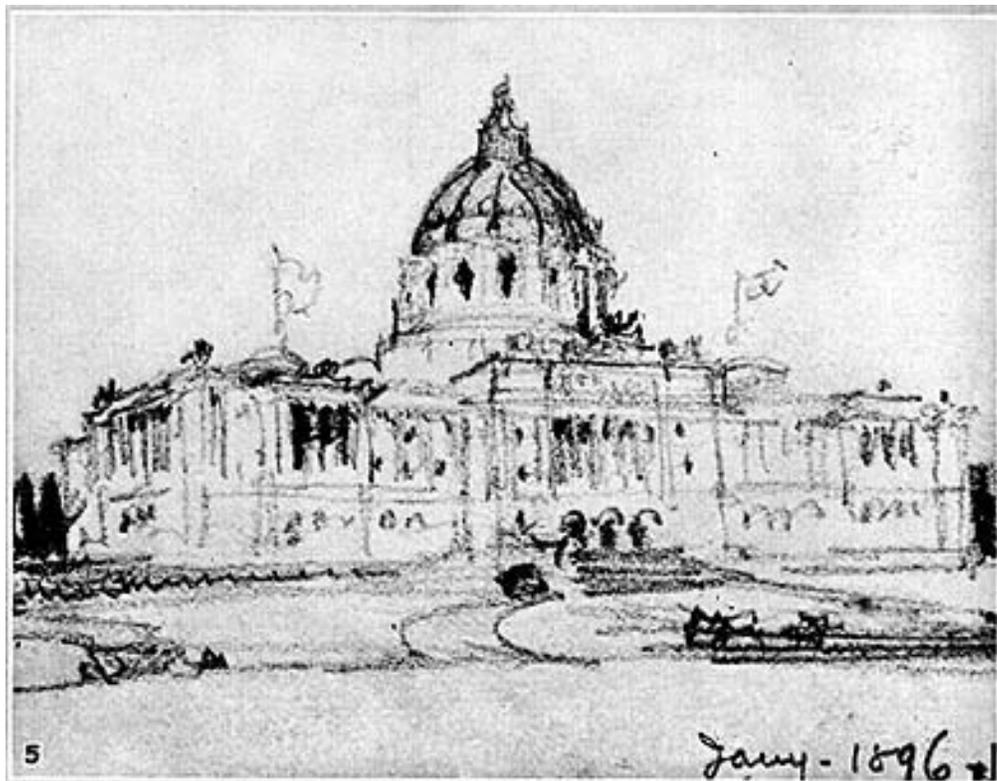


Minnesota State Capitol Interior Restoration and Asset Preservation

Schematic Design Phase
Initial Summaries of Observations, Conclusions and Requirements
May 23, 2006

1. Project Directory
2. Project Goals
3. Space Program
4. Documentation
5. Architectural
6. Structural
7. Mechanical
8. Electrical
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10. Schedule
11. Cost Estimate





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MINNESOTA STATE CAPITOL INTERIOR RESTORATION

1. PROJECT GOALS

As we have begun to work on the Minnesota State Capitol, we have reviewed the Pre-Design and we have talked to numerous people involved in this building’s daily business. The goals stated in the State Request for Proposal, indicated that the Project Goals were two fold:

1. to obtain services to complete Schematic Design Phase of the Minnesota State Capitol’s full interior restoration which will provide the framework for future phased restoration projects, and upgrade of the Capitol’s infrastructure,
2. to secure professional services for on-going miscellaneous Asset Preservation projects at the State Capitol Building and Grounds.

In order to communicate these goals to as wide a range of people as possible, the Design Team has developed and installed a series of display boards on the ground Floor of the Capitol building, adjacent to the Capitol Complex model. The four boards focus on the following: Project Team, Project, Key Team Members, and Fun Facts. The Key Team Members board indicates the previously mentioned Project Goals.

Initial Observations:

1. As we have interviewed Legislators and staff at the Capitol, it has become apparent that the Pre-Design/Program was based on the premise that the solution to the space shortage, which will result from the Interior Restoration and the need for additional program space, was a new Administrative Building to accommodate the Senate offices and additional Hearing Rooms. The program contained in the Pre-Design study includes an inventory of the current contents of these spaces with some accounting for future growth, but lacks information of optimum working relationships to improve the efficiency of government and the analysis of what other states have done or are doing to improve their capitol buildings.
2. From our initial observation, there appears to be very little bi-partisan support to proceed with the restoration as currently envisioned by the Pre-Design. Although everyone we have spoken with appreciates the importance of the building and supports the *idea* of its restoration, there is not support for the current approach. We have learned that there is insufficient support for passage, during this Session, of the funding of the planned Phase 1 restoration of the East Wing. This has been stated to us to be due, primarily, to two issues; a lack of a detailed “Plan” for the relocation of the functions displaced by the renovation – mostly the Senate activities, and a lack of support in the Governor’s bonding proposal. Support from both of these is fundamental to the project moving forward from Schematic Design. While it appears that the Senate might support the notion of a new building, it does not seem to be politically possible to pursue this option at this time.
3. With the exception of a large underground addition competition in 1976, planned to house the functions of the History Center and the Judicial Center, “found space” options at the Capitol itself have not been studied and documented in any significant detail. Nor have swing space options involving space within the Capitol been thoroughly explored.



Our Interim Conclusions are as Follows:

Our conversations with building tenants and stakeholders have provided us with a wide range of departmental and individual project goals.

1. There are many building users, tenants and stakeholders with a variety of goals– some of them are elusive to reach and difficult to quantify. These include visitors, students & teachers, lobbyists, delivery companies, and service providers. In order to understand their needs, we may need to interview people that are visiting the building and solicit their comments on their experiences in the building. Obtaining consensus on the project goals that will require leadership vision. We may also need to develop data based on similar space in other similar facilities and talk to these people as well as Minnesota users.
2. There is consensus that this Capitol building is indeed special and unique to the State of Minnesota. That there are issues of maintenance and repair that need to be addressed for the building to present itself in the best light to the public. To date, 60% of all the restoration funds allocated to this building have been dedicated to quick, emergency fixes.
3. There are currently many groups that champion the building; the Capitol Area Architectural & Planning Board (CAAPB), the Minnesota Historical Society (MNHS), the Friends of the Minnesota State Capitol Group, the Cass Gilbert Society and other Historical Preservation groups. As of this date - it is unclear whom the building champion is from within the political power structure itself. The Commissioner of Administration has offered to be an ally in this process.
4. The building has been divided up and negotiated over time in ways that may not be in the best interests of the building itself, and which can result in securing territory as a temporary goal.
5. It is our thought that the Pre-Design program should be revised, not just verified, to include thoughts about ideal working environments and requirements. The revised document should also address relocation logistics and requirements – we have been told that there are some aspects of the Senate functions that would be difficult to move from the Capitol during the Legislative Session.
6. The updated Program should also address the schedule of construction activity as related to Legislative funding requests and a-phased relocation of Senate Personnel. The key parts of the “Relocation Plan” are; location of Senate Personnel, swing space options, the available space and layouts for personnel within the Capitol during Restoration activity and the appropriate scope of the initial phase of work.
7. It may be that there should be four (or more) phases of Restoration activity. This may help to accommodate utilities, swing space, mechanical and electrical systems relocation, a visitor center and tunnel/circulation and parking options during Restoration activity.
8. Some of these items are beyond the scope of our Agreement, and this should be acknowledged by CAAPB and SAO.



Required Items and Tasks to move Project Goal Definition Efforts Forward:

1. A “Summit Meeting”, called by the Governor and attended by the majority and minority leaders of the Legislature, to set goals and develop a path to consensus regarding the potentials of a Capitol Restoration project.
2. A published account of the project goals statement, once established an additional Display Board acknowledging the goals and asking for additional feedback.
3. A project web site or public forum that provides an opportunity for updates, responses, concerns, etc.



MINNESOTA STATE CAPITOL INTERIOR RESTORATION

2. SPACE PROGRAM

Over the past six weeks, we have been working to verify the Pre-Design Program information. In doing so, we have re-assembled the Program sheets into a format that provides comprehensive room information on one page.

We have then organized these into 10 separate Departmental Groups:

- | | |
|-------------------------------|---------------------------------|
| 01 Attorney General | 06 Minnesota Historical Society |
| 02 Capitol Café & Rathskellar | 07 Plant Management |
| 03 Capitol Security | 08 Press Corps |
| 04 Governor’s Office | 09 Senate |
| 05 House of Representatives | 10 Supreme Court. |

There has been considerable effort to determine the appropriate department representatives to update the information. After a lack of reassurance on this individual – the packets were distributed based on attendees to the Advisory Committee Meeting. These packets have been distributed with a request for feedback by Wednesday April 19, 2006. In conjunction with these efforts, the design team has been participating in informational meetings with key legislators and staff to determine what the issues are that may impact the success of this program update process. To date, we have received four (4) packets: Attorney General, Capitol Security, Minnesota Historical Society and the House of Representatives. With the current Legislative Session underway, many key departments have been busy attending to the business of State.

Our Interim Conclusions are as follows:

1. The program updating process is slowed by; the Legislative Session currently underway.
2. The Pre-Design program states” *the Capitol building does not contain sufficient space to adequately support the needs of the public and the current tenants. Expansion space, adjacent to the Capitol, is needed to provide public hearing rooms and relocated office space.*” It noted that approximately 91,200 gross square feet is needed for hearing rooms and 70,000 gross square feet for offices. It noted that there are two (2) alternatives for this expansion space: *“to remodel existing space on the Capitol complex, or to build a new facility on the Capitol complex. If space is reused on the Capitol complex this will create a domino effect, requiring another group to relocate to provide the expansion space. The expansion space needs to be provided before the work at the Capitol can proceed.”* The new building premise, given the political climate on new State office buildings and the State finance priorities, would be difficult to implement. It also means that much funding and construction would need to occur prior to beginning work on the Capitol restoration itself.
3. The Senate has been reluctant to approve the Pre-Design conclusions in the past due to concerns about a lack of a detailed relocation plan and assurances of adequate space within the Capitol during Legislative Sessions.

Required Items and Tasks to move the Programming Update forward:

1. Once the Session is complete, the programming effort needs to have departmental champions identified that are able to devote time to the task of updating the pre-design program. The program updating process cannot be done effectively and thoroughly by the Design Team without such participation.
2. There needs to be a strategic level meeting to develop a bi-partisan approach for this project. The current legislative funding request is tenuous for project design development and hence project success. This needs to be scheduled and implemented as soon as possible.
3. There will need to be a detailed relocation plan developed and then communicated to the departments. This will likely require identification of a solution for office space and chambers. This effort may be outside of the Interior Restoration scope, but critical to the success of the restoration process.
4. The design options for the Capitol Interior Restoration will need to look at long-term solutions. It will need to look at a legacy design that establishes the building and its use for the next 100 years. To date, many repairs and replacements have been of a shorter time frame and been hampered by the funding cycles. As noted, 60% of the construction funding to date has been for quick emergency fixes. A successful Interior plan will look long term and have the building and its intended functions in mind. It will need to see the building vision as one for the people of Minnesota and a place to conduct government business.

MINNESOTA STATE CAPITOL INTERIOR RESTORATION

3. BACKGROUND DOCUMENTATION

Over the past six weeks, we have identified historic collections documenting the original construction of the Minnesota State Capitol and have located additional resources that describe subsequent work performed throughout the years. Available documents are being inventoried and we are developing a process to catalogue and procure essential documents that will help build our understanding of the Capitol. Sorting and assembling large quantities of disparate pieces of information is a slow and arduous task, however. This will be an ongoing process, evolving over time, as information about the building is revealed.

The resultant comprehensive database is a critical component for understanding the history leading up to the building's current conditions. The effort, essential to the design team, could also have far reaching benefits for the State Architect's Office, the Minnesota Historical Society, Plant Management, historians, preservationists, scholars, and students - to name but a few.

Our Interim Conclusions are as follows:

1. The Minnesota Historical Society has scanned images of most original drawings. However, none of these images are currently digitized. Reproduction costs are prohibitively expensive to generate the full set of available drawings using established protocol. Perhaps a more collaborative arrangement could be worked out, potentially trading digitized images and a consolidated database for access to the copied files.
2. There are hundreds of drawings associated with the original construction of the building. Not all drawings are clearly identified; some are not dated. This adds to the complexity of the task. Ideally, all drawings should be assessed for relevance and the role they played in the evolution of Cass Gilbert's concept for the building.
3. The Capitol Building has seen a hundred years of renovation and restoration. Records are not available for every known project and not all projects are accounted for. As built sets are hard to come by so it is often unclear how much of the proposed work was actually performed on completed projects. Building verification will be an ongoing process and will take time.
4. We have acquired background CAD files from a number of sources. The information is occasionally inconsistent and sometimes incomplete. We are in the process of assembling the information we have and translating it to a format compatible with current drawing standards.
5. There may be ongoing projects and projects going out for bid that we are unaware of. A complete list of "current" projects would be very helpful to this documentation process.

Required Items and Tasks to move Background Efforts Forward:

1. Negotiate a collaborative partnership with the Minnesota Historical Society to produce digitized images of the original construction drawings.
2. Continue to review and evaluate existing documentation describing past and present renovation/restoration projects.



3. Continue to develop CAD backgrounds
4. Continue existing building condition verification.



MINNESOTA STATE CAPITOL INTERIOR RESTORATION

4. ARCHITECTURAL

Over the past six weeks, the architectural tasks have been focused on gaining an understanding of the background information concerning the Capitol's original construction and the Capitol's current condition. This discovery process is a slow and arduous task. However, we are able to identify some important issues about the building's condition as we go. We have also begun to look at conceptual designs for "found space" within the capitol buildings lower levels and analyzing the requirements stated in the Pre-design program.

Many prior projects to repair and replace aging and damaged areas have been accomplished over the years. However, there are still some areas that require additional repair/replacement and some that will likely require further in-depth research and exploration. One critical area, the dome, is outside of this current and scope of Work and the Contract. As mentioned in the Structural Summary, there has been considerable water infiltration and damage throughout the dome, which should be further assessed before any interior cosmetic work, is begun.

Our Interim Conclusions are as follows:

1. The building has been subjected to long-term water intrusion. Evidence of the extent is still plainly visible from the inside where abraded plaster and peeling paint can easily be seen at window heads and jambs. Masonry and mortar on the inner face of the exterior dome show severe signs of prolonged water infiltration: masonry staining, efflorescence, degraded mortar joints. Although work has been done to correct these issues, active brick spalling and areas of apparent dampness indicate that water problems are persistent. This is not a conditioned space. Dampness and fluctuating winter temperatures will continue to stress damaged masonry.
2. Waterproofing measures have been taken to mitigate water penetration to the inner dome. The floor surface appears to have membrane protection that is integral with that of the intermediate dome. The intent of the membrane system seems to be containment of water leaking in through the outer dome. The system was most likely installed to prevent severe leakage into the interior space, the effects of which are still visible at the window heads and plaster walls at the base of the dome. Water, however, continues to pool at various locations along the walking surface indicating that positive drainage to the single floor drain is not occurring.
3. The dome windows and vents leak.
4. Stone patches at the dome's exterior lantern, some recently installed, appear to be failing. Chips and cracks can be observed at some locations; other patches appear to be separating from the marble. The stone patching material should be reassessed before any additional repairs are undertaken.
5. There are certain opportunities to develop "found space" within the lower levels of the building as well as additional underground expansion that begins to meet the program stated in the Pre-design document. These concepts will be presented, discussed and further explored in the coming weeks.



Required Items and Tasks to move Architectural Efforts Forward:

1. Learn status of ongoing dome work – what is completed - and what will scheduled for further repairs.
2. Review of the MDA maintenance manuals for the Capitol building.



3. MINNESOTA STATE CAPITOL INTERIOR RESTORATION 5. STRUCTURAL

Over the past six weeks, the structural tasks have focused on gaining an understanding of the Capitol's original construction and the Capitol's current condition. This discovery process has been slowed by difficulties in identifying previous projects and locating the accompanying drawings of those projects. However, we have been able to learn some important facts about the building's condition.

While there have been many prior projects to repair and replace structural damaged areas, there are still some areas that require additional repair/replacement and some that require further in-depth research. A key area that requires additional research and investigation is outside of this current and scope of Work and the Contract – that is the dome structure, particularly the steel tension rings that hold the marble/brick masonry assembly together. There has been considerable water leakage and damage in the area of these tension rings that would warrant in-depth investigation. A failure in this area could be catastrophic to the exterior dome integrity.

Our Interim Conclusions are as follows:

1. The building has suffered significant water intrusion through its 100-year life. The most severe damage, in the lantern, was addressed and appears to be structurally sound. This does not require further investigation, but should have an ongoing inspection plan and long-term repair/replacement plan in place.
2. While the water intrusion that damaged the tops of the middle dome columns appears to have stopped, the column tops condition should be investigated further.
3. The bottom of the middle dome and portions of the outer dome appear to continue to suffer from water intrusion. This is cause for concern and should be investigated further.
4. The roof structure above the main building suffered damage due to water intrusion in the past, and were subsequently repaired. The current condition of this structure is not known and needs further investigation.
5. The stated water intrusion through the 'witches hats' is a cause for concern. All structural elements that may be affected by this require investigation.

Required Items and Tasks to move Structural Efforts Forward:

1. A complete set of original design drawings and all subsequent structural and waterproofing work performed on the project. The projects of particular interest are all projects performed after 1988. At this point, we are trying to piece together the history of building repairs, which runs the risk that important projects will be missed. It would be a great help if the client provided a complete list of these projects.
2. Learn status of ongoing dome work – what has been completed, and what is scheduled for further repairs.
3. The joints between the marble stones on the outer dome have caused the majority of the water damage and structural deterioration over the years. Therefore, it is key that these



- joints be repaired with a joint system that is designed specifically for relatively large movement between the stones.
4. A review of the Gilbert papers that document the discussion between Cass Gilbert and his consulting structural engineer, to determine the final construction of the outer dome and the details of the 5 tension rings embedded between the marble stones and back-up masonry.
 5. Additional site surveys of the main roof structure to document the current condition of the building. Note that these have been delayed because it is much more time-efficient to review original design and repair drawings before surveys are conducted.

Appendix Summary of Findings:

1. The exterior terraces that surround the building and the porte cochere beneath the south entry stairs were completely rebuilt in 1995 and replaced with a cast-in-place structure. This new structure appears to be watertight when viewed from selected areas below.
2. Miller-Dunwiddie Associate's Comprehensive Preservation Plan, dated 1988, described evidence of damage due to water infiltration in many areas of the building.
3. The corridor ceilings around the dome perimeter have peeling paint and damaged plaster. This has been attributed to water entering through the rooftop vents above the four corners of these corridors – the 'witch's hats'. Building maintenance staff has told us that the covers above these vents have been replaced; however, they also tell us that small amounts of water continue to enter through these. We have not seen the repair documents, and have not confirmed that water continues to leak.
4. Appendix G, written by Jack Meyer of Meyer-Borgman & Johnson (MBJ) describes slight to moderate deterioration to the dome bell, and moderate to severe deterioration to the lantern.
5. The deterioration in the lantern was addressed in MBJ drawings dated 1986. This project replaced all deteriorated structural steel with new stainless steel members, replaced and repaired damaged marble stones and terra-cotta tiles, and repointed the entire lantern. Our site surveys found no evidence of water infiltration or deteriorated pieces in the lantern. The lantern appears to be in good condition. There is still some mild evidence of ongoing marble deterioration of the lantern that was not replaced. Some specific consolidation has been administered to the stone to mitigate the cracks and weathering. There are some cracks in the lantern and some mild delaminating of the exterior surfaces. Any long-term maintenance plan should address this situation and determine if and when the original lantern stone remaining will need to be replaced.
6. The lantern is supported by a 'middle dome' that consists of twelve steel columns in a round prismatic (cone) shape. The spaces between these columns are infilled with brick masonry. This middle dome is covered with an adhered rubber membrane. The MBJ report describes moderate corrosion at the tops and bottoms of these columns. Our site survey showed one column top had been uncovered and recovered with a patch material. We found no signs of rust jacking or other clues that the corrosion continued at the top of the columns. While we suspect that the column tops are sound, we cannot confirm this without further investigation.



7. The middle dome connects to the ‘outer dome’ through a 3’ wide steel horizontal tension ring. Because the original designers were concerned that the marble stone joints in the outer dome would leak, this tension ring doubled as a circular basin that caught the water that flowed to a drain embedded in the ring. The tension ring is covered with a rubber membrane that flashes up both the middle and outer domes. When viewed from within the middle dome, substantial efflorescence is visible at the tension ring elevation. This causes concern that the water infiltration may continue to damage the bottom of the middle dome columns and the tension ring itself. We have not discovered any repair drawings that address this problem.
8. Cass Gilbert’s original design includes five steel tension rings embedded between the marble block on the outside of the outer dome and a masonry backup wall built directly against the inside face of the marble. Appendix G describes these rings as having ‘light to moderate’ deterioration. Our site survey discovered water stains throughout the inner face of the masonry back-up walls, with areas damp to the touch. This creates considerable concern in our minds regarding the condition of the steel tension rings. The Gilbert Papers describe a discussion between the architect and his consulting engineer regarding the engineer’s concern about the structural stability of the outer dome. While we have not yet uncovered the design changes made to answer these concerns, it is probable that the tension rings are a part of the solution. We have concerns that these rings may rust through and diminish the structural stability of the outer dome. We have not found any design drawings that address the reported corrosion in the MBJ report.
9. In a phone conversation with Jack Meyer, he describes past deterioration in the structural steel supporting the building roof. He was subsequently involved with the repair and reinforcing of these structures. We have not discovered any design drawings that describe this work, and have not yet taken a site visit of these areas



MINNESOTA STATE CAPITOL INTERIOR RESTORATION 6. MECHANICAL

Over the past six weeks, the mechanical tasks have focused on locating, obtaining, organizing and reviewing the building as well as the systems within the building. A major task has been, and will continue to be determining how the original mechanical systems have evolved to their current state. The process of locating and obtaining the documents associated with the mechanical systems has taken some time; however, steady and measurable progress has been made and is likely to continue.

Our Interim Conclusions are as follows:

1. The building has seen numerous additions, modifications and equipment replacements. The work over time has transformed the building from one essentially without mechanical systems to one with complete modern systems 30 – 40 years ago. These systems now tend to be out-of-date and beyond their useful life, and are in need of replacement.
2. Many of these additions, modifications and replacements have been well documented. The design team has located most of this documentation and is currently in the process of obtaining, organizing and reviewing this documentation. We understand some areas like the East Wing may not be as well documented as the other areas.
3. The design team is in the progress of documenting the mechanical space available. It is our understanding that some of the HVAC equipment had been sized to accommodate the physical limitations of the mechanical spaces and not to accommodate the building's HVAC related needs. Our observations indicate most of the mechanical equipment rooms are undersized for the equipment that needs to be in them. They are not placed in common spaces and tend not to be arranged for best heating and cooling distribution. Adequate space is needed not only for equipment, but also for piping and ductwork, and space to service and maintain the equipment.
4. The design team is in the process of documenting the major mechanical equipment characteristics, equipment locations and areas served by equipment.
5. The major utilities and tunnels feeding the Capitol building have been identified. Work is ongoing.
6. The design team has obtained a heating report prepared in 2004 by Sam Stewarts and Associates. This report gives recommendations for improving the overall heating systems within the building. A few of these recommendations (those that were least expensive to implement) are currently out for bid or are in progress. It is the design team's understanding that this current heating system upgrade is relatively minor and being done to improve heating systems operation.
7. The design team has obtained a cooling report prepared in 2001 by Miller-Dunwiddie Associates (MDA) and Lindquist, Killen, Potvin & Bender (LKPB). This report gives recommendations for improving the overall cooling systems for the building. As a result of these recommendations, a project was completed and carried through. The full extent of the work done is not known at this time. The design team is in the process of determining this.



Required Items and Tasks to move Mechanical Efforts Forward:

1. The design team is awaiting the opportunity to review the latest sets of drawings from LKPB. This review will allow us to document further the building's existing conditions. A meeting to review LKPB's drawings is currently being coordinated. It will most likely occur during the week of April 24 through April 28, 2006.
2. Multiple tours/inspections of the Capitol, primarily the mechanical rooms and main distribution areas would allow the design team to perform an accurate analysis to give the best recommendations possible.
3. Conduct interviews with current building facilities people to determine current operational issues and problems with the existing HVAC systems.
4. A strategy to replace the whole-building mechanical systems needs to be incorporated and coordinated with the overall building plan for space layout and utilization. Thus, in order to move forward with an overall mechanical space layout and distribution plan, an overall team strategy needs to be developed. Therefore, at this time, until the team has completed overall planning, the mechanical strategy planning will be limited.



MINNESOTA STATE CAPITOL INTERIOR RESTORATION 8. ELECTRICAL

Over the past eight weeks, the electrical team has been focused on gaining an understanding of the Capitol's original construction, the work that has taken place over the years and the Capitol's current condition. This process has been slow while trying to trace down documentation and accompanying drawings of previous projects. We have had several tours and visits to existing sub-station and electrical distribution rooms and a general walk through of many of the facility spaces. A more detailed equipment evaluation and facility evaluation is being conducted to further advance the teams ability to anticipate the required changes that are necessary and the limitations of the existing systems.

Our Interim Conclusions are as follows:

1. The electrical infrastructure upgrade project significantly increased the ability of the facility to respond to the expanding power requirements. Two new electrical vaults were added adjacent to the existing building on the north side. These vaults, the yellow vault and the blue vault, were built below grade with each vault accommodating a new distribution substation that replaced the original equipment located in the lower level of the existing facility. These new substations then provide distribution to much of the existing electrical panel boards that are located throughout the Capitol building. Some other new equipment was also added at this time to support the additional upgrade projects that have been occurring within the building. Detailed drawings of the equipment are being procured from LKPB and will be valuable in the assessment process for the remainder of our project.
2. The base building branch panelboards located throughout the building are quite old and are in varying stages of disrepair. As some projects have been facilitated, such as the computer room upgrade, the panelboards are being upgraded as well. The panelboard interior is being replaced on the computer room upgrade project. Each of the panelboards requires evaluation to assess their condition and whether or not replacement or repair is required. The existing conductors feeding many of the branch circuits also require replacement and/or repair.
3. The mechanical equipment requirements are constantly changing in the Capitol and the electrical services to this equipment must respond as well. We are evaluating the condition of the existing Motor Control Centers and the distribution panelboards that service this equipment. Many of the equipment locations are inappropriate for their use and must be relocated or replaced.
4. The low-voltage systems in the building are in various stages of replacement and repair. The voice/data systems were recabled in 1997 and are in need of upgrade again at this point. The determination of the extent of this system will dictate the magnitude of the upgrade and to what level of future-proofing we will attain. The Fire Management System is in need of some updating, however, the "brains" of the system is capable of handling significant additions at this time. The Security System will require some significant upgrade. The system in place is not adequate for a facility of this type for 2006 and beyond. The assessment of this system will require significant evaluation and a



series of work sessions to determine the appropriate level of campus security management.

5. The other low-voltage systems present in the facility are still being assessed to determine condition and capability.

Required Items and Tasks to move Electrical Efforts Forward:

1. A compiled, complete set of original design drawings and all subsequent electrical work performed in this building. At this point, we are continuing to gather this information and will organize and evaluate its impact on our renovation project. After we collect all that we can find, we will meet with the client to compare the information we have with their records of work, to determine if anything is still missing.
2. Learn status of any ongoing work and its affect on our plans.
3. Additional meeting with electrical and maintenance staff to review our progress and learn more about the working of the building.
4. Facility background drawings have been created for the electrical systems and are being utilized to create new present condition documents. These documents will be utilized to confirm equipment locations, assess building conditions, and identify potential solutions and to communicate any required information to the design team.
5. An existing facility load analysis is also being developed to determine the capabilities of the new distribution equipment in conjunction with the existing facility load requirements. This information will be instrumental as the team develops the expansion strategy and coordinates that information with the additional electrical loads.

Over the past six weeks, the electrical tasks have focused on gaining an understanding of the Capitol's original construction, the work that has taken place over the years and the Capitol's current condition. This process has been slow while trying to trace down documentation and accompanying drawings of previous projects. We have had several tours and visits to existing sub-station and electrical distribution rooms and a general walk through spaces.

6. Learn status of any ongoing work and its affect on our plans.
7. Additional meeting with electrical and maintenance staff to review our progress and learn more about the working of the building.

MINNESOTA STATE CAPITOL INTERIOR RESTORATION 9. TELECOMMUNICATIONS

Over the past six weeks, we have been working to verify the Pre-Design Program information. Several attempts have been made to identify the appropriate department representatives to work with in confirming/updating the information. I have confirmed the following department representatives: Senate, Jim Greenwalt; Attorney General's Office, Rebecca Spartz and Richard Finch; Governor's Office, Bob Parnell; Department of Administration and Capitol Media/Press Corps, Gordy Specht. I do not have any department representation from Capital Security, the Supreme Court or the House of Representatives.

Our Interim Conclusions are as follows:

1. The program updating process has been hampered by a lack of response from the department heads – they need to identify this effort as a priority to their staff – once the current Legislative Session is complete.
2. We have confirmed that the telecommunications spaces distributed throughout the facility appear typically to be of inadequate size, improperly secured, poorly lighted, and where electronic equipment resides, insufficiently conditioned for temperature and humidity.
3. There are large amounts of apparently abandoned cable that should be properly dealt with, and much of the cabling infrastructure should probably be considered for replacement with an integrated, structured cabling infrastructure.
4. The media services areas appear to be the most up to date technology systems on site. However, they could certainly benefit from better special accommodations.

Required Items and Tasks to move the Telecommunications Update forward:

The programming effort needs to have departmental champions.

The telecommunications solutions for the Capitol Interior Restoration will need to address both existing and future requirements. To date, most implementations of telecommunications infrastructure appear to have been in response to an immediate need, with little forethought to future requirements. A successful telecommunications plan will look long term and have the entire building and its intended functions in mind.

MINNESOTA STATE CAPITOL INTERIOR RESTORATION 10. SCHEDULE

Over the past six weeks, we have been working to understand and verify the Pre-Design Schedule. The Pre-Design noted that there were two types of space to be provided outside of the Capitol Building: 1. Permanent Expansion Space, and 2. Temporary Swing Space. The Pre-Design lists 2 alternate approaches: the first approach involves relocation of tenants to an undetermined space of the Capitol Complex and the second approach involves construction of a new office building. It noted that there might be swing space to be found near the Capitol, but does not identify the solutions to the relocation. The key to both of these schedules is the timing of funding from the Legislature and the schedule of the Legislative Sessions themselves.

Our Interim Conclusions are as follows:

1. Our discussions with tenants and key leadership have indicated that the Senate has a strong preference for option of a new Office Building to solve their office needs and relocation issues, but that there is a lack of Legislative support for funding of a new office building at this time. Nor is there a legislative champion to offer a funding request for such a facility.
2. That the Governor's lack of support, in his bonding proposal, has influenced the project progress in an adverse way. The House and Senate were reluctant to fund the first phase of restoration without having a sense of a 'Plan' and without the Governor including it in his bonding proposal.
3. This project's schedule, success and decision making will be greatly influenced by the legislative funding process. Without sufficient support and funding, in a timely manner, this project will suffer from starting up and then stopping. This process requires revisiting of prior decision making and results in an inefficient use of resources.
4. Currently, developing the project construction schedule will need to be in response to approved and secured funding for this purpose. Ideally, there would be sufficient funding approved to complete design work and 1-2 phases of the restoration.

Required Items and Tasks to move the Schedule Update forward:

1. Bi-partisan support of the restoration process with a commitment to fund the project as it requires and in a timely manner.
2. Identification of the swing space option and then to have full approval and support of this decision with work on the space to follow immediately.
3. A decision on the Project Delivery method to be used for this project and then to select the appropriate contracting entity to work with the Design Team in development of budget, schedule and phasing.



MINNESOTA STATE CAPITOL INTERIOR RESTORATION

11. COST ESTIMATE

Over the past six weeks, the design team has evaluated the Pre-Design cost estimate, particularly in relationship to the current construction bidding market, but also relative to the lack of a swing space option and understanding its impact on this project, the uncertainty of the Legislative funding schedule which determines the construction duration (cost escalation) and lastly what seems to be a lack of full consensus of the Pre-Design solution.

We have summarized the Pre-design estimate and will use this as a base line for further evaluation, updating as the design evolves, and the funding parameters are established. We are using an assumption of construction starting in 2008 and commencing in 5-6 years, - giving us a mid point of construction in 2010.

Our Interim Conclusions are as follows:

The Pre-Design offered a Cost Estimate (dated July 3, 2001) in the following format;

Summary of Total Costs (2001): **\$133,915,979.00**

Which Included:

Phase 1

State Office Building & Parking: (511,200 SF) @ \$158.00/SF **\$80,775,910.00**

Office Building (211,200 SF)

*Parking Structure (300,000SF)

Existing Capitol Building Total: (342,248 SF) @\$155.26/SF **\$53,140,069.00**

Phase 2 (East Wing) (122,677 SF) \$20,245,758.00

Phase 3 (West Wing) (118,634 SF) \$14,531,202.00

Phase 4 (North Wing & Rotunda) (103,937 SF) \$18,363,109.00

These costs escalated from July 2001 to July 2010 (using 49.5%) are as follows:

Summary of Total Costs (2010): **\$205,494,040.00**

Which Included:

Phase 1

State Office Building & Parking: (511,200 SF) @\$242.50/SF **\$123,950,620.00**

Office Building (211,200 SF)

*Parking Structure (300,000SF)

Existing Capitol Building Total: (342,248 SF) @\$238.25/SF **\$81,543,435.00**

Phase 2 (East Wing) (122,677 SF) \$31,067,115.00

Phase 3 (West Wing) (118,634 SF) \$22,298,128.00

Phase 4 (North Wing & Rotunda) (103,937 SF) \$28,178,190.00

*The new parking structure was to be a ramp replacement for the existing Administration Building ramp, with additional parking for the Capitol building.



Required Items and Tasks to move the Schedule Update forward:

In order for a cost estimate evaluation to be meaningful, we will need to develop a consensus based design that accounts for all related conditions such as;

1. Scope of work,
2. Relocation strategy,
3. Funding cycles
4. Construction duration,
5. Construction Delivery method.

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