



# Comprehensive Master Plan

MOCA

**Minnesota Capitol Preservation Commission**  
**Mark Dayton**  
**Governor**  
*2012 Comprehensive Master Plan*  
*February 2012*  
*Final*



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## The Minnesota State Capitol Building Comprehensive 20 Year Master Plan



Existing Minnesota State Capitol Building 2011

Designed by Cass Gilbert, Architect 1900 - 1905

## 2012 MASTER PLAN

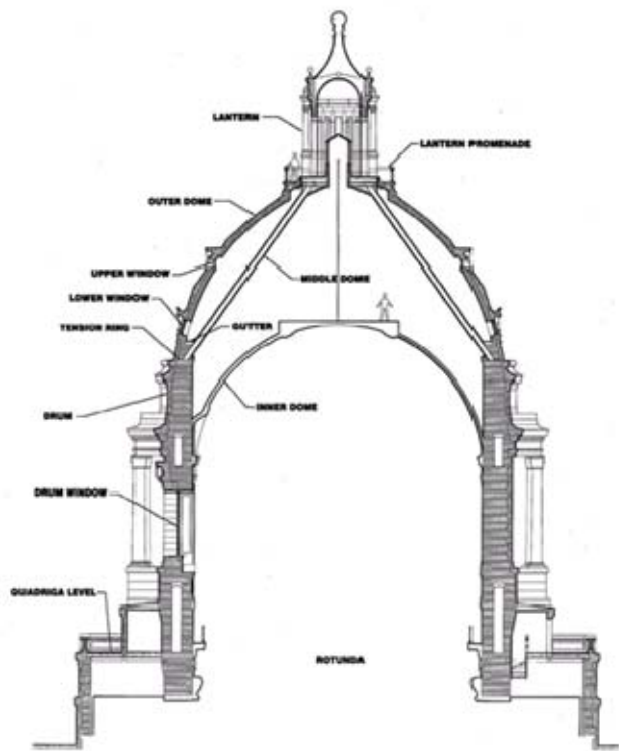
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INTRODUCTION

- Capitol Master Plan Mission Statement
- Campus Master Plan Objective
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MASTER PLAN

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Capitol Master Plan Mission Statement

The Master Plan must emphasize the architectural integrity of the Cass Gilbert Capitol, functionally enhance the operations of the state government and provide for life safety and security of all for the next 100 years to ready it for use by future generations.

Capitol Master Plan Objective

The Minnesota State Capitol Master Plan document is a living document that provides a 20 year view of the restoration, preservation and maintenance of the Capitol. The Master Plan should be reviewed periodically and as appropriate, amended and modified to maintain the 20 year view.

The Capitol Preservation Commission is required, by statute to develop a comprehensive, multiyear, predesign plan for the specific restoration of the Capitol building that is to conform and support the goals and objectives of the Capitol Master Plan.

This document provides the following goals, objectives and actions that are needed to implement the desires of the Capitol Preservation Commission.

- The Master Plan must identify appropriate and required government and public functions of the Capitol building.
- The Master Plan must identify and address space requirements for legislative, executive, and judicial branch functions.
- The Master Plan must identify and address the long-term maintenance and preservation requirements of the Capitol building.
- The Master Plan must consider the comprehensive plan for the Minnesota State Capitol Area, as amended in 2010.
- The Master Plan must abide by the rules governing zoning and design for the Capitol Area.
- The Master Plan must address citizen access.
- The Master Plan must address information technology needs.
- The Master Plan must address energy efficiency.
- The Master Plan must address security
- The Master Plan must address education programs including public and school tours

The Master Plan must address any additional space needs for the efficient operation of state government.  
The master plan must be **flexible** to accommodate changing needs as identified by the commission.



## Capitol Preservation Commission

The State Capitol Preservation Commission includes:

- Governor Mark Dayton
- Lieutenant Governor Yvonne Prettner Solon
- Attorney General Lori Swanson
- Justice Paul Anderson
- Senator Carla Nelson
- Senator Ann Rest
- Senate Majority Leader David Senjem
- Senator Keith Langseth
- Representative Matt Dean
- Representative Dean Urdahl
- Representative Mary Murphy
- Representative Larry Howes
- Representative Alice Hausman
- Commissioner Spencer Cronk Dept. Administration
- Commissioner Ramona Dohman Dept. Public Safety
- Historical Society Director and CEO D. Stephen Elliott
- Executive Secretary Nancy Stark,
- Ted Lentz—Public Member
- James Dayton—Public Member
- Dana Badgerow—Public Member
- Larry Gleason —Public Member

Members of the Capitol Preservation Commission participated in several meetings throughout the planning and development of this master plan. The Commission organized itself into subcommittees, to accomplish the planning work associated with the Capitol Restoration.

### Preservation and Planning Subcommittee

The Preservation and Planning subcommittee met to review the history of the Capitol, it's uses, and the changes that have taken place over the past 106 years. The subcommittee developed and recommended to the commission the guiding principals that will be used in making future decisions. These guidelines include the following:

- **Architectural Integrity** implies that the architectural design elements of Cass Gilbert's Capitol are among the most important aspect of the restoration. Not everything must be absolutely restored to the 1905 plan. The building must work for the next 100 years. When considering new space in the Capitol, it should be done with great care and respect to Cass Gilbert's 1905 vision. It is critical to preserve the integrity of the building and its great architecture.
- **Building Function** suggests that the building must work to improve and support the function of Government by solving some of the functional issues that currently exist. This, in turn, would also address functional issues within State Government.
- **Life Safety and Security** provides the public and those who work and visit the Capitol with a facility designed to:
  - Improve life safety by bringing the building up to current life safety codes.

- Reduce security threats from the outside.
- Provide for full accessible to all Minnesotans.

### Budget Subcommittee

The Budget Subcommittee reviewed the benchmarking analysis and other cost related data that was developed and presented their recommendations to the Commission.

## Commission Legislative Duty

*By January 15 of each year, the commission shall report to the chairs and ranking minority members of the legislative committees with jurisdiction over the commission regarding the activities and efforts of the commission in the preceding calendar year, including recommendations adopted by the commission, the comprehensive financial plan required under paragraph (a), clause (5), and any proposed draft legislation necessary to implement the recommendations of the commission.*

## Duties and Responsibilities

### **Specific Duties of the State Capitol Preservation Commission**

2011, 1st Special Session Chapter 6, Subd. 6

The commission shall develop a comprehensive, multiyear, pre-design plan for the restoration of the Capitol building, review the plan periodically, and, as appropriate, amend and modify the plan.

The pre-design plan shall:

- identify appropriate and required functions of the Capitol building;
- identify and address space requirements for legislative, executive, and judicial branch functions; and
- identify and address the long-term maintenance and preservation requirements of the Capitol building.

In developing the pre-design plan, the commission shall take into account:

- the comprehensive plan for the Minnesota State Capitol Area, as amended in 2010, ([www.caapb.state.mn.us](http://www.caapb.state.mn.us))
- the rules governing zoning and design for the Capitol Area,
- citizen access,
- information technology needs,
- energy efficiency,
- security, educational programs including public and school tours, and
- any additional space needs for the efficient operation of state government

The Commission shall develop and implement a comprehensive financial plan to fund the preservation and restoration of the Capitol building.

## 2012 MASTER PLAN



## The Planning Process

The State Capitol Preservation Commission began the planning process in October of 2011. The Commission retained the services of MOCA to develop a comprehensive Master Plan and define an implementation strategy. The planning team reviewed historic reports and plans prepared by HGA Architects, reviewed the program requirements, and identified planning alternatives with the help of mechanical engineers. The team focused on current and future needs associated with the systems, structure, and exterior and interior space needs associated with the Capitol proper. Traffic considerations, light rail and parking locations/configurations were also considered, although they were not the focus of the study.

The State Capitol Preservation Commission worked through the established subcommittee utilizing a series of workshops facilitated by the MOCA. Participant input was included in reports to the full commission documenting the workshops. The information developed in these workshops provided guidance to the commission by way of guiding principles and clarified the current and future needs of the Capitol. They also allowed for collaboration between different groups in order to further understand each other's needs.

Following these workshops, functional diagram sessions were held with some of the members of the Commission. The resulting diagrams identified areas of need that required further analysis and study. The planning team studied the organizational structures of 13 renovated State Capitols in order to provide a starting point for a space planning organizational structure for the Minnesota State Capitol

The Capitol's mechanical, electrical and plumbing systems were analyzed to determine adequacy of each of the systems. This analysis identified several areas for

improvement. The planning team was encouraged by the Commission to work within the framework and footprint of the Capitol, as well as to work with the original intention of Cass Gilbert. The mechanical and electrical systems were no exception.

The Commission provided suggested scenarios to assist with the development of space planning criteria. These eight suggested scenarios then formulated the identification of the proposed approach.

### Schedule

The Commission suggested that the schedule address not only the project construction requirements associated with a large historic restoration project. That it also be allow for flexibility in funding options and keeping the building open to the public and elected officials to the greatest extent possible. That creativity should be used by the contractor to accomplish the work in a shorter time fame without incurring additional costs of construction.

### Budget

The budgeting process focused on three basic cost elements. First, the hard costs associated with system replacement, including mechanical and electrical. Second, the decorative finish area or the historic specific finishes of the building. This would include historic lighting, decorative painting, wood window replacement, stone restoration and alike. And finally, the soft cost of furniture, fixtures, equipment, swing space and owner needs.

## Acknowledgements

This document has been developed and organized with the assistance of:

- MOCA Systems - Program Manager
  - Commission Facilitator
  - Team Coordinator
  - Master Planning
  - Cost Estimating
  - Scheduling
- Wold Architects & Engineers
  - Mechanical Concept
  - Electrical Concept
  - Space Planning
  - Graphics



We would like to express our appreciation to the Department of Administrative who provided assistance and guidance throughout the planning process.

## HISTORIC BACKGROUND

### Background

The Minnesota State Capitol was designed by Cass Gilbert. The building's dome was modeled, in part, after Saint Peter's Basilica in Rome - the unsupported marble dome is the second largest in the world, after Saint Peter's. However, like all Capitols with domes in the US, it's inspiration originated with the United States Capitol dome. Work began on the Capitol in 1896, and construction was completed in 1905. It is the third building in Minnesota to serve this purpose: the first capitol was destroyed by fire in 1881, and the second was completed in 1883, but was considered to be too small almost immediately.

Above the southern entrance to the building is a gilded quadriga called "The Progress of the State" which was sculpted by Daniel Chester French and Edward Clark Potter. It was completed and raised to the roof of the capitol in 1906. The four horses represent the power of nature: earth, wind, fire and water. The women riding in the back of the chariot symbolize civilization while the man standing at the front of the chariot represents prosperity. In 1994 and 1995, the statues underwent a restoration procedure which included replacing the gold leaf on the figures. A sphere perched above the capitol dome also has similar treatment.

Gilbert's dome is smaller than Michelangelo's St. Peter's Dome. His drawings show that he originally planned a wider drum and, correspondingly, a more massive dome. The dome, as constructed, is a simplified design: single columns around the upper lantern. The ribs on the capitol dome are less pronounced than those on St. Peter's, but they are still visually apparent. Gilbert knew that St. Peter's dome was on the edge of being unstable: it had cracked and had to be reinforced. His engineer for this project, Gunvald Aus, bound the brick dome in reinforcing steel bands, and Gilbert crowned the paired columns around the drum (which act as buttresses to counter the dome's weight) with additional stone.

Other than St. Peter's, additional buildings with marble domes include the Taj Mahal in India and the Rhode Island State House in the city of Providence.

Gilbert drew ire for choosing stone from Georgia rather than native Minnesota stone. A compromise was eventually made where the base of the building and interior spaces used varieties of native stone, including Kasota stone and the rare Pipestone used by Native Americans for their peace pipes. Upon completion, the exterior and interior of the building drew praise, leading to requests for Gilbert to design Capitol buildings for other states such as West Virginia and Arkansas and other notable structures.

The Capitol cost US\$4.5 million at the beginning of the 20th century. It opened its doors to the public for the first time on January 2, 1905. A hundred years later, the building's estimated value is \$400 million.

Upon entering the building by the south door, one is below the central dome. A large star, symbolizing Minnesota's motto, "The Star of the North", is directly beneath the apex. Various portraits of state governors, and flags captured by Minnesota's regiments during the American Civil War are on display. Paintings showing some of the related battles can be seen in the governor's outer office. Much of the building is open to the public, although one interesting sight is only rarely accessible. This is the cloak room behind the House of Representatives chamber. The walls are painted to simulate a north woods forest, but in one corner is a tiny four leaf clover. This was added by an Irish artist to remember his home island.

The structure was added to the National Register of Historic Places in 1972.

*History adapted from Wikipedia Dec. 29, 2011*



Cass Gilbert standing on the partially constructed state capitol building in Saint Paul, May 9, 1901.



## 2012 MASTER PLAN



Relocations

Minnesota State Capitol  
Timeline of Capitol Space Occupancy

*The information in this section has been provided by the Minnesota Historical Society.*

This document provides a summary of changes in the occupancy of space within the Capitol building. It should be considered a “work in progress” - as additional information becomes available to fill in gaps, that information can be added to the chronology. Also, this timeline is not a complete history of every state agency or commission that has moved since 1905. Rather, it captures the significant changes that have occurred and has led to the present day use of spaces within the Minnesota State Capitol.

In the history of the present day Capitol building, the most consistent driver of change in moving and relocating different agencies, commissions, executive offices, the judiciary, and the legislature, was the need for more space.

The construction of the Minnesota Historical Society Building in 1918 (690 Cedar St.) and the State Office Building in 1932 helped alleviate some of those space constraints, but as soon as an office or room was vacated in the State Capitol it was quickly filled by another state government entity.

Additional buildings were added to the Capitol Complex in the 1950s and 1960s. This period of relocation from the Capitol by other state agencies and commissions, and for the first time executive officers, began a transition of making the Capitol less an administrative headquarters and more a center of activity related to the legislative process, including the legislative and executive branches. That trend continued through the 1970s until

the 1990s as the original 1905 office spaces were converted to committee hearing rooms and spaces for legislators and their support staff.

Timeline of Capitol Tenant Occupancy and Moves

**1905** – All Executive officers and a variety of commissions and boards occupy the building. Each of the five Supreme Court justices has an office on the southeast 2nd floor. Senate and House members use their desks in chambers as office space. Other entities housed in the Capitol include:

Ground Floor:

- Board of Health
- Dairy and Food Commissioner
- Labor Commissioner
- Livestock Sanitation Board
- Minnesota Historical Society
- Board of Control
- State Public Library Commission
- Sec. of the Soldier’s Home

First Floor:

- State Auditor (Room 123)
- State Treasurer (Room 125)
- Secretary of State (Room 128)
- Governor’s Office (Room 130)
- Attorney General (Room 102)
- Adjutant General
- Railroad Commissioner
- Insurance Commissioner
- Public Examiner

Second Floor:

- Supreme Court
- Law Library
- House of Representatives
- Senate
- Committee Rooms

Third Floor:

- Superintendent of Public Instruction
- Game & Fish Commissioner
- Boiler Inspector
- Oil Inspector
- Law Library
- Forestry Board
- Committee Rooms

**1918** – Minnesota Historical Society moves out of E. Ground Floor to new building at 690 Cedar St. The Education Department is temporarily located in this same building.

**1918-1919** – The Supreme Court expects to use the space vacated by MHS, but for unknown reasons at this time, other commissions and agencies move into those ground floor spaces.

**1932** – State Office Building opens and a large number of commissions and agencies vacate the Capitol or move from the Old Capitol to this new building. The basement floor of the Capitol is lowered several feet to accommodate pedestrian traffic coming to and from the State Office Building tunnel and allow for the creation of office spaces.

**1930s-1958** – Dept. of Transportation Motor Vehicles License Bureau is located on W. Ground Floor corridor and in Room 15 until it moves into the new Highway Department Building (DOT).

**1938** – House of Representatives chamber north public gallery seating removed and converted into two floors of office space.

## HISTORIC BACKGROUND

**1956** – Highway Dept. Building built (Dept. of Transportation).

**1958** – Centennial Building opened for occupancy.

**1967-1968** – Administration Building is completed.

Executive Offices (State Treasurer, State Auditor) and Department of Administration move from the Capitol to the Administration Building. The Secretary of State's Office moves to the State Office Building the same year.

The Governor's Office absorbs the former Sec. of State office space (SW offices-1st Floor).

The Lt. Governor takes over the State Auditor's office space (Room 105).

A joint Senate-House Rules committee approves giving the 1st Floor East Wing over as offices and committee rooms for the Senate (Rm. 120) and House (Rm. 123 & 125) committees.

**1968** – Governor Harold LeVander suggests and is met with resistance to partition off the Governor's Reception Room for additional office space.

**1969-1970** – Capitol undergoes significant changes by remodeling and converting former commission and agency office spaces into committee hearing rooms.

Room 15, 112 and 118 are remodeled and become shared legislative committee rooms. Additional committee rooms are created for the House on the Ground floor and for the Senate on W. 2nd and 3rd Floors.

Rooms 107, 123 & 125 are remodeled as House Hearing Rooms.

Temporary offices (the addition of plywood and plaster

walls) are constructed in the E. and N. Ground Floor corridors and allow each House member an office space in the Capitol.

Senate Minority members are housed in a plywood enclosure in the 2nd Floor Rotunda, S. Corridor (built around and in front of the south French doors).

**1971-73** – 1st Floor W. Wing (Governor's office, 1st and A.G.'s offices) are remodeled.

Revisor of Statutes Office is located on the Ground Floor and Basement. Rooms are provided for the media in the Basement.

**1972** – Passage of the Flexible Session Amendment (which allows the legislature to set their regular session dates) begins the process of expanding legislative needs and requires finding more office spaces and support staff.

Partitions removed from 2nd Floor Rotunda, S. Corridor.

**1975** – House members and Senate minority members relocate to the State Office Building.

Each Senate majority member, after space is remodeled, is provided a private office in the Capitol.

**1975-76** – Lt. Governor's Office moves to Room 122.

**1984** – State Office Building is remodeled (which includes new committee rooms for the House of Representatives).

The addition of hearing rooms in the State Office Building leads to House committee rooms (including 123 & 125) being turned over to the Senate to use as office and committee rooms.

Revisor of Statutes Office moves from the Ground and Basement floors to the State Office Building.

**1990** – Lt. Governor's Office is incorporated into the Governor's office suites on W. 1st Floor.

**1991** – Supreme Court leaves the Capitol and moves to Judicial Center.

House, Senate and Governor's Office take over the vacated Supreme Court spaces on the second and third floor.

**1995** – After several years of discussion between the House and Governor's Office about space usage on the second floor (formerly Supreme Court space), and a court order to settle the dispute, an agreement between the House, Senate and Governor's Office is reached that allows:

- the governor to get office space on the W. Ground Floor occupied by senators at that time.
- the Senate receives House and Governor Office space on the 2nd Floor, S.E. Wing.
- the House retains the contested space and gets legislative funding to remodel others spaces it controls in the Capitol.

## 2012 MASTER PLAN



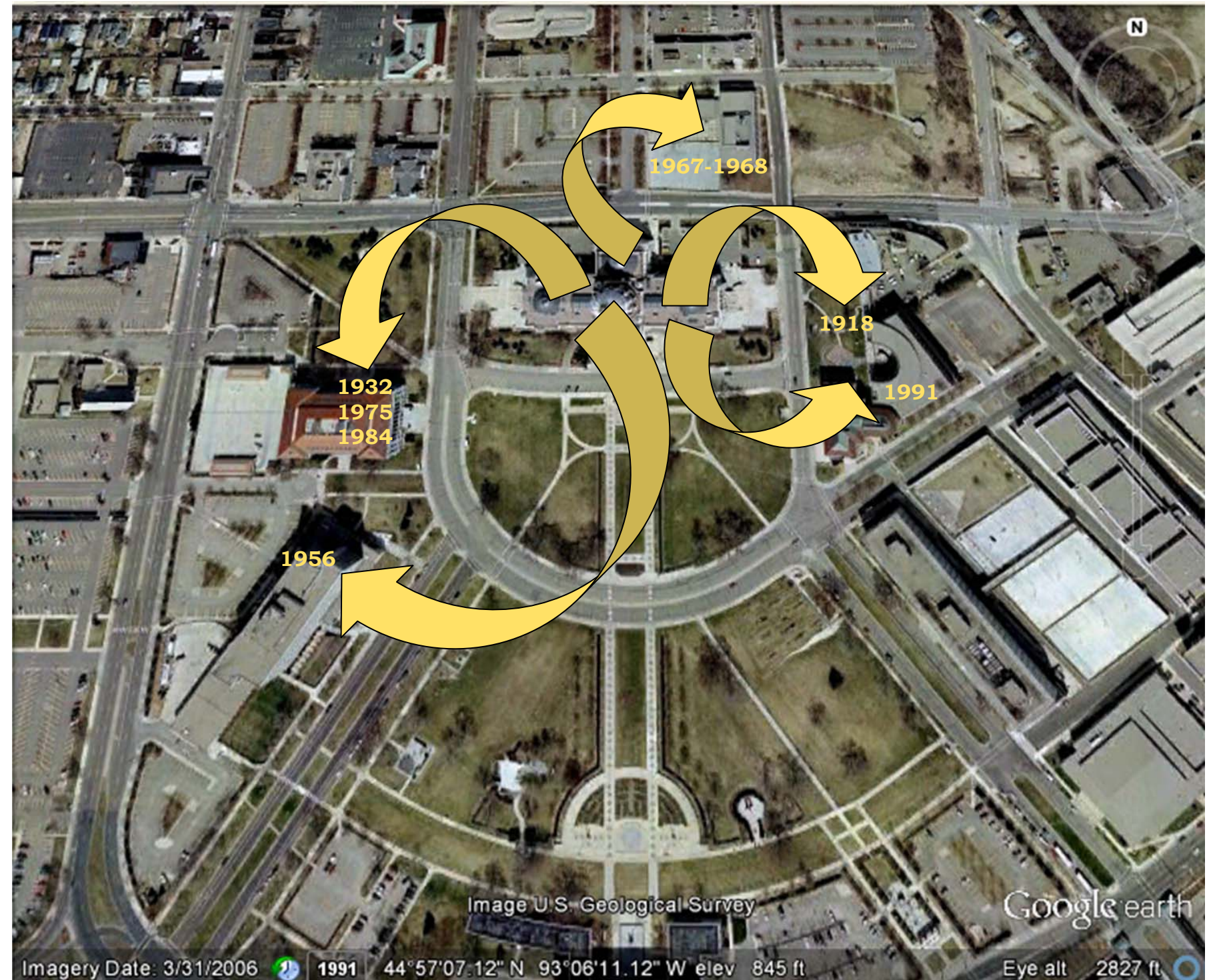
## HISTORIC BACKGROUND

### Significant Relocations from Capitol

In reviewing the timeline showing some of the significant movements of Capitol occupants over time, it is clear the changes occurred due to crowding and space issues. The most logical means to attain relief from overcrowding was to build new buildings or update existing buildings including the Capitol, as needed to accommodate the expansion of government. These buildings include:

- The Minnesota Historical Society's move out of the Capitol in 1918.
- The State Office Building opening in 1932.
- The Administration Building opening in 1967.
- The State Office Building remodeled in 1984.
- The Supreme Court moving out of the Capitol in 1991

With each successive move, the trend was to remove the state's administrative and service agencies and provide more room and spaces for legislative services and operations.



## 2012 MASTER PLAN



## The Capitol Campus in 2011

## Background

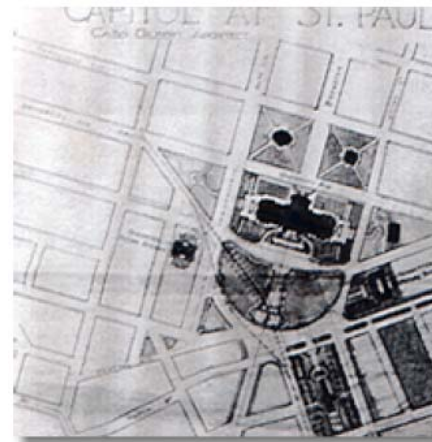
After Cass Gilbert won the architectural competition to design the Minnesota State Capitol in late October, 1895, he made a plea to the board to change the Capitol site in order to achieve a Capitol approach symmetrical to the layout of the streets. This plan was outlined by Saint Paul architect Thomas Holyoke who worked with Gilbert on the Capitol drawings. Holyoke wrote Gilbert from Saint Paul on November 5, 1895:

"Enclosed please find plat of the Capitol site enlarged by including blocks 3 and 4, so that it might be possible to center the dome on the axis of University Avenue as we talked of during work on the competition drawings. This scheme according to the city atlas in your office, from which the tracing is made, would give an unobstructed view of the dome from a point in [on?] Hamline or a distance of 3 • miles in riding into the city from Minneapolis. Brewster Avenue on the other axis is in line with a street running to the bluff in West St. Paul. It seems to me something that the commissioners might consider if you were to recall to their minds the fine effects that have been attained in Washington and Paris by similar means."(13)

## Gilbert's 1902 Plan

In 1902, recognizing that the state might not be forthcoming, Gilbert began working on the city and civic groups to raise funds for the development of the Capitol approach. He drew a plan and presented it in a lecture before the Woman's Civic League and Saint Paul businessmen at the Commercial Club on November 13, 1902. He outlined a mall

stretching between Wabasha and Cedar to the site of a new Saint Paul Public Library just in front of the old Capitol at Tenth Street. Two suggested buildings occupied sites immediately kitty-corner to the library on it's north side and opposite each other on the mall. The mall contained a large pool.

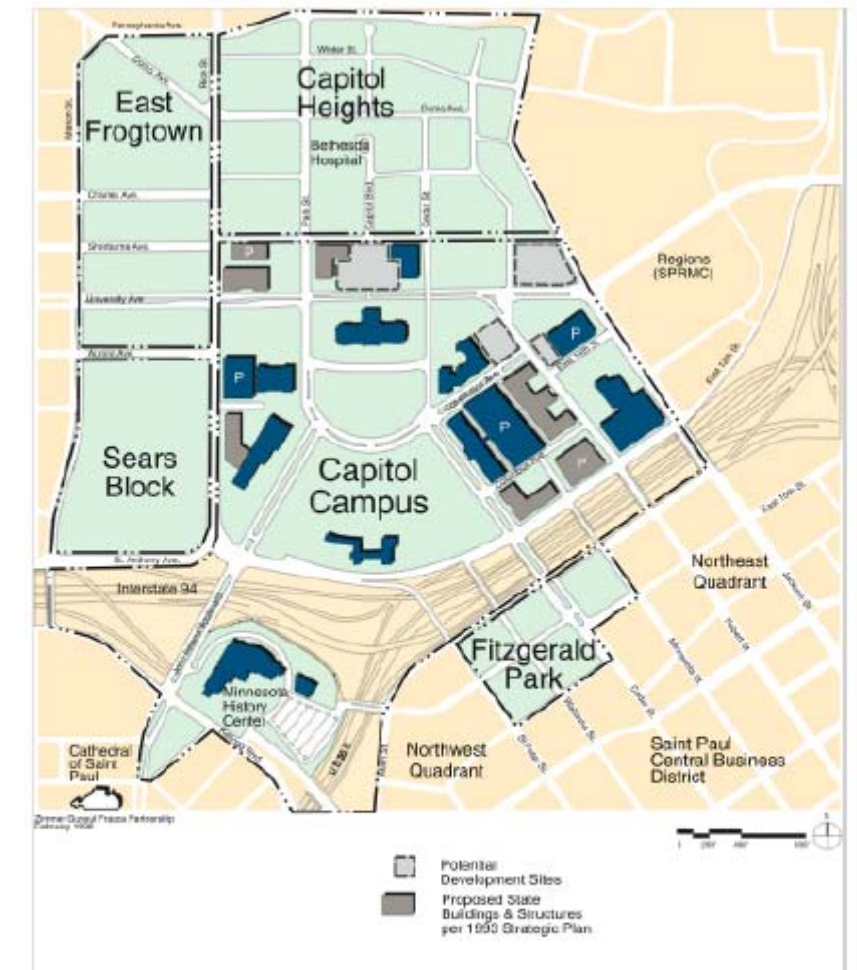


The earliest approach plan yet found. Attributed to Gilbert and drawn in 1902, it contains buildings on the future sites of the Historical Society and State Office Building, the approach from a veterans war memorial and a Cedar Street mall terminating at a library in front of the previous Capitol.

An approach directly south of the Capitol began at the block bounded by Summit, College, Rice, and St. Peter, well short of an approach to Seven Corners, which would occupy his later plans. The symmetrical curve of Central Avenue at the Capitol's front appeared at this time. Two suggested buildings occupied the sites of the present Historical Society and State Office Building. Another two buildings, similar in size to one another, sat on two adjacent sites north of the Capitol, one on the site of the forty-foot hill, the other on the Merriam Mansion site. The plan did not address an axis to the cathedral; the Catholic church would not purchase that site for another two years.

## Credits

*The above is an excerpt from the History of the Minnesota State Capitol Area by Gary Phelps for the CAAPB.*



*This plan shows potential development sites on the Capitol Campus. The east campus has much development potential.*

## 2012 MASTER PLAN



SECTION ONE:  
1985 TO 2011 IMPROVEMENT PROJECTS

Capitol Appropriations

Project Types

- Selective Remodeling
- Exterior Maintenance and Repairs
- Selective Life-safety, ADA and Security Work
- Structural Repairs (Exterior, Basement, SE & SW Terraces)
- Elevator equipment
- Paint and plaster repairs
- Pre-design and design work for restoration of Capitol Building Interior

Total Amount: \$69,167,000

Funding from 1985 to 1989

Year	Amount	Purpose
1985	\$1,790,000	General Renovation
	\$ 250,000	Clean, tuck-pointing. (Exterior)
	\$ 582,000	Dome and Lantern. (Exterior)
1987	\$1,500,000	Exterior (rehab. Phase III-MD). (Exterior)
	\$4,800,000	Senate Chamber
1988	\$ 350,000	Space planning
	\$ 220,000	Dome (Exterior)
1989	\$3,000,000	Senate remodel-north corridor; HR 107 & 112
	\$ 575,000	Ph. III & IV (MD general plan) (Exterior)
	\$2,200,000	House Chamber

Funding from 1990 to 1999

Year	Amount	Purpose
1990	\$ 300,000	Remodel in east wing (Per House & Senate)
1992	\$1,645,000	Fire mgmt system; investigation and testing of roof and Quadriga
1994	\$ 400,000	Campus security lighting.
	\$5,000,000	Roofs (Exterior), Quadriga restoration
	\$ 65,000	Exterior maintenance manual
1995	\$1,715,000	Renovation/Predesign
1996	\$7,400,000	NE & NW Terraces (\$4.8), lantern (\$1.4), cafeteria (\$1.2), structural stabilization. (Exterior & Bsmt.)
	\$1,500,000	Elevators' equipment. (Admin)
1997	\$1,035,000	Add to Café in Subd. 4 of '96, and Subd. 2 of '94.
1998	\$6,600,000	Structural stabilization. (Exterior & Bsmt.) SE & SW Terraces
	\$1,500,000	Accessibility (doors & hardware). (Admin)
1999	\$ 520,000	Security upgrades. (Admin)

Recent Asset Preservation Appropriations

Amount	
Laws of 2006	
Ch. 258, Sec. 12, Subd. 3	\$ 1,084,000
Ch. 258, Sec. 13	\$ 1,466,000
Laws of 2008	
Ch. 179, Sec. 12, Subd. 3	\$13,400,000
Laws of 2011	
1st Special Session, Ch. 12, Sec. 9, Subd. 3	\$ 4,000,000

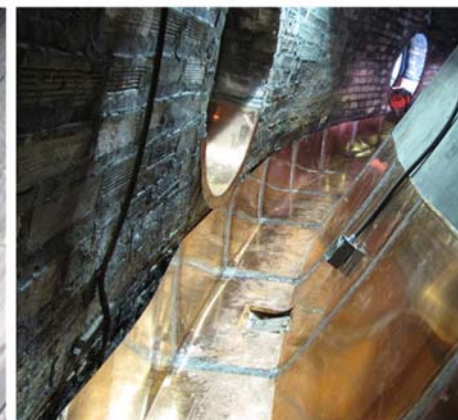
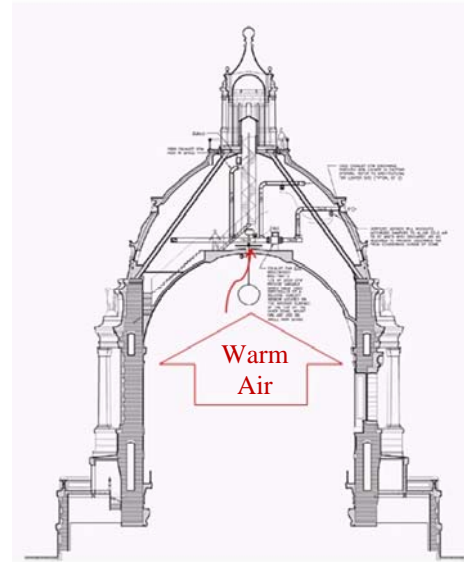
Total: \$19,950,000

# SECTION ONE: 1985 TO 2011 IMPROVEMENT PROJECTS

## Current Asset Preservation Projects

### Current Work — Phase

- **Dome**
  - Finial Repair & Re-gilding - Construction
  - Replace 12 Large Drum Windows - Design
- **Exterior**
  - Comprehensive Ext. Stone Assessment - Investigation
  - Main Roof Replacement - Investigation/Design
  - West Plaza and Stair Repair - Design
- **Internal**
  - Replace Hot Water Heating System - Construction
  - Storm Sewer/Sanitary Sewer Separation - Design/Construction
  - Senate Media HVAC Upgrade B29/B32 - Construction



## 2012 MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Activities

### General Activities

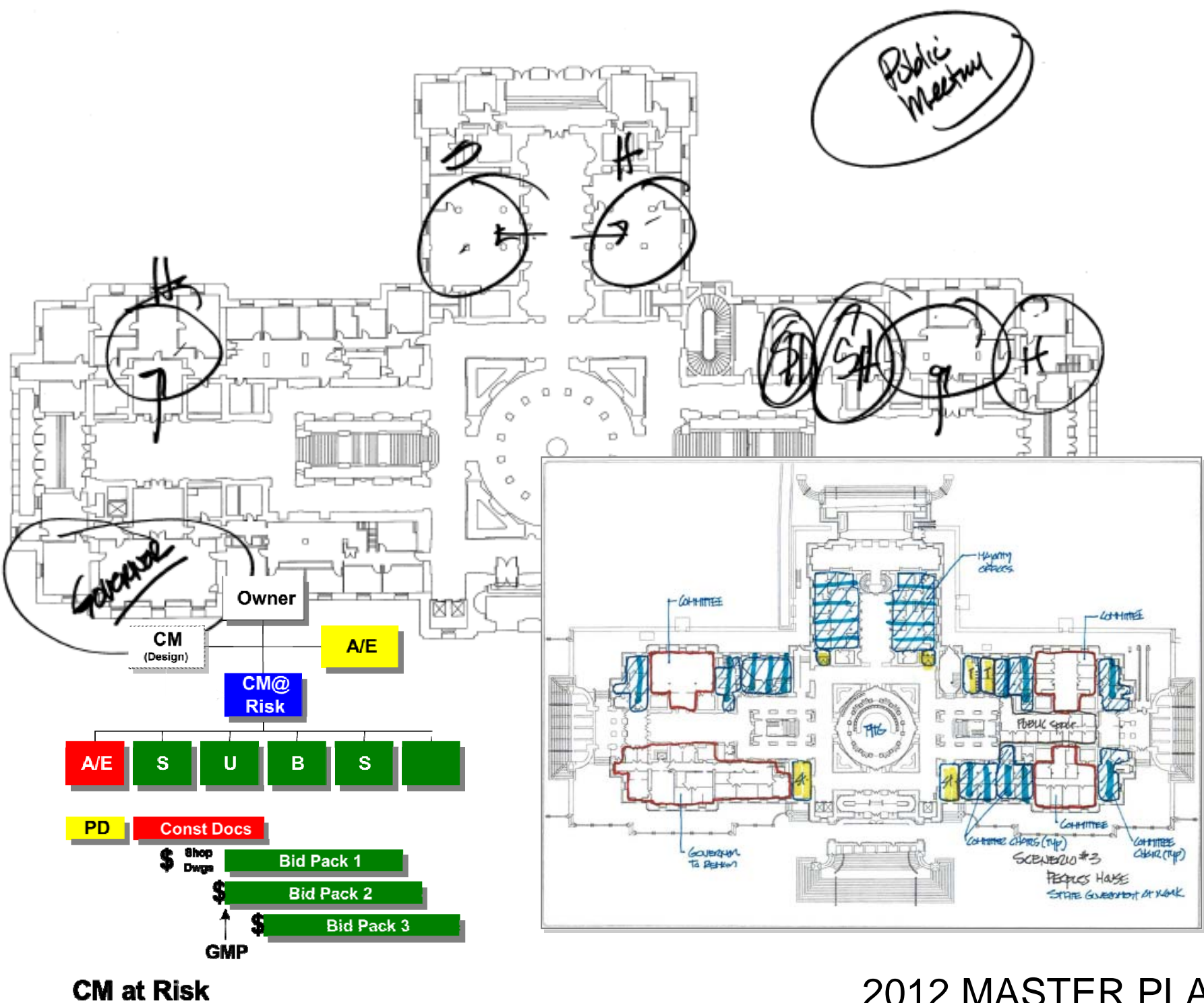
- Complete the Comprehensive Master Plan and develop an overall set of design guidelines and imperative documents for the project.
- Complete the Pre-Design documents per state guidelines
- Develop a collaborative management, design, and Construction team that will work collaboratively and deliver the restoration of the Capitol to the State of Minnesota.

### Pre-Design Activities

- Retain a project manager and project definition team for the overall project management, master planning, and design guideline documentation for the entire project (June 2012).
- Retain the architect, engineers and a construction manager for the entire project. Select the team through an integrated approach for the design and construction of the Capitol Restoration and the Swing Space (June 2012)

### Pre-Construction Activities

- Provide selective demolition to assist the design team in understanding the composition of the building (ongoing)
- Investigate the attic space to assist the design of the new concrete mechanical slabs in the attic of the Capitol. (August 2012)
- Prepare budget estimates and schedules for the sequences of the work according to the master plan (August 2012)
- Identify staging and laydown area for the attic mechanical work. (September 2012)



2012 MASTER PLAN



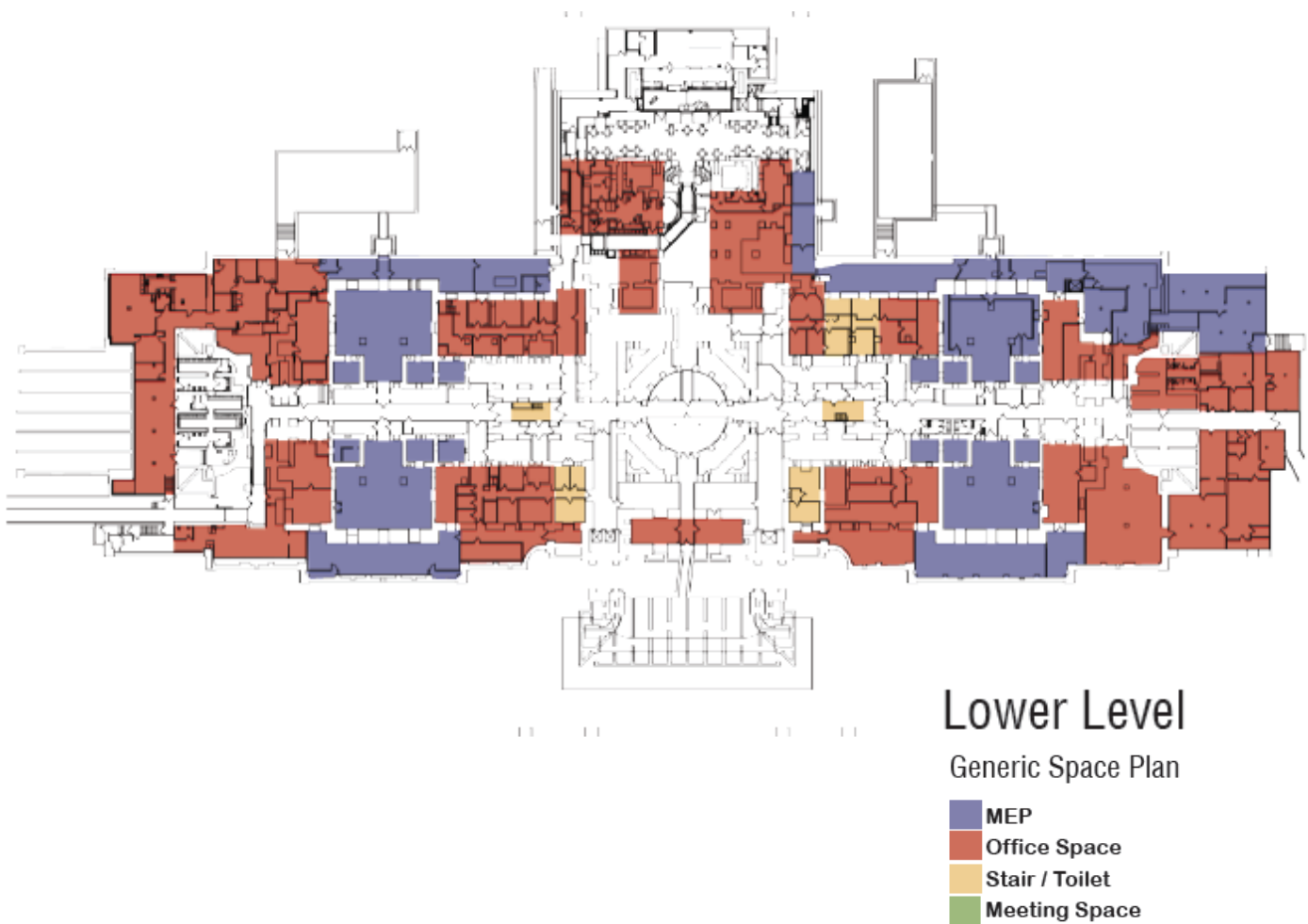
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## Space Planning Concepts

Fiscal Years 2012-2014

### General Concept

- The goals of the restoration of the Minnesota State Capitol are organized to maintain the architectural integrity of Cass Gilberts original design, to improve the function of government, and to improve access that the public has to the government and to provide for life safety and security as described in the introduction to the master plan.
- It is critical to the working of Government that the Executive, Legislative and Judicial branches of government be able to continue working in the Capitol during a significant portion of the Capitol Restoration. Sequencing of the construction work is critical to the project.
- Space organization and programing will need to accommodate three critical elements: mechanical and electrical needs of the people and the building, meeting space that is accommodating to the general public and provides for more public interaction with Government, and the determination and organization of the office space for each of the three branches of government that will occupy the building.
- The 1905 Capitol was not originally designed by Cass Gilbert to provide for modern day life-safety, ADA or security needs. These critical elements must be accommodated and incorporated into the space planning and organizational layouts of the Capitol. These requirements may impact both the functional and structural elements of the building
- The space planning process will be largely driven by the Capitol Preservation Commission. They will work closely with the OPM (owner project manager) and the AEC (architect, engineer and contractor) team to decide who will occupy which spaces within the Capitol. These discussions will need to take place early in the process and will need to allow for concerns and is-



sues on all sides to be heard and understood prior to making a final decision. It is anticipated that this will occur from 2012 to 2014 with the decision to be made prior to the legislative session of 2014.

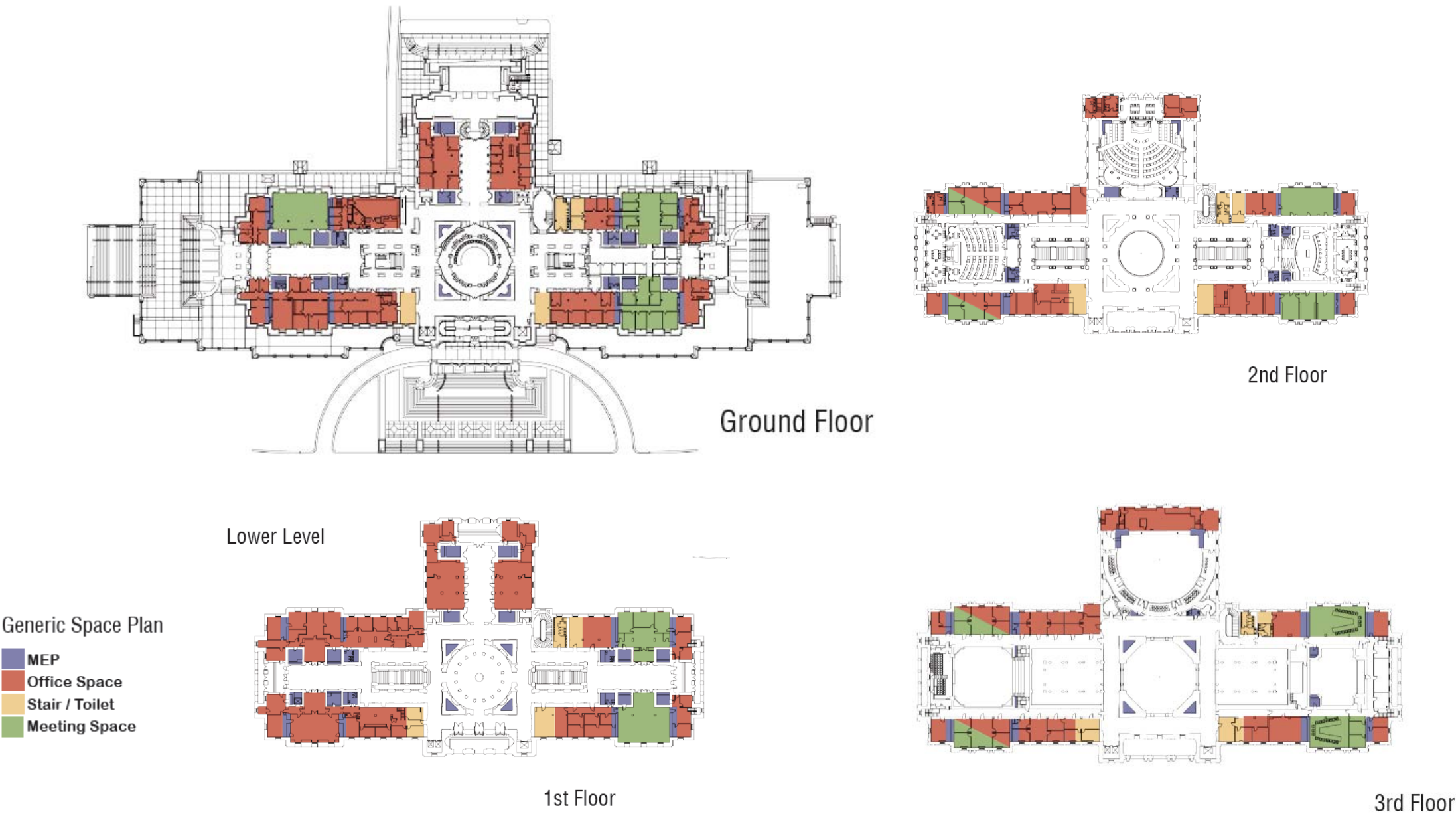
- Construction of Mechanical, Electrical, and Plumbing may proceed during the development and analysis of the functional space plan.

## 2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Space Planning Concepts



## 2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## MEP Space Planning Concepts

Fiscal Years 2012-2014

### Existing Conditions

- Maintained and Well Managed:
  - Cass Gilbert’s ventilation systems were open windows and natural ventilation – impractical today.
  - Retrofitted systems do not ventilate all areas of the building – not code compliant.
  - Recirculation of interior air only, creating an unhealthy environment.
  - Leaking Pipes are a risk to further damage the building.
  - Aged systems - higher costs for maintenance and energy use.
- Ventilation Systems – the building has been retrofitted over the years to where today it has 32 air handling units. These units are primarily located in the basement. Two units have been installed on the roof to serve the House and Supreme Court assembly areas. The systems serving the rotunda and the grand stairs areas do not have a direct source of outside air ventilation and originally relied on natural air flow through the building.
- Plumbing Systems – the current systems are original in many areas and have reached their expected life.
- Water distribution - was upgraded in 1984, however, the system pipe materials include copper and galvanized steel. Over the years, dissimilar materials have created corroding and leaking of joints.
- Hot Water - heated from district energy to temperatures of 110 Deg. F for general use and 140 Deg. F for the kitchen. A booster is used for the dishwasher to reach 180 Deg. F.
- Storm, waste and vent piping - uses a combination of materials. Leaks in accessible locations have been

repaired as needed.

- Building Controls – have been updated over time for direct digital control of most of the central systems. Pneumatic systems remain at terminal devices.
- Fire Protection – approximately 1/3 of the buildings total floor area has been retrofitted with a fire protection system. The Capitol does not have a integrated automatic smoke management system.
- Communication/Data – the communication and data systems currently operate “as needed”. This needs to be reworked to provide more efficient distribution of service. Wireless systems also need to be configured.
- Electrical Service - current service in to the building is 208 volt. The building is set for 13.8 KV, with the utility vaults outside of the Capitol. The Capitol should be transitioned to a 480 volt system.
- District Energy Service – the building heating and cooling is provided by St. Paul District Energy. Service piping enters the building in the northwest corner of the building. Currently, there is a project underway to improve the hot water service entrance and distribution piping.

### MEP Challenge

***Effective preservation planning requires a strategy of renovation to integrate engineered systems that will provide a modern standard of function with minimal modification to the historic fabric.***

### Recommended System

De-coupled Cooling Systems – new, more efficient approach delivers a high concentration of fresh air for ventilation. Less air is circulated requiring smaller equipment and ductwork. Devices located in each room provide temperature control.

### Advantages

- Smaller equipment and ductwork that is easier to integrate into a renovation design
- All new systems fit within the building footprint
- Central unit heat recovery/better energy performer
- Most outside air intakes located on the roof
- Smaller outside air connections
- Cleans up roof of existing mechanical equipment

### Challenges

- Integration of chilled beams into ceiling or wall design
- Integration of the exterior duct enclosures
- Integrating horizontal/vertical distribution into the building
- Smoke Management Systems approach

### Planning Recommendations

1. The exiting systems should be removed and replaced to provide a modern standard of function and to make ready for the next 100 years.
2. Building controls and a complete Fire Protection plan should be part of the restoration.
3. Building communication/data systems need to be upgraded. The electrical service can be reused. However, the distribution wiring and panels should be replaced to provide a modern standard of function.
4. The district energy services are in good condition and can be re-used to the greatest extent possible.

2012 MASTER PLAN



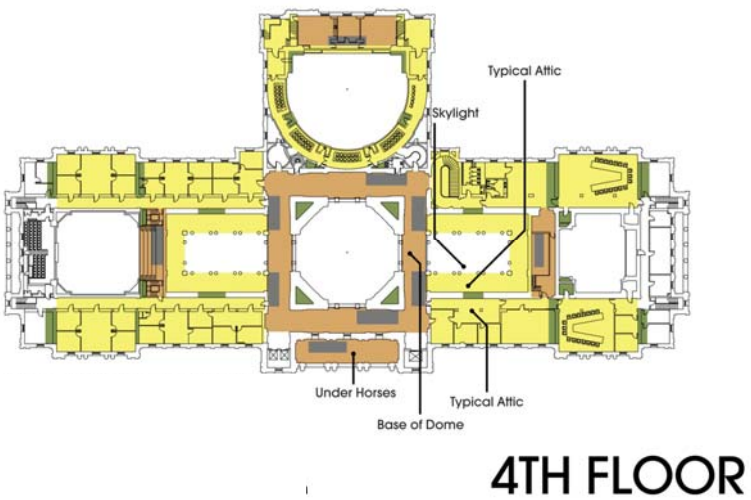
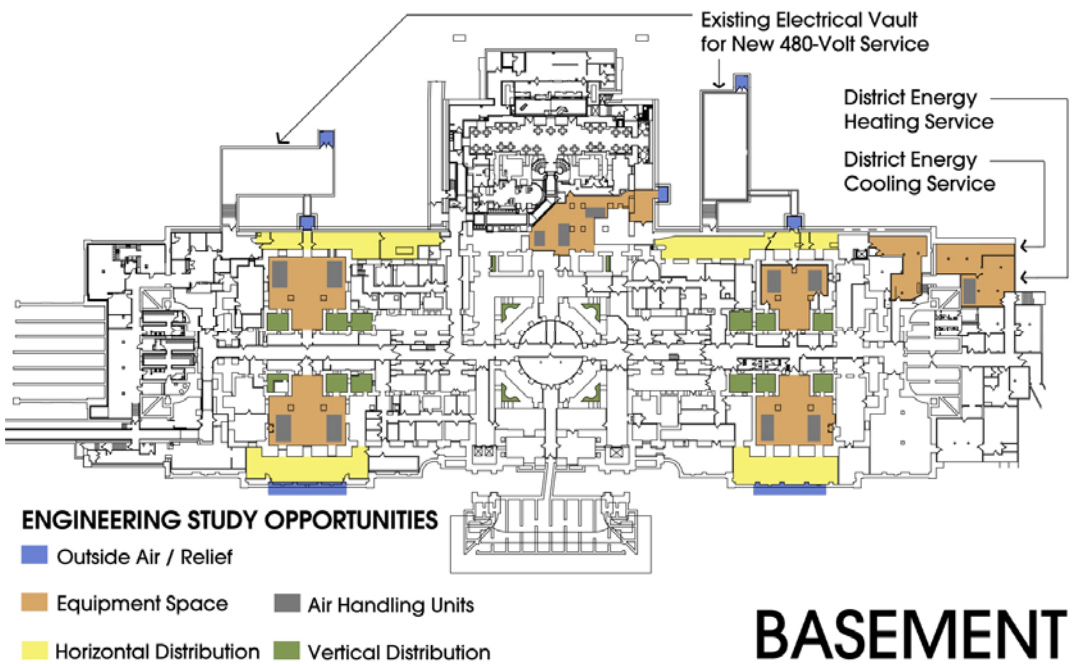
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## MEP Space Planning Concepts

Fiscal Years 2012-2014

### MEP General Concept

- The restoration of the Minnesota State Capitol is largely about the upgrading and improving of the mechanical and electrical systems in the building.
- The Impact that the vertical and horizontal equipment and duct work runs will have on the existing historic fabric must be carefully knitted through the building in order to maintain the architectural integrity of the building.
- The plan has been developed using as much of Cass Gilbert's original designed mechanical and electrical duct shafts as possible and only making them larger as needed to accommodate modern air flow and electrical demands.
- The primary equipment rooms in the basement and the horizontal distribution areas need to be carefully studied.
- The vertical shafts designed by Cass Gilbert will be enhanced to frame the public meeting spaces as they ascend the four floors of the Capitol.
- The fourth floor or Attic Space will house the mechanical equipment and will provide for the horizontal distribution to the Chambers and the other related spaces. This equipment will reside in the areas originally provided by Cass Gilbert.
- At the roof level, accommodations will need to be made to allow for air intake devices and equipment. The design of these elements will need to mesh with the architecture of the building and will not be allowed to compete or detract from the quality of the workmanship of the building. Likewise, all exterior duct runs will be enclosed in structures that are sympathetic to the architecture and should be designed of like materials to support the architectural integrity of the Capitol.

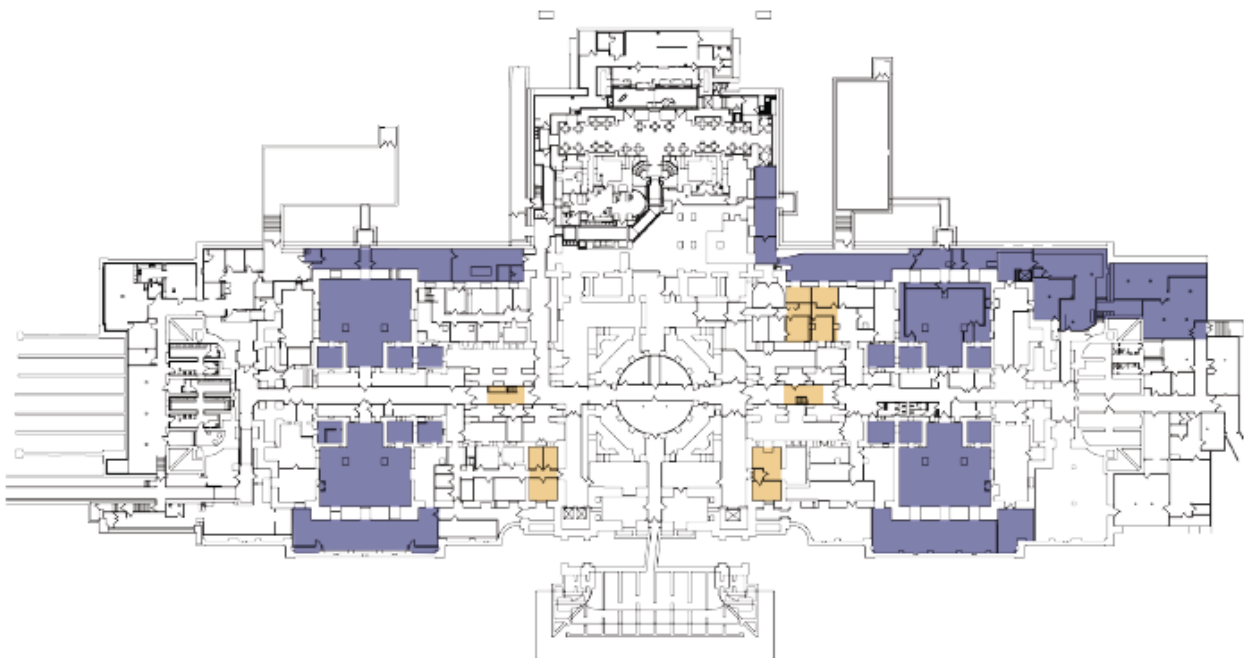


## 2012 MASTER PLAN

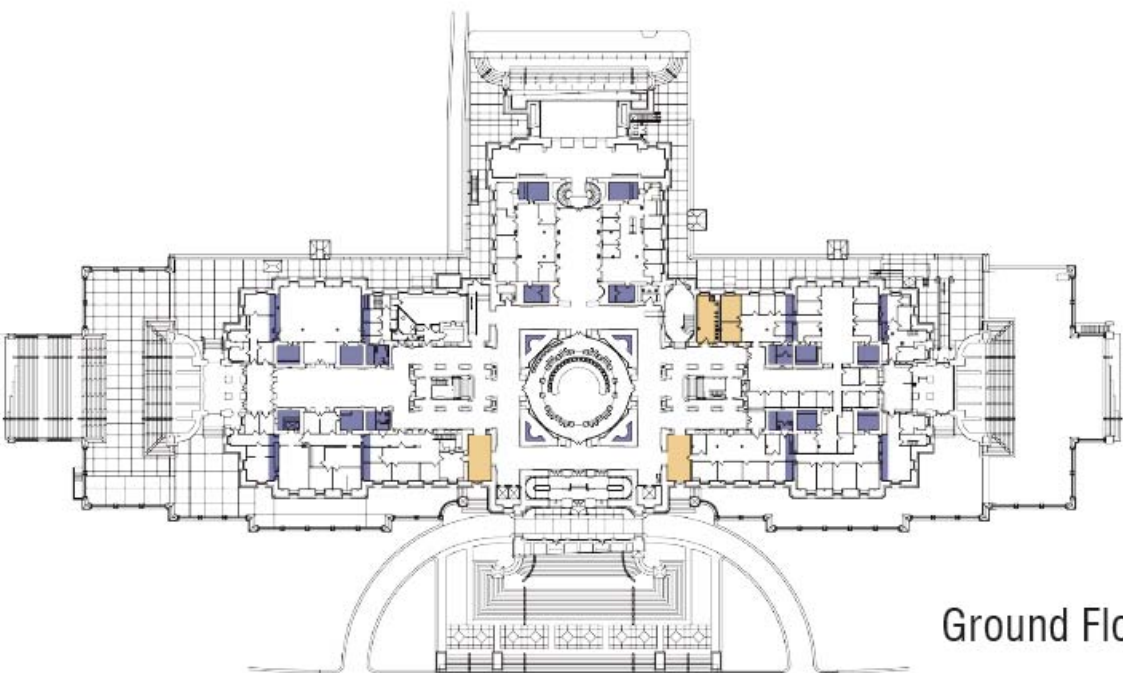
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

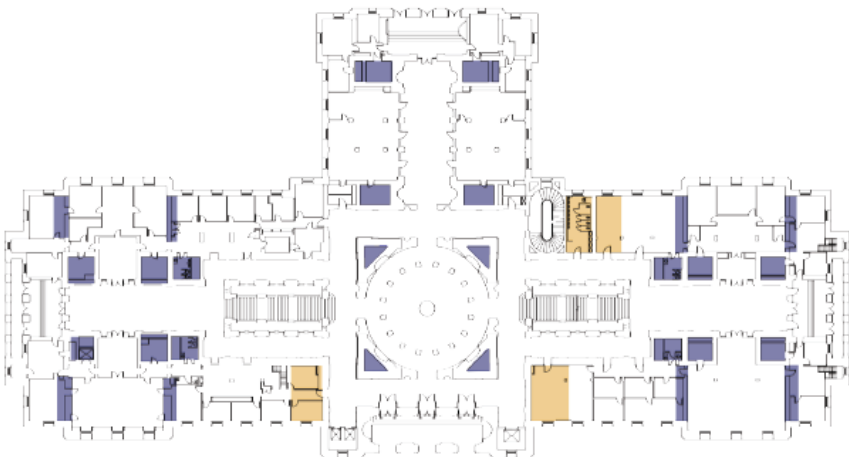
## MEP Space Planning Concepts



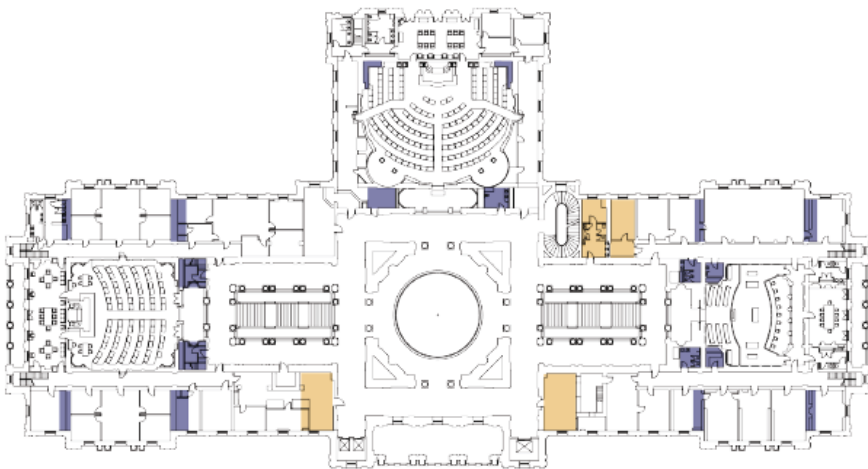
Lower Level



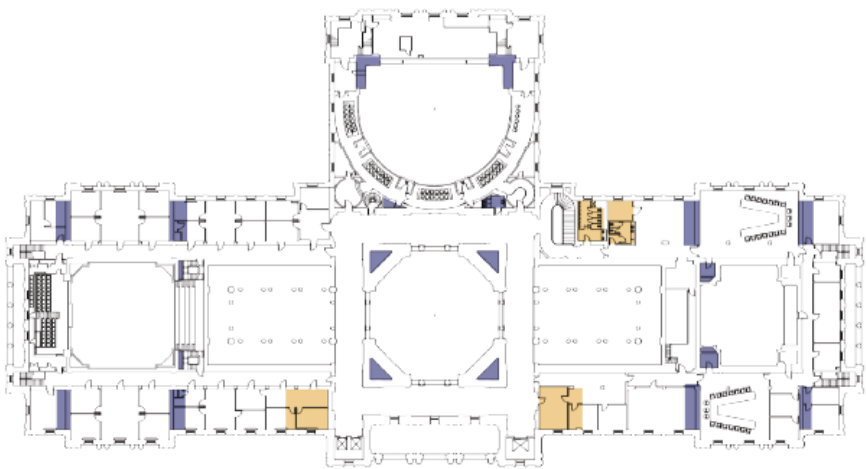
Ground Floor



1st Floor



2nd Floor



3rd Floor

Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

## 2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

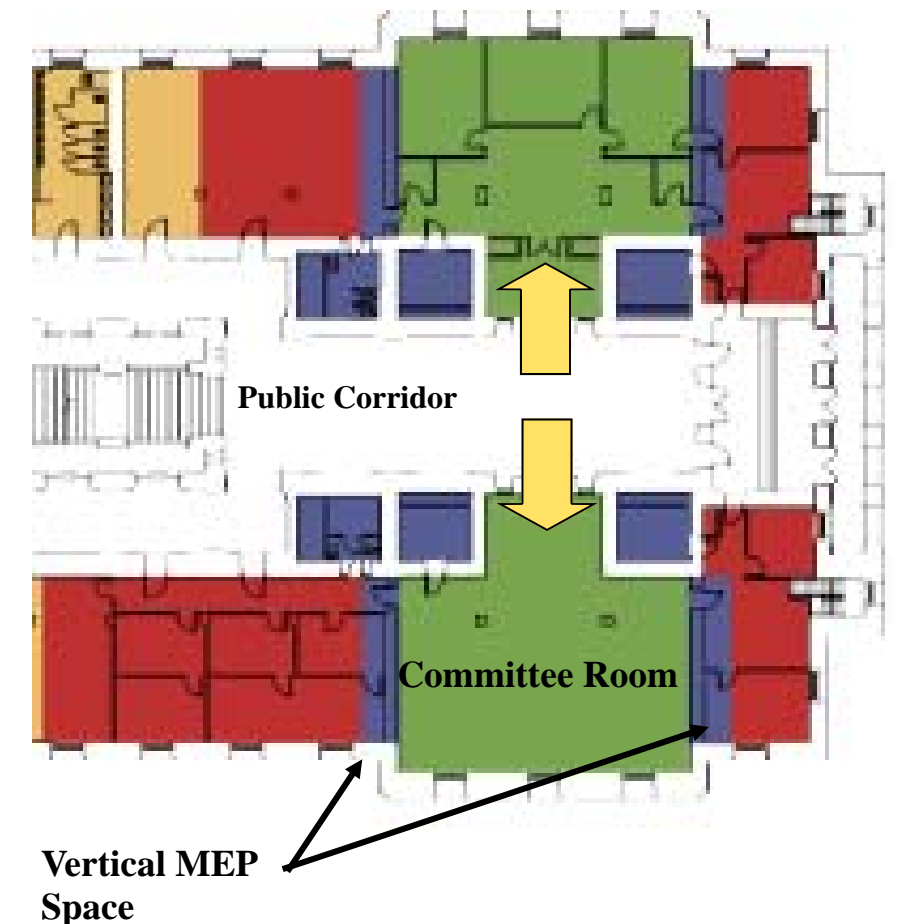
## Committee Room & Meeting Rooms Space Planning Concepts

### General Concept

- The Minnesota State Capitol is the “Peoples House”. As such, it needs to provide greater access to the government. The public’s ability to attend and participate in committee meetings and other legislative and executive meetings is critical to an open and transparent government.
- The current meeting rooms are small and do not provide a clear view of the proceedings due to obstructions such as columns within the room. Efforts should be made to limit or select spaces that provide an unobstructed view of the proceedings.
- There are several types of meeting spaces that need to be accommodated in the Capitol:
  - Committee Rooms - these spaces need to provide for legislators to gather around a Dias to discuss the people’s business. The audience needs to be able to participate in those meetings and hearings. These should accommodate as many members of the public as possible given the limitation of space due to the design of the building.
  - Caucus Rooms - these rooms need to be available to the Senate and House Majority and Minority members for meetings. Typically, members of the majority or minority will caucus together prior to voting on an issue or to discuss weighty issues. These rooms need to be in close proximity to the Chambers.
  - Conference Committee Rooms - these are basically large conference rooms where several members from the House and the Senate can gather to discuss the issues pertaining to a bill so that both bodies can come to an agreement on bills passed by the opposing body.

### Recommended Approach

- The design provided by Cass Gilbert provided for large unobstructed spaces in each of the four quadrants of the Capitol. These spaces, given the design of the building, are ideal spaces for Committee Rooms, Caucus Room and Conference Committee Rooms to be located in.
- They are framed vertically by the mechanical systems which separate them from the surrounding work and public areas.
- They are oriented with a major entry door way that leads into the public hall way on the ground and first floors of the building, making them ideal for committee Rooms.
- The spaces on the second and third floors are in close proximity to the Chambers of the Senate and House and would make excellent Caucus and Conference Committee Rooms.
- While they have two free standing columns in each of the spaces, the columns are located toward the back of the room providing both Dias and public space.
- Each room would need to be analyzed to determine the level of technology that is required. Consideration should be given for providing:
  - Visual display for presentations
  - Lighting levels
  - Shading systems over the windows
  - Sound and communications Systems
  - Recording equipment



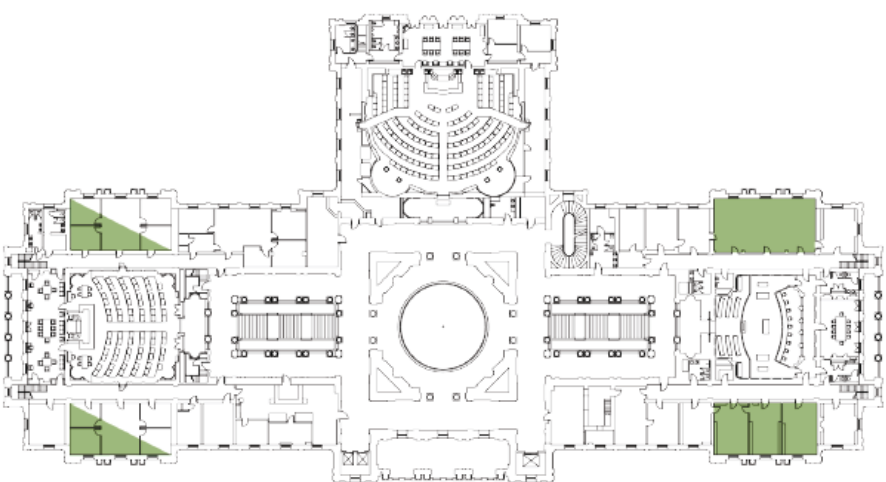
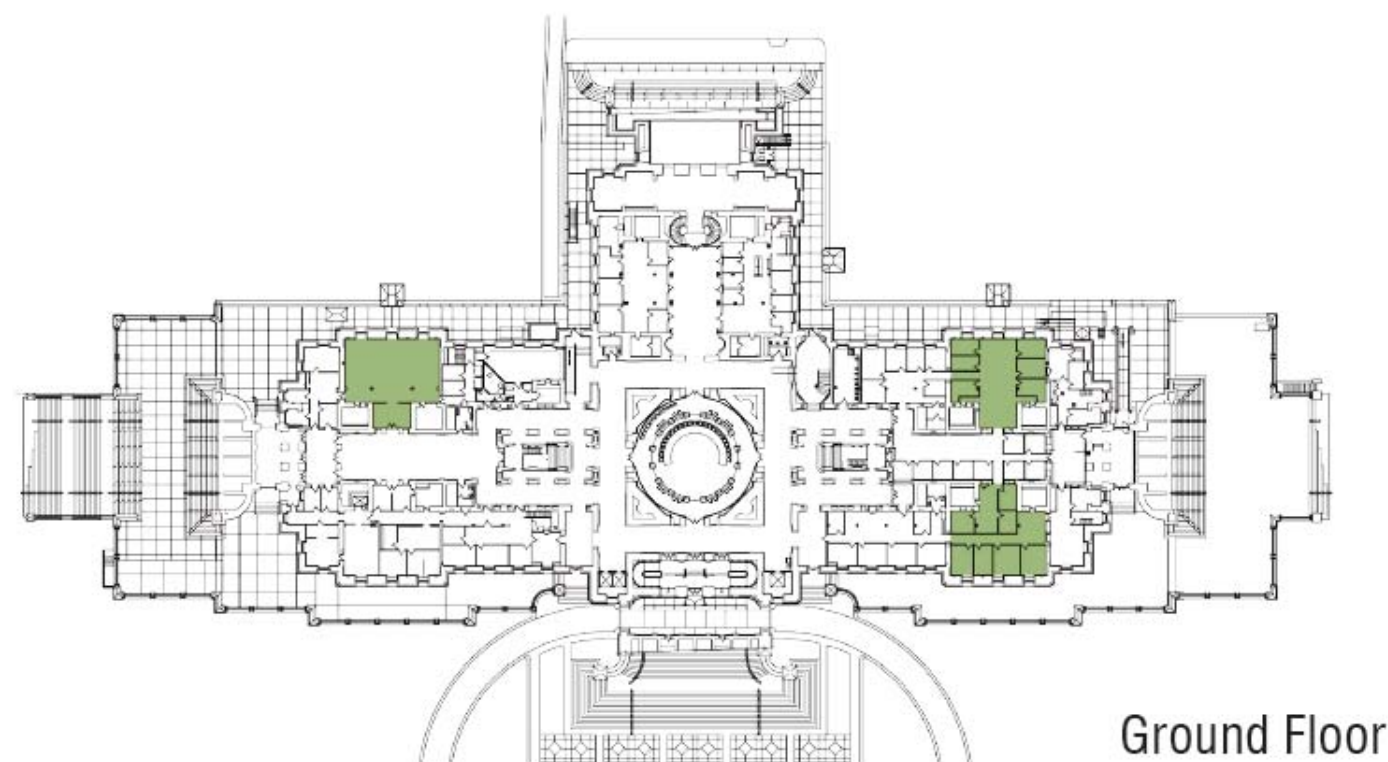
2012 MASTER PLAN



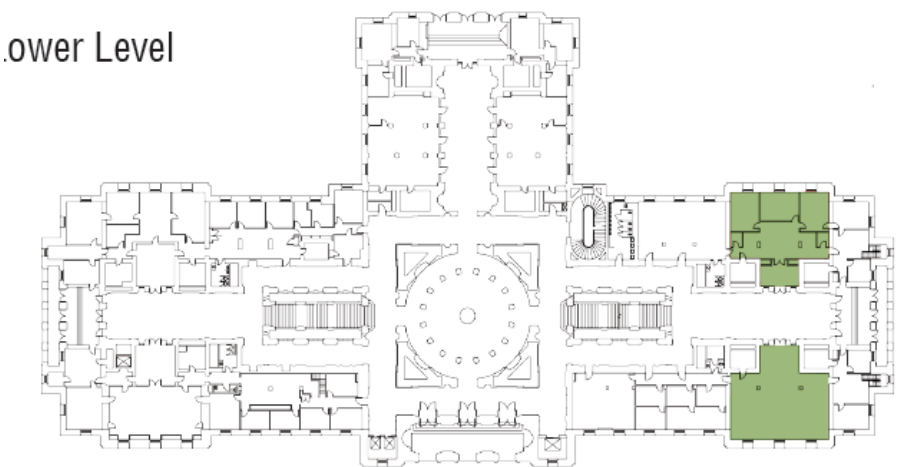
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

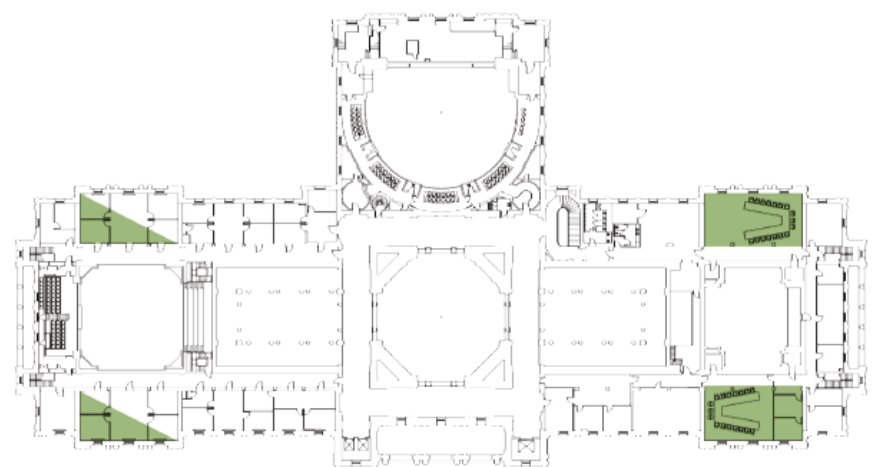
## Meeting Space Planning Concepts



2nd Floor



1st Floor



3rd Floor

### Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

## 2012 MASTER PLAN

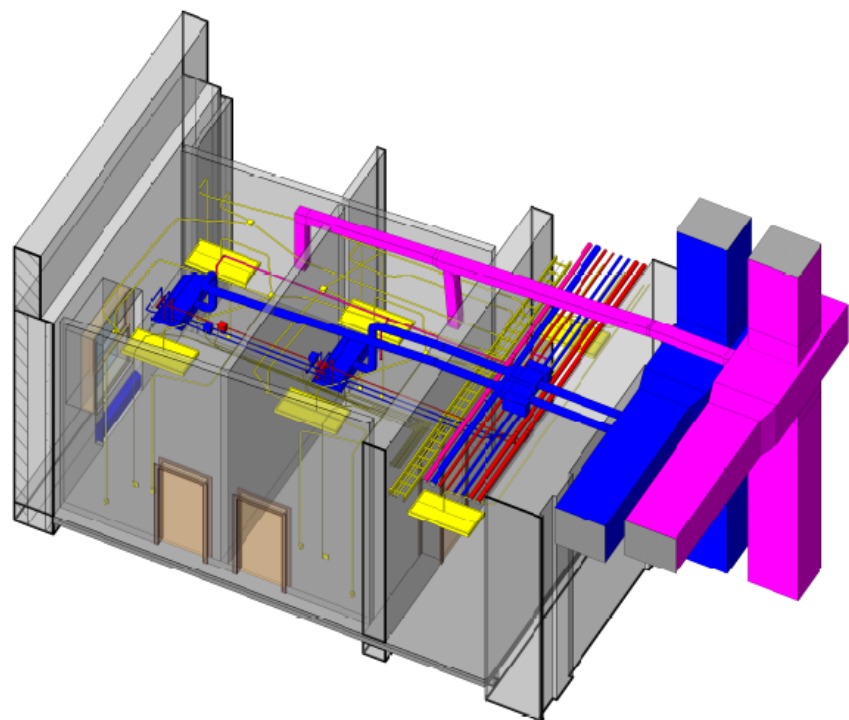
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Office Space Planning Concept

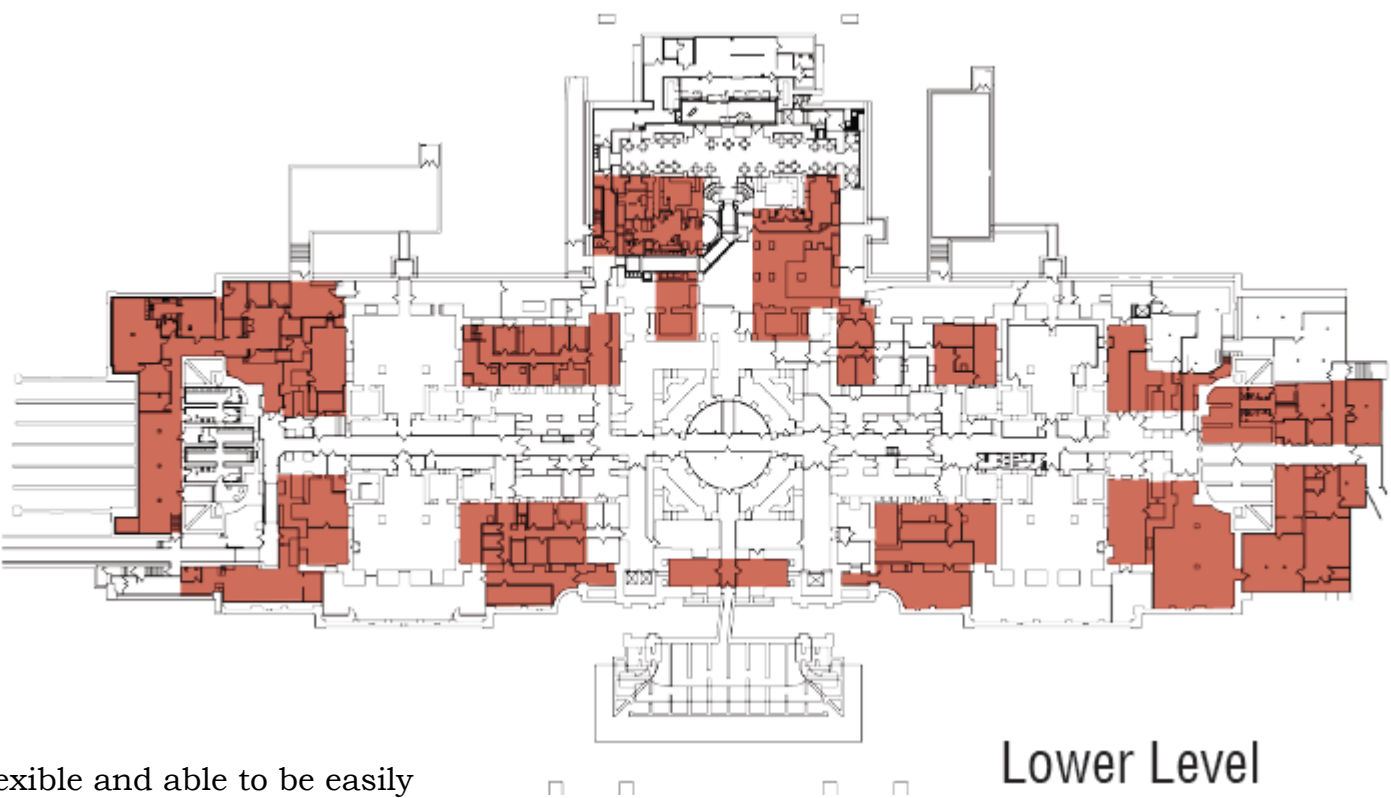
### General Concept

- The Minnesota State Capitol provides office space for many of the elected officials of the State as well as their support staff.
- The office space must be designed to improve the functionality of the building and accommodate the needs of the tenants.
- While at this time the program and tenant mix is not resolved, it is known that the spaces will include members of the Executive Branch, Legislative Branch and the Judicial Branch.
- There have been several scenarios discussed by the Capitol Preservation Commission (included as an Appendix to this report). It will be imperative that the final program and design meet the needs of the occupants as determined by the Capitol Preservation Commission.



### Office Space Infrastructure

- The office space while flexible and able to be easily molded into a variety of configurations the space will be largely determined by the mechanical and electrical infrastructure that both surrounds and runs through the space.
- In reviewing the existing office space and the planned mechanical and electrical upgrades that is needed there are several area of conflict that will make it necessary to relocate occupants of the offices to swing space during the installation of the new mechanical and electrical systems.
- Reconfiguration of the office spaces will be necessary due to the impact that the mechanical and electrical infrastructure will have on the physical space within the Capitol.



Lower Level

Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

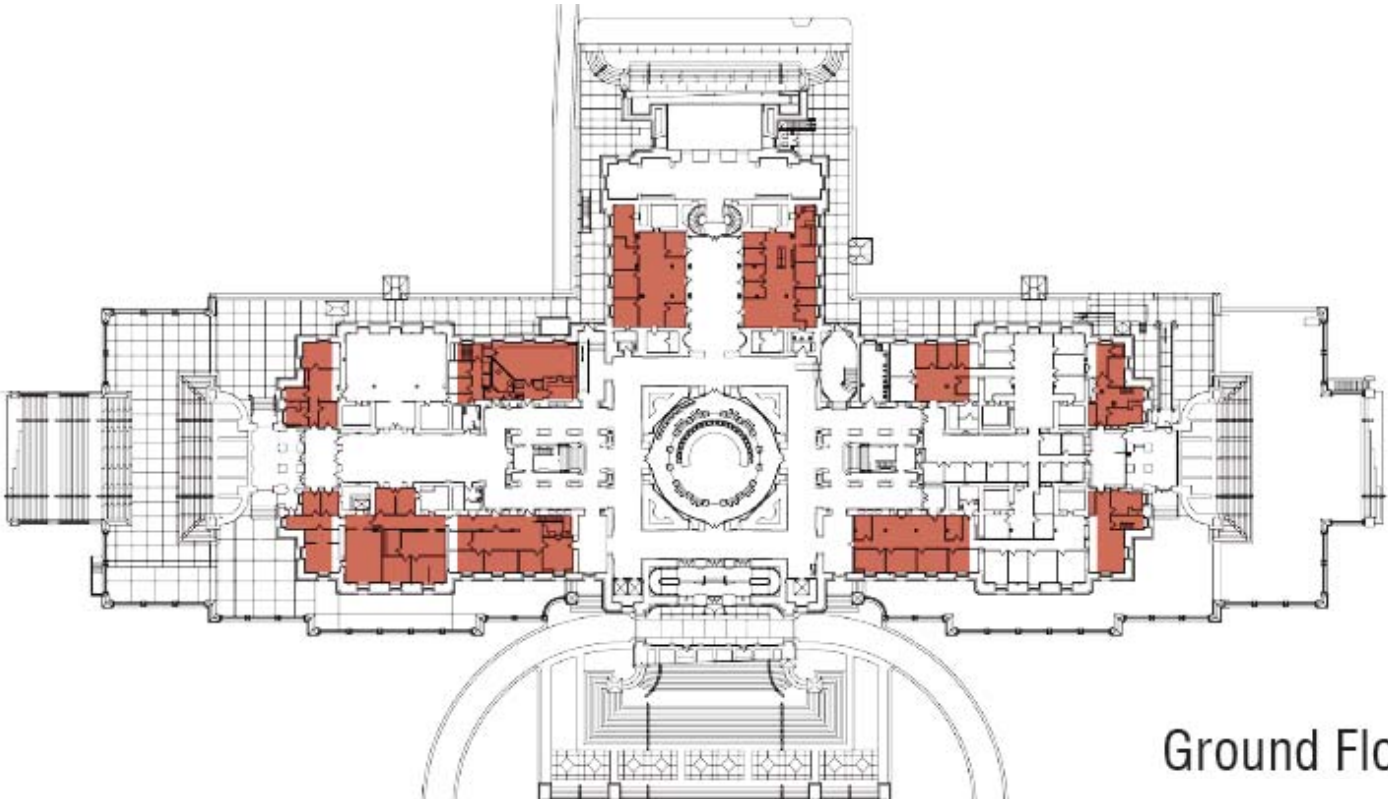
## 2012 MASTER PLAN



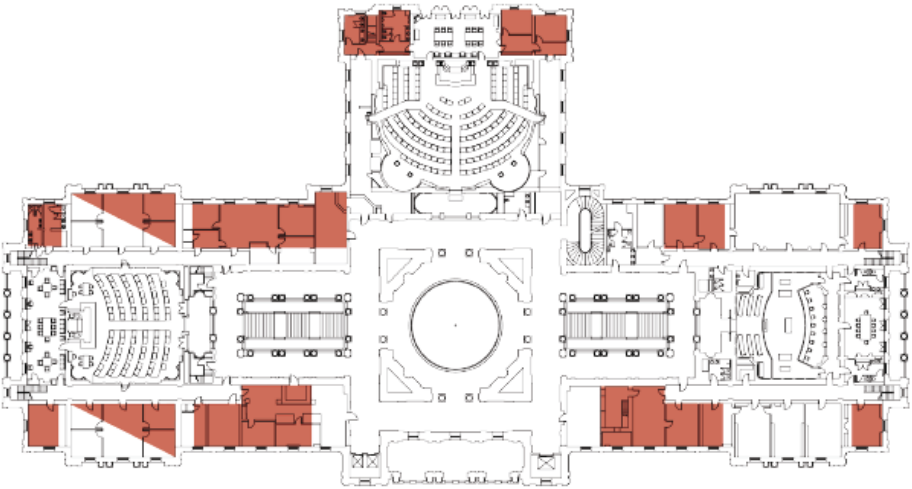
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Office  
Planning Concept

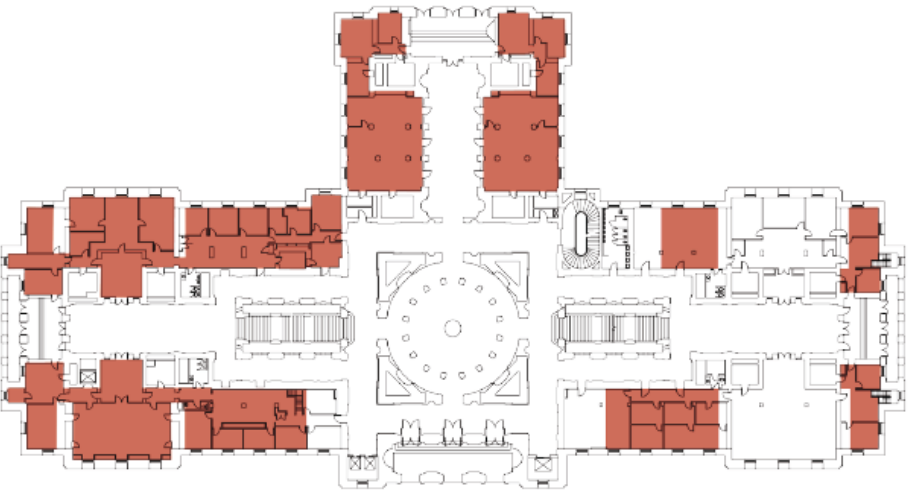
Fiscal Years 2012-2014



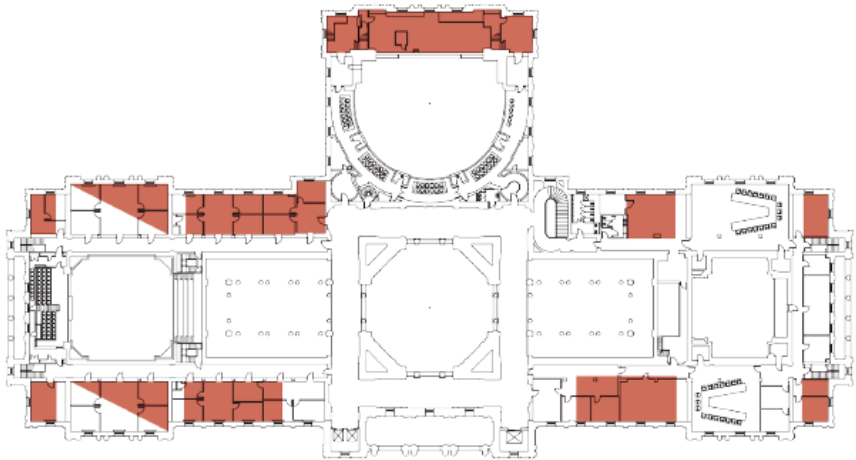
Ground Floor



2nd Floor



1st Floor



3rd Floor

Generic Space Plan

- MEP
- Office Space
- Stair / Toilet
- Meeting Space

2012 MASTER PLAN

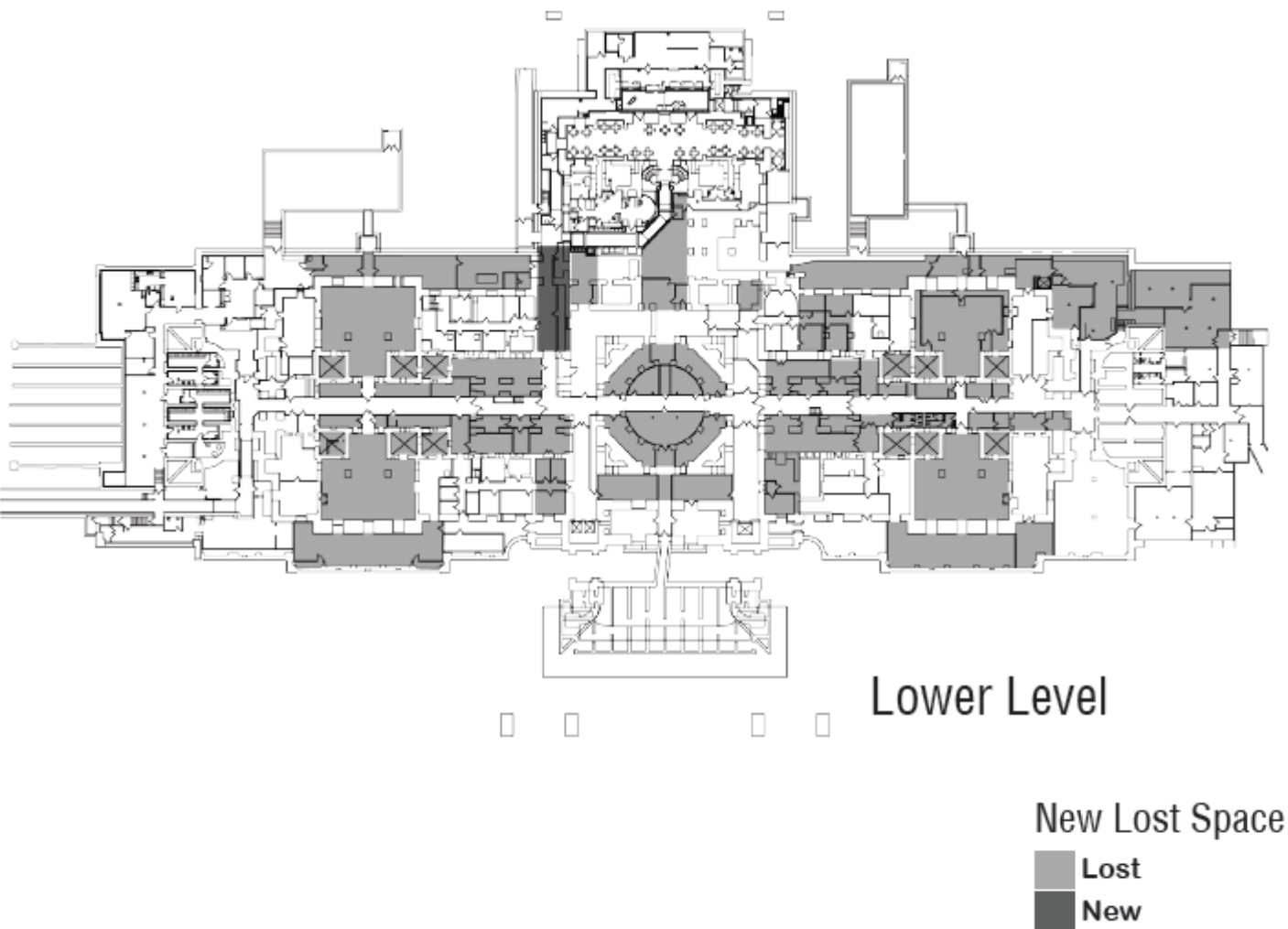
# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## Lost and Displaced Space

Fiscal Years 2012-2014

### General Concept

- Once the renovation of the Capitol is complete, there will be a reduced amount of office space available in the Capitol as a result of providing improved, life safety, mechanical and electrical systems and meeting space.
- There will be approximately 25,900 less square feet of useable space available on ground to third floors.
- The redesign of the basement, to make it more accessible and to improve the Mechanical and Electrical Systems will reduce the basement by approximately 11,000 square feet. Approximately 32,000 square feet of useable space will remain.
- Depending upon the final programmatic mix of which offices and branches of government occupy the ground through third floors, all of those displaced functions could be accommodated in the newly reconfigured basement with approximately 6,100 square feet left unoccupied.
- This will result in approximately 37,000 square feet of lost or permanently displaced space from the Capitol.
- While the amount will vary based upon the final program selected and the uses accommodated within the building, there will need to be a permanent relocation strategy developed for the displaced 37,000 square feet that will occur following the restoration.

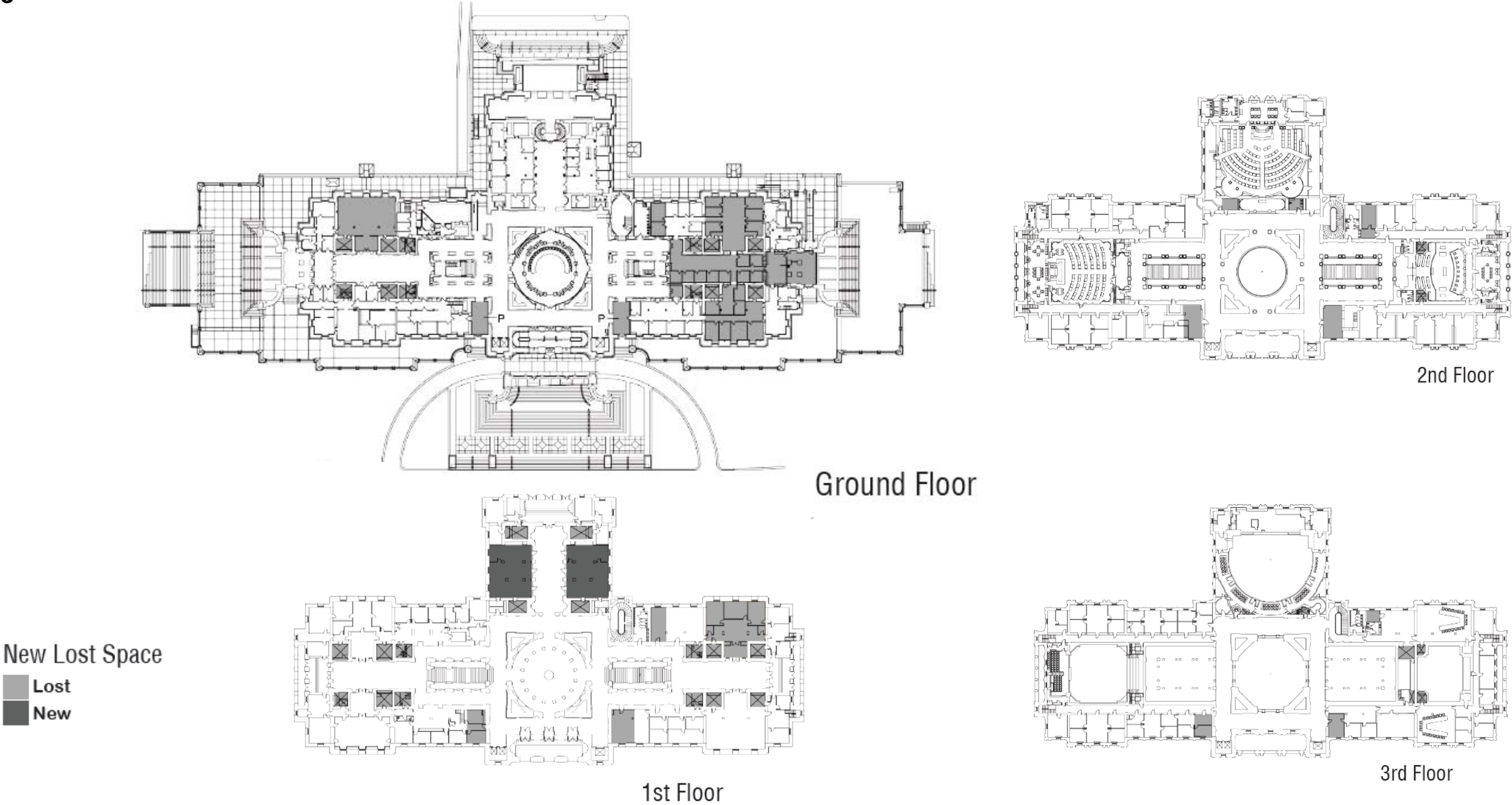


2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

Lost and Displaced  
Office Space



2012 MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

## Swing Space - Office Space

Fiscal Years 2012-2014

### General Concept

- Swing space for the restoration has been minimized by the construction sequence approach which will allow for occupancy of the building during a majority of the renovation.
- Swing space will be required from 2013 to 2016, or approximately three of the four years.
- Because of the short duration and due to the return of much of the space (all but 37,000 square feet), it does not make economic sense to build new office space for this period of time.
- The suggested strategy for swing space is to the extent possible, utilize existing state owned or state leased space to absorb this temporary inconvenience while the Capitol is being restored.
- This strategy will require a shift in the working environment of many other state agencies that are not in the Capitol building but rather in the neighboring office buildings that would be either state owned or non-state owned.
- Additional temporary leased space may be needed to meet all requirements.

Minnesota State Capitol Occupants					
	ESTIMATED NO. OF STAFF	CURRENT OFFICE SQ FTG	CURRENT STORAGE SQ FTG	ESTIMATED NEW OFFICE SQ FTG (200 sf/emp)	POTENTIAL RELOCATION SPACE OPTIONS
Attorney General	17	5,404		3,400	Bremer Tower (current location of AG office)
DPS - Capitol Security	49	7,156		7,156	Administration Building
Governor's Office	40	8,878	177	8,000	Governor's residence/Admin Building/525 Park
Historical Society		1,229	827	1,229	History Center
House	39-session	18,031	5,041	8,600	G56 - COB
	29- non-session				
	4 - IT				
Media		3,751			Kelly Inn
Plant Management	17-session	1,332	923	3,400	Admin G-10/691 N. Robert
	15- non-session				
Senate	253-session	77,027	5,048	50,600	Administration Building
	?- non-session				
Services for the Blind		142	64		N/A
Supreme Court		3,631	171		Judicial Building

Space Options in State Owned Buildings					
	ESTIMATED NO. OF STAFF	CURRENT OFFICE SQ FTG	COST/SQFT	COST/YEAR	STATUS
321 Grove St.					
First Floor	215-300	43,042	\$12.65	\$544,481	Vacant
Administration Building	(280-371)	57,545		\$1,165,287	
Ground Floor	78-105	15,658	\$20.25	\$317,075	Occupied
First Floor	72-96	14,488	\$20.25	\$293,382	Occupied
Second Floor	60-80	13,720	\$20.25	\$277,830	Occupied
Third Floor	70-90	13,679	\$20.25	\$277,000	Occupied
Centennial	(74-98)	11,064		\$177,024	
Ground Floor	34-45	4,257	\$16.00	\$68,112	Vacant
Third Floor	10-16	1,866	\$16.00	\$29,856	Occupied
Third Floor	18-21	2,908	\$16.00	\$46,528	Vacant or To Be Vacated
Third Floor	12-16	2,033	\$16.00	\$32,528	Vacant
Retirement Systems					
First Floor	10-12	1,204	\$21.30	\$25,645	To Be Vacated
State Office Building					
Basement	13-17	2,587	\$14.75	\$38,158	Vacant

SECTION TWO: PLANNING & DESIGN  
OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

Swing Space - Legislative Chambers & Hearing Room Relocations

General Concept

- Legislative Chambers are the most difficult element within the Capitol to relocate.
- The Legislative Chambers need to be relocated to a space that will accommodate both chambers and the required staff associated with the running and execution of the legislative session.
- The amount of distance between the two House and Senate Chambers is critical so that the information can physically be transported from one Chamber to the other within a very short period of time.
- The associated office space must provide for all the needed functions of staff. A full programmatic analysis will be required to assure that the one or two sessions out of the Capitol are accommodated effectively and efficiently.
- Hearing Rooms, Committee Rooms and Committee Conference Rooms are in tremendous demand during the legislative session and are in need during the other times of the year.
- There is a relationship with Committee Room and Conference Committee Rooms and the respective legislative chambers during the final weeks of the session, where time is of the essence and traveling long distances from the Chamber to the committee room is not feasible.

Potential Hearing Room Relocations					
	CURRENT DEDICATED OFFICE SQ FTG	CURRENT SHARED SQ FTG	COST/SQFT	COST/YEAR	POTENTIAL RELOCATION SPACE OPTIONS
Capitol Building					
Rm # G15	2,988		\$27.15	\$81,124	
Rm # 107	1,636		\$27.15	\$44,417	
Rm # 112	1,643		\$27.15	\$44,607	
Rm # 123	1,971		\$27.15	\$53,513	
Rm # 125	896		\$27.15	\$24,326	
Rm # 318	1,191		\$27.15	\$32,336	
Andersen 2nd Floor					
Rm # 2360	1,493		\$29.00	\$43,297	
Rm # 2370	2,263		\$29.00	\$65,627	
Rm # 2380	2,429		\$29.00	\$70,441	
Rm # 2390	1,563		\$29.00	\$45,327	
Centennial					
Ladyslipper	1,083	483	\$16.00	\$25,056	
Freeman - 1st Floor					
Rm # B144/B145	2,821		\$32.78	\$92,472	
Rm # B149	764		\$32.78	\$25,044	
Stassen				\$0	
Skjegstad	3,444		\$14.75	\$50,799	
Vets Building				\$0	
5th Floor	1,317		\$22.20	\$29,237	

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Implementation

### I. 2012 - Owner Project Manager (OPM)

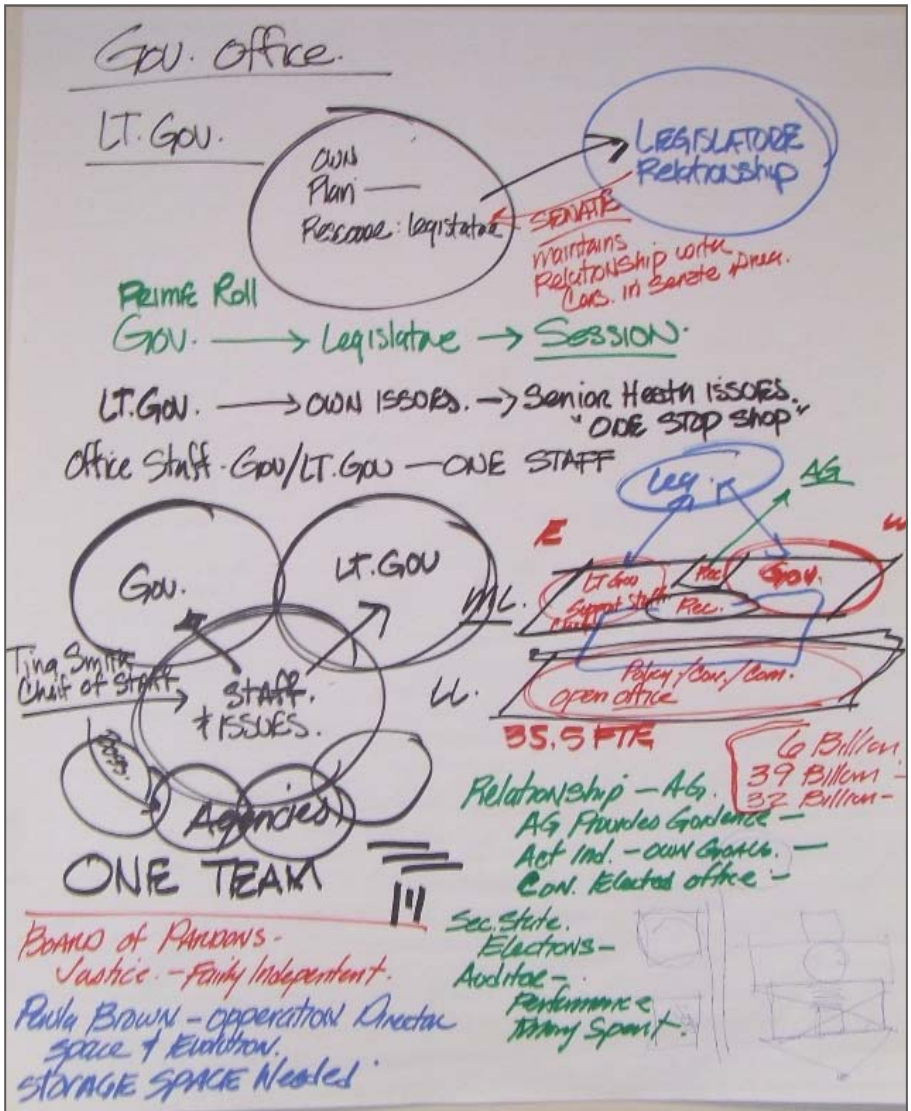
- A. Selection of the Owner Project Manager (OPM) for the entire project. The OPM shall work directly for the State and advise them on the over all process and progress of the Project. They shall work as an extension of the Capitol Preservation Commission.
1. The OPM shall develop Design Guidelines and Imperatives. When complete the Design Guidelines and Imperatives shall identify all the items and elements which the Capitol Preservation Commission feels are more important to be incorporated to complete a successful renovation.
  2. The OPM will provide project definition services to support the guiding principles of the Capitol Preservation Commission and identify those elements which the Board feels must be incorporated in the restoration.
  3. The OPM will work with the selected architect, engineers and CM to plan and design the project with in the established budget and schedule.
  4. Working with the Capitol Preservation Commission and the AEC the OPM will confirm that all planning actives are completed and have provided for the functioning of government both during and after the restoration of the Capitol.

## Implementation

### I. 2012 - Architect, Engineer/Construction Manager (AE/C)

The delivery method recommended for the restoration of the capitol is commonly referred to as Construction Manager at Risk (CMr). It will be necessary for the State to conduct two selections. One for the architect and one for the CMr. The State will hold both contracts. In this document they, the architect, engineer and construction manager are referred to as the AEC team.

- A. Selection of the Architect, Engineer/Construction Manager (AE/C) team that will be responsible for the final design and construction of the restoration of the Capitol.
1. The AE/C team will work with OPM to complete the preliminary pre-design that has been developed. The final pre-design package when complete will conform to state guidelines.
  2. This AE/C team will meet with the OPM to review and discuss the comprehensive master plan, design guidelines and imperatives.
  3. The AE/C team will start work immediately following the legislative session in July 2012 on the documentation of "Construction Sequence One" in accordance with the master plan.
  4. The AE/C team will complete design and documentation work before the end of 2012 on "Construction Sequence One" in order to begin construction of the attic mechanical space immediately following the 2013 legislative session.



## 2012 MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Implementation

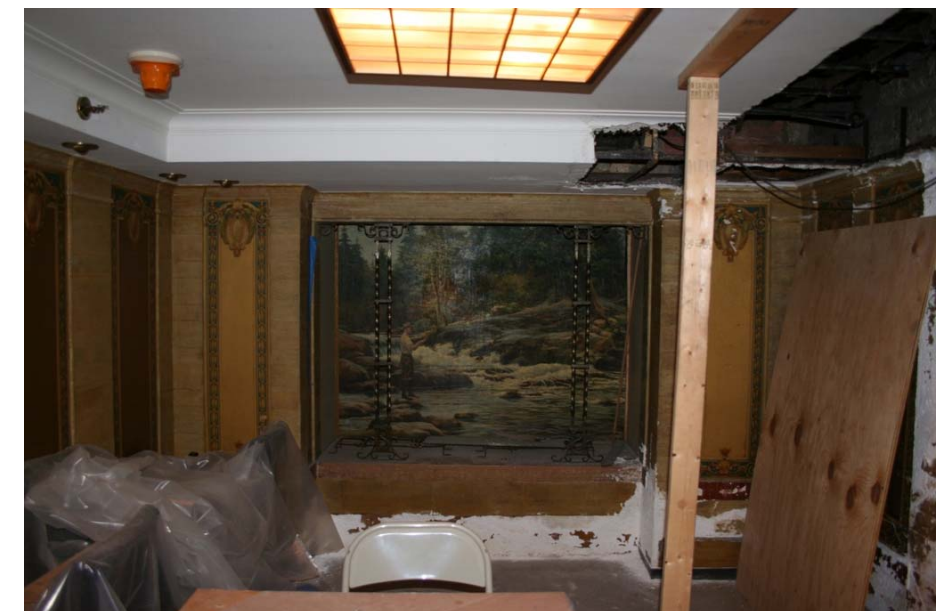
### I. 2012 to 2014 Planning and Design

- A. The selected AE/C team will work together with the OPM and the Capitol Preservation Commission to develop the restoration documentation as follows
  1. The AE/C team will work within the given schedule to provide the documents and the construction in the specified sequence of the work.
  2. The AE/C team will work with the OPM to finalize the construction sequences of the work in accordance with the Master Plan and shall identify the number and timing of all bid packages and complete the design documents no later than end of 2014.
  3. The Construction phasing will be an important aspect of this project so the AE/C team must be prepared to conduct critical path analysis in order to determine the most effective and efficient sequencing of the construction work in order to minimize cost and disruption to the legislators, staff, public and ongoing state operations in the Capitol Building
  4. The AE/C team will assist the Capitol Preservation Commission and the OPM in keeping the chambers open to the greatest extent possible throughout the restoration project. This will vary depending upon the sequencing selected by the CMr and the OPM.
  5. The AE/C team will work with the OPM and the Capitol Preservation Commission to understand and to resolve the space planning issues no later than the start of the 2014 general session.
  6. The AE/C team will complete all design services and documents by the end of 2014. This includes all bid packages.

## Implementation

### I. 2012 to 2016 Pre-Construction and Construction

- A. The selected CM shall work with the OPM and the Capitol Preservation Commission to keep as much of the Capitol building open to the general public, the state employees and elected officials as is possible without exposing anyone to health or safety risk from construction activities.
  1. The CM shall maintain a clean and orderly site at all times, safe from trip and other hazards.
  2. All General Conditions shall be the responsibility of the CM.
  3. The CM shall organize the work to minimize dust, noise and commotion during operating hours.
3. The CM and the AE will make special concessions to the elected officials during the course of the construction in order for the state to conduct the people's business. This may include relocating and stopping work in an area to allow for meeting and or protests to occur as part of the natural process of government.
4. The CM shall take all necessary precautions when working in the Capitol while it is open to the public to protect the public from harm. The CM shall provide safe barriers and enclosures that will protect the public while not creating an unsightly appearance in the Capitol Building.



2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

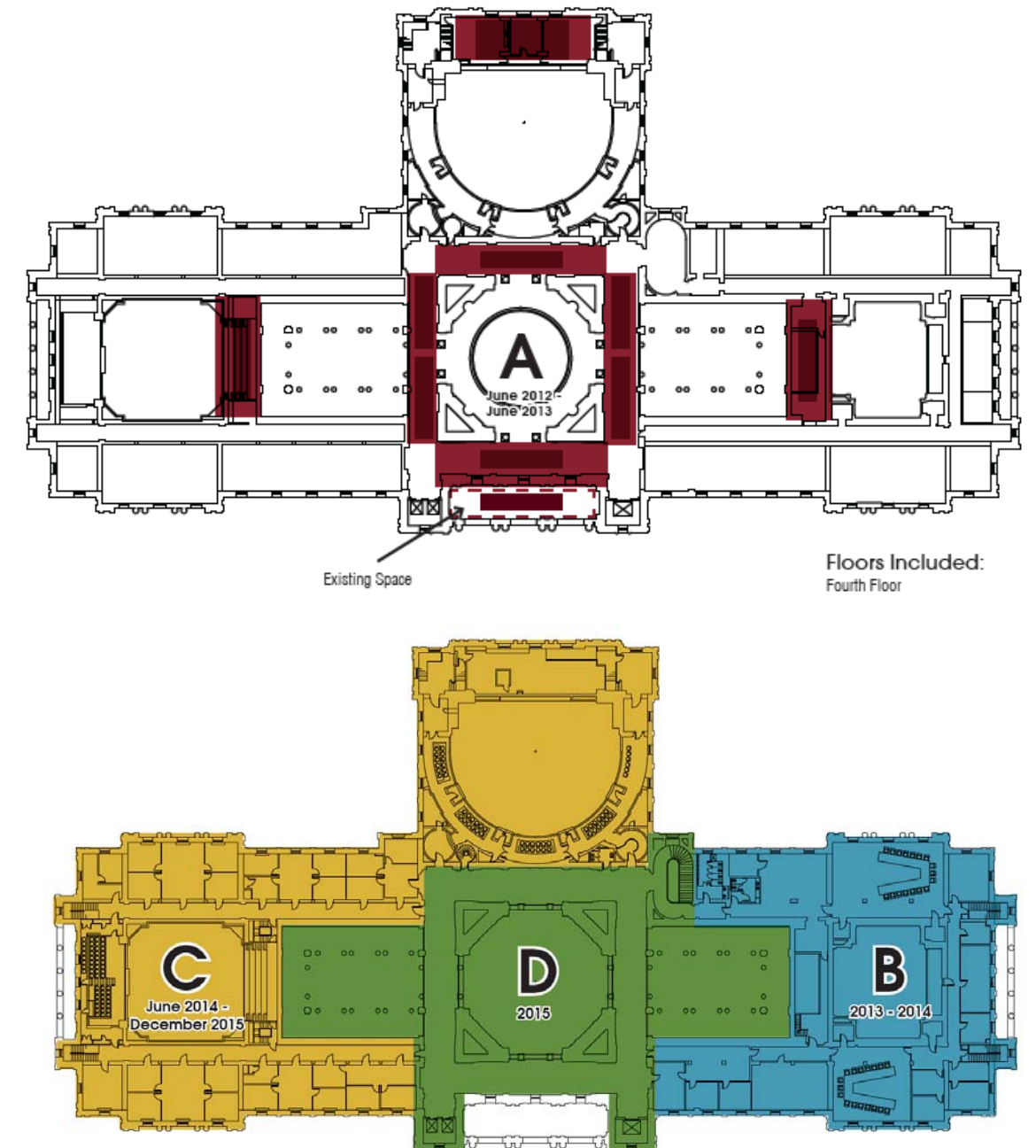
## Sequencing of Construction

Sequencing of construction will be critical in order to:

- Accomplish the restoration in a timely manner
- Allow the public and occupants of the Capitol more time in the Capitol prior to Closing
- Control costs
- Manage expectations of the public and elected officials

The following sequences have been design to accomplish these four goals. The sequences are:

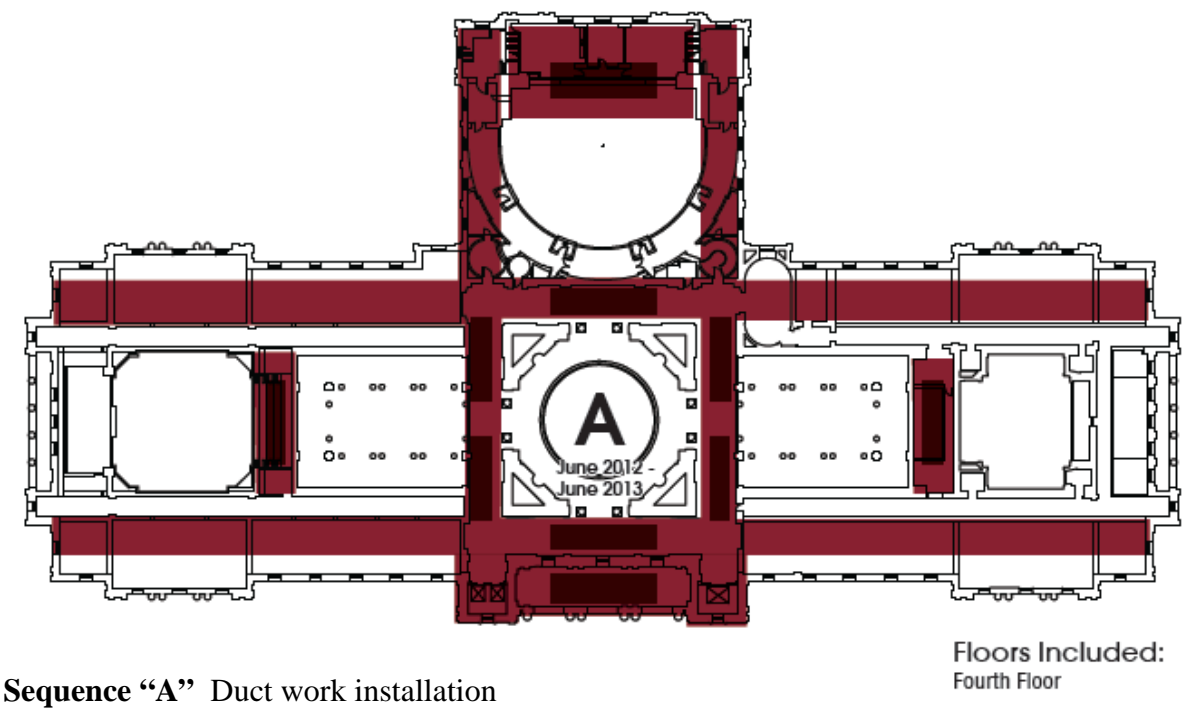
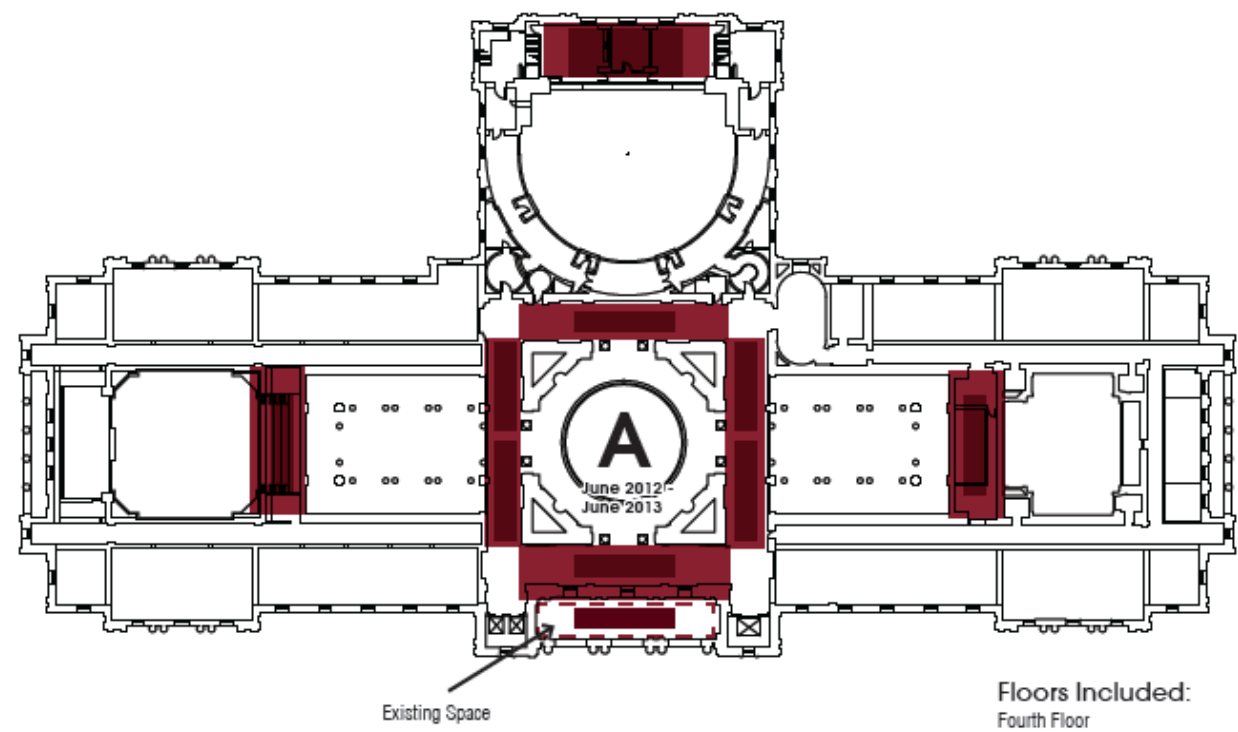
- Sequence “A” Attic and Roof Mechanical and Electrical preparation; Begin Work on Exterior Envelope
- Sequence “B” East Wing Renovation
- Sequence “C” North and West Wing Renovation
- Sequence “D” Public Space Recapture and Restoration.



2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

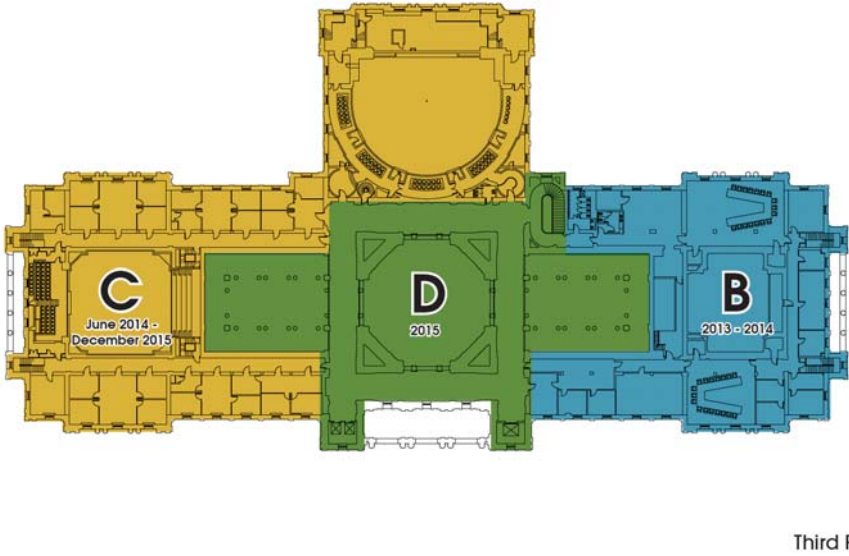
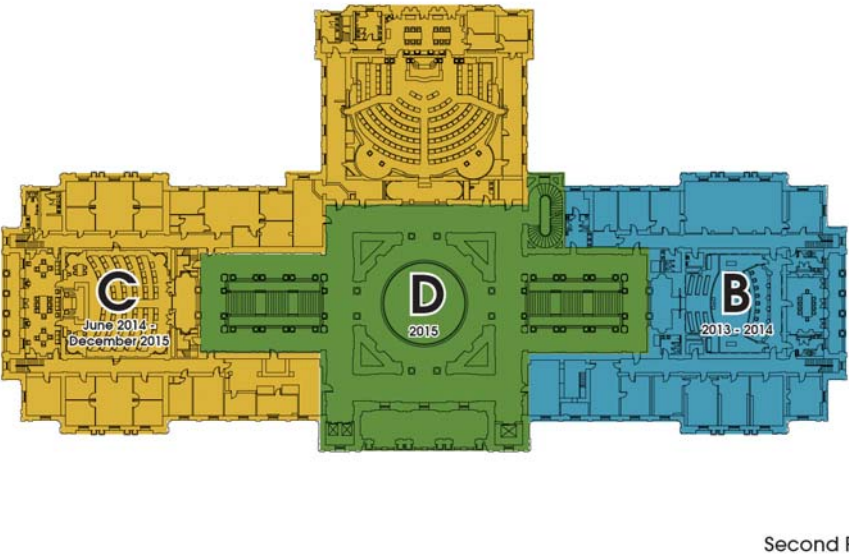
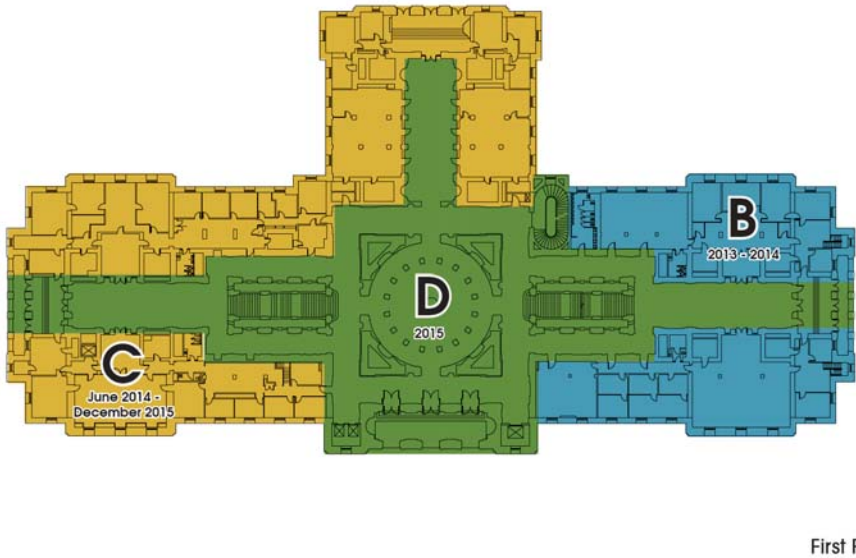
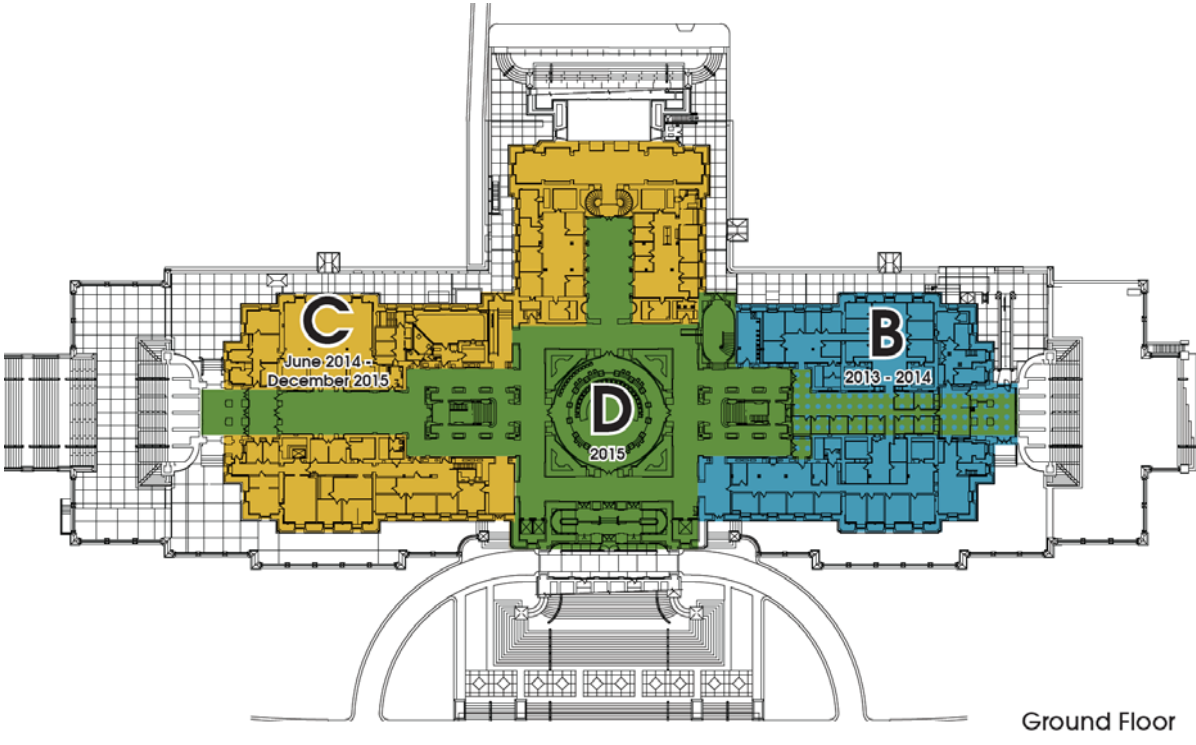
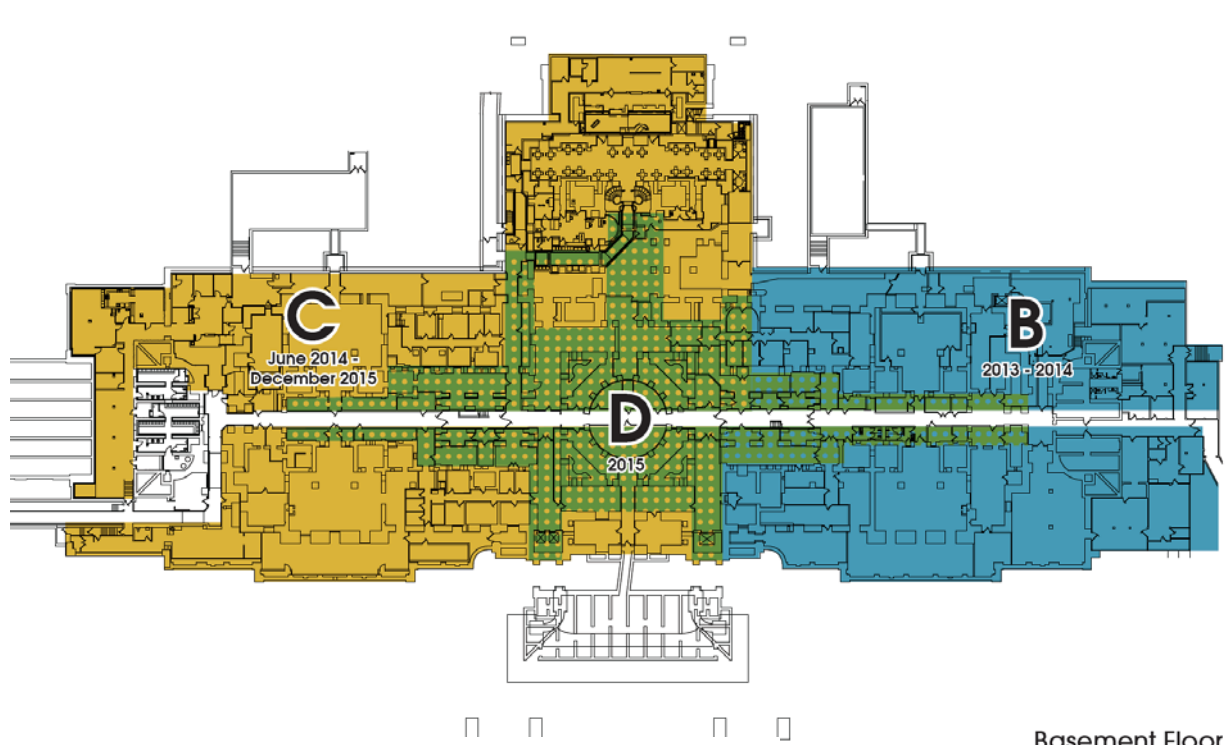


2012 MASTER PLAN



# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014



2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Procurement Activities

### Owner Provided Information

Each Shortlisted A/E and CMr team will receive:

- Comprehensive Master Plan
- Preliminary Pre-Design
- Design Guidelines Outline
- Design Process Outline
- Terms and Conditions of Collaborative Relationships
- Proposed Contract A/E or CMr

### Selection Process

Three Contracts – OPM, AE & CMr

- OPM - One Step Process Qualifications and Management plan basis of selection. Negotiate following selection. The Owner will provide an outline of duties and responsibilities for which the OPM is to provide their qualifications and Management plan.
- AE & CMr Teams selection - Two step process,
- Step One - Qualifications
  - Background of firm
  - Project specific experience in historic restorations with references
  - Specific Personnel in historic restorations
- Step Two - Management Plan, Interview and Fee
  - Owner provided information (see above)
  - Management Plan to include:
    - Approach
    - Pre-design
    - Design
    - Buyout
    - Construction
    - Budget Estimate (CMr only)
    - Contract Terms
    - Fee
- Negotiate following selection

### Design Process

Following the selection process:

The OPM will:

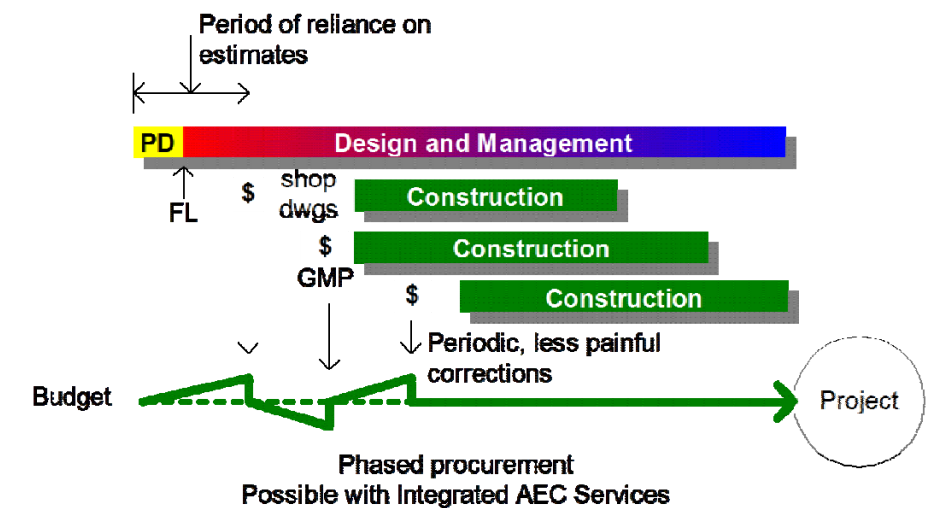
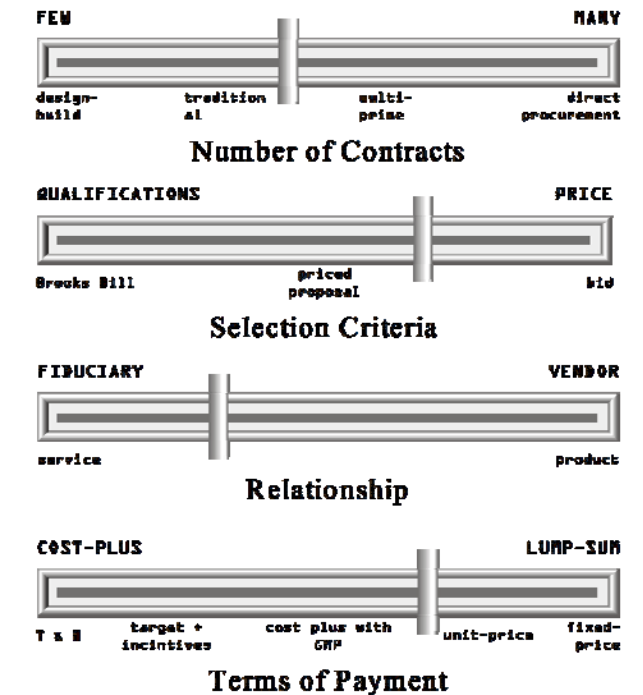
- Work directly with and communicate to the Capitol Preservation Commission
- Complete the Design Guidelines and imperatives for the project.
- Provide programing and management of the process with the Commission.
- Will organize and manage the design workshops and design process.
- Conduct the collaborative weekly design sessions.

The A/E will

- Collaborate with the OPM in all areas
- Complete the Pre-Design
- Provide the Historic Structures Report (SHPO)
- Review and provide comment to the OPM on the Design guidelines & Imperatives
- Provide outline specifications supportive of the Design Guidelines
- Participate fully in all the Design Workshops
- Participate in the Summary Document development.
- Implement the program developed by the OPM for the Commission.
- Complete Scope Documents
- Complete Construction Documents

CM will:

- Collaborate with the A/E and OPM on all elements of the project.
- Collaborate with the completion of the pre-design.
- Provide Project and workshop cost estimates throughout the design phase of the project.



2012 MASTER PLAN

# SECTION TWO: PLANNING & DESIGN OF THE CAPITOL RENOVATION

Fiscal Years 2012-2014

## Procurement Activities “Continued”

- Provide a scope document estimate
- Provide three estimates during construction documents (40%, 65% and 90%)
- Provide a schedule and schedule updates as new information affecting the schedule is discovered.
- Provide a Guaranteed Maximum Price (GMP)
- Provide all services related to the construction of the work as described in the contract documents.

## Payment Terms

Contract – OPM & A/E

- Lump Sum Fixed Fee for design and construction for the project. Paid monthly as a percent complete.
- CM Pre-Construction Fixed Fee for design phase services. Paid monthly as a percent complete.
- CM Construction Services, GMP, with a Fixed Fee and cost reimbursable for labor and materials. GMP shall include:
  - General Conditions Construction
  - CM Labor
  - Sub Contractor Labor and Materials
  - CM Fee
  - 10% Construction Contingency

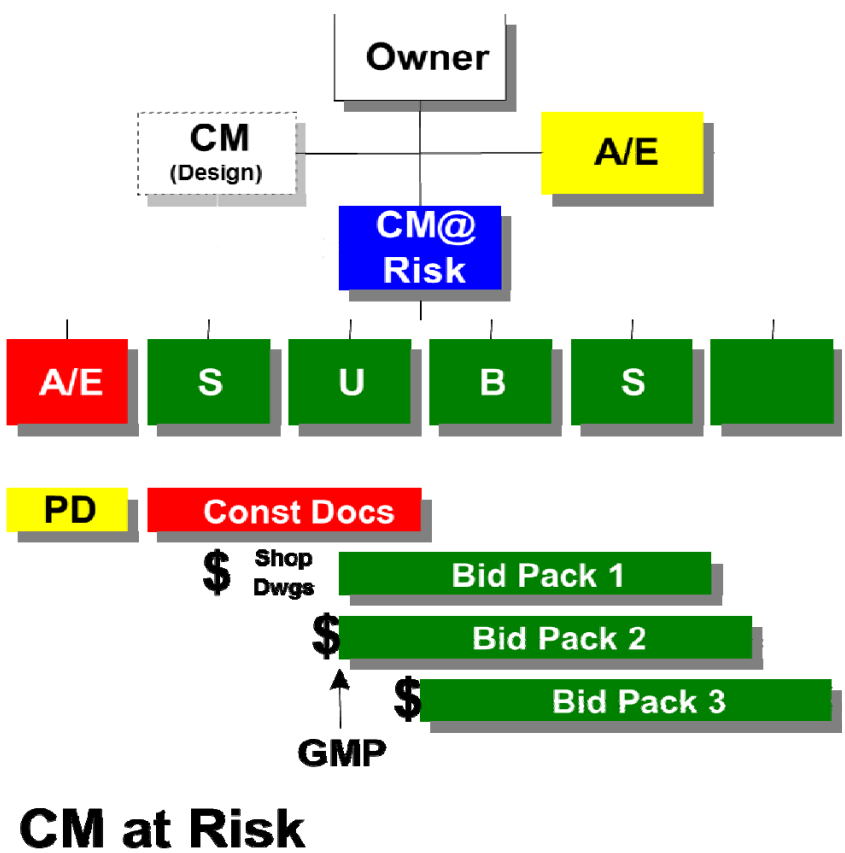
Paid Monthly deriving from a schedule of values approved by the State.

## Contract Terms

- There shall be an established Fixed Limit of Construction Cost (FLCC) which is established at \$142,000,000.
- The Owner, Architect and Contractor will agree to work together to complete the work for the FLCC. The Owner, Architect, and CMr will continue to work together with all diligence to provide a GMP within the FLCC for no additional fee regardless of how long it takes. Each must exercise the appropriate standard of care in executing his responsibility to one another.

other.

- The owner shall establish a Satisfaction Fee/Bonus for the Architect and the CMr as follows:
  - The Architect and CMr will each place 5% of their “fee” at risk. This shall be the portion of the fee that is earned by satisfying the owner.
  - The owner will then match the amount placed at risk by the AE/CMr. This shall be a bonus that the owner provides for satisfaction.
  - The Owner shall judge the level of satisfaction on the following criteria:
    - Schedule
    - Budget
    - Quality
    - Safety
    - Relationship
  - The team will rank these items and each quarter throughout the project the owner will conduct a satisfaction review meeting. A score of 90% or better will receive 100% of the Fee/Bonus, a score of 80% but less than 90% will receive 90% of the Fee/bonus, and so on. The AE/CMr will have the opportunity to earn back the portion of the lost fee (at risk amount) at the following quarterly review. However, the bonus portion is lost as a penalty.
- The CM cannot provide permanent construction with own forces.
- The CM must identify a contingency of 8-10%, which will be 100% returnable to the State. No shared savings will be accepted
- CMr to provide 3 competitive bids for each sub category.
- Each team commits to designing within the established budget.
- Owner will have full Audit Privileges. All open book accounting
- GMP at 80% of sub bids, based on 100% of bid docs.



2012 MASTER PLAN



# SECTION THREE:

## SEQUENCE "A" - ATTIC MECHANICAL INSTALLATION

Fiscal Years 2012-2014

### Activities

#### General Activities

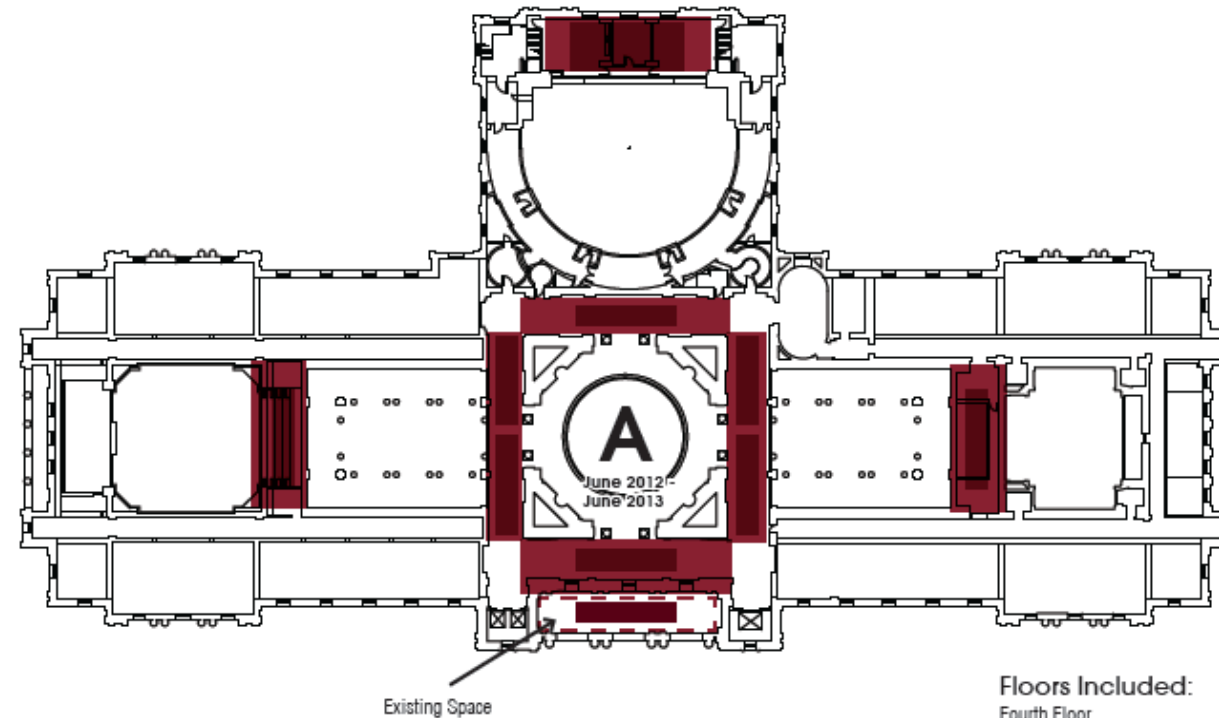
- To begin the mechanical and electrical systems installations.

#### Design Activities

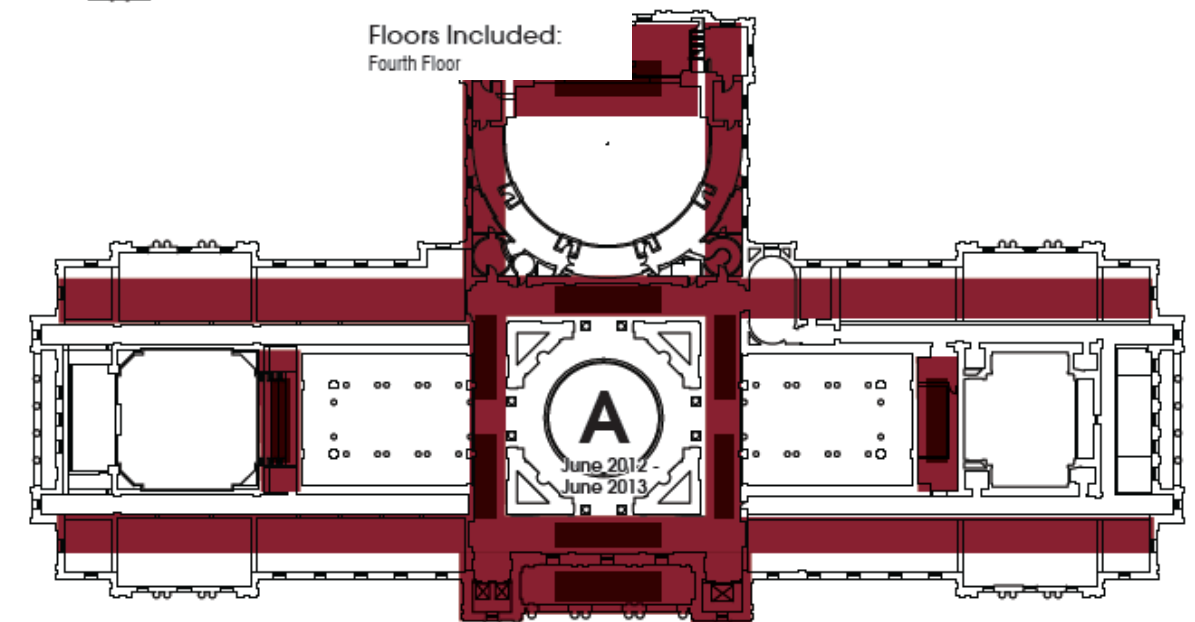
- The AEC team will work together starting in July of 2012 to quickly layout and design the structural slabs that will support the new mechanical air handling units. These units will be designed to fit within the available attic space.

#### Construction Activities

- Construct the concrete slab floors that will support the mechanical equipment.
- Provide structural support to hang plaster ceilings independent of the new floor structure.
- Construct mechanical room floors with provisions for waterproofing and floor drains.
- Provide permanent access for regular and periodic maintenance.
- Provide removable roof panels for access to move equipment into place.
- Provide outside air and relief air connections to the outside.



Sequence One – A Mech. Floor & Equipment



Sequence One –B Duct work installation

Floors Included:  
Fourth Floor

2012 MASTER PLAN

SECTION THREE:

SEQUENCE "A" - ATTIC MECHANICAL INSTALLATION

Implementation

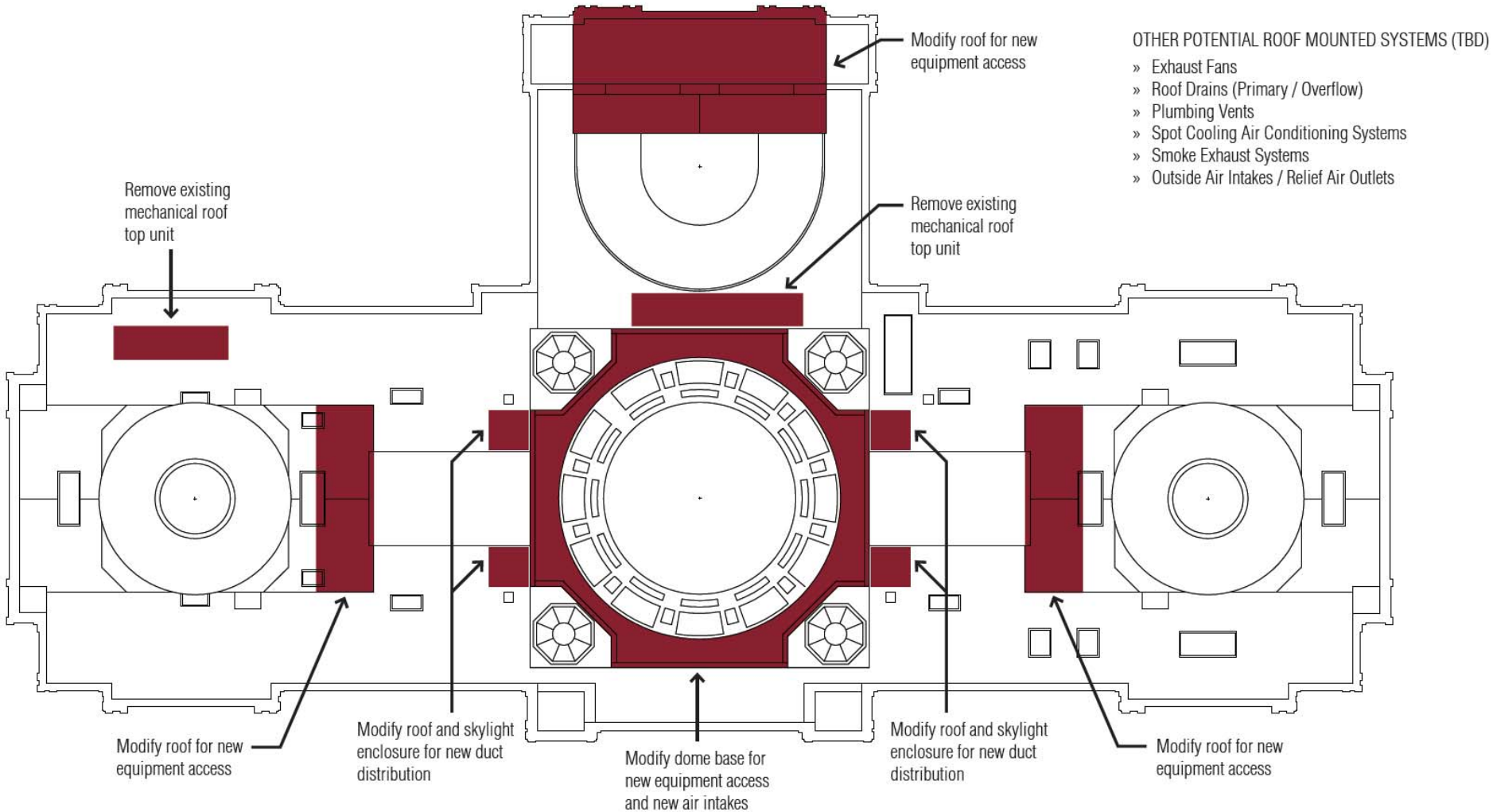
Fiscal Years 2012-2014

I. 2012

- The integrated AEC team will begin the planning and design work for the attic mechanical and electrical systems in conjunction with the overall design of the Capitol Restoration.
- The MEP "Sequence A" work will occur while other early packages are being developed and fully coordinated to confirm to the overall design of the project.
- The Mechanical and Electrical Engineers will closely coordinate the sequence of the work with the architectural designs and the Construction Manager's understanding of the existing building infrastructure.
- Following the legislative session, the Construction Manager may perform selected demolition within the building to understand the infrastructure and verify the openings that were originally designed into each floor.

II. 2013

- Demolition and preparation at the roof for construction activities shall begin in late May.
- Installation of the new floor slabs that will support the air handling units shall begin in July.
- Completion of attic preparation.
- Begin repairs on exterior stone, and on French doors and window replacement
- Begin preparation for mechanical and electrical work in the basement



Roof Plan

III. 2014

- Complete the Attic and Basement Mechanical and Electrical main equipment installation.
- During the legislative session preference will be given to the needs of the legislature.

2012 MASTER PLAN

# SECTION FOUR: SEQUENCE "B" EAST WING CLOSURE

Fiscal Years 2013-2015

## Activities

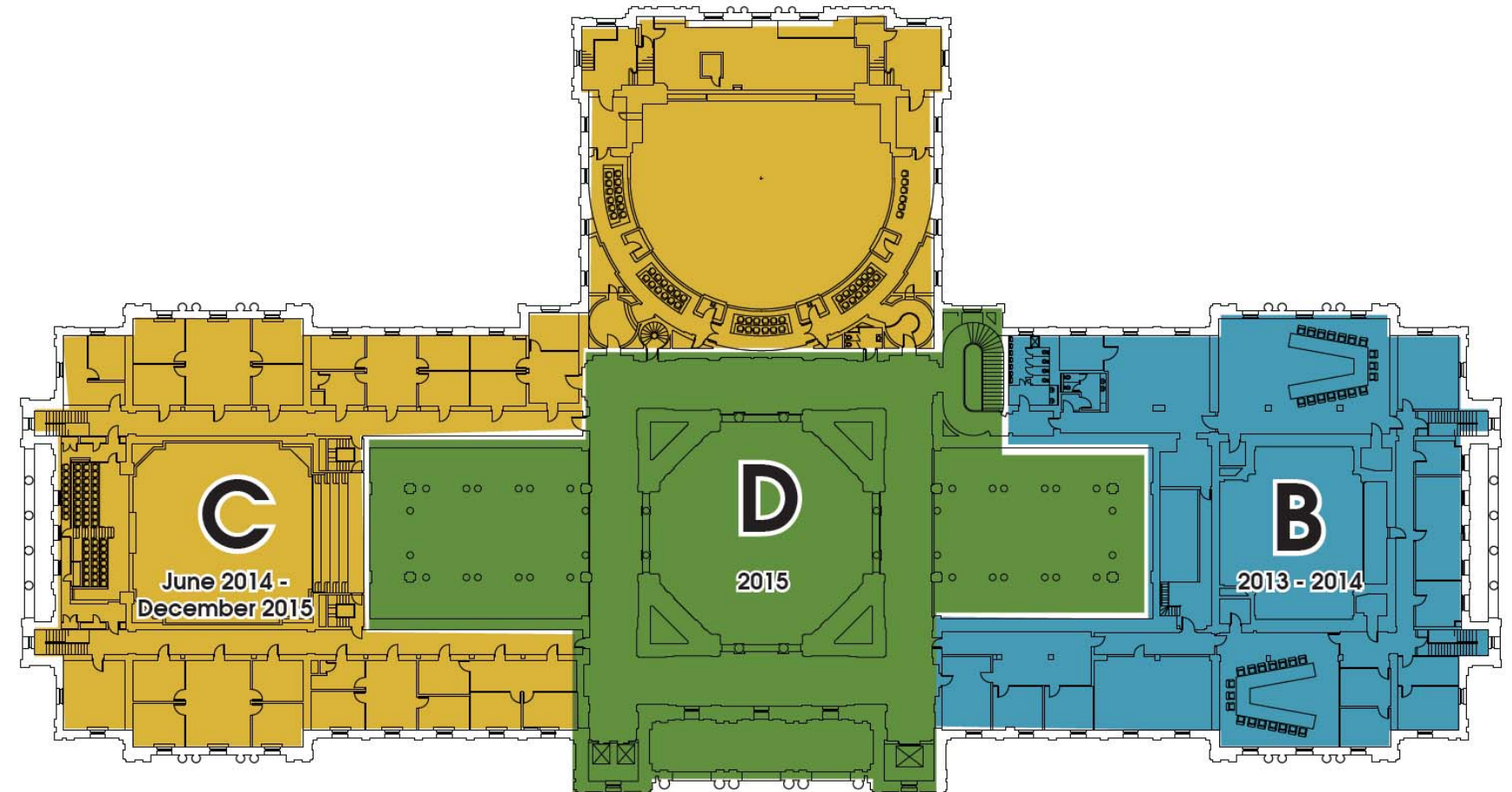
### East Wing Closure and Restoration

#### I. 2012

- Prior to beginning work the OPM will conduct a workshop that will identify the critical elements that are to be considered in this sequence. Following the workshop the AE/C team will be released to proceed.
- Working with the stakeholders and the Capitol Preservation Commission the AE/C team will develop the documents for:
  - Swing and permanent space layouts
  - Abatement
  - Demolition
  - Vertical mechanical and electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.
- A separate design team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2013.

#### II. 2013

- The AE/C team will finalize all documents and bids in preparation for the beginning of construction.
- The AE/C team will continue to work with the OPM, Stakeholder and the Capitol Preservation Commission to determine the space organization and office locations within the Capitol.
- Immediately following the Legislative Session in 2013 all occupants of the east wing from floors basement to third floor will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the east wing from the Basement to the fourth floor would be closed. The CM would seal off the space from the public for safety purposes.



#### Floors Included:

Lower Level	Second Floor
Ground Floor	Third Floor
First Floor	

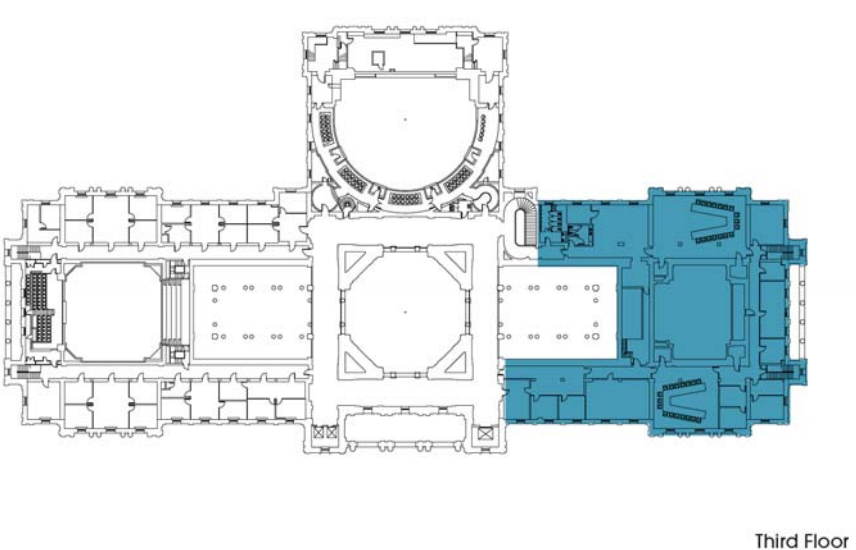
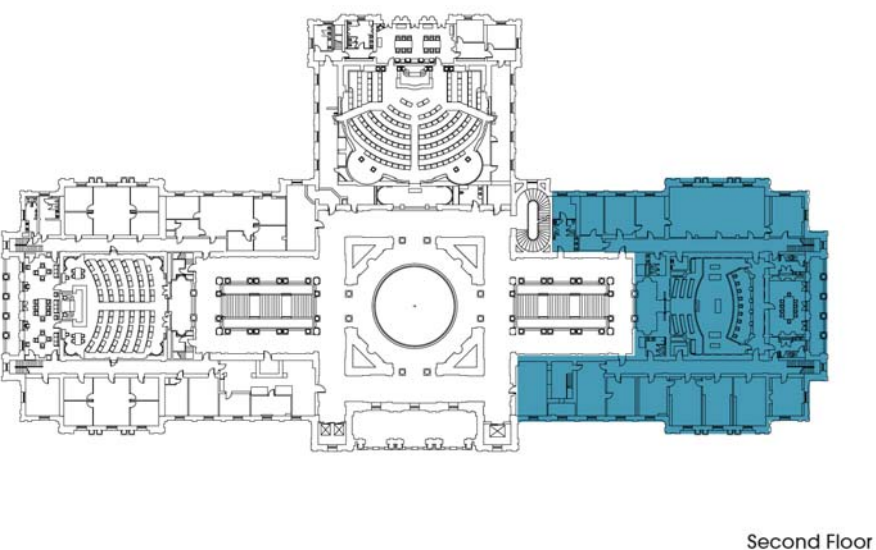
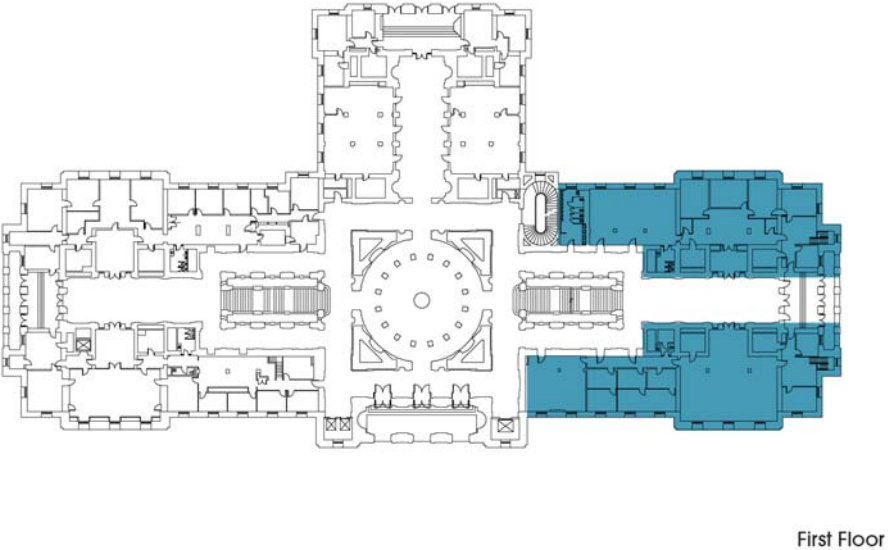
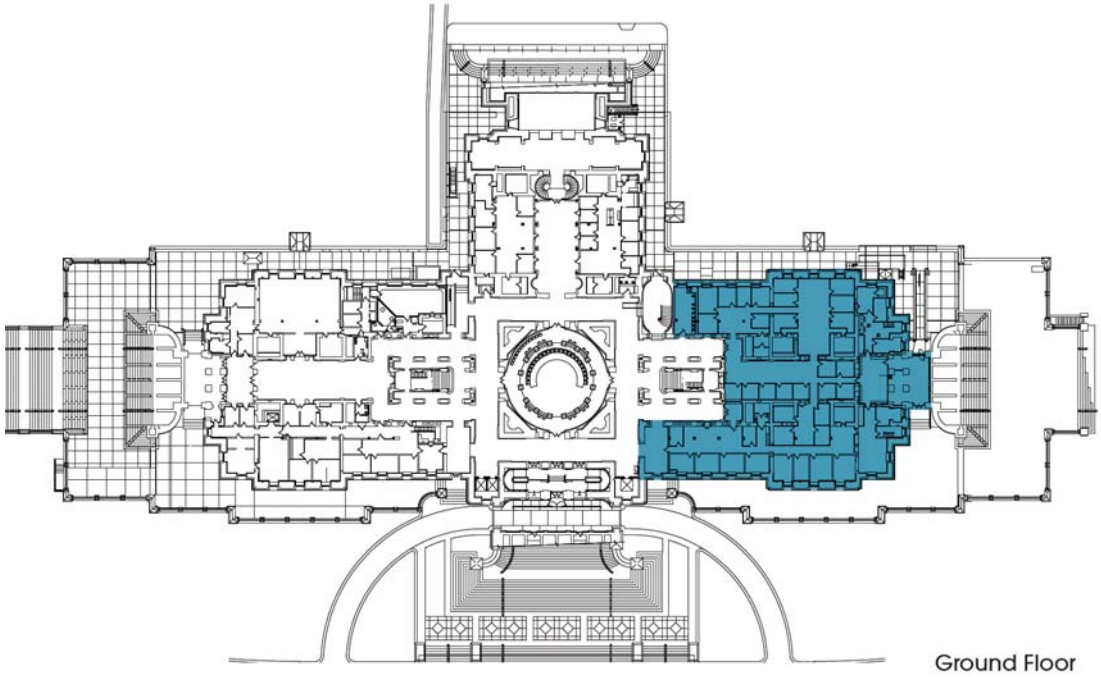
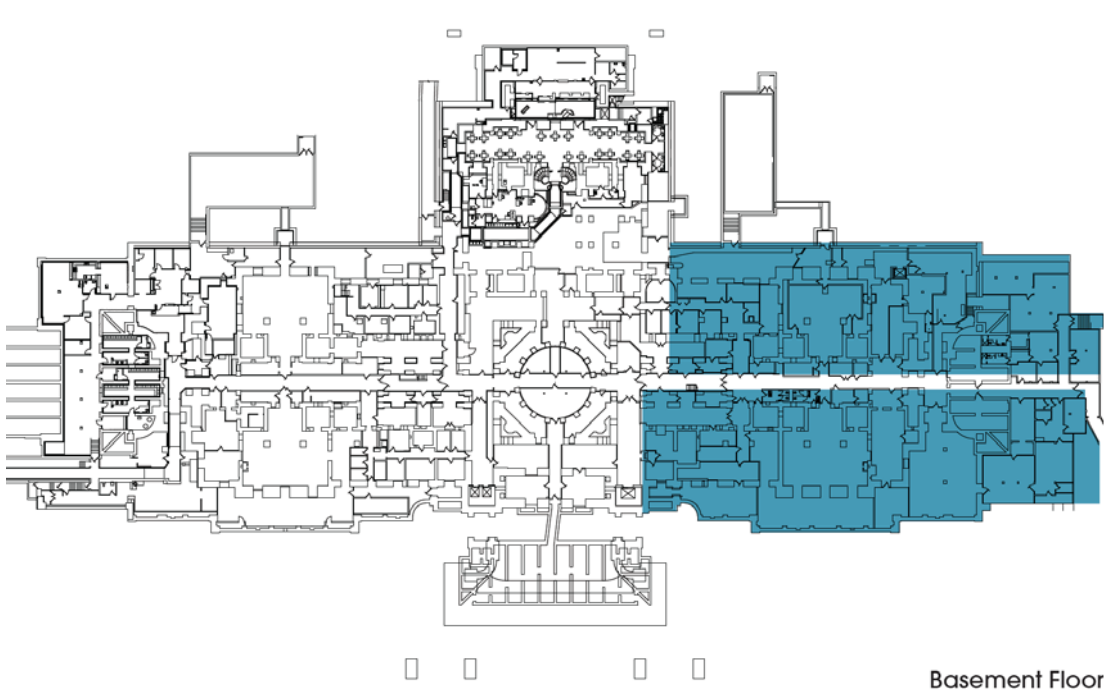
## 2012 MASTER PLAN



SECTION FOUR:  
SEQUENCE "B" EAST WING CLOSURE

Activities

Fiscal Years 2013-2015



2012 MASTER PLAN

SECTION FOUR:

SEQUENCE “B” EAST WING CLOSURE

Implementation

Fiscal Years 2013-2015

II. 2013 Continued

- Abatement and Demolition of the interior of the east wing would be the first construction activity to begin.
- Following the abatement and the demolition of all interior non-historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new mechanical and the electrical locations.
- New mechanical and electrical systems to be installed with order to minimize maintenance costs and to provide a flexible and adaptable platform for future modifications. The order is to start in the basement floor for electrical distribution and District Energy Services and in the attic for the air distribution.
- The CM working with the selected mechanical and electrical contractors will install the mechanical, electrical, communication, and other systems in the vertical chases that are identified in the bid documents.
- *Note: the selection of the mechanical and electrical sub-contractors is a critical step in the restoration process. It is highly recommended that the OPM and the CM work together to develop a selection process that would allow the mechanical and electrical sub-contractors to be selected for the entire Capitol restoration verses the possible selection of different sub-contractors for different phases of the work which may have an impact on both responsibility and quality.*

III.2014

- During the 2014 Legislative session the CM shall take precautions to eliminate noise, dust and other construction activities that will interfere with the legislative session. The construction activities may need to be stopped or relocated to another location in the building during this time. The AE/C team should consider this during the planning process so as to help in coordinating the work with the legislative

timeline.

- OPM, stakeholders and the Capitol Preservation Commission shall finalize the space layout or office locations for the occupants of the Capitol following the legislative session in 2014 . This will allow the AE/C team to move forward with documentation for the office and associated spaces within the east wing and throughout other parts of the Capitol.
- The AE/C team will coordinate the release of the tenant finish package with the completion of the mechanical and electrical vertical systems integration into the building.
- The tenant finish package will provide information on both the public meeting locations and the office space.

IV. 2015

- The east wing includes a public area that has been used as an office space for many years. This space will be returned to public use and will be designed as a gathering space for the public prior to attending committee room meetings. The pubic space will be returned to it’s original Cass Gilbert design, which will include the restoration of:
  - Light fixtures
  - Plaster ceiling using the same techniques used originally
  - Decorative painting identical to the other locations on the ground floor
  - Floor material will be reinstalled or cleaned to maintain the public space
- The AE/C team will issue the public space package as a separate bid package due to it’s unique requirement and products.
- The OPM and the CM will investigate the opportunity of issuing this bid package using design assist contracting due to the unique nature of this portion of the work.

- *Note: This will be the first of two bid packages that will consider the complete restoration of elements of the building within the pubic space. These elements; decorative painting, bronze light fixtures, floor finishes, wall treatment and plaster ceiling work, are artisan trade type elements and ,as such, should be procured as a design assist process and they should be procured for the entire project so at to not mix and match different artistic styles within the same building. This will alleviate the already complicated process of restoring the Cass Gilbert designs.*
- It is anticipated that all work will be complete as follows:

• Abatement and Demolition -	Jun. 2013
• Vertical MEP Systems installation -	Mar. 2014
• Tenant Finish build out complete -	Jun. 2015
• Public Space Restoration -	Oct. 2016

V. 2016

- Project Complete

# SECTION FIVE: SEQUENCE "C" NORTH & WEST WING CLOSURE

Fiscal Years 2014-2016

## Activities

North and West Wing Closure and Restoration

### I. 2012

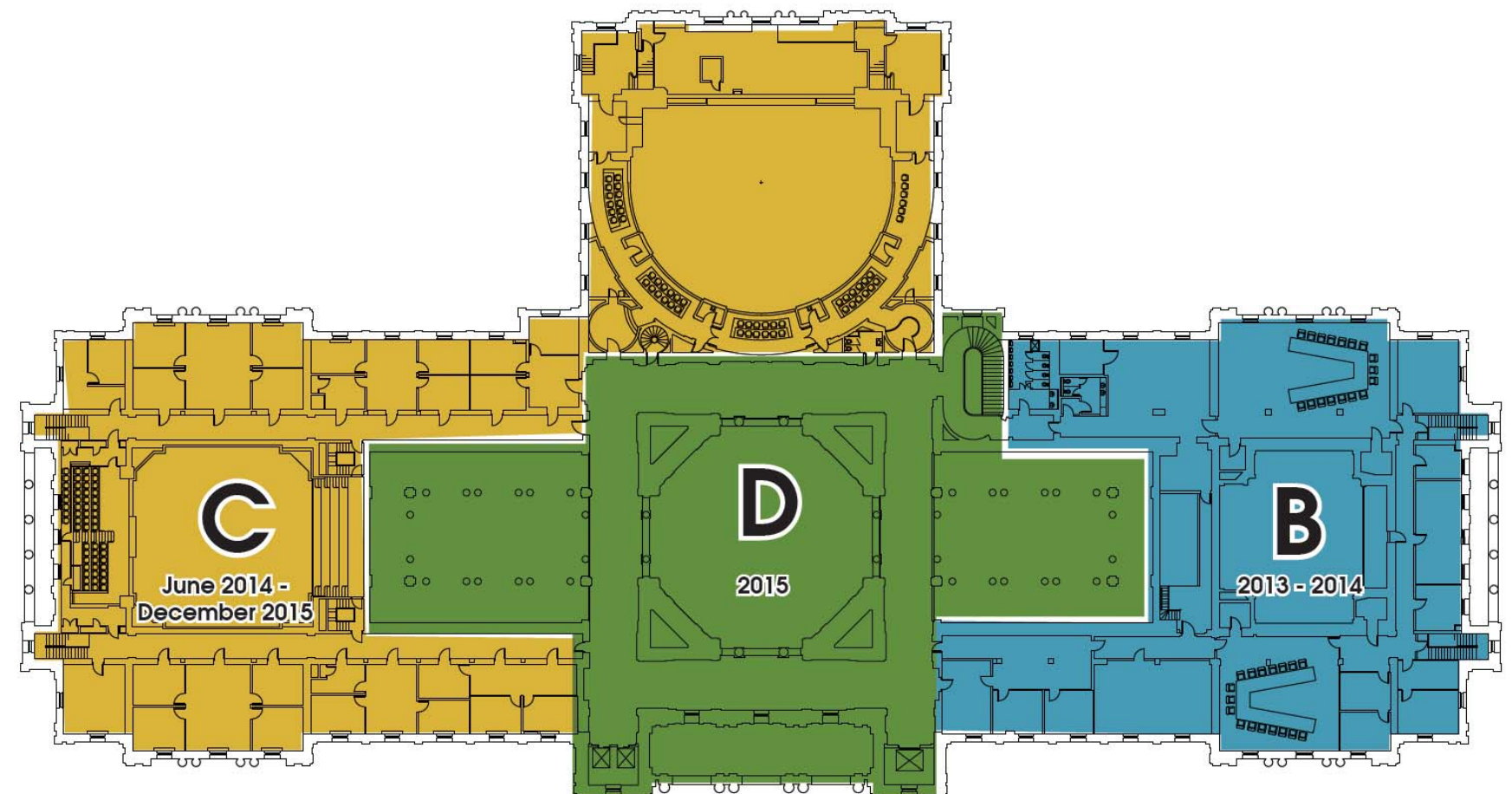
- Prior to the start of design by the Architect the OPM will conduct a workshop that will identify the critical elements of this sequence. Following that workshop the AE/C team will proceed with the design.
- Working with the stakeholders and the Capitol Preservation Commission, the AE/C team will develop the documents for:
  - Swing and Permanent space layouts
  - Abatement
  - Demolition
  - Vertical Mechanical and Electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.

### II. 2013

- The AE/C team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2014.
- The AE/C team will finalize all documents and bids in preparation for the beginning of construction.
- The AE/C team will continue to work with the OPM, Stakeholder and the Capitol Preservation Commission to determine the space organization and office locations within the Capitol.

### III. 2014

- Immediately following the Legislative Session in 2014 all occupants of the east wing from floors basement to third floor will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the Capitol North and the West wings from the Basement to the fourth floor the Capitol will be Closed to the public.



Floors Included:

Lower Level	Second Floor
Ground Floor	Third Floor
First Floor	

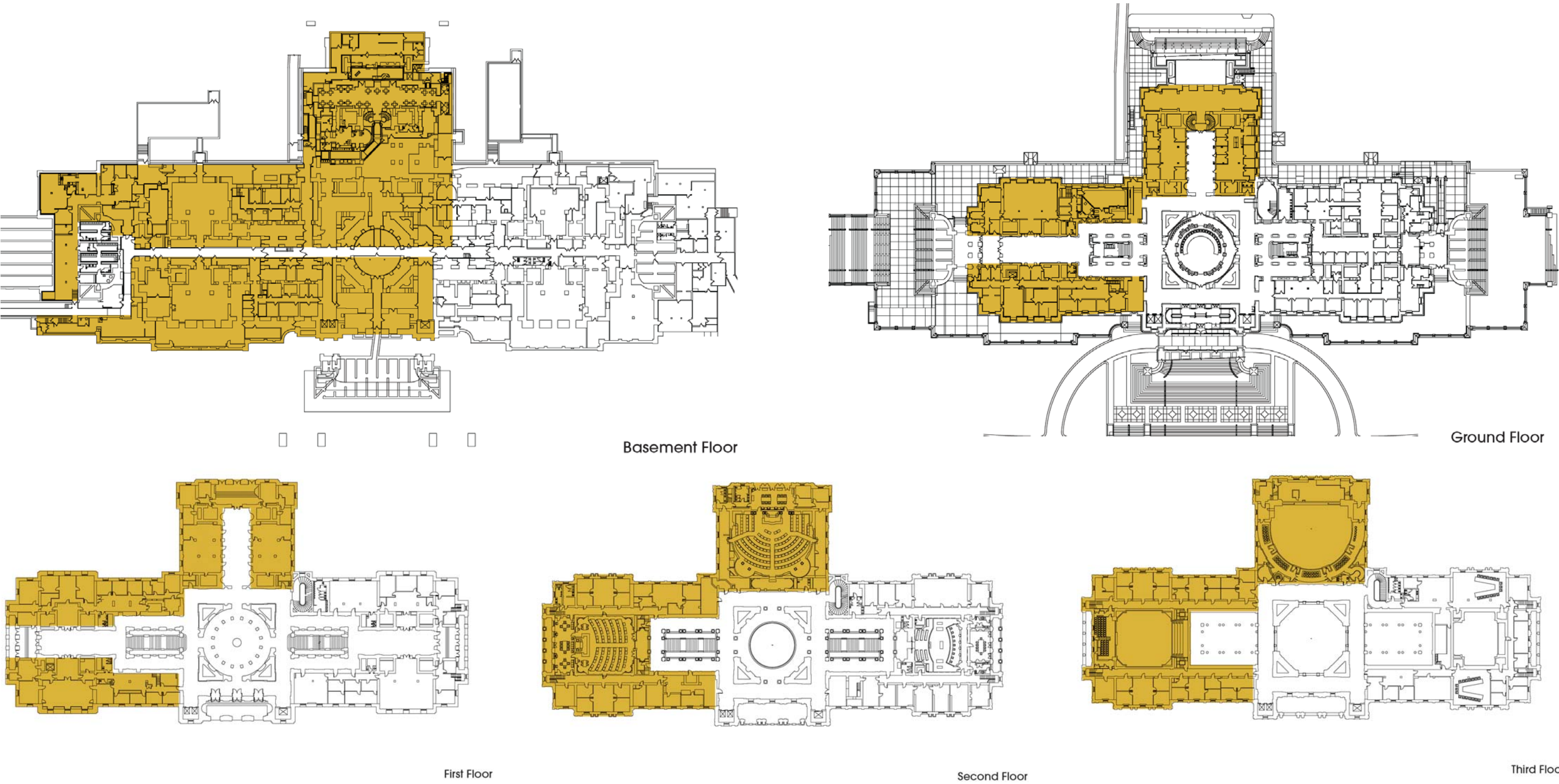
## 2012 MASTER PLAN



SECTION FIVE:  
SEQUENCE "C" NORTH & WEST WING CLOSURE

Fiscal Years 2013-2015

Activities



2012 MASTER PLAN

SECTION FIVE:

SEQUENCE "C" NORTH & WEST WING CLOSURE

Implementation

Fiscal Years 2013-2015

2014 Continued

- Abatement and demolition of the interior of the north and the west wings would be the first construction activity while other construction is proceeding in the East wing.
- The CM will need to assure and monitor the abatement work in the Capitol to assure the workers from other trades remain safe.
- Following the abatement and demolition of all interior non historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new Mechanical and the Electrical locations.
- The CM, working with the selected mechanical and electrical contractors, will install the mechanical, electrical, communication, and other systems in the vertical chases identified in the bid documents.
- The OPM, Stakeholders and the Capitol Preservation Commission shall finalize the space layout or office locations for the occupants of the Capitol following the legislative session in 2014 . This will allow the AE/C team to move forward with documentation for the office and associated spaces within the east wing and throughout the Capitol.
- The AE/C team will coordinate the release of the tenant finish package with the completion of the mechanical and electrical vertical systems integration into the building.
- The tenant finish package will provide information on both the public meeting locations and the office space.
- Complete exterior stone repairs and window replacement.
- Install mechanical equipment
- Replace flat roof

IV. 2015

- Construction continues
- It is anticipated at all work will be completed as follows:
- Abatement and demolition - Jun. 2014
- Vertical MEP Systems installation - Mar. 2015
- Tenant Finish build out complete - Oct. 2016

V. 2016

- Project complete

# SECTION SIX: SEQUENCE "D" PUBLIC SPACE RESTORATION

Fiscal Years 2014-2017

## Activities

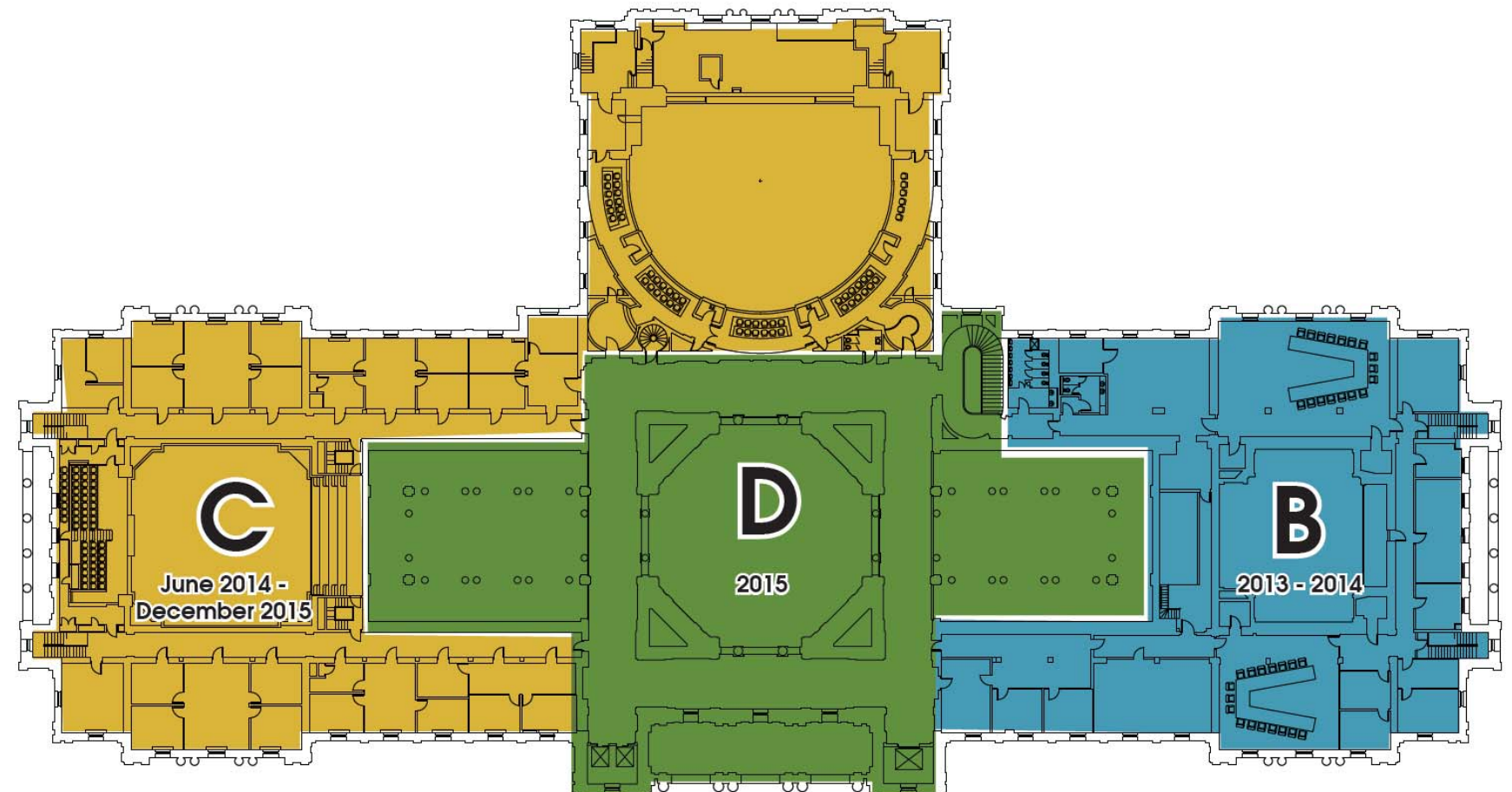
Public Space Closure and Restoration

### I. 2014

- The OPM will conduct a workshop that will kick off the design work for the Architects and Engineers, as well as the pre-construction work the CMr on the Public Spaces.
- Working with the stakeholders and the Capitol Preservation Commission the AE/C team will work with OPM and the Department of Administration to determine the best way to procure the service in a design assist performance contract for:
  - Decorative Paint
  - Marble and Stone Restoration
  - Plaster Ceiling Restoration
  - Bronze Light Fixtures Restoration and Manufacture
  - Historic Hardware Restoration and Manufacture
- Working with the State Historic Preservation Officer (SHPO), State Building Official and the State Fire Marshall the OPM and the AE/C team will determine the modifications within the public spaces that are acceptable.

### II. 2015

- The AE/C team will prepare the Public Space Modification documents which will provide for life safety and other modification to bring the building into conformance with code compliance issues.
- The AE/C team and the design assist contractor will work together to finalize all public space documents (decorative paint, marble and stone work, plaster work, light fixture restoration, and hardware restoration) and prepare the needed documents to finalize the procurement process in preparation for the beginning of construction in 2014.



Floors Included:

Lower Level	Second Floor
Ground Floor	Third Floor
First Floor	

Continued

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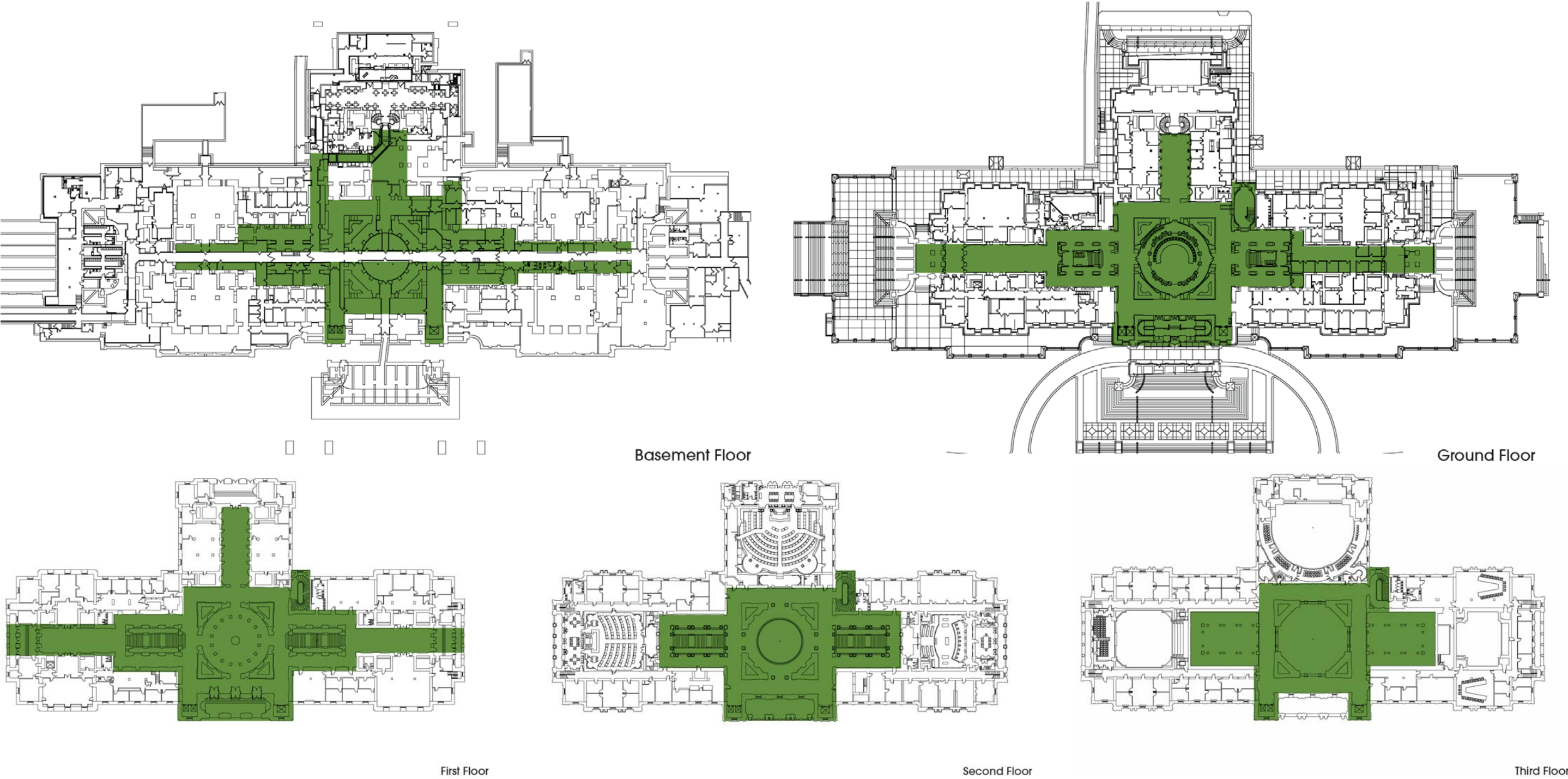
Page 43



SECTION SIX:  
SEQUENCE "D" PUBLIC SPACE RESTORATION

Activities

Fiscal Years 2012-2017



2012 MASTER PLAN

SECTION SIX:

SEQUENCE “D” PUBLIC SPACE RESTORATION

Implementation

Fiscal Years 2012-2017

III. 2016

- The CM will provide a schedule to the OPM indicating which public area they will be working in, the public areas that will be open to the public and the safety precautions that are being taken. This schedule will include the duration and mobilization and demobilization time.
- Abatement and demolition of the interior of the Public Spaces will be the first construction activity of this sequence in order to prepare the public spaces for the required life safety and accessibility upgrades.
- The CM will need to assure and monitor the abatement work in the Capitol to assure the other workers from other trades remain safe.
- Following the abatement and the demolition of all designated interior historic walls, partitions and finishes, as well as the existing mechanical and electrical components the CM will work through the layout process for the new Mechanical and the Electrical locations that are associated with the public spaces.
- The CM working with the selected mechanical and electrical contractors will install the mechanical, electrical, communication and other systems in the vertical chases that are identified in the bid documents.
- The OPM and the AE/C team working closely with the design assist contractors, will proceed with the implementation of all life safety and accessibility related elements in the public areas. This work will be completed in full, prior to any of the decorative finish work being performed.
- Following the installation of the life safety, mechanical and electrical elements, the plaster work will commence. All plaster work will conform to and match the existing in substance and quality. The CM will assure the OPM and the AE/C team that all protocols are being followed.

IV. 2016

- Once the OPM and the CM are satisfied that the working conditions are such that the generation of dust is at an acceptable minimal level, the decorative finish work may begin.
- Following the completion of the Plaster work, the order of the decorative work shall be as follows:
  - Interior Marble and Stone repair
  - Decorative Finish painting to restore the original design to all the public areas. The Design assist contractor shall verify and provide documentation as to the historic restoration and tie the work to the bid documents.
- Historic Light fixture installation. The light fixtures shall be ordered as follows:
  - Original and historic light fixtures to be removed with documentation of location. Restored and replaced to exact location.
  - Replicated light fixtures that were once in the capitol shall have their locations identified on the documents and shall be installed in specified locations.
  - New families of Light fixtures, created from the spinning and casting of the original historic light fixtures shall be hung in their designated locations in the new committee room or other new spaces that are within the public way.
- Door and Window hardware shall be replicated to match the existing and shall be installed as needed to complete the restoration.

- It is anticipated that all work will be completed as follows:
- Plaster Work and Ceilings - Dec. 2016
- Decorative Painting in Public Areas - Sep. 2017
- Installation of Light Fixtures - Nov. 2017
- Installation of Hardware - Nov. 2017
- Project Complete Nov. 2017

# SECTION SEVEN: SECURITY & GROUNDS

## Activities

Fiscal Years 2015-2016

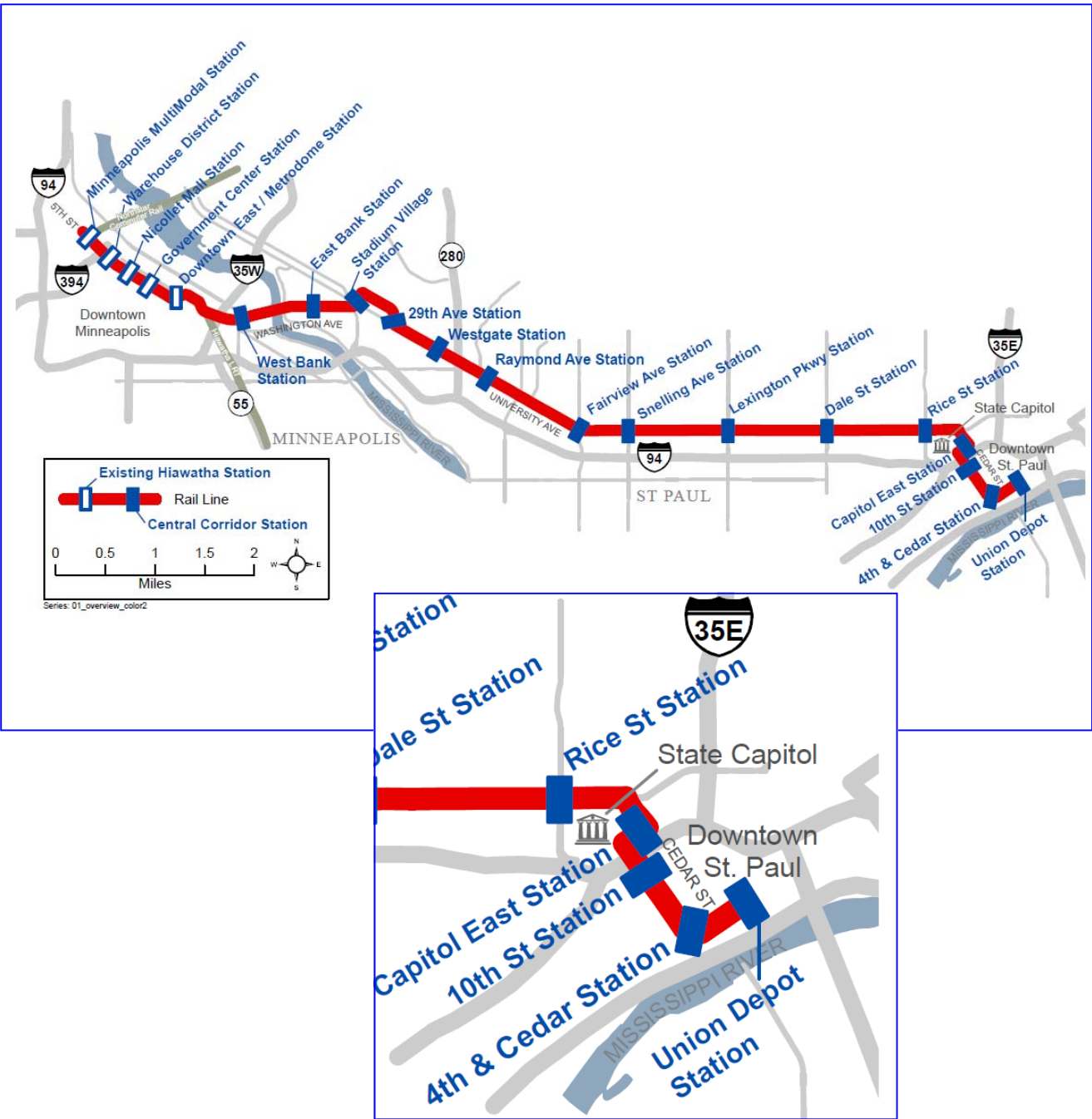
### General Activities

Reconfigure the grounds surrounding the Capitol to provide for:

- Improved security by surface parking lots
- Controlling access by school and tour buses
- Controlling access to the light rail system
- Identifying and controlling access points

### Design Activities

- The AE/C team, working with the OPM, the department of Public Safety, and the Capitol Preservation Commission, will identify areas where safety improvements are required.
- The AE/C team will provide design information to the Capitol Preservation Commission for direction on the reconfiguration of the parking and drop off areas.
- The AE/C team will ensure cost effective uses of technology for security in the complex.
- The AE/C team will include security-related devices such as locks, cameras, electronic card-readers, and communication systems
- The AE/C team will address unresolved questions about the need for weapons screening in and around the Capitol Complex. At a minimum, The AE/C team shall consider circumstances in which the use of mobile screening devices may be appropriate and design spaces to allow for such activities.
- The AE/C team will implement building design principles that facilitate crime prevention and response.
- The AE/C team will design to limit public access where appropriate. Such restrictions should be evaluated by the Governor's security coordinator after consultation with Capitol Security, the Department of Administration, and the organizations that occupy space in the Capitol.
- The AE/C team will work with the current light rail design and tunnel improvements under University Avenue. This area of design will facilitate and address deliveries from a location North of University Avenue.



2012 MASTER PLAN



# SECTION SEVEN: SECURITY & GROUNDS

## Activities

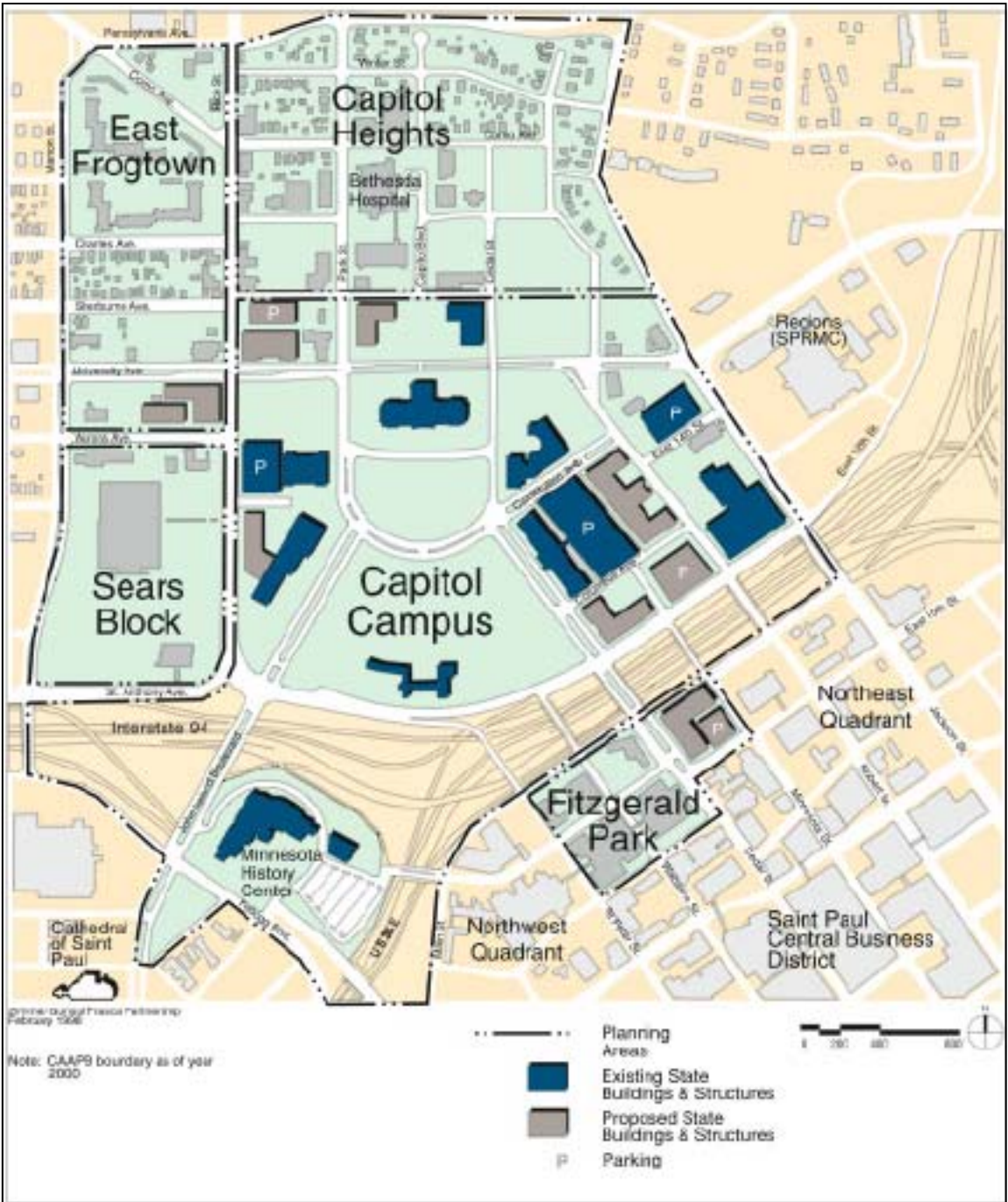
Fiscal Years 2015-2016

### Design Activities (cont.)

- The AE/C team will address security concerns as a result of the new light rail transit access points.
- The AE/C team will address threat response protocols, emergency alert systems, systems for securing portions of buildings, and evacuation protocols. Consideration should be given to electronic notification systems, where appropriate, for informing people within the Capitol Complex of possible threats or emergencies.
- The AE/C team will ensure broad access to cell phone carriers to the greatest extent possible in all areas of the building, including tunnels.
- The AE/C team will implement the design work.

### Construction Activities

- The CM shall begin the reconfiguration of the grounds in order to confirm to the desires of the Commission.
- The reconfiguration shall be complete prior to October of 2016.



2012 MASTER PLAN



## SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

### Furniture

There is a variety of historic furniture within the Capitol in various stages of condition and in various locations. The following is a brief explanation of their location and finish.

#### Public Area Furniture

- There are over 800 items of historical furniture within the Minnesota Capitol building. Most of these are the property of the Minnesota Historical Society. Over the past few years the Historical Society has restored a majority of the items located within public spaces. This restoration effort was split into two phases and included chamber desks and chairs, as well as all benches and sofas in public areas. Phase 1 of this restoration effort was completed in 2010 and Phase 2 is currently underway.

#### Non-Public Area Furniture

- Other historical furniture is currently being used in non-public areas ( typically offices throughout the Capitol). The historic items are available to Senators for their offices upon request. The condition of this furniture varies widely from restored to needing restoration. Currently there is no restoration planned for these historical furniture items.

#### Historical Furniture in Storage

- According to the Historical Society, there are currently close to 100 historical pieces that are in storage. These items were once housed inside the Capitol, but have been placed out of use due to the reallocation of space within the building or time. The condition of these pieces vary and they are located in the storage facility at the History Center and also at a storage location at 1500 Mississippi St. The potential to restore and return these items to the Capitol will be determined by final space allocation.



2012 MASTER PLAN

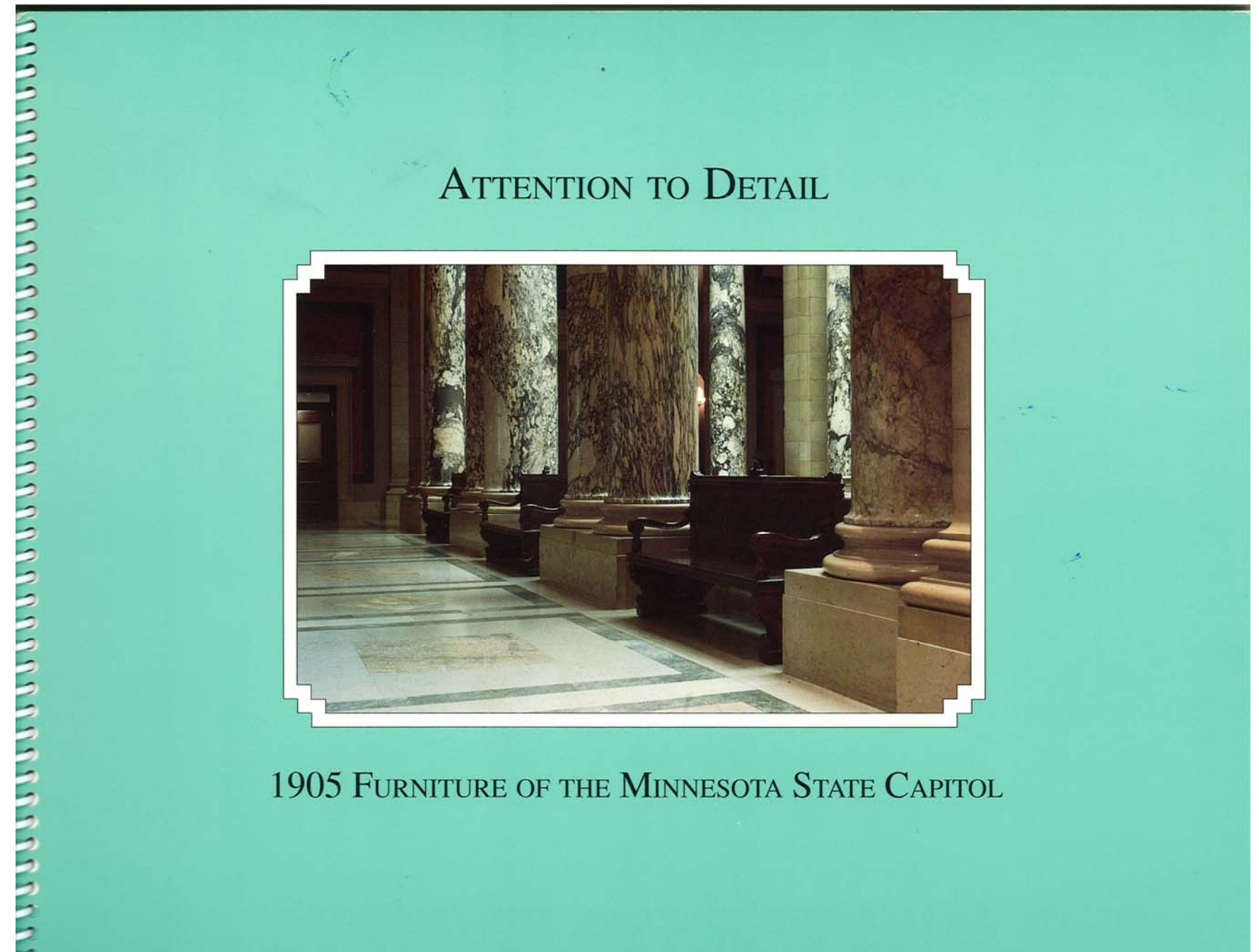
## SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

### Furniture

#### Publications

- The Minnesota Historical Society, Capitol Historic Site program released a document titled “**Attention To Detail**” in 1989. This report documents the existing 1905 furniture, it’s history, and known locations.
- The original Contract to build specialized furniture was awarded to Herter Brothers of New York. In 1905, there were roughly eight hundred pieces of furniture including forty two styles designed by Cass Gilbert.
- The Capitol Historic Site Program was established in order to inventory and document the surviving pieces. Each piece has been numbered, measured, and re-searched.
- The “Attention to Detail” document may prove to be a valuable resource for the AOR.



2012 MASTER PLAN



## SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

### Art

#### Condition of Art in the Capitol

- Over the years, leaks have caused deterioration of the plaster in various areas of the Capitol building. Some of these areas need simple repairs while others will require full-scale restoration. This plaster deterioration has impacted the decorative finish artwork that adorns the walls of the Capitol.
- Likewise, many areas have been decorated and redecorated multiple times over the years. Some forensic work will need to be performed by restoration artists to determine the historical timeline of color and design in order to determine the proper path for restoration.
- There are areas of the Capitol that have been used in different ways than was originally designed by Cass Gilbert. These are being returned to their original plan and possibly use. These areas will require analysis to determine the extent to which restoration can occur. It is anticipated that there are some areas that will require completely new decorative art work to be installed. Every effort should be made to identify and replicate the original decorative art.

#### Restoration of Decorative Art

- The process of identifying and repainting these historically significant decorative art works is a tedious process. In recent restoration work within the Capitol, artists hand-mixed paint colors to match the original documented colors. The AOR will need special consultants to assist in the restoration process. All artists and artisans who work on these important art pieces must be familiar with and conform to the “Policy for Works of Art in the Minnesota State Capitol”.



2012 MASTER PLAN

# SECTION EIGHT: FURNITURE AND ART

Fiscal Years 2013 - 2016

## Activities

### General Activities

- Furniture restoration and replication
  - Identify a furniture historian who can assist with the cataloging and development of replicated items
- Decorative art restoration and replication
  - Identify a Decorative Art Consultant that can provide guidance and direction on the restoration and replication of the decorative arts in the Capitol.

### Design Activities

- Decorative Arts
  - Investigate by performing scrap analysis under the direction of the OPM and the SHIPO.
  - Use Microscopic analysis to determine the original colors.
  - Match to the Color to the Munsell color number system.
  - Assist the AOR in the development of patterns and designs for the decorative bid package.
  - Oversee and manage the restorative and replication process.
- Furniture
  - Verify the existing catalog of historic furniture.
  - Determined the missing items and develop a complete list of furniture types.
  - Working with the AOR and their interior designers identify the room layouts that support the program developed by the Capitol Preservation Commission.
  - Determine the best approach for restoration and replication of the furniture in order to provide a complete assemblage of furniture to the Capitol.
  - Identify the best manufacturing process.
  - Develop documents with the AOR.
  - Develop a schedule and budget that the Capitol Preservation Commission can approve.

### Monuments and Public Art

#### General

Public art enriches the built environment and can improve our understanding of a place and its meaning in ways that buildings, landscape and infrastructure do not. Monuments belong to a particular category of commemorative public art that convey the values of a community. They tell the story of where a place has been and where it hopes to go. There may be opportunities for public art on the Capitol Campus to be integrated with public art in the Capitol Area neighborhoods.



Public art in Saint Paul has been supported by the civic commitment and private generosity of its citizens. The CAAPB's long-term policy of developing the Capitol Mall as a public park has produced memorials of significant civic importance in the last few years. The continuation of both State and private funding for the implementation and maintenance of public art is critical to future efforts. However, enthusiasm for the installation of commemorative works should be tempered with the primacy of maintaining the dignity of the Capitol Mall.

*Leif Erikson's monument may be appreciated in the context of the Capitol dome and as the park centerpiece.*

ART and Furniture

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SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

Fiscal Years 2012-2016

General

General Construction Costs

The budget has been developed through a series of analysis that include:

- Benchmarking
- Systems Analysis Estimating
- Investigation of Specialty Items
- Quantity Take Off of Specific Items
- Estimating Contingency for unknowns

This information has led to a rough order of magnitude estimate for project cost of \$241,000,000.

The analysis was categorized into the following CSI sections:

- |    |                                  |
|----|----------------------------------|
| 02 | Existing Conditions              |
| 02 | Asbestos Abatement               |
| 04 | Exterior Stone Restoration       |
| 05 | Roofing                          |
| 08 | Exterior Window Replacement      |
| 08 | Exterior Door Renovation         |
| 09 | Interior Historical Painting     |
| 09 | Interior Finish                  |
| 09 | Interior Finish                  |
| 09 | ADA Compliance and Accessibility |
| 14 | Freight Elevators                |
| 14 | Passenger Elevators              |
| 21 | Fire Protection                  |
| 22 | Plumbing                         |
| 23 | Mechanical Systems               |
| 26 | Fire Alarms                      |
| 26 | Electrical Systems               |
| 26 | Lightning Protection             |
| 26 | Historical Lighting Renovation   |
| 26 | Replica Historical Fixtures      |
| 27 | Telecommunications               |
| 28 | Security                         |
| 31 | Underground Excavation           |

Owner Costs

Owner Cost include all costs above and beyond the cost of the hard construction work. These are sometimes referred to as soft costs.

These costs include professional services such as:

- Owner program manger Fees,
- Architect and Engineering Fees,
- CM Preconstruction Services Fees
- Inspection Services Fees
- Commissioning Authority Fees
- Communication Design Services Fees

Other typical non-profession service items include:

- Contingencies
- General Expenses

However, for the restoration of the Minnesota Capitol, additional owner costs must be accounted for. These include:

- Historic Structures Report which will document the history and activities at the Capitol.
- Art work including both new art and restored works of art belonging to the State
- Relocation and moving costs for the occupants of the Capitol as well as for the displaced occupants of the future swing space.
- Swing Space ready costs
- Swing space for the occupants of the Capitol to use while the building is closed.
- Furniture designed to be sympathetic to the historic nature and design of the Capitol. This is above and beyond the typical furniture budget.

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011		
Program Costs		
Construction Costs	\$ 127,684,811.74	
Contractor Contingency	\$ 9,510,544.94	7.45%
Contractor Fee	\$ 4,659,613.41	3.65%
Total Construction Costs	\$ 141,854,970.09	
Owner Project Costs		
Project Mangement	\$ 1,483,000.00	1.05%
Architects	\$ 15,331,000.00	10.81%
Predesign - A/E Package	\$ 500,000.00	0.35%
Construction Contingency	\$ 14,832,000.00	10.46%
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%
Inspections - Special construcion and General	\$ 741,000.00	0.52%
Commissioning Energy services	\$ 2,000,000.00	1.41%
Security Equipment	\$ 1,851,000.00	1.30%
Furniture	\$ 7,416,000.00	5.23%
Total Owner Project Costs	\$ 49,900,000.00	
Total Project Costs	\$ 191,754,970.09	
Inflation at 11.79%	\$ 22,607,910.97	11.79%
Total with inflation	\$ 214,362,881.07	
Other Project Costs		
Design Guidelines/Master Plan	\$ 700,000.00	0.33%
CM PreConstruction	\$ 2,225,000.00	1.04%
Relocation moving costs	\$ 2,000,000.00	0.93%
Historic Structure Report	\$ 741,000.00	0.35%
General Expenses	\$ 741,000.00	0.35%
Swing Space	\$ 20,000,000.00	
Total Owner Costs	\$ 26,407,000.00	
Total Program Costs	\$ 240,769,881.07	
Total Estimated Cost	\$ 241,000,000.00	
Bond Request		

2012 MASTER PLAN



SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

CSI Construction Estimate

Fiscal Years 2012-2016

Minnesota State Capitol Historic Renovation									Sequence A	Sequence B	Sequence C	Sequence D
Draft Cost Estimate 12/23/2011									Attic	East	North/West	Public
All costs in 2011 dollars												
CSI DIVISION	ITEM	SUBITEM	PERCENT OF PROJECT	UNIT	QUANTITY	UNIT PRICE	COST	NOTES				
02	Existing Conditions			LS	1	\$4,600,000.00	\$4,600,000	Includes demolition and other Division 02 work.	\$ 1,150,000	\$ 1,150,000	\$ 1,150,000	\$ 1,150,000
02	Asbestos Abatement			LS	1	\$1,150,000.00	\$1,150,000	Removal of remaining asbestos in the Capitol	\$ 287,500	\$ 287,500	\$ 287,500	\$ 287,500
03	Concrete Floor Slabs			LS	1	\$7,475,000.00	\$7,475,000	New Slab in the new Mechanical spaces (Attic)	\$ 7,475,000			
04	Exterior Stone Restoration			SF	230,253	\$76.25	\$17,556,791	Estimate for repair only. Restoration cost not included. Design Cost for repairs have been budgeted with existing funds		\$ 17,556,791		
05	Roofing			SF	65,495	\$92.00	\$6,025,540	Design cost have been budgeted with existing funds		\$ 6,025,540		
08	Exterior Window Replacement			EA	248	\$9,200.00	\$2,281,600	Design cost have been budgeted with existing funds			\$ 2,281,600	
08	Exterior Door Renovation			EA	16	\$4,600.00	\$73,600	Install historical appearance hardware, refinish doors. Repairs to french door budgeted with existing funds.			\$ 73,600	
09	Interior Historical Painting			LS	1	\$17,595,000.00	\$17,595,000	Restore frescos and wall paint throughout the building				\$ 17,595,000
09	Interior Finish	Office Space		NSF	79,201	\$86.25	\$6,831,086	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing		\$ 2,049,326	\$ 4,098,651.75	\$ 683,109
09	Interior Finish	Meeting Rooms		NSF	33,620	\$172.50	\$5,799,450	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing		\$ 1,739,835	\$ 3,479,670	\$ 579,945
09	ADA Compliance and Accessibility			LS	1	\$1,150,000.00	\$1,150,000	Handrails, guardrails, staircase improvements		\$ 345,000	\$ 690,000	\$ 115,000
14	Freight Elevators			LS	1	\$303,600.00	\$303,600	Restoration of existing freight elevator			\$303,600	
14	Passenger Elevators			LS	1	\$1,472,000.00	\$1,472,000	Restoration of existing passenger elevators			\$1,472,000	
21	Fire Protection			GSF	287,986	\$6.23	\$1,795,017	Includes piping, sprinkler heads, storage tank, controls, pump		\$1,795,017		
22	Plumbing			GSF	287,986	\$9.87	\$2,841,558	Potable water systems, rest rooms, showers, roof drains, waste and vent piping		\$2,841,558		
23	Mechanical Systems			GSF	287,986	\$113.57	\$32,707,722	Heating and cooling systems		\$32,707,722		
26	Fire Alarms			GSF	287,986	\$7.27	\$2,093,082	Includes pull station, detectors, and alarms		\$2,093,082		
26	Electrical Systems			GSF	287,986	\$26.27	\$7,564,240	Panels, wire, outlets, non-historical lighting, emergency lighting, exit lighting		\$7,564,240		
26	Lightning Protection			LS	1	\$287,500.00	\$287,500	Renovate existing system		\$287,500		
26	Historical Lighting Renovation			LS	1	\$3,246,450.00	\$3,246,450	Restore bronze and faux brass fixtures throughout the building				\$3,246,450
26	Replica Historical Fixtures			EA	200	\$23,000.00	\$4,600,000	Historically accurate light fixtures for damaged, missing or replaced light fixtures				\$4,600,000
27	Telecommunications			GSF	287,986	\$12.49	\$3,596,657	Data and voice wiring (CAT5 or equivalent), fire alarm pull stations and control panels, strobes, horns		\$ 2,517,660	\$1,078,997	
28	Security			GSF	287,986	\$6.43	\$1,851,318	Motion detectors, security cameras, card readers, emergency broadcast system, magnetic detectors		\$ 1,295,923	\$555,395	
31	Underground Excavation			LS	1	\$234,600.00	\$234,600	Underground Storage Tank for Fire Protection	\$234,600			
Project Subtotal including 15% total contingency (Construction Contingency 10% + Estimating 5%)									\$ 9,147,100	\$ 80,256,694	\$ 15,471,014	\$ 28,257,004
Constructicon Costs with Contingency & Inflation									\$9,147,100	\$80,256,694	\$15,471,014	\$28,257,004
	Contractor General Conditions		8.00%	LS	1	\$10,650,544.94	\$10,650,545		\$ 731,768	\$ 6,420,536	\$ 1,237,681	\$ 2,260,560
	Contractor Fee		3.50%	LS	1	\$4,659,613.41	\$4,659,613		\$ 320,149	\$ 2,808,984	\$ 541,486	\$ 988,995
Total Construction Costs									\$ 10,199,017	\$ 89,486,214	\$ 17,250,181	\$ 31,506,559

2012 MASTER PLAN

SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

Activities

General

The construction has been broken into four sequences which the CM will manage and oversee. Each sequence is designed to advance the restoration of the Capitol in an effective manner over the four year period. They have also been developed in order to allow the Occupants (Executive, Judicial and Legislative branch of Government) to work in the building for as much time as possible prior to it's closure. Finally, the sequences have been developed in an organized manner to minimize any demobilization and remobilization of construction trades, which has a direct impact on the cost of the work due to time lost by subcontractors.

Sequence A - Mechanical & Electrical Attic costs

- The first sequence “A” will be focused on the installation of a new structural slab in the attic space above the third floor.
- This sequence will also include retaining professional services for the entire project.
- It is anticipated that while the work for the entire mechanical and electrical systems will not be included in this phase and may not be completely designed at the time of the Mechanical and Electrical subcontractor selection, it is in the best interest of the project to select them for the whole project and not piece meal the system through procurement processes.
- Exterior Envelope: Repair of the exterior stone and replacement of windows.

Sequence B - Restoration of East Wing

- The second sequence “B” will be focused on the vertical main runs for both mechanical and electrical services to the project through the west wing only. This sequence will allow the Legislative session to occur in 2014. The building will be closed following the session.
- Installation of the mechanical and electrical equipment and ventilation system.

Fiscal Years 2012-2016

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011			Sequence 1 Attic	Sequence 2 East
			Bonding Year 2012	
Program Costs				
Construction Costs	\$ 127,684,811.74		\$ 10,200,000.00	\$ 63,100,000.00
Contractor Contingency	\$ 9,510,544.94	7.45%	\$ 759,742.35	\$ 4,699,974.71
Contractor Fee	\$ 4,659,613.41	3.65%	\$ 372,229.52	\$ 2,302,714.02
Total Construction Costs	\$ 141,854,970.09		\$ 11,331,971.87	\$ 70,102,688.73
			\$ 11,401,000.00	\$ 70,642,000.00
Owner Project Costs				
Project Mangement	\$ 1,483,000.00	1.05%	\$ 371,000.00	\$ 371,000.00
Architects	\$ 15,331,000.00	10.81%	\$ 11,998,000.00	\$ -
Predesign - A/E Package	\$ 500,000.00	0.35%	\$ 500,000.00	
Construction Contingency	\$ 14,832,000.00	10.46%	\$ 1,070,000.00	\$ 7,612,000.00
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%		\$ 2,517,000.00
Inspections - Special construciton and General	\$ 741,000.00	0.52%	\$ 185,250.00	\$ 185,250.00
Commissioning Energy services	\$ 2,000,000.00	1.41%	\$ 500,000.00	\$ 500,000.00
Security Equipment	\$ 1,851,000.00	1.30%		\$ 1,295,700.00
Furniture	\$ 7,416,000.00	5.23%		
Total Owner Project Costs	\$ 49,900,000.00		\$ 14,624,250.00	\$ 12,480,950.00
Total Project Costs	\$ 191,754,970.09		\$ 25,956,221.87	\$ 82,583,638.73
Inflation at 11.79%	\$ 22,607,910.97	11.79%	\$ 3,060,238.56	\$ 9,736,611.01
Total with inflation	\$ 214,362,881.07		\$ 29,016,460.43	\$ 92,320,249.73
Other Project Costs				
Design Guidelines/Master Plan	\$ 700,000.00	0.33%	\$ 700,000.00	
CM PreConstruction	\$ 2,225,000.00	1.04%	\$ 1,230,000.00	
Relocation moving costs	\$ 2,000,000.00	0.93%		\$ 1,000,000.00
Historic Structure Report	\$ 741,000.00	0.35%	\$ 741,000.00	
General Expenses	\$ 741,000.00	0.35%	\$ 67,000.00	
Swing Space	\$ 20,000,000.00		\$ 8,000,000.00	\$ 12,000,000.00
Total Owner Costs	\$ 26,407,000.00		\$ 10,738,000.00	\$ 13,000,000.00
Total Program Costs	\$ 240,769,881.07		\$ 39,754,460.43	\$ 105,320,249.73
Total Estimated Cost	\$ 241,000,000.00		\$ 40,000,000.00	\$ 106,000,000.00
Bond Request				\$ 146,000,000.00

2012 MASTER PLAN

SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

Activities

Fiscal Years 2012-2016

General

Sequence C - North & West Wing Renovation

- The third sequence “C” will follow immediately behind that of B. It will first provide the mechanical and electrical vertical main lines similar to that of sequence B.
- It will include the interior layout for meeting rooms and office space for both sequence B and C. In this way the decision as to which offices and how many meeting rooms will not need to be finalized until the middle part of 2013. Thereby allowing the Capitol Preservation Commission ample time to listen to and address concerns prior to making the final decision.
- With the interior layout will also come the installation of all the remaining mechanical and electrical horizontal equipment.

Sequence D - Restoration of the Public Spaces

- The fourth sequence “D” is focused on the restoring the public spaces. This work will include the installation of proper ventilation which does not currently exist.
- It will include the installation of smoke and fire protection elements that will be nested in and around the decoratively painted ceilings and walls.
- With the mechanical and electrical work completed the decorative restoration work will be performed. This will include:
  - Decorative Painting of the Ceilings and walls
  - Restoration and Replication of the historic bronze light fixtures
  - Plaster Ceiling Restoration
  - Marble and Stone Cleaning
  - Woodwork Restoration for Doors and other wood materials.
- Once Complete, the owner will install the new historically replicated furniture and new artwork.

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011			Sequence 3 North/West	Sequence 4 Public
			Bonding Year 2014	
Program Costs				
Construction Costs	\$ 127,684,811.74		\$ 27,750,000.00	\$ 25,495,000.00
Contractor Contingency	\$ 9,510,544.94	7.45%	\$ 2,066,946.09	\$ 1,898,983.44
Contractor Fee	\$ 4,659,613.41	3.65%	\$ 1,012,683.27	\$ 930,391.35
Total Construction Costs	\$ 141,854,970.09		\$ 30,829,629.35	\$ 28,324,374.79
			\$ 31,064,000.00	\$ 28,615,000.00
Owner Project Costs				
Project Mangement	\$ 1,483,000.00	1.05%	\$ 371,000.00	\$ 370,000.00
Architects	\$ 15,331,000.00	10.81%	\$ 3,333,000.00	\$ -
Predesign - A/E Package	\$ 500,000.00	0.35%		
Construction Contingency	\$ 14,832,000.00	10.46%	\$ 3,259,000.00	\$ 2,891,000.00
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%	\$ 1,078,000.00	\$ 2,151,000.00
Inspections - Special construciton and General	\$ 741,000.00	0.52%	\$ 185,250.00	\$ 185,250.00
Commissioning Energy services	\$ 2,000,000.00	1.41%	\$ 500,000.00	\$ 500,000.00
Security Equipment	\$ 1,851,000.00	1.30%	\$ 555,300.00	
Furniture	\$ 7,416,000.00	5.23%		\$ 7,416,000.00
Total Owner Project Costs	\$ 49,900,000.00		\$ 9,281,550.00	\$ 13,513,250.00
Total Project Costs	\$ 191,754,970.09		\$ 40,111,179.35	\$ 41,837,624.79
Inflation at 11.79%	\$ 22,607,910.97	11.79%	\$ 4,729,108.05	\$ 4,932,655.96
Total with inflation	\$ 214,362,881.07		\$ 44,840,287.40	\$ 46,770,280.75
Other Project Costs				
Design Guidelines/Master Plan	\$ 700,000.00	0.33%		
CM PreConstruction	\$ 2,225,000.00	1.04%	\$ 995,000.00	
Relocation moving costs	\$ 2,000,000.00	0.93%	\$ 1,000,000.00	
Historic Structure Report	\$ 741,000.00	0.35%		
General Expenses	\$ 741,000.00	0.35%	\$ 674,000.00	
Swing Space	\$ 20,000,000.00			
Total Owner Costs	\$ 26,407,000.00		\$ 2,669,000.00	\$ -
Total Program Costs	\$ 240,769,881.07		\$ 47,509,287.40	\$ 46,770,280.75
Total Estimated Cost	\$ 241,000,000.00		\$ 48,000,000.00	\$ 47,000,000.00
Bond Request				\$ 95,000,000.00

2012 MASTER PLAN



SECTION NINE:

BUDGET AND SCHEDULE OF THE RESTORATION

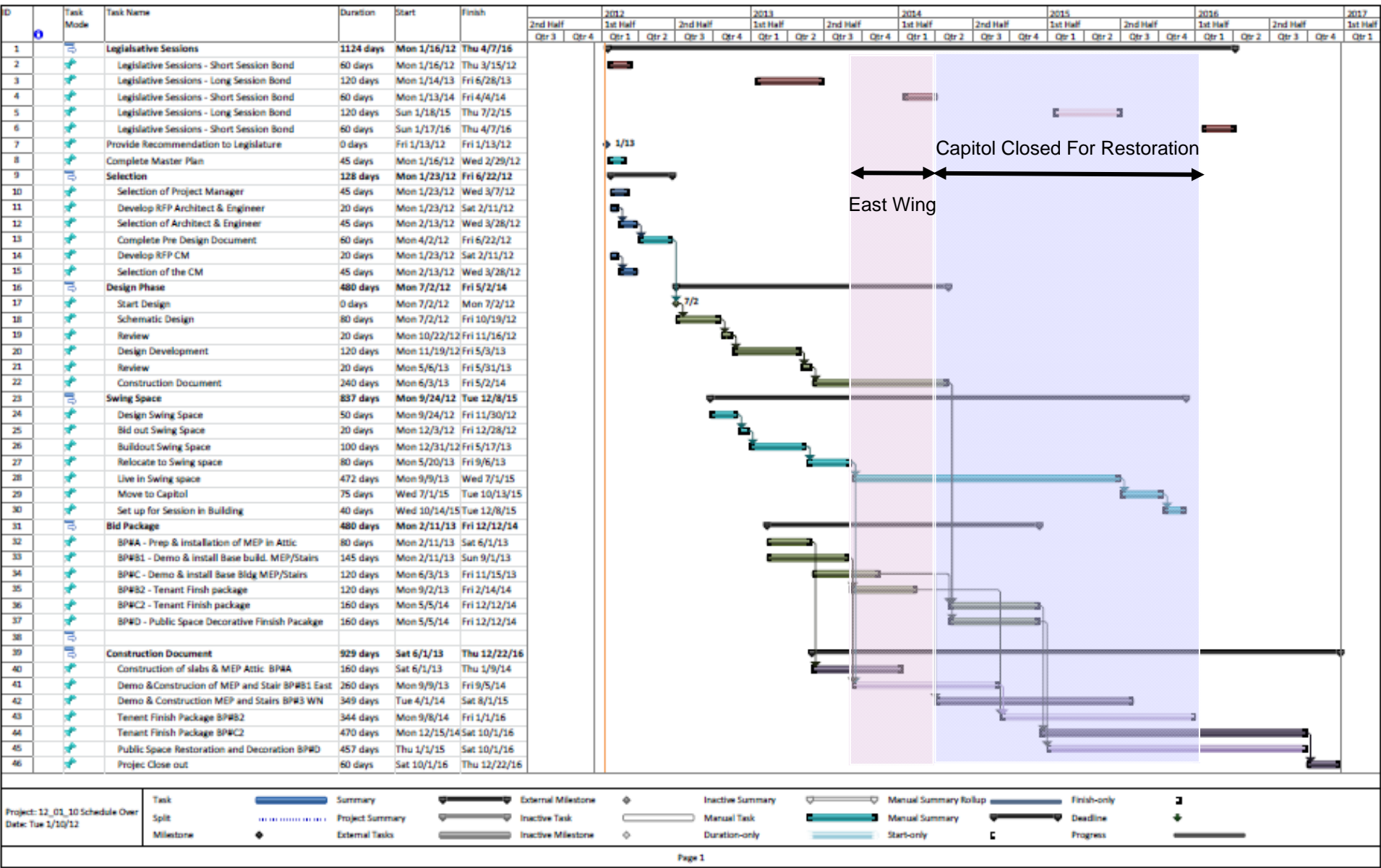
Fiscal Years 2012-2016

Activities

General

Schedule

- The schedule for the restoration of the Minnesota Capitol has been developed around the understanding that the procurement process will be built around a CM @ Risk or CMr model. This process will allow for multiple bid packages. Currently, there are six bid packages contemplated for the basic activities of the project. More may be desired as the work progresses.
- The schedule has also been designed to allow the CMr to manage the flow of the work to minimize any down time associated with the sequences of work.
- It has been developed to keep the building open in sequence A and partially open during sequence B. The Capitol will be closed to the public following the legislative session of 2014 for less than two years.



2012 MASTER PLAN

# SECTION TEN: MAINTENANCE AND STEWARDSHIP PLANNING

Fiscal Years 2017 - 2036

## General

Maintenance and Stewardship are critical aspects of the restoration of the Capitol. Restoring an iconic building such as the Capitol for the next century of life is a major undertaking for the taxpayers. Equally important is how that investment is cared for over that 100 year period following the restoration.

In order to allow the Capitol to be cared for properly over the next 100 years following the restoration there are specific items that must be addressed by the architects, engineers, legislature, administration and maintenance personal. These items can be divided into three main focus area:

1. Architectural Challenges - these are items that the architects and engineers need to pay attention to during the restoration that will have a major impact on how the building is cared for over time.
2. Maintenance Activities - include those activities that are currently be done as well as suggested modifications that should be considered following the restoration.
3. Stewardship Actions - those actions that need to be done by the stewards of the building to protect it and preserve it for future generations during the next century of life.

Each of these items will need to be carefully addressed throughout the planning, design and construction process of the restoration.

## Architectural Challenges

There are a number of architectural challenges associated with the restoration of the Cass Gilbert Minnesota Capitol that will be addressed during the design process by the AE/C team. Many of these challenges are either existing problems or potential problems impacting the long term maintenance of the Capitol. The AE/C team should take great care in addressing those design elements that are potential maintenance problems for the next 100 years.

At the beginning of the design phase the OPM will organize a workshop that will be focused on “Capitol Quality” and what that term means to the AE/C team as well as to the Capitol stakeholders. The definition of Capitol Quality will be critical to define since it will impact all areas of the restoration and specifically maintenance and stewardship activities. Additionally the OPM will coordinate with the Plant Management personal as needed for all additional meetings with the AE/C team.

The following items have been identified by Plant Management as issues that need further discussion in the design phase:

- Custom Door hardware, locksets, handles & closure
- Pivot on the exterior oak doors
- Varnish on the exterior oak doors
- Door should be prepared for security access
- Limestone floors at the entry to the Capitol
- Access to ceiling fixtures, cove lighting & sconce
- Pigeon problems
- Lighting of the flag poles on top of Capitol
- Ceremonial flag pole
- Central Lighting controls in maintenance office
- Electrical Cabling - No MC Cable
- Low Voltage and Cable Tray organization
- Elevator and Elevator shafts historic design
- Stair access from basement to ground floor
- Coordination of room numbers
- Fire suppression system
- Balcony access and accessibility



2012 MASTER PLAN



# SECTION TEN: MAINTENANCE AND STEWARDSHIP PLANNING

Fiscal Years 2016-2035

## Maintenance Activities

Following the Restoration of the Capitol, it will be imperative that the Capitol be maintained in a fashion that is consistent with the needs of the historic and new materials. The following is a brief list of materials and or items that will require ongoing maintenance to protect and preserve the restored work.

The OPM working with the architects and Plant Management will develop a material care manual that can be used by the Plant Management going forward to both plan and budget their work.

It is recommended that following the restoration the Capitol Preservation Commission develop and identify an ongoing budget that will be used to fund the maintenance on the following items:

- Decorative Art - painting on walls & ceilings
- Stone Walls Interior - cleaning and repair
- Exterior Stone - cleaning, repair & replacement
- Bronze Light Fixtures - cleaning & repair
- Brass Fixtures - natural patina & cleaning
- Decorative Rail - cleaning
- Ceiling and cove lighting - re-lamping
- Exterior lighting - re-lamp with right color
- Trash Receptacles - cleaning
- Marble Floors - remove wax, clean and polish
- Terrazzo Floors - remove wax, clean and polish
- Limestone Floors - clean
- Windows - paint & clean
- Quadriga - touch-up green pitting annually. Estimated cost \$25,000 annually.
- General Cleaning to be green cleaning

## Stewardship Actions

With the completion of the Capitol restoration the Capitol Preservation Commission's primary focus will be to function as a Steward for the Capitol. This activity will focus upon the operational aspects, conservation needs and maintenance responsibilities.

The Commission will need to address the following items:

- Use of the facility by the public – currently the public is allowed to use the public spaces in the Capitol. However, public space usage should be governed by an approved Rules of Conduct policy that addresses all manner of operation and management. The Capitol Preservation Commission should be part of this policymaking
- Tenant Owners Manual - with the restored capitol there will be many things that the tenants will need to know about working in the Capitol. An owners manual will help limit the amount of damage caused by unknowing tenants who desire to hang objects or relocate furniture from one space to another.
- Purchasing of Materials - the commission may want to identify a procurement process for the Capitol that will allow for Plant Management to purchase items to maintain the building without having to go through the standard procurement process.
- Energy Management - the Commission should encourage the use of meters to identify the use of energy in the building and to set standards and goals for energy consumption.
- Preservation Emergency Fund - the Commission should consider the development of a emergency fund to take care of or items needing repairs that are outside of the standard schedule of maintenance in order to maintain the facility properly.
- Decision Making Body - the Capitol Preservation Commission should be the decision making body.



2012 MASTER PLAN



# APPENDIX ONE: SCHEDULE MODIFICATION OPTION SEQUENCE "C" NORTH & WEST WING CLOSURE

Fiscal Years 2014-2015

## Activities

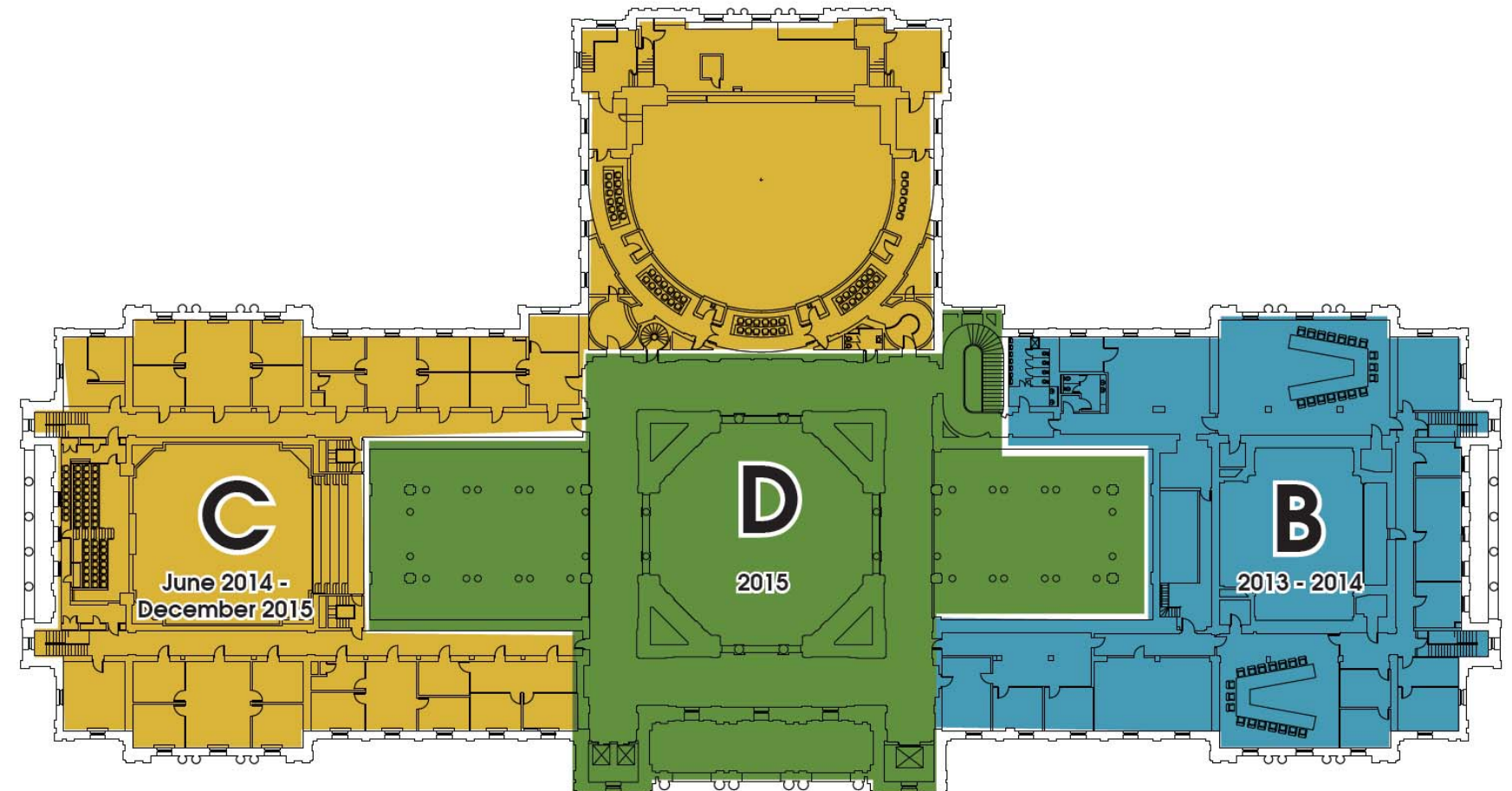
North and West Wing Closure and Restoration

### I. 2012

- Following the selection of the AE/C team the OPM will conduct a workshop that will kick off the design work for the Architects and Engineers, as well as the pre-construction work the CMr.
- The OPM will work with the Capitol Preservation Commission, the legislature and other constitutional officers to resolve the space planning of the capitol.
- Working with the stakeholders and the Capitol Preservation Commission, the AE/C team will develop the documents for:
  - Swing and Permanent space layouts
  - Abatement
  - Demolition
  - Vertical Mechanical and Electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.
- A separate design team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2013.
- Using the Stone Study that the Department of Administration had prepared, the AEC team will issue documents for the Restoration, Repair, and Repointing of the exterior Stone of the Building. These documents will be issued as a separate bid package by the CM in 2014, such that work may begin in early spring following the freezing temperatures.

### II. 2013

- The AE/C team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2013.
- The AE/C team will finalize all documents and bids in preparation for the beginning of construction of Se-



Floors Included:

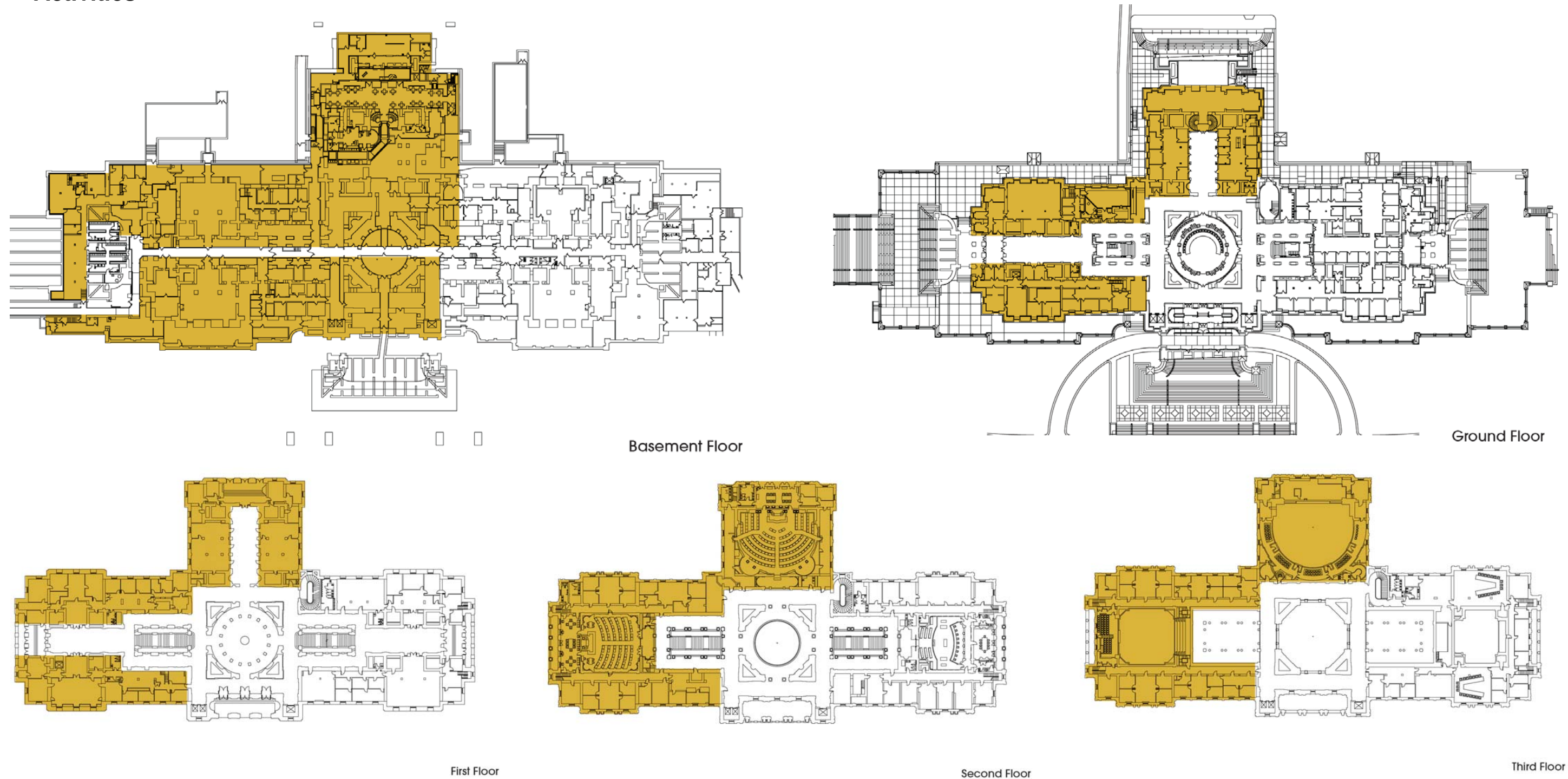
Lower Level	Second Floor
Ground Floor	Third Floor
First Floor	

2012 MASTER PLAN

# APPENDIX ONE: SCHEDULE MODIFICATION OPTION SEQUENCE "C" NORTH & WEST WING CLOSURE

Activities

Fiscal Years 2013-2015



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# APPENDIX ONE: SCHEULE MODIFICATION OPTION

## SEQUENCE "C" NORTH & WEST WING CLOSURE

Fiscal Years 2013-2015

### Implementation

- quence "C".
- The AE/C team will continue to work with the OPM, Stakeholder and the Capitol Preservation Commission to determine the space organization and office locations within the Capitol.
- To accomplish this schedule the CMr working with OPM and the architect will need to develop a schedule that may include working of multiple crews at multiple times throughout the daytime and evening hours. The CMr will provide this schedule prior to starting work.
- Following the Legislative Session in 2013 all occupants of the west and north wings from the basement to third floors will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the Capitol North and the West wings from the Basement to the forth floor sequence "C" will be Closed to the public and legislature.
- Abatement and Demolition of the interior of the North and the West wings will be the first construction activity while other construction is proceeding in the East wing.
- The CM will need to assure and monitor the abatement work in the Capitol to assure the workers from other trades remain safe.
- Following the abatement and demolition of all interior non historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new Mechanical and the Electrical locations.
- *Note: the selection of the Mechanical and Electrical Sub-contractors is a critical step in the restoration process. It is highly recommended that the OPM and the CM work together to develop a selection process that would allow the Mechanical and Electrical Sub-contractors to be selected for the entire Capitol restoration verses the possible selection of different sub-contractors for different phases of the work which may have an impact on both responsibility and quality.*

- The CM, working with the selected Mechanical and Electrical contractors, will install the main mechanical, electrical and communication systems in the vertical chases identified in the bid documents.
- The OPM, Stakeholders and the Capitol Preservation Commission shall finalize the space layout or office locations for the occupants of the Capitol prior to the legislative session in 2014 . This will allow the AE/C team to move forward with documentation for the office and associated spaces within the Capitol.
- It is anticipated all work will be completed as follows:
  - Space Plans complete - Jun. 2013
  - Abatement and Demolition - Jan. 2014
  - Vertical MEP Systems installation - Mar. 2014
  - Tenant Finish build out complete - Nov. 2014
  - Commissioning - Feb. 2015

### III. 2014

- The AEC team will coordinate the release of the tenant finish package with the completion of the mechanical and electrical vertical systems integration into the building.
- The tenant finish package will provide information on both the public meeting locations and the office space.
- Install mechanical equipment
- Replace flat roof

### IV. 2015

- Commissioning of Systems completes
- Sequence "C" Complete

2012 MASTER PLAN



# APPENDIX ONE: SCHEDULE MODIFICATION OPTION SEQUENCE "B" EAST WING CLOSURE

Fiscal Years 2013-2016

## Activities

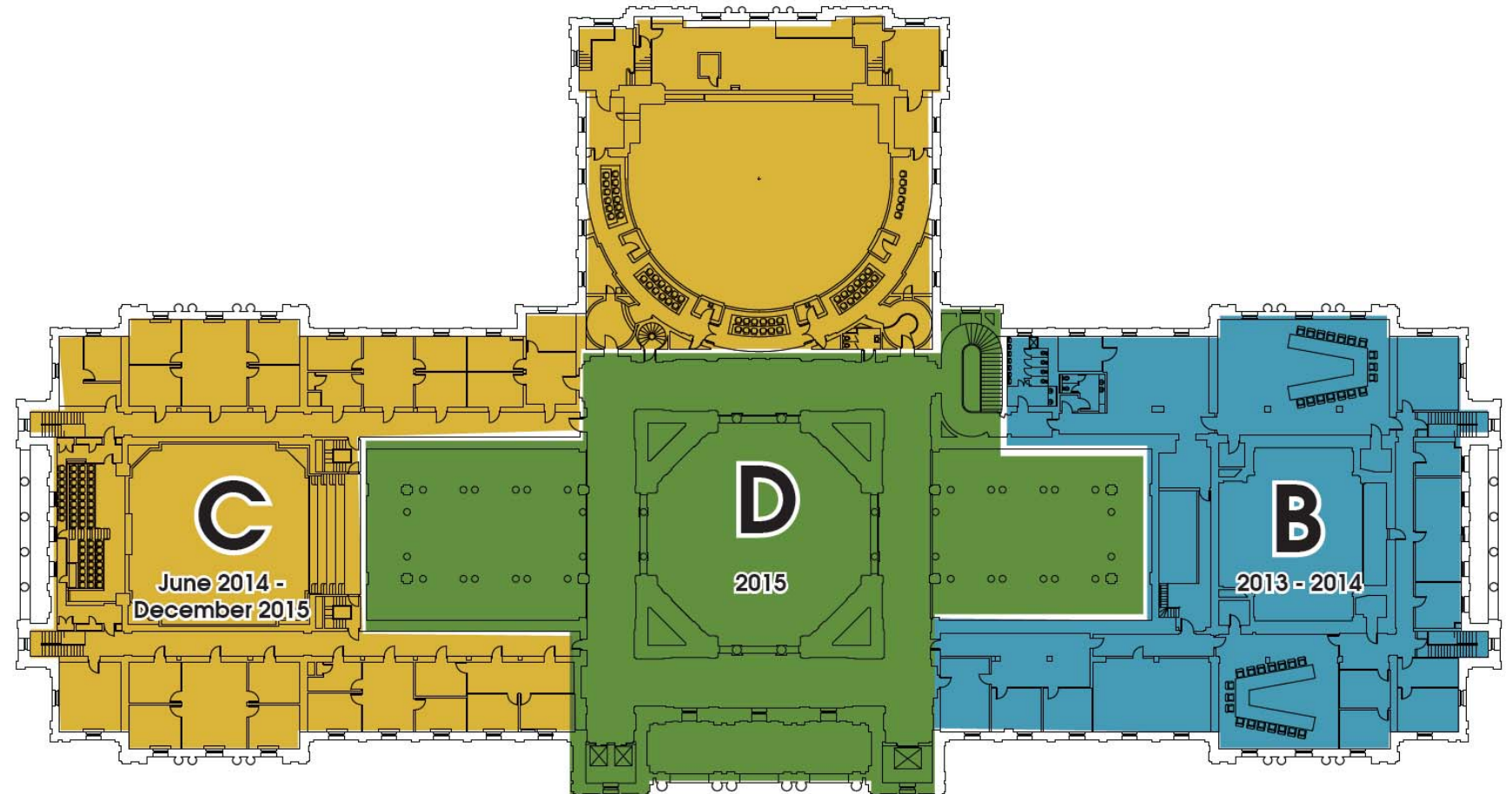
### East Wing Closure and Restoration

#### I. 2013

- Following the legislative session in 2013 the OPM will conduct a workshop that will kick off the design work for the Architects and Engineers, as well as the pre-construction work the CMr.
- Working with the stakeholders and the Capitol Preservation Commission the AEC team will develop the documents for:
  - Swing and Permanent space layouts modifications
  - Abatement
  - Demolition
  - Vertical Mechanical and Electrical Distribution
  - Meeting Room Standards that may be adapted to the large spaces in the east wing.
- A separate design team will issue documents for the build out of the swing space and permanent space for those occupants to be relocated. This space must be ready for occupancy immediately following the legislative session in 2013.

#### II. 2014

- The AE/C team will finalize all documents and bids in preparation for the beginning of construction.
- Prior to the Legislative Session in 2015 all occupants of the east wing from the basement to third floor will be relocated to the associated swing or permanent space.
- Once the occupants are relocated from the Capitol the east wing from the Basement to the forth floor would be closed. The CM would seal off the space from the public for safety and security purposes.



#### Floors Included:

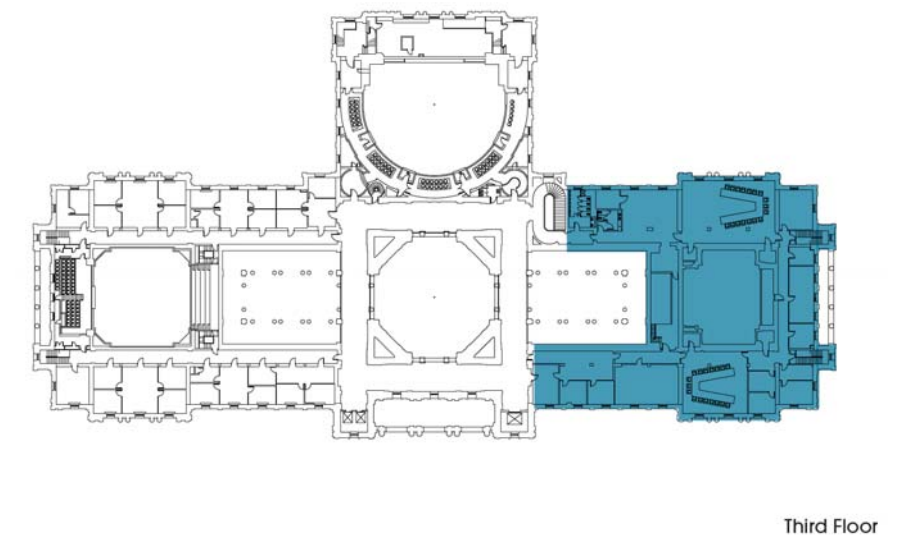
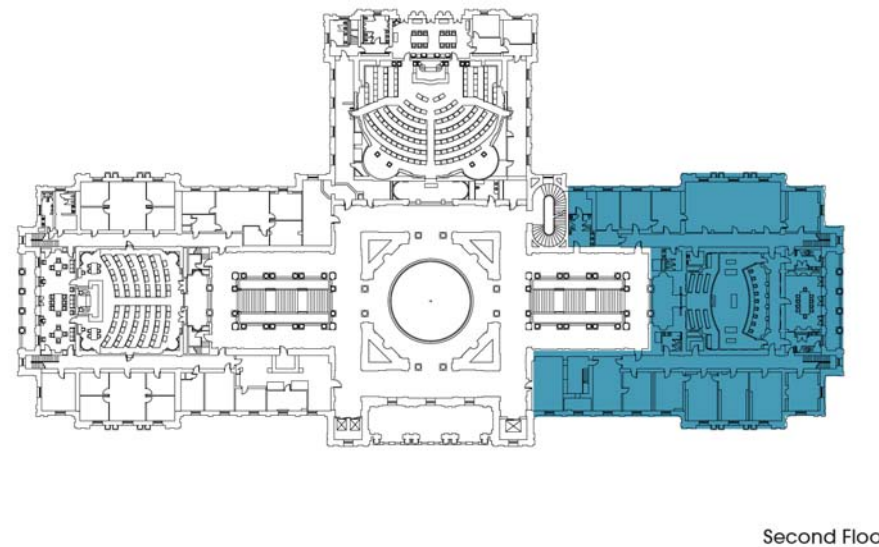
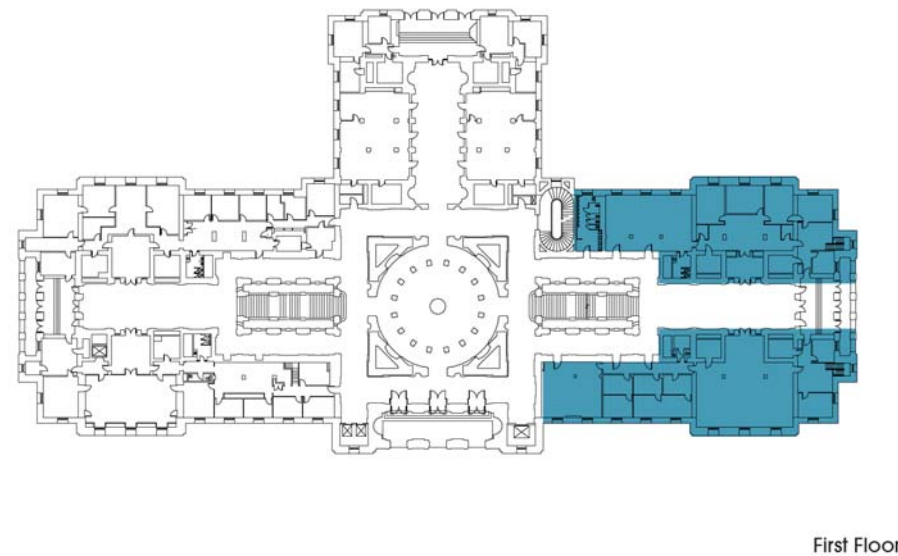
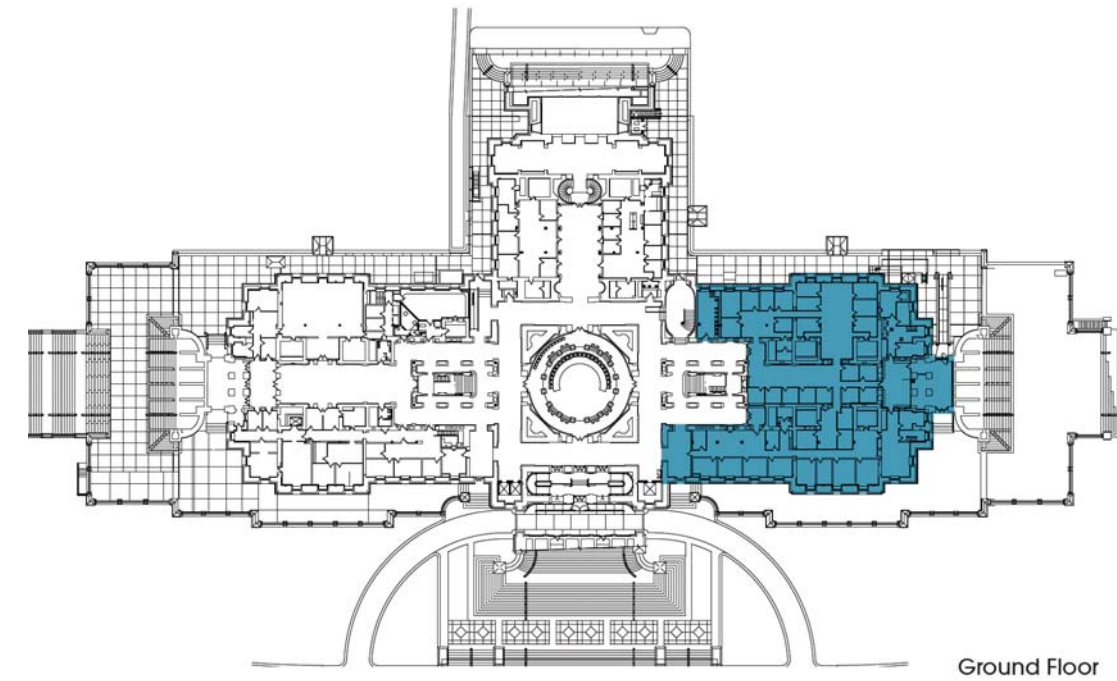
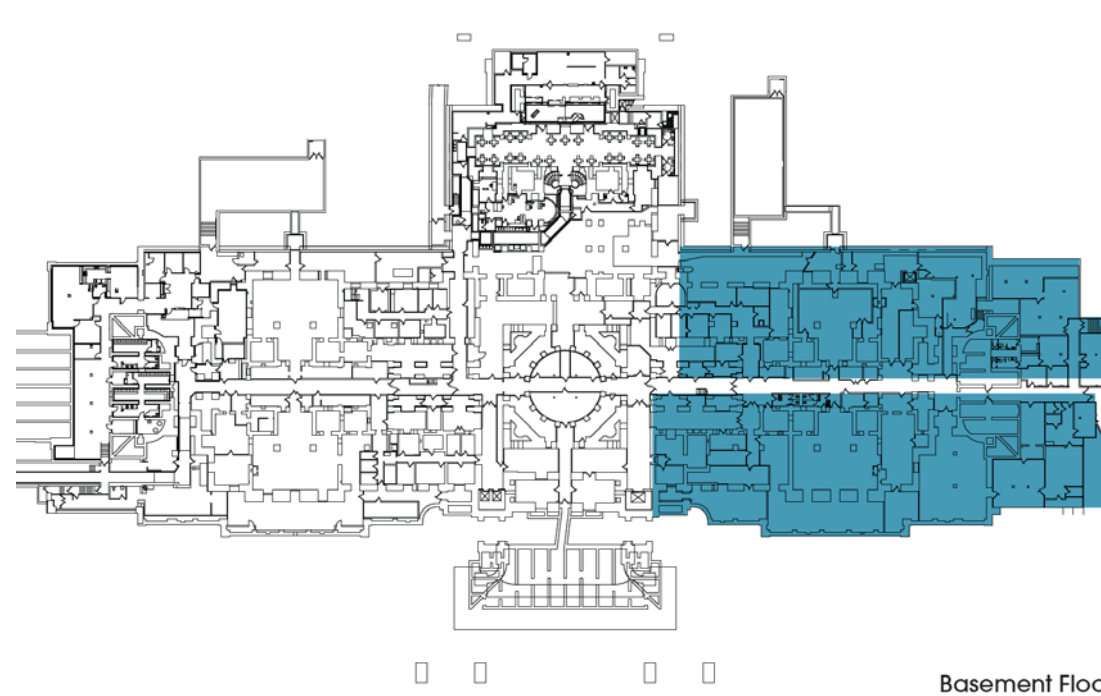
Lower Level	Second Floor
Ground Floor	Third Floor
First Floor	

2012 MASTER PLAN

# APPENDIX ONE: SCHEDULE MODIFICATION OPTION SEQUENCE "B" EAST WING CLOSURE

Fiscal Years 2013-2016

## Activities



## 2012 MASTER PLAN

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APPENDIX ONE: SCHEDULE MODIFICATION OPTION  
SEQUENCE “B” EAST WING CLOSURE

Implementation	Fiscal Years 2013-2016
----------------	------------------------

II. 2015

- Abatement and demolition of the interior of the east wing would be the first construction activity to begin.
- Following the abatement and the demolition of all interior non-historic walls and partitions, as well as the existing mechanical and electrical components, the CM will work through the layout process for the new Mechanical and the Electrical locations.
- New Mechanical and Electrical systems to be installed with order to minimize maintenance costs and to provide a flexible and adaptable platform for future modifications. The order is to start in the basement floor for Electrical distribution and District Energy Services and in the attic for the air distribution.
- The CM working with the selected Mechanical and Electrical contractors will install the mechanical, electrical, communication, and other systems in the vertical chases that are identified in the bid documents.
- *Note: the selection of the Mechanical and Electrical Sub-contractors is a critical step in the restoration process. It is highly recommended that the OPM and the CM work together to develop a selection process that would allow the Mechanical and Electrical Sub-contractors to be selected for the entire Capitol restoration verses the possible selection of different sub-contractors for different phases of the work which may have an impact on both responsibility and quality.*
- During the 2015 Legislative session the CM shall take precautions to eliminate noise, dust and other construction activities that will interfere with the legislative session. The construction activities may need to be stopped or relocated to another location in the building during this time. The AE/C team should consider this during the planning process so as to help in coordinating the work with the legislative timeline.
- The AE/C team will coordinate the release of the tenant finish package with the completion of the

mechanical and electrical systems integration into the building.

- The tenant finish package will provide information on both the public meeting locations and the office space.
- The east wing includes a public area that has been used as an office space for many years. This space will be returned to public use and will be designed as a gathering space for the public prior to attending committee room meetings. The pubic space will be returned to it’s original Cass Gilbert design, which will include the restoration of:
  - Light fixtures
  - Plaster ceiling using the same techniques used originally
  - Decorative painting identical to the other locations on the ground floor
  - Floor material will be reinstalled or cleaned to maintain the public space
- The AE/C team will issue the Public Space Package as a separate bid package due to it’s unique requirement and products.
- The OPM and the CM will investigate the opportunity of issuing this bid package using design assist contracting due to the unique nature of this portion of the work.
- *Note: This will be the first of two bid packages that will consider the complete restoration of elements of the building within the pubic space. These elements; decorative painting, bronze light fixtures, floor finishes, wall treatment and plaster ceiling work, are artisan trade type elements and ,as such, should be procured as a design assist process and they should be procured for the entire project so at to not mix and match different artistic styles within the same building. This will alleviate the already complicated process of restoring the Cass Gilbert designs.*
- It is anticipated that all work will be complete as

follows:

- |                                       |           |
|---------------------------------------|-----------|
| • Abatement and Demolition -          | Mar. 2015 |
| • Vertical MEP Systems installation - | Sep. 2015 |
| • Tenant Finish build out complete -  | Mar. 2016 |
| • Public Space Restoration -          | Mar. 2016 |

V. 2016

- Project Complete



# APPENDIX A: SCHEDULE MODIFICATION OPTION

## BUDGET AND SCHEDULE OF THE RESTORATION

Fiscal Years 2012-2016

### General

#### General Construction Costs

The budget has been developed through a series of analysis that include:

- Benchmarking
- Systems Analysis Estimating
- Investigation of Specialty Items
- Quantity Take Off of Specific Items
- Estimating Contingency for unknowns

This information has led to a rough order of magnitude estimate for project cost of \$241,000,000.

The analysis was categorized into the following CSI sections:

- 02 Existing Conditions
- 02 Asbestos Abatement
- 04 Exterior Stone Restoration
- 05 Roofing
- 08 Exterior Window Replacement
- 08 Exterior Door Renovation
- 09 Interior Historical Painting
- 09 Interior Finish
- 09 Interior Finish
- 09 ADA Compliance and Accessibility
- 14 Freight Elevators
- 14 Passenger Elevators
- 21 Fire Protection
- 22 Plumbing
- 23 Mechanical Systems
- 26 Fire Alarms
- 26 Electrical Systems
- 26 Lightning Protection
- 26 Historical Lighting Renovation
- 26 Replica Historical Fixtures
- 27 Telecommunications
- 28 Security
- 31 Underground Excavation

#### Owner Costs

Owner Cost include all costs above and beyond the cost of the hard construction work. These are sometimes referred to as soft costs.

These costs include professional services such as:

- Owner program manger Fees,
- Architect and Engineering Fees,
- CM Preconstruction Services Fees
- Inspection Services Fees
- Commissioning Authority Fees
- Communication Design Services Fees

Other typical expense items include:

- Contingencies
- General Expenses

For the restoration of the Minnesota Capitol, the following additional owner costs must be accounted for. These include:

- Historic Structures Report which will document the history and activities at the Capitol.
- Art work including both new art and restored works of art belonging to the State
- Relocation and moving costs for the occupants of the Capitol as well as for the displaced occupants of the future swing space.
- Swing Space ready costs
- Swing space for the occupants of the Capitol to use while the building is closed.
- Furniture designed to be complementary to the historic nature and design of the Capitol. This is above and beyond the typical furniture budget.

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011		
Program Costs		
Construction Costs	\$ 127,684,811.74	
Contractor Contingency	\$ 9,510,544.94	7.45%
Contractor Fee	\$ 4,659,613.41	3.65%
Total Construction Costs	\$ 141,854,970.09	
Owner Project Costs		
Project Mangement	\$ 1,483,000.00	1.05%
Architects	\$ 15,331,000.00	10.81%
Predesign - A/E Package	\$ 500,000.00	0.35%
Construction Contingency	\$ 14,832,000.00	10.46%
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%
Inspections - Special construcion and General	\$ 741,000.00	0.52%
Commissioning Energy services	\$ 2,000,000.00	1.41%
Security Equipment	\$ 1,851,000.00	1.30%
Furniture	\$ 7,416,000.00	5.23%
Total Owner Project Costs	\$ 49,900,000.00	
Total Project Costs	\$ 191,754,970.09	
Inflation at 11.79%	\$ 22,607,910.97	11.79%
Total with inflation	\$ 214,362,881.07	
Other Project Costs		
Design Guidelines/Master Plan	\$ 700,000.00	0.33%
CM PreConstruction	\$ 2,225,000.00	1.04%
Relocation moving costs	\$ 2,000,000.00	0.93%
Historic Structure Report	\$ 741,000.00	0.35%
General Expenses	\$ 741,000.00	0.35%
Swing Space	\$ 20,000,000.00	9.33%
Total Owner Costs	\$ 26,407,000.00	
Total Program Costs	\$ 240,769,881.07	
Total Estimated Cost	\$ 241,000,000.00	

2012 MASTER PLAN

APPENDIX A: SCHEDULE MODIFICATION OPTION

BUDGET AND SCHEDULE OF THE RESTORATION

CSI Construction Estimate

Fiscal Years 2012-2016

Minnesota State Capitol Historic Renovation									Sequence A	Sequence C	Sequence B	Sequence D
Draft Cost Estimate 12/23/2011									Attic/Ext/BMT	North - West	East	Public
All costs in 2011 dollars												
CSI DIVISION	ITEM	SUBITEM	PERCENT OF PROJECT	UNIT	QUANTITY	UNIT PRICE	COST	NOTES				
02	Existing Conditions			LS	1	\$4,600,000.00	\$4,600,000	Includes demolition and other Division 02 work.	\$ 1,000,000.00	\$ 2,000,000.00	\$ 1,000,000	\$ 600,000
02	Asbestos Abatement			LS	1	\$1,150,000.00	\$1,150,000	Removal of remaining asbestos in the Capitol	\$ 287,500.00	\$ 575,000.00	\$ 287,500	\$ -
03	Concrete Floor Slabs			LS	1	\$7,475,000.00	\$7,475,000	New Slab in the new Mechanical spaces (Attic)	\$ 7,475,000.00	\$ -	\$ -	\$ -
04	Exterior Stone Restoration			SF	230,253	\$76.25	\$17,556,791	Estimate for repair only. Restoration cost not included. Design Cost for repairs have been budged with existing funds	\$ 17,556,791.25	\$ -	\$ -	\$ -
05	Roofing			SF	65,495	\$92.00	\$6,025,540	Design cost have been budgeted with existing funds	\$ -	\$ 6,025,540.00	\$ -	\$ -
08	Exterior Window Replacement			EA	248	\$9,200.00	\$2,281,600	Design cost have been budgeted with existing funds	\$ 2,281,600.00	\$ -	\$ -	\$ -
08	Exterior Door Renovation			EA	16	\$4,600.00	\$73,600	Install historical appearance hardware, refinish doors. Repairs to french door budgeted with existing funds.	\$ -	\$ 73,600.00	\$ -	\$ -
09	Interior Historical Painting			LS	1	\$17,595,000.00	\$17,595,000	Restore frescos and wall paint throughout the building	\$ -	\$ -	\$ -	\$17,595,000
09	Interior Finish	Office Space		NSF	79,201	\$86.25	\$6,831,086	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing	\$ -	\$ 4,576,827.79	\$ 2,254,258	\$ -
09	Interior Finish	Meeting Rooms		NSF	33,620	\$172.50	\$5,799,450	Carpet, ceiling, woodwork, cove base, window treatments, interior door refinishing	\$ -	\$ 3,885,631.50	\$ 1,913,819	\$ -
09	ADA Compliance and Accessibility			LS	1	\$1,150,000.00	\$1,150,000	Handrails, guardrails, staircase improvements	\$ -	\$ -	\$ -	\$1,150,000
14	Freight Elevators			LS	1	\$303,600.00	\$303,600	Restoration of existing freight elevator	\$ -	\$ 303,600.00	\$ -	\$ -
14	Passenger Elevators			LS	1	\$1,472,000.00	\$1,472,000	Restoration of existing passenger elevators	\$ -	\$ 736,000.00	\$ 736,000	\$ -
21	Fire Protection			GSF	287,986	\$6.23	\$1,795,017	Includes piping, sprinkler heads, storage tank, controls, pump	\$ -	\$ 1,202,661.21	\$592,356	\$ -
22	Plumbing			GSF	287,986	\$9.87	\$2,841,558	Potable water systems, rest rooms, showers, roof drains, waste and vent piping	\$ -	\$ 1,903,843.77	\$937,714	\$ -
23	Mechanical Systems			GSF	287,986	\$113.57	\$32,707,722	Heating and cooling systems	\$ 5,565,012.43	\$ 11,783,454.69	\$ 5,891,727.34	\$ 9,467,528
26	Fire Alarms			GSF	287,986	\$7.27	\$2,093,082	Includes pull station, detectors, and alarms	\$ 497,567.28	\$ 1,022,318.99	\$ 573,195.98	
26	Electrical Systems			GSF	287,986	\$26.27	\$7,564,240	Panels, wire, outlets, non-historical lighting, emergency lighting, exit lighting	\$ 1,763,499.24	\$ 3,729,254.30	\$ 2,071,486.74	
26	Lightning Protection			LS	1	\$287,500.00	\$287,500	Renovate existing system	\$ -	\$ -	\$ 287,500.00	
26	Historical Lighting Renovation			LS	1	\$3,246,450.00	\$3,246,450	Restore bronze and faux brass fixtures throughout the building		\$ -		\$3,246,450
26	Replica Historical Fixtures			EA	200	\$23,000.00	\$4,600,000	Historically accurate light fixtures for damaged, missing or replaced light fixtures		\$ -		\$4,600,000
27	Telecommunications			GSF	287,986	\$12.49	\$3,596,657	Data and voice wiring (CAT5 or equivalent), fire alarm pull stations and control panels, strobes, horns	\$ 611,948.51	\$ 1,999,754.79	\$ 984,953.85	
28	Security			GSF	287,986	\$6.43	\$1,851,318	Motion detectors, security cameras, card readers, emergency broadcast system, magnetic detectors	\$ 440,095.11	\$ 904,234.67	\$ 506,988.22	
31	Underground Excavation			LS	1	\$234,600.00	\$234,600	Underground Storage Tank for Fire Protection	\$234,600	\$ -		
Project Subtotal including 15% total contingency (Construction Contingency 10% + Estimating 5%)									\$ 37,713,613.82	\$ 40,721,721.71	\$ 18,037,499	\$ 36,658,978
Construciton Costs with Contingency & Inflation									\$ 37,713,613.82	\$ 40,721,721.71	\$18,037,499	\$36,658,978
Contractor General Conditions									\$ 3,017,089.11	\$ 3,257,737.74	\$ 1,443,000	\$ 2,932,718
Contractor Fee									\$ 1,319,976.48	\$ 1,425,260.26	\$ 631,312	\$ 1,283,064
Total Construction Costs									\$ 42,050,679.41	\$ 45,404,719.71	\$ 20,111,811	\$ 40,874,760

2012 MASTER PLAN

# APPENDIX A: SCHEDULE MODIFICATION OPTION BUDGET AND SCHEDULE OF THE RESTORATION

## Activities

### General

The construction has been broken into four sequences which the CM will manage and oversee. Each sequence is designed to advance the restoration of the Capitol in a effective manner over the five year period. This phasing allows the Occupants (Executive, Legislative branch of Government) to work in the building for as much time as possible prior areas being closed. Finally, the sequences have been organized in a manner to minimize any demobilization and remobilization of construction trades, which has a direct impact on the cost of the work due to time lost by subcontractors.

### Sequence A - Mechanical & Electrical Attic costs

- The first sequence “A” will be focused on the installation of a new structural slab in the attic space above the third floor.
- This sequence will also include retaining professional services for the entire project.
- It is anticipated that while the work for the entire mechanical and electrical systems will not be included in this phase and may not be completely designed at the time of the Mechanical and Electrical subcontractor selection, it is in the best interest of the project to select them for the whole project and not piece meal the system through procurement processes.
- Exterior Envelope: Repair the exterior stone and replacement of windows.

### Sequence C - North & West Wing Renovation

- Following the 2013 session the West and North wings of the Capitol will be closed. The 2014 Legislative Session will be held in the Chambers, however all other legislative meeting will occur elsewhere.
- It will provide the mechanical and electrical vertical main lines.
- It will include the interior layouts for meeting rooms and office space.
- It will include the installation of all the remaining mechanical and electrical horizontal equipment.

**Fiscal Years 2012-2016**

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011			Sequence a Attic	Sequence C North/West
			<b>Bonding Year 2012</b>	
<b>Program Costs</b>				
Construction Costs	\$ 127,684,811.74		\$ 36,661,570.20	\$ 37,817,732.24
Contractor Contingency	\$ 9,510,544.94	7.45%	\$ 2,730,720.33	\$ 2,816,836.53
Contractor Fee	\$ 4,659,613.41	3.65%	\$ 1,337,894.00	\$ 1,380,085.93
<b>Total Construction Costs</b>	<b>\$ 141,854,970.09</b>		<b>\$ 40,730,184.53</b>	<b>\$ 42,014,654.70</b>
<b>Owner Project Costs</b>				
Project Mangement	\$ 1,483,000.00	1.05%	\$ 425,807.17	\$ 439,235.46
Architects	\$ 15,331,000.00	10.81%	\$ 15,331,000.00	\$ -
Predesign - A/E Package	\$ 500,000.00	0.35%	\$ 500,000.00	\$ -
Construction Contingency	\$ 14,832,000.00	10.46%	\$ 4,258,645.97	\$ 4,392,946.95
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%		\$ 2,690,000.00
Inspections - Special construciton and General	\$ 741,000.00	0.52%	\$ 212,760.02	\$ 219,469.64
Commissioning Energy services	\$ 2,000,000.00	1.41%	\$ 574,251.07	\$ 592,360.70
Security Equipment	\$ 1,851,000.00	1.30%		\$ 555,300.00
Furniture	\$ 7,416,000.00	5.23%		\$ 4,449,600.00
<b>Total Owner Project Costs</b>	<b>\$ 49,900,000.00</b>		<b>\$ 21,302,464.24</b>	<b>\$ 13,338,912.75</b>
<b>Total Project Costs</b>	<b>\$ 191,754,970.09</b>		<b>\$ 62,032,648.77</b>	<b>\$ 55,353,567.46</b>
Inflation at 11.79%	\$ 22,607,910.97	11.79%	\$ 7,313,649.29	\$ 6,526,185.60
<b>Total with inflation</b>	<b>\$ 214,362,881.07</b>		<b>\$ 69,346,298.06</b>	<b>\$ 61,879,753.06</b>
<b>Other Project Costs</b>				
Design Guidelines/Master Plan	\$ 700,000.00	0.33%	\$ 700,000.00	\$ -
CM PreConstruction	\$ 2,225,000.00	1.04%	\$ 719,786.52	\$ -
Relocation moving costs	\$ 2,000,000.00	0.93%	\$ 646,999.12	\$ 1,000,000.00
Historic Structure Report	\$ 741,000.00	0.35%	\$ 741,000.00	\$ -
General Expenses	\$ 741,000.00	0.35%	\$ 67,000.00	\$ 674,000.00
Swing Space	\$ 20,000,000.00	9.33%	\$ 6,469,991.23	\$ 5,000,000.00
<b>Total Owner Costs</b>	<b>\$ 26,407,000.00</b>		<b>\$ 9,344,776.88</b>	<b>\$ 6,674,000.00</b>
<b>Total Program Costs</b>	<b>\$ 240,769,881.07</b>		<b>\$ 78,691,074.94</b>	<b>\$ 68,553,753.06</b>
<b>Total Estimated Cost</b>	<b>\$ 241,000,000.00</b>		<b>\$ 77,400,000.00</b>	<b>\$ 69,000,000.00</b>
<b>Bond Request</b>			<b>\$</b>	<b>146,400,000.00</b>

**2012 MASTER PLAN**

2/28/2012

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# APPENDIX A: SCHEDULE MODIFICATION OPTION BUDGET AND SCHEDULE OF THE RESTORATION

## Activities

Fiscal Years 2012-2016

### General

#### Sequence B - Restoration of East Wing

- The East Wing of the Capitol will be closed prior to the start of the 2015 legislative Session. The 2015 legislative session will use the new committee room and chambers restored in the West and North wings of the Capitol.
- This sequence will be focused on the vertical main runs for both mechanical and electrical services to the project through the east wing.
- It will include the interior layouts for meeting rooms and office space.
- Installation of the mechanical and electrical equipment and ventilation system.

#### Sequence D - Restoration of the Public Spaces

- The final sequence “D” is focused on the restoring the public spaces. This work will include the installation of proper ventilation which does not currently exist.
- It will include the installation of smoke and fire protection elements that will be nested in and around the decoratively painted ceilings and walls.
- With the mechanical and electrical work completed the decorative restoration work will be performed. This will include:
  - Decorative Painting of the Ceilings and walls
  - Restoration and Replication of the historic bronze light fixtures
  - Plaster Ceiling Restoration
  - Marble and Stone Cleaning
  - Woodwork Restoration for Doors and other wood materials.
- Once Complete, the owner will install the new historically replicated furniture and new artwork.

Minnesota State Capitol Restoration Budget Recommendation By MOCA December 31, 2011			Sequence B East	Sequence D Public
			Bonding Year 2014	
<b>Program Costs</b>				
Construction Costs	\$ 127,684,811.74		\$ 16,545,556.64	\$ 36,658,977.50
Contractor Contingency	\$ 9,510,544.94	7.45%	\$ 1,232,388.24	\$ 2,730,527.21
Contractor Fee	\$ 4,659,613.41	3.65%	\$ 603,798.50	\$ 1,337,799.39
<b>Total Construction Costs</b>	<b>\$ 141,854,970.09</b>		<b>\$ 18,381,743.38</b>	<b>\$ 40,727,304.11</b>
<b>Owner Project Costs</b>				
Project Mangement	\$ 1,483,000.00	1.05%	\$ 192,168.98	\$ 425,788.39
Architects	\$ 15,331,000.00	10.81%	\$ -	\$ -
Pre-design - A/E Package	\$ 500,000.00	0.35%		\$ -
Construction Contingency	\$ 14,832,000.00	10.46%	\$ 1,921,949.00	\$ 4,258,458.08
Telecommunications (voice & data)	\$ 5,746,000.00	4.05%	\$ 3,056,000.00	\$ -
Inspections - Special construction and General	\$ 741,000.00	0.52%	\$ 96,019.70	\$ 212,750.64
Commissioning Energy services	\$ 2,000,000.00	1.41%	\$ 259,162.49	\$ 574,225.74
Security Equipment	\$ 1,851,000.00	1.30%	\$ 1,295,700.00	\$ -
Furniture	\$ 7,416,000.00	5.23%	\$ 2,224,800.00	\$ 741,600.00
<b>Total Owner Project Costs</b>	<b>\$ 49,900,000.00</b>		<b>\$ 9,045,800.17</b>	<b>\$ 6,212,822.84</b>
<b>Total Project Costs</b>	<b>\$ 191,754,970.09</b>		<b>\$ 27,427,543.55</b>	<b>\$ 46,941,210.32</b>
Inflation at 11.79%	\$ 22,607,910.97	11.79%	\$ 3,233,707.38	\$ 5,534,368.70
<b>Total with inflation</b>	<b>\$ 214,362,881.07</b>		<b>\$ 30,661,250.93</b>	<b>\$ 52,475,579.01</b>
<b>Other Project Costs</b>				
Design Guidelines/Master Plan	\$ 700,000.00	0.33%		
CM PreConstruction	\$ 2,225,000.00	1.04%	\$ 1,505,213.48	
Relocation moving costs	\$ 2,000,000.00	0.93%	\$ 353,000.88	
Historic Structure Report	\$ 741,000.00	0.35%		
General Expenses	\$ 741,000.00	0.35%		
Swing Space	\$ 20,000,000.00	9.33%	\$ 8,530,008.77	
<b>Total Owner Costs</b>	<b>\$ 26,407,000.00</b>		<b>\$ 10,388,223.12</b>	<b>\$ -</b>
<b>Total Program Costs</b>	<b>\$ 240,769,881.07</b>		<b>\$ 41,049,474.05</b>	<b>\$ 52,475,579.01</b>
<b>Total Estimated Cost</b>	<b>\$ 241,000,000.00</b>		<b>\$ 41,600,000.00</b>	<b>\$ 53,000,000.00</b>
<b>Bond Request</b>				<b>\$ 94,600,000.00</b>

2012 MASTER PLAN

APPENDIX A: SCHEDULE MODIFICATION OPTION  
BUDGET AND SCHEDULE OF THE RESTORATION

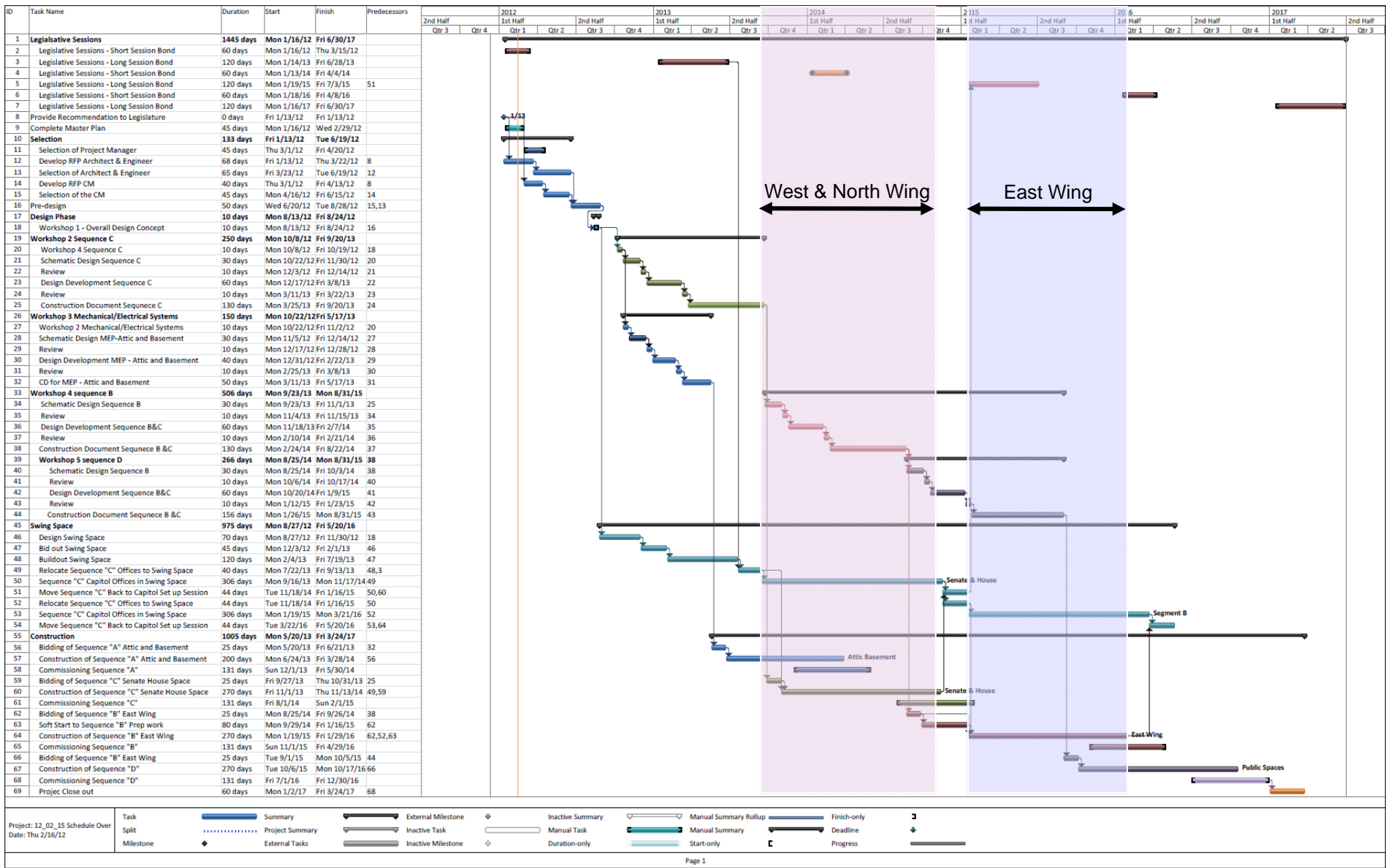
Activities

General

Schedule

- The schedule for the restoration of the Minnesota Capitol has been developed around the understanding that the procurement process will be built around a CM @ Risk or CMr process.
- This process will allow for multiple bid packages. Currently, there are six bid packages contemplated for the basic activities of the project. More may be desired as the work progresses.
- The schedule has also been designed to allow the CM to manager the flow of the work to minimize any down time associated with the sequences of work.
- The Capitol Preservation Subcommittee has asked that an aggressive schedule be developed that allows the legislature to be displaced for the shortest time possible. This schedule has been designed to accommodate that request. The CM will need to consider shift work and running multiple crews around the clock to complete sequences “C” and possibly “B” on schedule.
- The schedule has been developed to keep the capitol open. At no time will the capitol be allowed to close unless for very brief time periods that do not impact the activities of state government.
- The Schedule has been organized to utilize the legislative chambers during the restoration. Sequences have been staged and scheduled to allow for work to continue away from the chambers. The CM will need to manager the work flow in order to not disrupt the activities of the legislature and the pubic during these sessions in 2014 and 2015.

Fiscal Years 2012-2016



2012 MASTER PLAN