

DGS-30-456

(Rev. 02/22)

Construction Management at Risk Procurement Review Submittal Form

General Project Information

Agency Name:	Virginia Military Institute		
Is the agency a covered institution per §2.2-4379?	No		
Project Name:	Construct Center for Leadership and Ethics Phase II and Parking Structure		
Project Number:	211-18542-000		

Other Project Information

Advising A/E Name:	Tyler Morris, Wiley Wilson (Feas Study)	License Number:	55060
COV Sections: §2.2-4380.B.2, §2.2-4381.C.2			
Attach written determination for use of CM at Risk.			
COV Sections: §2.2-4380.C.2, §2.2-4380.B.1; §2.2-4381.D.2, §2.2-4381.C.1			
Is the procurement process proposed a two-step process?			Yes
COV Sections: §2.2-4380.C.2, §2.2-4380.B.7; §2.2-4381.D.2, §2.2-4381.C.7			

Agency Reasons for Use of CM at Risk

Construction Cost (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	Yes
Building Use (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	Yes
Project Timeline (COV Sections: §2.2-4381.B.1, §2.2-4380.C.3, §2.2-4381.D.3)	No
Need for Project Phasing (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	No
Project Complexity (COV Sections: §2.2-4381.B.1, §2.2-4380.C.4, §2.2-4381.D.4)	Yes
Value Eng. and/or Constructability Analysis Concurrent with Design (COV Sections: §2.2-4381.A)	Yes
Need for Quality Control/Vendor Prequalification (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes
Need for Cost/Design Control (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes

Supporting Information for Procurement Method Selection

Project Use (i.e. lab, classroom, office, etc.): (COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)			
The Center for Leadership and Ethics Ph 2 project will include construction of a 66,144 square foot, five story facility on the northwest corner of the VMI Post, adjacent to the existing Marshall Hall (Center for Leadership and Ethics). The facility will include learning classrooms and an auditorium, group collaboration areas, the relocated VMI museum, interactive learning opportunities, storage space, office space, catering space, and general support spaces. The parking structure will provide a 425 car, five level parking garage as part of and adjacent to the Center for Leadership and Ethics, Phase II facility. The existing 149 space Marshall Hall parking lot will be eliminated to provide space for a traffic circle, parking structure entrance, pedestrian walkways and green space.			
Construction Cost:	\$89,800,000	(COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)	
Project schedule: (COV Sections: §2.2-4380.C.3; §2.2-4381.D.3)	Design Start Date	Jan-24	Design Compl. Date
	Const. Start Date	May-26	Const. Compl. Date
	Attach bar chart schedule to illustrate fast tracking or other schedule complexities. (COV Sections: §2.2-4380.C.3, §2.2-4380.C.4; §2.2-4381.D.3, §2.2-4381.D.4)		

Additional description to highlight key attributes that affect the project complexity, need for value engineering/constructability analysis, quality control/vendor prequalification, and cost/design control as indicated by "Yes" answers above:

The CLE Phase II and Parking Structure project will cost nearly \$90 million total in hard and soft costs. It is a large and technically complex project involving the construction of two multi-faceted structures tied together in program and site footprint. There are significant construction related savings realized if the two facilities are constructed simultaneously. Allowing this project to be executed using the CM@Risk project delivery will further enhance those savings.

This project is a priority component of VMI's Strategic Plan and the VMI Post Facilities Master Plan. It is pivotal in furthering VMI's mission thus requiring a pre-qualified construction manager for proper quality control and execution. This project will bring together portions of the Leadership Development Program and VMI Museum system into a new facility allowing them to share resources, collaborate on programming, and grow the VMI leadership development experience for leaders at all levels with focus on the Corps of Cadets. By design, the Leadership Development program reinforces VMI culture, provides attendees with enhanced self-awareness, teaches baseline advanced leadership skills, offers opportunities for critical thinking and development of the Corps of Cadets, and professional development of the faculty and staff.

The location, topography and layout of the site in this compact historic area will require early involvement by the CM for constructability reviews and design input due to the significant coordination and paramount care required to protect adjacent cultural and historic resources. Specifically, Marshall Hall and George C. Marshall Library are very important, historic VMI facilities which are located nearby and occupied daily. Washington and Lee University (W&L) is also an adjacent property bordering the proposed construction site. A small piece of their land will need to be acquired prior to CLE Ph II construction. Early planning and coordination will be required with active involvement and constructability reviews of the CM resulting in sequenced, coordinated project planning to support Post operations and mitigation of impacts to neighboring Washington and Lee University and their campus resources.

Early CM involvement is critical to addressing and mitigating the difficulties associated with the challenging site location which is characterized by it's compact size, steep grades, limited site access, proximity to adjacent structures, and unknown subsurface conditions. The small size of the site (under 2 acres) relative to the size of the building (1.2 acres) will complicate material laydown, crane erection, scaffold erection, and storage, all of which must be reviewed during the design. Site access will be restricted making everything from material deliveries to utilities work and equipment erection complicated. These operations will require detailed planning and coordination early in the design process.

The site is also located in a karst topography environment which will likely require explosive, mechanical and/or chemical means of removing rock for the foundation. These intrusive and disruptive operations will take place in close proximity to historic buildings, the main entrance to Post and within a National Historic District thus necessitating early involvement of the CM and subcontractors during the design process. Early involvement allows the CM to coordinate for in-demand, specialty contractors (such as blasting, historic preservation, stucco) and receive their input early during the design process.

There will be a restriction of everyday VMI traffic patterns and parking during construction furthering the desire to use CM@Risk. A parking study was completed by Wiley Wilson in 2021 detailing the reality that parking will be severely limited at VMI while looking at future planned capital projects. This is the genesis of the need to construct this parking structure. During construction of CLE Ph II, the existing Marshall Hall parking lot will be offline furthering the strain on day-to-day parking with the loss of 149 parking spots. Early CM involvement will help plan, coordinate and implement interim parking measures while the new parking structure is being staged

and constructed. VMI is seeking private support and utilization of debt to support the construction of the parking structure. A solid value engineering effort and cost/design control with a CM on board will ensure the proper and efficient use of donor funding. Being good stewards of money spent during these philanthropic efforts creates further donor buy-in for future projects.

Perhaps the most challenging aspect of this project requiring early CM input will be the extensive, multiple utility relocations that will be required as part of the project. There is an overhead, 3 phase electrical power line that is located in the middle of the site. The overhead power will have to be re-routed underground. It is one of the main power sources feeding VMI so there will be an extensive outage plan required. Also, the main natural gas feed to VMI Post will have to be re-routed. The VMI and W&L master meter for natural gas is located in the site footprint. These will have to be relocated requiring CM input for outage coordination in dealing with the multiple agencies and utility providers. CM involvement will allow these efforts to be planned for constructability and executed safely with the least amount of impact to operations at VMI.

A major portion of this project is the relocation and expansion of VMI's Museum from Memorial Hall to the new CLE Ph II facility. The inclusion of the CM early in our design process will better position the project team to arrive at the most cost effective and sound solutions for construction of a separate honorary space which will host artifacts, displays, exhibits, plaques and other historic memorabilia. Having a pre-qualified, experienced CM assist in planning the relocation of countless historic artifacts and property from Memorial Hall will be of great benefit to the project to ensure adequate sensitivity in management of museum collection items.

In summary, early incorporation of the CM into the design team will benefit the constructability, schedule, cost, sequencing, and construction means and methods analysis that will be critical in executing this technically complex project on a difficult site location while minimizing disruptions to VMI operations. The project complexity as described necessitates early CM involvement. This will help Virginia Military Institute arrive at the most cost effective solution for the overall project.

(COV Sections: §2.2-4380.C.4; §2.2-4381.D.4)

Submitted by:

BG Dallas Clark

Date:

12/6/2023

Signature:

Dallas B. Clark

Title:

Deputy Superintendent for Finance and Support
(Agency Head or Authorized Representative)

For DGS Use Only

Based upon the information provided by the Agency, the use of Construction Management at Risk
IS recommended for this project.

Recommended by:

DocuSigned by:

W. M. Coppa

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W. Michael Coppa, RA

Director, Division of Engineering and Buildings