Emerging Landscape



a cultural venue for steamboat springs, colorado

Benjamin J. Emanuel

EMERGING LANDSCAPE

A Cultural Venue For Steamboat Springs, Colorado

By

Benjamin James Emanuel



A thesis submitted in partial fulfillment of
the requirements for the degree

Of

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1

"THE POWER OF PLACE WILL BE REMARKABLE"

--ARISTOTLE--

Through understanding the essence of a place, an authentic response can be made for how to delineate space from the complexities of that place.

-edward casey, "the fate of place"-

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Abstract

Architecture as a reaction to place.

As current design and construction practices increasingly move toward the rapid production of “carbon copy” structures and homes, it is important that we begin raising question to the resulting loss of character and sense of place. The pertaining Thesis will explore ideas of structuring space through a cumulative and authentic response to place as a way of restoring the individual character each place potentially holds.

At the small scale of a quaint mountain community, one faced with the growing pains of resort suburbia, this thesis will explore methods of evaluating place to structure an authentic response that speaks of the community and enhances the land it occupies, a response that “fits.”

"The contemporary American landscape is magical and, at times, beautiful. The collision and layering of the pieces of today's landscape, like fragments of our perplexing and complex social self, are yielding a remarkable mosaic, one that speaks with clarity and power to the interwoven and complex relationships between our culture and the land." [1]

Today, however, it is rare that we see this "remarkable mosaic" of "interwoven relationships between our culture and the land". Instead, we mostly see healthy forests cleared to make way for fancy resorts, historic town centers abandoned in favor of new strip malls, and beautiful landscapes transformed into endless miles of nostalgic, repetitive suburbia. This problem does not lie in today's current design practices, but rather the lack of design in today's modern world. As a nation we have let the responsibility of structuring our future environment fall in the hands of those who are consumed by money and power and as a result we are left with a "fast food nation" whose habits of consumption and destruction will eventually leave us in despair.

To avoid such a fate, it is important that we first, as a nation recognize our current path and raise questions about the developmental methods we have long since been addicted to. Second, we must develop a response that looks at methods of establishing an architecture of context; an architecture that suits its environment rather than agitate it, one that stems from community rather than separate it, one that is "magical and at times beautiful." James Corner refers to a similar concept as "Measures of Fit." He describes the latter; "In the landscape, measures


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Stonehenge, England



Urqhart Castle, Scotland

Cultivation refers to everything man has done to the world since our first appearance.[4] For centuries man has transformed the landscape as a means of survival and comfort. Whether it be recording the change of the seasons, structuring a defense mechanism, establishing a place for dwelling or simply creating a place for celebration and worship, architecture has been man's way of adapting to the natural environment.

of fit structure a beneficial reciprocity between occupant and environment. Through a careful gauging on natural and cultural circumstance, human communities can adapt their landscapes, buildings, and programs of occupancy to construct a way of life that is in harmony with the ecology of their environment." [2] We often forget that with every building we create, every street we pave and every city we erect we generate a new landscape, and from that, a response from the community it encompasses. It is rare that we see an expanse of land designed and developed with the whole in mind. Instead it is usually developed, at best, one block at a time with very little thought to the contribution of the landscape it creates. We, architects and land planners, need to recognize that what we do at a small scale affects the large result and structure collaborative retaliation to the "standardized" methods.

So how does one generate a landscape that "fits"? Ferd Johns answers; "Perhaps it has to do with first discovering the real nature of the place and of the people, and then taking logical steps to amplify that special and often unique character." [3] Isn't that what architecture is really about? Revealing the "unique character" of the place and the people that occupy it.


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"The presence of Architecture – regardless of its self-contained character – inevitably creates a new landscape.

-Tadao Ando, 461

"The purpose of architecture is to provide an existential foothold, one which provides orientation in space and identification with the specific character of a place." [5]

As we approach a new era in architecture, one that is expected to redeem a century of abusive land development patterns, it is important that we keep this statement in mind. It highlights an essential aspect that has been missing from much of the development in the last century. "The identification with the specific character of a place;" an aspect of architecture that should be placed at the top of our so called "design checklists." These lists, which previously have held the age old notion of "form follows function" at the pinnacle, are essential to the process that we, designers, set for ourelselves as guidelines for structuring our future environment. For these guidelines, it is vital that we establish and maintain methods of enhancing our future world. It is not being suggested that we abandon conventional methods of design, in fact they are a crucial foundation for structuring new methods, rather it is being suggested that we simply restructure our methods around a fundamental response to place, an "authentic" response.


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"Discovering the architecture which the site itself is seeking"
-Tadao Ando, 461



Piazza Il Campo, Siena Italy



St. Peters Church, Rome Italy

"The architectural pursuit implies a responsibility to find and draw out a site's formal characteristics, along with its cultural traditions, climate, and natural environmental features, the city structure that forms its backdrop and the living patterns and age-old customs that people will carry into the future." [9]

The structure of place shall be one that invites people into its presence for the test of time. It should hold clues to the history of the people and should reveal the stories of their culture and time.

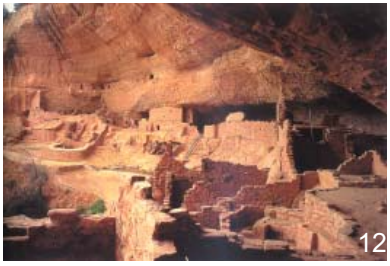
PLACE

First, it must be understood what is meant by the term *place*. *Place* refers to the totality of all things encompassing our being. It is defined by the customs we establish, the wilderness we cultivate and the environment we inhabit. Heidegger describes place as, "the very sense of beings disclosure and of the openness of the open in which truth is unconcealed. In the end, place figures as the setting for the post metaphysical event of appropriation." [6] This phenomena is described by Heidegger as *Phusis*; to bring that which holds truth into presence. Place in this sense refers more to understanding the spirit of all things, or the intangible, and is established by giving definition to those that are tangible.

Christian Norberg Shultz elaborates on Heidegger's early theories of place in a similar but mirrored manner. His view of place declares that the tangible or "concrete" things ultimately determine an environmental character. He states; "Place is presented as a given, spontaneously experienced totality. At the end it appears as structured world, illuminated by the analysis of the aspects of space and character." [7] The difference is Shultz implies that the character of a place is determined by all the things that generate that place, where-as Heidegger acknowledges that the character of all things are determined by the place which houses them. Both are getting at the same fundamental concept, that place is built upon our response to everything we are encompassed by. Edward Casey states; "Place is not something we come across as something we are simply in; it is what we precipitate by the conjoint action of directing and deserving--thus something to which our direct intervention gives rise." [8] This definition of place is perhaps the most relevant to the architectural profession because it accounts for the human interaction with the natural environment. It is here that place begins to take on meaning and establish a "character", for with out the human perception, there is no "character."



Capri, Italy



Mesa Verde, Colorado



Vitorchiano, Italy

"Emerging from the landscape"


14

"The temple's firm towering makes visible the invisible space of air."
– Christian Norberg-Shulz, 431

Authenticity is felt when you pass through a place and are in amusement by it's fundamental beauty. When you are left in silence, taken by its "awe", or left breathless, taken by it's undermining simplicity, you are in the presence of the *real.* The authentic has the power to evoke, in architecture, an emotion, and in life, an experience.


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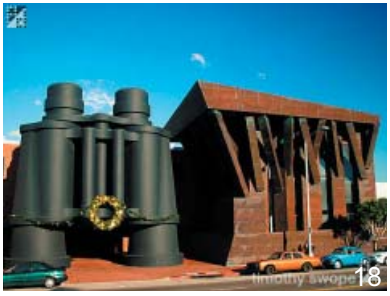
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AUTHENTICITY

Second, it must be understood what is meant by the term *authentic*. Authentic refers to the "direct aesthetic experience of the *real*." [10] Where the real refers to things both tangible and intangible which are true to their origin and non-representational of something else. While authenticity is most commonly referred to as describing the character of something, or better yet, some place, it is a rather difficult term to describe verbally. It is something that is instinctively felt by those in its presence. However, Michael Benedikt presents one of the most coherent descriptions of the "real" in his short book "For An Architecture of Reality." In his book he defines "the real," as it relates to architecture, as an "observable quality amenable to some level of conceptual formulation," [11] and he states that "realness" is best described by separating it into four components:

Presence
Significance
Materiality
Emptiness [12]

It should be noted that these four components are inevitably what constitute place as well, thus generating a direct correlation between place and authenticity.



"How history and places are transformed by the gloss of wishful and artful illusion, how image is revised and authenticity compromised to suite the taste of time."[13]

Much of Frank Ghery's work serves as an excellent example of the "unreal" or the "out of context." His moderately altered design templates, formulated to be simply droped in any location at any time, rarely exemplify the characteristics of the given place.



"A building with presence, for example, is not apologetic, but asserts itself as architecture, having a right to be there."

– Michael Benedikt, 34

"A Building with presence is not one that would wish to disappear, nor is it coy, silly, garbled, embarrassed, referential, nervous, joking, or illusionary- all attempts at getting away from being here now." [16]



"How buildings actually come to be and how they continue to be part of the lives of the people who dream them, draw them, build them, own them, and use them." P. 38

– Michael Benedikt, 34

"A building is given historical significance over and above its formal timeliness only if it brings to light the genuine history, human or natural, of its site and the circumstances of its construction." [17]

Presence

.

To bring into presence, is to invoke the senses.

Presence is about bringing the spirit of the place and people, the totality, to the surface. It's about revealing their true nature for all to view and experience. Something with presence is given "phusis." It contains the power of creating an emotional response. In the end, it defines a place, by stating that it is here, it has become the landscape. "It takes up its position as a new entity in the physical world." [14]


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Significance

Significance implies a purpose, a reason for being. Something with significance is created specifically for the people who utilize it. Thus it has an inherent character of the specified person or groups of persons. "Significant buildings, real buildings, are achieved rather than provided." [15] Take for example, a church, it is significant by the religion it represents and the people it houses and thus is given meaning from these characteristics. Or a bridge, it is significant for what it does by spanning the gap between here and there, providing the necessary connection between man and land, and thus generating a new landscape, a "connected" or "fitting" landscape.

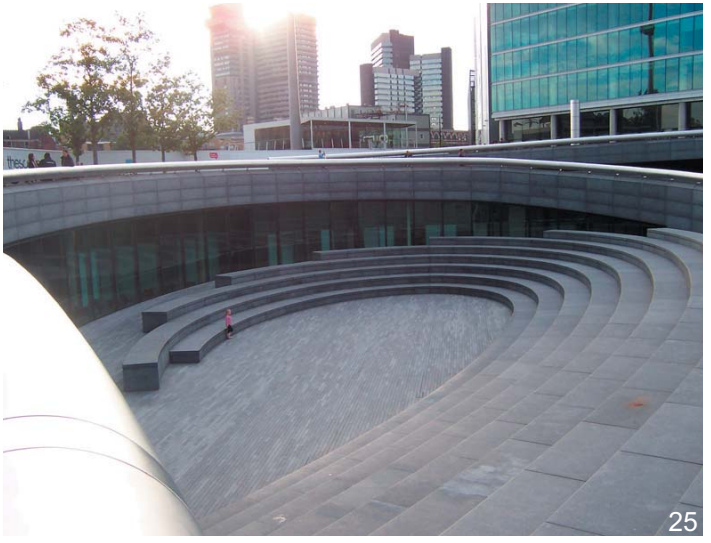

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“Landscape is the lens through which the contemporary city is represented and the material from which it is constructed.”[20]



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“Emptiness may resound without sound, may be filled by it’s potential to be filled, and make open what is complete.” [21]

“Emptiness is found in the space between”

– Michael Benedikt, 56

Materiality

Of the four, materiality is the only component which implies a direct correlation to the tangible things, things we can see, hear, and touch. For this reason it is most directly associated with the “realness” of things. Materiality is the one component in which character is best revealed. It has the ability to reveal the true nature and history of a place. “Part of our appreciating the materiality of an object has to do with our appreciation of the natural origin of its substance and the manufacturing or forming processes that the latter has evidently undergone.” [18]


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Emptiness

Emptiness, on the other hand, implies the greatest sense of the intangible, or rather the “spirit” of things, and refers more directly to the spatial qualities of places and things. Emptiness refers to the “potential” of something and in relation to architecture, some space. “Architecture with emptiness is thus always unfinished: if not literally, then by the space it makes and the potential it shows.” Emptiness suggests a “calling” to something, a desire to inhabit. It is found in “the pull of an empty room for us to enter and dwell there” [19] A space with emptiness presents the freedom to do with it what we please.


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When things fit, they not only go together physically but are proper for one another in an ethical sense, as if a mutual belonging is being fulfilled."

– James Corner, 121

RESPONSE

Thirdly, we must respond to our surroundings. We have been given two of the most profound matters; an infinite environment and the ability to do with it what we please. Time has proven that the latter is slowly eroding the prior and the time has come to structure a “resistive” design methodology; one that stands up for something other than formal expression, one that evaluates what is “best” rather than what is most “efficient.”

By acting resistively to our past paradigms we embrace new ideologies that are free from the restrictions brought on by today’s fast paced society. Subsequently, through an intuitive analysis of place we structure a logical response that is fitting of that place. James Corner elaborates further upon a method of “fitting” as; “Fittingness derives less from calculative accuracy and technical proficiencies than from refined instincts about place and culture, responding always to the play of contingency.” [19a] This illustrates that perhaps the best way to arrive at a fundamental truth about place, is to trust our accomplished intuition.

Thus, through an *intuitive* study of the local “vernacular,” we discover truths about the local environment and through a *logical* study of the “classical” typology, we gain a fundamental foundation for fresh ideologies with an indirect reference to the program of occupancy. Subsequently we are left with an “authentic” response to place; one that stems from the local history and stands for the local community, one that “fits” the regional environment. [19b]



Our ability to analyze what has been done in the past and respond in a manner that embraces the future is what inevitably constitutes a designer.



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"The Yampa Valley Community is dedicated to preserving protecting and enhancing our natural environment in a sustainable manner for future generations while balancing responsible public and private land use decisions. We value our land and its resources."

-The Nature Conservancy-

PHYSICAL / CULTURAL INVENTORY

In the heart of Yampa Valley, the quaint mountain community of Steamboat Springs, Colorado is a place renown for its pristine landscape, strong sense of community and love for the outdoors. Located in Northwestern Colorado, along the western ridge of the continental divide, Steamboat Springs' ten square miles lie in a valley shaped by the Yampa River flowing from the Flat Top Wilderness to the Green River in Dinosaur National Park. Nearly surrounded by National Forest and wilderness areas, Steamboat offers more in the way of outdoor recreation than any other community of its stature.

It's Steamboat's pristine mountain vistas and abundant wilderness that have shaped the community into what it is today; a community that thrives on recreation and whose identity has placed them as "one of the first eight cities to receive the 'Preserve America Community' designation form the White House." [22]

Today, Steamboat Springs is seen as a small historic and rather "authentic" town periled by the influx of new resort development brought on by the newer and larger Steamboat Ski Resort. As a result, the areas primary industry, which used to be farming and ranching, is now tourism. With an average 6,000 to 7,000 tourists in town at any given time and up to 11,000 during peak holiday seasons; residents are concerned that they are losing their community identity, an identity forever associated with a "small ranching community." While the majority of the residents recognize tourism as a good economic booster, it is the excess of second and third homeowners, multiplying at a near exponential rate, that have the community at concern. What concerns them is the fact that the fate of their


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Every winter the streets of downtown Steamboat Springs are filled with snow for the anual Winter Carnival, an event that gives the residents a chance to get together and celebrate the much anticipated winter. Activities include strolling, and the famed Ski Jouring event.


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Celebrating the 4th of July at Steamboat's famed Howelsen Hill.

Demographics

Population	9.815
Male	**5,425 (55%)**
Female	4,390 (45%)
Age	
under 15	1,510 (15%)
16-24	1,679 (17%)
25-44	**3,932 (40%)**
45-64	2,266 (23%)
over 65	428 (04%)
Ethnicity	
White	**9,509 (97%)**
African American	13 (0.1%)
American Indian	32 (0.3%)
Asian	49 (0.5%)
Hawaiin / Pacific Islander	10 (0.1%)
Other	72 (0.7%)
Two or more races	130 (1.3%)
Hispanic or Latino	307 (3.1%)

U.S. Census Bureau, 2000 census.

place lies in the hands of those with the most money, those who are not there year round, those who view Steamboat as a vacation get-a-way and thus base their decisions on what best suits their weeks away from work, rather than what best suits the people who spend their "work-a-day lives" there. In a recent survey conducted by the City of Steamboat Springs in 2002, the following comments were made about how life in Steamboat has gotten worse;

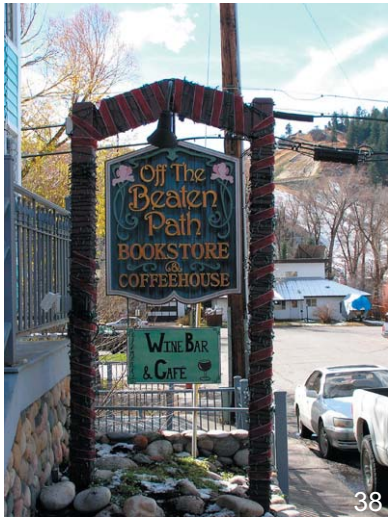
- "New comers with time and money seem to be making decisions for those of us trying to earn a living and pay our bills."
- "The influx of new people who bring their city 'high falutin' values to a small Mountain town. They build 5,000+ sq foot homes all for show." [23]

Although, not all is bad in the community of Steamboat. The majority of residents feel very strongly about their community and are optimistic about its future. In the same survey, when asked to identify the areas of most concern to the future of their community, the following conclusions were drawn: Ranked by "importance," the top five issues are:

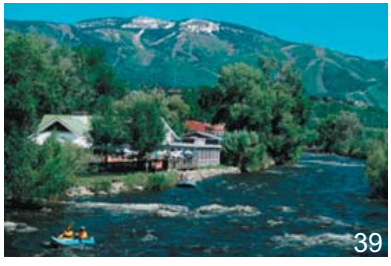
- The environment,
- Open space functioning as natural areas,
- Growth management,
- Construction and maintenance of public infrastructure, and
- Improving the sense of community. [23]

This provides evidence that the people of Steamboat care deeply and are quite active about their community and what is being done to it.


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While the history of Routt County dates back to the early 1800s, it was not untill 1914 that Steamboat Springs became famous for what it is today. With the introduction of ski jumping by Carl Howelsen, one the first official ski areas in Colorado, Howelsen Hill, was born. Since, the area commonly labeled “Ski Town, USA®,” has thrived as one of the nations strongest winter recreational communities, producing over 54 winter Olympians. [24].

However, Howelsen Hill’s mere 450’ vertical rise stands in stark comparison to the modern day ski area at Storm Mountain, with a veritcal rise of 3,668’ and 2,940 skiable acres.

PHYSICAL / CULTURAL HISTORY

Since the earliest settlements by the Yampatika Utes, ranching and hunting have been the primary industry of the area. In the late 1800's portions of the area gave way to the mining industry of gold, silver and coal, some of which are still apparent today. The area was first known as the Big Bend because it is here where the Yampa River makes its turn toward the west, the name Steamboat Springs stems from the French trappers mistaking the sound of a natural mineral spring for that of the chugging of a steamboat's engine.

Some general historical facts courtesy of Steamboat's Chamber of Commerce:

- James Crawford staked the first homestead in 1875
- City of Steamboat Springs was incorporated in 1900
- Hometown of 54 Winter Olympic athletes, more than any other town in the US
- Home to Howelsen Hill, Colorado's oldest ski area in continuous use (opened 1915)
- In the early 1900's, Steamboat Springs was the largest exporter of cattle in the Western United States
- Lincoln Avenue (US Highway 40), Steamboat Springs' main street was built wide enough to accommodate cattle drives
- Rodeo history dates back over 100 years
- Steamboat Springs' weekly summer rodeo was named the "Small Town Outdoor Rodeo of the Year" by the Pro Rodeo Cowboys Association in 2002
- Holds oldest annual winter carnival west of the Mississippi River
- Home to Perry Mansfield Performing Arts School & Camp (opened 1913) attended by such performing artist as Dustin Hoffman, Julie Harris and Agnes de Mille
- Ranching is one of the valley's mainstays. Cattle were introduced into the area around 1860
- There are more than 150 mineral springs in the area

-steamboatchamber.com (media)


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OVERVIEW

Upon first glance, Steamboat can be seen as “a streetscape caricature of rustic ‘Western movie’ architecture dominated by boutiques, ‘art’ galleries and souvenir shops.” [25] However, deeper investigation has revealed that Steamboat has an incredibly strong and diverse community, one with a grave concern for the environment and a deep love for the arts, in particular, music. Per season, Steamboat boasts over 60 musical concerts ranging from classical, jazz, country, rock, bluegrass, and holiday. The concerts provide the community with chances to escape their work lives and get together with family and friends for an afternoon of dancing and fun. Essentially, they assist in “bringing the community together.”

Upon investigating the community’s needed areas of improvement, the survey conducted in 2002 by the City of Steamboat Springs revealed the following “programs or services that would improve the quality of life in Steamboat.”

- “Emerald Mountain preservation-okay to raise taxes”
- “Improvement and management of Howelsen Hill trails. Convert airport into community recreation center.”
- “**Performance arts center which seats more than the high school**.”
- “Preservation of the Yampa River as the Yampa Valley's greatest natural resource.”
- “Sidewalk construction should be required on all developments (new & existing)”
- “**Emerald Mountain (Howelsen Hill) is the most important recreation to preserve**.”
- “Improve jumps at Howelson to allow year-around use for training.”
- “**More cultural support for the arts**.”

The apparent need for more “cultural enhancing” facilities is found evident here. Also, the emphasis on Howelsen Hill as the cultural and recreational center of Steamboat, suggest it would be a prime location for a cultural center.



A typical second or third home for Steamboat’s part time residents



Looking to the vernacular “provides cultural truths and aesthetic suprises”
-Ada Louise Huxtable, -



“Then there is the social solidifying of the community that comes, first from association in a common artistic purpose, and only slightly less so from the mere fact of recreation in crowds.”

-Sheldon Cheney, 9

DESIGN CHALLENGE

Given the diverse nature of Steamboat and its influx of new development, most of which has been conducted in a sprawling manner, it is the intent of this project to structure a “resistive” response to the community’s apparent needs and desires. To structure a response that is ordered around “keeping a fragile aesthetic ideology alive.” [26] To create a response that will strengthen the community identity by creating a cultural “center” in what is said to be the “heart” of Steamboat, that of Howelsen Hill.

Imagine if you will, “a small amphitheatre set against the grass and trees of the river bank that opens up to the vast panoramic landscape that frames the town. A band is playing there, surrounded by the tables and carts of thirty or so food vendors, fifteen hundred local residents are having lunch here, listening to the music, talking and being talked to, watching and being watched.” [27] This mental image was created by Albert Borgman in *Crossing the Post Modern Divide*, in which he describes how , in the case of a very similar town, Missoula, Montana, introducing a musical venue in a central and culturally significant part of town ultimately strengthens the community identity by avoiding a “long string of cars” and thus encouraging people to walk from and through the downtown area, ultimately strengthening local business.

The proposal for this project shall be a cultural venue for Steamboat Springs, Colorado. The venue’s primary function shall be an outdoor amphitheatre supported by an administration facility for aiding in the production of such venues as well as providing much needed office facilities for coordinating the many activities that take place at Howelsen Hill.



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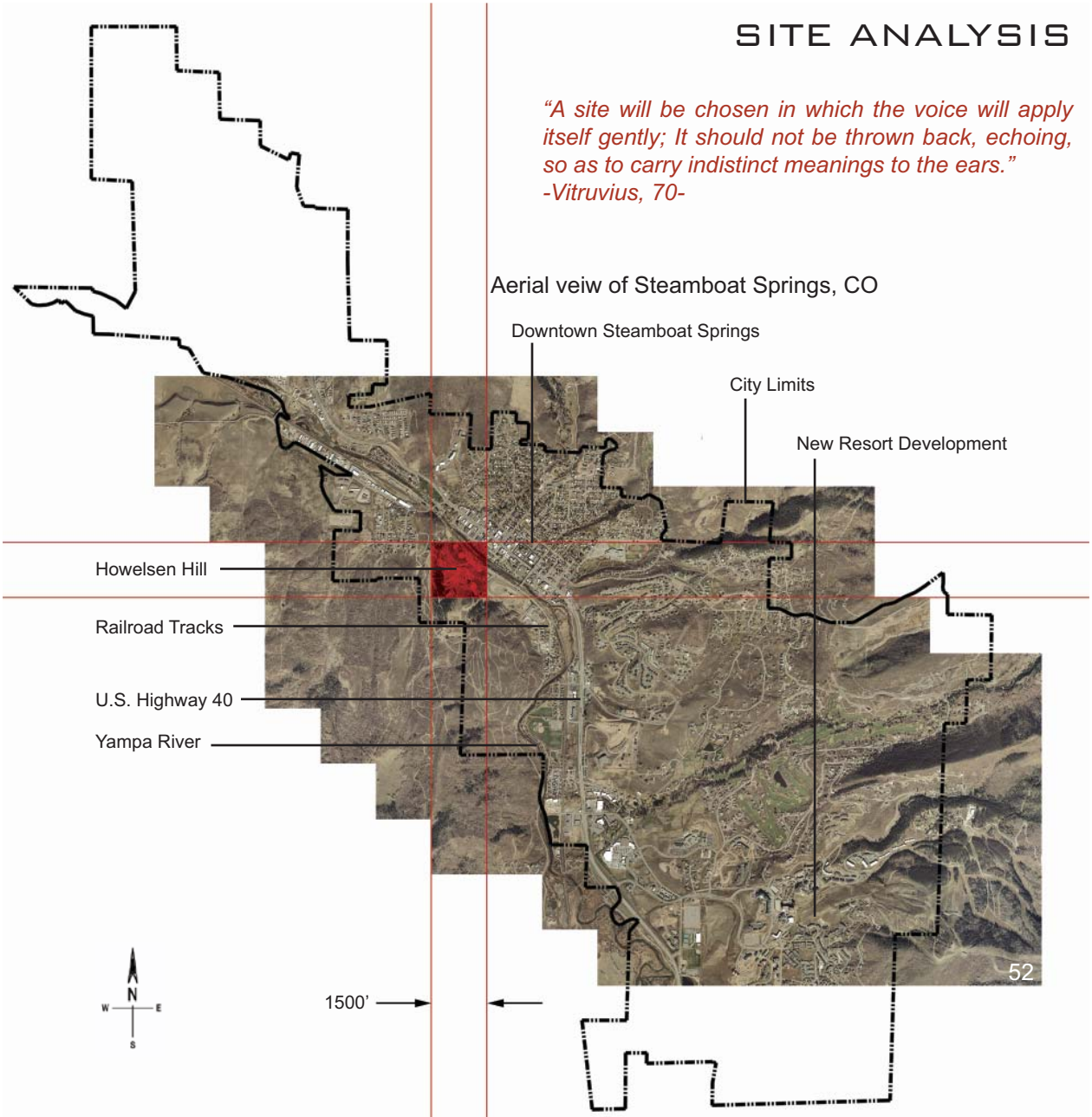

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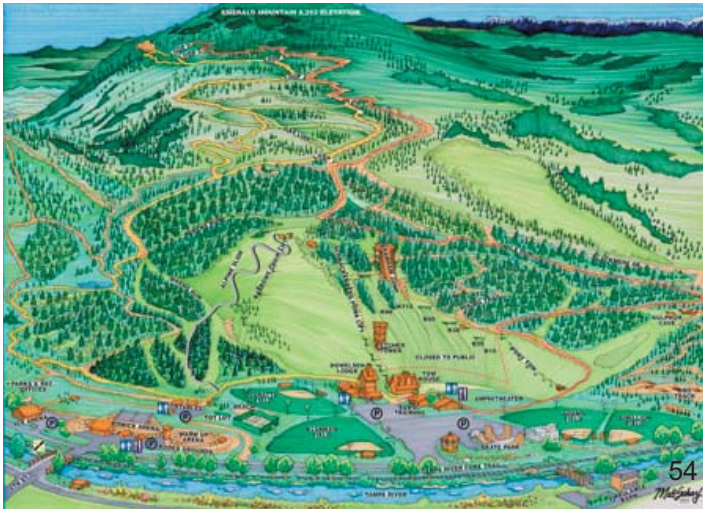
SITE ANALYSIS

"A site will be chosen in which the voice will apply itself gently; It should not be thrown back, echoing, so as to carry indistinct meanings to the ears."
-Vitruvius, 70-

Aerial veiw of Steamboat Springs, CO




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"Howelsen Hill's primary significance lies in its long term interrelationship with the residents of the surrounding area." -CSROHP p. 1

In the winter, when the area is generally covered by a five foot deep blanket of snow, Howelsen Hill's primary focus is skiing. With seven Olympic status ski jumps, the area serves as one of the nations best Olympic training facilities as well as a public ski facility, with it's most popular attraction being night skiing.


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In the summer however, Howelsen Hill boasts a wide array of recreational activities. Whether it be the weekly Pro-Rodeo Series, the Tripple Crown Softball Series tournament, a two week event held during late July, enjoying an afternoon concert or just simply out for a leisurely hike, there is always something going on.

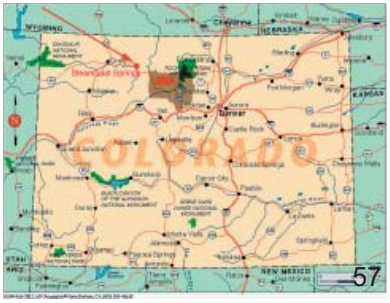

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CONTEXT

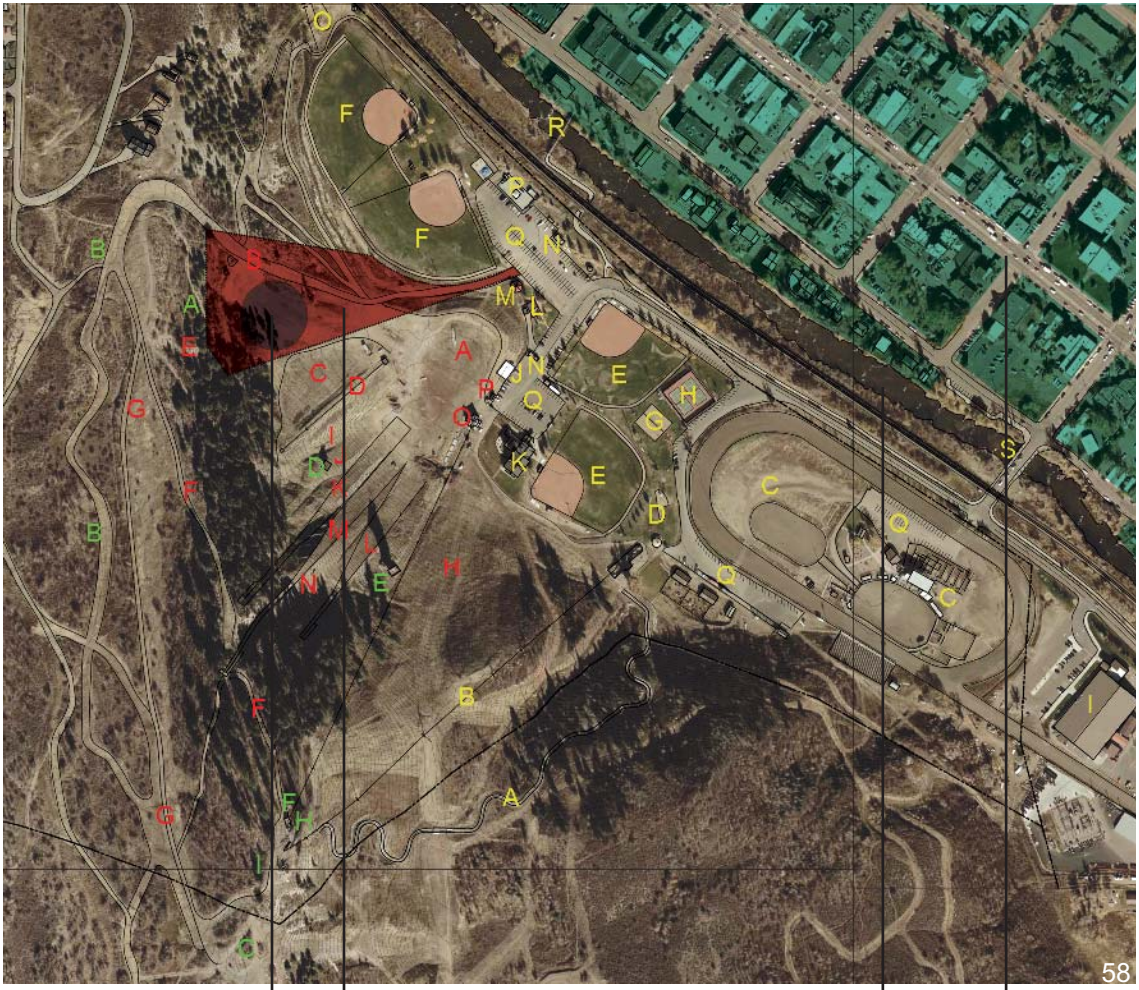
The primary site for this thesis is located with in Steamboat Springs' famed Howelsen Hill. Situated at the base of the 8,239 foot high Emerald Mountain and along the Yampa River, adjacent to Steamboats' historic downtown, Howelsen Hill serves as the community's cultural and recreational center. Founded in 1913 by Carl Howelsen, as the first official ski resort in Colorado, Howelsen Hill is a "highly visible geographic feature and an important cultural landscape." [28] Since its origination, its primary use has been recreational.

Rising from an elevation of 6,700' to nearly 7,160', the 460' hill stands firm against the town's grid oriented streets and provides an iconic scenery that residents take pride in daily. Given the goals of this project, it was important when selecting a site that it be centrally located with in the city and it have a strong cultural significance. Howelsen Hill suffices among any other in providing these qualities. It is with in walking distance of downtown, and has more than sufficient public transportation outlets.

Originally a site was chosen directly below the Ski Jumps where the Free Summer Concert Series currently set up temporary facilities. After close analysis, this location proved to be inadequate because it lacked the desired topography and competed with the ski jumping facilities. The chosen site now sits to the north of the ski jumps along Howelsen Hill's northern boundary. The site funnels westwardly away from the north parking lot toward the hill's progressive tree line. There is very little in the way of structures surrounding the immediate site, and the only building on the site is a small storage shed. The site's natural topography, starting flat and increasing in slope as you move west, is ideal for an amphitheatre.



Of the lower 48 states, Colorado is perhaps the most associated with the Rocky Mountains. It is known for its breathtaking scenery and abundance of outdoor recreational activities, skiing being the most popular. The small ranching community of Steamboat Springs serves as an ideal icon for the state. Year round, thousands of people from all over the world come to Steamboat to experience the awe of Colorado.


58
Site Boundary
Building Boundary
Yampa River
Highway 40

NEIGHBORHOOD CONTEXT

Historic Structures

- A Outrun Landing Area
- B Sulphur Cave Roadway
- C Sulphur Cave Run
- D Pony Lift Tow
- E White Chute Toboggan Run
- F Ridge Run
- G Mile Run Roadway/Ski Run
- H Alpine Slope
- I 20 Meter Ski Jump
- J 30 Meter Ski Jump
- K 50 Meter Ski Jump
- L 70 Meter Nordic Jump
- M 90 Meter Nordic Jump
- N Jump Access Trail
- O Howelsen Hill Tow House
- P Gabled Roof Storage Shed

Features with in the park:

- A Alpine Slide
- B Barrows Lift
- C Rodeo arena
- D Park
- E Athletic fields 1
- F Athletic fields 2
- G Volley ball court
- H Tennis court
- I Indoor ice rink
- J Parks Headquarters Building
- K Howelsen Hill Lodge
- L Rest rooms
- M Gazebo
- N Storage facility
- O BMX track
- P Skate park
- Q Parking lot
- R Pedestrian bridge
- S Vehicular bridge

Non-Historic Structures

- A Sulphur Cave Rroadway extension/horse and hiking trail
- B Mile Run hiking trail
- C Emerald View Run
- D Small Jumps Judge's Tower
- E Fetcher Tower
- F Poma lift/lower shack and landing/ upper shack/upper storage hut
- G Alpine downhill slalom run starting booth
- H Wren's Run storage hut

Light commercial/mixed use



Pedestrian Bridge



Gabled Roof Storage Shed



Parks Headquarters Building



Pony Lift Tow



Pedestrian Underpass

LEGAL

ZONING:

- Open Lands / Recreation
- Given local historic designation by the Colorado Historic Society
    - Nomination criteria
    - A: Property is associate with events that have made a significant contribution to history.
    - D: Property is of geographic importance.

OWNERSHIP

- Owned by City of Steamboat Springs

USE

- Recreation and Cultural / Outdoor Recreation

AREAS OF SIGNIFICANCE

- Social History
- Entertainment / Recreation
- Community Planning and Development
- Geography / Community Identity

-source: Colorado State Registry of Historic Properties.



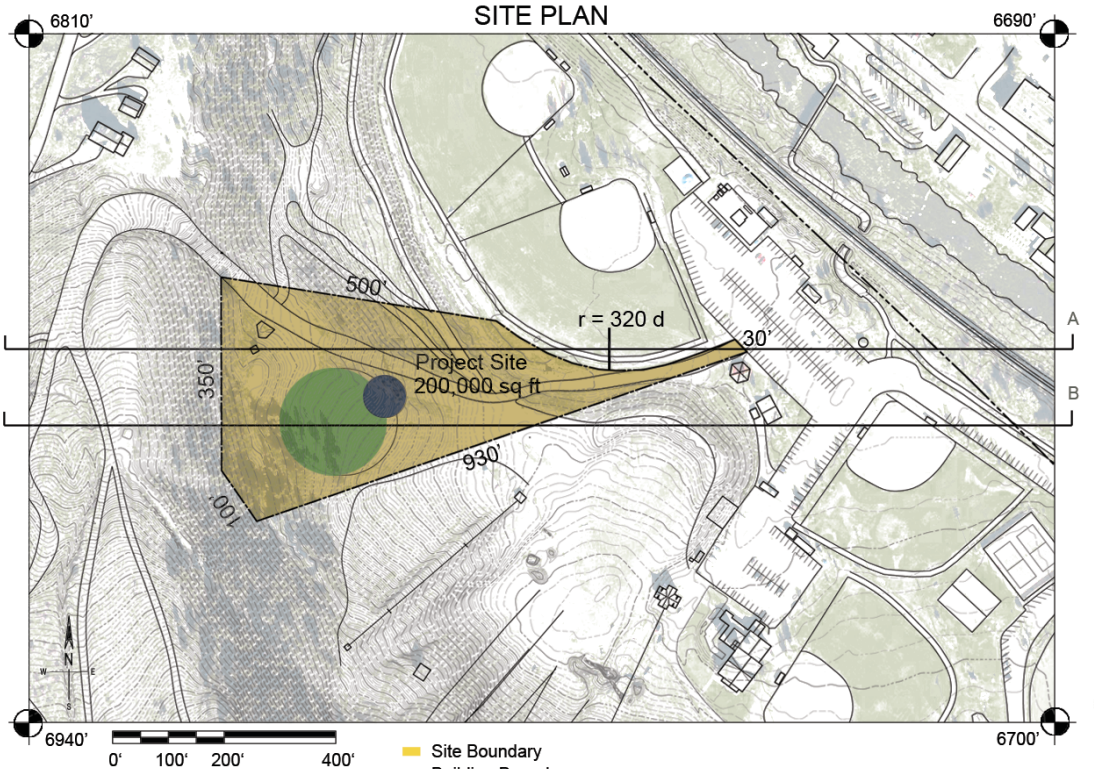
Howelsen Hill Lodge

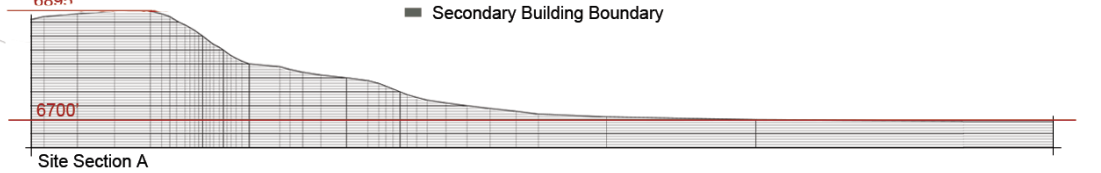


Howelsen Hill Tow House

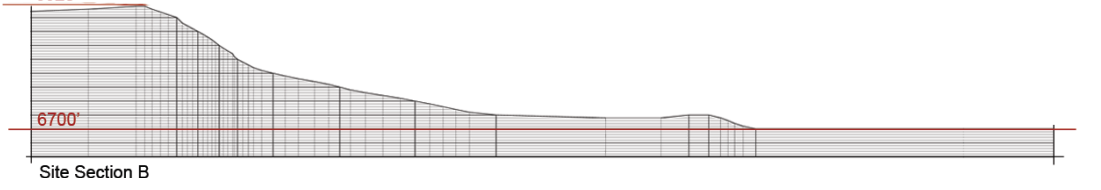


Fletcher Tower



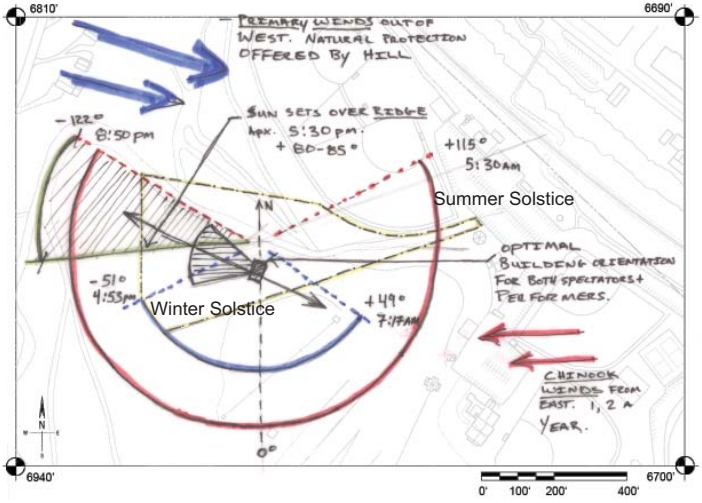


Site Section A

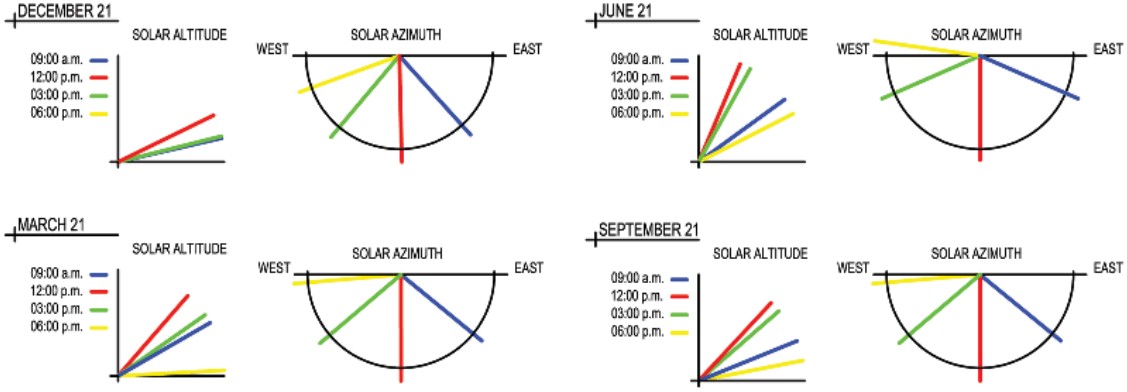


Site Section B

SENSORY CONDITIONS AND RESPONSE



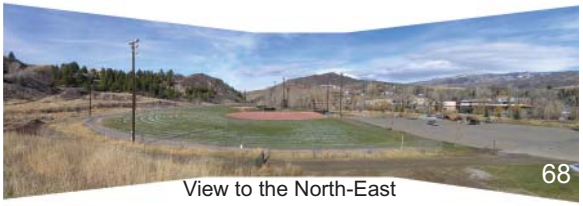
Given the topography of the site, and the relatively high tree line to the west, the sun sets behind the hill at about 5:30pm in the early summer and about 3:30pm in the late summer. Since the majority of the events are scheduled to occur in the early evening, and given the suns position when setting behind the hill, the optimal orientation of the venue would be along an axis tilted about 20 to 25 degrees from the East-West line. This orientation protects both the audience and performers from facing the setting sun while maintaining the optimal orientation offered by the natural conditions of the site as well as the optimal view orientation.





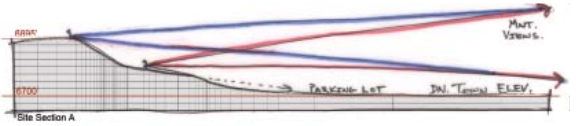
Panarama of Site

67



View to the North-East

68





View to the East

69



Veiw to the South-East

70



View to the South-West

14

Given the sites elevation above downtown, a rise of about 200 feet, a natural panorama spanning roughly 180 degrees of unobstructed views exists of both the town of Steamboat and the surrounding mountains. With the most significant, Mt. Werner or “Storm Mtn.,” being to the South East. Given the natural slope of the site, spectators shall be able to take full advantage of said views from nearly any position on the upper half of the site. Thus aiding in the selection of the building location.

For the same reason view corridors into the site exist on several east west oriented streets, as well as all along the river and pedestrian trail. The only major obstructions are displaced trees and if close to them, the small hills near the ball fields.

SENSORY

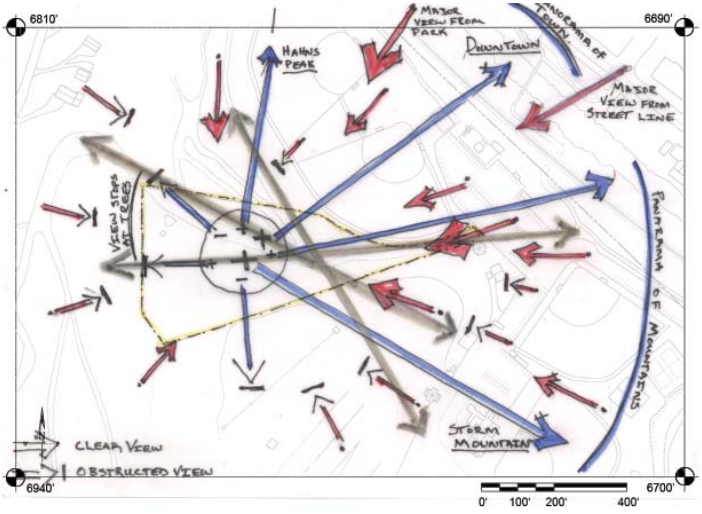




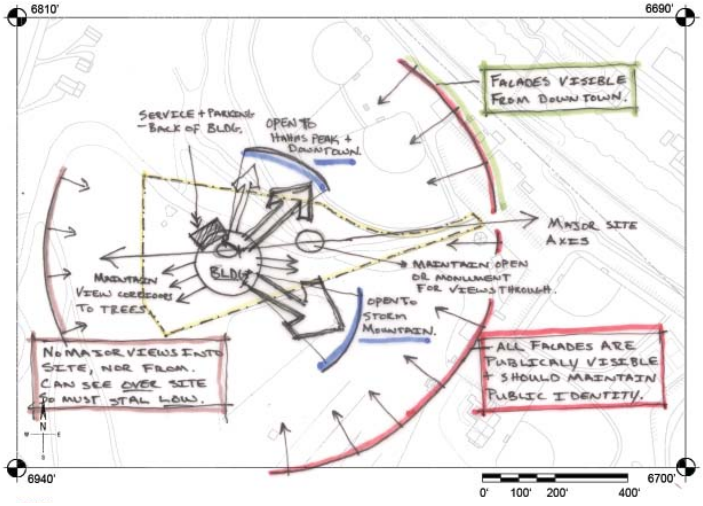




View Conditions



View Response





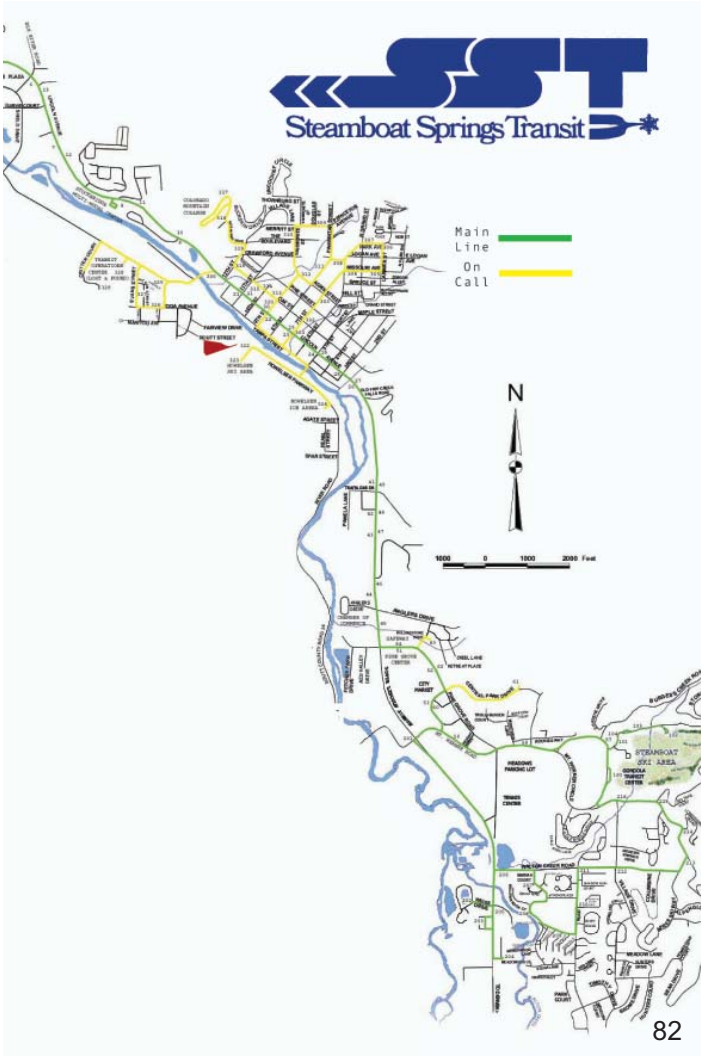


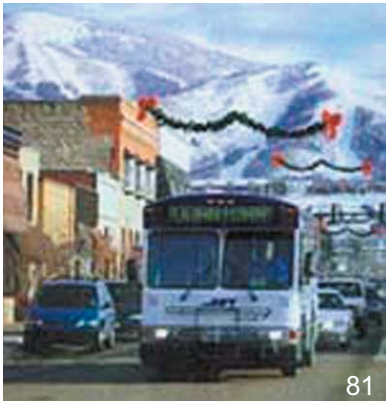








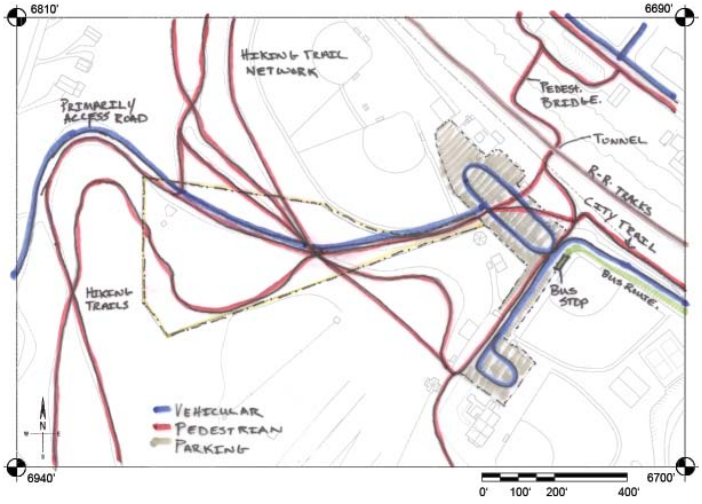

Steamboat Springs Transit
Main Line
On Call
N
1000 0 1000 2000 Feet
STEAMBOAT SKI AREA
82


81

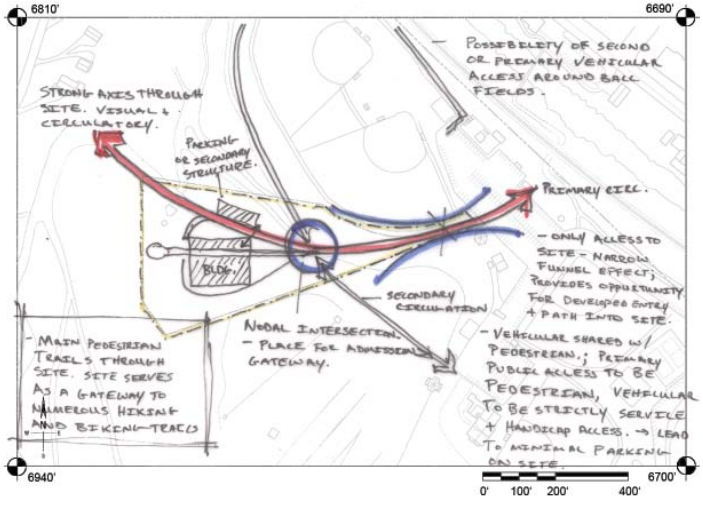

83

CIRCULATION

Conditions



Response



The only access to the general area is by a vehicular bridge off of fifth street and a pedestrian bridge that branches off of the 7 mile long city bike path just a few blocks north. For a city of such small scale, Steamboat offers an excellent public transportation system which delivers bus access directly to the immediate site location. The only major public access, both vehicular and pedestrian, to the immediate site is to the east, stemming from the North parking lot through a funnel like geographic feature between the Out-Run Landing area and the Northern baseball fields. However, this presents an excellent opportunity for establishing a strong entry feature and path into the site. Secondary vehicular access can be achieved from the North, either from around the ball fields or from the residential area to the Northwest, and secondary pedestrian access can be achieved from the South.





A natural back wall

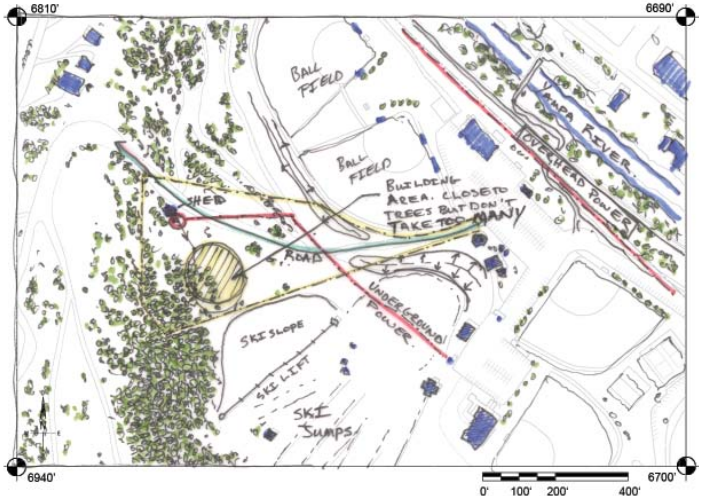




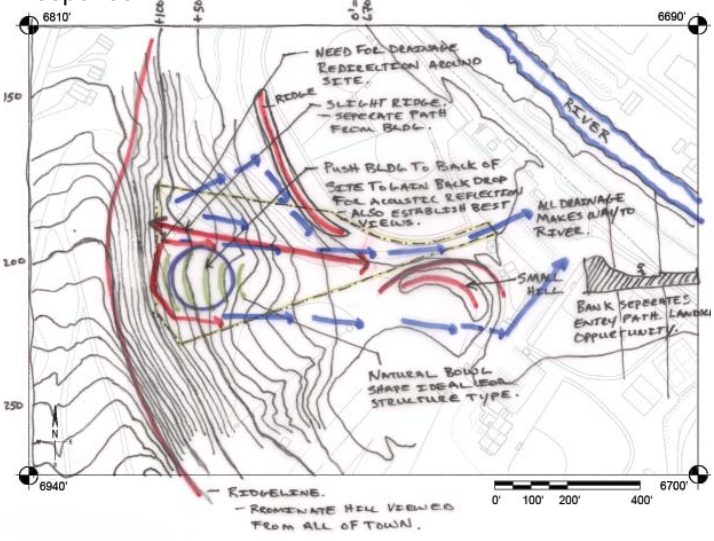


MAN MADE AND NATURAL FEATURES

Conditions

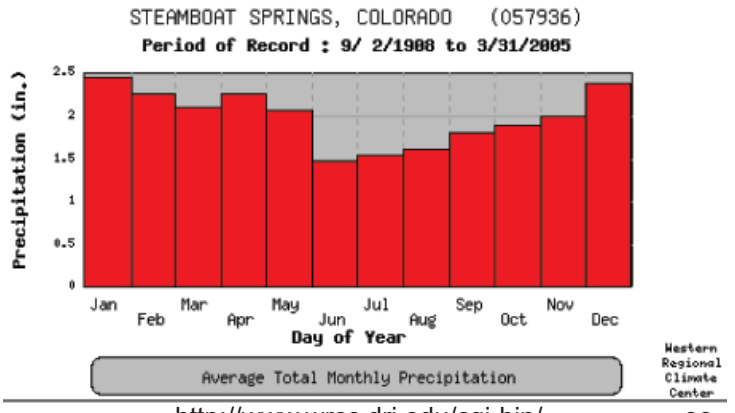


Response



There is very little in the way of man made structures, both on and immediately surrounding the site that would incfluence design. The only major influences are the baseball fields to the North, a dirt road that cuts through the site and a small storage shed adjacent to the local power supply. Underground utilities run in the North South direction toward the Eastern side of the site. A mature standing of Douglas Fir covers much of the north extending ridge along the Western slope of the site, and the majority of the lower slopes are free of large vegetation but have herbaceous ground cover.

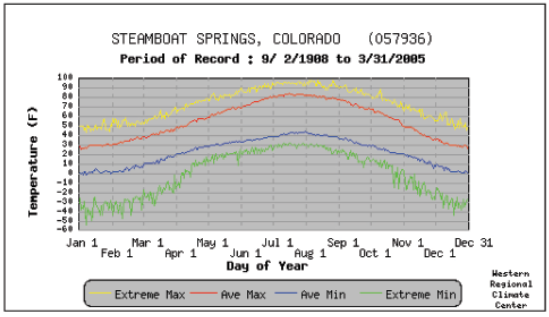
The site's natural topography is ideal for an amphitheater, it is relatively flat at its entrance and rises in slope as you move West, away form the city. The slope at the middle of the site is about 15 degrees, and at the rear of the site, where the topography is steepest, about 40 degrees. The steepness of topography toward the back of the site and the substantial tree line, provide a natural "back wall" which is essential to an open-air theatre.



http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?costea

88

POR - Daily Temperature Averages and Extremes



- Extreme Max. is the maximum of all daily maximum temperatures recorded for the day of the year.
- Ave. Max. is the average of all daily maximum temperatures recorded for the day of the year.
- Ave. Min. is the average of all daily minimum temperatures recorded for the day of the year.
- Extreme Min. is the minimum of all daily minimum temperatures recorded for the day of the year.

89

Because of the high mountain altitude, Steamboat experiences rather extreme weather patterns as well as high UV index ratings; this is benefical for solar gain and solar power. Primarily, winds come form the West, with the exception being once or twice a year when the down slope or “Chinook” winds come from the East. However, because of the valley’s North-South orientation, the town rarely receives winds stronger than a light breeze. Steamboat receives an average of 24 inches of moisture per year, most of which comes in the form of snowfall. The warmest month is typically July, with an average maximum temperature of 85 degrees Fahrenheit, and the coldest month is typically January, with an average minimum temperature of 1 degree Fahrenheit. Record lows of -54 degrees Fahrenheit and record highs of 100 degrees Fahrenheit have been recorded. [29]

CLIMATE

Steamboat Springs lies just west of the continental divide. At an elevation of 6,700 feet above sea level, the town experiences a rather dramatic change of seasons. While the summers are generally mild, they are in stark comparison to Steamboats intense winters which can experience weeks of subzero temperatures and abundant amounts of snow. With an average snow fall of 170 inches in town and over 400 inches in the mountains surrounding the area, it is no wonder that Steamboat it is commonly labeled “Ski Town USA.” On the other hand, summertime in Steamboat Springs is paradise. With mild day time temperatures, averaging around 70 degrees Fahrenheit, and cool evenings, averaging around 40 degrees Fahrenheit, Steamboat in the summer is the prime setting for outdoor recreational activities.



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Period of Record Monthly Climate Summary

Period of Record : 9/ 2/1908 to 3/31/2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	28.8	34.0	42.0	53.5	65.2	75.4	82.4	80.3	72.3	60.2	42.9	30.6	55.6
Average Min. Temperature (F)	1.0	4.2	13.5	24.3	31.4	35.7	41.4	40.2	32.6	23.9	14.2	3.3	22.1
Average Total Precipitation (in.)	2.47	2.24	2.11	2.28	2.08	1.49	1.54	1.60	1.81	1.89	1.97	2.38	23.84
Average Total SnowFall (in.)	35.5	29.7	23.8	13.2	2.7	0.1	0.0	0.0	0.9	6.9	20.0	32.6	165.5
Average Snow Depth (in.)	23	28	20	3	0	0	0	0	0	0	3	12	7

Percent of possible observations for period of record.
Max. Temp.: 97% Min. Temp.: 97.9% Precipitation: 98% Snowfall: 97.8% Snow Depth: 86%
Check Station Metadata or Metadata graphics for more detail about data completeness.

91

USE

Given the diversity of the events held at Howelsen Hill and music styles favored by the community, the intended usage of the facility shall be multi use. However, the primary function shall remain as a concert venue to accommodate Steamboat's Free Summer Concert Series and the Strings In the Mountains Music Festival. While the secondary usage shall be a general office facility to accommodate the coordination of the concert series, as well as other local programs such as the Winter Sports Club, the Tripple Crown Softball series, the Steamboat Springs Arts Council, and general facilitation of park events.

Steamboat's Free Summer Concert Series, produced by Great Knight Productions, is a fourteen year old program developed by the city of Steamboat Springs with the primary goal of delivering affordable entertainment to Steamboats' residents. The series consists of seven to ten free concerts each summer and is funded by numerous sponsors, both private and corporate. The shows are typically spaced about two weeks apart and feature top name bands like Little Feat and Big Head Todd and the Monsters, whom typically attract anywhere from 1000 to 2000 people. The concerts serve as a great way for the community to get together and visit with friends and associates. To date, the free concert series have been held at the base of Howelsen Hills' ski jumps in the Out-Run Landing Area, where a temporary stage and vendors are set up and then taken down every other week. This requires a great deal of time and energy and is a huge waste of money, thus demonstrating the need of a permanent facility.



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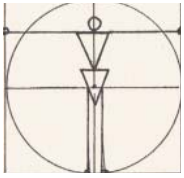
93



94



95


96

The Strings In the Mountains Music Festival is a program developed eighteen years ago by two local Steamboat residents, Kay Clagget and Betse Grassby. The organization was created “to foster an appreciation for fine music in a friendly and intimate setting, by presenting a diverse programming with a focus on chamber music, as well as to stimulate the cultural, educational and economic environment of the community. The program reached an audience of 1,400 people in its first year, an average of 30,000 per year since, and has a radio listening audience of 14 million people.” [30] The series was conceived with the notion of providing a diverse musical line up, capturing the taste of many among the community. Ranging from “chamber ensembles to orchestral masterpieces, jazz riffs to bluegrass jams,” [30] the series offers a wide array of musical selections. The program boasts an average of 45 concerts per season and this years line up features musicians like the John Jorgenson Quintet, David Lanz and his Smooth Jazz Group, The Hot Club of Cowtown, Asleep at the Wheel, and many others.[30] Currently, Strings in the Mountains holds their venues at the “Strings Tent” a temporary seasonal establishment located a few miles from downtown, however with a limited capacity of only 500 people, the current facility is outdated and undersized.

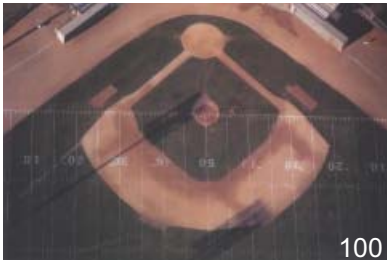

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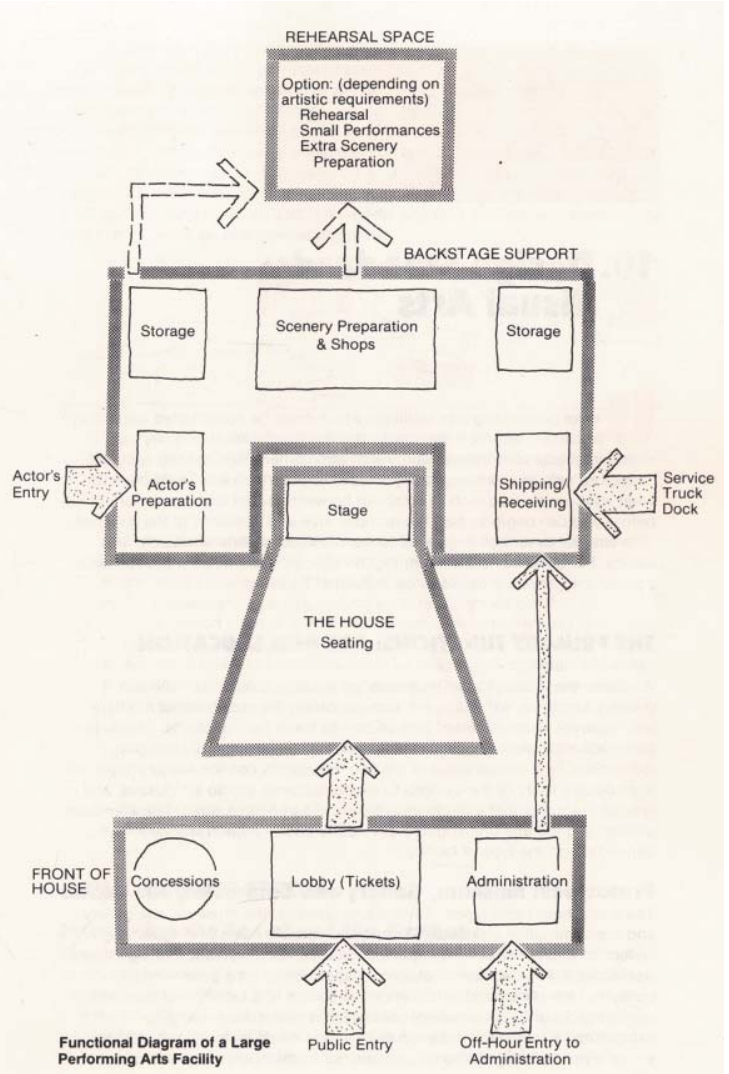
The Winter Sports Club is “the oldest ski club west of the Mississippi. It was initially formed to plan and promote the First Winter Carnival in 1914. Today it provides advanced training in four disciplines: Alpine, Nordic, Freestyle, and Snowboard and has trained more Olympic and World Championship skiers and members of the United States Ski Team than any other community in the country”[31]


99

The Tripple Crown Softball Series is a nation wide tournament which holds their annual “finale” at Howelsen Hill toward the end of July. The event lasts two weeks, during which the entire town seems to be structured around the events and nearly every room in town is booked. This short lived event is perhaps the strongest economic booster for local business during the summer season.


100

The Steamboat Springs Arts Council is an organization established for promoting and organizing the numerous cultural activities that take place in Steamboat; such as art exhibits, theatre, opera, jazz brunch, and many others.



Functional Diagram of a Large Performing Arts Facility

101

The adjacent diagram, borrowed from "Building for the Arts: A Guide Book for the Planning and Design of Cultural Facilities" illustrates spatial relationships and organizational patterns between both the stage and its supporting facilities, (i.e.. backstage, storage, prep area, etc.) as well as between the stage and the public facilities, (ie. entrance, seating, consession, etc.)

QUALITATIVE PROGRAM

The following comprises a list of spatial entities and a brief description of their character and function:



Amphitheatre (summer only)

The diverse populace of Steamboat inevitably leads to a diverse taste in music and Steamboat has been quite successful in accompanying these different tastes by offering a wide variety of concerts. With this in mind, the design configuration shall be adaptable to accommodate three different venue types:

The first type of venue shall be a “symphonic” type:

The character to be expressed here shall be that of an intimate setting. Imagine if you will, going to see your favorite live musical performance only to find that you are to be treated as if you are at a five star restaurant. The desired setting portrayed here shall be a “candle light performance” where every one shall have their own table and be provided with full service catering. This type of venue will ultimately generate a smaller crowd and for that reason it shall be estimated that only 50% of the facilities capacity shall be utilized.

The Second type of venue shall be a “casual” type:

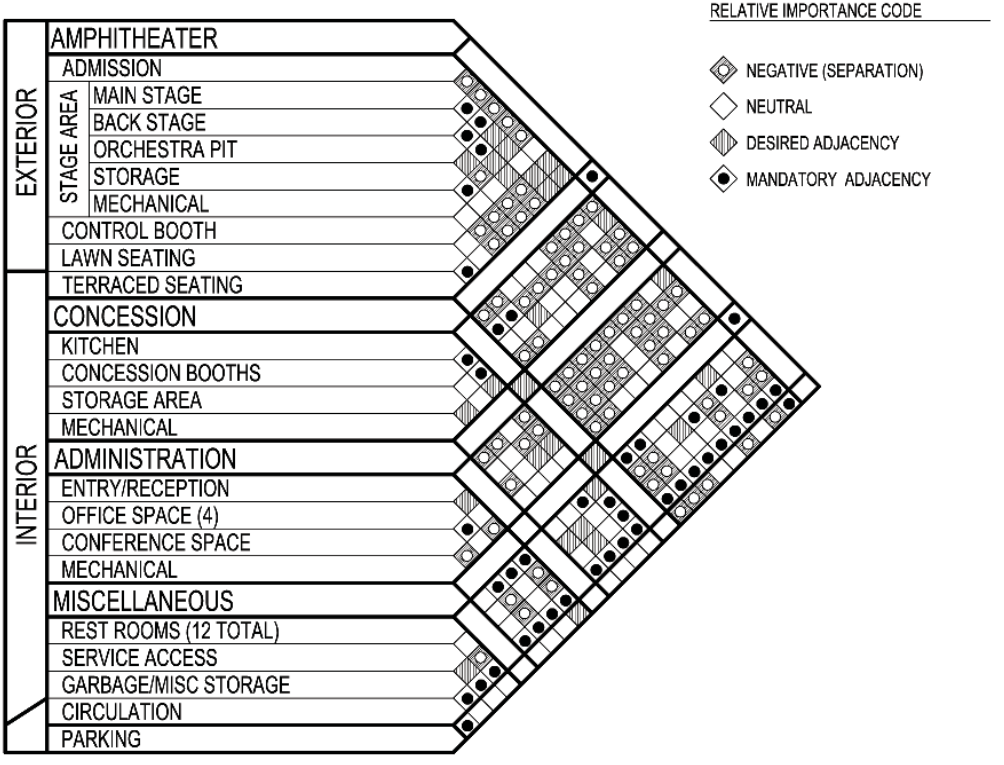
The styles of concerts this type shall accommodate are lite jazz shows and bluegrass festivals. The desired setting here shall be a casual mixture of fixed (table) seating, of which lite catering services shall be provided, fixed (stadium) seating, and general (lawn) seating, both of which shall be a “picnic” like setting where it shall be encouraged to bring your own food and drink.

The third type of venue shall be a “rock” type:

This type’s primary focus will be to accommodate the Free Concert Series; due to the larger crowd that these tend to generate, the setting shall be less formal and consist of “pit” or open lawn/floor seating, and fixed (stadium) seating.

Concession

The primary use of the concession facilities shall be for providing the venue with the required assets and storage necessary for accommodating the catering service. These include, but do not limit to; a large scale commercial kitchen, a full service bar, a plentiful amount of “cold” and dry storage, temporary concession booths (primarily for larger scale venues) in which a variety of local vendors can come in and set up displays, a as well as all the proper mechanical systems needed. The primary catering company to sponsor the events shall be Moving Mountains Catering Company, a locally owned and operated business. It shall be assumed that the primary structure for housing the majority of these facilities shall be directly adjacent to, but not necessarily part of, the main amphitheatre/stage structure.



Administration (year round)



Given the wide variety of events held at Howelsen Hill and the lack of space for coordinating such events, the primary function of the administration facility will be just that, coordinating the concert events, as well as other prescribed area functions. The structure for this facility will most likely, at least portions of it, serve as a “fronting” to the main amphitheatre/stage structure. It shall consist of an entry/reception feature, of which shall capture the identity of Howelsen Hill, 4 office facilities, each catered to the functions of the inhabitants, the Winter Sports Club, Steamboat Arts Council, etc., a central conference space to accommodate the prescribed inhabitants as well as the general public of Steamboat. It shall be noted that the character of this space shall present a public identity and will consist of a small stage/platform area, as well as a connection with, or open to, a “small scale” secondary outdoor seating and performance area. Additional facilities include required storage and mechanical as well as required restrooms.

Miscellaneous/Parking

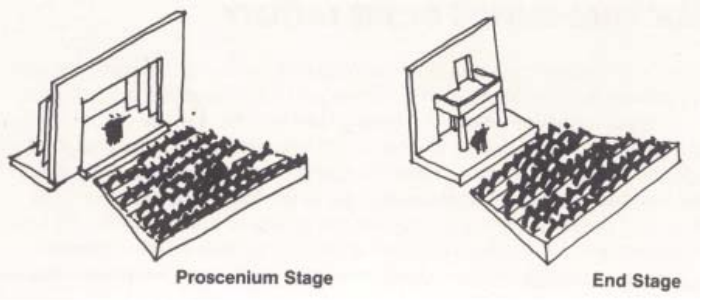
The function of these facilities are to accommodate the miscellaneous needs brought on by this scale of facility and include additional storage facilities, service accesses and garbage storage/removal, restrooms and handicap/service parking. Given the location of the immediate site, its isolation and limited access, the only on site parking provided shall be for accessibility and service. Code analysis has shown that for a venue of this size, a required 625 parking spaces are needed, of that 2% shall be handicap accessible. From this, there will be 15 accessible parking spaces and an additional 25 spaces for service purposes provided on site. It should be noted that the remaining parking shall be accommodated by the three parking lots located in the Howelsen Hill complex, down town public parking, which is just a matter of two or three blocks away, and a small dependence on the public transit system which has a designated stop adjacent to the site. There has also been talk from city officials of providing the City of Steamboat with a public parking structure in a vacant lot across the river from the complex.

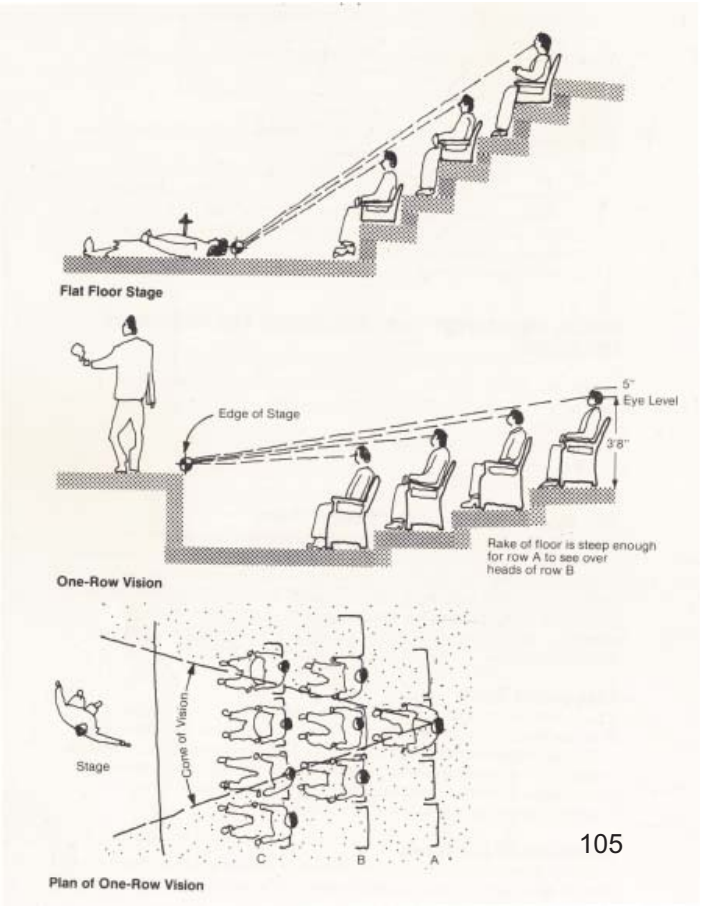


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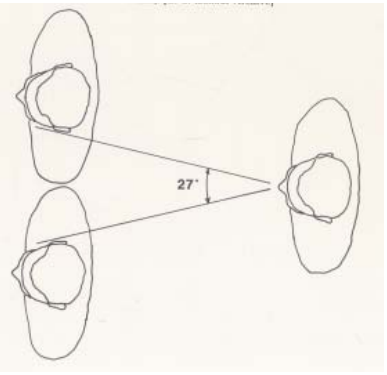
QUANTITATIVE PROGRAM

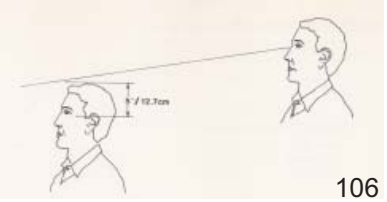
AMPHITHEATRE			
Entry Zone(outdoor)	2,000 sf.		
Ticket Window	400 sf.		
Stage Area			
-Front stage (outdoor)	800 sf.		
-Back stage	1,000 sf.		
-Orchestra pit	500 sf.		
-Storage	600 sf.		
-Mechanical	400 sf.		
Lawn Seating (outdoor)	5,000 sf.	(1000 people)	
Terraced (fixed) seating (outdoor)	10,000 sf.	(1200 people)	
Subtotal			20,700sf.
CONCESSION			
Kitchen(s)	1,000 sf.		
Concession booths	800 sf.		
Storage	500 sf.		
Mechanical	150 sf.		
Subtotal			2,450 sf.
ADMINISTRATION			
Reception/Entry	150 sf.		
Office space (4)	800 sf.		
Conference space	1,500 sf.		
Mechanical	200 sf.		
Subtotal			2,650 sf.
MISCELANEOUS			
Rest Rooms			
-(8) public – (4) M / (4) F 600 sf. Ea	4,800 sf.		
-(4) private – (2) M / (2) F 150 sf. Ea.	600 sf.		
Total Net sf.			
Enclosed			13,400 sf.
Open-Air			17,800 sf.
Total			31,200 sf.
Circulation (30%)	9,400 sf.		
Misc. Storage/Service access	1,000 sf.		
Total Gross sf.			41,600 sf.
Parking (on site)			
Service (15 spaces)	6,500 sf.		
Handicap (12 spaces)	4,000 sf.		
Total			10,500 sf.


Proscenium Stage
End Stage

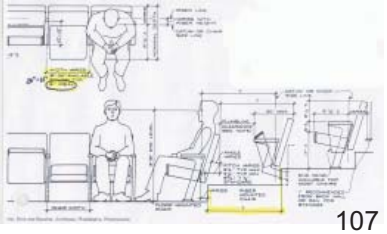

Flat Floor Stage
Edge of Stage
5"
Eye Level
3'8"
Rake of floor is steep enough for row A to see over heads of row B
One-Row Vision
Stage
Cone of Vision
C
B
A
Plan of One-Row Vision

105


27°


5" / 12.7cm

106

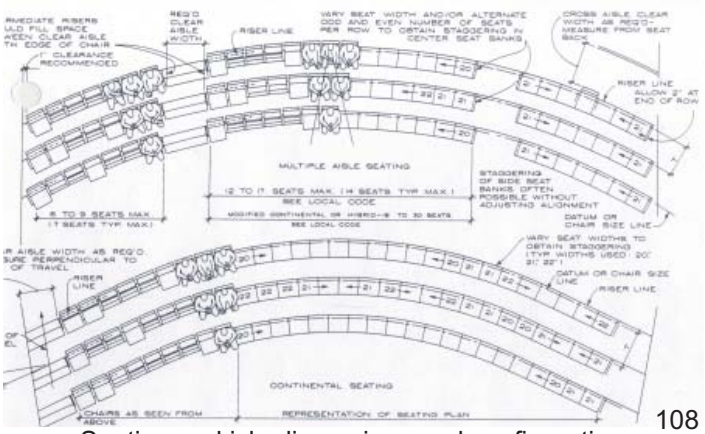


107

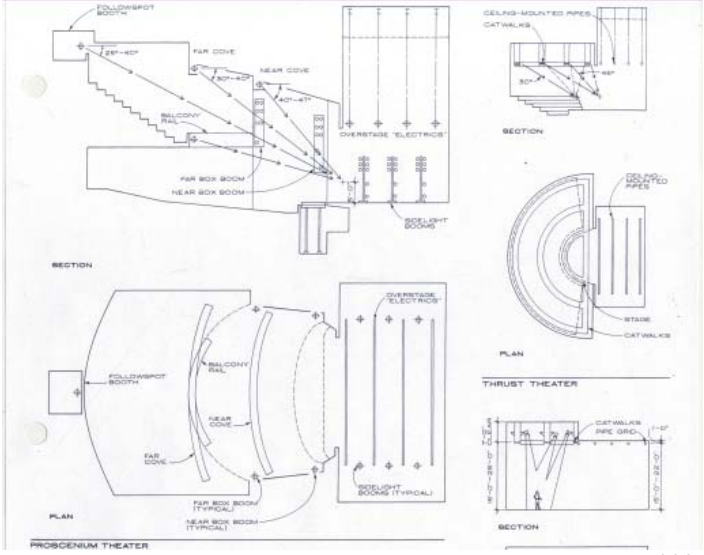
In designing an open air theatre, there are a number physical systems that come into play. Given the complexity of these systems, this proposal will provide a brief over view of the underlining principles behind; stage design, seating design and sight lines, acoustical analysis, and lighting systems.

Given the fundamental requirements, both set by the human form and departmental codes, seating arrangements are established based on means of egress and the best possible configuration for viewing and listening. Aside form this, the freedom to be creative with seating arrangements is endless.

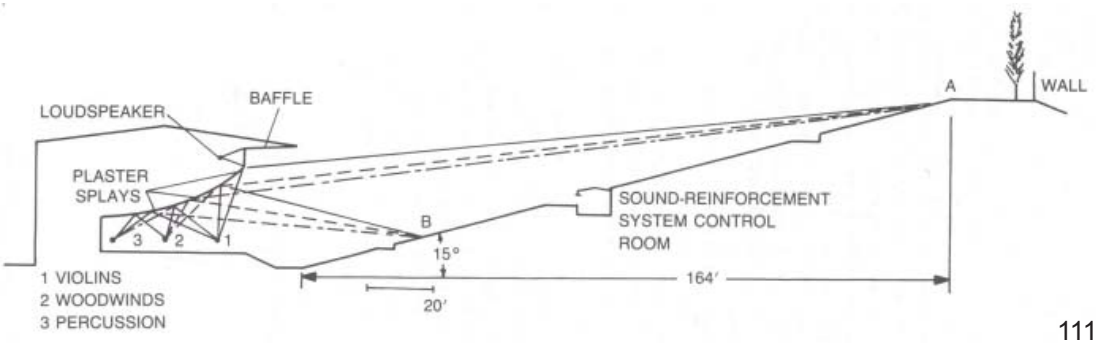
Lighting design systems are perhaps the most complex of the systems and are generally specific to the venue style. That being said, it is the goal to provide an adaptable lighting system.



Seating and isle dimensions and configurations 108



General lighting design configuration 110



111

Much of the acoustical qualities of an open-air facility depend upon the “back wall,” second to the seating arrangement, (angle of incidence and angle of seats themselves) for these are the only things for which sound can reflect off of.

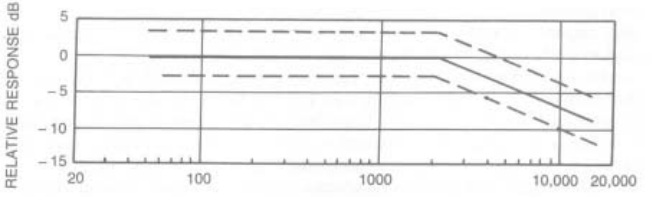
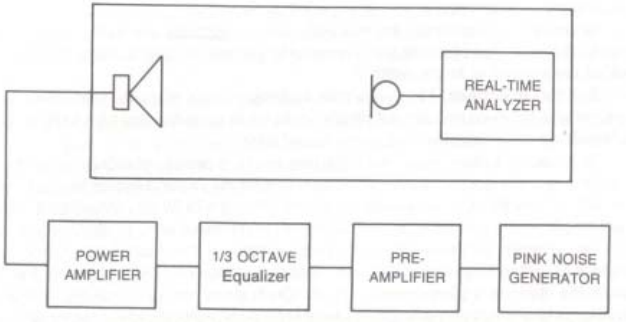


Fig. 4.11.6. ISO standard acoustic response curve for motion picture theatres (ISO Bulletin 2969).

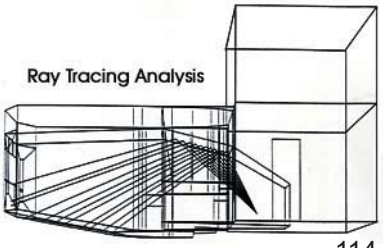
The diagram to the right illustrates generic sound system components and their relationship to one another.



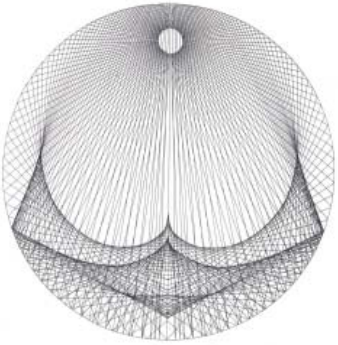
112

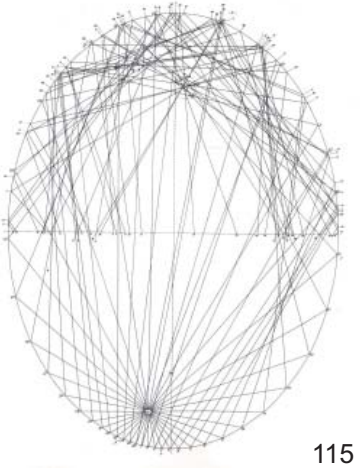
Acoustical overview

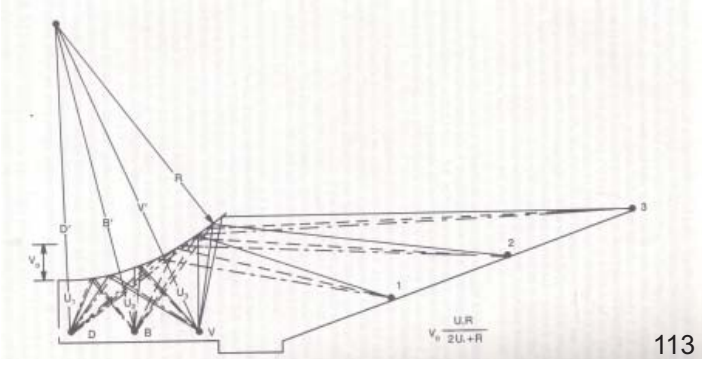
The acoustics of an open-air theatre are quite different from that of an indoor one. The lack of enclosure, resulting in the loss of reverberation time, establishes a whole different set of parameters. While numerous studies and computer analysis have been done in an effort to predict the acoustical performance of outdoor spaces, it proves most efficient to adhere to a fundamental set of rules. For the most part, the same set of rules that were used by the Greeks and Romans in their early theatre structures. In the most general sense, these rules rely on the fundamental idea that sound travels in a very similar manner as the site lines. Predicting sound travel distance and direction relies primarily on the sound intensity. Knowing the response angles, reverberation times and sound intensities, an educated response can be determined to estimate the sound and any location in the theatre. The adjacent diagrams illustrate the reflections of sound for a select variety of spaces.



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CODE ANALYSIS

BUILDING CODE ANALYSIS

Project Name:	Emerging Landscape: A Cultural Venue for Steamboat Springs, Colorado
Location:	Steamboat, CO
Client:	City of Steamboat Springs
Analysis Prepared By:	Ben Emanuel
Project No.:	One
Date:	4/215/2006

APPLICABLE CODES: ***VERIFY ALL OF THE BELOW-LISTED CODES (AND DATE OF LATEST ISSUE) WITH PARTICULAR MUNICIPALITY***

1. Zoning Ordinance:	
2. Building Code:	International Building Code 2003
3. Life Safety Code:	International Fire Code
4. Fire Code:	International Fire Code
5. Handicapped Accessibility:	ANSI A117.1-1998
6. Environmental Code:	http://enviro1.bir.co/regs/cfm/state/130
7. Electrical Code:	2003 ICC Electrical Administrtative Provisions
8. Mechanical Code:	2003 International Mechanical Code
9. Plumbing Code:	2003 International Plumbing Code

III. OCCUPANCY REQUIREMENTS

A. Building Use

1. Use Group	IBC Chapter 3	Assembly Group A-1, and A-2; Buisiness Group B
2. Occupancy Separation	IBC Table 302.3.3	A-1/A-2 Two hour rating; A-1/B Two Hour Rating; A-2/B Two Hour Rating

V. STRUCTURAL DESIGN CRITERIA

A. Live Loads

1. Floor Live Load	IBC Table 1607.1	Assembly: Fixed seats 60psf, Movable Seats 100psf, Stages 125psf Buisiness: Lobbies 100psf, Offices 50psf
2. Roof Live Load	IBC Section 1607.11	Comply with section 1607.11.1-.2.1

B. Snow Loads		
1. Ground Snow Load, Pg	IBC Section 1608	150 psf
2. Flat-Roof Snow Load, Pf	IBC Section 1608	to be calculated in accordance with section 7.3 of ASCE 7
3. Snow Exposure Factor, Ce	IBC Table 1608.3.1	Exposure C .9
4. Snow Load Importance Factor, Is	IBC Table 1604.5	Category III Is = 1.1
5. Thermal Factor, Ct	IBC Table 1608.3.2	Ct = 1
C. Wind Loads		
1. Basic Wind Speed (3-second gust)	IBC Section 1609	90mph
2. Wind Importance Factor Iw	IBC Table 1604.5	Category III Iw = 1.15
3. Building Category	IBC Section1609.2	Building, Partialy Enclosed
4. Wind Exposure	IBC Section 1609.4	Exposure C

VI. MECHANICAL SYSTEMS

A. Ventilation / Exhaust	IBC Section 1203	Natural Ventilation in accordance with section 1203.4 or Mechanical ventilation in accordance of *International Mechanical Code*

VII. ENERGY CONSERVATION CODE

A. Insulation Requirements.	Title 24	

IX. CONSTRUCTION REQUIREMENTS

A. Construction Type	IBC Section 602.1	Type III- Exterior Non Combustible and Interior as permited by Code
B. Maximum Allowable Height	IBC Table 503	Type III-A group A-1, A-2 and B Three Stories
C. Max. Allowable Area / Floor	IBC Table 503	Type III-A group A-1, A-2 and B 14,000 sq/ft
D. Fire Suppression and Automatic Fire Detection Systems	IBC Section 907.2	
	Group A	Manual Fire Alarm in accordance with NFPA 72 with occupant load of 300 or more -Not required if eqquipped with automatic sprikler system
	Group B	Manual Fire Alarm in accordance with NFPA 72 with occupant load of 500 or more -Not required if eqquipped with automatic sprikler system

E. Fire Resistive Ratings

1. Loadbearing Walls	IBC Table 601	Type III-A
a. Exterior Loadbearing Walls		2 hours
b. Interior Loadbearing Walls		1 hours
2. Nonloadbearing Walls	IBC Table 602	
a. Exterior Nonloadbearing Walls		1 hours
b. Interior Nonloadbearing Walls		1 hours
3. Structural Frame	IBC Table 601	1 hours
4. Floor Construction including Beams	IBC Table 601	1 hours
5. Roof Construction, including Beams, Trusses and Framing, Arches and Roof Deck	IBC Table 601	0 hours
6. Fire Walls and Party Walls	IBC Table 705.4	Group A and Group B - Party walls shall have 3 hour rating
7. Fire Separation Assemblies	IBC Section 706	
a. Fire Enclosure of Exits	IBC Section 706.3.2	Exit Enclosures shall comply with section 1019
b. Shafts	IBC Section 706.3.1	Shaft Enclosures shall comply with section 707.4 - Less than four stories; 1 hour rating
c. Mixed Use and Fire Area Separations	IBC Section 706.3.6	Seperation of mixed occupancies; also see section302.3.2
	IBC Table 302.1.1	Incidental use
	IBC Table 302.3.2	Main Use
8. Fire Partitions	IBC Section 708	Fire Partitions
a. Exit Corridors	IBC Section 706.3.3	Exit passageways; shall comply with section 1020.1 Width; shall comply with section 1005.1 not less than 44inches

X. ACCESSIBILITY REQUIREMENTS

A. Accessible Route

1. Width	ANSI Table 403.5	<24 inches: 32 inches >24 inches: 36 inches
2. Passing Space	ANSI 403.5.2	If route is <60 inches, must have passing space of 60 inches by 60 inchesat intervals of 200 feet max
3. Head Room		
4. Slope	ANSI 403.3	shall not exceed a ratio of 1:20
	ANSI 405.2	Ramps: Shall not exceed a ratio of 1:12
5. Protruding Objects	ANSI 307.1	Protuding objects on circulation paths shall comply with Section 307 Not to exceed 4 inches

B. Doors		
1. Clear Openings	ANSI 404.2.3	Not less than 32 inches
2. Maneuvering Clearances	ANSI Table 404.2.4.1	Refer to direction of approach in chart
	ANSI Table 404.2.4.2	
3. 2 Doors in Series	ANSI 404.2.6	Not less than 48 inches
4. Thresholds	ANSI 404.2.5	Not to exceed one half inch in height
5. Door Hardware	ANSI 404.2.7	Between 34 inches and 48 inches in height from ground level
6. Opening Protectives		
C. Toilet Rooms		
1. Toilet Rooms	ANSI Chapter 6	Refer to sections 601 to sections 610

XI. EGRESS REQUIREMENTS

A. Length of Exit Access Travel	IBC Section 1015 IBC Table 1015.1	Travel distance Group A, B: 200' unsprinkled, 250' sprinkled
B. Occupant Loads	IBC Section 1004 IBC Table 1004.1.2	Assembly A-1 Standing:1 occupant per 5sq/ft; Concentrated: 1 occupant per 7sq/ft Assembly A-1 Fixed Seats comply with section 1004.7, load determined by number of fixed seats Buisness areas 1 occupant per 100sq/ft
C. Number of Exits	IBC Section 1017 IBC Table 1014.1	Occupant load more than 1,000; minimum of 4 exits Spaces with one means of egress for group A and B minimum occupant load of 50
D. Exit Remoteness	IBC Section 1014.2.1	For required two exists: the distance to exit shall not exceed one half the length of the diagonal of the space being served
F. Corridors		
1. Dead Ends	IBC Section 1016.3	Unsprinklered; can not exceed 20 feet Sprinklered; can not exceed 50 feet
2. Unit of Exit Width	IBC Table 1005.1	Assembly and Business groups; unsprinklered .2 inches per occupant Assembly and Business groups; sprinklered ..15 inches per occupant
3. Minimum Required Width	IBC Section 1016.2	Not less than 44 inches
4. Ceiling Height	IBC Section 1003.2	Not less than 7 feet

G. Egress Doors		
1. Unit of Exit Width	IBC Table 1005.1	Assembly and Business groups; unsprinklered .2 inches per occupant Assembly and Business groups; sprinklered ..15 inches per occupant
2. Minimum Width	IBC Section 1008.1	Not less than 32 inches
3. Minimum Height	IBC Section 1008.1	Not less than 80 inches
H. Ramps		
1. Unit of Exit Width	IBC Table 1005.1	Assembly and Business groups; unsprinklered .2 inches per occupant Assembly and Business groups; sprinklered ..15 inches per occupant
2. Minimum Width	IBC Section 1010.5.1	Not less than 36 inches
3. Restrictions	IBC Section 1010.5.3	shall not reduce in width in direction of egress travel
4. Slope for Means of Egress Ramps	IBC Section 1010.2	not to exceed a ratio of 1:12, veritcal:horizontal or 8%
5. Landing Width	IBC Section 1010.6.2	at least as wide as the adjoinig ramp
6. Landing Length	IBC Section 1010.6.3	not less than 60 inches
7. Handrails	IBC Section 1010.8	if rise is greater than 6 inches, shall have hand rails on both sides complying with Section 1009.11
I. Stairs		
1. Tread depth	IBC Section 1009.3	Not less than 11 inches
2. Riser height	IBC Section 1009.3	Not more than 7 inches, and not less than 4 inches
3. Min. width	IBC Section 1009.1	Not less than 44 inches
4. Headroom	IBC Section 1009.2	Not less than 80 inches

XII. PLUMBING FIXTURE REQUIREMENTS

		Male	Female
A. Water Closets	IBC Table 2902.1	Assembly; A-1 One per 125 occupants; A-2 One per 40 occupants Business; One per 50 occupants	Assembly; A-1 One per 65 occupants; A-2 One per 40 occupants Business; One per 50 occupants
B. Urinals	IBC Table 2902.1	See section 419.2 of the International Plumbing Code	
C. Lavatories	IBC Table 2902.1	One per 75 occupants	One per 75 occupants
D. Drinking Fountains	IBC Table 2902.1	One per 500 occupants	One per 500 occupants
E. Other Fixtures	IBC Table 2902.1	Minimum of one service sink per floor	

HISTORY OF THE OPEN AIR THEATRE

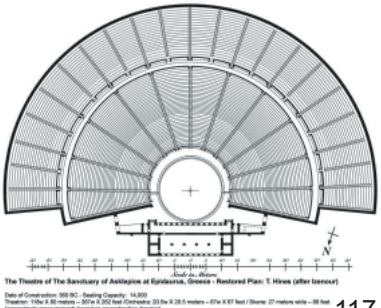
The notion of the open air theatre dates back thousands of years, stemming from the ancient Greek festivals honoring the god Dionysus, in which dancing around a circular “orchestra” ultimately led to the creation of the amphitheatre. Since, the open air theatre has evolved into numerous adaptations providing hundreds of unique examples throughout the world.

However, the most two most significant amphitheatres through out history are that of the ancient Greek Theatre of The Sanctuary of Asklepios at Epidaurus and The Theatre at Delphi Greece.


116
Theatre at Epidaurus

Theatre at Epidaurus

Best preserved and best acoustics of all ancient Greek theatres.
Dates to 350 B.C.
Architect was Plolykleitos
Seats 14,000
Built in celebration of Asklepios (God of Healing) [32]


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The theatre at Epidaurus stands today as one of the best preserved ancient structures throughout history. For centuries, it has inspired Historians and Architects alike to simply just admire, or in some cases, go to the extreme of generating computer models for analyzing and predicting the rather “unexplainable” acoustical qualities.

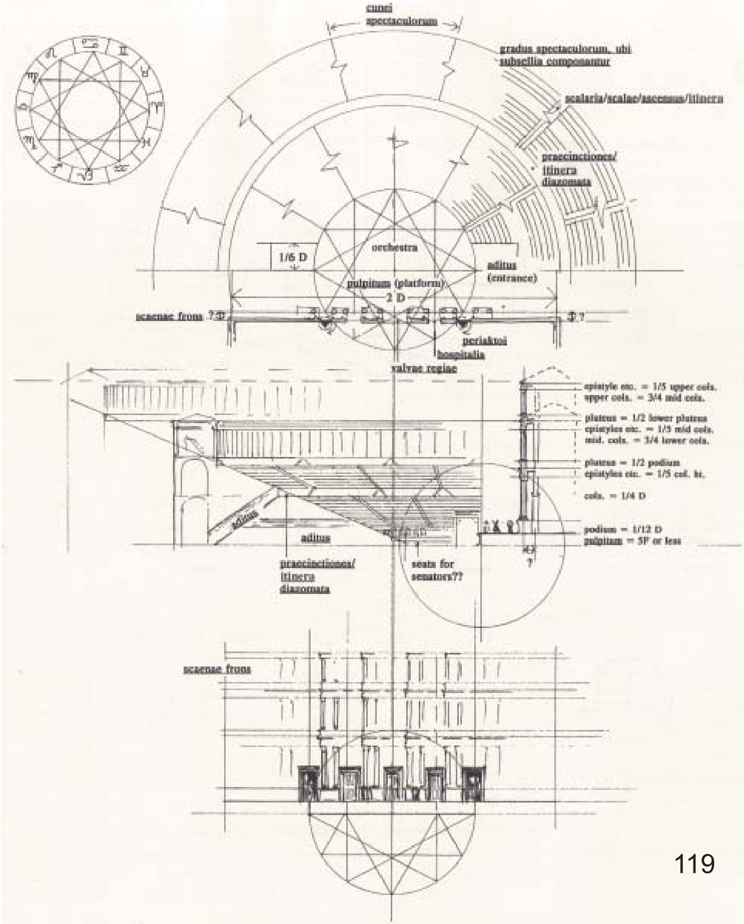
Theatre at Delphi

Date 350
Located on Mt. Parnassus
Built as the Sanctuary to Apollo [33]


118
Theatre at Delphi

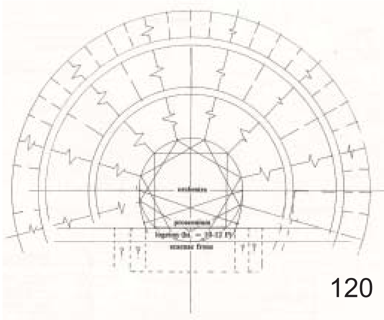
While not as popular as the theatre at Epidaurus, nor as well preserved, the theatre at Delphi serves as the personal favorite to many. It displays an indescribable inherent quality of the “real”, and with its location in the valley, it creates one of the most spectacular cultivated landscapes of its time, or of any time.

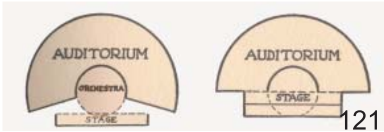
Greek Theatre orginization



119

Roman Theatre orginization


120



121

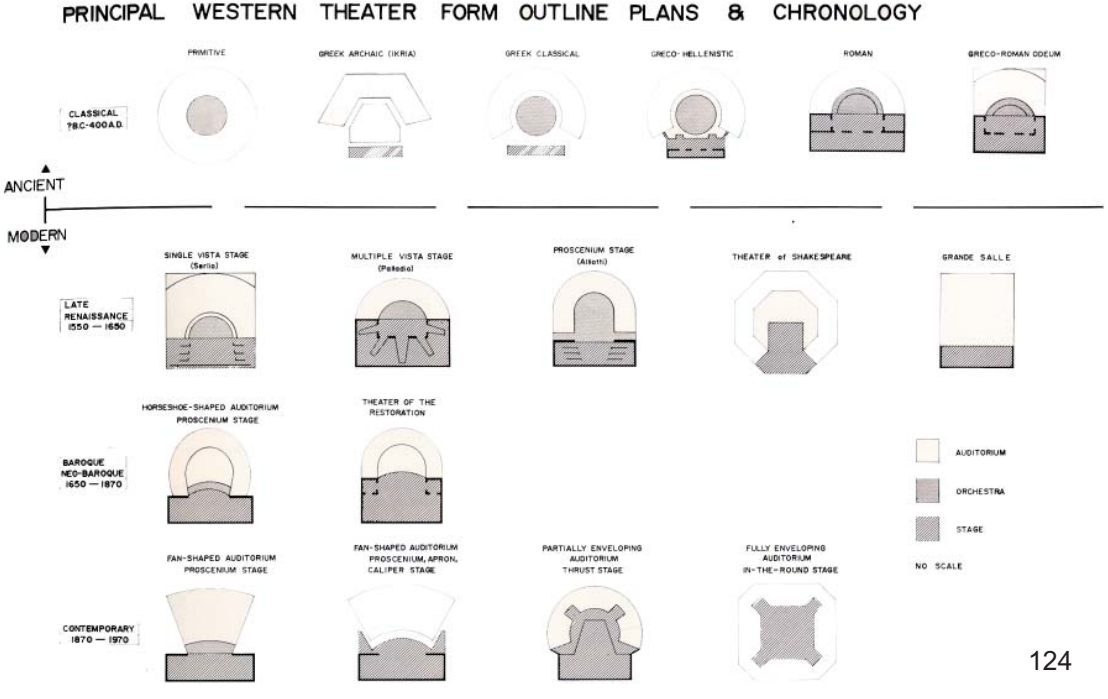
Diagram illustrating the difference between Greek and Roman Open Air theatre Layout.


122

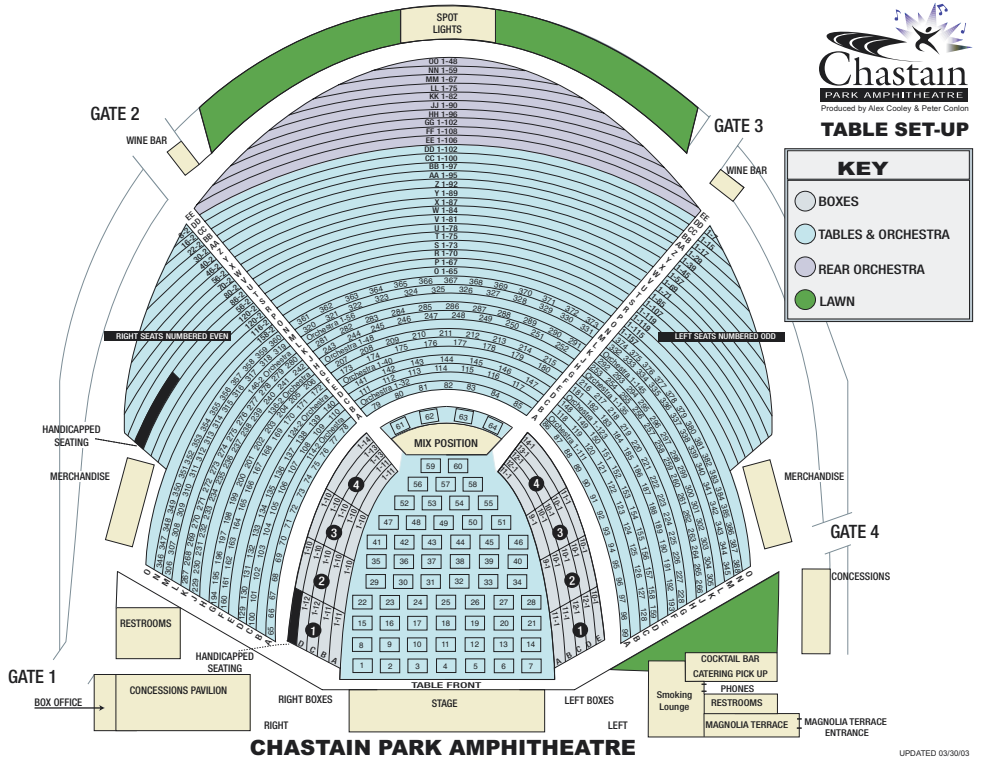
While these serve as the most significant to history, it was not until later, when the Romans modified the Greek theatre plan, that the foundation for much of today's modern day theatres was established. The Primary difference between the two was the configuration of the orchestra. For both, the circular orchestra became the fundamental organizing element. The diameter of the orchestra was divided equally (Greeks used two squares inscribed in the circle, and the Romans use three equilateral triangles) to establish the base geometry for designing the rest of the theatre. Both in section and plan, the angles determined by the dissections dictated the angles of the isles, the slope of the seating, and the proportions of the stage, thus ultimately resulting in perfect harmonious theatres.



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124

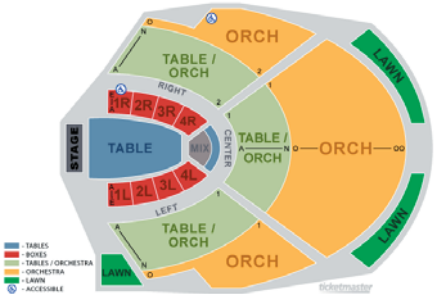


Chastain
PARK AMPHITHEATRE
Produced by Alex Cooley & Peter Conlon

TABLE SET-UP

KEY

- BOXES
- TABLES & ORCHESTRA
- REAR ORCHESTRA
- LAWN





CHASTAIN AMPHITHEATRE

While immense advances in technology have led modern day amphitheatres to new heights, the underlining principles have remained the same, thus delivering the same cultural experience forever associated with the open air theatre.

Chastain Amphitheatre serves as an excellent example of a modern adaptation to ancient techniques of open air theatre design. Utilizing a proscenium style stage configuration, the amphitheatre merges the diverse culture of the Southern city of Atlanta with the environment it inhabits. Set in deep in the woods of the Buckhead area of Atlanta, Georgia, Chastain Amphitheatre exhibits an adaptable layout to suit a variety of sizes and styles of venues, ranging from a small intimate symphonic like venue to a large rock and roll venue.

The more intimate setting is configured with multiple sections of tables divided by a semicircular row of box seats creating a casual and comfortable viewing experience. For these events, it is encouraged that concert goers either bring their own condiments, wine and dinner, or take advantage of the extensive catering services which provide snacks and beverages, or in select seating areas, a multi course meal. It's Chastain's relaxed and intimate setting that make it so successful and popular among concert goers around the nation.

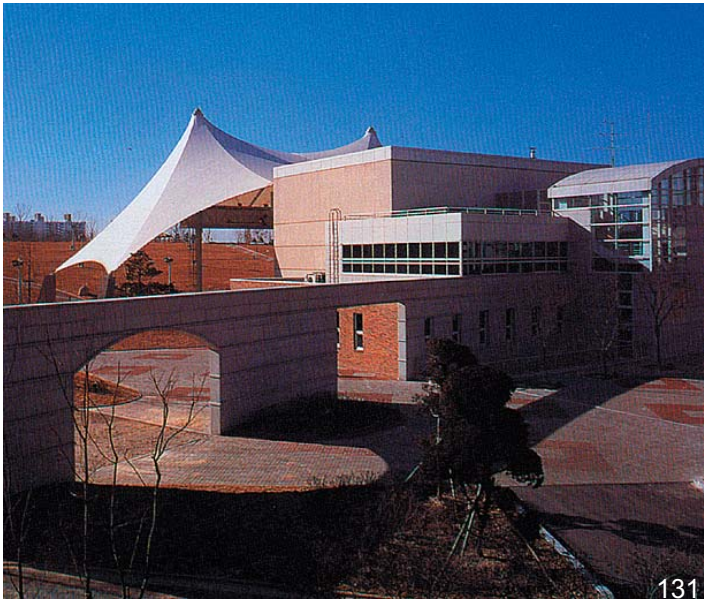
The amphitheatre however can be adapted to accommodate a larger scale venue by removing the table settings and generating, what in modern terms is referred to as a "pit" section, a section with no designated seating, allowing a more "lively" crowd the flexibility of dancing as they please.


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132

The idea of a demountable orchestra shell, much like that at Suwon Park, can be implemented in the summer as a means of protection from the elements, wind, sun, and rain, as well as serve an iconic sculptural piece. The lite structure can be removed in the winter, eliminating the structural requirements brought on by the significant snow pack.

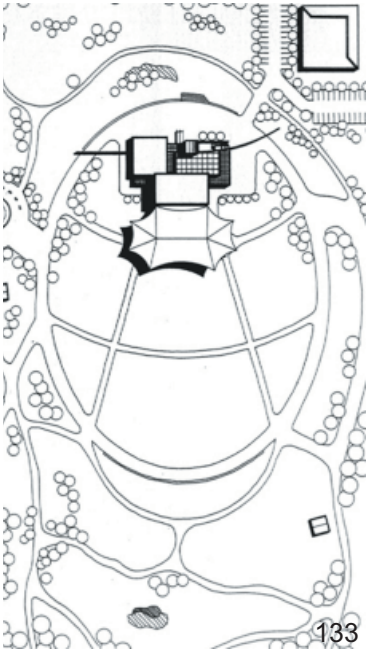
SUWON PARK OUTDOOR AMPHITHEATRE

Client: City of Suwon, Korea
Program: Outdoor Amphitheatre
Architect: Samoo Architects and Engineers

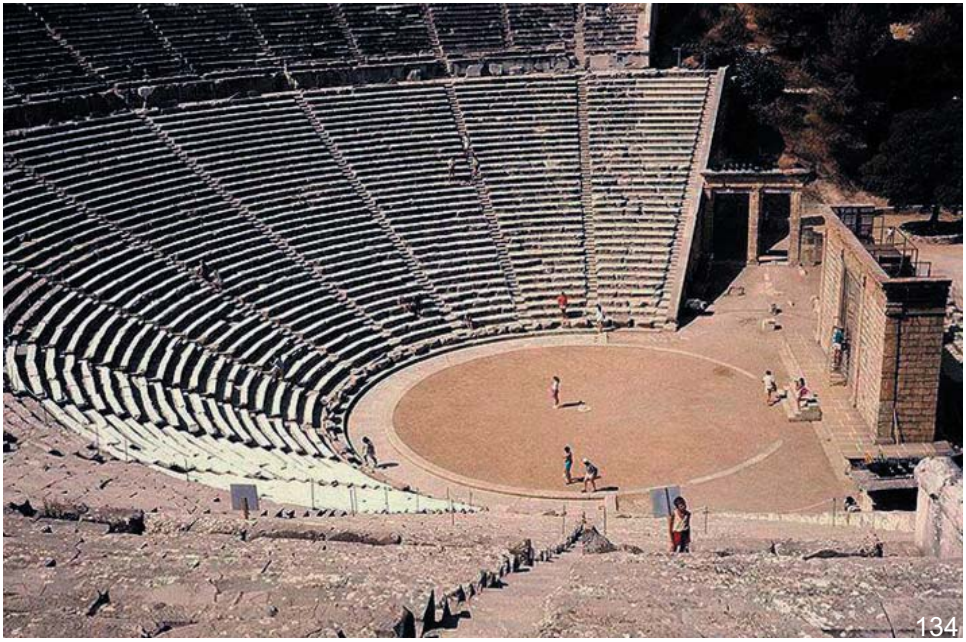
Acoustician: JH Acoustics
Size: 1,000 fixed seats
9,000 lawn seats
Completion: 1997

Copyright 2001. Fisher Dachs Associates

Suwon Park Outdoor Amphitheatre demonstrates a similar program situation as the one being proposed in Steamboat Springs, with the an amphitheatre as the primary function supported by an administration facility. The facility serves a good example of formal expression and spatial organization. The manner in which they organized the administration facilities behind the stage proves to be quite successful.



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“Always when the drama has been simplest, most genuine, and lit up most brightly by the joy of living, and always when the drama has been closest to the life of the people, it has had it’s setting in the open.”

- Sheldon Cheney, P. 1

ENDNOTES

1. Corner, James, *Taking Measures Across the American Landscape*. p. ix
2. Corner, James, *Taking Measures Across the American Landscape*. p. 121
3. Johns, Ferdinand, *Sustainable Tourism versus The American Dream*. p. 9
4. Shepard, Paul, *The Cultivated Wilderness: or, What is Landscape*. cover
5. Nesbitt, Kate, on Christian Norberg Shultz. *Theorizing a New Agenda For Architecture*. p. 429
6. Casey, Edward S., *The Fate of Place*. p.244
7. Norberg-Shulz, Christian, *The Phenomenon of Place; "Theorizing a New Agenda for Architecture*." p. 422
8. Casey, Edward S., *The Fate of Place.* p. 250
9. Ando, Tadao, *Toward New Horizons In Archtecture*; "*Theorizing a New Agenda for Architecture*." p. 461
10. Benedikt, Michael, *For An Architecture of Reality*. p.4
11. Benedikt, Michael, *For An Architecture of Reality*. p.30
12. Benedikt, Michael, *For An Architecture of Reality*. p.32
13. Huxtabel, Ada Louise, *The Unreal America*. p.4
14. Benedikt, Michael, *For An Architecture of Reality*. p.34
15. Benedikt, Michael, *For An Architecture of Reality*. p.40
16. Benedikt, Michael, *For An Architecture of Reality*. p.34
17. Benedikt, Michael, *For An Architecture of Reality*. p.40
18. Benedikt, Michael, *For An Architecture of Reality*. p.44
19. Benedikt, Michael, *For An Architecture of Reality*. p.56

19a. Corner, James, *Taking Measures Across the American Landscape*. p. 121

19b. Johnson, Ralph, *Architercture 121 T.A. Recitation Material.* p. 1-4

20. Resser, Amanda, and others. *Praxis Journal of Writing and Building: Landscapes*.
21. Benedikt, Michael, *For An Architecture of Reality*. p.50
22. Steamboat Chamber of Commerce, steamboatchamber.com (media)
23. Steamboat Springs Community Survey 2002, yampavalley.info (business and economy)
24. City of Steamboat Springs' web site. http:// www.steamboat-springs.net/
25. Johns, Ferdinand, *Sustainable Tourism versus The American Dream*. p. 1
26. Korin, Leonard, *Wabi-Sabi*. P.9
27. Borgman, Albert, *Crossing the Post Modern Divide*
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LIST OF ILLUSTRATIONS AND PHOTOS

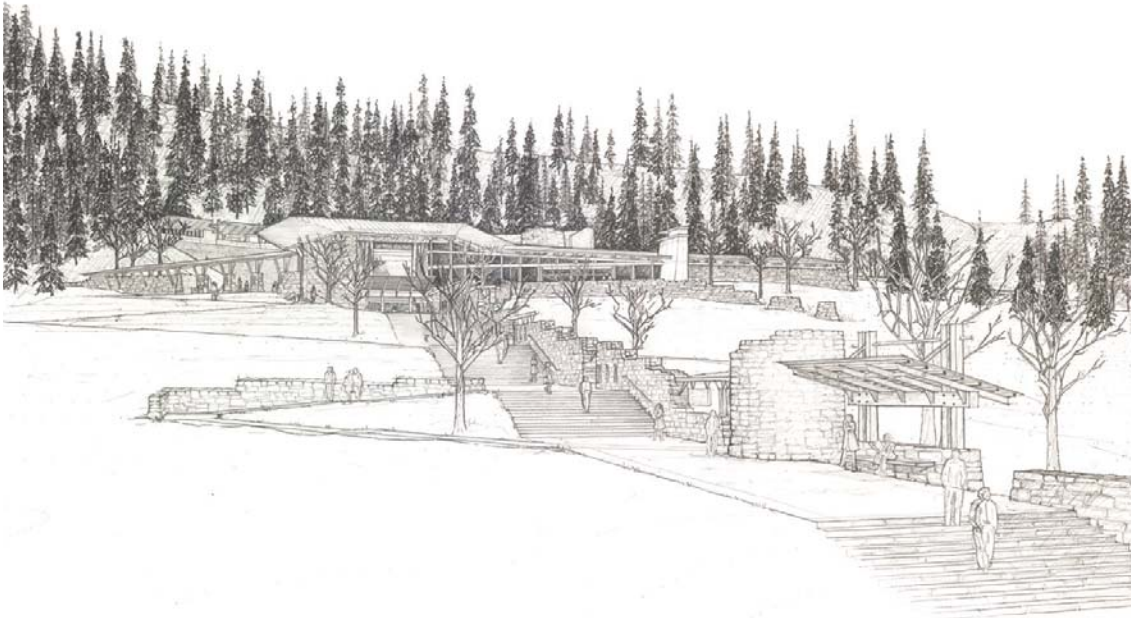
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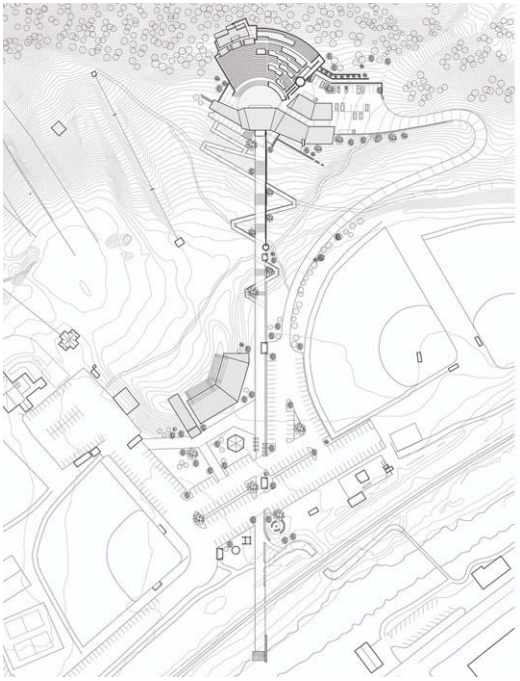
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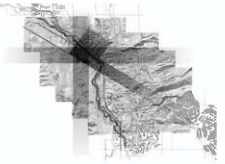
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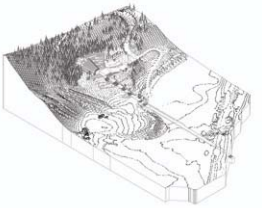
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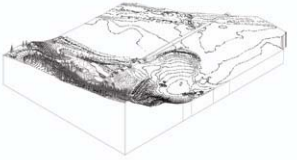
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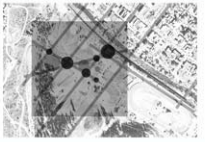


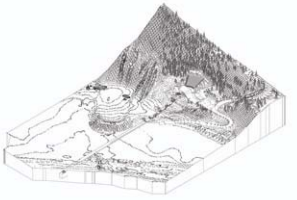








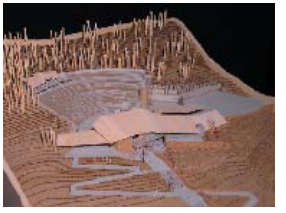




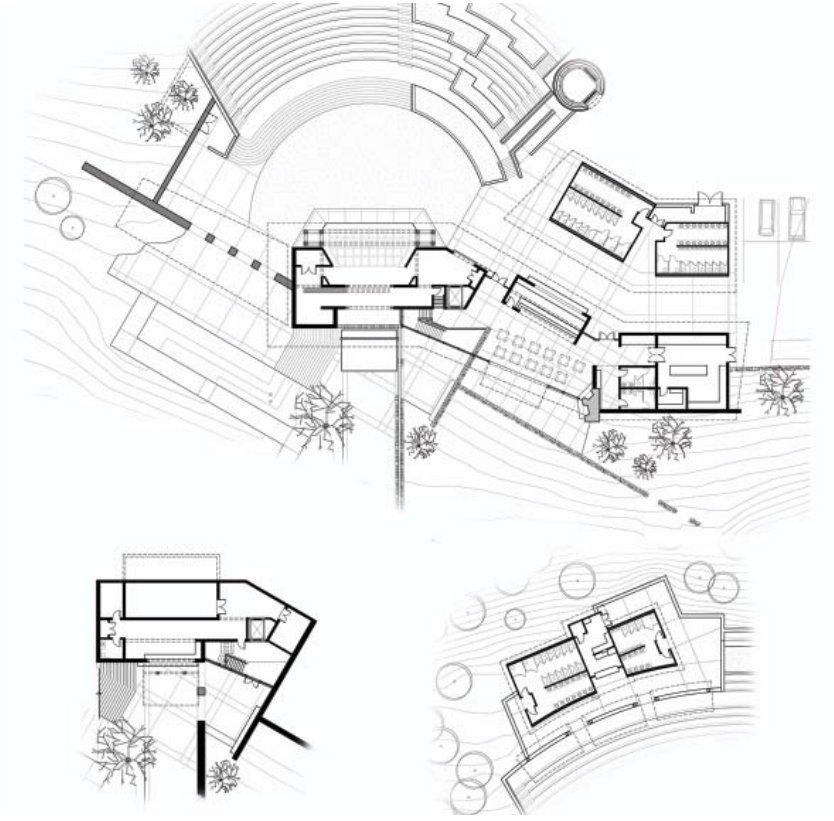








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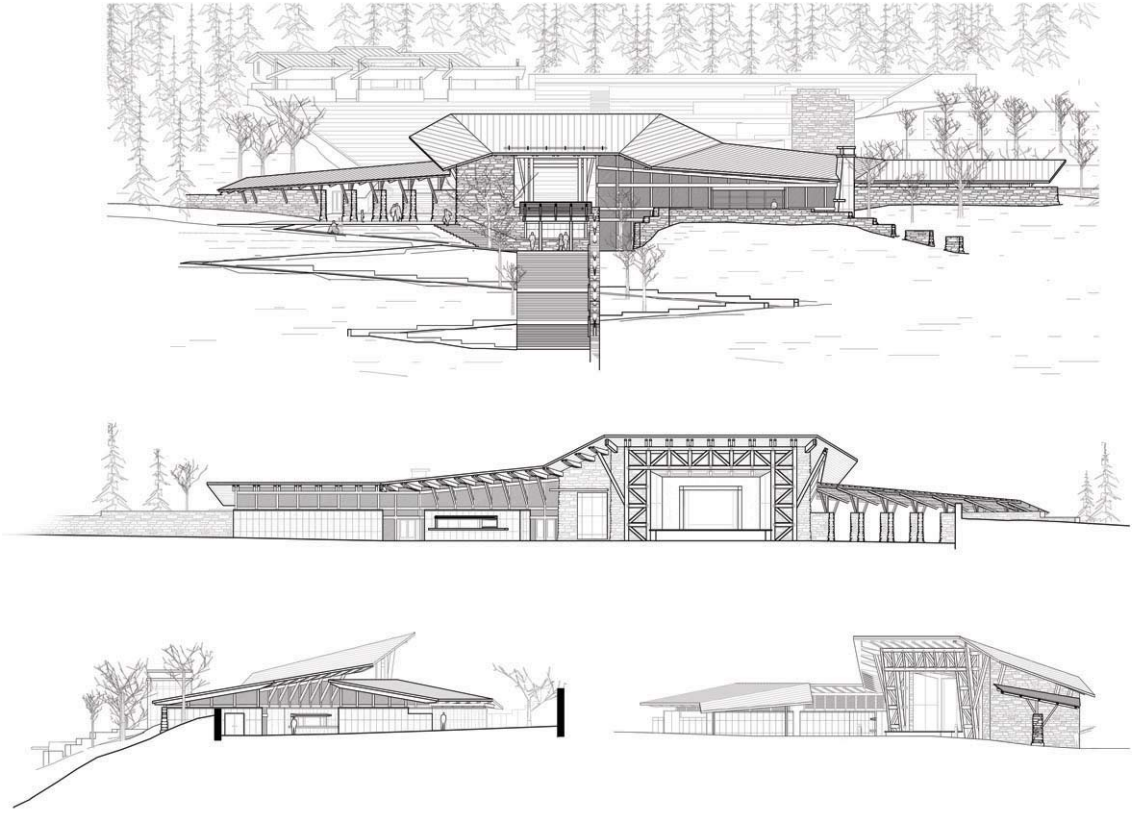








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