



Partners in Progress



Rebuilding Cedarbrook Middle School

Project Update

Facility Committee Meeting

September 1, 2015

The Month in Review

- **Land Development – August/September**

- Preliminary/Final Land Development

- Submission: August 2015

- Boundary and Topographic Information

- Traffic Study Report

- Environmental Impact Study

- Shade Tree Commission Meeting: August 27

- Planning Commission Meeting: September 24

- **Data Collection Pending**

- Geotechnical Report for Additional Test Borings:
Results Pending

- Geothermal Conductivity Test Complete:
Results Pending

- **Cost Estimate**

- Reconciled the Schematic Design Cost Estimate

- Revised scope to meet the targeted \$50,000,000
Total Project Cost budget



● **Reconciled Schematic Design (SD) Estimate**

- Includes the new 800-seat Auditorium and music classroom addition
- Includes the gymnasium addition and courtyard infill
- Includes geothermal
- Itemized list of soft costs
- Total square footage: 202,875 sf (67,110 sf new floor area)
- Total project cost (construction + soft costs) = \$57,960,152

● **Water Source Heat Pump (WSHP) vs Geothermal**

- WSHP: less expensive first cost heating/cooling system; savings of \$700,000 in construction costs
- WSHP used on the 3 elementary schools
- Total project cost with WSHP reduced to \$57,239,152

Geothermal Life Cycle Cost Analysis identifies approximately \$500,000 savings over 20 years

Reconciled Schematic Design Estimate

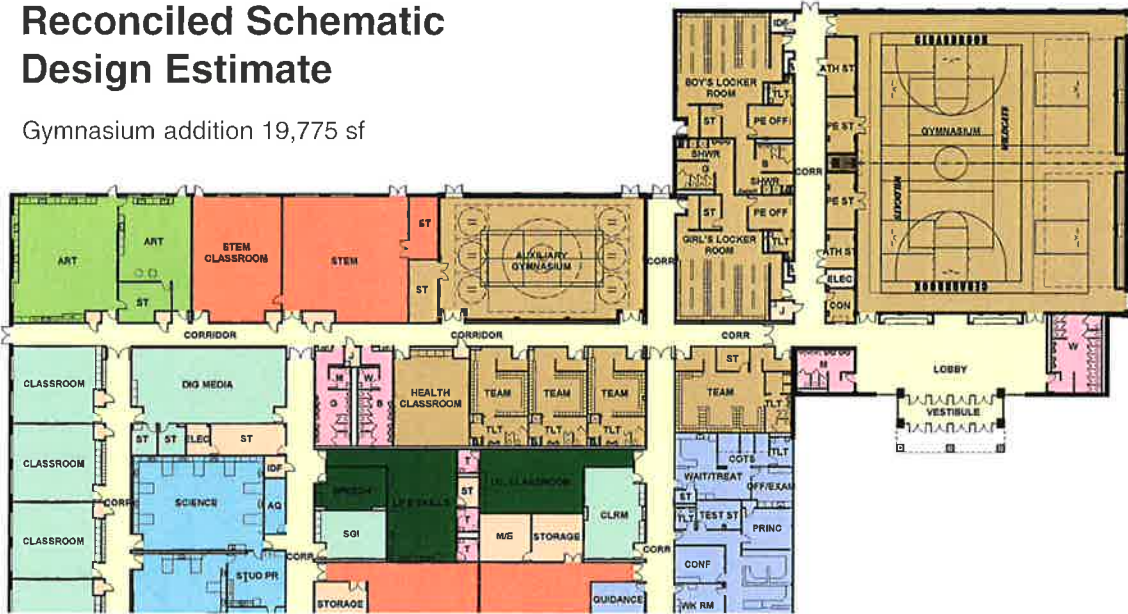
Auditorium/classroom addition 39,830 sf

Square Footage Reduction:
Eliminated exterior corridor and reduced auditorium seating capacity from 900 to 800 seats



Reconciled Schematic Design Estimate

Gymnasium addition 19,775 sf



Athletic Complex

Reconciled Schematic Design Estimate



- Eliminated 80 parking spaces with associated curbing and sidewalks – total 160 parking spaces
- Modified paving structure
- Does not include reconditioning athletic fields (bid alternates)



**Cost Estimate
#2**

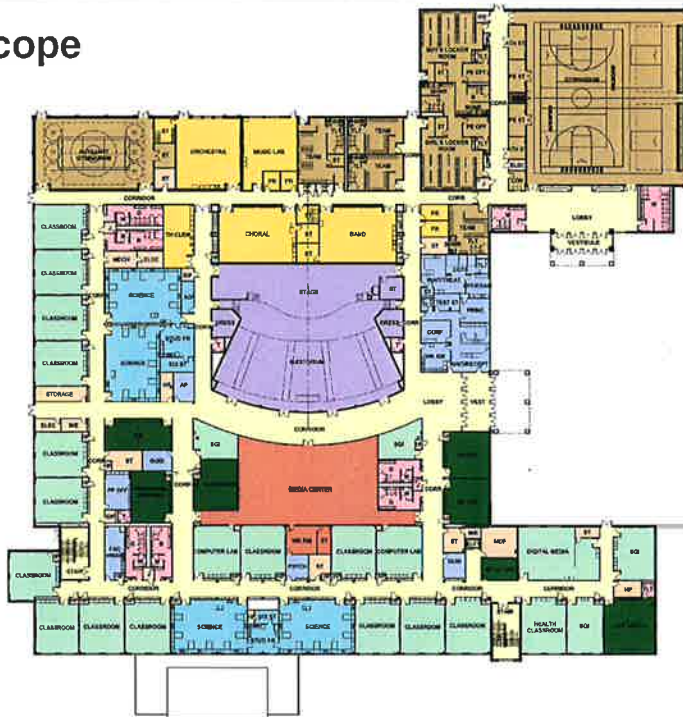
● **Revised Scope**

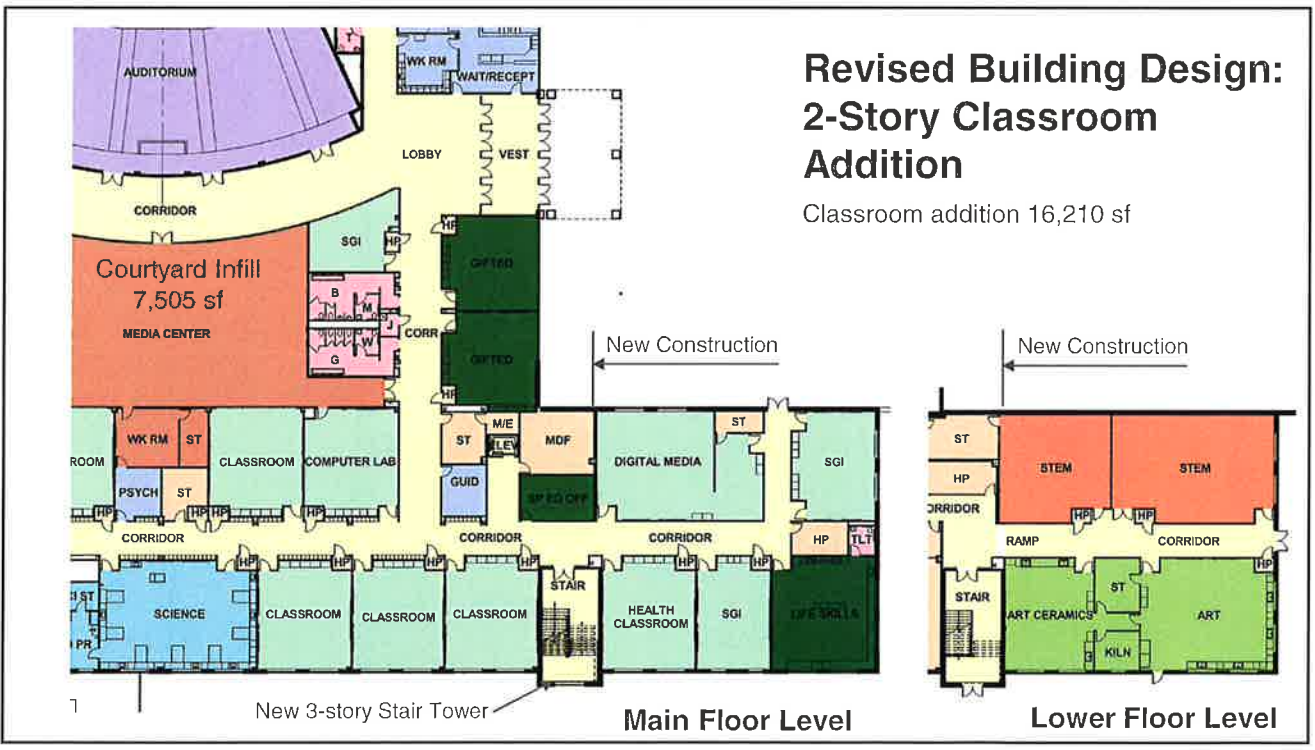
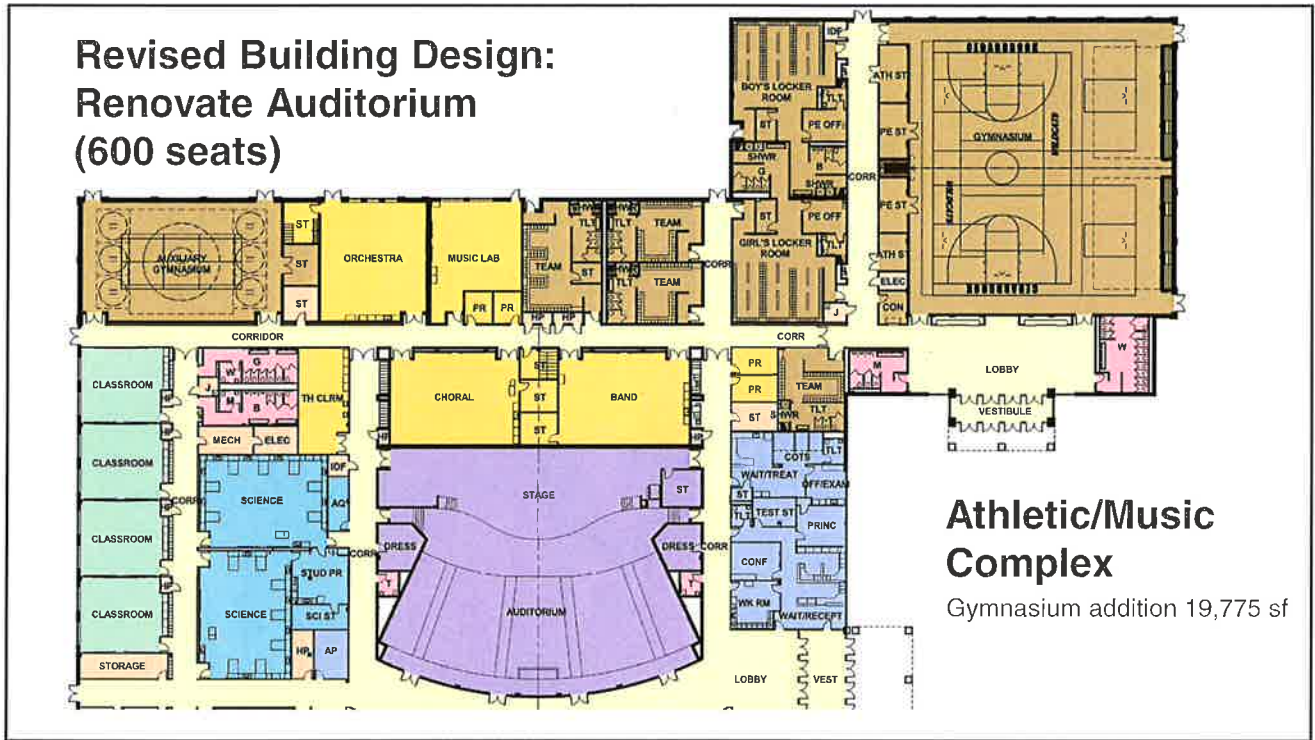
- Renovate the existing 600-seat Auditorium
- Includes a 2-story classroom addition to meet current program
- Includes the same gymnasium addition and courtyard infill
- Includes geothermal
- Itemized list of soft costs
- Total square footage: 179,255 sf (43,490 sf new floor area)
- Total project cost (construction + soft costs) = \$51,313,004

● **Water Source Heat Pump (WSHP) vs Geothermal**

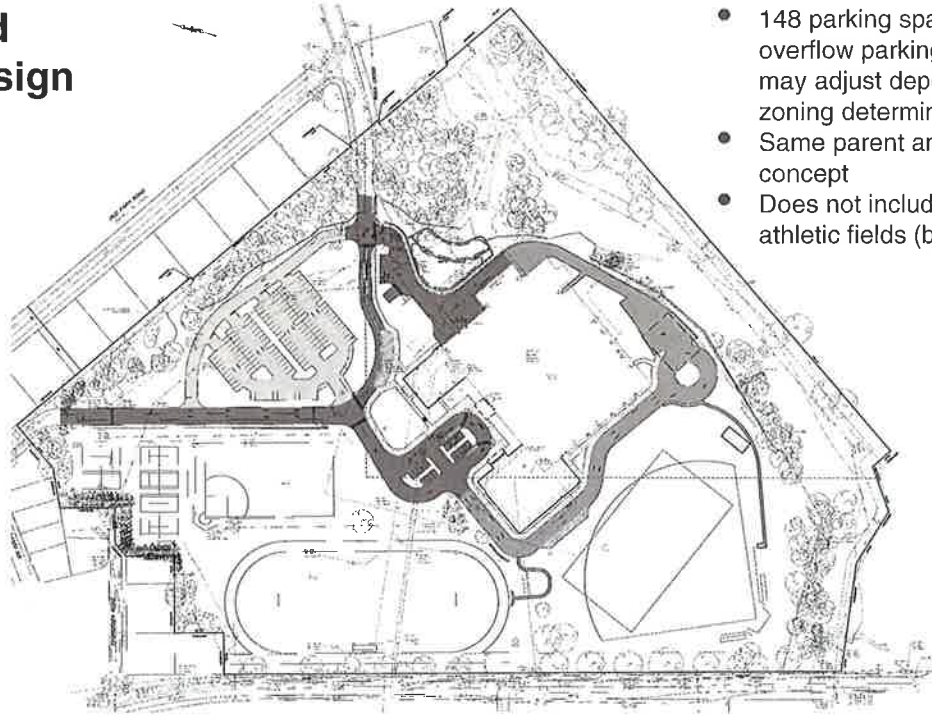
- WSHP construction cost savings of \$700,000
- Total project cost with WSHP reduced to \$50,592,004

Revised Scope





Revised Site Design



- 148 parking spaces plus overflow parking (parking count may adjust depending on zoning determination)
- Same parent and bus drop-off concept
- Does not include reconditioning athletic fields (bid alternates)



Revised Scope: View of Main Entrance



Revised Scope: View of New Library



Revised Scope: View from Route 309



Cedarbrook Middle School				Updated: September 1, 2015				
Project Cost Estimate Comparison Summary								
ESTIMATES OF PROBABLE COSTS	CONCEPT PHASE				DESIGN PHASE			
	Option 1 - Rebuild Cedarbrook		Conceptual Design Estimate		Turner Construction Co. Reconciled Schematic Design Estimate (New 800 seat Auditorium)		Turner Construction Co. Design Development Estimate - Revised Plan (Renov. Ext'g Auditorium)	
CONSTRUCTION COSTS	HIGH		HIGH					
Demolition:								
Existing Building Demolition	\$0		\$0		\$1,227,042		\$1,227,042	
Demolition of Gymnasium	\$0		\$117,020		\$292,313		\$292,313	
Sub-total of Demolition:	\$0		\$117,020		\$1,519,355		\$1,519,355	
Building Construction:								
Renovations	\$27,742,225	\$175/sf	\$22,532,310	\$170/sf	\$25,486,696	\$192.63/sf	\$26,035,092	\$200.64/sf
Auxilliary Gym			\$589,965	\$185/sf	\$894,086	\$259.16/sf		
Auxilliary Gym & Orchestra							\$1,421,761	\$236.76/sf
New Construction:	\$5,000,000	\$250/sf						
Gymnasium and Locker Room Addition			\$4,043,215	\$205/sf	\$5,877,463	\$297.22/sf	\$5,877,463	\$297.22/sf
Auditorium and Music Room Addition (8) Classroom Addition			\$6,918,180	Avg \$210/sf	\$11,419,924	\$286.72/sf		
Enclose Courtyard			\$1,085,700	\$150/sf	\$1,883,955	\$251.03/sf	\$1,878,626	\$250.32/sf
Sub-total of Building Construction:	\$32,742,225		\$35,169,370		\$45,562,124		\$39,108,582	
Site Construction:	\$0		\$3,600,000		\$4,857,529		\$4,857,529	
Design Contingency/Escalation:	\$2,762,200		\$1,555,456					
Total Construction Costs:	\$35,504,425		\$40,441,846		\$51,939,008		\$45,485,466	

ESTIMATES OF PROBABLE COSTS	CONCEPT PHASE		DESIGN PHASE	
	Option 1 - Rebuild Cedarbrook	Conceptual Design Estimate	Turner Construction Co. Reconciled Schematic Design Estimate (New 800 seat Auditorium)	Turner Construction Co. Design Development Estimate - Revised Plan (Renov. Ext'g Auditorium)
SOFT COSTS				
Construction Contingency			\$1,558,170	\$1,364,564
Design Services			1,555,000	1,555,000
Consultants:				
Construction Manager			591,860	591,860
Asbestos Consultant			55,000	55,000
Traffic Consultant			6,900	6,900
Commissioning			69,700	69,700
Surveys:				
Geotechnical Testing			18,000	18,000
Conductivity test (geothermal test well)			9,900	9,900
Boundary and topo			17,300	17,300
Fees:				
Testing/Inspection			90,000 (allowance)	90,000 (allowance)
3rd Party Inspector			80,000 (allowance)	80,000 (allowance)
Engineer Review for Land Development			14,000	14,000
Asbestos Remediation:				
Abatement/Monitoring			620,000	620,000
Underground storage tank			150,000 (allowance)	150,000 (allowance)
Advertising Costs			1,000 (allowance)	1,000 (allowance)
Act 34 Hearing Legal Fees and Stenographer			2,500 (allowance)	2,500 (allowance)
Builder's Risk Insurance			37,000 (allowance)	37,000 (allowance)
LEED Certification Fees			9,814	9,814
Building Code Review			75,000 (allowance)	75,000 (allowance)
FF&E			750,000 (allowance)	750,000 (allowance)
Moving Expenses			10,000 (allowance)	10,000 (allowance)
Technology			300,000 (allowance)	300,000 (allowance)
Total Soft Costs:	\$13,398,422	\$8,088,369	\$6,021,144	\$5,827,538

ESTIMATES OF PROBABLE COSTS	CONCEPT PHASE		DESIGN PHASE	
	Option 1 - Rebuild Cedarbrook	Conceptual Design Estimate	Turner Construction Co. Reconciled Schematic Design Estimate (New 800 seat Auditorium)	Turner Construction Co. Design Development Estimate - Revised Plan (Renov. Ext'g Auditorium)
TOTAL PROJECT COSTS	\$48,902,847	\$48,530,215		
TOTAL PROJECT COSTS WITH GEOTHERMAL (Construction Costs + Soft Costs; not including Financing Costs)			\$57,960,152	\$51,313,004
Design Directive (September 2015):			\$51,939,008	\$45,485,466
Water Source Heat Pump versus Geothermal			-\$700,000	-\$700,000
Total Construction Costs:			\$51,239,008	\$44,785,466
Total Soft Costs:			\$6,000,144	\$5,806,538
TOTAL PROJECT COSTS WITHOUT GEOTHERMAL			\$57,239,152	\$50,592,004
Add Alternates (to be determined upon receipt of bids):	Sub-Total of Proposed Add Alternates:		\$2,483,140	\$2,483,140
Terrazzo in all corridors & cafeteria			\$1,180,000	\$1,180,000
Add Athletic Storage Building			\$210,600	\$210,600
Include Refurbishing of Existing Athletic Fields (Refer to Turner Construc. Co. Summary Sheet Breakout)			\$996,540	\$996,540
Include Solar Heating of Domestic Water			\$96,000	\$96,000

Design and Approval Schedule

- **September**
 - School Board Legislative Meeting: Resolution to approve the project moving forward with or without Geothermal
 - “Maximum Project Cost”
 - “Maximum Building Construction Cost”
 - Advertise Act 34 Hearing
- **October**
 - Act 34 Hearing: October 6th at 6:30 pm
- **November**
 - Status of Land Development (LD) Approvals
 - Approval of PlanCon D – Costs Based on Estimates and PlanCon E – Design Development
- **December**
 - Status of LD Approvals to Prepare for Bidding

Act 34 Hearing Preparation

- **Intent of the Act 34 Hearing**
 - Pennsylvania School Code of 1949, Act 34 of 1973 requires a public hearing be held on all new construction and substantial additions
 - Purpose is to give an overview of the project and receive public comment
- **Resolution**
 - School Board by resolution adopt the “maximum project cost” and “maximum building construction cost”
- **Timeline for Public Comment**
 - 20 day waiting period from the posting of the advertisement to the date of the hearing
 - 30 day waiting period after the hearing