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AN ENTRANCE CENTER FOR YELLOWSTONE NATIONAL PARK

by

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A professional paper submitted in partial fulfillment
of the requirements for the degree

of

BACHELOR OF ARCHITECTURE

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PROLOGUE

"There are some who frankly and boldly advocate the eradication of the last remnants of wilderness and the complete subjugation of nature to the requirements of - not man - but industry. This is a courageous view, admirable in its simplicity and power, and with the weight of all modern history behind it. It is also quite insane. I cannot attempt to deal with it here.

There will be other readers, I hope, who share

my basic assumption that wilderness is a necessary part of civilization and that it is the primary responsibility of the national park system to preserve intact and undiminished what little still remains."[1]

-Edward Abbey

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INTRODUCTION

This book represents the method and order of approach that I used during the course of my thesis study.

BIRTH OF AN IDEA

It seems unfair to have my childhood memories destroyed by a misguided attempt to cope with technology. Must society host technology at such a great expense?

My thesis began with this emotion while living in Yellowstone National Park during the summers of 1973 and 1974. At the time I had no thought of applying the thoughts generated by this emotion toward my thesis.

While living in the Park I had the opportunity to ob-

serve many of the things that were happening to the Park. I questioned many things that were going on and began to consider some things that could be done to improve the situation.

When the time came for me to choose my thesis I considered working with these problems. However, I had doubts about the relativity of my ideas to a thesis project and before I could decide on a project I had to look at the values I associate with the thesis project.

THESIS VALUES

For each person doing a thesis project, there is a set of personal values that that person associates with the project. For myself, the thesis project provides a chance to explore a dream, a belief, an aggrivation, a joy, a disgust, a need, an interest, or a combination of any or all. It allows me to apply knowledge and technical skills that I have acquired through experience and the academic process. It gives me a chance, perhaps

a final chance, to work within the realm of near complete emotion. It enables me to work with a subject that has the structure I gave it. Thesis provides me the chance to work with the practical or the not so practical - the chance to make that choice.

The thesis project also presents some requirements that I must satisfy in order to adequately deal with the project. First of all, I must have a desire to work with the project that I have chosen. I must be willing to take a stand, to reach out, and to challenge the traditional or conventional.

I must have a belief in the project and the reason for the project, and, as well, I must have a belief in architecture and the role of architecture in the project. I will need to be able to utilize available knowledge and resources. I will need to strive for the satisfaction of the most critical client, myself.

Equally, the actual project has some requirements to fulfill. The project that I choose must be mentally stimulating and promote a working, learning environment. The project must have self-fulfilling expectations.

That is, it must be of such nature as to breed a desire to work with the project. It must enable me to satisfy my personal requirements for thesis and it must challenge my ability as a designer.

Once I had examined my values about thesis, I realized that my ideas about dealing with the problems in Yellowstone Park merited a thesis study, and I easily decided to work with this project. This was a very important step in my thesis process.

Once I had chosen the project I began to do research at a basic level and began to look at some aspects involved in recreation.

RECREATION

To begin with, I looked at recreation in general. For the most part, recreation may be defined as "the pleasurable and constructive use of spare time."[2] It involves any activity participated in at any time for the enjoyment it provides. It may be purely physical; provide intellectual, emotional, or aesthetic outlets; stimulate social interaction or provide the means for social segregation. Recreation is highly individual. For example, that which

is recreative to one person may be tedium to another. Recreation is necessary and beneficial to both the individual and society in general. It may actually require more work of the individual than is normally required in the everyday routine.

The benefits that a person receives in recreative pursuits depends on, not only the individual himself, but upon the outlets or degrees of outlets provided by recreation activities. Some of the benefits that may be available to the individual involved in recreation are as follows: a change of pace

from the everyday routine in society; rest and relaxation (both are very important to productive capacity, mental efficiency, and physical well being); a situation in which a person is exposed to a creative, as well as, recreative medium; individual personalities may actually improve; social relationships may improve; a sense of personal importance may be stimulated; a sense of accomplishment may be stimulated or the need for it may be satisfied; a medium may be created in which a person may explore and develop physical, emotional, social, and spiritual capabilities;

and a means may be created in which the desires and needs for new conquests may be satisfied.

Of course, there are many factors which influence the way people interpret recreation. As well, there are many factors that influence the degrees of benefits that people will enjoy. Some of these influencing factors include:

cultural background

physical and intellectual capabilities

education, training, and experience

age and sex

marital status and family

relationships

occupation

economic status

free time

residence, rural or urban

varying moods or emotional needs

available opportunities

manner in which recreation interests and opportunities are presented.

OUTDOOR RECREATION

After having looked at recreation in general, I began to get a better feel for some of the inherent properties of recreation. I then began to look more specifically at outdoor recreation and at the values of outdoor recreation on wild lands.

Wild land recreation areas provide and allow for health-giving, outdoor leisure pursuits. Even greater pleasure is sometimes obtained when the enjoyment of natural

lands is in the company of others with similar interests. Perhaps, most important, wild land recreation allows for the discovery, development and refinement of physical skills and, as well, stimulates cultural and intellectual interests.

For the individual involved in natural land recreation, his enjoyment is greatly dependent upon his own resources. To an extent, on a somewhat lesser scale, he or she is faced with hardships, demands, and pleasures like those known by his forefathers. Similarly, intellectual enjoyment of

natural lands is largely dependent upon the individual's perception.

Fishing, hunting, hiking, picnicking, camping, mountain climbing, skiing, boating, and swimming are the primary sources of physical enjoyment of natural lands. These, however, are not the only means in which a person can enjoy a natural area. For example, the exercise derived from a mountain ascent is not the only reward obtained from the trip.

Cultural and intellectual benefits stem from activities such as photography, handicrafts, nature study,

painting, scientific research, archaeological interests, historical interests, and even meditation. These interests often promote the development of high degrees of physical skills in the process of fulfilling these interests. Many times the physical efforts become a means to an end rather than the end itself.

The element of risk, very important in everyday life, is an important element provided by outdoor recreation. People of varied experience and expertise require and pursue activities providing an element of risk

comparable to their skill. Outdoor recreation can provide activities covering a wide spectrum of risk involvement.

In general, the qualities of a recreation experience can be represented by five categories; physical, emotional, aesthetic, educational, and social experiences.

The physical experiences entail the physical exercise involved in wild land use and the resulting stimulation from this physical exertion.

The emotional experiences, identifiable by physical reactions such as the

joy of experiencing and discovering new sensations and exploring wild regions, are generally achievment related experiences. Some examples might be the catching of a golden trout, the spotting of a big game animal in the wild, the matching of human skills against the trials of nature, or even the first building of a campfire.

Where emotional experiences can be identified by a physical reaction, perhaps an expression of joy such as a gasp or a verbal exclamation of excitement, aesthetic experiences are confined to a mental state of wild

land appreciation. For example, the contemplation of a scenic panorama might constitute an aesthetic experience. Aesthetic experiences might be in the form of an evaluation, such as an evaluation of a pattern of natural colors or an evaluation of an action in a wild land environment. The enjoyment of the beauty and serenity of an outdoor space as well as the appreciation of the immense volume of relationships present in an unmolested natural environment can be considered forms of aesthetic appreciation.

The educational exper-

iences available in wild land recreation result from the chance to acquire new or additional knowledge or to continue education to others relative to the importance of soil, water, wildlife, plant, and scenic resource preservation in wild areas.

The social experiences possible in a natural environment consist of encounters with individuals along the trails or at trail camps or lodges. The chance of meeting people of similar or like interests becomes very likely in these situations.

In studies performed in the White Mountains in

Vermont, these five experiences were ranked by users of the area according to how they value the different experiences when in a wild land environment. The following is the result of that study:[3]

Aesthetic	= Social X 10
Emotional	= Social X 8-9
Physical	= Social X 5-6
Educational	= Social X 1-2
Social	= Social X 1

public responsibility

Since 1900 the public has assumed, and properly so, an increasing portion of the responsibility for providing means for constructive leisure activities. The amount of both private and public lands available for recreational use has increased greatly. Zoological gardens, botanical gardens, museums, galleries, and specialized institutions offer important recreational outlets. A wide selection of recreational programs are offered by

schools, churches, and other organizations. Many private firms offer recreational benefits to employees and families.

The expense to the public and private businesses for sponsorship of these programs has been great, but easily justifiable when one looks at the cost of not providing outlets for energies, interests, and abilities of people in a society.

Our population today is primarily urban rather than rural. Therefore, the overall structure of occupations has changed and continues to change from largely active to

primarily sedentary. As well, there are more old and more young people who are, for the most part, largely unproductive; but who also require a means to expell their energies and explore their interests.

In 1955, David Sarnoff, former chairman of Radio Corporation of America, talked about the future of recreation:

"Leisure, of course, will be greatly extended. A much shorter work week will no doubt prevail in 1980, and another ten or fifteen years will have been added to the average life span. Not labor, but leisure will

be the great problem of the decades ahead. That prospect should be accepted as a God given opportunity to add dimensions of enjoyment and grace to life."[4]

Legislators have proven the public interest in leisure and recreation by the increase in the number of recreational areas and the growth of concern for environmental suffrage. Many private firms have been indicating their interest in recreation by setting up recreatioal programs, and many firms have shortened the work week to four days, thus increasing

opportunities for recreational pursuits.

population effects

The change in population distribution from primarily rural to primarily urban has greatly influenced the living styles and occupational pursuits of society. Most of the people in America today live in crowded regions where natural conditions are highly limited or nonexistent. Their employment is, for the most part, sedentary, with the bulk of the people involved in industrial, commercial, clerical, or professional activities. Due

to this, most Americans have lost the ability to conduct themselves safely and properly in a natural environment. In this urbanized society most people are separated from intimate contact with nature and the subsequent recognition of the inherent joys, difficulties, and hazards that one embraces when in a natural environment. This separation often results in unpleasant, sometimes disastrous, experiences.

The need for recreational lands, especially around more densly populated areas, has resulted in the growth of metropolitan, state, and

county park systems in many sections of the country. This need is perpetuated today, and overcrowded conditions present in most recreational areas, especially those near major population centers demonstrate this need.

Changes in patterns of population and living habits also demonstrate the reasons for the ever increasing pressure for reservation and preservation of unspoiled tracts, such as wilderness areas, where the populus can completely remove themselves from the confines of the city and enjoy recreation in truly

natural surroundings.

Damage done to recreational areas such as national parks as a result of the increased use and unwarranted public demands for facilities and services that are inappropriate to such areas has been great. We cannot afford to ignore this damage any longer.

One obvious factor which effects the nature of recreation facilities required is the age of the individual using the facility. The increase in the number of young and old people as of late has greatly effected the use of these recreational facilities.

These two groups have varying interests as well as physical abilities and, therefore, have widely divergent recreational needs. For example, the young's interests tend to lean toward facilities for active recreation, emphasizing sports, active group programs, and team play. For the most part, the older people desire activity based upon physical moderation, more passive activities, and, in general, find that areas with less rigorous climates are more appealing.

The length of the average work week over the last one hundred years has grad-

ually decreased. For example, if we were to examine an average work week of one hundred years ago, we would find that it was around seventy-four hours. Of the remaining ninety-four hours left in the week eighty-four were required for such things as sleeping, eating, and general personal care. Therefore, on the average, people had only ten hours of leisure time during their week. By the turn of the century the ten hour day and the six day work week was typical of the working style. Even today the eight hour day, five day work week is undergoing a

gradual change and is being replaced more and more by the four day work week. So in the past hundred years the individual has gained nearly thirty additional hours of leisure time each week.

In many cases today, the advancements of technology have created the possibility for the elderly to retire at an earlier age and at the same time has tended to prolong the economic immaturity of the younger people. For these people the increased amount of leisure time exposes an increased need for recreational facilities to satisfy their

interests.

Another factor influencing recreational needs is the prolonged and extended vacation periods initiated in many businesses today. This has opened up the possibility for people to choose and develop their interests to great depths and to travel great distances to develop these interests, as well as visit places solely for enjoyment.

Developments in the methods and facilities for travel has been great in the last several years. They have resulted in a change in patterns of both work and

leisure and have broadened both the horizons and the activities of society.

It is quite obvious that these travel mode developments along with the travel facility developments have made it easier for individuals to reach areas of recreation. Though these improvements of travel have been beneficial to recreation areas in many ways, many of these same travel modes, especially those that provide easy access to remote back country and other relatively inaccessable locations, threaten the survival of these recreation areas and

even tend to promote the destruction of their environmental and related values.

social science insights

Natural or wild land recreation constitutes many forms of people to environment interaction. People effect environments, and, equally, environments effect people. Therefore, attention given only to protection, development, or renewal of wild land resources is an inadequate approach to management. Effective management requires an influencing, directing, or regulating of human behavior.

If interested parties

do not understand the nature and source of that which threatens wild land recreation centers, they may attempt to defend these areas in ways that may actually be detrimental to those areas. As well, these parties, who desire to preserve our wild lands, may and probably inadvertently contribute to their desecration.

Now that vast numbers of people have the desire, the time, and the affluence to seek wild land recreation, recreation areas need protection more than ever before. This protection lies greatly in the hands of the govern-

ment agencies having control over them, and the success of protection efforts will be largely proportional to the dedication of the personnel within these agencies.

The responsibility does lie solely in the government agencies, however, for the spirit of preservation efforts can be abraded by internal attrition due to uneducated, unsympathetic criticism from a public that misunderstands the causes of deterioration and the reasons for the programs.

sociological principles

Modern sociology begins with one basic premise; that humans reach what they are from their past group exper-eiences, and that humans can do things collectively and as socially nurtured beings that they could not do otherwise.

The process by which people become what they are relative to their culture, speech, and attitudes is called "socialization." All people born into an environ-ment are subject to and undergo this lifelong pro-

cess. Similarly, it is natural for people to evaluate behavior patterns in groups according to their own standards. This is called "ethnocentrism" and is common to all people. For those who deal with attempts to redirect aspects of human behavior, ethnocentrism can be very important.

This concept of ethnocentrism has implications in all sectors of life. When a pattern of action begins to have value in a society, regardless of how that pattern may have originated, it begins to give birth to accepted norms. When a norm

has become established it will then tend to perpetuate the behaviors it demonstrates. More and more the norm will begin to seem natural to those that accept it and may reach a point of acceptance in which many believe that it existed always.

Some norms apply to every member of a group while others relate to specific positions. These more specific norms are known as role expectations. The relation of a norm to a physical, biological, and social environment will determine the type of norm prevailing within a group. Human beings

adjust and adapt themselves to fill conditions of life set by such processes as concentration, centralization, decentralization, segregation, invasion, and succession.

In spite of the ecological restraints, human behavior can be molded by normative considerations. Human behavior can also be shaped by nonnormative circumstance. One very important aspect of sociology is the term culture. It refers to standards of judgment, belief, and conduct that are socially acquired and socially transmitted. Differences in actions and expectations of different

countries is largely due to the differences in cultures. Cultures can and do change, seldom, however, without resistance to various pressures.

HISTORY

Once I had looked into recreation and some of the characteristics and influencing factors, I began to look at Yellowstone National Park.

Traditionally, John Colter, trapper, trader, and mountain man, and member of the famed Lewis and Clark expedition of 1806 is said to have been the first white man to have visited the region now designated as Yellowstone National Park. Whether his descriptions of the thermal activity were

from his observations or from Indian tales is debatable. Nevertheless, few people accepted his tales and descriptions of the phenomena.

Little attention was given to the area for the next forty or fifty years (around 1850). The only visitors were the traders and trappers who wandered in and out and the Indians living near the area. Civilization was beginning to sprout and grow all around. Gold was then discovered in Helena, Montana, and Montana's population soared. With the discovery of gold in

Cooke City, Montana in 1863, Yellowstone Park was prospected from one end to the other, yielding no strikes. In disappointment the once hopeful prospectors left, taking with them their stories of Yellowstone country.

In 1869 an expedition was formed for the purpose of investigating the Yellowstone region. It included three men, David E. Folsom, William Peterson, and Charles Cook, who spent several weeks within todays Park boundaries.

In 1870 Henry Dana Washburn led a second expedition into the area. Others in the group were

Gustavius C. Doane and Nathaniel P. Langford who later became the first superintendant to the Park.

On September 19, 1870, while camped at the junction of the Firehole and Gibbon Rivers, Cornelius Hedges, a member of the Washburn expedition, voiced an idea of making the Yellowstone region into a national park, thus preserving the area in its natural state.

On March 1, 1872 a bill was signed into law that established a great experiment, the first National Park. The intent of the bill was to establish the Yellowstone

area as a "pleasuring ground for the benefit and enjoyment of the people" and for "the preservation from injury or spoilation of all timber, mineral deposits, natural curiosities or wonders..... and their retention in their natural condition."[5]

Congress acted once again when in 1916 they established the National Park Service for the purpose of overseeing the growing number of national preserves. It was directed to "conserve the scenery and natural and historical objects and the wildlife.....and provide for the enjoyment of the same

in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.[6]

When Philetus W. Norris became superintendant in 1877 he brought with him the idea of government roads and was personally responsible for the location of roads along much of the present day system.

When the first automobile showed at the Park entrance it and its driver were forbidden entry. In fact, before the owner was allowed to enter, the car was chained to a tree. The car legally entered the Park on August 1, 1915.

PROPOSAL BACKING

Today Yellowstone National Park has world wide fame and is one of the most popular vacation spots in this nation. Last year visitation figures reached nearly the two and one-quarter million mark. During the summer season, on peak days, as many as three thousand five hundred people may be within the thirty-five hundred square miles that make up Yellowstone Park, most of them seldom straying from the roadway corridor. The twenty-

five hundred campsites are taken as early as nine o'clock a.m. Heavy crowds are prominent particularly around major attractions such as Fishing Bridge, Mammoth Hot Springs, West Thumb, Canyon, and, of course, the famed Old Faithful. Thousands may gather to witness eruptions of this popular geyser, standing as many as ten deep and lining about two sides of the feature. Following her elegant display, it is not uncommon to see bumper to bumper traffic along the entire seventeen miles that links Old Faithful to West Thumb.

Tourism and the woes of the city have invaded this natural region. Many values associated with and accepted in everyday society have found roots in many areas in the Park. Many times this has occurred to the point that it begins to be difficult to realize that one is actually in a natural land. People arrive by buses, cars, and motorcycles, loaded with luggage, and bring with them their dogs, cats, even macaws. Of course, when they leave, they take with them the essential artifacts of Yellowstone, ashtrays, giant pencils, sweat shirts, and

even busts of Charles Dickens' characters.

Society's technology has been very expensive on the focus and direction of the Park's goals and, consequently, on the Park itself. The parking areas required for handling cars and recreation vehicles has been immense. Thus the cost to the foliage and natural growth within the Park has been great. Equally, the cost to the animals has been great.

The presence of, not man, but the technology he takes with him has threatened and consumed the lives of many of the natural inhabitants

and continues to threaten the lives of more. This occurs directly in vehicle accidents as well as indirectly in less obvious ways. For example, consider the psychological safety associated with the automobile and its effect on the animals in the Park. In a four year span seventy-eight bears were destroyed because of the persistent approaching feeding and harassment by Park visitors, and many more were transported from the area entirely.

That man is a part of nature requires little, if any, elaboration. In this area, dedicated to the pre-

servation of the resources and curiosities of the area, insensitive inclusion of society's technology points at the destruction of a precious value that has existed since the very birth of our heritage.

THESIS STATEMENT

Yellowstone National Park, with sensitive design and careful management, can exemplify an environmental ethic in action.

SCOPE AND LIMITS

My thesis proposal begins or, perhaps, ends in its broadest sense as a program possible of national implications. For me to attempt to deal with a program of such massive proportions would be virtually impossible. Therefore, I am making no attempt to justify such a massive proposal, nor do I intend to dwell on it's feasibility, but I merely suggest that such a long range possibility does exist.

Dealing more specifically with one park system, I am steering toward such a broad possibility by proposing a pilot program to be initiated in and for the preservation of Yellowstone National Park.

Examination of this proposal exposes the immense number of design considerations deserving and requiring individual attention. The following is a schematic demonstrating some of the considerations that would be involved in setting up the program that I am proposing:

N A T I O N A L P A R K S E R V I C E

YELLOWSTONE PARK

ENTRANCE CENTERS

STUDIES:

RESTORATION	RECREATION	VISITATION	PERIPHERY	ECONOMICS	ECOLOGY	PSYCHOLOGY
attitude	INDIVIDUAL	GUIDED	housing	design cst.	EFFECTS OF:	EFFECTS OF:
spec. areas			alt. routes	study cst.		
demolition	automobile	mass trans.	physical	gov't funds	existing system campers	attitude
improvements	mass trans	trails	psychology	man power		design
physical	trails	bicycles	Teton Park	revenue		transport.
emotional	bicycles	horses	Forest Serv.	equipment		
	horses	x-country		neglect cst		EFFECTS ON:
	x-country	snowshoes		visitor loss	EFFECTS ON:	
	snowshoes			visitor gain		periphery
						visitation
					animals	
					foliage	
					curiosities	

The attention necessary to each of these considerations would require an immense input of time, to the extent that each would become a thesis study in themselves. For this reason I am dealing with many of these things only at a conceptual level and am dealing more specifically with one aspect, an entrance center for Yellowstone Park at the West Entrance at West Yellowstone, Montana.

PROBLEM SOLVING

Yellowstone Park was set up over a hundred years ago under a certain set of values. These values have since changed considerably. By allowing or, perhaps, forcing the Park to conform to these new values the values existing at the Park's formation begin to be distorted. Thus, most of the problems existing in Yellowstone Park today consist of problems in the attitude about the Park and, in general, wild land recreation.

The success of my proposal for Yellowstone Park would depend upon the attention given to this attitude. This would be done basically in three ways, in the attention given to the attitudes of the employees in the Park, the role of planning in the attitude and the role of the attitude in planning, and the ability of the architecture and design to demonstrate and promote this attitude.

Perhaps one of the foremost problems in the Park is the automobile. Examination of the effects of the automobile on the Park and

the attitude about the Park exposes many problems that can be either directly or indirectly related to the automobile.

First of all, the acceptance of the automobile, which is a very important contemporary value in society, opens the doors to and promotes the acceptance of many other contemporary values. The previously mentioned tourism that has invaded the Park is a prime example of this acceptance.

The automobile has also had a marked effect on the ecology in the Park. It has damaged the Park in the

form of destruction to the area for the several bypass routes that needed to be built in order to handle the increasing volume of traffic. As well, obvious damage has resulted in the construction of the many parking lots and car-trailer campgrounds. The automobile has also been dangerous to the animals, as many animals have fallen victim to speeding cars. Also, in spite of government controls, the automobile contributes to air pollution in this natural area and is, perhaps, the sole contributor to noise pollution in Yellow-

stone Park.

Perhaps another effect on the ecology in Yellowstone Park is the effect that the automobile has on the people visiting the Park. First of all, there is a loss of aesthetic appreciation due to the automobile. This occurs in several ways. For example, much of the Park's scenery is missed because of the motion of the automobile. That the Park cannot be experienced in motion is proven by the many bear, buffalo, moose, elk, even chipmunk jambs. Another loss to the aesthetic appreciation of the visitors oc-

curs due to the stress placed on them by the demand for campground spaces and, as well, to the stress placed on them by the traffic worries. On many occasions people cannot spend as much time as they would like at certain attractions in Yellowstone Park because they know that they might not be able to get a camping space. People cannot enjoy the scenery when in the common bumper-to-bumper traffic as much as they could if the traffic were eliminated. Maintenance worries also effect many peoples aesthetic appreciation of the Park

curiosities. Some people, an unfortunate few, are involved in traffic accidents and may not get to visit many of the natural wonders of Yellowstone Park.

PARK PROPOSAL

Having looked at some of the problems that can be related to the automobile, I begin my proposal by eliminating the automobile and the privately owned motorized vehicle from the Park. The removal of this highly important element in society sets the stage for an attitude of wild land appreciation. Let the people walk, ride bikes, ride horses, ski, or snowshoe into the Park. Many experienced already do this. Many inexperienced

will want to learn on their own as their ancestors did. Let them try. Many others will want and require assistance. Have that assistance available for them. Let the rangers become rangers and guides, not policemen. Let them lead the people through the Park and teach them about the ways of the outdoors and tell them the tales and folklore of Yellowstone country.

What about the aged, the young, and the handicapped? It might seem that a proposal such as this would be restricting visitation to those that have

no health problems or physical restrictions. This is not so, however, for anyone with the desire to experience Yellowstone Park would be able to do so. Many will be able to ride horses, a completely new experience to many. Many will be able to ride a bicycle or a variation of the bicyle, and many may even choose to push their wheel chairs along the roads and bike paths in the Park. Some people, confined to travel on crutches may, may choose to travel the trails that traverse the Park's primitave country. All of these people will

have one thing in common; a willingness to climb out of their air conditioned, carpeted automobiles and experience nature as a part of nature. They will have a willingness to experience the joys, pain, hardships, and hazards that the wilderness has to offer, just as their forefathers were willing to experience these when they first explored the Yellowstone region. For these people the Park will have special significance, for they will have to work hard to travel through the Yellowstone country.

Many people will not

be willing to get out of their cars and walk along the trails or ride along the roads of Yellowstone Park. There are hundreds of national, state, county, and municipal parks and zoos that cater to the tourism and the tinted glass of their cars and recreation vehicles. But out of the massive portfolio of all these places there will be one place, Yellowstone National Park, that will be for people.

park roads

The existing system of roads that travel through Yellowstone Park would be left in tact for the most part. These would be used by the bicyclers who could travel along these routes without worries over heavy traffic. Also, their journey would be more peaceful as the noise accompanying the traffic would also be eliminated. The Park Company could use these roadways for their maintenance vehicles for such things as

garbage removal and emergencies. They could also take in camping equipment for those who are unable to take it in themselves.

During the winter months the roads would serve as trails for cross country skiiers and for people who enjoy snowshoeing. The usual noise of the snowmobiles would no longer be heard.

park trails

One very important area to be studied would be the trails that wander through Yellowstone Park. At present there are over on thousand miles of maintained trails in the Park, some of them in the form of wooden walkways around some of the delicate attractions. Many factors would have to be considered in this trail study. For example, the distances on the trails would need to be of much concern. The young,healthy,

and experienced woodsmen would have obvious differences in the distances that they could attempt to travel. For the aged and the handicapped these distances may be very small. Therefore, a hierarchy of route difficulty and distance must be considered.

Some of the existing trails might be obliterated or allowed to expire at their own rate. Similarly, new trails might be considered for certain areas.

Some trails might be transformed into bicycle paths and some trails might be designated as horse paths.

In some areas the horse would probably be restricted because of delicate terrain or other similar reasons.

The highway that travels through the Park would need to be looked at as part of the trail system. It is forseeable that this road system could be used as a trail by some Park visitors, especially during the winter months.

Some trails could be discontinued from maintenance programs but could remain in use for those more experienced in backwoods navigation.

Studies would need to

be made concerning which trails should be used for winter recreation. Some trails would adapt themselves well to snowshoeing and others to cross country skiing. Some would work well for short, one day excursions while others would conform to longer, overnight trips. The Park roads could become routes for cross country skiiers. More trails could be broken along existing summer use trails for cross country skiing and snowshoeing. As well, trails might be considered for use solely during the winter months. Areas with high

avalanche dangers could be restricted to use by those knowledgable in snow dynamics.

Emergencies will occur. The study would need to include a system of emergency shelters located at different places along the trails and respecting the nature of the users of the individual trails. For example, on trails that would be used by more experienced campers these shelters might be spaced a long distance apart or might be omitted completely. On the trails used by the lesser experienced the shelters might be space at fre-

quent intervals along the trails. In any case, each shelter should become a special design concern and should be of such nature as to be in keeping with an at- for wild land appreciation. A special site would there- fore need to be chosen for each shelter and each shel- ter would need to be designed specifically for that site. In this way the shelter could become a part of the land- scape of each area. The shelters themselves might include shch things as a fireplace, matches, precut firewood, emergency rations, emergency blankets, and a first aid kit.

guide programs

One vital part of the program to be initiated in Yellowstone Park would be the guide programs. The guide programs would be available for all people regardless of their abilities. Many people would be able to enjoy the benefits of backwoods travel that normally would not get a chance to do so merely because of their inexperience. For example, many people would not consider striking out into the backwoods areas

of unmanaged wilderness regions because they have never been involved in backwoods travel. With this new program in Yellowstone Park, the supervision that these people require would be available in the guide programs.

The guide programs would not, however, be directed only toward the inexperienced camper. Yellowstone Park has much to offer other than the thermal phenomena. Some guide programs could specialize in studies about the plant life, studying the foods of the animals, edible plants, or maybe wild flower

identification. Others could study the animals themselves, generally or in specific detail. Still others could concern themselves with a study of the natural ecosystem or scientific phenomena.

The guide programs could include such things as camping, backpacking, rock climbing, nature study, bicycling, horseback travel, survival, canoeing, skiing, snowshoeing, winter camping, and mountaineering. People could learn how to saddle a horse, read a topographic map, follow a trail over slickrock, memorize landmarks, build a fire in the rain, treat snake-

bite, rappel down a cliff, glissade down a glacier, read a compass, load a pack horse, splint a broken bone, patch a rubber boat, portage a waterfall, survive a blizzard, avoid lightning, predict the weather, dodge falling rock, pitch a tent, fry a fish, and climb out of a box canyon. The rangers would be the guides, not policemen, as they are in the existing system.

Perhaps one of the most important parts of the guide programs would be the inclusion of the historical folklore and legendry that existed at the Park's birth.

The following is one example of the type of information and folklore that the guides might tell the people in the guide groups:

"Several tribes lived in the vicinity of the Upper Yellowstone. The Crows made their home in the country north and east of the Park as well as in the Yellowstone Valley. A wandering people, they might be found anywhere from the British line to the Spanish Provinces. They were bitter enemies of the Blackfeet, but on somewhat better terms with the whites. Highly developed thievish

habits made them feared by the trappers. The Blackfeet lived within the large territory drained by the headwaters of the Missouri. They had no prejudice about enemies; everyone was included, whether Indian or white, and hundreds of trappers, miners and settlers perished at thier hands. Fighters of the first order, they engaged in ambush, night assaults, and all forms of terror, partly for the fun of it. Both the Crows and Blackfeet were outstanding horsemen, and well armed. As adversaries of the whites they seemed to blend with

the land; they were everywhere and nowhere, and were sometimes referred to as 'those who approach like foxes, fight like lions, and fly away like birds.' Around the southern and western borders of the Park lived various tribes of the Shoshonean family including the Bannocks. They were usually friendly to the whites. A timid offshoot, the Sheepeaters, lived within the Park itself high in the mountains, apparently to escape the forays of their warlike neighbors....."[7]

Information such as

this along with the many tales of the early years of Yellowstone Park and such people as John Colter and Jim Bridger would become an important part to the guide programs. The rangers would know these tales and could use them as a part of the attitude about the Yellowstone region.

Guide programs could also begin from outside the Park by such groups as Sierra Club, Boy Scouts, Girl Scouts, National Outdoor Leadership, and Outward Bound.

potpourri

The removal of the tourism from the Park's interior would, of course, be a very important step toward an attitude toward natural land appreciation. Tourism has little, if any, place this attitude. For example, consider the relativity of a bust of a Charles Dickens character in a natural primitive region. The tourism would, then, be restricted to the periphery, existing in towns such as Cooke City, Gardiner, and

West Yellowstone, Montana. This would afford benefits to both the Park and the periphery centers.

Studies would need to be made concerning these periphery centers and the effect of the program on these centers. As well, these studies would need to concern themselves on the effect of the program on bordering national forests and Teton National Park.

Housing studies would be required, both internally and externally. Outside the Park housing would exist as private enterprise with no Park owned housing on the

periphery. This would benefit the periphery areas. Internally some housing would exist, only, however, in a way that respected a wild land attitude. This might be in the form of small log cabins located in various places in the Park. Campgrounds would be a form of housing. Campgrounds now in use for car-trailer parking could be converted to campgrounds for human use.

The program would, initially, involve itself with demolition and restoration programs. Some structures that exist in the Park would need to be obliterated. For

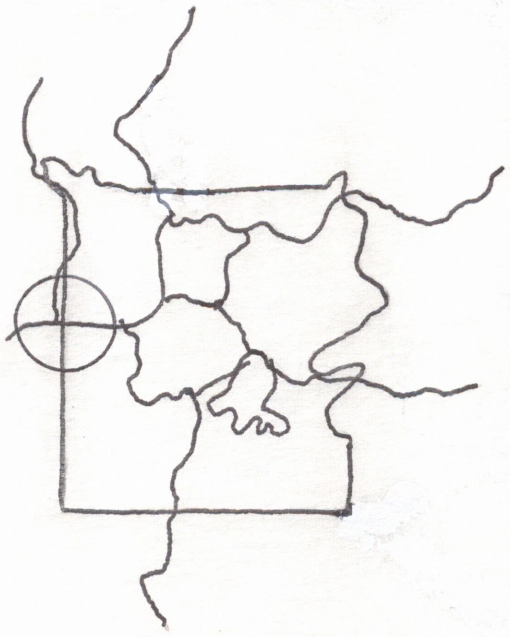
example, the massive overpass systems now in use due to the heavy traffic would need to be removed, perhaps by a dismantling process. Some areas in the Park would require efforts for restoration. Others would require only time to restore themselves. In any case, some of the possible areas of study relative to demolition and/or restoration would be the historical buildings, unnecessary structures, inconsistencies in natural land aesthetics, parking areas, car-trailer camps, road structures, scenic areas, natural curiosities, and structures

around natural curiosities.

Finally, the actual entrances to Yellowstone Park would require sensitive attention. They would stand as both a preview to and a testimonial for an attitude of wild land appreciation and would indicate the type of design consideration that the Park visitors could expect to see in their journey through the historic land. The entrances would serve as a nucleus to the activities in Yellowstone Park. The guide programs would begin and end at these entrances. Those people lacking equipment for backwoods or bicycle

travel would be able to obtain equipment at these centers. The architecture of these centers would have to be very sensitive to an aesthetic of wild land appreciation. It is with one of these centers that I deal with specifically.

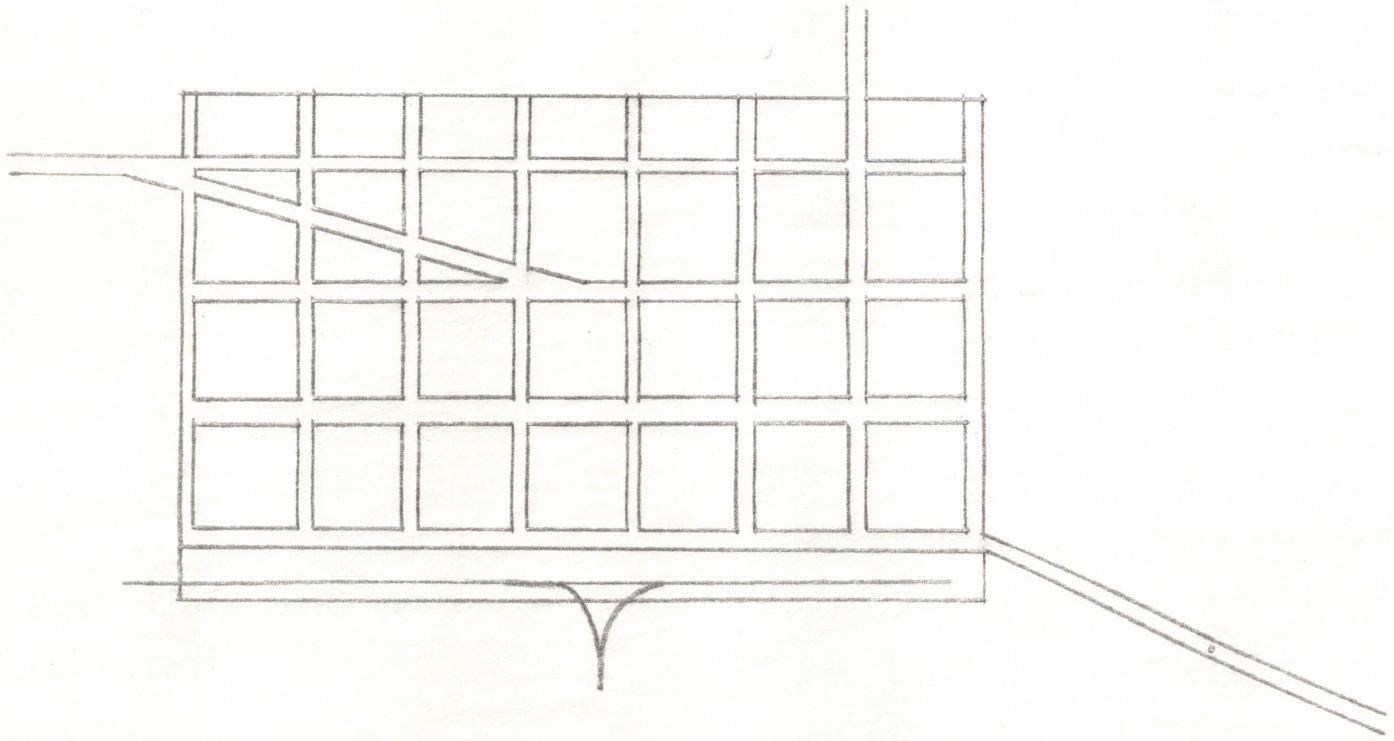
THE SITE



The site that I have chosen for my entrance center study is at the west entrance to Yellowstone Park at West Yellowstone, Montana.

West Yellowstone is a small town designed on a grid system and thriving basically upon the prominent year around tourist industry. It has year around highway and railroad access and seasonal airline access. The Park visitor statistics are highest at the entrance at West Yellowstone.

The actual site of the entrance center would be one-quarter mile southeast of the city itself, approximately at the location of the existing entrance structure.

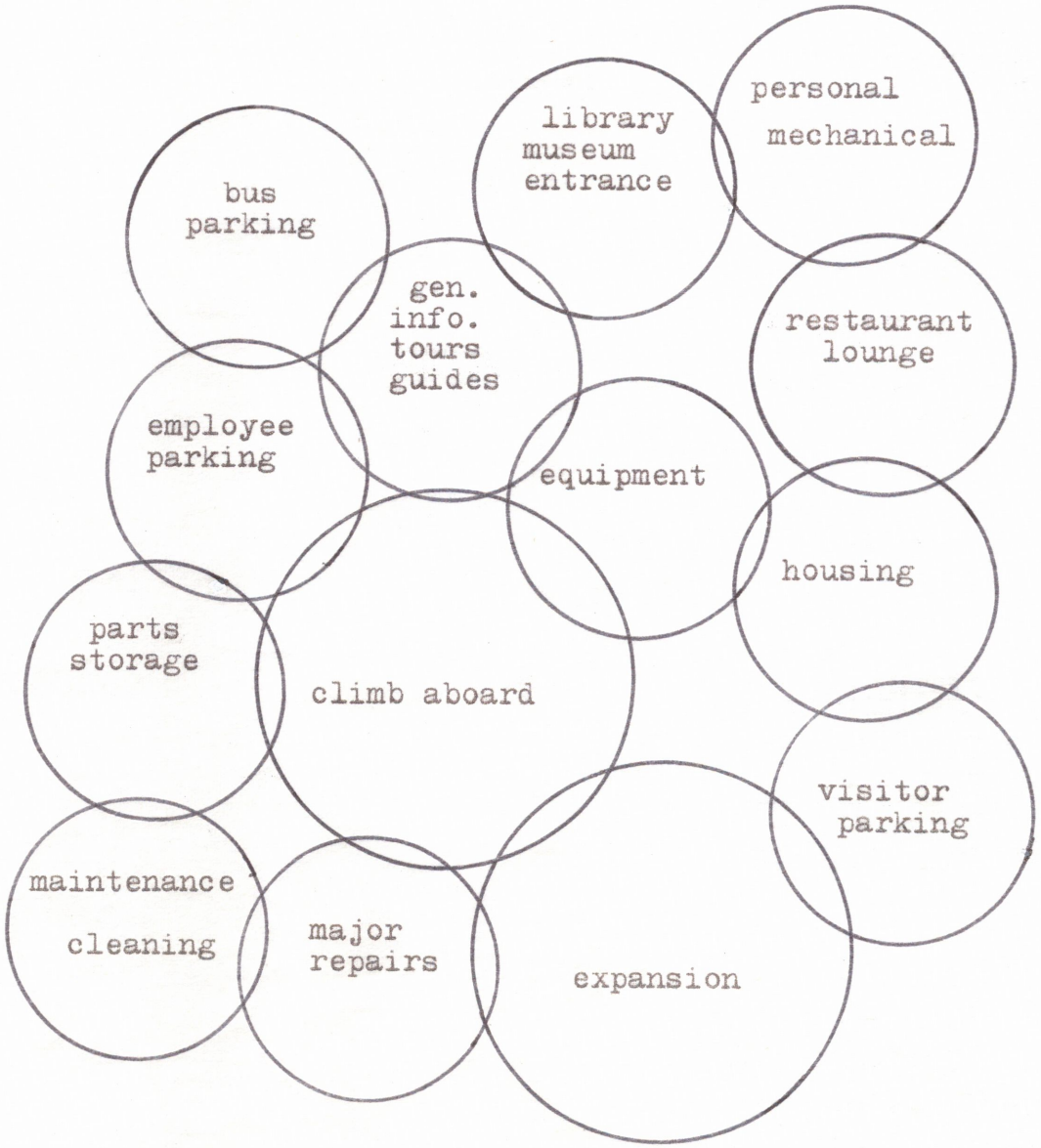


PRELIMINARY DESIGN

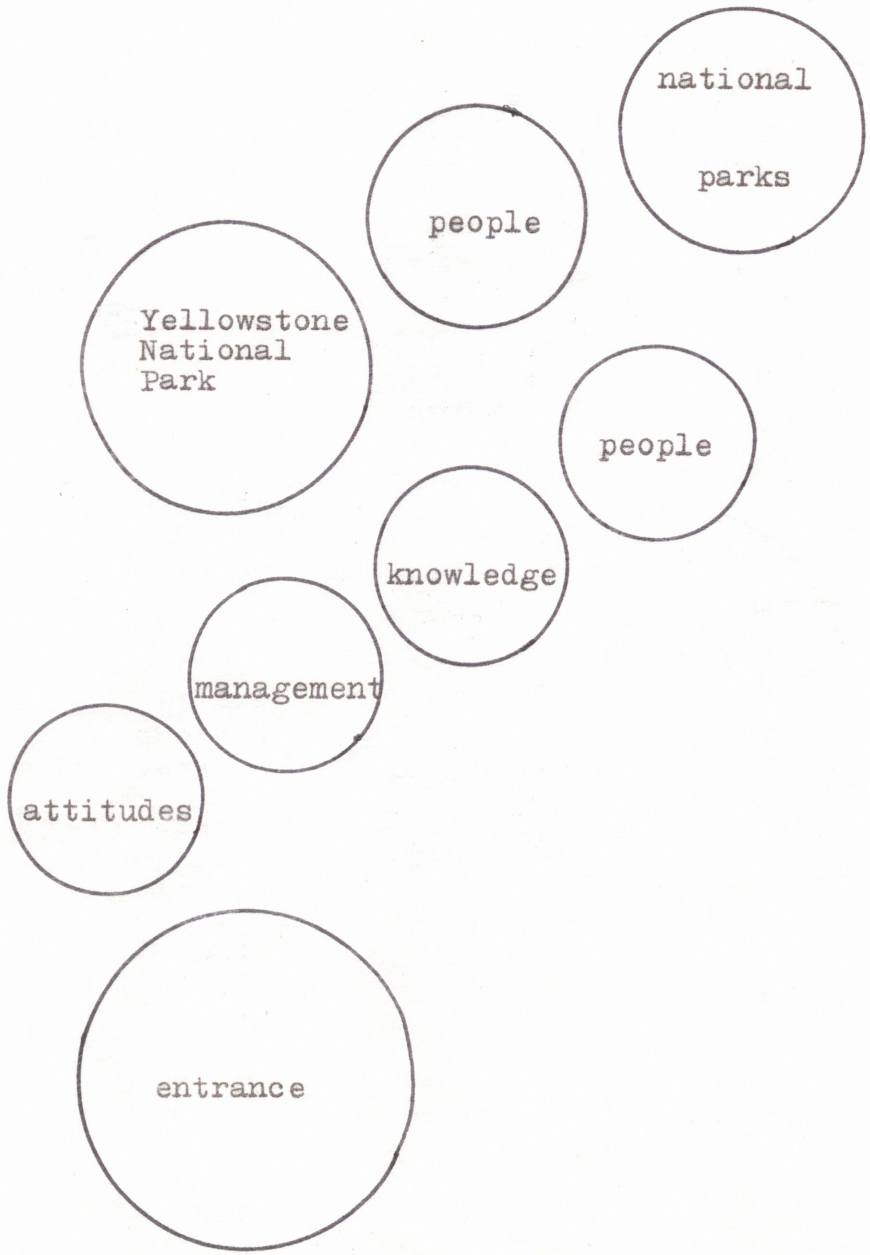
The following schematics, sketches, and drawings represent many stages of design that I went through in trying to establish my feelings on the way in which architectural design could demonstrate and be in keeping with an attitude for wild land preservation. For obvious reasons, many, perhaps most, of the design sidetracks studied and analyzed are not represented in this book. The represented developments indicate, more or less, the

flow of my thoughts through the design process, and it should be noted that many more design ideas were analyzed and discarded intermittently throughout the design sequence.

INITIAL SCHEMATIC



BENEFIT SCHEMATIC



Once a working program has been proven, new programs can be applied

The people will benefit from the attitude in the Park. Many will develop new skills, many will enjoy historic appreciaition, many will renew old skills.

The Park will benefit from a greater awareness in people and an effort by them to maintain the Park in its natural condition.

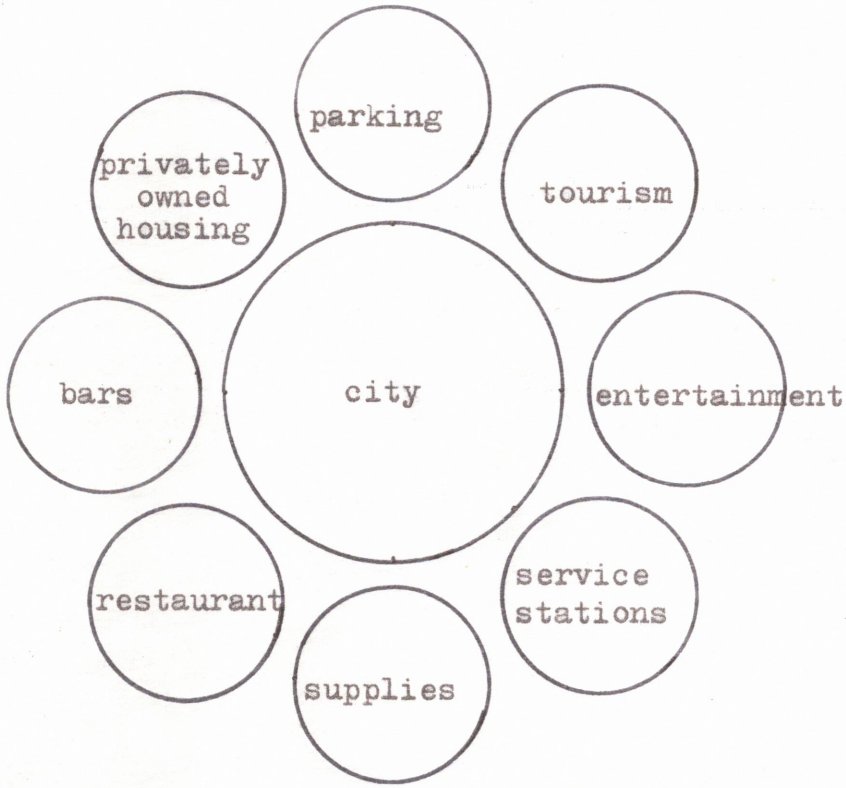
Knowledge of the past occurences in the Park as well as individual knowledge of natural land related fields by employees will help promote a natural land attitude

The Park will benefit from the management efforts made to keep it as a natural land.

The attitude is for the good of the Park, in keeping with the historic Park reasoning.

The entrances will be important previews to the new attitude about the Park. The Park will benefit from this preview. The people will begin to experience the wild land attitude as soon as they enter the Park.

BENEFIT SCHEMATIC (CONT.)



Both the Park and the periphery areas will benifit from the housing.

Parking could be privately owned, city owned, or Park owned.

The tourism, souvenirs, film, etc., will remain on the periphery. Thus the periphery area will benefit from the income from this tourism.

Before entering and after leaving the Park the people will seek entertainment in the bars, theaters, bowling alleys, etc. The periphery areas will benefit from this source of income.

VISITOR SPACES

Old trails, new trails

Combined

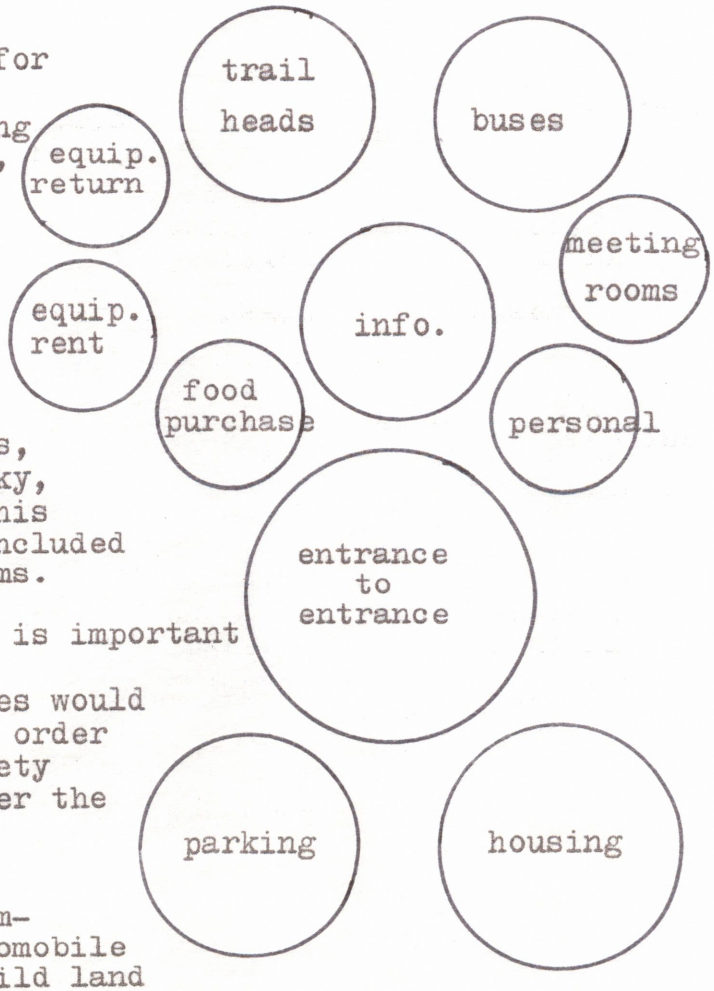
Rent equipment for backpacking, climbing, cooking utensils, bikes, snowshoes, skiis, tents, etc. May have package deals along with guide programs.

Dehydrated foods, candy, beef jerky, salami, etc. This could also be included in guide programs.

This transition is important

Security measures would be necessary in order to prevent anxiety due to worry over the automobile.

The anxiety and frustation accompanying the automobile ends here and wild land enjoyment begins.



Climb aboard here

Spaces for individual guide programs to gather and discuss plans, history, attitudes, etc., and for the inexperienced, a place to discuss equipment and its use.

lavatories and personal hygiene

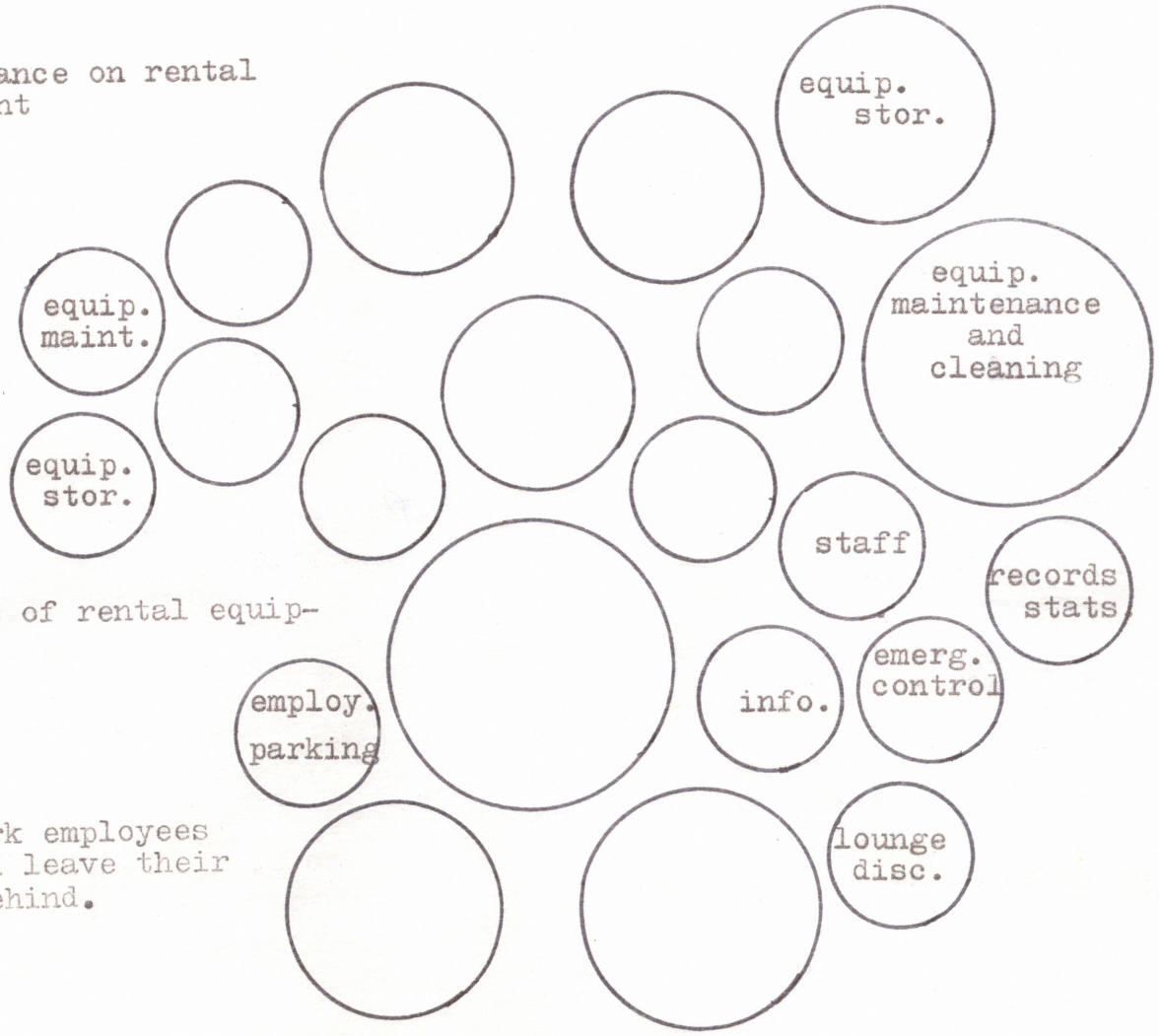
guide programs, busing information, maps, museum, general information, etc.

Should begin to demonstrate the feeling of the Park...the attitude in the Park.

A good deal of housing already exists, privately owned within the city. New housing may develop within the city.

The Park and the city work to help each other.

EMPLOYEE SPACES



Maintenance on rental equipment

Storage of rental equipment.

The Park employees as well leave their cars behind.

Parking for buses and large equipment.

Maintenance of buses and Park equipment.

Office spaces, secretaries, etc.

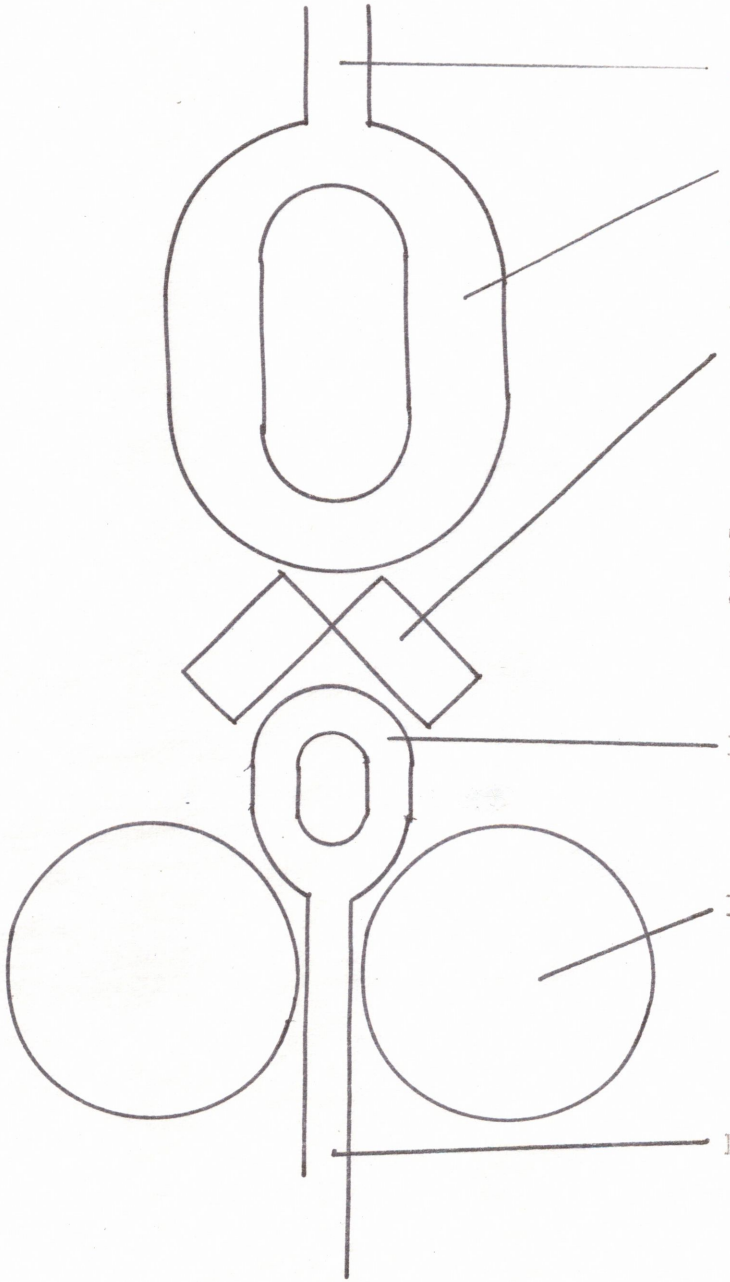
Recordings of vital statistics, visitor count, thermal activity, siezmographic data, weather activity, etc.

Headquarters for search and rescue and first aid.

Information by mail.

The attitudes of the employees toward the program is important. The employees could have discussions on Park actions and direction. They could explore complaints and discuss improvements.

DESIGN.....

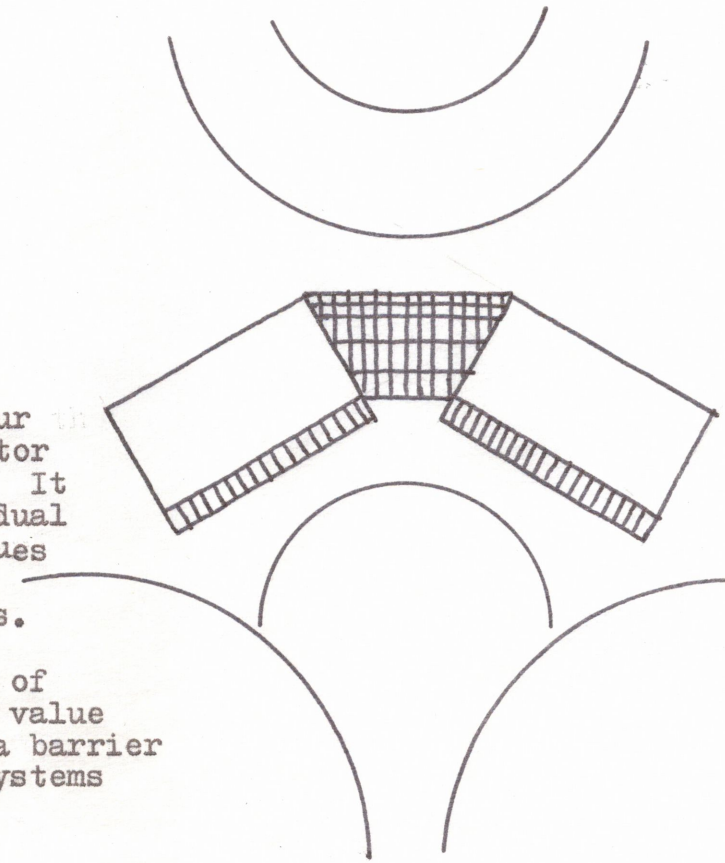

Existing road going into Yellowstone
Bus loop
Definite break between getting to the Park and getting in the Park.
Entrance center
This diagram shows the initial spacial relationships that were considered.
Drop off points
Parking
Main road in

The entrance center should stand as a preview to the attitude about the Park.

Since aesthetics is such an important design criteria, the building must be very much a part of the outdoors.

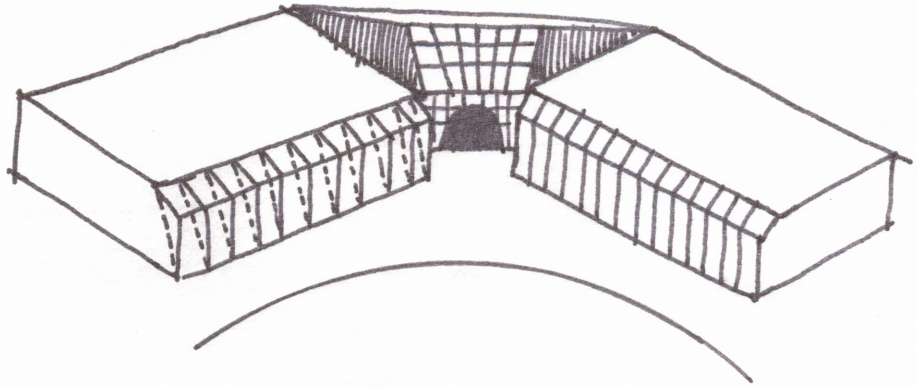
The entrance center could become a barrier dividing a natural land attitude from the norms of everyday society. The building would be split between two value systems. Tourism would be a part of the center in this case. The change would be gradual after the breaking point.

The division between accepted everyday values and accepted Park values could become the door to the entrance center. This abrupt divorcing of two sets of values could be very severe. Tourism would not be included in the entrance center, but many values of everyday society would still be visible.



The break could occur the moment the visitor got out of his car. It could provide a gradual transition from values of everyday life to values of wild lands. The entrance center would become a part of of the overall Park value system rather than a barrier between two value systems

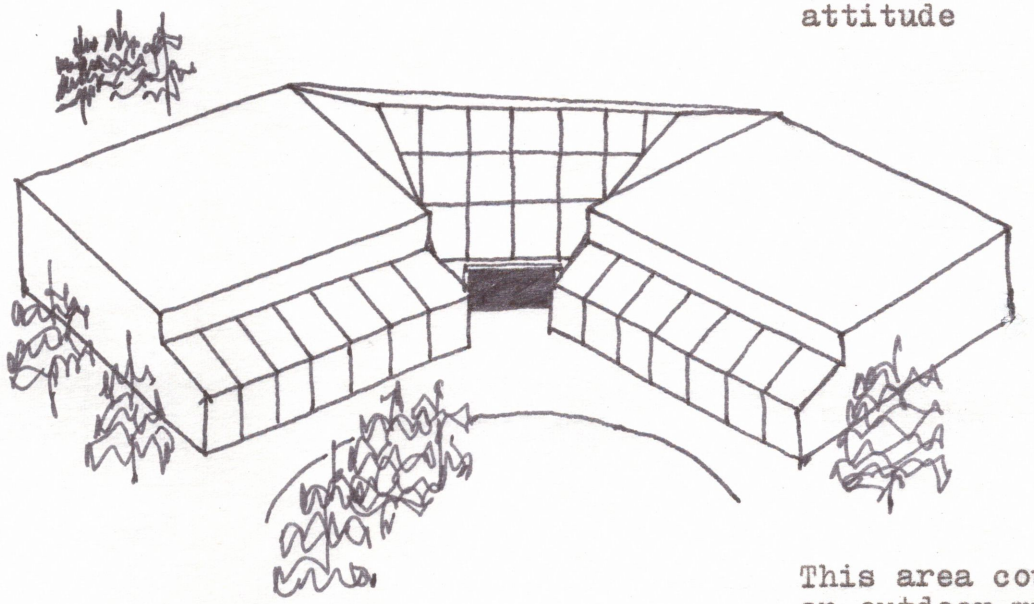
If a museum were included in the design it could begin on the outside with animal displays and such.



Glass could be used to help bring the outdoors indoors. It may be an important building material for aesthetics.

This does not seem fitting with a wild land attitude.

The feeling generated by this facade does not seem to be in keeping with a natural land attitude

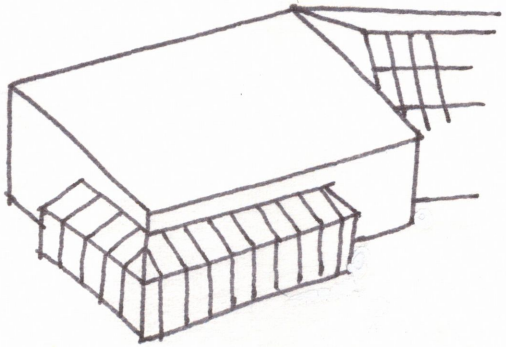


This area could be somewhat of an outdoor museum.

This design does not appear to be a part of nature.

The glass patterns could vary in shape and scale.

Some glass shapes and scales would tend to follow a wild land attitude more than others.

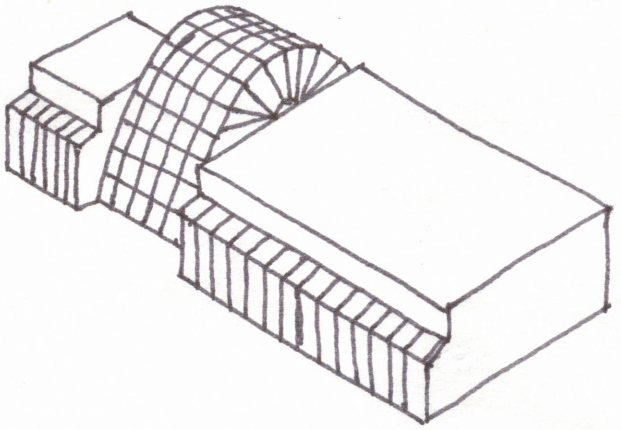


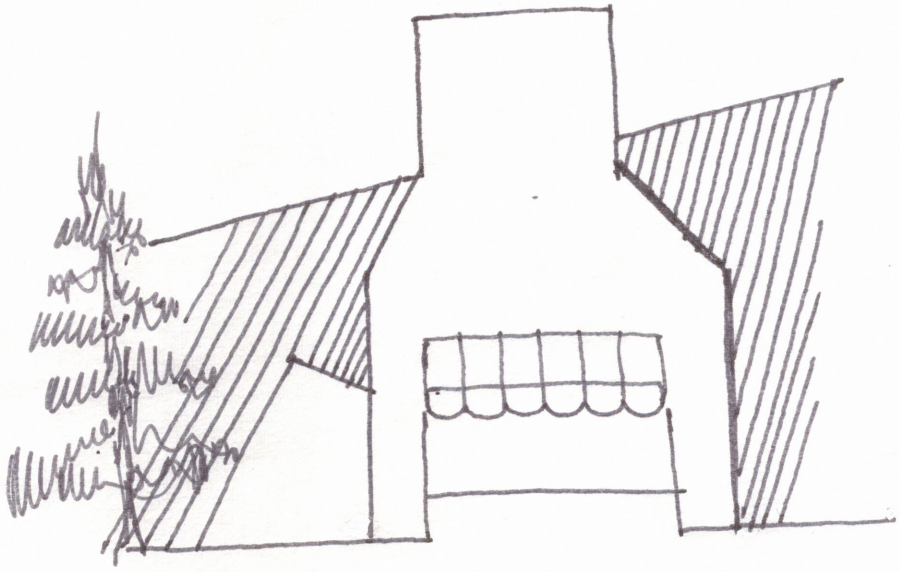
The building might be flexible and be able to adapt to seasonal changes in weather.

The building could be constructed over existing landscape leaving that landscape undisturbed and intact.

Trees inside

Open air shelters might be possible





The entire building should become a part of a natural landscape.

The materials used in the the building could be materials native to the area.

The building could look somewhat as though it grew there rather than look as though it were placed there.

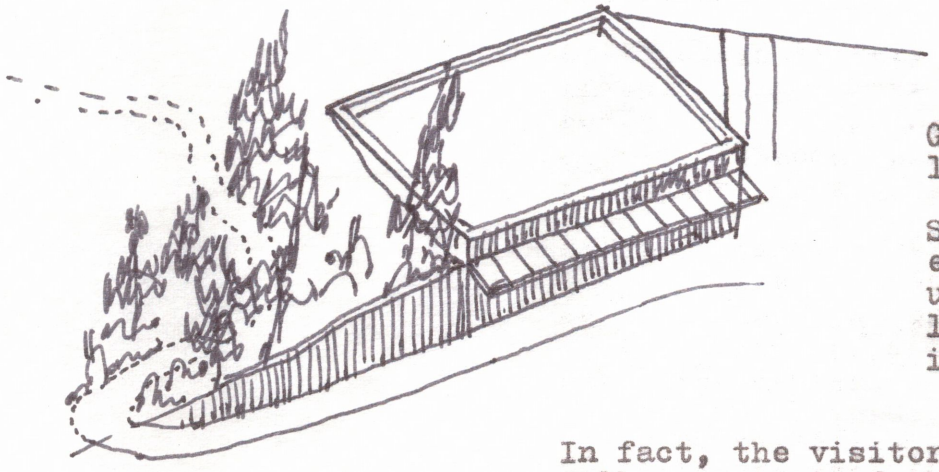
Awnings might be used effectively.

An entrance through a fireplace could be similar to an entrance to a cave opening.

Lodgepole pine is native to the area and might be a good material for natural land aesthetics.

The entrance center could be very formal and could be seen by the Park visitor a good distance before they actually reach the center.

Or it could be very low key, almost invisible to the visitor until he actually reaches the center.



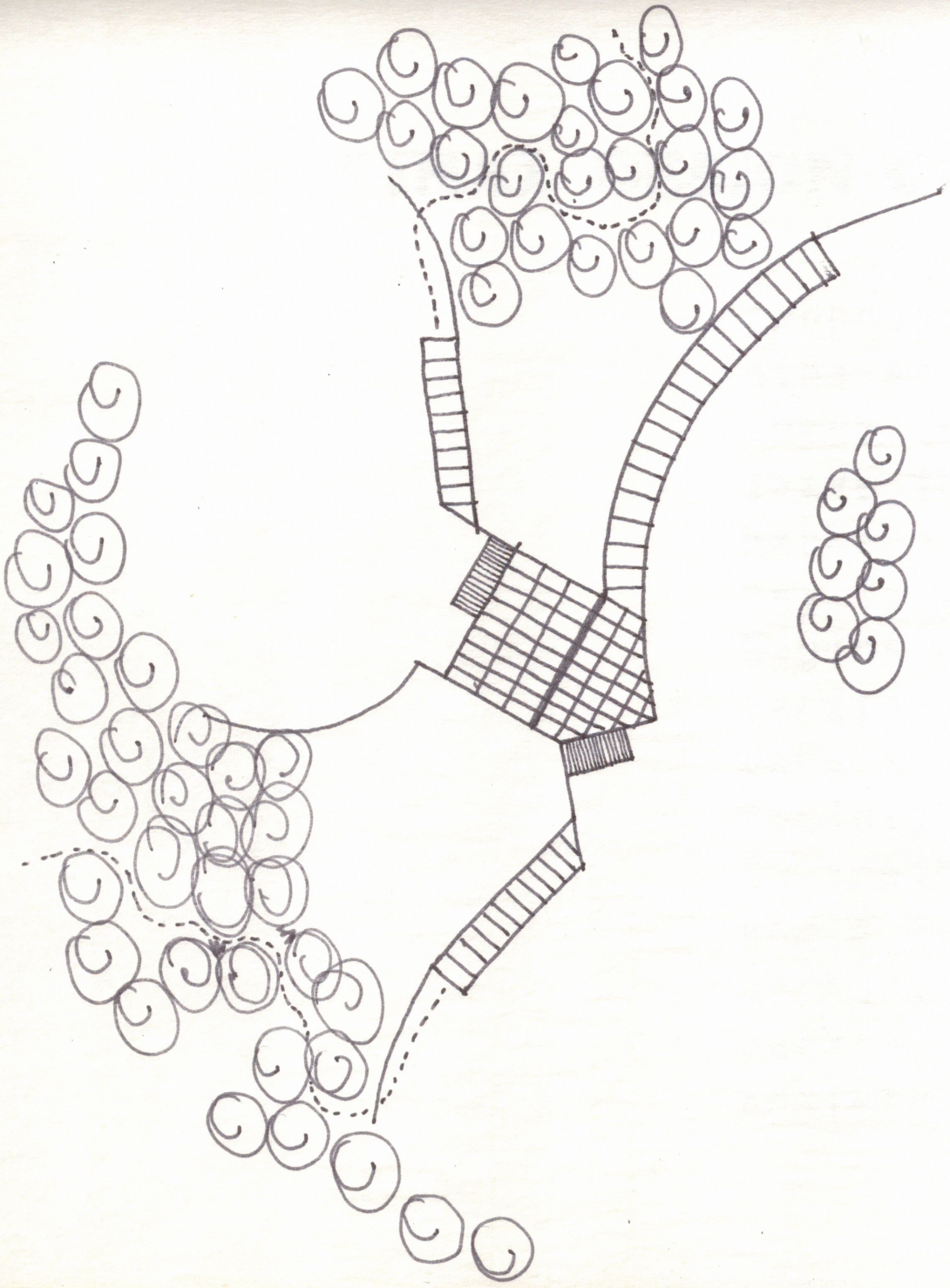
Glass could be used like an awning.

Skylights might be effective in opening up the building by lighting up its interior.

In fact, the visitor might actually walk on a part of the building as he approaches the entrance to it, maybe without even knowing.

A random geometry of plan might adapt itself well to a wild land area and therefore to a wild land attitude.

Natural lands, though random, may seem very orderly.



Value transition occurs on the trail.

Trails would be the means of transportation from the car to the entrance center. Wild land appreciation begins at the point where the people leave their automobiles.

Visitors wouldn't see the center until they actually reached it.

The building would become a part of the landscape.

The building could have more than one main entrance without conflict.

Building materials will be very important. Aesthetics are very important.

The roof of the building could be covered with dirt and native plant growth could be allowed to grow. The building would, then, become more of a part of the landscape.

Distances from parking areas to the entrance center would need to be relatively short but long enough so that the cars aren't visible from the center.

FINAL DESIGN CONCEPT

The final design of my proposed entrance center begins at West Yellowstone where the Park visitors would leave their cars and begin backwoods travel. Their journey to the entrance center begins with a gradual conversion from one visual vocabulary, that of everyday society and its technology, to another, that of nature and a wild land area. The parking would be security parking in order to avoid any anxiety and worry by the

visitors over their vehicles. The parking would not consist of a single solid mass of cars. Rather, it would be broken up into lots of forty cars each with each of these lots broken up into groups of five cars. In this way, the visitors would be exposed to a gradual adjusting to the natural land experience. The visitors would begin their journey by receiving small doses of the backwoods experience. They would go through a system of losing sight of the automobile and regaining sight of it until

finally they would lose sight of it completely. Once on the trail they would be completely exposed to trail vocabulary as they traveled the one-quarter mile distance to the entrance center.

The entrance center itself consists of three buildings. The first building would handle the administrative portion of visitor entry. Inside it the visitors would pay their entry fees, receive fire and fishing permits and have the option of getting involved in one of many guide programs. Also they would be able to file a camping plan with

the Park officials explaining their route and length of stay in the Park.

The interior of this building would combine a protective enclosed structure satisfying the needs of the administrative functions with a flexible structure having the ability to be completely open, and through the use of trail vocabulary, maintain a backwoods character. Thus, when the visitors enter the building they never actually leave the trail. The trail becomes an integral part of the building design.

From inside the building the people will be able to

look out through glass areas and see the road on which they will ride their bicycles or the trail heads which will lead them into the back-woods areas.

The building construction will be a combination of a concrete pan system covering the adminstrative portion of the center with a wood beam system covering the visitor use portion. The administrative portion of the center would be set into a hill that would be fabri-cated purely for aesthetic reasons during the obliter-ation of the existing road between the entrance center

and West Yellowstone. The roof over this area would be covered with earth fill allowing natural plant growth characteristic to the area to become part of the building design. This earth covered area would be pierced with skylights that would have the ability to open and close. In this way, this portion of the building would become immediately flexible and would be able to conform quickly to changes in weather conditions.

The visitor-use area would be covered by a wood beam construction and would, during the summer months,

remain completely open allowing the visitors to remain in an outdoor environment. During the winter months this area could be closed off completely by a system of insulated panels that would be fastened to the overhead beams and the entire building would become completely enclosed.

The building materials to be used in this building would be predominantly lodgepole pine, a material native to the area. This would be used both internally and externally in order to give the building a sense of belonging to the area.

Canvas awnings would be used as a building material. They would serve as a subtle indication of the entrance points to the buildings, providing these entrances with a sense of arrival. Also, they would be used on the interior of the building as a means to indicate the location of the functional positions such as the area for securing fishing and fire permits. At these points the awnings would serve still another function by providing temporary protection from the prevailing weather conditions.

The furniture within the center would receive special

design consideration and would be constructed of wood and glass, the same materials used for the overall building aesthetics.

Externally the appearance of the building would undergo seasonal changes. During the summer months the building would be covered with natural plant growth. This, combined with the low key nature of the building and the aesthetics provided by the wood construction would allow the building to exist as an integral part of the landscape. During the winter months the building would once again become a part of

the landscape of the site as it would be entirely covered with snow. The sense of arrival during this season would be provided by the mounds of snow that would accumulate due to the continual shoveling of snow.

The other buildings on the site would follow the concept for design and aesthetic appearance and therefore require only a description of the individual function of each. These buildings would provide the means for those visitors who lack equipment for backwoods and travel.

In one building visitors

could obtain equipment needed for backwoods travel. The equipment in this building would include such things as frame packs, day packs, tents, sleeping bags, and smaller items such as mess kits and fishing gear. There would be an area in this building for those that need this equipment to store the luggage that they used to bring in what clothing they would take on their trip. As well, there would be a store in this building that deals strictly with supplies of dehydrated foods, beef jerky, salami, soy beans, and other foods applicable to back trail use. A space

would be provided within this building for visitors to use in packing and unpacking their equipment. This space would receive mostly winter use as many small clearings outside the building would serve as locations for this function. In these small clearings guides could gather with their groups and explain equipment use and talk about the journey that they were about to take. Temporary canvas tent structures could be strung up in these areas to provide protection in inclement weather.

When the equipment is returned to the center or to

any of the other centers it would go directly into a maintenance area where it would be cleaned and checked, and, finally, stored for future use.

The third building would have the function of providing bicycles for those wishing to visit the Park in this fashion but who lack the equipment for this travel. This building would feed directly onto the road system that leads into the Park. The bicycle inventory in this building would consist of the normal two-wheeled bicycles, three-wheeled bicycles for use by the handicapped

and elderly, and smaller bikes for the younger visitors. As well, bike packs would be available along with other accessories such as tire pumps and water bottles. As in the trail use center, the bicycles would be returned directly to a maintenance area where they would undergo cleaning and inspection before they are used again.

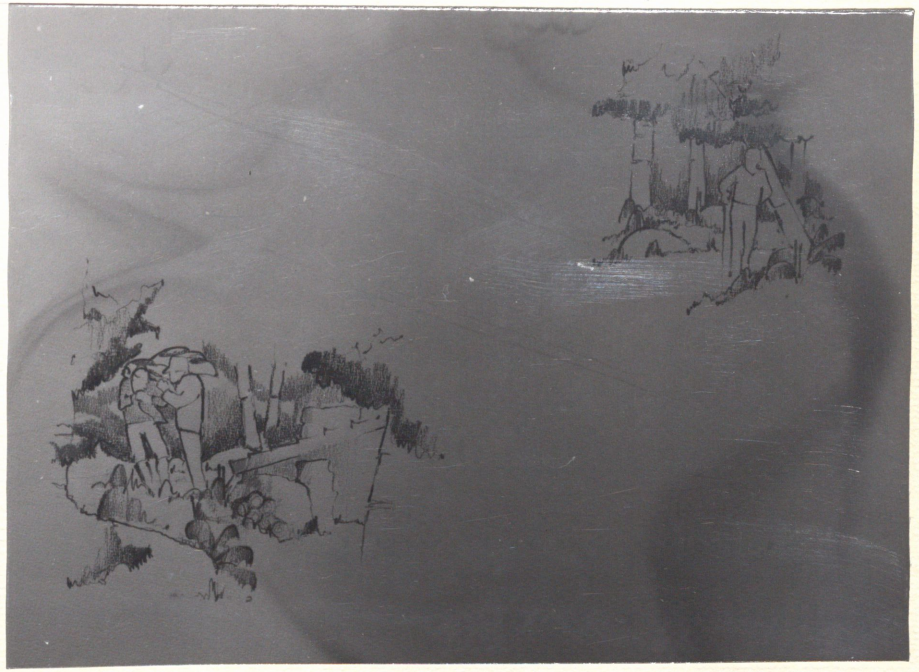
No visitor use bathroom facility would be provided in any of the three buildings. Bathroom facilities would be provided for in a separate building centrally located for use by the visitors in each of the three buildings.

By separating this function from the buildings the visitor-use portion of the buildings would remain as a part of the trails rather than strictly a part of the buildings.

FINAL PRESENTATION

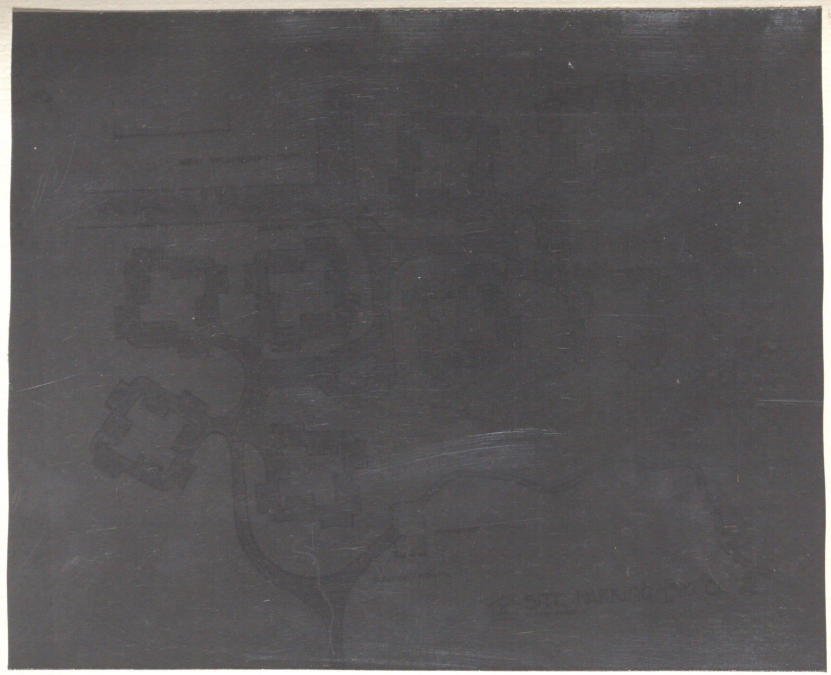
The following are photographs of the model and drawings used in the final presentation of my thesis study.



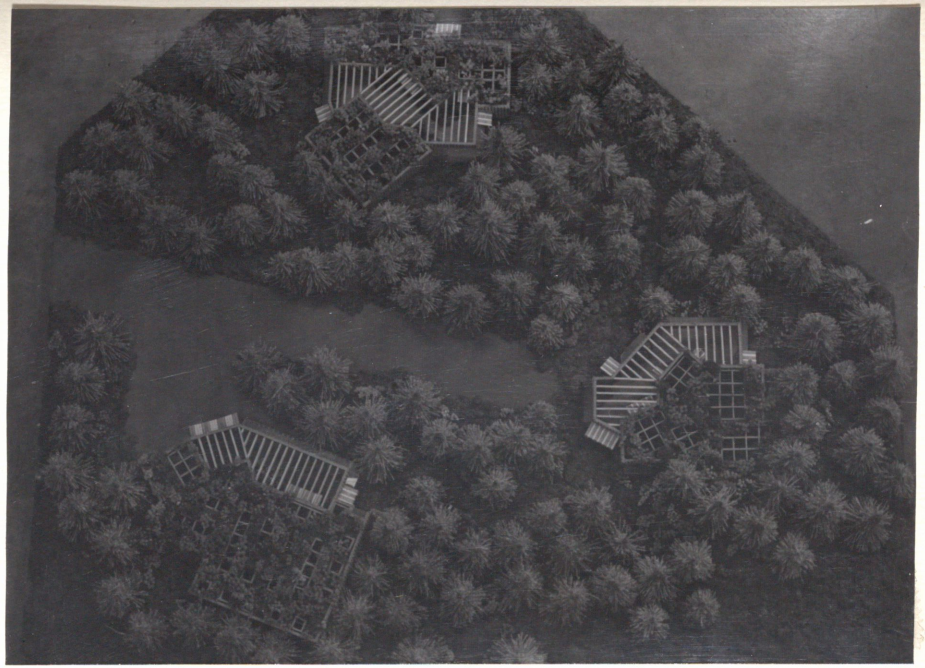


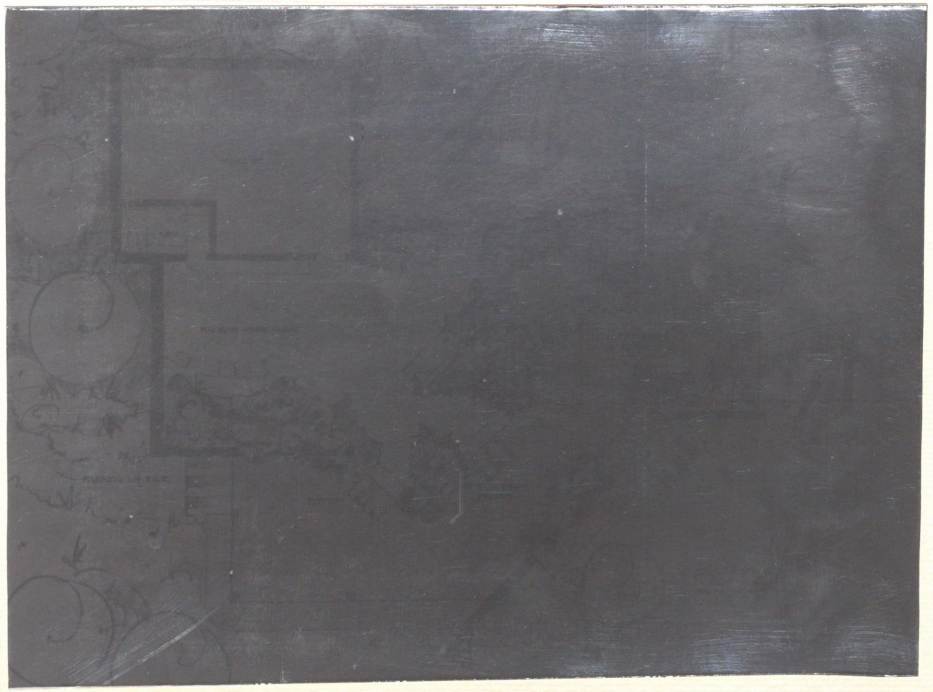




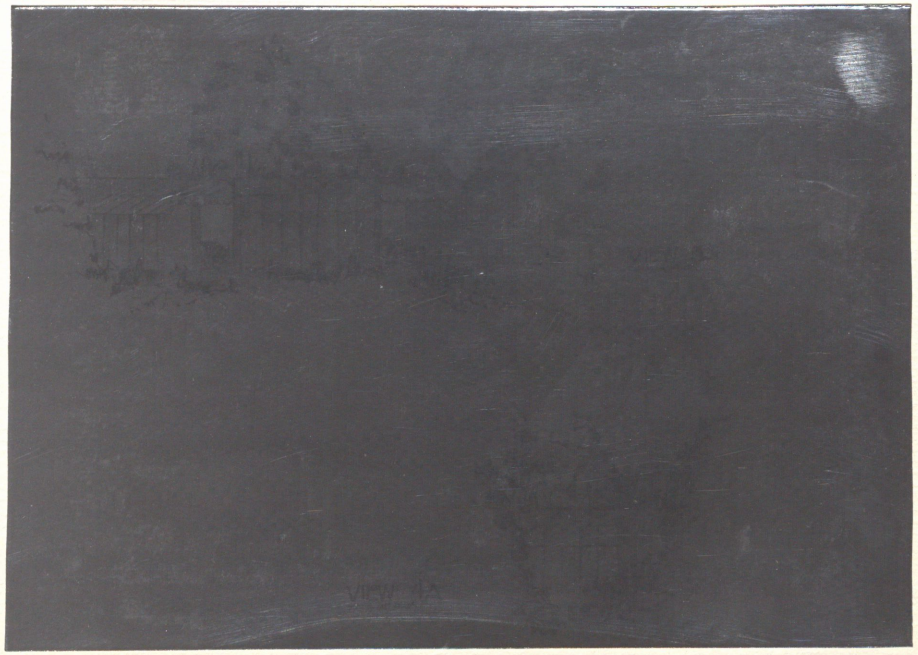




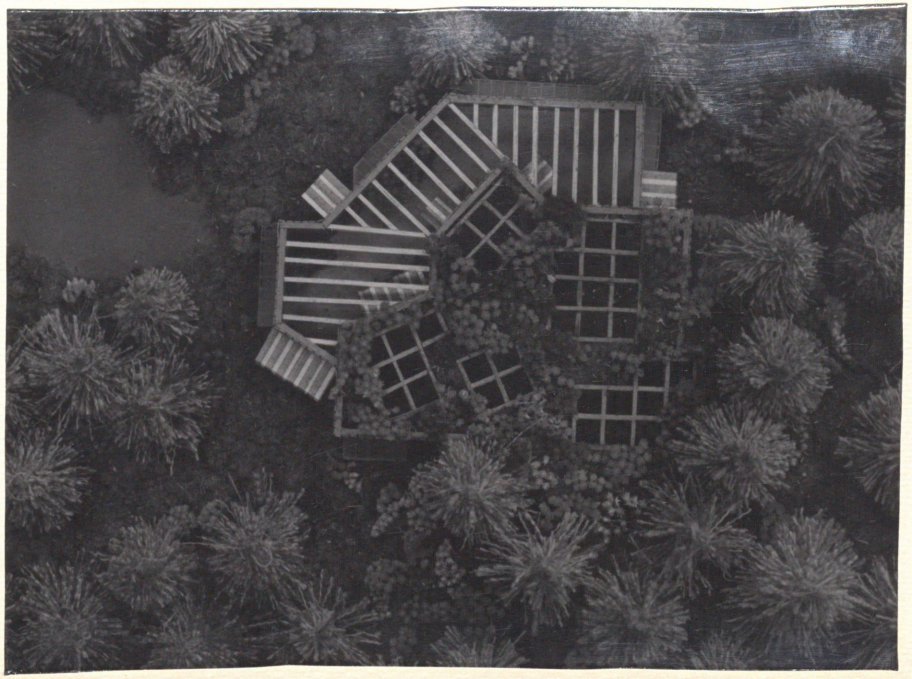




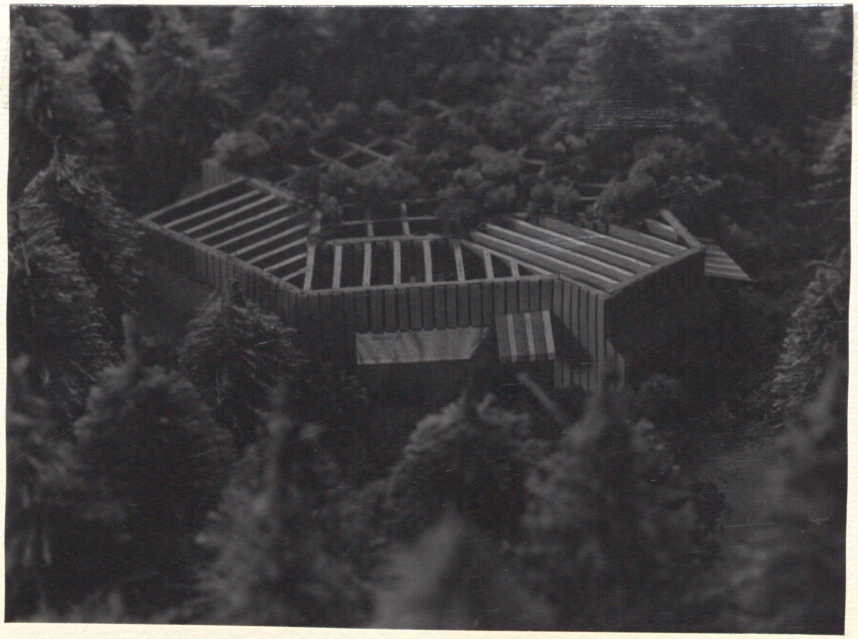

VIEW 1A

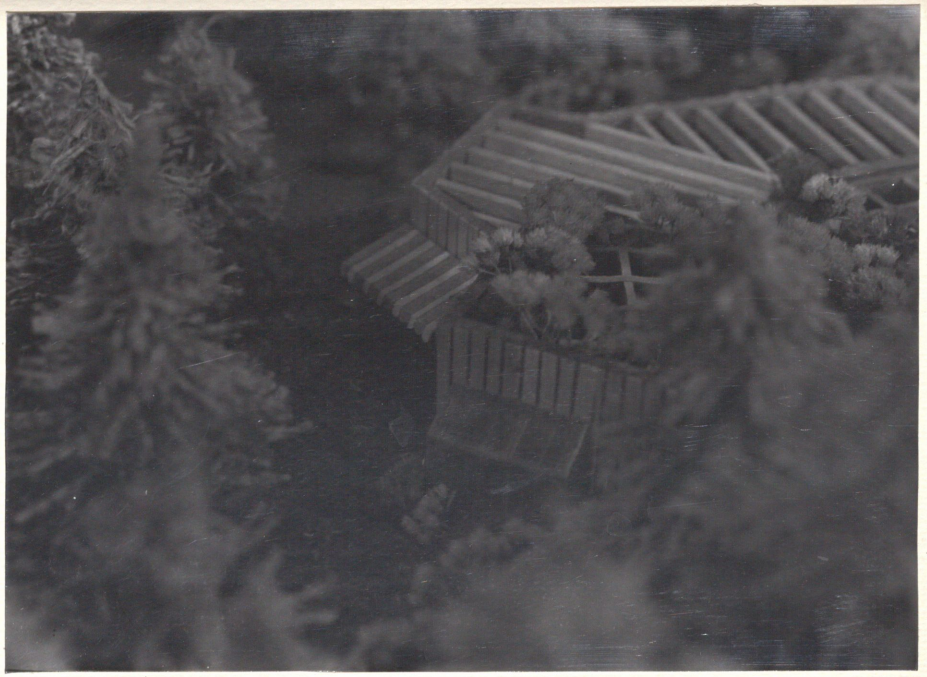

VIEW 1A

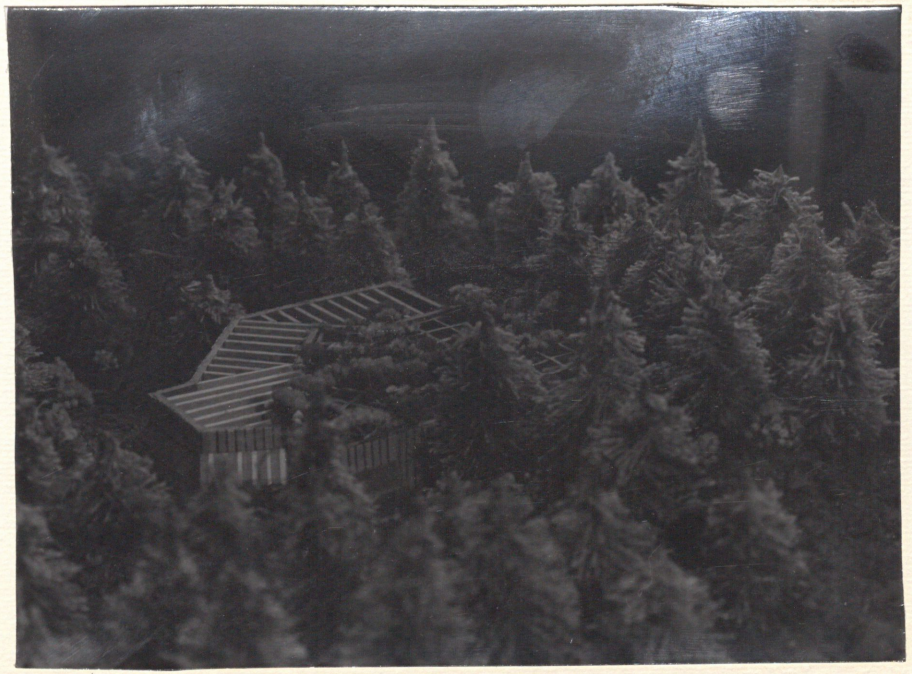




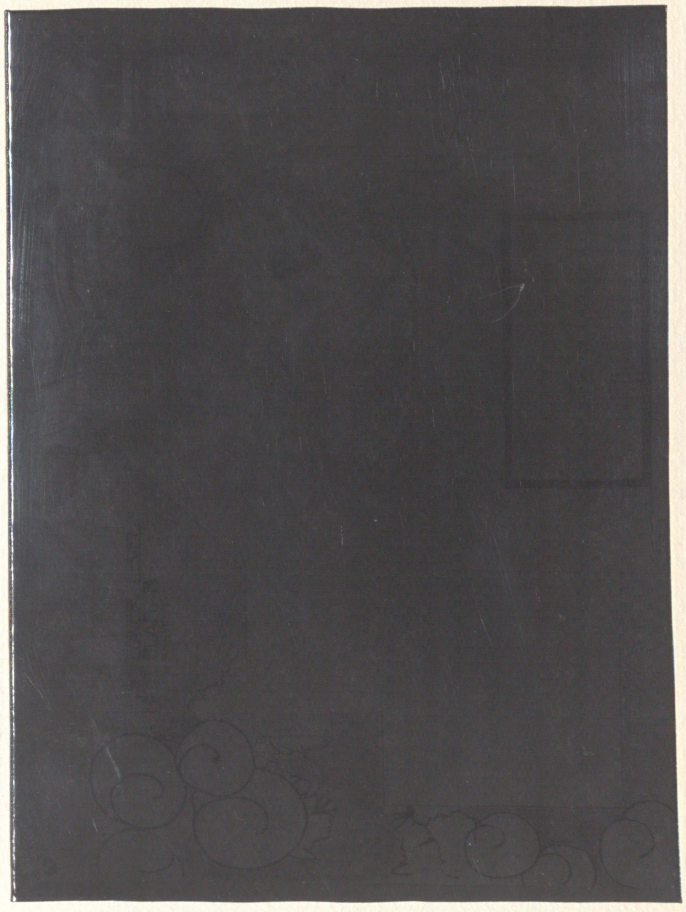








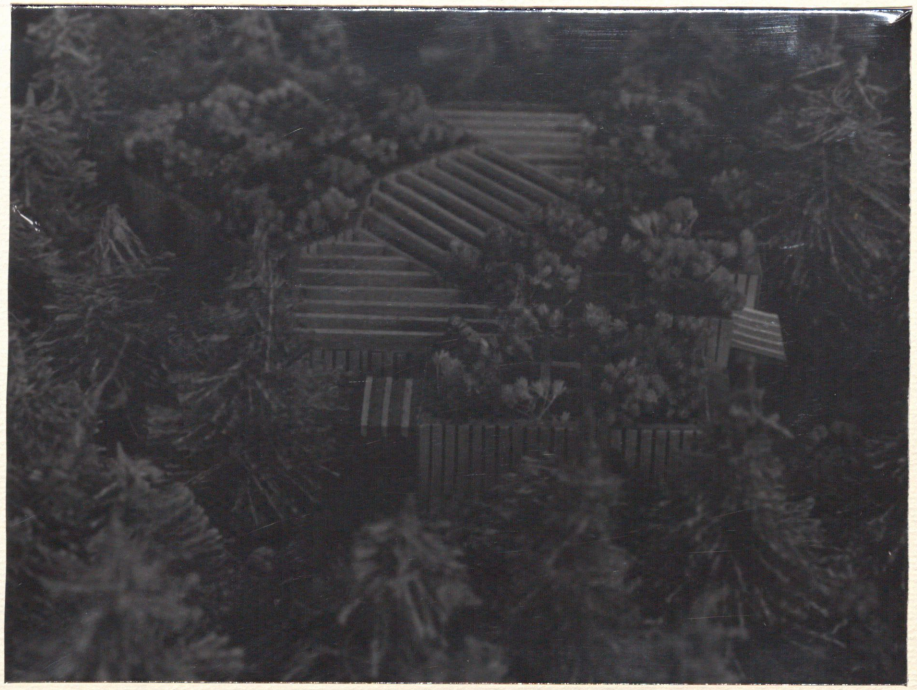


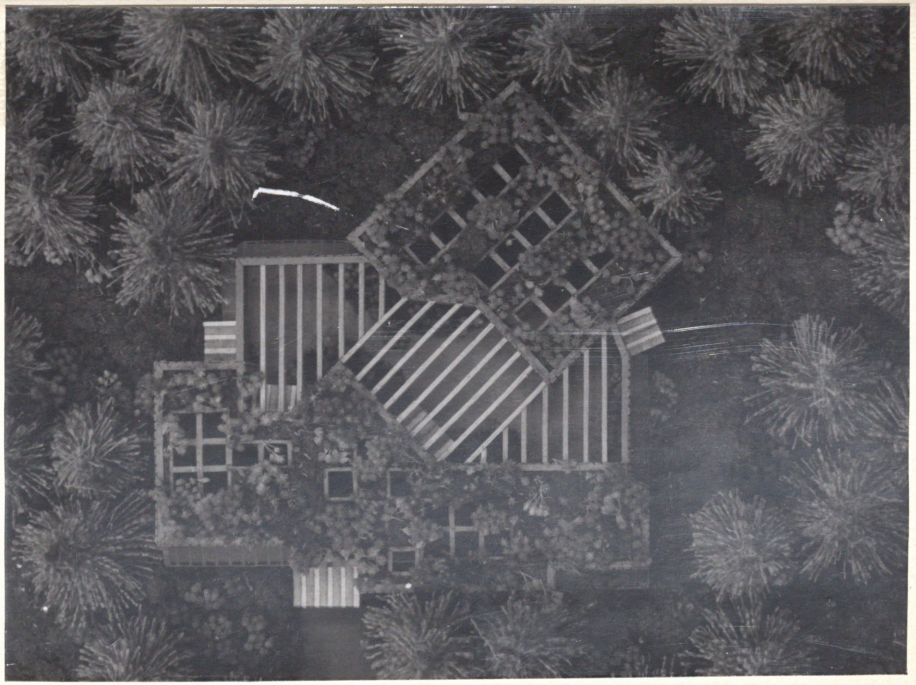




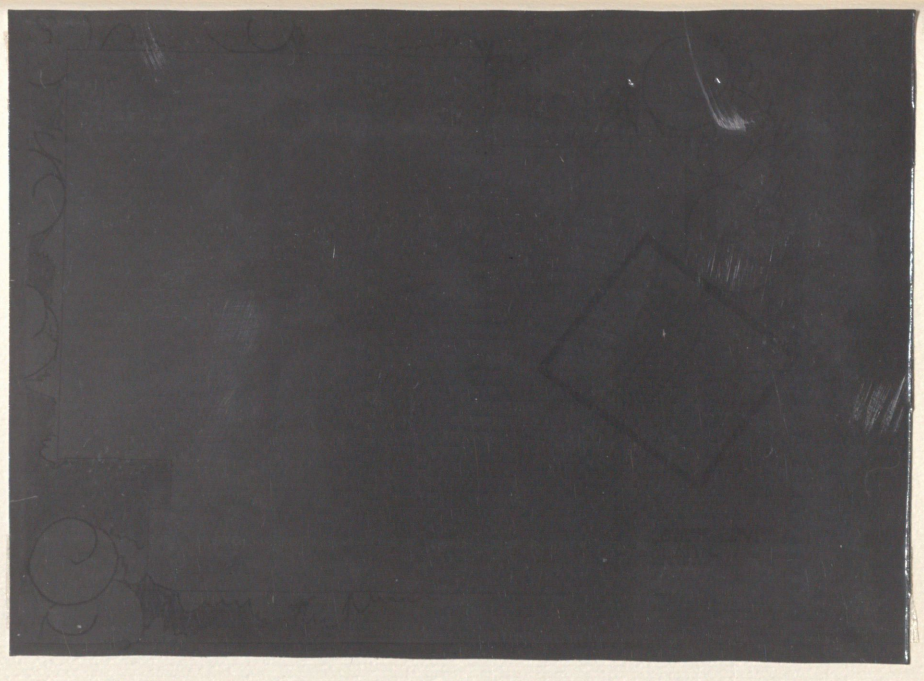




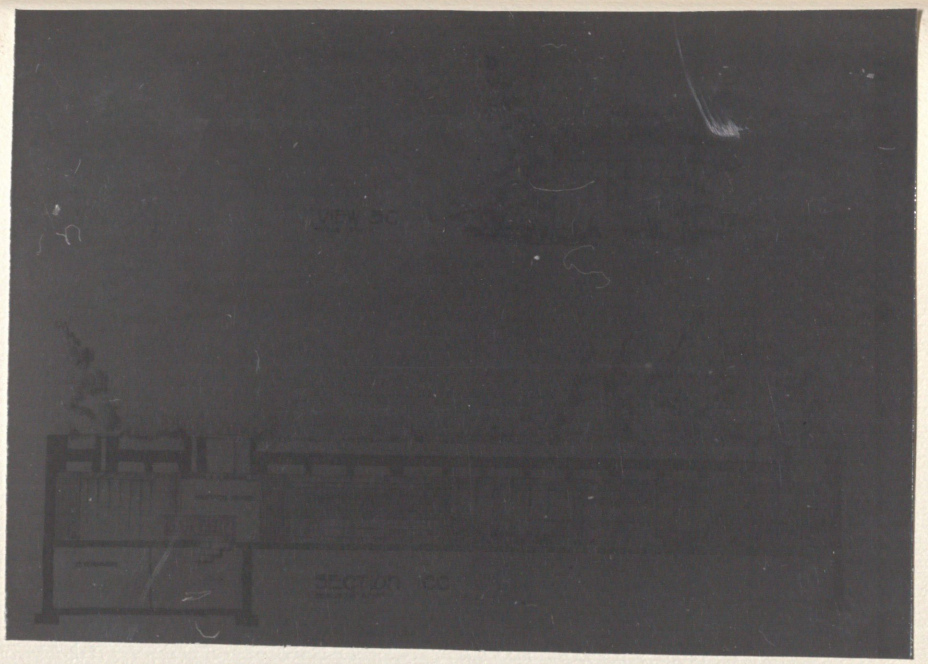




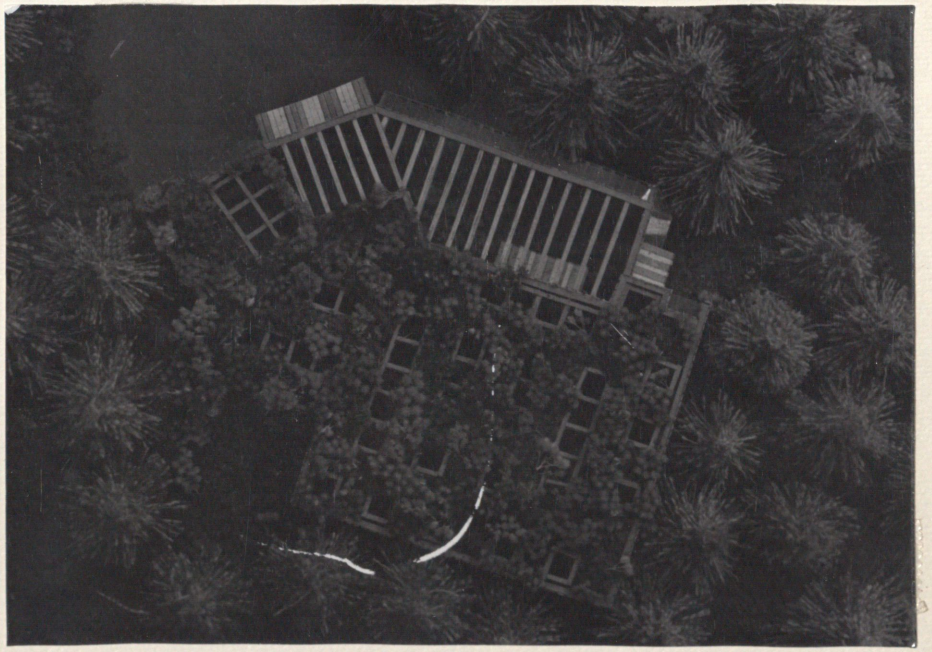












CONCLUSION

Many issues discussed within this project are highly controversial in nature and subject to much criticism. It was not my intentions to prove or disprove the validity of the stand I have taken relative to these issues, and to the direction of Yellowstone Park. To prove this would require years of study.

Rather, It was my intention to provide reasoning for the stand I have taken and demonstrate the sensi-

tivity with which this stand could be handled.

If, however, the study I have made on this subject has proven to others, as it has proven to me, that such a proposal is necessary, if Yellowstone Park is to survive, then the achievement in my study will have exceeded the degree of success that I had ever hoped to accomplish.

FOOTNOTES

[1]Edward Abbey, Desert Solitaire A Season in the Wilderness (McGraw-Hill, 1972), p. 47.

[2]C. Frank Brockman and Laurance C. Merriam, Jr., Recreational Use of Our Wild Lands (McGraw-Hill, 1959), p. 3.

[3]White Mountain Study, Environmental Behavior, vol. 1, no. 2, (Dec. 1969).

[4]Brockman and Laurance, p. 6.

[5]Alan Olson, Thesis Programming, (March 19, 1971), p. 2.

[6]Ibid., p. 2.

[7]Richard Phillips, Yellowstone Country Voices and Photographs, p. 15.

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1. Abbey, Edward, Desert Solitaire A Season in the Wilderness, New York, New York, McGraw-Hill,1972.

2. Assistant Superintendent Yellowstone National Park, interviewed by author, Mammoth Hot Springs, Yellowstone National Park.

3. Brockman, c. Frank, and Merriam, Laurance C. Jr., Recreational Use of Our Wild Lands, McGraw-Hill, 1959.

4. Ellis, William S.,"The Pitfalls of Sucess," National Geographic, vol. 141, no. 5, May 1972.

5. Environmental Behavior, vol. 1, no. 2, "White Mountain Study," Vermont, Dec. 1969.

6. National Parkways, "A Photographic and Comprehensive Guide to Yellowstone National Park.

7. Olson, Alan, Thesis Programming, March 1971.

8. Phillips, Richard, Yellowstone Country Voices and Photographs.

9. U. S. Department of the Interior, National Park Service, Master Plan.

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