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ABSTRACT

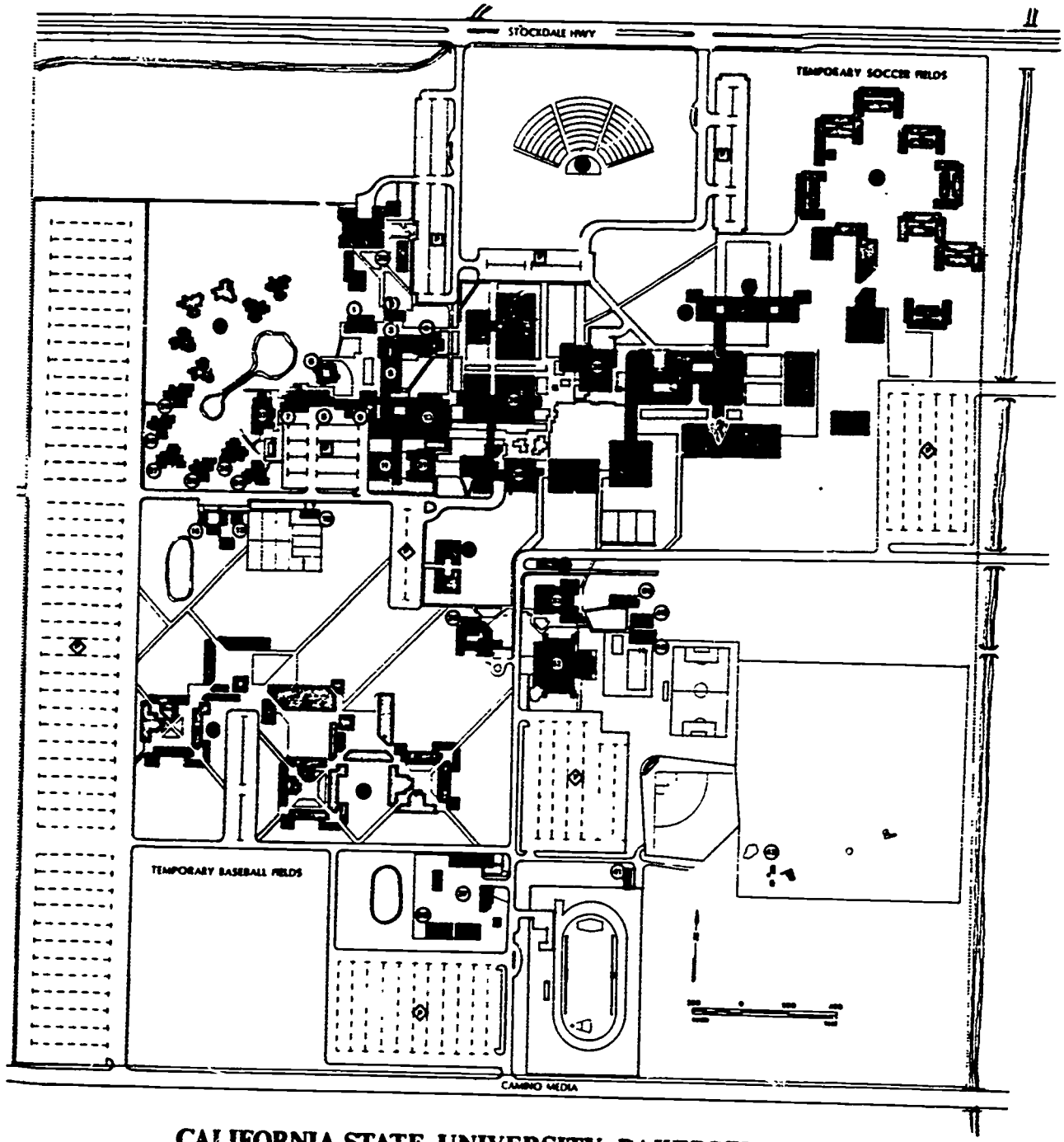
The goal of the new Stiern Library at California State University at Bakersfield, as outlined in the introductory comments to these building and design specifications, is to bring together under one roof the various sources of the university's information and knowledge--i.e., library, computing, and media services--and to deliver information physically, electronically, and through broadcast. It is noted that, if the library is to be successful, it must be a humane place which is warm, inviting, and attractive, and encourages students and faculty to use its facilities. The specifications discuss general conditions for the future library, and describe each area, including: (1) the circulation area; (2) the reference area; (3) government publications area; (4) reader areas and facilities; (5) stack areas; (6) media areas; (7) computer access; (8) technical services areas; and (9) administrative offices. Specifications for each area list its square footage, purpose, features and requirements, spatial and functional relationships, services, and equipment required. The appendix serves as an index and also summarizes data about the specifications (e.g., room dimensions). An executive summary with references to the main report, a graphic representation of the campus master plan, and a summary of spatial relationships are included. (SD)

California State University, Bakersfield

Walter W. Stiern Library

Project Specifications

July 14, 1989



CALIFORNIA STATE UNIVERSITY, BAKERSFIELD

CAMPUS MASTER PLAN

APPROVED SEPTEMBER 1980

FACILITY LEGEND: EXISTING FACILITY *Proposed Facility*

Master Plan Enrollment 12000 FTE

1. CLASSROOM BUILDING
2. FINE ARTS
3. LECTURE BUILDING
4. PERFORMING ARTS
5. STUDENT SERVICES
6. FACULTY BUILDING
7. COUNSELING-TESTING CENTER
8. ACADEMIC ADMINISTRATION
9. ADMINISTRATION
10. LIBRARY
11. PLANT OPERATIONS
12. SHOWER-LOCKER
13. SUPPORT SERVICES
14. CHILD CARE
23. DINING COMMONS
24. RESIDENCE HALL A
25. RESIDENCE HALL B
26. RESIDENCE HALL C
27. RESIDENCE HALL D
28. RESIDENCE HALL E
29. RESIDENCE HALL F
30. SCIENCE BUILDING
31. HOMBERG NURSING CENTER
32. DOROTHY DONNOR HALL
35. PHYSICAL EDUCATION
36. STUDENT HEALTH CENTER
37. CORPORATION YARD
38. CAFETERIA BUILDING
39. DORE' THEATRE & TODD MADIGAN ART GALLERY
40. HANDBALL COURTS
41. OUTDOOR P.E. STORAGE BUILDING
42. ENVIRONMENTAL STUDIES AREA
43. *Library*
44. *Classrooms*
45. J.R. HILLMAN AQUATIC CENTER
46. *Natural Sciences*
47. *Business*
48. *Industrial Technology*
49. *Health Science and Physical Education*
50. *Behavioral Sciences*
51. *Administration*
52. GYMNASIUM
53. *Student Union*
54. *Village B*
55. *Village A*
56. *Central Plant*
57. *Humanities*
58. WELL CORE REPOSITORY
59. *Student Housing*
60. *Public Safety*
61. T. ANTONINO SPORTS CENTER
62. *Campus Entry Development*
63. TEMPORARY BUILDINGS

CAMPUS BOUNDARY
EXISTING
FUTURE

PARKING
EXISTING LOT
FUTURE LOT
7000 TOTAL SPACES

BUILDINGS
EXISTING
FUTURE
TEMPORARY

EXISTING STRUCTURE
FUTURE STRUCTURE

TABLE OF CONTENTS

* Staff work stations do not indicate total number of staff, but the number of places where staff might work.

Summary of Spatial Relationships

This table summarizes the spatial relationships between the various functional areas, the entrance, and the stairs and elevators. Within functional areas there may be additional spatial relationships to observe; those are not shown here.

"Must be near" means within 100 feet or at the top and bottom of a staircase.

Area	Must Adjoin	Must be Near	Proximity Desirable
Circulation	Exit	Stairs & Elev Listening/Viewing Reference	RRR/24 Hr
Reference		Entrance Stairs & Elev	Gov Pubs Periodicals
Gov Pubs	Either Reference or Serv Point #3	Reference	
Technical Services		Receiving Periodicals	
Administration			Entrance
Reader Areas			
RRR/24 Hr Rm	Own entrance	Circulation	
List/View Room	Either Circ or Service Pt 3	Circulation	
Instruction Rooms		Stairs & Elev	Reference
Reading Room		Entrance	
Stack Areas			
Periodicals Stacks	Either Reference or Service Pt 3	Reference	

PROJECT SPECIFICATIONS

EXECUTIVE SUMMARY

This Executive Summary of the project specifications, or building program, for the Walter W. Stiern Library outlines in general terms the scope of the project and highlights many of the essential services to be contained in the building. Page references are given for specific programs, services and activities which are then described in detail in the specifications. These specifications were written by the staffs of the CSUB Library, the Media Center, Computer Services, Plant Operations and edited by Rodney Hersberger, Director of Libraries. In writing the program the staff drew on their collective experience, on their reading of the extensive literature about library buildings, and on visits to other libraries.

The program first discusses a score of considerations applicable to the building as a whole. Then it describes, one at a time, almost one hundred rooms or spaces within the building. For each room or space the program shows the purpose, the amount of floor space required, the relationships to other areas, the key special features and requirements of the room or space, and the furniture or equipment that will go there.

PREFATORY MATTER (p. i-v)

The Table of Contents does double duty by showing the Assignable (Usable) Square Footage (ASF), the number of seats for users and the number of staff work stations for each area programmed. It might be noted here that the building is to be more than a library; rather it will be an information center housing media services, most student access computer workstations, instructional television studios as well as CSUB's collections of books and other printed material. Approximately one-eighth of the usable square footage will be devoted to media and a tenth to the computer access. About forty percent of the space will be for book stacks and about twenty-five percent for the seating of readers.

A one page table summarizes key spatial relationships for the library portion of the building.

GENERAL CONDITIONS (p. 3-12)

The building is expected to have a gross area of about 153,400 square feet; the net assignable area will be 109,635 square feet. A building so large will probably have four or five floors. Despite the new building's large size, a way to expand in the future must be planned.

There will be a single public entrance to the library, but sections instructional television and some of the computer access services areas will have separate entrances. Theft detection units rather than staff will provide most of the security for the library's collection.

The general conditions section is largely devoted to physical elements of a library such as carpeting, lighting, ventilation and other mechanical systems, elevators, stairs

and so forth. However, there are a few functional elements in this section such as general design considerations, disabled access, and internal human circulation to name a few. Overlaying all functional and physical considerations is the requirement that the building be modular in design with as few fixed internal elements as possible to permit rearrangement and remodeling in later years.

CIRCULATION AREA (p. 14 - 27)

A key fact in planning is that the library will have a small staff for so large a building. One strategy for that situation is to cluster services to minimize the number of service points, which is the only way a small staff can keep a library open long hours.

Accordingly the Circulation Desk, the busiest of the library's service points, will be home to four services:

Exit Control
Book Checkout
Reserve Books
Media for Students

At busy times five or six assistants might work at the desk, some charging out books or dealing with user problems while others supply students with reserve books, video cassettes, or compact discs. But late at night one person might cover the desk singlehandedly.

The Circulation Area will adjoin the entrance and exit. The desk, it is hoped, will face the stairs and elevators so that people coming down from the stacks on the upper floors can check out their books on their way to the exit. Exit control will be as at present. Packages and bags will not be inspected unless they set off the alarm.

The Interlibrary Loan Office will be located in the Circulation Area so the two functions can share staff and equipment.

REFERENCE AREA (p. 28-36)

Reference librarians employ four main tools to help users: the catalog, paper indexes, compact disc indexes linked to microcomputers, and reference books. The program provides for a Reference Desk located in the midst of these four tools but also in plain view from the library entrance.

The catalog will soon be online. Computer terminals, some with printers, will access the catalog. These terminals will be scattered throughout the building but a main The printed indexes, the traditional guides to the periodical literature, will occupy 1,380 square feet of floor space near the Reference Desk. Equipment for the compact discs which are gradually replacing the indexes will occupy an adjacent area of the same size. Up to thirty work stations for users of the compact discs will be provided.

The reference books will occupy 2,200 square feet near the Reference Desk. Reference collections vary greatly in size. The CSUB librarians want a relatively small, lean, compact collection from which low-use material will be discarded or sent to the circulating collection.

Auxiliary areas include a workroom for support staff two rooms for online searching, and offices for librarians.

GOVERNMENT PUBLICATIONS AREA (p. 37-39)

The government publications, whose users very often need a librarian's help, will be near the Reference Area. This area of 3,820 assignable square feet may also house a map collection currently held by the Geology Department.

READER AREAS AND FACILITIES (p. 40-57)

Seating for readers will be scattered throughout the building, as at present, but there will be a greater variety of accommodations. In particular, faculty and graduate students will be provided for better than they are now. There will be twenty five, single-person studies for faculty, each the size of a small office, and twenty built-in carrels for graduate students.

The bulk of the general purpose seating will be at tables and carrels located throughout the book stacks, similar to the present building. Much of this seating may be on the perimeter of the building between the stacks and the windows.

Students who wish to study with their classmates will have fourteen group study rooms from which to choose. For students who want to study late at night, a room of 720 assignable square feet will be arranged so that it can be left open when the rest of the building is closed and locked.

One large and three small rooms will have electronic equipment for students using media. The larger rooms will have thirty media carrels equipped with earphones. These rooms will be near a service point where the video cassettes, sound recordings, and other media will be housed and loaned. For the first time at CSUB, listening to or viewing media will be as easy and convenient as reading books or magazines.

There will be two rooms for bibliographic instruction. Other special purpose space will include a small room for visually impaired students, forty work stations for reading microforms, and copier rooms.

One unique reading area is planned. The "Casual Reading Area" is described on pages 38-39. This sizable room near the entrance will be an unusual combination of a browsing area like that in the present library, exhibit cases for library displays, locking shelving for the display of rare books or special collections, and pedestals, niches, and gallery walls for the display of the sculpture and paintings that libraries inevitably accumulate. The furnishings and the floor and wall coverings will be semi-luxurious, provided that private funds can be raised for this purpose. The goal is to make a very attractive reading area that will be heavily used; the model is the Morrison Room at UC Berkeley.

Also described in this section on page 36 is a "Third Service Desk." (The Circulation and Reference Desks are the other two.) A key goal in planning is to minimize service points, but it seems unlikely in a building as large as this that the architect will be able to locate all the collections and equipment whose users need frequent help in such a

way that two desks will suffice. A third desk on the floor above or below the entrance level will probably be necessary.

STACK AREAS (p. 58-65)

The stack areas will occupy about half the library portion of the building. The stacks will be open to users, as in the present building. The ranges themselves will be braced for safety in earthquakes and a sprinkler system is a possibility. The ranges will be spaced 4'8" on center, as in the present building. The architect will be asked to consider stack lights that turn themselves off when no one is in the aisle.

Present plans are to continue shelving the periodical backruns in their own collection separate from the books. The curriculum collections will continue to have their own area and there will be a section for microforms.

MEDIA SERVICES, INSTRUCTIONAL TELEVISION, TECHNICAL CENTER (p. 66-84)

Among the major areas in this complex are a workroom for students and faculty to produce simple visuals for classroom presentation; a production area for television, photography, and audio production; an equipment room from which projectors and other equipment will be loaned to students and faculty; and an electronic distribution room that will be the heart of a campus cable TV system.

A closely related group of rooms will support the university's instructional television program. The core of this area will be two large studios from which broadcasts will originate. Each studio will have a control room.

The Technical Maintenance and Repair Area will be the workroom for eight technicians, which will include an electronic service area, a woodworking area, and a metal shop.

Most of these functions will operate largely independently of library activities and some areas will have their own entrances. Another category of media services will be provided elsewhere: the collections of video and audio cassettes, compact discs, and similar forms will be stored at the Library Circulation Desk or near the third service desk and played on equipment in the nearby Listening/Viewing Room and its satellites (pages 44-45).

COMPUTER ACCESS (p. 85-87)

The program provides for five student access computing facilities. The largest is a general purpose area equipped with eighty microcomputers of various kinds. This room will be for the use of individuals, not classes. Most software will be served through a network rather than by diskette. Classes will be served by four other rooms, each devoted to a different computing standard. These four spaces will have a total of 120 workstations.

TECHNICAL SERVICES AREA (p. 88-98)

It is in the Technical Services Area that the library's print and nonprint materials are acquired and organized for use. The area proposed is only a little larger than the present Technical Services Area. The increase in workload likely as enrollment increases will be balanced by labor-saving automation. Because methods of work are changing in unpredictable ways, the area must be as flexible as possible.

ADMINISTRATION AND OFFICES (p. 99-109)

The program provides offices for ten librarians (there are seven at present) and for up to five persons in the administrative suite (there are two at present). This is a small number of offices for the size of the building. The sizes of the offices are prescribed by a formula.

California State University, Bakersfield

Walter W. Stiern Library

Project Specifications

INTRODUCTION

A university library should represent mankind's cultural progress and intellectual richness. The goal at California State University Bakersfield (CSUB) for the Walter W. Stiern Library is to enhance student and faculty access to all intellectual resources by combining the power and diverse capabilities of telecommunications, computing, aural and visual media, and print under one roof. Service-minded professionals from various areas will likewise combine their abilities and talents to offer efficient and effective programs and services to learners and researchers. Since the Stiern Library is to be an information center, hopefully there will be few false dichotomies among the various media. Information and knowledge seekers will discover their answers from whatever media are appropriate.

The heart of this information center will be the traditional library. In spite of many technological changes, printed information continues to grow at phenomenal rates. And, certainly, new knowledge does not replace old knowledge; in fact, knowledge grows exponentially. College students today and for some time to come will rely heavily on books and periodicals to supplement their classroom lectures and textbooks. What is new and ever changing is that technological advances continually enhance access to information, thereby increasing the thirst for more printed and non-printed sources of information. It can also be assumed that, before this library is even built, there will be new technologies for accessing information which are not yet invented. Rapid change and new methods of information access can be expected for some time after the Stiern Library is completed. The goal in the Stiern Library, then, is to bring together under one roof the various sources of the University's information and knowledge--the library, computing, media services--and to deliver information physically, electronically and through broadcast. State of the art telecommunications are necessary to tie and unite the various elements into a cohesive whole.

The idea of a library as an information center recognizes that the value of information and knowledge-based resources comes from their content, not their format. Information and knowledge resources come in several formats: print, digital, video and sound recordings, broadcast and combinations for these formats. The information center will draw from all formats to satisfy users' informational, learning and research requirements and, thus, will become the hub of the students' learning experiences outside the classroom. Yet to be successful, the Stiern Library must be a humane place, with a warm, inviting, attractive environment which encourages students and faculty to use and enjoy the Library.

Because this project will benefit the entire community, there appears to be considerable community support for enhancing the Stiern Library with private funding to supplement the State budget. It is hoped that these funds will be raised during the

design process.

It is intended that these Project Specifications serve as basic conceptual guidelines for the Project Architect. The Architect should study these Specifications, the Program Planning Guide (September 1988), the CSUB Campus Master Plan and the design of the existing University physical plant prior to engaging in in-depth planning discussions with campus representatives.

GENERAL CONDITIONS

The following general information must be considered in the architectural design of the Walter W. Stiern Library. Each room is discussed individually in the Room Specifications (PPD 2 - 6) in another section of these instructions.

Architectural

California State University, Bakersfield is a relatively young institution which has been built over the past twenty years. While the buildings are by no means identical, there is an architectural compatibility among the various structures which will be continued. This library will be the largest building on campus. The architect will design the library to be harmonious with other campus buildings and to comply with the facilities Master Plan but, at the same time, the library should have its own character and certain unique aspects. The Library s design should be compatible with the CSUB Campus Master Plan; it is subject to review by BFGC, the University's Consulting Architects.

The building is funded to have an assignable square footage of 109,635 which shou d yield a gross square footage of about 153,400. Monumentality is not suggested but the library should be impos ng. It is anticipated the library will have at least four floors but any kind of towe: of many small floors is not acceptable. There is fierce competition for library programs and services to be located on the main level. For those services not gaining the first floor, the second floor is often the next desirable location. The architect will consider placing one level below ground; the building would then have the advantage of two second levels. If a floor is placed below ground, the architect must strongly consider design elements which will allow fenestration to at least part of the level below ground.

Any type of atria or mezzanine which would require library users to walk around an opening to reach another part of the floor will not be considered acceptable. Atria and mezzanines are also very energy inefficient.

Location

The location of the Stiern Library has been generally predetermined by the University's Campus Master Plan, a copy of which has been included in this booklet. The precise site plan should be established by the Project Architect after study of adjacent related facilities and discussions with the University staff and the CSUB Consulting Architects.

Expansion

The Campus Master Plan indicates this building is the first increment of a permanent library. Technological advances in storing information electronically and high density storage techniques for printed material may influence the future of any e pansion. Consequently, since this library may be expanded in later years, the architect will consider both the direction of expansion and how expansion might occur. However, this building must not look like a structure waiting to expand.

Structure

It is widely recommended that a library's floors be capable of supporting a live load of 150 pounds per square foot throughout the floor. During and after schematic design, the architect should advise the campus about the possibility and extra cost of designing certain areas to support a live load of 300 pounds per square foot. These areas might be used later for movable compact shelving.

This building should be of modular design. Since California Administrative Code, Title 24 parts 2, 3, and 5 requires a 36" clear aisle at the base, the stack ranges will be placed on 4'8" centers. The bay sizes, therefore, must also be in multiples of 4'8" on center. One can be certain the stack areas will one day require more space and new technologies will influence library management. Therefore, except as required by code for earthquake safety, there should be no interior load bearing walls.

The building must comply with all state building codes. It should be of the highest quality standards of materials and workmanship within budget and existing standards for public buildings.

Traffic Patterns

The orientation of the library's single public entrance is important both symbolically and practically. The architect must consider the foot and automobile traffic patterns of students, as well as the climate when locating the entrance.

Climate

Bakersfield's climate is both extreme and temperate. Summers are very hot, arid and dusty, with daily highs of more than 100 degrees F common from June through September. The other seasons are generally mild to warm, but below freezing temperatures are possible in the winter. Fog, sometimes prolonged, is common in winter, especially December and January. The building's design should reflect the region's climatic considerations. More importantly, the building should be as energy efficient as possible to minimize utility costs and comply with energy code restrictions and the very rigorous CSU energy conservation program.

Adaptability and Flexibility

For flexibility the library should be of modular construction. The library's needs will change, sooner or later, so fixed core elements must be considered very carefully. Their location will affect not only immediate use patterns but the flexibility desired later.

This building must also include a high degree of flexibility throughout in using new and yet-to-be developed technologies. We can anticipate a continuingly greater reliance on electronics and communications to access information within the building, within the campus and beyond the building and campus. The building must, therefore, be designed to provide the capability for technological change in designated areas.

Environment

The University is concerned with a number of environmental issues. Among these are water usage relating to landscaping, endangered wildlife which may be resident on campus and the deteriorating air quality in the southern San Joaquin Valley. The architects must become familiar with these issues and attempt to address them in the building's concept and design as well as in the landscaping surrounding the library.

Mechanical

Mechanical systems must be designed to insure the preservation of library materials and provide reasonable comfort for library users. Since materials and people must coexist, mechanical systems should generally provide an environment between 68 and 78 degrees F and 45--55% relative humidity. There may be some differing conditions for special use areas. Particulate filtration will be necessary throughout.

As mentioned earlier, operation of the University's mechanical systems is subject to strict energy conservation mandates. Design of the Library HVAC configuration must be compatible with that conservation program and should include the latest features in control devices and energy-efficient components. The architect should consult with the CSUB Director of Plant Operations to assure proper design coordination. Information on the CSU energy conservation program will be provided to the architect by the Chancellor's Office. A feasibility study of various mechanical plant options for support of the Library has been completed by BFGC; the Project Architect should employ that study as a planning reference.

The location of the make-up air intakes for the air condition and ventilating system should be diametric to the prevailing northwest winds and be of sufficient height above the ground to minimize the entrance of ground level debris into the filtration media and duct systems.

Lighting

Lighting is one of the most critical elements in a library. Well lit surfaces, both overhead and at the sides, visually enlarge volume, thus contributing to an atmosphere in which one wishes to work. Complete uniformity of brightness creates a sterile environment, however. Energy efficiency, comfort, glare, contrast, intensity and flexibility are all considerations when designing a lighting system.

Since it is recognized that lighting, like art, can be controversial and that what pleases some will not please others, the architect and engineer must exercise great care in proposing a lighting system. It is expected there will be different solutions for offices, work areas, stacks, open study areas, closed study areas, class and other meeting rooms, the entrance, corridors and so forth. For some reading areas, it may be appropriate to provide ambient lighting through indirect illumination reflected from the ceiling and vertical surfaces. Ambient lighting, if used, must meet the required fc listed below. If the architect proposes the use of any high-intensity discharge lighting, its advantages and disadvantages should be well reviewed with the client early on. Solutions proposed for open reading and stack areas should have the flexibility to be

modified when the library's needs change. Lighting must be controllable from the Circulation work area.

Some library building and design consultants recommend individually controlled stack range lighting to save energy and energy costs. The architect and engineer should study this option very carefully and make appropriate recommendations. The library is serious about considering individual stack range lighting but we would like the option well researched prior to making a decision. A mock-up of the proposed lighting solution would be appropriate.

If compatible with the CSU energy conservation guidelines, lighting design should maintain the following levels as measured in foot candles, based on 100% lamp replacement and luminaire cleaning once every three years:

Lobby (exclusive of service points)	20 fc
Reference, circulation, catalog and other service points	50 fc
Reading and computer workstation areas	50 fc
Bookstacks (30 inches above floor)	30 fc
Offices and other work areas	50 fc
Listening/viewing area (rheostatically controlled)	30 fc
Microforms	30 fc
Restrooms	30 fc
Corridors and stairs	10 fc
Areas for visually impaired students	70 fc

(This table is adapted from requirements in the building program for the remodel of the Myer Undergraduate Library at Stanford University.)

All interior lighting should be switched from the Circulation Workroom. Outside lighting should be controlled by nature. Emergency lighting should be provided for public safety as required by code. All fluorescent lighting fixtures shall be 277 volt.

Electrical

The building's electrical system shall conform to all applicable codes and to the standards established by the University for campus buildings. The electrical system design for the long-term need for functional flexibility in selected portions of the building. Adequate service must be provided to all areas in consideration of immediate and future expansion. Electrical outlets (grounded, three-wire) should be available on all walls in all usable rooms (110v, 60 cycle single phase unless otherwise noted in Room Specifications). Extra outlets should be provided at high use areas and near electrical devices. Attention to grounding will be necessary as per applicable codes. Refer to PPD 2 - 6's for specific requirements.

Building hallway convenience outlets shall be multi-circuited to allow multiple use of power floor machines and other equipment simultaneously.

Ten percent spare open conduit risers shall be installed in the wall from each electrical panel to the ceiling to facilitate the adding of additional circuits and additional equipment.

All electrical design shall be compatible with energy conservation requirements.

Plumbing

All plumbing services should be installed (i. e., gas, water, air, etc.) with consideration for future expansion. The architect should refer to the Room Specifications for specific requirements. Attention must be given to the protection of underground utilities from chemical damage associated the alkaline soil of the area.

The location and elevation of buried gas pressure regulating valve vaults will be situated at elevations necessary to preclude excess flooding. The porosity of the soil beneath the open-bottomed concrete vaults must be conducive to optimum and rapid percolation.

All gas piping above and below grade inside and outside buildings shall be standard-weight black steel Schedule 40 with 150 psi fittings, and all below grade piping shall be wrapped with at least 10 mil approved tape with a 50% overlap.

All water and air piping is to be the same as the gas piping, except it shall be standard-weight Schedule 40 galvanized iron. Irrigation piping outside of sidewalks, buildings, planters, curbs, and roadways may be PVC or similar type of pipe.

Fire Protection

The building's fire protection systems shall be designed to conform to all applicable codes and to the standards established by the University for campus buildings. Fire detection devices should include electronic detectors and manual pull stations and alarm devices must meet the requirements of audibly and visually impaired persons. Alarms must be connected to the University's existing detection and monitoring network. The methods of alarm monitoring and fire extinguishment should be determined in consultation with University officials, taking into consideration such factors as the local capability for rapid response to a detected fire condition, fire water sources and fire vehicle access. If code or circumstances indicated the need for sprinkler systems in all or part of the building, the system must be carefully designed and specified to minimize the potential for water damage to the building contents.

The design of mechanical, electrical, fire protection and building security systems must be carefully coordinated and integrated to provide effective building protection.

Security

The reader will note later on that, in addition to the traditional library, this building is programmed to contain a media center, computer labs, instructional television studios and various repair shops. The television studios and the repair shops must have separate entrances and be secure in their own right. Although provision should probably be made for access to the studios from the rest of the library, such access would have to be tightly controlled. The library itself will be designed with only one public entrance and exit. Access to the media center should be through the single public entrance mentioned above. The computer labs should have dual access both

from within the Library and from outside, but only on an either/or basis. A book theft detection system will be used. All other exits as required by code must have an alarm system designed for maximum protection of the building's contents. If within the project budget, preferably this alarm system will be on some sort of time delay to allow library staff to respond to a breach of security before the patron can exit.

The receiving area/loading dock is always a difficult area of a library to plan securely and needs special attention from this point of view. Also, it must not be a de facto staff entrance for library, custodial or maintenance personnel. Finally, most balcony arrangements for outside reading are a security problem and therefore are unusable.

Disabled Users

The building must of course meet the code requirements for access and use by disabled persons. The building and its layout will thoughtfully consider the needs of our disabled users, since the University is fully committed to a comprehensive program of disabled support services. Automatic opening devices should be provided for key exterior doors.

Room Surfaces

All rooms with a high use level should be provided with a surface which will be maintained as easily as possible. Light colors are preferred, with the use of accent colors encouraged to keep rooms bright and pleasant. Ceilings, where economically possible, should have acoustic qualities, particularly in high use and noise level rooms. The University is particularly interested in participating in color and materials selection. If private funding permits, the University will hire an interior designer to work on that part of the project.

All paints, varnishes, enamels, lacquers, stains, paste fillers and similar materials must be used only in accordance with the manufacturer's direction label on the container. The painted surfaces will be of sufficient mil thickness to withstand normal wear and cleaning.

Floor Coverings

The public areas of the building should be carpeted throughout except for the entrance lobby. The architect should also keep well in mind that carpet in certain parts of a library wears at much higher rates than does carpet in other areas. The entrance area should not have carpet. Instead the architect will consider some attractive, yet durable, flooring covering such as brick pavers or stone, if these types of materials are within the budgetary limitations. There is concern by some about noise from brick or stone floors, especially noise made by loaded book trucks over such a surface. Floors in work areas are generally to be covered with vinyl. The architect must give careful consideration to the floor covering of the public stairs. They will receive very high use and the covering should be durable, attractive and quiet.

Libraries depend heavily on book trucks. Threshold plates between carpeted and noncarpeted areas must be as flat as possible so book trucks can roll smoothly over them. Ramped floors should be avoided.

Elevators and Stairs

The elevators and main staircase should be visible from and close to the entrance. People entering the library and going upstairs should pass the main cluster of OPACs (online public access catalog stations) on the way in and the Book Charging area when exiting. Stairs and elevators are noisy and must be insulated from the reading areas as much as possible. On all floors other than the entry level there should probably be a small lobby for the stairs and elevators to contain noise and commotion Any secondary stairways should be enclosed on all levels.

If the architect can propose a satisfactory scheme which has one level underground, it will influence the need for mechanical vertical transportation. It is assumed that many, if not most, people will walk one level up or down for what they seek but will ride an elevator for two or more levels. Elevator layout and design must account for patron traffic but consider as well the movement of book trucks, daily mail, furniture, staff and so forth. There will be peak periods of ridership and also relatively slow periods. The wider the doors, the better the traffic flow. Center opening doors also facilitate movement. The interiors of the cars should be covered with a material, like carpet, to prevent graffiti and to minimize vandalism.

Corridors

Major public corridors in all parts of the library must be sufficiently wide (within controlling CSU standards) to permit the movement of objects such as desks, large reading tables, bookstack frames, etc. Corridor width is equally important both in public areas and near the delivery area. There should be double door access from the delivery site to all major portions of the building where equipment and furniture will be located. Corridor walls should be covered with material which is easy to maintain. Exposed wall corners require added protection to prevent damage and unsightliness.

Doors

All doors and frames should be considered with satisfactory wear and economy characteristics in mind. Panic hardware should be provided where codes dictate. All doors should be on a campus master key. All doors should be building master keyed. All joint use rooms should be on one sub-master except administrative offices and other areas to be identified which will contain expensive or sensitive equipment. All doors in the building are to be keyed individually. The Yale or Falcon unit lock shall be specified to match existing hardware on campus. A final keying plan should be established in consultation with University officials.

The configuration of entrance/exit doors must be clear, minimize confusion, maximize traffic flow and not be a safety hazard. If hinged doors are proposed, they should all open outward, preferably with a left side hinge. If sliding doors are proposed, the track should be overhead to minimize track blockage. The climate will definitely influence the entrance/exit door solution and may suggest an enclosed weather vestibule to minimize loss of conditioned air. Some automatic door for disabled access is required.

Any doors which open into reading areas should operate as quietly as possible. Fire doors at main the staircase should be held open until the fire alarm sounds. Doors to emergency exits should be closed at all times and openable only with panic hardware.

Graphics and Directories

Name frames shall be provided outside each office and major service units. Signs should match those in existing buildings, with no exceptions.

A large building directory shall be located in the main lobby area. The architect will consider both traditional type directories with interchangeable letters and other components and directories using some electronic or digital technology. Smaller directories should be provided at the entrance and at major service areas such as Media Services.

Windows

Windows can be an important component of attractively designed study areas throughout the building. Staff also generally prefer to work in an environment with some natural light. Too much sunlight will damage books, of course, and may make study impossible. Because of the heat and constant bright sun most of the year, the size and orientation of windows is an important consideration, and they must be tinted. Blinds are required in offices and should be considered for other windows, if appropriate or necessary.

Communications/Information Access

Access to information will increasingly rely on electronics and communications. These specifications include a large number of computer workstations. The library must be designed to allow for future needs for access to communication and electrical sources which do not even exist now. The cabling and electrical infrastructure is one of the very most important components of this program. Coordinating their recommendations with existing systems, the architect will propose a cost effective solution to this need throughout the library. NOTE: Computing and communication devices are specified throughout this program. The architect is responsible only for providing the cabling, not the devices themselves. The new CSUB-owned campus telecommunications distribution system will be a controlling factor in such considerations, since the Project Architect must provide a design in full compatibility with it. All in-building conduit, cabling and connections are a part of this project. The architect will use the latest edition of the CSU Systemwide Cable Plan and Budgeting Standards as a guideline.

A telephone outlet shall be provided in each office. Any specific telephone locations will be covered in the Room Specifications. Public pay telephone locations should be provided at conveniently located sites in the project, both interior and exterior.

In addition to telephone requirements covered above and in accordance with the CSUB telecommunications development program, all assignable rooms to be used by CSUB staff and students (except storerooms, janitor's closets, washrooms, etc.) should be fitted with closed-circuit TV and computer terminal outlets. The architect should

consult with the University's Director of Media Services and with the Director of Computer Services to determine the exact requirements. Special needs are indicated in the Room Specifications.

Acoustical Control

Care must be given to the location of television studios, bibliographic instruction rooms, the listening viewing room and other spaces where noise can intrude on study areas. Special attention should be paid to moderating noise at library service desks, at the entrance and at the other areas where conversations can be expected to occur.

Roof

Some planning consideration should be given to the roof area of the building. It is an ideal location for a satellite receiving antenna and other modern communications tools. The University's ITFS transmitting tower and antennae should also be located here. However, the CSU Trustees' design standards prohibit the location of other visible equipment (e. g. HVAC) on roofs. A flat roof is always difficult to make watertight. Leaky roofs are undesirable in any building but especially in libraries. Even though it rains infrequently in Bakersfield, a faulty roof in the present building, until repaired, caused considerable problems and some damage to books. If access to mechanical systems is located on the roof, it may suggest some special treatment of access routes. Also, maintenance access must not jeopardize library security.

Restroom Facilities

Restroom facilities shall be provided in areas where traffic is heavy and access convenient. Cot areas shall be provided in all women's restrooms.

Shelving of sufficient depth and capacity shall be installed in all restrooms for the temporary deposit of books.

The Project Architect will consult with the CSUB Plant Operations Department staff regarding fixture selection.

Custodial Rooms

Sufficient and adequately large custodial rooms shall be provided throughout the project. Each room should have a service sink for mops, etc., and enough movable storage shelving to supply all rooms in proximity with maintenance supplies (towels, soap, etc.) Sufficient floor space to store some power floor maintenance machines (waxes, buffers, etc.) should be available These rooms shall not be used by engineers for panel boards, switch gear, etc.

Maintenance

The building must be designed for ease of maintenance. Changing lighting fixtures is always a maintenance consideration. Built-in door mats may be desirable. Extra-durable and quiet surfaces are desirable along high traffic areas. Book trucks often mar walls, especially in elevators.

Convenient access and sufficient storage space must be provided for custodial and mechanical maintenance activities.

Roads and Access

Adequate access to all supply points must be considered, with particular given to minimize pedestrian traffic. The minimum widths of access sidewalks shall be at least sixty inches for utility vehicles.

ROOM DESCRIPTIONS

(PPD 2-6 SERIES)

Lobby

The lobby is a very important component of a successful library design. While a lobby should not waste expensive space, it must provide a place of transition between the outside and the library itself. The lobby must offer a welcoming appearance for the user as well as serving as a buffer between nature and indoor climate control. There is also, of course, the interplay between the exit control and the lobby. The lobby is also a place where good directional graphics may first be used in the library.

CIRCULATION

Name:

Circulation Desk.

Number and Size:

One, at 600 assignable square feet

Purpose:

This is the area where the Circulation staff and the library's users meet. It is the most heavily used public services desk. The desk has three main functions which are closely related:

Exit Control
Book checkout
Reserve and Media checkout

When the library is busy and fully staffed, separate specialists may handle each of these functions, but at less busy hours it will often be necessary for one or two staff to take care of all three. The areas should adjoin and have no barriers that would make it difficult for a single person to cover all three. There should be room for a number of specialists to work in clearly defined areas at the busy times.The counter or counters should be arranged so that patrons can tell which part to approach for which service.

Features and Requirements:

Exit Control

To detect uncharged material the Library will continue to rely on an electromagnetic sensing system which features an audible alarm and exit bars that will not open if an uncharged item is detected. Bags will not be checked unless the alarm sounds. Although one third of a million people passed through the exit in 1987/88, only a small share required any attention from staff. However, staff must be nearby in order to respond promptly when the alarm sounds. Entrance and exit lanes must be defined by railings and turnstiles so departing patrons pass through two or three side-by-side exits monitored from the nearby circulation desk.

Book Checkout

The counter should be long enough for three terminals and a cash register. It should also have space for two patrons who are not checking out books to consult with Library staff about interlibrary loans, holds, fines, etc. Ideally the counter should face and be close to the main stairs and elevators because most of the material to be checked out here will be brought down from the upper levels of the building. Patrons waiting at the

counter for service should not be in the way of people entering or leaving the library or moving through the building. It should be possible to place ropes in front of the counter to form lines of patrons, as in banks, so that each can be given service in turn without confusion.

The counter will be movable, not built in, and approximately 40" high by 24" to 30" deep. The architect will consider both traditional, sectional library circulation counters as well as office system adaptations. There must be a way for the staff to go through the counter to enter and leave the area. Computer terminals and related devices will be on or under the counter and will require power and other cabling. Checkout here and at the Reserve and Media counters will be by computer, using equipment which will be changed from time to time. Book return must also be provided for here.

A buzzer or chimes operated by buttons under the counter should be available to signal staff in the workroom when additional help is needed at the counter.

Reserve and Media Checkout

Reserve books and photocopies of periodical articles, headphones, audio and video cassettes, phonorecords, compact discs, and possibly films will be the bulk of the material loaned from this desk. Large equipment will not be circulated from this area. The reserve stacks and media storage , discussed later, should be immediately behind this counter.

The counter should be like the Book Checkout counter. The reserve material will be listed by class on the computer, with a printout backup. The material will be checked out and in by computer. No trays for book cards will be necessary. The counter should be long enough to accommodate two terminals. There must also be space for a book return bin under the counter.

One condition bears repeating: although the counter itself will obviously be fixed, the functions and services provided at the counters will expand and contract like an accordion. When traffic is high, staff can be expected at book checkout, reserve checkout and media checkout, which will be so labeled. When traffic is slower, all the activities will be consolidated at one or two terminals at the book checkout area.

Spatial and Functional Relationships:

The entire Circulation area must adjoin the entrance and be close to an elevator with access to the stack areas, so that book trucks can be moved conveniently to other floors. The Desk areas must adjoin the Workroom.

The Book Checkout section of the Circulation Desk must be close to and ideally will face the main public elevators and stairs. Americans entering and leaving buildings tend to keep to their right. Exit control stations, then, should be on the right of people leaving the library; that keeps them out of the way of people entering.

Book Checkout is more closely related to Exit Control than is Reserve and Media Checkout. Although both reserve material and media material will be checked out here, there are rooms designated for reserve reading and listening/viewing. Ideally

these rooms should be near the checkout area.

Services:

This area is totally automated and, therefore, relies heavily on electricity, data circuits, and telephones, all of which will be needed in abundance. Telephones will be attached to the counters so attendants will not have to leave their stations to answer the telephones.

Group Two Equipment:

1. Circulation counter
2. Six terminals connected to the Library's computer system
3. Cash register
4. Book return bin for reserve books
5. Three telephones mounted on the side or inside of the counter
6. Seven stools
7. Single-pedestal desk
8. Chair
9. Book return bin for circulating material

Name:

Circulation Workroom

Number and Size:

One, at 960 assignable square feet for four workstations.

Purpose:

This area is for the staff who supervise the work of the Circulation Department: lending, borrowing, reshelving, reserve, fines and billing, and maintaining the stacks. Space is also required here for student assistants performing various types of operations. A large number of books and other materials will constantly move through this area. A large quantity of supplies is also housed here.

Features and Requirements:

This area should be as open as possible. Work stations and work areas should be defined by office systems. Movable cabinets are preferable to built-in ones. Consideration must also be given for the parking of book trucks not in use. A small storage component in this space may also be desirable for spare machine and shelving parts. Using office systems, part of this area, about 125 asf, should be designed for conferencing.

A system is needed to tell people that the library is about to close. The first choice is a programed PA system that could not be used for emergency messages for individuals. Second choice is a combination of chimes and blinking the lighting. Controls for the system should be in the Circulation Workroom.

A system that would turn off all the copiers, microcomputers, etc., automatically by a timer would ease closing problems. Ideally a prerecorded announcement should warn users a few minutes ahead of time.

Treadle-operated doors along main routes for book trucks are required.

There should be a warning panel in the Workroom to alert staff about the locations of security breaches, fire alarms, high water and other hazards. This panel should have an audible component signal staff to look at the panel. If any video surveillance cameras are used at the emergency exits or in areas where there is expensive equipment, they, too, should be monitored in the Circulation area.

A book drop from the outside of the library should feed directly into this area. This drop must have smoke detection.

Spatial and Functional Relationships:

The area must adjoin and have a view of the Book Checkout Counter and, if possible, of the other two components of the Circulation Desk. A view lets the staff in the

Workroom see whenever crowds or problems at the counters require their attention. Reserve materials and media storage must also be adjacent or in contiguous space.

The office of the Circulation Services Coordinator should be nearby.

Services:

This area depends heavily on electronics and communications. Care must be taken when planning for these services.

Group Two Equipment:

1. Safe in secured closet
2. Four single-pedestal desks
3. Six chairs
4. Four, 3' x 4' computer workstations
5. Four small book cases
6. Four, 2 drawer filing cabinets
7. One, 4-drawer vertical file
8. One, 4-drawer lateral file
9. Three supply cabinets
10. Conference table for six people
11. Six chairs for conference table
12. 3' x 7' table
13. Two analog telephones

Name:

Sorting room.

Number and Size:

One, at 200 assignable square feet

Purpose:

After books are discharged, they go here for rough sorting by student assistants and then onto book trucks to upper floors for final sorting and reshelving.

Features and Requirements:

Exterior windows would be inappropriate. A window between this room and the Circulation Workroom might be useful for supervision.

Spatial and Functional Relationships:

This room should open into the Circulation Workroom.

Services:

None.

Group One Equipment

1. 20' counter

Group Two Equipment:

1. 12 sections of single-faced shelving
2. Supply cabinet
3. Chair

Name:

Circulation Supervisor's Office

Number and Size:

One, at 100 assignable square feet

Purpose:

The Circulation Supervisor needs quiet workspace for planning and confidential discussions.

Features and Requirements:

This office can be either one of sheet rock partitions or office systems which would provide the desired privacy and acoustics. This office must have interior windows. Exterior windows are also desirable.

Spatial and Functional Relationships:

This work space must be visible from the workroom or even a part of it. It should also be easy for Library patrons to find this office if they have questions or complaints.

Services:

Standard telephone, data circuits and electrical outlets outlets should be provided.

Group Two Equipment:

1. Double pedestal desk
2. Chair
3. Two, 3' sections of bookshelves
4. 3' x 4' computer workstation
5. Two side chairs

Name:

Reserve stacks.

Number and Size:

One, at 320 assignable square feet.

Purpose:

This area will hold the Library's reserve collection consisting mainly of books, photocopies of journal articles and published tests.

Features and Requirements:

This area does not need to be enclosed. It could be an extension of the Circulation Work Room. The architect will need to keep lighting in mind when locating this area and designing the ceiling.

Spatial and Functional Requirements:

This area will be behind the Reserve Checkout section of the Circulation Desk.

Group Two Equipment:

1. 30 sections of double face shelving to house 5000 volumes
2. Three lateral files to hold photocopies

Name:

Media storage.

Number and Size:

One, at 500 assignable square feet.

Purpose:

This area is for the storage of video tapes, audio tapes and cassettes, compact discs and other media the Library has. This area operates much like reserve.

Features and Services:

We seem to be of two minds about this area. Because the materials are relatively expensive, libraries often seem to be more security conscious about media than they are about books. On the other hand, there is often a certain advantage in being able to browse the covers or containers of some formats in this collection. In either case extra security is warranted.

Spatial and Functional Relationships:

This area may either be behind the Media Checkout section of the Circulation Desk and next to the reserve collection or in a small room next to the Third Service Point (see pg. 40), if there is one. The Listening/Viewing Room should be near this collection.

Services:

Group Two Equipment:

1. Shelving or cabinets for media

Name:

Interlibrary Loan Workroom

Number and Size:

One, at 600 assignable square feet

Purpose:

This area does all the processing for incoming and outgoing interlibrary loan requests. More than 6000 requests are processed each year. The number of requests can be expected to increase. New ventures in document delivery will likely be processed through this office.

Features and Requirements:

Because interlibrary loan and document delivery traffic may increase, consideration should be given now for expanding this area. Since ILL receives a great deal of mail, it needs a counter for wrapping and unwrapping. Abundant storage for records and supplies is also required. While currently there is one full time employee assigned to ILL, this work area should be large enough to accommodate two full time employees and several student assistants working at the same time.

Spatial and Functional Relationships:

This should adjoin the Circulation Workroom, be near the Circulation Desk and the Staff Copier Room. A door leading directly into the Library might also be desirable.

Services:

The work here is heavily automated and relies greatly on electricity and external digital communications.

Group Two Equipment:

1. Two OCLC terminals
2. Printer for OCLC
3. OPAC terminal
4. telefacsimile machine
5. Six sections of single-faced shelving
6. Microfiche reader
7. 3' x 4' counter for opening mail open below to receive 3' x 3' rolling mail bin
8. Single pedestal desk
9. Six chairs
10. Three storage cabinets
11. Two, 3' x 4' workstations for student assistants
12. One, 4-drawer vertical file

13. One, 4-drawer lateral file
14. Photocopier
15. One analog telephone

Name:

Student Assistant Time Clock Area

Number and Size:

One, at 60 assignable square feet

Purpose:

A non-public area, not necessarily a room, is needed for a time clock, 20 lockers for circulation student assistants, and a message board. The lockers should be large enough to hold a book bag and a jacket, and will not be assigned, i.e., a student assistant will use any empty locker. This area will serve Circulation student assistants only.

Spatial and Functional Relationships:

This area should be fairly close to the library entrance and to the Circulation Workroom. This area will probably be noisy and messy; the area should be contained.

Services:

Power for time clock.

Group Two Equipment:

1. Time clock
2. 20 lockers
3. Wall mirror

Name:

Staff copier room.

Number and Size:

One, at 225 square feet.

Purpose:

The staff needs photocopying facilities. The heaviest users are interlibrary loan and reserve.

Features and Requirements:

This room should be well-ventilated because the machines produce heat, fumes and particulates.

Spatial and Functional Relationships:

This room should be very near the Circulation work area, but not in it.

Services:

The room must have 220 wiring for photocopiers.

Group One Equipment:

1. Acoustical treatment

Group Two Equipment

1. Two photocopiers
2. Microform reader/printer
3. Small supply cabinet
4. Work table 30" x 60"

Name:

Computer Room

Number and Size:

One, at 500 assignable square feet

Purpose:

This room will house the Library's computer which supports an integrated library system.

Features and Requirements:

This should be a true computer room with raised floor, separate air conditioning, etc. Entry should be by coded keypad. The room should have a built-in closet of approximately 40 assignable square feet with adjustable shelves for storage.

Spatial and Functional Relationships:

Theoretically this room can be located anywhere. It would be very helpful, though, if it could be located on either the main floor or one floor away. Circulation staff may need to do some processing in the room on a daily basis.

Services:

Wiring and air conditioning should be appropriate for a computer room and should include power conditioning. A fire detection and suppression system is also required here.

Group One Equipment:

1. Counter, 3' x 5'

Group Two Equipment

1. Work station with shelving
2. Chair

REFERENCE AREA

Name:

Reference Desk

Number and Size:

One, at 400 square feet, for three occupants.

Purpose:

The reference desk provides a centralized service point for the reference collection, indexes and abstracts, compact disc reference area, computerized online reference, OPAC terminals and documents reference collection. The desk area, but not the desk itself, also houses several small reference collections: college catalogs, telephone books, pamphlet files and reference microfiche.

Features and Requirements:

Librarians and paraprofessionals at the reference "desk" should be able to see the reference area clearly so they can spot patrons who require assistance.

Spatial and Functional Relationships:

The desk should be near and visible from both the entrance and the building's main stairs and elevators. The reference desk should also adjoin the reference librarians' four principal tools: the OPAC terminals, the reference books, the periodical indexes and the compact disc workstations.The reference work room and five librarian offices should be nearby . Somewhat further off will be government publications.

Services:

There must be adequate floor wiring for microcomputers, microfiche readers and ready reference compact discs. Three or four telephone lines are requested.

Group Two Equipment:

1. A counter, perhaps curved, both standing height and seated height (for disabled individuals and for longer consultations) with enough room for 2 or 3 librarians and paraprofessionals. The counter height portion of the Reference service point should have knee spaces with foot rests.
2. Two sections of shelving or equivalent under the reference counters for ready reference
3. OPAC terminal
4. Microcomputer, printer, etc.
5. Microfiche reader
6. Two chairs
7. Two high stools for staff

8. Three low stools for patrons
9. Two microfiche cabinets
10. Three vertical file cabinets for pamphlets
11. Two digital telephones

Name:

Online Public Access Catalog (OPAC) Main Terminal Cluster

Number and Size:

Twenty terminals in 600 square feet

Purpose:

This area will house the principal cluster of Online Public Access Catalogs, the tools for finding what books the library owns and where they are located. People who come to the library to find books will ordinarily stop here to get call numbers and then go to another level of the library to find the books and other materials. Users of OPACs often need help from the library staff.

Features and Requirements:

It is envisioned that most terminals will be on counters for stand-up consultation. It will be necessary to have a few terminals at seating level for persons requiring longer consultation and for persons in wheelchairs.

Spatial and Functional Relationships:

The terminal cluster must be visible from the front door, must be visible from the reference desk and should be close to the stairs and elevators. The ideal location is to one side of the route between the front door and the stairs and elevators.

Services:

These devices will require abundant electrical outlets and data circuits. Lighting must be appropriate for CRT usage. These terminals will be used only briefly, typically less than 15 minutes.

Group Two Equipment:

1. 20 terminals
2. Ten printers
3. Counters for 15 terminals and seven printers
4. Carrels or tables for four terminals and two printers
5. Four chairs
6. Wheel chair access carrel or table for one terminal and one printer
7. Dictionary stand

Name:

Reference Stacks

Number and Size:

80 double-faced sections in 2200 assignable square feet

Purpose:

This area houses the library's reference collection of up to 15,000 volumes including law books and business services. Books in this collection are generally consulted rather than read.

Features and Requirements:

The sections in the Reference area will have six shelves spaced on 13" centers. The section at one end of each range will be counter height to allow for a consultation place convenient to any reference book. The business and law reference books will be segregated into their own alcoves, but are counted in the total volumes mentioned above. Shelving and aisles will need to be wider here, so the ranges will be on 66" centers rather than 58" center. As with any stack arrangement, it is paramount that the lighting system and the stack layout be designed in concert.

For attractiveness and a feeling of permanence, reference shelving should have wooden end panels.

Spatial and Functional Relationships:

The obvious relationship is with the reference desk. The collection is heavily used by the librarians in their consultation with clients.

Services:

Group Two Equipment:

1. 80 double-faced sections of shelving
2. One counter height double-faced section per range
3. One full height wooden end panel per range
4. One counter height wooden end panel per range
5. Three foot wooden tops for the counter height sections
6. Ten atlas cases
7. Photocopier

Name:

Periodical Indexes

Number and Size:

1380 assignable square feet to hold 3000 volumes

Purpose:

This area holds the most heavily used printed indexes to the contents of periodicals. People using periodicals typically start here and make lists of articles or papers on their subject. Then they check the list against a record of the library's periodicals and go to the periodicals collection to find the material. Users of periodical indexes frequently need assistance from the reference staff.

Features and Requirements:

Users of paper periodical indexes have to consult one volume after another, usually only briefly. Traditionally this collection has been shelved at index tables--heavy reading tables with two or three shelves running down the middle. Since printed indexes are being replaced by computers and compact discs, it is assumed this type of access to periodical literature has a limited life span.

Spatial and Functional Relationships:

This collection should adjoin the reference desk and the Electronic Reference Area. Users must have good access to the periodicals collection.

Services:

This area must be designed with wiring, data circuits and lighting like that in the electronic reference area which will eventually replace the indexes.

Group Two Equipment:

1. Ten single-faced sections, or equivalent
2. Eight two-tier index tables
3. 32 reader chairs

Name:

Electronic Reference Area

Number and Size:

30 workstations at 40 square feet each for a total of 1200 assignable square feet.

Purpose:

This area houses electronic access workstations. At the time of program writing the major components at each workstation are a microcomputer, a compact disc player and a printer. Many of the current stations are also capable of online access of remote data bases. While the specific technology may change, it is safe to assume electronic access workstations will be an increasingly important component of reference work.

Features and Requirements:

The program calls for 30 microcomputer workstations for this area. Individual workstations, each about 30" x 48", would permit the greatest degree of flexible space utilization. There should be sufficient space at these workstations to permit 2 students to work together at one workstation. Aisles between workstations should be at least 6' wide. Lighting it this area should be appropriate for CRT use.

Spatial and Functional Relationships:

At present there is a very strong relationship with the reference desk. Good access to the periodicals is also important. Proximity to the printed periodical indexes is necessary since this area should expand into the print index area over time.

Services:

There must be adequate electrical outlets and data circuits to each station to support independent microcomputers or networked terminals and printers.

Group Two Equipment:

1. 30 workstations to support the computers and peripherals
2. 45 chairs
3. Small bookcase for manuals

Name:

Reference Seating

Number and Size:

40 seats in 1000 assignable square feet (exclusive of index seating on pages 32 and 33)

Purpose:

The reference area must have several kinds of seating which provide for different uses. Some of the seating will be for brief consultation of reference books. Other seating will be required for more extensive research and study. No lounge seating is to be provided in this area.

Features and Requirements:

Although this program does not designate a large number of seats in the Reference Area, the seating should be high quality and convenient to printed reference material.

Spatial and Functional Relationships:

The arrangement of reference seating will follow the location of the reference desk and the reference book stacks. Some seating should be in the core of the reference collection and some on the perimeter. Seating arrangements should emphasize individual use of information resources and discourage use of this area for unrelated reading.

Services:

Group Two Equipment:

1. Tables and carrel seating for 40
2. 40 chairs

Name:

Reference workroom.

Number and Size:

One, at 225 assignable square feet.

Purpose:

This room will be used by the two staff members assigned to the Reference Area. It will also be used to store a minimal amount of supplies such as computer printer ribbons and paper for convenient evening and weekend access.

Features and Requirements:

If located very near the reference desk, this room may have an inside window to observe the reference area. Otherwise it is to be simple and functional.

Spatial and Functional Relationships:

This room should be near the reference desk.

Services:

There should be two telephone lines and two data circuits. Each wall should have one four-plug outlet per wall. It is desirable that lighting brightness be partly adjustable by the occupants.

Group Two Equipment:

1. Two small workstations
2. Two ergonomic chairs
3. Microcomputer workstation with printer
4. Two file cabinets
5. Bulletin board
6. Shelving for supplies

Name:

Computer search rooms

Number and Size:

Two, at 120 assignable square feet each

Purpose:

These rooms are for librarians to perform computer searches for students and faculty. The librarian will discuss the search with a client and then perform it on a microcomputer linked to remote data bases. A printed bibliography of the results is then produced.

Features and Requirements:

Efficient use of space is required for these rooms. The nature of bibliographic searching may well change over the next few years. This rooms should be designed to convert to librarian offices in the future.

Spatial and Functional Relationships:

These rooms should be in the reference area.

Services:

There should be standard telephone and data circuits and electrical outlets. Lighting brightness should be adjustable.

Group Two Equipment: (for each room)

1. Microcomputer workstation with sufficient space for peripheral equipment (perhaps a printer stand with a bailer for the printer)
2. Microcomputer with a modem, buffer and printer
3. Three ergonomic chairs
4. Small consultation table for work with patrons
5. Two sections single-faced shelving
6. Bulletin board
7. Analog telephone

GOVERNMENT PUBLICATIONS AREA

Name:

Government Publications and Maps

Number and Size:

One, at 3200 assignable square feet

Purpose:

This area houses the government publications and maps and their associated bibliographic tools. It also provides seating for the people who use these collections. The government publications are a separately classified and arranged collection of reports from United States, California, and possibly local government agencies. The collection is open to the public, and part of the material will be recorded on the OPAC like books, but use presents some difficulties and students will generally need help finding their material. As a designated depository library we are mandated by the U. S. Government to make depository documents "easily accessible to the general public and to insure their continued availability in the future."

Features and Requirements:

Government Publications should offer an inviting environment to help draw users to the collection. The collection should be easy to find. Seating and assistance should be close at hand.

Many factors will influence the growth of this collection, so it is difficult to predict future space requirements. A location that permits some expansion or contraction would be desirable.

Spatial and Functional Relationships:

Government Publications has the strongest spatial relationship with the Reference Area. The best location for GP is directly adjacent or as close as possible to Reference. In fact, GP should be considered a sort of extended reference collection, because of its strengths in bibliographic and statistical information. Ideally, GP should be adjacent to the reference law collection since Government Publications research often relies on legal materials and vice versa. The secondary alternative would be to have GP within 100 feet or a flight of stairs from the Reference Area; in this case there must be a desk nearby where users can find help most hours the library is open.

The Government Publications Workroom must adjoin this area. The GP Coordinator's office should also be within 100 feet or so of the GP collection.

Services:

Telephone lines, data lines and electrical lines for microform readers and microcomputers are required.

GOVERNMENT PUBLICATIONS AREA

Name:

Government Publications and Maps

Number and Size:

One, at 3200 assignable square feet

Purpose:

This area houses the government publications and maps and their associated bibliographic tools. It also provides seating for the people who use these collections. The government publications are a separately classified and arranged collection of reports from United States, California, and possibly local government agencies. The collection is open to the public, and part of the material will be recorded on the OPAC like books, but use presents some difficulties and students will generally need help finding their material. As a designated depository library we are mandated by the U. S. Government to make depository documents "easily accessible to the general public and to insure their continued availability in the future."

Features and Requirements:

Government Publications should offer an inviting environment to help draw users to the collection. The collection should be easy to find. Seating and assistance should be close at hand.

Many factors will influence the growth of this collection, so it is difficult to predict future space requirements. A location that permits some expansion or contraction would be desirable.

Spatial and Functional Relationships:

Government Publications has the strongest spatial relationship with the Reference Area. The best location for GP is directly adjacent or as close as possible to Reference. In fact, GP should be considered a sort of extended reference collection, because of its strengths in bibliographic and statistical information. Ideally, GP should be adjacent to the reference law collection since Government Publications research often relies on legal materials and vice versa. The secondary alternative would be to have GP within 100 feet or a flight of stairs from the Reference Area; in this case there must be a desk nearby where users can find help most hours the library is open.

The Government Publications Workroom must adjoin this area. The GP Coordinator's office should also be within 100 feet or so of the GP collection.

Services:

Telephone lines, data lines and electrical lines for microform readers and microcomputers are required.

Group Two Equipment:

1. 100 double-faced sections of shelving for the U.S. and California government publications
2. Six microfiche cabinets
3. 12 map cabinets (3.5' x 4.5') for census and geological maps
4. Index table and additional shelving (single-faced, double-faced or counter height) for government publication reference tools and bibliographies.
5. Two microfiche readers and one reader-printer
6. Microcomputer to support a CD for government publications
7. OPAC terminal on 2' x 3' stand or table
8. 4' x 6' table for consulting large maps
9. Card catalog cabinets for the shelflist
10. Combination of carrels and tables for twenty readers
11. 20 readers' chairs

Name:

Government Publications Workroom

Number and Size:

One, at 200 assignable square feet

Purpose:

in this room government publications and maps are received, unpacked, checked in or cataloged, and labeled for the shelves. Some publications must be held here until processing can be completed.

Features and Requirements:

No staff is assigned full time to Government Publications. A paraprofessional and a student assistant work here part of the time. Sometimes they will be working here at the same time. The room should include a large window at front so that Government Publications personnel can see approaching users and users will see that there is someone to assist them.

Spatial and Functional Relationships:

The room must adjoin the Government Publications Collection. This room should be immediately visible to someone entering the GP area.

Services:

This room should have standard University communications and electrical capabilities.

Group Two Equipment:

1. Typewriter/word-processing (with printer) workstation
2. OPAC workstation on 2' x 3' stand or table
3. Microfiche reader
4. Six sections of single-faced shelving
5. Three book trucks
6. 4' x 6' work table
7. Supply cabinet
8. Single-pedestal desk
9. Two ergonomic chairs

Name:

Third Service Desk

Number and Size:

One, at 150 assignable square feet.

Purpose:

To enable a small staff to operate a much larger building, the staffed service points need to be centralized and combined as much as possible. The library needs a minimum of two: Circulation and Reference. Both will be on the entry level near the entrance. It may not be possible to position all the collections and facilities whose users need help in such a way that all can be covered from those two service points. In that case a third service desk will be needed. The staff at this desk would be the source of help for the users of some of these collections and facilities, depending on where they are located:

Periodicals, the microform reading equipment, and the main cluster of photocopiers
Government Publications
Listening/Viewing Area
A cluster of microcomputers within the library
Curriculum Library

Features and Requirements:

A highly visible desk or counter is required, but it need not be large. A very small office may be attached. It must have windows to the service area.

Spatial and Functional Relationships:

This desk, if needed, should be one level above or below the entry level, close to the main stairs and the elevators. Its site will naturally take into account the location of the collections and facilities it serves. The desk's proximity to periodicals is the highest consideration.

Services

Wiring and cabling for an OPAC terminal and a telephone are required.

Group Two Equipment:

1. Small counter
2. High stool for counter
3. OPAC terminal on swivel base on the counter
4. Single-pedestal desk
5. Desk chair
6. Small supply cabinet
7. Analog telephone

Name:

Casual Reading Area

Number and Size:

One, approximately 3,000 assignable square feet, with about 60 seats and shelving for about 5,000 volumes.

Purpose:

This room is difficult to describe, except that the inspiration for it comes from the Morrison Room in the Doe Library at U C Berkeley. It is to be a "Fine Room", yet one students are encouraged to use on a casual basis. Since it will be near the entrance, this room will siphon off students who drop into the library between classes.

It will be a place where small groups of students who want to mix study with light conversation can do so without disturbing readers who need quiet; people seeking quiet places to study will find them in the parts of the library farther from the entrance.

The room will house the latest issue of the most popular periodicals (about sixty titles) newspapers, a collection of paperback books, the library's recreational books, and perhaps a collection of literary classics, "best books", and good reading. Students, staff, and faculty will come here to find enjoyable reading; for those who have that purpose, this area will be a convenient alternative to the main collections. Listening stations with headsets are provided in the Morrison Room.

In one section will be housed the handsomer volumes from the library's special collections. These will be kept behind locked glass doors. The area will house library displays and sculpture. Prints, paintings, and interesting maps will decorate the walls. The room will, if done right, be a place that alumni and friends of the university may want to enrich with gifts of books and artwork. One of the area's functions will be to attract gifts to the university.

Features and Requirements

This should be the most attractive part of the library. Community financial involvement will be necessary to enhance the appearance of the room. The room should use wooden paneling and wooden shelves, upholstered and leather furniture and other design elements to create the feel of a well-used fine private library or the library of a club. In essence the room should combine the following four functions:

a. The " Morrison Room"
b. A small special collections reading room
c. The existing CSB library's browsing area
d. An area for library exhibits

The area is intended to be heavily used by undergraduates. A beautiful room open only to a select clientele is not wanted here. Vandalism can be a problem in fine

rooms that are not restricted in use and the library will not be able to staff this area constantly. One defense against vandalism is a fairly open design, with some walls partially glass and much of it visible from the entrance and a staffed service point, e. g., Circulation.

It would be nice if the area could be made quiet, but accessibility and observability will have to take priority.

Spatial and Functional Relationships:

The area must be quite close to the entrance. People entering the library should have a good view of the area. It should also be visible from a staffed service point. It should be away from areas where students study seriously. One librarian's office should be attached to the room.

Services:

Floor lamps will require electrical floor outlets. Special lighting may be needed for the display cases, sculpture and the material on the walls.

Group One Equipment:

1. Wooden shelving throughout, preferably built-in Several kinds will be needed: shelving for displayed periodicals, shelving for paperbacks, shelving for books of regular size, shelving for rare books and fine bindings.
2. The section used for the small collection of fine bindings and other presentable books will need locking glass doors or some other system to provide high security. Some of these lockable shelves should be suitable for oversized books and books that must be shelved on their sides.
3. Two vertical exhibit cases, built in
4. Niches for sculpture

Group Two Equipment

1. Upholstered armchairs
2. Sofas
3. End tables
4. Floor lamps
5. Table lamps
6. Reading tables and/or carrels
7. Reading chairs
8. Two horizontal exhibit cases
9. 3' x 5' table for staff
10. Chair for staff
11. Analog telephone

Name:

General Seating

Number and Size:

Approximately 380 seats using 12,000 assignable square feet

Purpose:

This section concerns seating around the bookstacks, the bound periodicals and the curriculum collection which is not assigned elsewhere in the program. Seating for graduate studies, faculty studies and group studies immediately follows this section. Seating for reference, government publications and some other special areas immediately follow. The program contains 12,500 asf for general seating. The exact number of seats cannot be determined until the stacks are laid out and the mix of carrel versus non-carrel seating is proposed.

Features and Requirements:

The building should provide abundant, comfortable seating in a variety of configurations--table seating, individual carrels, multiple carrels and lounge seating. Since library readers vary in tastes, habits and moods, variety in reading spaces and furniture is desirable. Generally, however, reader areas should be warm and inviting rather than either colorless or overly vivid. Recessed ceilings near windows can be attractive and different forms of ambient lighting should be considered.

Table seating shall be 4'x6' for four readers and 5'x9' for six readers. There should not be too many of the larger size tables. They are mainly appropriate in places like reference rooms. Many students prefer the privacy of a carrel for study in the library. While a 3'x2' carrel is standard, many authors regard this size as inadequate. The library should contain these standard size carrels but the design should also consider sizes different from 3'x2' and work areas other than rectangular. (Carrels in the Stanford University Green Library may provide some inspiration.) The mix of seating must be considered carefully.

Lounge seating should most definitely be a secondary choice and should be used primarily for accent and primarily as individual seats, not sofas.

On each floor there should be some consideration for a small area where the foot candles are increased from 50 to 70. These areas are for visually impaired students and may contain some devices to assist their reading. It is obvious any over-lighted area should be easily accessible from elevators.

Spatial and Functional Relationships:

Seating and bookstacks should coexist meaningfully and peacefully. Seating should be near the books but should not interfere with the call number flow. Many users find

away from windows, without distractions. The bookstacks can often buffer reader areas from walkways. Only lounge seating should be considered for small lobby areas near stairs and elevators. Table seating or carrels are inappropriate in these areas.

Services:

In those areas where there are computer or media carrels, electrical and data circuits must be well planned. Power poles from the ceiling are not acceptable.

Group Two Equipment:

1. Tables and carrels to seat 400 to 450 readers
2. 400 to 450 chairs (Sled-based chairs are generally more stable and move better on carpets than leg-based chairs.)

Name:

Group Studies

Number and Size:

Fourteen, utilizing a total of 1700 assignable square feet

Purpose:

Group study space is usually considered very valuable on any campus since students often like to study in small groups or work on class projects in a library.

Features and Requirements:

The program requires fourteen group studies to seat seventy students for total asf of 1700. It should not be implied that each study will be slightly larger than 120 asf and will seat five students. All should have table seating only, however.

All group studies must be relatively sound proof and have glass for security and safety of occupants.

Spatial and Functional Relationships:

Group studies should be located throughout the Library and may be varying sizes, depending on the building's schematics. Group studies may be on the building's perimeter but they should not dominate it or preclude other attractive seating areas near exterior windows. It is generally an advantage for users of group study areas not to have to traverse other study areas to reach their destination. For the same reason--noise--group studies should not open directly into reader areas but they may open directly into stack areas.

Services:

All group studies should have individually controlled lighting.

Group Two Equipment:

1. 14 tables
2. 70 chairs
3. 14 chalkboards

Name:

Faculty Studies

Number and Size:

25, at 60 assignable square feet each for a total of 1500 assignable square feet

Purpose:

These studies are intended to be assigned for limited duration to faculty doing research using Library materials. A visiting scholar may also request a study.

Features and Requirements:

These studies should definitely be enclosed and quiet because they will be assigned for individual use for a definite time period. They must have doors which lock. While the studies should be in groups, all do not have to be together. Some, but not all, studies may have outside windows. If office systems are used for these studies, some future flexibility may be gained.

Spatial and Functional Relationships:

The studies may be located anywhere in the stacks. Faculty studies and graduate carrels should be identical and will be used interchangeably depending on demand.

Services:

In addition to adequate electrical outlets, the studies must have data circuits. Task lighting built into the desk would likely be appreciated.

Group Two Equipment:

1. Desk with drawers and built-in task lighting
2. Chair
3. 9' to 12' of wall shelving

Name:

Graduate carrels

Number and Size:

20, at 60 assignable square feet each for a total of 1200 assignable square feet

Purpose:

The highest degree currently offered in the California State University is the master's. There may be joint doctoral programs with the University of California or private universities, although this campus does not have any such arrangements at this time. Graduate students in some of the liberal arts and education are required to write a thesis. There is a need, therefore, to offer some accommodation for extended study, research and writing for these students.

Features and Requirements:

These carrels should definitely be enclosed and quiet because they will be assigned for individual use for a definite time period. They must have doors which lock. While the carrels should be in groups, all do not have to be together.

Spatial and Functional Relationships:

These carrels can be located anywhere in the stack area. Faculty studies and graduate carrels should be identical and will be used interchangeably depending on demand.

Services:

In addition to adequate electrical outlets, the studies must have data circuits. Task lighting built into the desk would likely be appreciated.

Group Two Equipment:

1. Desk with drawers and built-in task lighting
2. Chair
3. 9' to 12' of wall shelving

Name:

Reserve Reading Room/24 Hour Study Hall

Number and Size:

One, at 720 square feet to seat 24 students

Purpose:

Although reserve books and photocopies may be read anywhere in the Library, and some even outside the Library, it seems appropriate to designate a room for reserve reading. This room will also serve as a twenty four hour reading room for those times when the library is closed.

Features and Requirements:

Students will use this room late at night and their safety must be a consideration. This room must be on an outside wall with plenty of windows so that after-hours use can be observed by passers-by. There must be no corners which cannot be seen from the outside. It needs an exterior door and a door leading into the library, one of which will always be locked and impassable. There must also be a well lighted route to a nearby parking lot. It may also be desirable to have some of the microcomputers in an adjacent space, if twenty four hour access to them is appropriate.

Spatial and Functional Relationships:

This room should be adjacent to or near the Reserve Checkout counter. Proximity to the entrance is desirable.

Services:

A campus and a pay telephone should be included for the twenty four hour users. These phones might be better located outside to not interfere with studiers. Wiring should be provided to install closed circuit TV for monitoring by campus security.

Group Two Equipment:

1. 24 chairs
2. Tables and carrels to seat 24

Name:

Listening/Viewing Room

Number and Size:

One, at 1200 assignable square feet to house 30 stations.

Purpose:

General use video tapes, sound recordings, slides and so forth are to be used in this room.

Features and Requirements:

This room should be visible so people will know media equipment is available for use in the library. For good visibility and staff monitoring, this room may use some windows. Acoustical control of some sort may also be appropriate. It will be equipped with media carrels on which the equipment will be placed. (It is not important at this time to identify which carrels will received VCRs, or audio cassette players, or CD players.)

Spatial and Functional Relationships:

This public area should be near either the circulation counter or the third service desk, wherever the students will borrow their cassettes, compact discs, earphones, etc. Some proximity to Media Services and the group viewing rooms on page 51 is desirable.

Services:

This room will obviously have to be well wired to provide electricity to all the equipment. Consideration should also be given to lighting, since the level of lighting desired may vary with the different type of media being used.

Group Two Equipment:

1. 30 media carrels
2. 30 chairs

Name:

Group Viewing Room

Number and Size:

Two, at 125 assignable square feet each.
One, at 300 assignable square feet

Purpose:

The smaller rooms will be used by small groups of students who might have missed a class, who are working on a class project together or who have some other need to view video material. The use of the larger room will probably center around distant learning courses, staff training via satellite, and outside groups and agencies needing access to teleconference facilities.

Features and Requirements:

Each room will be equipped with projection, off-air, and satellite receiving capability to which patrons would be sent to view film, videotape, or satellite transmissions.

Spatial and Functional Relationships:

The rooms should be easy to find within the Library and they must be soundproof. Proximity to Media Services and the listening/viewing room is desirable.

Services:

This room must be wired to the campus' closed circuit distribution system.

Group Two Equipment:

For each small room:

1. Six tablet arm chairs
2. Media cart

For large room:

1. Training tables
2. 15 chairs
3. Instructor table and chair
4. Large screen monitor
5. Media cart

Name:

Bibliographic Instruction Rooms

Number and Size:

Two: one, to seat fifty students at 1000 assignable square feet; one, to seat 35 students at 700 assignable square feet.

Purpose:

More and more library programming is directed to instructing students in information access, processing and retrieval. The effort is to acquaint students with both traditional printed access as well as electronic access to information.

Features and Requirements:

It is desirable to locate these rooms with general view of stairways and elevators. They should not be near other study spaces and may be interior rooms, if the building's design otherwise lends itself to that notion. There should be a locking storage closet of about 60 asf outside the rooms. (If the rooms are near each other, one closet will be sufficient; if not located together, each room will need an adjoining smaller closet.) This closet will be used to keep handouts, overhead transparencies and other supplies needed for library instruction.

Students receiving bibliographic instruction will likely need space for note taking and examining handouts. Presumably students will also have some introductory hands-on experience with electronic data retrieval. The work surfaces will need to be designed to accommodate both activities. Two or three students can share a terminal.

Services:

Lighting should be rheostatically controlled. Adequate electrical and data circuits are required and must be distributed to student stations The rooms should also be on the University's broadcast band.

Group Two Equipment:

For small room

1. Training tables
2. 35 chairs
3. Two TV monitors in each room
4. 18 computer terminals and printers
5. Instructor table and chair

For large room

1. Training tables
2. 50 chairs
3. Two TV monitors in each room
4. 25 computer terminals and printers
5. Instructor table and chair

Name:

Room for Visually Impaired Users

Number and Size:

One at 150 assignable square feet

Purpose:

This room houses equipment that lets blind or partially sighted students read printed materials. It also provides a quiet room for a sighted tutor to read library materials to a visually disabled student.

Features and Requirements:

Some of the machinery talks, so this room should be acoustically insulated. The room should have a window for monitoring.

Spatial and Functional Relationships:

The room should be easy for a blind student to reach and close to a service point from which help with the machinery can be obtained. A location adjacent to the Listening/Viewing room might be desirable.

Group Two Equipment:

1. Kurzweil machine
2. TV camera and monitor for enlarging print
3. Space for a third item of equipment to be determined in the future
4. 3' x 5' table and 3 chairs

Name:

Microform Reading Areas

Number and Size:

Several, with a total of approximately 800 square feet.

Purpose:

In these areas are the readers and the reader-printers necessary for using microfilm and microfiche.

Features and Requirements:

These machines are best used in dim light. Some are noisy; the clusters of equipment should be buffered from other reading areas. Separate rooms would be best, but the equipment can go into stack areas.

Spatial and Functional Requirements:

The equipment will be in several locations. One or two machines will be near the Reference Desk and three in Government Publications, but the largest clusters will be in or adjoining the periodicals stacks where most of the library's microforms will be shelved. The microforms will be dispersed throughout the periodical stacks, so the readers should be somewhat dispersed too. No microform should be more than 100 feet or so from a reader and a reader-printer. A minimum cluster of equipment should have two reader-printers (one set for fiche, one for film), two film readers, and two fiche readers.

Users often need help with these machines. The largest cluster, located near the center of the periodicals stacks area, should be close to a staffed service point with a change making machine.

Services:

This area naturally needs adequate electricity to service whatever configuration is proposed.

Group Two Equipment:

1. Four reader/printers
2. 20 microfiche readers on 30" x 48" carrels
3. Six film readers on 30" x 48" carrels
4. Chair for each station
5. Locking caddies for reader/printer supplies

Name:

Periodicals Photocopy Area

Number and Size:

One or several, with a total area of 800 square feet.

Purpose:

The library's copiers are used heavily, and the bulk of that use is the copying of periodicals. Since the periodicals do not circulate, it must be possible to copy articles conveniently. Convenient, inexpensive copying also reduces mutilation.

Features and Requirements:

The room or rooms should be easy to find. The copiers emit fumes that affect some people; the rooms should be well ventilated.

Spatial and Functional Relationships:

This, the main cluster of copiers, should adjoin the periodicals stacks. Queuing is minimized if the copiers are centralized, but inconvenience might be reduced if they were dispersed in two or three locations through the stack area. The machines are noisy and need to be isolated acoustically from reader areas. The machines are also messy and should be on a surface that will not be disfigured by spilled toner.

The machines require frequent attention from staff but are basically self-service. Users should be able to report machines that don't work, but the copiers can be distant from any staffed service point.

Services:

Machines must have 220 power.

Group Two Equipment:

1. Six photocopiers
2. Change machine
3. A locking cabinet for copier supplies
4. Book trucks or shelving for copied items to be reshelved
5. Service table

Name:

Floor Copier/Terminal Rooms

Number and Size:

One on each upper floor, 150 assignable square feet each.

Purpose:

These rooms house one copier and and two OPAC terminals so that library users can copy pages from books or consult the catalog without having to leave the floor.

Features and Requirements:

These could be alcoves rather than rooms and should not have doors. The equipment should be visible from outside the room. A partial glass wall is a possibility to absorb some sound, yet allow the rooms to be visible. A locking supply caddy is needed for the copier.

Spatial and Functional Relationships:

The rooms should be centrally located and in the same place on each floor. The best location would be close to the main stairs and elevators so that people arriving on the floor would see the equipment. The rooms are noisemakers and should open either into lobbies or into stack areas where the book stacks can buffer the noise. It would be good if they were close to the sorting areas which will be found on each floor.

Services:

Wiring should be adequate for terminals and copiers. The OPAC terminals must connect by cable to the library's computer.

Group Two Equipment:

1. Copier
2. Two OPAC terminals on a 30" x 72" consultation table
3. Locking cabinet for copier supplies, counter height, so that copier users can sort their papers on top
4. Book truck where copier users may leave the books they have copied
5. Three analog wall telephones

SHELVING

Name:

Bookstacks

Number and Size:

1805 double-faced sections in 27,845 assignable square feet
(Metcalf p. 561 for 4'8" centers: 27,845/7.71 sf = 1805 min aisles)
27,845/8.41 sf = 1655 generous aisles)

Purpose:

Shelving is required to hold and maintain the Library's circulating collection, now numbering about 225,000 volumes. State formulas provide one assignable square foot for every ten books, which yields a planned open stack capacity of 287,260 volumes. It is expected that, in reality, this shelving will accommodate 400,000 volumes.

Features and Requirements:

While detailed specifications for the shelving appear elsewhere, standard library, welded frame, cantilevered shelving with double-faced base plate which support twelve bracket-type, adjustable shelves is required. Shelving is to be placed 4'6" on centers. It is paramount that the lighting system and the stack layout be designed in concert. The shelving design must, of course, meet or exceed all California seismic requirements.

Many libraries which have been retrofitted with smoke detectors, sprinkler systems and seismic bracing appear very cluttered near or around the tops of stacks and below the ceilings. If smoke detectors and sprinklers are required, they should be located essentially above the ceilings out of the way of the bookstacks. Ceiling, lighting and bookstacks come together with great frequency in a library. These elements must look like they belong together.

Spatial and Functional Relationships:

Bookstacks will appear throughout much of the building. This portion of the program constitutes the largest concentration. While other elements of the program may have stronger spatial relationships, the bookstacks must indeed be well thought out and not simply put in space not taken by other parts of the program. The layout must incorporate a variety of seating space near or adjacent to the book stacks. Even in an era which is becoming increasingly dominated by electronics, it remains important to intermingle student study spaces and books. Most importantly the stack layout must be logical in its presentation and progression through the call number sequence. Longer ranges rather than shorter ones generally aid the call number flow. Few things in a library are more annoying than a call number sequence which does not flow logically.

Services:

People use stack aisles only intermittently. There is always the energy question, therefore, of whether the stack aisles need to be lit when not occupied. The architect must study and recommend controllable lighting for each individual aisle in the bookstacks. Movement sensing equipment is preferable to switches, but at what cost? This issue is also addressed under "Lighting" on page 5.

Group Two Equipment:

1. 1862 double-faced sections of shelving
2. End panels for each end range

Name:

Periodical Stacks

Number and Size:

616 double-faced sections occupying 9500 assignable square feet.

Purpose:

This shelving is to house the periodicals collection which now numbers 2,690 titles and 46,000 bound volumes which can grow to 135,000 volumes in this program. The librarians have recommended that, with the exception of the current issue of about 60 titles in the current display area (p. 38), all periodicals shall be housed together, regardless of format. Unbound issues will be kept loose on the shelves, microfiche will be kept in binders and microfilms will be kept in plastic microform boxes, all on the shelves.

Features and Requirements:

While detailed specifications for the shelving appear elsewhere, standard library, welded frame, cantilevered shelving with double-faced base plate which support twelve bracket-type, adjustable shelves is required. Shelving is to be placed 4'8" on center. It is paramount that the lighting system and the stack layout be designed in concert. The shelving design must, of course, meet or exceed all California seismic requirements.

Many libraries which have been retrofitted with smoke detectors, sprinkler systems and seismic bracing appear very cluttered near or around the tops of stacks and below the ceilings. If smoke detectors and sprinklers are required, they should be located essentially above the ceilings out of the way of the bookstacks. Ceiling, lighting and bookstacks come together with great frequency in a library. These elements must look like they belong together.

Spatial and Funcional Relationships:

There is a strong relationship between periodicals and periodical indexes -- electronic and printed -- and with the reference desk. In the current building the periodicals are in sight of the reference desk and the indexes. Since periodicals are allotted a significant increase in space in this program, that very close physical relationship may not be possible. Librarians request that, if periodicals are not on the same floor with reference, they be only one floor away and near a staircase. An appropriate number and variety of reader stations discussed under "General Seating" must be well integrated with the Periodicals.

Services:

The architect must study and recommend controllable lighting for each individual aisle

in the periodical stacks. Movement sensing equipment is preferable to switches, but at what cost. This issue is also addressed under "Lighting" on page 5.

Group Two Equipment:

1. 616 double-faced sections of shelving
2. End panels for each range end, some of which shall be wood or decorative

Name:

Newspapers

Number and Size:

One, at 200 assignable square feet

Purpose:

Users want access to both current and older editions of newspapers. Newspapers are messy and bulky and do not lend themselves to the same shelf arrangements as bound periodicals. Because of this problem, older issues are kept on microfilm. Essentially then, there are three groups of newspapers---the latest daily issue, the older paper issues, and the microfilm issues. The most recent issues--last two or three days--will be in the reading room described on page 42. All other newspapers will be kept here.

Features and Requirements:

A possible way to display newspapers would be to have a display shelf next to hanging folders for the older issues. Folders should have date designations on the edge of the folder to aid users. Close to or underneath these paper issues should be microfilmed newspapers housed in microfilm cabinets. Because newspapers on microfilm continue to grow, expansion space is needed.

Spatial and Functional Relationships:

It is assumed that newspapers will be in the vicinity of the other periodicals (see page 60). Reader stations for those reading newspapers in both formats are needed near this area.

Services:

Microform readers obviously require electricity.

Group Two Equipment:

1. Two microfilm readers on 36" x 48" carrels
2. Two chairs
3. Six lounge chairs
4. 4' x 6' table
5. Four chairs
6. 20 microfilm cabinets

Name:

Microforms Storage

Number and Size:

One, at 200 assignable square feet

Purpose:

This area will house the library's microform collections, excluding the periodicals and newspapers, the government publications and the reference tools on microfiche. The two essential collections are ERIC and cataloged books in microfiche and microfilm formats.

Features and Requirements:

Spatial and Functional Relationships:

The area must be near reading equipment. Users sometimes need help finding this material, so it should be reasonably close to a service point. Since the microform readers will be in the periodicals area, microform storage should be nearby.

Services:

None.

Group Two Equipment:

1. Five microfiche cabinets
2. Five microfilm cabinets

Name:

Curriculum Library

Number and Size:

One, at 1000 assignable square feet

Purpose:

The Curriculum Library houses four kinds of material that are the tools of the trade for teachers: elementary and secondary textbooks, curriculum guides, children's books, and "kits" of teaching material.

Features and Requirements:

Seating is not included in the asf. There should be enough table seating nearby that a class of 30 could meet in the area.

Two of the collections, the children's books and the kits, are cataloged. That catalog may be continued in card form.

Spatial and Functional Relationships:

Students need some help finding this material, so it should be located near an elevator or stairway on one of the upper floors. It has a faint relationship to the education books, which have call numbers beginning with "L".

Services:

Group Two Equipment:

1. 42 sections of standard double-faced shelving.
2. Ten sections of extra-deep double-faced shelving for kits.
3. Card catalog cabinet or OPAC terminal
4. Microfiche reader

Name:

Special Collections Stacks

Number and Size:

One, at 700 assignable square feet

Purpose:

These stacks will house some of the Library's special collections and archives which, at this time, are quite modest. Some will also be kept in the Reading Room described on page 42.

Features and Requirements:

This room should have its own environmental controls which can operate outside the rest of the building's schedule. Requirements concerning bookstacks discussed elsewhere are appropriate here. The floor need not be carpeted.

Spatial and Functional Relationships:

This room can be located anywhere because use of special collections and archives is low. If space is available, proximity to the Reading Room is probably desirable for the future. Users will probably be directed to the Reference Desk to retrieve these materials.

Services:

Group Two Equipment:

1. 40 sections of double-faced sections of shelving

MEDIA SERVICES

Media Services currently consist of three broad areas: traditional media services which are generally concerned with the purchase, display, distribution and production of non-print resources; instructional television; and maintenance and repair of instructional equipment. The traditional media services are very much a part of the information a patron seeks when entering a library. For user convenience bibliographic and physical access to non-print resources should take place in the library. Slides, overhead transparencies and other media are routinely produced from library printed materials which have varying circulation restrictions, further increasing the need for media services to be in the library. Media services discussed on pages 67 through 76 should be within the Library.

Instructional television and maintenance and repair operations, however, have little in common with a library. Both these functions are entitled to space in the Stiern Library as generated by formulas for Media Services but they do not need to be part of the library. In fact, their placement in the building must be considered carefully so they do not detract from library operations. Instructional television studios will generate a large volume of pedestrian traffic which should not be routed through the library. Maintenance and repair areas may generate building noise and dust that must be isolated.

Name:

Media Reception and Secretary's Office

Number and Size:

One, at 225 assignable square feet

Purpose:

This area will serve as both a vestibule for those seeking assistance in Media Services and as a work area for support staff.

Features and Requirements:

The space must be inviting to welcome visitors, but it must also be designed to allow the staff to monitor or control traffic. Since there will be expensive equipment in Media Services, the reception area must be designed with security in mind as well.

Services:

The space must be wired adequately for all normal office communications.

Group One Equipment:

1. Reception counter (20' x 2') with flush duplex electrical outlets every five feet in counter top

Group Two Equipment

1. Five, 5-drawer filing cabinets
2. Worktable (3.5' x 6')
3. Two chairs on castors
4. Secretarial desk

Name:

Student/Faculty Production Area

Number and Size:

One, at 600 assignable square feet

Purpose:

This area will provide a convenient place for faculty and students to design and produce their own simple visuals for classroom presentations.

Features and Requirements:

The student/faculty production area must be large enough to allow several people to work on various projects simultaneously. There must be adequate space to provide a working environment around the equipment, materials, and layout tables. The area will probably have to accommodate classes, and/or be large enough to use as a lab area for demonstrating the use and application of equipment in this facility. The student/faculty production area will be supervised by a Media Specialist and student assistants.

Spatial and Functional Relationships:

The Media Specialist's office should be part of, or adjacent to, the student/faculty production area. This area has no special need to be located in close proximity to traditional library functions and may have direct outside access.

Services:

Most of the equipment here requires electricity. Electrical outlets must be thought out carefully in advance. Lighting should be in individually controllable grids to adjust lighting levels in the several areas delineated below.

Group Two Equipment:

Slide production

1. Copy stand on 3'x8' table
2. Slide duplication stand on 3'x5' table
3. 3'x10' light table for slide sorting
4. Four slide projection and programming carrels at 3' x 4'
5. Storage cabinets: four at 18" x 36", one at 48" x 48"
6. Six chairs on castors

Overhead transparency production

1. 3' x 5' table for thermofax and paper cutter

2. 3' x 10' table for two Macintosh SEs and laser printer
3. Two chairs on castors

Video editing

1. Two editing racks, each 6' x 8'
2. Six chairs on castors

Materials pro[illegible]ion and preservation

1. 3' x 6' table for dry mount press
2. 3' x 5' table for laminator
3. 3' x 5' table for paper cutter, materials binder
4. Storage cabinet, 48" x 48"

Name:

Director of Media Services Office

Number and Size:

One, at 160 assignable square feet

Purpose:

The Director of Media Services requires an office for planning and consultation with employees and faculty.

Features and Requirements:

If possible, this office should have an outside window.

Spatial and Functional Relationships:

This office should be adjacent to the reception area and should have good access to other parts of media services.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. L-shaped combination desk and computer workstation
2. 48" diameter conference table
3. Four chairs on castors
4. Shelving

Name:

Media Specialist office.

Number and Size:

One, at 110 assignable square feet

Purpose:

The Media Specialist works closely with students and faculty and must be near the production area.

Features and Requirements:

This office can be similar to that for librarians which is described on page 99.

Spatial and Functional Relationships:

This office should be within the Media Production Area.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. L-shaped combination desk and computer workstation
2. Two chairs
3. Wall shelving

Name:

Staff Media Production

Number and Size:

Three rooms, totaling 1300 assignable square feet.

Purpose:

This production area, which includes photography and video and audio will be a limited access facility. Media production will consist of several rooms, as described below.

PHOTOGRAPHY

Number and Size:

One, at 450 assignable square feet.

Features and Requirements:

The photography area should consist of two connected rooms. The dark room should have a large sink, 10' x 12' long, against one wall. The opposite wall should be the "dry" counter area for the enlarger, photo paper storage, etc. The front area is a combination of: office, light tables and photographic studio measuring approximately 12' x 12'.

Spatial and Functional Relationships:

This area should be in proximity to other media services.

Services:

The photographic are should have appropriate electrical services to support photography. In the dark room careful attention should also be given to air conditioning and humidity requirements and to dust control.

Group One Equipment:

1. See above under Features and Requirements

Group Two Equipment.

1. Analog telephone

VIDEO POST-PRODUCTION

Number and Size:

One, at 350 assignable square feet.

Features and Requirements:

This area consists of two editing suites, approximately 10' x 20' each. Since the rooms will be used for video tape editing, all partitions and the floor should be acoustically treated.

Spatial and Functional Relationships:

These rooms should be near the audio post-production facility.

Services:

Electricity to these rooms should go through a line conditioner.

Group Two Equipment:

1. Video dubbing rack, 4' x 8'
2. Two video dubbing systems, 8' x 10' each
3. Six chairs
4. Two open-faced storage shelves, 2' x 4' each
5. Patch cord rack, 2' x 4'
6. Analog telephone

AUDIO POST-PRODUCTION

Number and Size:

One at 500 assignable square feet

Purpose:

This area will be used for voice/musical recording work and slide synchronization productions.

Features and Requirements:

This area will consist of two soundproof booths, one 10' x 10' and the other 10' x 15', and one acoustically treated recording room. Windows should be double glazed with one pane set at a 5 degree angle between the soundproof booths and recording area. Fan and ballast noise are not acceptable here.

Spatial and Functional Relationships:

Audio-post production and video-post production should be near each other.

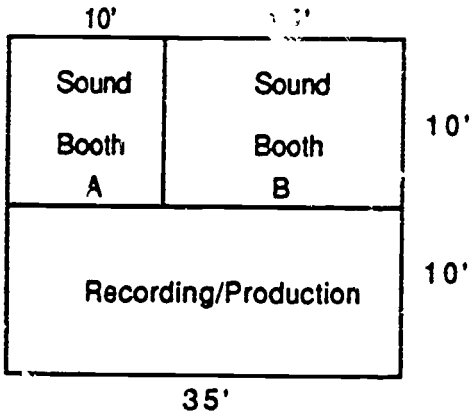
Services:

The rooms should have standard sound recording electrical services. Special attention must be paid to airflow in the soundproof booths to maintain a silent environment.

Group Audio Equipment:

1. Audio dubbing stand, 3' x 5'
2. Audio recorders, multi-track, time code (2), 3' x 6' each
3. Audio equipment rack, 4' x 4'
4. Screen
5. Projection stand, 4' x 4'
6. Table, 3' x 5'
7. Eight chairs
8. Storage shelf, 2' x 5'
9. Analog telephone

Possible Configuration



Name:

Physical Distribution

Number and Size:

One at 500 assignable square feet

Purpose:

Certain types of media-related equipment will be loaned to students and faculty from this facility.

Features and Requirements:

Staff at Media Reception will provide service to patrons needing to borrow media equipment. The checkout counter in Media Reception will also serve this area. Industrial shelving on which to store the equipment will use a substantial portion of this space. Double doors will be needed to allow passage of bulky carts and equipment.

Spatial and Functional Relationships:

The physical distribution area should have easy access because patrons will be carrying equipment in and out and media carts may also move in and out of this area and the building. Since the campus is now well-wired, media cart traffic will likely decrease. The physical distribution area must be adjacent to the Media Center reception area.

Services:

Electricity for recharging batteries.

Group Two Equipment:

1. 15 sections of 20" x 40" adjustable industrial shelving

Name:

Electronic Distribution

Number and Size:

One, at 500 assignable square feet

Purpose:

The electronic distribution facility will house the electronics associated with an eventual fifty-channel cable TV distribution system. Equipment will include film-chains, video playback equipment, equipment racks and monitoring devices, channel modulators, satellite and off-air reception equipment and test equipment. There will be some media storage to accommodate daily playbacks. One technician will also work out of this area.

Features and Requirements:

This area may have special cooling requirements and will require raised flooring to accommodate cabling requirements.

Spatial and Functional Relationships:

Since many of the materials to be distributed electronically will be housed in Media Storage (see p. 22), Electronic Distribution should be as close as possible to Media Storage.

Services:

Wiring and air conditioning appropriate to the activities planned here are required. This room should be fed with 50 twisted pair of telephone lines

Group Two Equipment:

1. 20 linear feet of standard 19" equipment racks
2. Single-pedestal desk
3. Two chairs
4. Ten feet of storage for films and videotapes

Instructional Television

Name:

Instructional Te sion Studio

Number and Size:

Three, at a total of 4200 assignable square feet

Purpose:

The University needs three studios for instruction and broadcasting over instructional television. Two of the rooms will hold fifty students and the other seventy five. This latter room may also be employed for some staff post production work.

Features and Requirements:

These studios will need special lighting and acoustical treatment. Lighting level should be 150 foot-candles and daylight temperature should be 5500 Kelvin. The interior walls of the studios should be treated with Sonex or similar material. The rooms themselves should be free of noise interference from adjacent areas. Heating and cooling for the ITV studios must be baffled adequately so no air or building mechanical noise interferes with sensitive room microphones.

Spatial and Functional Relationships:

Adjoining the broadcast studio area should be space for the control rooms, engineering staff, program coordinator, and receptionist. This area must have direct outside access.

Services:

Cooling and lighting requirements were described above. Electrical requirements will obviously be heavy.

Group One and Group Two Equipment:

The campus has one complete ITV studio which can be used as a model.

Name:

Instructional Television Control Room

Number and Size:

Three, at 250 assignable square feet each

Purpose:

ITV requires a complete control room next to each studio, which functions as a broadcast studio.

Features and Requirements:

The control engineer must be able to see into the studio and direct electronic activity from his station. Ten telephone lines will run into each control room. The control rooms will generate substantial heat and will need cooling capacity greater than adjoining rooms.

Spatial and Functional Relationships:

Control rooms must be located adjacent to the back of each ITV studio.

Services:

Services must support the electrical, cooling and communications requirements of the space.

Group One and Group Two Equipment:

1. The University has one complete ITV facility that may be used as a model for planning.
2. Two additional analog telephones

Name:

ITV engineer's office and workroom

Number and Size:

One, at 200 assignable square feet

Purpose:

The ITV engineer manages and oversees activities in the control room, maintains broadcast records and stores equipment records for all ITV equipment.

Features and Requirements:

This room is a fairly functional work space and will be as much a workroom as an office.

Spatial and Functional Relationships:

This room must be as close as possible to the ITV studios and ITV control rooms.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Shelving (18" x 60")
2. Workstation (3' x 5')
3. Four chairs
4. 48" diameter conference table
5. Two vertical filing cabinets

Name:

Program Coordinator's office

Number and Size:

One, at 150 assignable square feet

Purpose:

This positions coordinates all non-technical aspects of Instructional Television.

Features and Requirements:

An outside window is desirable

Spatial and Functional Relationships:

This office should be near all the other ITV spaces.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. L-shaped computer workstation, approximately 30" x 72"
2. Five-drawer filing cabinet
3. 48' diameter table
4. Four chairs
5. Book case

Name:

Instructional Television Reception and Office area

Number and Size:

One, at 230 assignable square feet

Purpose:

This room serves as a reception area for ITV and as work space for the ITV secretary. It will serve as a mail drop and pick-up for communications with distance learning students. Communications for ITV can be considerable because of syllabi, library materials, exams and so forth which must go out to distant learning students.

Features and Requirements:

This room must be on an outside wall.

Spatial and Functional Relationships:

This room should be near the ITV studios and have direct outside access.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. L- shaped workstation approximately 30" x 70"
2. Four vertical files
3. 30" x 72" mail sorting table
4. Three chairs

Name:

ITV Workroom

Number and Size:

One, at 200 assignable square feet

Purpose:

ITV staff need a work area to assemble materials for courses, to handle mail, to prepare other types of materials and so forth.

Features and Requirements:

This room can be fairly utilitarian.

Spatial and Functional Relationships:

The workroom must be adjacent to ITV reception.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Mail sorting table, 3' x 7'. with sorting bins above
2. Two chairs
3. Table, 3' x 8'

Name:

Technical Maintenance and Repair

Number and Size:

2150 assignable square feet

Purpose:

Personnel who will work in this facility maintain all the campus's instructional equipment. The maintenance and repair area must be large enough to accommodate eight technicians and their working equipment This area will also house a wood-working and metal-working shop.

Features and Requirements:

Four general work areas will include space for the following functions: electronic service area (800 asf); woodworking area (1000 asf); metalworking area (250 asf) and a supervisor's office (100 asf).

Spatial and Functional Relationships:

This area has no spatial relationship to traditional library needs and should have direct outside access. The wood-working area should be separated from the electronic repair area to minimize dust problems. This area is not a circulation point for materials or equipment.

Services:

All the areas except the supervisor's office have the following electrical requirements: voltages of 110, 208 and 220 both single and triple phase with static free grounding. Each workstation should have filtered and GFI power as well as individual power shut off. Lighting should be at least 100 foot candles. The electronic service air should have a centralized source for compressed clean dry air, as well as a central vacuum systems. All three service areas should be clean class 1000-10,000 HEPA filtered. Haylon fire suppression should be provided here. These areas must not introduce dust, noise or physical dangers to collections and equipment in the library.

ELECTRONIC SERVICE AREA

Group One Equipment:

1. First aid/eye wash station with wet sink, 3' x 4'
2. Chemical solvent sink with exhaust, 3' x 4'
3. Floor drain

Group Two Equipment:

1. Eight 12 ft repair/test benches with storage drawers and shelves for test

equipment
2. Four units, 2' x 6' open-faced storage for equipment waiting repair/parts
3. 15 linear feet of industrial shelving
4. Analog telephone

WOODWORKING AREA

Group One Equipment:

1. Sawdust removal system
2. Wet sink, 3 x 4'

Group Two Equipment:

1. Table saw, 3' x 6'
2. Layout table, 5' x 10'
3. Sander, 3' x 3'
4. Drill press, 3' x 2'
5. Panel saw, 2' x 8'
6. Drafting table, 3' x 4'
7. Tool locker, 2' x 4'6"
8. Band saw, 3' x 4'
9. Analog telephone

METALWORKING AREA

Group One Equipment:

1. Wet sink, 3' x 4' with floor drain
2. Chemical sink with exhaust, 4' x 2'6"

Group Two Equipment:

1. Metal lathe, 2' x 5'
2. Mill, 3' x 3'
3. Metal layout table, 5' x 10'
4. Compressed air, 3' x 4'
5. Tool locker, 2' x 4'
6. Metal band saw,2' x 2'6"

Name:

General Purpose Computing Facility

Number and Size:

One, at 3920 assignable square feet

Purpose:

This area will provide a total of eighty computers, twenty each of four different computing standards. It will be the first choice for students requiring computing for general course work. The room will not be reservable.

Features and Requirements:

All computer rooms should be quite visible and open. It is assumed that the terminals and microcomputers located here will be on a network to hardware outside the room and that most software will be served through the network. However, some provision should be made for lockable closets within the square footage allowed. Lighting brightness level should be adjustable.

Spatial and Functional Relationships:

Although this room can stand alone physically, for maximum flexibility of future adaptation, this space should be designed for both internal access from the Library and for external access, if longer hours are needed in future.

Services:

Although power requirements for each individual workstation are modest, there is an obvious need for electrical power to many points throughout the room. Power requirements and power dispersion need to be considered carefully.

Equipment:

1. 80 computer workstations
2. 80 chairs
3. Two student workstations
4. Two chairs
5. Office system for small work area (80 asf)

Name:

Specialized Computer Rooms

Number and Size:

Four, at 1470 assignable square feet each for a total of 5880 asf

Purpose:

Each specialized room will be devoted to one computing standard and will be used primarily for course instruction. Faculty can reserve a room for instruction. They will be open for general use when not reserved.

Features and Requirements:

All computer rooms should be quite visible and open. It is assumed that the microcomputers and terminals will be on a network to hardware outside the room and that most software will be served through the network. Lighting brightness levels should be adjustable. During classes two students will share a workstation. The arrangement and spacing of workstations should consider shared use.

Spatial and Functional Relationships:

These rooms are conceived as having a function somewhat different from the general purpose space described earlier. Nevertheless, for maximum flexibility at present, these rooms should be designed both for internal access from the Library and for external access, if longer hours are contemplated. All five computer rooms should be contiguous.

Equipment:

1. 120 computer workstations
2. 240 chairs
3. Four high resolution computer projection systems
4. Eight large monitors for projections
5. Four instructors' stations

TECHNICAL SERVICES

Name:

Technical Services

Number and Size:

One, at 3150 assignable square feet.

Purpose:

Technical Services consists of Acquisitions, Cataloging, Serials, each of which requires a work area. It also houses the review area for approval books.

In Technical Services the library materials are ordered and received; invoices are verified and approved for payment; records are kept of library expenditures for materials; new books and other materials are cataloged; the catalog records are updated as the collection changes; books are labeled and prepared for the shelves; and periodicals are received, recorded, processed for use and later gathered for binding. Most of the record keeping and processing is or will be automated.

This Technical Services department emphasizes efficient processing. Budgets are spent promptly and books are cataloged and made available to users with minimal delay. Although the staff is comparatively small for the volume of work, backlogs here have been infrequent. Book trucks are used to move material rapidly through the various stage of processing, so comparatively little fixed shelving is needed.

The chart attached shows the flow of materials through Technical Services.

Features and Requirements:

It is very important that these areas be attractive, pleasant, desirable places to work. Technical Processing should have exterior windows and must connect to the central parts of the library by spacious, well-lighted routes, not by back stairs or dim, narrow corridors. By the nature of the work, Technical Services staff receive less recognition for their efforts than do Public Services staff. Their part of the building, then, should express, as far as architecture can, the sense that their role in the library and on the campus is important and is so recognized.

Flexibility is essential. Technical Services work has changed greatly in the last fifteen years and more change is likely. In general, areas should be divided by office systems, rather than by walls. It must be possible to rearrange electrical, telephone and data circuits fairly easily throughout the area.

It is envisioned that Technical Services will be one large space. It is assumed that the functional areas will reflect the workflow and that there will be extensive use of office systems to define work stations, processes and functions. A small area of about 150 asf is needed for meetings and training sessions for the Technical Services staff. It is desirable to have this room near the manager's office.

Spatial Relationships:

Serials has links to Receiving and to the periodicals collection. Acquisitions and Cataloging have no strong links to other areas within the library except to each other and to Receiving. Adjacency to Receiving is desirable. The advantage would be that such a location tends to centralize a small staff, a strategy successfully used in the existing building and necessary in the new building; in particular, other Technical Services staff could receive deliveries when the Receiving Assistant is away. The disadvantage is that such proximity leads to interruptions in the work of the Technical Services staff. Technical Services must be easy to secure in the evenings or on weekends and must not be an entry to the building.

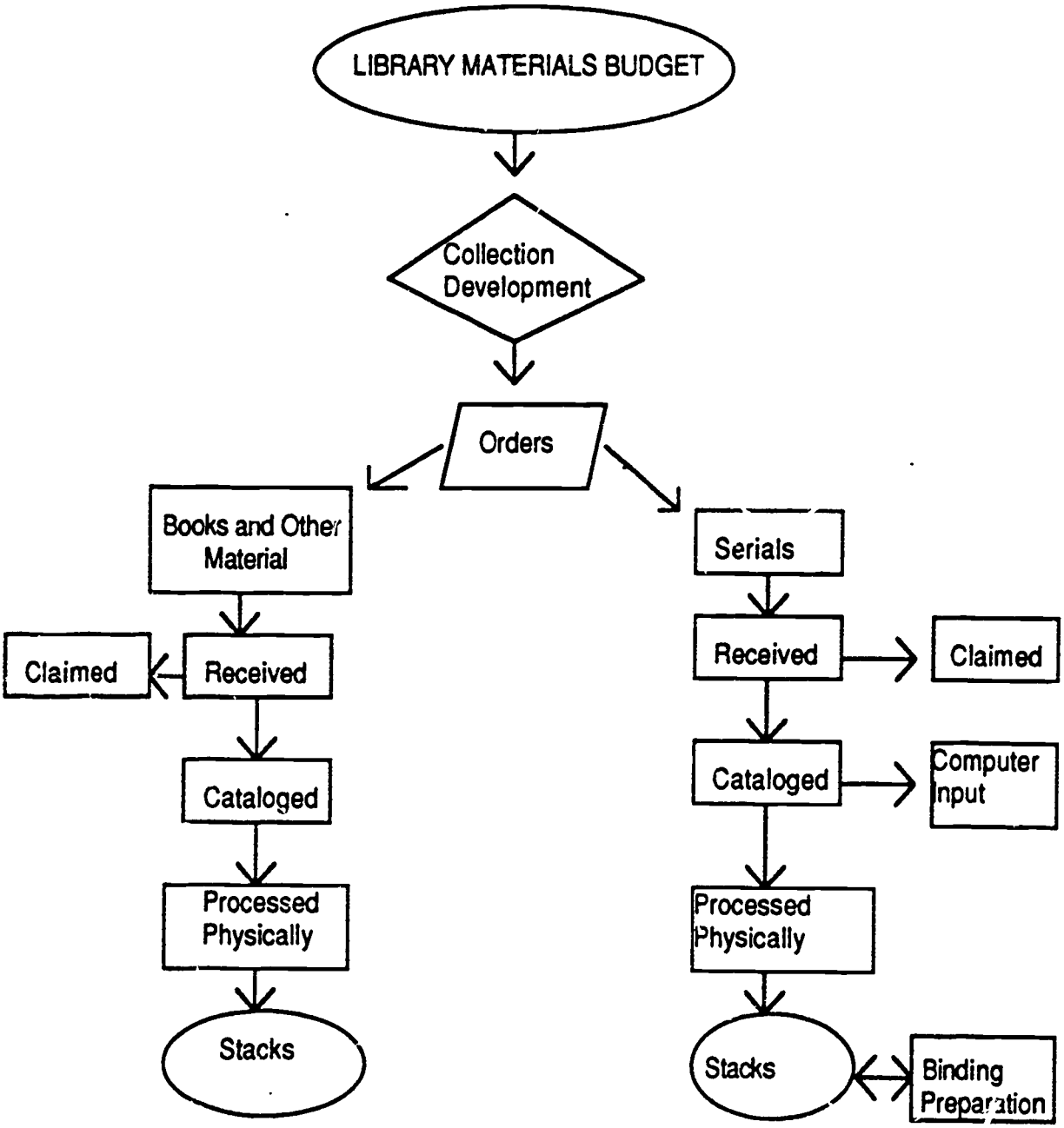
The area for faculty to review approval books should be within Technical Services, mainly for security. These new books do not have property stamps or book theft detection targets, so extra security is needed. The office for the librarian who coordinates collection development should adjoin the Technical Services area and be near the approval books. It is desirable to have the approval area near the manager's office.

The office for the librarian who coordinates bibliographic control should adjoin Technical Services.

Services:

At some point it can be assumed that all Technical Services processes except physical handling will be entirely automated. The main workstations will be microcomputers and terminals. Most of these workstations will connect to other computers in the Library, at very remote locations or elsewhere on the campus. A widespread network of data and telephone circuits is mandatory to achieve the flexibility required to respond to changing technologies. A sink near the cataloging area is necessary.

TECHNICAL PROCESSING FLOW CHART



Group Two Equipment:

Bibliographic Searching

1. Three OPAC work stations
2. Three chairs
3. Index table
4. Two chairs
5. 2' x 3' microfiche reader table or stand
6. Three sections single-faced shelving
7. Two 4' x 8' work tables
8. Eight chairs

Orders

1. Computer work station
2. Printer stand
3. Chair
4. Three sections single-faced shelving

Books and Other Non-serial Materials--Receipt

1. Three double-pedestal desks
2. Two 3' x 4' computer work stations
3. Three chairs
4. Two printer stands
5. Two chairs
6. Five 5-drawer vertical files
7. 1.5' x 3' card file
8. 1.5' x 2' movable file
9. Four sections single-faced shelving
10. 12 -- 14 book trucks

Cataloging

1. Two single-pedestal desks
2. Two chairs
3. Two sections single-faced shelving
4. Two-drawer filing cabinet
5. Two OPAC work stations
6. Two chairs
7. Three OCLC terminals and printers
8. Three chairs
9. Two 4' x 6' worktables with shelving on top
10. Four double-faced sections of shelving or single-faced equivalents
11. Shelf list catalogs occupying 45 sq ft

Serials

1. Two double-pedestal desks
2. Two chairs
3. Two 30' x 60" work stations for computer check-in of serials
4. Five-drawer vertical file
5. Two-drawer file
6. Two-drawer movable file
7. Two sections single-faced shelving
8. Computer workstation
9. Chair
10. 4' x 6' work table
11. Two chairs
12. Two to four book trucks

Binding Preparation

1. 4' x 8' work table
2. Two chairs
3. Six sections of single-faced shelving
4. 2' x 3' cabinet for binding supplies
5. OPAC work station
6. Typing stand
7. Two chairs

Conference Area

1. 4' x 10' table
2. Eight chairs

Approval Review Area

1. Eight single-faced sections
2. Two arm chairs
3. Floor lamp

Name:

Supervisor's Office

Number and Size:

One, at 100 assignable square feet.

Purpose:

To provide a quieter, private place for the supervisor to work.

Features and Requirements:

If possible, this room should have an outside window as well as interior windows. The manager should be visible and accessible to staff. It may well be desirable to use office systems for this space as long as they provide the required privacy.

Spatial and Functional Relationships:

This room should not impede the flow of work in Technical Services but it should be visible and easily accessible from all the work areas.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Double-pedestal desk
2. Two chairs
3. Computer work station
4. Printer stand
5. Five-drawer filing cabinet

Name:

Student Assistant Time Clock Area

Number and Size:

One, at 60 assignable square feet

Purpose:

A non-public area, not necessarily a room, is needed for a time clock, 20 lockers for technical service student assistants, and a message board. The lockers should be large enough to hold a book bag and a jacket, and will not be assigned, i.e., a student assistant will use any empty locker.

Spatial and Functional Relationships:

This area will probably be noisy and messy; the area should be contained.

Services:

Power for time clock.

Group Two Equipment:

1. Time clock
2. 20 lockers
3. Wall mirror

Name:

Mail and Receiving Room

Number and Size:

One at 400 assignable square feet.

Purpose:

This room is intended to be a true receiving room and not a holding tank. Incoming shipments of books, periodicals, mail, supplies, and equipment are received here. Mail is sorted here and equipment should generally be unpacked at this point. Shipments of books, periodicals and government publications will also be sorted and unwrapped here and put on book trucks for their respective departments.

Mail is delivered twice a day from the campus' mail room, and the campus' central receiving makes another two or three deliveries per day. The mail arrives in large canvas mail carts brought to the library by a delivery van or a small utility vehicle. The goods from central receiving are delivered in a van or a small utility vehicle and are carried into the Library receiving room and left on a table. Someone must sign for these deliveries.

UPS also delivers daily, but at the front entrance to the Circulation desk. Nearly all UPS deliveries are interlibrary loan materials, which should be true in the new building as well.

Features and Requirements:

This room should have two sets of doors: one set to the dock, obviously, and one set to the Library. A third door should lead into Technical Services. At least the outer doors should be high enough to allow a loaded forklift to enter the room from the loading dock. If the dock door is an overhead door, an additional personnel door should be provided to conserve energy.

There must be counter space for receiving packages, unwrapping them, sorting mail and so forth. Since this room will not be staffed at all times, it should be planned to allow deliveries to occur in the absence of staff. For instance, there should be provision for locking the mail carts under the counter, or elsewhere. The campus mail delivery person would have a key to both the receiving room and to the lockable cabinet.; this person could then deliver and pick up mail carts without Library personnel being present. A similar situation could pertain to the central receiving people; they could make their deliveries and then buzz for someone in Technical Services to sign for them.

Spatial and Functional Relationships:

The Receiving/Mail Room must obviously adjoin the loading dock. The room should either adjoin Technical Services or have good vertical access to it. It must also open into corridor space which leads to elevators for furniture and equipment deliveries to

all parts of the Library. Ideally the Receiving/Mail Room should be near Secure Storage.

Services:

Trash and recycling bins should adjoin this area on the outside.

Group Two Equipment:

1. Mail sorting bins.
2. Possibly mail metering equipment
3. Storage for mailing envelopes, cartons, other packing materials.
4. Mail delivery cart
5. Book trucks

Name:

Secure Storage.

Number and Size:

One at 150 assignable square feet

Purpose:

There are often incoming and outgoing pieces of equipment or other items in transit which require some short term storage. This area will provide for that storage.

Spatial and Functional Relationships:

The secure storage must be adjacent to the Receiving/Mail Room, but, ideally, not a part of it. The room must open onto the loading dock as well.

Services

Features and Requirements:

Group Two Equipment:

1. Industrial shelving

Name:

Loading Dock

Number and Size:

One

Purpose:

The dock should allow easy delivery of packages and equipment to the Library.

Features and Requirements:

Only one vehicle at a time will use the dock, which need not be covered. The dock should be high enough to allow a small delivery van or Cushman type utility vehicle to unload conveniently from its deck, which is about two feet above ground level. The dock should also be wide enough to allow a fork-lift or Cushman type vehicle to maneuver on top (approximately 12' wide.)

The doorway to Receiving should be wide enough and high enough to let a forklift truck with a tall load enter the building.

An adjustable steel dockplate or a movable ramp that would permit hand trucks to roll on and off truck beds of varying heights would be useful if not hazardous or too expensive.

The dock must have a ramp to allow handcart access from ground level to the entrance of Receiving. The ramp should be usable by pedestrians, handcarts, forklifts and small utility vehicles

Services:

A bell or intercom is needed to communicate with Library staff about a delivery.

Name of Area:

Librarians' Offices

Number and Size:

11 offices, at 120 assignable square feet each. 1320 total assignable square feet

Purpose:

These offices are the main work areas for the librarians and are locations in which they confer with professors and students. These offices could be the sites for the computer searching.

Features and Requirements:

The offices should be sufficiently soundproof for conversations to be held at normal levels behind closed doors without being overheard. Computer printers in use should not be more than faintly audible outside the offices or in neighboring offices. A combination of ambient and task lighting is preferable.Each office should have an exterior window, if at all possible. Doors should not have windows.

Spatial and Functional Relationships:

The offices should be visible, not hidden. They should be accessible from the main entrance without walking through quiet study areas, stack areas, or non-public work areas. Five of the offices should be near the Reference Desk, three should be near Technical Services, and one each in Special Collections, Government Publications, and Circulation.

Services:

Each office should have a four-plex electrical outlet on each wall and standard communication capabilities.

Group Two Equipment:

1. Desk
2. Computer workstation adequate to contain Apple Macintosh, peripherals and small area for working material.
3. An ergonomic armchair
4. Two side chairs
5. File cabinet
6. One section of wall mounted shelving
7. A coat hook on the back of the door.
8. A tackboard on one wall is optional.
9. In/out box mounted outside the office door.
10. Four digital telephones

Comment: The offices are small and will have to be carefully planned to hold all their

furniture. (The problem is that the State's standard size for an office was adopted before computers replaced typewriters as standard equipment, and the computers require more room.) Desks could be smaller than the very large desks which we have now. A large, deep shelf above the desk (as in a carrel or a modular workstation) might make up for the smaller work surface. If the door were placed about a foot and a half from the wall against which it opens, there would be room behind it for the book case or the side-opening file cabinet. Windows should not limit too much the possible arrangements of furniture.

ADMINISTRATIVE OFFICES

Name:

Director's Office

Number and Size:

One, at 180 assignable square feet.

Purpose:

At present the Library's administration consists only of a Director of Libraries and a secretary. This program envisions an increase over time to include an assistant director and possibly two other staff. The Director has responsibility for the leadership and development of library programs and services and management of these programs. Fiscal, personnel, procurement and facility responsibilities also reside here. The actual operation of programs and services and their daily management is, of course, spread throughout the library. However, all the librarians and two senior staff members report to the Director. The Director also supervises the Director of Media Services who, in turn, supervises not only media services but instructional television and an electronic repair facility as well.

General Conditions:

All offices in the administrative area should have outside windows. The area should be designed to appear attractive to visitors and potential donors.

Spatial and Functional Relationships:

Naturally, the Director has many meetings with the various staff under his supervision. While the administrative offices do not need to be near the entrance, for convenience and good form they should be easily accessible by all staff, the university community and visitors. The present Director very much maintains an open door policy and the office arrangement should reflect that philosophy. The administrative conference room would ideally adjoin the Director's office.

Features and Requirements:

Some enhanced architectural and design elements are usually appropriate for the administrative offices.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Executive Desk (not to be placed)
2. Five foot diameter table (to be used as desk)
3. Kneehole credenza, essentially for use as computer workstation and for telephone
4. Bookshelves
5. Executive chair and four low back matching chairs (all on castors) for the round table
6. Small sofa and matching club chair, or three or four small club chairs
7. Low table(s) to complement above seating.

Name:

Assistant Director's Office

Number and Size:

One, at 125 assignable square feet

Purpose:

As the University and the Library grow, eventually another administrative position will be necessary. This program anticipates that growth and this office will provide space for an assistant director.

General Conditions:

All offices in this area have the same general conditions.

Spatial and Functional Relationships:

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Double-pedestal desk
2. Executive chair
3. Kneehole credenza
4. Two side chairs (on castors)
5. Bookshelves
6. Digital telephone

Name:

Administrative Assistant's Office

Number and Size:

One, at 125 square feet.

Purpose:

This part of the program also anticipates eventual growth in administrative staff. This office will also be used by librarians and other staff working on assigned special projects.

General Conditions:

All offices in this area have the same general conditions.

Spatial and Functional Relationships:

This office should be next to the Director's office.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Double-pedestal desk
2. Executive chair
3. Kneehole credenza
4. Two side chairs (on castors)
5. Bookshelves
6. Digital telephone

Name:

Administrative Secretaries' Office

Number and Size:

One, at 250 assignable square feet for two occupants.

Purpose:

The position provides secretarial and business support for the Library's administration. The office should have standard office electrical and communication capabilities. At present there is only one secretary, but provision should be made for two positions.

General Conditions:

All offices in this area have the same general conditions.

Spatial and Functional Relationships:

Visitors should enter this room first.

Services:

The office should have standard office electrical and communication capabilities.

Group Two Equipment:

1. Two secretarial desks with return
2. Two computer workstations
3. Four secretarial chairs
4. Bookshelves
5. Three visitors' armchairs
6. Small storage credenza for paper supplies, etc.
7. Digital telephone

Name:

Administrative Conference Room

Number and Size:

One, at 400 assignable square feet

Purpose:

This room will be used for weekly staff meetings as well as for many other types of meetings. It should also be appropriate for donor and support groups to use.

General Conditions:

All offices in this area have the same general conditions.

Spatial and Functional Relationships:

This room should connect with the Director's office. It also should have an outside door leading directly into the Library so users of the room will not have to walk through the offices. If the Reading Room described on page 42 is designed in such a way that it can be used for receptions and donor gatherings when the Library is closed, there is some advantage in having the administrative offices and especially the administrative conference room next to the Reading Room, with access between the two rooms.

Features and Requirements:

Although water is not essential to this room, it would be nice to locate a portable sink/stove unit for preparing and serving refreshments.

Services:

Electrical, telephone and data circuits in every wall as well as some in the floor

Group Two Equipment:

1. Table(s) to seat 20-24
2. 24 chairs
3. Serving credenza
4. Pull down screen
5. Hidden marker board
6. Portable sink/stove unit

Name:

File and Work Room

Number and Size:

One, at 200 assignable square feet

Purpose:

This space will offer a place out-of-sight for files and a small work area for assembling reports, documents and for other tasks where a quantity of papers needs to be spread out for work or editing.

General Conditions:

This room can be interior and windows are not particularly desirable.

Spatial and Functional Relationships:

This room should be conveniently accessible for the secretaries.

Services:

Electricity

Group Two Equipment:

1. Four lateral files
2. 4' x 6' table
3. Two side chairs
4. Photocopier

Name:

Library Supplies.

Number and Size:

One, at 100 assignable square feet

Purpose:

This room will be the central supply depot for the Library.

Spatial and Functional Relationships:

This room will be located in the Administrative Offices.

Group Two Equipment:

1. Six storage cabinets

Name:

Staff Room

Number and Size:

One, at 350 assignable square feet

Purpose:

An area for staff to eat lunch and take breaks.

Features and Requirements:

Cupboards and counters as in the kitchen of a small apartment are needed. There should be a space for a refrigerator and for a microwave oven. Exterior windows are desirable.

Spatial and Functional Relationships:

Good access from all the offices and staff work-stations in the building, to minimize travel time.

Services:

Water and electricity are required

Group One Equipment:

1. Cupboards
2. Counter
3. Sink

Group Two Equipment:

1. Tables
2. Cafe chairs
3. Sofa
4. Lounge chairs
5. Large waste basket

Equipment that will be provided by the staff:

1. Refrigerator
2. Microwave oven
3. Large coffee maker

APPENDIX

ROOM LIST
(PPD 2-5)

Room Number	Room Name	Page Number	Stations	Square Footage
	Space for Materials			
1.	Book Stacks	58	0	27,845
2.	Bound Periodical Stacks	60		9,500
3.	Current Periodicals (deleted. see #23.1)			
3.1	Newspapers	62		200
4.	Reserve Book Room	21		320
5.	Reference Room	31		2,200
5.1	Indexes	32	32	1,380
6.	Government Publications	37	15	3,200
7.	Microforms	63		200
8.	Media Storage	22		500
9.	Special Collections	65		700
10.	Curriculum Area	64		1,000
			47	47,045
	Staff Areas			
11.	Reference Desk	28	6	400
11.1	Computer Reference Service Rooms(2)	36	6	240
11.2	Reference Workroom	35	2	225
11.3	Third Service Desk	40	1	150
12.	Librarians' Offices(10)	99	10	1,200
13.	Circulation Desk	14	7	600
13.1	Circulation Workroom	17	4	960
13.2	Sorting Room	19		200
13.3	Circulation Office	20	1	100
13.4	Student Assistant Time Clock	25		60
14.	Interlibrary Loan	23	2	600
15.	Government Publications Workroom	39	2	200
16.	Director	101	1	180
16.1	Secretaries' Office	105	2	250
16.2	Assistant Director	103	1	125
16.3	Conference Room	106	25	400
16.4	File and Work Room	107		200
16.5	Administrative Assistant	104	1	125
17.	Technical Processing Area	88	33	3,150
17.1	Technical Processing Office	93	1	100
17.2	Mail and Receiving Room	95		400

Room Number	Room Name	Page Number	Stations	Square Footage
17.3	Student Assistant Time Clock	94		60
18.	Library Supplies and Storage	108		100
18.1	Secure Storage	97		150
19.	Special Collections Office	99	1	120
20.	Copy Center	26		225
21.	Staff Room	109		350
22.	Computer Room	27		500
			106	11,370
	User Areas			
23.	Open Seating	44	380	12,000
23.1	Reading Room	42	60	3,000
23.2	Periodicals Photocopy Area	56		800
23.3	Floor Copier/ Terminal Rooms(3)	57		450
24.	Graduate Student Carrels	48	20	1,200
25.	Faculty Studies	47	25	1,500
26.	Group Study Rooms	46	70	1,700
27.	Conference Room (deleted)			
28.	Instruction Room	52	50	1,000
28.1	Instruction Room	52	35	700
29.	Listening/Viewing Room	50	30	1,200
29.1	Group Viewing Rooms(3)	51	32	550
30.	Reserve Reading Room/ 24 Hour Study Hall	49	24	720
31.	OPAC Main Terminal Cluster	30	4	600
31.1	Electronic Reference	33	30	1,200
32.	Reference Seating	34	40	1,000
33.	Current Periodicals (deleted. see # 23.1)			
34.	Microform Reading Areas	55	30	800
34.1	Special Collections (deleted. see #23.1 Reading Room			
35.	Visually Impaired Room	54	3	150
36.	Student Access Computer Workstations - General	86	80	3,920
36.1	Student Access Computer Workstations-Specific	87	120	5,880
			1033	38,370
	Media and Instructional Television Services			
37.	Staff Media Production	72	3	1,300
37.1	Student/Faculty Production	68	14	600
38.	Television Production (deleted)			
39.	Audio Production (see # 37)			

Room Number	Room Name	Page Number	Stations	Square Footage
40.	Photography Services (see # 37)			
41.	Technical Maintenance and Repair	83	8	2,150
42.	Physical Distribution	75		500
42.1	Electronic Distribution	76	1	500
43.	Small Group Viewing (deleted. see #29.1)			
44.	Media Director	70	1	160
44.1	Media Reception	67	1	200
44.2	Media Specialist	71	1	110
45.	Instructional Television Studio (3)	77	175	4,200
45.1	ITV Control Rooms (3)	78	3	750
45.2	Engineer's Workroom	79	1	200
45.3	ITV Program Coord.	80	1	150
45.4	ITV Reception and Office	81	1	230
45.5	ITV Workroom	82	2	200
			212	11,250
Totals			**1398**	**108,035**