

**DGS-30-456**

(Rev. 10/18)

**Construction Management at Risk  
Procurement Review Submittal Form****General Project Information**

Agency Name:	Department of Military Affairs	
Is the agency a covered institution per §2.2-4379?	No	
Project Name:	Renovate Roanoke Readiness Center	
Project Number:	123-18325-000	

**Other Project Information**

Advising A/E Name:	Moseley Architects	License Number:	0405000027
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)	Yes
Need for Project Phasing (COV Sections: §2.2-4380.C.5, §2.2-4381.D.5)	Yes
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)	No
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)
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This project will encompass the construction of a new readiness center, new combined support maintenance shop (CSMS), and renovation of existing facilities that will house readiness center operations. The existing facilities were designed in 1989 as part of the Botetourt Correctional Center located at 201 State Drive, Troutville, VA. The new readiness center and CSMS will be constructed on the same site, which currently has water and electrical services. These utilities may require upgrades during the new construction. The Department of Military Affairs (DMA) will be razing some existing facilities to make room for the new construction. DMA has currently renovated two of the existing buildings on the site. One serves as a field maintenance shop and the other a readiness center for the 29th ID Band.

These projects will be designed as three standalone projects but will be packaged and awarded as a single construction project. Each project has different funding splits between state and federal sources, and separation of costs and scopes will be imperative for tracking and payment purposes. This project will be required to achieve LEED Silver Certification upon completion.

The new readiness center is generally described as a specially designed National Guard Readiness Center of permanent construction, 31,230 SF in size, including 7,448 SF of common use space and 13,900 SF of unit and special space allowances.

The CSMS is generally described as a specially designed National Guard Combined Support Maintenance Shop of permanent construction, 23,467 SF in size. In addition to 4,487 SF of office, work, and personnel space and 10,368 SF of maintenance shop work bays, the National Guard Combined Support Maintenance Shop addition includes the following items that are integral to the facility: site lighting, military vehicle parking, rigid pavement for operations, loading dock, security fencing.

Both the readiness center and the CSMS will be designed to meet Industry Standards as well as all local, State, and Federal building codes and as per Public Law 90-480 and 900-400. Construction will include all utility services, information systems, fire detection and alarm systems, roads, walks, curbs, gutters, storm drainage,

parking areas, and site improvements. Facilities will be designed to a minimum life of 50 years in accordance with DoD's Unified Facilities Code (UFC 1-200-02) including energy efficiencies, building envelope and integrated building systems performance. Access for individuals with disabilities will be provided. Antiterrorism measures in accordance with the DoD Minimum Antiterrorism for building standards will be provided. The total project budget is approximately \$28,000,000.

The renovation of the existing facilities is generally described as repairs and upgrades to four (4) separate buildings currently located on the 201 State Drive site. These facilities require extensive review and inspection of existing conditions to determine valid constructability techniques. At a minimum, each facility requires replacement of roofing systems, finishes, MEP equipment, interior partitions, exterior wall cladding, and windows. Building 3 is 12,000 SF in size and will be transformed from typical inmate housing into caged storage, supply offices, locker room, latrines, and heated storage. A 120' long by approximately 20' wide loading dock will also be added to the west side of this facility to allow for vehicle loading and unloading. Building 4 is currently 6,500 SF but after selective demolition and a new addition, this facility will become 5,400 SF in size and be transformed from a dining hall/kitchen into an assembly hall. Building 8 is a 2,200 SF visitation facility that will be transformed into admin spaces. Building 20 is a 1,800 SF general facility that will be transformed into a kitchen to include storage areas. This project will include a 6,950 SY asphalt parking lot for POV parking and a canopy system to connect all of the facilities together for all weather access.

The renovated facilities previously described, the buildings previously renovated under separate projects, and the new construction constitute a complete National Guard Regional Readiness Center which includes secure areas critical to national defense and state emergency operations.

Construction Cost:	\$19,000,000	(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	Feb-19	Design Compl. Date	Oct-21
	Const. Start Date	Oct-22	Const. Compl. Date	Oct-24
	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:

This overall project includes three complete, standalone projects that have various, and oftentimes, competing requirements. There are authorized allotments for personally owned vehicle and military owned vehicle parking with little reasonably developable areas to site these lots on. The readiness center and CSMS operations differ but are both located in close proximity to one another. There are multiple variances between the state and federal funding splits, applicable regulations, and authorizations. The overall project must comply with all applicable state and federal requirements, regulations, codes, laws, etc. With a project of this magnitude, coupled with the ever changing military climate, the Agency expects multiple changes to the aforementioned requirements; the flexibility and adaptability created by engaging an experienced Construction Manager allows the Agency to incorporate such changes, at multiple intervals throughout the design and construction process, without undue financial burdens. Federal budgets are established seven (7) years out and the appropriated funding is locked in at that time; the authorized federal scope of work must be constructed at the authorized federal funding appropriation. A Construction Manager will allow the design to be structured to meet the federal scope and budget throughout the design process while minimizing the risk of changes during construction.

The project site is located on a functioning National Guard installation which will remain in operation throughout construction. The existing facilities include an operational Readiness Center and Field Maintenance Shop, both of which are centrally located within the confines of the proposed limits of construction. Every facet of the proposed project including laydown areas, delivery routes, parking areas, building footprint, etc. creates a potential hindrance for ongoing operations. As the regional hub for the National Guard, these existing facilities are critical, particularly in State Active Duty/emergency situations. By observing the current operations, the selected Construction Manager will acquire useful information regarding phasing, emergency preparedness, maintaining operational capability, and site usage, during and after construction, that will inform the design for the project. This input, early in the design process, is critical to formulating an efficient, effective construction plan that does not impede the existing facilities. Furthermore, this allows the design team to establish the limits of construction, routes for deliveries, staging areas, parking areas for construction personnel, working hours, and any other items that affect the areas adjacent to the project site so as to limit the impact of construction

activities on operations. The Construction Manager's expertise regarding each of the aforementioned site constraints will aid in creating seamless functional and aesthetic integration of the project into an already operational facility.

The site layout itself presents multiple challenges given the various elevation changes and limited areas for potential development. The Construction Manager will inform the design team of challenges and benefits for each potential citing of all required structures which allows the project team to properly locate parking, buildings, and site amenities for maximum efficacy. Also, pre-construction services planning by a Construction Manager will aid the design team in developing phasing plans that reduce construction traffic within current operational areas while maintaining the project budget.

The planned building renovations require extensive constructability analysis of existing and proposed conditions. These facilities, previously known as Botetourt Correctional Center, remained vacant and unmaintained for approximately 7 years prior to DMA acquisition. The Agency recently completed renovations to multiple buildings creating an operational Readiness Center and FMS; these projects resulted in numerous change orders due to constructability issues that were not previously known by the Agency nor by the design team. The Construction Manager will perform thorough analysis of each existing facility including: preliminary testing and start-up of existing equipment, site investigations to locate existing utilities, and destructive testing to determine structural integrity of floors and walls, water infiltration sources, and other encapsulated, existing conditions. Proper analysis of existing facilities is critical to the overall design, especially for Anti-Terrorism/Force Protection (AT/FP) requirements related to wall construction and blast resistance. Preliminary site investigations, destructive testing and inspections, and constructability reviews by a Construction Manager will allow the project team to make informed design decisions that will minimize potentially negative effects of unforeseen conditions. Without these preliminary services, the Agency risks exposure to multiple costly change orders throughout the construction process.

Value analysis and engineering, concurrent with the design progression, is critical to ensuring that both the federal and state budgets are maintained for the duration of the project. With the participation of the Construction Manager throughout design, the Agency expects to benefit in terms of cost, schedule, and quality. The Construction Manager will provide realistic cost estimates at timely intervals for budget control, evaluate proposed renovations against existing elements for constructability, provide recommendations for products and systems for budget, quality, and schedule control, and analyze proposed phasing to reduce inefficiencies and operational disruption.

Given the project complexity, project phasing, need for value engineering/constructability analysis, and cost control, the Agency considers the use of traditional design/bid/build procedures neither practical nor fiscally advantageous.

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

Submitted by: Derrick Hall Date: December 5, 2018  
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Date: 2018.12.05 15:10:04 -05'00'  
Title: AE Program Manager  
(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: W. M. Coppa 12/5/18

W. Michael Coppa, RA  
Director, Division of Engineering and Buildings