

Renewing Michigan's Capitol 2014-2016



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The Michigan State Capitol is a great example of a uniquely American architectural form — the statehouse. Opened on January 1, 1879, our elegant Capitol has stood watch as Michigan evolved from a timbered frontier to a center of manufacturing, agriculture, and tourism.

As the years passed, our once beautiful building became neglected and fell into decay. Brilliant decorative art was concealed, and spacious rooms were subdivided into dark and crowded offices. As the Capitol neared its century mark, the threat of demolition loomed on the horizon.

Yet, the people of Michigan were not ready to bid farewell to their historic Capitol. A dedicated group of citizens and elected officials joined forces to preserve the building. A major restoration, executed from 1987-1992, addressed the Capitol's ornamental interiors and a limited number of exterior concerns. At the conclusion of the restoration, the Capitol was rededicated to the people of Michigan.

Nevertheless, there were some major projects, such as the replacement of missing and weathered decorative elements on the dome and the complete restoration of the grounds, that were not addressed. As the years passed, time took its toll on the building's electrical, mechanical, and plumbing systems. The ability to complete such large projects, however, remained elusive in tight budget years.

Inspired by the need to preserve Michigan's iconic statehouse, concerned legislators authored bills to establish the Michigan State Capitol Commission in 2014. The body was tasked with the important responsibilities of preserving, operating, managing, and maintaining the Capitol and Capitol Square.

In the years since it formed, the Commission has overseen four major renewal projects. These projects have breathed new life into the Capitol's exterior, the decorative art, the ground floor, and Capitol Square. They are chronicled in this report, written by Capitol Historian Valerie Marvin.

I would like to personally thank the people of Michigan, Governor Rick Snyder, the Michigan Senate, and the Michigan House of Representatives for their ongoing support for the Capitol, and the Capitol Commission. Together we have — and will continue — to accomplish great things.

A handwritten signature in blue ink that reads "Gary L. Randall".

Gary L. Randall
Chair, Michigan State Capitol Commission

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TABLE OF CONTENTS

I	Introduction	1
II	Construction of the Michigan State Capitol	3
III	Renewing the Exterior — 2015	
	• A Brief History	7
	• Renewing the Stonework	8
	• Renewing the Dome	10
IV	Renewing the Corridor Ceilings — 2015-2016	
	• A Brief History	13
	• Reattaching the Corridor Ceilings.....	15
V	Renewing the Ground Floor — 2016	
	• A Brief History	17
	• Plaster Corridor Ceiling Renewal	19
	• Terrazzo Flooring Installation	21
	• Refreshing the Corridor Walls.....	23
	• Refreshing the Rotunda Ceiling and Columns	24
	• Renovating the Restrooms	25
VI	Renewing Capitol Square — 2016	
	• A Brief History	27
	• Restoring the Central Walkway.....	29
	• Security Bollard Installation	30
	• Replicating Historic Lamp Posts.....	31
	• Michigan State Historical Marker Installation	32
	• Construction, Restoration, and Renewal Plaques Installation.....	33
	• Astronomical Post and Azimuth Apron Installation	35
	• Redesigning the Perennial Flower Beds	36
	• Redesigning the Annual Carpet Flower Beds	37

Introduction

Between 1987 and 1992, the Michigan State Capitol underwent an extensive restoration designed to return both the Capitol’s exterior and interior spaces to their original late 19th century grandeur. Hailed a remarkable success, the project won numerous national awards, including the National Trust for Historic Preservation’s National Preservation Honor Award and the American Institute of Architects’ Honor Award for Architecture.

Great care was taken to document the individual projects that made up the restoration. Under the direction of the Michigan Capitol Committee, MCC Executive Director Jerry Lawler and Public Relations and Research Specialist Kerry Chartkoff compiled a series of three reports examining “The Restoration Process,” the “Restoration of the Ground Floor East/West Corridors,” and the “House of Representatives and Adjacent Areas.” These booklets quickly became an invaluable tool to anyone wishing to understand the scope of the projects undertaken in the Capitol during this period.

In 2014, the newly formed Michigan State Capitol Commission (MSCC) launched a dramatic renewal of the Capitol designed to continue and further the work accomplished during the restoration. Over the next two years, the Commission took on a series of four major projects to address needs on both the interior and exterior of the building, including the restoration and renewal of the Capitol’s exterior stonework and dome, the reattachment of the interior corridor plaster ceilings, the renewal of the ground floor, and the restoration of Capitol Square.

This report, inspired by the restoration booklets, attempts to chronicle all four of these major projects. It is designed to build upon the findings and projects recounted in the restoration reports written nearly thirty years ago.

This publication is the work of many MSCC employees. While every effort has been made to ensure its accuracy, it is important to remember that the Capitol, and our knowledge of its history, continues to evolve every day.

Construction of the Michigan State Capitol

A BRIEF HISTORY

In his address to the legislature on January 6, 1871, Michigan Governor Henry P. Baldwin declared that the time had arrived to build a new Capitol. “I deem it my duty to call your attention to the subject of the erection of a new Capitol. The present State House was built nearly twenty-five years ago, when the State was comparatively new, with a population about one-fourth as large as at the present time, and with about one-twelfth of the present taxable valuation.” Baldwin went on to remind members that the building in which the legislature was meeting was too small, had a notoriously poor ventilation system, and lacked adequate space to house the functions of government. He recommended that the legislature appropriate \$10,000 to procure plans, drawings, and specifications for a new Capitol building, and an additional \$100,000 the following year to begin funding the project.

Heeding Baldwin’s recommendation, the legislature began to take action on the Capitol project. An annual tax was imposed upon Michigan residents to cover construction costs. In addition, steps were taken to procure the necessary plans, drawings, and specifications required for the new Capitol. The newly formed State Building Commission issued an “advertisement soliciting competitive designs for a new Capitol, and a pamphlet of instructions to architects, giving them the number and sizes of the various apartments required, the kinds and quality of materials to be used, and such other directions and information as were deemed essential.” Though eighty architects initially inquired about the competition, only twenty entries were received and opened on December 28, 1871. Almost one month later, on January 24, 1872, the commission selected the design entitled “Tuebor” by Elijah E. Myers, a Philadelphia-born architect then living and working in Springfield, Illinois.

Once Myers was hired, the pace of work increased dramatically. Upon receiving construction bids from six contractors, the commissioners awarded the project to Nehemiah Osborn & Co. of Rochester, New York, who promised to build the new Capitol for \$1,208,000. Laborers first put their shovels in the ground to begin digging the foundation on the morning of July 25, 1872. Interestingly, no particular pomp marked the occasion, which was noted but not celebrated. That same October, shipments of stone began to arrive and masons began pouring concrete — composed of limestone, Louisville cement, and water — for the foundation. Workmen continued to labor on this project until late November when the cold made it impossible to continue.

Work on the foundation continued throughout much of 1873. On October 2, 1873, workers, statesmen, and Michigan citizens joined together to celebrate the official laying of the Capitol’s cornerstone, located on the northeast corner of



Workmen used derricks to move the large pieces of stone required for the Capitol’s thick walls.

Image Courtesy of the Archives of Michigan

the building. Approximately 30,000 people attended the ceremony, which included a parade, speeches by elected officials, and the laying of the cornerstone itself, executed with full Masonic rites. The celebration, the largest gathering held in Lansing to date, was hailed a rousing success.

By 1874, the Capitol was rising rapidly. Bricklayers were laying hundreds of bricks a day, forming the building's interior walls, partitions, and arches. The sandstone façade, which appears to stand independently, was linked to thick interior brick walls by heavy iron ties. Records estimate that somewhere between 17 and 19 million bricks were used in the Capitol. (Interestingly, the bricks were made in the Lansing area of clay from the Grand River.) By the time winter fell in late 1874, the stone and brickwork for the first floor were nearly complete.

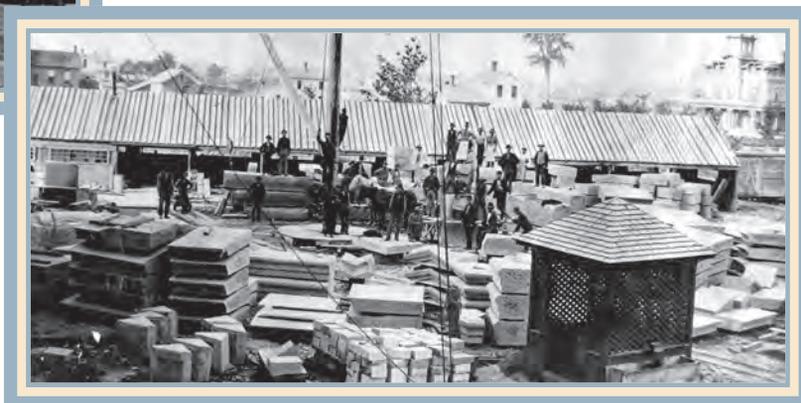
As the building continued to rise upward throughout 1875 and 1876, work on the interior began in earnest. Great quantities of wood began to arrive and the commissioners spent innumerable hours with Myers and James Appleyard (the superintendent of construction) selecting the best materials for the interior fittings. Some exterior portions of the building were reworked, including the design of the cornice, which the commission chose to execute in stone rather than tin as Myers originally specified.

Two major hallmarks of the Capitol began in 1876. First was the monumental sculpture, *The Rise and Progress of Michigan*, which occupies the pediment over the Capitol's front entrance. Designed by Detroit artist Lewis T. Ives (who also painted many of the Capitol's late 19th century portraits) and modeled by Detroit sculptor Herman Wehner, the design features three female figures representing Michigan, Commerce, and Agriculture. Agricultural implements, a partially built ship, lumbered logs, and mining tools surround the figures, reminding the viewer of the industries that drove Michigan's economy in the late 19th century. This beautiful work of art, comprised of seven separate sections of carved stone, was carefully lifted into place in the fall of 1876.



A local newspaper reported that the stonework had almost reached the top of the second floor windows by May of 1875.

Image Courtesy of the Archives of Michigan



A large shed, located on the southeast lawn, provided shelter for the skilled masons who shaped almost 700,000 cubic feet of stone for the building.

Image Courtesy of the Archives of Michigan

Later that fall, a second major project began — the construction of the Capitol’s dome. Crafted of wrought, cast, and sheet iron produced by the S.J. Creswell Ironworks Company of Philadelphia, the dome tops out at an impressive 267 feet. O.A. Jenison, a longtime Lansing resident who compiled a set of no less than six scrapbooks chronicling the construction of the Capitol, noted that pieces of the dome’s ironwork began to arrive in July of 1876. The assembly of this intricate work of art was watched closely by Lansing residents, including Jenison, who commissioned a series of photographs of the project that he included in his scrapbooks. Work on the dome would continue into 1878.



The Capitol technically has two domes — an inner dome and an outer dome. Elements of both are visible in this circa 1877 image.

Image Courtesy of the Archives of Michigan

The year 1877 brought the construction of the Capitol’s grand porticos, or porches. These graceful entrances were intended to extend the building outward, issuing a visual invitation to the visitor. Inside, the tin and glass ceilings in the House and Senate Chambers were installed, changing once ordinary spaces into magnificent rooms. The ongoing work attracted a steady stream of visitors, including the Indiana Capitol Building Commission, which praised it liberally. Everyone, it seemed, was confident the building would be a success.

The only serious problem with the project was that it was taking slightly longer than anticipated. The commission and contractors had originally hoped to open the building by the end of 1877. As the months rolled on, all parties realized that this goal could not and would not be met.

The spring of 1878 saw the installation of the Capitol’s floors and the purchase of furniture and lighting fixtures. A controversy arose when bids for the legislative desks were opened, revealing that the lowest bid was submitted by Kappes and Eggers of Chicago. The building commission, undaunted by Michigan’s status as the nation’s leading furniture manufacturer, awarded the contract to the Chicago firm, continuing a policy established early in the Capitol’s construction: that of awarding contracts to firms offering the best products at the lowest costs. This did not please Michigan’s many furniture manufacturers.

By the summer of 1878, the list of unfinished projects was shrinking every day. The dome was finished, the grounds were looking better and better, and offices were being properly furnished. Finally, on September 26, 1878, Elijah E. Myers, Nehemiah Osborn, and the building commissioners met one final time. Thoroughly pleased with their creation, the men congratulated each other on their success, and final payments were issued for a job well done. The Michigan State Capitol was ready to assume her role as the seat of state government.

Renewing the Exterior

A BRIEF HISTORY

When architect Elijah E. Myers designed the present Michigan State Capitol, he set out to create a beautiful structure built to stand for centuries, immune to fire and decay. To construct such a building, he specified the use of three main materials — bricks for the interior walls, floors, and ceilings; Amherst sandstone for the exterior façade; and iron for the elegant dome.

Like all materials, the Capitol's sandstone façade and iron dome require regular maintenance and occasional intervention. Some projects, such as painting the dome, have been undertaken at relatively regular intervals, approximately every fifteen years. Initially, the dome was painted light buff, a color that visually married the iron to the light sandstone below. This tradition ended in the mid-20th century when the decision was made to paint the dome bright white. The dome remained white until the Capitol's restoration (1987-1992), when the Michigan Capitol Committee voted to return it to a color similar to the sandstone facade.

The Capitol's sandstone was largely neglected over the decades. In retrospect, the fact that it was not cleaned routinely — a process that in the 20th century too often involved sandblasting — was probably a good thing. Though sandblasting was experimented with in the mid-20th century, it was halted before a significant amount of damage was done. In the 1960s, the increasingly dark and dirty sandstone was lightened with a new cleaning method involving the use of chemicals and steam.

The Capitol's restoration (1987-1992) brought with it the opportunity to perform major interventions on both the stone and the dome. Some sandstone was repaired or replaced using stone from the same Ohio formation used in the building's original construction. Many masonry joints were repaired. False joints — grooves carved into a single stone to simulate a joint — that had been covered over were cleaned and restored. Bushes and trees planted next to the building's foundation were removed to prevent further damage to the stone. Finally, the entire Capitol's dirty, darkened exterior stonework was cleaned using water and proper chemicals.

The restoration of the dome required stripping many layers of paint so that a durable, rust-resistant primer and finish coat could be applied. Rusted fasteners were removed and replaced. A system for handling the moisture created by condensation forming on the interior of the dome was put in place, and new windows replaced old blackout panels installed during World War II.

In 2014, over twenty-five years after the Capitol's restoration, the newly-created Michigan State Capitol Commission decided to launch a study to determine the condition of the building's exterior, including its stonework and dome. The findings showed that there was much work to be done. The dome was long overdue for a fresh coat of paint, and some sandstone joints had begun to fail. Inspired by the important task before them, the Commission launched a major renewal of the Capitol's exterior in 2015.



Ever since it opened on January 1, 1879, Michigan's beautiful capitol has been the subject of countless photographs. This image dates to about 1890, when the Capitol's exterior was still pristine.

Image Courtesy of the Archives of Michigan

RENEWING THE STONework

Spring, Summer, and Fall 2015

“All the exterior stone work . . . will be the very best quality of Number One Amherst sandstone.”

~ Elijah E. Myers, Architect

In 2015 the Michigan State Capitol Commission launched a major restoration to address issues relating to the Capitol’s exterior. This included a great deal of work to restore and stabilize the Capitol’s beautiful Berea sandstone, quarried in Amherst, Ohio.

REPOINTING AND CLEANING

Stone and mortar are both subject to regular expansion and contraction cycles caused by severe temperature fluctuations. This can break the mortared joints and allow water to enter. When this happens and the water freezes, it can cause the stone to spall, or fracture. Therefore, the restoration of the stonework began by grinding out, cleaning, and repointing (or re-mortaring) failed or failing joints, a slow and highly labor-intensive but necessary first step.

Once the joints were repaired, the stone itself was cleaned to reduce dirt and pollutants which had penetrated into its pores. In addition, an aluminum sheet metal covering, or flashing, was installed to protect weathered and worn surfaces at the top of some cornices near the roofline. This flashing was designed to be invisible from the sidewalk.

Schiffer Masonry Contractors, Inc., of Holt, Michigan, executed all of these restoration efforts. Their team was led by Doug Armstrong, a master mason with years of experience at the Capitol, including restoring the building’s west and north porticos.

REPLACING MODILLIONS

Early investigations revealed that many of the Capitol’s original sandstone modillions (ornamental brackets) under the roofline were badly damaged and disintegrating. The Michigan State Capitol Commission made the decision to remove the most severely damaged and replace them with newly carved modillions crafted from the same sandstone



A series of open joints in the stonework on the Capitol’s east portico.

Image Courtesy of Quinn Evans Architects



This trio of modillions shows the incredibly varied condition of these original sandstone elements when the exterior renewal began.

Image Courtesy of Quinn Evans Architects

as the originals. Modillions were replaced based on the degree of weathering, stone loss, and extreme discoloration. While the initial plan called for replacing 147 modillions, over 200 were eventually addressed.

The original modillions were carved in long blocks of stone that extended back into the Capitol's walls, underneath the roofline cornice. The decision was made to cut deteriorated modillions off flush with the surrounding stonework, leaving the recessed portion of the modillion in place. The new modillions were carved by hand, just like the originals. Two different carvers were involved, since there were too many for one person to craft alone. The modillions arrived by the dozen on large pallets that were stored on the Capitol's west lawn. Each was mounted by inserting one end of a steel rod into the modillion and the other end into the intact stonework.

REPAIRING THE PORTICO COLUMNS

The four central columns on the east (front) portico and the two central columns on the south portico were repaired during the summer of 2015. These large freestanding stone columns were in fair to poor condition due to graffiti, weathering, the improper use of salts and snow melting agents, and poor patching jobs.

To address this damage, a technique called a "dutchman repair" was undertaken. This involves removing damaged stone and cutting new stone to exactly fit the damaged area. Beginning at the east portico, where the four central columns had all suffered damage, sections of stone — approximately two inches deep and over six and a half feet tall, including portions of the lower column and base — were removed using specially designed power tools.

Dutchmen replacements were carefully carved offsite and installed under the guidance of master stonemasons. Installing and mortaring the new, massive dutchmen proved to be an impressive feat, requiring a crane and steady hands. The process was repeated at the south portico. The dutchmen made for these columns measure approximately four and a half feet tall, and only include stone on the column's lower shaft. From a distance the repairs are completely invisible.



Masons watch as a large stone dutchman repair is carefully lowered into place between a column and the adjoining stone balustrade on the Capitol's east stairs.

Image Courtesy of Valerie Marvin

RENEWING THE DOME

Spring, Summer, and Fall 2015

“There will be sixteen outer dome-ribs, made of the sizes of iron and construction shown upon the full-size detail drawings, and of the form shown upon the dome drawing, with cross braces three-quarters of an inch thick by two and one-half inches wide, secured to the dome-ribs with angle iron, and bolted together . . .”

~ Elijah E. Myers, Architect

In 2015 the Michigan State Capitol Commission launched a major exterior restoration to address issues relating to the Capitol’s exterior. Chief among the projects was repainting and resealing the Capitol’s graceful and elegant dome.



A dramatic photo of the lantern on the Capitol’s dome as it emerges, freshly painted, from the scaffolding.

Image Courtesy of Ike Lea

The Capitol’s dome is made of cast, wrought, and rolled sheet iron produced by the S.J. Creswell Ironworks Company of Philadelphia, Pennsylvania. Heralded by architects for its strength, the ease with which it could be cast into ornamental shapes and forms, and its resistance to fire, iron was a very popular building material in America from the 1830s until the early 20th century. Yet iron also requires consistent maintenance, as it expands and contracts due to temperature fluctuations. Iron must be kept sealed and painted to prevent rusting and deterioration from rain and snow. Although in the past the dome had been repainted about every fifteen years, almost twenty-five years had passed since its last paint job. The dome was showing signs of neglect.



Hundreds of decorative balls were missing from the garland that appears to wrap around the dome’s sixteen ribs. Every single one was replaced as a part of the renewal project.

*Images Courtesy of
The Christman Company*



Before the project could begin, a special scaffold had to be built around the dome. Brand Energy and Infrastructure Services undertook this complicated task, which began on April 6, 2015. The project lasted nearly seven long weeks, ending on May 22, 2015.

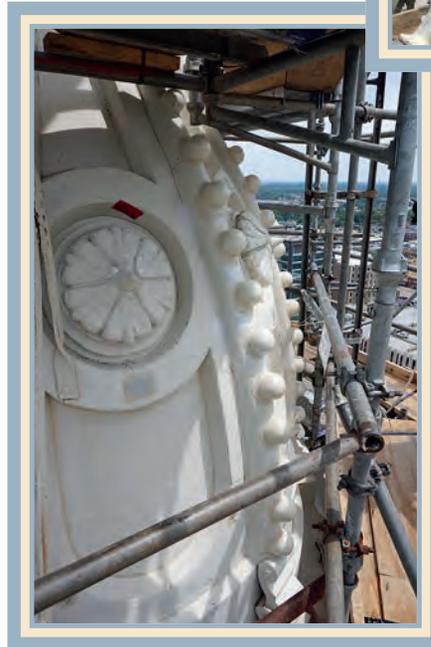
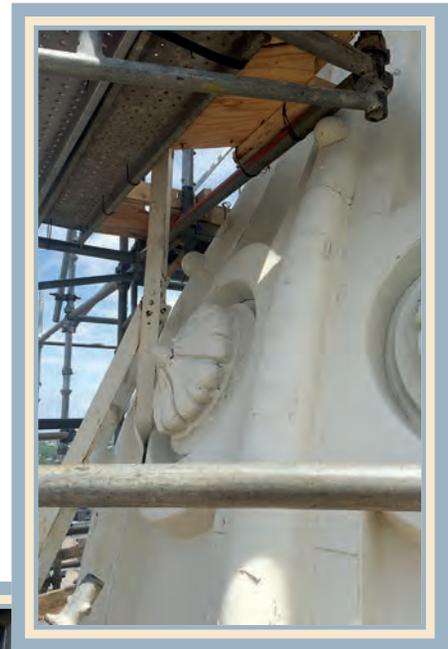
Workers initially thought that most of their time would be spent sealing open joints in the metalwork and replacing worn fasteners. Yet as they set about these projects, they began to notice that a significant number of the dome's original decorative elements were missing. Among the missing pieces were acanthus leaves on the dome's Corinthian columns, scrollwork found around the dome's octagonal windows, and decorative balls (or pellets) and their accompanying molding that appear to spiral around the dome's ribs. Also missing were a significant number of similar balls designed to ornament the ribs on the dome's lantern.

As soon as the Capitol Commission became aware of this, they resolutely agreed that the dome project would not be complete until ALL missing elements were replaced. Thus began an intense phase of study to determine exactly what and how many pieces were missing, and how and where to find replicas.

The solutions proved to be creative and diverse. Two original cast iron acanthus leaves were located and shipped to Robinson Iron, of Alexandria City, Alabama, where molds were made and new iron leaves were cast. A metalworker with CASS Sheet Metal of Detroit happened upon the perfect form on which new decorative metal balls could be created — a trailer hitch! Inspired by the enormity of their tasks, all those involved rushed to recreate these intricate elements.

Ultimately hundreds, if not thousands, of decorative pieces were replaced, restoring the dome — for the very first time — to its original majesty.

Once the seams were shut, the fasteners secured, and the decorative elements restored, it became time to paint the dome. Murray Painting of Freeland, Michigan, undertook this massive job. The project began in August. The dome was painted in levels, beginning at the finial and moving downward. Once a level was painted, the corresponding levels of scaffolding were removed. The topmost section of scaffolding began to come down on August 24, 2015, and the last piece was removed on October 23, 2015.



The remnants of old caulk, as seen in the image above, identified where decorative balls and other elements were missing. Replacements were eventually attached to the dome at these very same locations.

*Images Courtesy of
The Christman Company*

Renewing the Corridor Ceilings

A BRIEF HISTORY

When the Michigan State Capitol opened on January 1, 1879, the building was widely hailed as a success. Now, for the first time, the State of Michigan had an elegant, large, modern office building to serve as the seat of state government.

Yet, the building was not truly complete. Though the spaces inside were fully functional, the walls and ceilings remained unpainted. At first this omission made sense, as the thick horsehair plaster surfaces required time to cure. As the years passed, however, the call to decorate the walls and ceilings was raised. In his 1881 address to the legislature, Governor Charles Crosswell noted that,

“In planning the building, it was expected that when the walls had been thoroughly dried and settled, measures would be taken to have them frescoed and decorated in a style comporting with the character of the structure, and worthy of the State. With this end in view the walls were left coarse and bare. They are now thoroughly dry, and I allude to this subject that you may consider it.”



Acanthus leaves, scrolls, and swags are artfully intertwined in this beautiful decorative motif found on a first floor corridor ceiling panel.

Images Courtesy of David Marvin

Decorating finally began four years later, in 1885, when the legislature appropriated \$25,000 for “frescoing and decorating the walls and corridors of the State Capitol.” This would be the first of several appropriations to cover the cost of painting the entire building. William Wright of Detroit won every contract for the project.

Over the next several years, Wright’s decorative painters slowly covered the Capitol’s plaster walls and ceilings with a broad palate of colors and decorative motifs. After completing the most prominent spaces, including the Governor’s suite, the Senate Chamber, what was then called Representative Hall and the rotunda, the artists moved into the corridors and offices. Over the course of five years, from 1885 to 1890, they skillfully created a colorful masterpiece spanning approximately nine acres of surfaces.



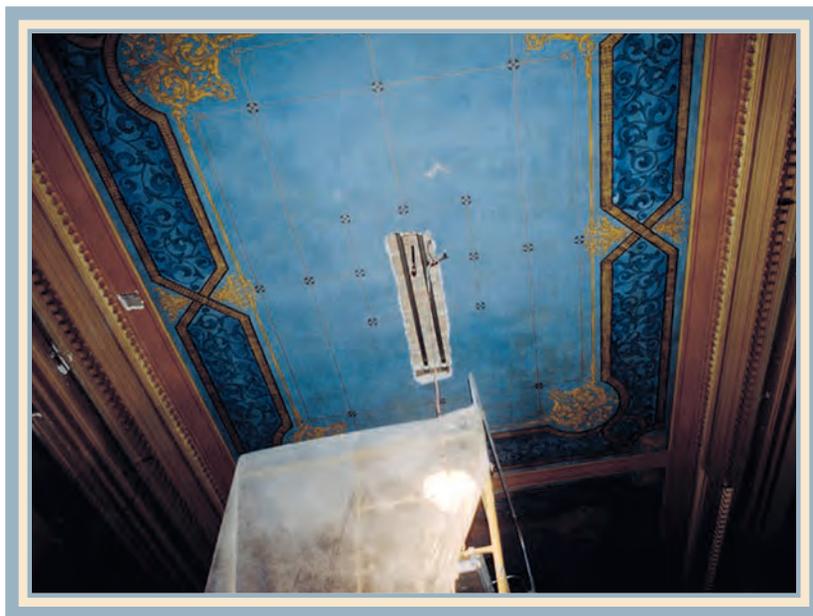
As the years passed and fashions changed, most of the Capitol’s original decorative surfaces were painted over many times. Original marbling, wood graining, elaborately stenciled and hand painted designs were hidden and lost. Yet a few

surfaces — including the lofty corridor ceilings — escaped this sorry fate. Though some small interventions occurred, the original corridor ceilings survived largely intact, thanks in part to the fact that they are so hard to reach!

The Capitol’s restoration, begun in the late 1980s, brought with it the opportunity to study and examine these ceilings. Decorative artists and conservators climbed up scaffolding to stand beneath this elegant art, which had survived for over a century nearly untouched. Investigations were completed and minor issues addressed. Cracks were repaired, and surfaces were conserved.

At the same time the ceiling project was taking place, the decision was made to remove the large “Michigan chandeliers” that hang in the corridors. Originally designed to burn gas, the chandeliers were electrified sometime in the late 19th or very early 20th century. Shocked restoration workers discovered that these massive chandeliers, weighing in at a hefty 400 pounds each, were supported only by their original gas pipes. Upon learning this, each chandelier was taken down, and a small section of the plaster directly around the chandelier was removed so that appropriate plates and bolting could be installed. The plaster was then carefully patched and painted.

The next intervention began in the fall of 2015, following the discovery that the ceilings were beginning to sag dangerously in some areas. Alarmed at this sudden development, the Michigan State Capitol Commission quickly reached out to experts who could reattach the original ceilings.



Workers were forced to cut into the corridor ceilings to install stronger supports for the Capitol’s massive Michigan chandeliers during the restoration.

Image Courtesy of The Christman Company

REATTACHING THE CORRIDOR CEILINGS

Fall 2015 and Winter 2016

“All the ceilings of the three stories (except otherwise specified) will be furred by two-by-four inch scantlings, placed twelve inches between their centres, well secured to the iron beams by iron clamps or bolts, or with both if required . . .”

~ Elijah E. Myers, Architect

In the fall of 2015, facilities staff members discovered that the Capitol’s historic plaster corridor ceilings were, in some places, beginning to sag dramatically. The Michigan State Capitol Commission moved quickly to address the disturbing problem.

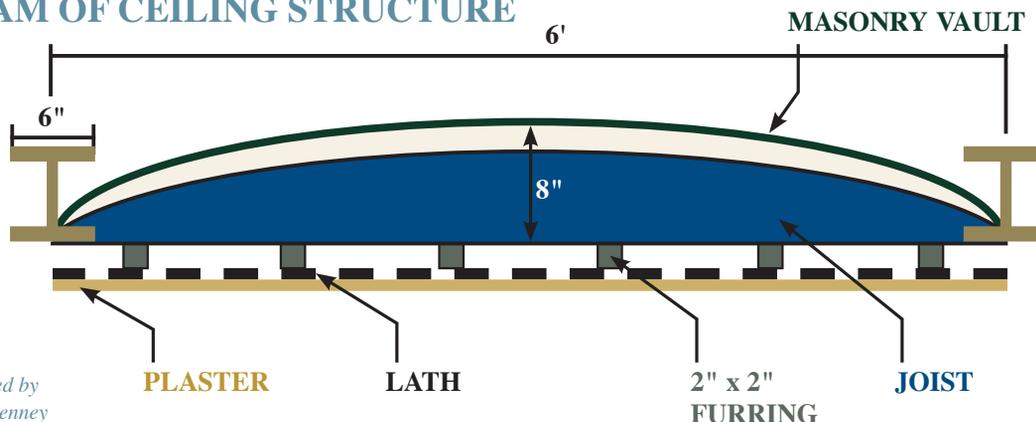
A close examination revealed that the plaster and lath corridor ceilings were separating from the wooden supports that hold them in place. During the Capitol’s original construction in the 1870s, nails were used to secure the lath and the furring to the joists. Unfortunately, over the years, the nails had begun to back out, causing the lath and plaster to sag anywhere from one half to four and a half inches. Investigations revealed that the problem was widespread throughout the building. Sagging ceilings were identified throughout the corridors on the first, second, and third floors.

John Canning & Co., a nationally recognized decorative painting firm with extensive experience in the Michigan State Capitol, was hired by the Capitol Commission to address this problem. Across several months, Canning’s craftsmen reattached the ceilings on the first, second, and third floors in the north, west, and south wings. Their talented team created a customized approach that married modern technologies with historic craftsmanship to address these failures while preserving the Capitol’s fragile painted art. Begun in the fall of 2015, the project lasted through the winter of 2016.

MODERN TECHNOLOGY MEETS TRADITIONAL SKILLS

One of the largest challenges faced during the ceiling reattachment project was determining exactly where and how the plaster and lath were secured to the furring and joists located above. Further complicating matters, most of the fabric of the ceilings, including both the plaster and the decorative art, was original to the Capitol. Everyone involved knew that it was critical to limit the number of intrusions while still successfully securing the largely original materials.

DIAGRAM OF CEILING STRUCTURE



*Diagram Created by
Patti Romain-Denney*

When the Canning Company drilled their first hole in the ceiling, no one was quite sure what they would find. To examine the cavities within the ceiling they used a small tool that proved to be invaluable for their investigations — a borescope. A borescope is a handheld device used to inspect the interior of a space via a small hole. It consists of a handheld screen attached to a wand with a small, lighted camera at its tip. This tool, which fit through an access hole only one inch wide, made it possible to determine where the nails attaching the lath and the furring to the joists were backing out.

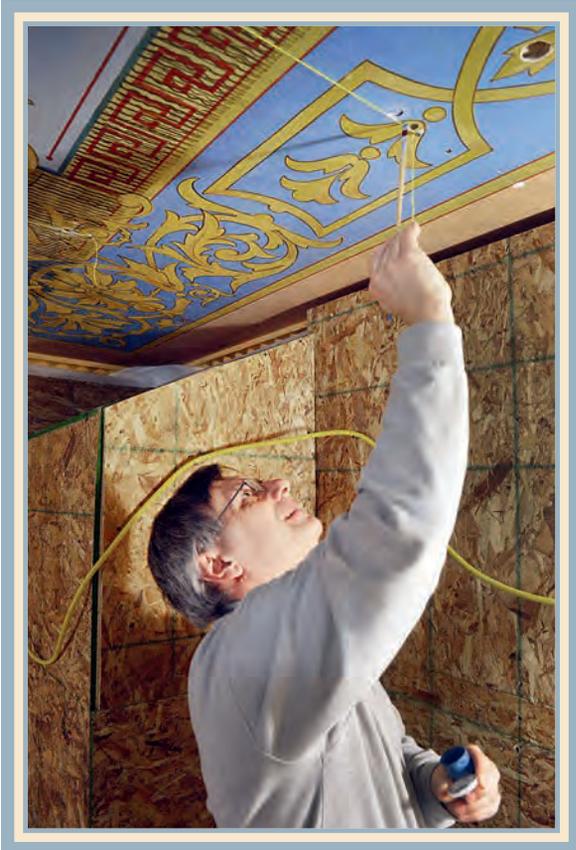
Once the locations of the nails were determined, Canning’s crew drilled a series of 3/4" access holes near them. Aware that the smooth nails used during construction had proven to be an inadequate long-term choice, they began reattaching the furring to the joists using 4"-6" GRK RSS Round-Head Wood Screws, selected for their deep, coarse threading and their resistance to corrosion.

Once the screws were installed and the lath, furring, and joists were reattached, expert plasterers carefully repaired the holes using a three coat plaster system consistent with the Capitol’s original ceilings. When the plaster finished curing, decorative artists painted each white plaster patch to match the elaborate artwork. Today, as a result of their careful work, this treatment is nearly invisible to the human eye.



Employees from the John Canning Company at work on a blue ceiling panel. The worker on the left drills into the historic plasterwork while the worker on the right plasters a hole closed.

Image Courtesy of Patrick Yockey



A decorative painter from the John Canning Company brushes blue paint over a small patch in the ceiling.

Image Courtesy of Patrick Yockey

Renewing the Ground Floor

A BRIEF HISTORY

When architect Elijah E. Myers designed the Michigan State Capitol, he did not intend the ground floor to play a very visible role. Capitol's visitors and staff were supposed to use the first floor grand entrances to the building. The ground floor originally housed only the State Agricultural Society, the Military Department (in the form of an armory), assorted storerooms, workrooms and wash-rooms. Because they were not meant to be seen by the public, these spaces were never finished with the elaborate decorative art so evident elsewhere in the building.

As the years passed, the ground floor was pressed into use for offices. By the turn of the 20th century, dozens of employees worked in this once-quiet space. Slowly, the appearance of both the private and the public spaces changed. In 1931, a fire on the ground floor caused extensive damage to the east wing and the rotunda. While simple repairs were quickly made to cover the damage, a large grant in 1937 made it possible to redecorate the entire floor. Wood and linoleum floors were removed and replaced with green and white terrazzo arranged in a series of geometric patterns. In the corridors dark wood wainscoting was removed, the walls were painted cream, and the ceilings were painted white to complement the new floors.

As the various state departments left the Capitol in the early to the mid-20th century, their former offices were occupied by legislators and their staffs. The plain corridors were lined with massive wooden storage cabinets. Soffits designed to house mechanical equipment hung from the ceiling on both sides of the hallways. The center of the ground floor rotunda was occupied by a large wooden desk and wooden display cabinets encircled the walls. All of this was illuminated by glaring fluorescent tube lights.

The Capitol's restoration brought major changes to this sadly altered space. For the first time in many years, the corridors were emptied of cabinets and vending machines. The intrusive soffits were removed and the equipment once housed in them replaced and relocated. The corridor walls were bumped out several inches and metal studs were installed to create cavities to hide modern heating



By the turn of the 20th century many of the rooms on the ground floor were being used as offices for departmental clerks and staff. This rare image shows eleven members of the Auditor General's staff working in one small room.

Image Courtesy of the Archives of Michigan

and cooling ducts, fire suppression sprinklers, and electrical and communication lines. The equipment and studs were covered with drywall plastered and scored like the rest of the walls to create the illusion of sandstone.

The restoration also brought other changes to the ground floor. Ceramic gray tile flooring was installed in the public spaces. Period-appropriate lighting fixtures were hung from freshly painted ceiling vaults. For the first time in many years, the ground floor was a pleasant, open, inviting space.

Yet as time passed, not all the restoration efforts on the ground floor proved to be as durable as hoped. The ceramic floor tiles cracked and chipped. The plaster ceilings in the corridors cracked and shed paint. The once freshly painted walls, rotunda ceiling, and columns grew worn.

In 2016, the Commission decided to confront these problems directly with a complete renewal of the ground floor. Throughout the spring, summer, and fall new ceilings and floors were installed, painted surfaces were refreshed, and the restrooms were renovated.

PLASTER CORRIDOR CEILING RENEWAL

Spring and Summer 2016

“All the walls, and such ceilings as are furred, will be plastered three coats of lime mortar, each coat gauged with cement; the work must be worked with bottom and top screed, and in every respect to be of the thickness required by the grounds, true and plumb at all angles and surfaces. The mortar must be well mixed with clean winter-slaughtered hair; the lime must be slacked, run off into a large hole excavated in the earth, and, when perfectly cool, the hair must be put in. For each cubic yard of mortar there must be used twenty pounds of plastering hair, which must be thoroughly mixed through the mortar. The hair must be thoroughly whipped and free from lumps and dirt before it is put into the mortar. The ceilings of the basement will be plastered three coats and finished in plaster of paris.”

~ Elijah E. Myers, Architect

The Capitol’s ground floor ceilings are constructed of bricks, laid to form vaults, supported by iron beams. Both the beams and the bricks are original to the Capitol. In addition to serving as the ground floor ceiling, they also form the support structure for the first floor.

Elijah E. Myers, the Capitol’s architect, specified that the Capitol’s brick walls and ceilings were to be finished using three coats of plaster. As was common at the time, the original lime plaster contained horsehair.

During the restoration of the Capitol (1987-1992), the original plaster ceilings on the ground floor were skim-coated with a layer of gypsum plaster and repainted. Unfortunately, these materials proved to be incompatible with the original lime plaster, resulting in cracking and flaking. Repeated attempts to address the problem failed. Ultimately the Commission decided to replaster the ground floor corridors. The project was carried out during the spring and summer of 2016.

RESEARCH AND ANALYSIS

The Capitol Commission began to discuss the damage to the corridor plaster ceilings in early 2016. Concerned about the integrity of the cracked and peeling surfaces, they commissioned a study to determine the exact nature of the failing plasterwork. Multiple plaster cores were taken and sent to AEON Preservation Services, LLC, in Bladensburg, Maryland, for analysis.

The study showed that the original plaster contained both a lime-based brown coat and a lime topcoat, in keeping with typical 19th century lime plasters. The analysis also noted that it was unlikely that the nature of the original lime plaster itself caused the delamination and cracking.

The study suggested that more recent modifications to the plaster were likely to blame. These most likely occurred at least twice: once when conduit for wires was tucked into the plaster, and once during the Capitol’s restoration (1987-1992), when two skim coats of gypsum plaster were added to the ceiling. These interventions caused movement of both the brick vaults and the plaster, allowing moisture to seep in. And, although a traditional, breathable lime plaster can absorb and release moisture, gypsum plaster does not have this capability. The introduction of the gypsum layers was, most likely, what caused the plaster to crack and the paint to peel.

REPLASTERING THE CEILINGS

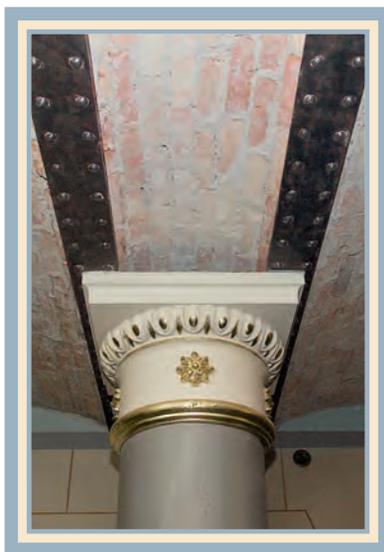
Based on the plaster analysis, the Commission hired the John Canning Company to install a new plaster system. Once demolition was complete, Canning’s team methodically replastered all of the ground floor ceilings in the spring and summer of 2016, working at night so as not to disturb the building’s occupants.

The team began by applying a scratch coat of plaster, so-called because the plaster is heavily scratched, or textured, so the next layer of plaster will adhere to it. The plaster contained synthetic goat hair, used as a binding agent in much the same fashion as the horsehair in the original plaster. The scratch coat required at least a week to cure, based on the temperature and the humidity levels within the building.

When the scratch coat had properly cured, the plasterers returned to apply a second coat, known as the brown coat. This coat was given a much smoother finish. Like the scratch coat, this coat required at least a week to properly cure.

Once the brown coat had cured, a finish coat of plaster was applied. This layer was topped using a product called “Keim,” a silicate mineral paint named after Adolf Wilhelm Keim, who patented it in 1878. Keim paint allows lime plaster to breathe, preventing damage to the paint and plaster. It is also highly durable.

The blue-green color of the Keim matches the original color found on the plaster samples analyzed by AEON. Previously it was thought that the ground floor ceilings were originally light blue. Over the years they were repainted many times: first ivory, then white, and finally, during the restoration, sky blue. Now the ceilings have finally been returned to their original blue-green color.



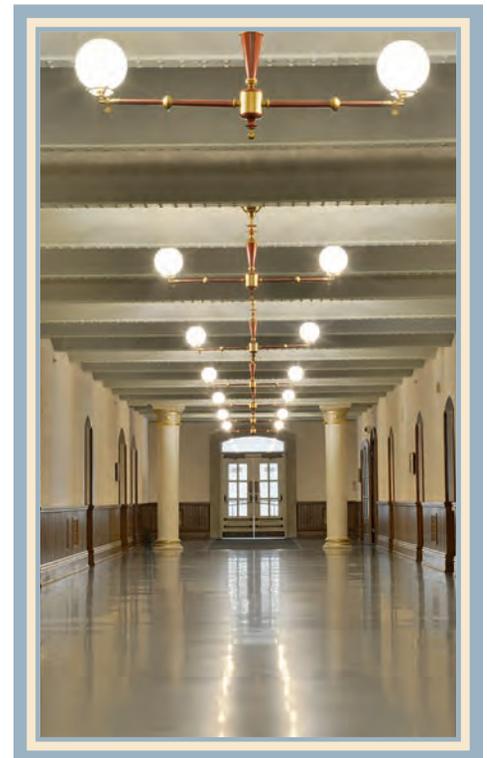
The ground floor ceilings are comprised of brick vaults supported by iron beams and columns. The vaults and beams were stripped bare at the beginning of the project. The supporting column was repainted once the ceiling was completed.

Image Courtesy of David Marvin



Plasters from the John Canning Company smooth a coat of plaster in the vault immediately south of the rotunda.

Image Courtesy of David Marvin



The new completed plaster vaults in the south corridor.

Image Courtesy of Chris Powers

TERRAZZO FLOORING INSTALLATION

Summer 2016

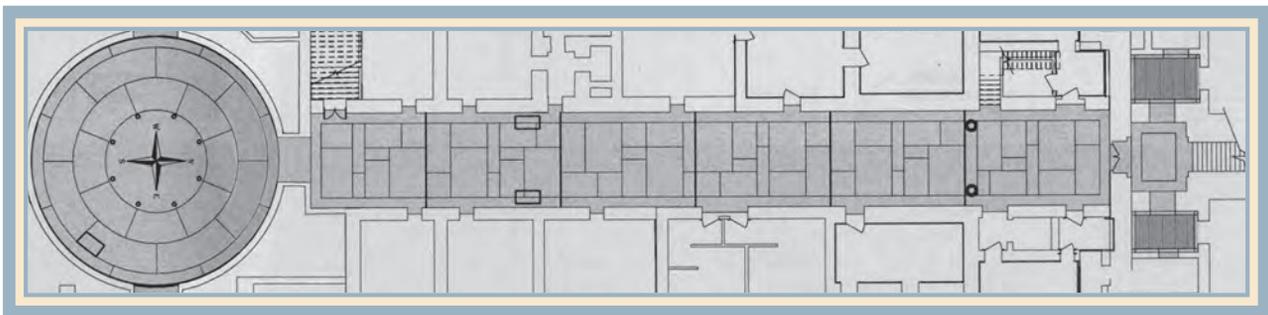
“The floors of basement corridors to be of slate . . .”

~ Elijah E. Myers, Architect

A new terrazzo floor was installed on the ground floor of the Michigan State Capitol during the summer of 2016. Terrazzo is a traditional flooring material consisting of chips of marble or granite set in an epoxy resin and polished to form a smooth surface.

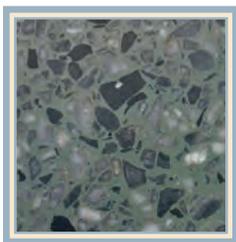
Capitol architect Elijah E. Myers originally specified a slate floor for the basement, or ground floor. Building commissioners deemed the material impractical and expensive, and substituted oiled pine flooring instead. As the years passed, the pine floors, declared a fire hazard, were covered with “battleship linoleum,” a heavy linoleum originally used on warships. This floor was replaced in 1937 with elaborately figured green and white terrazzo poured into a dizzying medley of Art Deco patterns. Gray ceramic tiles, intended to mimic the appearance of slate, were installed over the inappropriate green and white terrazzo during the Capitol’s restoration (1987-1992).

As the years passed the gray ceramic tile proved to be a poor choice, as the floor cracked and chipped under heavy use. The Capitol Commission, concerned with safety, voted to replace the tile floor with a new terrazzo surface. Projected to last 100 years, this new terrazzo is durable, easy to maintain, and handsome. Great effort was made, however, to ensure that the terrazzo pays homage to Myers’s original specification for a slate floor. The predominantly dark gray terrazzo was poured into a coursed ashlar block pattern, reminiscent of how slate tiles were traditionally laid. Sections of the terrazzo contain gray, blue, green, and copper colored chips suggesting the colors commonly seen in late 19th century slate flooring.



An architect’s rendering of the ashlar block pattern for the new terrazzo flooring.

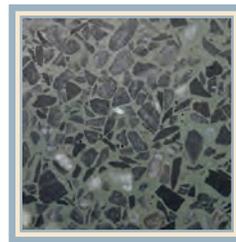
Images Courtesy of HopkinsBurns Design Studio



Gray terrazzo with blue chips.



Gray terrazzo with copper chips.



Gray terrazzo with gray chips.



Gray terrazzo with green chips.

INSTALLING THE FLOOR

Installation began in mid-June 2016. Artisan Tile Inc. of Brighton, Michigan, won the contract for the project.

Before they could begin, however, workers installed a crack isolation membrane on top of the old green and white terrazzo uncovered when the ceramic tiles were removed. This membrane provided a smooth, even surface for the installation of the new flooring. Next, they installed a series of brass dividers to define the pattern and separate the different colors. These dividers were arranged according to the plan developed by the project architect, HopkinsBurns Design Studio.

Once the dividers were in place, workers prepared the terrazzo mix. They began by mixing together the epoxy resin terrazzo base with a predetermined recipe of marble chips. This recipe varied slightly for each of the four color variations. This mixture, which resembled a very thick cake batter full of chips, was then carried by wheelbarrow to the appropriate areas. Working quickly, the team troweled the slurry into the different sections, making sure to keep the pattern consistent with the plans. After installing a complete batch of one color recipe in a particular hallway, they moved on to the next color, until all the sections were filled.

At first, the initial finish was rough, with many chips breaking the surface of the epoxy. The terrazzo was left in this condition to dry, or cure, for a period of time. Once the entire hallway had completely cured, workman brought in large machines to grind the surface of the terrazzo to create a smooth finish. Finally, the surface was polished.

The project was divided into four segments, allowing traffic to continue to flow through the ground floor all summer. Work began in the west wing, followed by the east, north, and south wings. The project was completed and the entire ground floor open and accessible just before Labor Day.



The installation of the terrazzo floor began in the west wing. Here two members of the team at Artisan Tile Inc. of Brighton, Michigan, trowel freshly mixed terrazzo.

Image Courtesy of Barbra Thumudo



The new brass compass in the rotunda serves both as a stylish design feature and a practical wayfinding tool for visitors.

Image Courtesy of Chris Powers

THE ROTUNDA COMPASS ROSE

While designing the terrazzo floor, a conversation arose regarding the plan for the ground floor rotunda. Commissioner and Capitol Historian Emeritus Kerry Chartkoff suggested that a compass rose would be an appropriate choice for the space. Using this suggestion as their inspiration, HopkinsBurns Design Studio created the compass rose now in place.

When the demolition of the gray ceramic tiles was underway in the rotunda, everyone was pleasantly surprised to discover that the 1937 green and white terrazzo also included a compass rose! This had been hidden for many years by an old circular information desk, which sat in the center of the ground floor rotunda from 1972-1991.

REFRESHING THE CORRIDOR WALLS

Summer 2016

“The walls of the corridors and dome in basement will be finished and laid off in blocks to represent stone, the joints of the blocks to be struck and penciled in dark color.”

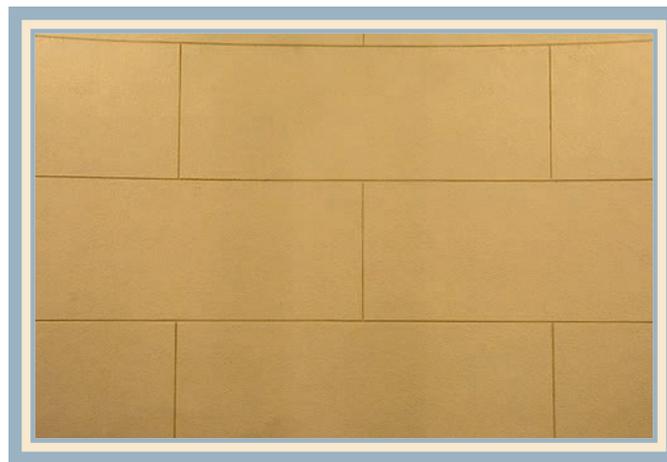
~ Elijah E. Myers, Architect

During the latter half of the summer of 2016, the faux sandstone surface of the walls on the ground floor of the Michigan State Capitol were repainted. This area was last refreshed during the Capitol’s restoration (1987-1992).

Elijah E. Myers, the architect of the Michigan State Capitol, original specified that the walls for the basement level (known as the ground floor since the mid-20th century) should be painted and scored to mimic the light buff-colored Berea sandstone on the Capitol’s façade. Myers’s design was typical for the late 19th century, when faux finishes were frequently used to create the illusion that inexpensive materials, such as pine and plaster, were in fact more expensive products, such as walnut and stone.

Myers’s use of faux sandstone ashlar and mortar lines is also in keeping with the false joints executed on the exterior of the building. (False joints are grooves carved into a single stone to simulate a joint.) Just as the deeply grooved false mortar joints give the base of the building’s exterior increased visual strength, so too the use of false sandstone ashlar gives the walls on the ground floor the same illusion of weight and permanence.

The Capitol Commission, concerned with damage that had been done to the walls since the restoration, voted to repaint the walls and the false mortar joints. Appropriate paint colors were chosen based on the color of the exterior sandstone and its mortar. The work was executed by the John Canning Company.



The faux “stone” walls in the rotunda still contain original plasterwork from the late 19th century. The plaster was repainted as a part of the Capitol’s renewal.

Image Courtesy of Chris Powers

REFRESHING THE ROTUNDA CEILING AND COLUMNS

Summer 2016

“There will be six cast iron columns in the basement east corridor, and eight in the rotunda. Thickness of metal, one inch; base, shaft and cap cast solid, with drums, to support the connecting beams, shown in isometrical sections. The size and form of columns is shown upon transverse section through east corridor. There will be two columns, of the same size, in each of the north and south corridors, to support the triple arch over them.”

“The beams that form the floor of the rotunda to be twelve inch beams, weight per foot forty-two pounds, resting twelve inches on the wall, upon stone blocks, and secured to twelve-inch circular joists, resting upon plates of cast-iron columns, with intermediate ten-inch beams in the rim, all secured to the circular joists, with six inch flanges each side of joists, and through-bolted together.”

~ Elijah E. Myers, Architect

In 2016 the Michigan State Capitol Commission voted to repaint the ground floor rotunda ceiling and the columns standing in east, north, and south wings, and in the rotunda. These surfaces were last painted during the Capitol’s restoration (1987-1992).

All of the iron columns throughout the Capitol were cast by the S.J. Creswell Company of Philadelphia. Though their primary function is structural, supporting the brick vaults, iron beams, and rotunda glass floor, the columns are also important architectural features.

The Capitol Commission, concerned with the damage and wear evidenced on both the columns and the rotunda ceiling, voted to repaint these surfaces. After much discussion, the decision was made to use the buff and taupe colors found on the faux sandstone walls of the ground floor, as the original color of the ceiling and columns is not known.

H & H Painting Company prepared and painted the rotunda ceiling over the course of several nights. Joshua Risner, the Capitol’s decorative painter, painted the columns. Now, once again, the rotunda ceiling and ground floor columns have an appropriate, dignified appearance.



The Capitol’s iconic glass floor forms the ceiling for the ground floor rotunda. Eight slender columns support the glass and its surrounding ironwork.

Images Courtesy of Chris Powers

RENOVATING THE RESTROOMS

Summer and Fall 2016

“The basins in the wash-room to be white china bowls, plain, with screen-overflows. The basins will be enclosed in white pine frame-work; door framed and paneled together . . .”

~ Elijah E. Myers, Architect

In 2016 the Michigan State Capitol Commission decided to renew the restrooms located on the Capitol’s ground floor in the north and south wings.

Relatively little is known about the Capitol’s original restrooms, which were referred to as water closets and washrooms in Myers’s original design documents. His floorplans show public washrooms on the third floor and numerous others designed for staff in the office suites. Nearly all were intended for men, as the number of women working in or visiting the Capitol in the late 19th century was small.

Not all of Myers’s specifications, which called for outfitting washrooms with white china bowl basins and pine cabinets and stall partitions, were used. The State Building Commission overseeing the Capitol’s construction chose to substitute marble partitions for wood. Whether they followed his specification for black walnut toilet seats is unknown!



The remodeled restrooms contain wooden cabinets topped by white marble counters. While the materials are finer than what Myers originally intended, the aesthetic is accurate to the period.

Image Courtesy of The Christman Company



The south restrooms were completed in the early fall of 2016. The north restrooms are projected to be finished by January 2017.

Image Courtesy of Chris Powers

walls and floors. Marble dividers and wooden stall doors were installed, and white sinks were mounted on wooden cabinets. Crisp white subway style tiles were installed to form sleek, easy-to-clean wainscoting, and the floors were covered in small, period-appropriate black and white hexagonal tiles. The walls above the tiles were painted a color selected from the Capitol’s color palate, ornamented with a simple decorative paint motif. Drop ceilings were removed and the original brick ceiling vaults were replastered to match those in the corridors. Now, for the first time in many decades, the ground floor bathrooms have the appearance of historic washrooms.

The Capitol’s restrooms have been remodeled (and occasionally relocated) many times throughout the building’s long history. Relatively little information about them survives, as such spaces are frequently used but rarely documented in photographs or writing. During the Capitol’s restoration, architects paid particular attention to the restrooms on the third floor, which were restored to the appearance of a turn of the century washroom. These restrooms served as a guide for the work on the ground floor.

As a part of the overall renewal of the ground floor in 2016, the Michigan State Capitol Commission voted to renovate both sets of ground floor bathrooms. Modern metal dividers and stall doors were removed, and contemporary colored tile was stripped from the

Renewing Capitol Square

A BRIEF HISTORY

“The Building will be located in the centre of the Capitol grounds, fronting upon Capitol Avenue, at the head of Michigan Avenue.”

~ Elijah E. Myers, Architect

Capitol Square has always been a special place in downtown Lansing. When the legislature decided to relocate the seat of government from Detroit in 1847, this piece of land was reserved as the future location of the large, grand Capitol that the state hoped to build someday. Yet, only a few years later, in 1854, the state erected a two story brick office building on this land in order to house some of the growing number of state government offices. The project was rightly criticized as being shortsighted, as the new office building would have to be demolished before a new Capitol could be constructed.



Landscape gardener Adam Oliver of Kalamazoo, Michigan, designed the Capitol’s grounds to feature large, open expanses of green lawn framed by double rows of shady trees that formed an allée.

Image Courtesy of the Archives of Michigan

Capitol Square was a bevy of activity throughout the six years that the much-awaited new Capitol was under construction (1872-1878). The building commissioners knew that the Capitol’s grounds needed to be both simple and elegant to provide an appropriate setting for the majestic structure. They hired Adam Oliver, a Kalamazoo landscape designer, to lay out and oversee the preparation of the grounds. His plan called for an open, spacious expanse of lush green lawn edged by a stately allée of trees framing Capitol Square. Under his direction, a team of forty-seven men, two waterboys, and six teamsters graded the lawn, planted trees, and generally instituted his plans.

As the years passed, Oliver’s original design scheme was forgotten. A large collection of shade and ornamental trees were planted randomly throughout the grounds. As these trees matured, they shaded the lawn so that the grass died and began to hide the building from view. Large shrubs were planted near the building, covering windows and damaging the stone facade.

Yet not all the changes to Capitol Square were negative. A series of flower beds were introduced in the late 19th and early 20th centuries. While some of these beds proved to be short-lived, the large flower beds that swept along the north and south wings of the building and the flower beds that framed the central walkway quickly became beloved features of Capitol Square. Over the years, a broad scope of plants and flowers were grown in them.

Another significant addition to the grounds came in the form of monuments. The first, erected to honor Austin Blair, Michigan’s Civil War governor, was dedicated on October 12, 1898. In the years that followed, monuments honoring the veterans of the Civil War, the Spanish American War, World War I, World II, and the Korean and Vietnam conflicts were placed on the outer edge of the Capitol’s lawn.

In 1990, preservation architect Richard C. Frank authored the first-ever preservation analysis and master plan for Capitol Square. Among his adopted recommendations was limiting the introduction of new trees to a perimeter grove, redesigning the flower beds, and installing historically-inspired lamp posts. He also recommended a moratorium on additional monuments. The report was adopted by the Michigan Capitol Committee during the Capitol’s restoration.

Dedicated to advancing the efforts begun during the Capitol’s restoration, the Michigan State Capitol Commission voted to undertake a major renewal of Capitol Square in the summer of 2016. The original path of the central walkway was restored, and several new elements, including security bollards, historic reproduction lamp posts, a new state historical marker, and two plaques honoring the construction, restoration, and the renewal of the Capitol were installed. In addition, the Capitol’s sweeping perennial flower beds, and the much-beloved annual flower beds, were redesigned.

RESTORING THE CENTRAL WALKWAY

Summer 2016

In 2016 the Michigan State Capitol Commission voted to install new sidewalks for the Capitol's central walkway.

The central walkway leading from Capitol Avenue to the building has been redesigned several times since the building first opened in 1879. The first walkway, paved in bluestone, was laid in 1878. Early photographs reveal that the walkway was originally a broad, straight path.

The first major modification to the central walkway took place in 1898 when Edward Clark Potter's statue of Austin Blair was installed. Early photographs reveal that the walkway around the statue was not initially enlarged. The substantial base of the statue consumed more than half of the passage, narrowing pedestrian flow significantly. Sometime between 1898 and 1906, the walkway around Blair was widened to form a circle, allowing greater traffic flow.

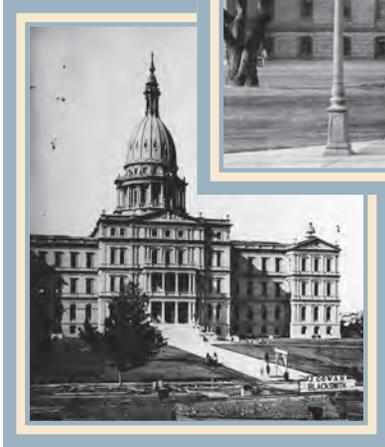
The shape of the walkway changed again sometime in the early 20th century. Photographs taken in the 1920s reveal that the corner where the central walkway met the Capitol Avenue sidewalk had been expanded into the lawn at an angle. These angles would grow in size over the years, absorbing more and more of the Capitol's green lawn.

Determined to restore the central walkway and the Capitol lawn to their original clean lines, the Michigan State Capitol Commission voted to redesign this much-altered space. A new central walkway, and a new sidewalk running along Capitol Avenue, were poured during the summer of 2016. Now, once again, the Capitol's central walkway meets the Capitol Avenue sidewalk at a crisp right angle.



By early 20th century the central walkway had been modified to accommodate the statue of Austin Blair and two new large electric lamp posts.

Image Courtesy of the Archives of Michigan



This early image of Capitol Square shows the broad, even expanse of the original central walkway.

Image Courtesy of the Archives of Michigan



The new central walkway contains the infrastructure for a snow melt system that will be made operational in the future.

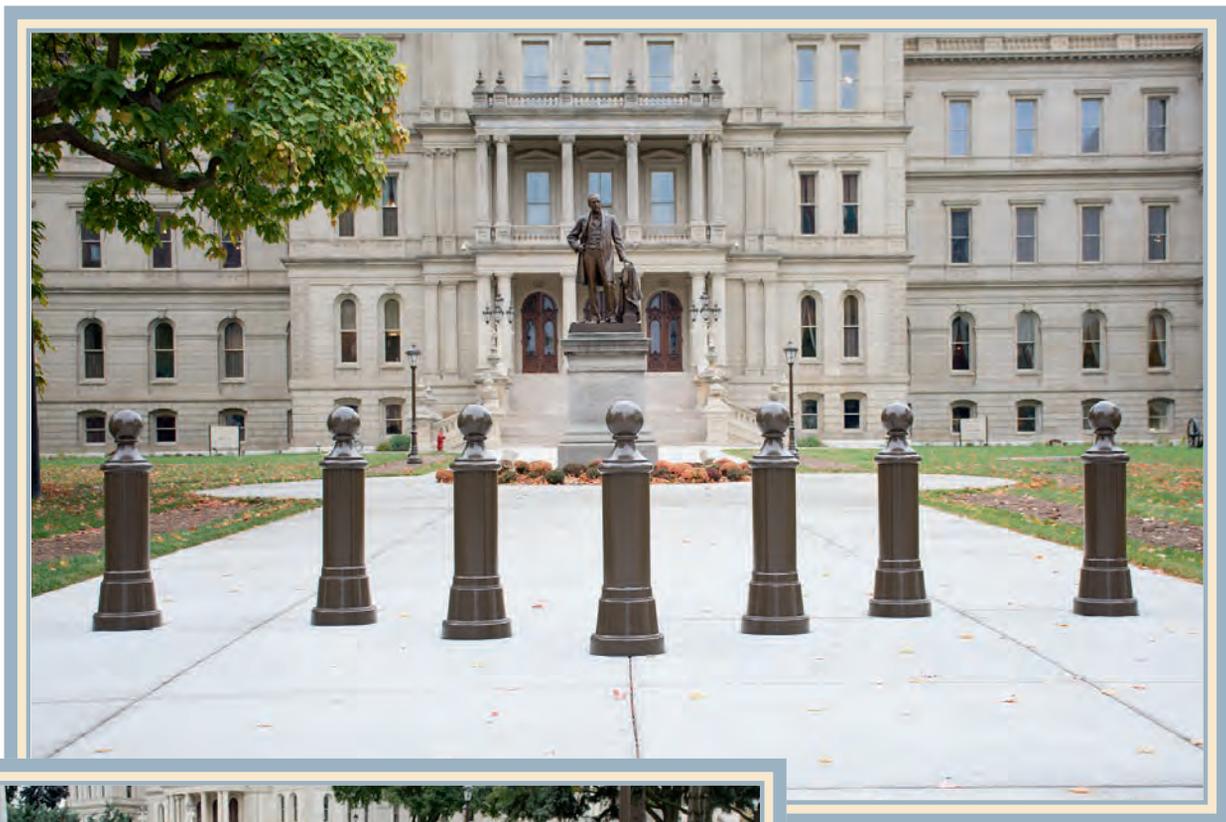
Image Courtesy of Chris Powers

SECURITY BOLLARD INSTALLATION

Summer 2016

The Michigan State Capitol Commission voted to install security bollards on the Capitol's eastern sidewalks in 2016. Their purpose is to direct the flow of pedestrian traffic while limiting vehicles on the grounds. While most of the bollards are permanent, a select few were designed to be easily removed to allow access for large equipment.

The Commission voted to place the bollards on Capitol Square as part of a more comprehensive Capitol security plan. The bollards were installed at the three eastern entrances to the Capitol's walkways near the intersections of Capitol Avenue and Ottawa Street, Capitol Avenue and Michigan Avenue, and Capitol Avenue and Allegan Street.



The bollards on the central walkway form an arrow that extends towards Capitol Avenue.

Image Courtesy of Chris Powers

Additional bollards are located at the north and south entries to the Capitol's curving walkways.

Image Courtesy of Chris Powers

REPLICATING HISTORIC LAMP POSTS

Summer 2016

In 2016 the Michigan State Capitol Commission voted to replicate the two large historic lamp posts that once flanked the entrance to the central walkway on Capitol Square.

When the Michigan State Capitol opened on January 1, 1879, two monumental lamp posts stood tall on either side of the Capitol's central walkway. Lit by gas, they provided an elegant frame for the statehouse and welcomed thousands of visitors.

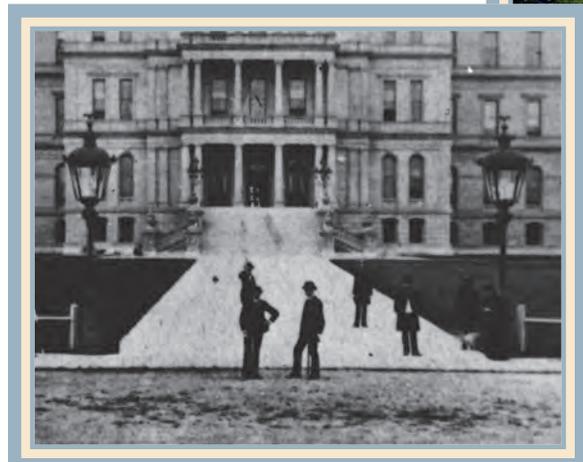
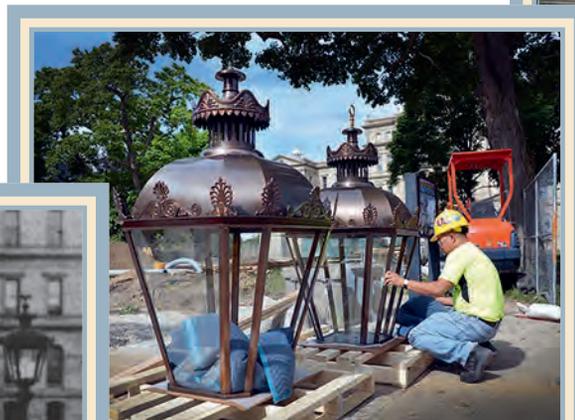
The original lamp posts were produced by the S.J. Creswell Ironworks Company of Philadelphia, Pennsylvania. This same company cast the iron used in the Capitol's staircases, balconies and dome. Newspaper clippings tell us that Creswell's lamp posts were installed in early December of 1878.

Sometime around the turn of the 20th century, the lamp posts were modified for electric lights. At that time, the gas head (the top portion of the fixture) was replaced. Over the next twenty years, a variety of electric lights were used on the lamp posts, including, at one time, a string of light bulbs on a metal frame that formed the letter "M." The bases were relocated on the Capitol's grounds before disappearing altogether in the 1920s.

Inspired by the beauty of these lost fixtures, the Michigan State Capitol Commission voted to recreate them. Using historic photographs, the St. Louis Antique Lighting Company cast two replicas posts. They were installed during the summer of 2016, in conjunction with the pouring of the new central walkway.

A workman examines the head of one of the new lamp posts.

Image Courtesy of Patrick Yockey



Historic photographs were used to replicate the original posts. The men in this photo provided excellent scale.

Image Courtesy of the Archives of Michigan

The new lamp posts were finished with a lovely bronze patina that matches the nearby statue of Austin Blair.

Image Courtesy of Patrick Yockey

MICHIGAN STATE HISTORICAL MARKER INSTALLATION

Summer 2016

On July 23, 2016, the Michigan State Capitol Commission dedicated a new Michigan state historical marker on Capitol Square. The marker was installed earlier that same summer.

The Michigan historical marker program dates to 1955, when the legislature passed an act to draw attention to Michigan's rich history through a series of historical markers. The Capitol's first marker was dedicated two years later, on April 2, 1957.

This marker was replaced during the Capitol centennial celebration. The new marker featured the images of all three buildings that have borne the title of Michigan State Capitol.

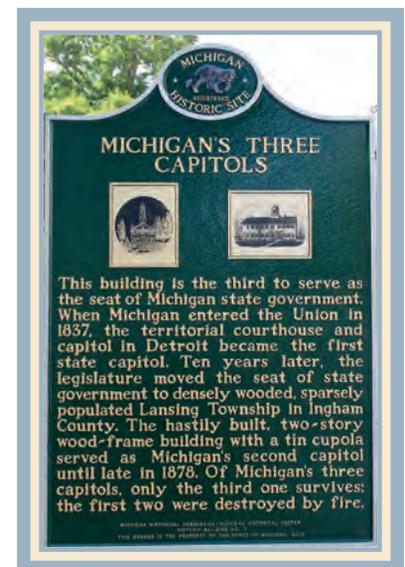
The present marker, dedicated on July 23, 2016, is the Capitol's third. Like the second, it features the likenesses of all three Michigan Capitols.

THE FRONT PANEL READS:

Hailed by Michigan citizens as a proud symbol of their young and growing state, this building was dedicated on January 1, 1879. National publications praised its scandal-free construction, which took six years, and its thrifty \$1.43 million budget. After 110 years of aging and intense use, it was restored (1989-1992) to its former elegance. It is recognized for its unparalleled decorative painting, for establishing the domed Capitol as an American icon, and for launching the national career of its architect, Elijah E. Myers of Detroit. It was declared a National Historic Landmark in 1992.

THE BACK PANEL READS:

This building is the third to serve as the seat of Michigan state government. When Michigan entered the Union in 1837, the territorial courthouse and Capitol in Detroit became the first state Capitol. Ten years later, the legislature moved the seat of state government to densely wooded, sparsely populated Lansing Township in Ingham County. The hastily built, two-story wood-frame building with a tin cupola served as Michigan's second Capitol until late in 1878. Of Michigan's three Capitols, only the third one survives: the first two were destroyed by fire.



The new historical marker features images of Michigan's first and second capitols, located in Detroit and Lansing.

Image Courtesy of David Marvin



MSCC members (left to right) Travis Weber, Chairman Gary Randall, Kerry Chartkoff, and Tim Bowlin at the dedication of the new historical marker on July 23, 2016.

Image Courtesy of David Marvin

CONSTRUCTION, RESTORATION, AND RENEWAL PLAQUES INSTALLATION

Summer 2016

In 2015, the Michigan State Capitol Commission voted to install two new bronze plaques honoring the many dedicated men and women whose vision and hard work resulted in the construction, restoration, and renewal of Michigan's National Historic Landmark Capitol.

The bronze plaques were designed by the Greater Lansing Monument Company and cast by ColdSpring Bronze of Cold Spring, Minnesota. The posts were crafted by Bannasch Welding of Lansing.

The first plaque bears Elijah E. Myers's architectural rendering of the Capitol's dome. It reads:

MICHIGAN STATE CAPITOL

CONSTRUCTION 1872 TO 1878

IN 1871 GOVERNOR HENRY P. BALDWIN CHALLENGED MICHIGAN'S LEGISLATURE TO BUILD A FIREPROOF CAPITOL TO HOUSE THE STATE'S GOVERNMENTAL OFFICES, RECORDS, AND CIVIL WAR RELICS. MODELED AFTER THE UNITED STATES CAPITOL, IT IS ONE OF THE FIRST POST-CIVIL WAR CAPITOLS TO FEATURE A LOFTY CAST IRON DOME. HERALDED A GREAT SUCCESS UPON ITS COMPLETION, MICHIGAN'S CAPITOL BECAME THE MODEL FOR STATEHOUSES ACROSS THE NATION.

BOARD OF STATE BUILDING COMMISSIONERS:

EBENEZER O. GROSVENOR
JAMES SHEARER
ALEXANDER CHAPOTON

SECRETARY TO THE BOARD:

ALLEN BOURS

GOVERNORS:

HENRY P. BALDWIN
JOHN J. BAGLEY
CHARLES M. CROSWELL

ARCHITECT:

ELIJAH E. MYERS

CONSTRUCTION COMPANY:
NEHEMIAH OSBORN AND COMPANY

CONSTRUCTION SUPERVISOR:
OLIVER MARBLE

DEDICATION: JANUARY 1, 1879



Elijah E. Myers's original dome rendering, seen here on the new plaque, features both the Capitol's inner and outer domes.

Image Courtesy of Chris Powers

THE SECOND PLAQUE READS:

RESTORATION

IN 1982 GOVERNOR WILLIAM G. MILLIKEN FORMED THE FRIENDS OF THE CAPITOL, INC., A NON-PROFIT ADVOCACY GROUP, TO STUDY THE MICHIGAN STATE CAPITOL'S CONDITION AND MAKE RECOMMENDATIONS FOR ITS IMPROVEMENT AND RESTORATION. AS A RESULT, IN 1987, AFTER YEARS OF NEGLECT AND DECLINE, A PROJECT WAS LAUNCHED THAT BROUGHT TOGETHER ARCHITECTS, ARTISTS, AND TRADITIONAL CRAFTSPERSONS FROM AROUND THE WORLD WHO RESTORED THE CAPITOL TO ITS ORIGINAL BEAUTY. FOLLOWING THE COMPLETION OF THE AWARD-WINNING RESTORATION IN 1992, THE CAPITOL WAS NAMED A NATIONAL HISTORIC LANDMARK.

THE PEOPLE OF MICHIGAN WOULD LIKE TO THANK THE FRIENDS OF THE CAPITOL FOR THEIR EFFORTS TO SAVE AND PRESERVE THE MICHIGAN STATE CAPITOL.

OVERSIGHT BODY: THE MICHIGAN STATE CAPITOL COMMITTEE,
1987 TO 1992

CHAIRS: REP. RICHARD A. YOUNG, SEN. WILLIAM A. SEDERBURG,
SEN. JOHN J.H. SCHWARZ

SENATE APPOINTEES: SEN. DAN L. DEGROW, SEN. VERNON J. EHLERS,
SEN. WILLIAM FAUST, SEN. DEBBIE STABENOW

HOUSE APPOINTEES: REP. LEWIS N. DODAK,
REP. PATRICK M. GAGLIARDI, REP. MICHAEL D. HAYES,
REP. JAMES E. O'NEILL, REP. GARY L. RANDALL

EXECUTIVE APPOINTEES: ATTORNEY GENERAL FRANK J. KELLEY,
ROBERT BOWMAN, WILLIAM C. KANDLER, JOHN KOST,
JEFF MCALVEY, ROBERT L. MITCHELL, COLLEEN PERO,
SHELBY SOLOMON, LUCILLE TAYLOR

EXECUTIVE DIRECTOR, MICHIGAN CAPITOL COMMITTEE: JERRY LAWLER

GOVERNORS: JAMES J. BLANCHARD, JOHN M. ENGLER

LEGISLATIVE LEADERSHIP: SENATE MAJORITY LEADER JOHN M. ENGLER

HOUSE OF REPRESENTATIVES SPEAKER: LEWIS N. DODAK

PRESERVATION ARCHITECT: RICHARD C. FRANK, FAIA

IMPLEMENTING ARCHITECTS: EUGENE C. HOPKINS, ARCHITECTS FOUR; DAVID EVANS, QUINN EVANS;
JOHN MEYER, WIGEN TINCKNELL MEYER AND ASSOCIATES

CONSTRUCTION MANAGEMENT: RONALD D. STALEY, THE CHRISTMAN COMPANY

REDEDICATION: NOVEMBER 19 AND 20, 1992

RENEWAL

IN 2014 SENATORS ROGER KAHN AND RANDY RICHARDVILLE AND REPRESENTATIVES SAM SINGH AND JIM STAMAS AUTHORED LEGISLATION TO ESTABLISH THE MICHIGAN STATE CAPITOL COMMISSION. UNDER THE COMMISSION'S DIRECTION, A SERIES OF MAJOR PRESERVATION PROJECTS WERE UNDERTAKEN TO CONTINUE THE RESTORATION BEGUN IN 1987. THE CAPITOL'S DOME AND EXTERIOR SANDSTONE WERE RESTORED, INCLUDING REPLACING HUNDREDS OF MISSING AND DAMAGED ARCHITECTURAL ELEMENTS. SIMULTANEOUSLY, THE COMMISSION OVERSAW EXTENSIVE RESTORATION OF THE LANDMARK DECORATIVE PAINT THAT ADORNS THE CAPITOL'S INTERIOR.

OVERSIGHT BODY: THE MICHIGAN STATE CAPITOL COMMISSION, 2014 TO 2016

CHAIRS: CAROL M. VIVENTI, GARY L. RANDALL

MEMBERS: TIM L. BOWLIN, KERRY K. CHARTKOFF, JEFFREY F. COBB,
SALLY J. DURFEE, JOHN TRUSCOTT, TRAVIS W. WEBER

GOVERNOR: RICK SNYDER

LEGISLATIVE LEADERSHIP: SENATE MAJORITY LEADER ARLAN B. MEEKHOF

HOUSE OF REPRESENTATIVES SPEAKER: KEVIN COTTER

PRESERVATION ARCHITECT: EUGENE C. HOPKINS, FAIA

IMPLEMENTING ARCHITECTS: HOPKINS BURNS, QUINN EVANS

CONSTRUCTION MANAGEMENT: THE CHRISTMAN COMPANY

REDEDICATION: JULY 23, 2016



The plaque honors the many men and women who have worked to preserve and restore Michigan's beautiful Capitol.

Image Courtesy of Chris Powers

ASTRONOMICAL POST AND AZIMUTH BLUESTONE APRON INSTALLATION

Summer 2016

Among the more minor projects that took place on Capitol Square during the summer of 2016 was the removal of the worn fencing that formerly enclosed the astronomical post and azimuth located on the south and north lawns, respectively.

The astronomical post and the azimuth were installed on the Capitol's grounds in 1875 by the U.S. Lake Survey, the first organization aligned with the U.S. Army Corps of Engineers in the Great Lakes region. Following an 1872 request for assistance in surveying the state from Governor Henry P. Baldwin, the Corps installed a series of astronomical posts and azimuths across Michigan. The markers were often placed on the grounds of public buildings, where they were more likely to remain undisturbed. Their precise locations were determined using astronomical and radio observations.

A keen eye will note that the top of the astronomical post bears crosshairs carved into the stone. These marks denote the location where a surveying transit can be placed. When a transit was not available, a surveying line could be established between the marks on the astronomical post and the accompanying azimuth. Sadly, the lines on the azimuth are no longer visible.

Over the years the two markers became the victims of neglect, graffiti, and misunderstanding. In 1990, during the Capitol's restoration, black metal posts linked by chains were installed around the two markers. They remained in place until 2016, when the Michigan State Capitol Commission removed the now-worn fencing and installed a non-obtrusive bluestone apron around each stone. The use of bluestone is in keeping with the original hardscaping on Capitol Square.



The worn stone azimuth barely breaks the surface of the Capitol's northeast lawn.

Image Courtesy of Chris Powers



Once referred to as the "Mystery Stone" because no one understood its purpose, the astronomical post has long attracted attention.

Image Courtesy of Chris Powers

REDESIGNING THE PERENNIAL FLOWER BEDS

Summer and Fall 2016

In 2016, the Michigan State Capitol Commission oversaw the replanting of the two large perennial flower beds that gracefully frame the building.

Photographs and postcard images reveal that the beds have been located in the same general area in front of the north and south wings of the building since the early 20th century. Though the varieties of flowers planted in the beds has changed over time, the beds themselves have been a constant presence on Capitol Square for well over 100 years.

These large, magnificent beds were fully redesigned and replanted from 1993 to 1994, following the completion of the Capitol's restoration. Designed by MSU Associate Professor of Landscape Architecture and Urban Planning Miriam Rutz, in conjunction with graduate student assistants Jennifer Hanna, Kristi Robbins, and Mari Rutz, the beds followed the design principals advocated by renowned English gardener Gertrude Jekyll (1843-1932). The beds contain the full range of the color spectrum. The warmest colors, such as reds and oranges, are located near the Capitol's main entrance. The beds then continue outward in a rainbow of yellows, pinks, whites, lavenders, and dark blues.

These beds were temporarily emptied in the early spring of 2015 in anticipation of the major restoration of the exterior stonework. This project brought with it heavy equipment that took a considerable toll on the Capitol's lawn, including the perennial flower beds. The work continued late into the fall of 2015, making it impossible to replant the beds until the following spring.

In 2016, Capitol staff and Commission members worked with the W.H. Canon Landscape Company to design and install new perennial bedding, based once more on the principals advocated by Gertrude Jekyll. A hot, dry summer brought challenges to the new plants, leading to a partial redesign and reinstallation under the guidance of Daphney McCristal in the fall of 2016.



This colorful postcard, circa 1940, features the large, curving flower beds that have flanked the Capitol's main entrance since the early 20th century.

Image Courtesy of the Michigan State Capitol Archive

The curving perennial flower beds were redesigned in the fall of 2016.

*Image Courtesy of
Chris Powers*

REDESIGNING THE ANNUAL CARPET FLOWER BEDS

Summer 2016

The Michigan State Capitol Commission decided to enlarge the Capitol's traditional annual flower beds in the summer of 2016, in conjunction with the installation of a new central walkway.

Historic photographs and postcards reveal that small flower beds were installed along the Capitol's central walkway (where it forms a circle around the statue of Austin Blair) sometime in the first decade of the 20th century. By the 1930s the beds had grown to border the entire central walkway, stretching from the Capitol Avenue sidewalk westward to the building. Though the beds remained a constant presence on Capitol Square from this time on, the flowers growing in them varied immensely from decade to decade.

These long, linear beds were fully redesigned and replanted from 1993 to 1994, following the completion of the Capitol's restoration. MSU Associate Professor of Landscape Architecture and Urban Planning Miriam Rutz, working in conjunction with graduate student assistants Jennifer Hanna, Kristi Robbins, and Mari Rutz, crafted a scheme for the beds based on Victorian "carpet bedding," in which annual flowers are densely planted in intricate designs. This style originated in England in the 1860s before spreading to Europe and the United States where they were used in public gardens and on the grounds of major buildings well into the early 20th century.

As a part of the renewal of the 2016 Capitol Square, the Michigan State Capitol Commission voted to replace the central sidewalks running from the corner of Capitol and Michigan Avenues to the building. Because the work lasted throughout much of the summer of 2016, the decision was made not to plant the beds that year.

Once the walkway was completed, new edging for the annual beds was installed. After much discussion the Commission decided to continue the footprint of the beds all the way to the Capitol Avenue sidewalk, where they make a sharp 90 degree turn and continue north to the new Michigan State Historical Marker and south to the new Construction, Restoration, and Renewal plaques. New flower bed designs, based on traditional Victorian carpet bedding, will be introduced in these areas in 2017.



The 2015 annual flower beds featured red, white, and blue flowers arranged in swags.

Image Courtesy of Barbra Thumudo



Brightly colored flower beds were introduced in the areas immediately around the statue of Austin Blair in the early 20th century.

Image Courtesy of the Michigan State Capitol Archive



For more information regarding the Michigan State Capitol,
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