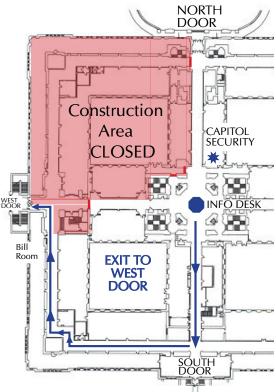
THE CAPITOL SOWER

THE NEWSLETTER OF THE CAPITOL COMMISSION | VOLUME FOURTEEN | NUMBER ONE | FEB 2022

HVAC Phase 3 Update

hase 3 of the Nebraska State Capitol Heating, Ventilation and Air Conditioning Upgrade Project encompassing the northwest quadrant began in November of 2021. As the Judicial branch moved out of temporary tower office space and back to their southeast quadrant offices, the relocation of numerous Legislative offices began. Predominantly occupied by the Legislative branch, 21 state senators and support staff moved from the northwest quadrant into tower office space. Visits with senators in tower offices are scheduled by calling the senator's office directly for a staff escort to their floor. Senator's phone numbers are available on the website: <nebraskalegislature.gov> and at the information desk in the center of the Capitol. The Clerk of the Legislature moved to the southwest quadrant of second floor across from the Speaker of the Legislature. During Phase 3 the west door is being used as the construction entrance limiting direct west center corridor access in and out of the Capitol. The Bill Room is still easily found just inside the west door and by following the south and west corridors around first floor.

The State Treasurer is the only non-Legislative office affected in this phase of the project. The Treasurer and his support staff have moved to temporary offices on third floor. The Unclaimed Property Division is located at 809 P Street; other public services are available on the Treasurer's website https://treasurer.nebraska.gov>.



The northwest quadrant contains the Capitol's accessible elevator. Members of the public needing the Capitol's accessible elevator, located in the project area, will require a staff escort into the construction area. Phone the tour office 402-471-0448 or Capitol Security 402-471-2400 for more information, or follow the instructional signage once inside the accessible north door. The public women's rest room on second floor is in the construction area and unavailable. Accessible women's and men's rest rooms are available in the outside corners of ground floor. An additional women's rest room is located in the south center ground floor corridor.

Nebraska Capitol Commission Membership

Pete Ricketts
Governor, Chairman

Mike Hilgers
Speaker of the Legislature
Vice-Chairman

Michael Heavican
Chief Justice Supreme Court
Vice-Chairman

Katherine Ankerson

Dean

College of Architecture, UNL

Trevor Jones
Executive Director & CEO
Nebraska State Historical Society

Doug Carey

Congressional District 1

Thomas Sanderson Congressional District 2

Trent D. Loos
Congressional District 3

Robert C. Ripley
Capitol Administrator
Secretary



The People of the OCC Office of the Capitol Commission

ADMINISTRATION
Bob Ripley, Administrator
Matt Hansen, Preservation Architect
Vacant, Preservation Architect
Brett Daugherty, Capitol Manager
Tammy Honnor, Facilities
Construction Coordinator
Vacant,
Administrative Assistant
Clark DeVries
HVAC Project Manager

ARCHIVE Karen Wagner, Archivist

CARPENTRY
Vacant, Shop Supervisor
Lana Gabel,
Furniture Conservator
Dawn Hickmon,
Furniture Conservator
Vacant, Finisher
Dan Kratky, Mason
John MacKichan,
Hardware Conservator
Mike Marshall, Cabinet Maker

CUSTODIAL Perry Shuman, Capitol Conservation Supervisor Richard Mallam, Custodial Leader David Hoelscher, Custodial Leader

GROUNDS Heather Dinslage, Groundskeeper Leader Kirby Baird, Mechanic

MAINTENANCE
Michael Jordan, Shop Supervisor
Jeff Gillett, Plumber
Tahir Karimi, Electrician
Chris Lahmon,
Maintenance Technician
Harry Holcome,

TOURS Roxanne Smith, Public Information Officer/ Tourism Supervisor/ Special Events Coordinator Susan Myers, Tourism Aide Jessica Richard, Tourism Aide Kirk Wiota, Tourism Aide

Maintenance Technician

Experience and Service

Years of Service Recognized

apitol Commission staff were recognized in 2021 for their service to Nebraskans. Capitol Administrator Bob Ripley appreciates the dedication of his team and congratulates staff as they care for and preserve the Nebraska State Capitol. Ripley recognizes long term service provides the opportunity for staff to improve their job expertise which in turn improves the long term maintenance and preservation of the building.



Kirby Baird 5 years



Michael Marshall 15 years



Jeff Gillett 20 years



Perry Shuman 25 years



Steve Janssen 45 years



Harry Holcome



Susan Myers

The Office of the Capitol Commission will benefit from new staff's experience. Holcome brings 40 years of experience in building maintenance to OCC. Myers, a native of Lincoln, brings over 20 years of experience teaching and working with students to the tour program.

Commission's 2022 Schedule

The Nebraska Capitol Commission will hold their quarterly meetings in Hearing Room #1507 on ground floor of the Capitol. The Commission uses these meetings to oversee and review Capitol maintenance and preservation projects; discuss and approve projects and the upcoming budget for the Office of the Capitol Commission, and set administrative rules for the use of the Capitol. The last meeting of the year

includes a joint Capitol Commission/ Capitol Environs Commission meeting. These meetings are open to the public.

- February 10, 2022 at 9:30 a.m.
- · June 9, 2022 at 10:00 a.m.
- · August 23, 2022 at 10:00 a.m.
- November 15, 2022
 Joint Meeting at 10:00 a.m.
 Capitol Commission at 11:00 a.m.

Gold Dome Restoration PROJECTS

apitol architect Bertram Goodhue chose a glazed gold ceramic tile to cover the dome of the Nebraska State Capitol anticipating it would prove durable in Nebraska's climate. He knew the dome, nearly 400 feet above ground, would not be easily accessible for maintenance or repair. During the 1998-2010 Exterior Masonry Restoration Project, with the entire tower scaffolded, an inspection of the gold tile dome revealed it was in good condition and only needed cleaning. Removal and replacement of the flexible sealant in the expansion joints which allow the dome to move with changing temperatures was included in the dome restoration work.

In 2016 staff noticed efflorescence on the exterior the dome and in 2019 hired an inspection crew to survey the gold tile surface. Their report revealed sealant installed in the expansion joints during the Exterior Masonry Project had deteriorated due to ultra-violet exposure. The failed sealant allowed water to infiltrate and the natural freeze/thaw cycle caused some of the gold-glazed ceramic tile to delaminate from the mortar. In some areas the substructure beneath the tile and mortar had fractured.

The Office of the Capitol Commission and preservation architect consultants developed a plan to repair and restore the dome. First, restoration contractors removed the failed sealant and crumbling grout on the dome. Then the delaminated tiles were numbered, removed, cleaned and stored on the dome scaffold. Damaged mortar beneath the tile was removed; the substructure was inspected and repaired when necessary. Once the substructure was ready, the contractors reapplied mortar and reset each tile in its original location. Grout was applied to fill the spaces between the newly reset tile and a thin coat of grout was applied to seal all joints between all tiles. The expansion joints were filled with the best silicone sealant, and then covered with lead t-shaped shields to slow or prevent further ultra-violet damage. The completed restoration work will require periodic inspectiontt to see that it remains water tight and protective.

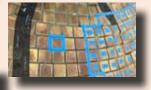




Above left, a 2019 inspection revealed the failure of sealed expansion joints in the gold tile allowed water to infiltrate the dome. Above right, after the project to repair the dome was approved, plans were made to scaffold and repair the dome. Scaffold was installed in September of 2021.



Above, from the scaffold, OCC staff inspected each of the 20,200 tiles on the dome and outlined approximately 1,100 to be removed and reset with blue tape, below.



Above, contractors numbered each tile within the project before they were removed.



Above left, OCC staff and contractors were amazed that some of the tile was completely delaminated and being held in place by gravity. Once removed contractors stockpiled the tiles on the scaffold, above right, until they could be cleaned far right, and readied for reinstallation, below right.



Left, once the gold tile was removed, contractors cleared away the damaged mortar bed until they reached the original dome substructure. Where needed, they filled in the missing base with new mortar.



Above, the numbered tiles were returned to their original location and set into a new mortar bed. Once the tile was set in the mortar bed, contractors sealed the joints with a new darker grout, right.

Right, to improve the durability of the sealant placed in the expansion joints, contractors covered the grout with lead T-channels. The lead channels will keep the ultra-violet light from degrading the sealant and extend its service life on the dome.



Dome Restoration, Part 2

Because the low bid for the dome restoration project came in below the consulting preservation architect's estimate, additional funds were available to further repair and waterproof the lantern beneath the Nebraska State Capitol's gold dome. With any project on a high rise tower scaffold cost is a major component. The unexpected additional project funds and extremely mild fall and early winter weather conditions gave the Office of the Capitol Commission the opportunity to use the scaffold investment to its best advantage. Knowing the opportunity might not come again for 50 to 100 years, OCC scheduled as much repair and restoration as possible. To the original planned restoration work on the Thunderbird mosaics and gutters, improvements to the gutter drainage system and additional flashing where vertical elements of the lantern meet the four corner turrets were added.

The grout seams between the ceramic tile Thunderbird mosaics and the limestone walls of the lantern were cleaned out, filled with new flexible sealant and lead "T" protection applied. A top-coat of grout was applied to the surface of all eight Thunderbird mosaics to fill any surface cracks in the existing grout.

Because the Capitol's tower is considered a prime nesting location by Peregrine falcons, it was necessary to find a dome gutter system less susceptible to being clogged by bird body parts. Existing gutters were cleaned and an easily cleaned filter system was installed. Flashing in and around the gutter was repaired relying on traditional techniques and materials. Mortar joints in the turrets were upgraded. The improved waterproofing accomplished with the Dome Restoration Project will preserve and protect the Capitol for many years to come.



Above left, the existing condition where the gold dome met the limestone turrets allowed water to infiltrate. Above right, after repair, the seam was refined and filled with sealant. The installation of the lead T-channel will extend the life of the waterproof seal.



Above left, the sealant seam between the Thunderbird mosaics and the limestone facade had failed. Above right, repairs included cleaning the seam and installing new sealant covered

with the lead T-channels. Right, a top coat of lighter colored grout was added to seal and upgrade the existing mortar joints.



Below, the completed project.





easily cleaned

the dome was installed.

from inside

Above, turret capstone seams were upgraded with new sealant, and the lead flashing enhanced with additional horizontal flashing.

Dome

repair

project

expands

Prorty-five Year Career Ends

teve Janssen, the Office of the Capitol Commission's Finisher, turned a high school interest into a forty-five year career. Woodshop class is taken by many high school students; for Steve, the class sparked an interest that would lead him to the Nebraska State Capitol and retirement from a fulfilling career. Working in manufacturing following high school, a slowing economy forced him to look for different employment. Pursuing his interest in woodworking, Steve took a temporary position in the carpenter shop of the Capitol. In 1976, the position became permanent and Steve began his dedicated service to Nebraska.

In the newly organized Carpenter shop, Steve perfected the skills learned in school, and learned a new set of skills. In the 1970's the idea of historic preservation was just taking hold and fortunately for Nebraska, Steve joined a team guided by preservation architects Tom Kaspar and Bob Ripley. In its first 50 years, little attention was paid to preservation of the high-quality furniture and finishes in the Capitol. As Tom Kaspar researched and documented the furniture and finishes, he guided Steve's transition from using lacquers and varnishes on Capitol original wood to using the original shellac finishes. Steve quickly adopted a preservation attitude and learned techniques to meet the challenge of caring for the furniture

collection and the building's thousand walnut doors. From the early days of the preservation program throughout his forty-five year career Steve met many challenges and did his best to care for the Capitol.

Like many who have worked, and those who continue to work maintaining and



Above, Steve applies stain to a door casing during one of the many renovation projects he supported.

preserving the Capitol, Steve valued the opportunity. The Capitol preservation

team provided him with confidence in his ability, and the respect and friendships built on a shared mission of excellent service.

During his long career at the Capitol, Steve was called upon to do all types of finish work, from wood to metal to stone. As the Nebraska State Capitol was adapted to meet different needs, Steve adapted and learned new techniques. He learned to put faux finishes on

metal, mimicking wood, stone or bronze when necessary. The current HVAC project gave him opportunities to analyze paint colors and work on wall finishes. Steve easily moved from doors to floors. He worked with the team to repair and refinish damaged wooden floors in Executive and Judicial branch space. Steve participated in significant furniture restoration projects, such as the Governor's desk and Judge's chairs.

Steve is most proud of his work on the Capitol's doors. Through the years he developed methods to restore color to doors faded by sunlight and developed techniques to provide a more durable finish on the doors. Each day staff and visitors alike use the doors he cared for as they go about their business, often without noticing their beauty or importance. As Steve did for forty-five years, the doors work behind the scenes and serve every person in the Capitol. He retired pleased to know his work will be touched by and benefit many future generations of Nebraskans.



Above, a security camera mount is well camouflaged by Steve's faux painting skill. Below, Steve's work at the Capitol included repairing and restoring the original exterior wooden Legislative flagpoles.



WHAT'S OLD IS NEW

The Office of the Capitol Commission's archive of historical construction era photographs once again proved invaluable to those preserving and restoring the Nebraska State Capitol. Capitol architect Bertram Goodhue specified a gold tile dome for the top of the 400' tower because of its durability. During a 2002 inspection of the dome as part of the Exterior Masonry Restoration Project it was determined to be in good condition and contractors needed only replace the sealant in the dome's expansion joints. Unfortunately currently available sealant is not nearly as durable as that used 50-100 years ago. Ultraviolet light quickly deteriorated the new sealant leading to its failure, allowing water infiltration. As the water migrated through the dome's substructure the freeze-thaw cycle of Nebraska's winters caused some of the mortar and grout to deteriorate and tile to break free. Miraculously, none of the loose tile came off the dome.

Once Capitol Preservation Architects discovered the problem, they contracted to have a survey of the dome's condition and with that report hired contractors to restore the dome. As contractors were investigating current conditions, the Capitol Archivist was investigating historical conditions. Preservation architects knew they had to fully understand original dome construction to analyze the extent of the damage and how to properly repair the dome substructure and tile.



Above, in this 1930 photo workers build the tile dome structure covering the *Sower's* steel beam support frame.



Left, once the dome structure was in place and coated with a tar based waterpoof sealant, heavy expanded wire mesh was attached to the dome to secure a substrate for the gold tile application.



Above, a cement coating was sprayed onto the mesh to provide a smooth thick substrate bed upon which to apply mortar and gold-glazed tile.

Right, the cement setting bed was scored while wet in a cross-hatched pattern. Once dry, the irregular surface provided a textured surface for

the mortar adhereing the tile to the dome structure. When contractors working on the Dome Restoration Project found the cross-hatched pattern underneath the mortar they knew they were close to the dome's substructure.

CAPITOL EVENTS

Lincoln Birthday Vigil
February 12, 2022
The Sons of Union Veterans of the
Civil War will stand vigil at the Lincoln
Monument of the Capitol from 8:00 a.m. to
noon.

Presidents Day February 21, 2022 Capitol tours 10:00 a.m. - 5:00 p.m.

State Fair Awards Ceremony February 25, 2022 The NEBRASKAland Foundation will recognize State Fair educational competition winners at 1:00 p.m. in the 2nd floor rotunda.

Capitol Closed February 26, 2022 The Capitol will be closed for statehood day activities.

Statehood Day March 1, 2022 Nebraska's 155th Birthday

Theater in Our Schools Day March 1, 2022 The Nebraska Thespians will have a first floor display celebrating the importance of theater in schools and a musical performance in the 2nd floor rotunda at

Dress in Blue Day March 4, 2022

noon.

The Nebraska Cancer Coalition will illuminate the Capitol in blue for colorectal awareness and hold a program and walk around the Capitol at 7:00 p.m.

AFSP State Capitol Awareness March 7-11, 2022 The American Federation for Suicide Prevention Nebraska Chapter will have a display in the 1st floor rotunda.

Youth Art Month Display March 14 - 26, 2022 The Nebraska Art Teachers Association will display student artwork in the 1st floor rotunda. Problem Gambling Awareness March 14 - 18, 2022

The Department of Health and Human Services and Creating Family Choices will have a display providing information on the Gamblers Assistance Program in the 1st floor rotunda.

NMEA Capitol Concert Series March 21 - 25, 2022 The Nebraska Music Education Association plans to hold their annual concert series in the Capitol 2nd floor rotunda from noon to 1:00 p.m. each day.

"I Love NU" Display
March 21 - 25, 2022
The University of Nebraska System will
have a display in the 1st floor rotunda
identifying the benefits of the University
System to Nebraskans.

Youth Art Awards Ceremony March 26, 2022 The Nebraska Art Teacher's Association will hold an awards ceremony in the Capitol 2nd floor rotunda from 2:00 to 4:00 p.m.

Financial Awareness Month April 1, 2022 The Nebraska State Treasurer will light the Capitol green to promote the College Savings 529 Program and financial awareness.

Mother of the Year Recognition Ceremony April 7, 2022

The Nebraska Mothers Association Inc. will recognize the Nebraska Mother of the Year and the American Mothers Inc. state 5th grade essay winners at noon in the 2nd floor rotunda.

Soundsational Singers Concert April 12, 2022 O'Neill Public Schools will hold a concert in the 2nd floor rotunda at noon.

COVID-19 Vaccination Display April 18-29, 2022 The University of Nebraska State Museum and Libraries and the National Institutes of Health will display poster contest winners in the 1st floor rotunda. Worker's Memorial Day Vigil April 28, 2022 The United Support Memorial for Workplace Fatalities will hold vigil on the North Plaza at 6:30 p.m.

Arbor Day April 29, 2022 Nebraska's home grown holiday. Capitol tours 10:00 a.m. - 5:00 p.m.

Mayor's Run April 30, 2022 The Lincoln Track Club will host a youth fun run around the Capitol from 8:00 a.m. to noon.

State Holocaust Commemoration May 1, 2022 The Jewish Federation of Lincoln and the Institute for Holocaust Education will hold a 3:00 p.m. ceremony in the 2nd floor rotunda.

Peace Officer's Memorial Day May 6 - 15, 2022 The Nebraska State Patrol will sponsor a 1st floor display to honor Nebraskan's fallen peace officers.

Memorial Day May 30, 2022 Capitol tours 10:00 a.m. - 5:00 p.m.

Cornhusker Girls State
June 9, 2022
The American Legion Auxiliary
Department of Nebraska will hold the
annual Girls State Inauguration in the 2nd
floor rotunda at 2:00 p.m.

All events at the Nebraska State Capitol are free and open to the public.

Guided Tours are offered Monday-Friday hourly from 9:00 am to 5:00 pm, except at noon. Saturday and Holidays from 10:00 am to 5:00 pm, except at noon and Sunday from 1:00 to 4:00 pm. Please call 402.471.0448 or visit www.capitol.org for more information.



In this issue:

DOME REPAIR	3
DOME REPAIR CON'T.	1
45 YEAR CAREER	5
DOME PHOTOS	5
EVENTS	7

Guided Tours are offered Monday-Friday hourly from 9:00 a.m. to 5:00 p.m., except at noon. Saturday and Holidays from 10:00 a.m. to 5:00 p.m., except at noon and Sunday from 1:00 to 4:00 p.m. Please call 402.471.0448 or visit www.capitol.nebraska.gov

The Capitol Sower,
published by the Office of the
Capitol Commission,
is available online at
www.capitol.org.
Contact the Tourism
Supervisor at
<roxanne.smith@nebraska.gov>
for more information.

Please contact us if you have any questions or comments about the content. All images are property of the Office of the Capitol Commission unless noted.

THE CAPITOL SOWER

THE NEWSLETTER OF THE CAPITOL COMMISSION

FEB 2022

Nebraska Capitol Commission

Nebraska State Capitol Seventh Floor 1445 K Street P.O. Box 94696 Lincoln, Nebraska 68509-4696 www.capitol.org 402.471.6691



Capitol Architect Bertram Grosvenor Goodhue, 1869-1924

Aviation Beacon Upgrade

magine the Nebraska State Capitol's impact on the 1932 Lincoln skyline. At 400 feet tall, the Capitol would have towered over the city. Soon after Wilbur and Orville Wright took to the air in 1903 Lincoln became an early aviation center. From 1910 - 1930 Lincoln hosted up to four airplane manufacturers and flight schools. Lincoln was home to the aviation school that trained Charles Lindberg to fly. An aviation warning beacon atop the Capitol became a necessity once pilots began to fly at night. Placed between the Sower's feet, the beacon has identified and protected the Capitol since 1937.

The Office of the Capitol
Commission took advantage of access
the Dome Restoration Project scaffold
provided to inspect the beacon.
OCC staff and electrical contractors
determined the beacon should be
rewired for long term reliability and
retrofitted for LED bulbs. In the past,
the incandescent bulbs were replaced
every two years. The LED lamps
are projected to last for 8 · 10 years,
eliminating the need for frequent
trips onto the dome and lowering
maintenance costs.





The trip up to change the beacon light begins at the top of the Capitol under the gold dome. Above left, a 30 foot ladder leads to a platform beneath a hatch, above right, which opens out onto the *Sower's* base.

At the *Sower's* base, below left, another ladder climbs 14 feet to the beacon between the *Sower's* feet. Below right, the 30 inch tall beacon's clear outer and red inner glass case is hinged in the middle and opens to change the lamps.



