sewers on University property would be accomplished at the expense of the University. Updating and separation of public sewers in Urban Renewal areas adjacent to the campus is already under way.

*This section was prepared by E. R. Ronald & Associates.

Electric Power

Electric power is distributed by the Louisville Gas and Electric Company to metropolitan Louisville and outlying areas. The company is under regulation of the Public Service Commission.

Electric service to the campus is provided by the Louisville Gas and Electric Company to a high voltage switchgear in the Central Power plant. The distribution voltage is a 13.8 KV, three phase, ungrounded system.

The campus is presently served by two loop circuits with provisions for expansion of two additional circuits, one to the west and one to the east. Presently one circuit serves the north campus and the other circuit serves the south campus. The south loop circuit has not been completed south of Eastern Parkway. Each circuit has capacity to serve 7500 KW continuous demand and 9500 KW momentary demand.

The present electrical distribution system is underground and alongside the Steamed and Chilled Water piping tunnels. It includes spare conduits for future expansions. However, this distribution system does not extend east of the railroad right-of-way. A new loop circuit may be planned for this area originating in the Central Power Plant. The development of the property south of Eastern Parkway may include the completion of the south-loop circuit.

Telephone, Campus Security & Automation Systems

These systems are now distributed throughout the campus in an underground conduit system that parallels the electrical distribution system and Steam and Chilled Water piping tunnels. However, this distribution system does not presently extend east of the railroad right-of-way and may be included with the development of the electrical distribution system. The completion of the electrical loop circuit south of Eastern Parkway may also include the extension of services to serve the future development of the engineering complex.

Gas

Natural gas is supplied by the Louisville Gas and Electric Company which is a private corporation under the regulation of the Public Service Commission. Gas is received by transmission lines of the Texas Gas Transmission Corporation. Gas is distributed throughout the metropolitan area and even far beyond to outlying areas and cities.

The pressure in these underground distribution mains ranges from 4 ounces to 100 pounds. The distribution lines bounding the Campus range in size from 4" to 20", all at various pressures. Since the Louisville Gas and Electric Company has a continuous maintenance program, the mains should have an indefinite life span.

It is assumed that natural gas will be an adequate supply to provide for the present needs of the campus as well as future campus expansions.

The campus expansion program and some of the proposed facilities encompass areas containing both Louisville Gas and Electric Company mains and University owned gas mains. In order to properly follow the campus expansion program, it will be necessary for the University to grant special utility easements for some of these mains and to relocate others.

Steam and Chilled Water

Steam and chilled water, used to heat and cool a considerable number of buildings throughout Belknap Campus, is produced in the Central Steam and Chilled Water Plant. The facilities are served by a network of piping, most of which is located in walk-thru tunnels. Some of the distribution system is buried underground.

The present steam plant has three boilers with a total capacity of 196,000 pounds of steam per hour. Usage has indicated that the steam plant has ample steam to provide for the connected load and a reasonable amount of future facilities.

The present chilled water plant has a total capacity of 4,450 tons. Usage has indicated that the chilled water plant can produce adequate cooling capacity for present needs of the campus; however, the chilled water distribution system is loaded to capacity in certain areas of the campus. The chilled water distribution system should be further developed to meet the needs of the campus expansion program. These new steam and chilled water tunnels are indicated on the accompanying drawings.

Summary—Utility Systems

General

The existing utilities are adequate to serve the present facilities and by relocation, extensions, and/or additions serve an enlarged campus.

A careful study must be made of each utility prior to the start of any development program. This study should include the time schedule, size, and location of development to insure the most practical and economical means of serving the present and expanded campus.

The program as presented can establish only probable areas of campus growth. The need for relocation, expansion, or development of major utilities must be studied and reevaluated constantly.

The Long Range Development Plans, utility data, and reports should be forwarded to Utility Companies and Agencies immediately upon completion in order to coordinate their future plans with the plans of the University.

Construction of the additional steam and chilled water distribution system (tunnels), shall be completed under the five year plan.

Water

Water pressure and supply mains seem to be adequate for the present and expanded campus facilities. The location of mains, and pressure, and metering systems and the adequacy of the fire protection system should be verified before the initiation of expansion programs.

Sewers

The sewer system is continually being improved under the direction of the Metropolitan Sewer District and Urban Renewal Agency and should be adequate to provide for the present and the expanded campus. As some planned facilities are indicated in areas containing the largest sewers in the area, it would be well to verify their location before proceeding with any expansion program.

Gas

Present gas supply and mains seem adequate for the present campus as there are numerous mains located in and adjoining the campus.

Steam and Chilled Water

Heating and cooling distribution should consist of a network of piping systems that form complete loops around the campus. These piping systems should be located in underground tunnels of sufficient size to allow proper maintenance. Existing buried piping should eventually be replaced, and all facilities should be served from the tunnel systems.

Steam capacity is adequate for most facilities.

Chilled water distribution capacity is already at capacity and cannot take care of some of the existing buildings on the existing system much less additional future needs of the campus.

Electrical

During campus expansion, a primary electrical distribution system should be provided to serve all buildings on the campus which are owned and maintained by the University.

Dual primary circuits should be extended to each main transformer location, and a primary selection switch arrangement should be provided to protect against a cable failure. Primary circuit arrangement may either be radial or loop feed, depending on existing cable insulation.

New facilities should be provided with double substation arrangement with tie switches to protect against transformer failure. An oil filled, forced air cooled transformer for overload capacity should be provided also.

Where building design, occupancy and/or the Owner requires, engine-drive generators should be provided for alarm systems, exit lighting, and essential loads (such as elevators, pumps, refrigeration, etc.). Elsewhere, a battery powered system should be provided to serve alarm systems and exit lighting as required by the Life Safety Code. Automatic transfer arrangement should be provided in buildings served by double-ended substations and where engine driven generators are provided.

Telephone

Telephone service is provided by the South Central Bell Telephone Company. Telephone distribution on the campus is underground. Some of the distribution lines are in cable ducts and others are direct burial cables. The location of some of these direct burial cables is unknown. The direct burial cables are often cut or dug up, during campus improvement programs. This causes service outage to many or possibly all campus facilities. Since the routing of some of these cables is unknown, restoration of service can be delayed considerably.

Television

Closed circuit television is available on the Campus. The system is owned, installed, and maintained by the University. Space should be provided in the underground duct system for cable distribution to all buildings when requirements are known.

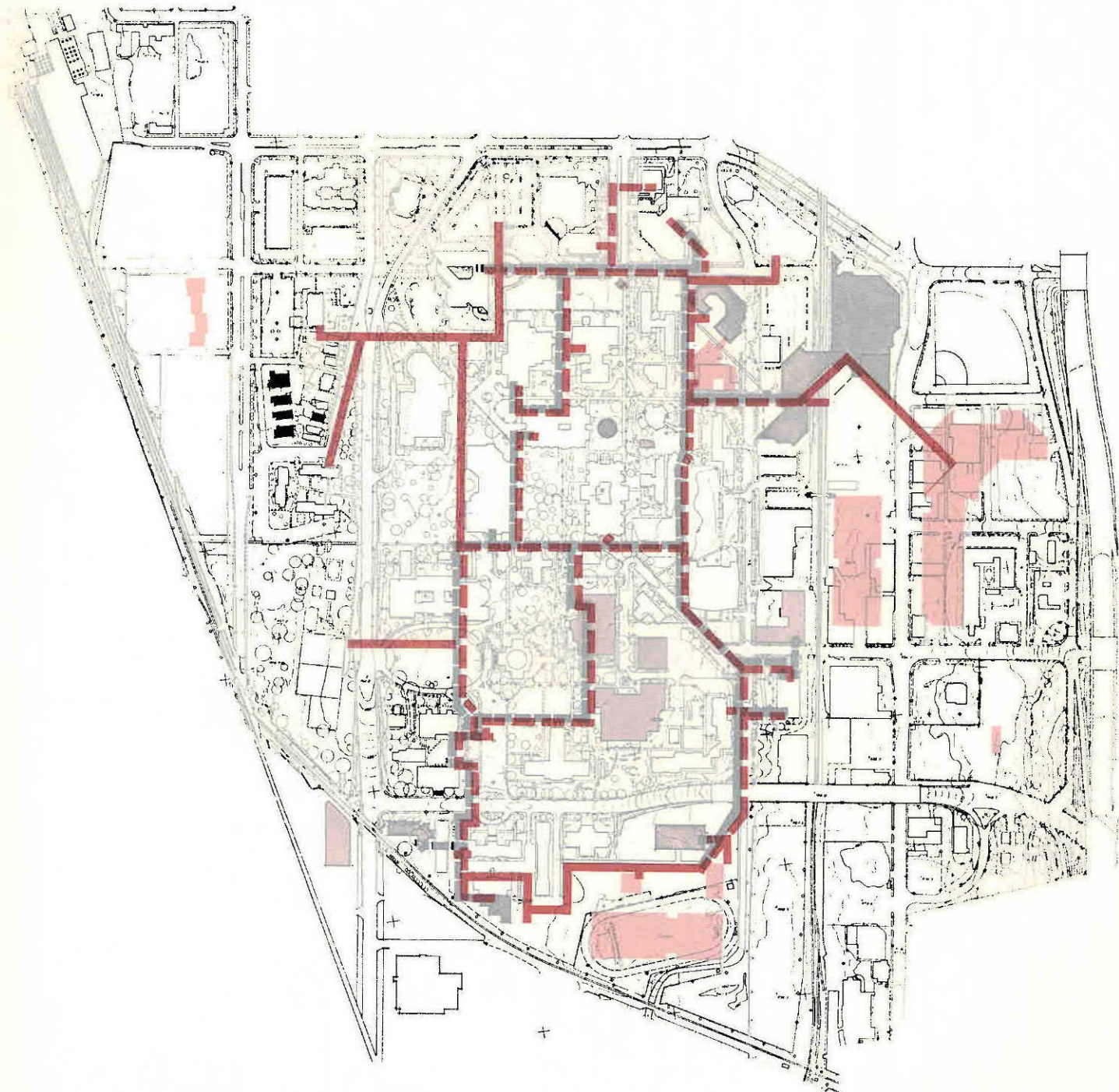
Utility and Building Security Systems

The University is contemplating campus-wide utility and building security systems. Space should also be provided in the underground duct systems for cable distribution to all buildings when requirements are known.

Belknap

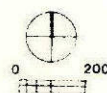
Campus

Tunnel Plan



	Five Year Plan	Long Range Plan
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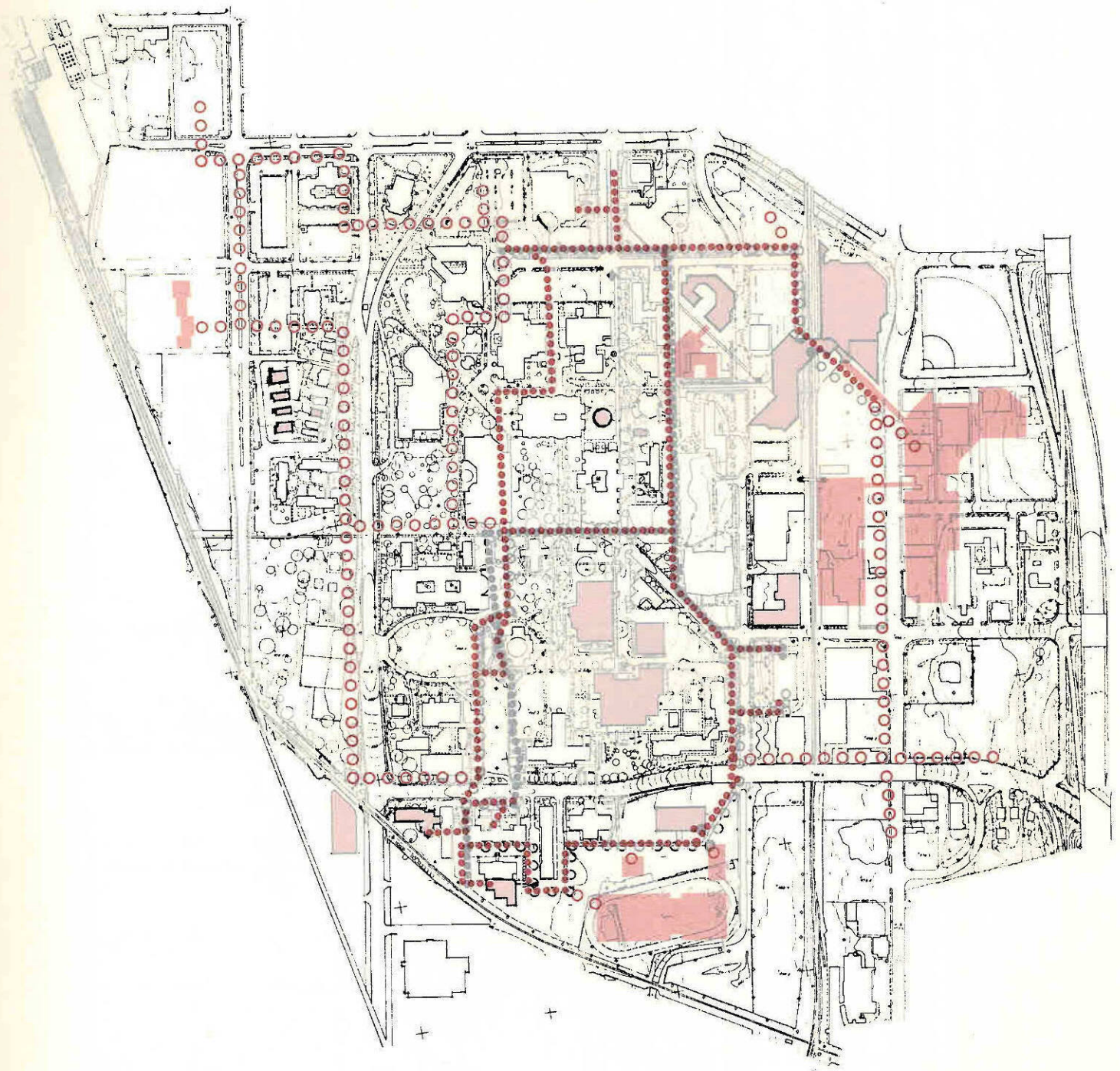
Existing Utility Tunnels		
Proposed Tunnel Extensions		
Planned Renovation and Construction		





Belknap

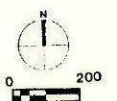
Campus

Electrical Plan



Five Year Plan **Long Range Plan**

- | | | |
|-------------------------------------|---|---|
| Existing Distribution | ●●●●●●●● | ●●●●●●●● |
| Proposed Distribution | ○ ○ ○ ○ ○ | ○ ○ ○ ○ ○ |
| Planned Renovation and Construction |  |  |



Appendix

D

Belknap Campus Statistical Summary

Academic Space (gross square feet)	
Existing (1,532,000 + 406,377)	1,938,377
To be removed	<u>45,317</u>
Balance	1,893,060
<i>Required (190 gsf x fte)</i>	
Proposed—new buildings (exclusive SAC)	<u>+ 142,000</u>
Total	2,035,060
Parking (Spaces)	
Existing	5,450
Red = 372	
Blue = 526	
Yellow = 450	
Green = 3,731	
Visitors = 320	
Handicap = 50	
Proposed	+ 1,000
Red = 372	
Blue = 526	
Yellow = 450	
Green = 2,375	
Brown-new = 2,356	
Visitors = 320	
Handicap = 50	
Total spaces	6,450
Housing (Beds/Units)	
Existing	1,446
Proposed (226 apartments + 100 rooms)	<u>+ 326</u>
Total	1,772
Athletic Acreage (Acres)	
Existing	10.5
Proposed (100 sf/fte)	<u>+ 10.5</u>
Total	21
Campus Acreage	
Existing	146.00
Proposed Acquisitions	<u>+ 30.00</u>
Total	176.00
Population	
Full-time student	9,521
Part-time student	+ 7,678
Projected increase (+ or — 5%)	
Total	17,199
Full-time staff	1,418
Full-time faculty	+ 540
Projected increase (+ or — 5%)	nc
Total	1,958

Appendix

E*

Additional Comments on Health Sciences Center Parking and Access

Issue: Parking at the Medical Center Campus

Parking on the Medical Center Campus is now available in a series of surface lots and in one deck of the 800 space parking garage on the southwest corner of Muhammad Ali Boulevard and Jackson Street (140 spaces). Surface lots are located under I-65 north of Broadway (190 spaces); at the rear of the Kentucky Lions Eye Foundation on the north side of Muhammad Ali Boulevard (60 spaces); under I-65 on the west side of Preston north of Jefferson (90 spaces); on the south side of Muhammad Ali, just east of Floyd (30 spaces); on the north side of Chestnut at Floyd (60 spaces); on the northwest and northeast corners of Chestnut and Preston Streets (320 and 220 spaces, respectively); on the south side of Chestnut between Preston and Jackson (30 spaces); and on the southeast corner of Chestnut and Hancock Streets (40 spaces). Visitor spaces are located in several locations, principally along Abraham Flexner Way (20 spaces). About 80 spaces are provided to students in housing on the north side of Gray, east of Preston Street. Total parking availability on the Medical Center Campus is about 1370 spaces.

In the Five Year Plan, the reopening of Floyd Street would take about 30 spaces. The development of the northwest and northeast corners of Chestnut and Preston Streets as additional University medical facilities and a parking garage, respectively, would take away surface parking at these sites (550 spaces). A proposed 800 space parking structure on the northeast corner would provide replacement parking with a net increase of about 220 spaces.

Another parking garage is proposed under the Long Range Plan for the rear of the Kentucky Lions Eye Foundation. This 400 space garage would be coordinated with planned expansion on the rear of the Lions foundation building and would result in an additional net increase in parking of about 340 spaces.

Total parking supply at the Medical Center campus would increase to almost 1900 spaces from today's total of 1325 spaces.

*This section was prepared by Schimpeler-Corradino Associates.

Appendix

F*

Additional Comments on Health Sciences Center Utilities

Utility Systems

This utility report has been compiled as an integral part of the Long Range Development Plan for the Health Sciences Center. This fast developing area is comprised of a considerable number of buildings owned and/or operated by the University of Louisville.

The utility and service data contained herein was compiled from information provided by the University and from original construction data, maintenance records, utility company maps, etc. The data was not established from actual field surveys and, therefore, cannot be considered totally accurate. However, it should be sufficient and within tolerances necessary to complete any evaluation for the Long Range Development Plan.

This program can establish only probable areas of growth and the need for expansion or development of major utilities and would have to be studied and reevaluated constantly. This would be especially true of the power plant which produces steam for heating and other purposes and chilled water for air conditioning for a number of buildings located in the area.

The present Health Sciences Center is now served with water, sanitary sewers, storm sewers, gas, electricity, and telephone systems. Closed circuit and commercial television is also available. Major buildings are also served with steam and chilled water from the Medical Center Steam and Chilled Water Plant located in the Health Sciences Center.

At this time, all systems are believed to be adequate to serve the area. It is anticipated that these systems will be expanded as required. All systems will have to be reevaluated as the area develops.

Water

The water supply system is owned and operated by the Louisville Water Company. After processing, supply is drawn from a 20 million gallon clear well and then from the Crescent Hill reservoir having a capacity of 30 million gallons.

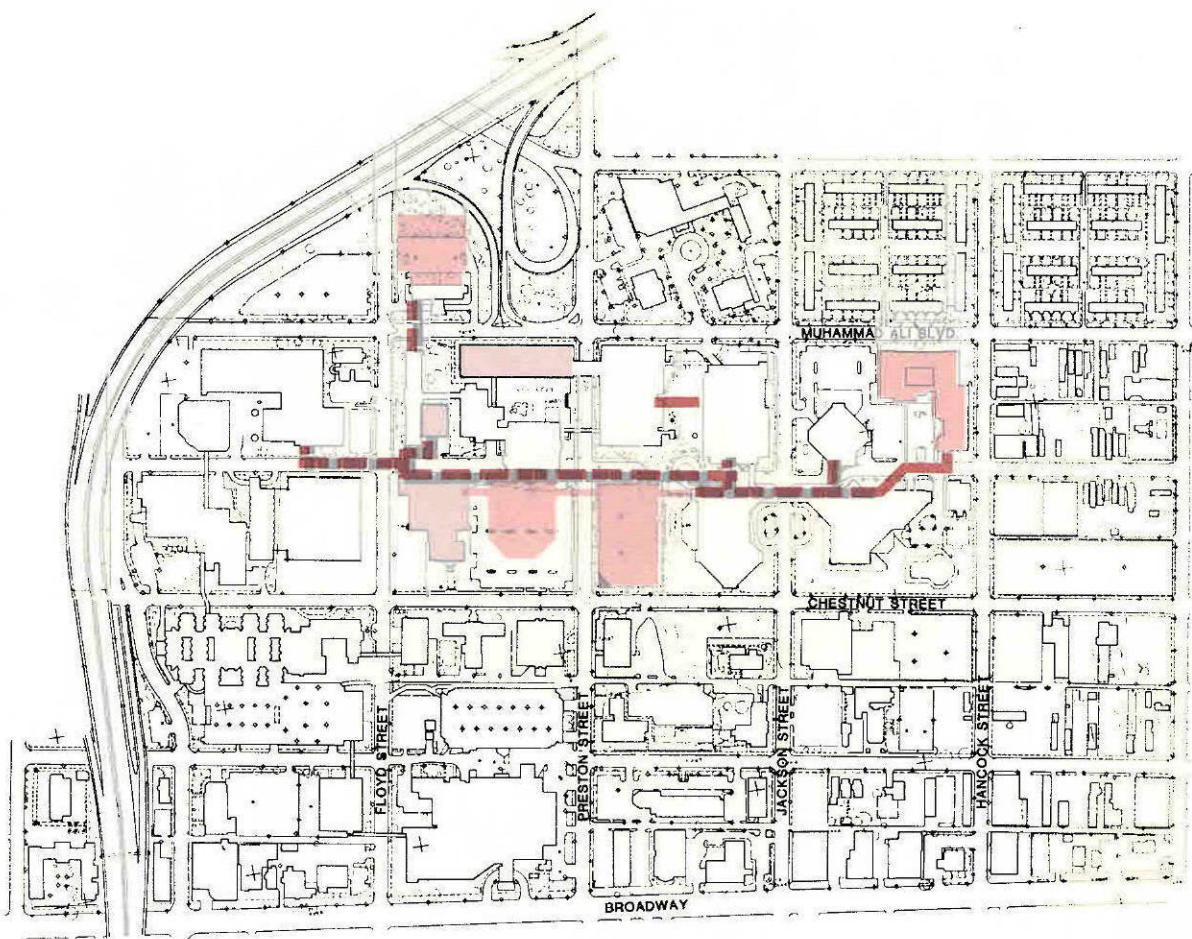
Distribution piping serves the entire metropolitan area which includes the Health Sciences Center. The piping system serving this area is a loop system of cast iron water mains ranging in size from 6" to 20".

Ample pressure has been maintained for both domestic and fire protection requirements. Pressure normally exceeds 70 psi at street level and has been recorded as high as 85 psi. This pressure is sufficient to supply most facilities without the use of pressure pumps.

It is believed that the existing distribution system is ample to supply both domestic and fire protection systems for the present Health Sciences Center facilities as well as future facilities planned by the University.

Health Sciences Center

Tunnel Plan



Five Year Plan **Long Range Plan**

Existing Utility Tunnels

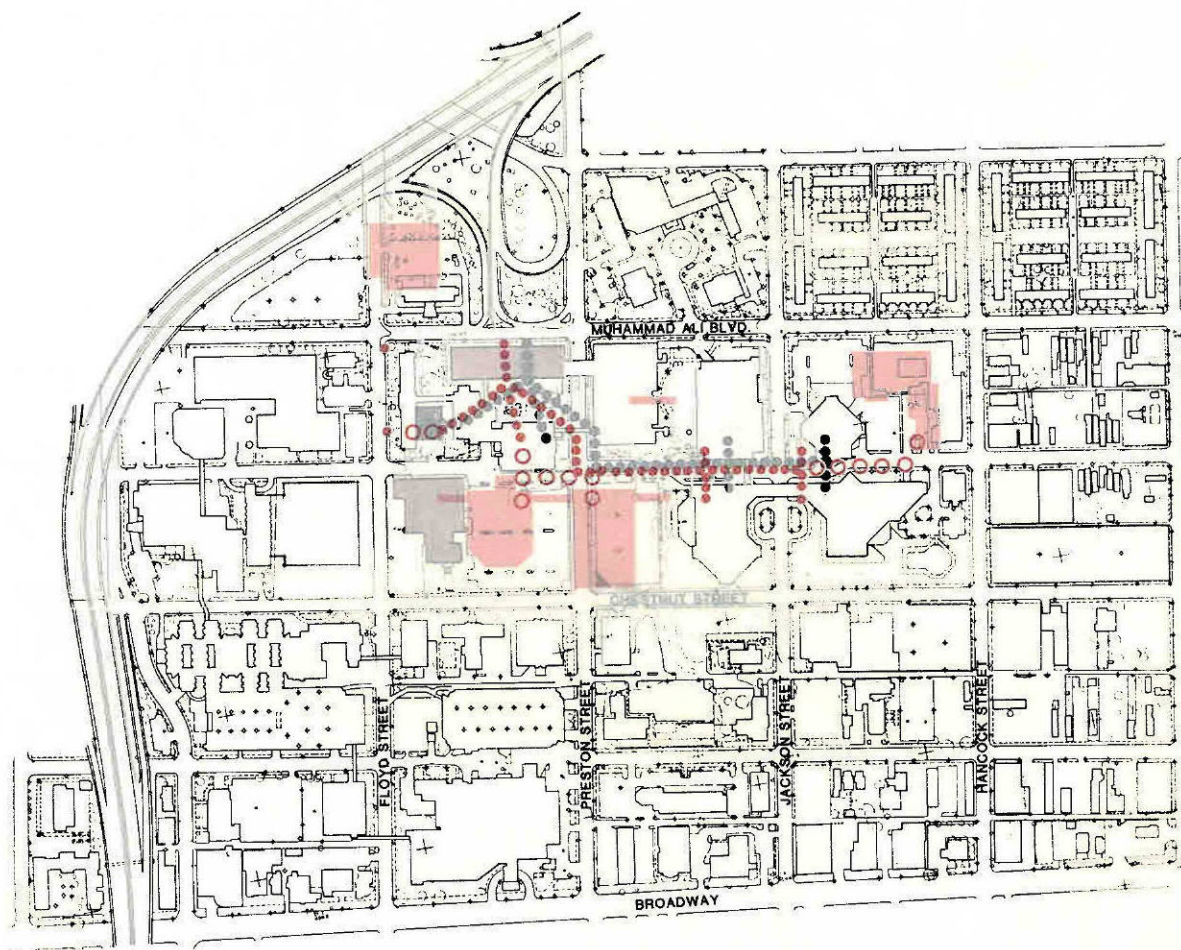
Proposed Tunnel Extensions

Planned Renovation and Construction



Health Sciences Center

Electrical Plan



Five Year Plan Long Range Plan

Existing Distribution	●●●●●●	●●●●●●
Proposed Distribution	○●●●○	○●●●○
Planned Renovation and Construction	■	■



Sewers

The sewer system is owned and operated by the Metropolitan Sewer District. The network of sewers carries the sanitary waste to a sewage treatment plant and then to the Ohio River. The Metropolitan Sewer District's system serving the Health Sciences Center is a conglomerate of systems, storm, sanitary, and combination, all of which have undergone continuous changes and/or replacement in recent years. These sewers are still being changed and/or replaced at the present time.

The private distribution system owned and operated by the University is also a conglomerate of systems. The older sewers are normally combination storm and sanitary systems, whereas facilities built within the past 17 years are probably serviced by separate storm and sanitary sewer systems.

The Metropolitan Sewer District's distribution sewers in the Health Sciences Center range in size from 12" to 96". It is believed that the present system will be properly maintained and that it is adequate to handle both present facilities and future facilities.

It is anticipated that in the interest of ecology, that the Metropolitan Sewer District will require the separation of storm and sanitary sewers. This separation of sewers within the University's property would have to be accomplished at the expense of the University.

Steam and Chilled Water

Steam and chilled water, used to heat and cool a considerable number of buildings in the Health Sciences Center, is produced in the Medical Center Steam and Chilled Water Plant. The facilities are served by a network of piping most of which is located in walk-thru tunnels. Some of the chilled water mains are buried underground.

The present steam plant has six boilers with a total capacity of 348,000 pounds of steam per hour. Assuming that one boiler would be out of service, the steam plant could produce 255,000 pounds of steam per hour with coal fuel and 180,000 pounds of steam per hour with gas fuel. Calculations indicate that the steam plant can produce ample steam to provide for the connected load as well as a limited amount of future facilities.

The present steam plant probably has sufficient capacity to serve the future and renovated facilities for the next five years. Since the present chilled water plant is loaded near to capacity, additional refrigeration machines would have to be installed to serve any other future facilities.

Electric Power

Electric power is distributed by the Louisville Gas and Electric Company to metropolitan Louisville and outlying areas.

Most of the Health Sciences Center is served by 13.8 KV primary distribution lines. Secondary service would be 480/277 volt or 120/208 volt.

There is ample electric service to provide for the present demands in the Health Sciences Center. At this time there is no reason to doubt that ample electric power is already available or will be made available for future facilities planned for the Health Sciences Center.

Telephone

Telephone service is provided by the South Central Bell Telephone Company. The present central system and cable distribution system are satisfactory for the present facilities of the University. It is believed that the present system could be expanded and/or new systems provided to meet any future requirements of the University.

Television

Provisions for closed circuit, educational, and commercial television have been included in some of the facilities owned and operated by the University. These systems are assumed to be adequate for present facilities. Present systems could be expanded and/or new systems provided for any future facilities to be constructed in the Health Sciences Center.

Summary—Utility Systems

Summary—Utility Systems

Domestic Water

Adequate for most facilities.

Fire Protection

Adequate for most facilities.

Sewers

Adequate for most facilities.

Gas

Adequate for most facilities.

Steam

Steam is probably available in sufficient capacity. Distribution branches must be provided.

Chilled Water

Chilled water is probably available in adequate capacity. Distribution branches must be provided.

Electric

Adequate for most facilities.

Telephone

Adequate for most facilities.

Television

Commercial, Education and C.C.T.V. can be made available.

Appendix

G*

Additional Comments on Health Sciences Center Landscaping

Overview

There are a variety of architectural styles expressed on this urban campus. The landscape treatment is uneven in that some facilities are richly landscaped while other buildings have few plantings around them. The Landscape Development Plan for the Health Sciences Campus involves four major recommendations.

1. Landmark/Image Intersections

The Health Sciences Campus is somewhat undefined in relationship to neighboring health-related facilities. There are three existing intersections that either serve or could serve as identity points for the campus. These include the intersection of Muhammad Ali Boulevard and Preston Street on the north, Chestnut Street and Floyd Street on the west, and Chestnut Street and Jackson Street on the south (see Landscape Development Plan). These intersections should be improved by placing low walls diagonally as shown on the plan. These walls could form a base for signage or create raised planters that define the entrances to the campus. The design expression should be repeated at all three intersections. An additional five intersections (designated I-2) could be treated in latter phases to complete the landmark/image intersections which will better define the Health Sciences Campus visually. A separate comprehensive signage study also proposes identification and information kiosks located as shown on the plan. The proposed intersection treatments could provide a second level of visual identity for the campus.

2. Unification of New and Old Architecture

Simple, angular planting beds are proposed to unify existing buildings that are at both 45 degree and 90 degree angles to the streets they front. These plantings should be organized in simple masses so as not to compete with the dynamics of the architecture but to harmonize with it.

3. Canopy Street Tree Enrichment

In some streets bordering the campus, there are mature canopy trees that provide human scale and relieve the predominance of concrete and maintenance. There are, however, many voids and gaps along campus streets which should be filled. Where space is limited, trees should be placed in grates with guards. These trees will provide a visual perimeter boundary which will create a positive image to the Health Sciences Center.

4. Visitors Center

A small plaza is proposed for the northeast corner of Chestnut Street and Preston Street to provide an appropriate setting for a proposed Visitors Center located integral to the proposed parking deck. The plan of the center would allow people to park temporarily in the structure while getting direction and information. Pedestrians could also walk into the information center for assistance.

Gardencourt Campus

The Gardencourt property provides an opportunity for the University as both an architectural and landscape architectural showplace. Its axial, terraced gardens have potential for restoration and reuse in conjunction with uses of the facility as a conference center, faculty club, or special guest housing. It is essential that economic feasibility for reuse be determined before any adjustments to the building are attempted.

In terms of landscape recommendations, the site is deteriorating and this deterioration should be stabilized. A detailed assessment of paving and masonry repairs should be undertaken. The value of existing plant materials should be assessed. If there are substantial quantities of perennials that are worth saving, they should be consolidated in a single effective location. The remaining empty bed areas should be planted with ground cover to inhibit weed growth. Mowing and weed control/fertilizing of lawn areas should be continuous. Dead limbs should be pruned from trees and large shrubs.

*This section prepared by Johnson, Johnson and Roy.

Appendix

H

Health Sciences Center Statistical Summary

Academic Space (gross square feet)

Existing	813,358
Proposed	+ 152,000
Total	965,358

Parking (Spaces)

Existing	1,325
Red = 332	
Blue = 168	
Green = 825	
Proposed (1,748 — 423) loss	
Total spaces	1,325

Housing (Beds/Units)

Existing (81,450 sq. ft.)	N/A
Proposed	
Total	

Campus Acreage

Existing	35.4
Proposed	
Total	35.4

Population

Full-time student	1,677
Part-time student (205)	
Full-time staff	1,017
Full-time faculty	+ 420
Total	3,114

Appendix

I

Gardencourt Campus Statistical Summary

Academic Space (gross square feet)	
Existing	30,459
Proposed (30,459; net 19,060)	N/A
Total (including = 7,000 Carriage House)	
Parking (Spaces)	
Existing	115
Proposed	+ 50
Total spaces	165
Conference Housing	
Existing	0
Proposed	0
Acreage	
Existing	13.76
Proposed	+ 0
Total	13.76
Population	
Full-time student	237
Full-time staff	68
Full-time faculty	+ 34
Total	339
Proposed Population	N/A

Appendix

J*

Additional Comments on Landscape— Detailed Planning

In selecting plant materials for the three University of Louisville campuses, the following criteria are recommended:

1. Availability/Cost

While plant materials are referenced in many textbooks by geographic/ climatic zones, local nurseries are better sources of information on the performance of various cultivars in their respective region. Commonly, available plants tend to be more economical to use than those listed in botanical books. Therefore, local nurseries should be surveyed to develop a list of available plants.

2. Soils/Drainage

Soil conditions on the campuses can vary from heavy clays to sand loams. This variation can occur on one site. Drainage conditions can also vary. Therefore, plants must be selected in response to soil and drainage conditions.

3. Relationship to Existing Palette

A survey of existing plant materials is needed to determine the types of proposed plants that should be used. New plantings should harmonize with existing plants.

4. Maintenance

Maintenance budgets are limited and the selection of new plantings must be tempered by maintenance considerations.

5. Function

The proposed plant's function—screening, shade canopy, barrier, ornamental focus, etc.—is an important criteria for this selection.

A comprehensive planting plan is needed for all three campuses in order to effectively determine varieties and locations for specific plants. It is recommended that detailed planting plans and specifications be developed on a phase-by-phase basis as funding permits.

**This section prepared by Johnson, Johnson and Roy.*