



Justification for Approval for Innovative Procurement - UAA Consortium Library Old Core Mechanical Upgrades, Phase 2

The project is phased to accomplish work in each of the four central cores in the original UAA Library Building. Phase 2 consists of replacement of boilers, main air supply/exhaust fan units, heating/cooling coils, galvanized piping and humidification systems and hazardous material abatement in two central cores (Quadrants A and D). The total project cost for Phase 2 was \$8,019,000; \$4,162,000 for Quadrant A and \$3,857,000 for Quadrant D. At the December 2013 BoR meeting, the project was conditionally approved for the amount of available funding. The current amount of available funding is insufficient to cover both quadrants. We can accomplish the design of Phase 2, including both quadrants, and renovate Quadrant A with available funding. The work in Quadrant D can then be accomplished as additional funding becomes available.

However, the mechanical equipment in the two quadrants are designed to operate together to support the two respective library cores. For example, there are currently two boilers installed in each quadrant. When Phase 2 is completed, only quadrant A will house the new boilers and the heat exchangers, and controls for the two quadrants will be installed in Quadrant D. The same relationship will exist in quadrants B and C under Phase 1 of the work. When both phases of the work are completed, the entire building will need to be commissioned and re-adjusted to ensure that the entire system is working together with the equipment that was installed when the new Consortium Library addition was constructed. The dependency of the work done in each quadrant during each phase of the project and at the completion of the work make it imperative to have the work accomplished by the same contractor.

The work in each quadrant will also require significant work outside the mechanical rooms in each quadrant. The entire air distribution system installed above the existing suspended ceilings will be replaced. This will require removal of the ceiling grid, demolition of the existing ductwork, VAV boxes, controls, etc., and installation of the new equipment. These areas currently include major library collections, and research and reference materials that must be protected and will require access during the work, as well as offices and work spaces for library employees.

The funding scenario resulting in multiple inter-related design packages and construction phases, combined with the need for partial occupancy and operations within the building while under renovation, are compelling reasons to utilize the innovative project delivery method of construction manager at risk (CMAR).

There are significant benefits of using the CMAR procurement method. CMAR strengthens coordination between the architect/engineer, the Owner and occupant. The contractor that will actually do the work will be able to participate with the design team, university project management staff and occupant during planning and design. The CMAR contractor will be closely involved in developing the phased schedule to minimize impact on the occupants, keep

the facility operational and provide the most effective methods of implementing construction to complete the work to meet UAA schedule and requirements. The ultimate success of the project will be based upon the ability of the contractor to collaborate with the design team, Owner, and occupant.

Other significant benefits for using the CMAR procurement method are as follows:

- During design development, the architect and contractor work together to cultivate and review the design; the contractor can provide a constructability review of construction documents, and help determine phasing and sequencing of the work.
- The contractor develops a guaranteed maximum price (GMP) through a reconciliation process with the design team and Owner. A detailed comparison of cost estimates developed by the design team, Owner and contractor provides cost control and, in some cases, results in cost saving resulting from value engineering.
- The CMAR contractor is selected based on qualifications. This helps ensure that the contractor has the experience and other qualifications to accomplish the scope of work. This also ensures a strong allegiance to the Owner because their business relies on references and repeat work.
- The contract can be written to allow near-future phased work to be accomplished by the same CMAR contractor as funding becomes available, if performance is acceptable and the contractor is willing to do the work. Additional mobilization costs are potentially saved. The contractor is familiar with similar work as each phase of the project becomes available with funding. Familiarity and experience with the scope of work may reduce potential change orders because the contractor knows the challenges of the project. When it comes time to commission the entire building, the same Contractor will have been responsible for all phases of the work.

Therefore, it is considered to be in the best interest of the University to employ the CMAR delivery method for this project.