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I, Kyle Burns, hereby submit this original work as part of the requirements for the degree of Master of Architecture in Architecture (Master of).

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Re-inventing the National Park Visitor Center

Student's name: Kyle Burns

This work and its defense approved by:

Committee chair: Jeffrey Tilman, PhD

Committee member: John Eliot Hancock, MARCH
Re-inventing the National Park Visitor Center

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Kyle Burns
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Abstract

National parks and monuments are incredibly important elements of American culture. Preserved in their natural state, they must also be accessible for the enjoyment of society. Unfortunately accessibility usually implies built form, infrastructure, landscape alterations, and other human changes that considerably change the natural terrain of many parks. Although these human changes are essential for the traditional visitor experience, it is necessary for intelligent design, especially architecture, to integrate into the landscapes and natural elements of the park.

Through personal submersion into multiple national parks across the country, visitor center analysis, and research about modernism’s effects on the park system, it has become apparent that casual design solutions are not enough to effectively allow nature to overtake people’s imprint. Parks that have begun to think about new design processes and ideas include Grand Teton and Yellowstone in Wyoming and Denali in Alaska.

Thinking in a direction other than “National Park Rustic” has brought about new forms and unfamiliar volumes, creating a different kind of park experience. The parks have built significant structures on reused sites where former, ineffective buildings once stood and have introduced sustainable strategies to minimize ecological footprints.

Considering the history and development of national park architecture, it is interesting to contemplate the individuality of each structure in regards to the character of a particular park. The character of the park must be considered when introducing any man made object into a natural landscape. The latest surge in park design in which park individuality was a major influence occurred in the middle of the century, leaving a lot of possibilities to create a contemporary architecture language relevant to each park. This has created a large gap in the progress of design in national protected areas, creating a contemporary necessity for change, especially in terms of the visitor center. Although they may be the same building type, in this case a visitor center, designs in Colorado’s parks will have significantly different considerations and challenges than buildings in Arizona’s parks.

As park rates continue to increase, it is important that facilities and infrastructure within protected lands are able to cater to the needs of visitors. Innovative park design ensures the continued protection of the most important natural spaces within the country. New buildings have the opportunity to replace dilapidated structures or those designed without considering the environmental implications. Architecture within the parks also provides opportunities for smarter development in areas not directly associated with architecture, including modern education methods, recreational opportunities, and ecological studies.
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Wilderness Theory and the National Park Idea
Theory, History, Evolution
Wilderness Origins

Introduction, Term, Ideas

National parks were created to protect America’s natural, untouched landscapes for the dual benefit of wild spaces and future generations of Americans. The wild features, revered elements in American society, have gone through a multitude of theories pertaining to accessibility, recreation, and preservation. Extreme landscapes such as the jagged peaks of the Rockies or the vast granite topography of the Sierra Nevada Mountains were not always regarded as a valuable asset to human culture. Our perception of wild spaces has evolved immensely from its initial thought as a cruel, uninhabited sort of hell into an area praised for beauty, opportunity, and personal reflection. It was through the establishment of America’s national parks that this evolution was made possible. It is also through the Park Service’s continued protection and regulation of wild spaces that peoples’ connections with nature will continue to evolve. Architecture is just one identifier that has developed into a successful element in the preservation of most national parks. Unfortunately, many parks have become inefficient and unable to accommodate the ever-increasing number of visitors. Can a new approach to architecture and design reevaluate the decisions and designs brought forth by earlier movements, such as Mission 66, that focused on wilderness preservation while addressing contemporary societal problems, including increasing park demand, access, and rising visitor rates?

David Brower, director of the historically active environmentalist group The Sierra Club, had a simple point of view concerning wilderness; “The wilderness we have now is all that we will ever have” (Buccholtz). This is not how wilderness was always considered. The first views of wilderness, a term in which the definition has evolved almost as much as the views towards it, were
introduced in the early thirteenth century. The first significant defining moment of the term occurred as John Wycliffe translated the Latin Bible into English in the late fourteenth century. This “wilderness” term was designated to describe the arid, treeless wasteland in which most of the New Testament occurred (Nash 2). Just as paradise was reserved as the best place for the faithful followers of God, wild uninhabited land was a place not meant for righteous men, but instead savages and sinners.

The term wilderness evolved slightly when it was included in Samuel Johnson’s 1755 Dictionary of the English Language, defined as “a desert; a tract of solitude and savageness” (Nash 3). Although by definition “wilderness” is no longer considered a desert of savages, it still describes an uncultivated and undeveloped land, of course the absence of people is assumed. These views towards wilderness continued as the primary perspective, but as more people ventured to the newly formed America, the ideas shifted. The lands of particular interest, today’s remaining American wilderness and national parks, were first described by white Americans on Lewis and Clark’s expedition, famous for traversing the unexplored West. Wild lands of this scale and dominance were not a common feature of European civilization, even in the Swiss Alps. This American wilderness was unlike anyone had ever seen. Thomas Jefferson actually believed when he sent Lewis and Clarks’ Corps of Discovery out to survey the newly acquired Louisiana Purchase that they would see ancient creatures like the wooly mammoth and saber-toothed cat. This belief showed that nobody really knew what the new wilderness
included, but with Lewis’s reports of grand scenery of epic scale, more and more people ventured out to see what the new world had to offer.

It is interesting to consider what was thought of as wilderness just a few centuries ago. In the early 1800s the wilderness was western Virginia and Michigan. To think that people saw these lands as exotic and untamed is interesting considering what we see within wilderness areas of Montana and Alaska. The landscapes are simply incomparable. People have since settled most of the colonial wilderness, but it is impossible to think of land tracts in the northern states as ever being able to be civilized like Virginia. Jefferson himself may have been one of the first Americans to write about the possibility of enjoyment of wild lands. When speaking about the Virginian wilderness, he said “If all America somehow could be transformed into a garden, a permanently rural republic, then its citizens might escape from the terrible sequence of power struggles, wars, and cruel repressions suffered by Europe.” This is the logical background of what is known as the Jeffersonian dream- “a native version of an ancient hope” (Marx 138). Henry David Thoreau believed in this theory as well, perhaps defining it more concisely. He believed that an excess of either wilderness or civilization was not ideal. The “vitality, heroism, and toughness that came with a wilderness condition had to be balanced by the delicacy, sensitivity, and intellectual and moral growth characteristic of civilization” (Nash 92).

**American Wilderness**

American wilderness became something to be seen, an escape that more and more people believed was a valuable asset to America. Jefferson alluded to this in a 1784 description of the Allegheny Mountains, “This scene is worth a voyage across the Atlantic.” Nash concluded, “America’s nature, if not her culture would command the world’s admiration” (Nash 68). From this point forth, Americans had a new view towards their wild spaces. Wilderness soon transformed from a sight of beauty into a place of refuge. The national parks have become the best place to seek this refuge from the hectic world of civilized life. As much as American society is entrenched in the search for income, power, and stature, natural elements somehow bring a newly renewed life into an otherwise
busy lifestyle. Leo Marx references this trend in his *Machine in the Garden*, showing that the journey of self-discovery has three distinct stages; “It begins in a corrupt city, passes through a raw wilderness, and then, finally, leads back toward the city” (Marx 71). But through this process, those returning to the city are not the same who went into the untamed wild. They have developed a new discovery within themselves, something that the solitude and reverence for nature has formed within their psyche. As discussed earlier, wilderness was known as a terrifying, lifeless mass not meant for people, so what is it that draws millions of people to the western national parks every year? Marx states that man “is drawn to a simple life in a remote place, but he cherishes the fruits of high civilization—architecture, music, literature, fine wines, and the rest; he wants to preserve a provincial, rural society, but he is devoted to the advance of science, technology, and the arts” (Marx 135). The personal opportunities found in nature counteract the intensity of civilization while establishing a inner equalibrium.

Early wilderness advocates channeled the theories of men like Jefferson and Thoreau when working to define the first stages of wilderness conservation. Thoreau was that first to significantly analyze why people need nature, with such notable thoughts like “in wildness is the preservation of the world” and “our lives need the relief of [the wilderness] where the pine flourishes and the jay still screams” (Nash 86-87). The mid-to-later part of the 1800s saw nature preservation surge. In response to civilization moving westward and more people needing more resources, wilderness areas were being mowed down. Pioneers believed wilderness protection to be absurd, but activists on the east coast as well as prominent figures in California fought to protect certain pristine areas of the American backcountry.
Origins of the Park Idea

The first glimpse of an idea for a park or preserve came about in 1832 when George Catlin, a painter of Native Americans, thought “what a beautiful and thrill specimen for America to preserve and hold up to the view of her refined citizens and the world, in future ages! A nation’s Park, containing man and beast, in all the wild[ness] and freshness of their nature’s beauty“ (Nash 100). Horace Greenly reacted to this idea in 1851, imploring to the public, “Friends at home! I charge you to spare, preserve and cherish some portion of your primitive forests; for when they are cut away I apprehend they will not easily be replaced” (Nash 96). The middle of the nineteenth century became a time when advocates began thinking about legally protecting such areas, stopping civilization from transforming them for other purposes. The first true victory for American park advocates appeared in an 1864 federal grant of Yosemite Valley to California as a park “for public use, resort, and education” (Nash 106). This area, measuring only about ten square miles, laid the foundation for future preserved landscapes. This was also the first time design was incorporated into nature in order to allow for effective human enjoyment. Frederick Law Olmsted, designer of New York City’s Central Park, designed the Yosemite Valley development in an attempt to avoid what he deemed a Niagara Falls-esque “destruction by settlement” (Nash 107). This was the first time in a national park that planning and design were taken into consideration, successfully paving the way for newer, wilder development attempts.

The next momentum surge for preservation came on March 1, 1872 with the establishment of two million acres in northwest Wyoming as Yellowstone National Park. The interesting part about this acquisition was that it was not to protect wild spaces, but rather prevent exploitation of geothermal
features by private entities. Nonetheless wilderness advocates appreciated the park’s establishment, deeming it a success for the cause. Soon after, companies, mostly railroads, tried to exploit the parks with tourism and shipped as many people as possible to Yellowstone. Preservationists persevered against railroads, as representative William McAdoo lobbied against the destruction via railroads and for people who wanted to seek “in the great West the inspiring sights and mysteries of nature that elevate mankind and bring it closer communion with omniscience” (Nash 115). The persistence of conservationists led to laws and regulations regarding the wild spaces of Yellowstone, but it is important to understand that the wilderness aspect was never taken into consideration. Profit, rather than preservation, started the certified National Park idea.

**John Muir and the Wilderness Park**

As more and more people experienced the psychological influences of wild spaces, one man rose into significance and expressed transcendentalist importance in what he believed national parks could preserve. His name was John Muir was he was obsessed with the Sierras, more specifically Yosemite Valley. He was the founder of the Sierra Club and is credited with bringing the importance of wilderness to the masses. He published many, many books on the importance of wild spaces, believing that nature was a temple in which everyone belonged. He made it clear that he believed the reason for national parks was for the preservation of wilderness, not for the protection against monopolies and private profit. The most significant act of his life occurred when he personally influenced Theodore Roosevelt into enlarging Yosemite National Park during
a multi-day pack trip in the high Sierras above Yosemite, this time specifically for reasons of wilderness preservation. Although Muir succeeded at Yosemite, that did not stop his perseverance to establish legal protection for more of what he considered sacred spaces. As Muir continued fighting for the protection of nature, the American frontier was deemed dead; civilization had taken over the American West. Roderick Nash addressed this realization with the metaphor “the average citizen could approach wilderness with the viewpoint of the vacationer rather than the conquerors” (Nash 143). In particular he was referencing solitude and hardships that were terrifying to pioneers but may now be considered attractive to their “city-dwelling grandchildren” (Nash 143). Without Muir, there would be no National Park System, there would be no grace left in Yosemite, there would be no chance for current park patrons to feel the same experiences as Muir had when he first stepped into Yosemite Valley. It is the theories of Thoreau that Muir translated into the minds of the twentieth century preservationist and the modern vacationer.

As Muir and Nash alluded to, the pristine elements that made America different and wilder than the forests of Europe were disappearing very quickly. Even Theodore Roosevelt joined in by saying that in the 1890s “the frontier had come to an end; it had vanished” (Nash 149). Yosemite Valley, in state protection until Muir and Roosevelt’s trip, was itself overrun with cattle, sheep, crops, and cabins. The wilderness identity would vanish forever unless more lands were protected under government rule, hence the creation of the Department of the Interior’s National Park Service in 1916, a personal victory for Muir. The missions of the National Park Service will be further discussed in the following chapter, but their establishment increased the population’s positivity on the protection of nature.
A Wilderness Setback Begins a Wilderness Victory

As the National Park Service strove to protect more lands, a surge of lands became particularly notable for their pristine attributes and massive size. There was a rush to protect more lands after the notorious Hetch Hetchy controversy. The loss of this area was a major setback for park advocates. Hetch Hetchy, a massive valley located within Yosemite National Park in which John Muir argued was just as glorious as Yosemite Valley was dammed up, flooded, and became a reservoir for the booming metropolis of San Francisco. This was a large concern for wilderness in National Parks, which by definition meant congressional protection, but apparently it meant protection until it meant discomfort for cities in need. The setback saw massive amounts of responses in favor of wilderness protection, which made it much easier for parks to gain admittance into national park status. The interesting aspect of these responses and letters to congressmen was that the majority of the responses were from easterners. Most of those against the dam had never seen Yosemite National Park, not to mention the remote Hetch Hetchy Valley. In addition to the issues in Yosemite, this time served as a prominent decade for preservation as parks including Glacier, Rocky Mountain, Denali, and Grand Canyon were established. National Parks had somehow gained momentum through its biggest failure at Hetch Hetchy.

Forty years later, the momentum gained due to Hetch Hetchy contributed to the largest preservationist victory in American park history, the defeat of the Echo Park dam in Dinosaur National Monument. The seemingly small amount of people in opposition to
Hetchy Hetchy had grown large enough to vow to never let national parklands become a site for such a man made, ecologically changing abomination. Proponents of the Echo Park Dam assured that the water recreation opportunities would outweigh the current recreation possibilities through hiking and climbing. But that was not the point or the argument. The point was that the monument was established because of the pristine primeval character and massive amounts of dinosaur fossils. The natural state could in no possible way be enhanced by the construction of a dam, no matter how much it would apparently benefit the energy uses of neighboring communities. It would instead completely destroy something that the earth had worked millions and millions of years to make. Echo Park, ensured by the passing of the Wilderness Act the following year, showed that American parks would no longer be developed for purposes other than preservation.

As the National Park Service assumed preservation of wilderness, it is important to distinguish the difference between parks and wilderness. During the first hearings concerning congressional wilderness declaration, Ed Zahniser said, “We owe the leaders of the National Park Service a great debt for the way in which they have fostered the wilderness idea, but we must recognize that the wilderness concept is compatible with, not identical to, the national park idea—an enrichment certainly of the national park purpose, but not the genesis” (Miles 145). Many wilderness areas are located within national parks, but wilderness areas are considered a completely different entity. Wilderness meant no sign of people, but parks worked to attract more and more people, but in a controlled manner. In
Rocky Mountain National Park 91.5% of the land is designated as wilderness, meaning no common comforts other than beaten trails. Other parks like Voyuegers and Denali are termed National Wilderness Parks, calling to their dual attributes. Parks have a decent amount of development with many miles of roads, concessions, and buildings, but wilderness is defined as the absence of any signs of people. The park system has evolved into allowing the juxtaposition of both.

More and more lands became established as national parks and monuments as an increasing number of people saw the importance of preserving slivers of the American frontier. How did the National Park Service develop into such an important organization? The service almost did not make it through the middle of the century; perhaps there was too much land for one organization to handle. Increasing population combined with an insufficient park budget of course led to degradation, and park official Bernard DeVoto suggested closing several national parks because the service could not handle the massive hoards of visitors. The ideals the park service and preservation advocates had fought to preserve for Americans for over 75 years had backfired. Traffic jams, long lines, and cramped campgrounds were not what was expected when declaring these sacred landscapes as protected. This began a switch in conservation ideals, the parks that formerly needed to be protected due to private enterprises now had to be protected from too many visitors loving them. Design took a major role in the relationship between developed spaces and natural forms.
Modernizing the National Parks

As modernism moved throughout the design world, the National Park Service realized that nature too must be modernized. Buildings were not the only park issues that needed to be updated, but also every piece of infrastructure from roads to sewage lines. Parks were initially designed to accommodate horses and buggies, not massive amounts of new post-war families in automobiles. Roads, buildings, campgrounds, utilities, everything was re-evaluated and redesigned. Architecturally, European design strategies had reached America by mid century and National Park Service director Colin Wirth saw this as an opportunity to enhance and redevelop the park system. Wirth was an interesting choice for the position of director. On paper he was almost the opposite of his predecessors. He was not a wilderness man, nor had he published any material about the conservation of wild places. Instead he had experience, over twenty years in the state parks service, and was a qualified bureaucrat with a savvy mind for business (Carr 64). Modernism in addition to the end of World War II was enough reason for a re-evaluation of what was defined by the park experience. But modernizing the natural landscape was not so simple, these parks were designated as wild places to get away from the lures of civil life. Why would nature need to become another sect of modernism? As far as Wirth was concerned, park status did not mean that development was impossible. Smart development would be the key, and by using modernistic principles, the design would only serve to be more effective and efficient.

Mission 66 sought to move away from the railroad funded design of the 1900s towards a simpler, more humble approach. There was no more need for ritzy ornamentation or luxury, but instead an approach that would amplify the landscapes. Simple volumes pertaining to interior function replaced
high-pitched roofs and multilevel hotels. Intelligent site planning, form, and materiality worked with the surroundings to create accessible, thoughtful development. New ideas for park architecture inherently brought controversy. The first controversial building was Jackson Lake Lodge in Grand Teton National Park. High concrete walls portrayed a much different language than what was expected in previous national park structures. People were used to seeing works of architecture close to that of Old Faithful Inn, but the design movement of the 1950s and 1960s was nothing like that of the early 1900s. In addition to the materiality, the formal strategies of interlocking boxes and functionality were viewed just as negatively. Just because the building was in a national park did not mean it could not pursue the current architectural style. It was simple fact: rustic was out, modernism was in; like it or not park design was being updated. Although critics despised the design, today it is hard to argue its effectiveness in accommodating visitors. The lodge allowed for large amounts of visitors without destroying the integrity of the park. Intelligently designed roads and parking lined with native aspens made the building invisible to other viewpoints in the park. The building paved the way for the rest of modern Mission 66 architecture, but served as just the beginning of criticism from pro-rustic park enthusiasts.

Mission 66 Redefines Park Architecture

Mission 66 was created to deal with park development in relation to surrounding social changes, as well as to celebrate the National Park Service’s 50th anniversary. The visitor rates skyrocketed after World War II and it was obvious that if the parks were not managed better, they would lose integrity and possibly slip away into the control of civilization. The success of Mission 66 was not immediately known or appreciated, but it is obvious that without the decade-long design movement the national parks and monuments that have become an integral part of America’s cultural identity would be nothing like they are today. This presents the problems the parks are seeing today, much like the post war problems which Conrad Wirth set out to resolve. With the ever-growing population, said to be approximately 7 billion worldwide, and park visitor rates of over 270 million annually, the buildings of Mission 66 are either at or well beyond capacity. The post-war facilities were designed for the population boom of that time; the 150 million citizens of 1950 shot to
almost 180 million in 1960. In retrospect, design considerations of Wirth’s movement were designed to house less that half of today’s park visitors. In addition to the obvious increase of population, economic difficulties and homeland security issues have shifted American’s travel patterns. How much longer can the structures of Mission 66 be responsible for the intelligent facilitation of visitor experiences?

Mission 66 was beyond a success, but why have the buildings of Mission 66 become inefficient? New technologies and new visitor needs have forced Wirth’s visitor centers to become stale, two-dimensional houses for exhibits and models. Visitors are no longer looking for a map of the park with vistas and picnic grounds highlighted. Although the basics of the visitor center, such as maps, guides, historic photos, and general information are still a necessity in this new century, it is essential that these classic features become appetizing for the new age. Take for example one of the most praised Mission 66 structures, Beaver Meadows Visitor Center in Rocky Mountain National Park. Designed by Frank Lloyd Wright’s Taliesen Architects, the building sought to include four basic design principles: engage the land rather than sit upon the land, destroy the traditional box characteristic of American architecture, use materials that would weather over time so they may reveal their true nature, and somehow embody the idea of democracy (Buccholtz). The building was unlike any other visitor center in the system and gave a sense of individuality to the park. Taliesen was chosen for this building for their ideas on “organic architecture” and designing buildings closely related to the landscape. This was in essence the idea behind all of Mission 66: visitation and education without destruction and degradation. The building is no longer praised for its modern design; instead it serves as an administration building with virtually no visitor services. The weathering is a great effect, but the site itself does not give much for the building to mimic. The only effective Mission 66 structure of the park in terms of visitor services sits high above on Trail Ridge Road, but the unique Alpine Visitor Center is only open a few months a year.
**Significant Approaches**

Parks included in Mission 66’s design scheme took different approaches on development. There were two basic strategies to choose from: place all built accommodations, those other than campsites, and new structures outside of actual park boundaries in order to keep the entirety of the park as primitive as possible, or intelligently re-design existing developed regions inside park boundaries. After several years of planning and design considerations, a third response also served as an option: the hybrid model. The first example was an option for Yosemite, attempting to move all buildings into neighboring El Portal, but was actually first used in the planning of Mount Rainier in Washington. The town of Paradise was developed to allow the rest of the park to remain in its natural condition. The redevelopment solution is apparent in Yellowstone, specifically in Canyon Village. Here development was moved away and out of sight from the Grand Canyon of the Yellowstone. The newly designed Canyon Village sat away from the canyon and falls and included a campground and new modern visitor services including a visitor center, a lodge, a restaurant, and a fueling station. The village was designed to not intrude on the neighboring natural wonders by efficiently channeling traffic and visitors through less destructive corridors. The hybrid model can best be seen in Rocky Mountain National park in Colorado. No accommodations other than campsites are located within park boundaries; instead the towns of Estes Park in the east and Grand in the west serve as areas for hotels and tourist accommodations. But inside park boundaries several new structures were built, notably the three main visitor centers: Beaver Meadows in the east, Alpine in the middle, and Kawuneeche in the west. Another center, Fall River, north of Beaver Meadows was constructed about forty years later.
New Approaches

There is always a search for something new to be experienced, but with National Parks it is also important to remember the history of preservation while taking new steps towards better management. National parks serve as symbols of wilderness to the many Americans whom otherwise will never experience true wilderness; therefore it is essential that architecture must work with the park to enhance wild identity. As Mission 66 successfully allowed the scenery to take control of views, it did so with simple boxes and simple materials. But instead of simply stripping buildings of ornament and site identity, why not engage the landscape to better enhance the presence of wild spaces, almost like the wilderness is taking over civilization? One of the park service’s newest structures, the Eielson Visitor Center in Denali National Park, actually redefines a previous Mission 66 building on the same site. Originally constructed in 1960 in the place of Camp Eielson, the structure was considered an abomination to wilderness values. In particular, Adolph Murie, a park service field biologist, referred to it as “the Dairy Queen” (Carr 286). Finally in 2006 the building was demolished to make way for a new structure that would work with the bluffs while accommodating a modest amount of visitors. Located sixty-six miles into the Alaskan wilderness, it was essential that the new structure not attempt to compete with the Alaska Range. The fragile tundra of the site was literally lifted up to allow the structure to slide in and physically engaged the landscape. The tundra was intelligently reused as a green roof, presenting the language of wilderness ruling over civilization. This insertion was substantially more effective than the Beaver Meadows Visitor Center which merely slid into the site in order to make the two level form look as though it was a single story.
Contemporary Wilderness and Design

The modern theory of wilderness has developed into the antithesis of the colonial view. As wilderness reserves continue to grow, with new lands being acquired for both national parks and wilderness areas every year, it is almost like wild lands are attempting to take back civilization. Architecturally this idea is expressed as the arctic tundra of Denali seemingly takes over the Eielson Visitor Center. Most new wilderness areas admitted into congressional protection have done so by either the donation or purchase through private land owners. Although some lands simply change designation, for example turning a piece of national forest into a certified wilderness preserve, civilization is somewhat quietly receding back into the wilderness. This theory brings forth several questions. Can wild spaces continue to grow in popularity without the management by man, especially architecture, trail building, and roads, or is it better that man just keep out of wilderness management and instead continue to manage parks? National Parks and Monuments are definitely beneficial to man, allowing easy access and sometimes luxurious accommodations, but because parks cater to the needs of visitors this does not necessarily mean that the psychological or transcendentalist experience is any less important that that of the untouched wilderness. Perhaps Roderick Nash alludes to the best view of wilderness, he states “it is tempting to let the term define itself: to accept as wilderness those places people call wilderness. The emphasis here is not so much what wilderness is but what men think it is” (Nash 5). The allowing of individual experience is the best thing about land preservation through national parks, especially when thinking about the difference between parks and wilderness. The experience is completely up to the visitor.
National Park mid century architecture did not really seek any individual identity by somewhat slipping into the modernist idiom. Did the designs of Mission 66 really explore to the fullest how architecture could be both successful and individual? Mission 66 began to incorporate crucial design principles, but the sheer size of the projects and the mission itself take away from the overall success of the investigation. The most important contemporary design ideal is relation to site. Mission 66 attempted this goal with some semi-successful in buildings like Beaver Meadows, but some projects were questionable, like Richard Neutra’s Cyclorama at Gettysburg. Within the national parks, site is everything, but the Cyclorama literally sits on top of one of the most crucial parts of one of the most important battlefields in American history. Although praised at its construction, it has become obvious that this was not an intelligent location for a building. The building must serve as an extension of the site, not an obtrusive element that can be seen from multiple vantage points. Visitor Centers have evolved into a middle ground, a transitioning point between civilization and wilderness.
Sociocultural Effects of the National Park Visitor Center
Client / Institution / Cultural Situation
How Does a Visitor Center Portray the Values of the National Park Service? 

Ideas, Relationships, and Priorities

The National Park Service, created in 1916 under the Department of the Interior, serves as the institution in charge of most of America’s scenic wonders. “The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations” (National Park System). The service prides itself on its original goals as described in the Organic Act, but additionally serves as “guardian of our diverse cultural and recreational resources; environmental advocate; world leader in the parks and preservation community; and pioneer in the drive to protect America’s open space” (National Park System). The Park Service has not had an easy history and has had to work hard for the protection of natural wonders. Even in the beginning when it seemed like everyone was against it and preservation would fall to consumerism, the organization stuck to its core values and developed into one of Americas most crucial agencies.

Parks exist for the showcasing of natural elements, but visitor centers have become a standard feature to ensure visitors gain the most fulfilling experience. This distinct form of architecture must serve as a medium for the core ideas and values of the group it represents. The protected landscapes usually serve as the principle identity of individual parks, but it is the visitor center that is responsible for education while presenting the importance of preserving the land. Visitor centers embody the values and priorities that the park service has worked almost one hundred years to protect. There are many important aspects of built form within primeval landscapes that are not usually considered with many forms of architecture. The idea behind park architecture is to enhance the landscape by becoming a
The problem occurring today with national park architecture and design is not with the idea of the visitor center, but the quality of existing structures. The majority of park facilities, especially visitor centers and lodges, are extremely lacking in functionality and sustainability. The last surge of infrastructure and architectural design was through the historical Mission 66. Many of the mid century structures are unable to house millions of annual visitors, instead they have become places for crowds, lines, and inefficiency. The parks need to work towards a new kind of visitor center, one that is able to effectively deal with several cultural problems including overpopulation, resource conservation, and landscape management while simultaneously working to provide recreational opportunities for the American public. It is through these buildings that the public gains an understanding of why parks exist and why they must continue to exist. The re-evaluated idea of the visitor center would exemplify the values the park service was created to do: preservation, education, nature enhancement, and recreation.

platform to see from rather than to be seen. Conversation without degradation is a major theme in National Park architecture. Most built forms in other environments are meant to be a focal point of a particular area, but visitor centers must work to become the opposite, almost invisible to guarantee the focus on nature. Just as the National Park Service works to protect significant landscapes across the country, individual visitor centers and other pieces of architecture work to provide protection though education and interpretation.
Visitor Center as an Educator

**Learn, Experience, Develop**

The visitor center is the main medium for education in the parks. Most national parks have several visitor centers; usually each is positioned to highlight unique adjacent sites or features. This is evident in Yellowstone’s Old Faithful Visitor Education Center, which is responsible for exhibits about the neighboring geysers. But at the Canyon Visitor Center, located to the northeast of Old Faithful, the exhibits focus on the Grand Canyon of the Yellowstone with limited information on any geothermic features. The larger, more influential parks such as Yellowstone and Glacier can have upwards of four or five visitor centers, each showcasing different elements special to the region. Other smaller parks, like those of Wind Cave and Devil’s Tower, must confine all information and exhibits into one simple, central visitor center.

The visitor center as an architectural presence was introduced in Mission 66 as a built form to get information about the park. Anything from hiking guides to camp safety to historical exhibits are provided in these buildings. Of the millions of annual visitors during the post-war years, most had never seen landscapes or natural wonders like the Grand Canyon or Grand Teton, so it was essential that they understood and learned why the sites must be preserved.

Visitor centers have progressed exponentially from the initial buildings of the sixties to the contemporary explorations of today. Technology has played a large part, allowing sustainable building techniques as well as new kinds of exhibits. For example, the new Old Faithful Visitor Education Center incorporates an artificial geyser within its scientific exhibits. Like the Old Faithful Visitor Center, the Craig Thomas Discovery Center focuses on the immediate...
history and significance of the area. Its exhibits dive into the storied mountaineering history of the neighboring peaks, providing a unique experience not encountered in many older centers. In the case of National Historical Parks, it is essential that visitors know the important history of America’s past. These built parks are a different challenge from the nature parks but have the same duties while taking a different approach. The final duty as an educator was to ensure visitors were able to find many sources of safe recreation. With park rangers stationed in the centers, it serves as the last place to get information, permits, and instructions on hikes, climbs, water recreation, etc. As visitors experience these centers then travel onto the natural aspects of the park, they gain a distinct appreciation and realization of why it is so important that the parks be preserved.

Visitor Center as an Icon of Heritage

**History, Culture, American Identity**

Parks have developed into an essential part of American heritage. Fortunately, preservation activism has allowed for the protection of millions of acres of wild American land, land deemed beautiful and important enough to protect forever. Visitor centers and architecture in the parks have become increasingly important to the park experience and essential park destinations, many establishing themselves as American icons. The first buildings of the parks were usually ritzy hotels or similar accommodations and were built by railroad companies in order to increase tourism and profit. Railroads could benefit both from people taking train as transportation and by being the only hotel service in close proximity to the rail stop and park. These buildings have evolved from
a medium for profit into a protector of American culture. Take for example the Old Faithful Inn in Yellowstone or El Tovar in Grand Canyon; both are masterful pieces of architecture and staples of each park’s experience. Although both are still working hotels, many visitors simply enter the buildings to get a taste of an early 1900s perspective. Each park’s experience would not be complete without a visit to these important structures.

Some untraditional parks like the Little Bighorn National Battlefield or Dinosaur National Monument have taken a different view on visitor centers. Both preserve pieces of the past that have a distinct presence in the country’s unique history. Little Bighorn serves mostly as a museum, showcasing artifacts like uniforms and weaponry from one of the bloodiest battles in the war for the west. Quarry Visitor Center at Dinosaur serves as a protective structure for the main dinosaur excavation site, but also incorporates labs to analyze fossils found within the visitor center. Both buildings accommodate a multipurposed program in one effective building design, but more importantly they hold valuable pieces of American culture. Historical sites can be just as important to culture as natural wonders, and visitor centers work to preserve both. The sites the National Park Service protect may vary in size, natural versus built, and historical significance, they are all dynamic elements of American culture. Without these sites there would be no heritage, no history, no American identity.
Visitor Center as Recreation

*Climb, Hike, Explore*

Another important purpose of visitor centers is the promotion of recreation. Whether it be hiking, backcountry camping, or snowshoeing, parks bring millions of visitors looking to get more out of the parks than simply driving around in cars and parking at vista points. Most bookstores located within visitor centers sell multitudes of hiking guides and have topographic models showcasing important recreational features of each park. Those wishing for adventure can find much information on trails, conditions, and wildlife by checking in at a visitor center beforehand. One interesting example of a visitor center focused on recreation is located atop Jewel Cave National Monument. This building not only houses exhibits and souveniers, but also serves as the entrance to the cave. Elevators located inside the center take people underground into the second largest cave system in the world. This allows controlled numbers of visitors into the cave under ranger supervision to ensure the longevity of the cave system. Limits are presented to backcountry camping and hiking for the benefit and conservation of visited area. Far away from the roads and developments of the park, the backcountry houses some of the most fantastic, seemingly untouched sites of the parks. Although it is important for people to be able to venture out into these remote locations, it is also extremely important that the use be limited so landscapes and trails are not destroyed or marred. These offices can be integrated into the program of the visitor center, combining to form a central hub in which to set off for various recreational possibilities.
Iconic Visitor Center Periods

National Park architecture can be channeled into three distinct periods:

1. Early 20th Century Railroad Rusticated Accomodations
2. Mission 66 Modernism
3. Contemporary Re-evaluations

Early 20th Century Railroad

Pre-war park architecture always incorporated rustic design principles into momentous structures. According to Ethan Carr, these early national park structures “were sited to form elements of pictorial landscape compositions experienced by visitors moving through and around a park village” (Carr 150). The buildings were meant to emulate ritzy mountain chalets, pioneer residences, and Native American culture. This is obvious in Old Faithful Inn, Lake McDonald Lodge, and Glacier Lodge where luxury was just as important as proximity to attractions. These buildings have become staples of the park experience. Although they are still luxury lodgings, they were initially constructed solely for profit rather than visitor experience and education. This style paved the way for future park designs, but will always be known as the original “National Park Rustic.”

Mission 66 Modernism

Mission 66 structures, visually the complete opposite of early century architecture, removed almost all ornamentation and historic allusion. They were instead meant to avoid having a powerful presence and work to “facilitate appreciation for park landscapes. The architecture, ideally, should be nearly transparent: a composition of functional, overlapping spaces and outward views, not of structural mass and decorative facades” (Carr 152). The best example of this movement is Jackson Lake Lodge in Grand Teton, which is composed of interlocking concrete masses where volumes directly relate to interior functions. What the building lacks in rusticality
and ornamentation it makes up in functionality and efficiency. This building paved the way for other designs that gave a new look to park architecture, including the Quarry Visitor Center at Dinosaur National Monument and St. Mary’s Visitor Center on the eastern border of Glacier National Park.

**Contemporary Re-evaluations**

Contemporary park architecture has more or less combined the most significant ideas and considerations from the two previous eras of visitor center design. Modern function and formal strategies have incorporated local, rustic materials while producing new architectural language in order to create a sense of place and belonging to the park. The new strategies mix to create forms and techniques that engage the building into the surroundings, working to not take away from the grandeur of the park. An important theme is to become a platform to see from rather than a platform to be seen. The best example of this clashing of two ideas is the Craig Thomas Discovery Center in Grand Teton National Park. While incorporating sustainable strategies, the building offers a connection between the visitor and the special geology of the park, allowing the user to decide how intimate to make their relationship.

Mary Scott, superintendent of the park spoke of the building’s most important aspect, “the center’s most enduring legacy will be its ability to capture the hearts and minds of people, linking them to not just the park, but to all national parks across the United States” (Lehoux 9). The idea behind the building was not unlike the ideas and values behind the establishment of the National Park Service.
Visitor Center and Society  
**History, Nature, Aims, and Aspirations**

The history of the visitor center building type dates back only to the mid 1950s. Architecture had been present in National Parks for over fifty years, but the term “visitor center” was a creation of the park service under Mission 66, a movement to modernize park planning and design. With soldiers returning from World War II and beginning families, American pride and tourism in the wild west soared. This increase in visitor rates forced agency supervisors to create a new building type; one for the education and regulation of millions of Americans. During Mission 66’s ten-year search for modernism, one hundred and ten visitor centers made their appearance in national parks and monuments. Through the effective design of these structures, visitors now had the opportunity to learn the sciences and values of not just individual parks but also for the National Park Service as a whole.

These centers were created to serve as the architectural identity of the parks. The architectural language attempted to match the vernacular forms of neighboring communities and cultures, while creating a new building type. Aside from profit-driven ritzy hotels and lodges created by railroad companies, there was no place for visitors to receive important geological and historical information. Along with education and interpretive exhibits these buildings serve as guidance centers for those venturing out onto the trails and mountains. The idea was for visitors to begin their experience by stopping in at the visitor center, learning and gaining information, then venturing out into the park. After all, the primary function of the NPS is to preserve sites for the recreational use of future generations.
Architecture has not always been welcome in the national parks, many activists still believe there is no place for man made construction within the primeval territories of this country. Some architecture has been praised as works of art, as seen in Ahwahnee Lodge and El Tovar, and some have been declared an abomination, take for instance Eielson Visitor Center in Alaska, located sixty-six miles into a designated wilderness area. Fortunately the service has since placed a hold on wilderness development. The Eielson controversy helped lead to the passing of the Wilderness Act of 1964, placing a ceasefire on developing wild lands. With “wilderness” officially protected, the park service now focused on the places where development is permitted, placing a new emphasis on sustainable development strategies.

What is the Client’s Mission

**Fundamental purposes, reasons, and positions**

The establishment of the National Park Service was long overdue, but it did not happen without its difficulties. Yellowstone, the first National Park founded in 1872, was forced to rely on private donations and volunteers to run the park. When news of the park was heard around the country the Army was forced into protecting the park. But on one fateful day in 1916 the National Park Service was founded to protect and organize the use of federally protected landscapes.

The National Park Service prides itself on its effective management of wild spaces. They allow for the protection of lands still untouched by man, primeval states that have existed for millions of years. As their official mission statement announces, the purpose of the service is “to promote and regulate the use of the...national parks...which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to 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.” Furthermore, “the Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.” (National Park Service). As Conrad With and Frederick Law Olmsted Jr. both interpreted, “the duty of preservation came first, since without it there
would be nothing for the public to enjoy. But preservation without public enjoyment was not what public parks were intended to achieve” (Carr 70). It is sometimes forgotten that the Park Service does not simply protect America’s natural wonders but also its significant historical sites. What would America be without the massive Grand Canyon? But at the same time, what would America be if Independence Hall, a National Historic Park, were to be demolished? America’s natural wonders are just as important to cultural identity as Independence Hall. It is this wide range of spaces and elements that the National Park Service was created to protect; from mountains to battlefields to historic residences, the National Park Service is in charge of most of America’s culturally significant sites.

The park service is always evolving in ways to deal with societal change. From its beginning it has worked to separate itself from other organizations, most notably the United States Forest Service, an organization dedicated to the protection of resources for intelligent use, in order to develop its important goals and core values. Gilford Pinchot, John Muir’s nemesis, believed the conservation of goods, most notably timber, was to be protected for future sustainable harvesting. Because of this, NPS has adapted wilderness protection goals to save lands from the use of the Forest Service. Along with wilderness value, increasing populations have contributed to the challenge of providing landscapes and sites for millions of annual visitors while concurrently limiting the natural degradation of the areas in order to preserve for future generations. Changes were evident in the mid-twentieth century, as Assistant Park Service Director Stanley Cain summarized the “problem of the day: the needs of our growing population,
living in the immense and complex urban environment, having diverse and rapid means of transportation, with ever-rising personal income and tens of hundreds of thousands of hours of leisure time, require park and recreation programs of broadened and diversified dimensions” (Allaback). Mission 66 was the first movement to try to control the “problem of the day.” With the redevelopment of controversial parts of parks, public use was channeled into less destructive patterns. This allowed for the preservation of certain areas while making other areas accessible to the increasing amount of visitors. As much as recreation has increased in the past years, it has also been limited. As more people ventured into backcountry trails and campsites, there was obviously an increase in human imprint. Many parks have set a limit on visitors allowed to popular sites. For example, at Half Dome in Yosemite it was not unusual to see upwards of five hundred hikers daily, exponentially more during holidays and sunny summer days. Three years ago there was finally a limit set on visitors allowed to venture onto the hike, only 200 permits a day are issued. Many other climbs also require permits both for safety reasons and environmental reasons. You very well cannot have 2000 people climbing up a popular face such as El Capitan at once, both for safety and preservation purposes.
Political Context

Influences of the Visitor Center

Architecture has been a crucial part of national parks for more than a century. Buildings attempt to house the minimal luxuries for park visitors, both day travelers and those on extended trips. But as much as buildings are sometimes arguably marring the park landscape, they provide accessibility to the user. This can best be summed up by Mission 66’s guiding principle: “the parks belong to the people, and they have a right to use them” and that “redevelopment and the spread of visitor use both geographically and seasonally, would make it possible” (Carr 106). The Park Service allows the public to benefit however each individual may choose, while concurrently allowing for nature’s continuing dominance.

From a political stance, the National Park serves as the primary natural preservation agency. The National Park System of the United States comprises 384 areas covering more than 83 million acres in 49 States, the District of Columbia, American Samoa, Guam, Puerto Rico, Saipan, and the Virgin Islands. These areas are of such national significance as to “justify special recognition and protection in accordance with various acts of Congress” (National Park System). The service’s actions and values contribute to many other groups ranging from preservation groups, scientific groups, and native peoples cultures. Design and development in parks do not only affect the immediate vicinity of the construction, but also other institutions and the park service as a whole. If certain values are not protected within one park, then that allows other parks in the service to decrease in integrity. But with the protection of these immense spaces, organizations other than those directly linked to the Department of the Interior can benefit simultaneously.

El Tovar
Visitor Centers serve as a sign that the park service and advocates are passionate about the protection and visitation of the lands. As far as direct benefits, the National Park Service does not make a huge income because of the centers. Most monetary funds are collected via vehicle entry fees. Souvenirs do play a hefty role financially, but camping and backcountry permits are the only ways the landscapes actually bring in revenue. The National Park Service was not created to make money for the government. Visitors pay fees to ensure the protection and dedication of these lands for generations to come.

New evaluations in park design have increased visitor efficiency and natural conservation. With more and more people venturing into the National Parks, it is essential that architecture attempt to solve the social problems that visitors carry into the parks. While it is the major goal of the park service to provide lands for people, the sites are nothing if people do not respect and appreciate the features. Visitor centers along with other areas of park development have become a transitional state between societal norms and wilderness. Once comfort is reached in the middle ground, visitors are encouraged to ride off into the wild and explore. Through intelligent design and site positioning, visitor centers will serve populations while preserving the sites the park service was created to protect.
Glacier Basin Site Analysis
Strategy/Location/Elements
Rocky Mountain National Park

The specific site conditions of Glacier Basin share the same language as the majority of the park, openness and awe. This part of the park really opens up to magnificent views in all directions. The site is among the lower areas of the park but is surrounded by some of the most significant towering peaks. It is not only the neighboring mountains that contribute to the open language, but also the seemingly random quasi-rectangular field at the entrance of the campground. The only existing vehicular entrance crosses Glacier Creek before encountering a barrier of trees, before opening entirely to the field, displaying views of Flattop Mountain and its neighbors. Unfortunately, the open language is further felt because of the eradication of infected Lodgepole pine trees due to Mountain Pine Beetle infestation. The removal of this section of forest is not ideal, but it contributes to the dwarfing feeling of the mountains and must be dealt with. It is impossible not to be in awe at the site’s surroundings.
The neighboring peaks rise 4,000 feet higher than the elevation of the flat campground, dominating everything in sight. The open language is not felt as strongly in every part of the site, as the views to the north contain a much softer topographical change as well as a closer proximity to the forest, making the scale more welcoming. The north section still has a lot of uninfected pine trees, which works with the simpler land features to portray a less imposing feeling. When discussing the existing location of the campground, it is obvious that the planning was in direct response to the views.
Ecosystem

Animals, Trees, Shrubs

Due to the elevation of the site, Glacier Basin is categorized as a Montane Ecosystem, meaning it lies between approximately 5,600 and 9,500 feet. Southern slopes usually have open patches of large pine trees, mostly ponderosa, with grasses and small shrubs growing in between widely spaced trees. Shrubs that grow here include the Rocky Mountain juniper, big sage, and wax currant. The north facing slopes of this ecosystem escape some of the sun, therefore holding more water and in turn producing tall, slender, compacted bunches of trees. Because of the high moisture content on the slopes, aspens and evergreens thrive. Evergreens in this part of the park include Douglas fir, Lodgepole pine, Ponderosa pine, with the occasional blue spruce or Engelmann spruce. In addition to these plants, animals make up a large identity of this ecosystem. Some mammal animal residents include bighorn sheep, elk, black bear, deer mouse, moose, mountain lion, and mule deer.
Site

Site Sections

Unlike the rest of the park’s noteworthy elevation changes and dramatic rocky peaks, the majority of this site is completely flat. There is no slowly increasing slope nor any abrupt changes. As the forest takes over, the elevation rises and becomes the neighboring mountains, but as far as the current site of Glacier Basin is concerned only the edges see any change. The only change in elevation that is currently part of the site program is the entry road from Bear Lake Road, and this is only a small grade change. The majority of the campground is a flat-bottomed depression adjacent to the dominating mountains.
Vehicular Access

Car vs Shuttle

Glacier Basin is accessible by a single entrance on Bear Lake Road. Although there are several trails that lead to the campground, the majority of visitors enter via private vehicle or park shuttle. There are two important shuttle stops within walking distance of the site. The first is adjacent to the ranger station within the campground. This shuttle takes visitors north to several trailheads and ultimately Moraine Park. Another shuttle, located across Bear Lake Road, transports visitors to Beirstadt Lake and the Bear Lake region. Glacier Basin serves as a hub for this transportation system considering these are the only two routes in the park. This offers a great opportunity for visitors to leave their cars behind while limiting traffic and congestion.

Shuttle Bus at Park and Ride

Adjacency to Bear Lake Recreation
Climate

Basic Attributes for the Rocky Mountain Region

This climate region includes the majority of the Rocky Mountains and is situated above an elevation of 7,000 feet. The mostly cool climate is no stranger to heavy loads of snowfall that can remain on the ground for half the year. Temperature, snow, wind, and light can vary drastically depending on the slope’s height and orientation. Although the temperature requires heating for most of the year, the high elevation allows sunshine to be available for more than 60% of winter daylight hours. Design priorities revolve around keeping heat in while protecting from the cold temperatures and winds. Control is essential considering the natural climate is only comfortable about 8% of the year (Lechner 90).
Climate

Wind

The wind for this particular site can be rather fierce. Winds come down from the collection of peaks surrounding Bear Lake and pick up speed as they continue through the basin. Although winds are not constant, there is definitely a possibility for heavy and intense speeds at all times. Due to the eradication of the pine tress, the winds from the southwest do not have much material that will slow their speed; unlike the concentration of trees on the east and west that do a good job hampering the intensity. Depending on the particular area of the site and the proximity to the forest, the difference in wind speed can be quite dramatic. The wind in response to the newly cleared field is a large reason why the campground has become uncomfortable. Winds have the ability to destroy tents during the mildest of storms because there is nothing to slow them down. Although the tables shown give averages in terms of velocity and direction, because of the extremely mountainous surroundings, the wind can always be unpredictable.
Climate

Temperature and Light

It is no mystery that Colorado is famous for its winters, but it has a surprisingly temperate and comfortable summer season. The short tourist season takes advantage of temperatures averaging in the high sixties through the mid seventies. Although the daytime hours in the short summer season are quite pleasant, the night temperatures can become much colder, especially with the addition of the wind. The neighboring mountains do not have an adverse effect on this natural lighting for this location, fortunately the mountains to the south are far enough away to not cast large shadows. Aesthetic benefits of the mountains to the south are the sunrise and sunset, both spectacular portrayals of juxtaposition easily viewed from anywhere on the site. Natural light and heat gain must be harvested in the winter months, and the large southern exposure of the site allows for efficient gain opportunities. Heat storage is essential for the short winter days, but summer will not have to utilize as much storage.
Climate

Cold and Snow

Rocky Mountain National Park receives its fair share of snow, enough to close the majority of the park from late October through most of May. The only major road open during this off-season is Bear Lake Road, making Glacier Basin and the Bear Lake recreation area the main attractions. Although it is the only significant route that is plowed in the winter, the thoroughfare is still subject to unpredictable and hazardous conditions. Because of the lower elevation of Glacier Basin, snowfall is among the lowest in the park. The accessibility of this region spurs a great demand for winter recreational opportunities. Furthermore this area is within a rather short distance of Estes Park, the main center for winter accommodations.

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Site History

**Abner Sprague**

The eastern side of Rocky Mountain National Park was formerly the lands of early homesteaders, specifically significant to this site, Abner Sprague. He and his father first settled here in 1875, acquiring it from the Earl of Dunhaven. Their land stretched from nearby Moraine Park to present day Sprague Lake, just south of the Glacier Basin Campground. Sprague situated several tourist cabins on the site as he led multi-day camp trips from his land. The National Park Service purchased his land and buildings by 1958 and re-planned them as part of the Mission 66 program. Most of his cabins were destroyed by 1967 and his fields replanted with native vegetation in hope to rejuvenate a neighboring wetland. Although his main residence at Moraine Park still exists today, the majority of structures were declared not important to the park story and were destroyed.
Recent Changes

**Mountain Pine Beetle**

The campground was shut down in 2009 for the removal of infected Lodgepole pine trees due to their danger of falling and possibly injuring visitors, especially from the high wind that frequents Glacier Basin. An insecticide was applied to approximately 5,000 “high value” trees throughout the park, mostly on the east side. In order to be effective, this spraying must be reapplied annually. The clearing of dead trees has affected the site in terms of sunlight exposure, wind, privacy, and wildlife. A campground is designed to fit in between nature with minimal open spaces, instead a new large open field currently dominates the campground, producing no privacy for neighboring campers, as well as no shade at all for three of the campground’s five loops. Loops A and B have been kept intact, but loops C, D, and the group camping section are totally clear-cut. The wind is also a large factor that has been altered. Without any trees to protect tents, campsites get pummeled all night by winds flowing from Bear Lake.
Context
Views

The views from this site are perhaps its best attributes. The most epic view is to the southwest and looks directly onto the Bear Lake area. Several distinct peaks can be seen in this direction including Hallett Peak, Taylor Peak, Powell Peak, McHenry Peak, and one of the most popular days hikes, the summit of Flattop Mountain. In addition to these snow capped peaks sits the Tyndall and Andrews Glaciers. The juxtaposition of glaciers and 12,000+ high mountains makes this particular view one of the best in the park, definitely the best that is accessible year round. The view to the south houses a glimpse at the park’s highest point, Long’s Peak. The mountain’s 14,259 feet pinnacle is barely seen behind several 13,000+ peaks in the foreground. With some of the most spectacular views to the south, views to the west and north are composed of lush pine forests with more peaks looming in the background.
Context
Existing Structures
Built form in Glacier Basin is minimal, as it is in most national park campgrounds. Standard camp facilities are scattered throughout the site. Each loop has at least one comfort station, which includes a men’s and women’s restroom as well as an outdoor sink. The larger the loop, the more comfort stations. Currently there is about one station per ten campsites. An amphitheater sits to the west of the campsites, close to the ranger station. It is a simple form with concentric wood bleacher seating around a simple wood stage. Next to the ranger station is a simple wood shed in which firewood and water is sold. Directly adjacent to the ranger station sits a ranger’s residence, a year round lodging for one or two rangers in charge of patrolling the Bear Lake area.
Context
Park Structures
Context

Adjacent Recreational Opportunities

The Bear Lake corridor which leads to Glacier Basin is one of the best access points in the park for recreational activities including hiking, climbing, bicycling, and backcountry camping. Glacier Basin receives a lot of traffic both from those staying in the campground and those seeking adventure at Bear Lake. Several popular peak hikes begin at the campground, as well as several smaller trails leading to Bear Lake if visitors do not want to deal with their vehicles or the shuttle bus. This is a major benefit of staying this campground rather than Moraine Park or Aspenglen campgrounds. Unlike many other campgrounds in the National Park System, in which accommodations are situated in a village format, Glacier Basin sits somewhat far away from other built areas in the park. There is no grocery, no camp store, no eatery within walking distance. The proximity of Glacier Basin to trails and the forest makes it the most sought after accommodation in the park, especially for its winter recreation.
Site Strategies

**Department of the Interior Basics**

The National Park Service has several design guidelines that are always considered when altering a park or monument’s landscape, especially when creating new structures. These are considered when designing something as small as a trailhead or as large as a new visitor village, such as what is occurring in South Denali in Alaska. The most important of these guidelines are included below (United States pg 25).

Achieve harmony with the existing surroundings, both cultural and natural

Allow simplicity of functions to prevail, while respecting basic human needs of comfort, safety, and access

Balance long-term and short-term social and environmental benefits and costs

Minimize the disturbance of cultural resources, vegetation, geology, and natural water systems

Identify and environmentally safe means of onsite energy production and storage

Locate and orient structures to maximize passive energy technologies

Reuse previously disturbed areas where built areas have been abandoned

Avoid sensitive areas and remote areas that may cause visitors danger

Visual, cultural, and ecological capability

Maximize desired views of natural features and facilities that support all visitor experiences
The initial site strategies revolve around the preservation of the site. Views are essential so the large field at the entrance must be kept intact. Redevelopment is necessary in the form of tree replanting. This same practice was done at a much larger scale in Yellowstone after a devastating forest fire in 1988. Depending on building site, the campground will be changed significantly, but it would be best if Loops A and B were kept in place. The entry would be kept in place, but the middle section could be altered slightly to make access simpler while increasing the field space.
Site Strategy

Craig Thomas Discovery Center

The Craig Thomas Discovery Center in Grand Teton National Park uses several site techniques in which I am interested. The building is located on a reused site in between a sagebrush meadow and a riparian forest, a prime example of the ecosystem that creates the identity of the park. The location was chosen because of its unparalleled views of the three Tetons. The connection between site and building, enhanced by a three-story tall curtain wall, allows the form to almost vanish into the view. The center is also inserted into the forest in which it is meant to mimic, allowing it to be hidden from other viewpoints in the park. The site strategy in regards to parking is also effective. Parking is located somewhat far away from the entrance, forcing visitors to leave behind the civilization in which they came from in order to experience the building and the park.
Site Strategy

**Eielson Visitor Center**

The Eielson Visitor Center in Denali National Park uses site strategies in order to create an invisible building. The building uses the fragile tundra as a green roof as the form is inserted into the bluff. As a certified wilderness area, it is essential that the presence of people and civilization, especially a building, be as limited as possible. This allows the hillside to become the building, it is almost like the bluff itself has windows and viewing platforms rather than an actual building inside the slope. As the building to slope connection is perfected, the view of the Alaska Range and Mount McKinley takes over. The building is effectively lost in the immense view.
Possible Building Locations

*Insert, Focal Point, Re-use*
Building Possibilities
Diagonal, View Oriented Approach

This proposed building location allows for the maximizing of views and preservation of key campground elements. The amphitheater, loops A and B, and the group campsites will remain, but the ranger station and loop C will be lost. There is a possibility for a redesign of several campsites but several will be deleted. The building will not encroach on the untouched forest; instead it will utilize the newly cleared area while allowing for the replanting of pines around the structure. This will allow the forest to again take over the site, as well as enhance the existing trailheads that begin adjacent to the proposed center. This is the best possibility for this site.
Building Possibilities

Engage Hill Approach

The approach would attempt to work with the site’s subtle change in topography. In this area, Emerald Mountain begins to increase in slope and there is a chance that the building could slide into the landscape, much like the Eielson Visitor Center in Alaska. However from this area views may be compromised, but building design could address this issue. This approach would also allow for easier parking possibilities and preservation of most of the campground, significantly the amphitheater and ranger station. However, this area was not altered by the pine beetle eradication and would require significant site destruction.
Building Possibilities

Focal Point Approach

This approach’s strategy is very straightforward: focus on view. The orientation of this proposed site offers unblocked views of some of the best known peaks in the park. This location would also allow for the preservation of almost all the campsites, although some would have to be removed to allow space for parking. This location would work in unison with the existing roads, but small pieces of relocation would be ideal. If new parking were limited, with most parking placed in the existing park and ride across Bear Lake Road, the center would not be as obtrusive to the campground. Replanting of trees on the site would allow the center could be shielded from the program of the campground, providing more visitor privacy.
Conclusion

Glacier Basin provides a unique opportunity to build within Rocky Mountain National Park without interfering with or destroying essential natural elements. The site has a rich history dating back to homesteaders, and today has become a jumping off point for visitors seeking mountain recreation. Due to the recent unfortunate deforestation from the Mountain Pine Beetle infestation, it is essential to attempt to redevelop this area into the lush forest it once was.

The infrastructure is built, the parking and accessibility are sufficient, and visitor passion for this area proves that the site must be fixed. Trees could simply be replanted, but the development of a site specific visitor center could enhance the Bear Lake experience without actually encroaching on Bear Lake. Several elements must be addressed: preservation, access, recreation, and view while considering the constraints of limited land destruction, conservation of the ecosystem, and protection of the existing campground. If these are intelligently addressed, there is a large opportunity for this area to become a major hub within the park. As the last populated area before venturing into the wilderness at Bear Lake, intelligent site design could either make or break this unique site.

By limiting site development and utilizing the existing layout, the original character of the site will remain intact while the building will enhance the experience. The National Park Service prides itself on building only for the benefit of the landscape, this project will work to fit into this driving factor. The center must serve as an element of the site rather than an intrusion.
Programming a Rocky Mountain Visitor Center
Spaces/Adjacencies/Activities
Introduction
How the Program Brings a Unique Visitor Experience

The program at the proposed Glacier Basin Visitor Center is very much like the program at many park visitor centers. Critical traditional spaces include a large exhibit hall, a theater, and a gift shop. New elements that will join the common visitor center program include a medic station, ranger headquarters, and backcountry registration office. It is nothing new to design an exhibit hall or a terrace overlooking a view, but it is the detail and design identity that makes each visitor center a unique park experience. Park structures that focus on their immediate surroundings offer a connection of built form and site, but the programmatic elements form the cohesive element that makes the relationship attainable. Each area will focus on the natural elements that make the park an experience to be sought. Exhibits and theater presentations will relate to geology, ecosystem, and recreation, in particular each’s influence on the Rocky Mountain experience. The experience from the program is different for every park patron. Families will have a completely different experience that a backpacker set on climbing a mountain, just as the experience had by a park ranger will be nothing like that of the camper staying at the neighboring campground. The usefulness of the program also differs with the type of visitor. Many residents of Estes Park and Colorado will not use the center for exhibits and presentations, but rather for the backcountry office and food counter. Likewise, tourists from Ohio are not going to spend their limited time in that park on a backcountry expedition, but rather for info on short hikes and exploration of the museum-like qualities of the exhibit hall. Winter visitors will also attain a vastly different experience than if they were to visit in during the crowded summer months, both in recreational possibilities and exhibit focus. Successful program design will ensure the center has year-round demand and functionality.
Activities

**Enter** – car, shuttle, foot traffic

**Shop** – gifts, food, equipment, bookstore

**Exhibit** – interactive, geology, history, technologically derived

**Learn** – ranger info, maps, books, exhibits

**Explore** – trailheads, hikes, trail descriptions, outdoor opportunities

**Rest** – sit, relax, rejuvenate

**View** – imagine, appreciate, revere

**Eat** – picnic, stop and go, recuperate

**Visit** – just a stop along the way, leave nothing permanent

**Watch** – theater, ranger presentations

**Camp** – tent, camper, winter cabins

**Lounge** – meet, enjoy, sit

**Store** – seasons, rentals

**Respond** – medical, search and rescue, emergency

Spaces

- Theater
- Lobby
- Exhibit Hall
- Camp Store
- Gift Shop
- Restroom
- Info Desk
- Backcountry Office
- Ranger Station
- Living Quarters
- Multipurpose Classroom
- Campground
- Medical Room
- Outfitters
- Storage
- Mechanical
- Viewing Terrace
The ranger experience begins at the ranger residence on site at Glacier Basin. The ranger grabs a thermos of coffee and a quick breakfast and walks into the center via employee entrance at the ranger station to begin his or her day. Upon opening the center at 8 am, the main entrance must be unlocked as well as assuring everything is in order to allow the hoards of visitors to experience the center. As the center opens, it will be the ranger’s job to assist park patrons, most likely from behind a central information desk or at the office. This is where information on adjacent activities such as trail locations, and scenic vistas will be provided. As the day continues, a bus of school children from the neighboring town of Estes Park comes in for a private tour and education session as part of a field trip. The ranger begins with a presentation in the multi purpose classroom about Bear Lake’s unique characteristics and identity within the park. After this short session and a stint in the exhibit hall, the ranger leads the children outside to a small loop trail that introduces the natural elements in which they learned about inside the center. The trail ends, the children hop back on the bus and relocate to meet another ranger at Bear Lake where they will continue their exploration. The ranger returns to the center and continues normal every day duties including reservations and check-ins for the campground and backcountry camper registration. In mid-afternoon, it is time for one of three presentations in the theater. The ranger is part of the show, introducing artifacts and props in order to produce a more effective and interesting presentation. As the seasons change, the duty of the ranger will also change. Snow brings different information on trail locations, recreational opportunities, and safety precautions, as well as different presentations in the theater and classroom. As the center closes at 9 p.m., everything is shut down and locked up. The ranger walks back to the adjacent residence and relaxes until it is time to do it again the next day.
Camper

The camper, whether it is by tent or RV, begins the visit at the campground check-in kiosk. He receives his site assignment as well as rules and regulations then drives off to look for the correct spot. Upon arrival at the site, it is discovered he forgot the stakes to secure his tent, crucial equipment considering the strong winds at the exposed site. Luckily the visitor center houses a camp store, the perfect place for a situation like this. He walks over to the center, enters the lobby, and continues into the store, eagerly searching for the stakes due to an ensuing storm. He finds his stakes, several varieties are offered, but he chooses the metal pack. He pays, and runs back to the campsite, stopping only momentarily to check on the storm coming over the mountains. He successfully anchors his tent down and grabs a deck of cards just in time as the storm begins overhead. While in his tent he realized how many interesting parts of the center he had to unfortunately pass up. He knows exactly where he will begin his next day.

Backpacker

Those seeking something extra from the national park experience often venture away from the roads and crowds and into the wilderness via multi-day backpacking excursions. Many campsites, accessible only by arduous hiking, are scattered throughout the park, all requiring registration and reservations. The backpacker starts by parking at the park and ride, then crossing Bear Lake Road. He surpasses the majority of the visitor center, making his way to the backcountry office entrance away from the main entrance. Backpackers are usually not interested in the built parts of the parks, their focus is on getting everything ready and venturing out into the wild. The backpacker has already made reservations online but has to pick up his permit in order to legally be allowed to stay in the designated campsites. The visit to the visitor center is short and sweet, right to the point. He grabs a copy of all the necessary maps and regulations, finishing off his visit to the structure. Depending on the hike, he will either start at the trail outside the center or take the shuttle to Bear Lake to get a head start on the excursion.
Children have a different experience than most visitors. Many do not have the amount of knowledge that adult visitors have, so there is a large opportunity for education through effective exhibits and information. As the child enters the facility, she is immediately attracted to the variety of colors and range of props in the exhibit hall and runs in leaving her parents behind. She is amazed at the amount of interactive exhibits and just starts playing with the digital screens and hands on exhibits without knowing she has the opportunity to learn from them. As her parents catch up with her, they offer assistance with the exhibits so she can gain knowledge and have fun simultaneously. They also see that the theater is having a movie and ranger presentation in an hour, so they have plenty of time to see every exhibit. She learns about how geology and glaciers have carved out the land, as well what kinds of animals visit the region. An announcement tells them that the show will begin in five minutes, so they line up outside the neighboring theater. The child is in awe as the show starts; she has never seen anything so awesome. As the movie end she runs out with anticipation about exploring the park. Her parents share her enthusiasm and they return to their car to explore the neighboring sites.
Most of Rocky Mountain National Park visitors are day tourists arriving in their own private vehicles. The park was designed to cater to these tourists’ needs, mostly by pushing all accommodations other than campsites outside the park in the neighboring towns of Grand and Estes Park. Visitors begin their day by leaving their hotel, most likely in Estes Park, Boulder, or Denver. The vehicular entrance fee is paid at the gate and cars make a crucial left turn heading towards Bear Lake. After a glance at the park map, it is decided that Bear Lake would be a perfect place for a hike to start the day. The tourist sees there is a brand new visitor center located at the Glacier Basin campground, a mere five miles from the trailhead at Bear Lake. This is an obvious must see attraction and the best place to find the perfect trail for the family expedition. The family makes their way from the small parking lot at the visitor center or at the park and ride lot across Bear Lake road and walk to the center. As they exit their vehicle, they are forced to admire the fantastic views to the south around Bear Lake, a preview of their upcoming hike. They do not want to spend their entire day at the center, just a quick stop for some trail information and a small trot around the exhibits. The first stop is the info desk where they grab a pamphlet of the trails at Bear Lake, but to ensure a good trip they ask the ranger what is the best bet for good views, a moderate length, and one that is not too strenuous. A trail is chosen, everything is set for the hike, but they stroll through the exhibits to gain a greater appreciation for the park. They decide to pass on the presentation in the theater because they need to make the most of their one day adventure. They leave the center, but also decide to leave their vehicle as well, taking the shuttle to Bear Lake instead.
Many visitors stay for several days in order to get the fullest Rocky Mountain experience. Most of the best hikes and excursions take several hours, the majority requiring at least a half-day to complete. The Bear Lake region houses the trailheads to several of the most popular day hikes, namely Flattop Mountain and the Loch. The hiker first stops in the visitor center to grab some information and to decide which hike is best. Along with a recommendation by the ranger to take on the challenge of Flattop Mountain, he takes a map as well as a pamphlet on hiking in bear country. He takes the shuttle to Bear Lake and after 4.4 miles of strenuous hiking, he looks down on the park from the peak of the mountain. Exhausted from his hike, he takes the shuttle back to the visitor center to grab a drink and a sandwich at the food counter. He takes the time to admire the exhibit hall, especially the exhibit focusing on the history of hiking at Bear Lake. The satisfying experience of the hike and information from the exhibits persuades him to buy a memento in which to remember the journey. At the gift shop he buys a book on Rocky Mountain trails and a small patch to add to his pack. His journey is finished and he returns to his car and leaves the park.
Space Standards

Exhibit Space

The exhibit space will work to engage the visitor into the interesting elements of the area. There will be a focus on the mountains and surrounding water elements including Glacier Creek, Bear Lake, and several alpine lakes reachable via Bear Lake. The space will be a large open space with moveable and changeable exhibits based on the season. The main summer tourist season will highlight the elements including family aspects, peak hikes, and various hiking and backcountry possibilities while the winter will showcase the unique alpine conditions in relation to winter hiking and recreation. This area’s winter and summer months offer entirely unique experiences and it is important for the exhibits to transform along with the site. The exhibits themselves will have individual foci, examples include geology, animal life, and history of the area, but they can always be altered or rearranged. The exhibits must move away from the dull two-dimensional maps and photos of Mission 66. Technology and interaction are then most important characteristics essential to the success of this space. Spacing of the individual exhibits must be spaced out so there is a meandering, individually set progression through the exhibits. There will be no set path in which to explore this space, but passages will change in width to channel use. This space will abut the theater and lobby, creating a combined large education space.
Lobby

The lobby must involve an airlock to protect the interior environment from the extreme outdoor environment. This will also serve as a central meeting point in which all other program could radiate or align with. This space will serve as hub in which visitors will be able to move about unimpeded to other areas of the building. The lobby will house a large exhibit, must likely a relief model highlighting the areas associated to Glacier Basin and Bear Lake rather than the entirety of the park. This will allow visitors to not be overwhelmed by the recreational opportunities outside of this region. This will be especially useful in showcasing winter recreational possibilities. With the addition of a map to highlight winter possibilities, a stone hearth will welcome hikers returning from a snowy excursion. A variety of seating will further entice visitors to stay and relax until they are ready to venture out again. The space will offer personal assistance as well as assistance through brochures and pamphlets. Signage will ensure circulation clarity for incoming patrons.

Classroom

The classroom will serve as a multifunctional educational space. It will have the ability to split into two separate spaces, as well as the ability to house several smaller breakout groups. Storage will be necessary for chairs, desks, and other furniture. The room will be adjacent to the exhibit hall for multi-spatial education and lectures. The outdoors will be directly accessible from the classroom for effective outdoor teaching and examples. A small kitchenette will be positioned in the corner to allow for luncheons and other functions.
Theater

The theater must be able to adapt to large numbers of summer visitors while also working to not be a dominant experience for lower numbers of winter visitors. As the season changes, so too will the film or presentations. The material will not be a Ken Burns-esque overview of the park but instead be something to enhance the experience of the concentrated region. Example films or presentations could include the history of climbing the impressive neighboring peaks and the development of climbing over the years. Winter films will focus on avalanches and the majestic character of the Rockies during immense snowfall. The space must be used significantly due to its size. It is important for visitors to become engaged in whatever is presented here, a looping video every two hours will do nothing for the visitor experience. New elements, with three-dimensional or planetarium characteristics will work to separate this theater from the stale projections of other visitor centers. Furniture should be movable to allow for large groups to gather for purposes beyond the usual theater presentation. The summer season will use more seating where the winter season will obviously require less seating due to limited visitor rates. Seats should be comfortable to allow for relaxation and focus on the presentation. The seating will be enough for about 60 visitors at a time, about the same size as a full tour bus.
**Entry**

The entry should funnel visitors efficiently while following the natural contours and topography of the site. The entry will use a loop to eliminate unnecessary traffic and allow buses and shuttles to function properly. Parking will be limited and combined with the existing parking at the shuttle stop. New parking for disabled visitors will be shielded by vegetation. Emergency access will also be screened to limit visual impacts.

**Living**

Due to its remote location and possibility of extreme weather, several living quarters will be necessary to ensure safety and effective operations for the Glacier Basin area. Small accommodations will be necessary for two rangers responsible for patrolling both Glacier Basin and Bear Lake, especially during the winter, an on-site medic or search and rescue personnel, a sales associate responsible for the gift shop and camp store, and a salesperson responsible for renting and selling winter recreation equipment at the outfitting store. These accommodations will be very basic but must be able to endure the winter months. The necessities of this space include a sleeping area, kitchenette, bathroom, and small sitting or lounge area. These spaces will not be attached to the main visitor center but instead will be situated more into the forest to provide privacy and escape from their daily work schedule, most likely in close proximity to the existing campground.
Space Standards

Store

This space will house several separate areas: a camp store, a gift shop, and a food counter/café. This combination of spaces serves as the merchandise section. The camp store will contain campground essentials such as accessories, emergency equipment, fire starting materials, safety equipment, and a limited amount of food. The gift shop will contain park literature, souvenirs, and other mementos. The café will offer grab and go sandwiches and food, hot and cold beverages, and snacks for hikes. The space will have the ability to accommodate returning hikers, campers, and tourists of all types. A moderate amount of seating will be available for those wishing to stay and enjoy their food before heading out on a hike or drive.

Outfitters

The outfitting space will only be utilized during the winter months, which is approximately mid-November through May, and will serve as storage during the busy summer tourist season. Winter activities will include but not be limited to snowshoeing, cross-country skiing, and camping, and it is important for those visitors who may not own the necessary equipment to be able to rent or buy proper equipment. This will ensure both safety and functionality while achieving a complete Rocky Mountain winter experience.
The Craig Thomas Discovery Center was the first visitor center to take a new approach at exhibit planning and design. The building has an open plan, allowing the exhibit area to blend with the lobby, art gallery, information desk, and bookstore. This allows a free flowing kind of circulation where visitors can decide the order in which to experience elements of the center. The space itself is meant to be an extension of the forest outside. Large Douglas fir columns articulate the journey of venturing through nature in search for the information hidden on the three-dimensional exhibits. The exhibits themselves are very unique and clearly portray the identity of the Tetons. For example, a major section of the space is dedicated to the park’s mountaineering history. Early climbing artifacts like ropes and gear are juxtaposed with an artificial wall in which visitors can see the equipment in use. The exhibit traces the history from the first daredevils who attempted the dominant peaks to today’s newer extreme methods of risk taking. The space is mostly set up in rows, but the rows have interruptions to facilitate free circulation. A large curtain wall system ensures a connection between the view to the Tetons and the exhibits designed to honor them. Perimeter seating serves as a rest station as it moves visitors away from the busy attractions. Proximity to the theater creates cohesion between learning from reading and touching the exhibits and moving pictures from the theatrical presentation. It is through the intelligent juxtaposition of different educational exhibits with the neighboring spaces that makes the program of the Craig Thomas Discovery Center a successful design.
Design by Similar Space
Space by Standards
Auditorium / Theater

The theater is responsible for accommodating a large amount of visitors for films and live presentations. Half of the seats will be fixed, the other half interchangeable based on season and type of presentation. The seats will be wood contoured seat and back with wood armrests. Occupant load for fixed seating is based on seating length, one occupant per eighteen inches of seating length. Free standing seating requires 7 SF per occupant. A theater of 2,500 SF, 200 SF of which will be a stage, allows for an occupant load of 327 if the seating was all free standing. Because half the rows will be fixed and half unfixed, the occupant load will be 163 for the free standing, and fixed seating will allow for another 100 seats, bringing the total to 263. The floor will be sloped slightly to allow for a satisfying line of sight, also allowing for visitors in wheelchairs to have the same view as others. Lighting must include several varieties, front lighting, foot lighting, spot lighting, follow lights, beam light, and a projection room to control it all. The lights will allow the space to accommodate several different types of presentations. Acoustics in this space are very important for an enjoyable show. Noise criteria is recommended between NC-20 and NC-30 and a sound transmission class rating from STC 40 to STC 50. This is achievable by a type II vinyl wall covering and fabric acoustical wall panels for the interior finish. A plaster-plywood combination will be used on the ceiling to control reverberations.
Space by Trial Design
Multi-purpose Classroom

The driving design considerations of this space include effective splitting of the space, connection to the outside, and appropriate connection to the exhibits and theater. The classroom will utilize material outside, in the exhibit hall, and information from the theater in order to attain an overall educational experience. This room must also be able to accommodate travelling exhibits whether they be art displays or special seasonal displays, as well as meetings or conventions.
Qualitative Standards

Lobby

The lobby serves as the transition point from the wilderness character to the civilized structure of the visitor center. This space should have a clear welcoming feeling that will serve as a beacon to attract travelers. This will be the first shelter for weary hikers and car tourists. This space should relate directly to the site and provide a simple progression from exterior to interior as well as from interior to exterior. There should be no abrupt transformation, but instead a gradient of materials and submergence into a relaxed state.

Exhibit Space

The exhibit space must promote an open and welcoming feel in order to entice visitors to want to learn more. The more inviting the space, the more the public will show interest and explore the educational possibilities. Openness will be essential so there is a lax exploration of the material, much like the openness of the park itself. Exploring the variety of exhibits will not be unlike the exploring of the park. As park visitors follow their own path among the different educational features in this space, they must too decide how they will tackle the various neighboring geological spectacles. The mountains outside the center are simply naturally designed exhibits. The exhibit hall must work with the natural “exhibits” through building transparency and naturally weathering materials, both enhancing a desired multi-sensory experience.
**Theater**

The theater will work to express a sense of relaxation and total awe at what is being presented, whether it be a park video or a live presentation by a ranger. Here the park visitors will be formally educated, unlike in the exhibit hall where they are allowed to wander and experience whichever education they wish to receive. The presentation is merely a glimpse into what visitors are able to experience once they leave the building. Lighting will work directly with what is being presented. Controlled lighting will work to enhance live presentations rather than simply using spotlighting. The theater will use certain special effects ranging from surround sounds to wind and water elements to physical models to enhance the presentation.

**Viewing Space**

The viewing platform will receive perhaps the most attention. This space will work with the café to create a relaxed experience, allowing the enormous mountains to take over. It is in this space where the visitor leaves the civilized visitor center behind and escapes into the view. Tables and seating will allow for resting or having a post hike lunch or an early morning coffee before a hike. This will also serve as an outdoor meeting area and can assist with ranger presentations or outfitters demonstrations.
Square Footage Summary

<table>
<thead>
<tr>
<th>Facility</th>
<th>Square Feet</th>
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<tbody>
<tr>
<td>Theater</td>
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</tr>
<tr>
<td>Lobby</td>
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</tr>
<tr>
<td>Exhibit Hall</td>
<td>2,500 SF</td>
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<tr>
<td>Camp Store</td>
<td>800 SF</td>
</tr>
<tr>
<td>Gift Shop</td>
<td>1,200 SF</td>
</tr>
<tr>
<td>Restroom</td>
<td>800 SF</td>
</tr>
<tr>
<td>Info Desk</td>
<td>200 SF</td>
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<td>Backcountry Office</td>
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<td>Living Quarters</td>
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<td>Campground</td>
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<td>Medical Room</td>
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<tr>
<td>Food Counter/Cafe</td>
<td>800 SF</td>
</tr>
</tbody>
</table>

Built Facility Sub Total 15,100 SF
Grossing Factor 25% 3,775 SF
Total Facility 18,875 SF
Number of New Parking 30 Spaces

Eielson Floor Plan

First Floor
- Theater
- Exhibits
- Hot Spring Ecology
- Why Geysers Erupt
- Hot Water Treasures
- Scientific Research
- Young Scientist Program
- Resources
- Backstore

Old Faithful Floor Plan
Programmatic Adjacencies
The program is broken up into four distinct sections: services, living, education, and utilities. This way the experience can be broken up based on why the visitor is entering the building. If the visitor is not interested in hiking or camping they can focus on the educational spaces. Likewise, extreme backpackers most likely has no interest in interactive exhibits and a film on the dangers on hiking. Each visitor will have a different experience than every other, but they will all be able to use the facility in some way that will benefit the overall park experience.
Room Data

**Space Name:** Exhibit Hall  
**Area:** 2000-2500 SF  
**Occupancy:** 167  
**Space Height:** 20-25 ft

### Activity

The exhibit hall serves as the main spaces for interpretive education. Here the visitors have the opportunity to learn as they please. If they are interested in the geology of the park they will be able to concentrate their time on exhibits about the park’s natural phenomena. At the same time if other visitors have no interest in the particular geological origins of the park, they are able to decide to spend their time on other exhibits that may focus on the ecology or history of the area. There is no set in stone way to learn in the exhibit space, but rather a personal experience where exhibits cater to the preferences of individuals. Individuals will learn about everything they will need to know about the region’s basics before taking to the trails and wilderness themselves.

### Features

**Fenestration**- Ample number of large windows to allow solar gain and expansive views to the south  
**Floor Finish**- Textured concrete to emulate the exterior ground  
**Wall Finish**- Wood partitions, stone veneer, gypsum  
**Acoustical**- Space should not allow exhibits to compete with one another  
**Lighting**- Focal lighting for individual exhibits, but most lighting will be natural daylight

### System and Utility Requirements

**Ventilation**- Natural ventilation is the best choice for summer months. Controllable fenestration will allow for energy savings during these months, but intake and exhaust will be necessary during the winter when windows must remain closed for temperature reasons.

**Data**- Due to the different display pieces, internet connection is a must. Not only for the uploading of new programs and information for the actual exhibits, but also for visitors to research related topics.

**Temperature**- Summer in the park allows for windows to invite the outside air inside. Outdoor temperature in the summer is pleasant, but summer nights winter requires a decent amount of mechanical heating in order to achieve interior thermal comfort.

**Water**- Water features may be part of the room, depending on seasonal exhibits

**Electrical**- A decent amount of outlets will be needed to fuel the displays. An outlet every 20 feet, with the assistance of surge protectors and power adaptors will ensure exhibits function properly. Several stations will require more power than others, and some not at all.

**Security**- Doors from the space to the viewing deck must be able to lock and alarm to ensure protection of fragile and historical pieces.

### Furnishings and Equipment

Movable, interchangeable exhibit pods, seating along the perimeter, computer desks for additional research. Exhibits will change in style, number, and size with the season.
Room Data
Space Name: Theater
Area: 1,500
Occupancy: 100
Space Height: 15

Activity
The theater will hold the center’s presentations and showings. Live presentations by rangers as well as video productions will collaborate with neighboring exhibits to educate the public. The theater will not have looping video, but instead work to become more of an object theater that blends moving picture and audio with real artifacts and objects artistically through presentation. Surround sound, lighting design, and special effects will enhance the often dull visitor center movie experience. The theater will serve as a multi-sensory experience unlike any other.

Features
Fenestration- Window shades will be controlled based on what presentation is happening
Floor Finish- Carpet to control sound and ensure comfort
Wall Finish- Wood acoustic board
Acoustical- Space should ensure no echoes or reverberations and allow for good presentation sound quality
Lighting- Perimeter lighting along pathways to ensure safe circulation. When a presentation is over, the window shade will lift, allowing natural light to infiltrate the space

System and Utility Requirements
Ventilation- Mechanical ventilation
Audio Visual- High quality movie and surround sound, special effects.
Data- Needed for special presentations.
Temperature- Must be at a comfortable level because visitors will be sitting rather than walking around creating energy.
Water- None
Electrical- A collection of outlets will be needed to accommodate the necessary equipment for showings and presentations.
Security- The control booth must have locks to protect the expensive movie equipment.

Furnishings and Equipment
Projectors and surround sound equipment, drop down projection screen, small stage to assist with live presentations, moveable podiums to assist with object, both bolted and unfixed seating.

Socio-cultural Character
The space should be welcoming and promote relaxation with the submersion to the presentation. Lighting will create an intimate experience while promoting outdoor recreation. When the show begins, it is important that the show takes 100% of the audience’s attention. The theater and experience should feel like the visitor is right at home.
Room Data
Space Name: Lobby
Area: 2500 SF
Occupancy: 350
Space Height: 20 ft

Activity
The lobby serves as the entrance, meeting place, and gateway to the other spaces. This will be the first space visitors enter.

Features
Fenestration- Curtain wall system will provide a transparent entrance, blending the interior of the center with the natural environment outdoors
Floor Finish- Textured concrete to emulate the exterior ground, with carpet at the entrance to avoid wet or dirty floors
Wall Finish- Open environment leading to other spaces, no actual partitions
Acoustical- Ceiling to limit noise from entering other areas.
Lighting- Natural daylight will provide the majority of lights, minimal electrical lighting

System and Utility Requirements
Ventilation- Natural ventilation is the best choice for summer months. Controllable fenestration will allow for energy savings during these months, but intake and exhaust will be necessary during the winter when windows must remain closed for temperature reasons.
Audio Visual- none
Temperature- Summer in the park allows for windows to invite the outside air inside. Outdoor temperature in the summer is pleasant, but summer nights and winter requires a decent amount of mechanical heating in order to achieve interior thermal comfort.
Electrical- Not many are needed because the lobby is more of a large transitional space.
Security- The front doors must be lockable and latchable to ensure nobody enters during closed hours.

Furnishings and Equipment
Seating at the immediate entrance as well as lining the perimeter, located to ensure easy circulation. Signage will escort visitors to their desired space.

Socio-cultural Character
This space will work as a portal for the transition from exterior to interior. No abrupt changes will be made, but rather a simple progression from space to space. The space will attempt to enhance the immediate outdoor.
Room Data
Space Name: Classroom
Area: 1200 SF
Occupancy: 60
Space Height: 12 ft

Activity
This multipurpose room will be available for a variety of functions. It will have the versatility to split into halves, as well as the ability for people to breakout into smaller group sessions. The space will be able to house community events, travelling exhibits, artwork, and historical artifacts.

Features
Fenestration- Windows will offer transparency in order to communicate with the outside
Floor Finish- Textured concrete to emulate the exterior ground
Wall Finish- Wood veneer
Acoustical- Sound proof room divider, acoustic ceiling
Lighting- Daylighting will be used, but ceiling lights will provide additional lights

Furnishings and Equipment
Desks, chairs, tables, lecture podium, overhead projectors, all moveable and able to be placed in storage room.

System and Utility Requirements
Ventilation- Natural ventilation is the best choice for summer months. Controllable fenestration will allow for energy savings during these months, but intake and exhaust will be necessary during the winter when windows must remain closed for temperature reasons.
Audio Visual- Used for presentation, overhead projection.
Data- Internet connection will be used for presentations and lectures
Temperature- Summer in the park allows for windows to invite the outside air inside. Outdoor temperature in the summer is pleasant, but summer nights winter requires a decent amount of mechanical heating in order to achieve interior thermal comfort.
Water- Kitchenette
Electrical- An outlet every 20 feet, with the assistance of surge protectors and power adaptors will ensure functionality.
Security- Doors from the space to the outside must be able to lock and alarm.

Socio-cultural Character
The classroom will echo the standard feel of a school classroom, but the fenestration will connect the space to the forest outside. The classroom atmosphere will be changeable much like the furniture, shading and lighting will be able to change the mood of the space, depending on the activity being done.
Room Data
Space Name: Ranger Station/Backcountry Office
Area: 600 SF
Occupancy: 14
Space Height: 12 ft

Adjacent Spaces
Medic
Outside
Info Desk
Camp Store

Activity
The ranger station will serve as the office for rangers on duty. Filing, desk work, and the everyday business activities will occur here. This will also serve as the personal space where rangers can get a away from the busy exhibit hall and gift shop. This is also the space for backcountry registration and reservations, as well as checking in after a long hike.

Features
Fenestration: Windows will be limited due to the central location of the space
Floor Finish- Local wood and carpet
Wall Finish- Wood partitions, stone veneer, gypsum
Acoustical- No extra acoustical material is necessary
Lighting- Electrical lighting primarily because of office like setting

System and Utility Requirements
Ventilation- intake and exhaust will be necessary.
Audio Visual- none
Data- internet must be available for the everyday procedures of the rangers.
Temperature- Summer in the park allows for windows to invite the outside air inside. Outdoor temperature in the summer is pleasant, but summer nights winter requires a decent amount of mechanical heating in order to achieve interior thermal comfort.
Water- Drinking fountain and sink.
Electrical- Outlets for computers.
Security- Sensitive material must be protected by locked doors.

Furnishings and Equipment
Desks, filing cabinets, shelving, chairs, podium
Conclusion

Through theory, site, program, and precedent studies, designs in wild space have continued to progress. As wild spaces remain the major attractions of national parks, architecture has become an important portal allowing the transition from the normal, everyday lives of people to the immersion into natural elements. Buildings like Old Faithful Lodge have ensured a park architectural identity, but it is through the modern and contemporary considerations that architecture has become an essential part of America’s National Park experience. Design continues to reuse sites and resources while implementing new strategies and focuses. Parks are one of the few areas in which man is not in control, but rather a humble visitor destined to experience an individual awakening. Technology along with traditional values have evolved the once luxurious identity of architecture into a successful medium for knowledge and recreation. Individuality through design allows the identity and infrastructure of every park to progress, but the visitor will always have the fortune of experiencing the unique power of nature.
Bibliography


