



9/09:01	SBC	10/02/17	<p><b>Design Update 08/21/2017 – VE Process:</b> PMA and SMMA presented to the committee 2 lists of VE items.</p> <ol style="list-style-type: none"> <li>1) Design to cost item – There are items which the architect included as a pricing exercise or have found alternative more cost effective ways to construct. These items have no effect on Education Plan or Educational components of the School. In most cases, the end user would not know that any changes were made.</li> <li>2) Recommended VE items are items presented to the committee as options to reduce the project cost. None of these items affect the educational programing.</li> </ol> <p>All of the design to cost items were accepted by the committee as presented by the committee.</p> <p><b>M:TB S:SK</b> – Accept design to cost VE items, for a total of \$1,297,122 as presented by PMA. <b>VOTE 11-0-1</b></p> <p>The recommended VE items we all accepted except for the recommendation to eliminate one of the cover bike storage areas. Both cover bike storage areas will remain in the project design.</p> <p>Two additional “Maybe” items were accepted by the committee: 1) Utilize aluminum conductors for circuits over 100amps. 2) Utilize aluminum switch gear bus.</p> <p>One item which was accepted after significant discussion was to remove gray water flushing of toilets.</p> <p>MRJ: Expressed strong opposition to removing the gray water toilet flushing system. She commented that someone has to step up to the plate and exact change in the way we build.</p> <p>TB: Commented that he doesn’t consider this a green item because the gray water system uses more electricity because the rain water needs to be pumped through the building.</p> <p>SMMA and PMA commented that these systems need to be maintained and serviced. The maintenance and servicing are commonly beyond the capability of school departments. SMMA informed the committee that the amount of water reused would remain the same. The same amount of water would be used to water lawns and gardens. There is no change to the LEED credit for water reuse.</p> <p>MJR: Strongly opposed the removal of this items and asked for a roll call vote.</p> <p><b>M: TB S: SK</b> – To accept VE item #38, removal of the Gray Water Toiler flushing system. Roll Call Vote:</p> <p>AS-Y; SK-Y; SL-Y; EB-Y; SR-Y; TP-N; MS-Y; TC-Y; MJR – N; TB-Y; NB-Y; AA-Y; RK-Y; LD – Y;</p> <p><b>VOTE 12-2-0</b></p> <p><b>M:SK S:SR</b> Accept remaining recommended VE items totaling \$1,169,694. <b>VOTE 13-0-1</b></p>
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		10/02/17	<b>Construction Update 08/23/17 –none</b>
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#### Cost / Schedule

Item	Responsible	Due	Notes
09:11	PMA	10/02/17	<b>Project Schedule: Update 08/21/17</b> – The next phase of construction is the placement of the modulars in late December. DD submission to the MSBA is scheduled for 9/1. VE process will take place this week. 60% CD are scheduled to be available around thanksgiving; 90% CD are scheduled to be available in February.
1/06:01	PMA	10/02/17	<b>Project Budget: Update 6/26/17:</b> No update
3/14:06	City	10/02/17	<b>Historic Process: Update 08/23/17:</b> RK: We had an almost hour long meeting with SHPC. SHPC was advocating to save as much of the building as possible. IT took some time to explain the budget restrictions, construability issues and storage capacity. Working with Sarah White, they understood the concerns and issues and that the project will strive to save as much as possible. RK made assurances that items save would be stored and protected by the city. RK thanked Aldermen Rossetti and Niedergang for their support.
	ALL	10/02/17	<b>New Business: 8/21/17</b> – Future meeting dates  <b>Future Meeting Dates:</b> 10/2 – 4:30 11/27- 5:30 12/4 – 4:30 1/22 – 4:30 2/15 – 5:30 3/26 – 5:30 4/23 – 5:30 5/14 – 5:30
	ALL	10/02/17	<b>Public Comment:</b> None

**Meeting Adjourned:** Motion to Adjourn **M:RK; S:SK** All For 7:50PM

The author of these minutes assumes, to the best of his or her knowledge, that the above content of these Meeting Minutes depict all that transpired during this Project meeting. All attendees are required to address by memo or via e-mail, any omissions, errors or inconsistencies in the reporting of these Meeting Minutes, to the writer, within two (2) business days of receipt of these Meeting Minutes.

**Prepared By:** Sean Burke, PMA Consultants

**Signed:** Sean Burke

**Date:** 08/24/17;

# Somerville High School Building Committee

Meeting Sign in Sheet

PROJECT: Somerville HS

LOCATION: Somerville HS

MEETING DATE: August 23, 2017

## Building Committee

Mayor J. Curtatone

Chair T. Pierantozzi

Adda Santos

Ed Bean

John Oteri

Mary Skipper

Mary-Jo Rossetti

Max Nadeau

Nelia Braga

Rob King

Stan Koty

Steve Roix

Tom Bent

Tony Ciccariello

Vince McKay

Signature

## OPM: PMA Consultants

Chris Carroll

Chad Crittenden

Sean Burke

Walter Hartley

## Architect: SMMA

Alex Pitkin

Lorraine Finnegan

Matt Rice

Phil Poinelli

Erin Prestileo

## CM: Suffolk

Chris Walenten

Doreen Crowley

## School Staff

Leo DeSimone

Sebastian Lagambina

## Guests (please print):

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Item	Discipline	Description	Decision Affects LEED Credit (Y/N)	Scope Creep? (Client/D D)	Suffolk Estimated Savings	Suffolk SAVINGS	Design to Cost Recommended	Not Recommended	Strong Maybe	Maybe Duplicate/Scope Creep	EXPLANATION
1	A10 Foundations	Remove exterior site stair connection from the gymnasium northwest-corner stairwell to GLX	N		\$ (167,282)	\$ (167,282.00)		x			
2	A10 Foundations	Remove exterior site stair connection from field plaza to GLX	N		\$ (862,234)	\$ (862,234.00)		x			Already part of design as alternate
3	A10 Foundations	Use a precast concrete panel with a form liner in lieu of brick veneer and backup around the base of the A and C wings	N		\$ (168,405)	\$ (168,405.00)	x				Already implemented @ retaining walls in SD - this is new exposed foundation, same approach recommended
4	A10 Foundations	Reduce scope of slab demo and new slab at Level 1, D wing. Replace with selective trenching as required for new plumbing work and 1.5" thick topping/leveling slab across the entirety of Level 1, D wing to align with new Level 1 floor elevation.	N		\$ (35,487)	\$ (35,487.00)		x			Suffolk to review expectation base vs VE
5	A10 Foundations	7000sf of trenching existing CTE slab and patch concrete ILO wholesale slab replacement			\$ (41,631)	\$ (41,631.00)	x				Need to shot blast floor, infill old trenches, self leveling throughout
6	A10 Foundations	Eliminate Barrier One Moisture Reduction Admix			\$ (489,250)	\$ (489,250.00)		x			this VE item assumes not adding topical moisture mitigation ... not recommended due to overall project schedule
7	B10 Superstructure	Omit intumescent thin-film fire-proofing for gymnasium trusses	N		\$ (538,420)	\$ (538,420.00)	x				Replacing with cementitious per item below
8	B10 Superstructure	Medium Density Cementitious Fire Protection on Gymnasium trusses ILO Intumescent	N		\$ 15,156	\$ 15,156.00	x				Need to add if intumescent credit accepted unless State approve no fireproofing
9	B10 Superstructure	Eliminate fire proofing on existing auditorium trusses	N		\$ (80,000)	\$ (80,000.00)			x		VARIANCE REQUIRED FROM STATE
10	B20 Exterior Closure	Use flexible copper or stainless steel fabric through wall masonry flashing with exposed stainless steel drip edge, in lieu of formed & welded stainless steel through wall masonry flashing	N		\$ (50,522)	\$ (50,522.00)	x				Constructability item - this is level 1 reduction, level 2 would be go to from SS fabric to membrand with SS drip edge and is not recommended at this time.
11	B20 Exterior Closure	Use peel & stick AVB in lieu of liquid applied AVB ... need to review NFPA 285 implications	Y		\$ -	\$ -		x			
12	B20 Exterior Closure	Use 4" mineral wool insulation board in lieu of 3.5" of foil faced polyisocyanurate insulation in the following exterior wall assemblies: EWA-1, EWA-1b, EWA-2, EWA-3 & EWA-4. Refer to drawing A-003.	N		\$ (107,779)	\$ (107,779.00)	x				Constructability item.
13	B20 Exterior Closure	Avoid installation of new long span joists across the entirety of the gym roof, will preclude making the gym roof PV ready for standard ballasted systems	N		\$ (101,043)	\$ (101,043.00)		x			8 joists
14	B20 Exterior Closure	Re-use existing auditorium wood roof purlins & plywood decking, as opposed to replacing with new metal deck	N		\$ (67,200)	\$ (67,200.00)				x	
15	B20 Exterior Closure	Retain existing gym windows - re-glaze existing with new IGUs	N		\$ (80,834)	\$ (80,834.00)		X			Existing gym frames are in good condition, but the glazing unit seals have failed in the past 30 years - this approach will replace only the glazing
16	B20 Exterior Closure	Use an alternative auditorium roofing material - PVC membrane roof - assumes future PV will cover the primary appearance of the roof	N		\$ (206,552)	\$ (206,552.00)				x	Proposes changing the new auditorium roof from standing seam metal to an alternative material. This approach is being considered because the auditorium roof will eventually be covered with solar PV panels, making the appearance of the roof less critical.
17	B20 Exterior Closure	Use an alternative auditorium roofing material - Vented asphalt shingles - assumes future PV will cover the primary appearance of the roof	N		\$ (413,104)	\$ (413,104.00)		x			Proposes changing the new auditorium roof from standing seam metal to an alternative material. This approach is being considered because the auditorium roof will eventually be covered with solar PV panels, making the appearance of the roof less critical.
18	B20 Exterior Closure	Change ALL composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing - CAN BE TAKEN IN CONJUNCTION WITH ITEM BELOW	N		\$ (111,204)	\$ (111,203.50)				x	Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
19	B20 Exterior Closure	Change 50% of composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing	N		\$ (111,204)	\$ (111,203.50)		X			Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
20	B20 Exterior Closure	Remove 1 large skylights at the A wing	N		\$ (10,913)	\$ (10,913.00)	x				Sufficient lighting in space, skylight unnecessary
21	B20 Exterior Closure	Remove one WT-5 large skylight (5 total) in dining commons	N		\$ (20,000)	\$ (20,000.00)	x				Sufficient lighting in space, skylight unnecessary
22	B20 Exterior Closure	Reduce quantity/scope of roof screens ... where omitted structral stub-ups will be maintained for screen installation at a later date if needed			\$ (176,000)	\$ (176,000.00)		x			Existing mechanical equipment has been reviewed and will be compliant with DEP environmental noise regulations without the need of acoustic roof screens. This approach will provide stub ups for future visual or acoustic roof screens to be installed at a later point if deemed necessary.
23	B20 Exterior Closure	Eliminate Roof Walkways Pads			\$ (22,454)	\$ (22,454.00)			x		
24	C10 Interior Construction	Provide 2" wide face HM frames in lieu of 1" wide face HM frames for all interior doors and borrowed lites	N		\$ (38,666)	\$ (38,666.00)	x				Pricing exercise
25	C30 Interior Finishes	Fabricate interior window head & jamb surrounds from painted (or laminate clad) water-resistant MDF, as opposed to field-finished gypsum board returns. Requires a piece of trim at the face of the wall for installation tolerance.	N		\$ (10,500)	\$ (10,500.00)	x				SMMA to provide detail (JGS)
26	C30 Interior Finishes	Remove 18" high continuous tacksurface above whiteboard from the combination boards, use a continuous tack strip only instead	N		\$ (8,420)	\$ (8,420.00)			x		preference of the educators
27	C30 Interior Finishes	Use epoxy terazzo flooring in lieu of large format porcelain tile with crack supression membrane and 5/8" thick mudset as specified	N		\$ (67,362)	\$ (67,362.00)		x			Replaces the porcelain ceramic tile in the Dining Commons with epoxy terrazzo flooring.
28	C30 Interior Finishes	Epoxy flooring in all toilet rooms except large gang toilets at First Floor next the gym/dining commons	N		\$ (47,153)	\$ (47,153.00)	x				tile in airport entry, epoxy from there on back
29	C30 Interior Finishes	Reduce Ceramic Tile wall height to 4'-0" AFF in corridors (currently 5'6")	N		\$ (101,043)	\$ (101,043.00)			x		

Item	Discipline	Description	Decision Affects LEED Credit (Y/N)	Scope Creep? (Client/D D)	Suffolk Estimated Savings	Suffolk SAVINGS	Design to Cost Recommended	Not Recommended	Strong Maybe	Duplicate/Scope Creep	EXPLANATION
30	C30 Interior Finishes	Reduce Ceramic Tile wall height to 7'-0" AFF in toilet rooms	N		\$ (58,380)	\$ (58,380.00)			x		coordinate with tall toilet partition
31	C30 Interior Finishes	Eliminate ceramic tile on non-wet walls in toilet rooms			\$ (280,675)	\$ (280,675.00)			x		
32	C30 Interior Finishes	VCT flooring in classrooms in lieu of linoleum	N		\$ (65,566)	\$ (65,566.00)		x			
33	C30 Interior Finishes	Epoxy flooring in locker rooms in lieu of rubber	N			\$ -		x			
34	C30 Interior Finishes	Utilize prefabricated gypsum board corners to save on labor	N		\$ (56,135)	\$ (56,135.00)	x				check if proprietary product (only soffits)
35	C30 Interior Finishes	Change 2'x2' (ACP-1) ACT to 2'x4' ACT				\$ -		x			
36	C30 Interior Finishes	Change sloped GWB-1 in auditorium to sloped 2'x2' tegular ACT			\$ (55,574)	\$ (55,574.00)		x			can't take this - not functional for auditorium acoustics
37	C30 Interior Finishes	Change ACP-8 (called ACP-7 on Finish Legend) in Lecture Hall to ACP-1			\$ (17,963)	\$ (17,963.00)		x			finish schedule to be updated
38	D20 Plumbing	Remove toilet flushing from rainwater harvesting system (keep irrigation)	Y		\$ (106,000)	\$ (106,000.00)	X				Removes a portion of the rainwater harvesting system that is flushing toilets in the large toilet rooms next to the Dining Commons. In addition to removing system costs and ongoing maintenance concerns, it will also free up approximately 300 SF of usable space within the school for educational program that is currently dedicated for tanks & filters.
39	D20 Plumbing	Remove irrigation from rainwater harvesting (keep toliet flushing, add traditional irrigation system)	N		\$ (350,000)	\$ (350,000.00)			x		Removes a portion of the rainwater harvesting system that is dedicated for site irrigation. An irrigation system would still be provided, but it would be supplied from the City domestic water piping.
40	D20 Plumbing	Remove toilet flushing and irrigation from rainwater harvesting system (add traditional irrigation system)	Y		\$ (738,000)	\$ (738,000.00)			x		This would eliminate all components of the rainwater harvesting system.
41	D20 Plumbing	Change solar hot water system to more of an educational skid-mounted system - not tied to an interior tank system.	N		\$ (6,800)	\$ (6,800.00)	x				incorporated during estimate meeting
42	D20 Plumbing	Change the two small green roofs located to the east & west of the auditorium roof (at level 3) to ballasted roofs	Y		\$ (7,679)	\$ (7,679.00)			x		
43	D20 Plumbing	Change pipe fittings for water piping (up to 1.5" diameter) to "Propress" type fittings if this is an acceptable installation technique for AHJ	N		\$ -	\$ -	x				incorporated during estimate meeting ("In base" Suffolk)
44	D20 Plumbing	Relocate toilet room in early education classroom to avoid need for heating trace of the drain piping	N		\$ (1,200)	\$ (1,200.00)	x				incorporated during design
45	D20 Plumbing	ADD heat trace at roof drain baskets (does this affect generator size)		Client	\$ 20,000	\$ 20,000.00		x		c	request by City (generator size not affected)
46	D20 Plumbing	Gas line installation by Eversource	N		\$ (16,700)	\$ (16,700.00)	x				Being performed by Eversource
47	D20 Plumbing	Change pipe fittings for compressed air (up to 1.5" diameter) to "Propress" type fittings if this is an acceptable installation technique for AHJ	N		\$ (10,000)	\$ (10,000.00)			x		
48	D30 HVAC	Change gymnasium HVAC system to DX units to allow it to function as a cooling center on emergency generator power (includes generator upcharge)	N	Client	\$ 280,000	\$ 280,000.00				c	This item would allow the field house to serve as an emergency cooling center, which was a request of SFD. Involves changing the mechanical units for the gym to standalone tpyes, and upsizing the emergency generator to account for the load of these mechanical units.
49	D30 HVAC	Eliminate ceiling fans in Gym	N		\$ (18,974)	\$ (18,974.00)		x			
50	D30 HVAC	Eliminate ceiling fans in Band and Orchestra	N		\$ (2,470)	\$ (2,470.00)		x			three rooms
51	D30 HVAC	Use fabric ductwork with reinforced internal skeleton for gymnasium ductwork	N		\$ (168,405)	\$ (168,405.00)	X				This replaces the metal ductwork in the gymnasium to fabric ductwork in the gymnasium. Approach needs to be confirmed with fabric ductwork manufacturer.
52	D30 HVAC	Change to green cooling throughout building	Y		\$ (220,000)	\$ (220,000.00)			x		
53	D40 Fire Protection	Use flex piping from branches to heads for fire protection system	N		\$ -	\$ -	x				(In base. VJA & Suffolk)
54	D50 Electrical	Add 3 campus security "blue light" system	N	Client	\$ 62,983	\$ 62,983.00				c	SPD requested that the project consider a campus blue-light safety system that would dial into SPD.
55	D50 Electrical	Reduce height of generator exhaust stack from the top of the gymnasium down to 10'-0" above the generator itself.	N		\$ (16,000)	\$ (16,000.00)			X		The exhaust stack for the emergency diesel generator is currently planned to run up the south side of the gym to the gym roof in order to make sure it is free and clear of windows. However, the generator is currently located far enough away from the school to allow the exhaust stack to simply extend above the generator by 10 ft, which is what this item proposes changing the design to reflect. Extending 10 ft above the gym is a more conservative design approach.
56	D50 Electrical	Eliminate Lightning Protection System. GGD does not recommend this however it is not a code requirement	N		\$ (218,927)	\$ (218,927.00)				x	This item would omit any type of lightning protection/prevention system. While these systems are not required by any code, they are a recommended system for public school buildings.
57	D50 Electrical	Change from Lightning Protection System to Lightning Prevention System	N		\$ (140,338)	\$ (140,338.00)	X				The lightning protection system provides the school with a Master UL label for insurance purposes. This type of system is designed to take lightning strikes and being it to the ground. It is intended to guard against fires, but does not necessarily protect electronic equipment in the building. A lightnging prevention system is a series of 20 ft tall poles at 320 ft on center which are intended to guard the building against lightning strikes.



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58	D50 Electrical	Eliminate UPS units. Please note If this item is accepted individual rack mounted UPS units will be required to be purchased with technology budget	N		\$ (106,657)	\$ (106,657.00)		x					
59	D50 Electrical	Utilize non-plenum rated cable for tel/data vs. plenum in non-plenum areas.	N		\$ (56,135)	\$ (56,135.00)		x					not possible; all plenum
60	D50 Electrical	Utilize aluminim conductors for feeders over 100Amps. This will increase conduit sizes in some locations and will require additional service in the future	N		\$ (72,976)	\$ (72,976.00)			x				This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
61	D50 Electrical	Utilize aluminum transformer windings	N		\$ (19,647)	\$ (19,647.00)			x				This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
62	D50 Electrical	Utilize aluminum switchgear bus	N		\$ (22,454)	\$ (22,454.00)			x				This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
63	D50 Electrical	Install wireless battery clocks in lieu of 120V type. Requires battery changes for future maintenance	N		\$ (28,068)	\$ (28,068.00)		x					
64	D50 Electrical	<b>Eliminate police radio city wide repeater and associated equipment room</b>	<b>N</b>	<b>Client</b>	\$ 134,724	\$ 134,724.00							SPD requested the addition of a city wide radio repeater system on the roof of the high school. This would include the radio tower itself, as well as a air-conditioned room on the roof to locate equipment associated with the tower.
65	E10 Equipment	Eliminate one dock leveler	N		\$ (11,227)	\$ (11,227.00)			x				This would omit one of the two dock levelers at the loading dock for the school. This item seems viable given that a smaller percentage of the trucks serving the school are likely to make use of the adjustable loading dock height that the leveler provides.
66	F10 Special Construction	Use conventional Hydraulic Elevator at Auditorium in lieu of Roped Hydraulic Elevator	N		\$ (22,454)	\$ (22,454.00)	x						
67	F10 Special Construction	Eliminate covered structures over bike parking areas	<b>N</b>		\$ (22,454)	\$ (22,454.00)		X					This item proposes omitting the freestanding structure to cover the bike parking located near the main Highland Avenue entrance. The covered structure for the NWFC/field bike parking is proposed to be retained so that it can double as a covered area for field events and/or NWFC students waiting.
68	F10 Special Construction	Eliminate climbing wall at gymnasium	N		\$ (98,236)	\$ (98,236.00)		x					
69	F10 Special Construction	Eliminate climbing wall at dining commons	N		\$ (95,205)	\$ (95,205.00)				x			requires feedback from SHS
70	F10 Special Construction	Move 1895 monitoring to Reimbursable costs	N		\$ (175,000)	\$ (175,000.00)	x						

VALUE OF DESIGN TO COST ITEMS	\$ (1,297,122)	X
VALUE OF RECOMMENDED ITEMS	\$ (1,265,701)	X
VALUE OF REJECTED ITEMS	\$ (2,474,535)	X
VALUE OF "STRONG MAYBE" ITEMS	\$ (333,508)	X
VALUE OF "MAYBE" ITEMS	\$ (501,460)	X

Construction Cost approved at PS&B:	\$ 199,051,710
<b>SCHEMATIC ESTIMATE TARGET VALUE</b>	<b>\$ 199,051,710</b>

VJ Associates Reconciled	\$ 201,640,278	0.006%
PM&C Reconciled	\$ 200,147,180	-0.734%
CM Estimate:	\$ 201,627,370	
SUBTRACT Design to Cost Adjustments	\$ (1,297,122)	
<b>Revised CM Estimate Prior to VE:</b>	<b>\$ 200,330,248</b>	
<b>DD VE TARGET:</b>	<b>\$ 1,278,538</b>	

AFTER VE INCORPORATED:		
W/ "RECOMMENDED" ITEMS:	\$ (12,838)	Negative value = over budget
W/ "RECOMMENDED" and "STRONG MAYBE" ITEMS:	\$ 320,670	Positive value = under budget

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5	A10 Foundations	7000sf of trenching existing CTE slab and patch concrete ILO wholesale slab replacement			\$ (41,631)	\$ (41,631.00)	x					Need to shot blast floor, infill old trenches, self leveling throughout
7	B10 Superstructure	Omit intumescent thin-film fire-proofing for gymnasium trusses	N		\$ (538,420)	\$ (538,420.00)	x					Replacing with cementitious per item below
8	B10 Superstructure	Medium Density Cementitious Fire Protection on Gymnasium trusses ILO Intumescent	N		\$ 15,156	\$ 15,156.00	x					Need to add if intumescent credit accepted unless State approve no fireproofing
10	B20 Exterior Closure	Use flexible copper or stainless steel fabric through wall masonry flashing with exposed stainless steel drip edge, in lieu of formed & welded stainless steel through wall masonry flashing	N		\$ (50,522)	\$ (50,522.00)	x					Constructability item - this is level 1 reduction, level 2 would be go to from SS fabric to membrand with SS drip edge and is not recommended at this time.
12	B20 Exterior Closure	Use 4" mineral wool insulation board in lieu of 3.5" of foil faced polyisocyanurate insulation in the following exterior wall assemblies: EWA-1, EWA-1b, EWA-2, EWA-3 & EWA-4. Refer to drawing A-003.	N		\$ (107,779)	\$ (107,779.00)	x					Constructability item.
20	B20 Exterior Closure	Remove 1 large skylights at the A wing	N		\$ (10,913)	\$ (10,913.00)	x					Sufficient lighting in space, skylight unnecessary
21	B20 Exterior Closure	Remove one WT-5 large skylight (5 total) in dining commons	N		\$ (20,000)	\$ (20,000.00)	x					Sufficient lighting in space, skylight unnecessary
24	C10 Interior Construction	Provide 2" wide face HM frames in lieu of 1" wide face HM frames for all interior doors and borrowed lites	N		\$ (38,666)	\$ (38,666.00)	x					Pricing exercise
25	C30 Interior Finishes	Fabricate interior window head & jamb surrounds from painted (or laminate clad) water-resistant MDF, as opposed to field-finished gypsum board returns. Requires a piece of trim at the face of the wall for installation tolerance.	N		\$ (10,500)	\$ (10,500.00)	x					SMMA to provide detail (JGS)
28	C30 Interior Finishes	Epoxy flooring in all toilet rooms except large gang toilets at First Floor next the gym/dining commons	N		\$ (47,153)	\$ (47,153.00)	x					tile in airport entry, epoxy from there on back
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41	D20 Plumbing	Change solar hot water system to more of an educational skid-mounted system - not tied to an interior tank system.	N		\$ (6,800)	\$ (6,800.00)	x					incorporated during estimate meeting
43	D20 Plumbing	Change pipe fittings for water piping (up to 1.5" diameter) to "Propress" type fittings if this is an acceptable installation technique for AHJ	N		\$ -	\$ -	x					incorporated during estimate meeting ("In base" Suffolk)
44	D20 Plumbing	Relocate toilet room in early education classroom to avoid need for heating trace of the drain piping	N		\$ (1,200)	\$ (1,200.00)	x					incorporated during design
46	D20 Plumbing	Gas line installation by Eversource	N		\$ (16,700)	\$ (16,700.00)	x					Being performed by Eversource
53	D40 Fire Protection	Use flex piping from branches to heads for fire protection system	N		\$ -	\$ -	x					(In base. VJA & Suffolk)
66	F10 Special Construction	Use conventional Hydraulic Elevator at Auditorium in lieu of Roped Hydraulic Elevator	N		\$ (22,454)	\$ (22,454.00)	x					
70	F10 Special Construction	Move 1895 monitoring to Reimbursable costs	N		\$ (175,000)	\$ (175,000.00)	x					

VALUE OF DESIGN TO COST ITEMS	\$ (1,297,122)	X			
VALUE OF RECOMMENDED ITEMS	\$ (1,265,701)		X		
VALUE OF REJECTED ITEMS	\$ (2,474,535)			X	
VALUE OF "STRONG MAYBE" ITEMS	\$ (333,508)				X
VALUE OF "MAYBE" ITEMS	\$ (501,460)				X

Construction Cost approved at PS&B:	\$ 199,051,710
SCHEMATIC ESTIMATE TARGET VALUE	\$ 199,051,710

VJ Associates Reconciled	\$ 201,640,278	0.006%
PM&C Reconciled	\$ 200,147,180	-0.734%
CM Estimate:	\$ 201,627,370	
SUBTRACT Design to Cost Adjustments	\$ (1,297,122)	
Revised CM Estimate Prior to VE:	\$ 200,330,248	

DD VE TARGET:	\$ 1,278,538
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AFTER VE INCORPORATED:		
W/ "RECOMMENDED" ITEMS:	\$ (12,838)	Negative value = over budget
W/ "RECOMMENDED" and "STRONG MAYBE" ITEMS:	\$ 320,670	Positive value = under budget



Item	Discipline	Description	Decision Affects LEED Credit (Y/N)	Scope Creep? (Client/D)	Suffolk Estimated Savings	Suffolk SAVINGS				EXPLANATION
						Design to Cost	Not Recommended	Strong Maybe	Duplicate/Scope Creep	
1	A10 Foundations	Remove exterior site stair connection from the gymnasium northwest-corner stairwell to GLX	N		\$ (167,282)	\$ (167,282.00)	X			Already part of design as alternate
2	A10 Foundations	Remove exterior site stair connection from field plaza to GLX	N		\$ (862,234)	\$ (862,234.00)	X			Already implemented @ retaining walls in SD - this is new exposed foundation, same approach recommended
3	A10 Foundations	Use a precast concrete panel with a form liner in lieu of brick veneer and backup around the base of the A and C wings	N		\$ (168,405)	\$ (168,405.00)	X			
4	A10 Foundations	Reduce scope of slab demo and new slab at Level 1, D wing. Replace with selective trenching as required for new plumbing work and 1.5" thick topping/leveling slab across the entirety of Level 1, D wing to align with new Level 1 floor elevation.	N		\$ (35,487)	\$ (35,487.00)	X			Suffolk to review expectation base vs VE
5	A10 Foundations	7000sf of trenching existing CTE slab and patch concrete ILO wholesale slab replacement			\$ (41,631)	\$ (41,631.00)	X			Need to shot blast floor, infill old trenches, self leveling throughout
6	A10 Foundations	Eliminate Barrier One Moisture Reduction Admix			\$ (489,250)	\$ (489,250.00)	X			this VE item assumes not adding topical moisture mitigation ... not recommended due to overall project schedule
7	B10 Superstructure	Omit intumescent thin-film fire-proofing for gymnasium trusses	N		\$ (538,420)	\$ (538,420.00)	X			Replacing with cementitious per item below
8	B10 Superstructure	Medium Density Cementitious Fire Protection on Gymnasium trusses ILO Intumescent	N		\$ 15,156	\$ 15,156.00	X			Need to add if intumescent credit accepted unless State approve no fireproofing
9	B10 Superstructure	Eliminate fire proofing on existing auditorium trusses	N		\$ (80,000)	\$ (80,000.00)		X		VARIANCE REQUIRED FROM STATE
10	B20 Exterior Closure	Use flexible copper or stainless steel fabric through wall masonry flashing with exposed stainless steel drip edge, in lieu of formed & welded stainless steel through wall masonry flashing	N		\$ (50,522)	\$ (50,522.00)	X			Constructability item - this is level 1 reduction, level 2 would be go to from SS fabric to membrand with SS drip edge and is not recommended at this time.
11	B20 Exterior Closure	Use peel & stick AVB in lieu of liquid applied AVB ... need to review NFPA 285 implications	Y		\$ -	\$ -		X		
12	B20 Exterior Closure	Use 4" mineral wool insulation board in lieu of 3.5" of foil faced polyisocyanurate insulation in the following exterior wall assemblies: EWA-1, EWA-1b, EWA-2, EWA-3 & EWA-4. Refer to drawing A-003.	N		\$ (107,779)	\$ (107,779.00)	X			
13	B20 Exterior Closure	Avoid installation of new long span joists across the entirety of the gym roof, will preclude making the gym roof PV ready for standard ballasted systems	N		\$ (101,043)	\$ (101,043.00)		X		Constructability item.
14	B20 Exterior Closure	Re-use existing auditorium wood roof purlins & plywood decking, as opposed to replacing with new metal deck	N		\$ (67,200)	\$ (67,200.00)			X	8 joists
15	B20 Exterior Closure	Retain existing gym windows - re-glaze existing with new IGUs	N		\$ (80,834)	\$ (80,834.00)	X			Existing gym frames are in good condition, but the glazing unit seals have failed in the past 30 years - this approach will replace only the glazing
16	B20 Exterior Closure	Use an alternative auditorium roofing material - PVC membrane roof - assumes future PV will cover the primary appearance of the roof	N		\$ (206,552)	\$ (206,552.00)		X		Proposes changing the new auditorium roof from standing seam metal to an alternative material. This approach is being considered because the auditorium roof will eventually be covered with solar PV panels, making the appearance of the roof less critical.
17	B20 Exterior Closure	Use an alternative auditorium roofing material - Vented asphalt shingles - assumes future PV will cover the primary appearance of the roof	N		\$ (413,104)	\$ (413,104.00)	X			Proposes changing the new auditorium roof from standing seam metal to an alternative material. This approach is being considered because the auditorium roof will eventually be covered with solar PV panels, making the appearance of the roof less critical.
18	B20 Exterior Closure	Change ALL composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing - CAN BE TAKEN IN CONJUNCTION WITH ITEM BELOW	N		\$ (111,204)	\$ (111,203.50)		X		Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
19	B20 Exterior Closure	Change 50% of composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing	N		\$ (111,204)	\$ (111,203.50)	X			Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
20	B20 Exterior Closure	Remove 1 large skylights at the A wing	N		\$ (10,913)	\$ (10,913.00)	X			Sufficient lighting in space, skylight unnecessary
21	B20 Exterior Closure	Remove one WT-5 large skylight (5 total) in dining commons	N		\$ (20,000)	\$ (20,000.00)	X			Sufficient lighting in space, skylight unnecessary
22	B20 Exterior Closure	Reduce quantity/scope of roof screens ... where omitted structural stub-ups will be maintained for screen installation at a later date if needed			\$ (176,000)	\$ (176,000.00)	X			Existing mechanical equipment has been reviewed and will be compliant with DEP environmental noise regulations without the need of acoustic roof screens. This approach will provide stub ups for future visual or acoustic roof screens to be installed at a later point if deemed necessary.
23	B20 Exterior Closure	Eliminate Roof Walkways Pads			\$ (22,454)	\$ (22,454.00)		X		
24	C10 Interior Construction	Provide 2" wide face HM frames in lieu of 1" wide face HM frames for all interior doors and borrowed lites	N		\$ (38,666)	\$ (38,666.00)	X			Pricing exercise
25	C30 Interior Finishes	Fabricate interior window head & jamb surrounds from painted (or laminate clad) water-resistant MDF, as opposed to field-finished gypsum board returns. Requires a piece of trim at the face of the wall for installation tolerance.	N		\$ (10,500)	\$ (10,500.00)	X			SMMA to provide detail (JGS)
26	C30 Interior Finishes	Remove 18" high continuous tacksurface above whiteboard from the combination boards, use a continuous tack strip only instead	N		\$ (8,420)	\$ (8,420.00)		X		preference of the educators
27	C30 Interior Finishes	Use epoxy terazzo flooring in lieu of large format porcelain tile with crack supression membrane and 5/8" thick mudset as specified	N		\$ (67,362)	\$ (67,362.00)	X			Replaces the porcelain ceramic tile in the Dining Commons with epoxy terrazzo flooring.
28	C30 Interior Finishes	Epoxy flooring in all toilet rooms except large gang toilets at First Floor next the gym/dining commons	N		\$ (47,153)	\$ (47,153.00)	X			tile in airport entry, epoxy from there on back
29	C30 Interior Finishes	Reduce Ceramic Tile wall height to 4'-0" AFF in corridors (currently 5'6")	N		\$ (101,043)	\$ (101,043.00)		X		

Item	Discipline	Description	Decision Scope Affects LEED Credit (Y/N)	Suffolk Estimated Savings	Suffolk SAVINGS				<div> <div>Design to Cost</div> <div>Not Recommended</div> <div>Strong Maybe</div> <div>Duplicate/Scope Creep</div> </div>			PLANATION
30	C30 Interior Finishes	Reduce Ceramic Tile wall height to 7'-0" AFF in toilet rooms	N	\$ (58,380)	\$ (58,380.00)				X			coordinate with tall toilet partition
31	C30 Interior Finishes	Eliminate ceramic tile on non-wet walls in toilet rooms		\$ (280,675)	\$ (280,675.00)					X		
32	C30 Interior Finishes	VCT flooring in classrooms in lieu of linoleum	N	\$ (65,566)	\$ (65,566.00)			X				
33	C30 Interior Finishes	Epoxy flooring in locker rooms in lieu of rubber	N		-			X				
34	C30 Interior Finishes	Utilize prefabricated gypsum board corners to save on labor	N	\$ (56,135)	\$ (56,135.00)	X						check if proprietary product (only soffits)
35	C30 Interior Finishes	Change 2'x2' (ACP-1) ACT to 2'x4' ACT		\$	-			X				
36	C30 Interior Finishes	Change sloped GWB-1 in auditorium to sloped 2'x2' regular ACT		\$ (55,574)	\$ (55,574.00)			X				can't take this - not functional for auditorium acoustics
37	C30 Interior Finishes	Change ACP-8 (called ACP-7 on Finish Legend) in Lecture Hall to ACP-1		\$ (17,963)	\$ (17,963.00)			X				finish schedule to be updated
38	D20 Plumbing	Remove toilet flushing from rainwater harvesting system (keep irrigation)	Y	\$ (106,000)	\$ (106,000.00)	X						Removes a portion of the rainwater harvesting system that is flushing toilets in the large toilet rooms next to the Dining Commons. In addition to removing system costs and ongoing maintenance concerns, it will also free up approximately 300 SF of usable space within the school for educational program that is currently dedicated for tanks & filters.
39	D20 Plumbing	Remove irrigation from rainwater harvesting (keep toilet flushing, add traditional irrigation system)	N	\$ (350,000)	\$ (350,000.00)				X			Removes a portion of the rainwater harvesting system that is dedicated for site irrigation. An irrigation system would still be provided, but it would be supplied from the City domestic water piping.
40	D20 Plumbing	Remove toilet flushing and irrigation from rainwater harvesting system (add traditional irrigation system)	Y	\$ (738,000)	\$ (738,000.00)					X		This would eliminate all components of the rainwater harvesting system.
41	D20 Plumbing	Change solar hot water system to more of an educational skid-mounted system - not tied to an interior tank system.	N	\$ (6,800)	\$ (6,800.00)	X						incorporated during estimate meeting
42	D20 Plumbing	Change the two small green roofs located to the east & west of the auditorium roof (at level 3) to ballasted roofs	Y	\$ (7,679)	\$ (7,679.00)		X					
43	D20 Plumbing	Change pipe fittings for water piping (up to 1.5" diameter) to "Propress" type fittings if this is an acceptable installation technique for AHJ	N	\$ -	-	X						incorporated during estimate meeting ("In base" Suffolk)
44	D20 Plumbing	Relocate toilet room in early education classroom to avoid need for heating trace of the drain piping	N	\$ (1,200)	\$ (1,200.00)	X						incorporated during design
45	D20 Plumbing	ADD heat trace at roof drain baskets (does this affect generator size)	Client	\$ 20,000	\$ 20,000.00	X	X		c			request by City (generator size not affected)
46	D20 Plumbing	Gas line installation by Eversource	N	\$ (16,700)	\$ (16,700.00)	X						Being performed by Eversource
47	D20 Plumbing	Change pipe fittings for compressed air (up to 1.5" diameter) to "Propress" type fittings if this is an acceptable installation technique for AHJ	N	\$ (10,000)	\$ (10,000.00)		X					
48	D30 HVAC	Change gymnasium HVAC system to DX units to allow it to function as a cooling center on emergency generator power (includes generator upcharge)	N	\$ 280,000	\$ 280,000.00				c			This item would allow the field house to serve as an emergency cooling center, which was a request of SFD. Involves changing the mechanical units for the gym to standalone types, and upsizing the emergency generator to account for the load of these mechanical units.
49	D30 HVAC	Eliminate ceiling fans in Gym	N	\$ (18,974)	\$ (18,974.00)		X					three rooms
50	D30 HVAC	Eliminate ceiling fans in Band and Orchestra	N	\$ (2,470)	\$ (2,470.00)		X					This replaces the metal ductwork in the gymnasium to fabric ductwork in the gymnasium. Approach needs to be confirmed with fabric ductwork manufacturer.
51	D30 HVAC	Use fabric ductwork with reinforced internal skeleton for gymnasium ductwork	N	\$ (168,405)	\$ (168,405.00)	X						
52	D30 HVAC	Change to green cooling throughout building	Y	\$ (220,000)	\$ (220,000.00)		X					
53	D40 Fire Protection	Use flex piping from branches to heads for fire protection system	N	\$ -	-	X						(In base. VJA & Suffolk)
54	D50 Electrical	Add 3 campus security "blue light" system	Client	\$ 62,983	\$ 62,983.00				c			SPD requested that the project consider a campus blue-light safety system that would dial into SPD.
55	D50 Electrical	Reduce height of generator exhaust stack from the top of the gymnasium down to 10'-0" above the generator itself.	N	\$ (16,000)	\$ (16,000.00)		X					The exhaust stack for the emergency diesel generator is currently planned to run up the south side of the gym to the gym roof in order to make sure it is free and clear of windows. However, the generator is currently located far enough away from the school to allow the exhaust stack to simply extend above the generator by 10 ft, which is what this item proposes changing the design to reflect. Extending 10 ft above the gym is a more conservative design approach.
56	D50 Electrical	Eliminate Lightning Protection System. GGD does not recommend this however it is not a code requirement	N	\$ (218,927)	\$ (218,927.00)				X			This item would omit any type of lightning protection/prevention system. While these systems are not required by any code, they are a recommended system for public school buildings. The lightning protection system provides the school with a Master UL label for insurance purposes. This type of system is designed to take lightning strikes and being it to the ground. It is intended to guard against fires, but does not necessarily protect electronic equipment in the building. A lightning prevention system is a series of 20 ft tall poles at 320 ft on center which are intended to guard the building against lightning strikes.
57	D50 Electrical	Change from Lightning Protection System to Lightning Prevention System	N	\$ (140,338)	\$ (140,338.00)	X						

Item	Discipline	Description	Decision Scope Affects LEED Credit (Y/N)	Suffolk Estimated Savings	Suffolk SAVINGS			Design to Cost			EXPLANATION
								Not Recommended	Strongly May be	Duplicate Scope Creep	
58	D50 Electrical	Eliminate UPS units. Please note If this item is accepted individual rack mounted UPS units will be required to be purchased with technology budget	N	\$ (106,657)	\$ (106,657.00)		X				
59	D50 Electrical	Utilize non-plenum rated cable for tel/data vs. plenum in non-plenum areas.	N	\$ (56,135)	\$ (56,135.00)		X				not possible; all plenum
60	D50 Electrical	Utilize aluminim conductors for feeders over 100Amps. This will increase conduit sizes in some locations and will require additional service in the future	N	\$ (72,976)	\$ (72,976.00)			X			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school.
61	D50 Electrical	Utilize aluminum transformer windings	N	\$ (19,647)	\$ (19,647.00)			X			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school.
62	D50 Electrical	Utilize aluminum switchgear bus	N	\$ (22,454)	\$ (22,454.00)			X			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school.
63	D50 Electrical	Install wireless battery clocks in lieu of 120V type. Requires battery changes for future maintenance	N	\$ (28,068)	\$ (28,068.00)		X				
64	D50 Electrical	Eliminate police radio city wide repeater and associated equipment room	N	\$ 134,724	\$ 134,724.00						SPD requested the addition of a city wide radio repeater system on the roof of the high school. This would include the radio tower itself, as well as a air-conditioned room on the roof to locate equipment associated with the tower.
65	F10 Equipment	Eliminate one dock leveler	N	\$ (11,227)	\$ (11,227.00)			X			This would omit one of the two dock levelers at the loading dock for the school. This item seems viable given that a smaller percentage of the trucks serving the school are likely to make use of the adjustable loading dock height that the leveler provides.
66	F10 Special Construction	Use conventional Hydraulic Elevator at Auditorium in lieu of Roped Hydraulic Elevator	N	\$ (22,454)	\$ (22,454.00)	X					
67	F10 Special Construction	Eliminate covered structures over bike parking areas	N	\$ (22,454)	\$ (22,454.00)		X				This item proposes omitting the freestanding structure to cover the bike parking located near the main Highland Avenue entrance. The covered structure for the NWFC/field bike parking is proposed to be retained so that it can double as a covered area for field events and/or NWFC students waiting.
68	F10 Special Construction	Eliminate climbing wall at gymnasium	N	\$ (98,236)	\$ (98,236.00)		X				
69	F10 Special Construction	Eliminate climbing wall at dining commons	N	\$ (95,205)	\$ (95,205.00)			X			requires feedback from SHS
70	F10 Special Construction	Move 1895 monitoring to Reimbursable costs	N	\$ (175,000)	\$ (175,000.00)	X					

VALUE OF DESIGN TO COST ITEMS	\$ (1,297,122)	X
VALUE OF RECOMMENDED ITEMS	\$ (1,265,701)	X
VALUE OF REJECTED ITEMS	\$ (2,474,535)	X
VALUE OF "STRONG MAYBE" ITEMS	\$ (333,508)	X
VALUE OF "MAYBE" ITEMS	\$ (501,460)	X

Construction Cost approved at PS&B:	\$ 199,051,710
<b>SCHEMATIC ESTIMATE TARGET VALUE</b>	<b>\$ 199,051,710</b>

VJ Associates Reconciled	\$ 201,640,278	0.006%
PM&C Reconciled	\$ 200,147,180	-0.734%
CM Estimate:	\$ 201,627,370	
SUBTRACT Design to Cost Adjustments	\$ (1,297,122)	
<b>Revised CM Estimate Prior to VE:</b>	<b>\$ 200,330,248</b>	

<b>DD VE TARGET: \$ 1,278,538</b>
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AFTER VE INCORPORATED:		
W/ "RECOMMENDED" ITEMS:	\$ (12,838)	Negative value = over budget
W/ "RECOMMENDED" and "STRONG MAYBE" ITEMS:	\$ 320,670	Positive value = under budget



Item	Discipline	Description	Decision Affects LEED Credit (Y/N)	Scope Creep? (Client/D D)	Suffolk Estimated Savings	Suffolk SAVINGS	Design to Cost	Recommended	Not Recommended	Strong Maybe	Maybe	Duplicate/Scope Creep	EXPLANATION
9	B10 Superstructure	Eliminate fire proofing on existing auditorium trusses	N		\$ (80,000)	\$ (80,000.00)			x				VARIANCE REQUIRED FROM STATE
14	B20 Exterior Closure	Re-use existing auditorium wood roof purlins & plywood decking, as opposed to replacing with new metal deck	N		\$ (67,200)	\$ (67,200.00)				x			
15	B20 Exterior Closure	Retain existing gym windows - re-glaze existing with new IGUs	N		\$ (80,834)	\$ (80,834.00)	x						Existing gym frames are in good condition, but the glazing unit seals have failed in the past 30 years - this approach will replace only the glazing
17	B20 Exterior Closure	Use an alternative auditorium roofing material - Vented asphalt shingles - assumes future PV will cover the primary appearance of the roof	N		\$ (413,104)	\$ (413,104.00)	x						Proposes changing the new auditorium roof from standing seam metal to an alternative material. This approach is being considered because the auditorium roof will eventually be covered with solar PV panels, making the appearance of the roof less critical.
18	B20 Exterior Closure	Change ALL composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing - CAN BE TAKEN IN CONJUNCTION WITH ITEM BELOW	N		\$ (111,204)	\$ (111,203.50)			x				Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
19	B20 Exterior Closure	Change 50% of composite metal panel soffits to direct applied finish system soffits - all soffits assumed for pricing	N		\$ (111,204)	\$ (111,203.50)	x						Proposes changing the exterior soffit materials (located at the underside of exterior overhangs)
22	B20 Exterior Closure	Reduce quantity/scope of roof screens ... where omitted structral stub-ups will be maintained for screen installation at a later date if needed			\$ (176,000)	\$ (176,000.00)	x						Existing mechanical equipment has been reviewed and will be compliant with DEP environmental noise regulations without the need of acoustic roof screens. This approach will provide stub ups for future visual or acoustic roof screens to be installed at a later point if deemed necessary.
27	C30 Interior Finishes	Use epoxy terazzo flooring in lieu of large format porcelain tile with crack supression membrane and 5/8" thick mudset as specified	N		\$ (67,362)	\$ (67,362.00)	x						Replaces the porcelain ceramic tile in the Dining Commons with epoxy terrazzo flooring.
30	C30 Interior Finishes	Reduce Ceramic Tile wall height to 7'-0" AFF in toilet rooms	N		\$ (58,380)	\$ (58,380.00)				x			coordinate with tall toilet partition
31	C30 Interior Finishes	Eliminate ceramic tile on non-wet walls in toilet rooms			\$ (280,675)	\$ (280,675.00)				x			
38	D20 Plumbing	Remove toilet flushing from rainwater harvesting system (keep irrigation)	Y		\$ (106,000)	\$ (106,000.00)	x						Removes a portion of the rainwater harvesting system that is flushing toilets in the large toilet rooms next to the Dining Commons. In addition to removing system costs and ongoing maintenance concerns, it will also free up approximately 300 SF of usable space within the school for educational program that is currently dedicated for tanks & filters.
51	D30 HVAC	Use fabric ductwork with reinforced internal skeleton for gymnasium ductwork	N		\$ (168,405)	\$ (168,405.00)	x						This replaces the metal ductwork in the gymnasium to fabric ductwork in the gymnasium. Approach needs to be confirmed with fabric ductwork manufacturer.
55	D50 Electrical	Reduce height of generator exhaust stack from the top of the gymnasium down to 10'-0" above the generator itself.	N		\$ (16,000)	\$ (16,000.00)				x			The exhaust stack for the emergency diesel generator is currently planned to run up the south side of the gym to the gym roof in order to make sure it is free and clear of windows. However, the generator is currently located far enough away from the school to allow the exhaust stack to simply extend above the generator by 10 ft, which is what this item proposes changing the design to reflect. Extending 10 ft above the gym is a more conservative design approach.
57	D50 Electrical	Change from Lightning Protection System to Lightning Prevention System	N		\$ (140,338)	\$ (140,338.00)	x						The lightning protection system provides the school with a Master UL label for insurance purposes. This type of system is designed to take lightning strikes and being it to the ground. It is intended to guard against fires, but does not necessarily protect electronic equipment in the building. A lightnging prevention system is a series of 20 ft tall poles at 320 ft on center which are intended to guard the building against lightning strikes.
60	D50 Electrical	Utilize aluminim conductors for feeders over 100Amps. This will increase conduit sizes in some locations and will require additional service in the future	N		\$ (72,976)	\$ (72,976.00)				x			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
61	D50 Electrical	Utilize aluminum transformer windings	N		\$ (19,647)	\$ (19,647.00)				x			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
62	D50 Electrical	Utilize aluminum switchgear bus	N		\$ (22,454)	\$ (22,454.00)				x			This items is a metal change from copper to aluminum in certain portions of the electrical system for the school. <b>Item to be reviewed with Tom Bent.</b>
65	E10 Equipment	Eliminate one dock leveler	N		\$ (11,227)	\$ (11,227.00)				x			This would omit one of the two dock levelers at the loading dock for the school. This item seems viable given that a smaller percentage of the trucks serving the school are likely to make use of the adjustable loading dock height that the leveler provides.

Item	Discipline	Description	Decision Affects LEED Credit (Y/N)	Scope Creep? (Client/DD)	Suffolk Estimated Savings	Suffolk SAVINGS	Design to Cost	Recommended	Not Recommended	Strong Maybe	Maybe	EXPLANATION
67	F10 Special Construction	Eliminate covered structures over bike parking areas	N		\$ (22,454)	\$ (22,454.00)	X					This item proposes omitting the freestanding structure to cover the bike parking located near the main Highland Avenue entrance. The covered structure for the NWFC/field bike parking is proposed to be retained so that it can double as a covered area for field events and/or NWFC students waiting.
69	F10 Special Construction	Eliminate climbing wall at dining commons	N		\$ (95,205)	\$ (95,205.00)				x		requires feedback from SHS

VALUE OF DESIGN TO COST ITEMS	\$ (1,297,122)	X				
VALUE OF RECOMMENDED ITEMS	\$ (1,265,701)		X			
VALUE OF REJECTED ITEMS	\$ (2,474,535)			X		
VALUE OF "STRONG MAYBE" ITEMS	\$ (333,508)				X	
VALUE OF "MAYBE" ITEMS	\$ (501,460)					X

Construction Cost approved at PS&B:	\$ 199,051,710
<b>SCHEMATIC ESTIMATE TARGET VALUE</b>	<b>\$ 199,051,710</b>

VJ Associates Reconciled	\$ 201,640,278	0.006%
PM&C Reconciled	\$ 200,147,180	-0.734%
CM Estimate:	\$ 201,627,370	
SUBTRACT Design to Cost Adjustments	\$ (1,297,122)	

<b>Revised CM Estimate Prior to VE:</b>	<b>\$ 200,330,248</b>
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<b>DD VE TARGET:</b>	<b>\$ 1,278,538</b>
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AFTER VE INCORPORATED:		
W/ "RECOMMENDED" ITEMS:	\$ (12,838)	Negative value = over budget
W/ "RECOMMENDED" and "STRONG MAYBE" ITEMS:	\$ 320,670	Positive value = under budget