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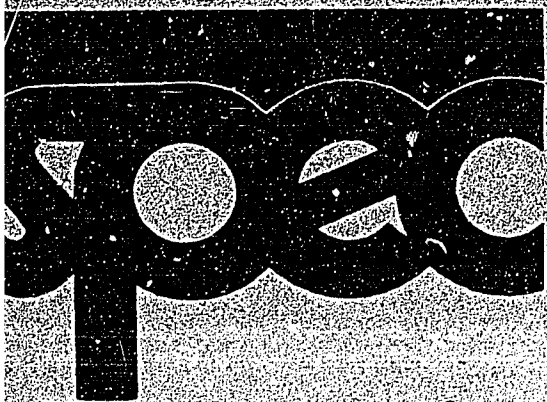
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ABSTRACT

This collection of library documents related to building renovation, by members of the Association of Research Libraries (ARL), contains excerpts from: (1) a plan for upgrading and expanding library facilities at the University of Kansas; (2) a report on storage facilities at Rutgers University; (3) documents presenting the essential remodeling rationale for public service space requirements and library design considerations at Iowa State University, and an accompanying speech by W. Robert Parks on the lack of sufficient library space at Iowa State University; (4) reports on the architectural and engineering firm selection process and the library building program requirements at the University of Oklahoma; (5) proposals for library minor capital improvement projects at the University of California, Riverside; and (6) a draft planning report for library alterations from the University of Cincinnati, with a brief accompanying analysis of patron needs and a public services flow chart. A concise summary of issues and trends presents the results of a telephone survey of nine libraries, which was conducted to ascertain their management of; the perceived need for; and the amount of library director, staff, and user involvement in renovation projects. A five-item bibliography and an evaluation sheet for this ARL Systems and Procedures Exchange Center (SPEC) kit are also provided. (ESR)

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Building Renovation in ARL Libraries

Kit 97

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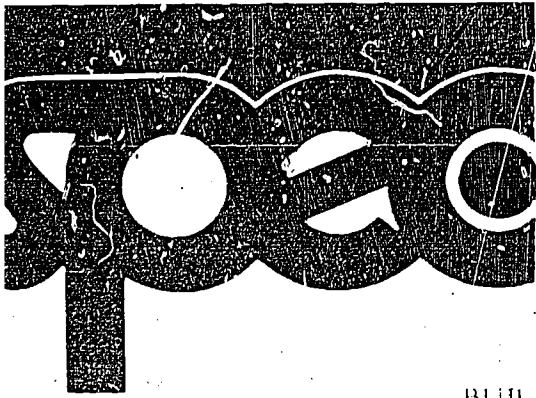
Maxine Sitts

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#97 SEPTEMBER 1983

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Systems and Procedures Exchange Center

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BUILDING RENOVATION IN ARL LIBRARIES

As library buildings become crowded or technologically outmoded, several ARL member institutions are turning to renovation or expansion of existing space as a less costly alternative to constructing new libraries. The introduction of public use computer terminals, the changing traffic patterns of patrons resulting from varied public services, and the growing self-service nature of libraries also have created new interest in remodeling, redesigning, and expanding older structures. Such improvements of library facilities require the involvement of the director, staff, users, and space planners at various stages of the capital project. To gather some examples of how renovation projects have been managed, SPEC interviewed nine libraries by telephone. Standard questions in each interview attempted to determine the reasons for and nature of the capital projects and to identify trends.

NEED FOR RENOVATION In the libraries surveyed, lack of gross space, poor use of space, poor location of service facilities and circulation traffic areas, improper lighting and aesthetics were major considerations for adding, renovating or remodeling. Difficulty in adapting technology for large scale public use was cited as another factor. Among libraries contacted, additions to the main library ranged in size from 76,750 to 150,000 square feet. In nearly all cases involving an addition to the main library, there was also renovation or remodeling of existing facilities. There was quite a difference in the length of projects -- one took two and one-half years while others took more than ten years. Financing of projects was fairly traditional: State universities' projects were funded by state funds; private university projects were funded through their normal sources for capital improvements. One state university, however, financed a \$13 million addition in equal parts of state funds and private donations.

Most of the library additions focused on library service and operation, as opposed to stacks. Circulation and reserve, reference, card catalog, current periodicals and microforms are among the services being located in these additions and the main entrance and exit control points are often relocated to the new area.

It has been observed that the better the original design of the library the more difficult it is to improve or modify the concept. Major renovations appear to occur when services and collections are poorly integrated (e.g. some closed stack arrangements), when space is fragmented by a confusion of interior walls, when circulation space and people movement are poor, and when services are poorly located or defined. Outmoded environmental controls and lighting problems also are major reasons to renovate.

Cooperative or shared storage facilities also are being considered as cost-effective options. One campus with a decentralized library system selected a centralized storage facility to accommodate collection expansion for all campus libraries. A state with a large number of public universities is planning two regional library storage facilities for use by all libraries with space needs. While these arrangements may limit access to the collections, lower construction costs and improved preservation capabilities through better environmental control are attractive economies to consider. (See SPEC kit #39 on Remote Storage -- December 1977).

DIRECTOR, STAFF AND USER INVOLVEMENT Any capital improvement project necessarily goes through several stages prior to or concurrent with program writing, and the library director is usually the key figure in the beginning stages. The director carries the standard through the university's approval process, solicits backing from the university community, and obtains the continuing support of the university administration. The political process and negotiation efforts at the university level as well as at the state level were judged the most critical to project success by those surveyed.

Further, the library director plays a key role in building program design, specification and approval. While seldom actually writing the program, the director brings together the necessary forces for planning and stimulating the creative process. A librarian with planning responsibility usually draws the assignment of collecting information and writing the building program. At the libraries surveyed, there was staff participation in planning, generally for the departmental or operational level. The director and his/her appropriate deputies, however, made the major decisions. Liaison with the project and campus architects, crucial to a smooth project, fell to the planning librarian mentioned earlier.

User involvement in the planning process was much less uniform. One library's project involved no formal input from users, whereas another library reported that extensive student involvement may have negatively influenced the planning process. Another library cited its "strong customer orientation" as a reason for inviting faculty and students into the planning process.

TRENDS AND ISSUES While lack of stack space is a principal reason to add and remodel, other factors figure prominently in design approach. Improved seating capacity for users is equally important as is the quality of study areas. There is a strong need in most cases to make the library a more appealing and pleasant place to use. It is also quite important to define service areas well and locate them more logically when they are incorporated into an addition. Libraries surveyed also tried to plan additions to accept technological improvements, even though large scale computer access systems may not have been in place on opening day.

The planning process can be organized to accommodate any desired level of staff involvement. To be effective and timely, however, planning must be highly structured. Usually, one person is designated project manager, with day-to-day control over scheduling events, devising processes, creating planning instruments, and involving other staff. The size of the project may dictate that the project manager's time be totally committed for the duration of the project. With the director, the project manager bears the major responsibility for the project's completion and success.

Paramount in obtaining approval for library construction is the successful negotiation for a capital project at the university level. This persuasive, political process can be a major focus of a director's energy over a lengthy time period. However, once the university administration enunciates its support, the library project has a strong chance of success, although the final product may take some time to complete. Since they are often more salable, expansion and renovation rather than replacement are the likely avenues of increasing and improving library space in the near future.

SPEC Kit #97, Building Renovation in ARL Libraries (September 1983, 99 pages), contains a listing of libraries contacted, examples of a variety of planning and final report documents from six ARL members, and a short bibliography. SPEC Kits are available mainly by subscription from: SPEC Center, Office of Management Studies, ARL, 1527 New Hampshire Ave., N.W., Washington, D.C. 20036. Individual kits are available for \$15.00 prepaid. Outside the U.S. and Canada, add \$5.00 per order to the prepayment for parcel-post shipping. (ARL library members receive kits for \$7.50).

This Flyer/Kit was prepared as part of the
Collaborative Research/Writing Program
by Rodney M. Hersberger, Assistant to the Dean for
Administrative Services, University of Oklahoma, Norman

USES OF SPEC KITS

The Systems and Procedures Exchange Center (SPEC) is a clearinghouse operated by the Association of Research Libraries, Office of Management Studies that provides a central source of timely information and materials on the management and operations of large academic and research libraries. It facilitates the exchange of knowledge and documents through SPEC Kits, which are distributed ten times each year to ARL members and other interested libraries. The Kits include topically-arranged groupings of unedited primary source documents - selected for their value to administrators and decision-makers - that illustrate a wide range of alternative approaches to specific issues.

Kit documents come from general membership surveys and from selected libraries contacted directly by SPEC, and most Kits are produced within six months of surveys. The documents' value comes from their variety of ideas, methods, and solutions. They are not viewed as finished products, but rather as points of departure for a library's planning efforts and as stimulants to innovative approaches to problem-solving. As such, Kits do not present answers or prescriptions for any one library; instead they illustrate how selected ARL members are planning for or dealing with particular issues. The worth of any one Kit to a particular library will depend upon the specific topic covered and the library's stage of development in that area.

Materials are selected according to the following criteria:

- Presents an approach of potential value to administrators and decision-makers.
- Timely, and dealing directly with the topic under consideration
- Probability of application of ideas or thinking to other library situations
- Illustrative of actual practice, rather than theoretical
- Understandable, readable communication

All together, the materials should provide a range of alternative approaches that complement each other, provide variety, and stimulate comparison and contrast.

Libraries can take advantage of the Kit compilations in a number of ways. Administrators can evaluate the assumptions, methods, and results of other libraries' approaches; compare and contrast them; and use the learnings in their own situations. Library staff members can use the kits as professional development and current awareness tools. Committees and task forces can use them to begin a review of current practices. And the Kits can identify other persons or places to contact for further information. Back-up files in the SPEC office also are available for loan to member libraries. In addition, SPEC will conduct on-demand surveys or analyses geared specifically for a single library.

EVALUATION

Kit Title/Number _____

1. Which uses did the library make of this Kit?

2. Please indicate how useful the Kit was for these purposes.

Very Useful Quite Useful Somewhat Useful Not Useful

3. Do you have suggestions for this Kit or for future Kits?

(optional)

NAME _____

LIBRARY _____

PHONE _____

Please return this form to the SPEC Center, OMS/ARL, 1527 New Hampshire Ave., N.W., Washington, DC 20036.

1/82

SPEC KIT ON BUILDING RENOVATION
SEPTEMBER 1983 Kit #97

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University of Kansas	
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Storage Facility: Final Report, Selected Sections	32
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SPEC SURVEY ON BUILDING RENOVATIONS, REMODELS, AND ADDITIONS

APRIL 1983

PROJECTS SURVEYED *

University of Oklahoma	150,000 sq. ft. addition and renovation
University of Cincinnati	Expansion, reorganization, remodelling being planned
Virginia Tech University	110,000 sq. ft. addition
University of Kansas	Remodel
Rutgers University	(storage facility - sq. footage unknown)
University of California - Riverside	Remodel
University of Arizona	Remodel of large science library
Iowa State University	106,000 addition - renovation
University of Illinois	Sixth stack addition 76,750

*Libraries contacted after initial mailing (see pages 1A, 1B following).

OFFICE OF MANAGEMENT STUDIES

ASSOCIATION OF RESEARCH LIBRARIES
April 8, 1983

1527 New Hampshire Avenue, N.W., Washington, D.C. 20036 • (202) 232-8656

TO: SPEC Liaisons

FROM: Rodney M. Hersberger, Assistant to the Dean for Administrative Services, University of Oklahoma

Maxine K. Sitts, SPEC Center *Maxine*

We are working to create a SPEC Kit on building renovations/remodels/additions for publication in Fall, 1983. We are generally contacting institutions where improvements have been made to the main library, unless a large division or branch was involved.

Some of the possible areas of focus for the kit and flyer are: What stages occur during the planning process, reasons for physical facility changes, funding of improvements, the director's role, the university staff's role (e.g., campus architect), staff and user involvement in the planning process, and common issues or trends in library physical improvements.

This survey will be limited to 10-15 ARL members, and will be conducted primarily by telephone interviews. We are looking for documents for the kit that will be helpful to other ARL institutions, including planning reports, needs assessments, descriptions of building programs, and evaluations of projects.

Please take a few moments to respond to the questions on the next page, and return it to:
Rodney M. Hersberger
Assistant to the Dean for Administrative Services
Office of the Dean, University Libraries
401 West Brooks, Room 141
Norman, Oklahoma 73019

Please return the next page by April 15, 1983. You might want to alert the person whose name you are providing, and share this page with them. Rod Hersberger will be telephoning them during May and June.

Thank you for your cooperation.

OFFICE OF MANAGEMENT STUDIES

ASSOCIATION OF RESEARCH LIBRARIES

1527 New Hampshire Avenue, N.W., Washington, D.C. 20036 • (202) 232-8658

April 1983

SPEC SURVEY ON BUILDING RENOVATIONS, REMODELS, AND ADDITIONS.

The following information will become the basis for phone calls to selected ARL libraries during May and June, for a SPEC Kit in Fall 1983.

1. Name, Position, and Phone Number of library staff person to contact:

Name _____

Position _____

Phone Number (area code) _____

2. BRIEF note on nature of physical changes at your library:

3. Are there likely to be planning documents available?

Return to: Rodney M. Hersberger
Assistant to the Dean for Administrative Services
Office of the Dean, University Libraries
401 West Brooks, Room 141
Norman, Oklahoma 73019

(Phone 405 325-2611)

Please respond by April 15, 1983. Thank you.

THE UNIVERSITY OF KANSAS

A
PLAN FOR THE
UPGRADING AND EXPANSION
OF
LIBRARY FACILITIES

Not Included in Kit

chapter 3: Collections
chapter 5: Existing Library
Facilities

Prepared by the
Libraries Facilities Planning Committee

Ralph Christoffersen
John Dagenais
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William Griffith
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The University of Kansas, Lawrence
November, 1976

Chapter I

INTRODUCTION

The present concern for the physical facilities of the Libraries at the University of Kansas goes back at least to 1965. In that year the Kansas Higher Education Facilities Commission retained Dr. R. B. Downs, Dean of Library Administration of the University of Illinois, to survey the space needs of all college and university libraries in the State. At the University of Kansas Libraries, he found reader space to be deficient by 44,000 square feet, and he warned that bookstack space would be exhausted within three-years (1968).

Since that time the need for additional space has become steadily more acute. The only significant addition to the physical facilities of the Libraries in that interval has been the new Spencer Library, occupied in 1968. Although Spencer is one of the best rare book and manuscript buildings in the country, it is limited both by its function and by the terms of bequest in its quantitative impact upon the library space problems of the Lawrence campus. It permitted the removal from Watson Library, for example, of only ten per cent of the collections, ten per cent of the staff, and fewer than five per cent of the readers. Meanwhile, the number of students enrolled in the University and requiring library service increased from about 12,000 to more than 22,500, and the book collections grew from 950,000 to over 1,600,000--an increase of about 70 per cent.

Since the "Physical Facilities Investigation" by Louis J. Krueger, private consultant retained by the Regents in 1971, the University administration has also been fully aware of the necessity of improving the quality of existing library space, particularly Watson Library. That investigation placed Watson in a category needing major remodeling because "the interior . . . is functionally inappropriate for meaningful library use".

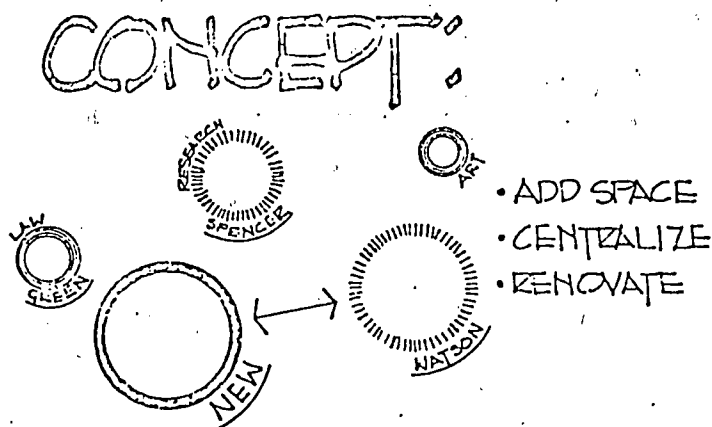
With this background, the University in 1974 requested three nationally recognized library consultants--David Kaser of Cornell University, Warren Kuhn of Iowa State University, and Carl Jackson of Indiana University--to survey the total library system. After a thorough investigation, they reported that "it would seem desirable to place a new central library on a high priority". As evidence, the consultants pointed out that in Watson "access is confusing, in some cases, actively deterring use"; that it is "a problem building with service and space needs strong enough to make the most ingenious architect blanch"; that its "generally inflexible design", both in and of itself and because of the make-shift alterations which have been made to it, "poses puzzles rather than invitations to users"; and that "space . . . is inadequate everywhere but Spencer".

More specifically and of equal importance for the user, the consultants found that Watson experienced constant difficulties with ventilation and air-conditioning; provided "little clear indication to the user of coherent traffic and service patterns"; offered a seating capacity only "about 40 per cent of standard", with collections "dispersed and obviously cramped"; and was visually unattractive.

A review visit by the North Central Association of Colleges and Secondary Schools in 1975 provided additional concern. "We are convinced", they wrote, "that the library is a major problem at the University of Kansas and that solutions to problems of library space and funds must be found if the University is to maintain quality undergraduate and graduate programs".

In response to this increasing evidence that the Library needed immediate and substantial attention, a Library Facilities Planning Committee was formed early in 1975 to investigate the physical problems of the Library and to propose plans for their solution. The recommendations of that Committee, presented in its report of 29 November 1975, consisted of two alternate proposals: 1) abandon all present library facilities, with the exception of Spencer, and replace them with a single new structure large enough to meet existing and projected needs; or, 2) retain and renovate Watson, supplement it with

a new facility of sufficient size that the two structures together are adequate for present and projected needs, and relinquish the space occupied by most departmental libraries and reading rooms in the various academic buildings on campus. The administration of the University elected to pursue the second alternative, and in February 1976 a new committee was appointed to study and develop this concept. The present report, an overview of which is presented below, is the first step in this process.



* * *

The Library, unlike many other parts of the University, cannot avoid growth, even when enrollment is stable or actually declining. Constant growth is necessary because the Library must continually acquire the latest and best books on subjects of interest to students and faculty. This imperative, coupled with the economic and practical necessity to expand buildings in sizeable increments, suggests that planning for new library facilities ought probably to accommodate a minimum of some twenty years of projected growth, or, our needs in about the year 2000.

The planning of library facilities adequate and appropriate for the year 2000 involves a projection of our requirements to that date, an analysis of existing facilities to determine the portion of those requirements they can meet, and, finally, the extent and character of the new facilities which will be required. Because of the obvious interdependence of these considerations, they are frequently treated together in this report.

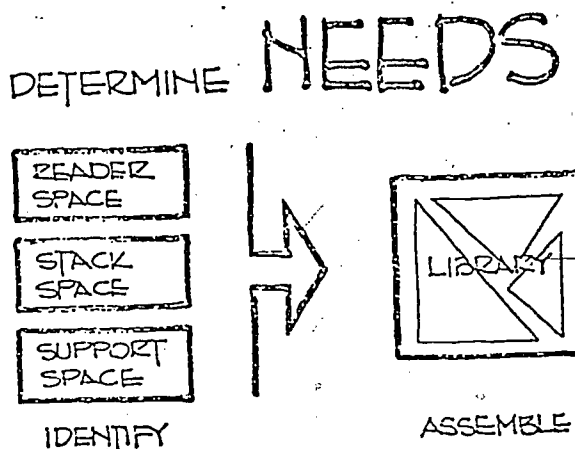
In conformity with the guidelines stated in the Regents' Physical Development Planning Manual, library space needs are analyzed under three major groupings:

the long-range need for reader space and the capacity of existing reader space to accommodate current and projected user populations;

the long-range need for stack space and the capacity of existing stack space to house current materials and to absorb additional materials;

the long-range need for space for the staff to work and provide necessary library services, and the capacity of existing space to accommodate present and projected requirements.

In Chapters II through IV, projections are made to determine the space required in the year 2000 for readers, for the collections, and for the library staff and services. Chapter V examines existing library space from the standpoint of both use and quality. Chapter VI proposes a library facilities plan for the future involving the renovation of Watson and the construction of a new library facility. Finally, Chapter VII presents a summary of the recommendations. This report excludes from consideration both the Law and Medical libraries, the former because new facilities are under construction, the latter because of its location in Kansas City.



Chapter II

READERS

Central to determining the space required for readers are the number to be accommodated and the type of accommodation to be provided. Most planning guides, including the Board of Regents' Physical Development Planning Manual, express these requirements in terms of the percentage of the total number of readers to be seated at one time and the average number of square feet to be provided for each. To determine the space required by readers in the year 2000, three questions must be addressed:

How many readers--students, faculty, and others--need to be accommodated?

What sorts of accommodations--table/chair combinations, individual study carrels, lounge seats, private studies, group study areas, etc.--should be provided?

Finally, how much space will this require?

Number of Readers

During the past quarter century, enrollment on the Lawrence campus has nearly quadrupled--from 5,809 in 1951 to 22,553 in 1976. (See Table I.) The nature of this increase has had particular implications for the Library. Graduate students, who make especially heavy use of the Library, increased almost seven-fold--from 929 to 6,302; and the number of doctorates awarded rose twelve-fold--from 23 to 287. Directly related to the increase in graduate work was a twenty-fold increase in external funding for University research and training programs--from \$597,852 to \$13,531,087, according to the Office for Research Administration.

Kansas population growth rates, the distribution of population among the age groups, declining birth rates, and the percentage of college-age youth already attending college seem to preclude any comparable enrollment growth during the next quarter century. Any decrease in on-campus enrollment of youth in the traditional college-age group, however, will be offset by the University's accelerated off-campus "outreach" programs, and especially by Linwood Center which will grow rapidly and be largely dependent upon the Lawrence campus for library resources. Other factors unrelated to student numbers which can be expected to increase library usage are the continued expansion of upper-division and graduate

Table I

UNIVERSITY OF KANSAS
ENROLLMENTS
LAWRENCE CAMPUS

School Year	Head Count	Graduate	Under-Graduate	Full-Time Equivalent
1951/52	5,809	929	4,880	--
1952/53	6,087	981	5,106	--
1953/54	6,319	995	5,324	--
1954/55	6,682	936	5,696	--
1955/56	7,261	1,123	6,138	--
1956/57	7,985	1,235	6,750	--
1957/58	8,355	1,302	7,053	--
1958/59	8,441	1,391	7,050	--
1959/60	8,611	1,617	6,994	--
1960/61	9,219	1,790	7,429	9,395
1961/62	9,949	1,974	7,975	10,060
1962/63	10,509	2,149	8,360	10,401
1963/64	11,441	2,477	8,964	11,194
1964/65	12,244	2,609	9,735	12,178
1965/66	13,565	2,839	10,726	13,384
1966/67	14,605	3,080	11,525	14,697
1967/68	15,791	3,229	12,562	15,833
1968/69	16,482	3,157	13,320	16,616
1969/70	17,576	3,395	14,244	17,813
1970/71	17,947	3,689	14,316	17,798
1971/72	18,518	4,091	14,427	18,051
1972/73	18,546	4,201	14,345	18,134
1973/74	18,683	4,434	14,249	18,241
1974/75	20,395	4,667	15,728	19,277
1975/76	21,738	5,205	16,533	20,449
1976/77	22,553	6,302	16,251	21,011

programs, a gradual evolution of teaching methods toward individualized programs and a greater dependence on the Library, and new and updated academic programs. In the light of the foregoing considerations, a relatively stable yearly enrollment of about 20,000 students is projected for the next twenty-five years.

Through the years a rather constant ratio of 1:15 has been maintained between the teaching and research faculty and the student body. Under-scoring this pattern are the budgetary guidelines recently issued by the Regents approving this ratio as the basis for requests for new University faculty to meet enrollment increases. Employing this ratio, a teaching and research faculty of 1,333 would be required for the anticipated enrollment of 20,000.

Accommodations for Readers

Academic libraries have traditionally supplied a single type of accommodation for the vast majority of their readers--an open reading room with rows of large study tables. In more recent times libraries have recognized that many students prefer individual facilities in which distractions are reduced and concentration comes more easily. This usually takes the form of individual study carrels, or at least, small tables seating two or three readers and located in small alcoves. Further, it has been observed that many users wish only to read, do not need table space, and are more comfortable in lounge-type seating, which costs no more than a table/chair combination and requires no more space. Small private studies are needed by some faculty and graduate students while engaged in activities involving intensive use of library materials. Readers also require special facilities for microform and certain audio-visual materials, for typing, and for certain other activities that occur in libraries. All of these various accommodations for readers should be a part of the modern library.

Space Required for Readers

Higher education planning agencies and library building experts have generally employed formulas for the allocation of space for library readers. These formulas, usually expressed in terms of the percentage of the student body that can be seated at one time, have varied from a low of 18 per cent in community colleges, 25 to 30 per cent for typical residential universities such as the University of Kansas, to a high of 50 to 60 per cent for small liberal arts colleges and law schools. Many of the formulas also attempt to differentiate among types of students by providing seating for larger percentages (30 to 40 per cent) of upper division and graduate students, who tend to use libraries more intensively. These same formulas recommend that seating be provided for 10 to 15 per cent of the faculty.

Formulas are also employed for determining the number of square feet necessary for each reader station. From 25 to 30 square feet are

recommended for seats at tables, 30 to 40 square feet for study carrels, 30 square feet for lounge-type seating, and 50 to 75 square feet for faculty studies.

The guidelines developed by the Kansas Board of Regents for the allocation of space for library readers are explicit and consistent with national standards. They specify that reader stations averaging 30 square feet be provided for 25 per cent of the full-time-equivalent student enrollment and that stations averaging 75 square feet be provided for 10 per cent of the full-time-equivalent faculty.

The application of this formula to the library needs projected for the University of Kansas in the year 2000 produces:

Code No.	Name	Unit	Room Type	Activity Load	Guideline Value	Projected Area (Square Feet)
410000	Libraries	F.T.E.	410	5,000*	30	150,000
		F.T.E.	410	133**	75	9,975
Total Reader Area Required						159,975

*Twenty-five per cent of projected F. T. E. student enrollment

**Ten per cent of projected F. T. E. faculty, based on a faculty/student ratio of 1:15

Chapter IV

STAFF AND SERVICES

Completing the space required for the Libraries is that necessary to accommodate the staff in their processing of library materials and in their provision of services for users. Some of the staff require individual offices to carry out their assignments, while others require space in large work areas if they are engaged in processing materials, or space in public areas if they are working directly with readers.

Library Staff--Present and Projected

The staff presently numbers 145.8 full-time employees. Of these, 92.3 are classified employees and 53.5 professional librarians. Seventeen work in the Spencer Library, thirteen in departmental libraries, and the balance in Watson Library, with about equal numbers engaged in the processing of library materials and in the provision of direct public services. In addition, the Libraries employ in excess of 150 student assistants on a part-time basis who perform a variety of services.

In projecting the size of the staff the Libraries will need in the future, several factors must be considered. First, as a service organization, the Libraries have little control over the obligations they incur, these being largely determined by the academic programs of the University. For example, teaching methods employed by the faculty vitally affect the amount of use students make of the Libraries, yet the Libraries have no direct responsibility in this area; central University policies generally determine the degree of centralization of library services, yet this affects the size of staff required; the rate of growth of the collections is seldom determined by the Libraries, yet the size of the processing staff required is directly related; and finally, the introduction of new academic programs is independent of the Libraries, yet the new programs vitally affect the book needs of students and faculty.

Second, although the work load of the Libraries is not unaffected by increases in enrollment, a more significant consideration is the range and complexity of the graduate and research programs. Whereas the enrollment of 500 more students will place additional stress on the facilities and create a need of multiple copies of some books, the addition of a single new doctoral program makes necessary the acquisition of thousands of new books and journals in several languages.

Third, universities erecting new library buildings commonly experience increases up to three-fold in the numbers of students frequenting the

library. Although much of this additional patronage will not require staff time, some of it inevitably will.

Fourth, staff shortages and crowded working conditions have combined to produce massive backlogs of work in many areas of the library system. Clearly, the working off of these backlogs will require not only better physical facilities but also a larger than normal staff.

Finally, the University of Kansas Libraries have several obligations not normally present in state universities of our size and scope which consume a substantial portion of the time of our staff. Among Big Eight institutions, only the University of Kansas has a special library building and program-- Spencer Library--for rare books and other special collections, requiring a staff of 17 employees. Kansas also has the most extensive array of language area programs--Latin American, East Asian, and Slavic--among Big Eight schools, requiring about ten full-time Library staff. Among Big Eight institutions, the University of Kansas alone supports an internal book bindery, employing four staff. Summarizing, of the staff of about 146, more than 30 are involved in the support of programs not found in sister universities. Nevertheless, the University of Kansas Libraries staff is only about the same size as comparable Big Eight schools.

In view of the foregoing considerations, to fail to anticipate some expansion of staff would probably not be realistic. It is not necessary to project exact staff size, however, since the Regents' guidelines largely express the needs for space for staff and services as a percentage of the combined space devoted to readers and stacks.

Space Required for Staff and Services

For this category, as for readers and stacks, the Board of Regents' guidelines are consistent with national standards. In recognition that some staff require individual offices for their work, the guidelines stipulate that for every 1,000 full-time-equivalent students, six staff be provided with offices averaging 150 square feet each. For the processing of library materials, for direct services for readers, and for the remaining staff, the guidelines call for an amount of space equal to ten per cent of the total reader and stack space. Finally, for general use facilities, such as lounges, cloak rooms, etc., the guidelines specify that 30 square feet be provided for each staff member requiring office space. Thus, for staff and services, 71,886 square feet are required, comprised as follows:

Code No.	Name	Unit	Room Type	Activity Load	Guideline Value	Projected Area (Square Feet)
410000	Libraries	Area	44	502,856*	0.10	50,286
		F. T. E.	300	120**	150	18,000
		F. T. E.	600	120**	30	3,600

Total Staff and Support Area Requirement 71,886

*Total reader and stack area

**Six staff for every 1,000 F. T. E. students of an estimated 20,000 enrollment

Summary of Library Space Needs for the Year 2000

Summarizing the information presented in the last three chapters, the planning guidelines found in the Board of Regents' Physical Development Planning Manual indicate that by the year 2000, the University of Kansas Libraries will need 159,975 square feet for the accommodation of readers, 342,881 square feet to house its collections, and 71,886 square feet for library services and staff--or, a total of 574,742 square feet. This assumes, as has been stated, a doubling of the collections between now and the year 2000, a student body of 20,000, and a faculty of 1,333. Much of this space, of course, is already in existence. In the following pages, present library facilities are carefully examined in terms of extent, use, and quality, with the view of meeting the space needs generated below:

Code No.	Name	Unit	Room Type	Activity Load	Guideline Value	Projected Area (Square Feet)
410000	Libraries	F. T. E.	410	5,000	30	150,000
		F. T. E.	410	133	75	9,975
		Vols.	420	3,941,162	.087	342,881
		Area	440	502,856	0.10	50,286
		F. T. E.	300	120	150	18,000
		F. T. E.	600	120	30	3,600
Total Library Needs for the Year 2000						574,742

UNIVERSITY OF KANSAS LIBRARIES*
 COMPARISON OF EXISTING SPACE
 WITH CURRENT SPACE REQUIREMENTS
 (Net Assignable Square Feet)

Type of Space	Existing Space	Current Space Requirements (per Regents' Guidelines)
Readers	55,593	168,082**
Bookstacks	122,415	165,834***
Staff and Services	46,850	56,072****
	224,858	389,988

Notes:

- * Excludes the Medical and Law Libraries.
- ** Based on actual full-time equivalent student enrollment of 21,011 for the fall semester of 1976 and on a full-time equivalent faculty of 1,401, computed on a 1:15 faculty/student ratio; per Regents' guidelines, 30 square feet provided for 25 per cent of full-time equivalent student enrollment (157,582 square feet) and 75 square feet for 10 per cent of the full-time equivalent faculty (10,500 square feet).
- *** Based on actual collection of 1,906,136 equivalent volumes on 1 July 1976; per Regents' guidelines, .027 square feet provided for each equivalent volume.
- **** Per Regents' guidelines, an amount equal to ten per cent of the total space allotted for readers and bookstacks is added for Processing (33,392 square feet); and 120 square feet of office and other space is provided for each of 126 staff (22,680 square feet), computed at the rate of 6 staff for every 1,000 full-time equivalent students.

Chapter VI

A PLAN FOR THE DEVELOPMENT OF THE LIBRARIES

In this chapter a plan for the development of the Libraries is presented which will restore the quality of existing space and provide sufficient new space to meet the Libraries' needs in the year 2000. The plan, in broad outline, proposes the renovation of Watson and the construction of a new building to provide the additional space needed. The plan assumes that the possibilities for additional library space mentioned earlier will materialize; that the space presently occupied by the departmental libraries and reading rooms will be relinquished, with those collections being brought into the newly constructed facility; and that the renovation of Watson will not significantly alter its present net square footage.

The essential information necessary for determining the size of the new facility, summarized in Table VII, has been largely developed. Earlier chapters have established that the Libraries at the present time need 389,988 square feet of space for the proper accommodation of their readers, collections, staff, and services. It has been projected, further, that by the year 2000 the Libraries will need an additional 184,754 square feet, or a total of 574,742 square feet. The bulk of the increase between now and the year 2000 is for housing the expanding collections. During this interval, the space necessary for readers is actually expected to decline slightly, and the space for staff and services to rise only moderately. It has also been established that the existing Library space consists of 224,858 square feet, just 58 per cent of the total currently required, and that the major portion of this space, particularly that in Watson, is of low quality, poorly suited to the needs of students and faculty, and even dangerous. To the space currently available must be added that represented by the four possibilities for development of additional space in the near future--the unfinished basement space in Watson and Spencer, the planned Art Library in the new Helen Spencer Art Museum, and the proposed temporary addition to the Science Library in Malott Hall, a total of 52,788 square feet. From currently available space must be subtracted 39,050 square feet, the relinquished library quarters for the four departmental libraries in Malott, Marvin, Murphy, and Strong Halls, and the reading rooms in Snow, Dyche and Summerfield Halls. The difference, then, between the projected space requirements in the year 2000 and the adjusted figure for space currently available is 336,146 square feet, the size which the new facility must be if it is to satisfy fully the Libraries' needs.

UNIVERSITY OF KANSAS LIBRARIES*
 FULFILMENT OF LIBRARY SPACE REQUIREMENTS
 IN THE YEAR 2000
 (Net Assignable Square Feet)

Projected Library Space Requirements In The Year 2000

574,742

To Be Met By Existing Facilities

Facilities in Existence at Present

224,858

Plus Possible Additions

Watson Basement Area

8,391

Spencer Basement Area

15,246

Malott Temporary Addition

15,000

Art Library

14,151

Total Possible Additions

52,788

Less Relinquished Facilities

Malott (Science Library)

26,220

Marvin (Engineering Library)

4,253

Murphy (Music Library)

4,450

Strong (Mathematics Library)

1,501

Summerfield (Business Reading Room)

1,195

Dyche (Museums Reading Room)

966

Snow (Entomology Reading Room)

465

Total Relinquished Facilities

-39,050

Net Existing Facilities

238,596

To Be Met By Proposed New Facility

336,146

574,742

* Excluded are the Law and Medical Libraries

In succeeding paragraphs the plans for the future development of the Libraries, including the renovation of Watson as well as the proposed new facility, are outlined in some detail.

The Plan

The proposed plan addresses the twin problems of the present library facilities--poor quality and insufficiency--through a two-part program:

Watson Library--retain Watson for library purposes and house there the collections and services for the humanities and the social sciences and most library processing activities; upgrade all mechanical systems--ventilation, plumbing, lighting, transportation, acoustics, etc.--to meet currently accepted standards and State building codes; renovate the building throughout, giving especial attention to the removal of walls and other barriers which presently frustrate the user and preclude the proper and efficient organization of library services; redecorate the building and refurnish with attractive and functional equipment.

New Proposed Library Facility--construct a new building on the site of the present Military Science facility to house collections and services for business, engineering, sciences, technology, and music, as well as some general library activities; design and site the structure so that it can either function indefinitely as originally constructed or be the first phase of an entirely new general library building, as future conditions may require; relinquish space presently occupied by departmental libraries in Strong, Malott, Marvin, and Murphy Halls, and reading rooms in Snow, Dyche, and Summerfield Halls.

Several considerations contributed to the adoption of this plan, rather than a new general library, an addition to Watson, or any of a number of other alternatives. Watson, having been originally built as a library, can almost assuredly be more economically and satisfactorily upgraded for library purposes than for any other. The importance of this consideration is readily apparent when the replacement cost of Watson, with more than 170,000 square feet, is contemplated. Watson for some time has not served effectively as a library, chiefly because of piecemeal efforts to repair the mechanical systems, general congestion that has developed throughout the building, and outworn and unattractive furnishings. If these deficiencies were resolved, many library operations could be effectively pursued in Watson. This is not to say full efficiency could

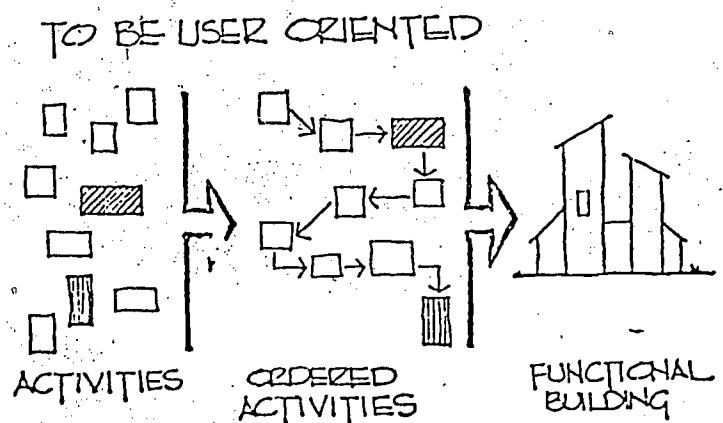
be attained--it could not, for the building is definitely dated; it is to say, however, that an acceptable level of space utilization could be realized.

Five separate and distinct additions have been made to Watson over the years. They have produced a very complex, poorly-articulated structure which it is difficult to make function as a unit. The proposed renovation, it is believed, can largely relieve the dysfunction; however, to attach a large addition to Watson would almost assuredly complicate the problem beyond recall.

The construction of a new facility so planned that it can either stand alone indefinitely or be the first phase of an entirely new general library building provides the Libraries and the University with highly desirable flexibility. If efforts to continue to use Watson for library purposes had someday to be abandoned, the option of expanding the new facility proposed here to serve as a general library would still exist.

Lastly, a new facility addresses the total space needs of the Libraries. Although virtually all disciplines in the University suffer from acute library problems, those problems are the most severe among the disciplines that would be housed in the new building. Throughout the sciences, library space is grossly inadequate; the space that exists is of poor quality; and the collections are badly dispersed, requiring students and faculty to go to many locations to fill their needs. Fortunately, the sciences are clustered on campus so that a library in the proposed location would be readily accessible to all. The School of Business is currently poorly provided with library service, having only a small reading room in their quarters and being at a distance from Watson. The proposed new facility would be immediately adjacent and serve their needs well. The School of Engineering, now dependent upon a completely inadequate library in Marvin Hall, would be admirably served by the new facility. Finally, the humanities and social sciences could be much better served by Watson if the congestion were relieved by the transfer of some collections and services to the new facility.

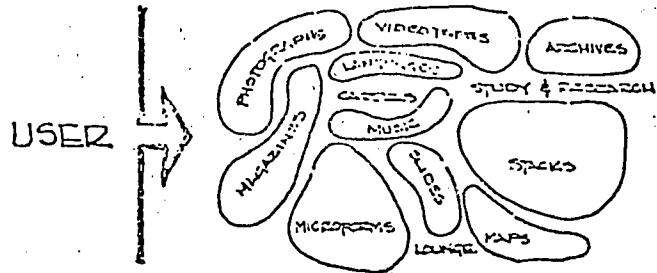
Before proceeding to a fuller discussion of the renovation of Watson and the construction of the proposed new facility, a few planning objectives applicable to both projects should be presented. First among these should be recognition that the organization and design of the library must be user oriented. Although this observation might seem obvious, unnecessary, and even trite, it has



been lost sight of quite as frequently as it has been remembered in the planning of libraries. Watson is a notable example.

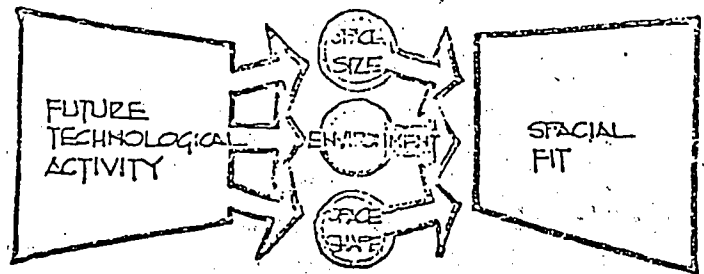
The second objective proceeds directly from the first--the convenience of the user requires that the libraries house and service all of the materials he needs, regardless of whether they are in the traditional printed book form or, in one of the newer media forms--films, tapes, discs, slides, graphics, etc. This all-encompassing library has been variously called a "learning resource center", "educational materials center", or "media center". By whatever name, it recognizes a responsibility for collecting and servicing all of the major forms of communication in our modern culture--the newer media forms as well as the traditional printed book.

TO HOUSE & SERVICE MATERIALS



Third, the newer technologies, most especially computers, are affecting not only the form of library materials but also the manner in which libraries do their work and the physical space they require. Prior to the 1950s, computers were of limited importance to libraries. Recent years, however, have seen an abrupt reversal. Today, computers either have already changed or will shortly be changing the manner in which most library operations are carried on. They are extensively used both for the processing of data and for the storage and retrieval of data lodged in large files, or data bases. Computers are being used for both the acquisition of materials and for their cataloging. They are being employed for the maintenance of circulation and serial records. They constitute the basis for the development of computer-based systems for literature searches. Clearly, libraries must increasingly adapt their quarters to accommodate computers and computer-related gear.

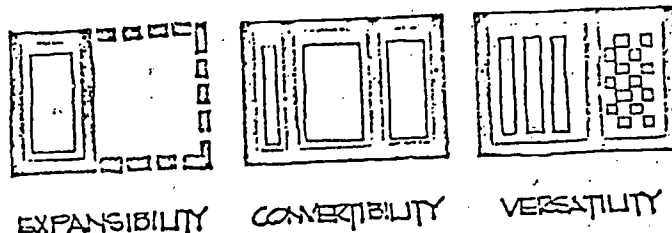
TO PROVIDE FOR NEW TECHNOLOGY



This will involve more attention being given to carefully controlled humidity and temperature. Magnetic tapes, microforms, and computers, just as books, require a controlled environment. Also required will be a greatly increased electrical power and cable capability to accommodate the new electronic systems.

Finally, since additional changes in higher education appear to be inevitable and we are able to foresee only in part the purposes our buildings will be asked to serve in the future, the maximum degree of flexibility possible must be built into them. It is discouraging to reflect that although our buildings with proper maintenance can remain in good shape for one hundred years, most of them are seriously compromised functionally after a generation.

TO HAVE FLEXIBILITY



Renovation of Watson

The successful renovation of Watson to serve as the humanities and social sciences library and to house central processing activities is dependent upon the achievement of several specific objectives:

- 1) Placement of heavy traffic and major public service areas on the main floor of the building. This will certainly involve the Circulation and Reference Departments, the Reserve Book Room, and perhaps other activities. Essential, too, are alterations necessary to permit easy use of the building by the handicapped.
- 2) Location of remaining service and technical departments on other floors in proper relation to each other and in readily accessible places.
- 3) Distribution of appropriate and comfortable reader stations throughout the public areas of the building, and especially in those areas housing collections.

- 4) Provision of attractive offices and work areas for the staff, located and designed to further the efficient performance of their work.
- 5) Design of bookstack areas that are clear and logical in their organization, comfortable and safe to use, and convenient to enter and leave.
- 6) Provision of adequate space for the growth of the collections and staff, as well as for the adoption of new communication technologies as appropriate.
- 7) Provision of good facilities for the housing and use of non-book materials, only minimally provided at present.
- 8) Reworking of mechanical systems to make the building a safe and comfortable place in which people may work and in which the collections can be properly housed and protected.

The preceding objectives can in considerable part be realized through the renovation program outlined below:

- 1) Place all mechanical and physical aspects of the building, i. e., ventilation, plumbing, lighting, transportation, acoustics, etc., in first class condition. The most serious deficiency is ventilation.
- 2) Remove walls and other barriers which now preclude the proper and efficient organization of library services and collections.
- 3) Upgrade precautions for protection of life and property in the event of fire, water incursions, etc., including the installation of auxiliary lighting and sprinkling systems.
- 4) Refurbish and redecorate building.
- 5) Refurnish and re-equip building.
- 6) Remove center bookstacks, reflooring the area on the first, second, and third reading room levels. These stacks are a danger and a fire trap because of their low ductwork and doors and their design.
- 7) Provide adequate public rest rooms. The sub-basement, basement, and second floor are without public toilets.
- 8) Upgrade present elevators and erect new one in the East Addition.

9) Provide convenient access between East sub-basement and the sub-basement proper. At present this is effectively blocked by an unexcavated area and by the University Photo Service.

At the end of the chapter are layouts of the various floors. They are intended to show the probable location of major library services and indicate generally the nature of the renovation envisioned, particularly with respect to the removal of walls and the opening up and simplification of the building. The layouts, of course, represent at this stage possibilities only; and they should in no way be considered as definitive floor plans.

Proposed New Library Facility

The proposed new facility would provide the additional space required to meet current and projected library needs, and it could be made to house library collections and services in the sciences, business, engineering and technology, music, and possibly other areas. This arrangement would relieve Watson of enough of its current obligations to allow library services in the older structure to focus on the humanities and social sciences and on the library processing activities to be centered there. Small collections in several outlying locations could also be brought into the new library, thus permitting a more efficient use of staff and greater convenience for most users. The result, of course, would be that general library services would emanate from two major buildings, rather than one.

This pattern of organization has frequently been resorted to by older and larger universities, brought on by the necessity of keeping an older building in operation. Although certain advantages of centralization are forfeited, the arrangement has advantages of its own. For example, scientists, humanists, and members of the professions use libraries in somewhat different ways which could be recognized through specialized organization of services in the two libraries. Too, distance from the main library on a large campus can become a problem for those departments on the periphery. The new facility, properly sited, would place library services much closer to its primary clientele than is now the case, with little sacrifice in convenience for the departments that would largely be using Watson. It should be noted also that dispersing library services from two major points rather one, in and of itself, would not require a larger staff.

Included in the new facility would be the full spectrum of library services, with the exception of processing. There would be ample bookstacks for the collections, reading space for some 3,000 users, full reference and circulation services, periodicals and documents quarters, accommodations

for use of microforms and audio-visual materials, conference and group study rooms, faculty studies, and space for the staff.

Essential for the proper functioning of the new facility would be its siting. It is a tribute to past planning efforts at the University of Kansas that engineering and most of the sciences, along with business, are clustered in one part of the campus; and in the midst of that cluster is a large site than can be entirely freed by the removal of an old and relatively small Military Sciences building. The new facility must be so placed on that site and so designed that it could function indefinitely as proposed here, or be the first phase of an entirely new general library building, should Watson eventually have to be abandoned. This is entirely possible to do; and it would provide the University with an invaluable flexibility in the years ahead.

In the planning of the new structure, library building developments of recent years must be fully exploited. Up to World War II, libraries tended to be architectural monuments--ill-adapted to expansion or change and characterized by grand entry ways, large and rather formal reading rooms, immovable walls, and complete inflexibility. Such a structure is Watson. After the War, a new concept--modular planning--was introduced. This is a system of building construction in which the floor area is divided into equal rectangles defined by structural columns at the corners, instead of by load-bearing walls. The result is a building of great flexibility and openness, largely devoid of interior walls, with all space being equally suitable for books, readers, or staff. Care must also be exercised to ensure that the space thus created is well ventilated, properly lighted, acoustically pleasant, and attractively furnished. Modular library buildings, the first of which have now been in use for twenty-five years, have proved to be remarkably functional, capable of expansion, and adaptable to changed uses at reasonable costs. The new facility must be such a building.

Chapter VII

RECOMMENDATIONS

It is recommended that the building programs outlined in this report for the improvement and expansion of library facilities be given the highest possible priority on the University's capital improvement schedule. The reasons for this recommendation are clear and compelling. Quality educational programs at both the undergraduate and graduate levels require the support of strong library services; yet library services at the University of Kansas are seriously compromised at the present time by the poor condition and the insufficiency of existing library space.

Earlier chapters have reported in detail concerning the unsatisfactory physical condition of Watson Library--its inflexible and inappropriate design, its complexity, its inadequate and outmoded mechanical systems--(particularly air-conditioning and ventilation), its threats to human safety and to the proper preservation of books, and its generally unattractive and depressing appearance. Also described were the resultant difficulties in arranging library services in any organized and efficient pattern, and the obstacles and discomfort encountered by students, faculty, and staff in attempting to study and work in this environment.

It has been further pointed out that there is a crippling shortage of space. Bookstack space has long since been exhausted, with thousands of volumes now stored in boxes and in not readily accessible locations; study space is only about one third of that recommended by the Regents' guidelines; and library staff work wherever space can be found. Indeed, existing space has been shown to be only 58 per cent of that which the Regents' guidelines show as now necessary.

Program for the Improvement of Library Facilities

A comprehensive physical facilities program for the Libraries, exclusive of Medicine and Law, has been developed in this report which seeks to upgrade the quality of existing space, to provide the additional space urgently needed at the present time, and to meet the space needs of the Libraries in the years ahead. It is presented in summary form below.

Anticipated Additions to Library Space

Several possibilities exist for the increasing of library space by a total of 52,788 square feet in the near future. It is recommended that all of these possibilities be pursued with dispatch.

- 1) Unfinished Basement Area in Spencer Library. An unfinished area of 15,246 square feet in the basement of Spencer Library presents an excellent opportunity to gain desperately needed temporary storage space for some 250,000 volumes at very low cost. To make this area usable would require expenditures for bookstacks and lighting.
- 2) Unfinished Basement Area in Watson Library. The upper level of the East Sub-Basement of Watson Library affords another opportunity to gain space immediately at low cost. This area, 8,391 square feet, also requires only bookstacks and lighting to be fully operational and would accommodate the storage of 150,000 volumes.
- 3) Art Library in the Spencer Art Museum. The ground floor of the new Spencer Art Museum has been reserved for an Art Library, but at present funds are not available to finish and equip the area, 14,151 square feet. The Endowment Association, as you know, is presently endeavoring to arrange funding. The completion of this project, in addition to providing excellent new quarters for the Art Library, would free the space in Watson it now occupies.

Mention should also be made of the projected expansion of Malott Hall, now in the planning stage, which includes an addition of 15,000 square feet to the Science Library. This space, planned so that it can be readily converted to laboratory use on evacuation by the Science Library, would provide temporary relief for a period of about three years at one of the most congested points in the entire Library system.

Renovation of Watson Library

It is recommended that Watson Library be retained for library purposes, that it house the collections in the humanities and social sciences, that it provide library services for the students and faculty wishing to use these collections, and that it continue to house all or most of the processing activities. This will require a complete renovation of the building and will include, but not necessarily be limited to: the placing of all physical and mechanical aspects of the building in first class condition, with particular emphasis given to air-conditioning and ventilation; the removal of interior walls and other barriers that presently preclude the proper and efficient organization of collections and services; the upgrading of precautions for the protection of life and the preservation of the collections; removal of the center bookstacks and the reflooring of the area on the first, second, and third reading room levels; provision of adequate rest rooms; upgrading of access throughout the building, including the installation of an elevator in the East Addition; and, finally, redecoration, re-equipping, and refurbishing of the building.

The extensive renovation of a building that is extremely congested and that must continue in operation during the process will obviously require careful coordination and planning and, inevitably, additional cost.

Relinquishing of Departmental Library and Reading Room Space

Departmental libraries and reading rooms now occupy, or will shortly, 39,050 square feet in various academic buildings on campus. It is recommended that these collections be drawn into the proposed new facility and that the space they presently occupy be relinquished. Small departmental libraries and reading rooms are in most instances expensive and inefficient operations and represent an inconvenience to the academic community at large, although, admittedly, they can be a convenience to the few people who occupy the same building. The proposed Art Library in the new Spencer Art Museum would be the only departmental library remaining.

Proposed New Facility

It is recommended that the additional space the Libraries require be provided through the construction of a new facility that would house the collections and services for business, engineering, science, technology, music, and possibly other areas. The structure must be so designed that it can stand alone indefinitely or be the first phase of an entirely new general library building if Watson someday had to be abandoned for library purposes. The building, which will provide the full spectrum of library services, should be modular in concept and design, thus, permitting a maximum of flexibility.

Size of New Facility. If the requirements of the Libraries for the year 2000 are to be fully met, the size of the new facility must be 336,146 net square feet. This represents the difference between the adjusted figure for existing space of 238,596 square feet and the 574,742 square feet which the Regents' guidelines indicate will be needed by the Libraries in the year 2000. The latter figure, it will be recalled, is based upon three assumptions: that the enrollment will be 20,000 full-time-equivalent students; that the faculty will number 1,333, based on a student/faculty ratio of 15:1; and that the collections will only double in size during the next quarter century rather than triple as they have in the past 25 years. The development of this data is shown in its entirety in Table VIII.

Siting of the New Facility. Critical for the acceptance and proper functioning of the new facility will be its site. It should be within the academic core of the University, in the mainstream of student traffic, close to the academic departments to be served, accessible by fire and other service vehicles, and reasonably close to parking. The site must

SPACE NEEDS IN THE YEAR 2000

(Net Assignable Square Feet)

Code Number	Name	Unit	Room Type	Total ^a Activity Load	Guideline ^b Value	Projected ^c Area	Existing Space					New Facility
							Watson Library	Spencer Library	Spencer Museum	Departmental Libraries ⁱ	Reading Rooms ^j	
410000	Libraries	F.T.E.	410	5,000 ^d	30	150,000						
		F.T.E.	410	133 ^e	75	9,975	32,823	15,443	5,000	0	0	106,709
		Volume	420	3,941,162 ^f	.087	342,881	83,995	49,247	8,000	0	0	201,639
		Area	440	502,856 ^g	.10	50,286	21,819	8,866	965	0	0	18,636
		F.T.E.	300	120 ^h	150	18,000	4,955	4,110	186	0	0	8,749
		F.T.E.	600	120	30	3,600	1,907	1,280	0	0	0	413
Total						574,742	145,499	78,946	14,151	0	0	336,146 ^k

^a The data for all activity loads are based on projections for the year 2000.

^b Guideline values are taken from the Physical Development Planning Manual established by the Kansas Board of Regents

^c The projected area is based on all University library needs except those for Law and Medicine.

^d Estimated F.T.E. enrollment for the year 2000 is 20,000 students. Regents' guidelines recommend that libraries provide seating for 25 per cent of the student body, or, 5000 students.

^e At a ratio of 1 faculty member per 15 students, the guidelines recommend that 10 per cent of the faculty have study spaces in the library; hence, an activity load of 133.

^f This figure is in equivalent volumes and includes conversions for documents, maps, manuscripts, microform materials, etc.

^g This activity load is the result of adding the projected areas for reader and stack spaces.

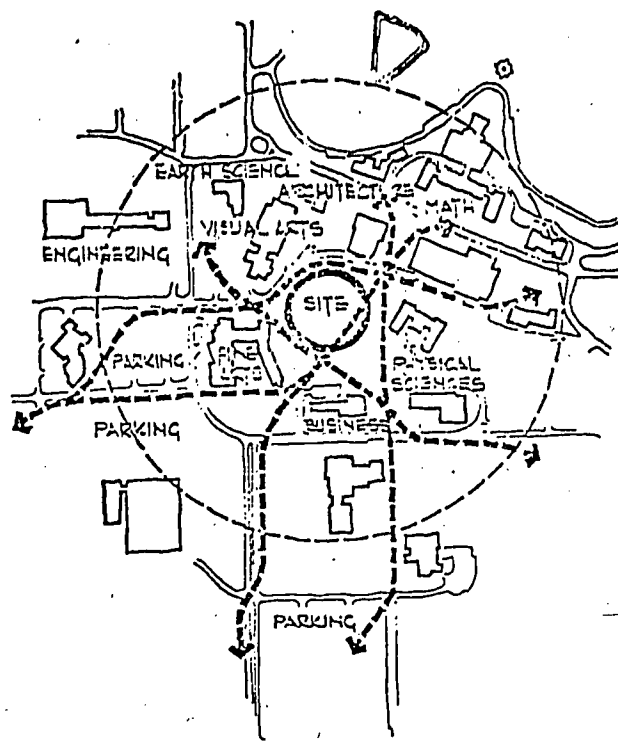
^h At the rate of 6 staff members per 1,000 F.T.E. students, the activity load for staff members requiring offices is 120.

ⁱ Includes departmental libraries in Malott, Marvin, Murphy, and Strong Halls.

^j Includes reading rooms in Summerfield, Snow, and Dyche Halls.

^k Not area requirements for libraries are converted to gross by use of a factor of 1.4 (Sect. 332.4, FDPN); hence, 336,146 x 1.4 equals 470,604 square feet.

also be large enough to accommodate comfortably the building as now proposed and as possibly expanded in the future. An examination of the campus plan (Table IX) shows that the site occupied by the Military Sciences building comes singularly close to fulfilling all of these requirements, and, if it can be freed, is a near-ideal site for the new library. Even parking is reasonably nearby, remarkable for an established campus of over 20,000 students. Understandably, the Military Sciences site is the first and only location recommended and is considered to be crucial to the successful functioning of the new facility.



Funding

The total program anticipates funding from the Kansas Legislature with the exception of finishing the Art Library in the Spencer Museum of Art. The projects which make up this total program are completion of the basement stack area in Watson Library, completion of the basement stack area in Spencer Library, renovation of Watson Library, and a new library facility. The total budget for these four projects is \$38,555,000, with the estimated cost for the completion of the Watson stack area being \$100,000, the completion of the Spencer stack area being \$280,000, the renovation of Watson Library being \$6,220,000, and the new facility being \$31,955,000.

The funding estimate, Table X, is based on a schedule which would require that the University, in its next request to the Board of Regents, ask for preliminary planning funds for the new facility, final planning funds for the renovation of Watson Library, and construction funds for the completion of the Watson and Spencer stack areas. This anticipates that the renovation of Watson Library will be bid in 1979, with completion in the summer of 1981; and that the new facility will be bid in 1980, with occupancy scheduled for the fall of 1982. The bidding and installation of shelving and lighting in Watson Library and Spencer Library would take place in 1978.

Campus Map

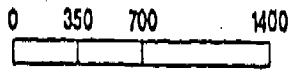
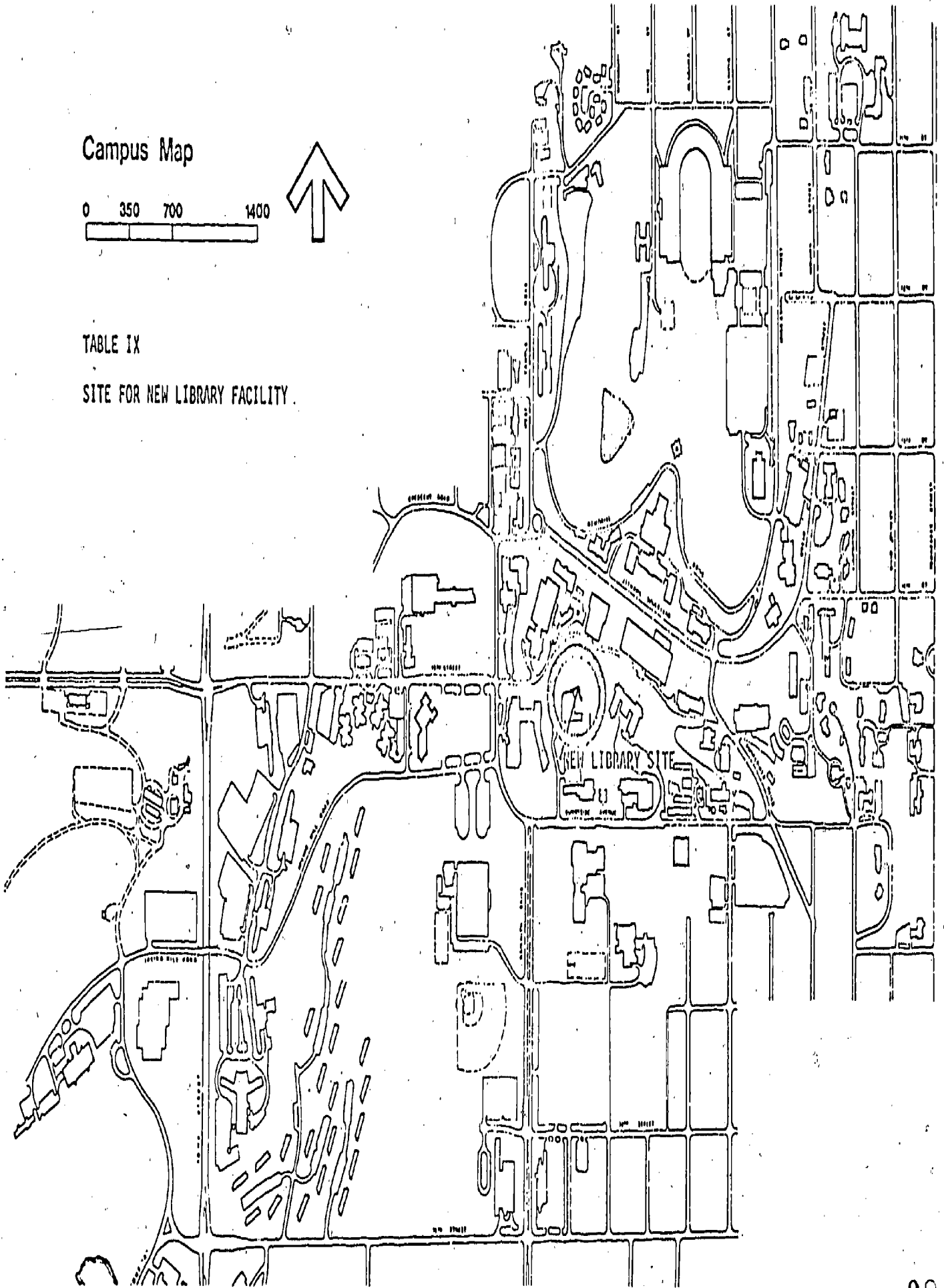


TABLE IX

SITE FOR NEW LIBRARY FACILITY.



Funding Estimate

Table X

Resources:		
Legislative Appropriation 1978	\$ 100,000	
Additional Shelving for Watson Library	280,000	
Additional Shelving for Spencer Library	550,000	
Planning Funds for Watson Renovation	550,000	
Planning Funds for New Facility		\$ 1,480,000
Legislative Appropriation 1979	\$ 960,000	
Renovation Funds for Watson	5,670,000	
Final Planning Funds for New Facility		\$ 6,630,000
Legislative Appropriation 1980		\$15,222,500
Construction Funds for New Facility		
Legislative Appropriation 1981		\$15,222,500
Construction Funds for New Facility		
		\$38,555,000

Costs (Shelving for Watson Library):		
Estimated Cost Other Than Construction:	\$ 0	
Architect's Fee	1,000	
Printing and Other Administrative Cost		\$ 1,000
Estimated Cost of Installation:	\$ 80,000	
Shelving	19,000	
Painting and Lights		\$ 99,000
		100,000
Estimated Cost of Shelving		
Costs (Shelving for Spencer Library):		
Estimated Cost Other Than Construction:	\$ 0	
Architect's Fee	1,000	
Printing and Other Administrative Cost		\$ 1,000
Estimated Cost of Installation:	\$ 230,000	
Shelving	49,000	
Painting and Lights		\$ 279,000
		280,000
Estimated Cost of Shelving		
Costs (Renovation of Watson Library):		
Estimated Cost Other Than Construction:	\$ 500,000	
Architect's Fee	10,000	
Printing, Freight & Travel	2,000	
Surveys, Soil Investigating & Testing	35,000	
Resident Inspection (24 mo.)	200,000	
Movable Equipment	3,000	
Landscaping	500,000	
Project Contingency @ 8%		\$ 1,250,000
Estimated Cost of Renovation ¹ :		
Interior Finishes (floors, ceilings, walls	\$ 2,370,000	
Restrooms, doors, etc.)	360,000	
Fixed Equipment (stacks, etc.)	320,000	
Structure (stairs, elevator, central stack)		
Heating, Ventilating, Air Conditioning,	1,850,000	
Plumbing and Electrical	50,000	
Site Work	20,000	
Mechanical Balancing		\$ 4,970,000
		6,220,000
Estimated Cost of Project (Renovation)		
Costs (New Facility):		
Estimated Cost Other Than Construction:	\$ 1,435,000	
Architect's Fee	20,000	
Printing, Freight & Travel	10,000	
Surveys, Soil Borings & Testing	35,000	
Resident Inspection (24 mo.)	1,000,000	
Movable Equipment	20,000	
Landscaping	1,500,000	
Project Contingency @ 5%		\$ 4,020,000
Estimated Cost of Construction ² :		
New Construction including Fixed	\$27,530,000	
Equipment 470,400 s.f. @ \$58.50/s.f.	350,000	
Site Work (including utility tunnel)	55,000	
Mechanical Balancing		\$27,935,000
		31,955,000
Estimated Cost of Project (New Facility)		
Estimated Cost of Total Program		\$38,555,000 ³

¹ Costs for renovation of Watson Library is estimated on construction bids to be taken in July 1979.

² Costs for construction of New Facility is estimated on construction bids to be taken in July 1980.

³ Costs for completion of the Art Library in the Spencer Art Museum is not included in this funding estimate.

Schedule

As indicated in the previous funding statements, this program is predicated on the assumption of a certain schedule of events and a logical sequence of funding by the State Legislature. A graphic presentation of this time schedule is found in Table XI.

* * *

Once again, the educational programs of students at the University of Kansas are being adversely affected by the inadequacies and poor quality of existing library facilities. Actions that would repair present deficiencies and provide for future needs have already been too long delayed. Your support of the program outlined in this report is respectfully requested.

Storage Facility

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June 1, 1981

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Sue Emonds

Janet Greenberg

Jill Schoenberg

Ruth Simon

Arlene Tallau, Chairperson

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Storage Facility - Final Report

Introduction

Storage facilities, once an interim solution for colleges and universities who couldn't currently afford new library buildings, have now become the common answer to the need for increased shelf space in academic libraries. The idea of providing low cost storage space for lesser used materials has struck an economic chord in the higher education community as money for library additions or new buildings dwindles.

Storage facilities have had some additional benefits. The reduction of handling of fragile materials has extended their shelf lives. The removal of lesser used materials has improved stack maintenance by reducing the amount of material in the open stacks which must be kept in order. Lastly, the reduction of the number of stacks needed in existing buildings has released increased space for user activities. In light of the doubling of collections and users in the past 20 years, storage facilities are an idea whose time has come.

Summary of Current Status

Although no official storage facilities existed at Rutgers University, a preliminary investigation revealed over 100,000 volumes were either housed in temporary storage or had been identified as prime storage material. (See Appendix I) The "First Day Collection," as these volumes came to be known, provided the committee with data about the collection by size (See Appendix II) and an introduction to the types of concerns which had to be addressed in establishing policy and criteria for inclusion the Storage Facility. The final report addresses these policy concerns and provides as an appendix, specific criteria for storage materials by format.

should be established at the Storage Facility.

A. Physical Facilities

Recommendation 1: On-site user facilities will be available.

It is anticipated that some material and some uses will lend themselves to delivery of material to another location. These instances include scanning of long runs of journals or consultation of records by submitting departments. For these purposes, some supervised on-site user space will be provided.

Recommendation 2: On-site staff will be present in numbers sufficient to monitor on-site users.

Security considerations dictate that some control of certain entrances and exits as well as direct observation of use of certain materials will require on-site staff.

Recommendation 3: Photoduplication equipment will be available at the Storage Facility.

In some instances, the transportation of material from the Storage Facility to a library will not be cost efficient. In these instances, the Facility may choose to supply a photocopy in lieu of the original. This decision shall be at the discretion of the Facility, and shall be paid for by general library funds.

Users who request photocopies in lieu of the original will be expected to pay for copies which do not meet the established cost efficient criteria.

Recommendation 4. Material shall be shelved by size regardless of sending unit.

In the interests of storing the largest amount of material, no distinction will be made in shelving based on the source of the shipment or original location's classification system. The shelving will be designed to accommodate certain sizes of material. Shelving or other equipment will be provided to store non-book formats. Special arrangements will be made for any magnetically recorded materials to protect them from being erased.

Recommendation 5: A centralized preservation center

Most research libraries are experiencing increasing preservation problems with their collections. Since much of the material being submitted to the Storage Facility may be in need of restorative techniques, an active preservation program will become an urgent necessity. Given the existing space difficulties, and the site of the bulk of the material in need of preservation, it appears sensible to locate these facilities at the Storage Facility.

Recommendation 6: Suitable fire protection equipment shall be installed in the Storage Facility.

Although the probability of fire may be small, the irreplaceability of much of the stored materials requires that fire protection be provided. The form of protection should be the least damaging to the stored materials that can be afforded.

Recommendation 7: The Warehouse facility at Kilmer should be retained to prevent the misuse of the space at the Storage Facility.

For a number of years, libraries have been sending materials to a warehouse in Kilmer. In many instances these materials have not been reviewed before shipment and no records may exist of what has been shipped. This type of shipment is not envisioned for the Storage Facility, and it is recommended that the warehouse facility in Kilmer be maintained to meet this interim housing need.

B. Selection Criteria

Recommendation 1: Weeding should be done on materials as they are considered for storage.

It is anticipated that a tendency may develop to send little used materials into storage without proper consideration for their future value. The criteria for selection (See Appendix III) should contain a review mechanism and safeguards to insure that a review of items submitted occurs and a record of the withdrawal recommendation is created.

Recommendation 2: Once material has been selected for withdrawal, a procedure for implementing the decision should be activated.

Once a decision is made that material is to be considered for withdrawal, the implementation procedure should insure that all the appropriate persons and

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groups are consulted. If the decision is approved, it must be implemented. While additional space will be added to the facility, there will never be enough space to store every item which any particular library no longer wishes to keep on its shelves.

Recommendation 3: Specific criteria should be developed for each material format to be selected.

Different types of material require different criteria for selection. Specific criteria for each format will enable the selection process to take these differences into account. While some overall criteria can be applied for each format, they are more useful and understandable when stated in relation to specific considerations which apply only to the specific type of material. The specific criteria by type are located in Appendix III.

Recommendation 4: Some items will be designated for use at the Storage Facility only.

The physical condition of certain items may require that minimal handling occur with each use. These items will be so designated by the sending library at the initial shipment. In the future, other items may be so designated by the Storage Facility in consultation with the sending library. This recommendation assumes on-site staff to monitor use. If staff is not available, some means of special transportation will be necessary.

Recommendation 5: Items which are used more than once a year should be reviewed for return to the sending unit.

The Storage Facility is meant to contain very low usage materials. An item which is used more frequently than once a year, should be reviewed. Two uses by the same individual in one year may not merit return to the sending unit, but serious consideration of return should be made of any item used three or more times a year.

C. Bibliographic Records

Recommendation 1: No material may be submitted to the Storage Facility without some bibliographic record or finding aid at the submitting library.

The responsibility for providing access in terms of subject, author, or title will remain with the submitting library in the foreseeable future.

For this reason, no material may be sent to the Storage Facility which cannot be accessed at the sending library.

The amount of alteration of this access record to indicate shipment to the Storage Facility varies with the type of material. In general such changes shall be kept to a minimum in the interests of maintaining flexibility. The commonest changes, reflected in Appendix III, are charging on the circulation printout, noting on the NJULS, or providing an overlay in the catalog. It is expected that some differences may occur between sending units based on the amount of material shipped and the size of the total collection. In the interests of uniformity, such differences should be kept to a minimum.

Recommendation 2: An active program to create bibliographic records or finding aids needed to send materials to storage shall be created and funded centrally.

Due to previous shortages and past decisions, there will be collections and groups of items for which no bibliographic records or finding aids exist. Since any item or collection sent to storage must have a bibliographic record or be included in a finding aid, an active program to create the necessary records is needed.

Each collection or group of items that is identified as a suitable storage candidate and which has no adequate records, shall be placed in a prioritized list by the sending library. (See appropriate section of Appendix III for the identification procedure.) From the lists submitted by the sending units, an overall ranked list of collections or groups of items shall be created, and records or finding aids created with as much speed as possible. The amount of use and quantity of material shall be the key determinants in the ranking.

Recommendation 3: The Storage Facility will be responsible for maintaining records of the usage of materials from the Facility and for making reports to the sending units of "high" use items.

In order for the sending unit to return an item to its active collection, some record of the amount of use must be maintained. This responsibility belongs to the Storage Facility. Records of material removed from the Facility, photocopied or used on the premises shall be supplied to the sending unit on a regular basis. The sending unit shall also be notified when one of its items is lent to another unit.

responsible for assigning and maintaining the records of the exact location of each item at the Storage Facility and for providing records to the sending units of the items in storage.

While each sending library will be responsible for providing bibliographic access to the items sent from its collection to the Storage Facility, the Facility will be responsible for assigning a location within its building to the specific items. The Storage Facility will be able to locate the items using classification or name by which the sending unit has charged the item on the sending unit's printout. The Storage Facility will also provide a list, arranged by these classifications or names of items sent from each unit to each unit, and an overall integrated list of all storage items from all units to all units.

D. Service

Recommendation 1: From Monday to Friday noon, 24 hour turnaround delivery service shall be available, in New Brunswick at least.

One of the greatest concerns expressed regarding material in a "remote" location has been the availability of items when a user wants them. The location of the Storage Facility in a corner of one campus means that daily pickups and deliveries can be made within the regular library delivery schedule. If material cannot be located, the Storage Facility will notify the requesting unit of the delay. Whenever possible, 24 hour service will also be provided to Camden and Newark.

Recommendation 2: There will be no direct stack use by users.

Materials will be sent to the Storage Facility which are confidential or valuable. It is necessary to assure departments that their records will be secure, and that valuable items sent from libraries will not be stolen or mutilated. While there may be instances where a member of a sending department or library may require direct access, users should not be able to consult items in the stacks.

Recommendation 3: A "pass" issued by the sending unit will be presented by the on-site user.

For some material, on-site use must be controlled. This recommendation addresses only this type of material. These items will be identified at the time of shipment. In general they will be records of University

Departments. Special precautions will be instituted to ensure access only to "qualified" persons.

Recommendation 4: Some of the items sent to the Storage Facility will be marked "For use in Library only"

Although some items may be sent from storage to a library other than the sending library, they are not expected to be used outside of a library. Those materials, which were not allowed to circulate from the sending library, will constitute the bulk of this material. All items will be so marked when they are sent to the Storage Facility.

E. Implementation

Recommendation 1: There shall be a full-time professional for at least the first 2 years, who shall be responsible for the implementation of the storage program.

On a day to day basis, many small decisions will have to be made as the Facility begins to accept material and to operate. It is the strong feeling on the part of this committee that these decisions should be made by someone who is able to recognize the long term impact of the decision and the effect that one decision may have on other areas. Unless such a person is available full-time, there is a danger that the decision will be made without adequate consideration.

Recommendation 2: There shall be special funds made available to the sending units to cover the costs of materials and labor involved in sending the "First Day Collection" and the "First Shipment" to the Storage Facility.

Once the Storage Facility and storage program is fully established, it is expected that the costs of sending materials to Storage will automatically be included in the annual budget of each sending unit. The start-up costs will, however, be too much to be assimilated into most of the annual budgets of the sending units, and therefore deserve the financial support of special project funds. These funds will be used for purchasing storage boxes, labor costs for packing or shipping and labor or material costs for the creation or alteration of records necessary for shipping.

Recommendation 3: There shall be a series of Advisory Committees responsible for the

on-going program of the facility

Since this facility will affect all University libraries, input to the program of the facility should be made from the librarians affected. It is anticipated that one or more committees will exist to deal with questions of 1) user services, such as delivery, circulation, photoduplication and interlibrary loan policies; 2) retention, review and disposition of materials; preservation, revision and supervision of criteria for submission and return; creation or retention of records by sending unit and creation of Storage Facility records.

Appendix 1

First Day Storage Collection

Library	Shelves	Linear Feet	Est. Vols.
Archibald S. Alexander Library	1299	3897	32,475
Archives	333*	1000*	8,325*
Records	0**	0**	0**
Special Collections	500	1500	12,000
Camden Arts and Sciences Library	0	0	0
Camden Law Library	0	0	0
John Cotton Dana Library	0	0	0
Kilmer Area Library	0	0	0
Library of Science and Medicine	1319	3957	32,975
Mabel Smith Douglass Library	614	1842	15,350
Newark Law Library	0	0	0
Total	4,065	12,196	101,625
Estimated Building Capacity	16,000	48,196	400,000

* Temporary estimate

** To be Available Shortly

Iowa State University
from Staff Convocation
September 5, 1978
W. Robert Parks, President
Iowa State University

The disturbing lag between the development of the Iowa State Library and the vigorous growth of the university itself, had, by the mid-1960's, become an impelling core concern of the university. For not only was the Library already visibly failing to provide the strong resource support so necessary in maintaining quality research and instructional programs; but the growing inadequacies of its holdings loomed as obstacles threatening to impede and impair the university's continuing efforts to increase its excellence and its usefulness. The Library's limited holdings were still good, solid, and substantial; but they were not of the size, scope, and depth so necessary in adequately supporting a major teaching-research university. Not only were there great gaping holes in its collections in the socio-humanistic areas of knowledge, but the Library was also slipping gradually behind in its acquisitions in the fields of science and technology.

The university, in 1968, therefore, took on as one of its major goals the task of building the kind of library holdings and developing the variety of library services which would be commensurate with the needs of this growing, quality educational institution. Consequently, in that year, the university began the systematic financial underwriting of a large-scale library acquisitions program. In 1973, the acquisitions program was given a more solid and long-term financial underpinning when a special additional \$250,000 legislative appropriation for library improvement was incorporated in the annual base budget of the university.

The Library was on its way. And the progress it has been making within the last decade has been deeply satisfying. Working with imagination, discrimination, and specialized expertise, the Library, within 10 years, has been able almost to double the number of bound volumes which it held in 1968--holdings it had taken an entire century to accumulate. Today--that is, as of July 1, 1978--the Library's holdings include 1,253,002 bound volumes; 17,000 current serials subscription titles--up 50 percent from 1968; 912,796 microform units--up 644 percent; 318,618 photographs and slides; and 24,510 other audio-visual materials.

Moreover, during the same years in which it was moving full steam ahead in strengthening and enlarging its collections, the Library was innovatively attempting to expand and improve its

services to readers. The growing usefulness of the Library is clearly reflected in the remarkable increase in total circulation the Library has experienced. During the past year, for example, the total circulation of the Library was 781,327--an increase in circulation of more than 85 percent within the past decade. And, during this past year, the library building itself had over a million-and-a-half users.

Lest we become complacent about the progress the Library is making, however, let me point out that despite its remarkable growth in collections over the past 10 years, the Iowa State Library ranks only 82nd among the 94-member universities of the Association of Research Libraries. The Iowa State Library has now achieved a level of adequacy which permits it fully to meet the needs of existing undergraduate programs and many graduate programs on the campus. But the task of building the strong, valuable collections necessary to support the varied research of a broad-based university is still far from complete. Much work must still be done in improving and refining individual areas of the collection.

Nevertheless, the Iowa State University Library stands today as a fine, highly valuable, enormously useful and heavily used central resource of this university. Unfortunately, even as the Library is achieving so much, its continuing worth is being gravely threatened by its crippling and disabling physical situation, by being cramped and crowded into a far too small and dismally inadequate physical structure.

The history of the physical structure of the Iowa State Library has long been the frustrating experience of insufficient space, of library additions which were too little and too late. Perhaps Iowa State was able to find adequate space for housing those first 77 volumes--listed as being received from the Department of the Interior--which comprised the Library's holdings in 1868. That I do not know. Moreover, I can only suspect that the Library enjoyed less than adequate space facilities during those long years when it was housed in Morrill Hall, along with the Chapel and the Museum. For within five years after the completion of the first library structure, in 1922, it was already necessary to move overflow publications into storage on the fourth floor of the new Memorial Union.

So overcrowded had the Library become, by 1940, that upwards of 75,000 volumes were transferred to a new storage building on the periphery of the campus. Nor did the completion of Library Addition I, in 1961, provide sufficient space to permit the return of those volumes to the main library. Moreover, despite the considerably increased space provided by Addition II, in 1969, the Library's growing collections had soon far outstripped its shelf capacity, even after additional stack space was provided by the repeated reduction of already severely limited and urgently needed student seating space. Today, all presently available storage space is again filled to overflowing, and the Library will once again be renting additional storage from the Memorial Union.

It is difficult to convey an understanding of the extent and nature of the housing crisis which the Library is now experiencing. By almost any standard and on the basis of such working criteria as size of library holdings, variety of library services, numbers of graduate and undergraduate students, and needs of the faculty, the Library has far less square footage than is commonly considered acceptable for a quality teaching-research library. But square-footage shortages do not portray the reality of the emergency situation under which the Library is operating.

Day after day, the working life of the Library is one of make-shift and make-do, of coping with inadequacies and contriving emergency solutions. Over the past few years, the Library's daily experience has been the frustrating, confusing, time-consuming, and costly one of living with insufficient space: of shifting and reshifting collections hither and yon; of narrowing down stack aisles and installing shelving too close to study tables; of tearing out student seating or arranging for it in tightly compressed, heavy traffic areas; of hauling valuable and needed books into storage, where they are a prey to humidity, dust, and insects; of knocking out walls; throwing up partitions, juggling space needs, and converting rooms and corridors to new purposes for which they are ill-suited; and, finally, of having no solution at all for the very serious deficiencies of no graduate study spaces or carrels; extremely few and extremely inadequate work spaces for faculty; and no group study areas at all.

Today, the end of the road of coping and contriving has just about been reached. No more temporary solutions, however ingenious, can solve the growing space crisis the Library is experiencing. The Library has been living on borrowed time. The crisis is here. And it is up to the university to find a solution to this bedrock problem which will be adversely affecting this entire academic community.

The only solution is, of course, the construction of a large, major addition to the Library. And this will be no easily achieved undertaking. For the dimensions of the Library's space and remodeling needs are so large-scale that any library building program will require heavy outlays of capital funds.

Many of us, I am sure, when we envision a major new addition to the Library, have pictures in our heads of a structure enhanced and enriched by such highly functional, but sometimes depressingly costly, attributes as a visually satisfying and even exalting exterior, large open vistas temptingly guiding the eye into the quiet, spacious study and research environment of the Library, and that harmonious combination of stone, woods, and color which is so necessary in providing a library with warmth and dignity and in creating a sense of intellectual excitement and achievement.

We must, however, exclude such vaulting ambitions when we go to the legislature. As we look toward a library addition financed by state appropriations, we can only consider a bare-bones, no frills, building program which will merely provide adequate space and minimal facilities. For even these minimal library requirements will total up to a large capital asking.

Those qualities in structure and materials which are so generally the properties of the truly distinguished libraries must be gained by another road. Fortunately, the Iowa State Library can, I believe, look forward to receiving substantial assistance from those alumni and friends of the university who, understanding the high importance to this institution of a quality library, are ready to take an active part in bringing about the Library's development and improvement. Already, The Friends of the Library Association is carrying forward in its purpose of enriching the Library's collections. Moreover, the Iowa State University Foundation has

recently taken on as a major goal the raising, through voluntary contributions, of \$4,000,000, funds which are to be used to support and supplement the planning, equipping, and construction of an addition to the Library.

For centuries, philosophers have been preoccupied with the search for the essence of the natural phenomena they saw about them. And certainly the question of what constitutes the essence of a university has long come in for its share of philosophical delineation. Moreover, it is natural that so complicated and intricate a social institution as a university should be subjected to almost as many definitions of its essence as there are students who have considered the problem. Closely related and equally numerous are the theories which attempt to explain the components which create the worth and the usefulness of a university.

As a pluralist, I hold the belief that a university has many essences--depending upon the angle of one's view and upon the problems and purposes of the university which are being considered. Therefore, when one attempts to examine the university as a working entity carrying forward its confusing miscellany of varied activities, I believe that the university is, in its essence, an interdependent organism in which the work of each part is dependent upon the workings of the other parts and upon its relationships to an effective functioning whole.

Scholarship is generally a lonely occupation. But even the work and the achievements of the most solitary scholar are dependent upon the caliber of that network of functioning relationships which is the university. No discipline, no department, no college of the university can stand alone. It cannot achieve the high peaks of nationally recognized excellence and distinction unless it is a part of a disciplinarily interdependent university, known to be strong in the basic areas of knowledge. Moreover, no discipline, no department, no college on this campus can stand apart from the future of the University Library, independently aloof from the problems it is facing. For the quality and worth of every discipline is tied into the quality and worth of the Library's holdings.

The advancement of the common good of this academic community, then, is heavily dependent upon our Library's ability to make continuing progress. Unfortunately, too often, what is everybody's business becomes nobody's business. The long-term good of the university as a whole can quite easily become submerged in the intricacies of specialized drives and purposes. This university's paramount need for a new library structure, however, must become the shared concern of each scholar and each department on this campus. We must each of us make it our own individual business. And, together, perhaps we can achieve the kind of distinguished Library which is commensurate with the breadth and stature of the Iowa State University.

ISU LIBRARY - ESSENTIAL REMODELING RATIONALE

(PUBLIC SERVICE REQUIREMENTS)

At the heart of every university library is the priority requirement to provide access to and information about its collections for the hundreds of thousands of uses made each year. The foremost service points in this information-providing function are the Reference and Government Publications Departments. Libraries, particularly university libraries, have become so enormously complex that without professional guidance and assistance they cannot be used effectively, nor can use be properly made of the complementary additional resources in other libraries.

This indispensable public service function will be tremendously improved in the plans for remodeling the existing Library building at Iowa State. Both the Reference and Government Publications Departments, now in totally inadequate offices and removed from the patrons they are trying to serve, will be physically brought together on the First Floor. It is essential and an absolute priority that the service functions and locations of these joint departments be given the necessary remodeling they require.

To our knowledge no university in the United States now combines its Government Publications and Reference Departments in this fashion. While these departments have somewhat different orientations as to their materials, their basic function is to provide information to the public. In these days of limited personnel, Iowa State believes that the joining of these two departments (keeping them distinct as departments but located side-by-side) will not only be cost effective for the state and innovative but will also, in effect, increase the number of information personnel available to the public.

We also plan in this remodeled area to have an entire section devoted to computerized bibliographic retrieval, a service which is receiving increasingly heavy degrees of usage by faculty and students and which will continue to do so. Electronic retrieval of information from hundreds of data bases throughout the nation and the world is made accessible to Iowa State users through this type of retrieval. Again, such a renovated area is indispensable.

The entire First Floor will also be remodeled to accommodate not only an expansion from the current inadequate Reference Collection to one of 30-40,000 volumes, which is a prime necessity, but the floor will also include all of the Library's governmental reference sources now lodged in nooks and crannies and other unacceptable locations in the present building. Thus the Reference and Government Publications reference materials will be melded together in an attractive and exciting new environment for users as well as being readily at hand for use by the staff in assisting the patron.

An additional great step forward is planned in the remodeling with the combining together of Iowa State's entire microtext collections. These are now in a poorly-lit basement area or crammed into poor locations on the Second Floor or elsewhere. Readers needing to utilize this material must go to several locations,

necessitating additional Library personnel. It should be remembered that Iowa State's total collection currently (July 1980) consists of 1.3 million physical volumes and over 1.1 million microforms; thus the microform collection is almost the same size as the bound volume collection. In many libraries microforms, unfortunately, are given very poor treatment. At Iowa State we believe that the microform will continue to be a prime tool of information for the future, that publication will increase in this area and that we must provide skilled public service personnel to provide access to it for our patrons. For these reasons we are combining our microform collections and reading equipment in one totally redesigned area on the First Floor of the expanded Library building. It will be directly accessible to the staffs of the combined Reference and Government Publications Departments and the Library patrons, backed up by the enlarged reference collections throughout that floor. The area requires rheostats, special lighting, special equipment and handling of its environment to provide the necessary operational center for microform storage and use. Thus there is an essential need for remodeling this area for such use.

Similarly, other areas of the older building, such as the remodeled Reserve and Periodical Rooms and study areas on the First and Second Floors as well as remodeling of the Second Floor to include the Library's excellent map collection, and graduate student and faculty study spaces, are all essential to the success of the final building. Reserves and Periodicals, for example, account for more than half of all of the materials circulated from the Library and are the two areas outside of Circulation and Reference most constantly in use every day during the year. Again, it is essential that funds be made available for their renovation and remodeling.

Additionally, several offices on the First Floor of the Library will be remodeled to provide a Visual Assistance Center, complete with all types of reading aids and equipment for reading by the visually handicapped. This is an essential need; it does not now exist anywhere on campus, and must be provided.

It must also be understood that the older building First Floor serves as a major reference extension for the First Floor of the new Addition. It cannot continue in its present form without affecting in a severely negative way the improvements and innovations to be established in the new Addition under construction. Both parts of the expanded Library building, the new and the old, must be compatible if the entire building is to function successfully. Thus it is imperative that remodeling funds be made available for this purpose.

Finally, it should also be recognized that as an extension of the new floor area in the Addition, the remodeled older First and Second Floors will become an essential part of the new and improved major traffic passageways into the building. Without the needed remodeling, this improved access by users to the information resources of Iowa State will be degraded and shortchanged.

Warren B. Kuhn
August 19, 1980

Building Exterior

A comprehensive and serviceable library is essential to the educational process. A university functions to explore, create and preserve knowledge for the present and future generations, and the library of a university exists to support these functions.

The library building should, by its presence, welcome users and convey its significance as a repository of the records of civilization. It should have distinction and dignity and at the same time be visually appealing and inviting to enter.

The proposed addition to the Library shall be designed to be compatible in appearance with the classic style of the original building and with the previous additions to it. Of primary concern is the aesthetic character of the completed project as a unified total complex. It is not anticipated that the classic elements would be repeated in the new construction, but that the features of the addition should be integrated with those of the earlier work. This approach should prove to be a challenge to rather than a restriction on the architect's design talents.

A greater amount of fenestration than exists in the west portion of the present building would add visual interest and permit more immediate recognition of the building function.

PUBLIC ENTRANCE

A single public entrance to the building is preferred. Should a second entrance be deemed necessary because of the mass of the structure, it should be so planned that security control between entrances and all public areas can be maintained at a single point. The entrance should be capable of handling several thousand users daily, including those who are physically handicapped.

The area immediately outside the entrance should be pleasant and relaxing and may incorporate a ramp, perhaps enclosed or otherwise protected, for handicapped access. Benches, waste receptacles and sand urns should be considered for the vicinity of the entrance. Existing trees shall be preserved wherever possible.

At the entrance doors the design should incorporate an exterior canopy, overhang or other device to permit patrons to furl or unfurl umbrellas, or to pause or wait for short periods before entering or leaving the building in times of inclement weather.

Service Entrance

One service dock and entrance should provide for the needs of the entire building. The present south service entrance shall be eliminated. The existing north dock, if it be retained as the service entrance, must have a freight elevator installed nearby, to serve all floors of the building. The dock location should be at a location where a minimum disturbance is created in study and work areas because of noise generated at the dock.

The dock will provide access for deliveries of mail, books and other materials, for pick-up of trash from the building, and for maintenance and service crews. Space for and access to the

trash receptor shall be planned adjacent to the dock. Provide pedestrian steps between grade and dock level.

Short-term parking space for service and delivery vehicles, and for the Library truck should be located near the dock.

Building Structure and Mass

The two earlier additions to the original building, against which the proposed addition will join, are of reinforced concrete frame construction, with applied exterior walls of stone and precast concrete panels. The new addition will presumably use a concrete framing system.

The choice of the building module will be crucial to good library planning. The bay dimensions must be selected to accommodate standard dimensions of library shelving, in both directions.

Columns in the present building appear overly large and obstruct sight lines because they incorporate air ducts on the sides of the columns. It is urged that a different air distribution system be developed in the new work to allow minimum column sizes.

Floor levels in the existing west portion of the existing building shall be maintained in the new addition to permit ready access between the old and new areas on each level. An alternative solution to permit higher ceilings might be developed with the incorporation of a ramp or ramps (with a slope not exceeding 1 in 12).

Whether the addition will be built on three, four or five levels remains to be determined. Some operations in the building must be maintained on a single level with ready access between elements.

Other functions may be performed as well on split level locations. Bay size will be a factor

in determining the area of each floor level and thereby the most useful element in establishing the number of levels to be built.

Lobby

Provide a vestibule deep enough to meet the Iowa Code requirements for handicapped persons and to furnish protection against cold and drafts in the lobby area.

The lobby should be visually inviting as well as sufficiently large and open to accommodate traffic. An entering patron should be quickly oriented to the building and its most immediate services. A bank of at least two elevators should be located within the lobby or nearby.

The lobby should offer an open vista of the main floor and suggest the transition to the Library's study and research environment. Provision for exhibit cases or art displays are suggested to aid in that transition. No provision will be made for smoking within the lobby, nor will food or beverages be permitted to be brought into the Library by patrons. A building directory of attractive design should be easily seen. Lighting within the entrance area can be of a type softer and more diffused or different from that provided in the general stack or reading areas.

Near the entrance should be the main circulation desk, the new book display, the reference service area and reference reading room, and the public catalog and information desk. While these services require primary attention, other services could be located on the main level of the expanded building. However, since many Library elements would benefit from a location on the main level and limited building size precludes the accommodation of all, the design should

others either above or below the main level.

Building Interior

The successful library building should combine good function and beauty. Users must find within the Library building an environment conducive to study and learning where they can be efficiently served in pleasant yet functional surroundings. The new addition and renovation of the older structure must focus on eliminating ultimately as many internal barriers as possible and on opening up the building for the reader.

It is also of great importance to achieve glare-free and unobtrusive lighting in those portions of the building where there will be steady reading and staff work. In the bookstacks the lighting intensity can be at a low level. In the rare bookstacks, special shields should be employed to control ultraviolet light and range aisles should have specific switching control for maximum preservation. Better control of lighting for portions of floors or areas is also necessary for both appropriate illumination and energy conservation. The larger stack areas aside, lighting should seek contrasts and varied mood settings to avoid a too-brilliant, over-institutionalized character for what is a large and complex building.

Research library collections require the best sort of atmospheric conditions to insure their preservation. The cooler the temperature, the longer the period of paper survival, and the air must equally be filtered and cleaned. Humidity controls are particularly important for rare books and manuscripts of the Department of Special Collections. Reading and staff work

of electric power in libraries is mounting rapidly due to greater dependence upon equipment to replace limited staff. Circuitry should provide for a large growth in capacity. Strongest consideration must be given to fire control systems. In Special Collections the use of a special system such as liquid Halon is recommended where irreplaceable rarities and archives require non-damaging fire control. The use of office landscaping which would be desirable for the rapidly changing Library environment and particularly for the large service and work areas should be considered.

A communications ducting system should be provided to allow for ongoing development of future computer programs, audio services such as wired carrels throughout the building, closed circuit television, etc.

Exhibits and displays are important to the Library's informational and educational mission. Built-in or free-standing exhibit cases should be considered near the public entrances as well as where designated elsewhere in this program. Exhibit cases are of special importance in the Special Collections and Iowa State rooms.

Throughout the Library colors and surfaces should provide a sense of warmth and modest beauty. These should convey the stimulation of intellectual achievement represented by the building and establish a totally fresh and appealing interior. Internally the Library should refresh the spirit as well as the mind.

Functional Relationships

Certain close relationships for various library functions must be preserved in the overall Library design, while others require only reasonable proximity. These are presented here in general fashion, but the architect will be expected to study the Library operations and discuss these with the appropriate Library personnel in order to best understand requirements and help resolve conflicts presented by the building configuration.

Almost all major Library elements require relocation and expanded quarters, and to solve this a number of present functions must be moved to the new addition. Present locations are to a large degree the result of compromise and substitution caused by lack of proper space and, while workable as a temporary measure, should not be considered a guide to future location or relationships.

52 A library derives its functional unity from the fact that its collections and services are interrelated in use, one dependent upon the other. Ease of access to all points within the library thus becomes of paramount importance. In theory, a large cube or rectangle would be most desirable for the building mass, while a tower might be least desirable. In practice, however, there are some services, such as technical processes or the most heavily-used reader services, where the efficiency achieved in locating them together will require greater floor space.

When additions are joined to an already existing structure, the problem becomes more complex, particularly where little practical structural change can be effected for the multitier stack or in the load-bearing walls and certain fixed functions of the original library building.

Improvements here will probably depend upon more effective elevator access for the tiers and

relocation of operating areas within the older building once additional library space is available.

The most reliable building approach for any large teaching-research library is to seek the most adaptable, flexible and appropriate space possible to house not only informational material as we now know them, but also the informational materials of the future plus the space essential for the equipment and types of reading areas through which their variety of formats can best be put to use.

To provide the necessary horizontal space for services and to preserve good functional relationships among them, the expanded building must allow the maximum amount of open floor space for interchangeable use. Consequently, all floors of the new addition where they abut existing floors should be contiguous. Traffic flow should move in the most open fashion possible, and movement through the building should be clear to the user. Internal non-load-bearing walls should be considered as removable in whole or part to insure this movement, notably in public service and reader areas. A fresh architectural eye must be given all present service, study and collection space configurations and in the channeling of user traffic to them.

There is a pressing need for improving patron access to information and services. This includes the need for specialized seating and widening the use of specialized collections, as well as better external access to the Library itself and more adequate space for the staff to conduct its work on behalf of patrons. Appropriate service space, now mostly makeshift and overcrowded, is of particular importance in the modern university library. Ordinary shelving

may accommodate the greater proportion of the book collections, but access to these and to the almost limitless variety of other forms of information demands a wide range of enlarged and carefully designed service points, equipment arrangements and properly-sized staff areas where personnel may work closely with students, faculty and other researchers. No matter how full a library's collections, poor service impairs and limits patron use.

Thus in planning for overall library space improvement, the Phase I new construction should be geared largely to meeting these essential requirements - external access including new effective elevator cores, specialized seating, specialized collections, expanded service and work space - insofar as possible. The present building would accordingly be renovated in Phase II and be most heavily used for housing the general collections and general seating.

Once more functional locations have been found for them, the major building elements such as service desks, technical services, special collections, government publications, microform/media and the central administrative offices will probably remain fixed, but their collection or service requirements may necessitate later change. Therefore, the building design should have the potential for accommodating this without significant cost beyond removing partitions.

Possible Area Growth or Contraction

Predictable growth patterns for certain services, collections and their use as well as the potential for change in organization and library technology require that special attention be paid to space planning for either growth or contraction in several areas. Areas where major growth is most likely to occur include special collections and archives, microforms and media, and those in which specialized equipment is used for automated bibliographic retrieval.

The present public card catalog should remain in use probably through the 1980's but will be supplemented with microform or terminal units to handle probable changes in catalog access; at some future time the public card catalog area should contract to be gradually replaced by the space needed for more advanced technological equipment and reference service points. An area of somewhat lesser growth would include the main reference office area, primarily due to increased staff. Technical services and library instruction are areas where future contraction may occur because of changing organizational and staffing patterns and the use of technology. Thought should be given to the possibility of linking the main reference service area with that of government publications.

General collection growth is an entirely separate problem and must be treated independently.

General

Finally, the many functions within the Library present varying degrees of access. The most basic degree should be for access by the general public to the greater portion of the entire building wherein users can move freely to services, collections and seating with security controlled at the building exit. A second degree involves access to staff work areas and offices, faculty studies and other assigned seating. A third degree permits access of authorized staff to locked staff areas where materials awaiting processing are held, to the special collections stack and vault, and to the Library mail, supply and maintenance rooms. A final degree of access would be the supervised service entrance at the Library loading dock.

Implications of Automation

The Library has for many years utilized computerization in its operations. It developed and

installed the first automated circulation system in the State in 1969; it produces a two-volume serials catalog by computer; and since 1977, it has been cataloging the bulk of its monographic materials through use of OCLC, Inc., a computer-linked network. Automated bibliographic information retrieval systems using computer data bases are in use by the reference staff, computers prepare the Library's in-house budget records, and the Library uses the computer to prepare bibliographies, indexes and lists of specialized holdings.

For the future it is clear that this use of automation within the Library will increase. Not only will there be greater use of the computer by staff in technical services, public services and business services, but there will undoubtedly also be use of terminals by patrons. Computer terminals providing direct on-line access will be needed in nearly all staff areas and in a number of service and reading areas accessible to the public. These electronic devices will generally be of desk-model terminal size with a probable upper limit in size being an in-house mini-computer, something already seen in a number of academic libraries.

In planning for the expanded and renovated building, therefore, terminal capability will need to be included in staff areas, studies and in the central public catalog and bibliography areas. Precise locations will be set at a later stage in the planning process.

University of Oklahoma

SELECTION OF ARCHITECTS FOR THE BIZZELL LIBRARY EXPANSION

Five architectural firms under consideration for the Bizzell Library Expansion Project were interviewed on June 5 and 6, 1979. These interviews and the preliminary review process were conducted in accord with the provisions of State law and the policies of the Board of Regents. The following qualifications of each firm were considered:

1. Acceptability of design
2. Quality of engineering
3. Adherence to cost limits
4. Adherence to time limits
5. Volume of changes
6. Financial stability and standing
7. Firm experience
8. Past University projects
9. Firm staff and size

In view of the size and scope of this project the committee also considered each firm's qualifications in relation to the following special criteria:

1. Amount of experience with the planning, design and engineering of public and institutional buildings in the \$4,000,000 to \$12,000,000 cost range.
2. Indicated capability of the firm's professional staff. Has the firm handled major multi-phase building projects in the past? Has the firm successfully completed additions to existing multi-million dollar projects.
3. Experience of the firm and its consultants with public or institutional library facilities.
4. Experience of the firm's staff engineers or engineering consultants (mechanical, electrical, structural and other consultants) with projects of this type.
5. Firm's indication of interest in and preference for library projects.

The interview group obtained information from the files of the State Board of Public Affairs and from other sources. A summary of the review of firm qualifications is attached. Based upon the interviews and a complete review of all information available to the interview group, the firms were rated as indicated in the attached tables.

TABLE 1.

SUMMARY OF EVALUATION OF FIRMS INTERVIEWED, (SUM OF RAW SCORES) BIZZELL LIBRARY EXPANSION

<u>Evaluation Factors</u>	<u>FIRMS</u>				
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Acceptability of Design	64	67	32	45	47
Quality of Engineering	63	66	35	45	47
Adherence to Cost Limits	55	61	43	47	50
Adherence to Time Limits	62	56	44	46	49
Volume of Changes	56	61	42	46	48
Financial Stability	<u>57</u>	<u>63</u>	<u>43</u>	<u>50</u>	<u>50</u>
Total Rating	357	374	239	279	291

TABLE 2.

SUMMARY OF RATINGS OF FIRMS INTERVIEWED, (RANKED SCORES) BIZZELL LIBRARY EXPANSION

<u>Evaluation Factors</u>	<u>FIRMS</u>				
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Acceptability of Design	4	5	1	2	3
Quality of Engineering	4	5	1	2	3
Adherence to Cost Limits	4	5	1	2	3
Adherence to Time Limits	5	4	1	2	3
Volume of Changes	4	5	1	2	3
Financial Stability	<u>4</u>	<u>5</u>	<u>1</u>	<u>3</u>	<u>3</u>
Total Rating	25	29	6	13	18

Note: 5 = Highest; 1 = Lowest

TABLE 3.

SUMMARY OF PROPOSED FEES AND PRIOR STATE AND UNIVERSITY WORK FOR THE LAST 5 YEARS

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Percent Fee *	6.9%	6.9%	5.5%	5.7%	6.0%
Principal's Hourly Rate	\$45	\$40	\$30	\$40	\$35
Extra Service Multiplier	2.8	2.8	2.5	2.5	2.5
Percent State Work	3.50	1.40	2.20	1.40	0.50
Dollar Value of State Work	\$271,900	\$122,513	\$185,480	\$123,741	\$42,546
University Projects in the Last 5 Years	\$90,000	0	\$39,000	\$95,789	0

*Based upon first phase with a \$3,200,000 construction cost.



UNIVERSITY OF OKLAHOMA

SUMMARY OF THE PRELIMINARY REVIEW OF THE QUALIFICATIONS
OF ARCHITECTURAL FIRMS FOR THE BIZZELL LIBRARY EXPANSION PROJECT

	Out of State Location	High Percentage of Work	Low Stated Priority for Type of Work	Small Professional Staff	Current O.U. Design Contract	Limited Capability or Experience	Selected for Interview
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. William Appleby and Associates			X			X	
2. Benham Blair & Affiliates					X		
3. Binnicker & Associates					X		
4. Blevins United Arch. & Consultants						X	
5. Boyd Broach Foster						X	
6. Bozalis and Roloff							*
7. Coleman-Ervin & Associates			X		X		*
8. Day-Yadon-Ragland, Inc.						X	
9. Design Professional Associates						X	
10. Ebert & Cramer						X	
11. E/R Associates						X	
12. Everett & Davis						X	
13. Fell Brusso Bruton & Knowles, Inc.		X					
14. Frankfurt-Short-Bruza					X		
15. Stan W. Gralla, AIA						X	
16. Hellmuth Obata & Kassabaum, Inc.	X						*
17. Holabird & Root	X						
18. HTB, Inc.		X					
19. Imel & Graber						X	
20. Kaign Associates, Arch., Inc.						X	
21. Locke Wright Foster					X		
22. Russell L. Magee & Assoc., Inc.			X			X	
23. Mansur-Daubert-Williams, Inc.						X	
24. McCune McCune and Associates					X		
25. McCutchan Pierce Mason						X	
26. Murray Jones Murray, Inc.		X			X		
27. Ragsdale Christensen			X			X	
28. The Architectural Collective							
29. Rees Associates, Inc. and HOK					X		*
30. Reid-Cunningham			X			X	
31. RGDC, Inc.						X	
32. Thornhill & Mills					X		*
33. Urban Design Group			X			X	
34. Harold J. Westin Associates						X	
35. Wilbanks & Smith Associates						X	



SUMMARY OF BASIC INFORMATION ON ARCHITECTURAL FIRMS
FOR THE BIZZELL LIBRARY EXPANSION PROJECT

	Total Employees	Registered Architects	Registered Engineers	Project Type Precedence	Number of Previous Similar Projects	Amount of State Work	Percent of State Work
1. William Appleby and Associates	5	3	0	14/27	0	\$ 279,922	5.3
2. Benham Blair & Affiliates	200	21	55	2/6	14	255,412	5.0
3. Binnicker & Associates	15	4	2	1/3	5	514,875	6.0
4. Elevins United Arch. and Consultants	25	4	2	-/3	0	0	0
5. Boyd Proach Foster	6	3	0	1/10	0	0	0
6. Notalis and Roloff	4	3	0	7/13	2	42,546	.5
7. Coleman-Erwin & Associates	14	8	1	-/16	0	185,480	2.2
8. Day-Yadon-Ragland, Inc.	15	6	0	-/8	0	0	0
9. Design Professional Associates	2	1	0	-/10	0	0	0
10. Ebert & Cramer	6	3	0	2/3	0	0	0
11. E/R Associates	5	1	0	1/2	0	31,850	.4
12. Everett & Davis	7	2	0	1/4	0	0	0
13. Fell Brusso Bruton & Knowles, Inc.	15	1	2	1/2	1	1,010,000	11.9
14. Frankfurt-Short-Bruza	37	12	6	1/4	3	56,811	.7
15. Stan W. Gralla, AIA	4	1	0	-/6	0	14,200	.2
16. Hellmuth Obata & Kassabaum, Inc.	557	100+	15+	1/1	0	122,513	1.4
17. Holabird & Root	164	?	?	2/9	10	0	0
18. HTE, Inc.	275	35	24	1/3	12	3,535,035	41.6
19. Imel & Graber	6	2	0	-/6	0	0	0
20. Kaign Associates, Architects, Inc.	7	2	0	1/2	0	0	0
21. Locke Wright Foster	14	6	0	1/3	1	311,073	3.7
22. Russell L. Magee and Assoc., Inc.	7	1	0	8/11	0	50,811	.7
23. Mansur-Daubert-Williams, Inc.	40	3	13	-/16	0	364,000	4.3
24. McCune McCune and Associates	28	6	4	1/1	2	541,000	6.3
25. McCutchan Pierce Mason	13	1	2	1/2	0	49,528	.6
26. Murray Jones Murray, Inc.	44	11	2	1/3	5	734,416	8.6
27. Ragsdale Christensen, The Architectural Collective	6	1	1	6/13	0	0	0
28. Rees Associates, Inc.	25	15	0	1/3	9	271,900	3.5
29. Reid-Cunningham	7	2	0	10/13	0	0	0
30. RGDC, Inc.	17	3	4	1/3	0	0	0
31. Turnbull & Mills	8	4	0	1/4	2	123,741	1.4
32. Urban Design Group	9	2	0	8/24	0	0	0
33. Harold J. Westin Associates	6	3	1	3/3	0	0	0
34. Wilbanks & Smith Associates	6	3	0	5/15	0	0	0

UNIVERSITY OF OKLAHOMA
REPORT ON THE ARCHITECTURAL FIRM SELECTION PROCESS FOR THE
BIZZELL LIBRARY EXPANSION PROJECT

A. Statement of Actions in Chronological Order:

1. The list of architectural firms that were registered with the State Board of Public Affairs was requested on April 12, 1979.
2. Letters of solicitation were sent on April 16, 1979 to each of the firms included on the list provided by the State Board of Public Affairs.
3. A list of 34 architectural firms that responded affirmatively to the letter was sent to the State Board of Public Affairs on May 21, 1979 with a request that a copy of the file on each firm be sent to the University for review.
4. The files provided by the State Board of Public Affairs with their letter dated May 23, 1979 were reviewed. Five firms were selected for interviews from the 34 firms indicating an interest in the project.
5. Individual interviews were held with representatives of each of the five selected firms on June 5 and 6, 1979.
6. Reports on the interviews and other items of information were provided to the University of Oklahoma Board of Regents.
7. The University of Oklahoma Board of Regents selected Hellmuth, Obata and Kassabaum, Inc. at their meeting on June 14, 1979.

B. Total Number of Consultants Screened: 34

Rejected: Limited experience	19
Current contract with University	6
Out of state location	2
High percentage of state work	2

Total for detailed evaluation 5

C. List of the Five Consultants Selected for Detailed Consideration

1. Rees Associates, Inc. and
Hellmuth, Obata & Kassabaum, Inc.
2. Hellmuth, Obata & Kassabaum, Inc.
3. Coleman-Ervin & Associates
4. Turnbull, Mills & Associates
5. Bozalis, Roloff & Associates

D. A Rated Evaluation of All Firms Interviewed

<u>Evaluation Factors</u>	<u>Firms</u>				
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Acceptability of Design	64	64	32	45	47
Quality of Engineering	63	66	35	45	47
Adherence to Time Limits	55	61	43	47	50
Adherence to Cost Limits	62	56	44	46	49
Volume of Changes	56	61	42	46	48
Financial Stability	<u>57</u>	<u>63</u>	<u>43</u>	<u>50</u>	<u>50</u>
Total Rating	357	374	239	279	291

E. Dollar Volume of Work Done for the State of Oklahoma During the Last Five Years by Each of the Firms (Individual Members of the Firm and/or Associates) Selected for Final Evaluation.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>
Dollar Value of State Work	\$271,900	\$122,513*	\$185,480	\$123,741	\$42,546
Percent of State Work	3.50	1.40*	2.20	1.40	0.50

* This work was performed as a subcontractor to an Oklahoma based firm not as an architectural firm of record.

F. Percent of Design Consultant Work by the Above Firms (Members and/or Associates) Within the Last Five Years.

See Item E.

List of Members Comprising Selection Committee

Interview Committee:

- Ms. Kristen Alexander, Assistant to Vice President of Administrative Affairs
- Dr. James Alsip, Associate Director, University Library
- Dr. Roger Babich, Assistant Professor, Communications and Member of the Library Committee
- Dr. James Burwell, Interim Dean, Arts and Sciences
- Mr. Arthur Kessler, Acting Director, Physical Plant
- Dr. Sul Lee, Director, University Library
- Dr. J.R. Morris, Interim Provost

Mr. Arthur N. Tuttle, Jr., Director, Architectural and Engineering Services

Selection Committee: Members of the Board of Regents

- Mr. K. D. Bailey, President
- Mr. Richard A. Bell, Vice President
- Mr. Dee A. Replogle, Jr.
- Mr. Charles E. Engleman
- Ronald H. White, M. D.
- Mr. Dan Little
- Mr. Julian Rothbaum

Name of the Firm Recommended for Selection:

Hellmuth, Obata & Kassabaum, Inc.

If the firm (Member and/or Associates) Recommended Has Had More Business with the State of Oklahoma Than Other Applicants, Then a Statement of Justification for the Selection is Required in Accordance with 61 O.S. Supp. 1976 Sect. 62F. This Statement Must be Specific (Giving All Reasons).

According to the information received from the Oklahoma State Board of Public Affairs on May 23, 1979, the amount of state work undertaken during the past five years by the firms selected for interview ranged from a high of 3.5 percent to a low of 0.5 percent. The firm selected for the project had completed 1.40 percent of the state work. The actual dollar amount of the fees earned by the firm placed it fourth on the list of five firms with an amount of state work greater than only one other firm, a firm that had had 0.5 percent of state work.

It was the judgment both of the interview committee and the selection committee that the firm chosen had superior qualifications in all major areas of consideration including acceptability of design, quality of engineering, adherence to cost limits, adherence to time limits and financial stability. In addition, the firm selected has had extensive experience with college and university library facilities; experience that is far more extensive than that of any other firm expressing any interest in the project. Therefore, it was concluded that the small difference in the amount of state work completed by the two firms was not significant and should not become the deciding factor.

- J. If the Principal Place of Business of the Recommended Firm is Located Outside the State of Oklahoma, A Detailed Justification of this Preference Over an Oklahoma based Firm Will be Submitted with the Report (61 O.S. Supp. 1976 Sect. 62G3).

After a careful review of the qualifications of all the firms under consideration, it was concluded by the selection committee that Hellmuth, Obata and Kassabaum, Inc. had outstanding and unique experience with the planning and design of college and university library facilities and should be selected for this project. The firm has provided professional services and completed plans and specifications for the following major library facilities: (1) University of Alaska Library, (2) W. Dale Clark Library (Omaha, Nebraska), (3) Lockwood Library (Vassar College), (4) Northern Illinois University Library, (5) Ohio-Northern University Library, (6) Penrose Library (University of Denver), (7) Omer Pooos Law Library (St. Louis University), (8) Southern Illinois University Library, (9) Stanford University Graduate Library, (10) Western Illinois University Library and a number of other major libraries. This extensive list of design credits greatly exceeds those of any other firm expressing an interest in the project. In the view of both the interview committee and the selection committee, Hellmuth, Obata and Kassabaum is superior to the other firms to a significant degree and clearly the firm best qualified to provide the required planning, design and engineering services.

It was the judgment both of the interview committee and the selection committee that the firm chosen had superior qualifications in all major areas of consideration including acceptability of design, quality of engineering, adherence to cost limits, adherence to time limits and financial stability. In addition, the firm selected has had extensive experience with college and university library facilities; experience that is far more extensive than that of any other firm expressing any interest in the project. Therefore, it was concluded that the small difference in the amount of state work completed by the two firms was not significant and should not become the deciding factor.

- J. If the Principal Place of Business of the Recommended Firm is Located Outside the State of Oklahoma, A Detailed Justification of this Preference Over an Oklahoma based Firm Will be Submitted with the Report (61 O.S. Supp. 1976 Sect. 62G3).

After a careful review of the qualifications of all the firms under consideration, it was concluded by the selection committee that Hellmuth, Obata and Kassabaum, Inc. had outstanding and unique experience with the planning and design of college and university library facilities and should be selected for this project. The firm has provided professional services and completed plans and specifications for the following major library facilities: (1) University of Alaska Library, (2) W. Dale Clark Library (Omaha, Nebraska), (3) Lockwood Library (Vassar College), (4) Northern Illinois University Library, (5) Ohio Northern University Library, (6) Penrose Library (University of Denver), (7) Omer Poos Law Library (St. Louis University), (8) Southern Illinois University Library, (9) Stanford University Graduate Library, (10) Western Illinois University Library and a number of other major libraries. This extensive list of design credits greatly exceeds those of any other firm expressing an interest in the project. In the view of both the interview committee and the selection committee, Hellmuth, Obata and Kassabaum is superior to the other firms to a significant degree and clearly the firm best qualified to provide the required planning, design and engineering services.

ARCHITECTURAL AND ENGINEERING SERVICES
 UNIVERSITY OF OKLAHOMA
ARCHITECTURAL AND ENGINEERING FIRM SELECTION SUMMARY

Date: _____

Project: _____

Firm Name: _____

Ratings:

Check Appropriate Box

Highest

10	8	6	4	2
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Lowest

1. Acceptability of Design
 - a. Former client satisfaction
 - b. Previous similar design experience
 - c. Contractor relations
 - d. Size of firm

2. Quality of Engineering
 - a. Number of professional engineers
 - b. In-house design capability
 - c. Previous design reputation

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

3. Adherence to Cost Limits
 - a. Previous project reputation
 - b. Former client satisfaction
 - c. Projects rebid
 - d. Cost estimating procedures

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

4. Adherence to Time Limits
 - a. Present work load
 - b. Location to project
 - c. Former client satisfaction
 - d. Previous project reputation

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

5. Volume of Changes
 - a. Previous project reputation
 - b. Clarity of drawings
 - c. Normal percent project allowance

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

6. Financial Stability
 - a. Firm profit record
 - b. Previous incompleted projects
 - c. Previous record of contested work

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Comments:

Under the provisions of 61 O.S. Supp. 1976, Section 62G, the Governor is required to make an independent review of the total process of consultant selection.

A report will be addressed to the Governor at the conclusion of your selection process in the following format:

a. Statement of actions in chronological order.

b. Total number of consultants screened: _____

Rejected:

Low Priority for Type of Work _____
 No Demonstrated Capability _____
 Other Reasons (Specify) _____

TOTAL for Detailed Evaluation: _____

c. List of the 3-5 consultants selected for detailed consideration.

d. A rated evaluation of all firms interviewed will be included in the following format:

Evaluation Factor
 (Use Adjective or Numerical Rating)

Detailed Evaluation Ratings

FIRMS:

Acceptability of Design
 Quality of Engineering
 Adherence to Cost Limits
 Adherence to Time Limits
 Volume of Changes
 Financial Stability

e. Dollar volume of work done for the State of Oklahoma during the last five (5) years by each of the firms (individual members of the firm and/or associates) selected for final evaluation.

f. Percent of design consultant work by the above firms (members and/or associates) within the last five (5) years.

g. List of members comprising selection committees.

h. Name of firm recommended for selection.

i. If the firm (members and/or associates) recommended has had more business with the State of Oklahoma than other applicants, then a statement of justification for the selection is required in accordance with 61 O.S. Supp. 1976 Sect. 62F. This statement must be specific (giving all reasons).

j. If the principal place of business of the recommended firm is located outside the

PROGRAM REQUIREMENTS FOR THE MAIN LIBRARY BUILDING

UNIVERSITY LIBRARIES

UNIVERSITY OF OKLAHOMA
Norman, Oklahoma

SECOND DRAFT

(A Working Document, not for Public Distribution)

October 15, 1979

SPECIFICATIONS OF THE LIBRARY AREAS

SUMMARIES

	<u>Page No.</u>	<u>Seating</u>	<u>Shelving</u>	<u>Area (in s.f.)</u>
<u>General Requirements</u>	1			
<u>Public Services</u>	3			
1. Lobby and Exit Control	4			1,000
2. Public Catalog	5			3,150
3. Bibliography Area	6			780
4. Reference Department	7	300	27,500 (volume equivalent)	12,545
5. Access Services, Circulation	13			1,910
6. Access Services, Reserve	17			1,120
7. Serials Processing, Current Periodicals	20	200	58,750 (volume equivalent)	6,860
8. Serials Processing, Microforms	21	60	10,000 (volume equivalent)	3,165
9. Interlibrary Loan	23			825
10. Database Searching	25			500
11. Government Documents	26	50	261,000 (volume equivalent)	15,665
<u>Books and Readers</u>				
12. Reading/Study	29	693		17,325
13. Book Stack	30		1,769,822	127,417
14. Atlas Shelving/Browsing Area	31		1,000	450
<u>Special User Facilities</u>	32			
15. Faculty Studies	33	100		9,300
16. Graduate Locked Carrels	34	90		4,030
17. Group Studies	35	120		2,000
18. Large Conference Room	36	35-70		1,536
19. Visually Impaired Room	37	6		225
20. Typing Room	38	12		480
21. Student Lounge/Snack Bar	39	50		-1,950
<u>Special Collections</u>	40			
22. Bass Collection	41	30	32,000 (volume equivalent)	4,380
23. History of Science	43	62	97,500 (volume equivalent)	12,211
24. Rare Book Collection	53	18	30,000 (volume equivalent)	3,610

SPECIFICATIONS OF THE LIBRARY AREAS

SUMMARIES

	<u>Page No.</u>	<u>Seating</u>	<u>Shelving</u>	<u>Area (in s.f.)</u>
<hr/>				
<u>Technical Services</u>	55			
25. Acquisitions	56			3,000
26. Catalog Department	57			6,350
27. Serials	66			2,350
28. Technical Services Conference Room	68			280
<u>Administrative Suite</u>	69			
29. Reception	70			550
Dean's Secretary	71			275
Dean	72			300
Associate Director	73			400
Assistant to Dean	74			180
Systems Analysis and Development	75			180
Accounting	76			400
Work Room	77			300
File and Storage Room	78			450
Conference Room	79			450
<u>Other Library Areas</u>	80			
30. Staff Lounge	81			1,200
31. Data Processing	82			2,500
32. Copy Shop	83			1,090
33. Shipping/Receiving	84			1,390
34. Equipment Storage	85			1,000
35. Fumigation and Deacidification Chamber	86			120
36. Staff Toilets	87			in gross
37. Custodial Facilities	88			in gross
38. Elevators	89			in gross
39. Bookdrops	90			in gross
40. Exhibit Areas	91			none
41. Photocopy Machines	92			none
GRAND TOTALS		1861 seats	2,287,572 volumes	252,199 net s.f.

GENERAL REQUIREMENTS

The following statements of general requirements are applicable to the total library design. Specific program requirements are detailed after the general requirements

Aesthetics

The new addition should blend in an aesthetically harmonious fashion with other existing buildings in the vicinity. Landscaping and site beautification are equally important considerations.

Space Efficiency

The Main Library should achieve a space efficiency of at least 80% of gross.

Flexibility

To meet changing conditions in higher education and library management, the Main Library must possess the utmost flexibility.

Energy Efficiency

The Main Library should be designed to be as energy efficient as possible.

Ventilation

Air filtration is important to minimize dust particles introduced into the Library.

Lighting

High quality illumination of adequate intensity is essential for proper reading and study. All lighting should be controlled by central switches at the Circulation Desk. Lighting design must consider a switching system for reduction of lighting during periods of energy shortage.

Humidity

Since books and journals are deteriorating rapidly due to poor environmental conditions, constant humidity control is essential for preservation of materials.

Acoustics and Visuals

Since a library is a place for intense, concentrated study, sound needs to be suppressed as much as possible. This factor dictates carpeting throughout the building. Carpeting and wall coverings should be visibly harmonious. They should emit a feeling of light, warmth and comfort.

Graphics are equally important to the library user. While being visually appealing the library's graphics must convey a sense of location and direction to the casual user. Floor charts should be large enough to be read with ease.

Windows

To enjoy the outside weather and to provide natural light, the Main Library must have some windows. Windows must be designed and located not to allow direct sunlight on stack areas. Consideration should be given to windows that can be opened by library staff with special tools when the air conditioning system fails.

Adaptability

Although work areas may be defined, the building should be designed with maximum flexibility so that its interior may be changed without structural alteration. Columns must be designed to be unobtrusive and not to obstruct vision unnecessarily. It is desirable to locate as many fixed functions as possible around the perimeter of the building.

Communication

Communication outlet design should be commensurate with the requirements of maximum flexibility and adaptability.

Automation

The Main Library design must be consistent with the concept of a totally automated library.

Access to Building and Materials

To allow the library to be used efficiently, effectively, and economically, the library materials and services must be easily accessible. Entrance to the building should be designed to encourage a flow of traffic into the library. At the same time, the building must have only one control point to protect its materials. From the entrance, the user should easily be able to see the Circulation Desk, the Reference Desk, the Public Catalog, and stairs and elevators to the upper floors. We prefer a lateral main stairwell, easily visible and adjacent to the main entrance.

Human Resources

In its incorporation of library functions, the Main Library design must minimize the movements and time of the library staff.

Study

The building is to provide study and research space in a variety of ways: table study, individual student, private faculty and graduate study and group study. Study areas should be integrated with library materials without interfering with the logical flow of call numbers.

Material Accommodation

The Main Library must have a shelving capacity of 2,250,000 volumes. Material arrangement in the Main Library must be both logical and easily accessible by both public and staff.

Safety

The Main Library must be equipped with safety devices which meet existing State and Federal Codes. Smoke detectors and a visual alarm system are important considerations. Library materials need to be kept as safe as possible from fire and water hazards as well as from theft and mutilation.

Handicapped Users

The Main Library must meet all State and Federal Codes governing handicapped users.

PUBLIC SERVICES

Spatial and Functional Relation to Area:

Public Services is primarily concerned with satisfying the information needs of the user. To meet this goal the building must be logically arranged and have graphics which lead patrons from one functional area to another. While it is impossible to have all public service areas contiguous, they should be so arranged that each unit is easily accessible.

Services:

Every effort should be made to provide adequate electrical outlets and telephone communication. Conduit should be installed which will eventually be used for wires connecting computer terminals. This installation should be done in a manner which will give the library a great deal of flexibility.

Special Requirements:

The floor covering should be carpeted. Other acoustical material should also be used to muffle noise. Lighting should be of high quality and adequate intensity. Seating throughout the building should be comfortable and casual. All of the facilities should be designed so that they may be used by the physically handicapped

1. Lobby and Exit Control

Number Required: 1

Purpose and Function:

To be used by patrons entering and leaving the library. It also should provide security for library materials and have attractive display cases for library exhibits.

Spatial and Functional Relationship to Other Areas:

Lobby is to be on the main floor, just inside the main entrance.

Services:

Maximum electrical outlets

Special Requirements:

1. Entrance and exit should be suitably separate so that they are not confusing to patrons.
2. Electric outlets in the entrance/exit desk should be ample to handle security devices.
3. Provision for handicapped persons to enter and exit building.

Equipment:

1. One 3M Tattle Tape detection system for control point
2. Counter height desk (accommodating two people). This unit should have an automatic counter to count patrons.
3. Display cases as appropriate
4. Wall decorations
5. Floor plants

TOTAL AREA REQUIRED: 1,000 s.f.



Public Catalog

Number Required: 1

Purpose and Function:

The Public Catalog is the Libraries' bibliography. Currently the Public Catalog is in traditional card form in cabinets. It is anticipated that the Public Catalog will be automated soon. It should also be assumed that for an indefinite period many catalog records will be in card form and some will be in machine readable form.

Normal Occupancy: 75

Spatial Relationship with Other Areas:

The Public Catalog's current strongest spatial relations are with Reference, Circulation, and the Catalog Department. With an automated catalog, these spatial relations diminish greatly.

Services:

1. Adequate electrical outlets
2. Conduits for computer terminals

Equipment:

1. 50 60-drawer card catalog cases in double-face ranges on 18' centers
2. 24 2'x 5', 40" high, consultation tables
3. Space to accommodate 30 computer consoles on 2'x 3' tables.

TOTAL AREA REQUIRED: 3,150 s.f.

3. Bibliography Area

Number Required:

Purpose and Function:

To house national and trade bibliographies which are used by the Library staff and patrons.

Normal Occupancy: 10

Spatial and Functional Relationship to Other Areas:

Should be near the Public Catalog. Should be easily accessible by the Technical Services and the Reference Department.

Services:

1. Adequate electrical outlets
2. Conduit for computer terminal

Equipment:

-
1. 40 double-face sections of shelving or 80 single-face sections of shelving
 2. Consultation tables at counter height or consulting shelves

TOTAL AREA REQUIRED: 780 s.f.

4. Reference Department

7

Number Required: 1

Purpose and Function:

The Reference Department has the primary responsibility of helping patrons with bibliographical problems and informational needs. It is also responsible for collection development and liaison with academic departments.

The Department is divided into the following:

- A. Reference desk and shelving area
- B. Office for Head of Reference
- C. Office for Reference Librarians
- D. Workroom
- E. New-book area
- F. Study/reading area

A. Reference Desk and Shelving Area

Number Required: 1

Purpose and Function:

The reference desk has the primary responsibility for helping patrons with bibliographical problems and informational needs.

Normal Occupancy: 3
Visitors: 3-8

Spatial and Functional Relationship to Other Areas:

The reference desk should be the central point on the main floor. It should be near the card catalog and should have easy access to the serial record.

Services:

1. Telephones
2. Adequate electrical outlets
3. Conduit for computer terminal(s)

Equipment:

1. 3 desks
2. 3 posture chairs
3. 3 side chairs
4. 8 sections of lockable shelving, for ready Reference and Interlibrary Loans.
5. 2 2' x 4' tables for computer terminals
6. 2 atlas stands
7. 1 3' x 5' table, 40" high, for information leaflets
8. 10 4' x 9' index tables, double-faced and double-tiered, in five rows of 2
9. 10 ranges of 10 double-faced sections of 10" shelving, with 2 pull-out shelves per range side, to hold 20,000 reference books @ 500 per double face section. These ranges must be on 4' 8" centers.

Area required: 3,620 s.f.

B. Head of Reference Office

Number Required: 1

Purpose and Function:

To provide a private office for consultation.

Normal Occupancy: 1

Visitors: 1-3

Spatial and Functional Relationship to Other Areas:

Should be adjacent to the Reference Department work area and easily accessible by patrons.

Services:

1. Telephone
2. Adequate electrical outlets

Equipment:

1. 1 double pedestal desk
2. 1 arm chair
3. 3 side chairs
4. 2 4-drawer filing cabinets
5. 2 single-face shelving sections, wall-hung
6. 1 typing stand and 1 typewriter
7. 1 coat hook on back of door

Area required: 150 s.f.

C. Offices for Reference Librarians

Number Required: 7

Purpose and Function:

To provide offices for reference librarians to consult with faculty and students and conduct other library matters.

Normal Occupancy: 1

Visitors: 1-2

Spatial and Functional Relationship to Other Areas:

Must be adjacent to the reference desk and work area.

Services:

1. Telephone
2. Adequate electrical outlets

Equipment:

1. 7 double pedestal desks
2. 7 arm chairs
3. 14 side chairs
4. 7 typewriters and 7 typing stands
5. 7 4-drawer filing cabinets
6. 14 sections of wall-hung shelving
7. 7 coat hooks on back of doors

Area required: 125 s.f. for each office

TOTAL AREA REQUIRED: 875 s.f.

U.C. at Riverside

TO: Vice Chancellor Bovell

March 17, 1983

FROM: Joan Chambers *Joan Chambers*
University Librarian

RE: Library Minor Capital Improvement Project Proposals

Enclosed are five Minor Capital Improvement projects for the Library. They are listed below in priority order. We are hopeful that the first project, Library Alterations for Technical Processing, will be funded for 1983/84. The second project is a combination of two projects previously submitted. It was thought to be less costly and more effective to merge these into a single remodeling project for Special Collections. Two projects (nos. 3 and 5) were included last year and they are being resubmitted without change. The fourth project is a reworking of one submitted last year and has been rewritten to eliminate overlapping with other projects proposed.

1. Library Alterations for Technical Processing
2. Library Alterations for Special Collections
3. Library Alterations for Reference Services
4. Library Alterations for Circulation Services
5. HVAC Alterations for Physical Sciences and Bio-Agricultural Library

Two projects submitted last year have been deleted: 1) AVTV Coaxial Cables-- Audio Visual Distribution System, because of current plans for a campus telecommunications network and the probability that Television Cable will be installed in the near future; and 2) Music Library Alterations, because the Music Department is submitting a minor capital proposal with the Library's support which will provide adequate space to expand the Music Library while meeting other needs of the Music Department.

If you or the Building and Physical Planning Committee require any further information, we would be happy to respond. Thank you for your consideration.

/gn

Enclosures

cc: ULC (w/o enclosures)

MINOR CAPITAL IMPROVEMENT PROJECT PROPOSAL

Campus: RIVERSIDE

Project Title Library Alterations for Technical Processing

Funding Year 1993-84

Plant Ledger Title /LIB ALTS FOR TECH PROC

Campus Priority No. 4

Funding (State/Id Fee) State (Loan Fee/ Gift) _____

Account No. 957159

Cost Estimate \$65,000

Source

Category 6

DESCRIPTION:

This project includes (1) the removal of temporary partitions in Room 108; (2) dismantling library stacks now in Room 2 and reinstallation in Room 108; (3) removal of the public services counter in Room 4; (4) some minor changes to expand the office area now occupied by the Reference Department (Room 114); and (5) the removal of the Library's Photo-duplication Services Unit from Room 14 to Room 108.

JUSTIFICATION:

The purpose of the proposed project is to physically consolidate the Technical Processing Department on the basement floor of the Library (Rooms 2 and 4) and to move public services functions now in that location to the first floor (Room 108). Centralizing several public service units in one area would enhance services available to library user by relocating materials and services to within easily identifiable locations. Technical services would also be enhanced by reducing the distance, and therefore time, between tools and records. Processes which are closely associated are now physically separate from one another. Physical consolidation of processing functions would both reduce processing turnabout times and increase productivity.

CLASSIFICATION OF SPACE

- New or Additional
sqf or gsf
- Critical Life Safety
- Reclassification of
Space (2E.71)
- Other

Construction	A	\$ 54,200	81
Feas. Plans, Supervision	B	8,100	
Special Items	C		
Contingency	D	2,700	
Equipment			
TOTAL PROJECT		\$ 65,000	

John Huggan

3/12/92

the necessary environmental controls to protect and preserve these materials. Since 1850, paper manufacturers have used unpurified wood fibers in paper production and also have used alum-rosin compounds as sizing agents. In the presence of atmospheric moisture, the alum-rosin sizing generates sulfuric acid which acts to destroy the paper. This chemical reaction is accelerated by high temperature and humidity. Scientists at the Library of Congress have recommended that libraries:

- 1) maintain a temperature of 68° - 75° F;
- 2) keep the humidity between 40-50%;
- 3) keep the change in temperature and relative humidity to less than 10°F and 15%; and
- 4) install effective air filters to eliminate pollutants which have a deleterious affect on paper products.

PROJECT PROPOSAL

Project Title: Library Alterations for Reference Services

Unit Ledger Title: LIB ACTS REF SERVICES

Funding (State/Fed/Inst) _____ (Local Fee, Gift) _____ Source _____

Computer: Riverside

Funding Year: 1978

Computer Priority No: 8

Account No: _____

Cost Estimate: \$33,000

\$37,000

Category 6

DESCRIPTION:

Convert present ready-reference stack area into additional space for secretary's office and small room to be utilized for computerized literature searching services and research guide storage. Enclose area on front and one side with combination glass on top and paneling below. Divide the two new offices with solid wall having window placed near secretary's desk. Construct circular reference counter with capacity to seat two reference librarians, house a small collection of ready-reference materials, and accommodate computer terminals, for which appropriate wiring is needed. Additional electrical outlets will be required and heating and air conditioning ducts need to be rearranged. Remove long counter now used for storage.

JUSTIFICATION:

In support of the instructional programs of the University, the Library's Reference Service Department assists users by connecting them with appropriate information sources via printed material or computer and teaching the necessary skills of research methodology. Reference services work directly toward building in students the skills of inquiry and research. In meeting the objectives stated in the University of California Libraries: A Plan for Development, the Reference Services Department offers active programs of instruction (both through a formal course and integrated into established courses) and computerized literature searching. Of relatively recent origin, both programs have contributed to an increase in the number of users assisted at the Reference Desk, at a time when staffing has not increased to accommodate the new demands.

The proposed alteration seeks both to make more effective utilization of the staff and increase the effectiveness of reference services. By placing the secretary out in front, it will be possible for her to monitor the traffic at the reference desk and at the same time reduce the noise inherent in secretarial functions. The move will also lessen the congestion in the reference office, which now is actively used for user inter-action concerning library instruction and computerized literature searching. The additional space for computerized literature searching will create necessary privacy for both quick reference work and extended searching, while placing it in an area readily discernible to the users. This is designed to increase user awareness of the use of computers in libraries. Greater user demand for literature searching has necessitated the training of several reference librarians without the availability of additional space. The new "reference desk island" would create an approachable atmosphere conducive to offering a high level of research assistance. A growth in work space for the academic librarians encourages greater productivity, use of time, and, most of all, availability to users requiring consultation in computerized literature searching, library instruction, and lengthy reference inquiries.

OBJECT:

Construction	A	5,25,000	30,800	<input type="checkbox"/>	New or Additional Use or Use
Fees, Plans, Supervision	B	2,200	4600	<input type="checkbox"/>	
Special Items	C			<input type="checkbox"/>	Critical Life Safety
Contingency	D	7,500	1600	<input type="checkbox"/>	
Equipment				<input type="checkbox"/>	Reclassification of Space (28.71)
TOTAL PROJECT:		5,25,000	37,000	<input checked="" type="checkbox"/>	

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1. Remove Information Desk
2. Reconfigure Circulation Desk
 - closer to gates (or gates closer to desk)
 - added CRT's for patron access status checks
3. Combine Reference Desk and Catalog Assistance Desk
 - site to be Northeast of base of stairs
 - shape could be "u-shaped" or an enclosed island
4. Relocate card catalog and new CRT's in spine near the Reference Desk
5. Combine Microfilm Desk as Current Periodicals Desk
 - combine at Current Periodicals Desk
 - extend wall along spine to I.L.L.
 - open North wall of Current Periodicals
6. Arrange for more reference materials to be nearer to the Reference counter
 - reconfigure Cohen area
 - relocate and remove government documents workroom and office,
remove government documents desk
7. Rearrange space for Library Instruction
 - rearrange instructional area
 - possible relocation of office areas
8. Remove vending area to 5th floor lobby
 - rearrange internal space for study
9. Develop space for student computer use
 - ideal would be 24 hour access
 - develop in conjunction with UCCC
10. Rearrange space now designated for Media
 - develop in conjunction with Library Instruction Programs

1. Remove Information Desk

The information desk has not been used as a service point for several years, nor is it reasonable to expect it to be attended in the future. Students sit on it and try to use it in other ways not designed for its use.

Once the structure is removed, carpet underneath will need to be replaced. Phone lines and power lines should be terminated.

Estimated Cost: \$ _____

2. Reconfigure Circulation Desk

- closer to gates (or gates closer to desk)
- added CRT's for patron access status checks

The circulation ^{desk} needs to be closer to the security gates so that staff can be more effective handling situations when the alarm sounds. A staff member has no way to stop an exiting patron. He or she can only yell and hope the patron returns to the desk.

The desk is too massive and could be reduced in size. One scheme includes a desk centered in the middle of the hallway, with flows in and out passing each side. CRT's could be installed on the counter and/or against the west wall.

Another approach would be to eliminate the current desk and the wall near the exit gates and install a flexible desk unit near the gates. Additional counter space could be lined up along the west wall..

If the current desk were retained, additional structural support will be needed for terminals on the north side.

Estimated Costs:

- A) Remove circulation desk; install flexible unit desk in center of entry way - \$ _____
- B) Remove circulation desk and west wall; install a long flexible unit desk from the exit gates to the elevators - \$ _____
- C) Move exit gates closer to current circulation desk - \$ _____
- D) Reinforce structure of current circulation desk - \$ _____

3. Combine Reference Desk and Catalog Assistance Desk

- site to be Northeast of base of stairs
- shape could be "u-shaped" or an enclosed island

Current reference service is too remote for patrons to find, especially with no information desk in operation. Further, staffing efficiencies and improved effectiveness will result from combining these two service points at or near the present site of the Catalog Assistance Desk.

The desk should be counter-high and assembled from moveable, flexible components. Storage of reference tools in a secure location under the counter is required. The desk will also need to support several CRT's.

The current small reference desk should be removed.

Estimated Costs: \$ _____

4. Relocate Card Catalog and New CRT's in Spine Near the Reference Desk

OPTION ONE

At some point in the future there will no longer be card catalog cards, nor the cases, and only computer displays. Right now no CRT's exist, but in July, 1984, thirty terminals will be available. Neither will have all the information from that moment on, but the phasing out/phasing in may take fifty years or more.

Both provide the same reference function (although the computer-based system does a lot more). Both need to be near the reference desk and they can easily be mixed. Power and communications are needed for the CRT's.

The number of CRT's will be approximately 27. Furniture (whether stand-ups or sit down, will also need to be planned. Approximately 10 printers are to be installed too.

Estimated Costs: \$ _____

OPTION TWO

Removing walls contingent to the spine around rooms 450, 451 and 447 would create a larger area for the card catalog and allow other areas in the spine to remain open. CRT's should be placed under the first baffled area once the cube-like seats are removed.

Estimated Costs: \$ _____

5. Combine Microfilm Desk and Current Periodicals Desk

- combine at Current Periodicals Desk
- extend wall along spine to I.L.L.
- open North wall of Current Periodicals

Microform collections are expanding and increased use of microfilm requires additional space. Extending the wall along the spine to the ILL office would create a larger, controlled area for periodicals and microfilms. Combining service points would aid both in efficiency and effectiveness for staff and patrons.

Microform equipment and current periodicals would switch current space. Electric would have to be moved. The wall extension to ILL would require fire exits. The wall between the two right now would need a passageway; the rear entry would need an "emergency exit only" door.

Estimated Costs: \$ _____

A second option would be to remove the wall between the two areas.

Estimated Costs: \$ _____

6. Arrange for more Reference Materials to be Nearer to the Reference Counter

- reconfigure Cohen area
- relocate and remove government documents workroom and office,
remove government documents desk

Reference materials are not visually close to the current reference and will be further away when the reference desk is moved to the spine. High shelving now close to the reference area does not allow patrons to open and read materials unless they take them to a table or work on the floor. A series of High-Low shelves would allow greater visibility and better access to referenced materials.

Extending and modifying the Cohen area would take advantage of natural light for reading and square-off the angle to allow more usable shelving for reference materials.

Estimated Costs: \$ _____

Since the Documents staff could be moved to the Reference office and rearranged with library instruction, the current Documents office area could be eliminated, including the Documents counter. This counter has never been opened. Additional reference materials could then be brought forward and placed near the reference desk.

Estimated Costs: \$ _____

7. Rearrange Space for Library Instruction

- rearrange instructional area
- possible relocation of office areas

Library Instruction classrooms, rooms 462, 463, 464, and 465 are located in the northwest quarter of the building. Staff are located in the reference area, 401N, in the southeast quarter.

This Phase II project has Phase I contingencies determined in part by the movement of Government Documents and the timing of user education with the CRT's.

8. Remove Vending Area to 5th Floor Lobby

- rearrange internal space for study

Food, vermin, bugs and library materials are a bad combination. Placing the vending area adjacent to, but not in the library, should help to control eating and drinking in the building. The fifth floor lobby is approximately the size of the area where the machines are now, plus the area under the skylight.

For additional space, the outside walkway could be enclosed with glass and metal. This would provide an almost equal amount of space.

Delivery of food is available from a fifth floor access. Water and electric would be required.

Inside the library, additional stack space and reader space would be available.

Estimated Costs: \$ _____

9. Develop Space for Student Computer Use

- ideal would be 24 hour access
- develop in conjunction with UCCC

With the increased use of computer technology by students, faculty, and staff, and the recent inclusion of UCCC in the Office of the Provost, greater pressure will be on the library to identify space in or near the building for an Input/Output (IO) Center.

A small facility in the old IMC, 475 Central Library, will be open in June, 1983, but long-term strategies need to be developed and tested with a number of people.

10. Rearrange Space now Designated for Media

The entire northwest corner of the Central Library should be reevaluated and redesigned in light of the instructional mission, goals and strategies. Media Services should be part of the development to find appropriate technical strategies and match with patron needs.

TRADITIONAL CUSTOMER NEEDS

Selection

Acquisition

Catalog

Reference

Circulation

Current Periodicals

ILL

Reserves

U.C. Faculty

- Research materials and space
- Graduate teaching materials/documentation
- Undergrad teaching materials

U.C. Students

- Grad research materials and space
- Undergrad research/teaching materials and reader space

U.C. Alumni

- Research materials
- Reading space

GCLC

- High School to Adult - research materials and reader space
- Corporate research materials

Other

- General Public
- Research materials and reader space

Financing

- Tuition
- State Subsidy (Taxes)
- Grants, contracts, endowment
- Gifts

CURRENT CUSTOMER NEEDS

J.C. FACULTY

- Information
 - Search of "what's been done"?
 - Who is now doing what?
 - Computer, document new data
- Laboratory to experiment (pos)
- Time to write, document
- Space to prepare document
- Funding sources
- Equipment, staff to help
- Course design

U.C. GRAD. STUDENT

- Information
 - . Literature search
 - . Key persons
 - . Compilation
- Possibly same as Faculty
- Possibly course design
- Study/Reading space

U.C. UNDERGRAD

- Information
 - . Basic for given course
- Social Space
 - . "between classes"
 - . "9:30 mixer"
- "Sleeping space"

CENTRAL LIBRARY

- Not as much applied research
- Mostly book people, humanities, social sciences
- Active Efforts to show/demonstrate/tell
HOW to find out themselves
(Library Instruction)
- Acquire materials not in Collection (ILL)
- Acquire information as to what has been done (Data Base searching)

U.C. ALUMNI

- More thorough search than Public Library

GCLC

- Key loaner of materials

OTHER

- Special needs for information
U.C. Libraries - best place

POSSIBLE FUTURE CUSTOMER NEEDS

U.C. FACULTY

- All the same except financial resources will decline
- Other Colleges/Universities in same fix
- Library Automation
- Communication Technologies
 - . CATV
 - .. Numerical Data Bases

U.C. GRAD STUDENT

- Same Activities /less \$

U.C. UNDERGRAD

- Campus Students same activities/ less \$

U.C. ALUMNI

- Same, but growing need to retain
- Potential source of \$

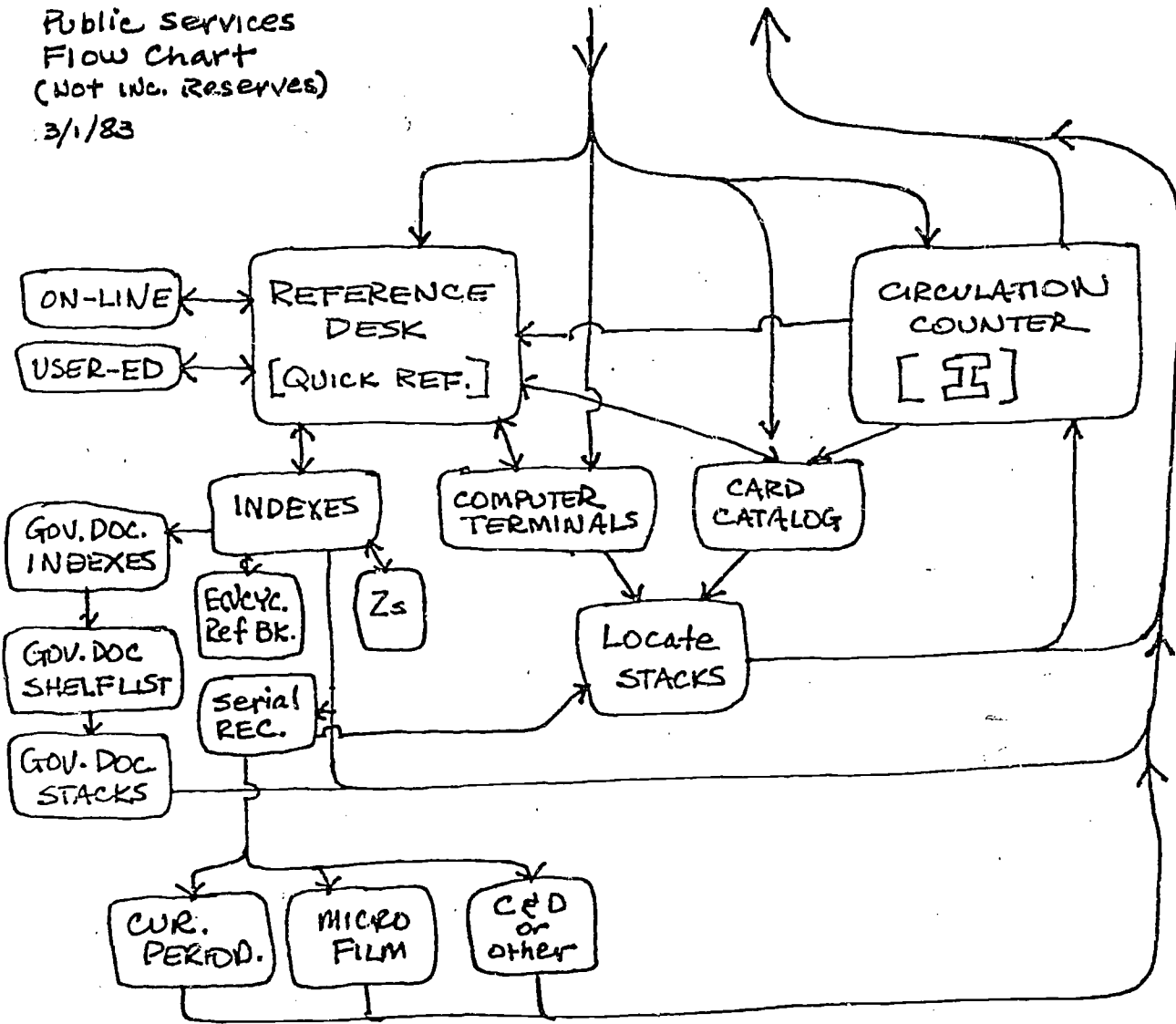
CORPORATE TRAINING

- . Specific skills needed to fulfill GOALS of ORG.
- . Background literature Search on specific situation
 - Strategic Planning
 - Decision-Making
 - Technical Information
 - Holistic Thinking
 - Ecological, Gov., Legal, Medical information
- . Potential source of \$

GCLC

OTHERS

Public Services
 Flow Chart
 (Not Inc. Reserves)
 3/1/83



BIBLIOGRAPHY

Cohen, Aaron. Designing and Space Planning for Libraries. New York: Bowker, 1979.

Ellsworth, Ralph E. "The ABC's of Remodeling/Enlarging an Academic Library Building: A Personal Statement" The Journal of Academic Librarianship 7(6)334-43. January 1982.

Mason, Ellsworth. Mason on Library Buildings. Metuchen, NJ: Scarecrow, 1980. (Chapter 2 and Appendix II)

Poole, Frazer G. "Planning the College Library Building: Process and Problems" in College Librarianship ed. by William Miller. Metuchen, NJ: Scarecrow, 1981. (pp. 233-82)

Thompson, Godfrey. Planning and Design of Library Buildings. 2d ed. New York: Nichols, 1978.

