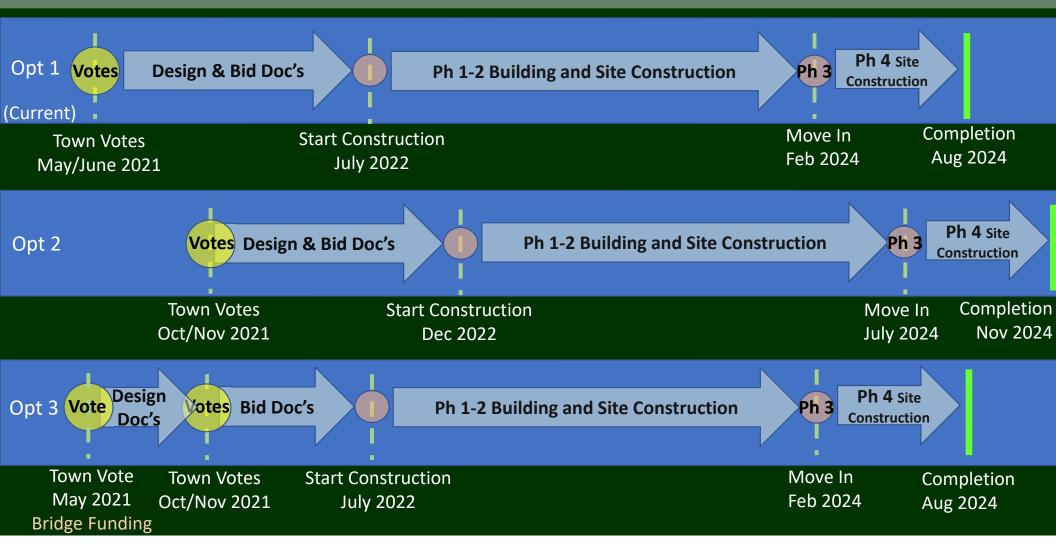


Agenda

- Schedule
- Value Management Overview
- Working Group Recommendations

Projected Project Schedule Options



Construction Cost Estimates From last SBC Meeting on Dec 11, 2020

Target Construction Cost	\$ 70,38	81,157		
Target Soft costs	\$ 17,80	00,000	Items included in reconciled cost estimate	
Target Project Cost	\$ 88,18	81,157	 Natural Gas Emergency Generator vs. Bio-Diesel 	
Cost Estimates from two Professional C Reconciled to form one agreed upon co			 Radon Mitigation Project Schedule extended Possible Access Road connection Ledge Removal 	
Reconciled Construction Cost Estimate Potential Savings (Three buckets) :		70,885,948 (2,422,928)	\$504,791 Above target (<i>Rev 12/21/20</i>)	
	•		Three Buckets: Accept Make into an Alternate	
Potential Revised Base Construction Cos	t \$ 68,64	45,202	□ Not Accepted	
Possible AC revisions: future review	T	BD		
Alternate: Add UV-C system	\$ 20	05,760	Rev 12/21/20	

Value Management: Review Assignments **Review** and **Recommend:** Possible Savings \$2,422,928 **Site Working Group:** Site Accept **Aesthetics Working Group: Design Related** Alternate **Educators Working Group: Functional Use** Other **D+W:** Not

Accept

Value Management: Review Assignments Site Working Group

- 1. Phased Landscaping
- 2. Provide sloped grassed landscape in lieu of precast units at amphitheater
- 3. Modify planter beds and curbs at entry plaza
- 4. Modifications to curbing and sidewalks:
 - Replace portion of concrete sidewalks with asphalt
 - Reduce amount of curbing
 - Consider replacing granite curbing with precast concrete or wood guardrails



Initial Estimated Savings: \$601,425



Site Plan

1. Phased Landscaping

Phase 1 Trees and shrubs in base bid

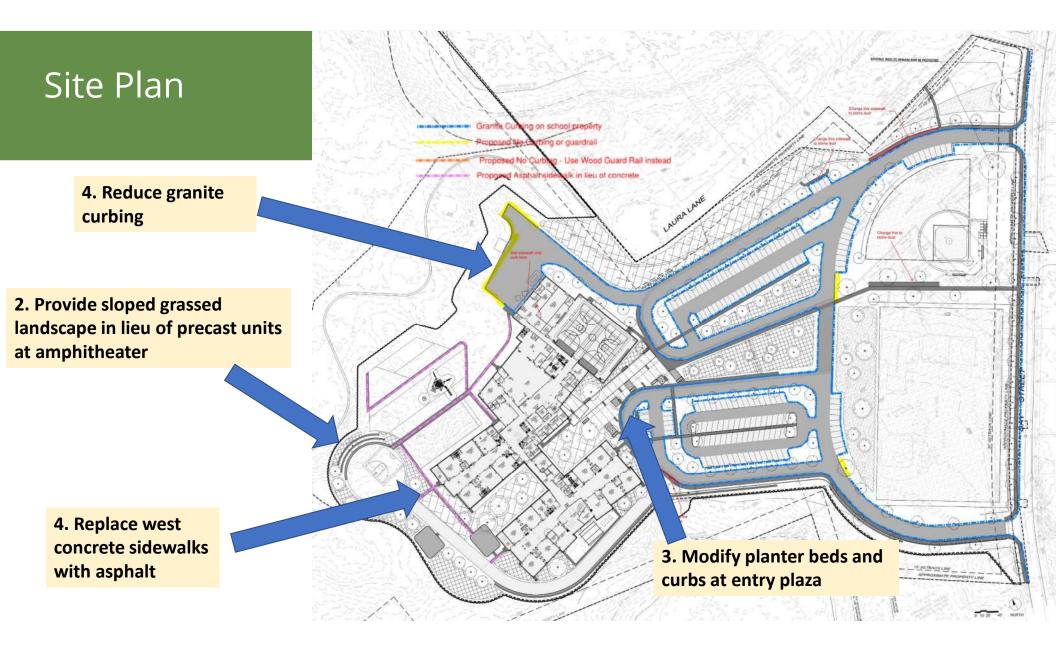


Site Plan

1. Phased Landscaping

Phase 2 Remaining Trees and shrubs as Alternate





Value Management Review Assignments

Site Working Group

Initial Estimated Savings: \$601,425 Proposed Credit: \$586,922

	Recommendation from Site		
Item with initial estimated savings	Working Group	Proposed Credit	Notes/Discussion
	Accept, with continued discussion at the SBC	\$224,000	Deducted Ph 2 from the Base, include as an Add Alternate
			include as an Add Alternate
	mtg		
2. Provide sloped grassed landscape in lieu	Accept	\$166,686	
of precast units at amphitheater(\$151,450):			
3. Eliminate planter beds and curbs at entry	Take \$40k credit	\$40,000	D+W team to identify
plaza(\$75,725):			alternative/modified approach
			or smaller elements and stay
			within revised budget
4. Modifications to curbing and sidewalks	Accept with revisions	\$156,236	After 2nd review with cost
 Reduce quantity of granite curbing 	proposed by D+W on		estimator, granite is less than
Replace a portion of concrete sidewalks	their revised site plan		wood guardrail due to extra
with asphalt			stone, so granite remains in.
 Reduce curbing and replace with wood 			, , ,
guardrails(\$170,375)			
		\$586,922	Total





Value Management: Review Assignments

Initial Estimated Savings: \$1,649,083

Aesthetics Working Group:

Building Exterior: \$1,575,991

- 1. *Canopy outside Library: Reduce size or consider as Alternate
- 2. Eliminate roof screens
- 3. Change rainscreen system to Terracotta shingles
- 4. Entry walkway canopy: Simplify, reduce size
- 5. Remove or modify sunshades/horizontal element on east and west facades (item 5A), library (item 5B), and southern classroom facades (5C)
- 6. Change fieldstone to brick
- 7. Change curtainwall to storefront system

Building Interior: \$73,092

- 8. Delete wood trim at storefront systems, use aluminum finish instead (Media Ctr and Cafeteria)
- 9. Use painted concrete block at stairways in lieu of polished ground faced block

*Also being reviewed by Educators Working Group





Building Exterior 2. (\$106,100) Eliminate roof screens



With roof screen

Without roof screen



Composite Wood-Resin– Rainscreen panel (Prodex shown)

10 year warranty

50 year expected lifespan

Current product specified

New England Conservatory of Music

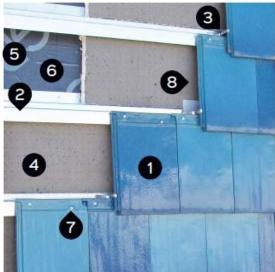
3. (\$326,400) Change rainscreen system to Terracotta shingles

TERRACOTTA PANEL ATTRIBUTES

- Warm, all-natural material provides superior aesthetics
- Variety of colors, textures, and sizes
- Color permanent façade
- Class A fire rated
- Sustainable material that will last 100 years
- Maintenance free

75-year warranty including color





Rainscreen NeXclad System

Proposed product









Building Exterior 5A. (\$1

5A. (\$100,000) Reduce size of solar shade on east and west facades



Building Exterior 5A. (\$100,000) Reduce size of solar shades on east and west facades



Building Exterior 5B. (\$30,000) Reduce size of solar shade at library

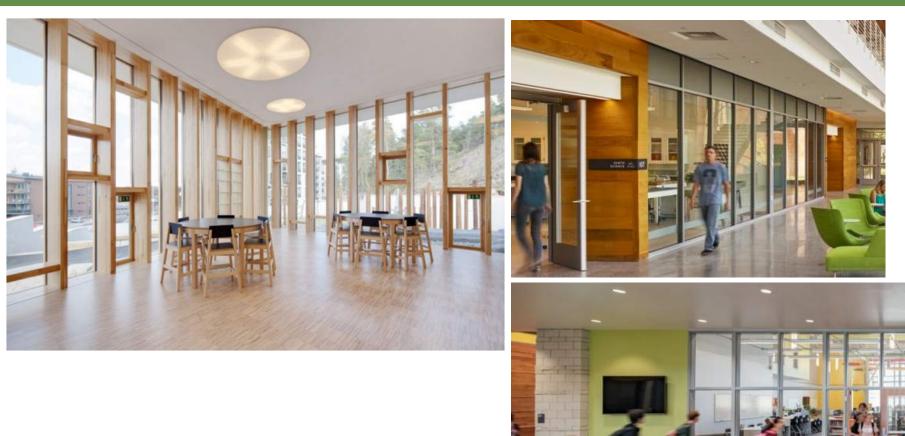


5C. (\$168,000) Reduce size of solar shades on southern classroom wings



Building Interior

8. (\$42,000) Delete wood trim at storefront systems, use aluminum finish instead (Media Ctr and Cafeteria)



Building Interior

9. (\$38,846) Use painted concrete block at stairways in lieu of polished ground faced block

Polished ground faced block

Looks cleaner, polished look Easier to maintain; no painting Cannot change color







Painted concrete block

Institutional Requires painting Can paint mural or change colors





Building Exterior 1. (\$132,251) *Canopy outside Library: Reduce size or consider as Alternate (not accepted)





Educators: Okay to reduce in size but still would like ample shade

4. (\$384,450) Entry walkway canopy: Simplify, reduce size (not accepted)







6. (\$173,148) Change fieldstone to brick (not accepted)





Possible brick option 1



Possible brick option 2

Fieldstone blend





7. (\$180,925) Change curtainwall to storefront system (not accepted)

Curtainwall system



-Water management with drainage through weeps at each lite of glass, better for exterior, exposed locations
-Various exterior mullion cap options available
-Structurally independent, anchored to building structure
-Can span multiple floor heights
-Larger opening/glazing sizes Storefront system



-All water drainage through sill of assembly, best for interior use or protected locations
-Flush glaze with no projecting stops.
-Single span anchored at head and sill
-Not structural, framed openings required and coordinated with CFMF.
-10' to 12' maximum heights typical

-Limited opening sizes

Value Management Review Assignments

Aesthetic Working Group

Initial Estimated Savings: \$1,649,083Proposed Credit:\$811,346

Item and initial estimated savings	Recommendation from Aesthetics Working Group	Proposed Credit	Notes/Discussion	
1.(\$132,251) *Canopy outside Library: Reduce size	Not accepted			
or consider as Alternate: not accepted				
2.(\$75,000) Eliminate roof screens	Accept credit	\$106,100		
3.(\$287,452) Change rainscreen system to	Accept credit	\$326,400		Accept
Terracotta shingles		Ş520,400		
4.(\$384,450) Entry walkway canopy: Simplify,	Not accepted			
reduce size				
5.(\$295,000) Modify sunshades/horizontal element	Accept credit	\$298,000		$\langle - \rangle$
on east, west, south facades		\$238,000		2
6.(\$220,913) Change fieldstone to brick	Under further review by		\$173,148 value: Identified as	
	SBC		a deduct alternate	Alternate
7.(\$180,925) Change curtainwall to storefront	Not accepted			
system				
8. (\$37,979) Use aluminum finish instead of wood	Accept credit	\$42,000		
(Media Ctr and Cafeteria)		J=2,000		
9. (\$35,113) Use painted concrete block at	Accept credit	\$38,846		e b
stairways in lieu of polished ground faced block		330,040		Not
		\$811,346	Total	Accept

Value Management: Review Assignments

Educators Working Group:

Initial Estimated Savings: \$73,395 Proposed Credit: \$0

Item and initial estimated savings	Recommendation from Educators Working Group	Proposed Credit	Notes/Discussion
1. *Amphitheater – Eliminate Precast Units	Accept credit	Incl in Site	
2.*STEAM Canopy- reduce in size or eliminate	Not accepted		 Important to curriculum Would accept reduction in size but desire ample shade
 Sliding Glass Doors at ELA's – use fixed borrowed lite instead.(\$73,395) 	Not accepted		 Easy access to ELA is important to educational function
4. Change from 100% AC to partial AC and dehumidification (value TBD)	Not accepted		 Educators need for summer programming Community needs Allows flexibility for future space use Climate Change resiliency
		\$0	Total



Accept

* Value carried in Site or Aesthetics

Value Management: Review Assignments

Dore + Whittier:

Initial Estimated Savings: \$99,025Proposed Credit:\$0



ltem	Recommendation from Dore + Whittier	Proposed Credit	Notes/Discussion
1. Eliminate External Grease Trap (\$29,125)	Not accepted		TBD during DD phase
2. Eliminate Lightning Protection (\$69,900)	Not accepted		Insurance doesn't require it but recommended to minimize damage to equipment and systems
		\$0	Total



Value Management – **Recommendations Summary**

Item	Recommendation from Working Groups	Proposed Credit	Notes/Discussion
1. Phased Landscaping (Ph 1 in base, Ph 2 as alternate)	Accept credit, Review with SBC	\$ 224,000	Deducted from the Base, included as an Add Alternate
2. Eliminate precast units at amphitheater	Accept credit	\$ 166,686	
3. Modify planter beds and curbs at entry plaza	Accept credit	\$ 40,000	
4. Reduce curbing and concrete sidewalk	Accept credit	\$156,236	
5. Eliminate roof screens	Accept credit	\$ 106,100	
6. Change rainscreen system to Terracotta shingles	Accept credit	\$ 326,400	
7. Modify sunshades on east, west, south facades	Accept credit	\$ 298,000	
8. Change fieldstone to brick	Review with SBC		\$173,148 value: Identified as a Deduct alternate
9. Delete wood trim at storefront systems (Media Ctr and Cafeteria)	Accept credit	\$ 42,000	
10. Use painted concrete block at stairways in lieu of polished ground faced block	Accept credit	\$ 38,846	
		\$ 1,398,268	Total

Construction Cost Estimate- Updated after VE

Target Construction Cost	\$	70,381,157	
Target Soft costs	\$	17,800,000	
Target Project Cost	\$	88,181,157	
Reconciled Construction Cost Estimate	\$	70,885,948	\$504,791 Above target (<i>Rev 12/21/20</i>)
Site	\$	(586,922)	
Aesthetics	<u>\$</u>	(811,346)	
Recommended Savings to Accept :	\$	(1,398,268)	Recommendations from Working Groups
Revised Base Construction Cost	\$	69,487,680	(\$893,477) Below target
Alternate: Add UV-C system	\$	205,760	
			Under review by SBC
			Add Alternate: Phase 2 landscaping \$ 224,
			Deduct Alternate: Use brick in lieu of fieldstone (\$173,

Questions, Comments, Reactions?