JOHN LEE CONSTENIUS

HUMANIZATION OF LIVING ENVIRONMENTS

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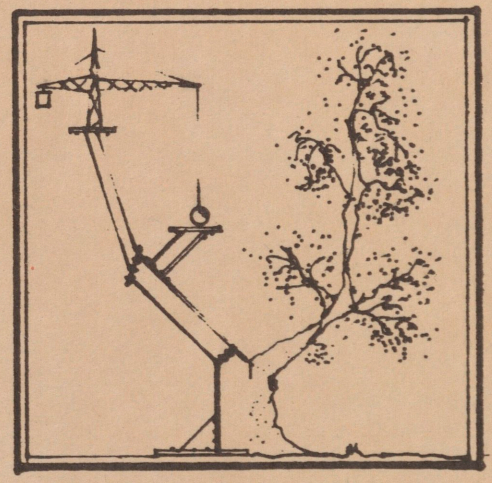
# HUMANIZATION of LIVING ENVIRONMENTS
## A Study of Materials and Detailing



A THESIS, by John Lee Constenius, 1978

# HUMANIZATION OF LIVING ENVIRONMENTS
## Study of Materials and Detailing

by

JOHN LEE CONSTENIUS

Submitted to the School of Architecture
as a partial fulfillment of requirements
for the degree of Bachelor of Architecture

Approved:

Francis B. Woods
Thesis Advisor

Department Head

MONTANA STATE UNIVERSITY
Bozeman, Montana

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Signature John Lee Contreras

Date 6/10/78

ACKNOWLEDGEMENT

To my parents who have given me reassurance and encouragement through these difficult years.

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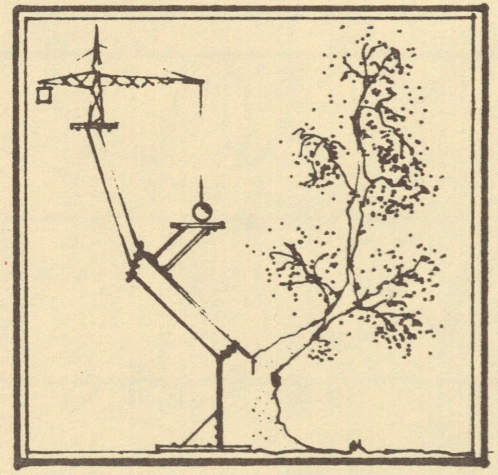
# PREFACE



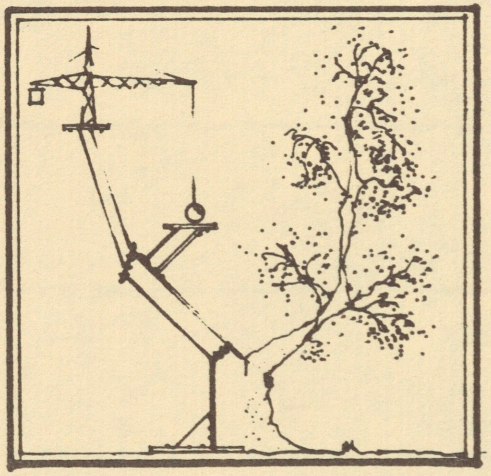
PREFACE

This book will be a documentation of the work I have done in fulfillment of my undergraduate thesis in architecture. The book is ordered chronologically, describing the thought process and its origins as pertaining to my proposals.

Because my study is primarily dependent on the many intuitive and sometimes irrational, as well as the purely rational ideas that spring from the mind of a designer, you will not find the mass of technical data common to some previous thesis books. I will address the various concerns of the project, the town, the site, and the material selection and detailing as they measure against my expectations.

The work presented herewithin should not be considered as a complete documentation of all that I have done, but rather as a composite of my ideas and the respective avenues of approach taken in pursuit of them. Readers should also be aware that a reasonable background in architectural history is presumed and only historical data directly related to this thesis is presented.

# INTRODUCTION



## INTRODUCTION

This thesis is the outgrowth of a particular concern that I have developed through my years at school. Firstly, I suggest that the lack of emphasis on detail which pervades most of our design here in school is a regrettable omission, and as I see it, a flaw in my education. Seldom have the concerns of detail and material selection that are so basically important to good architecture been pursued to a level where the building might be fully envisioned to the smallest corner.

Secondly, and surely as important, is the lack of variety and richness in the selection of materials and detailing that can be found in a great number of buildings throughout the country. Much of the poor quality results in the use of tight and monotonous regimes in which many industrially produced products are used.

It is my contention that better and more timeless architecture can be done if a philosophy about the proper and logical use of materials is arrived at. Of primary importance to this philosophy is historical

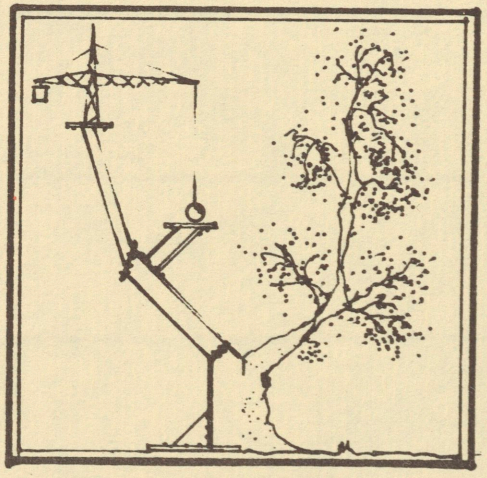
precedence. The modern movements parentage lies in the Bauhaus cum International Style, and the Arts and Crafts movements. For many years the two movements have branched out in divergent directions. While formerly there was interplay between the two, now they lie at extremes.

The path that I suggest might be considered as an effort to meld the two divergent ethics into one single philosophy that acknowledges the greatness of each but also recognizes their respective failures.

My thesis statement is a verbal confirmation of my hope for a better, more humane architecture. It reads as follows:

> Industrially produced materials, as they are presently being used, deprive the human senses and spirit of the variety of experience so necessary for man's existence.
>
> I believe that the qualities inherent in these materials can be used to provide a richness, a purity, and a vitality that will replenish our sensory enthusiasm.

# CONCEPTUAL FOUNDATIONS



## CONCEPTUAL FOUNDATIONS

### Prologue

The dissatisfaction I feel in viewing much of modern architecture can be traced to the inception of the machine and the advent of mass-produced products. History reveals that the Gutenburg Press of 1642 can probably be considered as the first machine constructed. Traceable to this first machine is a trait common to all machine made products. This trait would culminate in an architectural revolt two centuries later. Gutenburg's machine was fashioned to work on sound mechanical principles, leverage, reduction, compression, etc.; yet, the printface used imitated hand printing instead of reflecting the economy and uniformity available from the machine.

Jobs formerly done by hand gradually were supplanted by machines as time passed. Even as society changed to accommodate the new machines, it became dependent on them. Unfortunately the technology of the day was incapable of handling the needs of city living, the machine only compounded problems by attracting more people to the cities to tend them. The result

was wretched and inhumane living conditions, inescapable for the people trapped in the cyclical web that bound their lives to the machines they tended.

Against this background were formed two reactionary movements whose goals were to remove the ever tightening noose of the machine on society and living conditions of the masses. These two movements, the Arts and Crafts Movement and the Bauhaus, fostered principles and ideas that are fundamental to modern architecture.

## The Arts and Crafts Movement

Kurt Rowlands, in his book A History of the Modern Movement, termed the era as the "machine age". It was at this time that society was succumbing to the technological explosion of the 1850's. A man of resource and vision stepped forward at this time to stem the tide of technology. His name was William Morris, an English gentleman and artist, he sought a return to the values of pre-industrial England when men fashioned their environment with their own hands and lived independently of one another.

He saw in his own day though "the products of machines, manned by workers in deplorable conditions, as quite outside the creative process, filling peoples lives with trash and ugliness." "As a condition of life, production by machinery is altogether evil,"[1] he wrote. It was from the platform of a socialist that he stepped forth, gathering about him artists and craftsmen who shared his vision, to change what he saw and ultimately to influence drastically the architecture of his time. Morris influenced many fields; among them, fabric design, furniture design and all matter of things that had succumbed to the machine.

In 1859, at Morris's request, Phillip Webb designed for him a house "that has come to be recognized as a milestone in the evolution of modern architecture."[2] Known as "Red House" because of its exposed brick walls it was entirely contradictory to the fashion of the times in concept and in the use of materials. Its real roots were in English medieval architecture and it differed from nearly every rule of domestic architecture then held. The simple and honest use of materials speak well for Morris's ideals and values.

## The Downfall

Though the Arts and Crafts Movement has had a lasting effect on architecture, it was in its own time unsuccessful in either improving the design quality of mass produced goods or in creating a society with traditional values and methods. The meager supply of products produced by the Arts and Crafts people proved too expensive for the masses. The machine could produce an abundance of comparatively inexpensive products that the majority of the people found quite adequate for their needs. Morris's instincts were correct but he had come too late to have a significant effect on the social issues he cared for.

## The Bauhaus

In modern architecture we feel another strong legacy, that of the Bauhaus. The Bauhaus was a school for artists and craftsmen who were to explore the implications of the machine. Many of its social ideals were shared by the Arts and Crafts Movement but the Bauhaus chose not to refute the machine but to exploit its virtues as a solution.

Walter Gropius, the founder, declared the ultimate goal of the Bauhaus was to acquire the ability to "influence the industry of his country sufficiently for a new school of design to arise."[3] He felt also that if life were to have meaning, designers should concentrate on giving human values to the products of their design. Every conceivable contrivance was reshaped and modified according to their philosophy. Designs for cars, trains, airplanes, boats, factories, houses, kitchenware, and on and on, all done with the intent of enriching human environments. Ideally every product of the Bauhaus was, according to Gropius, "to prevent man's enslavement by the machine . . . by guarding mass production and homes from mechanical anarchy and filling them with a life directed purpose. Our intention was to remove disadvantages of the machine without sacrificing the advantages."[4]

## The Downfall

Like the Arts and Crafts movement, the Bauhaus also eventually fell victim to the machine, but in a different way. Their failure was to recognize that the machine was incapable in many ways of providing

the variety and the richness that the human environment must have. Variety is perhaps the quality that a mass produced object is least likely to have. Mass production can be true to its principles only when large quantities of items are produced in the simplest possible form. None of the irrational variety of the craftsmen can be present.

Architectural terms present in the "international style" buildings of the 20th century adhere closely to Bauhaus fundamentals. Simplistic "boxes" of steel and glass are subject to the monotony of repetition and the conformity of a system. The hard inelastic materials used in their construction, that suit so well the machine; are offensive to the human body. Wolf Von Eckardt, noted architectural critic, reacted to the monotony and the hard edged quality when he said, "an international style house, in all its studied and pristine simplicity, calls for the studied and pristine life of a Zen Buddhist monk."[5]

A Philosophy Developes

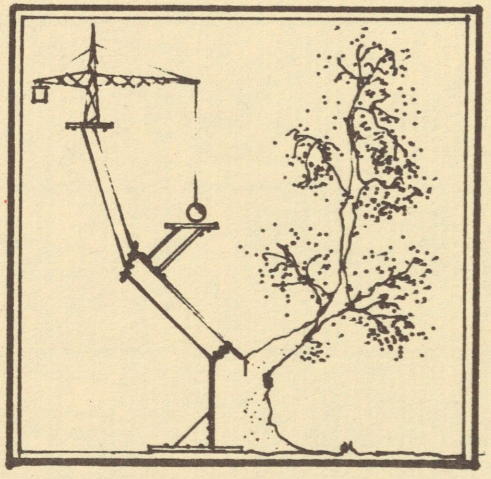
Modern architecture seeks its traditions in the ideas of the Bauhaus and the Arts and Crafts movements of the turn of the century. Though

each of these movements encountered drawbacks in dealing with the "machine age", they have provided us with rationale that is still valid today. Now that the "space age" is upon us we must carefully consider the lessons history has provided and develope a philosophy for dealing with the machine.

Today it is an inescapable fact that our buildings are assembled largely with materials resultant of some mechanical modification or process. We must accept and deal with this fact. A return to hand crafted buildings in our time is morally and economically wrong. Similarly, it would be wrong to design places for people irrespective of human needs. George Nelson noted in his book, Form Follows Fiasco, that some architects seem to believe that "contact with hard edged components will in fact elevate your visual and tactile literacy and your spirit."[6] Buildings assembled purely of machine made components can seldom be human places. Neither alternative alone can be valid, rather each attitude should be used, one to compliment the other. The monotony of mass produced pieces can be relieved by contrasting a specially conceived part against it. Thus a philosophy of combination and contrast can provide timely architecture with human values.

The quality of the final product is only as good as the quality of its parts. In architectural terms the most logical and effective place to implement this newly developed philosophy would be in the selection and detailing of materials. Carefully chosen materials, detailed properly, can effectively contrast our standard and often times boring building materials. New and different uses of existing materials might also prove effective. One can, at the same time, have the simplicity and order of the machine, and the variety and richness of originally conceived details. A most desirable objective achievable with this philosophy that willingly combines two philosophies is an architecture that has variety, richness and purity to offer human environments.

# OTHER CONSIDERATIONS



## OTHER CONSIDERATIONS

### The Senses

Any new design philosophy must eventually be accounted for in terms of the human body and spirit. Man perceives his environment through a remarkable system of receptors coupled with the intricacies of the mind. His environment is significantly altered by his perception. A knowledge of the senses is vital to the designer in his design and detailing of materials. Ample consideration must be made to compensate for quirks in perception. Quality decisions can also be made about where and how to use particular materials.

### Perception Rationalized

Around 1910 a group of brilliant psychologists developed a model that proved that irrational forces acted on and transformed objects being perceived. Certain patterns were recurrent in healthy adults. Visual perception was altered by a phenomenon known as closure (a tendency to reduce a complicated pattern to a more recognizable and simpler pattern). "Remarkable in these observations was the revelation

that individuals tended to simplify patterns toward horizontal and vertical rather than scew organizations; toward symmetry rather than asymmetry; and toward basic geometric groups rather than randomless precise ones."[7] One example, for instance, would be a square, it was shown to be the most memorable and neutral form because of its regularity and orientation.

The modern movements in architecture of the 20th century found that these theories of perception provided a rationale for recognizing beauty. "Moreover the observation that humans possessed a tendency or a "will" to simplify and order stimuli lent support to those who championed the economics of a new industrialized architecture and who argued that efficient, coherent and rectilinear geometric forms . . . were a higher form of architectural expression."[8] This was, of course, a crude and contemptuous notion on the part of these architects, for it failed to respect the careful experimentive process established by the psychologists to substantiate their ideas.

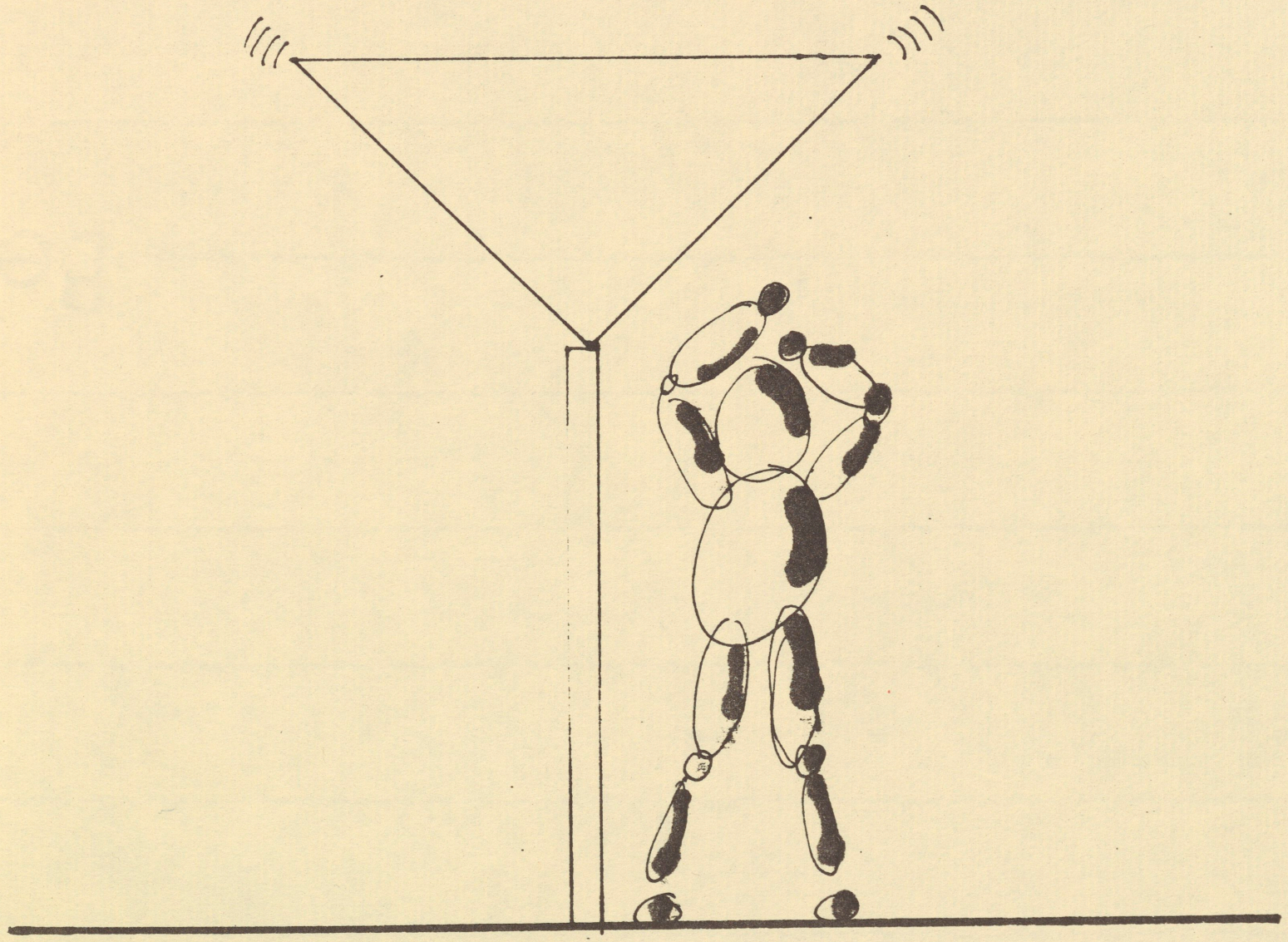
These ideas about perception should not be used as, after the fact, confirmations of their architecture but as guidelines to consider in making design decisions.

## The Five Basic Senses

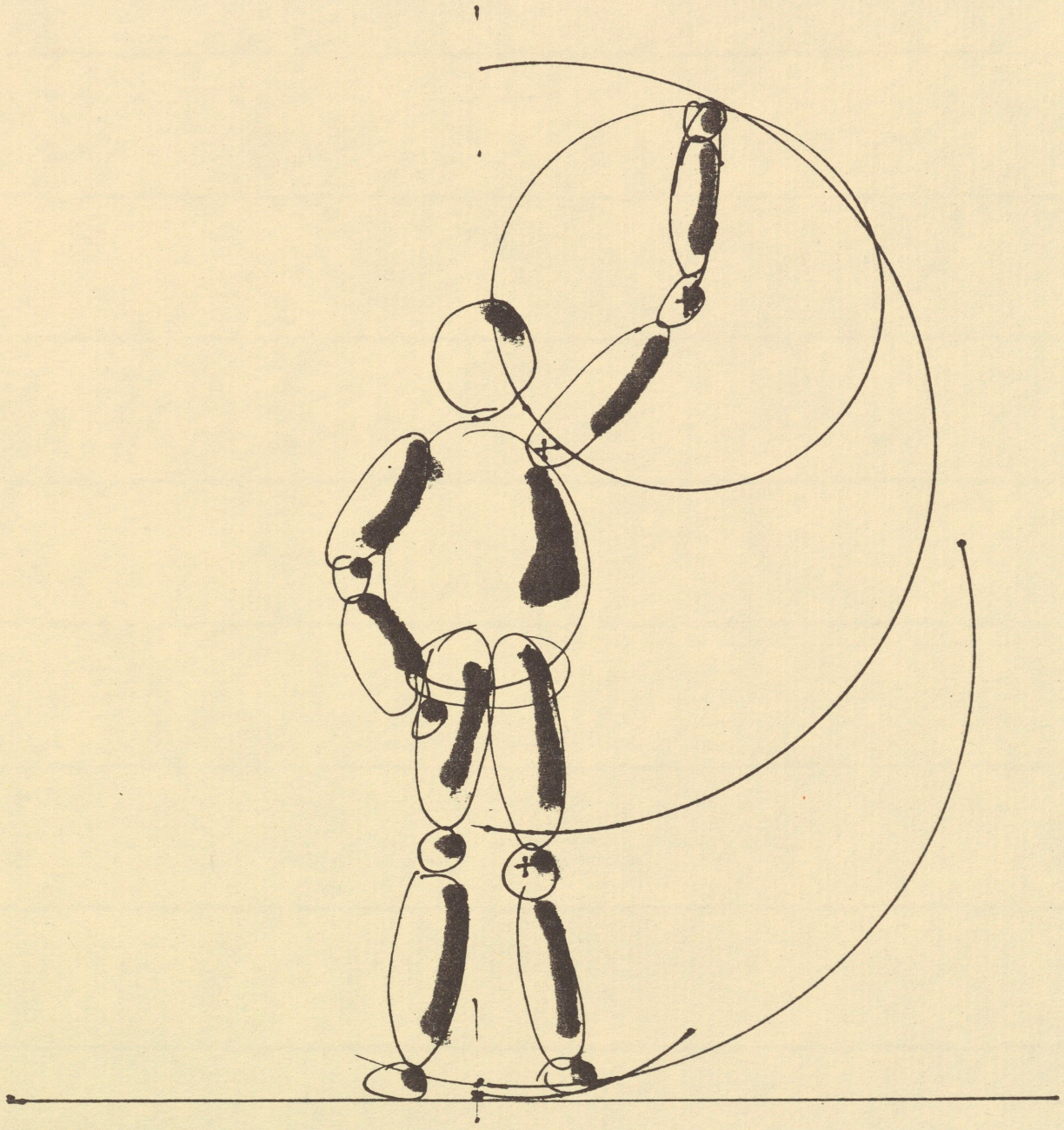
There are five classical senses that are generally accepted today as they were in Aristotle's time. They are the senses of sight, sound, taste, smell and touch. Architects as modelers of three-dimensional space need a more concise and all encompassing description of how the body perceives in space. J.J. Gibson, an environmental psychologist, regards the senses as "aggressive, seeking mechanisms and not as passive sensation receivers."[9] Gibson's five new sense descriptions deal with environmental information rather than bodily response. Accordingly his systems are the visual system, the auditory system, the taste-smell system, the haptic and the basic orienting systems. The latter two senses are vital to man's ability to sense three-dimensional space.

## The Haptic and Basic Orienting Systems

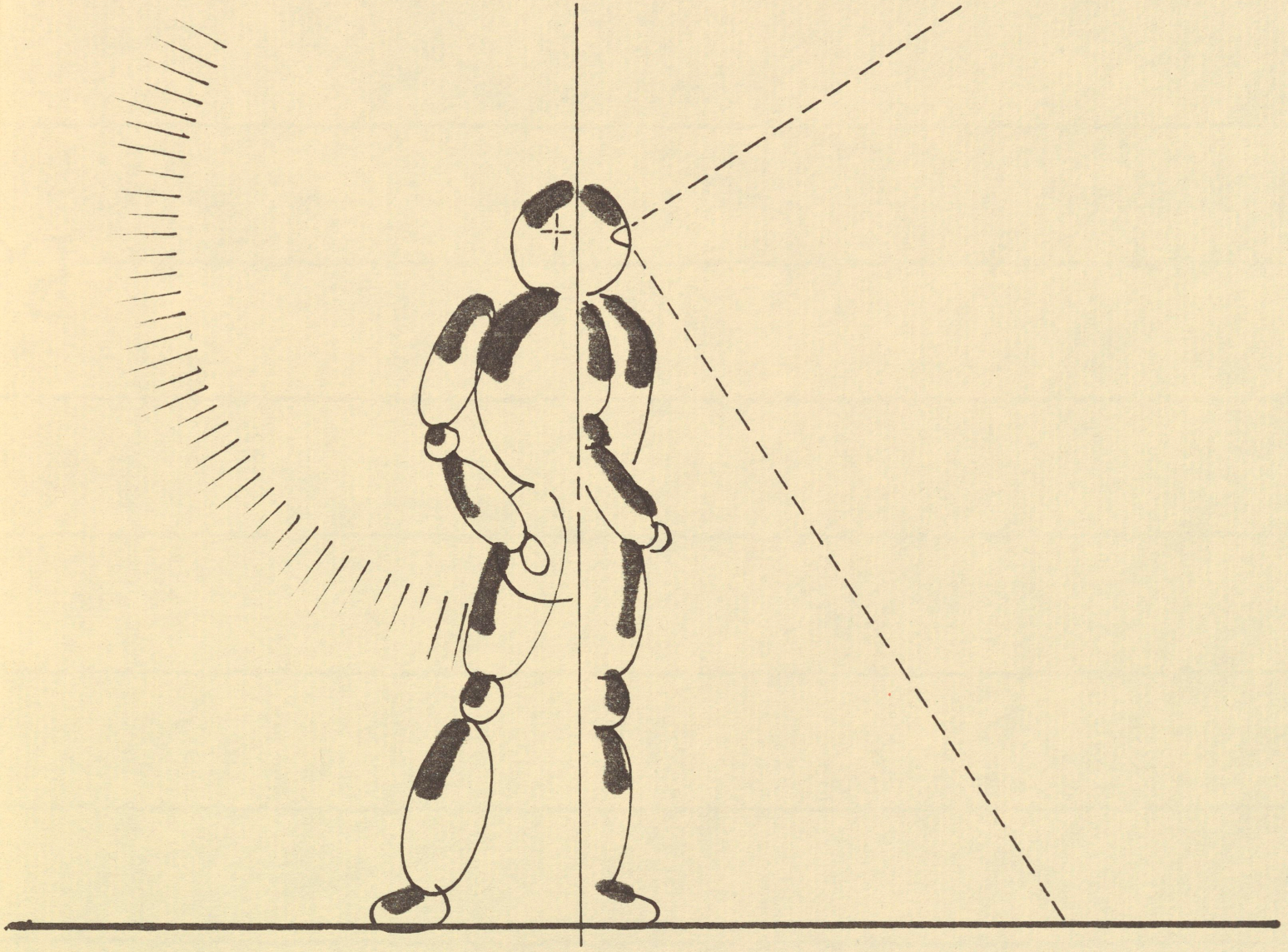
The haptic sense is simply the sense of touch considered to include the entire body not simply the hands. The haptic sense deals directly with the three-dimensional world and has the ability to alter our environment while we perceive. In designing environments for men, the designer can



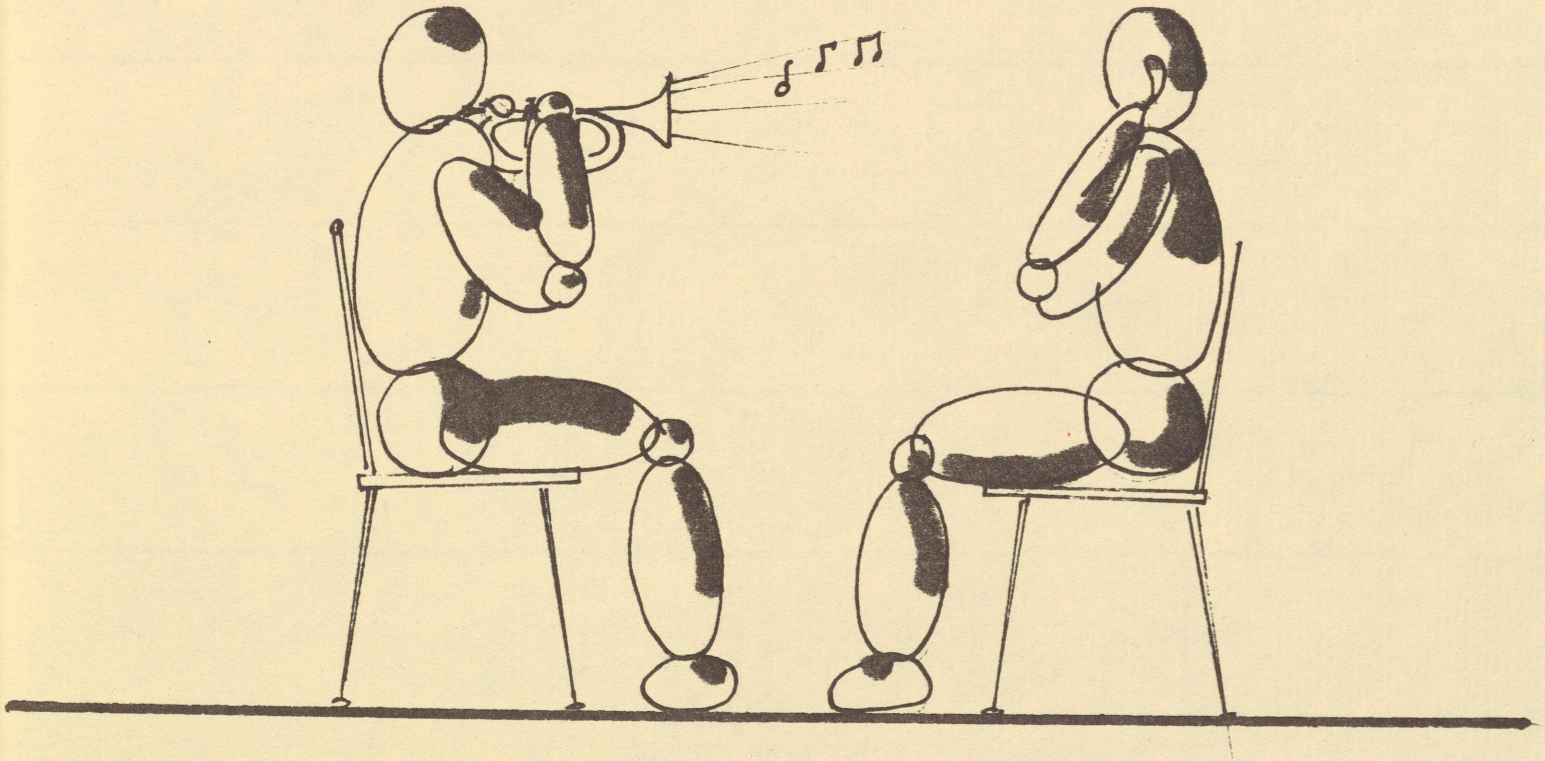
Sensory System 1. The Basic Orienting deals with our postural sense of up and down and is also dependent upon coordination of the other four senses.



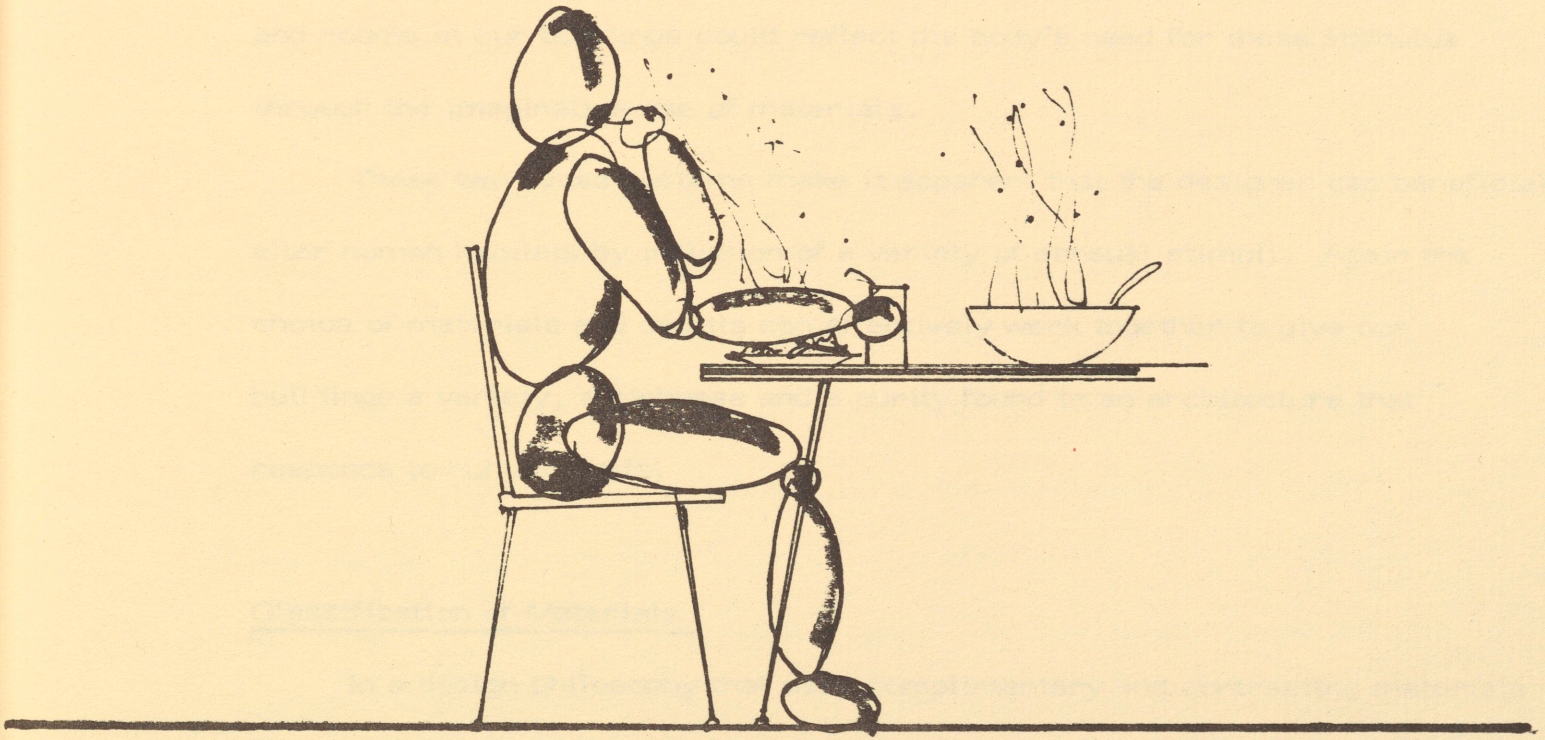
Sensory System 2. The Haptic System
* Important for Sensing 3-Dimensionality



Sensory System 3. The Visual System



Sensory System 4. The Auditory System



Sensory System 5. The Taste-Smell System

easily affect perception in the haptic realm by materials chosen appropriately for the task with due consideration to their properties.

"Basic orientation refers to our postural sense of up and down which, because of its dependence on gravity, establishes a knowledge of the ground plane."[10] This postural orientation that we maintain accentuates our need to balance the incoming stimulus of sight, sound, touch and smell. Volumes and rooms in our buildings could reflect the body's need for these stimulus through the imaginative use of materials.

These two sense systems make it apparent that the designer can beneficially alter human habitats by inclusion of a variety of sensual stimuli. Again the choice of materials and details can effectively work together to give our buildings a variety, a richness and a purity found in an architecture that responds to human needs.

## Classification of Materials

In a design philosophy that uses complimentary and contrasting materials and detailing to reach its goal there must be a breakdown of the materials into groups that reflect their intended uses. The properties of the materials

themselves will readily lend them to particular uses.

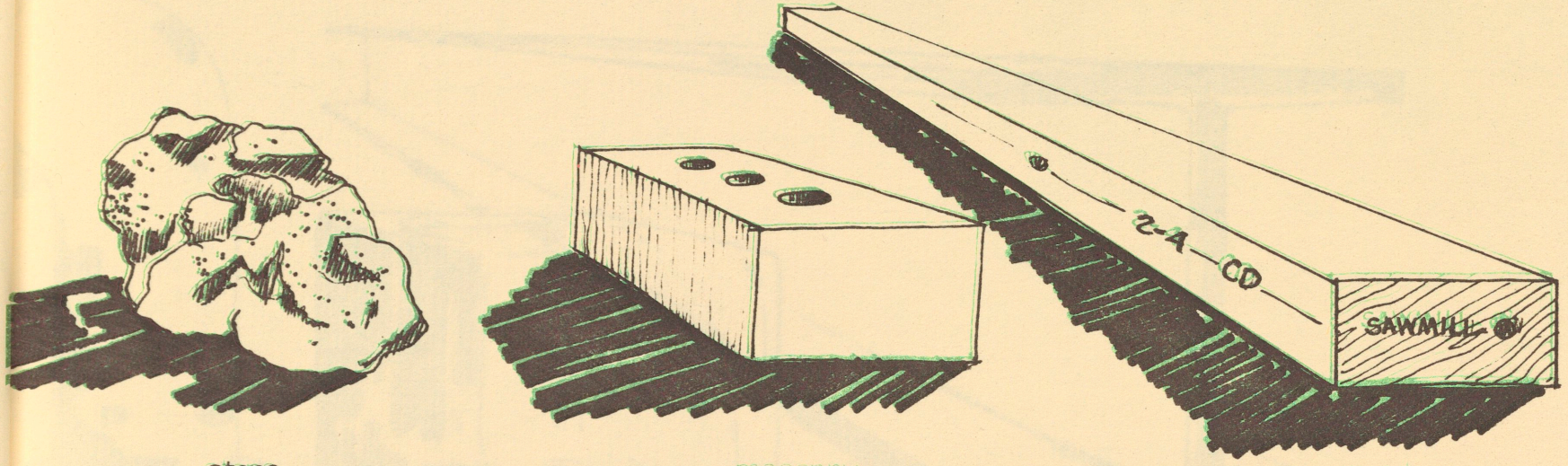
## The Three Basic Groups of Materials

Three basic groups of materials can be isolated in the range of materials available today. They are synthetic products, natural products and retero-fitted products. "Synthetic" or manufactured products are those which are the result of some process or fabrication by man. As technology becomes more sophisticated these products become both more numerous and more complex in their makeup. "Natural" products are essentially products of nature that have been altered for use by man. These could be considered to be the traditional in the sense that they are often materials indigenous to a particular region. The third class is "retero-fitted" products. These are products or objects which lend themselves to architectural use but were not originally intended for that use but some other, often unrelated, use. The knowledge of these basic categories plus a familiarity with the specific qualities of a material will give the architect a complete palate to work with. Of the three categories, natural products lend themselves most easily to modification

and creative detailing, followed by retero-fitted products. Synthetic products, because of their need to work in systems and be produced in large quantities, are not easily modified to new roles.

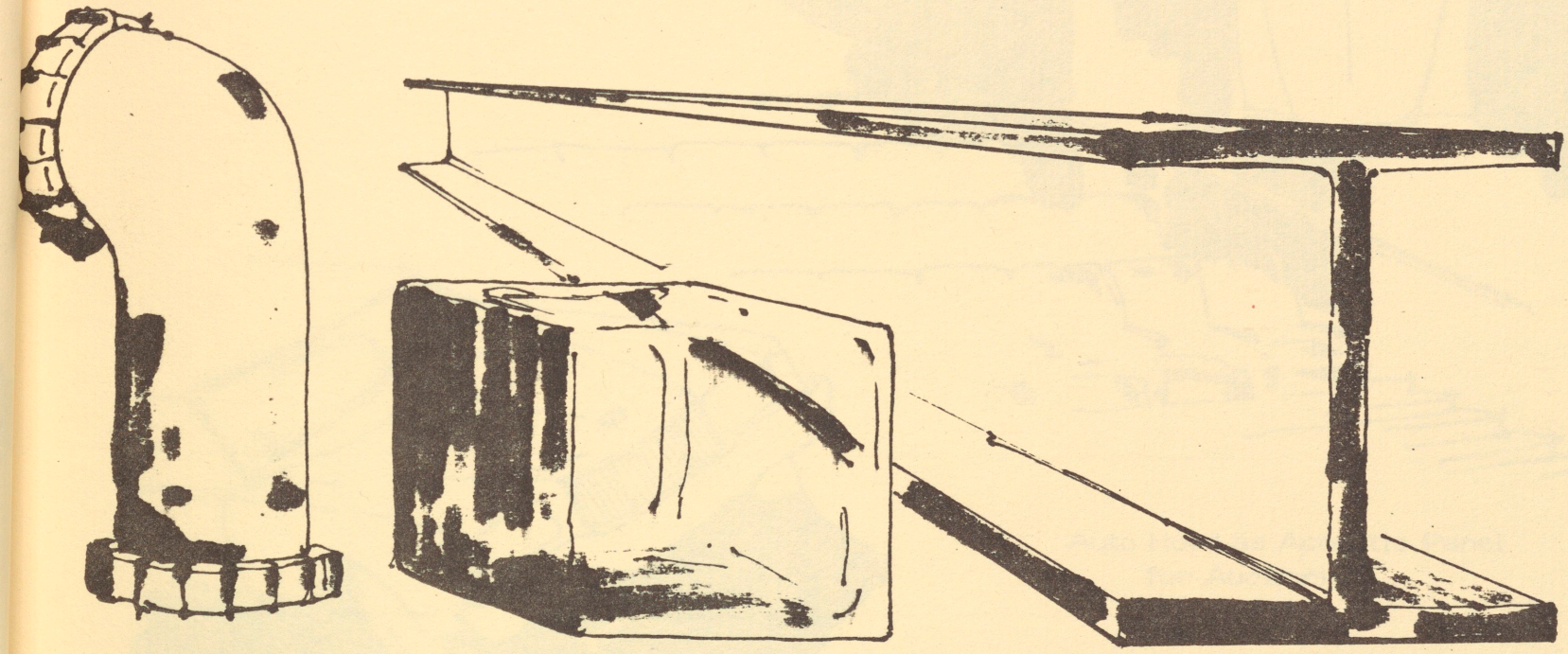
## Testing

The ideas and conjectures within this thesis will be tested by their application to an actual architectural project. Many of the conclusions drawn need confirmation and proof. The solution reached can be judged, primarily, only on subjective terms by the designer and viewers present on submission. There can be no final or dogmatic solutions to this problem and its ramifications. Men are products of their environments and, as such, are incapable of making unbiased decisions. Even a historical perspective can not always be objective. We must design in our contemporary period of thought while striving to create architecture that can be judged on its ability to be vital, rich and pure. These are the important measures against which architecture may be judged.



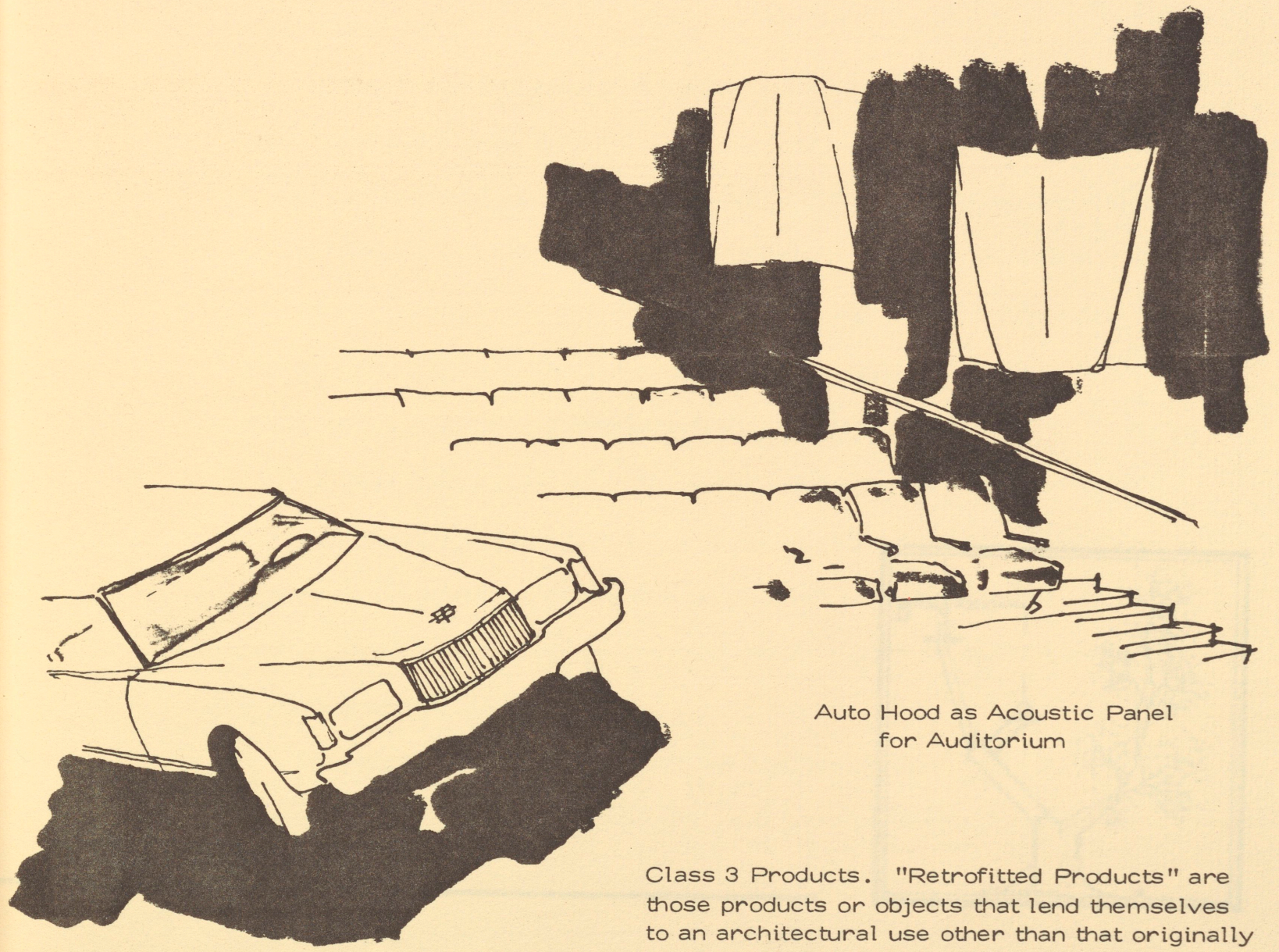

stone masonry wood

Class 1 Products. "Natural Products" are those which have been produced by nature and are altered for use by man.



plastic glass steel

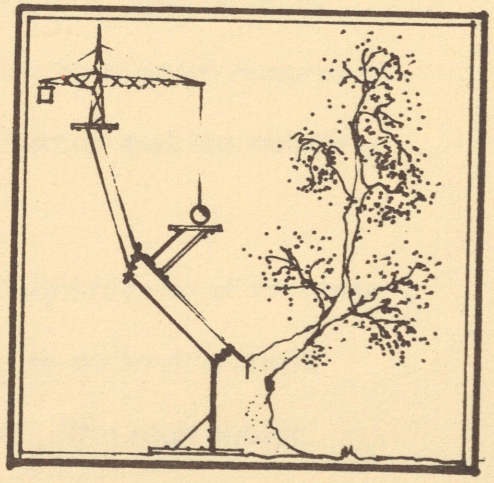
Class 2 Products. "Synthetic or Manufactured Products" are those which are the result of some process or fabrication by man.



Auto Hood as Acoustic Panel
for Auditorium

Class 3 Products. "Retrofitted Products" are those products or objects that lend themselves to an architectural use other than that originally intended them.

# THE PROJECT



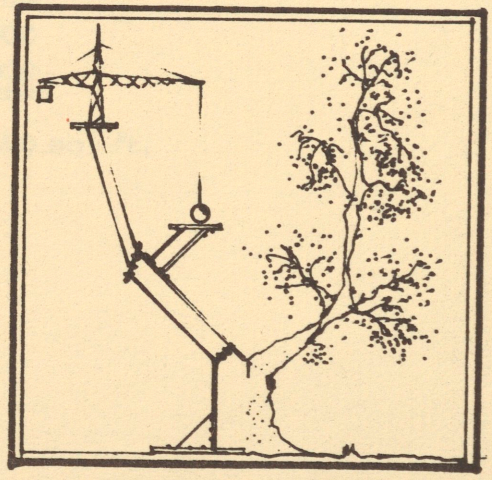
## THE PROJECT

From the beginning of this thesis I have searched for a project that would enable me to explore the conjectures of my thesis in rational form. It was apparent that the most effective way to demonstrate my ideas would be with a building of simple functional needs yet one that could be a significant architectural expression in its own right. Important also, was the need for it to be a vital place of human occupation as the final test of the structure will be as a receptive environment for man.

A real need and program to be met were important considerations, for no purpose would be served in a mere assemblage of good details. The selection of materials and detail considerations must be an outgrowth of the concept under which the building was conceived so that the building might not be just a whim.

Finally an Information Center for the small tourist town of Whitefish, Montana was selected as the project. The location is an environment which I thoroughly understand in all its dimensions. The high public saturation of the building will provide opportunities to demonstrate my ideas of materials and detailing of space. A plan for a useful and needed service will be rendered for the town.

# THE PROGRAM



## THE PROGRAM

### Building

By assimilating the spacial requirements of existing information centers, a reasonable program was developed with appropriate square footage assignments.

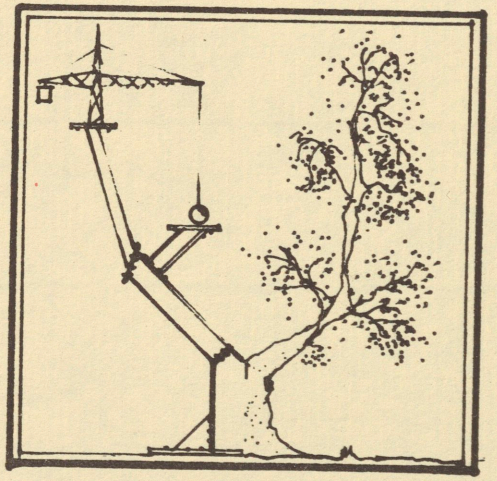
| Space | Area Sq. Ft. |
|---|---|
| foyer | 300 |
| lobby | 2,000 |
| gallery | 450 |
| director's office | 150 |
| receptionist desk | 150 |
| restrooms | 300 |
| storage | 1,000 |
| Total | 4,350 sq. ft. |

## Site

Site needs were established by projecting uses subservient to building usage and by replacing displaced functions.

| Need | Requirement |
|---|---|
| Parking | |
| BN | 30 cars |
| Information Center | 20 cars, 10 R.V.'s |
| Veranda | 625 sq. ft. |
| Large Open Space | 6,000 sq. ft. |
| Parade Organization Space | paved areas |

# THE SITE



## THE SITE

### The Town

Situated at the foot of the Whitefish Range and on the shores of Whitefish Lake is the small tourist town of Whitefish, Montana. Populated by 6,800 people, employed mainly in the rail, timber, light manufacturing and tourist related industries, the town enjoys a relaxed small town flavor. The majority of the buildings on the town's main street have been facelifted and the architecture is a blend of restored and a sort of alpine modern. Most of the retail stores are located near city center, with merchants providing full goods and services for residents and tourists alike.

At a max elevation 4,500 feet above the valley floor astride the Whitefish Range is the Big Mountain Ski Hill which attracts increasingly great crowds with four chairlifts and great skiing to be offered. One lift runs in the summer, when the resort turns convention center, taking people to the top for an exquisite view down the Flathead Valley to the south and to the north 27 miles, Glacier Park's snow covered peaks reach skyward.

At the mountain base lies Whitefish Lake, a deep freshwater lake, some 8-1/2 miles long and 2 miles wide at its widest. The lake is a mecca for water sports in the summer. Resorts and summer homes line the lake-shore. A widely acclaimed 18 hole golf course skirts the lake to the west.

The town is laid out on an orthogonal grid with the Burlington Northern railyard bisecting the town on an east-west plane and the Whitefish River slicing diagonally through the city from northwest to southeast. The seven blocks of commercial district occupy the center of town just to the south of the railyard. Residential housing occupies the flanking areas. The sole means of expedient access across the "tracks" is provided by a viaduct for foot and auto traffic.

Three major transportation networks serve the town: air, rail and highway. Only the latter two offer direct access. Amtrack rail service is provided twice daily by the Empire Builder, east to Minneapolis and west to Seattle. U.S. Highway 93, known as the North American Holiday Highway, extending from Central America to Alaska, enters town from the south and departs to the west to Canada. The route crosses the Whitefish River at two points.

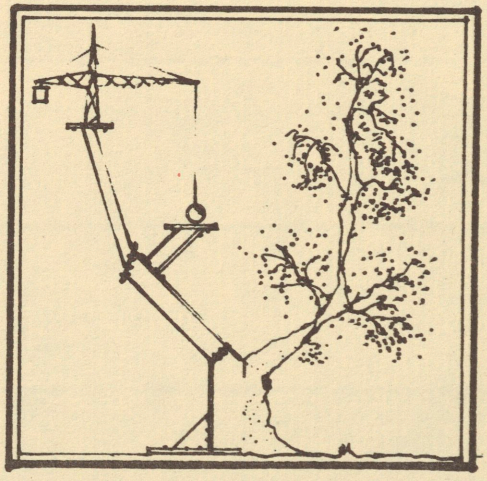
## The Site

Two and one-half blocks of railroad frontage at the terminus of main street was chosen for its ideal qualities. Because of the adjacent viaduct, a large amount of slow moving traffic must converge on and pass the site. A strictly enforced 15 m.p.h. speed limit and a busy intersection place the building at the high activity point for the town. Both water and ski recreation tourists must pass the site to reach their destinations as the viaduct provides the sole access. Ample signage is provided by large overhead signs on Highway 93 denoting the recreation access.

Presently the site is an untended void in the city fabric. Ideally it can become a buffer zone and park that will enhance the image of the town and that of the existing Burlington Northern park that is included in the site boundaries. The greater part of the site is devoid of greenery and covered with trash and scrub brush.

The important relationship of site to building gives the Information Center a format and context that are essential to the creation of good architecture.

# THE DESIGN



## THE DESIGN

When a designer talks about his creations, there are always reservations and uncertainties encountered. I recognize this, but I will try to talk forthrightly about this design and the creative process that rendered it. Much has been gained in the design and research done. I have gained new insights into myself, design, the past, and most importantly, the selection and detailing of materials to give us a better environment.

The building portrayed here represents some of the thoughts and inspirations that have passed from hand to paper in the last six months, some have remained, others have glowed briefly with promise and then faded as their worth in a total scheme was evaluated. Assimilated of ideas and pieces that are worthy of one another and right for the time, it is my hope that what is rendered here is an architectural statement that contains a purity, a richness and a vitality that will separate it from many contemporary buildings as a proper human environment.

The predominant importance of the automibile to an information center proved to be a key element in the initial design of the structure.

The demands made by the fast pace and limited view of the auto called for special considerations and liberties to be taken in the shape, size and scale of the building in order that it have the visibility vital to this type of program. The building presents itself to the viewer from three major vantage points: above descending, skirting and head on, the latter being a major determinant in the siting of the building. Recognized early in the design development, these facts pinpointed the building to the lower western corner of the site.

Conceptually the building is the outgrowth of a single line that traces a shallow curve along the major arterial frontage of the site from end to end. The concept of line manifests itself in a wall fronting the street with an equally lineal building rising behind. At once the wall is a segment of the building and a part of the site. As constructed the wall would stretch from the base of the viaduct approach ramp to the edge of the block abutting Main Street. Large signs terminate the wall at each end and also provide a highly visible identity for the center at automotive speeds.

The site and building behind the wall are reserved for the slower paced activities of the pedestrian. Here there is room for the kids to

play, a picnic in the grass, or just a place to park your oversized camper and see the town on foot. The axial pinpointing of the building by the major arteries locates it along a curved section of the wall or "line" mentioned earlier. This particular location of the building also works out well in terms of orientation as the structure is properly positioned for solar exposure, views, setting, climatic conditions and ease of access.

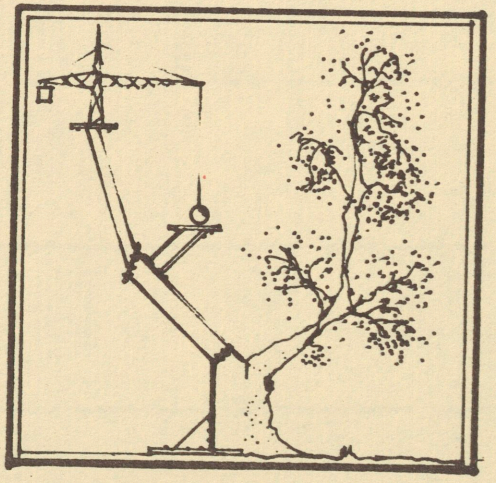
Programmatic flexibility enabled the building to take on a character similar to that envisioned in the conceptual stages of design. Spaces were linked together in a long chain to give the building predominance. Ordinarily this linking would result in a building with an inordinate number of hallways, but this is not true here as there are no actual hallways, rather, the spaces flow together and are defined by simple plains, junctures and, of course, material and detail changes.

Spatially the building is organized around the lobby with its two substantial fire places organizing loosely areas, for lounging and exhibits, that can be placed in a variety of configurations to encourage flexibility in the space. Smaller subservient spaces are arranged around the lobby maintaining primarily a lineal relationship. Adjoining the lobby to the

east are offices for the center director and receptionist-secretary. Southward the entry foyer stretches outward from the building to the wall in a receptive jesture. Twenty-four hour information servies, such as a hotel directory, telephones for weather, road and snow reports, and pamphlets, brochures and maps, would be based in this space which is separated from the lobby by a second set of doors for security. To the west of the lobby is a gallery for art or historical displays, a pair of restrooms and a large space for exhibit preparation and storage. A large tensile structure would attach to the rear of the building for informal use of a veranda during the temperate season of the year. High open ceiling would be used throughout with ample amounts of natural light provided by a variety of sources.

In the final analysis, we must eventually judge all architecture by its merits versus its faults. I judged many of the buildings, I objected to at the onset of this thesis in this way and feel that the Information Center is in comparison a success. It is a place for people, the materials work as intended to heighten the human experience and it is a result of designing within the perameters established in this thesis. (Note: See SELECTED DETAILS for information on detailing and material selection.)

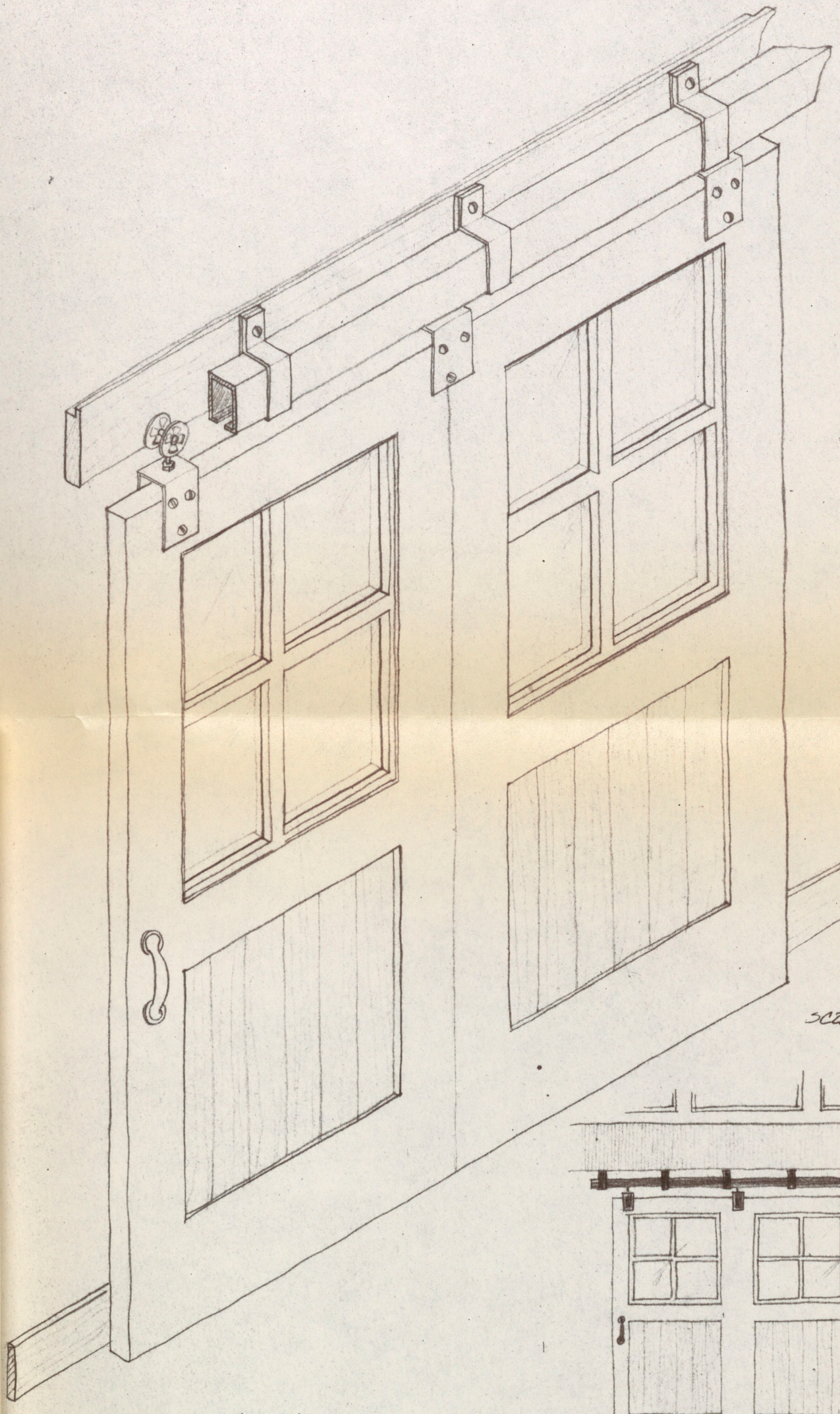
# SELECTED DETAILS



## SELECTED DETAILS

Shown in this section are details, used in the Information Center, that exemplify application of the philosophies developed earlier in this thesis. The possible applications of this philosophy are too numerous to show in their entirety. They encompass the entire range of decisions possible in the selection and detailing of materials. The uses shown here highlight a few imaginative uses that clearly demonstrate my ideals.

The details selected are presented for consideration in graphic form. They are ordered by space, surface and detail. Each particular function or room of the building is considered as a space. The planes that enclose space: wall, ceiling and floor, are considered as surfaces. The location of the surfaces is noted by the heading "Detail".



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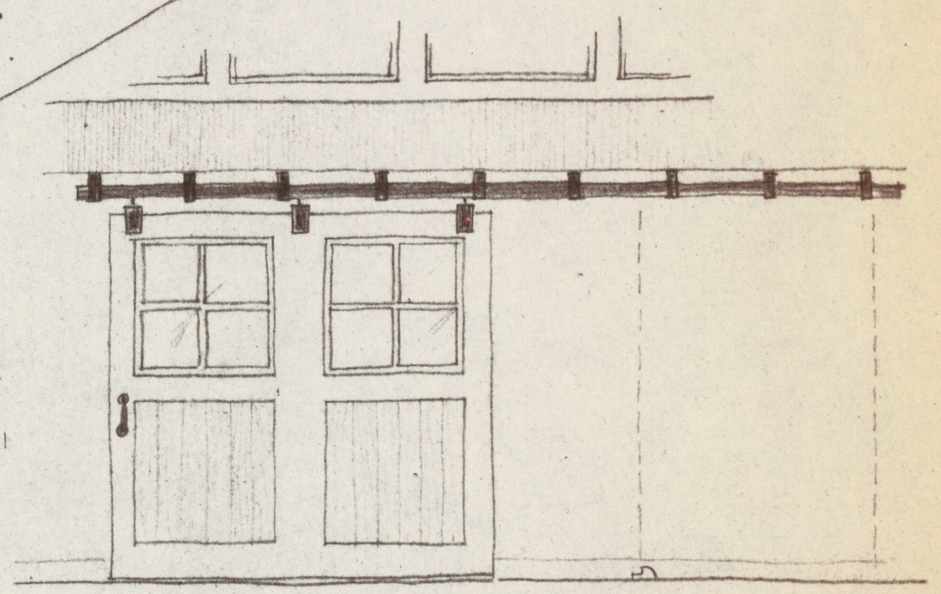


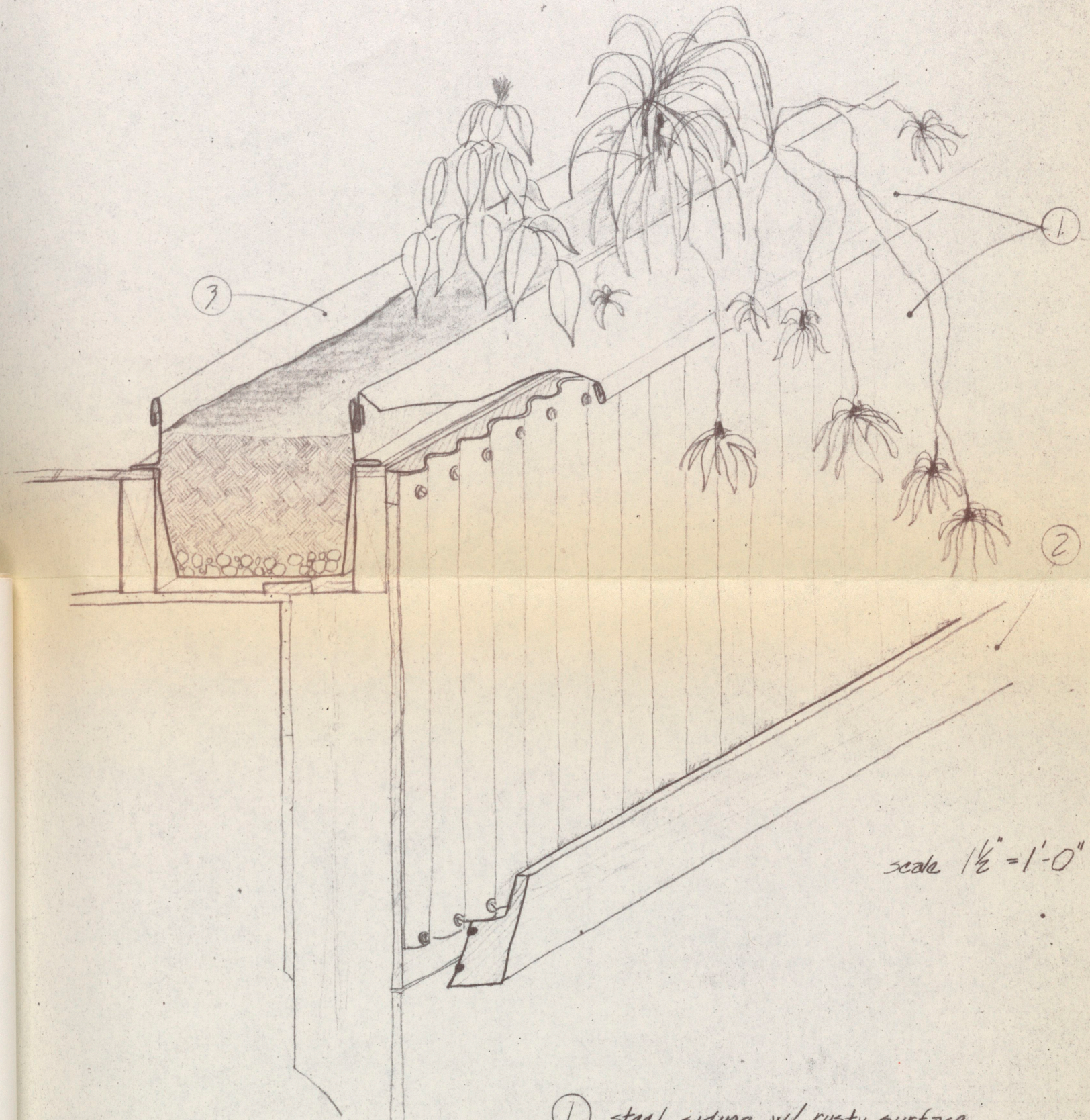
scale ¼"=1'-0"

RW door no. 514

SPACE: GALLERY

SURFACE: WALL

DETAIL: SLIDING DOOR (1)



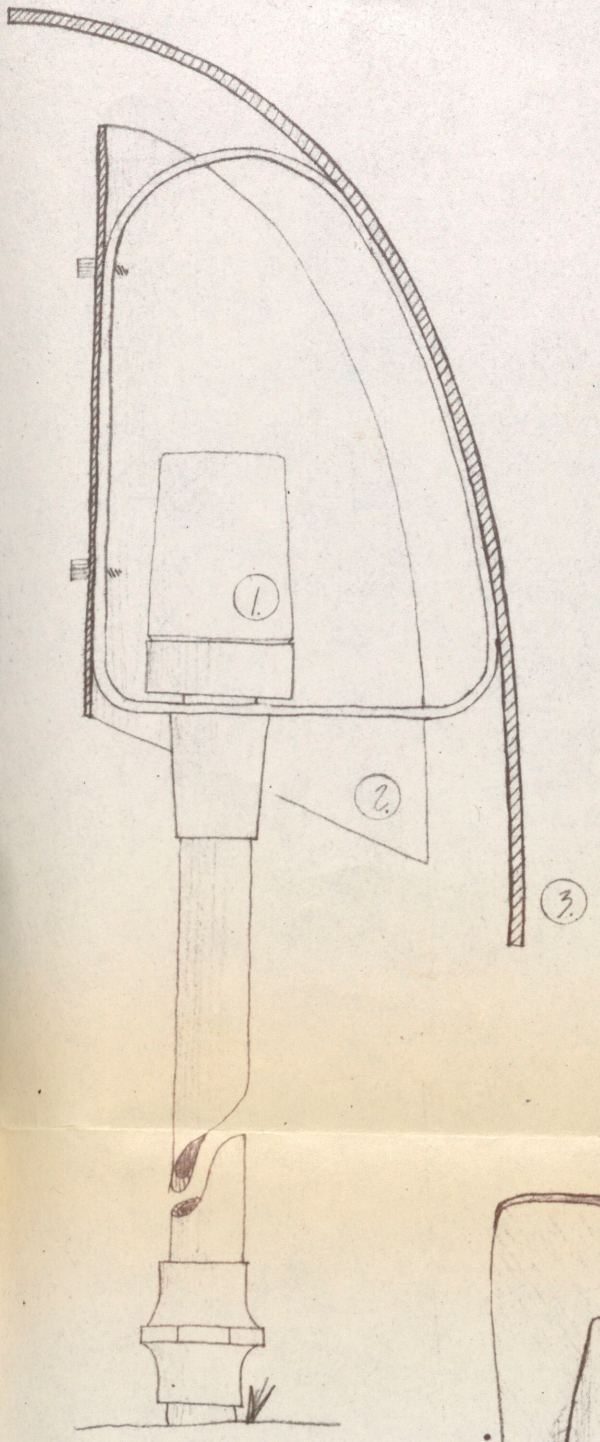

scale 1½" = 1'-0"

1. steel siding w/ rusty surface
2. ash moulding
3. galvanized steel planter box

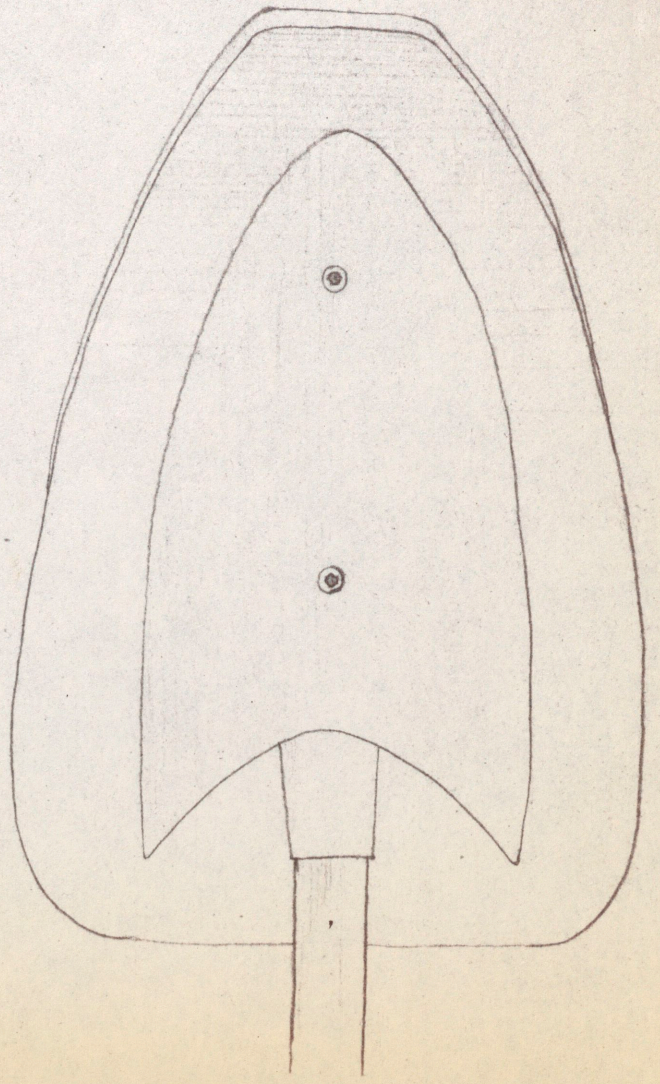
SPACE: GALLERY

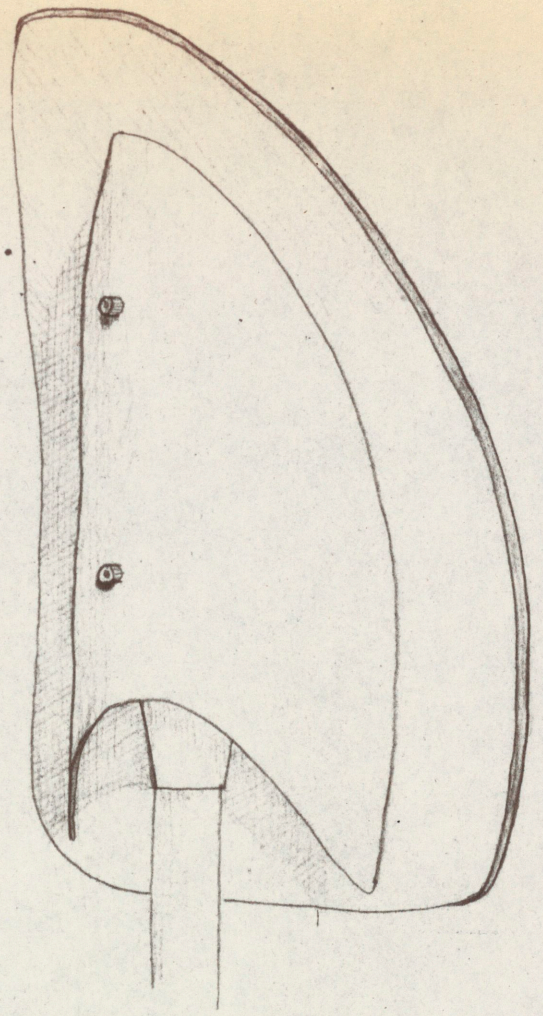
SURFACE: WALL

DETAIL: PLANTER ○




scale 3"=1'-0"





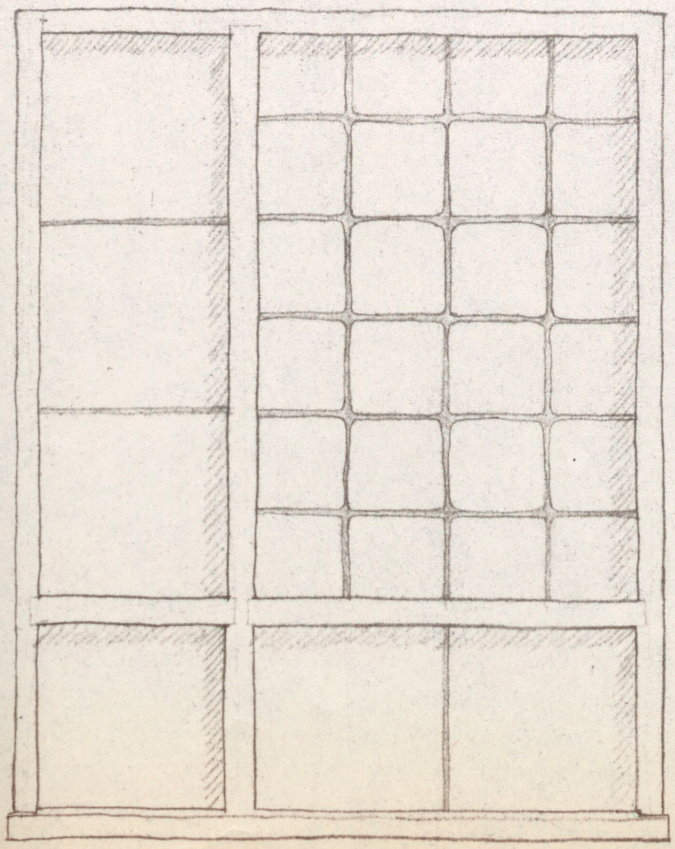
1. lamp unit
2. 1/8" aluminum plate
3. 1/4" steel plate

1

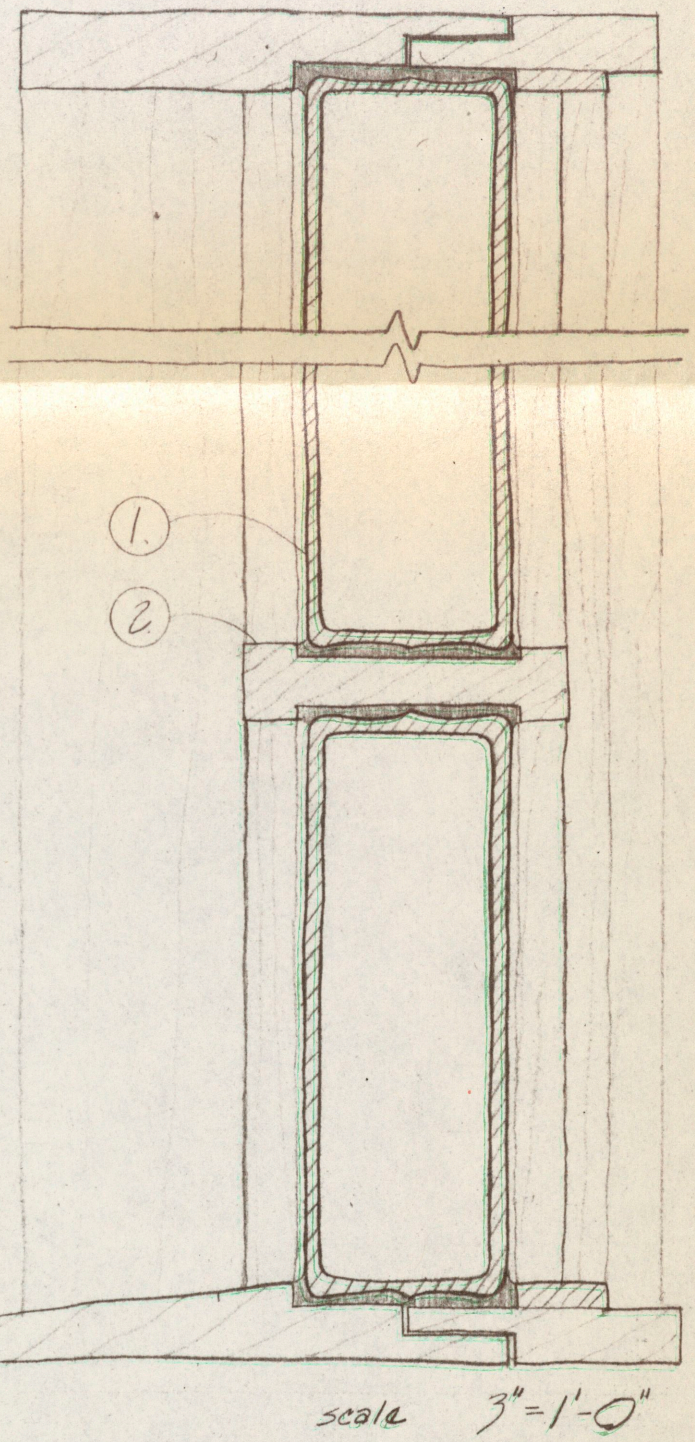
SPACE: EXTERIOR

SURFACE: WALL

DETAIL: LIGHT (3)



scale 1" = 1'-0"



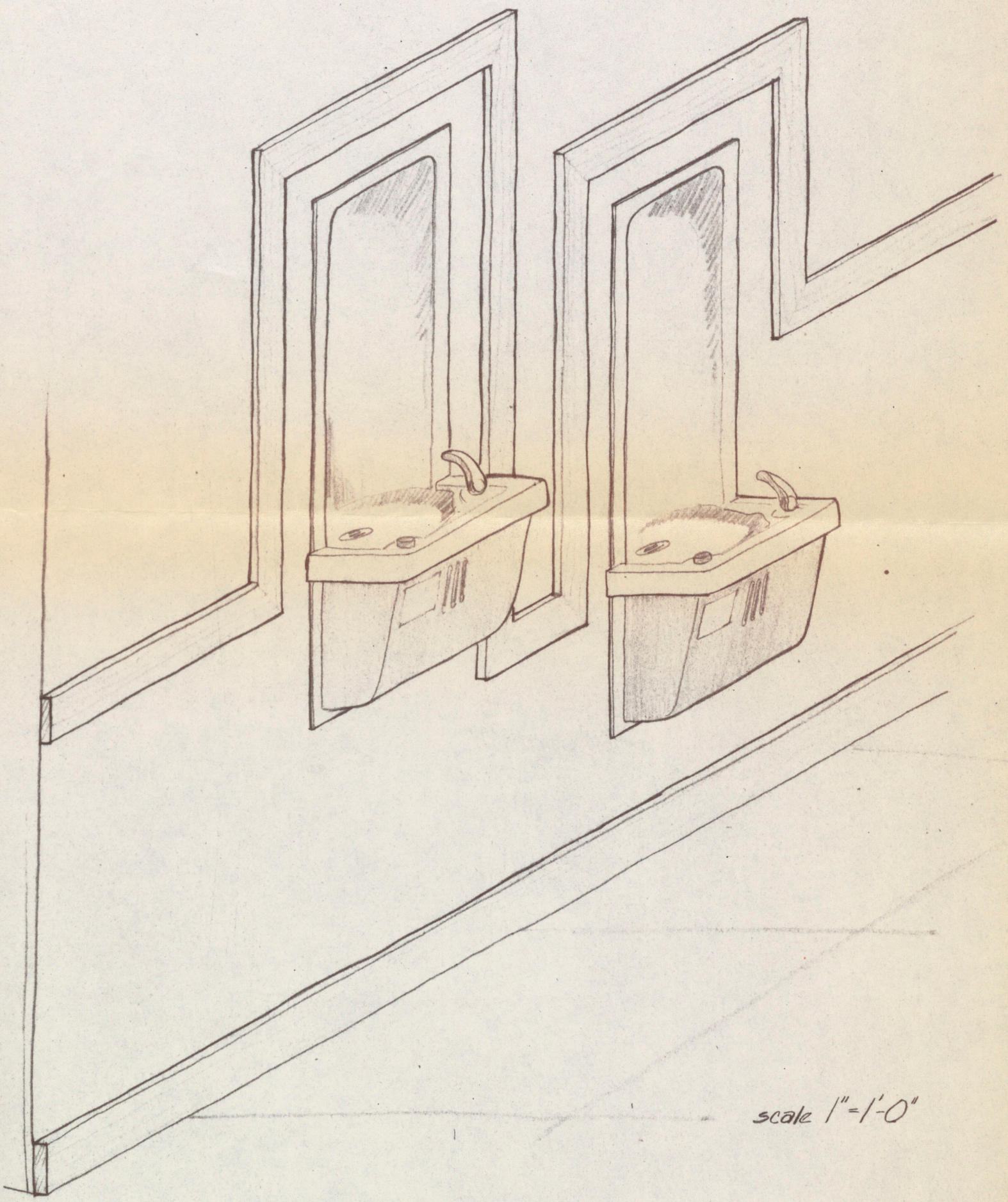

scale 3" = 1'-0"

1. 12 x 12, 6 x 6 glass block
2. 1½" redwood

**SPACE:** RESTROOM

**SURFACE:** WALL

**DETAIL:** GLASS BLOCK (4)

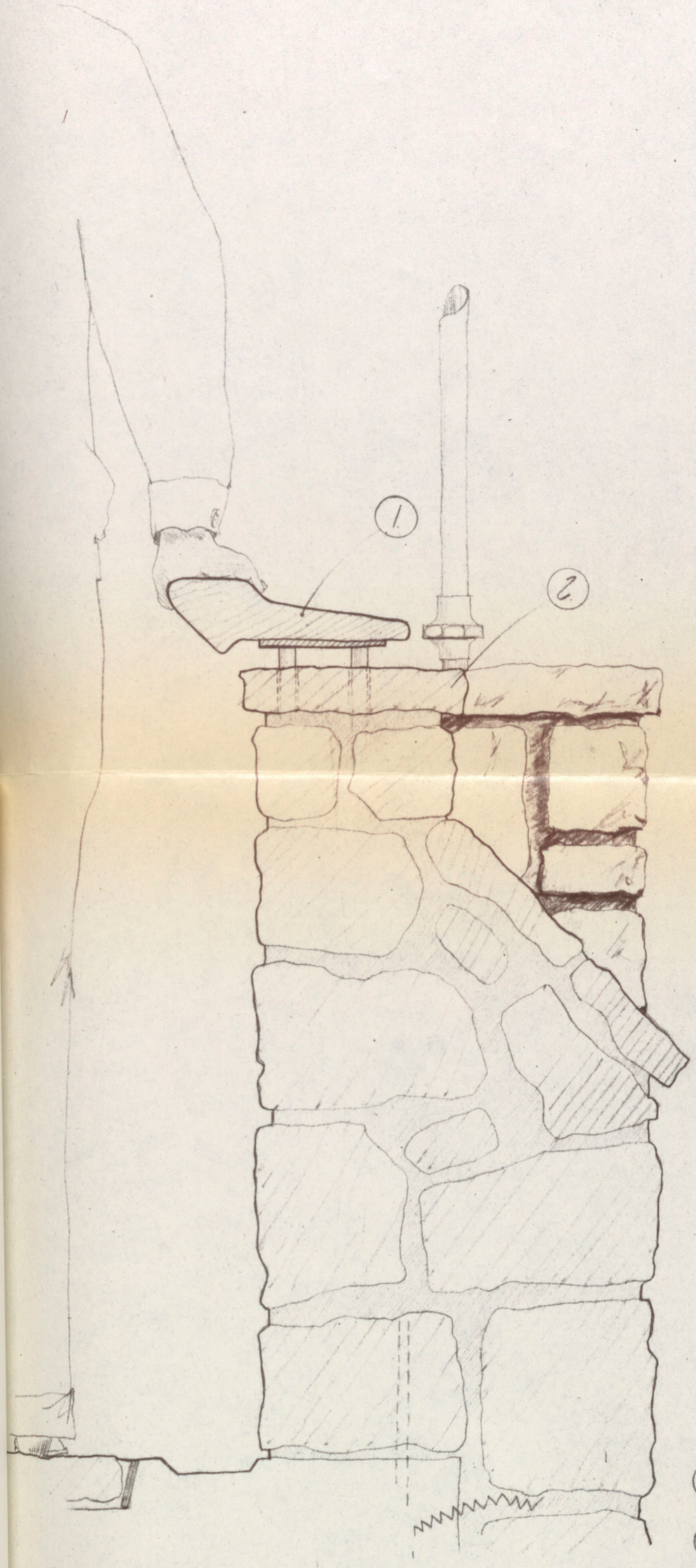


scale 1"=1'-0"

SPACE: LOBBY

SURFACE: WALL

DETAIL: FOUNTAIN (5)



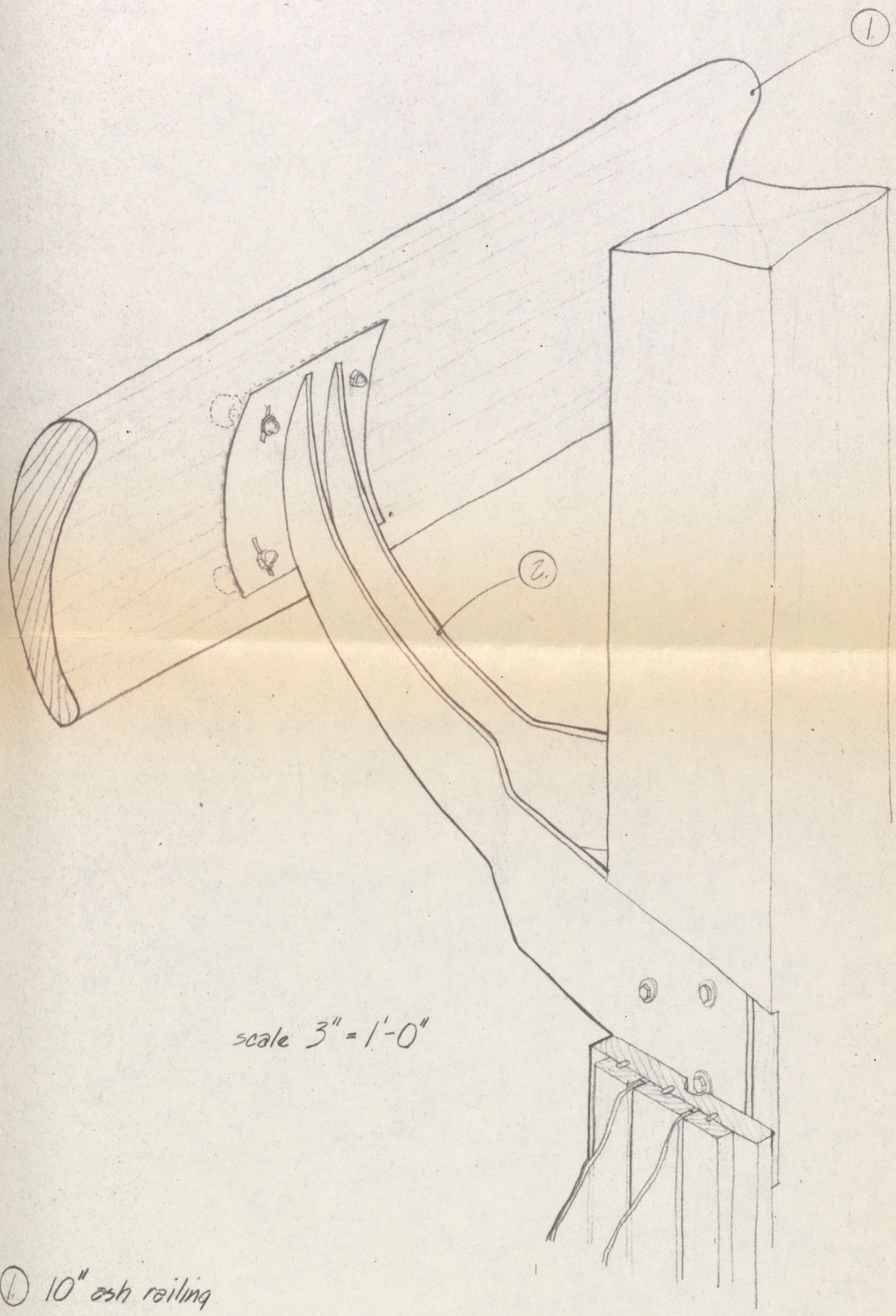

scale 2" = 1'-0"

1. oak railing - oiled
2. montana granite wall

SPACE: EXTERIOR

SURFACE: WALL

DETAIL: RAILING (6)



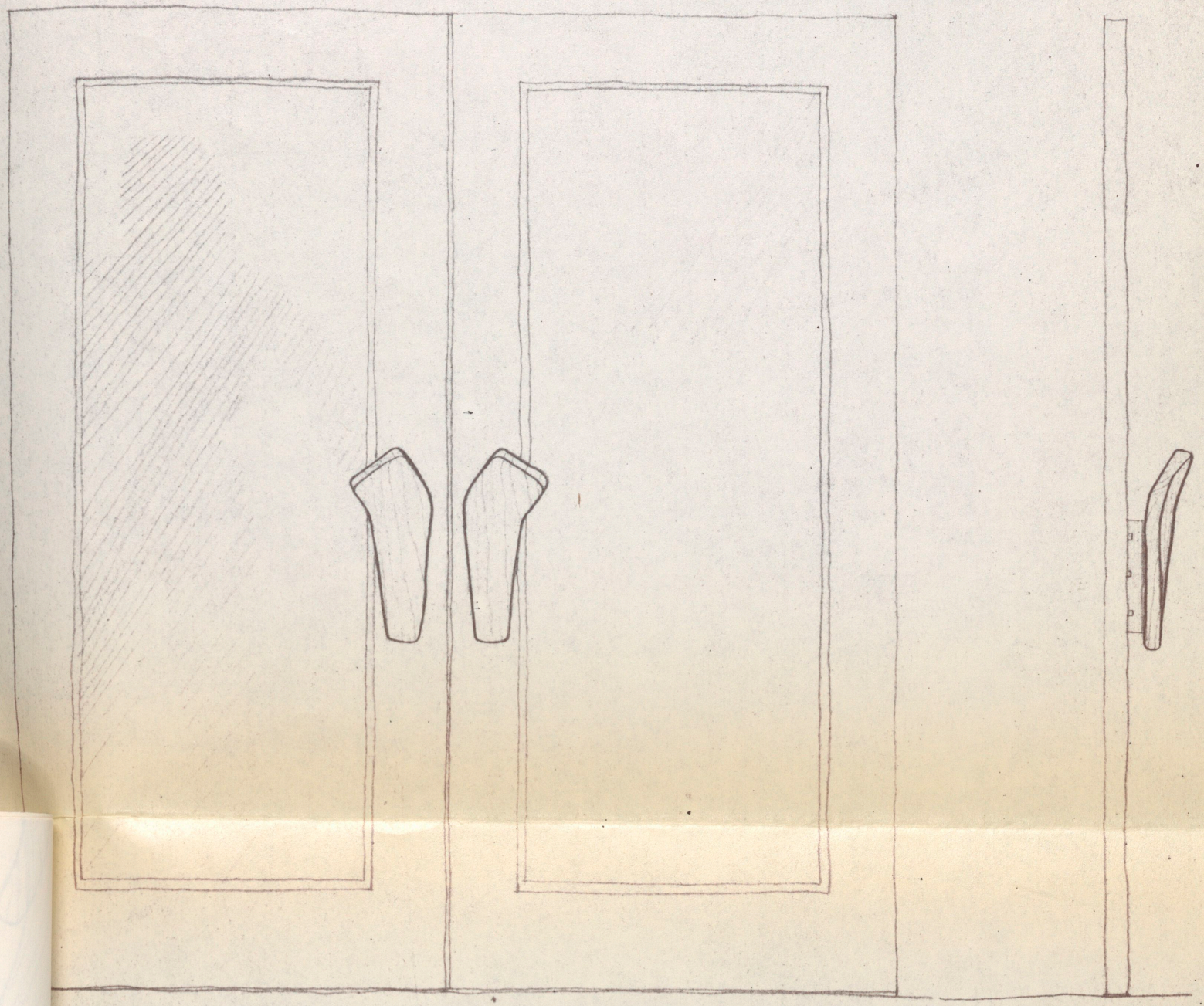

scale 3" = 1'-0"

1. 10" ash railing
2. 1/4" steel plate

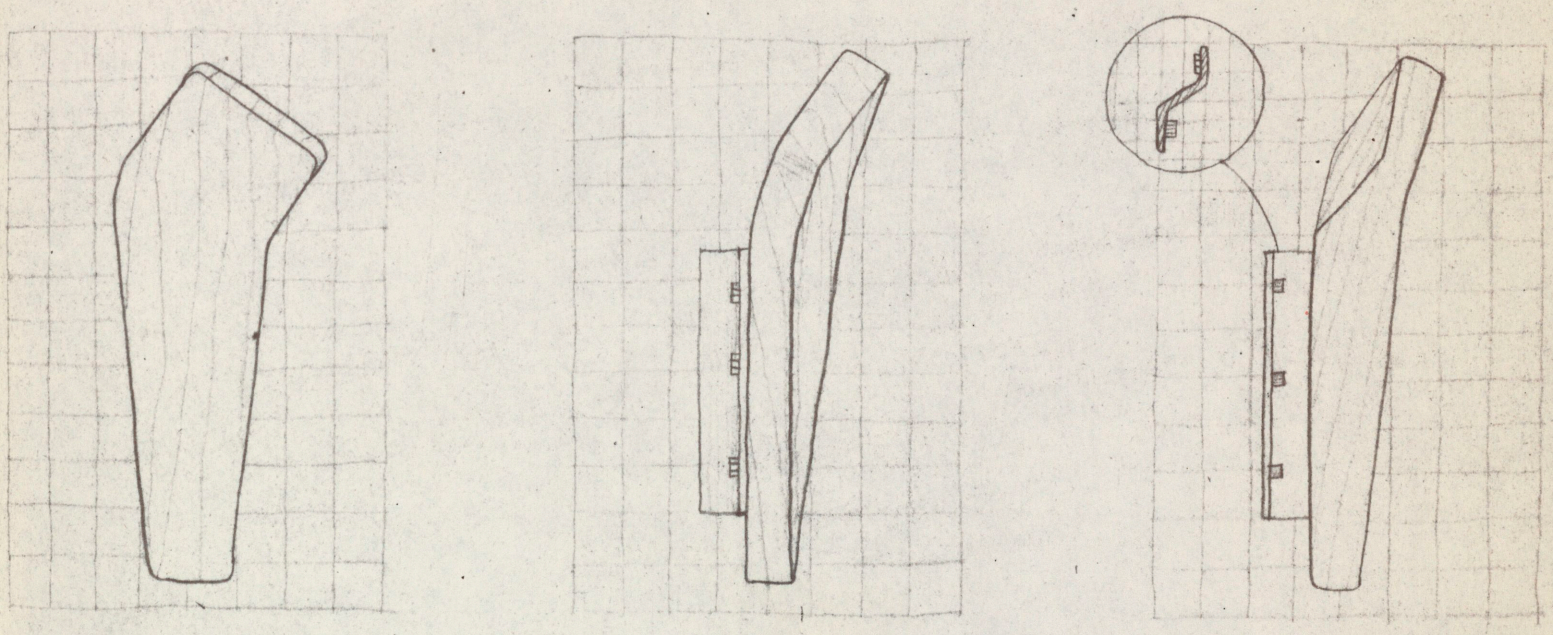
SPACE: LOBBY

SURFACE: WALL

DETAIL: RAILING (7)



scale 1"=1'-0"

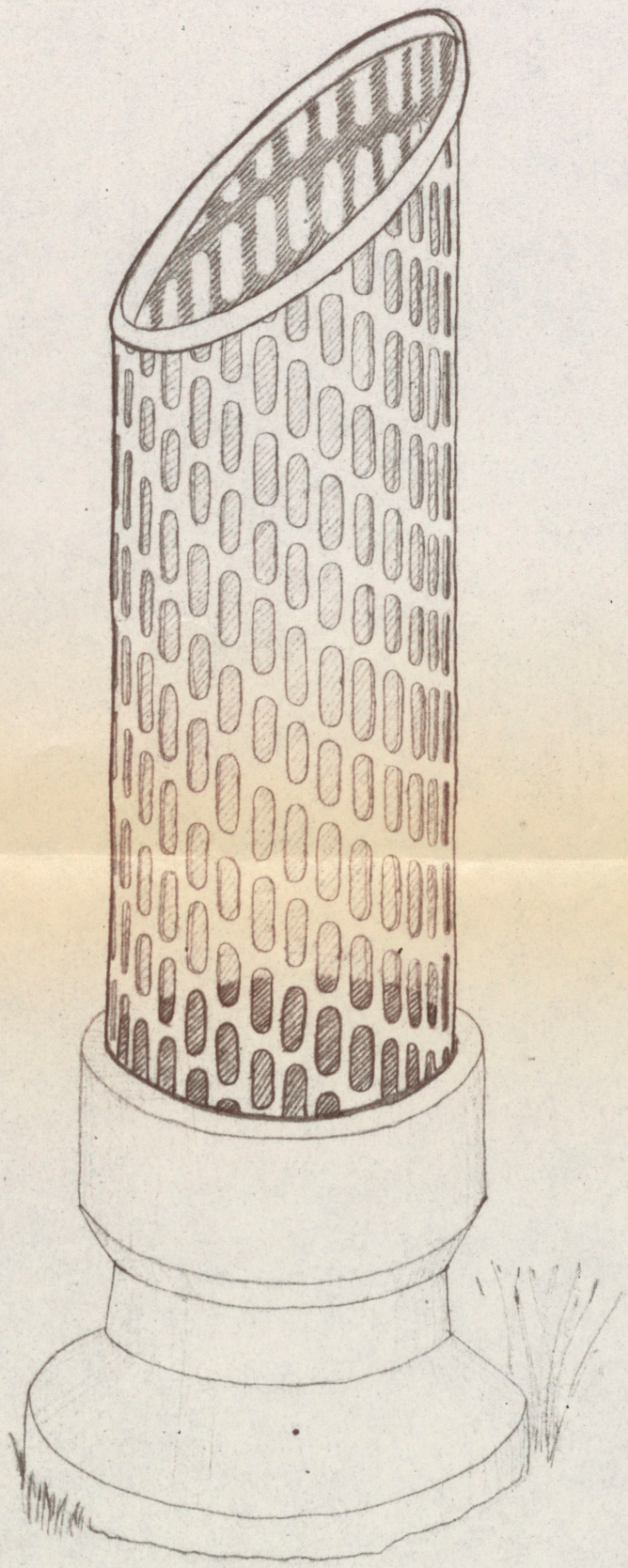


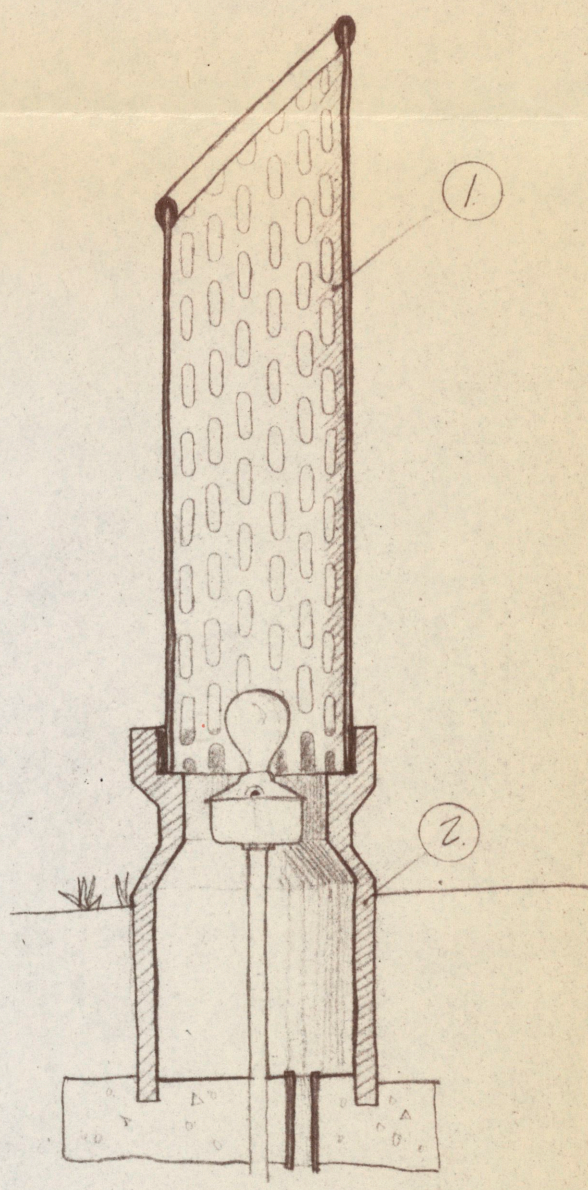
scale 2"=1'-0"

SPACE: FOYER

SURFACE: WALL

DETAIL: DOORPULL (8)





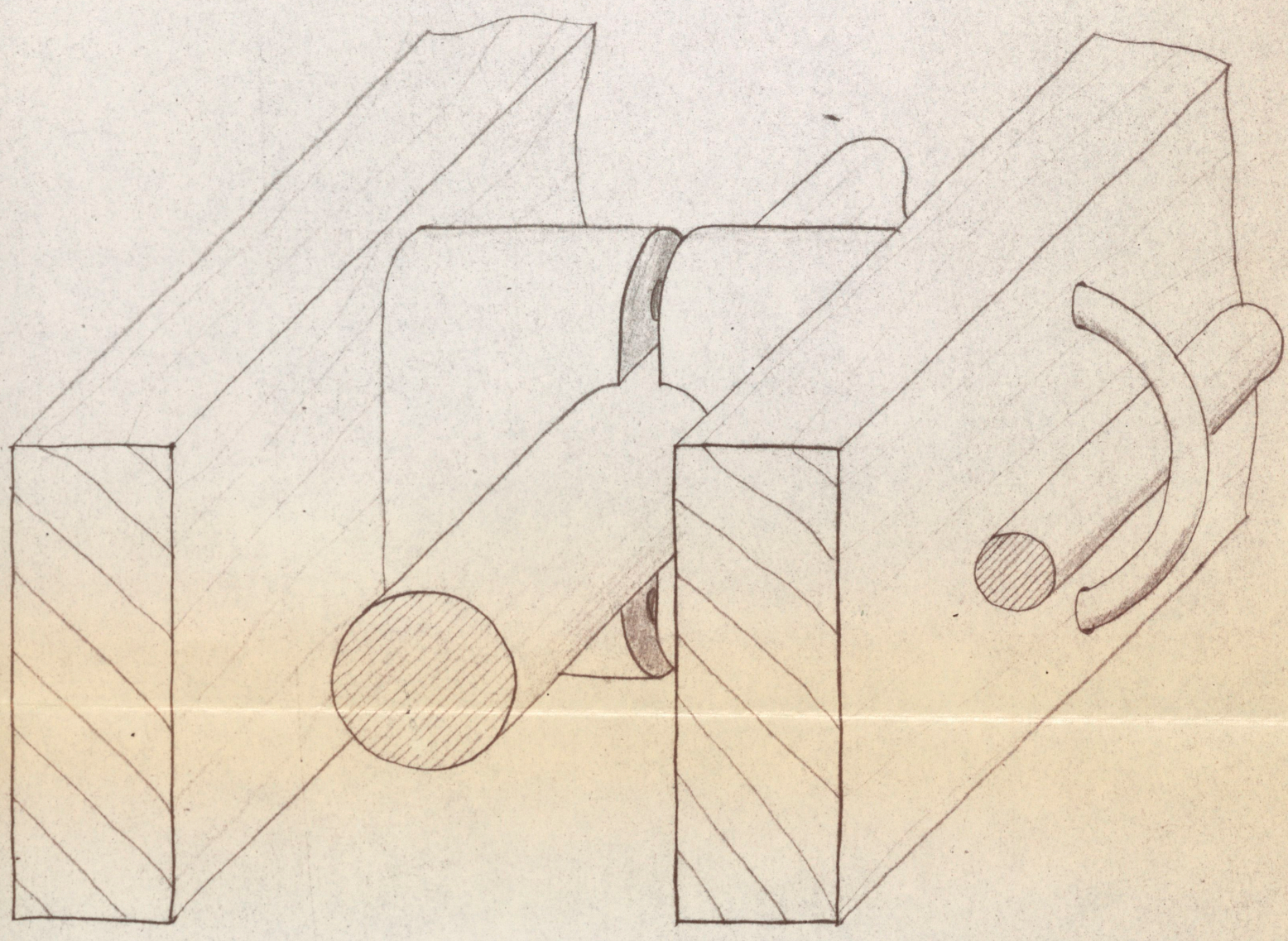

scale 1½" = 1'0"

1. exhaust shroud, 7½"
2. 8" ceramic sewer pipe

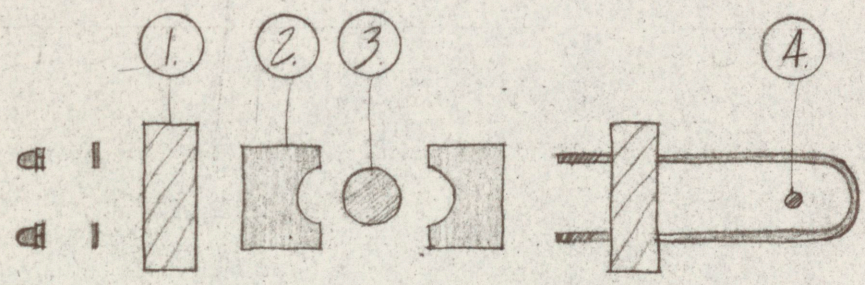
SPACE: EXTERIOR

SURFACE: GROUND

DETAIL: LIGHT (9)



full scale

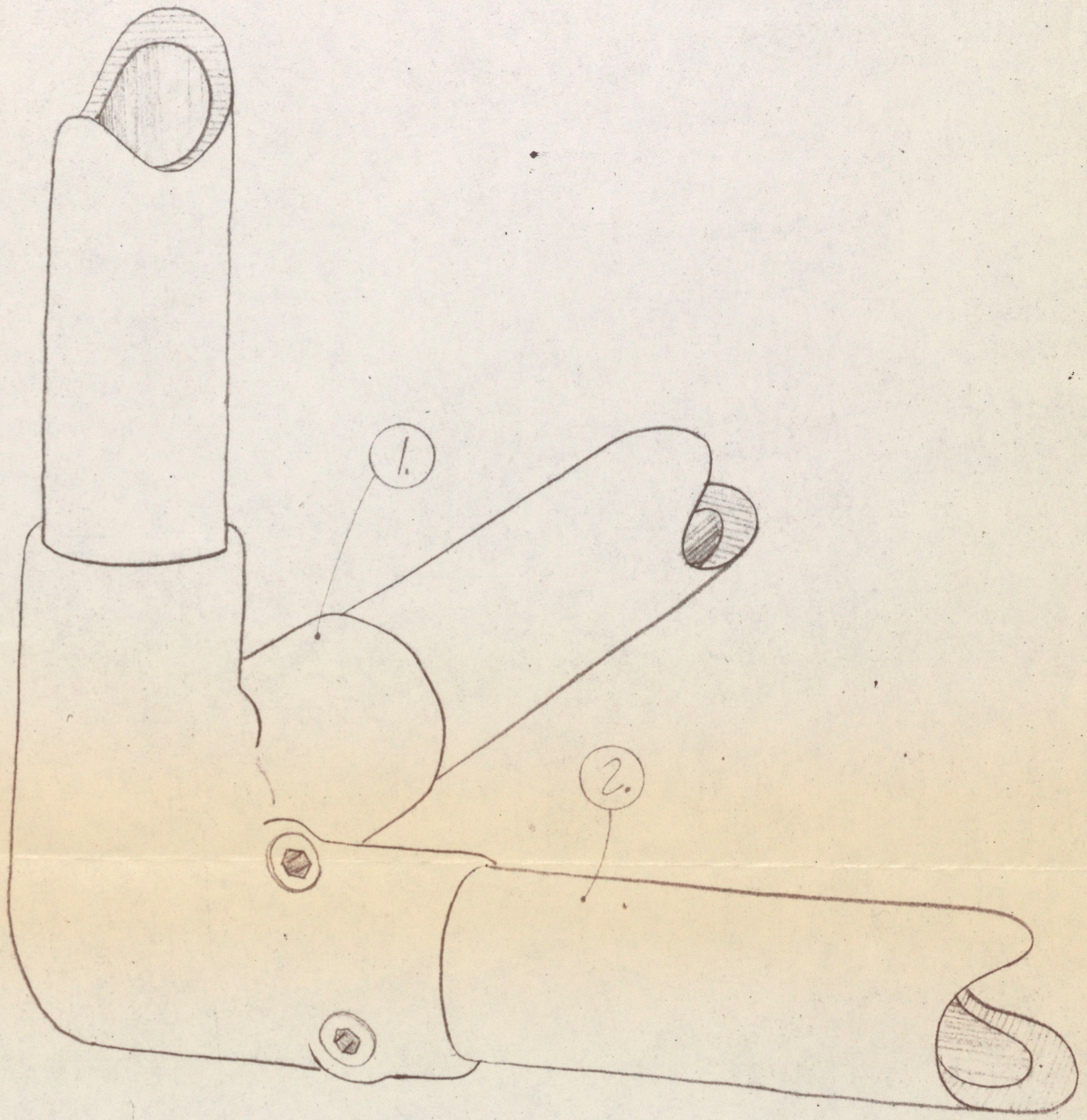



1. 1" × 3" redwood
2. cable clamps
3. 1⅛" steel rod
4. ½" pin

SPACE: LOBBY

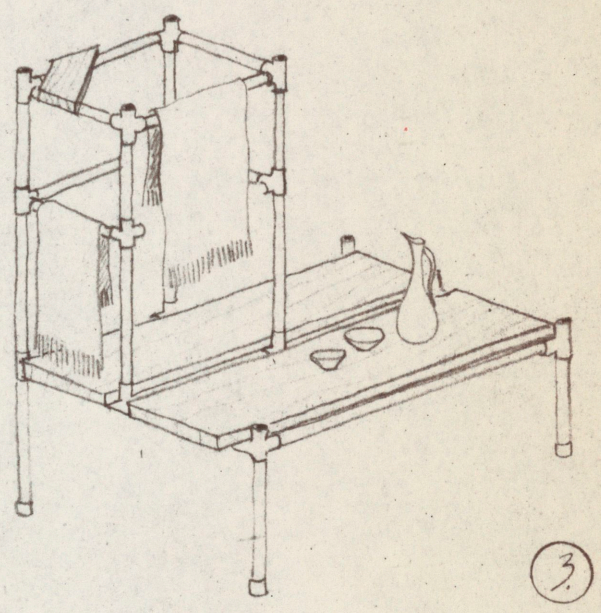
SURFACE: CEILING

DETAIL: OVERHEAD DISPLAY (O)




full scale

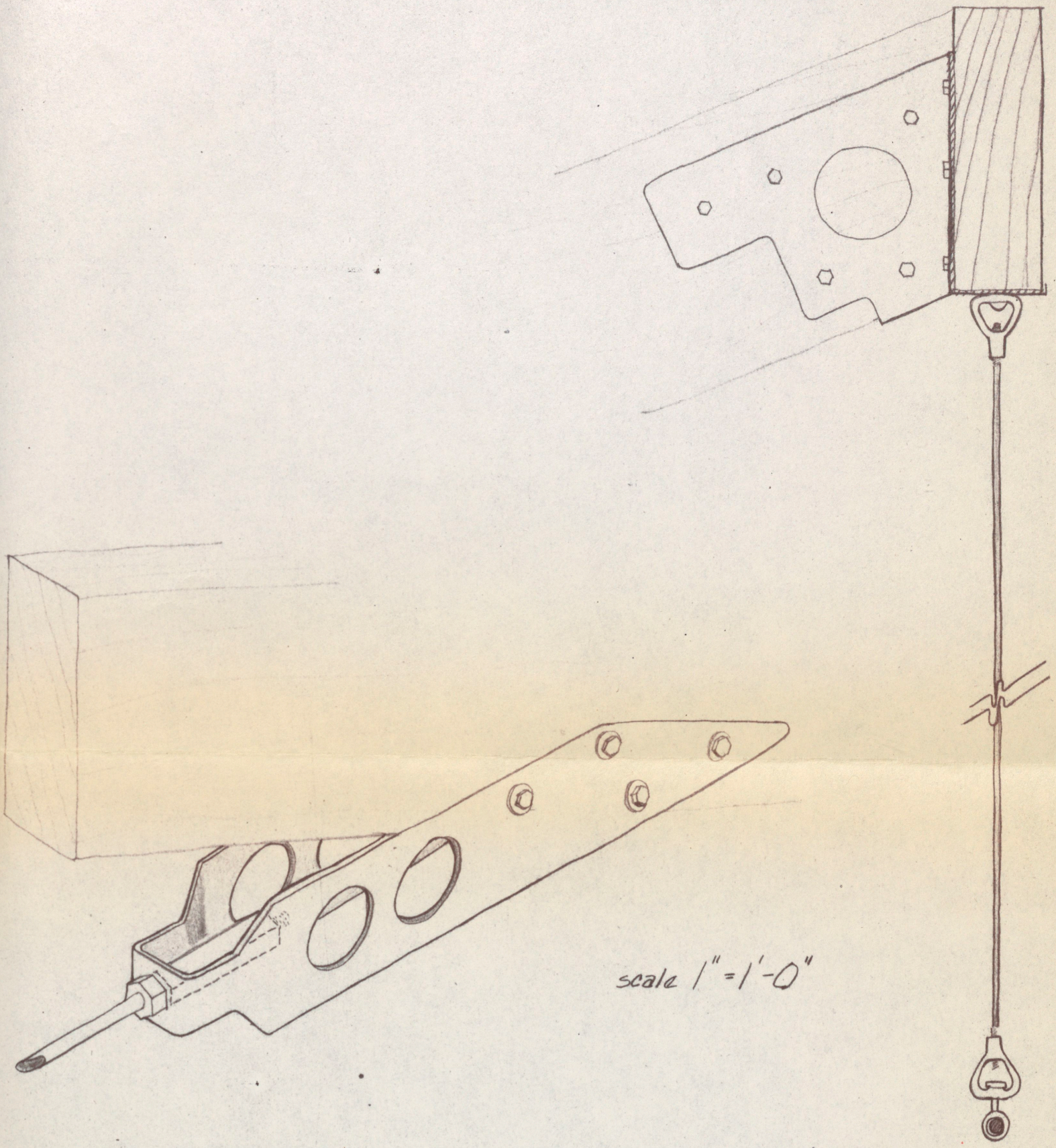
(1) Kee - Klamps - chrome
(2) 1⅛" steel pipe - black
(3) 1½" ash planks



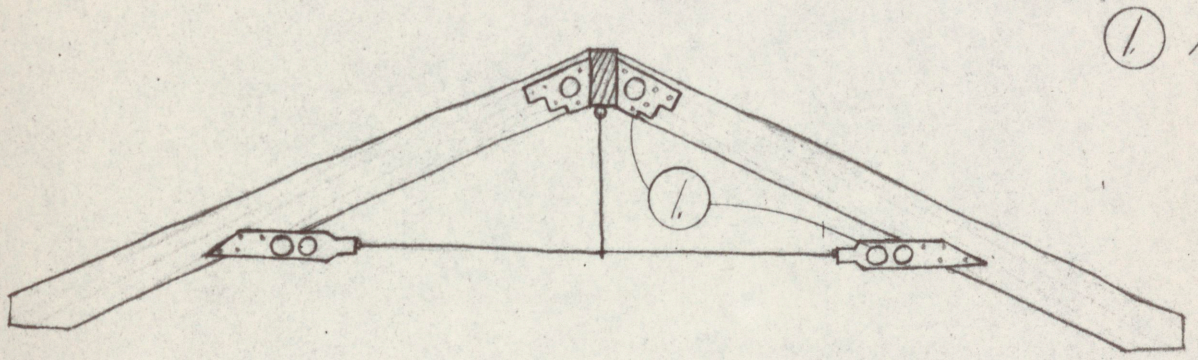

SPACE: GALLERY

SURFACE: FLOOR

DETAIL: DISPLAY RACK (11)



scale 1" = 1'-0"



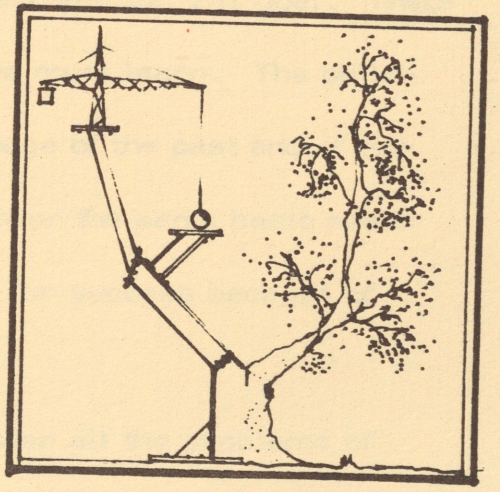

(1) ½" steel plate

SPACE: LOBBY

SURFACE: CEILING

DETAIL: 1 TRUSS (12)

# CONCLUSION



## CONCLUSION

As with all theses, this project is developed from conjectures and promises made at the outset. Much of what I saw in buildings around me replused me and I felt that a personal philosophy about materials and their uses might give my architecture a nucleus to work around. The result of these thoughts was a philosophy that contrasted and complimented one material against another, whether it be natural, synthetic or retro-fitted, with an eye toward creating structures that would by their very being give added richness and vitality to our environment and our lives. History shows us that in the past many men have tried to accomplish this goal. Their mistakes are also revealed to us and from them we must learn. The philosophy developed in this thesis grew from a knowledge of the past and of our needs today. It is a response that attempts to answer the same basic needs recognized by past architects, but it has a chance for success because of the lessons of their failures.

Material selection and detailing will not answer all the problems of modern architecture; it can't, the issues are too numerous and complex,

but it can help revitalize existing environments and create new ones that have qualities that are receptive to the human spirit. Of course the designer must recognize that he must apply himself with energy, sensitivity and heart to better architecture and human environments.

The development of this philosophy is a milestone in my life and education. I firmly believe that with it, myself and all architects who choose to follow will help to design better buildings for the future.

FOOTNOTES

1. Rowland, Kurt. A History of the Modern Movement. New York: Van Nostrand Rienhold Co., 1973, p. 11.

2. Rowland, Kurt. A History of the Modern Movement. New York: Van Nostrand Rienhold Co., 1973, p. 13.

3. Rowland, Kurt. A History of the Modern Movement. New York: Van Nostrand Rienhold Co., 1973, p. 208.

4. Rowland, Kurt. A History of the Modern Movement. New York: Van Nostrand Rienhold Co., 1973, p. 209.

5. Von Eckardt, Wolf. A Place to Live. New York: Delecorte Press, 1967, p. 37.

6. Nelson, George. Living Spaces. New York: Whitney Pub., 1952, p. N/A

7. Bloomer, Kent and Moore, Charles. Body, Memory and Architecture. New Haven, Conn.: Yale University Press, 1977, p. 31.

8. Bloomer, Kent and Moore, Charles. Body, Memory and Architecture. New Haven, Conn.: Yale University Press, 1977, p. 32.

9. Gibson, J.J. The Senses Considered as Perceptual Systems. Boston, Mass.: Houghtin Mifflin Co., 1966, p. 109.

10. Bloomer, Kent and Moore, Charles. Body, Memory and Architecture. New Haven, Conn.: Yale University Press, 1977, p. 34.

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Rowland, Kurt. A History of the Modern Movement: Art, Architecture and Design. New York: Van Nostrand Rienhold Co., 1973.

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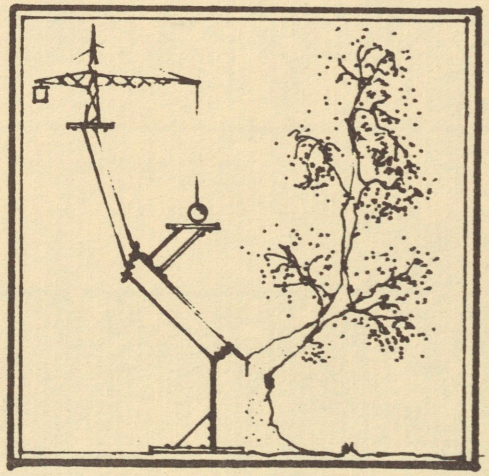
Von Eckardt, Wolf. A Place to Live. New York: Delacorte Press, 1967.

# ILLUSTRATIONS



**THESIS STATEMENT:** Industrially produced materials, as they are presently being used, deprive the human senses and spirit of the variety of experience so necessary for man's existance.

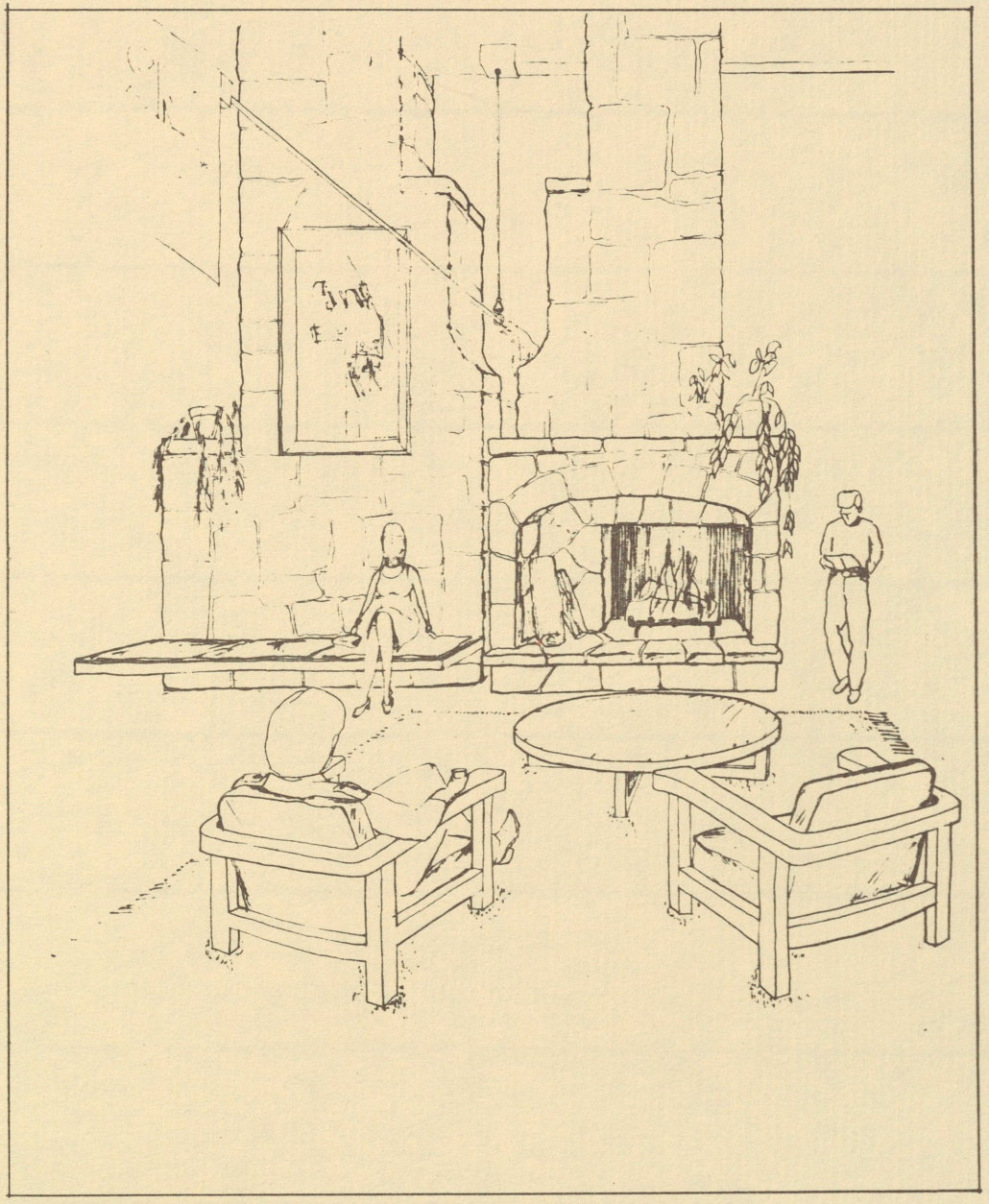
I believe that the qualities inherant in these materials can be used to provide a richness, a purity, and a vitality that will replenish our sensory enthusiasm.

**THESIS OBJECTIVE:** I hope to develope a philosophy about the selection and detailing of materials by an imaginative exploitation of their virtues, especially in new and different applications.

# AN INFORMATION CENTER

for WHITEFISH, MONTANA

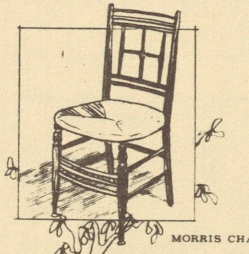
by JOHN L. CONSTENIUS



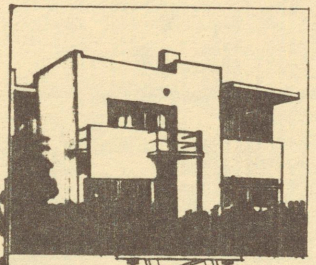
PERSONAL
DESIGN
PHILOSOPHY

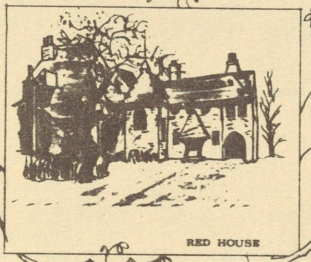


BREUER CHAIR

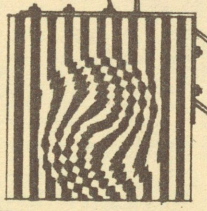


MORRIS CHAIR

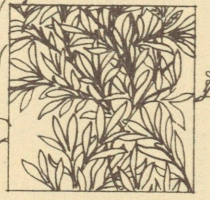




RED HOUSE



ALBERS PATTERN

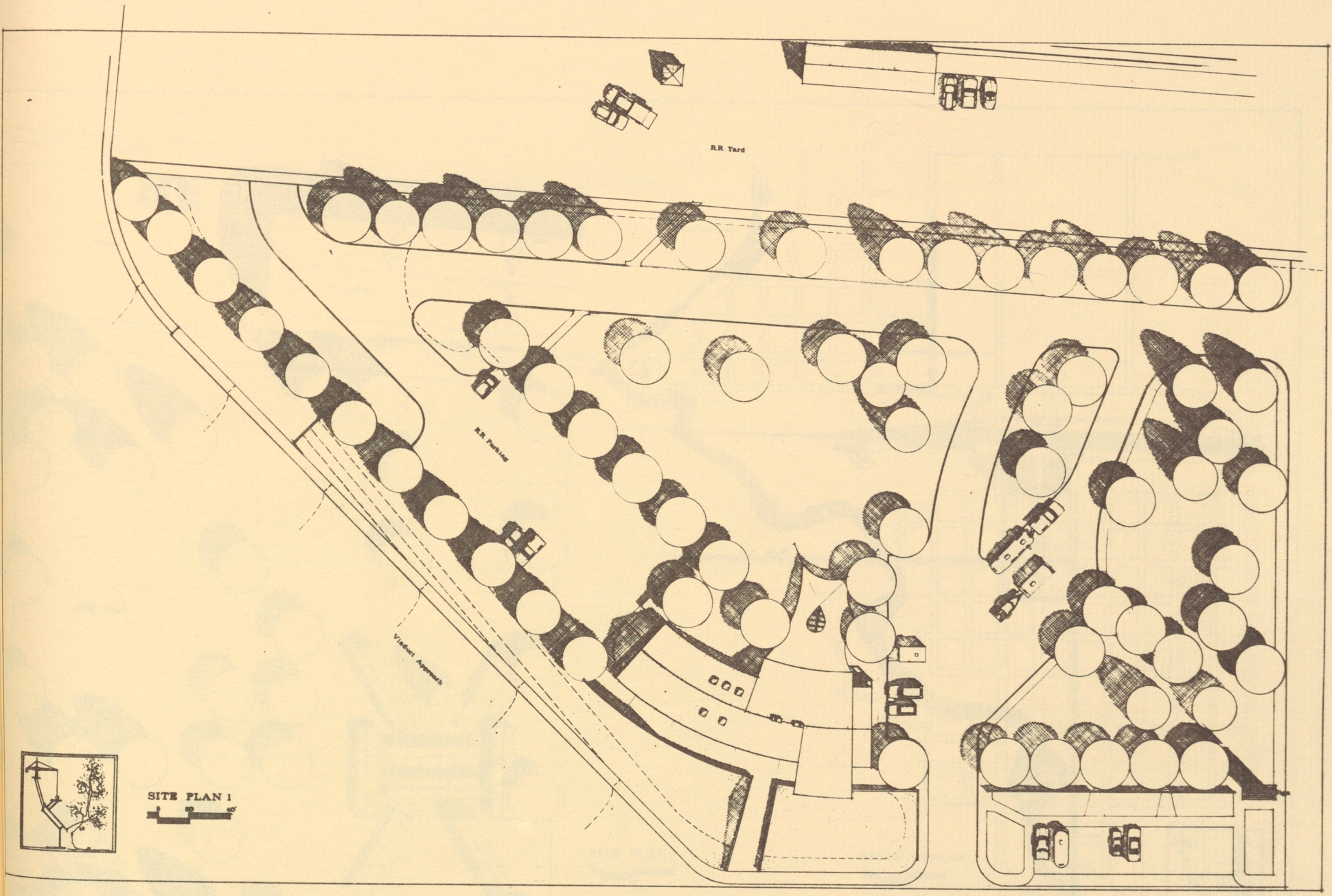


MORRIS PATTERN

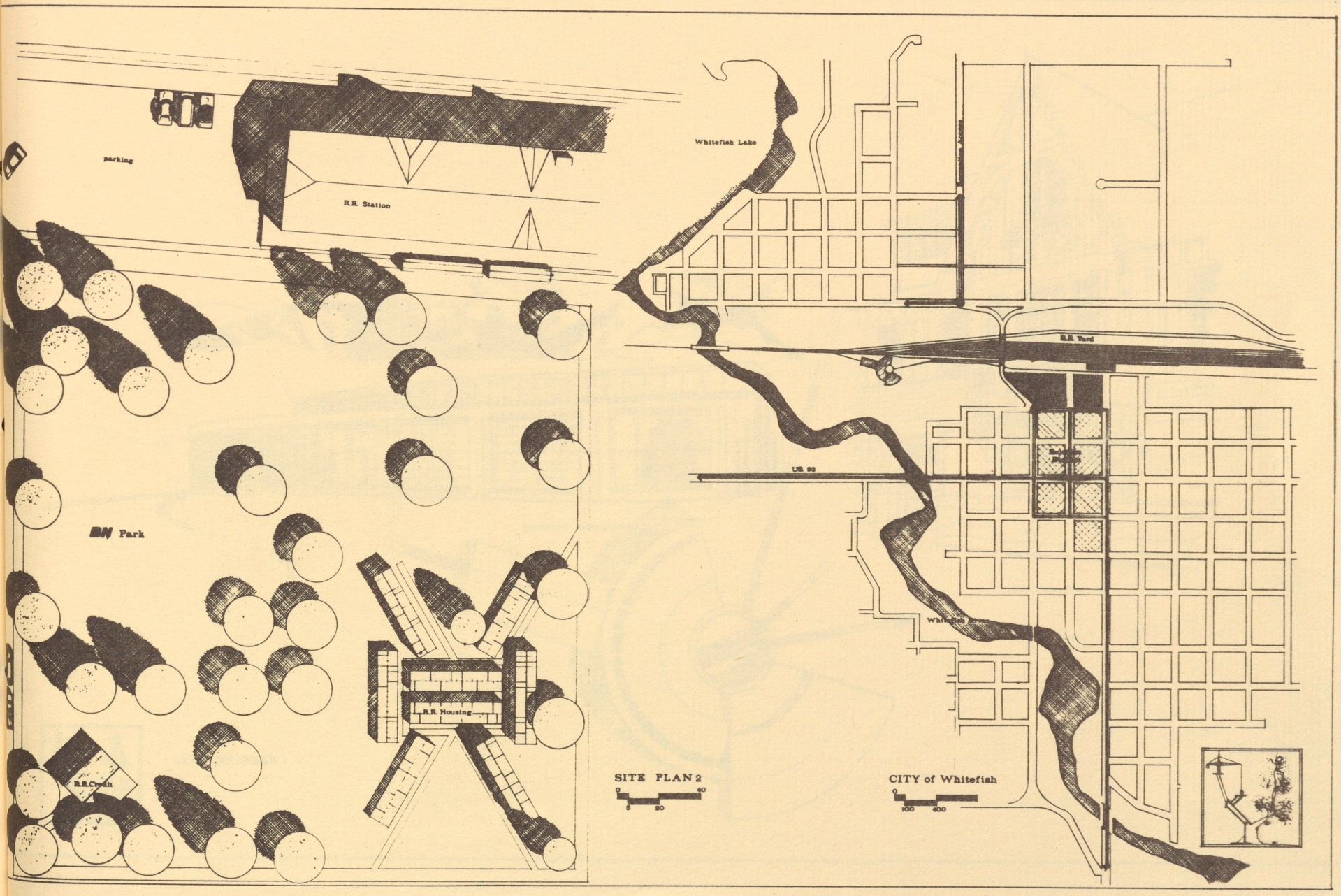
Design Initiative

Machine Ethic

Arts & Crafts




SITE PLAN 1


parking
R.R. Station
Park
R.R. Housing
R.R. Trestle
SITE PLAN 2
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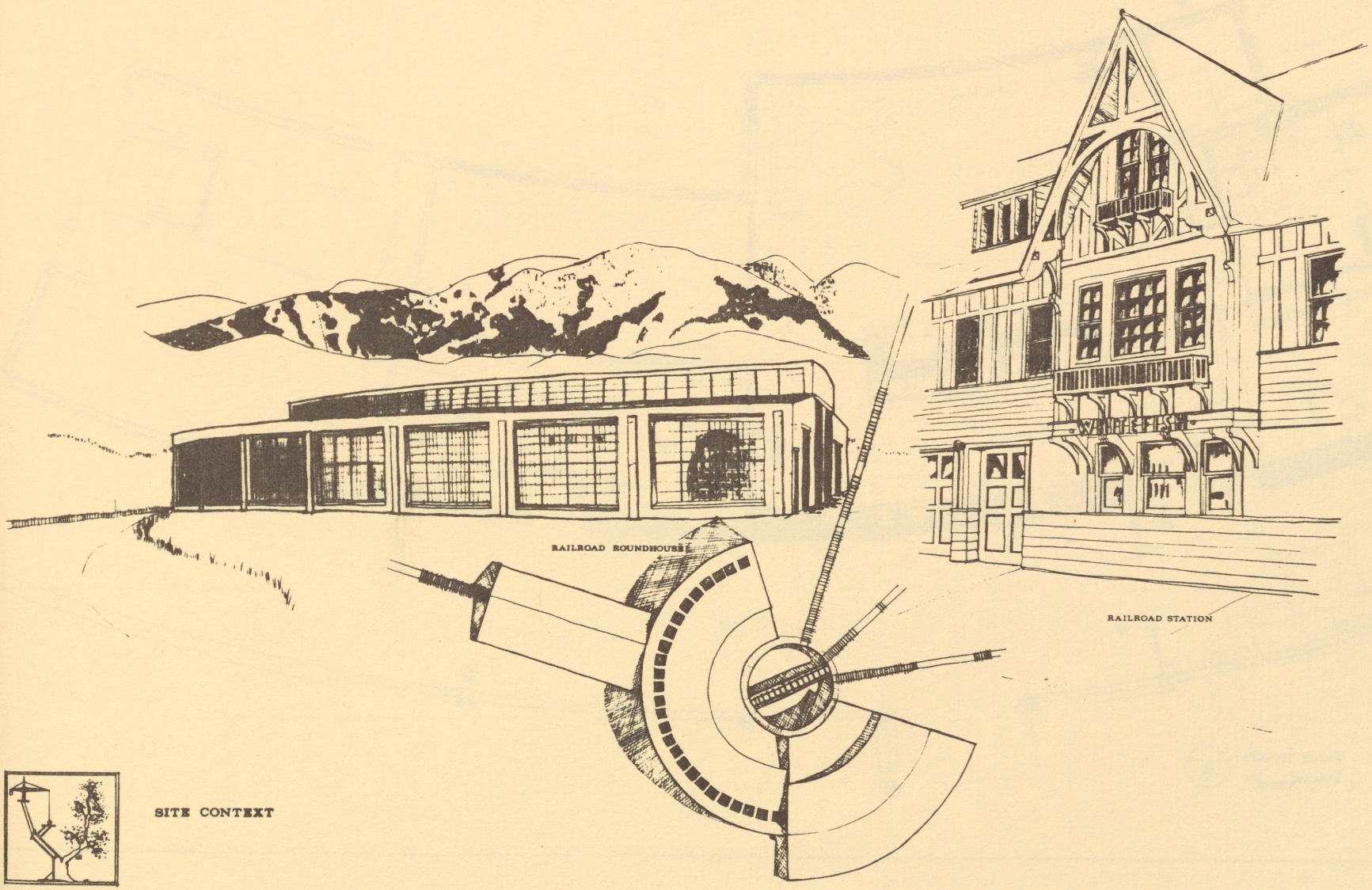
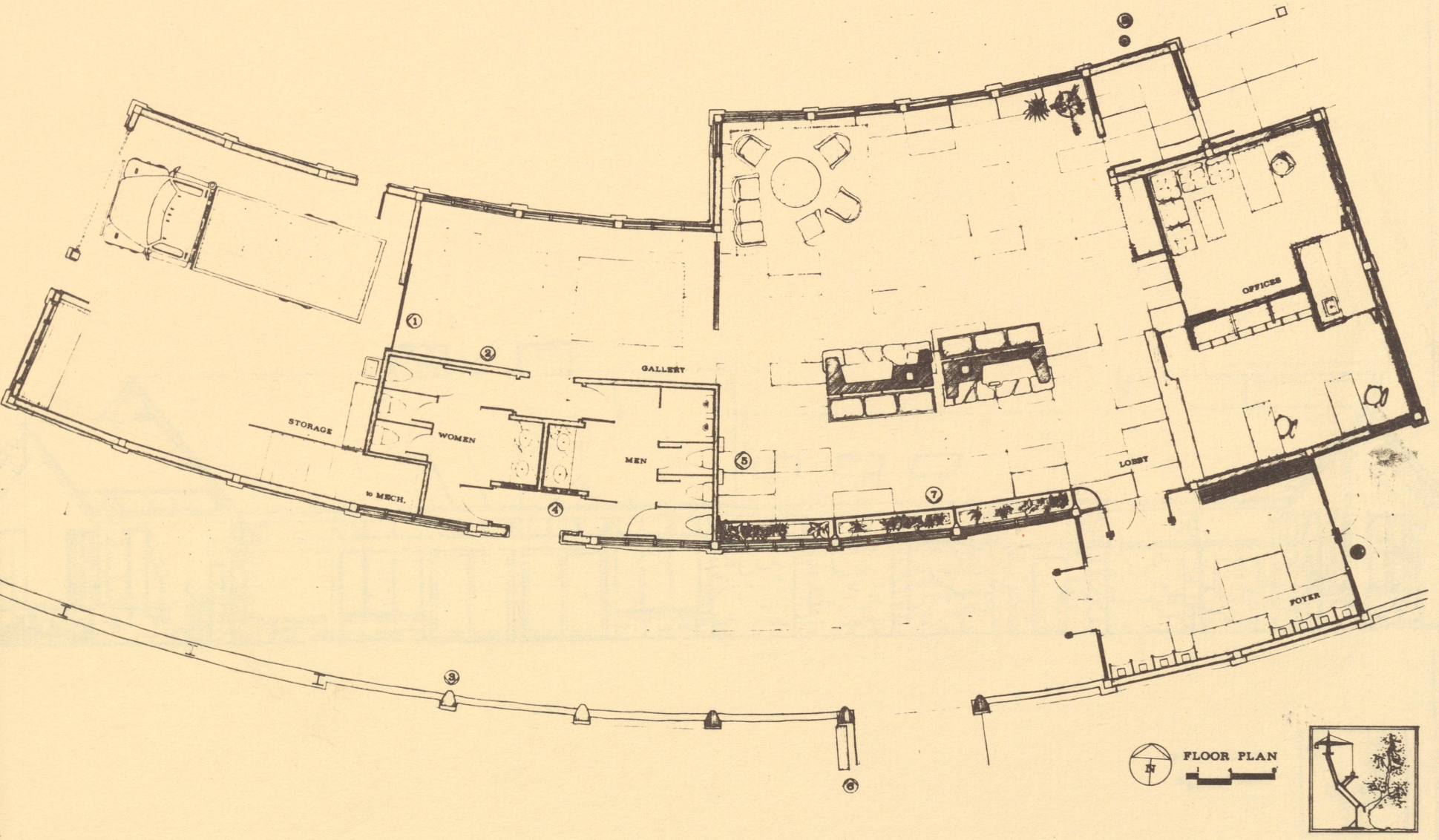
8
20
Whitefish Lake
R.R. Yard
US 93
CITY of Whitefish
0
100
400






SITE CONTEXT


STORAGE
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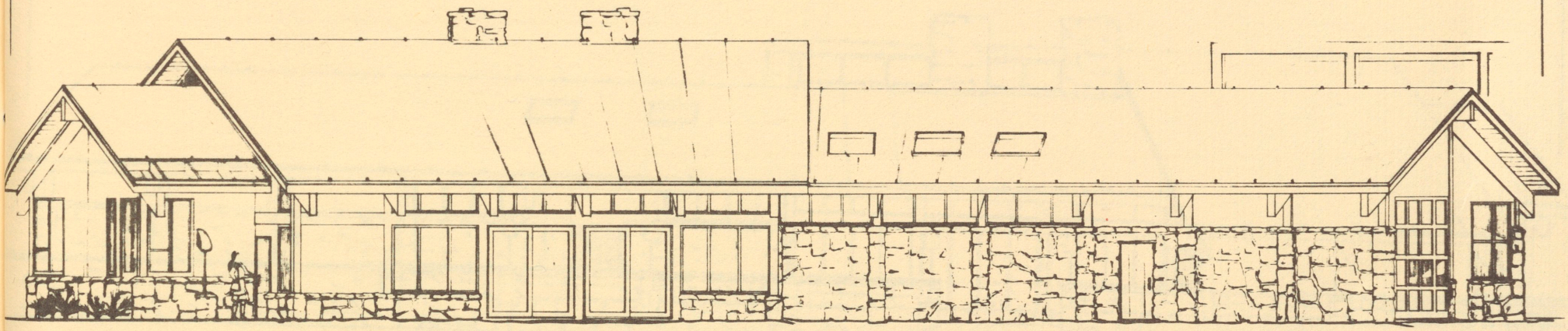
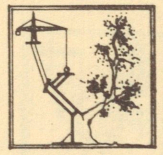
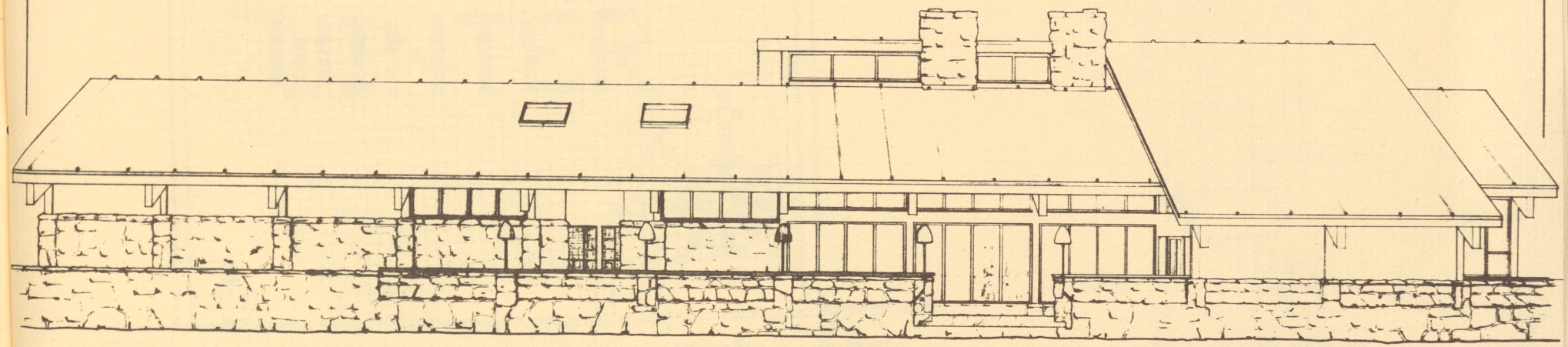
FLOOR PLAN



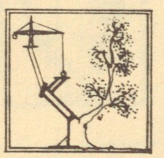
N. ELEVATION

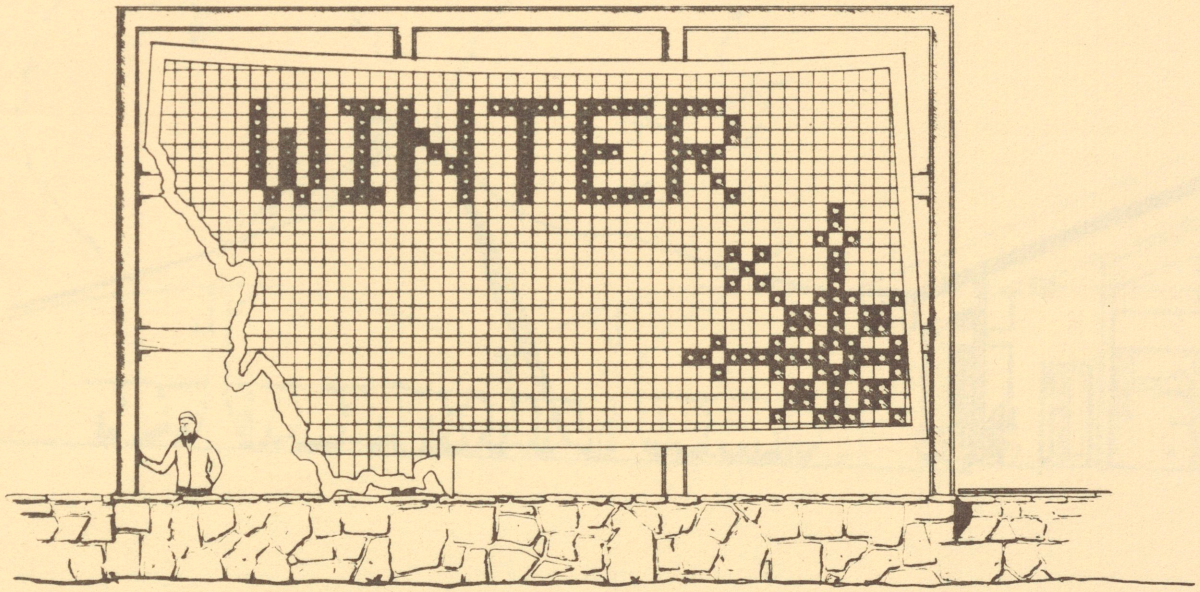


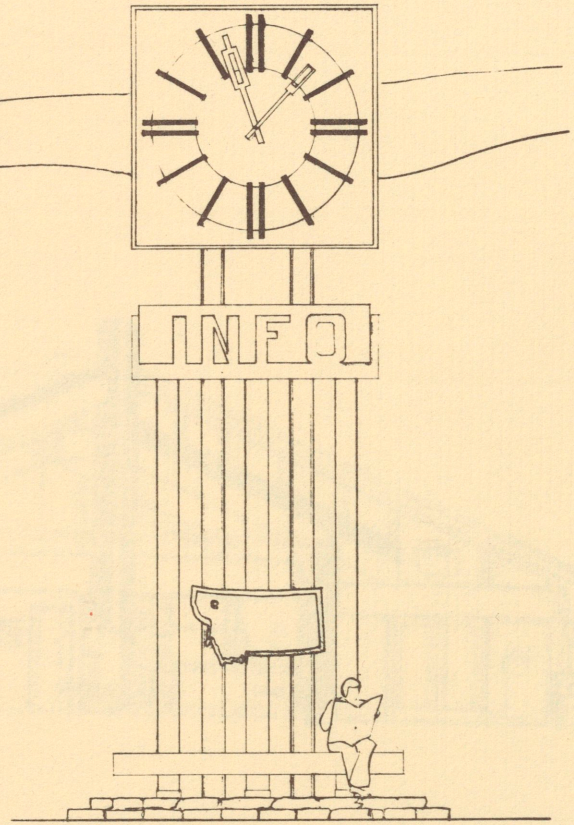


S. ELEVATION

0 4 8



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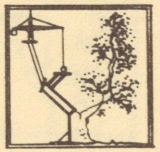

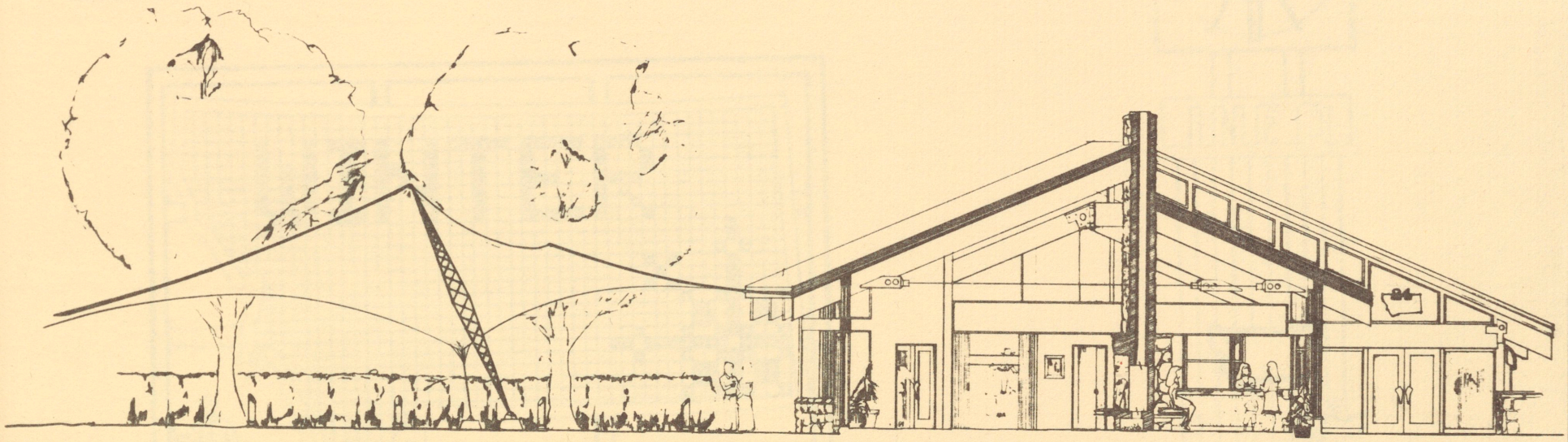

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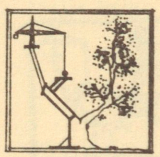

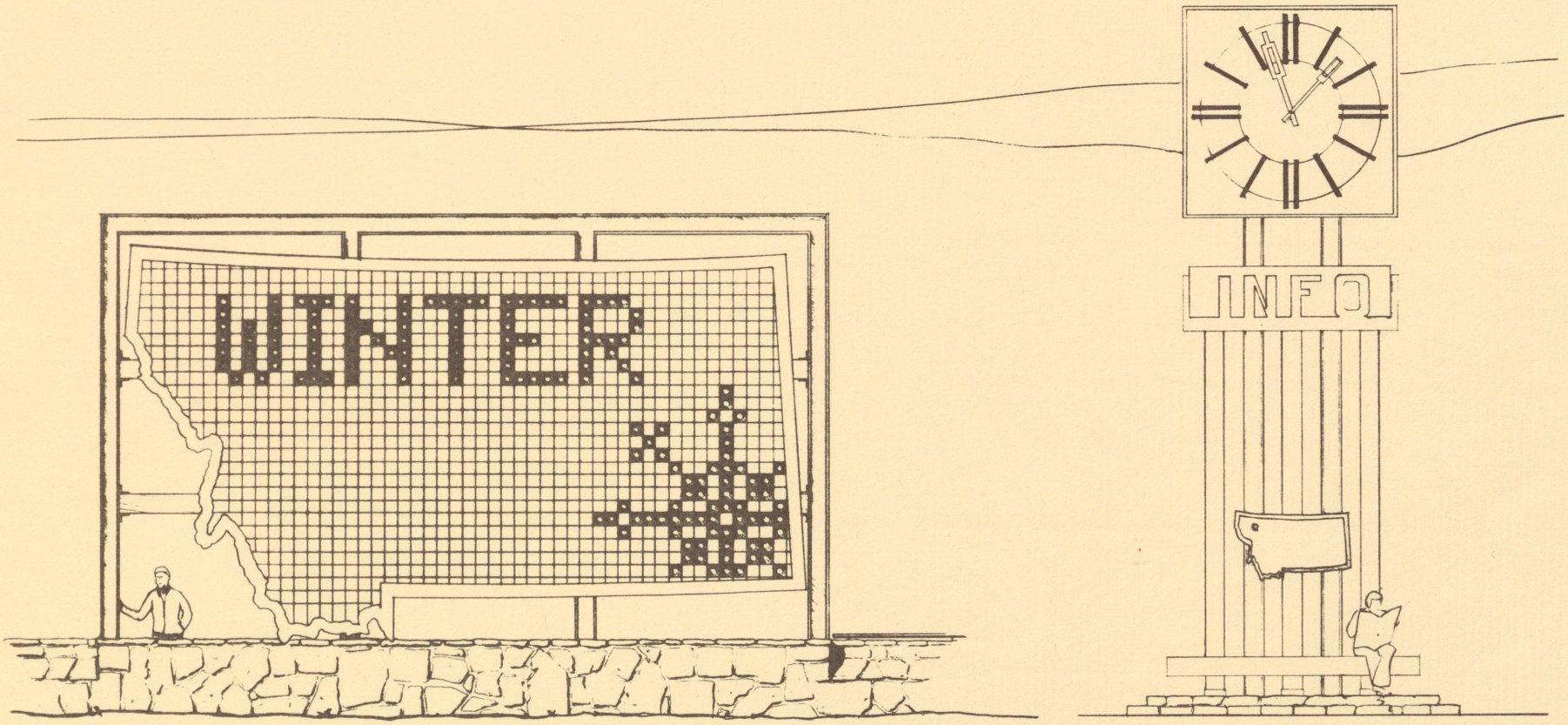


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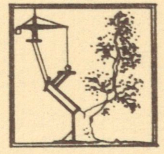

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