Board of Alderman Update
Angier Elementary School

February 3, 2014

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

JOSLIN LESSER
Project Management

Board of Alderman Update

Angier Elementary School

February 3, 2014

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*

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Project Management

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February 3, 2014

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**

JOSLIN LESSER
Project Management

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 simpify 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
Substitue 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

ANGIER ELEMENTARY SCHOOL - NEWTON, MA 2/10/2014

DESIGN DEVELOPMENT TOTAL PROJECT BUDGET SUMMARY

	MSBA BUDGET
Feasibility Study (currently funded)	**$ 717,659**
Administration (includes OPM fees for DD through Closeout)	**$ 970,000**
Architecture and Engineering (DD through Closeout)	**$ 2,491,100**
CM at Risk Pre-Construction Services (DD through Closeout)	**$ 123,600**
Construction Costs	**$ 26,231,698**
Off-Site Improvements (MSBA Excluded)	**$ 3,948,259**
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	**$ 360,210**
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)	**$ 26,222,990**
DD Construction Costs: Favorable Variance to Budget	**$ 8,708**
Note: Estimate includes recommended value engineering adjustments, see attached	
Budgeted Construction Cost per Gross Square Foot	$ 349.94
Estimated Construction Cost per Gross Square Foot	$ 349.83