

**Oklahoma State University** 

Stillwater, Oklahoma

DESIGN PROGRAMMING AND DESIG

DESIGN DEVELOPMENT

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# GARDINER HALL RENOVATION

DESIGN PROGRAM DESIGN DEVELOPMENT

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School of Architecture Oklahoma State University

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# BOOK ONE: ARCHITECTURAL PROGRAMMING

#### PREFACE

This book represents the first phase of work performed toward completion of Professional Project, the final step required to complete graduate study in Architecture at Oklahoma State University. Upon completion of Professional Project, I shall be eligible to receive the Master of Architecture Degree, the highest degree of architecture education, which provides the necessary preparation for those aspiring to enter the practice of architecture as professionals. This book is the result of hours of conversations with the administration and faculty of the Art Department at OSU. Many others have lent their time and patience to me by sharing their thoughts, advice and support. Particular thanks are extended to:

Herb Gottfried : Art Department Head Joe Baker **Richard Bivins** Dean Bloodgood Nick Bormann Art Faculty Paul Cooper Susam Hamlet Ellen Meissinger) Bob Parks Nancy Wilkinson ) Professor John H. Bryant : School of Architecture Head Professor Bob Heatly : Professional Project Advisor Professor Alan Brunken : Academic Advisor Bill Halley : University Architect Gloria Corley : Typist Mary Davis : Printing

# INTODUCTION

## THE PROJECT

"Renovation": the act of restoring to life vigor, activity; reviving; renewing --Webster

The concept of building renovation has, within the past decade, become a movement of considerable force in this country. The building boom of the 50's and 60's was characterized by the philosophy of "new" is better than "old". As a result, many fine old landmarks were razed to make way for new, modern structures. The destruction of such buildings was carried out to such an extent that many cities soon lost all trace of their past architectural heritage. With the coming of the 70's came a recession, an energy crisis, and rising inflation, all of which have affected the construction industry with soaring building costs. As a result, innovations have appeared in design philosophy and building techniques. Renovation, although an old idea, now took on new light. Old buildings which no longer proved adequate for their use can be renovated, or retrofitted, to either better serve their original function, or to serve entirely new functions. It has been discovered in most cases that, if the building's structure is sound, not only can it be renovated at a lower price than that of an entirely new structure, but that in doing so, society also benefitted in that a certain portion of its heritage was being retained--that all important link to the past.

Renovation is not an entirely new concept at Oklahoma State University. The first renovation project on campus of major consequence was the renovation of the Old Gymnasium building to house the School of Architecture. This project, completed in 1976 at a cost of \$850,000, has provided an important and creative example in the successful use of renovation as a tool in battling increasing building costs while preserving a campus landmark long associated with sentimental memories of the many people who had at one time been associated with the building. At present, there is a three year moritorium on new construction on the OSU campus in part to encourage renovation as an alternative to new construction. It appears then, that more campus buildings should be considered for renovation. Gardiner Hall presents an excellent opportunity for full scale renovation.

## **ART EDUCATION at OSU**

Education in the visual arts has undergone enormous growth and development during the past several decades. Art related programs have expanded on most college campuses to bachelorate or graduate programs, even institutions where neither degree previously existed. The bachelor's degree in art is available at almost any state regional college and the Bachelor of Fine Arts degree is becoming more commonly the preferred degree. The Master of Fine Arts degree, the terminal degree in studio art, has garnered acceptance as the professional degree for the artist-teacher. Accreditation for academic programs, another mark of the rate of expansion, is now carried out by the National Association of Schools of Art.

Curricularly, there are several kinds of visual arts programs: art for art's sake programs which relate degrees to the traditional thrusts of the fine arts; art and design programs that stress the interrelatedness of the visual arts and the study of theoretical and applied design; avant-garde programs which strive to be on the leading edge of arts activity.

The program at OSU is more closely tied to art and design. The program is about forty years old and has always had a strong drawing and design core curriculum. Students currently study most of the traditional art and design subjects: drawing, design (two and three dimensional), painting, printmaking, graphic design, sculpture, ceramics, jewelry and metalsmithing. Course work is offered at the beginning and advanced levels. About 50% of all enrolled students obtain an art degree as a vehicle for a liberal arts education. Another 25% work toward certification for public school teaching, and the remainder work to achieve commercial and aesthetic success in graphic design fields or studio art.

Students at OSU seem to have achieved about the same level of success as students from comparable programs at other universities. A small percentage of graduates has gone to graduate school, college teaching, studio recognition, and careers in graphic design.

The future program for the OSU department calls for continued development of courses in theoretical and applied design and for a Master's degree program for the public school teacher.

## PURPOSE

In my search for a suitable architectural project to be undertaken as my Professional Project, I first established my educational goals for the project. After considerable thought, I established my goals as the following:

To undertake an architectural design project which would fully challenge my abilities as a designer; a project which would encompass and surpass all my previous educational experiences in the field of architecture.

That the project selected should be a realistic one with a real client and a real situation, a project which is fully intended to be implemented. Thus, I would not only be fulfilling an educational degree requirement, but also lending my services to further the cause of enriching the environment of my fellow man through competent architectural design.

To undertake and carry through the project as it would be carried out in an actual office situation through a systematic, analytical process.

Upon establishing these educational goals, I then began the process of searching for a suitable architectural design project. With luck and at the suggestion of John Bryant, Head of the School of Architecture, I discovered the Gardiner Hall Renovation Project for the OSU Art Department. I selected this project for my Professional Project as it not only met my educational goals for the course, but it also offered me the opportunity to become involved in a comprehensive renovation project. Renovation has long been a major interest of mine, and although I have had experience in several renovation projects in previous design courses, the Gardiner Hall Renovation Project far surpasses those previous experiences in comprehensiveness and complexity. And, to be sure, Gardiner Hall is of definite historical and architectural value to the OSU campus as well as the City of Stillwater. If I can, with this project, help save this fine building from demolition and aid in its transformation into a once again useful structure for the OSU Art Department, then my goals shall be

more than fulfilled. Gardiner Hall was scheduled for demolition in 1974 to make room for a new auditorium; however, funding for that auditorium never materialized, and with the moritorium on new construction on campus, combined with continually rising building costs, it appears the new auditorium is now only a dream. Fortunately, Gardiner Hall escaped demolition and remains intact.

Another factor which played an important role in my selection of the Gardiner Hall Project for Professional Project was the high degree of reality of the project. The Art Department has never had adequate modern facilities since its beginning at OSU. Because of this, it is extremely difficult for the Art Department to attract high quality faculty and students of the caliber required to become a prominent art education facility. It is high time that the Art Department be given its chance to blossom.

Recently, encouragement has come from the OSU Foundation with its interest in the future of the Art Department. In October 1979, the Foundation was presented designs for a new art complex to be located just north of the Gardiner site. The designs were presented by two graduate Architecture students as their professional project. I must admit that a new complex such as they submitted would be the optimum situation for the Art Department, but the recent actions of the state legislature now makes these schemes unfeasible. It is my hope that with this project, I shall offer in the design solution which results from this book, a feasible alternative solution for the needed improvement in the OSU Art Department. 5

## **OBJECTIVES**

Having selected the Gardiner Renovation Project for my Professional Project, I then established the following project objectives:

□ Architectural Programming

□ Schematic Design

□ Design Development

□ Design Solution Presentation

□ Slides □ Drawings □ Model

## THE PROGRAM

Programming: "A process leading to the statement of an architectural problem and the requirements to be met in offering a solution." - Webster

The programming process is a creative, problem solving effort. Before problems can be solved, they must first be sought out, defined, analyzed, and categorized. You can't solve a problem unless you know what it is. Programming concerns five steps in the search for sufficient information to clarify, to understand, and to state the problem:

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- 1. Collect and analyze facts and data
- 2. Determine needs
- 3. Establish goals
- 4. Uncover and test concepts
- 5. State the problem

Programming, therefore, involves an organized method of inquiry...a five step process... interacting with the considerations of Function, Form, Economy, and Time. These considerations indicate the types of information needed.

#### THE PROCESS ARCHITECTURAL PROGRAMMING Determine Influences: FACTS & DATA Historical background Client Recource people Users Site analysis **Building analysis** Climate analysis Zoning regulations Code survey **Determine Requirements: NEEDS** Space requirements Functional relationships **Project** phasing **Budget analysis** □ Establish Project Direction: GOALS Project goals □ Analýze Ideas: CONCEPTS Programmatic concepts □Summarize: PROBLEM STATEMENT

# PART ONE: FACTS and DATA

- FACTS: Knowledge obtained from investigation, study, or instruction presented as having objective reality; truth.
- DATA: Factual material used as a basis for reasoning, discussion or decision.

## HISTORICAL INFORMATION STILLWATER and OSU

The Stillwater area was the first area of the State of Oklahoma to be settled by the white man. As is well known, up until the Land Run of 1889, Oklahoma had been set aside as Indian Territory. The first attempt of establishing a settlement took place on December 22, 1884. Several previous attempts led by David Payne, had been thwarted by the U. S. Army, as it was illegal for white men to settle in Indian Territory. The 1884 attempt, however, was more organized. A group of some 200 men led by William Couch successfully established a colony on Stillwater Creek near where it is joined by Boomer Creek, which is approximately one mile southeast of the present site of Stillwater. The colony survived for about a year until the illegal settlers, or "Boomers" as they were called, were forced to evacuate by the Army. Although these men had failed in their struggle for settlement, it was the actions of these men and other Boomers which finally led to the opening-up of Oklahoma Territory to settlment by the white man.

The Oklahoma Land Run took place on April 22, 1889. Guards were posted along the border to prevent attempts of overly-eager settlers to sneak in before the opening date in order to claim the best land. Such preventive measures were not fully successful, as many settlers made their way to predetermined areas and staked out their claims. Of these "Sooners", Robert Lowry, John Barnes, David Husband, Robert Cooper, Frank Duck, Thomas Miller, and Sanford Duncan settled in the Stillwater area at the city's present location, and became the city founders. On may 24, 1889, the new town was plotted, and on June 11, the first town government organized. Upon application approval, Stillwater was officially designated a city on June 6, 1890. At that time, the city consisted of 160 acres.

When the question arose as to which city would be the seat of then County #6, a contest among Payne Center, Perkins, and Stillwater erupted. Payne Center, located between Stillwater and Perkins, soon compromised and stepped out of the contest upon the agreement that the county be named Payne County. Perkins, ten miles south of Stillwater, remained a rival, however, and a hostile one at that. At one point in the contest, townsmen of the two cities nearly engaged in a gun fight along Stillwater Creek, when a group of armed Perkinites on their way to Stillwater to take the county records, then in Stillwater by force, were met by armed men from Stillwater. What could have erupted into a bloody battle was averted, but only after a heated debate between the two city's leaders along the banks of the creek. It was decided that bloodshed would only set back the growth and development of both towns, and that the matter should be decided in a county election. The vote resulted in Stillwater's favor and on May 2, 1890, Stillwater was officially named as the couty seat of Payne County.

One of the first acts of the new town was a proposed bond issue of \$10,000 to aid in the construction of an "Agricultural and Mechanical College" at Stillwater. The vote favoring the proposition was unanimous and Oklahoma A & M College (now Oklahoma State University) was opened on December 14, 1891. The first building to be constructed, now named Old Central, was completed in 1894 at the cost of \$20,000. It was equipped with all modern appliances, completely heated by steam, and furnished fully with the most modern furniture of the time. Eight acres were set aside for a campus, and walks and driveways laid out.

From that time on, the city and the university grew rapidly. Today, Stillwater is the eighth largest city in the state with an approximate population of 33,000. Oklahoma State University is now one of the largest in the state with an enrollment of 20,000 on the Stillwater campus in addition to the campuses of the technical school in Oklahoma City, the technical training school at Okmulgee, and agricultural extension offices in each county.

## HISTORICAL INFORMATION GARDINER HALL

Gardiner Hall was constructed in 1910 at a cost of \$62,000 as a girl's dormitory and was named the Women's Building. A. E. Etherton was the architect. The building served not only as a dormitory, but also housed the Dean of Women and women's physical education classes. Two gyms with shower and locker rooms in between were located on the basement level. In addition, the building was home for a multitude of other activities, among them speech, agricultural extension, drafting, a mailing room, a library for physical education, karate, cadet drills, musical activities, and 4H posted contest results within The name of the building was later changed to Gardiner Hall, in memory of Maude Gardiner, past head of Home Economics.

In 1915 the building suffered a major fire which probably destroyed the two upper floors as well as smoke and water damage to the remaining portions. The building was remodeled to its original character soon after.

Sometime before 1922, Gardiner Hall was discontinued as a dormitory, and became the home of OSU Extension service. Since then, it has housed several different departments until the Art Department took residence in the late 1960's.

Gardiner Hall has played a significant role in the history of the university and the City of Stillwater. It is one of the oldest remaining buildings on campus, located in the oldest section of campus. Nearby, to the southwest, still stands the first building built on the campus, Old Central, completed in 1891. Located immediately west of Gardiner Hall is yet another old campus landmark, Morrill Hall.



## **RECOURCE PEOPLE**

ART DEPARTMENT PERSONNEL:

Joe Baker : Art Principles Richard Bivins : Ceramics Dean Bloodgood : Drawing and Painting Nick Bormann : Graphic Design, Silkscreen Paul Cooper : Sculpture Susan Hamlet : Jewelry, 3 Dimensional Design Ellen Meissinger : Watercolor Bob Parks : Print Making Nancy Wilkinson : Slide Library

UNIVERSITY ARCHITECT'S OFFICE PERSONNEL

Bill Halley : University Architect Troy Cobb : Civil Engineering Vernon McKinsey : Director of Utilities

## **USERS**

GENERAL PUBLIC: Included in this group is Stillwater residents and visitors from other cities and states. They come to view the traveling exhibits and student exhibitions, and/or to attend lectures and films. Their ages range from very young to old and they come from all walks of life. Their main space is the Gallery.

STUDENTS: These are students not majoring in Art who walk past the building to/from other parts of the campus or neighboring residential areas. Some of these students are enrolled in art courses to fulfill a degree requirement or an elective course, or for personal advancement. Their ages generally range from 18 to 25. Their spaces include the Gallery, Lecture Room, Slide Library, and lower division course studio spaces.

ART STUDENTS: These the the principle building users. They need 24 hour access to the studios and labs, and require functional space to work in that is flexible and durable. For their emotional and social needs, they need lounge and refreshment space, as well as quiet areas for study and contemplation.

MAINTENANCE AND SERVICE PEOPLE: Service circulation should be well planned to allow delivery and shipping of supplies and exhibits, and performance of service functions in a way that is safety conscious and non-distracting. For ease in maintenance duties, surfaces should be durable and easily cleaned. They require storage rooms for supplies and equipment on each floor.





## SITE LOCATION

Gardiner Hall is located on the central eastern edge of the Oklahoma State University campus. The principle facade faces south onto Morrill Avenue. The rear facade faces north onto the E-W Library pedestrian axis. Thatcher Hall, and Hanner Hall and the Architecture Building beyond. The building is bounded by the Seretean Performing Arts Center on the south across Morrill Avenue, Morrill Hall to the west, Thatcher Hall to the north, and a residential/commercial area to the east. Many students who live east of the campus walk past Gardiner Hall several times daily on their way to and from classes and other campus activities. The main pedestrian axes affecting the site are as follows: the E-W Library axis, the major campus E-W axis, which terminates near Gardiner Hall at Knoblock Street; E-W along both sides of Morrill Avenue; N-S along the west side of Knoblock Street. and N-S along the west side of the Performing Arts Center, past the west side of Gardiner Hall, and then past the Architecture Building to Lewis Field (football stadium) and Gallagher Hall (basketball arena). Vehicular circulation around the site is heaviest on Knoblock Street, a two lane, two-way city street. Morrill Avenue is less congested, being a one-way, one lane campus street (traffic direction is east from Hester Street to Knoblock Street). Traffic is heaviest on Morrill Avenue during the hours of 7:00 AM to 5:30 PM when Hester Street is closed to traffic between Morrill Avenue and Athletic Avenue, and north bound traffic on Hester Avenue is directed east to Knoblock Avenue via Morrill Avenue. The heaviest concentration of parking in the area is located just north of Gardiner Hall in two interconnected lots. Street parking is located along the north side of Morrill Avenue between Hester and Knoblock Streets. Truck delivery and refuse truck services to Gardiner Hall is provided on the north side through the parking area.



## MASTER PLAN

In 1969, a campus master plan for OSU was developed by Caudill-Rowlett-Scott, Architects of Houston, Texas. This master plan was adopted after further refinements by Chaplin Bills, the University Architect at that time. The current plan, dated 1971, calls for the follow-ing new developments in the Gardiner Hall area:

□ Gardiner Hall to be demolished and replaced by a new auditorium.

- □ Two new Humanities Buildings to be located in the space between Hanner Hall and Thatcher Hall, immediately northwest of Gardiner Hall.
- Hester Street to be converted into a landscaped pedestrian area to alleviate the problems of pedestrian traffic across Hester Street to and from the central campus area.



#### MASTER PLAN PROPOSAL

Because of the trend of continually rising inflation which has prevailed over the past decade and continues to be incessant, and the moritorium on the construction of new buildings on the OSU campus, it seems that some changes in the campus master plan might be appropriate. As stated before, Gardiner Hall was scheduled for demolition in 1974 to be replaced by a new auditorium. For the following reasons, the renovation of Gardiner Hall would be a reasonable alternative:

- □ The fact that the demolition of Gardiner Hall and the construction of a new auditorium in its place as planned, was never carried out.
- The moritorium on the construction of new buildings to encourage renovation projects as an alternative source of new building space.
- The immediate necessity of upgraded facilities for the Art Department to attract quality faculty and students.
- □ The strong relation of art to theater and architecture suggests that maintaining the present location of the Art Department in Gardiner Hall, which is adjacent to the Performing Arts Center and in proximity to the Architecture Building, is justified.

Should a new auditorium such as proposed on the Gardiner Hall site, in the future, become a reality, perhaps a more optimum location for the structure would be in the space between Hanner Hall and Thatcher Hall where it would be allowed greater pedestrian access from other parts of the campus by way of the Library pedestrian axis, the major E-W campus pedestrian axis. The new auditorium would help strengthen that axis by creating a major high activity use near the east terminus of the axis. The two proposed Humanities Buildings shown to be located in that space could then be located either side of the Architecture Building.

This proposal simply rearranges the master plan's configuration of buildings in the Gardiner Hall area while maintaining Gardiner Hall. This does not violate the predominately Arts and Sciences Concentration called for by the master plan for this sector of campus.

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## SITE ACTIVITY ANALYSIS

The Gardiner Hall site is within a high activity area of campus. The Seretean Performing Arts Center draws heavy pedestrian traffic both day and night. During concert and theater performances, not only is pedestrian traffic heavy, but vehicular traffic on Morrill Avenue and Knoblock Street is heavy as well. Many who attend the performances park in the two lots north of Gardiner Hall, and thus pass Gardiner Hall while walking to the Performing Arts Center. Another high activity area is the Student Union, located one block west of Gardiner Hall. A final high activity area is located just east of Gardiner Hall. Along Elm Street and Knoblock Street are located no less than five local taverns, all within a two block area. These taverns play a major role in the lifestyles of many students, and three of the taverns are known as student favorites, making the area a highly popular entertainment center. Although one of the main activities of patrons of these taverns is the consumption of alcoholic beverages, the problems of vandalism and damage to campus buildings in the area due to intoxicated tavern patrons has been relatively slight, with only minor complaints of litter problems reported.














# SOIL CONDITION

At the present time, information is unavailable for soil conditions of the immediate area of Gardiner Hall. As a result, soil conditions for the nearby sites of the Seretean Performing Arts Center and the Business Building will be examined in this report.

The data gathered on the soil conditions of the two sites mentioned above indicate stable conditions, with no ground water encountered at either site where test holes were drilled to depths varying from 17 to 30 feet. According to the Civil Engineering Department of the University Architect's Office, the actual water table level is unknown for the area, and tends to fluctuate at locations where it has been determined.

Therefore, it appears that, should below-grade construction be necessary, ground water problems should not be encountered for such construction if the depth is limited to no more than 30 feet.

For a detailed report of the soil conditions of the Performing Arts Center and the Business Building, refer to the Soil Condition Data in the Appendix.

#### **BUILDABLE AREAS**

Certain considerations are important in the selection of the location of any new additions to Gardiner Hall. The existing setback from Morrill Avenue and Hester Street, and the open space between the building and Morrill Hall are important visually and historically, as well as functionally. Therefore, new construction is not recommended either east or west of the existing building. So, not to disrupt or obscure the existing front (south) facade, only underground construction is recommended south of the building. The rear (north) facade is the least important functionly and faces a poorly composed area of parking lots. Therefore the north side of the building is most suited to new construction either above and/or below ground level. It should be noted that any new construction here should be sensitive in form and materials to the original design of the existing building.





### **BUILDING CONFIGURATION**

The basic layout of Gardiner Hall is that of a four story, H-shaped structure consisting of a center wing and two end wings. The center wing is the largest and runs east-west. Within the center wing is contained the original stairs, one on each end. Its south facade is the principle facade of the building and is characterized by an arcade on ground level, an open veranda on the second level, an exterior deck on the third level, and an external stair connecting the veranda to the ground level. The north, or rear, facade is characterized by a somewhat imposing chimney stack which rises from a second level exterior deck through the roof. At present, an existing brick arcade on the ground level is obscured from view by the more recent wood"shack" addition. Running east-west through the center of the center wing is a load-bearing masonry wall which rises three levels and is wood on the fourth level. The two end wings are only slightly shorter and narrower than the center wing in that they project more toward the front (south) than the rear, making the building symmetrical east-west, but not north-south. The end wings are characterized by the third floor Palladian windows on the south facades, iron spiral fire escape stairs on the east and west facades, and arched windows on the second level. Within the end wings on the second, third, and fourth levels are toilet rooms, one on each wing. The roof is fully gabled with dormer windows on all sides. The roofing material is a greencolored composition shingle.

Internally, few changes have taken place in Gardiner Hall since it was built in 1910. The ground level center wing contains spaces that were once the kitchen, boiler room, laundry, offices, coal storage rooms, and a sub-basement (accessible by a stair in the rear of the boiler room). These spaces are now used primarily as storage. Part of what was once the kitchen has been partitioned to provide a studio space (now unused) and a photo darkroom. An enclosed mezzanine level which once contained a shower room and toilet room occurs over what was once the boiler room. The shower room is now a toilet and the once toilet room has been divided into a small toilet, two storage closets, and a corridor to the wood "shack" addition. The wood "shack" addition contains art student lockers and it is in this room that the brick arcade of the north facade now occurs. Completing the ground level is the gallery in the east wing (once a basketball court) and studios in the west wing (once the mess hall). An important asset of the two end wings is the unobstructed open space available, as steel beams carry the load of the floor above to the side load-bearing walls.

As intended in the original design, the second level is the piano nobile or main level. The main access to this level is via the exterior barouque stair and veranda on the south. Immediately inside the main entry door is what was once the reception room which extended fully between the stairs. This space is now divided into two spaces: an entry/display lobby and a vending machine room. On the opposite side of the center load-bearing wall where is now located the lecture room, Department Head's Office and secretary, was once a parlor (at the fireplace), an office, and a classroom. The two end wings which have been divided into studios once housed classrooms. As on the ground level, no load-bearing walls occur inside the wings.

The third level remains primarily as it did originally with the dorm rooms in the center wing now being offices north of the center load-bearing wall, and a studio space south of the centerload-bearing wall has been provided with the removal of several walls. The end wings have also been converted to studio spaces by removal of the walls which once framed the dorm rooms. It is important to note in the end wings that four-inch pipe columns occur through the center of the wings at what was once the walls of the hallway.

The fourth level remains virtually unchanged from original construction. What were the dorm rooms are now used as offices. At the center wing, the south wood wall of the hall is the load-bearing wall. At the end wings, load-bearing walls occur on both sides of the hallways.

Gardiner Hall initially was equipped with a small elevator, probably used for freight. The shaft remains and is located in the northeast corner of the west end wing.

























#### PHYSICAL CONDITION

#### EXTERIOR

The exterior of Gardiner Hall has remained virtually unchanged since it was constructed in 1910. The only major change is the wood addition to the north built probably sometome in the late 1940's. The wood addition remains in fair condition but relates poorly to the original building in form and materials. Elsewhere, the exterior remains intact from original construction. The exterior brick masonry remains in good condition except for several cracks which appear on the northeast corner of the east wing. These cracks apparently occurred many years ago and further cracking seems unlikely. Except at the cracks, mortar joints in the brick remain in good condition. The original exterior doors and windows remain and are in fair condition. Some repair to caulking around glass may be required and the wood frames of all windows and doors will require scraping and painting. The roof has been fairly well maintained and no leaks are apparent. A complete inspection of the roof should be undertaken to determine any hail or rain damage that may be present.

#### INTERIOR

For the most part, the interior of Gardiner Hall has been poorly maintained and is now in a state of neglect and deterioration. Most changes in the interior have consisted of removal of some existing wood partitions and construction of new wood partitions where required to produce new spaces. All interior masonry walls are plastered and painted. All interior floors are wood except in the Gallery which is carpet over concrete, and the storage rooms on the ground level which are concrete. The wood floors remain in fair to poor condition, and patching is evident in many areas. The stairs are also of wood construction and remain in fair to poor condition. Most ceilings are painted plaster. In some areas, cellulose ceiling tiles have been glued to the ceiling and suspended acoustical tiles appear in some studios on the first and second levels.

### **BUILDING STUCTURAL CONDITION**

In September 1979, Mr. Harvey Gulley, a professional engineer, was consulted by OSU Architectural Services to determine the physical condition of the structure of Gardiner Hall. On September 18, 1979, Mr. Gulley, accompanied by Bill Halley, University Architect, and myself, Gary Flesher, visually inspected the building. In short, Mr. Gulley recommended that Gardiner Hall is economically suitable for renovation. A full copy of Mr. Gulley's report may be found in the Appendix.

# PHOTOGRAPHIC SURVEY EXTERIOR

SOUTH ELEVATION SOUTH ELEVATION DETAILS EAST ELEVATION NORTH ELEVATION









## PHOTOGRAPHIC SURVEY INTERIOR

LOCKER ROOM, FIREPLACE IN LECTURE ROOM DRAWING STUDIO-SECOND FLOOR SILKSCREEN STUDIO-FIRST FLOOR WATERCOLOR STUDIO-THIRD FLOOR









### GEOGRAPHIC and CLIMATIC FACTORS

**GEOGRAPHY:** The OSU terrain is characterized by rolling plains with spotty trees and vegetation. Stillwater is accessible by auto from the east by Cimarron Turnpike and US 51, north and south by US 177, and from the west by US 51 to Interstate 35.

**CLIMATE:** Oklahoma's climate can be harsh and unpredictable. Summer temperatures are sometimes over 100°F, and in the winter, the temperature can drop to -10°F with the average in the low 20's. The hottest months are July and August, and the coldest are January and February. Total snow fall per year in Stillwater is relatively insignificant, averaging

21 st	jan	teb	mar	apr	may	jua	jul	aug	8 <b>e</b> p	oct	104	dec
D SET	64 <sup>5</sup>	76	90	104	115	119	115	114	90	76	64 <sup>5</sup>	60
auth alt.	33	42	40	61	74	80	74	61	48	42	33	30

#### Sun Position Relative to South Wall



4.65 inches per year. Skies are clear an average of 9 months out of 12. Rainfall averages 33 inches per year; May is the wettest month. The prevailing wind is out of the south-southeast at an average of 11.4 MPH. The average humidity in summer is about 80%. The critical sun angles are 30° on December 21 (Winter Solstice) and 80° on June 21 (Summer Solstice).


## **BUILDING CODE SURVEY**

Oklahoma State University uses the 1976 edition of the Life Safety Code and the 1967 edition of the National Building Code for all buildings on the OSU campus. The sections applicable to the Gardiner Hall Renovation Project are listed below:

LIFE SAFETY CODE: Chapter 9, Educational Occupancies

Section 9-1 General Requirements

Section 9-2 Means of Egress Requirements

Section 9-3 Protection

Section 9-4 Building Services

Section 9-5 Special Provisions

NATIONAL BUILDING CODE

Article III Educational Occupancies

Article V Light and Ventilation

Article VI Means of Egress

Article VII Requirements for Types of Construction

Article VIII Fire Protection

Article IX Design Loads and General Building Requirements

Article X Chimneys, Fireplaces, and Venting Systems

Article XI HVAC

Article XIII Elevators

Article XIV Gas Piping and Plumbing

Article XV Electrical Installations

Article XVII Safety to Life Requirements for Existing Buildings

# PART TWO: NEEDS

NEEDS: Requirements; something necessary; an indispensible thing or quality.

SPACE REQUIREMENT: Detailed listing of the amounts of each type of space designated for a specific purpose.

FUNCTIONAL REQUIREMENTS: Those requirements dealing chiefly with the way people will use the project with convenience, efficiency, and effectiveness. These, also, will involve the adequacy, the quality, and the organization of space.

HUMAN REQUIREMENTS: Those requirements stemming from the generalized human needs in terms of the physical, social and psychological environment to be provided. These human needs involve such general categories as self-preservation, physical comfort, self-image and social affiliation - initially expressed as specific goals.

## INITIAL DESIGN PROGRAM SUMMARY

## PHASE ONE

Gallerv	3,000
Workshop	3,000
	400
Gallery Recention/Security Desk	100
Locture Doom	680
	400
Slide Library	150
	200
Executive Secretary	200
Seminar/Conference Room	300
Mail/Work Room	150
Lounge	200
Faculty Offices (15 $@$ 150 sq. ft.).	2,250
Student Gallery	400
Drawing Studios (3 @ 1400 sq. ft.).	4,200
Oil Painting Studio	1,800
Watercolor Studio	1,400
Pron Room	600
3D Design Studios (2 @ 1400 sg ft)	2.800
Colon and Design Studios (2 $\oplus$ 1400 sq. ft.)	2,800
Aut Design Schulio	1 400
	1 / 00
Graphic Design Studio	1,400
Photo Lab	400
Silkscreen Studio	1,400
Printmaking Studio	2,000
TOTAL	29,180

# PHASE TWO 4,000 Ceramics Lab 4,000 Sculpture Lab 4,000 Jewelry Lab 2,000 TOTAL 10,000 TOTAL : PHASE ONE & TWO. 39,180

# INITIAL DESIGN PROGRAM FUNCTIONAL AREAS









	Space LECTURE ROOM
Slide Library St. 30' focal length minimum	area 680 sq.ft. height 9' finishes floor VA tile or wood ceiling suspended acoustical wells painted gyp board USERS Faculty, Students staff Faculty
Function Classroom for lectures, sli Special Considerations Maximum for to block	de shows and miscellaneous functions. 
Systems hvac plumbing	electrical 110 volt wall outlets lighting dual system; general houselights, seating area lights (dimmer switch)
Furniture Movable seating for 35-50	D students
Equipment Slide projectors	

	a second of the second s
Slide Slide Fibrary St. Projector Room St. 30' focal length minimum	<pre>area 400 sq. ft. height 8' minimum finishes</pre>
Function Copying, preparation, sorting, and vi Special Considerations Separate work area storage, storage c	iewing of slide collection for student assistants, separate area, or room for slide loset (40 sq. ft.)
Systems hvac plumbing	electrical 110 volt wall outlets lighting fluorescent
Furniture Four desks (30 x 60") and chairs, thr video carrels	ree work tables (3' x 6'), three file cabinets, three
Equipment Copy stands (photo), type writers	









	Space LOUNGE
	<b>area</b> 200 sq. ft.
	height 8' minimum
	finishes floor VA tile or wood ceiling suspended acoustical walls painted gyp board
	<b>USERS</b> Faculty, Department Head, Staff, Students
	staff -
Function .	
Special Considerations 8' length m	nversation, snacking s to both faculty and art students (24" counter along one wall - ninimum) with cabinets above and below
Function       Lounge space for lounging, cor         Special Considerations       Easy access         8' length m         Systems         hvac         plumbing       hot and cold water	electrical 110 volt wall outlets fluorescent
Function       Lounge space for lounging, cor         Special Considerations       Easy access 8' length m         Systems       Nvac         plumbing       hot and cold water         Furniture       Lounge type seating for 8-10 p	electrical 110 volt wall outlets lighting fluorescent

	Space FACULTY OFFICES
	<b>area</b> 15 offices @ 150 sq.ft. = 2,250 sq.ft.
	height 8' minimum
	finishes floor carpet ceiling suspended acoustical walls painted gyp board
	<b>USERS</b> Faculty
	<b>staff</b> Faculty
Special Considerations Locate i	in proximity to classrooms and studios
Systems hvac plumbing	electrical 110 volt wall outlets lighting fluorescent
Furniture One desk and chair, booksh	nelves, file cabinet, work table, tackboard, visitor chair
Equipment	

	Space STUDENT GALLERY
	<b>area</b> 400 sq. ft.
	height 8' minimum
	finishes floor VA tile or wood ceiling suspended acoustical walls tackable wall surface
	<b>USERS</b> Art Students
	staff Student Assistants
Function Exhibition of student work	provimity to studios (public area): security needed
	proximity to studios (public area), security needed
Systems hvac plumbing	electrical 110 volt wall outlets lighting track lighting, fluorescent
Furniture	
<b>Equipment</b> Display cases, shelves	

Brawing Studios	DRAWING STUDIOS
A	area 3 studios at 1400 sq.ft, = 4200 sq.ft.
· · · · ·	height 12'
Prop. Stor. Oil Painting Watercolor	finishes floor VA tile or wood celling exposed structure walls painted gyp board, tackable wall surface USERS Faculty, Students (25 maximum) staff Faculty
<b>Function</b> Studio for instruction of drawing ter <b>Special Considerations</b> Locate in proximity ble plan - rectanged adjacent: dressing room for models (50 sq.ft.)	chniques via props and models y of painting studios; light control at windows; open, flexi- ular shaped room is best; still life and prop. storage located
Systems hvac exposed plumbing hot and cold water	olectrical 110 volt floor outlets lighting fluorescent and natural lighting (north light) flexible track lighting arrangement
Furniture 25 - 18" x 24" adjustable drawing ta	ables and stools, storage lockers (one per student)
Fauinment Countantes with the sinks and store	

Image: Prop. Stor.       Image: Prop. Stor.         Prop. Stor.       Image: Prop. Stor.         Image: Prop. Stor. <th>Drawing Studios</th> <th>Space OIL PAINTING STUDIO</th>	Drawing Studios	Space OIL PAINTING STUDIO
Prop. Stor.       heigh finish floc ceil wall         Offile       Watercolor         Painting       Watercolor         Function       Studio for study and instruction of painting in oils and         Special Considerations       Locate adjacent to drawing studios; are ventilation         Systems       hvac exposed; special ventilation at chem.sto. electrical lighting naturing,         Furniture       25 easels and stools, one 4' x 8' work table, tabarets (2)		area 1800 sq. ft.
Prop. Stor.       finish floc         Ofilition       Watercolor         Watercolor       staff         Function       Studio for study and instruction of painting in oils and         Special Considerations       Locate adjacent to drawing studios; are ventilation         Systems       hvac exposed; special ventilation at chem.sto. electrical lighting natu ing,         Furniture       25 easels and stools, one 4' x 8' work table, tabarets (2)		height 12'
Øii       Watercolor       users         Function       Studio for study and instruction of painting in oils and         Special Considerations       Locate adjacent to drawing studios; are ventilation         Systems       hvac exposed; special ventilation at chem.sto. electrical lighting naturing,         Function       25 easels and stools, one 4' x 8' work table, tabarets (2)	Prop. Stor.	finishes floor ceiling walls VA tile or wood exposed structure painted gyp board
Function Studio for study and instruction of painting in oils and Special Considerations Locate adjacent to drawing studios; are ventilation Systems hvac exposed; special ventilation at chem.sto. electrical 110 lighting nature lighting nature for the store of the stor	011 Painting Watercolor	<b>USERS</b> Faculty, Students (25 maximum) <b>staff</b> Faculty
Special Considerations Locate adjacent to drawing studios; are ventilation Systems hvac exposed; special ventilation at chem.sto. electrical 110 plumbing hot and cold water lighting natu ing, Furniture 25 easels and stools, one 4' x 8' work table, tabarets (2	ction Studio for study and instruction of painti	ng in oils and acrylics
Systems hvac exposed; special ventilation at chem.sto. electrical 110 plumbing hot and cold water ing, Furniture 25 easels and stools, one 4' x 8' work table, tabarets (2	cial Considerations Locate adjacent to drawi ventilation	ng studios; area for chemical storage and use with
<b>Furniture</b> 25 easels and stools, one 4' x 8' work table, tabarets (2	ems hvac exposed; special ventilation at chem.sto. plumbing hot and cold water	<pre>electrical 110 volt wall outlets lighting natural lighting (north light); track light ing, fluorescent</pre>
	iture 25 easels and stools, one 4' x 8' work tab	le, tabarets (25)
auinment Counterton with two sinks and starting ashingto shows an	pment Counterton with two sicks and starters as	binate shave and below: vertical lackship macks for
storing paintings (2-3spaces/student), movable stage	storing paintings (2_3spaces/student) m	ovable stage



Drawing Studios	Space PROP STORAGE
Prop. stor 0il Painting Watercolor	area 600 sq. ft. height 10' finishes floor VA tile or wood ceiling exposed structure walls painted gyp board USERS Faculty, Student Assistants staff
unction Storage of props for drawing, Special Considerations Locate in p	oil painting, watercolor studios roximity of drawing, oil painting, watercolor studios
Systems hvac exposed plumbing	electrical lighting fluorescent
Furniture Storage racks	



			Space COLOR & DESIGN STUDIOS
Col Des	lor and sign	Color and Design	<pre>area 2 studios at 1400 sq.ft. = 2800 sq.ft. height 10' finishes     floor VA tile or wood     ceiling exposed structure     walls painted gyp board, tackable wall         surface     Users Faculty, Students (25 maximum)     staff Faculty</pre>
Function Stu	dio space for s	study and instruction	i on of 2 dimensional design
Special Cons	iderations		
Systems hvac ex plumbing ho	posed t and cold wate	27	electrical 110 volt floor outlets lighting fluorescent and natural lighting (north light)
Furniture Eig	ht flat work ta	bles (4' x 8'), 25	stools, flat file storage
Equipment c	ountertop with	two sinks and stora	ge cabinets above and below, paper cutter

	Space ART PRINCIPLES STUDIO
	<b>area</b> 1400 sq. ft.
	height 10'
	finishes floor ceiling wallsVA tile or wood 
	staff Faculty
Special Considerations Storage room f	For student work (50 sq.ft.)
Systems hvac exposed plumbing hot and cold water	<b>electrical</b> 110 volt floor outlets <b>lighting</b> fluorescent, natural lighting (north light), track lighting
<b>Furniture</b> Eight flat work tables (4' x 8')	, 25 stools, flat file storage
<b>Equipment</b> Countertop with two sinks and	storage cabinets above and below, papercutter



			Space PHOTO LAB	
	Enlarging Deckroom		area 400 sq. ft.	
Graph	ic	Silkscreen	height 8' minimum	
Desig	n Work Area Film Bkrm		finishes floor colling wallsVA tile exposed structure painted gyp boardUSERSFaculty, StudentsstaffFaculty	
Function Special Co	Darkroom for film proc nsiderations Three	essing and printing for each of the second sec	or Graphic Design and Silkscreen studios om (2 @ 35 s.f.); enlarging darkroom with six enlarging	
	stat	ions (200 s.f.); ligh	t trap entray at enlarging darkroom; work area (100 sf)	
Systems hvac plumbing	exposed; additional ve hot and cold water,	entilation in dkrms.el Floor drain li	ectrical 110 volt wall outlets ghting fluorescent and darkroom lighting	
Furniture				
Equipment	Film Darkroom: 24" w	work clunter on one wa	all, developing sink on opposite wall	
	Enlarging Darkroom: lets at counter heig Work Area: 30" x 54 cabinet (30" x 48")	30" work counters wit it; two-sided sink (3" ' print dryer, finishi	<pre>:h shelves below on two walls with 120 volt wall out- ' x 8') in room center ing counter (3' x 8') with paper cutter, storage</pre>	





			Space PRINTMAKING STUDIO DRAWING & DESIGN	2 of 5
	Relief Photo Print- Intaglio	>	area 600 sq. ft.	
	ing	J .	height 8' minimum	
Design	Stone Litho	Stone (Etching) Litho	finishes floor wells wells users staff	
Function		en <u>-</u> chien - en <i>t</i> -	······································	
Special Consider	ations Separate ro	om or area; inv	estigate sharing with silkscreen studio	
Systems hvac plumbing	<del> </del>	el li	ectricai 110 volt floor outlets ghting	
Furniture 4' x 8' (3); 2'	tables (3); stools ( x 3' x 3' lockers (2	12); 4' x 8' cu 5)	tting table; 3' x 5' light table, 3' x 4' flat files	<u> </u>
Equipment Project above a	ion screen, opaque p nd below	rojector, paper	cutter, counter space with sink and storage cabinet	S

		Space PRINTMAKING STUDIO RELIEF PRINTING
Drawing & Design	Relief Frint-Photo IntaglioIntaglioIntaglioIntaglioIntaglioStone LithoIntaglio	area 250 sq. ft. height 8' minimum finishes floor VA tile or raked concrete ceiling exposed structure walls painted gyp board, tackable wall
Function		users staff
Special Conside	Easy access to dra	awing and design
Systems hvac plumbing hot	and cold water	electrical 110 volt outlets lighting
Furniture 4' x 8'	work tables (2), 4' x 8' print	ing table for linoleum press
Equipment Count dry in	erspace with sink and storage ca g racks (3' x 4')	abinets above and below (8' length minimum), linoleum press,

Relief Print- Intaglio	Space PRINTMAKING STUDIO INTAGLIO (ETCHING)	
Drawing & ing Design (staglig) Stone Litho (Eiching)	<pre>area 1090 sq. ft. height 8' minimum finishes floor VA tile or raked concrete (preferred) ceiling exposed structure walls painted gyp board, tackable wall surface users</pre>	
Plate Processing → Grounding → Acid → Inking & Printing Function	staff	
Special ConsiderationsSeparate Areas: Plate proces (100 s.f.); Inking and PrintiSystems hvac plumbing hot and cold water, floor drainelectronic lighti	rical 110 volt and 220 volt wall outlets	
Furniture Plate Processing: Plate chopper (30" x 60"), large stainless steel sink for plate washin Grounding: 30" work bench 10-12' long with st 4' x 8' work table with shelf under, safety	4' x 8' filing table, storage cabinet (3'x4'); g orage cabinets above and below, 24" x 36" hot plate disposal cans	
<b>Equipment</b> Acid Room: 36" x 12' long work bench with sto wash sink, safety disposal cans Inking and Printing: One 30" x 50" and one 26 table, safety disposal cans	rage cabinets above and below, stainless steel deep " x 48" press, 3' x 8' work table, 4' x 8' work	





## Space CERAMICS LAB

### SPECIAL CONSIDERATIONS

lockable dry area for clay bulk storage (100 sq.ft.); separate room for clay mixing (dust control), separate room for kilns (heat control) with easy access to glazing prep area; separate room in quiet area for lectures, films, displays; storage room for displays (100 sq. ft.); damproom, airtight with humidity control and shelves and racks for storing unfinished projects (150 sq.ft.); outdoor area for salt and Raky kilns and for general use, screened from public (400 sq. ft.); separate plaster area (120 sq. ft.); let walls open up on nice days; trough in floor for hose-down; shower in clean-up area; investigate sharing lecture room with sculpture lab.

## EQUIPMENT (CONTINUED)

scales (glazing area), storage buckets for wet glazes, spray booth with exhaust hood for applying liquid glazes, 30 gallon steel drums for bulk wet clay storage, fire extinguishers.

2 of 2


# SCULPTURE LAB

# 2 of 2

#### SPECIAL CONSIDERATIONS

Outdoor work space (400 sq. ft.) possibly combined with ceramics outdoor space, let the walls open up on nice days, separate work areas for metal, wood, plaster, locate adjacent to jewelry studio for tool and equipment sharing, trough in floor for hose-down, shower, tool and supplies storage room (150 sq. ft.), storage space for completed projects, investigate sharing lecture room with ceramics lab, drawing area, large door at foundry and welding area, open space planning.

Truck Service High Noise Smith-Area	Space			
ing Anvils Work Tables and Benches Lathe Pol- ish- er Nork Flow: Design &→ Layout & → Assembly → Finishing → Display Sketches Cutout	<pre>area 2,000 sq. ft. height 8' minimum finishes floor VA tile ceiling exposed structure walls painted gyp board USERS Faculty and Students (20 maximum) staff Faculty</pre>			
Function Studio space for design and fabrication of jewelry				
Special Considerations Refer to following page				
Systems hvac exposed; additional ventilation at kilns plumbing hot and cold water lighting fluorescent				
Furniture Stools (20)				
<b>Equipment</b> Free Standing: polishing machine, bead blaster 4' x 8'), 2 anvils on stumps, 4 work tables (4 Counter Top: Vacuum and centrifugal casting, ing, wax injector, vulcanizer, polishers, sand forming, bench shears, micro drill press, lath	, drill press, metal smithing tables (2 at ' x 8'), lockers (20) burnout kiln (18" x 18" x 18"), etching, invest- ers, ultrasonic cleaner, hot plate, electro- e, bench grinder, buffing machine.			

## Space JEWELRY LAB S SPECIAL CONSIDERATIONS Locate adjacent to sculpture lab for tool and equipment sharing; tool and supplies storage room (60 sq. ft.), counterspace with 2 sinks and cabinets above and below; burnout kiln close to casting area; metal smithing next to enameling; ventilation for burnout kiln, enameling kiln, etching or plastic work, electroforming; separate areas for metalsmithing (noisy) and other areas (quiet); display area near entry and office; storage room (60 sq. ft.) for student work, 30" work benches (4' space for each student).



#### EXPANSION/GROWTH POTENTIAL

During the 1970's, Oklahoma State University experienced a boom in enrollment which has caused a cramping of space campus wide. The need for expansion has and still exists although the enrollment increases have tapered and actually begun to decline slightly as predicted earlier. The OSU Art Department is currently being expanded for the 1980-1981 academic year as cooperation with the Architecture Department has brought about the resurgence of the requirement that Architecture Students complete courses in freehand drawing and three-dimensional design offered by the Art Department. Similar arrangements have been made with the Home Economics Department for Interior Design students. It may be anticipated that in the future, other departments related to art and design will follow suit. In addition, if the demand warrants, new courses such as textile arts and industrial arts may be added to the art curriculum in the future.

As for Art Department personnel, several developments are anticipated. With new and upgraded facilities, the Art Department will be able to attract more quality students and faculty. For the present, it is hoped that two or three additional faculty members will be acquired, raising the total number of faculty from twelve to fifteen. It is also anticipated that the Art Program will at some future date be expanded to include a graduate program, which would require additional studio space and special areas for graduate teaching assistants. Thus, it is clear that the need of additional space for expansion and growth is a definite possibility for the future.

#### PHASING

As it is unknown at this time the total amount of funding that will be available initially, phasing of the project should be considered as an alternate to a "total package" project. It should be noted that the heavy labs (ceramics, sculpture, jewelry) will most likely require a new addition to the renovated structure, and that due to the fact that there is now a moritorium on new construction on the campus, and the face that these labs at present have adequate facilities, although located in a different area of campus, it is possible that their construction will necessarily be delayed until further funds become available and the moritorium lifted. Consequently, a proposed phasing, outlined below, has been determined by immediate necessity and convenience:

**PHASE ONE:** Relocation of the Art Department into temporary facilities, and renovation of Gardiner Hall

#### **PHASE TWO:** Heavy Lab Addition

A possible location for temporary facilities for the Art Department during renovation would be in the Animal Husbandry Building located on the corner of Washington Street and Farm Road, as new facilities for Animal Husbandry will soon be constructed at another location. The old Animal Husbandry Building contains within it suitable office and classroom space, and a large enclosed open space which could be converted to studio space at relatively little cost.

#### **BUDGET ANALYSIS**

As a detailed budget analysis is beyond the scope of this programming phase because it would require a considerable amount of time for study and research, much more time than is available, I shall present at this time a rough cost estimate based on probable building costs; and, as it is difficult to accurately predict future building costs in the years ahead due to an uncertain economy, I shall use 1980 as the base year. The cost per square foot figures used below were arrived at through discussions with OSU University Architect, Bill Halley, and OSU School of Architecture Head, John H. Bryant.

> 1980 Renovation Costs: \$50/sq.ft. 1980 New Construction Costs: \$95/sq.ft.

#### ESTIMATED BUILDING COST

PHASE I:	Renovation of Gardiner Hall 32,300 sq. ft. x \$50/sq. ft		\$1,615,000
PHASE II:	New Construction - Heavy Labs 10,000 sq. ft. x \$95/sq. ft	• • • •	\$ 950,000
TOTAL PHAS	E I AND PHASE II		\$2,565,000

### PART THREE: GOALS

GOAL: The end toward which effort is directed; suggests something attained only by prolonged effort.

PROJECT GOALS are established by the client working with the architect. These are elicited from the considerations of Function, Form, Economy, and Time... and their sub-categories.

#### GOALS FUNCTION Provide for the OSU Art Department adequate, modern facilities conducive to high 1. quality education and to attract quality faculty and students. 2. Generate within the public a new interest in art and the considerations artists deal with. Provide for the emotional and social needs of the principal users; art students 3. and faculty. Promote student-faculty-public interaction. 4. 5. Allow the individual student a sense of individual identity among a large mass of people. 6. Provide audio and visual privacy among teaching spaces. Provide for the safety of the building inhabitants. 7. Locate the Gallery in a prominent location with easy access by students, faculty, 8. and the public while maintaining strict security. 9. Provide an outdoor as well as indoor exhibition space.

100

#### GOALS

SETTING AND ENVIRONMENT

- 10. Maintain the existing building setback along Morrill Avenue and Knoblock Street.
- 11. Strengthen and improve the E-W Library Pedestrian axis.
- 12. Provide a strong sense of entry into the building.
- 13. Any addition to the existing building should respect the architecture of that building as well as university axes and materials, and yet possibly project an image of an art school.
- 14. Create an environment that does not inhibit or alter creative conceptual thought. The psychological environment definitely has an effect on the art produced.
- 15. Create studio spaces that allow personal identify for the individual student.

# GOALS ECONOMY 16. Phase the construction to proceed as funding becomes available. 17. Minimize operating and building costs. 18. Control initial construction costs.

# GOALS TIME Provide facilities that can adjust to growth and expansion as the Art Department grows and expands. 19.



# PART FOUR: CONCEPTS

CONCEPT: Something conceived in the mind; idea, notion.

PROGRAMMATIC CONCEPTS refer to ideas intended mainly as functional and organizational solutions to the client's own performance problems. They are general or abstract ideas generalized from particular instances.









#### CONCEPTS

#### FORM

11. ACTIVITY GROUPING: Centralize high activity areas (Gallery, Lounge) for ease in pedestrian access.



12. PRIORITY: Provide specific areas for social interaction and relaxation.



13. RELATIONSHIPS: New addition(s): Compliment or contrast the existing architecture and axes with materials, forms, and masses. Limit construction to areas which will not interfere with street setbacks or other historical aspects of the site.



# CONCEPTS FORM 14. FLEXIBILITY: Provide flexible spaces that can grow and change with individual needs. 15. SITE CIRCULATION: Improve and upgrade existing pedestrian circulation to/from the site as well as on-site circulation,

16. PRESERVATION: Retain and restore the building's exterior to the original intent as closely as possible and retain significant interior details and forms where practical.



#### CONCEPTS

#### FORM

17. ORIENTATION: A point of reference within the building will prevent a feeling of being lost.



#### CONCEPTS

#### ECONOMY

18. ENERGY CONSERVATION: Investigate utilization of passive solar energy concepts within the building, and consider utilization of natural lighting and ventilation.



19. PHASING: Renovate Gardiner Hall first, and plan the new addition(s) to be constructed as funds become available.



20. COST CONTROL: Carefully consider choices of building materials and construction methods.





# PART FIVE: PROBLEM STATEMENT

PROBLEM STATEMENT: A description of the critical conditions and design premises which become the starting point for Schematic Design.

DESIGN PREMISE: A specific condition leading to a general design directive.

DESIGN CRITERIA: The problem statements in terms of design premises are used as standards to judge a design solution.

#### **FUNCTION**

The new facility must accommodate a variety of functions with varying accessibility and control. A KEY PROBLEM IS TO ACCOMMODATE THIS MIX BY MINIMIZING CONFLICTS WHILE ACCENTUATING SOCIAL INTERACTION AMONG STUDENT, FACULTY, AND PUBLIC CIRCULATION PATTERNS.

□ The Gallery is to be the main focal point of the complex. THE LOCATION OF THE GALLERY SHOULD BE CENTRALIZED FOR EASY ACCESS TO STUDENTS, FACULTY, AND THE PUBLIC, WHILE PRO-VIDING ADEQUATE CONTROL AND SUPERVISION.

□ The long range goal is to ultimately unite all facets of the Art Department. THE RENOVATION OF GARDINER HALL SHOULD RESPOND TO THE LATER ADDITION OF A CERAMICS-SCULPTURE-JEWELRY COMPLEX IN CONSIDERATION OF PEDESTRIAN CIRCULATION PATTERNS BETWEEN AND AMONG THE TWO STRUCTURES AS WELL AS THE CAMPUS PEDESTRIAN CIRCULATION ROUTES WHICH SERVE THEM.

#### FORM

- □ The historic and architectural attributes of Gardiner Hall are significant. CARE MUST BE EXERCISED IN THE DESIGN OF THE RENOVATION AS TO RESPECT AND MAINTAIN THE HISTORICAL CHARACTER OF THE BUILDING WHILE CAPITALIZING ON THEIR EXISTENCE.
- □ Gardiner Hall is located in a high activity area as well as a historic area of campus. THE RENOVATION AND ADDITION SHOULD RESPECT AND STRENGTHEN THE MAJOR CAMPUS AXES AND MAINTAIN THE HISTORICAL CHARACTER OF THE AREA.
- □ People involved in the study and instruction of art are generally more perceptive of and sensitive to the environment around them. THE DESIGN OF THE RENOVATION SHOULD RESPOND TO THEIR SPECIAL NEED OF A HIGHLY STIMULATING ENVIRONMENT.
- □ The later addition of the ceramics-sculpture-jewelry complex will be adjacent to the existing building. THE DESIGN OF THIS NEW STRUCTURE SHOULD RESPECT THE CHARACTER OF THE EXISTING BUILDING WHILE PERHAPS PROJECTING THE IMAGE OF AN ART SCHOOL.

#### **ECONOMY**

□ The Gardiner Hall Renovation Project is one of the first total renovation projects on the OSU campus. A MAJOR DESIGN OBJECTIVE IS TO FURTHER DEMONSTRATE THE AESTHETIC, ECONOMIC, AND CULTURAL BENEFITS OF THE RENOVATION OF HISTORICAL AND/OR STRUCTURALLY SUITABLE ARCHITECTURE.

□As with most state financed institutions, the budget will be somewhat limited in these times of soaring costs of materials and construction. MATERIALS AND FINISHES SHOULD BE CAREFULLY CONSIDERED FOR THEIR EFFECT ON CONSTRUCTION AND MAINTENANCE COSTS. SPACES REQUIRING FLEXIBILITY OVER TIME SHOULD BE DESIGNED FOR ECONOMICAL AND EFFICIENT ADAPTATIONS TO CHANGE.

#### TIME

□ Enrollment in art courses is subject to fluctuation over time and the art curriculum will continue to be added to and subtracted from. THE DESIGN SHOULD, THEREFORE, PROVIDE SPACES THAT CAN ADAPT TO INDIVIDUAL NEEDS AND GROWTH THROUGH EXPANDIBILITY, CONVERTIBILITY, AND VERSATILITY, WHILE MAINTAINING THE HISTORICAL CHARACTER OF THE EXTERIOR FACADE AND INTERIOR DETAILS AND FORMS THAT HAVE BEEN RETAINED.

□ The project will be developed in two phases: Phase I - Renovation, and Phase II -New Addition. THE DESIGN OF THE RENOVATION MUST RESPOND TO THIS PHASING IN PLAN-NING OF PEDESTRIAN CIRCULATION AND FUNCTIONAL RELATIONSHIPS WITHIN THE ENTIRE COMPLEX AS WELL AS THE SITE AND SURROUNDING AREA.

# APPENDIX

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#### **BIBLIOGRAPHY**

Berlin Basil Chapman. <u>The Founding of Stillwater</u>. Oklahoma City, Oklahoma: Times Journal Publishing. Co., 1948.

Robert E. Cunningham. Stillwater: Where Oklahoma Began. Stillwater, Oklahoma: Arts and Humanities Society, 1969.

Carl Coke Rister. <u>Land Hunger</u>. Norman, Oklahoma: University of Oklahoma Press, 1942.

William Pena et all. Problem Seeking: <u>An Architectural Programming Primer</u>. Boston: Cahners Books, Inc., 1977.

Pierre Schneider, "Converting the Past", Architecture Plus, March/April, 1974.



#### COBB-GULLEY & AFFILIATES ARCHITECTB-ENDINEERB-PLANNERB-CONBULTANTS 4515 HAYDEN LANE 405-946-0575 OKLAHOMA CITY, OKLAHOMA 73112 September 27, 1979

Architectural Services Attn: Bill Halley 122 ASPPA Building Stillwater, Oklahoma 74074

RE: Gardner Hall Renovation

Dear Bill,

Gardner Hall was inspected for structural stability on 18 September 1979. Members present were Bill Halley, Harvey G. Gulley, an Architectural Grad student and the head of the Art Department.

The building is constructed of load bearing exterior masonry walls. The floor system consists of hardwood flooring on wood floor joists, which is supported by an interior masonry wall in the center section and steel columns and beams on the east and west wings. The building is three stories in height with a full basement. The foundation system is continuous concrete spread footings. Severe cracks were found on the second floor in the northeast, southeast and the southwest corners. These cracks extend thru the walls. No new cracking is apparent due to the foundation settlement. I recommend the walls be repaired and observed for further cracking prior to considering foundation repair. Wood timber beams on the 1st floor (east wing) was observed to have horizontal shear cracks. These beams are parallel to the wood floor joists, therefore, do not carry floor lood. They oppear to provide loteral support for the steel beams. In the same area two steel beams appear to be deflecting. In checking the drowings; a concrete floor has been poured on the wood flooring obove. If the concrete is removed, I think the deflection will disappear. No other serious structural damage was found.

In my professional opinion, I rate the building os economically structurally repairable. There are numerous code and handicop requirements that will have to be designed into the building if it is renovated.

Sincerely yours, COLD - GULLEY & AFFILIA Harvey G Department of Architectural Services

HGH/&



-	DUCINECO	
۱.	DUSINESS	
•	SECTION 1 - EXCAVATI	ON, GRADING & DEMOLITION
	TEST HOLE MARKED NO.	1: (West of Center of Morrill Hall)
	$     \begin{array}{r} \underline{\text{Depth}} \\ \hline 0 & - & 1 \\ 1 & - & 3 \\ 3 & - & 6 \\ 6 & - & 7 \\ 7 & - & 9 \\ 9 & - & 12 \\ 12 & - & 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 14.5 \\ 12 \\ 12 \\ 1 \\ 21 \\ 21 \\ 22.5 \\ 22.5 \\ 23 \\ - & 24 \\ 24 \\ 24 \\ 24 \\ 24 \\ 24 \\ 24 \\ 24$	Description Soft dark brown organic clay, moist Dark soft clay with plaster, etc., fill Stiff dark gray clay, moist Stiff yellowish brown clay, moist Reddish brown stiff clay, moist Reddish dark brown clay becoming stiffer, moist Red shaley clay, less moist 2 or 3" thick hard layer, dry Mixture thin light gray siltstone layers and dark red shaley clay, dry Hard thin layer, dry Soft fine sandstone or siltstone, grinds to powder, dry Hard shaley clay, dry Thin layer light gray siltstone, dry Reddish brown hard clay with small amount of gray, dry
	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	2: (Center Line Near West End of Building) Dark organic clay Soft reddish brown clay, moist Soft reddish clay, moist Same but becoming stiffer and drier Very stiff not quite shaley Hard thin layer Soft light siltstone, dry Dark red shaley clay with thin light gray streaks, dry Light gray siltstone Dark red shaley clay, hard, dry

#### **B. PERFORMING ARTS CENTER** HUMANITIES BUILDING **OSU - STILLWATER CAMPUS** TEST HOLE NO. 1 - GROUND ELEVATION 911.2' DEPTH FROM TO DESCRIPTION AND REMARKS 2.5' 0.0' Black silty clay, moist, fairly soft, medium plasticity 2.5' 5.0' Dark gray silty clay, slightly moist, stiff, fairly high plasticity 5.0' Gray silty clay (with some very fine sand and orange flecks), 6.5' moist, medium stiff, medium to fairly high plasticity 6.5' Reddish-brown, silty clay (with white streaks and pieces of 9.0' gravel), moist, medium stiff, medium to fairly high plasticity 9.0' Mixed transition zone 9.5' 9.5' 17.5' Dark red shale (silty clay), slightly moist, shiny, soft as rock but slow to auger, fairly high to high plasticity (blue streaks around 14.0') ASTM Standard Penetration Test 26 blows 12.5' 13.0 13.5' 35 blows 13.0' 61 blows for one foot penetration Auger refusal at 17.5' 17.5' 22.5' Red sandstone (with blue streaks around 17.5'), medium hard as sandstone - NX core taken with 100% recovery No ground water apparent
### LOG OF BORING HUMANITIES BUILDING OSU - STILLWATER CAMPUS

### TEST HOLE NO. 2 - GROUND ELEVATION 911.6'

D	EPTH	
FROM	TO	DESCRIPTION AND REMARKS
0.0'	2.0'	Dark brown silty clay (with some very fine sand), moist, fair- ly soft, medium plasticity
2.0'	5.0'	Brown silty clay (with white streaks), moist, stiff, fairly high plasticity
5.0'	6.0'	Mixed transition zone
6.0'	9.0'	Red silty clay, moist, stiff, fairly high plasticity
9.0'	10.0'	Blue-gray and purple-brown (mixed) silt-stone, slightly moist, soft as rock but slow to auger, low plasticity
Auger re	efusal at 10.0'	
ASTM Sta	undard Penetrati	on Test
10	0.0' 10.3'	50 bTows for 4" penetration
10.0'	13.0'	Similar siltstone but harder - Circulation drilled with tri- cone rock bit
Rock bit	refusal at 13.	0'
13.0'	13.6'	Gray hard rock (Limestone?)
13.6'	17.5'	Light brown (with some red streaks) sandstone – medium hard as sandstone but with some soft seams – NX core taken from 13.0' to 17.5' with 61% (2.75') recovery
No grour	nd water apparen	t

PLATE "C"

### LOG OF BORING HUMANITIES BUILDING OSU - STILLWATER CAMPUS

# TEST HOLE NO. 3 - GROUND ELEVATION 913.1'

	DEPTH	
FROM	TO	DESCRIPTION AND REMARKS
0.0'	3.5'	Dark brown silty clay, moist, stiff, medium to fairly high plasticity
3.5'	6.5'	Reddish-brown (with white and black streaks) silty clay, slight- ly moist, stiff, fairly high plasticity
6.5'	7.5'	Mixed transition zone
7.5'	13.5'	Dark red shale (silty clay), slightly moist, shiny, soft as rock but slow to auger, fairly high to high plasticity
ASTM S	Standard Penetratic	n Test
	12.5' 13.0' 13.0' 13.5'	21 blows 25 blows 46 blows for one foot penetration
13.5'	14.0'	Purple-brown and blue-gray (mixed) sandstone or siltstone, soft as rock but slow to auger
Auger	refusal at 14.0'	
14.0'	17.0'	Similar sandstone (or siltstone) but harder-circulation drilled with tri-cone rock bit
17.0'	18.0'	Similar to above - cored
18.0'	22.0'	Blue and purple-brown (mixed) sandstone with gray shale streaks - harder and softer layers
NX cor	e taken from 17.0'	to 22.0' with 30% (1.5') recovery
No gro	ound water apparent	PLATE "D"

# LOG OF BORING HUMANITIES BUILDING

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# OSU - STILLWATER CAMPUS TEST HOLE NO. 4 - GROUND ELEVATION 910.32' (PAVING)

-	DEPTH	
FROM	TO	DESCRIPTION AND REMARKS
0.0'	~ 0 <b>.</b> 5'	6" asphaltic surfacing
0.5'	2.5'	Black silty clay, moist, fairly high plasticity
2.5'	4.5'	Dark brown silty clay, moist, stiff, fairly high plasticity
4.5'	5.5'	Mixed transition zone
5,5'	8.5'	Reddish-brown silty clay (with black and light tan streaks and pieces of gravel), moist, stiff, fairly high plasticity
8.5'	9.0'	Blue-gray siltstone, slightly moist, soft as rock but slow to auger, low plasticity
9.0'	12.0'	Dark red (with blue-gray streaks) shale (silty clay) unusual- ly hard for shale - Circulation drilled with tri-cone rock bit
12.0'	13.0'	Similar shale - cored
13.0'	17.0'	Red (with blue-gray streaks) sandstone, medium hard as sand-
NX cor Hole r	re taken from 12.0' to reamed from 12.0' to 17	17.0' with 60% (3.0') recovery .0' with tri-cone bit
17.0'	22.0'	Similar sandstone - NX core taken with 100% recovery
No gro	ound water apparent	

PLATE "E"

### LOG OF BORING HUMANITIES BUILDING OSU - STILLWATER CAMPUS

# TEST HOLE NO. 5 - GROUND ELEVATION 909.67' (PAVING)

DE	EPTH	
FROM	TO	DESCRIPTION AND REMARKS
0.0'	0.5'	6" asphaltic surfacing
0.5'	4.0'	Brown silty clay, moist, medium stiff, fairly high plasti- city
4.0'	5.0'	Mixed transition zone
5.0'	8.5'	Red (with some white streaks) silty clay, moist, stiff, fair- ly high plasticity
8.5'	12.0'	Dark red (with blue-gray streaks) shale (silty clay), slightly moist, shiny, soft as rock but slow to auger, fairly high to high plasticity
Auger re	fusal at 12.0'	
12.0'	17.0'	Reddish-brown (with blue-gray streaks) sandstone with some shale lenses, medium hard as sandstone - NX core taken with nearly 100% recovery - 80% of core lost in hole, however
17.0'	21.0'	Similar rock - circulation drilled with tri-cone rock bit
21.0'	26.0'	Similar rock - NX core taken with 100% recovery
N		

No ground water apparent

PLATE "F"







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# **PROGRAM ANALYSIS**

From the comparison of design program areas, existing areas, and the total available area of the existing building tabulated on the following page, it is clear that new construction in addition to the existing building will be required in order to provide the Art Department adequate facilities. Due to budget limitations and the inadequacy of space available in the existing building as compared to the space required as determined in the programming phase, it will be necessary to also consider reducing the program areas where feasible.

		Tam		
SFACE COMFANIS		lgor		
	1672	2000		
	636	3000		
VALLET	0.00	400		
REC /SEC DESK	Õ	100		
DEPT, HEAD	185	150		
SECRETARY	315	200		
WORK ROOM	0	150		
LOUNGE	0	200		
SEMINAR/CONFERENCE	0	300		
FACULTY OFFICES(15)	1682	2250		
SLIDE LIBRARY	396	400		
LECTURE ROOM	<b>79</b> 7	680		
STUDENT GALLERY	0	400		
DRAWING STUDIOS(3)	2513	4200		
OIL PAINTING STUDIO	1352	180 <b>0</b>		
PROP ROOM	0	600		
WATERCOLOR STUDIO	1112	1400		
THREE-D DESIGN STUDIO(2)	1864	2800		
COLOR/DESIGN STUDIOS(2)	1864	2800		
ART PRINCIPLES STUDIO	747	1400		
GRAPHIC DESIGN STUDIO	900	1400		
SILKSCREEN STUDIO	9/6	1400		
PRINIMAKING STUDIU	945	2000		
PHUID LAB	234	400		
CERAMICS LAB	4000	4000		
SCULPTURE LAB	4000	4000		
JEWELRY LAB	2000	2000		
TOTAL (S.F.)	26400	41400		
total area in Gardinar:	32500	of		

















# SCHEMATIC DESIGN SCHEME B



























The three schematic design schemes A, B, and C, and the advantages and disadvantages of each were fully discussed in a meeting attended by Art Department Head Herb Gottfried, design advisor Bob Heatly, and designer Gary Flesher. After carefull consideration, Scheme C was selected over Schemes A and B as the scheme which most successfully fullfilled the program requirements while at the same time being the most sensitive to the historical character and form of the existing building.

SPACE COMPARIS	existing	rogram	cheme A	cheme B	cheme C	•
GALLERY	1672	3000	<b>00</b> 2520	3850	3000	
WORKSHOP	636	3000	2009	2340	1655	
VAULT	0	400	2009	2340	1000	
REC./SEC. DESK	Ŭ.	100	Õ	õ	Ő	
DEPT. HEAD	185	150	150	150	150	
SECRETARY	315	200	200	200	200	
WORK ROOM	0	150	150	150	150	
LOUNGE	0	200	234	230	230	
SEMINAR/CONFERENCE	0	300	630	330	286	
FACULTY OFFICES(15)	1682	2250	27 <del>9</del> 7	2949	2448	
SLIDE LIBRARY	396	400	800	400	377	
LECTURE ROOM	797	680	800	675	650	
STUDENT GALLERY	0	400	432	432	432	
DRAWING STUDIOS(3)	2513	4200	3360	3360	4770	
OIL PAINTING STUDIO	1352	1800	2340	1120	1120	
PROP ROOM	0	600	0	0	0	
WATERCOLOR STUDIO	1112	1400	1120	1120	1120	
THREE-D DESIGN STUDIO(2)	1864	2800	2240	2240	2240	
COLOR/DESIGN STUDIOS(2)	1864	2800	2240	2240	2240	
ART PRINCIPLES STUDIO	747	1400	2340	1120	1120	
GRAPHIC DESIGN STUDIO	900	1400	·· <b>922</b>	<b>92</b> 2	922	
SILKSCREEN STUDIO	976	1400	≦ <b>9</b> 60	960	<b>9</b> 60	
PRINTMAKING STUDIO	945	2000	2340	2340	2340	
PHOTO LAB	234	400	312	312	312	
CEDAMICS LAR	4000	4000	4000	4000	4000	
	4000	4000	4000	4000	4000	
JEWELRY LAB	2000	2000	2000	2000	2000	
TOTAL (S.F.)	26400	41400	38900	37450	36500	
total area in Gardiner :	32500	s.f.				

# PART TWO: DESIGN DEVELOPMENT

# **DESIGN PHILOSOPHY**

The development of Schematic Design Scheme C proceeded with careful attention to the DESIGN GOALS and PROGRAMMATIC CONCEPTS established in the Design Program according to the condiderations of FUNCTION, FORM, ECONOMY, TIME and HISTORICAL IMPLICATIONS.

# **FUNCTION**

The Art Department is at present housed in two separate buildings in different areas of campus, the greater part of the school being located in Gardiner Hall, and the heavy labs--ceramics, sculpture, and iewelry located in Quonset #28. Although the quonset hut is quite adequate spatially and physically, its isolation from the main art facility is a psychological as well as physical burden for the students and faculty alike. It is essential that the entire art curriculum be united within one structure for the intellectual and psychological exchange necessary for a strong student/faculty identity with arts and the art school. For the new facility to accommodate its variety of functions with their variety of accessibility and control requirements, and to accentuate the necessary intellectual and psychological exchanges, a logical and meaningful spatial concept emerged. This spatial concept composes the studios around a central "service/social-intellectual" core, the entire center wing, which contains such service elements as fire stairs, elevator, toilets, and mechanical spaces, and such social-intellectual elements as lounges, student lockers, Department Head's Office, Student Gallery, Seminar/Conference Room, Slide Librery. At ground level, the building is fully accessible to the handicapped via exterior ramped walks and plaza and the interior elevator which connects all levels. Studios are located in the east and west wings where the greatest open spaces are attainable without the interruption of interior bearing walls. Due to their nature, the heavy labs--ceramics, sculpture, and jewelry, which require very large spaces in locations which isolate the high noise levels produced, are located underground on the north side of the existing building, where they open onto a central exterior courtyard, a space which provides natural lighting and ventilation and an outdoor work area more or less protected from public view. Another advantage of their underground location is the thermal
effects provided by the surrounding soil which at a depth below six feet remains a constant 65 to 70 degrees regardless of exterior weather conditions. Delivery service to the heavy labs is provided by a swingable hoist in the work court or via a hydraulic lift at the main corridor. The heavy labs connect underground to the central core lower level which has been excavated beneath the existing building. The Gallery requires a prominent location with easy access by students, faculty, and the general public, while maintaining strict security control. It has been situated underground in conjunction with an exterior sculpture court, producing a new focal point at the building main entry. Access is by exterior stairs at the sculpture court or by the interior stairs or elevator.

## FORM/HISTORICAL CONSIDERATIONS

In order to maintain the existing setback along Morrill Avenue and Knoblock Street and the open space between Gardiner Hall and Morrill Hall, new construction has been eliminated east and west of the building and has been limited to underground construction on the north side at the Gallery and Sculpture Court. In addition, the Sculpture Court plays another important "form role" in that, by its location underground in front of the building at the main entry, it strengthens the entire entry sequence by acting as a focal point for the building and the Gallery, and strengthens the existing stair-step form of the front facade produced by the projecting veranda and stair. The stair as existing projects the classical image of the building's main entry at the second level or, to be historically precise, the piano nobile (first floor). In its present form, the stair is bulky and obtrusive. It has been redesigned to a more ethereal form, producing improved lighting and visual effects at the ground level arcade. The second level no longer acts as the main level, but acts in union with the second level as two equal main levels, with the second level Student Gallery, a principle public space, united to the ground level display lobby, lounge, and Department Head's Office by means of openings in the second floor over the display lobby and lounge, as well as the new

exterior stair to the second level. Retaining the exterior stair also maintains strength to the symmetry of the building, while maintaining the historical character of the original design. Maintaining and accentuating the historical character of Gardiner Hall has been consistently adhered to throughout the design of the renovation in a sensitive response. To further accentuate the arcade on the principle (south) facade, and to help unite the new Sculpture Court and Gallery externally to the existing building, a new duplicate brick arcade has been added to the south wall of the Sculpture Court at the sidewalk, allowing passerbys to experience the entire main entry space as a series of views through the arcade, providing a sense of intimacy with the whole, thus projecting the building out to the passerby with an invitation to join the experience. As the encore, the entire entry space is laterally united by a plaza of brick paving with concrete or stone strips perpendicular to the arch bases. This paving pattern is repeated at the Sculpture Court. On the north side of the building, a similar arcade rises from the work court at the sidewalk of the main east-west Library pedestrain axis which has been refined and strengthened from Hester Street to Knoblock Street to resemble its prominence at the campus center. This pedestrian axis is an important connection at the east edge of campus to residential areas. Rising from the center of this pedestrian axis, centered with the existing building's chimney stack is the chimney flue for the kiln room and foundry below. Besides its functional purpose, the new chimney acts as a new visual landmark at the east terminus of the Library pedestrian axis.

Internally, a major form consideration is the extension of the entry plaza paving into the ground level interior spaces and the continuance of brick up the exterior stair to the Veranda where it continues on the interior as matching quarry tile. The quarry tile pavers appear at all vertical circulation areas: stairs, elevator, and elevator lobbys, thus strengthening the interior--exterior relationship. As a resust of the deteriorated condition of the existing building interior, all floors walls, and ceilings will require new materials and finishing. In order to prevent the sterile environment that may result, all existing masonry walls are stripped of their plaster to expose the brick masonry in order to add a sense of the old and to provide variety and accent to interior spaces. Walls or partitions butting up to these brick walls are avoided where possible. Studio spaces are designed open as possible for flexible arrangement.

As a final form consideration, carefull attention has been given to lighting externally and internally. Externally, lighting is designed to accentuate the arcades and their three-dimensional lighting effect produced by shadows by day. At night, they are illuminated by directional downlights on the wall beyond, producing the effect of a dark arcade over a lit wall which is opposite the effect by day. Internally, the exposed brick walls are lit by downlighting to accentuate the color and masonry joints.

## ECONOMY

Because of the limited space available in the existing building, and the high cost of new construction, it has been decided to limit new construction where possible and to reduce the sizes pf the program spaces accordingly. The excavation and construction under the existing structure will cost considerably more than normal construction, yet is vital to the success of the design, and has proved economically feasible in at least one such renovation in Stillwater. Energy conservation is another important factor and is enhanced by the benefits of underground construction. All windows in the studios are provided with shutters for sun control in summer, and windows throughout the building remain operable for natural ventilation benefits in seasonable weather.

If bufget restrictions are critical, it is suggested that a two phase construction plan be adopted whereby the renovation of the existing building along with the new Gallery addition and the underground portion under the existing building is completed as phase one. Phase two would consist of construction of the heavy labs as funds become available.

## TIME

Flexibility has been provided for in the design of open studio spaces that can change and adopt as required.

Maintenance is another important consideration. Careful attention has been given to selection of building materials and finishes which require minimal upkeep and replacement.

## **DESIGN PRESENTATION**

























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