

OBO Industry Advisory Panel

Value Engineering Ideas

Gregory S. Knoop, AIA, LEED-AP, SAVE

Value Engineering Trends

- Use VE concepts to develop project concepts
 - Work with the project stakeholders in a one- to two-week value-based design charrette
 - This is not a VE workshop, but lays the foundations of real value assessment from the start of the design
 - Goals established in this effort give clear direction to the design team

Value Engineering Trends

- Perform a value workshop to assess the way the SED is used. The SED is a tremendous tool for a team that is given creative leeway to strive for value-based quality design
 - Templates vs. standards: Which one is it?
 - Kit of parts vs. cookie cutter design: What should an embassy representing such a diverse nation try to be? Equal but different?

Value Engineering Trends

- Analyze life cycle costs since energy usage/costs and fiscal operational needs are always critical to the owner
 - Measurements
 - How OBO does business
 - O&M data
 - Post habits, management and procedures

Value Engineering Trends

- Incorporate risk analysis into the VE process at the beginning of the Creative Phase
 - Brainstorming risk mitigation measures, saves costs
 - Insurance
 - Political
 - Security
 - Cost
 - Schedule
 - Risk analysis enables the VE team to identify, prioritize, mitigate, or eliminate project risk

Value Engineering Trends

- Involve an advisory group of users/Post representatives in the process of establishing goals
- Relationship building between Posts and OBO to help make project execution insure value.
- Who is OBO's customer?
 - Embassy
 - Main State
 - We the People
 - Prioritization of service insures managed expectations

Value Engineering Trends

- Conduct multidisciplinary, independent constructability reviews
- Involve contractors on VE teams to enlighten the team on constructability issues
 - Craft
 - Materials logistics
 - Schedules and sequences
 - Coordinated work

Value Engineering Trends

- Use VE concepts to develop RFPs for Design/Build contracts
 - How a project is presented to the marketplace can have a profound effect on the outcome of the building process:
 - Number of bidders
 - Cost
 - Schedule
 - Attitude
 - Change order mitigation

Value Engineering Trends

- Use a Value Management team to evaluate government management procedures
 - Funding
 - Procurement
 - IT
 - Comment process
 - Reviews
 - Use of AE
 - Use of contractors
 - Internal Government communication

Value Engineering Trends

- Use a VE team to evaluate RFPs and to evaluate resulting bids
 - If OBO were to experiment with a best value, 2 phase bidding process with fixed costs and allow the bidders to bid quality not cost, then the VE team could be used to assess the bids
 - Speak with NAVFAC and COE for examples

Value Engineering Trends

- Use the VE team to evaluate best construction procurement method for specific projects depending on new construction and renovations
 - Design Build
 - Design Bid Build
 - Construction Manager
 - Negotiated Bid
 - Lease buy back

Value Engineering Trends

- Project programming and prioritization
- To establish and quantify value, the government must establish priorities and measurements
- Program is not just the square foot numbers, it is the guiding principle and it is a living document

Value Engineering Trends

- VE team evaluates the best way to successfully incorporate LEED principles
 - AE consultants new generation and old school
 - General Contractor
 - Librarian from OBO or GSA
 - Refer to LEED checklist within the Creative Phase of the VE Job Plan to brainstorm ways to incorporate sustainable design

Value Engineering Trends

- Focus different VE teams on specific tasks
 - Technical review
 - Process
 - Programming
 - Design excellence
 - Contracting
 - Evaluation of multiple projects for lessons learned

Value Engineering Trends

- VE team needs to evaluate the best way to successfully use BIM 3D/4D tools
 - Autocad Person
 - Microstation Person
 - AE consultants new generation and old school
 - General Contractor
 - Librarian from OBO or GSA
- Make sure the tool serves the user not the user serving the tool

Value Engineering Trends

- Have OBO do one small SED project, design and build from in-house:
 - Demonstration of proper use of standards
 - Demonstration of on-time delivery
- The VE team can help evaluate the process

Value Engineering Trends

- Use VE team to evaluate business management practices involved in creating an embassy building
- How does OBO Inc. compare to the market place?
- How does OBO motivate the market place to make a Partnership for success.