

February 3, 2014

Board of Alderman Update Angier Elementary School

The project remains on budget at the Design Development Phase

- *Two full independent cost estimates were reconciled to within \$100 K (on a budget of \$26.2 M)*
- *The drawings, specifications and cost estimates were reviewed by:*
 - ✓ Architect and Engineers
 - ✓ Owner's Project Manger
 - ✓ Construction Manager
 - ✓ Commissioning Agent
 - ✓ Newton Public Buildings
 - ✓ Design Review Committee
 - ✓ Newton Public Schools
 - ✓ Executive Committee
 - ✓ Angier Working Group

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A comprehensive list of Value Engineering opportunities were identified

- *No cuts to programs*
- *No impact on the energy efficiency*
- *No reduction in the quality, durability, or life expectancy of building components*
- *No significant changes to the layout or design of the school*

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Value Engineering, cont.

- *Certain design elements and systems were more costly than on typical school projects and were adjusted accordingly*
- *Some redundant functionality or unnecessary systems capacity was eliminated*
- *Life cycle cost and payback periods were analyzed for all items which impacted operating expense*
- *The recommended VE list was unanimously approved by NPS, NPB, DRC, the Angier Working Group and the Executive Committee*

Board of Alderman Update

Angier Elementary School

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Value Engineering Summary

Site	\$73,571
Building	\$454,415
Building Energy Efficiency	\$172,211
Interior Finishes	\$203,241
Exterior Materials	\$122,119
MEPFP	\$637,655
Subtotal DD Phase Budget Adjustment Items	\$1,663,212

ANGIER ELEMENTARY SCHOOL - NEWTON, MA

2/3/2014

DESIGN DEVELOPMENT TOTAL PROJECT BUDGET SUMMARY

	MSBA BUDGET
Feasibility Study (currently funded)	\$ 750,000
Administration (includes OPM fees for DD through Closeout)	\$ 970,000
Architecture and Engineering (DD through Closeout)	\$ 2,441,100
CM at Risk Pre-Construction Services (DD through Closeout)	\$ 123,600
Construction Costs	\$ 26,229,482
Off-Site Improvements (MSBA Excluded)	\$ 4,000,475
Miscellaneous Project Costs (Utility Fees, Testing, Moving)	\$ 230,000
Furnishings and Educational Technology	\$ 1,116,000
Potentially Eligible Construction Contingency	\$ 1,311,474
Potentially Eligible Owner's (soft cost) Contingency	\$ 327,869
Total Project Budget	\$ 37,500,000
Key Project Metrics	
Design Enrollment (Planned Number of Students)	465
Total Building Gross Floor Area (Square Feet)	74,960
DD Estimated Construction Costs (WT Rich, CM)	\$ 26,236,539
DD Construction Costs: Variance to Budget	\$ 7,057
<i>Note: Estimate includes recommended value engineering adjustments, see attached</i>	
Budgeted Construction Cost per Gross Square Foot	\$ 349.91
Estimated Construction Cost per Gross Square Foot	\$ 350.01

Angier Elementary School: Newton, MA**Design Development Phase Value Engineering Summary****2/3/2014**

SITE	\$	73,571
Simplify materials/detailing for trellis at front plaza, dimensions and function will not change: design target	\$	20,000
Substitute chainlink for PVC fence at abutter	\$	4,290
Delete redundant exterior stair at Gym ramp	\$	6,971
Shift some site benches to Alternates: Concrete benches at overhang, wood benches at cafeteria and bench at gym/plaza	\$	29,708
Reduce width of concrete pavement border at playground	\$	8,848
Relocate future charging station for electric cars closer to building, reduce conduit length	\$	1,609
Delete power and data to trellis at front plaza, not necessary for educational purposes	\$	2,145
BUILDING	\$	454,415
Use crushed foundations instead of imported material as structural fill	\$	6,435
Substitute concrete for stone below grade: not visible, no impact	\$	3,604
Increase gym width 16" for full length instead of center bump out, use continuous bench instead of bleachers	\$	57,739
Do not increase parapet height as proposed, leave it as designed at SD	\$	26,813
Reduce height of mechanical penthouse screenwall by 12", will still screen equipment from view	\$	12,773
Do not add light wells and clerestory, leave design as it was at SD	\$	91,876
Substitute 4 fixed for retractable back boards at gym	\$	19,305
Delete upper window into gym from stair	\$	10,725
Substitute stock wood cubbies for proposed custom cubbies and simplify detailing	\$	91,967
Redesign and simplify classroom storage with sliding marker boards: design target	\$	125,000
Use manual overhead doors at servery and simplify instead of proposed electric doors	\$	8,178
BUILDING ENERGY EFFICIENCY	\$	172,211
Do not increase spray foam wall insulation by 1" as was proposed: minimal impact on energy model	\$	23,798
Delete all exterior solar shading devices; minimal impact on energy model	\$	148,413
INTERIOR FINISHES	\$	203,241
Substitute linoleum for porcelain tile at first floor cafeteria and corridor	\$	68,785
Reduce area of rated glass in stairwells: design target	\$	100,000
Substitute standard (Armstrong) wood ceiling product for ipe wood	\$	6,571
Reduce painted wood ceiling trim by 50%	\$	13,406
Substitute painted hollow metal for factory pre-finished storefront framing	\$	14,479
EXTERIOR MATERIALS	\$	122,119
Substitute larger brick shapes (jumbo, economy, panel) for small area of remaining modular (standard) brick	\$	19,833
Substitute ground faced masonry for brick at entire gym	\$	23,166
Substitute acoustic tile for ipe wood ceiling at exterior overhangs	\$	54,968
Delete window safety film at ground floor admin area	\$	24,153
MEPFP	\$	637,655
Make HVAC Controls, Security System, PA System and IPTV System open bid rather than proprietary	\$	238,095
Delete radiant ceiling panels and piping: this would offer no real benefit for operations	\$	150,150
HVAC system engineering simplification: target design savings	\$	125,000
Down size Diesel Generator (& distribution) to 75 KW: appropriate for schools of this size, will carry all desired load	\$	107,250
Reduce the number of data drops from 6 to 4 in each classroom: coverage will remain appropriate	\$	17,160
SUBTOTAL DD PHASE BUDGET ADJUSTMENT ITEMS	\$	1,663,212

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Board of Alderman Update Zervas Elementary School

Project Team

- Joslin, Lesser + Associates: Owner's Project Manager
- Design Partnership of Cambridge: Architect

Feasibility Study Investigation

- Preliminary educational / space programs and planned enrollment
- Existing building and site conditions
- Alternative site options
- Buildable area of the Zervas site
- Swing space options