

**2009 Restoration of the  
Mississippi Old Capitol Building**  
The Issues Addressed and the Decisions Rendered

Part 2  
Comprehensive Historical Report on the 2009 Restoration of the  
Old Mississippi State Capitol

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## INTRODUCTION

This volume is the last in a series of documents dealing with the research, analysis, recommendations and changes accomplished in the 170 year history of the Mississippi Old Capitol Building. It details the known history of the building since its initial conception. The documents begin in 1996 with a Historic Structure Report prepared by architect Robert Parker Adams, continues with additional historical research compiled by architectural historian Richard Cawthon in 2007, and reported in his 2009 Part 1, being the architectural history portion of a Comprehensive Historical Report on the Old Capitol. For detailed information on history, dates, sources, and work performed, the reader is referred to the preceding documents and the Contract Documents prepared by Adams for the Restoration of the Old Capitol.

The following document, called Part 2 of the Comprehensive Historical Report, itemizes the decisions rendered during the planning and construction phases of the 2009 restoration and records the reasoning behind these decisions. It is the expectation of those involved in the current restoration that these documents will assist those who care for the building in the future and will assist them in their task.

## RESTORATION CONCEPT

This document presents the reasoning behind certain decisions that were rendered during the 2009 restoration of the Mississippi Old Capitol Building. These determinations were guided by a committee composed of representatives from The Mississippi Department of Archives and History, the architectural firm of Robert Parker Adams, the Mississippi Bureau of Building, Grounds and Real Property Management, and other consultants. A list of these contributors is found in Section G. Within the Department of Archives, the State Historic Preservation Officer and representatives of the Historic Preservation and Museum Divisions were major contributors. The decisions rendered were unanimously adopted, and were guided by adherence to The Secretary of the Interior's Standards for Rehabilitation of Historic Properties. Exceptions to this policy are noted herein. They include the acceptance of questionable decisions made during prior restoration work when there is insufficient historic information available to alter these decisions.

It is imperative to establish an Era of Interpretation for any restoration. It is always tempting to establish this as the original date of the building. The Old Capitol incorporates several alterations to the original exterior such as the added portico railing and round arches and the cast iron substitutions of failed stone lintels and other parts. These alterations are considered to be permanent and now historic in their own right. To this end, the exterior of the building more accurately represents the appearance of the building following the 1870 structural alterations to the building, although it is almost entirely the original Nichols design. Very little of the original 1839 fabric remains; the stone, stucco, copper, and most wood trim having been replaced in earlier repairs and restorations. It is fortunate that almost all these replacements were done in identical style and material to that being replaced. The Ionic column capitals of the west front and the consoles at the north and south entrances are considered to be original, as well as much of the brick work of the east facade.

The building interior has been altered a number of times, mainly in 1870, 1916, and 1960, and primarily for the purpose of adapting the spaces to changing needs of government or for adaptive uses when it was no longer a State House. The current adaptation as a museum imposes similar requirements. For this restoration, certain major interior spaces were declared ASacred Spaces@ where restoration criteria demanded returning to the original conformation if possible. These included the formal entrance stair foyer, the rotunda, the lateral first floor halls, the Governor's Office, the House and Senate Chambers and galleries, and the three apsidal spaces on the first, second, and third floors. Exceptions to this policy are noted under the specific sections.

Restoring the site of Capitol Green to its original configuration is hampered by the later additions of the War Memorial and Capers Buildings which flank the Old Capitol. The current restoration ignores these buildings as well as the Confederate Monument to the south and parking provisions to the rear. The original extent of Capitol Green is acknowledged by the reconstruction of the original Nichols designed fence along State Street and the re-establishment of a row of large oak trees behind the line of the fence.

## SECTION A: SITEWORK

### Capitol Green Fence

#### Origins:

The Old Capitol Building was originally enclosed with a stone and iron fence that was designed by the building architect, William Nichols. The fence was not installed until 1846, some six years after the opening of the building.<sup>1</sup> It is likely that another more temporary fence initially kept the animals off of Capitol Green, as cattle and horses were still being driven down State Street. Old photos show cotton bales stacked in the south yard, and a wooden fence enclosed the north and south ends of Capitol Green. The original wrought iron fence was installed from Amite Street to Pearl Street, then known as Greasy Row.<sup>2</sup> Several types of wood fence extended from the ends of the iron fence, following Amite and Pearl toward the Pearl River Swamp to the east.<sup>3</sup> The limestone and iron fence helps to complete Nichols= sophisticated Greek Revival building.

#### Removal:

The stone and iron fence experienced problems soon after installation, the cause undoubtedly arising from the unstable Yazoo Clay that heaved beneath the stone base. In addition, the slope of the ground trapped water behind the fence, exacerbating the problem.

By 1915 the fence had been removed.<sup>4</sup> There is much conjecture about what happened to the fence. Several possibilities are addressed under Section F: Legends.

#### Fence Design:

Plans for the original fence have long since disappeared, but several photographs made in the late nineteenth and early twentieth century show the fence in sufficient detail to reconstruct it with a great deal of accuracy. A study of similar fences of the 1840 era shows a number of similarities in form, joinery, and material. A very similar fence, still surrounding the U.S. Mint in the New Orleans French Quarter, has almost identical detail and sizing with only the spear point shape and the intermediate column detailing being of differing design. Detail specifications of this fence, installed in 1835, were discovered by the architect in New Orleans archives, and lent insight to the dimensions and detailing of a very similar construction of that era. Scaling of the Old Capitol photographs confirmed the dimensions of the fence.<sup>5</sup>

#### Fence Configuration:

Photographs show the fence to consist of a running band of spear-pointed pickets which pierce a top rail, and are set into a stone base chain wall. Photo analysis showed the pickets to be about 1" diameter, a common size of bar stock at the time. The reconstructed fence was designed around this information. During construction a picket was unearthed in the area of the original fence. It was of cast iron and from a later date, but conformed closely to the shape and size of the original spear point.

The Capitol Green fence was centered on the capitol building and set behind a sidewalk that was initially above the street and at the same elevation as the base of the fence. The sidewalk was eventually lowered to the street level, leaving a terrace at the old fence line.<sup>6</sup> The center of the fence is marked by two large stone pylons which flanked a carriage gate about ten feet in width. Each pylon was topped with a lantern (described elsewhere) and was festooned with a raised laurel wreath carved into the stone cap. These major pylons were flanked by two smaller but similar pylons which framed a pair of personnel gates. Similar personnel gates were also placed in the fence at locations beyond the ends of the building facade in order to afford access from the north and south approaches.<sup>7</sup> The fence ended abruptly at both ends without terminating stone pylons at either Amite or Pearl streets. A late 1800s photo is focused on the fence at the corner of State and Amite St. and shows the fence coupled to a white wooden fence turning east. Other photos show a rail fence and a picket fence at these locations. Since the character of Capitol Green at the terminal ends of the fence has changed dramatically with the addition of two major buildings flanking the capitol, it was decided not to reproduce the temporary north and south wood fences for the 2009 reconstruction.

The iron fence has intermediate pickets that are of a heavier size and with a spear point of differing design reminiscent of a medieval halbred or spontoon. These intermediate iron columns occur at eight-foot intervals and are braced to the ground on the east side.<sup>8</sup> The braces do not occur on all intermediate columns in old photographs, and may indicate items lost to damage. It was determined during this reconstruction to place the braces on alternate posts, at sixteen foot spacing. Future information may indicate additional braces.

The center carriage gates are missing from all known photographs. It is not certain if they were ever installed, but one photograph shows hinge points for suspension of a gate. Wrought iron gates were notoriously flimsy due to the difficulty of joinery (most of them now exhibit welded repairs) and these, the largest of the gates, may have failed or been removed. It was impossible to recreate these gates without conjecture as to their design, so no center gates were installed pending the location of further photographs or other information. A concealed reinforcing bar similar to those supporting the personnel gates was provided beneath the limestone cladding for possible future use as an attachment point.

#### Eagles:

Each of the smaller pylons is topped with a cast iron eagle with outstretched wings.<sup>9</sup> It is not known if these were original to the fence design or added later as the lanterns were. Three original eagles reside in the Old Capitol Museum collection, and a fourth one can be found mounted on a brick pylon at the intersection of North State St. and Council Circle. Others are rumored to have been installed at entrances on Robinson Road and now lost. The six eagles used in the reconstruction were cast by Ball and Ball of Philadelphia, PA using one of the Archives= artifacts as a model. They were finished to match the patina of the lanterns on the major pylons. Two extra eagles were cast and retained by MDAH as spares for possible future use.

#### Foundation:

Information concerning the need for fence repairs appears early in the history of the building and indicates that forces were causing rapid deterioration of the structure. This was undoubtedly due to the heaving effects of the Yazoo Clay on which the fence rested. The 2009 reconstruction installed concrete piling topped by a reinforced concrete beam on which the new fence could rest. Site drainage was also improved to collect water and direct it away from the fence.

#### Wrought Iron vs. Cast Iron:

Most of the ornamental iron used today is actually Cast Iron, a brittle material that is poured into a mold, where Wrought Iron is worked into shape on an anvil. Cast Iron came into vogue in 1850 when the Baroness Pontalba used it extensively on the large apartment buildings flanking Jackson Square in the French Quarter of New Orleans. The balconies were festooned with castings featuring the Pontalba initials and floral motifs. These became a stylistic rage, as well as being a more economical material, and most New Orleans Wrought Iron was ripped out and replaced with the more acceptable (for the time) Cast Iron. This occurred within five years following the erection of the Old Capitol Fence. Few examples of true wrought iron can be found today, but it is significant that the Old Capitol Fence is constructed from this tough, ductile, rust resistant material. Wrought Iron has not been produced in this country since the last century, and has even ceased production in England and Spain. The material for the Old Capitol fence was obtained from salvaged Wrought Iron recovered in England, reheated and reformed into bar stock, and shipped to America. The source was old bridge members, store fronts, and even anchor chain! It was the largest single shipment ever attained by the Real Wrought Iron Company of Farnsworth England, and the fence is probably the largest Wrought Iron project undertaken in the last century.

#### Blacksmith:

Smithing is almost a lost trade in this country, the need being somewhat limited to horseshoes and those who ply the trade for their own enjoyment. The occasional welder who creates fence work sometimes develops an interest in the more ancient craft. An organization of these individuals exists in Mississippi and is called the Mississippi Forge Council. The selection of a contractor for this fence was bid according to state law, with requirements stating that all construction must follow the material and fabrication methods in use in the 1840s. The low bidder was D. E. Warren of Custom Ornamental Ironworks of Clinton, MS. Warren worked with the architect to evolve authentic details and he, his staff, and members of the Forge Council fabricated the fence, including some 1,400 spear point pickets.

#### Lanterns:

Each of the major pylons at the carriage gate is topped with a large carriage lantern.<sup>10</sup> It is not known whether they were initially installed with the fence, but lanterns appear in the earliest engravings and photographs. If original, the lanterns would have been fueled by oil, since gas only became available in Jackson in 1857 and was installed in the Old Capitol for lighting in 1860. Early photographs show an external gas supply line running up the

east

side of the gate pylons. Later photographs show only the base of the lamp, with the upper glass portion missing. The lanterns installed in 2008 were fabricated by Ball and Ball from sketches done by Richard Cawthon from old photographs. They are constructed of bronze, and lighted electrically.

#### Wreaths:

Each major pylon features a Laurel wreath carved in relief on the capstone.<sup>11</sup> The wreaths are rendered with their openings pointed down as opposed to the more traditional orientation where the binding of two laurel fronds is placed at the bottom and the opening is at the top. The wreaths are accurately oriented on the pylons as they are shown in the early photographs.

#### Artifacts:

There are only two original fence artifacts in existence; the pylon eagles and one fence picket. Of the six original eagles, three of them are in the MDAH collections. One of these collection eagles was used as a model for the casting of eight new but identical eagles for the project, with six of them being installed and two being placed in the collection.

A cast iron bar with spear point and double collar attached was unearthed in 2008 along the line of the fence near the southwest corner of the building. It was buried about two feet below grade and was heavily encrusted with rust and Yazoo Clay. The Archeology section of the MDAH Historic Preservation Division cleaned and preserved the artifact. It was used as a guide to confirm the design of the spear points on the 2009 fence and is retained in the MDAH collection. The national Ornamental Metal Museum confirmed that this cast picket was manufactured at a later date and was probably a replacement part.

#### **Sidewalks**

There were probably no sidewalks along State Street when the building was constructed, the street was still dirt, and animals wandered freely until the fence was constructed in 1846. Old photographs show the fence to be set back from the street and elevated several feet above it. Later photos show a brick walk between the fence and the street, with the grade change occurring at the street line. Subsequent street widening and replacement of the walks resulted in the street-level concrete walks we see today.<sup>12</sup> The walks are subject to constant heaving from Yazoo Clay as well as tree roots and require periodic replacement. None of the current walk placement, elevation, or materials is original, with the oldest component being the granite curbs (c.1903) that line State Street. During the 2009 restoration it was necessary to replace the sidewalks in the immediate front of the building, maintaining the existing material, alignment and elevation. The granite curbs were straightened in this section as well.

The central approach walk to the building is a replacement of the one from the 1959 restoration with the exception of reworking the grade change at the line of the fence. The original center entrance or carriage gate had no steps. The street grade was ramped up to

the fence grade to accommodate vehicles. Steps, if they occurred at all, would probably have been at the street line. The lowering of the sidewalk in earlier times dictated that a grade change be made at the fence line. This was accomplished at all three gate positions.

There are two east-west walkways connecting the street sidewalk to the north and south ends of the building. These walks roughly coincide with the personnel gates that can be observed in early photographs. A walkway existing from the 1959 restoration on the north end of the building was reused and the north personnel gate was installed here. A matching walk and gate were placed at the south end of the building.

The perimeter concrete walkway around the base of the building undoubtedly replaced an earlier brick paving that was installed in 1854 in an attempt to divert water from the base of the building. This concrete walk was removed in 2008 for installation of underground pipes but was replaced in like kind and configuration with the exception of drainage grates noted elsewhere.

### **Drives and Parking:**

Service drives and parking areas have developed over time to serve the rear (east) side of the building. The old sidewalk leading down to the Mississippi Fairgrounds can still be seen between the Old Capitol and the War Memorial Building. Other walks and drives are more recent. In the 2009 restoration it was determined that the upper level was to be dedicated to delivery and handicapped parking and that the lower level was to be designated as visitor parking. A central walk and steps were added to aid the visitor=s approach from the lower parking area.

The earlier paving (circa 1970) was of exposed aggregate construction and thought to recall gravel drives. It was a poor representation, and was slippery when wet. The 2009 restoration changed the material to regular concrete but retained the essential alignment of the drives and parking.

### **Site Drainage**

#### **Storm Water Drainage:**

The Old Capitol occupies one of the highest points in town. As such the site water drains away from the building by a natural downslope on three sides. This results in sheet drainage on the east side which has in the past been handled by the drives and gutters. Curb inlets and underground piping were added to the upper parking lot to collect and dispense with water underground. The north side water was collected in area catch basins and piped to the parking lot system. Surface water on the west front of the building has traditionally sheet drained across the yard and sidewalk to the State Street gutter. This is no longer possible with the blocking effect of the fence, and in fact the blocking of this sheet drainage may have contributed to the demise of the original fence. It was decided to provide a line of catch basins inside the fence, connected by underground piping to funnel this water to the south and away from the fence.

#### Sanitary Sewer:

The Old Capitol did not originally incorporate sewers, and was served by outhouses placed to the rear of the building. Subsequent modernization brought plumbing into the building and placed it in the expansive soil beneath the first floor. Leaks from this piping contributed to the rising damp condition discussed under structural considerations. To eliminate this underfloor piping all plumbing was relegated to the upper floors and discharged through sanitary sewer piping concealed within two exterior down-spouts on the east and west faces of the north wing. From here they were piped to the city sewer at the southwest corner of the site.

#### Subgrade Drainage:

The 1959 restoration project installed a sheet piling caisson around the building in an attempt to exclude water which was erroneously thought to be coming from the ground water table outside the building. When testing proved that the water level was higher within the caisson than outside it became apparent that draining was necessary. The caisson was punctured at locations around the building perimeter and drainage pipes were inserted below the elevation of the foundation wall. The water was thence carried to just above the lower parking area and discharged at the surface so that drainage could be observed.

Two perimeter french drains were discovered during excavation, one ancient one about two feet deep and one about four feet deep. The earlier one was clogged with sand and mud and was not repaired when disrupted. The later one was probably from the 1959 restoration. It appeared functional but the outfall could not be located. It was repaired where disrupted and left in place. It was decided to incorporate a french drain into the new sub-grade system designed to de-water the area inside the caisson. This system continues to discharge water at the outfall following heavy rains.

#### Roof Drains:

Roof water has always been collected behind the parapet walls, led into scuppers and dropped in copper downspouts to cast iron boots at grade. These boots most recently led to underground piping that was carried to the curbs at State Street. The boots descended inside the line of the caisson, turned below grade to penetrate the caisson wall, and continued away from the building beneath the perimeter sidewalk. The joints had broken at the turn and allowed roof water under the building. The piping to the street had also been crushed and was non-functional. This system was redesigned in 2008 to discharge through boots that terminated in grade-level trench drains whose flow could be observed through open grates in the sidewalk. The roof water is then led to the underground piping system just east of the fence line, piped to the south, and terminated in a city curb inlet at the Pearl Street-State Street intersection.

#### **Landscaping**

The original landscaping at the capitol consisted of virgin oaks left from the original forest and a view of the Pearl River swamp to the east. This information, based on research performed by Evamaria Neumaier and appearing in the 1997 Old Capitol Historic Structure

Report, provided the guidelines for the restoration of landscaping during the 2009 restoration. All of the current base planting which had been placed against the building was removed. Much of the planting at the south end of Capitol Green, placed after the construction of the Capers Building, was inconsistent with the type of plant material that would have occurred here at the time of Old Capitol construction. This material was thought to be associated more with the Capers Building than the capitol and was left in place except as it conflicted with the original configuration of the Old Capitol. This primarily applied to a twentieth century tree that had been planted in the line of the original fence and it was removed. It is highly recommended by all who have studied this situation that other non-conforming plant material in this area should be removed from the grounds in the future.

Many of the trees just behind the State Street curb had exceeded their life expectancy and several were missing. Two damaged ones had to be removed by the city during the 2009 restoration. To replicate these trees a new line of oaks was created along the east side of the fence line where they were originally placed. Here they would be free to thrive. It is anticipated that they will attain acceptable size before the curb-line trees expire. To the east of the building, the appearance of the Pearl River Swamp cannot be reconstructed due to recent development. A group of oak trees was established at the base of the hill to limit the view of recent development and to suggest the swamp area to the east.

### **Site Memorials**

The Old Capitol, Mississippi's most historic building, is a logical location to place memorials to events and to fallen heroes. The first memorial erected was the 1891 Confederate Monument, placed just to the south of the Old Capitol.<sup>13</sup> Several minor tablets were also placed around the grounds, and the War Memorial Building, a major monument to all Mississippians who fought for the nation, was erected just north of the capitol in 1940. Since then a policy has been adopted by the Department of Archives that no further memorials will be placed on the capitol grounds. A small vertical memorial to the Spanish-American War veterans had been placed directly in front of the capitol about 1927.<sup>14</sup> This was relocated in 2008 to a more appropriate position between the Old Capitol and the War Memorial Building. The Jefferson Davis statue which had resided within the Old Capitol since its removal from the Confederate Monument in 1922 was returned to its original location in that structure during a separate 2009 restoration. The World War I German Field Gun at the War Memorial Building<sup>15</sup> was given a permanent mounting there during the 2009 Old Capitol Restoration.

### **Accessibility**

Access to the building for those with disabilities while maintaining the historic fabric of the building was deemed of prime importance. The closest area of parking (the upper level) was reserved for handicapped access and all impediments of level change were eliminated. A temporary front door ramp was replaced in 2008 with a stone ramp more consistent with the building design, and a shorter route was defined from the parking area to the front door entrance. The southernmost front entrance door is equipped with an automatic operator.

## **Exterior Lighting**

Although the original Capitol did not employ exterior lighting, the building's prominence in the town, its historic importance, and its stature demand that it be observed at night time as well as during the day. Earlier attempts at lighting were meager and they required roof access for changing lamps or even to assess if the lights were operating. The east and west faces of the dome, the Capitol's most prominent feature, were not lighted. A new lighting system was designed by the lighting engineer that recently redesigned the lighting for the Washington Lincoln Memorial. This system accomplishes the desired illumination while eliminating the maintenance problems of the past.

## SECTION B: BUILDING EXTERIOR

### Limestone Facing

The original facing for the first floor of the Old Capitol was to be a native stone. Native stone is virtually non-existent in the state of Mississippi where the geology is primarily one of unconsolidated sediment from the Mississippi River basin. A very poor quality stone, actually Catahoula Sandstone, was found to exist in a quarry near Raymond, Mississippi.<sup>16</sup> This poor quality stone was used for gravestones and some of it was used for Depression Era structures at the Jackson Zoo and in Smith Park. It was utilized for the Old Capitol and remnants can be found in the building's below-grade footings. The stone began to fail soon after installation and portions, particularly the structural parts such as lintels, required replacement. The window lintels were replaced with cast iron in 1870 and the straight lintels beneath the portico were changed to arched stone openings at the same time.<sup>17</sup> It is not known how much of the other stone was replaced, but in 1959 the entire first floor stone casing was replaced with the Indiana Limestone we see today.<sup>18</sup> Only selected components which exhibited structural cracking were replaced or patched in 2008.

### Stucco Facing

The original wall facing on the Old Capitol Building incorporated stone for the covering of the first floor, and a stucco covering over the brick of the top two stories. This stucco was specified by the architect to match the stone in color and texture and to be scored to imitate the stone material.<sup>19</sup> It was a common approach to imitate stone on other Mississippi buildings of the nineteenth century as well.

The original stucco existed on the building from 1839 to 1959 when it was removed during the restoration of that date, leaving the upper two floors with exposed brick. The exposed brick was in vogue in the mid twentieth century, so the stucco was not replaced. The upper two floors remained bare for the next fifty years and few people noticed the inconsistency between the rather sophisticated stonework and cornices and the crudity of the poor quality brick. Even fewer remembered the original appearance of the stucco.

The brick was poor in construction, inconsistent in porosity, and was never intended to be left unprotected. The result was moisture penetration through the fabric of the walls which degraded the brick and mortar and affected the interior plaster surfaces. The decision was made in 2008 to replace the stucco as originally designed by architect Nichols.

It is not certain that the current stucco is the same color as that originally installed on the building. If it followed Nichols's wishes it would have matched the color of the original stone, not the Indiana Limestone on the building today. The sandstone from the original quarry near Raymond is more of a sand or caramel color than the gray limestone of today. Since the original stone was a structural failure and could and should not be replaced, it was deemed preferable to match the existing stone rather than have a miss-matched facade. A sample of the Raymond sandstone removed by the architect was placed in the Museum collection in 2009, and portions can still be observed in the Old Capitol elevator pit.

### **Drum Configuration**

The cylindrical area between the dome and the main roof is called the drum. It generally follows the circular rotunda below, but it is larger in diameter and is not a structural support of the dome. The cladding of the drum was replaced in 1959 with smooth stucco when minor repairs were performed on the drum. Earlier Aas-found drawings prepared in 1916 show the drum to have a panelized cross-section. This is more in keeping with the scale and more appropriate to the expected surface of a supporting drum, and the surface was accordingly divided into columns and recessed panels in the 2009 restoration.

The 1916 drawings also show the cornice between the drum and the tension ring to have a molded cross section. This was replaced in 1959 with a straight wood fascia board bent to follow the circumference to the radius. This was probably an expedient way of closing the surface since a cornice mold cannot be bent into such a compound shape. The material was changed to stucco in the 2009 restoration so that the molded shape could be reproduced.

### **Brick Repairs**

The only brick designated by the architect to be left exposed on the original building was that on the east side. Since it faced the Pearl River Swamp and was not seen from any public way it was not afforded the expensive stone covering for the ground floor nor the stucco covering for the upper floors. Most of the brick used on the Old Capitol was of low quality and records show seven brick companies were fired from the job for poor quality control. Some of this original brick was replaced when the north and south walls of the building were removed in 1959 for the installation of a new piling foundation. Brick from the core of interior walls removed in 1959 was used for the facing brick at that time since it came from the original construction. It was of the poorest quality however, since the brick for interior walls was always selected from the most previous brick delivered to the job. The hard burned brick was usually reserved for the exterior walls of the building.

A modern mortar was used to lay both the new brick on the end walls and the old brick which was relaid on the outside of the ends and on parts of the faces of the north and south wings and patchwork elsewhere. This consisted of a Portland cement pre-mixed mortar rather than the lime mortar employed in the original construction. The Portland mortar has considerably higher strength than the lime mortar and even higher than much of the original brick. The result was a wall system where the brick became the sacrificial component rather than the mortar. This was evidenced by moist brick, brick which froze and slaked, and a general inability of the wall system to rid itself of the moisture that normally should exit from the mortar joints. In addition, the brick had been sand-blasted in the past and the mortar joints had been widened into the brick faces during prior re-pointing. During the 2009 restoration the Portland mortar was removed from all areas where it was installed over lime mortar and it was re-pointed with a high lime mortar to match the original. Where the entire depth of the wall was laid with Portland mortar in 1959, only the outer 3/4 inch was removed and pointed to match the rest of the facade. Damaged brick on the east wall were replaced using original brick salvaged from the upper floors of the north facade before these areas were refinished with the stucco. The wide

joints and inconsistencies seen in the east wall are the result of repeated repointing.

The deteriorated mortar and weak brick of the east wall were strengthened by consolidation in 2008. The porous masonry and mortar were also treated with a system that prevented the entrance of liquid water while allowing moisture vapor to escape.

All of the brick work on the first floor had been affected by a moisture problem known as Rising Damp. This condition is discussed under the Section D: Structural portion of this document

### **Roof Repairs**

The original roof of The Old Capitol was framed with heavy timber framing, supporting a copper clad roof much like the one we see today.<sup>20</sup> The roof experienced serious and ongoing problems with leakage, resulting in deterioration of the structure. This is illustrated by early reports and photographs as late as 1915 which show large reinforcing timbers descending through the Senate gallery to support a sagging roof. This framing was replaced with the steel trusses we see today, and the configuration of the flat portion of the roof was changed slightly. The primary source of leaking was in the flat portion of the roof and the internal gutters which were covered with flat seamed copper. This system, one of the best available in 1839, is subject to degradation of the many joints inherent in a seamed metal roof with little slope for runoff. The flat roof had been changed to an asphaltic membrane at some time in the past and several materials were tried over the years. In the late twentieth century a single membrane EPDM roof was installed to eliminate as many joints as possible, and this served reasonably well. During the 2009 restoration a new PVC single membrane roof manufactured in Mississippi was installed on the flat portions. The internal gutters were relined with EPDM at this time.

Hurricane Katrina removed the copper roof from the southwest side, beginning at the north eave of the portico and peeling the copper back from the entire portico, the west slope of the south wing, and part of the south slope. This area was replaced with like material and design, but not until after hurricane Rita inundated the building one month after Katrina. The 2009 restoration straightened and repaired the remaining copper roof.

The copper covering of the dome had been replaced in 1959 and had recently exhibited leaking in the area of the steps at the base of the dome. This area is traditionally called the tension rings. Temporary repairs were effected several years ago, and the entire copper cladding of the tension rings was replaced in 2008. The copper on the dome itself dates from 1959. Additional information on dome repair can be found in the structural section of this document.

The Old Capitol roof is drained by sloping the roofs to an internal gutter behind the external parapet wall, channeling water along these gutters to parapet penetrations, where copper scupper-heads collect the water and direct it into copper downspouts. These downspouts were replaced with slightly larger downspouts in 2008 to eliminate an earlier

backup and overflow condition. Two additional Downspouts were added as discussed in the structural section under Rising Damp.

### **Cupola**

The cupola (also called a lantern) which tops the dome is a 1959 replacement for a very similar device which had experienced leaking and structural rotting. Earlier photographs show various devices atop the dome of the cupola, including a flag staff and perhaps a cross.<sup>21</sup> An extensive study was made of the finial in 1959 and it was determined that the finial was originally a stylized Magnolia. It was recreated at that time and is still in good condition. Old photographs show the windows to be double sash units with a thickened meeting rail, probably single or double hung windows like the others in the building. These windows are rounded in plan however to fit the circular form. Opening a movable sash at this inaccessible location would have been difficult or impossible. The sash units were replaced with fixed sash using obscure glass in 1959. This sash was repaired and the glass reset with new glazing putty in 2008. The entire cupola was fitted with new sealants, the paint stripped, and repainted.

All surfaces of the lantern other than the copper dome were wood, painted white, and were severely peeling. Due to its inaccessible location (a 250 foot lift was necessary to perform the 2009 restoration work) the lantern probably had not been repainted since 1960. It was decided to change the color of the lantern from all white to a color to simulate limestone for the columns and cornice, with the window sash remaining white as throughout the building.

### **Exterior Millwork**

The exterior woodwork, including windows, doors, wood cornices and trim, were painted and intended to appear as stone work. Much of this work was peeling prior to restoration and was completely stripped to examine the structural condition of the underlying material. The wood trims were observed to be primarily of Cypress construction, but from a much later date than the original 1839 material. The 1959 plans show most of this material being replaced in kind. The four consoles which are placed in pairs above the north and south entrance doors may be original items. The balance of the millwork is considered to be of a later, mostly 1959, vintage.

### **Windows**

The existing double hung windows are 1959 replacements, as are jambs and trim. They are consistent in design with the old photographs, and are considered to be replications of earlier windows. There is some historical mention of the original third floor windows being single hung<sup>22</sup>, but all were found to be double hung during the 2009 restoration.

Old glazing putty was missing or loose and all was entirely replaced. All windows were stripped and painted except for their interior facings. Existing glass was retained, including some obscure glass that once masked utility spaces such as the elevator shaft (now a pipe chase) but was removed from spaces such as 1959 toilets formerly adjacent to the back stairs and removed in the 2009 restoration. The Lantern glazing is also obscure. It could not be determined if this glass was originally clear. It was replaced with obscure glass in

fixed, curved sash when the lantern was rebuilt in 1959. It remains that way.

The windows have traditionally been painted the same limestone color as the other exterior millwork. A painter=s contract dated August 18, 1850 requires window sash and frames to be repainted with two coats of white lead and oil. Following this specification, all sashes were painted white in 2008.

It is interesting to note that several windows on the north and south ends were Afalse@ and covered solid brick walls behind them. The brick walls were painted black and appear darker in the photos. This information and the reason for opening them in a prior restoration can be found in the Part 1 historical section. It was decided not to return these windows to a closed condition in 2008 since they have become an integral part of the House and Senate podiums.

#### **Bulls-eye Window:**

Prior to the 2009 restoration there was a round bulls-eye window placed in the center of the tympanum of the front portico in 1917.<sup>23</sup> This area has held several devices over the years, the first being a clock donated by the City of Jackson. None were original to Nichols= design and the window was removed during the 2009 restoration.

#### **Doors**

At present there are ten exterior door leafs on the old capitol. All are considered to be replacements, just as were the windows. All were painted to match the stone work. The 1850 contract for painting of the building requires the clear coating of nine exterior doors with wood-grained finish, and the whitening of other glazing.<sup>24</sup> It is known from this reference that at least the exterior faces of these doors was grained to appear as a natural wood of higher quality than the cypress from which they were built. This was a common practice in the mid nineteenth century, and in fact all or most of the interior doors may have been wood-grained as well. There was insufficient evidence and budget to grain them all, but this should be researched further and considered in the future. Charles Manship, a noted decorative painter and later Jackson Mayor, was practicing in Jackson at the time, and is known to have done some type of work on the Old Capitol and the Governor=s Mansion.

The discrepancy between the count of nine exterior doors and today=s ten may indicate a change in the exterior door configurations. Photographs indicate single French type paired doors in all five openings under the portico. The door from the second floor to the balcony may be the same. The north and south entrances are each a pair of normal width doors. The inclusion, or even the existence of two rear doors is not assured. Although there are two stairs in the building at present and both show on the 1916 as-found drawings, the five Sanborn Fire Insurance Maps of 1885 to 1904 show only the south rear stair. The nine doors (or pairs of doors) may be five under the portico, one north entrance, one south entrance one rear door and the balcony. It is also possible that the count includes two doors north (they were not French doors but a pair of doors), two south, and that the balcony and the utilitarian east doors were not grained. The important information is that the doors

were wood grained! It was decided by the committee not to replicate this graining due to perceived maintenance problems on these highly utilized exterior doors.

## SECTION C: BUILDING INTERIOR

### Space Allocation

#### Equipment Relocation:

During the 1959 restoration, all mechanical air handling equipment was positioned in the attic in order to fully utilize the accessible floor space for the intended state history museum, curatorial functions, and staff. Access to the attic equipment was afforded by wall-mounted ladders placed in the third floor stair wells and leading to small hatches in the attic floor above. This arrangement provided extremely difficult access and maintenance suffered accordingly. When the state planned a separate freestanding State History Museum, it allowed the Old Capitol Museum to reduce its mission to specific legislative, building, and historic preservation issues. This resulted in a reduction in museum space requirements and allowed the mechanical equipment to be relocated to the unused third floor spaces between the legislative chambers and the rotunda. This location also allows the museum staff to make cursory inspection of the equipment rooms and to monitor condition, but not maintenance.

#### First floor (Ground floor):

The first floor was assigned the functions of controlling visitors through the main west facade entrance and the control of staff and delivery through the east facade entrances. Visitor greeting was afforded at the front door though a centrally placed reception desk encountered immediately upon entering the rotunda. This location also was designed to house security and minor sales functions. The first floor also functioned as a base of operation for the docent guides. The associated education department offices were located in this area and the primary area to the east of the rotunda was reserved for changing exhibits and special receptions. The balance of the space, which constituted the majority of the floor, was allocated to exhibits which would demonstrate the mission of the museum, and the Governor=s Office enjoyed a special interpretation.

#### Second Floor:

The second floor is the main floor of the building and primarily houses the Chambers of the House of Representatives to the north, and the Senate to the south. The area east of the rotunda traditionally housed the High Court. This level has the greatest congregation of public at one time due to the auditorium function of the House chamber. For this reason, the toilet facilities (which were relocated from the first floor to eliminate plumbing problems) were assigned space on this floor. The remaining minor spaces were assigned various administrative functions.

#### Third Floor:

The third floor houses the upper parts of the chambers of the House and Senate, which have traditionally been the public observation galleries. This function continues in the House,

where public functions are regularly held. The gallery space in the Senate can be used for observation as well, but is also utilized for the display of the Mississippi Hall of Fame portraits. The aforementioned mechanical equipment occupies much of the remaining space, along with staff offices and storage.

#### Sacred Spaces:

The Old Capitol has performed many functions in its lifetime and room assignments and configuration have changed accordingly. The Restoration Committee agreed that there were certain ASacred Spaces@ that would be restored as closely as possible to original function and condition. The other spaces, mainly those located in the hyphens between the rotunda and the north and south wings, were to be adapted to more utilitarian rather than historic uses. This included offices, storage spaces, toilets, mechanical and electrical spaces and such.

Those spaces designated as Sacred Spaces include the front entrance hall and spiral stairs, the rotunda and dome, the first floor north and south hallways, the apsidal spaces located east of the rotunda on all floors, the House and Senate Chambers and their Galleries, and the Governor=s Office in the southwest corner of the ground floor. There are minor exceptions to this rule and they are discussed under the individual spaces.

#### **Building Codes and Egress**

The adaptation of a historic building to contemporary building and life safety codes can be a monumental challenge requiring careful consideration and adaptation while providing life safety that does not compromise the historic aspects of the building. There were no building codes of course when the building was constructed in 1839. Much of the building was constructed of wood, and unenclosed stairs were considered adequate for escape. The original building, some 50,000 square feet in area, would have been classified as a building with non-combustible exterior walls but with combustible floor construction, attic and roof framing. No fire suppression systems were available at the time. The basic building would not have met today=s code requirements.

Since then two masonry stair wells have been installed to carry occupants directly to the outside at the first floor, a steel frame and concrete floors have replaced the wood framing of the three floors, and fire alarms have been added. During the 2009 restoration a sophisticated pre-action fire suppression system was installed. This system is discussed in Section E: Building Systems.

Although disruptive to the historic aspects of the building, lighted exit signs and fire escape plans have been added to direct occupants to a safe passage. A closed circuit camera system allows observation of almost every occupied space in the building.

The previous elevator system was not in an enclosed shaft, but a fire rated enclosure was added in the present restoration. Virtually all construction on the first three floors is of fireproof construction (masonry and steel and concrete) and the third floor is isolated from the wood framed attic and roof above by a fireproof ceiling. The attic is fully sprinkled.

The style of the original doors would not have qualified for a UL label, but are solid wood and of sufficient width to accommodate the anticipated occupancy. The present building would be classified as a Type II Building, sprinkled, by the International Building Code.

### **Elevator**

There have been two elevators previously installed in the building. Neither were original. The current one was installed, in the same location as the 1959 elevator which was very slow and from its appearance it was probably intended to perform freight operations. During the 2009 restoration the elevator cab and equipment were upgraded as discussed in Section E. An increase in speed to three times that of the older unit allowed the delivery of patrons from the first to the third floor so that they could then walk down the museum in the logical progression designed by the exhibit firm. The new elevator and hall door finishes are contemporary in design to identify the equipment as a later addition to the building. The elevator was equipped with removable pads for protection from freight.

### **Rest Rooms**

The leaking of plumbing supply and drainage pipes below the building had caused considerable damage in the past. For this reason, the toilet facilities, drinking fountains and other plumbing was restricted to the second and third floors. The auditorium function of the House Chamber generates the greatest congregation of public at any one time and this second floor location was thus deemed the logical position for these facilities.

The original Old Capitol Building did not initially incorporate indoor plumbing. Like the elevator, this was a convenience added at a later time and there were various locations and designs. To differentiate the new from original construction, the 2009 rest rooms are constructed with permanent, sanitary materials such as granite, marble and stainless steel, and are expressed in a more contemporary decor to set them apart from the original facilities.

### **Millwork and Trims**

Virtually all of the doors, trims, base and other items were either replaced in 1959 or the earlier 1916 renovations. Although the 1959 restoration attempted to replace in kind, there are several locations where old photographs show this is not the case. Door and window facings are a case in point as they do not agree with the small amount of historical documentation available. This is explored in depth by Richard Cawthon in the Architectural History portion of this report. In general there was too little definitive information to warrant changing all the facings in the building.

There is a very clear photograph of the doors leading from the central hallway into the Senate Chamber and they are clearly doors with solid panels below and divided glass panels above.<sup>xxv</sup> This was ostensibly so that one house could keep an eye on the other! The doors are similar to the north and south entrance doors on the first floor. The solid panel Chamber doors were replaced with these half glass doors in the 2009 restoration.

### **Finishes**

### General:

Building interior finishes fall into two categories; those that occur in the sacred spaces and those that occur in the other spaces such as exhibit rooms and administrative spaces. The sacred spaces utilize finishes that are generally as close to the original ones as possible. This is explored in more detail in the discussion of individual rooms. The finishes in support spaces which occupy original rooms but now have adaptive use functions are derived from those in the sacred spaces, but have been altered slightly to accommodate their new functions. Exhibit rooms for instance incorporate original colors but with exhibit colors that are slightly more intense than the originals. Obviously new functions such as the elevator and the rest rooms incorporate compatible but more contemporary finishes and colors.

### Paint Colors:

Virtually all wall surfaces in the Old Capitol are paint on plaster. The only exceptions are modern adaptations such as the rest rooms. One of the first items of restoration planning was the consideration of existing colors and their authenticity. It is known that most all of the building trims and surfaces have been replaced over time, especially in 1916. All wood trims, bases, doorframes, door leaves, window sash etc, were replaced in the 1959 restoration when an effort was made to replicate original millwork in accord with the 1916 measured plans. Many notations state to match existing. The same appears to be the case with paint colors.

Renna Johnson, the primary Interior Designer with the Overstreet architectural firm, stated to this author many years ago that she had performed an extensive color analysis of the building prior to the 1959 restoration. Although she supposedly left color samples with Seabrook Paint Company for future use, they could not be located at Seabrook's or in any state archives. Johnson is no longer available nor are the Seabrook's personnel of that era. There is some confirmation in the fact that Seabrook's and Benjamin Moore paint have been the standard for use on this and the Governor's Mansion projects for many years. This was reported to be a requirement to assure continuity in material and color.

Conducting a contemporary paint analysis was considered futile, knowing that the building had been heavily altered in 1916 when the steel frame replaced many interior walls, and again when virtually everything interior other than the rotunda and first floor hallway ceilings was replaced in 1959. Samples taken in 2007 showed the plaster and trims to exhibit only a few coats of paint, and none to be of original vintage. Further research showed the existing colors to be generally consistent with those in favor in the mid nineteenth century. It was determined by the committee that the palate evolved by Johnson in 1959 and still existing in the building would continue to be the basis for paint colors, pending any new information uncovered during the restoration. To record this, digital photographs were taken to show the placement of paint colors, accents, and gilding prior to the 2009 restoration.

In order to study and preserve the existing color palate, Seabrook paint was retained to

color match each existing color and to label same as to place of origin. Samples were cleaned of chalking, dirt, cigarette stains, etc., and then were hand tinted to match. The resultant colors appear brighter due to matching with cleaned samples. Wet samples were prepared and upon approval they were cataloged, labeled and described for the upcoming contract. The mixing formula was made of record and all this information was stored in the files of Seabrook Paint, at Robert Parker Adams, Architect, and in the archives of MDAH.

During the 2009 restoration all the plaster was removed on the first floor to a height of eight feet in order to correct rising damp problems and no original plaster was encountered. One wall on the east portion of the first floor apse was found to have been enclosed in a facing wall of a later date, and original plaster was found to be preserved on the hidden wall. The color was very close to the current base color for the walls, considering age, chalking and dirt encrustation. Pre-construction access to the upper levels of the rotunda were estimated to cost \$75,000 for scaffolding, so examination of those surfaces was deferred until scaffolding was erected for repairs during the contract. It developed that these dome and rotunda surfaces had been re-plastered and repainted previously, but that colors were an acceptable match.

It is possible that wood graining, now referred to a faux finishing, was employed throughout the building. It is known to have been used on exterior doors as noted under Section B. None of the interior photographs clearly show wood graining on the interior doors or trims, but photos do show the baseboards, also called mop boards, to be a dark color rather than the light color of other trims.<sup>26</sup> All baseboards were thereby rendered as dark in the 2009 restoration, but not marbled for lack of information and budget concerns. Some marbling of the trims does occur in the Governor's Office and is discussed under that Section.

Photographic evidence established that several components that were painted in 1959 were actually stained in the original. This was true of the foyer handrail and balusters and the railing between the columns at the Senate. Where possible these components were stripped and stained, where not, they were painted a brown stain color.

## Flooring

### Wood:

It is likely that all floors, including the first, were originally wood flooring over wood framing.<sup>27</sup> Some areas were topped with stone or covered with carpet. At present the first floor public spaces (rotunda and halls) are limestone over concrete on grade, the balance are soft tile or broadloom carpet on concrete. The upper floors are all concrete structure with carpet or tile except for the north and south halls, the rotunda and the apsidal rooms. These are wood over concrete except for the north and south halls of the second floor and the rotunda which are wood applied directly to the floor joists. The wood, installed in 1959, consists of a narrow oak flooring which was given a clear varnish finish.

The narrowness is probably a mistaken interpretation of historic information noting

the flooring to be thin 12 " boards. This more likely referred to thickness rather than width.<sup>28</sup>

The ideal restoration technique would be to return the floors to their original construction, or at least to render them as an exposed wood finish over the modern concrete floors. The exception to this would be the floor of the House, the Senate, and the Governor=s Office, all of which were known to have carpeting (over wood) in their original format. The original flooring would have been heart pine, the same as Nichols used in the Governor=s Mansion at the same time. It would have been selected from close-grained virgin timber and cut to reveal a vertical grain for the best resistance to wear, and sized to five or six inches in width. Although heart pine is available today, material possessing these desirable original qualities is extremely rare. It is likely that the narrow 1959 oak floors were selected as oak for their resistance to wear under this high traffic use.

In order to duplicate the original floor material the architect located a source of heart pine that had been harvested 150 years ago and floated to the mill, but sank before arrival. It remained under water for this entire period until it was recovered by divers, allowed to air dry, and was carefully cut into flooring to match the required specification. This river-recovered heart pine was used for replacement of wood floor in the Senate debate well and ring and on the podium floor. It was finished in a traditional oil rubbed finish using only pure Tung oil applied in multiple coats and burnished to a sheen. Maintenance will require only the re-application of a thin coat of Tung oil if the floor looks dry or shows scratches. It should never be coated with varnish or urethane. An alternate bid was taken for replacing all of the oak flooring with heart pine, but this was not accepted due to its high cost.

#### Carpet:

There are documented references to the installation, repair, and poor condition, which establishes the existence of carpeting in at least the House Chamber, the Senate Chamber, and the Governor=s Office. A reference to sewing indicates that relatively narrow strips were pieced together to form the broad carpet. There is no mention of color, pattern, material or style of the carpeting. The carpet installed in these spaces in 1959 consisted of a Wilton type wool carpet, woven in a pattern that was commonly available in 1959. The same pattern was used in both House and Senate, though incorporating different colors. This type of carpet, woven on looms of the day that produced only 27 inch wide strips, are increasingly rare in this country. Fortunately such a loom existed at a carpet mill in Greenville, Mississippi in 1959 and this may have influenced the selection of pattern and type. The mill is no longer in operation.

The 1959 carpet was viewed as incorrect for interpretation of the building in its time period. Discussions with project interiors consultants Mimi Miller, Kelly Griffin, Mary Lohrenz and Ann Masson confirmed this decision and contact was

initiated with John Burrows of J. R. Burrows and Company of Rockford, Massachusetts, who is an acknowledged expert on the subject of nineteenth century carpets. Patterns were selected with Mr. Burrows= guidance, and the carpet was woven on narrow looms in England. Colors were selected in accord with information discussed under the individual rooms elsewhere in this Section.

### **Fabrics**

The use of fabrics is confined to the seat coverings in the House of Representatives and the window draperies in the House Chamber as well as the Senate Chamber and the Governor=s Office. Very little information was available concerning these materials, and the existing 1959 fabrics did not conform to what little was known.

The coverings on the auditorium seating are not original to the building of course, that function being newly provided in the House in 1959. The initial horse hair coverings in a Burgundy color were replaced in 1998 and are still serviceable. They were simply cleaned and the auditorium chairs touched up in 2008.

The House of Representatives draperies are based on an observation made by a *New York Herald* reporter in March of 1861 which described the windows as being covered with Afaded blue curtains...suspended from a triple bar of gilded Indian arrows@.<sup>29</sup> From this meager description it was determined that a blue (not necessarily faded because the drapes were forty years old at the time of the reporter=s sarcastic comment) color was appropriate if not mandatory. The pattern selected for the tone-on-tone fabric was the Devereaux Damask pattern from the F. Schumacher & Co. Natchez collection, which was a pattern of the appropriate time frame. This standard fabric, with custom colors, was specially woven by Schumacher for the Old Capitol project, sewn by Beverly Robinson, and hung from three gilded Indian arrows as described.

The Senate draperies are based on a drapery fabric that was purloined from the Old Capitol by a Federal soldier and fashioned into a heavy shirt or jacket. The item was subsequently returned to the state by the soldier=s descendants and now resides in the collection of the Old Capitol Museum. The original location of this drapery within the building is unknown, but it would likely have been the Senate or The Governor=s Office, since the House was known to be blue in color. It was decided that this artifact would become the basis for the Senate draperies. The archive fabric division of Schumacher & Co. was selected to replicate the garment=s fabric for use in producing the draperies. The drapery style was taken from the Winterthur Portfolio 10 and similar draperies found in the Virginia Statehouse.

The draperies produced for the Governor=s Office were derived from the only remaining historical source, a portion of a fabric covered valance from the Old Capitol. After reviewing Schumacher strike-offs for pattern and color, this fabric was approved for replication and use in the Governor=s Office. Like the other draperies, sewing and installation were executed by Beverly Robinson.

## **Window Blinds**

It is believed that most if not all of the windows originally incorporated integral interior shutters that folded back against the side recesses of the window and appeared as a facing with recessed panels.<sup>30</sup> Early changes to the exterior walls of the building, primarily to install or hide the steel framework added in 1916, made the exterior walls consist of various thicknesses. This would make the accurate rendering of the internal shutters difficult or impossible, as the panel width must equal the wall thickness to be effective. It was decided to continue with the Venetian blinds that had graced the windows for more than fifty years. These types of blinds were known to be available and were utilized in Natchez homes at the time of construction. An added advantage of this type blind is to allow variable control of light entering the building for the protection of artifacts as well as to present a uniform exterior appearance for the building regardless of the varied uses of spaces within.

## **Furniture**

There were two distinct types of furniture installed in the 2009 Old Capitol Restoration. The administrative furniture for offices, classrooms and other staff spaces was specified from contemporary furniture lines and ordered through the state=s Contract Furniture Program. The historic furniture was considered a part of the exhibit functions of the building. It was selected by the architect=s staff and consultants and provided by the Exhibition Contractor. The individual historic items are discussed under the appropriate room heading below.

## **Governor=s Office**<sup>31</sup>

The three branches of government are Legislative, Executive, and Judicial. In accord with the constitutions of the state of Mississippi, the Legislative Branch has traditionally been accorded far more power than the Executive. The result is a less influential role for the Governor. This is expressed in the Old Capitol Building by the placement of the Governor=s Office. While the House and Senate occupy the two main floors, the Governor=s Office was relegated to the ground floor, which was also known at the time as the basement.

The assignment of offices within the ground floor has changed often in the history of the building, but it appears that the southwest corner has always been reserved as office space for the governor. The size of the office is subject to question. The 1959 restoration allocated a space forty feet long for the governor=s office space. This room was lavishly decorated by Earl Hart Miller, a Dallas interior designer, in the grand manner of Natchez mansions.<sup>32</sup> The Old Capitol Restoration Committee and present day consultants deemed the interpretation to be far in excess of what would have been expected for this secondary position and not representative of the actual decor. Accordingly, the size of the room was reduced to a more manageable twenty-six feet, the crystal chandelier replaced with a more appropriate gasolier fixture, the French mantle replaced with a more appropriate one, and comparatively simpler furniture was selected.

The 1959 fireplace mantel was purchased by Miller for that interpretation. It is inconsistent with the mantels designed by William Nichols and was thus removed and stored in the MDAH warehouse. It was replaced with a simpler mantel, styled after an original one still existing in the Governor=s Mansion and designed by Nichols in the same time frame as the Governor=s Office. The mansion mantel was marble grained in its original form and that was sufficient evidence to treat the office mantel in the same manner. To this end, Malcolm Robson, a fifth generation English grainer from Virginia was employed to simulate Portera marble on a new mantle patterned after the mansion mantel.

The electrified Waterford crystal chandelier was also removed to storage. Its replacement is a gas fired equivalent of a chandelier, called a gaselier or gasolier. It would not have been original to the building since gas was only installed in the building around 1860. The present gasolier was manufactured in Philadelphia in 1857.

Draperies for the governor=s office were patterned after the fabric covering on a valance held in the collections of MDAH. It is not known where this valance was originally located in the building, but it is reasonable to assume that only a few of the more important rooms were equipped with draperies. With the selection of blue draperies for the House and draperies patterned after the shirt for the Senate, it was assumed that the valance may have come from the Governor=s Office. Accordingly, the valance fabric was carefully analyzed by Schumacher & Co. for color and pattern, and then replicated for the 2009 restoration.

The drapery style selected was taken from the Winterthur Portfolio and Godey=s Lady=s Book of 1854. The wood valance is a direct replication of a hand carved and gilded valance from Hope Farm in Natchez, and was produced by Easley and Easley Millwork of Jackson using a computer driven router.

Carpeting is known to have been in place in the Governor=s Office from the earliest days. In the recent past, visitors were excluded from access into the elegantly designed Governor=s Office. It was decided to encourage interaction by inviting visitors into the office as an exhibit. To this end an exhibit carpet was initially planned throughout. This was modified during construction by the addition of a glass rail to restrain the public while allowing full development of the exhibit with furniture and artifacts appropriate to the office. The carpet was divided into two types to indicate this demarcation. The historic carpet was selected from the J. R. Burrows collection of historic carpets of the period. The standard Acorn & Peony pattern with deep burgundy and gold colors coordinated well with the drapery and it was used without modification.

It is known that the initial furniture for use in the Capitol Building was purchased in Philadelphia, Pennsylvania<sup>33</sup>. While it would be preferable to furnish the office entirely with American made furniture from Philadelphia, circa 1840, these antiques are increasingly rare and are exorbitantly expensive. The furnishings purchased for the

Governor=s Office are from the early to mid nineteenth century, and where possible of American craftsmanship.

Furniture purchased for the Governor=s Office includes the following:

Secrétaire & Bookcase, Carved Mahogany, Baltimore, 1825  
Classical Mahogany Bookcase, early 19<sup>th</sup> Century, New York  
Classical Carved Mahogany Pier Table, early 19<sup>th</sup> Century, Boston  
Classical Mahogany Tea Table, 1830, New York  
Classical Carved Mahogany Work Table, early 19<sup>th</sup> Century, New York  
Rococo Revival Cast Iron Hall Stand, mid 19<sup>th</sup> Century, American  
Federal Carved & Gilded Looking Glass, 1810-1825, New York  
Charles X Black Marble Portico Clock, 19<sup>th</sup> Century  
Gothic Revival Solar Lamp, mid 19<sup>th</sup> Century, English  
Partner=s Desk, Mahogany with Leather inlay, English, 1850  
Empire Mahogany Chairs, French, 1840  
Desk/Library Chair, English, 1830

### **Chancery Court**

The rounded area east of the first floor rotunda housed the Chancery Court from 1842 to 1856 when the court system was abolished and the State Library was moved here from the third floor. The space served as the main stairwell from 1916 until 1959 when its form was returned to the original configuration. It has since, and will continue to be, a multi-functional space utilized for receptions adjacent to the major space of the first floor rotunda. The space also houses traveling or special exhibits of a temporary nature. No changes were made in 2009 except removing a Jefferson Davis statue and two 1959 drinking fountains.

### **Supreme Court**<sup>34</sup>

The space on the second floor that is immediately above the Chancery Court was dedicated to the Supreme Court. It was reconfigured in 1959 to suggest the appearance of a courtroom and since no photographs are found of this space it was allowed to continue in its conjectural 1959 form. This rather bare room took on a more active appearance in 2009 with the installation of an interactive exhibit that demonstrates the functions of the Judicial Branch of government. The exhibit furniture in the room is not of historic importance.

### **State Library**<sup>35</sup>

This space, located on the third floor, above the Supreme Court, functioned as the Library from 1842 until it was moved to the first floor in 1858 following the demise of the Chancery Court. The library has been restored to its original configuration based on a 1915 T.F. Laist photograph and on the As-found plan of 1915-1916. This information led to the realignment of the non-structural columns some eight feet east of where they had been placed in the 1959 restoration in order to conform to the photograph. The as-found plan differs slightly, but the photograph was judged more definitive.

The law books seen in the library are old and many are the actual books that resided there in 1842. They had been kept in the collection of the State Law Library and were returned here for inclusion in the 2009 restoration.

### **House of Representatives**<sup>36</sup>

The decision to retain the 1959 function of an auditorium in the House of Representatives dictated that the space remain relatively untouched from those alterations. Exhibit graphics panels were added to illustrate and explain the evolution of this space as the state grew and required more space for additional representatives. A handicap ramp was added for access to the upper seating level and to an exhibition of a representative's desk and chair. A disappearing projection screen was nestled into the bottom of the entablature between the huge Ionic columns of the podium. It normally resides retracted so as not to mar the architecture, but descends to show re-enactments of some of the historic events which occurred here.

The origin of the blue draperies in the House is discussed elsewhere (see page 25). The knowledge of this coloration led to the selection of carpet colors. A mid-nineteenth century pattern called Empire Block was selected from the records of J. R. Burrows & Company, and custom colors were selected. The carpet was specially woven for the Old Capitol in the English mills of Burrows & Co.

The House Gallery is often used for overflow seating, for photography, for television camera positions and even for performances from this balcony. This requires that the balcony be kept free of obstruction in order to maintain flexibility. A glass rail was added as a restraining device at the entrance area. A storage room was provided adjacent to the balcony and equipped with stackable chairs for overflow seating.

### **Senate Chamber**<sup>37</sup>

This chamber is probably the most authentic of the sacred spaces with a few exceptions given to exhibit functions. A number of revisions were required to bring the space back to its original format.

#### Dome:

There is a dome in the form of a shallow saucer above the center of the Senate, it actually occurs at the ceiling of the third floor gallery above. The original ceiling was probably removed in 1916. During the 1959 restoration it was replaced with a conjectural ceiling formed of tapered rectilinear recesses both in the dome and around the periphery. Although handsome in its own right, it was not in conformity with the known configuration of the dome as shown on page 126 of John Ray Skates' book on Mississippi's Old Capitol.<sup>38</sup> The photograph does not show beyond the curvature of the dome, so the horizontal coffering was left unchanged. The surface of the dome itself was completely rebuilt using the tapered octagonal coffers shown in the 1915 photograph and cast medallions copied from those in the main rotunda. Ornamental plaster craftsmen are difficult to find, and the craftsman who fashioned the new dome was a Romanian plasterer with European plaster

training.

He was also responsible for repair of other ornamental work in the building including major work in the State Library.

The glass skylight referred to by Skates was actually a gaslight reflector. This is discussed in more detail under Section F: Legends.<sup>39</sup>

#### Millwork:

Some reconfiguration of Senate millwork was necessary. The railing between the Corinthian columns consisted of short sections flanking each column and an opening in the middle. Photos from 1915 show the railing to be solid, with openings only at the cardinal and alternating points. The incorrect railing sections were replaced with new sections to reflect this. The photos also show the rail to be stained, but all except the top and bottom rail had been painted a cream color in 1959. The wood species used in 1959 would not accept stain so the painted parts were painted a color to match the stained parts as closely as possible.

The window behind the Senate podium is one of those that was initially a false window that was closed, perhaps because of a taller podium platform than the one that exists today. Without evidence for this interior modification there was no need to alter the window from its 1870 form.<sup>40</sup>

#### Carpet:

The carpet of the Senate Chamber was the Empire Medallion pattern from the Burrows historic Wilton collection. Custom colors were selected to reflect the green and blue patterning of the shirt fabric used for the draperies. The floor of the Senate well was restored in 2008 with heart pine as noted elsewhere. The third floor Senate Gallery oak floors from 1959 were sanded and refinished.

#### Furniture:

The Senate is equipped to illustrate the legislative process by means of mannequins of Senators which are portrayed at their desks around the circle. The President is presiding, and lobbyists are plying their trade while a debate is occurring in the pit. There is an actual 1870 Senate desk and chair from the museum collection. They are displayed in the Senate Chamber. Twelve matching desks were crafted by Jerry Summerford, furniture craftsman of Jackson, Mississippi, and twelve chairs were crafted by Smyda Woodworking of Brandon to match the originals. These are arrayed around the raised area above the debate pit and are used in the exhibit re-enactment of Senate proceedings.

The Senate Gallery on the third floor is still available for observation, but it also displays the Mississippi Hall of Fame portraits. A room to the northwest of the gallery houses a First Ladies= Exhibit.

## SECTION D: BUILDING STRUCTURE

### Dome Repair

The Old Capitol dome is a single shell dome of heavy timber construction. It has an exterior cladding of copper over wood sheathing and an interior surface of plaster on wood lath. There is no access between these exterior and interior surfaces of the dome. The timber dome structure consists of two laminated rings resting on the brick cylinder of the rotunda, topped by a series of 64 arched ribs which are anchored into one of the bottom rings (called the tension ring) and into a similar top ring (called the compression ring) at the base of the lantern (See page 74). All timber members are necessarily curved to form the dome surface or to conform to the rotunda cylinder. The members are of such a length that they cannot be cut from a single board so they are fabricated of several members which are lapped and pegged together. The bottom of the two lower rings is composed of two members, each three inches thick. They are pegged together and rest on top of the eighteen inch thick brick wall of the rotunda. It is not attached in any way, but merely serves as a base plate on which to bear the weight of the dome above. The other lower ring, composed of three members each three inches thick, is placed eight inches above the lowest ring and is separated from it by a series of 8x8 blocks spaced about four feet apart. This upper ring is not attached in any manner to the blocks, nor the blocks to the lower ring. The rib members above are either two or three pieces thick depending on their task, and are mortised into the upper ring to resist their tendency to move outward at the base. Thus the upper ring is referred to as the tension ring. The compression ring at the top of the dome above could not be inspected without removing the decking, but it was exposed in 1959 to the team who replaced the lantern at that time. For reasons to be explained later, the current team made the assumption that the compression ring was in acceptable condition and avoided the destructive investigation necessary to confirm this. There is a non-structural portion of the dome consisting of a second cylinder outside the rotunda wall and about four feet from it. This device is termed the drum. It supports an architectural tension ring of three steps in the surface at the base of the dome, the bottom one of which conceals an internal gutter. The drum is constructed of wood studs and the architectural tension ring feature is supported by various light timber framing, much of which was added during later repairs.

The structure of the dome was found to be in a deplorable condition. There was copious evidence of leakage at virtually every point around the base of the dome and from the internal gutter. Many of the original timber components had rotted away, including portions of the upper and lower rings and even a number of dome ribs were totally missing their lower portions. There was no continuity in the tension ring and no apparent reason that the ribs did not sag, spread, and fail in their mission to support the copper above and the heavy plaster inside.

Observation of the structure failed to explain how the dome could be standing and it appeared that it could fail at any moment. A subsequent analysis by Jeff Laird, P.E. revealed that the dome was probably restrained only by the wood sheathing and old nails, and possibly the copper skin.

It was apparent that some action was in order. Three options were proposed by the team:

1. Rebuild the dome:

This option entailed removing the entire dome and reconstructing it to the original design. This approach was the safest and most permanent solution. It was not without potential difficulties. Removing the copper and sheathing to access the ribs would have undoubtedly compromised the structure, resulting in an accidental collapse. Even careful demolishing of the structure would mean the loss of some of the last remaining decorative plaster in the building. Reconstruction would utilize more modern materials than the rough sawn heavy timbers and pegs, and the replacement of wooden lath and plaster is almost unheard of today. Lastly, this alternative would add a year to completion of the project and about one million dollars to the cost.

2. Ignore the problem:

The dome structure exhibited multiple patches of timber and fasteners from several different ages. It is likely that this problem existed from early in the building's history, as there are many reports of leaking roofs found in the literature. The random nature of the patching indicated that earlier efforts showed a need to attack the problem, but an unwillingness to do so. This team could imagine earlier teams observing the condition, musing about a solution, and coming to the conclusion that "It's standing up now, so why bother it. Let's patch it and move on." Support for this approach states that the dome was subjected to the high winds of Hurricane Katrina in 2005 and also from Rita a month later. It probably sustained the highest empirical testing it has ever experienced and it survived. The problem with ignoring the problem is that the defective dome could fail at any time, and heavy criticism would be warranted.

3. Repair the Dome:

This approach was tenuous at best and contained many compromises. Repair would have to consist of careful patching of the rotted and missing components and the establishment of a true tension ring to restrain the dome ribs. The nature of the problem required the installation of the tension ring to be the last effort, and the dome would be in danger of collapse until then. The inability to remove the copper or the sheathing for fear of losing the dome restricted actions to just the bottom four feet or so of the ribs before they disappeared between the outer sheathing and the inner plaster surface.

The contractor would need to carefully support the damaged ribs one at a time and replace the wood rings below. It was decided not to require the rings to be cut from old heart pine and pegged together, but rather to use contemporary pine of the same total thickness since they would simply act as blocking in the new structural design. Analysis of the original design showed that the bottom ring was intentionally not connected to either the brick drum nor the ribs so that any

spreading of the ribs would not spread the drum and cause catastrophic failure of the whole. The large blocks isolated the dome above and allowed it to float without affecting the brick below. This system could be maintained provided that the dome above was reinforced to act as a unit and still be supported by the isolating blocks below.

When the rings had been replaced, steel channels formed to the curve of the ribs could be bolted to each side of each rib to reinforce rot or replace missing ends. These channels could then be bolted to the upper ring below. The drilling of many bolt holes in the structure was a concern since the vibration of the plaster could damage the delicate keys to the lath and result in loss of the inner shell. With the replacement of the ribs a steel band could be added around the outside of the top ring and attached to the rib channels. This would give positive restraint to any potential future movement. Once this was attained, the outer drum and architectural tension ring could be removed and rebuilt to the original design. Although this approach is not totally thorough since it lacks attention to the compression ring and uses some non-original components, it gives a dependable structure to the dome without defacing the original decorative plaster or the aged copper dome. The major problem with this approach would be the high possibility that the very actions of repair could cause the loss of the delicate condition of the dome. As such, success of the approach could not be guaranteed.

After due consideration by the team, the Department of Archives and History and the Bureau of Building it was decided that the Repair Option offered the best opportunity for a successful project and this approach was followed without incident.

### **Rising Damp**

Rising damp is a condition that is often found in old masonry buildings. It was known to have existed in the Old Capitol since the early years following construction as there are mentions of difficulty with plaster deterioration since that period. Rising damp is characterized by the bubbling, flaking and loss of paint and plaster on the ground floor of a building, always accompanied by Ablooming@ of fine, white crystals that have an appearance similar to cotton. This usually occurs from two to perhaps four feet above the lowest floor, but is known to rise even higher. In the Old Capitol the loss was as great as eight feet above the floor. The damage is caused by the Awicking@ of subgrade moisture by porous masonry material in an action much like a sponge whose end, dipped in water, will wick the water to some point above the water level. The height depends on the structure of the sponge and other factors.

The rising of the liquid is actually the result of capillary action, and the smaller the pores and the more confined the surfaces of the masonry the higher the column can rise. As the moisture rises it dissolves salts available in the brick and primarily the mortar and carries them along in this state until they reach their maximum height. At this point they migrate to the exterior of the wall, where they dry and crystallize back into their original state. It is

these crystals that raise the paint finish off of the plaster and deposit the cottony substance on the surface. The plaster below is deteriorated by the wetting action of the moisture as it exits the wall. An attempt to seal the moisture in by water resistant paint or other treatment increases the encapsulation and raises the capillarity to an even higher point, whereupon the crystallization exits the wall once more.

Correction of this condition required the elimination of one or more of the necessary and sufficient conditions associated with rising damp. These consist of the elimination of the source of moisture, the removal of the existing moisture, the blocking of the rise of any moisture through the brickwork, and the prevention of migration of moisture or crystallization from brickwork to plaster. The success of any one of these four conditions would eliminate the rising damp. All four were instituted during this restoration.

There have been long-standing rumors that a spring beneath the Old Capitol was the source of the water rising up the walls. This theory is discussed under Section F: Legends. The first floor of the building was completely removed in 1959 without discovery of the rumored spring. The first floor was reinstalled using a continuous concrete slab on grade, and a caisson of sheet steel pilings was driven around the periphery of the building about one foot out from the outside walls. The piling are twelve feet deep and topped with concrete between the piling and the brick wall. With no source of water from a spring the water source was thought to have been ground water from outside, and this method was an attempt to stop it. During the preparation of the Historic Structures Report by Adams in 1997 there were exploratory holes bored outside the front and rear of the building and two through the floor inside the building, all in a line just north of the rotunda. It was found that the water level was higher inside the caisson than outside the caisson. The water was laboratory tested and revealed to contain copper salts, chlorine, and fecal coliform. It was immediately obvious that the water source was internal. All of the piping in the building descended to the first floor, spread web-like in the expansive Yazoo Clay just below, and leaking joints contributed a constant water source to the clay below the building. The obvious solution was to move all water pipes, drains, sprinkler lines and downspouts to the upper floors to eliminate piping below the slab. One exception is a small prep sink in the kitchen area that pipes directly out the rear wall before descending below grade.

Removal of the water from the saturated soil beneath the building is a more difficult and longer process. The brick walls extend some five feet into the clay below and form a giant waffle pattern as they crisscross the building. All of this is contained by the sheet steel pilings driven around the perimeter. To allow this moisture to migrate from the subgrade, a drain pipe was installed around the building just below the bottom of the brick footings, and a number of laterals were taken through the sheet steel and below the outside footings to drain the interior. This is expected to be a long-term process in that the porosity of Yazoo Clay is more similar to modeling clay than to a pervious soil like sand or silt and thus will take a long time to migrate laterally to the new drains. There are also no drains penetrating to the center sections of the building and this area will depend on lowering the level in the outside bays first. An additional perforated French drain was placed to encircle the building in order to dewater the soil and intercept any ground water that might approach the building.

The trench also served as a device that would hopefully sever any unknown water lines or drains that may have been installed during the previous one hundred and seventy years. During this trenching multiple dripping leaks were discovered in the fire sprinkler line just adjacent to the building on the southeast side. This could have been a major contributor to subgrade moisture and would not have shown up on a water bill since these lines are not metered.

Rising damp is normally combated by installing a layer of impervious stone at the base of the wall. Granite is a common material, although a layer of slate or lead was often used. No such barrier was placed in the Old Capitol construction, and inserting one after construction is extremely difficult if not impossible. An alternative measure is to inject the wall with a chemical that will infuse the wall and form a physical/chemical barrier to the passage of moisture by interrupting the porosity of the brick and mortar. This treatment was applied to all of the porous brick walls in the Old Capitol. It was not applied to the more recent walls such as the north and south walls installed in 1959 or to later concrete block walls that rested on top of the concrete floor slab.

The damaged plaster on the first floor was removed from all porous brick walls to a height of eight feet. It was discovered that earlier attempts to stop the rising damp included plastering beneath the lime plaster with hard coat of Portland Cement, plastering with Ironite, a highly impervious and water proof plaster, and even coating the brick and cement with an asphaltic compound. All of this conspired to increase the level of rising damp by containing the moisture rather than eliminating it. These actions are part of the reason the rising damp attained such great heights in this building. To preclude this happening again if other actions should fail, the first floor plaster was applied to galvanized mesh rather than directly to the brick. A layer of asphalt saturated felt was loosely placed between the brick and the mesh to isolate any moisture without encapsulating it.

### **Ground Movement**

The Old Capitol has experienced movement since it was first constructed. This is mostly because the building sits on a bed of highly expansive Yazoo Clay whose volume changes with a change in moisture content. Early problems were attacked with a series of rods and plates to tie the walls together, and eventually an entire steel structure was inserted into the building so the exterior walls became independent of the load of the roof and floors. This, along with the rebuilding of the north and south walls in 1959, served to stabilize the building. There was minor cracking found in the front walls, primarily because of differential movement between the new end wall foundations and the original building, and one major displacement of the stone in the arch on the north wall of the portico. This displacement was caused by very high moisture content in the soil supporting the corner of the porch. The engineers deemed this to be a loss of shear strength in the soil and that it would be self correcting if the soil were drained. Drainage was installed and the stone patched, but the condition will bear watching.

## SECTION E: BUILDING SYSTEMS

An analysis of building systems is beyond the appointed scope of this report. The reader is referred to the plans and specifications for the 2009 restoration project for details of the actual work accomplished. A general summary follows:

### Mechanical Systems

#### Water Supply:

Much of the problem of rising damp and building movement were accorded to the excess water discovered in the soil beneath the building. For this reason and as noted elsewhere under the discussion of Rising Damp, all plumbing fixtures, and all supply and waste piping, were relegated to the upper floors. An entirely new domestic water system was installed beginning where the city water line crossed the State Street property line just south of the building, was run eastward to the rear line of the building and turned north to enter the building through an existing utility tunnel that once served a boiler plant behind the capitol building. A new valve was installed near the fence line to enable the Old Capitol and the Capers Building to be controlled individually.

#### Sanitary Waste:

Waste piping was also restricted to the upper floor except for an individual drain from the first floor prep sink which empties directly through the rear wall. The upper floor waste piping discharges through the north wing exterior walls approximately midway and descends outside, concealed in a non-functional downspout, where it continues outside the line of the caisson to a manhole and hence to the city sewer in State Street.

#### Storm Water:

Rooftop storm water is collected from internal gutters by way of through-wall scuppers to collector heads and thence down the outside of the exterior walls in copper downspouts. Site drainage is discussed under Section A: Sitework.

#### Heating and Cooling:

The initial system of heating with fireplaces has long since been abandoned, the fireplace in the Governor=s Office being the only remaining one of approximately twenty eight estimated to have been in the original building. The building has been serviced with hot and chilled water from a central plant since the Capers Building was constructed in 1970. When the Winter Building was completed in 2003 the source of conditioned water was relocated to the new central plant at the corner of Amite and Jefferson Streets, with new piping to the Capers Building basement. In the 2009 restoration, new pumps were installed in Capers to handle the Old Capitol and new piping installed from there to the air handlers in the Capitol. At the same time new piping was also run to the system in the recently restored War Memorial Building.

The old equipment was removed from the Capitol attic and all new air handlers were installed on the third floor. All old ductwork and controls were replaced to provide an entirely new, efficient and code compliant system.

## **Electrical Systems**

At the time of the 2009 restoration the power and lighting systems in the building were approaching fifty years old. They were outdated from a technical standpoint, no longer conformed to current code requirements, and parts were difficult or impossible to obtain. A decision was made to replace the entire electrical system with the exception of certain decorative light fixtures and some concealed conduit which could be reused if rewired. Reused fixtures were removed, cleaned, painted, rewired, and reinstalled.

Access for present and future wiring in an old building is always difficult. To accommodate this, electrical panels were located in each of the four quadrants, close to the rotunda. From there they were routed to an electrical closet southeast of the rotunda and dropped to similar closets on each floor below. Two large raceways from the first floor electrical closet to the electronics room near the northwest corner of the rotunda allowed the extension of circuits that required control from this room. The result was to provide for staff control of all the lighting and exhibits from one central point in the building.

The installation of state-of-the-art historical exhibits dictated the installation of special lighting and power provisions. Remote control of dimming and operational functions was provided in the electronics room and programmed for easy use by the staff.

## **Fire Suppression Systems**

A wet pipe sprinkler system was installed in the Old Capitol in 1959. It was inadequate for protection of the wood framed attic in an unheated area subject to freezing, and the condition of the piping and components was unknown. It was also a concern that a dry or wet pipe system could be accidentally discharged and destroy valuable artifacts and building components. For these reasons a sophisticated pre-action fire suppression system was installed in 2008. This system will only activate when a combination of conditions in addition to the loss of a sprinkler head confirm that a fire is present. Each room has a heat detector, and a smoke detector. The computerized controller must sense the loss of a head (usually due to melting in a fire) as well as the presence of smoke and heat of adequate temperature and rate of rise to indicate an actual fire event. This combination of sensors gives adequate protection to the occupants as well as protection to the building and artifacts from accidental discharge.

The entire fire suppression system supply line was replaced from the junction with the city line at the street throughout the complete building. A few existing sprinkler heads could not have their terminal piping replaced without destroying decorative plaster. In these conditions the heads and fittings were replaced and the terminal section of piping was evacuated, pressure tested, and flushed repeatedly before being returned to service.

## **Elevator System**

Two elevator systems were installed in the building before the 2009 restoration, both in the same general location. The second one, installed in 1959, was a very slow utilitarian elevator best described as a freight elevator. It was insufficient in size and speed to move groups of people during tours. The elevator was a traction type with the motor-generator mounted on a platform between the third floor ceiling and the attic floor. Access was difficult and it did not meet elevator codes. In 2008 the system was completely rebuilt. The size of the cab could not be increased significantly due to the confining size of the shaft, which consisted of original brick walls on two sides. A decision to convert the system to a hydraulically driven, hole-less piston operated cab allowed the machinery to be relocated to the ground floor. It also eliminated the weight stack, which effectively increased the shaft size slightly. The greatest advantage was an increase in elevator speed to three times its former velocity, lessening travel time. A new cab, finishes and doors were installed and the cab and hallway doors were changed and widened.

With the relocation of equipment a new machinery room was enclosed on the ground floor and the elevator shaft was provided with a code compliant shaft wall on a formerly open side.

## **Security System**

The Old Capitol had a rudimentary security system from earlier installations that was replaced by a modern system consisting of access, motion, and seismic detectors as well as a recording surveillance camera system. A card access system was provided at the employee entrance. The system needs were defined by the museum committee and the equipment and installation were defined by Capitol Police.

## **SECTION F: LEGENDS**

Many old buildings, and this seems particularly true in the South, have tales associated with them that were handed down through generations and became woven into the fabric of the history of the building. It is this re-telling of the story, and the oral method of transmitting it, that embellishes a tale which probably had an initial kernel of truth into an *Aimproved@* telling of the story.....and the people of Mississippi are famous for their story- telling ability.

The Old Capitol Building does not possess the essential resident ghost, nor the requisite Civil War cannonball hole, but it does have a number of legendary tales that have enhanced history in an interesting manner. It is essential to a faithful restoration that legends be investigated and the true facts exposed to accurately understand history and recreate actual events without this embellishment. It is equally important to preserve these legends, for they too have become a part of the history of the building.

Some of the legends known to the author include:

### **A Spring Beneath the State House?**

It was probably obvious to everyone from the earliest times that there was something wrong with the building. The ground was shifting, the brick and stone were cracking, and the roof was leaking. The flaking paint and fuzzy plaster on the first floor would have been embarrassing. The Yazoo Clay beneath the building was probably not fully understood in the early days, but the presence of ground water would have been noted. There were cisterns dug outside the building and pits for a privy would have revealed standing water. The impervious nature of the fat clay would have retained the water and led to a belief that copious amounts of natural water were lurking beneath the building and causing the problems. The legend of a spring persisted well into the twentieth century. The entire first floor was removed and replaced with concrete in 1959 without finding a spring. The decision to install a twelve foot caisson to keep the water out must have been made following this finding. The legend persisted however and was occasionally repeated to explain the still-occurring plaster problems.

Investigations during the preparation of a Historic Structure Report for the Old Capitol revealed that the condition was rising damp (see Section D) and the cause was water that came from within the building rather than from a spring. Although a spring would have been a logical explanation, it is curious that people would have placed a spring at this, the high point of town. One would also have expected that a spring this close to such a steep bank behind the building surely would have seen a source of flowing water. The water was actually being caused by leaking pipes (likely from downspouts to begin with) and poor masonry construction, but the spring was a more appealing and understandable story.

### **Chimneyville and The Old Capitol**

There is a long standing legend, now accepted as fact and published in many places, that Jackson was burned to the ground several times (pick a number) during the Civil War and that the town was

known as Chimneyville for years thereafter. It is said that there were only four (pick a number) buildings left standing, and that the Old Capitol was one of them.

This is a charming story and, like all legends, has some basis in fact. Generals Grant and Sherman, during the Vicksburg campaign of 1863, approached Jackson from Raymond to cut off Confederate supply and support to the rear of Vicksburg. The means of production and making of war were destroyed, including the burning of factories, warehouses, foundries, gun emplacements, etc. and the destruction of the railroads. The Federal forces moved quickly toward their objective of Vicksburg, accomplished that task, and withdrew through and eventually to Atlanta. Looting was rampant and part of Jackson was burned again during this occupation, but it was not totally destroyed. The legend is largely perpetuated by exaggerated reporting in newspapers and magazines. Hearsay evidence and eye witnesses are regarded by professional investigators as the poorest of sources. Participants tend to overstate their accomplishments or conversely exaggerate their degradation in the telling of such events. Publications such as *Harper's Weekly* often ran printed engravings of such exaggerated scenes. They were not engraved on the scene of course, but in some northern studio from memories or from hurried sketches in the field. There are several of these featuring the burning of Jackson. Most, if not all, contain at least one inaccuracy, casting doubt on all of the artists' rendering.

The most reliable source is a photograph. These were difficult to produce under battlefield conditions and are quite rare. Eliseus von Seutter was a professional photographer in Jackson who took a panoramic photo looking west from the top of the Old Capitol in 1869. The photo shows buildings along South State Street, down Capitol Street, and up North State Street and as far away as City Hall and the Penitentiary. An enlargement of this photo was installed in the first floor exhibit room in 2008. The photo shows almost all of the buildings are still existing along the street only four years after the cessation of hostilities, and in the midst of the reconstruction period. There are some open lots, but no buildings are new or burned ruins. Some of them are still there today, but most were demolished years later, after the war.

Indeed there are only a few pre-war buildings in Jackson today, but not because of Chimneyville destruction. Most were demolished to make way for more current and fashionable buildings even as late as the mid-twentieth century. The Capitol itself, by the way, experienced surprisingly little damage during the Civil War.

### **Stain Glass Dome Over the Senate**

It has long been rumored that a skylight was originally placed in the third floor ceiling above the circular well between the Senate floor and the Senate gallery. This is even reported as a glass dome in the definitive research and 1990 publication by the official biographer of the building, John Ray Skates.<sup>40</sup>

It is not known where Skates found this information, but it may have been an assumption on his part. He illustrated the dome in the book and identified it as a skylight. He may not have recognized the central glass portion as a gaslight reflector, and may not even have known about such a device. It

was recognized by Architectural Historian Richard Cawthon while conducting research for the 2009 restoration.

The dome was restored with the correct gas light reflector in 2008, but it is interesting that even an authority such as Skates is capable of initiating, or at least perpetuating, a legend!

### **Who Took the Fence?**

The fence along State Street disappeared almost one hundred years ago. The building was abandoned in 1903 when the New Capitol was opened, and the fence was existing at the time of a 1910 photograph, but gone at the time of a 1912 photograph. No one seems to know exactly when it disappeared, and no one knows where it went. There are at least two legends that attempt to explain the final destination.

#### **Governor Bilbo and the Fence:**

There is a persistent rumor that the fence was removed by Governor Bilbo, or at least given to him and subsequently carried to his farm in Smith County. This legend is reported in Carl Mc Intyre's regular AWeekender column in the February 8, 1981 issue of *The Clarion-Ledger*. The article quotes S. E. Coleman of Jackson who states that a part of the fence and two of the eagles were removed to Theodore Bilbo's farm south of Mize....and remained on the farm near Mize after Bilbo sold it. Coleman lived near the Mize farm at the time and recalls that Bilbo had purchased the place from former Governor Vardaman. This supposedly occurred in 1908 after a tornado ripped through Jackson.

A photograph showing hurricane damage to the building during 1909 shows the fence still in place at that time. A subsequent photo from 1915 shows it to have been removed, so it was not taken by Bilbo, at least not in 1908. The acknowledged historian of Smith County is Gene Tullos of Raleigh. Tullos stated that it certainly is not true that Bilbo had a farm near Mize. Bilbo had no connection with Smith County and never lived there. He was from Poplarville in Pearl River County. Furthermore, Vardaman was from the Delta (Greenwood) and never had Smith County property either. Governor Longino, from Sylva, was the only governor with a Smith County connection.<sup>41</sup>

Secretary of State Eric Clark stated that he had never heard of Bilbo or Vardaman in Smith County, and furthermore if Gene Tullos does not know, it did not happen!<sup>42</sup>

In 1908 Governor Bilbo had just arrived on the scene as a state senator from Pearl River County. There are many legends surrounding his later tenure as governor (1916-1920 and 1928 to 1932) and this may be one of them. It is known that Bilbo bought forty columns from the Old Capitol in 1918 after it was converted into an office building. They were taken to his farm in Pearl River County, subsequently returned by his descendants, and four of the column capitals were installed in the Senate Chamber in the 1960 restoration. It may be this combination of events that grew from a tale of interior columns, Bilbo, and Pearl River

County to a tale of fence and columns, Bilbo, and Smith County. It is entirely possible that some of the fence made it to Pearl River County, but this has never been reported as part of the legend.

#### The Taylor Family Fence:

An exciting telephone call was received by Lucy Allen, Director of the Archives Museum Division during the early part of restoration. The mysterious caller would not give her name or location, but stated that her relatives in Mississippi had told her that the Old Capitol fence was being rebuilt. She claimed to have 210 feet of the original fence, including one gate, around her house! This would have been a valuable find, because the fence was being replicated from fuzzy black and white photographs. The lady would not reveal her identity but stated that she only had part of the fence because the Taylor family had donated part of it during a wartime scrap drive. Because of her grandfather=s admonition that this Old Capitol artifact was valuable and never to leave the family, she and her husband had made eight trips from Mississippi to the upper west coast to move the fence. She did agree to send current photographs, but never did so. She made one later call to get the address again but never sent the photos. We knew only the name Taylor and a west coast location.

Months later the architect received a phone call from a different lady who stated that she knew I was restoring the Capitol and knew who I was because her husband waited on me at Montgomery Hardware. She had seen a recent article about the fence reconstruction and had pictures of the original fence if I would like to see them. The fence was not in Jackson, but at her sister=s house in Richland, Washington! She did not know that her sister had contacted us, and apologized for her sister=s elderly mental condition and her fear that someone would want the fence back.

I met as soon as possible with Russell and Mary Grace Taylor Nobles to see their photos.<sup>43</sup> She asked to see my black and whites first, looked briefly, and stated sadly that her fence was obviously not from the Old Capitol. It was not, as it was shorter, and was a much later cast iron grapevine design.

There was a 1970 article in the *Clarion- Ledger*<sup>44\*</sup> that spoke of a cast iron fence around Johnnie Taylor=s house in Jackson. It was said to have been salvaged from the Governor=s Mansion about 1914 and moved to Oscar L. Taylor=s home in Morton, thence to Jackson about 1952. The article was complete with a photograph that matched Mrs. Nobles= photos of her father and the fence in Morton. So, perhaps the fence was not from the Old Capitol, but rather from the Mississippi Governor=s Mansion. A review of archives photos showing the former Mansion fence proved that the Taylor fence was not from the Mansion either.

The origin of this fence is still unknown and yet to be fully researched. Johnnie Taylor was a Hinds County Supervisor for thirty years. His brother, R. M. Taylor, was a respected Jackson City Alderman for thirty-two years (the Jackson Zoo was named for him). It is possible that the fence was salvaged from some city property, possibly even the City Hall.

If so it would be logical for the Taylors to have received it. A valuable souvenir to Taylor, the next generation could have expressed the artifact=s importance as coming from the Governor=s Mansion. Another generation or two and it was said to come from the Old Capitol. This is a perfect example of how fact becomes legend with time and re-telling of the story.

We still don=t know what happened to the original Old Capitol fence. Perhaps another legend will lead a future researcher to discover the real answer concerning its final disposition. Such a breakthrough could even lead to a discovery of the appearance of the main carriage gate. Its replication would provide the final ingredient of William Nichols=fence, the defining element of Old Capitol Green.

## **SECTION G: SIGNIFICANT PARTICIPANTS**

The 2009 Restoration of The Old Capitol Building began in 1996 with the preparation of a Historic Structures Report by Robert Parker Adams, Architect, for The Mississippi Department of Archives and History. The project was essentially completed with this report in 2009. In the intervening thirteen years a great number of persons contributed to the research, the decisions, and the construction of the building. The following list gives credit to those that made significant contributions to this effort. There are many others who are not listed.

### **Mississippi Department of Archives and History:**

Elbert Hilliard, Director Emeritus

Director of MDAH during initiation of the 2009 restoration

Hank T. Holmes, Executive Director

Director of MDAH and State Historic Preservation Officer during restoration

Lucy Allen, Director of MDAH Museum Division,

Primary administrative responsibility for the project

Clay Williams, Director, Old Capitol Museum

Chief coordinator of the restoration and exhibit functions of the museum

Todd Sanders

MDAH Historic Preservation Division representative to Old Capitol Team

### **Robert Parker Adams, Architect, P.A., Jackson, MS**

Robert Parker Adams, Architect, MAHP

Principal Architect for the 2009 Restoration

Lee D. Nutt, Jackson, MS

Specification Writer and Construction Coordinator for the restoration

Robert E. Bounds, Jackson, MS

CAD Technician and drafter of most of the architectural restoration plans

Penny E. Tant, ASID, Jackson, MS

Staff Interior Designer with primary responsibility for furniture and colors

Jocelyn R. Barnette, ASID, Jackson, MS

Staff Interior Designer with primary responsibility for specialty fabrics and carpets

Cynthia D. Robinson, Jackson, MS

Office Manager and Traffic Director during the restoration

## **Consultants**

Richard J. Cawthon, Jackson, MS  
Consulting Architectural Historian

Kelly G. Griffin, MHP, ASID, Jackson, MS  
Historic Interiors Consultant

Mimi Miller, Historic Natchez Collection, Natchez, MS  
Historic Interiors Consultant

Ron Miller, Historic Natchez Collection, Natchez, MS  
Historic Consultant

Ann Masson, Tulane University, New Orleans, LA  
New Orleans Historic Interiors Consultant

Beverly Robinson, Jackson, MS  
Historic Drapery Consultant

John Burrows, Rockland, MA  
Historic Carpeting Consultant

Dennis Rude CEO, Cathedral Stone, Jahn Mortars, Hanover, MD  
Stucco and Stone Repair Consultant

Perry Atherton, PE, Jackson, MS  
Mechanical Engineer

C. Holden O=Gwyn, PE, Jackson, MS  
Electrical Engineer

Eugene G. Wardlaw, PE, Jackson, MS  
Geotechnical Consultant

Daniel J. Zuczek, PE, Alexandria, VA  
Exterior Lighting Consultant

## **Bureau of Building Grounds and Real Property Management, Department Finance and Administration**

W. F. Campbell, AIA, Jackson, MS  
Staff Architect

Jimmy Foster, Jackson, MS  
Staff Construction Administrator

**Contractors**

Formations, Inc. Portland, Oregon  
Exhibit Design and Construction

Evan Johnson & Sons, Brandon, MS  
General Contractor

Beverly Robinson, Seamstress, Jackson, MS  
Drapery Fabrication

Securitas, Jackson, MS and New Orleans, LA  
Security and Surveillance Systems

D. E. Warren, Independent Metalcraft, LLC, Clinton, MS  
Blacksmith

Maurice Dessa, Southern Stucco, Baton Rouge LA  
Decorative Plastering

Bryan Smyda, Jackson, MS  
Furniture Craftsman

Jerry Summerford, Jackson, MS  
Furniture Craftsman

## **SECTION H: BEFORE AND AFTER PHOTOGRAPHS**

The existence of early photographs proved invaluable during the 2009 restoration for identifying changes made to the building in earlier times. To record this current restoration for future work and study, the Museum Division of MDAH made and filed weekly photographs of progress on the building. The following selected photos illustrate before and after conditions of some significant areas. Most of the photos are credited to Clay Williams or Robert Parker Adams, or are taken from earlier reports where the original photographer is identified therein.



Fig.1. Exterior Before replacing stucco



Fig. 1. Exterior  
After replacing

stucco

## END NOTES

The following citations are referenced to Part 1 of the *Comprehensive Historical Report on the Architectural History of the Old Mississippi State Capitol* as prepared by Richard J. Cawthon, Architectural Historian, unless noted otherwise. Page references such as C-3.5 refer to Section C-3, page 5 of that document.

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1. B-4.1

2. John Ray Skates, *Mississippi's Old Capitol: Biography of a Building* (Jackson, Miss.: Mississippi Department of Archives History, 1990), 58.

3. B-4.4

4. B-4.5

5. B-4.2

6. B-3.1

7. B-3.2-3

8. B-3.2

9. B-3.3

10. B-3.3-4

11. B-3.3

12. B-2

13. B-1.2

14. B-6.1

15. B-7.2

16. C-2.1

17. C-21.1 and C-2.3

18. C-2.4

19. C-3.1

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20. C-7.1
  21. C-7.4-5
  22. C-5.1
  23. C-4.1
  24. C-6.3
  - xxv. D-3.4
  26. Illustrations D-3-7, E-5-6, E-5-7, and E-7-2
  27. D-4.1-2
  28. D-4.2
  29. E-6.1
  30. D-2.2-3
  31. E-4
  32. E-4.3
  33. Skates, *Mississippi=s Old Capitol*, 42.
  34. E-7
  35. E-8
  36. E-6
  37. E-5
  38. Illustrations E-5-2, E-5.5
  39. C-6.2, C-6.4, E-5.2, and E-5.5
  40. E-5.2
  40. Skates, *Mississippi=s Old Capitol*, 126.
  41. Eugene C. Tullos, Raleigh, Miss., telephone interview by author, Jackson, Miss.,

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26 March 2007.

42. Eric Clark, Secretary of State, Jackson, MS, telephone interview by author, Jackson, Miss., 7 April 2007.

43. Mr. And Mrs. Russell Nobles, personal interview at the office of the author, Jackson, Miss., 28 July 2008.

44. Danny Murray, AOld Mansion Fence Still Beautiful@, *Jackson Miss. Clarion Ledger*, 5 March 1984.