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## A Historic Look at the Civilian Conservation Corps and their **Construction of the Guinavah Amphitheater**

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## A HISTORIC LOOK AT THE CIVILIAN CONSERVATION CORPS AND THEIR CONSTRUCTION OF THE GUINAVAH AMPHITHEATER

By

**Michael Jones** 

Thesis submitted in partial fulfillment Of the requirements for the degree

of

**DEPARTMENT HONORS** 

in

Landscape Architecture and Environmental Planning

Approved:	
Thesis/Project Advisor	Department Honors Advisor
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> Year of graduation Spring of 2006

# A Historical Look at the Civilian Conservation Corps And their construction of the Guinavah Amphitheater



Honors Thesis
Utah State University
Department of Landscape Architecture and
Environmental Planning
Spring 2006
By Michael D. Jones
Advised by Professor Michael Timmons

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#### Abstract

The purpose of this project is to document the historical record and current condition of the Guinavah Amphitheater in Logan Canyon, Cache County, Utah. The information collected will be helpful in ongoing efforts by the U.S. Forest Service (USFS) to stabilize and preserve an excellent example of Civilian Conservation Corps (CCC) era construction on the Wasatch Cache National Forest. It is also hoped that the assembled research will contribute to the listing of this site with the Historic American Landscapes Survey (HALS), housed at the Library of Congress.

Research into the historic background of the Guinavah Amphitheater began with a brief review of the origins and role of the CCC at both a national and statewide level. More specific information was sought regarding the local CCC operations, although a limited amount of material was actually located. Useful sources included the Utah State University Library Special Collections, USFS archival drawings provided by Region Archaeologist Richa Wilson, and an archival collection of miscellaneous historic documents in the possession of Scott Bushman, USFS Logan Ranger District employee. Additional background was sought through local historians, and a "Letter to the Editor" published in the Logan Herald Journal. The letter requested information from readers who may have had personal memories and/or photographs to share. The letter inspired several phone calls, one of which led to a 1939 photograph of a family reunion at the amphitheater (see image 12).

The final part of the project involved the recording of the existing condition of the amphitheater, which included a detailed site survey. The data collected was essential to recreating a 3D model of the amphitheater using SketchUp modeling computer

software. Numerous photographs of the amphitheater's existing condition were also taken, and included as part of the documentation. Through the analysis and photo record, added features from the original design such as stairs and electrical lighting were documented.

## **The Great Depression**

During the late 1920s, the American Economy began to decline from the boom years of the teens and twenties. This "strong economy" was built on a financial bubble with little foundation. Then came Black Thursday, October 24<sup>th</sup> 1929, and a subsequent three year melt down of the New York stock exchange. By the end of this "crash" in 1932 stock values had fallen to 20 percent of what they had been in 1929. This huge loss of financial capital sent the US into a depression lasting over a decade, ending in the early 1940's. At the peak of the depression, the unemployment rate of the US went from 3.1 percent in 1929 to an average of 25.2 percent in 1933. (Wikipedia 2, 4)

### Roosevelt and the New Deal

Franklin D. Roosevelt was elected president in 1932, in the heart of the depression. As part of his platform he argued that to repair the economy, a reformation would need to take place. This reformation entailed a complete overhaul of how the United States conducted business. Franklin D. Roosevelt's New Deal, as it came to be known, included major overhauls of the government, and implemented new programs varying from social security, to vast public works undertakings. With unemployment skyrocketing, Franklin D. Roosevelt proposed a program to put youth to work, while at the same time restoring America's natural recourses. This work force was known as the "Civilian Conservation Corps" (CCC). The idea was adapted from a program that Roosevelt had implemented earlier as the governor of New York, which had succeeded in improving the lands, giving skills to younger generations and helping to solve unemployment issues. (CCC Alumni 1-3)

## **The Civilian Conservation Corps**

The CCC was a work relief program created in March of 1933. In a radio address to the nation, Roosevelt announced the CCC program stating:

First, we are giving opportunity of employment to one-quarter of a million of the unemployed, especially the young men who have dependents, to go into the forestry and flood prevention work. This is a big task because it means feeding, clothing and caring for nearly twice as many men as we have in the regular Army itself. In creating this civilian conservation corps we are killing two birds with one stone. We are clearly enhancing the value of our natural resources and second, we are relieving an appreciable amount of actual distress. (CCC Wikipedia 1)

The CCC was to be run as a military camp and the actual camps were operated under the command of the Army. By 1937, there were 1500 camps across the nation, with over 300,000 men enrolled in the program.

The CCC was in operation from March 1933 to 1942, when the funding was cut due to resources needed for World War II. During its operation, the CCC provided many great services to communities around the country and gave purpose to the men that comprised it. Men in the corps were paid 30 dollars a month, of which 25 dollars was sent back to support their families. They were trained in construction, masonry, forestry, heavy equipment operation, reading, cooking, and fire fighting, while being given a chance to see other parts of the country. (CCC Wikipedia 4)

## The Civilian Conservation Corps in Utah

Over the 9 years the CCC was in operation, there were a total of 116 camps established in the state of Utah. Only 30 to 40 were in operation in any given year. Most of the camps created in Utah were under the jurisdiction of the USDA Forest Service. Utah has been greatly enhanced because of the work that these men did. Today Utah is known for its outdoor recreation opportunities, and much of the recreational enhancements of our public lands are attributed to work undertaken by the Corps. Among the hundreds of construction projects created by the CCC in Utah are 478 bridges, 929 miles of telephone line, 423 large diversion dams, 2069 miles of fence, 117 dwellings, and 4246 miles of road as well as hundreds of other construction projects. The scope of the Corps was not limited to construction projects. They were involved in the planting of 3255 acres of trees, hand stocking one million fish and over 40,000 man-days of fighting fires. (Baldridge, 2) In a radio address in 1937, Intermountain Region, Regional Forester R.H. Rutledge stated,

This country is primarily one of agriculture and stock raising. Both of these industries depend upon irrigation and the necessary water supply for their perpetuity. Assured and constant water supplies mean watersheds that are protected and maintained in good condition. Where watersheds have been abused and floods have resulted, the CCC has stepped in and applied the necessary remedies. We have as an example the work in Davis County and Willard Canyon areas in Utah. The stockman benefits further because of the many betterments that are being made on his range allotment. So the tie or close relationship

between the farmer and stockman, or agriculture in general, with the Forest service work and that of our CCC camps is natural, distinct and important.

But this is not the whole story – the man in the city, the camper, the fisherman, the hunter, and others, all are influenced by this work. Recreation improvements, fish planting, road and trail construction, tree planting, and the one hundred or more important activities improved the National Forests and making them more usable and valuable as public properties. (Wilson, 32)

## Work in Northern Utah's Cache Valley

There were three main camps established by the CCC in Cache County working on the Cache National Forest. Camp F-1, Located at Tony Grove in Logan Canyon during the enrollment seasons of 1933 and 1934, worked much of their time in Logan Canyon where they improved campsites, roads, and drift fences, and undertook pest eradication and the planting of 1500 trees. Camp F-2, Blacksmith Fork Canyon, was established in 1933 and was only in operation for one season, completing a road through Herd Hollow and Cowley Canyon. (USFS On Horse Back and By Highway, 19-20)

In 1934 both Camps F-1 and F-2 were combined to make Camp F-34, Hyrum. Camp F-34 continued the work of both of the previous camps in their respective canyons, and was maintained with year around work until closing in May, 1941. During their existence, they completed many projects and created the rich legacy of recreational facilities founded in the Cache National forest today. In 1936, work on Guinavah/Malibu campground was being completed by camp F-34. One of the projects showing the CCC's

high quality of work was the Guinavah Amphitheater completed sometime around 1936. (USFS On Horse Back and By Highway, 22)

## **Guinavah Amphitheater**

The Guinavah Amphitheater is located 5.3 miles up river from the mouth of Logan Canyon, at the east end of the Guinavah/Malibu campground and picnic complex. It is nestled into the landform on the north facing slopes of the canyon. Created out of locally quarried lime stone, it becomes part of the natural landscape. The Amphitheater allows its patrons to feel a close connection to nature. Since its creation it has been heavily used by community and religious groups (see image 3), Boy scouts, family reunions (see image 12), plays and other informal gatherings (see image 4). Regular evening lectures are hosted during summer months on topics of local historic and natural resource interests. It is still used and enjoyed as new generations discover the joys of recreation on the Wasatch/Cache National Forest.

## **Guinavah Amphitheater Setting**

The Guinavah Amphitheater is accessed by a half mile long entry road passing through the Guinavah campground. The road crosses the Logan River and terminates in a gravel parking area accommodating approximately 25 cars. Access to the amphitheater is not separated from access to overnight camping spurs, creating some conflict of use. Amphitheater users are not charged the 5 dollar entry fee as those using overnight campsites are.

A short trail leads from the parking lot to the amphitheater, ascending approximately 15 feet of grade over a 70 foot distance, with use of stairs. The natural slope of the north facing landform is approximately 20%, into which the amphitheater seating has been inserted with minimal disturbance of grade. Dense vegetation surrounds the site, consisting primarily of Big Tooth Maple. Comparison of early photos with the existing conditions indicates that the forest has matured significantly over the past 65 years. (Compare image 4 versus image 11)

### Survey

The amphitheater was surveyed on April 22<sup>nd</sup> and April 29<sup>th</sup>, 2006. After initial survey was completed, data was entered into in AutoCAD and later transferred into SketchUp enabling unlimited numbers of 2D and 3D images to be produced. Sheet numbers 4, 5, 6, 7, and 8 depict the amphitheater in its current condition from several vantage points.

### Design

The amphitheater is comprised of two main parts: a two story stage structure and the seating area. The stage itself serves as a roof above 3 lower level rooms, used as dressing rooms and for storage. Due to its integration into the slope, the structure serves as a retaining wall with walk out access in back on level 1, and walk-out at stage level in fronts, on level 2. (see cross section, sheet 5)

The amphitheater seating is arranged in a traditional fan shaped configuration, conforming to a USFS generic amphitheater plan of the time period (see sheet 3 & 4).

The slope of the seating area is approximately 16% and is ideal to the seating arrangement, affording excellent views of the stage and optimal acoustics.

The amphitheater is constructed of quarried limestone from local canyon sites. Wall construction consists of an uncoursed rubble stone masonry. Due to the irregular shapes of the limestone, mortar joints range from .5 inches to 3 inches. (see image 8)

#### Stage

Construction of the stage seems to be built from generic plans that where adapted to the site as needed for proper construction. (see sheet 2) The stage area and rooms beneath the stage were constructed with poured-in-place concrete walls and stage floor, which give the basis of the stage's form. The stage is 27 feet from inside of sidewall to inside of other sidewall; it is 22 feet from back wall to front of stage. All stone walls are 18 inches thick and vary in height from 2 feet to 16 feet.

There are two sets of stone staircases on ether side of the stage, which allow access from stage to the lower rooms. These steps are comprised of 14 steps measuring 36 inches wide with a 9 inch tread and 7.5 inch riser. Under the stage there are three rooms, two of the rooms located directly under the front of the stage measure 13 feet 3 inches by 9 feet 7 inches. I believe where changing rooms and or storage areas. These rooms at one time where able to be locked, but have since had the doors removed. The third room located under the back half of the stage measures 27 feet by 9 feet 8 inches. All three rooms have a ceiling height of 7 feet 9 inches. To access there are four doors

along the back of the stage two large doors measuring 4 feet 7 inches by 6 feet 7 inches, and two smaller doors measuring 2 feet 9 inches by 6 feet 7 inches. (See sheet 7)

On the stage itself the front corners of the walls have built in lighting areas, modified for electrical lighting from the original design. Front access stairs have been added since original project completion. These stairs are 5 feet wide with 1 foot treads and 7.5 inch risers, constructed of formed concrete. Due to lack of ties to main stage, these stairs have pulled 2 inches away from the front of the stage. The backdrop is of stone construction and measures on each side from stage floor to top of wall 6 feet 6 inches and in the center 7 feet 6 inches. Over all measurements of the stage are 39 feet from side to side and 23 feet 2 inches from back to front. The stage itself is 2 feet 6 inches off the ground.

### **Amphitheater Seating**

The seating area is divided into three areas, each consisting of 19 rows of bench seating. Benches are set on stone terraces, each terrace 36 inches deep with the front 18 inches constructed of stone set in mortar, and the back 18 inches consisting of ¼ inch ½ inch loose gravel. (see image 5) The center seating area is set parallel to the stage and the side areas are angled in toward the stage at a 35 degree pitch. The seating is separated from the stage by a wall, 18 inches high and 18 inches deep running the length of the first row of benches. The stage is set 11 feet 8 inches from the first row, with the front of the separation wall 3 feet 6 inches from the front of first bench to front of wall. The seating is contained within 18 inch wide stone side walls that vary from 12 to 18 inches tall on the inside, and range from 18 inches to 5 feet tall on the forested side of wall. On the 10<sup>th</sup> row of benches on each side there is an access point cut through the side walls: at the

back of the amphitheater on each side there are also access points into the seating area.

(See image 10 & sheet 4)

The benches have been replaced since the original construction and now are constructed of 2.5 inch by 11.5 inch timbers, supported at 6 foot intervals by concrete blocks and an additional timber support piece. The original seating visible on historic photographs (see image 4) shows log seats planed flat on the top and bottom as depicted in generic USFS amphitheater detail type 3 (see sheet 1). The benches themselves are 1 foot tall but reach 18 inches tall due to the 6 inch riser of the terrace the benches are set on. (see image 7) The seats measure 20 feet in the center and range from 5 feet 9 inches to 32 feet 4 inches on the sides. Using 2 feet per person, there is a roughly a 600 person seating capacity.

### Bibliography

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  1891-1960 A Contextual and Architectural History. Ogden: USDA Forest

  Service, 2004



Image 1 (Ogden Forest Service archives)
View of Amphitheater 1936, view of original construction design.



Image 2 ((Michael Jones)
View of Amphitheater 2006, comparison view of image 1



Image 3 (Ogden Forest Service archives)
Program held at amphitheater, 1937



Image 4 (Ogden Forest Service archives)
Small group relaxing, 1937



Image 5 (Michael Jones) View of central stair case, 2006



Image 6 (Michael Jones) Guinevah amphitheater stage, 2006



Image 7 (Michael Jones)
Bench detail of construction, 2006



Image 8 (Michael Jones)
Small rock wall and detail of rock spacing and mortar joints, 2006



Image 9 (Michael Jones)
Back wall, and entrance to back rooms, 2006



Image 10 (Michael Jones) Side wall entrance, to seating area, 2006



Image 11 (Ogden Forest Service archives) View of seating area, to stage.

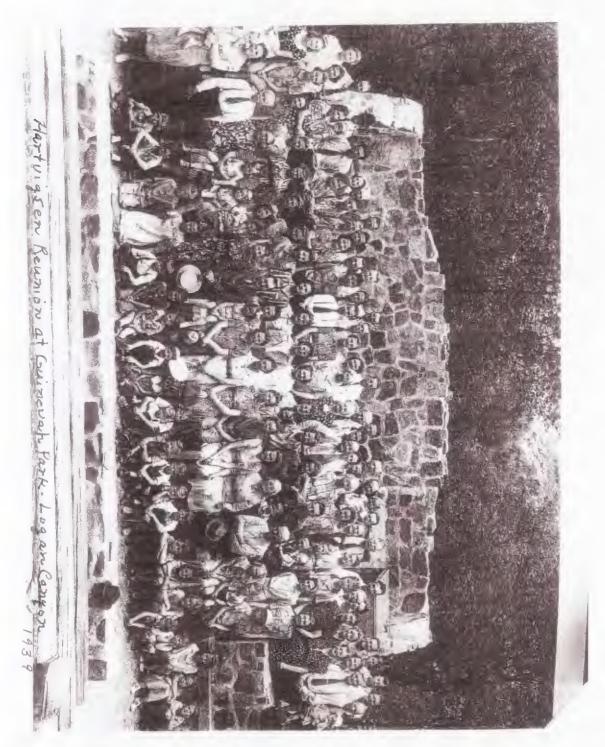


Image 12 (Luana J. Mortensen)
Family reunion 1939, descendents of Peter Andrew Hartvigsen and Tarlena Nielsen Hartvigsen.

General Construction specifications for amphitheater construction, part of generic construction documents used by U.S. Forest Service. This document dated March 10<sup>th</sup> 1934, was issued to be used through out the Rocky Mountain region.

#### GENERAL:

The entire work is to be constructed and finished in every part in a good substantial and workmanlike manner according to the plans a part hereof, and these specifications to the full extent and meaning thereof.

Where figures are not given, all drawings must be accurately followed and measured according to their scale. All notations and figures on plans are to be considered a portion of these specifications, and must be followed. Follow figures in preference to scale,

#### Foundation and Footings:

Plans have been drawn with the assumption that this building will be constructed on a site on which the topography slopes. If erected on an approximately level site, the footings shall be adjusted to the conditions of the site. In all cases, it is the intent to have the footings below the frest danger line. If it is known that the frost extends to a depth of 2'-0" be sure that the footings extend below that line. Should the frost extend lewer, provision must be made to go lewer for safety. (Usually 6" to one foot below frost line will be ample.) The Bill of Materials provides for a depth as shown in plans -lower depths require more material. It may be economical to step the footings when the slope is over 2%, when practical to do so.

#### Rock Work

Rock work will be used where possible. It shall be either coursed or uncoursed rubble, using the available materials to advantage.

A capable rock mason should be engaged to supervise and direct the work. The rock will be laid in a mortar made in the following propertions for each cu, yard:

1/4 part \*\*\* of Portland Coment
3,5 parts \*\*\*xxx of clean sharp sand

The mortar will be of a heavy batter consistency, numelly requiring included

All rock shall be wet when placed so that the absorption of moisture from the mortar will be prevented.

#### Rock Floores

Dry Base Mesential: Good practice generally recommends that the floor be placed on a fill which is at least six (6) inches higher than the surrounding grade. This fill may consist of well compacted cinders, gravel, earth or a mixture of these materials. If the site on which the floor is to be located is poorly drained, it is advisable to run drain tile around the foundation so as to intercept water which might otherwise drain underneath the floor. Such a tile line should be placed about two (2) feet below ground or floor level and sloped toward an outlet to insure quick and complete drainage,

The joints are to be filled and struck flush with the recks so that no dirt can collect in them.

The recks are to be chosen of as large and flat a surface for the floor as is practicable. They should be at least 5" thick.

#### Concrete Work:

All forms are to be constructed of dry lumber which is to be substantially braced and plumb. The insides of the forms are to be as smooth as possible - put the best face of the lumber in always.

Details of the fermork for the reinforced concrete slab over the dressing rooms are indicated on the drawing. It is the intention, that the interior concrete walls shall be poured after the stone walls have been raised to the underside of the stage floor slab. The walls shall harden sufficiently before the formerk is removed. The slab over the dressing rooms will then be srected utilizing as much form material as possible used before in the wall. The forms under the slab must not be removed for ten days.

The ingredients of all concrete work shall be mixed thoroughly in the preportions called for for each type of work. Concrete may be mixed by machine or by hand. In either case, mixing must proceed until stones and pebbles are completely coated with a mortar of sand and coment.

Concrete for the footings, interior concrete walls, and dressing room floor to be made of 1-2-1/2-5 concrete, using seven (7) gallons of clear, clean water carefully measured, to each one sack batch where the sand and gravel are dry, or six (6) gallons of water where the sand and gravel are moist.

The bottoms of the footings and the dressing room floors are to be leveled, graded, and carefully tamped, as called for on the drawing.

1 - 2-1/2 - 5 concrete required the following material for each cubic yard of mix:

4.84 sacks of cement

.46 cubic yards of sand .92 cubic yards of gravel

The stage floor slabs, stair slabs, treeds and risers shall be made of 1-2-4 concrete using six and one-half gallons of clear, clean water, carefully measured, to each one sack batch where the sand and gravel are dry, or five (5) and one half gallons of water where the sand and gravel are moist.

Note that the stage floor is to pitch two inches to the edge,

1 - 2 - 4 concrete required the following material for each cabic yard of mix:

5,92 sacks of coment ,45 cubic yards of sand ,89 cubic yards of gravel

This amount, as well as that above, must be added or deducted for each cubic yard of increase or decrease made necessary by actual site conditions, varying from that shown.

#### Concrete Floors:

Dry Base Essential: While well made concrete is absolutely watertight, good practice generally recommends that the floor be placed on a fill which is at least six inches higher than the surrounding grade except in basements where this practice cannot pertain. This fill may consist of well compacted cimiers, gravel, earth, or a mixture of these materials. If the site on which the floor is to be located is poorly drained, it is advisable to run drain tile around the foundation so as to intercept water which might otherwise drain underneath the floor. Such a tile line should be placed about two feet below ground or floor level and sloped toward an outlet to insure quick and complete drainage.

One-course construction shall be used. This term indicates that the full thickness of floor is placed using the same mixture of concrete throughout and troveling for surface finish (see paragraph below).

Concrete floor work should be rather stiff, requiring some tamping to get it to settle into place. It is deposited in the area to be concreted and evened up or struck off flush with a straightedge, which is worked back and forth over the mass to bring it to the proper level.

Proper fall or drainage is indicated on the plans.

Floors for structures shall be placed in one operation whenever possible in order to avoid construction seams.

The surface of concrete floors should not be finished at once, but given time in which the concrete can stiffen,

CAUTION: Attempts to finish the surface immediately after pouring may cause fine particles to come to the top. This causes a tendency for the finish to check or orack and does not wear well.

#### Reinforcing:

Reinforcing shall be deformed bars of the size called for and shall be placed accurately in the positions called for on the drawings. Rods shall be securely tied at all intersections with #16 gauge black annealed wire and shall be supported by concrete or metal chairs or spacers.

At all surfaces of slabs, in which the concrete is deposited directly against and exposed to the ground, shrinkage reinforcement shall have a minimum covering of one and one-half inches.

The reinforcing for the slabs over the dressing rooms shall be placed not nearer the exposed surfaces than  $3/4^{\circ}$  and shall be accurately bent and placed as detailed,

#### Erection

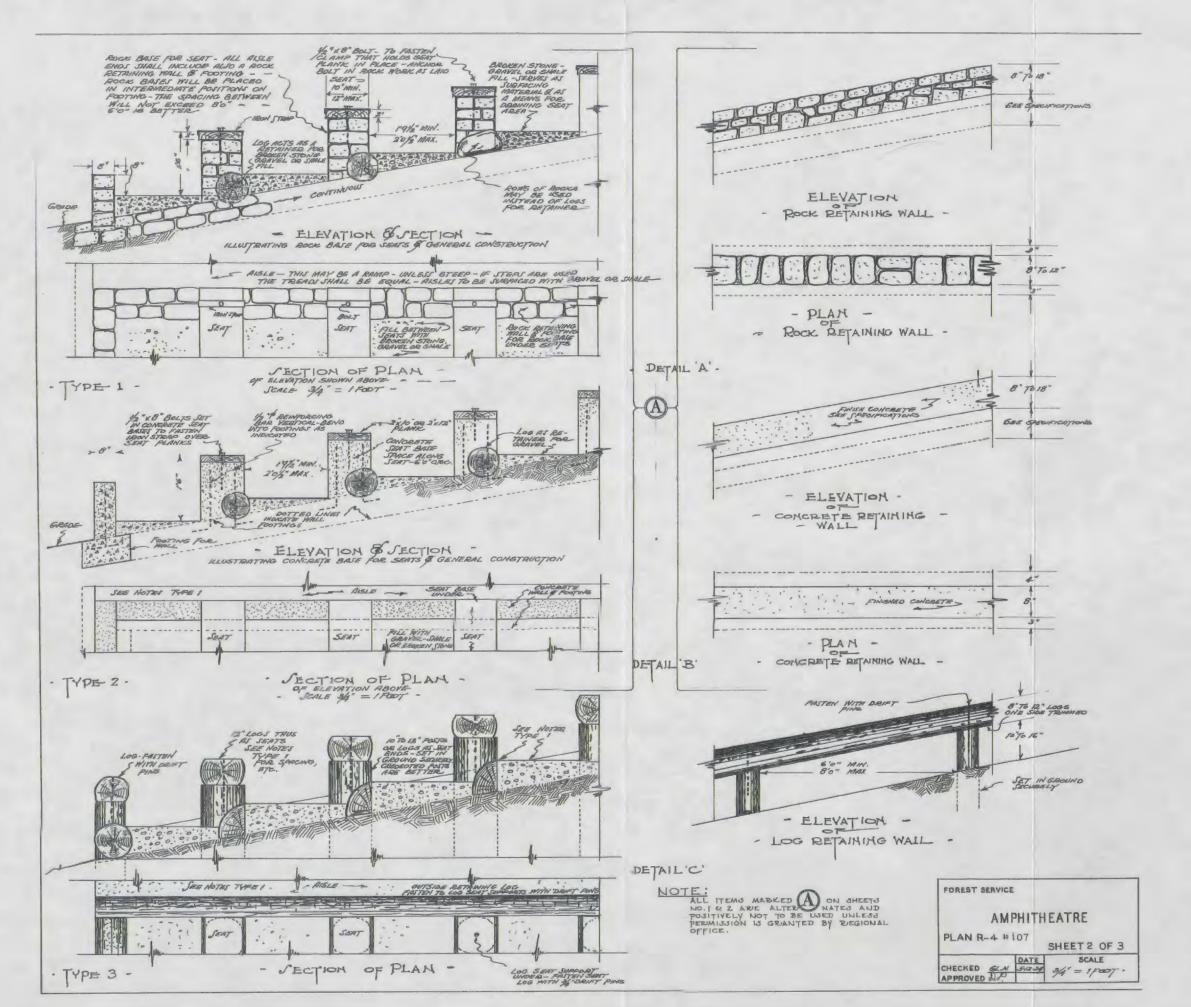
framing: The details of the framing and erection are shown clearly on the plans and are to be followed in detail,

#### Paint and Painting

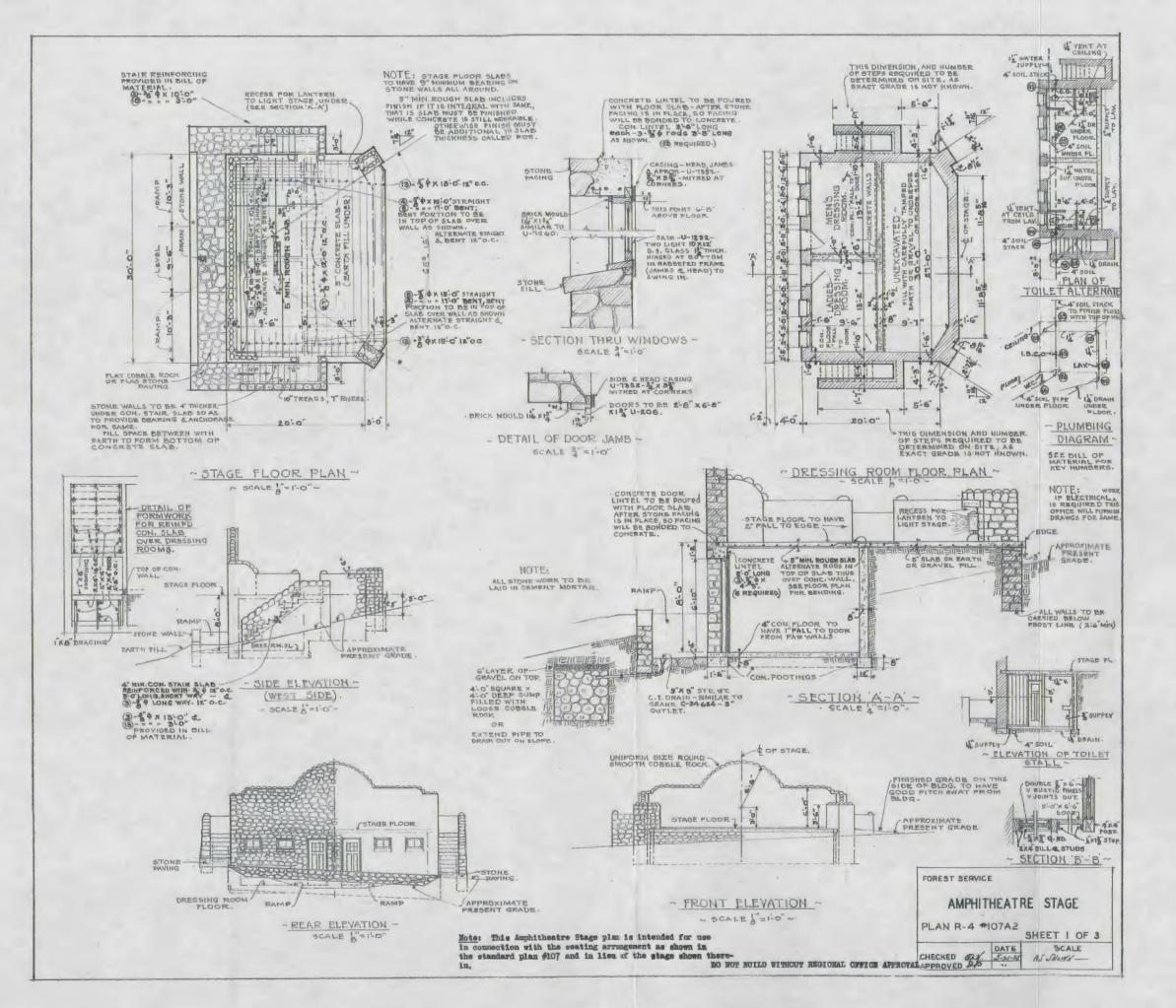
All painting shall conform to the Lands Manual,

The interior wood surfaces of doors; frames and sash, shall be of silver gray stain. (See Lands Manual, page 53a for color chart). All stain will be applied according to the manufacturer's directions.

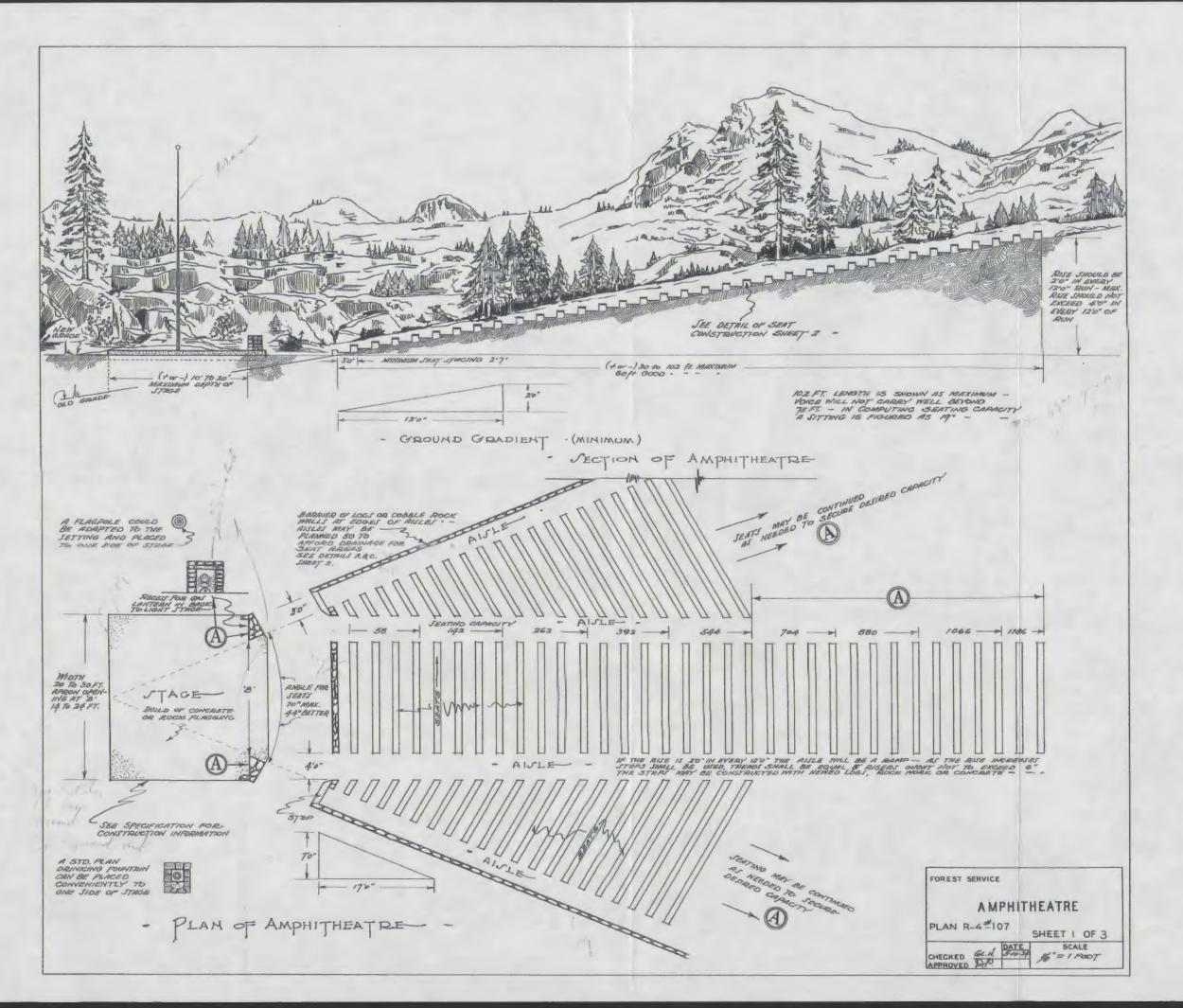
The exterior wood surfaces of doors, frames, and sash shall be of dark brown stain. These surfaces may also be painted according to exceptions as allowed by the Lands Manual.



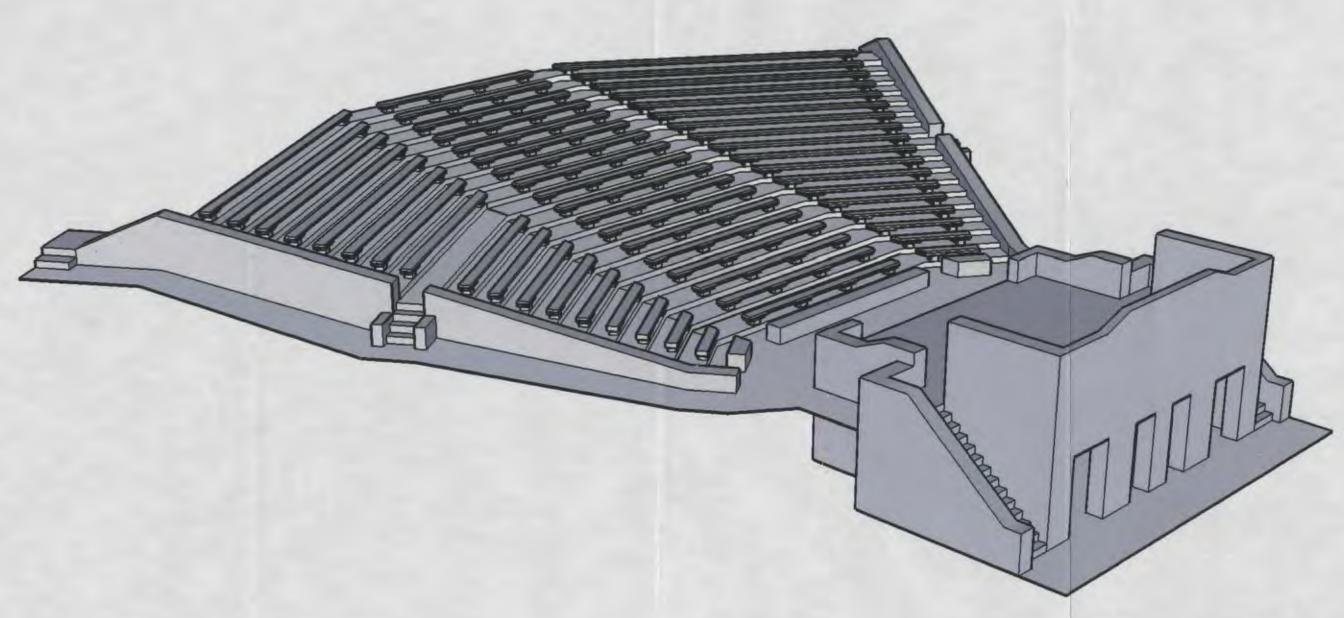
Sheet 1
Generic Bench Details
USFS 5/12/34



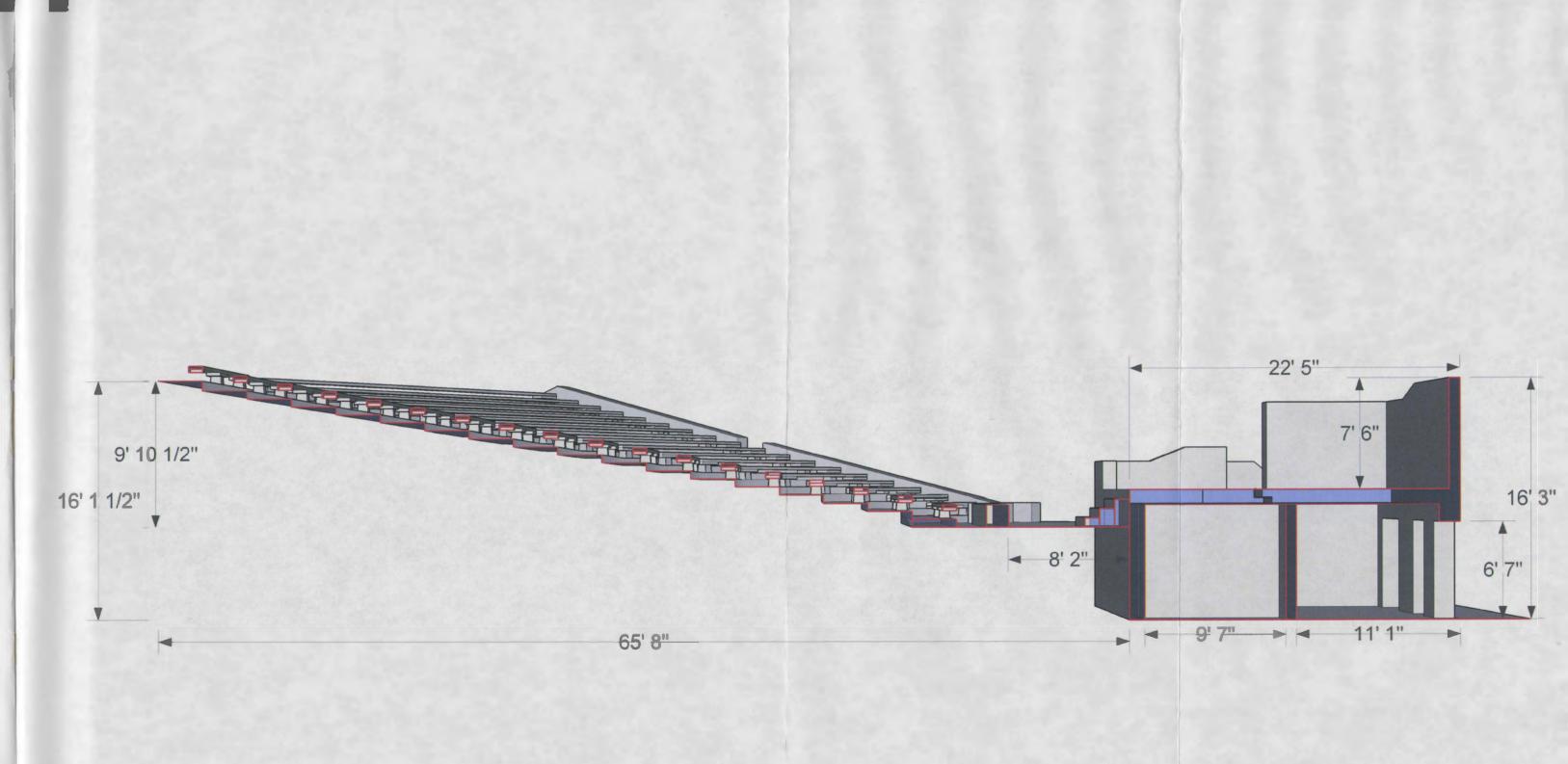
Sheet 2
Generic Stage Details
USFS 5/21/35



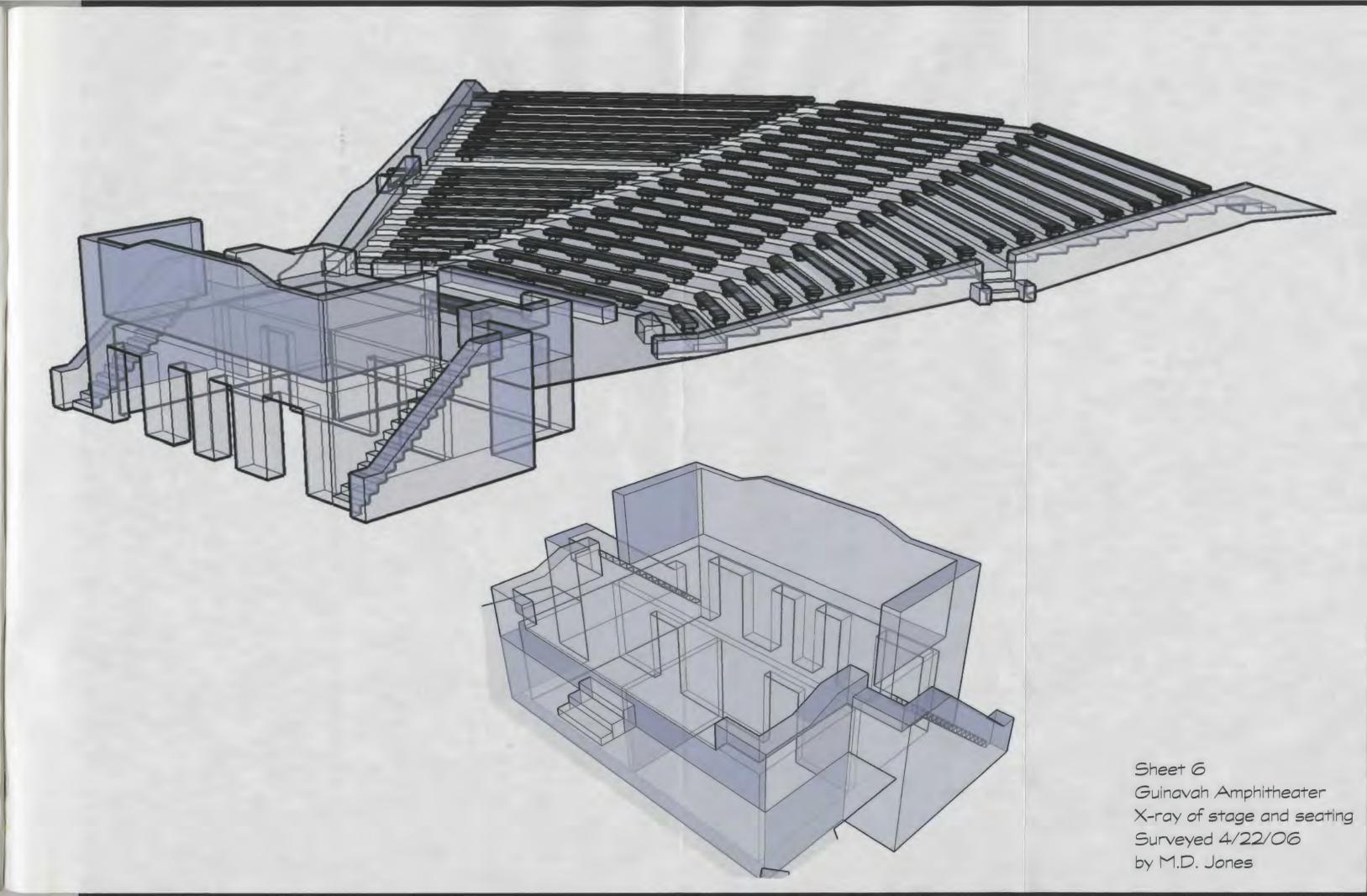
Sheet 3 Generic Seating Plan USFS 5/10/34

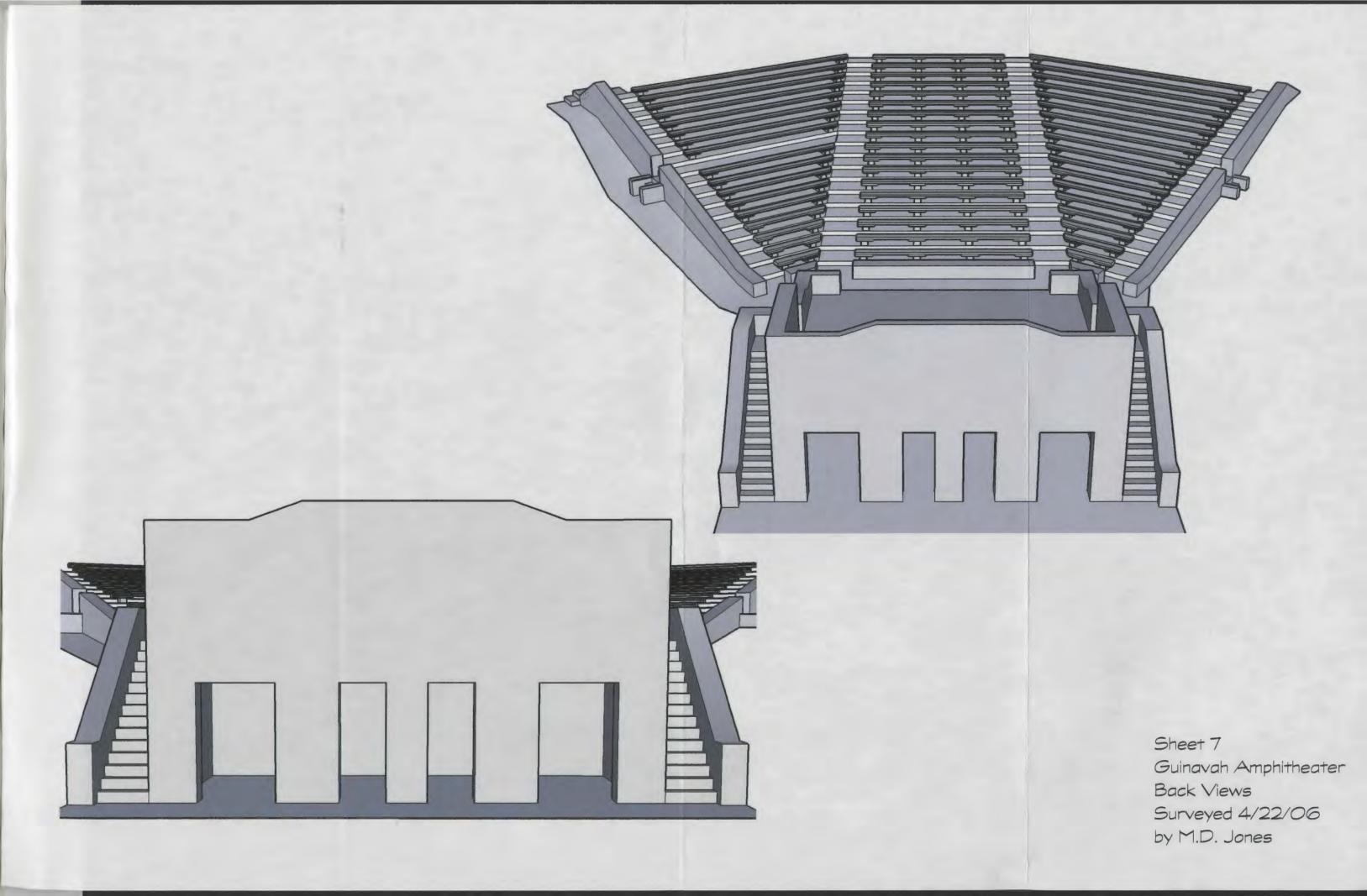


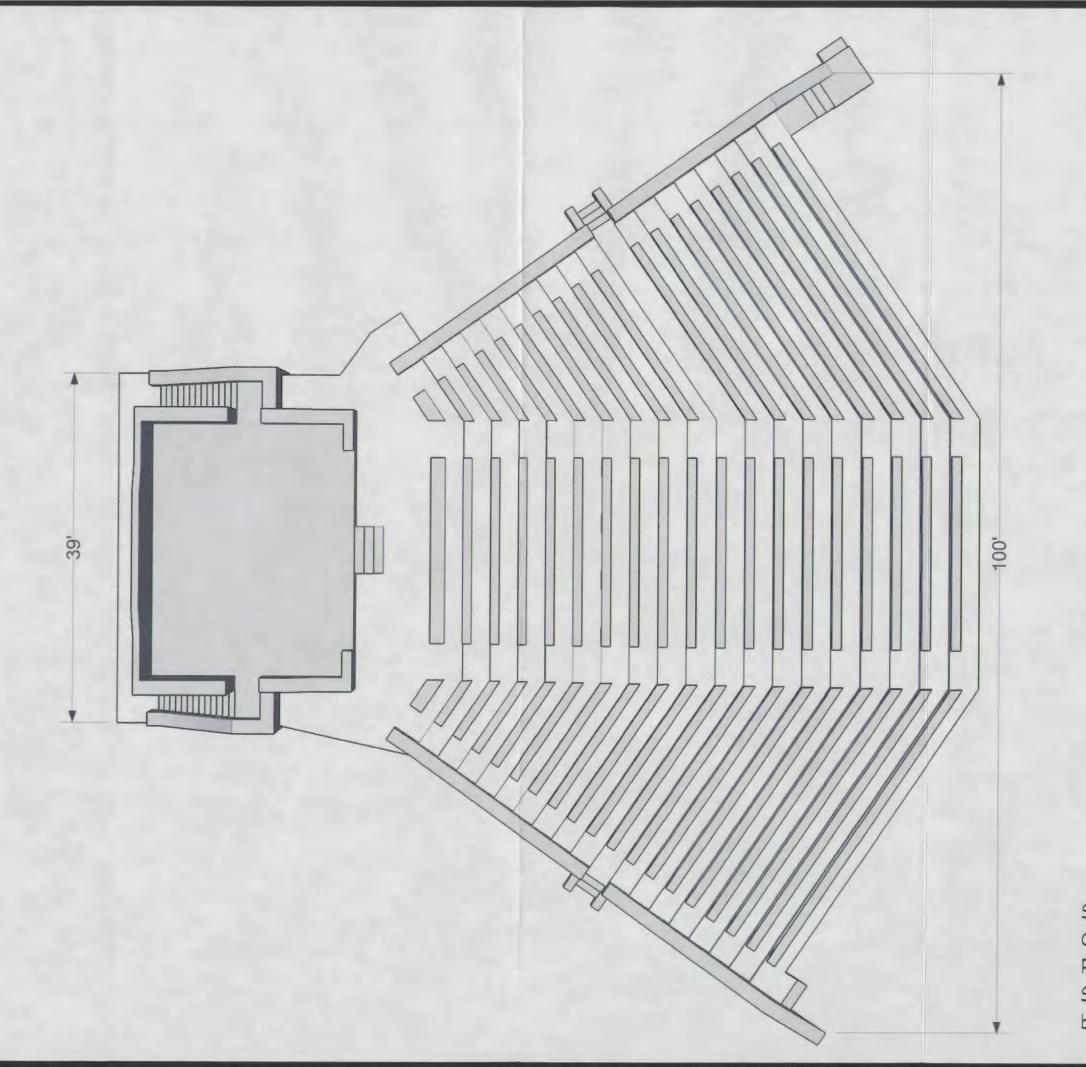
Sheet 4
Guinavah Amphitheater
Perspective
Surveyed 4/22/06
by M.D. Jones



Sheet 5
Guinavah Amphitheater
Cross section
Surveyed 4/22/06
by M.D. Jones







Sheet 8
Guinavah Amphitheater
Plan Viiew
Surveyed 4/22/06
by M.D. Jones