

SCFP SUBCOMMITTEE ON TWIN CITIES FACILITIES AND SUPPORT
SERVICES (STCFSS)
MINUTES OF MEETING
FEBRUARY 17, 2004

[In these minutes: Approval of Minutes, Discussion/Debriefing of Committee¹'s Tour of Andersen Library/MLAC on December 16, 2004, Gopher-Only Stadium, Riverbend Commons Garage Deicing Project Update]

[These minutes reflect discussion and debate at a meeting of a committee of the University of Minnesota Senate or Twin Cities Assembly; none of the comments, conclusions or actions reported in these minutes represent the views of, nor are they binding on, the Senate or Assembly, the Administration or the Board of Regents.]

PRESENT: Calvin Alexander, chair, Sharon Folk, Edward Kosciolek, Carrie Meyer, Dan Allen, Laurie Scheich, Steve Spehn, Gary A. Davis, Gordon Girtz, Gary Jahn, Patrice Morrow, George Wilcox, Jennifer Hannaford

REGRETS: Steve Fitzgerald, Brian Horgan

ABSENT: Donald Kelsey, Lorelee Wederstrom, John Adams

I). Professor Alexander called the meeting to order and welcomed all those present.

II). Members unanimously approved the November 18, 2004 and December 16, 2004 minutes.

III). Professor Alexander noted today¹'s first item of business is a discussion/debriefing of the Committee¹'s tour of Andersen Library/MLAC on December 16th. He distributed a handout, which contained monitoring data of MLAC as of the last week in January 2004. Next, Professor Alexander walked the Committee through the temperature and humidity control data contained in the handout. He highlighted the following:

- Temperature and humidity control in the MLAC film storage facility was operating at spec.

- Temperature in the MLAC Lower Mezzanine area was higher than it was supposed to be. In terms of humidity levels in this area, although they were generally within spec, there were some exceptions.
- Temperature in the MLAC Archives Highbay area was higher than spec and the humidity in this area was below specification roughly half of the time.
- Both temperature and humidity were out of control in the MLAC Highbay areas.

The MLAC system came online in 2000. Ongoing attempts have been made to correct the temperature and humidity control problems in this facility without success. This is not an attempt to point fingers but rather to find out why these types of problems keep occurring in MLAC. Professor Alexander believes STCFSS should trace the history of these problems.

A member reported that the architecture and engineering firm of Einhorn Yaffee Prescott (EYP) recently completed a major retrofit of MLAC, which allows the facility to operate according to its design specifications. After this retrofit was completed, another problem was uncovered. It was impossible to discover this new problem, however, until after the major retrofit had been completed and the building was operating properly. The new problem arises when the outside air temperature is 17 degrees or colder. When this occurs it is difficult to control the temperature in the caverns. EYP has studied the problem and put forth a proposal to correct it with a new chiller unit. Apparently, the original chiller unit was inadequately designed. Professor Alexander requested the Committee receive a report once this problem has been corrected including information on the cost.

Comments and questions from members included:

- Who was the heating/air conditioning contractor on the MLAC project?
- It is not unreasonable to think it might get below 17 degrees in Minnesota during the winter.
- In Professor Alexander¹'s opinion, the original architects on the MLAC project used the wrong design criteria when they applied the standard design criteria (an ASTM standard for an above ground storage facility was applied). Why was a standard design criteria used on a unique underground storage facility?

- Facilities Management continuously reviews its construction standards to see where they can be improved. Other areas that being reviewed include the performance side of contracts, etc.
- The Andersen Library¹'s web page does not accurately reflect the actual temperature levels in MLAC. The web site states that the temperature is set at 62 degrees when in fact it is set at 60 degrees.
- The Andersen Library/MLAC problems need to be put in perspective. When the system initially went online, the temperature and humidity were both out of control. However, FM diligently worked at ³tweaking² the old system to get it to conform as much as possible to spec. Now with the new system, FM has spent time making sure it is operating to spec. It has been a monumental journey.

Next, Professor Alexander noted that in addition to the temperature and humidity problems in Andersen Library/MLAC, there is a shotcrete problem. Apparently, the shotcrete was never inspected and it is falling off the ceiling. He then distributed a report, ³*Legal Audit of Design and Construction Contracts*² issued by the Office of the General Counsel (OGC). Based on findings from this report, the OGC reported to the Board of Regents in June 2002 that, ³the University has no comprehensive process of inspection of major construction projects to assure good workmanship and conformity with plans and specifications.² Professor Alexander asked Steve Spehn if there was ever a FM response to the above referenced document. According to Mr. Spehn, initially there was a FM response, but with the reorganization that occurred approximately one year ago, he does not know the status of the response to the recommendations outlined in this document.

Continued discussion highlights included:

- Is the use of commissioning agents standard practice outside the University? For a while the use of commissioning agents was thought to be the wave of the future, but this philosophy has been tempered a bit. Commissioning agents basically verify that a system works the way it was designed. They do not verify that the design will work in the first place. The MLAC problem appears to have been a design issue.
- There are big voids in building projects across the University.

- It would be interesting to look back and determine which particular construction philosophy each building on campus was built under. FM has undergone several major reorganizations over the years, each with its own construction philosophy. By doing this type of research, it would be possible to determine if certain philosophies produced better buildings. The purpose of collecting this data would be to provide the University with information it could use to avoid future construction problems.
- Invite representative(s) from Capital Planning and Project Management (CPPM), which is under new leadership, to explain their construction and overall operating philosophy.
- Reference was made to a footnote in the OGC report, which indicates that the ³University of Minnesota-Duluth does routinely inspect large projects². It would be interesting to ask UMD whether they have experienced problems similar to those encountered on the Twin Cities campus. It was noted that UMD Facilities Management Director John King used to work on the Twin Cities campus. When he moved to UMD, he took with him the philosophy that there exists an obligation on the part of the University to inspect as well as correct and give direction on large projects. This philosophy also assumes the contractor, engineer, etc. are not always right. A suggestion was made to invite Mr. King to attend a future meeting to share UMD¹'s process/philosophy for managing its large capital projects.
- Who is the University assigning responsibility to when it comes to inspecting, correcting and giving advice on large projects? Should the contractor be responsible or should it be a University entity that gives direction and has the power to change the course of a design midstream? Who has the power to enforce in-field assignment redirection/reconstituted design at the University? The MLAC ventilation problem clearly should have been caught during the commissioning process or during review of the project. The larger questions that need to be answered are who is ultimately responsible for large projects and who has power and who does not. It would be more useful to have the power to enforce back in the field where it used to be.
- It appears that the University tends to disregard the expert knowledge that resides at this institution. The lack of reliance on institutional memory and knowledge at the University is shocking.

Professor Alexander noted the two suggestions that were raised during today¹'s discussion:

1. Invite representative(s) from CPPM on the Twin Cities campus to:
 - a. Share its process/philosophy for managing large capital projects with the Committee.
 - b. Remind CPPM that institutional memory exists on campus and should be taken advantage of.
2. Invite representative(s) from UMD to explain their process/philosophy for managing its large capital projects.

Professor Alexander suggested a joint meeting whereby these two parties could share their philosophies with the Committee. A member noted that philosophically these two entities have a disparity of views on how to manage large capital projects and did not think a joint meeting would be a good idea. UMD exhibits a strong sense of autonomy away from central control.

One member felt strongly about hearing from UMD to get some rendering of how successful they have been in terms of getting buildings constructed properly. It was noted that there are plenty of people on the Twin Cities campus who were around when the UMD philosophy was practiced on the Twin Cities campus. If the old philosophy (current UMD philosophy) worked before, how can the philosophy that the Twin Cities campus presently operates under continue to be defended?

A member asked if the current Twin Cities philosophy is a product of a larger issue, budget restrictions. If the management of large capital projects were outsourced, they would presumably be paid for out of capital costs; whereas if these projects were managed internally then salaries and other costs would be departmentally incurred. It was noted that currently owners¹ representatives manage the process of contract management. In the past, however, construction managers managed this process plus had the obligation to oversee and provide in-field management on large projects. As in the past with construction managers, owners¹ representatives are paid from the contract budget; their livelihoods come from projects.

It was noted that conversations are underway regarding overall good stewardship of projects within University Services and what does this role

mean. Staffing and other limitations prohibit University Services from providing adequate oversight on projects.

Based on the Committee¹'s discussion, Professor Alexander volunteered to invite Associate Vice President of Capital Planning and Project Management Mike Perkins to the March 23rd meeting. He will ask AVP Perkins to provide the Committee with a CPPM review, update and progress report. Professor Alexander requested that members thoroughly read through the *³Legal Audit of Design and Construction Contracts²* issued by the Office of the General Counsel (OGC), which he distributed earlier. Professor Alexander also suggested providing a copy to AVP Perkins so he can comment on/refer to the document during his presentation.

A member asked whether UMD representatives are going to be invited to attend the March 23rd meeting as well. Despite the fact that there are still individuals at the University that were around when the current UMD philosophy was practiced on the Twin Cities campus, does not mean these individuals are free to comment. It would be much more effective to have a representative(s) in an official capacity currently following the UMD philosophy speak to the Committee.

Professor Alexander reminded members that there are only two more meetings remaining for this academic year. What does the Committee hope to accomplish in the next two meetings before it adjourns for several months? A member suggested hearing from AVP Perkins and then based on what he reports, the Committee can take a stand either in support of CPPM¹'s direction or against. Another member suggested drafting a letter to both AVP Perkins on the Twin Cities campus and Director John King from UMD asking them to respond to the following questions:

- What are the goals of their respective departments?
- How do they establish their objectives?
- What type of assignment of responsibility does each unit have for their respective owners¹ representatives/project managers?
- What is each unit¹'s view of contractor responsibility?
- What liabilities could the University potentially incur if the contractor were given total control of a project?

Then, based on their responses, the Committee could discuss the matter and come up with their own recommendation.

To summarize, Professor Alexander will invite AVP Perkins to the March 23rd meeting and also try to have some conversations with him prior to this meeting. Professor Alexander asked for volunteers to sit in on these discussions. Professor Patrice Morrow and Jennifer Hannaford both volunteered.

On a side note, a member expressed concern over the way in which the University gets money from the legislature for its capital projects. Legislative requirements that force a price to be put on a building in the early stages of pre-design puts the University in a precarious position if changes need to be made to the design during the course of a project. This approach needs to be rejected and the University needs to plan further into a project before it commits to move forward with an initiative. It was suggested that the Committee make a statement/recommendation to this effect. One member stated that if the State gives the University an ultimatum to either accept what it allocates for capital projects or not build, there will be a great temptation on the part of the University to hope for the best and move forward with its projects despite insufficient funding. Another member added that these legislative requirements oftentimes result in exorbitant O&M charges for newly constructed or remodeled buildings, which could have been teased out in the construction and design process if enough money had been allocated in the first place. It is not in the University¹'s best interest to always seek out the lowest bidder or rush into projects without investigating them fully. It was noted that AVP Perkins has recommended the University get further along in the design of a project before a budget is locked into.

Professor Alexander asked whether any progress has been made with respect to the ongoing issue of deferred maintenance costs. Mr. Spehn noted that efforts have been made to more clearly define deferred renewal needs for the campus. An inspection-based analysis was completed within the past year, which identified buildings by their needs. Unfortunately, funding does not always equal the need. A member asked the estimated price tag of the deferred maintenance costs uncovered in the analysis. Mr. Spehn agreed to share this information with the Committee at its April meeting once it has been reported to the Board of Regents.

IV). Other business - A STCFSS member is particularly interested in the stadium issue. A suggestion was made for Professor Alexander to identify the chair of the committee/task force created to deal with this issue and invite this individual to an upcoming STCFSS meeting to provide the Committee with an update. Or, alternatively, if STCFSS¹ parent Committee, SCFP, is dealing with this issue then interested STCFSS members can attend their meeting(s) when the issue is being discussed. Professor Alexander will check with Professor Charles Campbell, chair of SCFP, to see if they are dealing with the stadium issue.

V). Next, Professor Alexander distributed a response by AVP Perkins to questions from Professor Alexander concerning the Riverbend Commons Garage Deicing Project.

Professor Alexander has visited the site numerous times over the past few months to follow the progress of this project. He reported that ice has formed outside of the temporary plastic enclosure designed to prevent ice from forming. As a result, Parking and Transportation has undertaken deicing efforts, an additional cost not identified by CPPM in their original estimates for this project. A member suggested Professor Alexander contact Mike Ramolae or Bob Baker of Parking & Transportation to find out more information about these efforts including the cost.

Despite CPPM¹'s best efforts to stop the ice from forming in the Riverbend Commons Garage this winter, the fundamental problem of ground water emerging from the rock surface remains. It was noted that if the circulation of cold air in the garage could be controlled it would help resolve the freezing problem. The issue, however, that needs to be addressed is why was this design error made in the first place. Apparently, this issue had been raised numerous times during the design phase with the contractor, Armlin North, who made the decision to move forward with the project anyway. As it turns out, Armlin North was wrong and the original contract as it was drafted does not provide the University with any leverage for resolving the problem.

VI). Hearing no further business, Professor Alexander adjourned the meeting.

Renee Dempsey
University Senate