

Meeting Minutes



1102 Douglas on the Mall, Omaha, Nebraska 68102 (402) 346-7007

October 29-30, 2012

HVAC, Electrical, and Life Safety Renovation
to the Elliott Building

Alvine No. 2012 2883

Attendees: See attached Attendance/Distribution List

Meeting Overview

Two days of meetings were conducted on site at the UNL Elliott Building in Scottsbluff, Nebraska. The meetings were held to provide an overview of the progress of the HVAC and life safety upgrades to be constructed in 2013.

A large group meeting was held to initiate the two days of smaller user group meetings. An overview of the project was presented to the staff and users of the facility. The scope of the HVAC system, lighting systems, fire sprinkler system, fire alarm systems, and general construction work were presented to the large group.

Small Group Discussions

The following items were discussed in the small group meetings with the various users.

1. Lighting control will be provided using dual-technology occupancy sensors.
2. The occupancy sensors will have automatic-on for low levels of lighting and manual-on for full lighting levels.
3. Laboratories will have manual, two-level switching due to the need to have the lighting in the laboratories remain on during normal business hours.
4. The public circulation areas, such as corridors, hallways, etc., will be painted as part of the base-bid project.
5. The base bid will include the single-story building. The Alternate #1 will include the two-story building, which primarily houses the UNMC School of Nursing. Alternate #2 includes a new chiller for the building to replace the existing chiller.
6. Fire alarm and sprinkler systems are being done throughout the facility, including the two-story building under the base bid.
7. It is anticipated that fire alarm and sprinkler systems will be installed in the two-story building while the facility is occupied.
8. Alvine Engineering requested a classroom scheduling calendar for the fall semester of 2013. This can be utilized to inform the phasing that will be required for the fire alarm and fire sprinkler work.
9. No upgrades are being provided for the data telecommunications wiring systems as a part of this project.

10. The data telecommunications rooms are being provided with separate cooling units to allow them to operate at the appropriate temperatures.
11. A telecommunications room is being constructed around the existing telecommunications equipment located in the southeast mechanical room on the second floor.
12. Temporary relocation of the staff in the single-story space was discussed at length. There is a steering committee that has been formed that is providing guidance and direction for these relocations.
13. Specific types of equipment and personal effects that must be relocated by the users was discussed with each user group.
14. Emergency power support for laboratory equipment was discussed with each laboratory user. At least one 20-amp, 120-volt quad emergency power outlet will be provided for each laboratory. These outlets will be red so that they are obviously indicated as the emergency power.
15. Some labs will require two circuits for specific critical low-temperature coolers and freezers.
16. Fume hoods were discussed with each laboratory user. Laboratory users are generally satisfied with using four- or five-foot hoods.
17. The users of the Chemistry and Potato Laboratory requested a larger fume hood of eight feet in length. Barry Shull indicated that he would review the University inventory and see if there are any hoods of this size available.
18. Temporary power for the greenhouse evaporative cooling was discussed as a possible need. Alvine Engineering will review the power requirements for this and determine if it can be integrated into the base bid for temporary backup during the power outages that will be incurred during construction.
19. Power outages were discussed with all user groups. It is anticipated that a worst-case power outage would be scheduled for a three-day holiday weekend. Another option would be to do two shorter power outages of potentially a single-day each. This seems to be the more economical and desirable solution if it can be accomplished.
20. The construction schedule was discussed with all users. Construction is anticipated to start early in May, with Phase I being substantially complete in August prior to the commencement of classes.
21. The plumbing renovation was discussed. All plumbing main lines in the corridor areas where ceilings are already being removed will be replaced. Valves will be added where connections are made to the existing piping.
22. It was discussed that the replacement of the mains should provide some incremental improvement. However, if the old galvanized piping is deteriorated at the fixtures themselves, there may not be significant improvement through the replacement of the mains. There could also be a potential for water leaks due to the increased pressure that will be seen by the existing

pipng after replacement of the mains. Hopefully leaks will be detected during the construction period and can be remediated. However, there is no guarantee of this.

23. An individual from the steering committee suggested that a temporary corridor be added on the west side of the lobby area to allow access to the rooms along the east side of the two-story addition that would be part of a potential Phase 2. This would allow access to those rooms that are directly adjacent to the Phase I construction area. After further review of this idea, it appears that this is achievable and will be a good way to maintain access to the much-needed rooms in the two-story building.
24. Miller and Associates will review the egress requirements for the temporary corridor and will incorporate that into the construction documents.
25. Any demolition required in the area above the temporary corridor would be done prior to the construction of that corridor.
26. During discussions with the users, it has become apparent that there is a need to have some understanding about the length of time that will be required for demolition and reconstruction, particularly for areas in which the sprinkler and fire alarm systems will be installed in occupied areas.
27. Another area of concern for the length of time that will be required for demolition and reconstruction is in the two IT rooms. These rooms will not be relocated and must be maintained to provide service to the two-story building as well as other research computers that will remain in some of the laboratory spaces.
28. Specific notes should be added to the construction documents for protection of furniture and equipment. A combination of poly, plywood, and other protection materials must be used by the contractor to ensure that remaining furniture and/or equipment is protected.
29. The users of the one-story facility will need access to the construction site periodically. This access is to retrieve resources and/or equipment that is seldom used but would likely be used during the construction period at some point. The method and time of access should be integrated into the construction documents.
30. After discussion with the users about topics such as phasing, access during construction, temporary facilities, etc., it has become apparent that it would be very beneficial to engage a contractor for a limited scope of work to assist in the development and better understanding of some of these issues. If a contractor is engaged, a more accurate assessment and procedure for these items can be integrated into the construction documents, assisting in understanding and pricing for the contractors. Doug Alvine will generate a scope of work to be forwarded to UNL for consideration.
31. The meeting with the UNMC School of Nursing was a very beneficial meeting to allow the design team to communicate more accurately to the School of Nursing the design intent and the ideas behind the phasing of the project.

32. The design team informed the School of Nursing that the proposed phasing of the two-story building was strictly the idea of the design team based on two requirements of the project:
 - A. The single-story building was required to be the initial phase due to the major mechanical equipment being located in this area.
 - B. The project budget was limited enough that a significant alternate needed to be defined. The two-story building was a large enough alternate that it could provide that needed budget management.
33. The School of Nursing indicated that they had understood that the University was only interested in making their portion of the building better if there was enough funding.
34. The School of Nursing indicated that the temperature control for the space was very poor. They stated that, in particular, the rooms on the exterior were in the 50-degree range during the winter time. It has been significantly bad that they are concerned about student retention, particularly out-of-state students that are paying significant tuition rates.
35. Several of the other users indicated that offices on the exterior walls were also very cold during the winter. After further review, it has been determined that the exterior wall envelope, for the most part, is uninsulated. This will have to be dealt with in the design. Further discussion is included later in these meeting minutes.
36. The School of Nursing also indicated that hot water is unavailable at the restrooms as well as the break room in the two-story building. This may require additional circulation pumps and/or point-of-use water heaters for these spaces.
37. If possible, the permanent generator should be installed, started, and tested prior to the outages for the new electrical service. This could possibly eliminate the cost for temporary power.
38. Special precautions need to be taken to protect the IT equipment in the two IT rooms. This equipment will not be relocated. Special instructions should be provided in the construction documents that the demolition and construction of systems in these spaces need to be coordinated to occur in a simultaneous, consolidated manner so that the rooms are not disturbed multiple times for multiple trades.
39. The IT rooms will likely require temporary power if the outages are of durations longer than one or two hours.
40. There is a significant number of IT cables that are loose in the ceiling spaces. These cables are currently laying on ductwork that will be demolished. The construction drawings should indicate that all of the loose cables shall be supported by J-hooks up and away from any equipment to be demolished prior to the initiation of demolition.
41. The IT staff is to provide the coordinating committee a list of all equipment and loads that are going to be used in the IT rooms by November 15th. This will allow the design team to provide the proper electrical power and cooling to the IT rooms.

42. After review of the ceiling space in the auditorium, it was determined that the ceiling above the stage will come out, and a new acoustical tile ceiling will be installed.
43. In general, the biosafety cabinets in the laboratories will stay. All of the loose equipment in the laboratories is to be moved by the users.
44. Ceilings and walls will be patched where hoods are removed.
45. Openings in the laboratories need to be patched to allow the systems to be properly balanced and maintain negative pressure. Miller and Associates will coordinate the cutting and patching required in these spaces. They will indicate on their plans specific cutting and patching, and they will also refer to the mechanical/electrical demolition plans and indicate patching shall be provided where mechanical/electrical equipment is removed.
46. Many of the hoods that are to be removed have asbestos transite panels. The University will need to have these panels removed prior to the start of construction.
47. In general, the countertops where the hoods are removed will remain as existing for work surfaces. A patch for the cup sinks will be provided as part of the construction documents. Miller and Associates should include an infill panel at the cup sinks. There are typically two cup sinks per fume hood.
48. Some piping extends beyond the building exterior wall toward the greenhouse area. The piping replacement will stop at the building exterior wall. New valves will be put in at the connection point to the existing piping that extends to the greenhouses and outbuildings beyond the Elliott Building exterior wall.
49. In the shipping and receiving area, there is a -80 deg F cooler.
50. The shipping and receiving area has several smaller rooms that are continuously heated for drawing purposes of samples. The shipping and receiving room is typically always warm because of these heated rooms located within this area.
51. The two-story School of Nursing spaces have a significant heating problem on the perimeter during the winter months. As previously noted, the exterior wall is either uninsulated or poorly insulated. Hot water fin tube heating should be reviewed as a primary solution for this issue.
52. After a lot of discussion, it was determined that another alternate package could be designed for the School of Nursing. Currently, the full HVAC upgrade package is going to be implemented only if the budget allows it to be included. With an alternate, smaller bid package, the likelihood of improvement in this space is significant based on the current budget estimates for the Phase I base bid.
53. The improvements that would be included to the two-story space as a part of the additional alternate to be designed are:
 - A. Hot water fin tube at the perimeter of classrooms and offices.
 - B. New DDC controls for the existing air handlers.

- C. Point-of-use hot water heaters for the kitchen/break room and restrooms.
 - D. Extension of the four-pipe system from the single-story to the air handlers in the two-story. The four-pipe system could be interconnected with the existing two-pipe air handlers and controlled manually or automatically.
 - E. Relocation of thermostats to provide better temperature control.
54. An ADA door controller will be added for the interior door at the primary ADA entrance to the two-story building.
55. There is a water leak in the two-story building. When it rains, there is a bucket on the first floor that is put there to catch the water. The exact source of the water leak has not been determined. It is potentially a roof leak or possibly a building façade leak. Miller and Associates will look at this area to see if it can be determined where the source of the water leak is. If possible, this will be repaired when the roof is patched, and/or the façade will be patched if it is determined that is the source.
56. It was suggested by Barry Shull that the contractor provide as a part of his bid proposal, a critical path for the overall project. In addition, the contractor should provide the durations for individual portions of the work, such as the work in the IT rooms.
57. The design documents should indicate that the ADA restrooms in the two-story building need to be available during construction.
58. Access to the greenhouses will need to be provided during construction.
59. Access to the shipping and receiving area will need to be provided during construction. Perhaps the receiving area can be renovated first and then the contractor can turn the space over.
60. Consideration should be given to including in the construction documents turnover of portions of the building to the Owner in lieu of turning over the entire area at one time. This would allow for a separate move in back into the facility if this is possible.
61. There will be a follow-up meeting on site to discuss the final details of the project the week of December 10th. This will be coordinated with UNL and the users similar to the meetings this week.

Please submit comments, additions, or corrections to these meeting minutes in writing within five days of issuance. If no comments are received within this period, this memo will be assumed accurate and filed as part of the permanent record for this project.

Submitted by: Doug Alvine and Steve Ford

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SEF/mkm