VALUE ENGINEERING STUDY
TEAM PARTICIPATION STUDY
Procedure July 8, 2025
EASTON AREA NEW HIGH SCHOOL
CHA Project No. 251174

1. CHA's Value Analysis Leader (VAL), Michael DePodwin will gather data from the design data compiled to date, and organize and assemble the initial Value Engineering Spreadsheet to list all the VE items for the project. **Date of Phase I VE Spreadsheet distribution to Architect and VE team will be a in person meeting on July 08, 2025**. The Architect will supply the following (as it may exist for each project) for the team to review:

a. The VE Summary Spreadsheet (developed by the VAL) prepared by CHA

b. The project budget estimate itemized by specification division prepared by CHA

c. Schematic Design Presentation

d. Project renderings, sketches or available cross sections prepared by Architect

e. Project floor plans that identify square footage for each space already issued to team members

f. Building site plans including anticipated utility connection locations and preliminary grading prepared by Architect

g. Preliminary Outline Specification provided by Architect

h. Sketches and notes on the proposed structural system (masonry bearing, steel frame, etc.) and similar notations for the proposed foundation systems in each major area prepared by Architect.

i. Preliminary exterior and interior wall cross sections as they are available

j. A brief description of the planned HVAC system and control system. This may include system comparison charts, a summary of building zones, and sketches of proposed ducting arrangements

k. A brief description of the plumbing and fire protection systems

l. A brief description of electrical and low-voltage systems

m. A description of the planned roofing system and roof drainage system.

n. A general outline of proposed building finishes for each of the major spaces

p. Notes on any special features, building components or sole source items

q. Any other details or information the design team wants to examine.

r. Adopted Guiding Principles and Design Requirements

2. **Phase II - Creative Phase** – After the VAL distributes the Value Engineering Spreadsheet and design data, the Design Team and VE participants are to add additional VE ideas that may or may not have been discussed for the project. The ideas are to be listed by specification division as noted in the spreadsheet. We are focusing on "FUNCTION" at this stage of design. This is a free flow of ideas. No ideas are wrong! No ideas are silly! All ideas will be considered. More is better. The preference is that the Architect distributes the VE Spreadsheet to the subconsultants and that the subconsultants return the VE Spreadsheet directly to the VAL. At this stage we would expect at least 50 “implementable” ideas for each project that are compiled without judgment regarding the quality of the idea. **The Phase II Creative Phase VE Spreadsheet are due back to CHA via email to tbarbato@chasolutions.com by July 22, 2025. Subject Line: EASD VE Study Phase II**

3. **Phase III - VE Workshop** – The VAL will organize the collected the VE ideas by category for presentation to the team. The Team will convene for a meeting at which the VAL will review all ideas collected and lead the team through the Evaluation Phase. VE Ideas agreed to be viable by the team will be scored and assigned to team members for further development at the end of the meeting. Scoring Considerations are as follows:

3 = "No Brainer"

2 = Should be considered for the design with added research

1 = No Measurable Impact

0 = Drop from list

Date of the Phase III Workshop will be a Ad Hoc meeting on August 5, 2025.

4. **Phase IV - Development Phase** – The VE Idea development assignments (those ideas that scored 2 or 3) will be returned to the VAL for review and inclusion on the VE Spreadsheet. Development includes Technical Investigations (Calculations, Contacted Suppliers, Vendors, Contractors as appropriate).

Support All Ideas with:

Written Description of Original Design Concept & Alternate Design Concept

Written Advantages & Disadvantage of Alternate Design Concept

Cost Information, including initial Life-Cycle Costs (if applicable) which Clearly Displays Difference Betweenthe Original Design and Alternate Cost

Impact on Budget and Schedule

The Phase IV development assignments are due back to CHA via email to tbarbato@chasolutions.com by August 12, 2025. Subject Line: EASD VE Study Phase IV.

5. **Phase V - Presentation and Reporting Meeting** - After the VAL has compiled and organized the VE ideas, the Team will convene for a meeting to review the VE Summary. The Owner will confirm the developed VE ideas to ensure rejection or inclusion in the project scope. **The Date of Phase V -Presentation and Reporting Phase meeting will be an Ad Hoc Meeting on August 19, 2025**.

6. **Board Presentation - August 26, 2025**

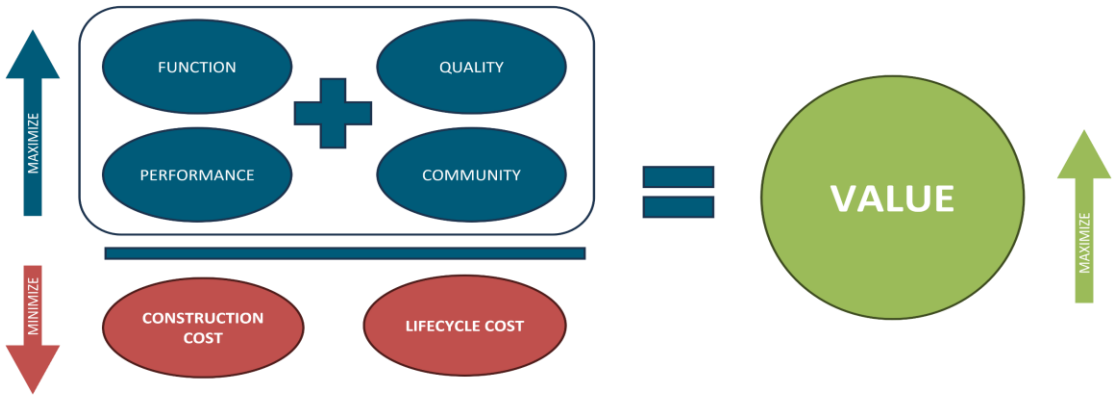
VALUE ENGINEERING STUDY
OPENING STATEMENT

The primary goal of a Value Engineering (VE) study is to maximize value, which is defined as the performance/function, and quality divided by cost. Unlike cost-cutting measures that may compromise quality by substituting high-quality components with lower-quality ones, Value Engineering focuses on optimizing functionality without sacrificing essential project elements.

During the VE process, our team will analyze each component of the building design to identify opportunities for enhancing functionality while minimizing construction and life-cycle costs. This approach aims to maximize value by finding cost-effective alternatives that do not compromise the project's core functions.

The core principle of Value Engineering is to examine the "function" of each design element and discover ways to achieve that function at a lower cost. Potential value improvements may involve refining scope definition, material and system selections, enhancing functional design, improving constructability, coordination (both internally and externally), and optimizing the project schedule and phasing plan.

In summary, our challenge is to develop a more economically efficient design that reduces both construction and operational costs while adhering to the project budget and the Design Guiding Principals.



VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Newtown Middle School	ALTERNATIVE NO.:	19
DESCRIPTION:	Reduce windows, glass sizes where feasible.	SHEET NO.:	1 of 2
		RESP. To COST	BRFA

ORIGINAL DESIGN: (Sketch attached N/A)

Large areas of glass are used to allow natural light into interior spaces

ALTERNATIVE: (Sketch attached N/A)

Reduce the amount of glass

EXAMPLE

ADVANTAGES:	DISADVANTAGES:
Improves building efficiency, save costs.	Less natural light maybe?

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN	$380,000.00		
ALTERNATIVE	$315,800.00		
SAVINGS	$64,200.00		

VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN			
ALTERNATIVE			
SAVINGS			

VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN			
ALTERNATIVE			
SAVINGS			

VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
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ALTERNATIVE			
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VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN			
ALTERNATIVE			
SAVINGS			

VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN			
ALTERNATIVE			
SAVINGS			

VALUE ENGINEERING ALTERNATIVE

Printed 7/8/2025

PROJECT:	Easton Area High School	ALTERNATIVE NO.:	0
DESCRIPTION:		SHEET NO.:	
		RESP. TO COST	

ORIGINAL DESIGN: (Sketch attached N/A)

ALTERNATIVE: (Sketch attached N/A)

ADVANTAGES:

DISADVANTAGES:

DISCUSSION:

COST SUMMARY	INITIAL COST	RECURRING COSTS (Cost/yr - 10 year assumption)	PRESENT WORTH LIFE-CYCLE COST
ORIGINAL DESIGN			
ALTERNATIVE			
SAVINGS			