



**US Army Corps  
of Engineers**

# ENGINEERING AND CONSTRUCTION BULLETIN

No. 2003-4 Issuing Office: CECW-ETC Issued: 27 Feb 2003

**Subject:** Value Engineering on Military Construction Design-Build Projects

**Applicability:** Guidance

1. Purpose. The purpose of this bulletin is to provide guidance on the application of value engineering principles during the development and execution of Military Construction design-build projects.
2. References:
  - a. OMB Circular No. A-131.
  - b. Engineering and Construction Bulletin Number 2002-16, Subject: DD Form 1391 Preparation Planning Charrette Process.
  - c. Engineering and Construction Bulletin Number 2002-32, Construction Contract Durations & Schedule Slippage.
3. Reference 2.a. requires Federal agencies to use value engineering as a management tool. Value engineering should be tailored commensurate with project needs and must become an integral part of our USACE Business Process. There are several points in a design-build project delivery lifecycle that provide excellent opportunities for application of integrated value engineering principles.
  - a. Planning Charrette. Reference 2.b. provides guidance on the content and conduct of the project planning charrette. A value engineering approach can help streamline the charrette workshop to focus on meeting project requirements considering first costs and lifecycle costs. Districts should work with installations to advocate performance-based criteria in developing the programming documents.
  - b. Request for Proposals (RFP) Development. Design-Build contracting may use both performance and prescriptive specifications in the technical requirements of the RFP. For any project \$2 million or above, value engineering shall be used during the RFP development and review phase to analyze the intended functions of a facility and the prescriptive criteria to evaluate the essentiality from a performance perspective and to examine lifecycle cost implications. Value engineering at this phase provides an effective mechanism to drive prescriptive mandates toward a performance basis, thus allowing more flexibility and innovation in the proposals and subsequent design from the design-build contractors.
  - c. Contractor Submitted Value Engineering Change Proposals (VECP). After award of the design-build contract, which includes the VECP contract clause, the contractor may submit value engineering change proposals. Only VECP's that address prescriptive requirements in the RFP

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and do not affect the proposal evaluation factors used to determine contract award may be considered.

4. In general, value engineering should not be performed by the Government on a design-build contractor's design. At this stage of project execution, the best-value contractor has contractually committed to provide the design and construction in accordance with the RFP and accepted proposal for an agreed price and performance schedule. The Government's responsibility should be one of quality assurance to verify that the design is in conformance with the contract. Any Government influence on the contractor's design solution at this point dilutes the sole source responsibility principle of design-build. Further, any formal changes to a design that is in compliance with the contract would normally result in either a credit modification to the Government or an equitable adjustment to the contractor. Any savings that would accrue due to a less expensive design that is still in compliance with the contract would be realized entirely by the contractor. Contractual changes based upon Government value engineering after contract award may likely result in a time extension for the contractor.

5. In keeping with the principles in reference 2.c., we must assure that our customer is fully apprised of the additional assumption of performance risk by the Government in the areas of schedule and quality if we embark on a value engineering study of the contractor's design. Another downside to performing Government value engineering after award of a design-build contract is that the funding for this effort must come from construction funds. The use of Planning and Design (P&D) funds after award is not permitted.

6. Value engineering principles can and should be used appropriately to enhance the delivery schedule, cost effectiveness and quality of design-build projects. Value engineering must be accomplished within the Project Delivery Team environment to assure that desired efficiencies are maximized for the investments made.

6. Point of contact for this bulletin is Mark Grammer, CECW-ETC, 202-761-4127.



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