

March 6, 2014

VIA Email

College of Lake County  
19351 West Washington Street  
Grayslake, Illinois 60030

Re: College of Lake County: AB Wing HVAC Remodeling Programming Mtg #3  
Architect's Project Number: 214016.00  
**Meeting Minutes –**

Summary of a Committee Meeting held at 9:00AM Thursday, August 21, 2014 at the College of Lake County. These notes record our understanding of items discussed and decisions made at this meeting. Please notify us within seven (7) calendar days of any necessary additions or corrections.

## PERSONS IN ATTENDANCE

Scott Allen,	CLC
Jim Marison	CLC
Erik Solomon	CLC
Carolyn Sizemore	Mortenson
Joe DiGiacomo	Cotter
Tim Jansky	Cotter
Vuk Vujovic	Legat Architects
Ryan Sprangers	KJWW
Dave Hickman	KJWW
Michael Lundeen	Legat

## ITEMS DISCUSSED

1. The group followed the meeting agenda. Presentation materials were sent to all attendees August 19 with agenda.
2. The group discussed the current schedule of potentially starting DD by Sept. The challenge of alignment of budget/cost for bore the Café/Core and AB remodeling has impacted approvals to proceed. Cotter is developing a schedule with input from Mortenson and Legat.
3. KJWW briefly described the geothermal system and Hybrid mechanical systems. The geothermal budget/costs have required the project to utilize a boiler and cooling tower to support the heat pumps during winter and summer. AEI calculation of the geothermal is that the wells will support the heat pumps 60% of the time. During the other 40% of the time the boilers/cooling towers will provide heating/cooling up to 70% of the load on the coldest/hottest days.
4. Group reviewed the central plant layout below the cafeteria in the basement. See plan.
  - A. Jim noted that water softener system likely not required. CLC does not have one. KJWW to discuss with kitchen consultant.
  - B. Cooling tower location discussed along with number of cells and closed verses open system. Open more efficient, but uses a lot more water. CLC may want to look at this from a water use standpoint.
  - C. Jim asked that the trolley for installation of the pumps be left in place for replacement of pump motors.

College of Lake County: AB Wing HVAC Replacement

**Meeting Minutes** – August 21, 2014

Page 2 of 3

5. Group reviewed the potential phasing of Core/Cafeteria, then A wing (min 2 phases), and then B wing (min 2 phases). Currently A wing would start while cafeteria is finishing up, Schedule and phasing is still being developed. Each phase will take about 6 months from start to finish.
6. Group reviewed the geothermal pipe routing from the pumps in cafeteria basement through the basement to B wing classrooms, courtyard then to PAC. Routing will not go through the Core or be buried below the floors.
7. Group reviewed penthouse layouts, potential addition to penthouse 4 if system becomes 100% VAV. Under the chilled beam HVAC design a penthouse design is not needed. Cooling tower may be on A or B roofs. Exact location to be determined.
8. Group discussed redundancy. Redundancy will only be provided at the boilers, not at the cooling tower.
9. Group discussed load shaving and peak loads. CLC recommended that the system be designed at 100 design load. We will not pursue load shaving through class scheduling, thermostat (heat/cooling) adjustments to reduce loads. This could reduce equipment sizes.
10. The group discussed the differences in the two mechanical systems being considered. 50% DOAS/Chilled beam/50%VAV compared to 100% VAV. KJWW indicated the cost difference is about \$2-4/SF. Mortenson indicated it is closer to \$8/SF or approximately \$1,000,000 less the penthouse additions required to house the larger VAV HVAC units. Penthouse additions for the VAV would be at penthouse 4 with a footprint of 1,400 SF.
11. Group discussed how a new BAS would be incorporated into the project. Mortenson will be looking at differences between a competitive bid and sole specifying. Deltek. CLC would prefer to stay with Deltek Controls. To be consistent with existing system. This will save with training staff. Sole specifying and putting in the mechanical bid will have a premium added to the estimate. Jim indicated that recent controller replacements were done in a way that the controllers can be re-used with this HVAC replacement.
12. The group reviewed 4 options for the Cafeteria/Kitchen HVAC locations. Currently the design has it located on the server roof with a built access enclosure. CLC would prefer to have it in the basement or SW of the Lounge clearstory windows. The basement would cost less, however ductwork will take away from kitchen space. The rooftop solution adjacent to lounge clearstory windows was preferred. This will block all windows to the central lounge space, however it will be more difficult to see from the board rooms and A/B wing windows.
  - A. CLC noted that they did not like the basement location for the AHU because it would take away space from the other mechanical equipment. Yes/No. KJWW would design with appropriate clearances.
  - B. KJWW will look at the existing mechanical room behind the elevator to determine if any equipment could be placed there. Perhaps Core AHU could be placed here.
13. Group discussed LEED requirements and potential for Silver or Gold. Selecting the 100% VAV system will likely not allow Leed Gold to be achieved. Vuk will look at combining the 2 projects.
14. Mortenson will be presenting the AB cost estimates to Cotter/Legat/CLC later today.
15. .

Thank you.

Sincerely,

Legat Architects, Inc.

Michael Lundeen, Senior Project Manager

College of Lake County: AB Wing HVAC Replacement

**Meeting Minutes** – August 21, 2014

Page 3 of 3

ML/ML

ATTACHMENTS

Agenda

Presentation

CC

CLC MP Website

Greg Evans

CLC

Dorothy McCarty

Cotter

Jeffrey Sronkoski, Legat Architects

Ryan Horsman, Legat Architects