



Interview for the Leicester Middle School

Leicester, MA

April 3, 2018



Leicester Middle School
Leicester, Massachusetts



Why NV5 is the Best Fit

- **NV5's Deep Bench of Resources**
- **We Know the MSBA process**
 - **We Have Successfully Executed 35+ MSBA OPM Contracts**
- **Unique Ability to Effectively Manage a Diverse team of Architects, Contractors, Engineers and Other Consultants**
- **Oversee & Review Architect's Work for Quality & Efficiency, Identify Design Conflicts and Make Recommendations to Correct**
- **Extensive Experience with D-B-B and CM at Risk (MGL 149 & 149A)**
- **Excellent Representation and Quality Control on Site**



Leicester Middle School
Leicester, Massachusetts

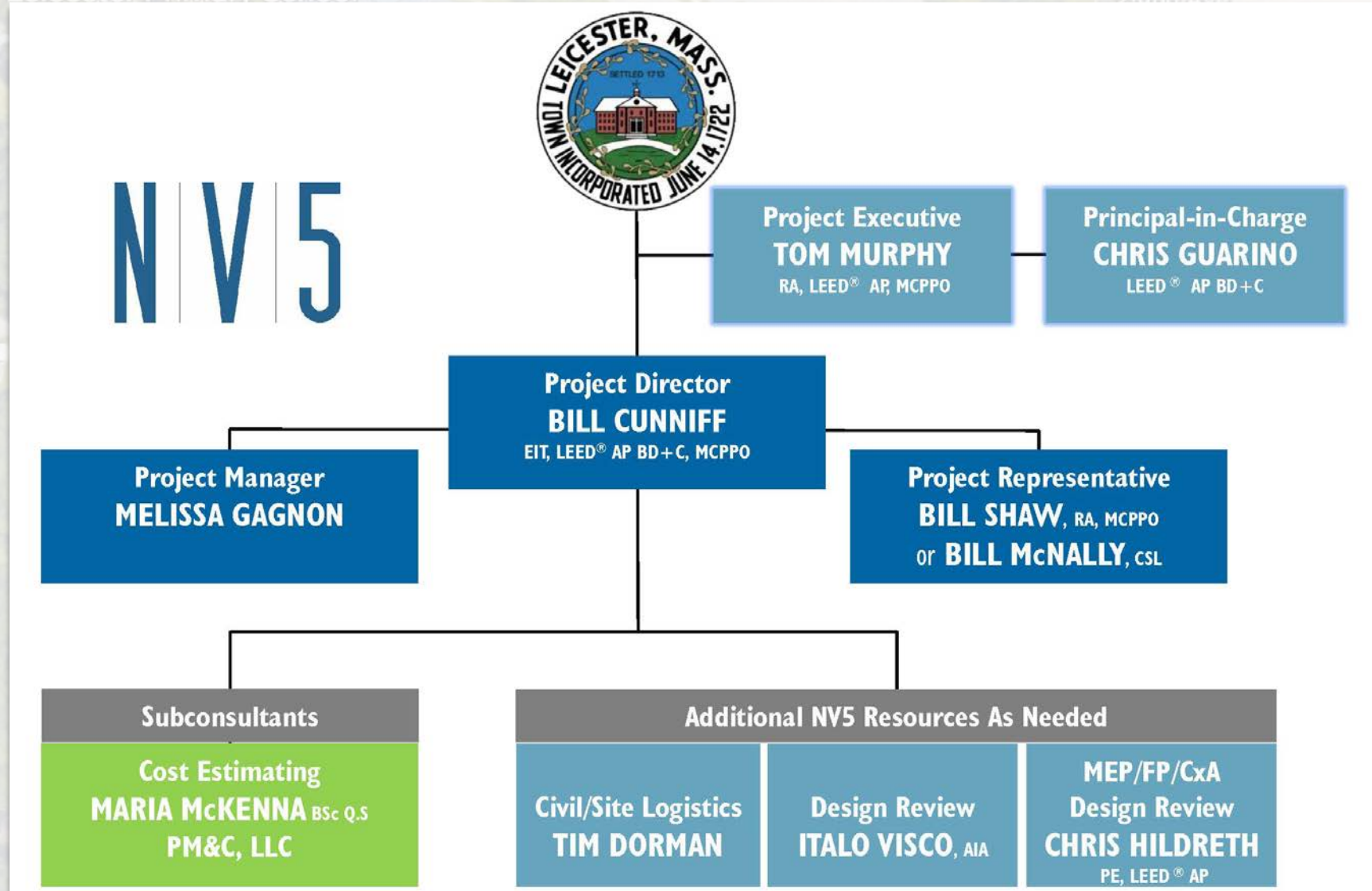
NV5

Efficient Use of Complementary Skills = Team Work

Leicester Primary School

Hyland Ave

Hyland Ave



Leicester Middle School
Leicester, Massachusetts

NV5

Winslow Ave

Winslow Ave

Winslow Ave

Dec

Middle/High School Experience



Lynn Thurgood Marshall Middle School
Project Completed April 2016
Architect: Raymond Design Associates
CM: Walsh Brothers
Grades: 6-8 Cost: \$92M



Lunenburg Middle/High School
Project Completed Fall 2016
Architect: Tappe Associates, Inc.
CM: Shawmut Design & Construction
Grades: 6-12 Cost: \$72.9M



Wakefield Galvin Middle School
Project Completed 6/2015
Architect: Tappe Associates
CM: Bond Brother
Grades: 5-8 Cost: \$73.9M



Grafton High School
Project Completed 9/2012
Architect: Symmes, Maini, & McKee
CM: Dimeo Construction Company
Grades: 9-12 Cost: \$72.5M



Longmeadow High School
Project Completed 11/2013
Architect: OMR Architects
CM: Gilbane Building Company
Grades: 9-12 Cost: \$76M



Uxbridge High School
Project Completed Fall 2012
Architect: Raymond Design Associates
CM: Shawmut Design & Construction
Grades: 9-12 Cost: \$45M



Southbridge M/H School
Project Completed 7/2012
Architect: Tappe Associates
CM: Consigli Construction Co.
Grades: 6-12 Cost: \$74M



Greater Lowell Technical High School
Project Completed Fall 2015
Architect: Knight, Bagge & Anderson
CM: Consigli Construction Co.
Grades: 9-12 Cost: \$65.3M



Wilmington High School
Project Completed 2/2015
Architect: Dore & Whittier Associates
CM: Gilbane Building Company
Grades: 9-12 Cost: \$83M



Waltham High School
Projected Completion 9/2020
Architect: SMMA
GC/CM: TBD
Grades: 9-12 Cost: \$250M



Leicester Middle School
Leicester, Massachusetts

N | V | 5

Grade Configuration Study



MSBA Approved Enrollment Studies

Existing school 57,000 SF

- 455 students grades 6-8 84,305 SF
- 805 students grades 4-8 128,800 SF
- 920 students grades 1-8 147,200 SF
- 1005 students grades K-8 160,800 SF



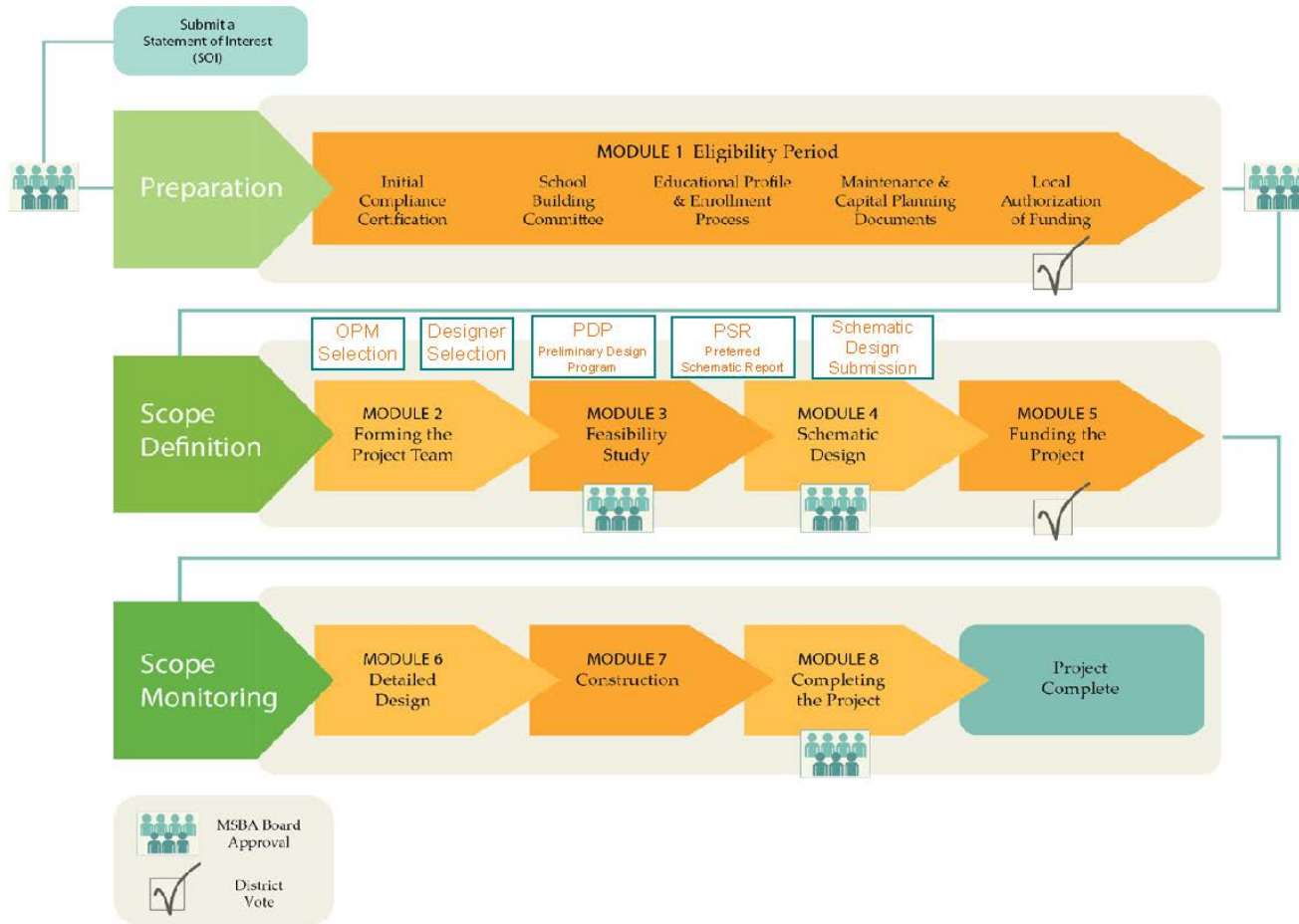
Leicester Middle School
Leicester, Massachusetts

N | V | 5

MSBA Process



MSBA Core Program Process Overview



Your Schedule

Leicester Primary School

Hyland Ave

Hyland Ave

Leicester Middle School, Leicester, MA

Preliminary Milestone Schedule

Thursday, June 7, 2018	2016	2017	2018	2019	2020	2021	2022	2023	2024
MSBA Modules	Eligibility		Team	FS	SD	CD	Construction		Close
Submit SOI to MSBA	◆ March 22, 2016								
MSBA Invitation into Feasibility		◆ December 13, 2017 Invitation to MSBA Feasibility							
OPM Selection		◆ June 4, 2018 MSBA OPM Panel							
Designer Selection		◆ 3rd Qtr. MSBA Designer Selection Panel (September 18 and October 2, 2018)							
Feasibility Study (PDP/PSR)		Feasibility Study							
MSBA Board Approval (PSR)		◆ 2nd Qtr. 2019 MSBA Board Meeting - Move Project to SD							
Schematic Design		Schematic Design							
MSBA Board Approval (PSB)		◆ 2nd Qtr. 2020 MSBA Board Meeting - PSBA							
Local Vote / Funding Approval (PFA)		◆ Town Approval Spring 2020							
Design Phase / Bidding		Construction Documents / Bidding							
Construction		Construction							
Students and Staff Move In		Students and Staff Move In							
Project Closeout		Project Closeout							

* MSBA Board dates are estimated dates based on the MSBA 2018 meeting schedule.

** The Schedule is subject to change, based on final approved preferred option.

PDP = Preliminary Design Program

PSR = Preferred Schematic Report

PSB = Project Scope and Budget Agreement

PFA = Project Funding Agreement



Leicester Middle School
Leicester, Massachusetts



Winslow Ave

Winslow Ave

Dec

Existing Conditions: Building

Some Deficiencies:

- Existing building constructed in 1961
- Building systems have outlived their useful life
- ADA non-compliant
- Insufficient science labs
- Insufficient SPED program area
- Insufficient auditorium
- Can not achieve 21st century learning
- Need for small group instruction spaces
- Lack of dedicated HS/MS meeting spaces



Some Issues to Study and Evaluate:

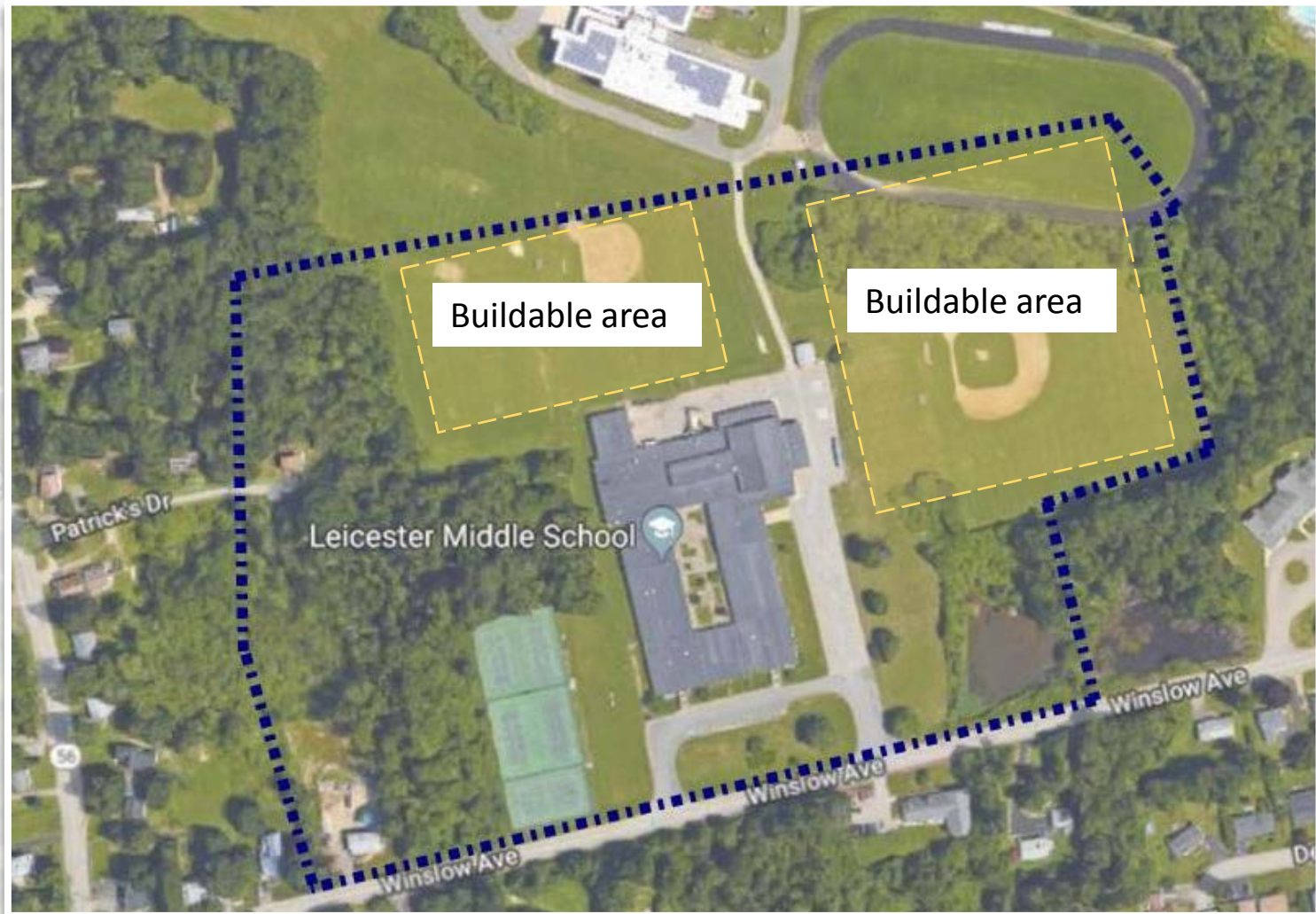
- Possible environmental impacts
- Restrictions to possible expansion
- Reconfiguration to outdoor athletic areas
- Reconfiguration of grade levels
- Possible phased construction with swing space
- Community space
- Traffic / parking / separation of buses and cars



Leicester Middle School
Leicester, Massachusetts

N | V | 5

Existing Conditions: Site



Leicester Middle School
Leicester, Massachusetts

N | V | 5

Options Analysis

LEICESTER MIDDLE SCHOOL, LEICESTER, MA

Options and Criteria Evaluation Matrix

● Favorable ⊕ Neutral ○ Unfavorable

CRITERIA	Grades 5 - 8			Grades 6 - 8			Grades Pre K - 8		
	1	1A	1B	2	2A	2B	3	3A	3B
	Renovation Only	Addition/ Renovation	New	Renovation Only	Addition/ Renovation	New	Renovation Only	Addition/ Renovation	New
Existing Leicester Middle school = 75,000 SF									
Note: *All design options will meet current building codes.									
Building and Site Facts									
Student enrollment population	440			330			930		
Approximate square footage required per MSBA standards	75,000	63,000	63,000	X	82,000	82,000	X	144,000	144,000
Pre-K classrooms									
Size of site (acres)									
Wetlands, soil conditions and grade									
Cost and Schedule									
Phased construction									
Maintains project approvals schedule - new school opens in 2022									
Minimizes disruptions to school + neighbors during construction									
Educational									
Meets educational program for all students + design enrollment									
Maintains current Acton-Boxborough school districting									
Provides flexibility for future growth									
Community									
Provides accessibility to community used space									
Accommodates community program needs									
Accommodates Pre-K program									
Building									
Maximizes security									
Optimizes use of natural light and daylighting									
Optimizes connection of outdoor/indoor space, integration with site									
Meets ADA requirements efficiently									
Fosters a sense of school community									
Site									
Maximizes building set backs and lot lines									
Separates bus and automobile circulation									
Provides sufficient parking for teachers, staff + visitors									
Accommodates additional parking and circulation for special events									

Middle School
Grades 5 - 8
440 Students

Middle School
Grades 6 - 8
330 Students

Elementary & Middle School
Pre-K - 8
930 Students



Leicester Middle School
Leicester, Massachusetts



Options Analysis



Middle School
Grades 5 - 8
440 Students
82,000 SF

Middle School
Grades 6 - 8
330 Students
63,000 SF



Leicester Middle School
Leicester, Massachusetts



Options Analysis

Elementary & Middle School
Pre-K - 8
930 Students
144,000 SF



Leicester Middle School
Leicester, Massachusetts



Project Management Approach



Leicester Middle School
Leicester, Massachusetts

N|V|5

Budget Controls & Reporting

- Master Budget Management
- Review Pay Requisitions
- Review cost estimates and change orders, evaluate and offer VE solutions



SD Cost Estimate Comparison: Reconciliation						4/3/2014
	JCJ / VJ Associates		Shawmut		Variance Between VJ and Shawmut	
	Gross Floor Area	147,996	Gross Floor Area	147,996	Gross Floor Area	0
	Total Cost	Cost/GSF	Total Cost	Cost/GSF	Total Cost	Cost/GSF
SUBSTRUCTURE	\$ 2,486,821	16.80	\$ 2,215,442	14.97	\$ 271,379.00	1.83

Foundations
Basement Construction
SHELL
SuperStructure
Exterior Structure
Exterior Walls
Exterior Windows
Exterior Doors
Roofing
INTERIORS
Interior Construction
Staircases
Interior Finishes
SERVICES
Conveying Systems
Plumbing
HVAC
Fire Protection

Caleb Dustin Hunking School - Haverhill, MA EXECUTIVE SUMMARY May 16, 2017

Project Budget - PFA Bid Amendment						
	Original Budget	Current Budget	Spent	%	Balance	
Feasibility Study	\$ 653,564	\$ 653,564	\$ 653,564	100%	\$ -	
Owner's Project Manager Services (OPM)	\$ 1,510,000	\$ 1,510,000	\$ 1,435,040	95%	\$ 74,960	
Architect/ Engineer Design and Contract Administration	\$ 4,073,800	\$ 4,146,414	\$ 3,975,741	96%	\$ 170,673	
CM Preconstruction	\$ 150,000	\$ 150,000	\$ 150,000	100%	\$ -	
FF&E - Furniture & Equipment	\$ 1,206,000	\$ 1,406,453	\$ 1,406,454	100%	\$ (0)	
FF&E - Technology	\$ 1,206,000	\$ 1,386,458	\$ 1,386,458	100%	\$ (0)	
Other/Misc. Costs including Testing, Utility Co. Fees and Moving	\$ 199,906	\$ 199,906	\$ 111,850	56%	\$ 88,056	
Construction (Current Budget is SDC Contract Value)	\$ 49,998,830	\$ 49,544,770	\$ 45,808,338	92%	\$ 3,736,432	
Building Permit Fee	\$ -	\$ 300,000	\$ 300,000	100%	\$ -	
Changer Orders	\$ -	\$ 1,937,468	\$ 1,400,644	72%	\$ 536,824	
Construction Contingency	\$ 2,084,900	\$ 444,345	\$ -	0%	\$ 444,345	
Owner Contingency	\$ 417,000	\$ -	\$ 417,000	100%	\$ -	
Total	\$ 61,500,000	\$ 61,379,378	\$ 56,745,088	92%	\$ 5,051,290	

PFA Amendment

Contingency Allocation					
	Allocation	Committed	Current Balance	Pending	Projected Balance
GMP Contingency**	\$ 752,354	\$ 294,014	\$ 458,340	\$ 35,014	\$ 423,326
Construction Contingency	\$ 2,418,338	\$ 1,973,993	\$ 444,345	\$ 60,000	\$ 384,345
Owner's Contingency	\$ 417,000	\$ 417,000	\$ -	\$ -	\$ -
Total	\$ 3,587,692	\$ 2,685,007	\$ 902,685	\$ 95,014	\$ 807,671

** GMP (CM) Contingency is included in the construction budget line item, within the SDC Contract.



Leicester Middle School
Leicester, Massachusetts



Monthly Reporting

Tracking & Reporting from the beginning to the end - from the Field to the Office



ELEMENTARY SCHOOL PROJECTS: MEETING & MILESTONE SCHEDULE

ANGUS - A ZERVAS - Z CABOT - C 4/2016 - 8/2016

UPDATED DRAFT-07/11/16

MOODAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
ROADS MEETING	MEETING/CONSTRUCTION	OPEN HOUSE MEETING	OPEN HOUSE MEETING	OPEN HOUSE MEETING
...

UXBRIDGE HIGH SCHOOL - UXBRIDGE, MA
PROJECT SCHEDULE, SEPT 2012 OPENING
JULY 22, 2010

ID	Task Name	Duration	Start	Finish	2009	2010	2011	2012
...	...	30 days	Thu 1/26/12	Wed 3/7/12	Q4	Q1	Q2	Q3
...	...	10 days	Thu 1/26/12	Wed 3/7/12	Q4	Q1	Q2	Q3
...	...	28 days	Thu 1/18/12	Mon 2/27/12	Q4	Q1	Q2	Q3
...	...	28 days	Tue 2/14/12	Thu 3/22/12	Q4	Q1	Q2	Q3
...	...	28 days	Tue 2/21/12	Thu 3/29/12	Q4	Q1	Q2	Q3
...	...	56 days	Thu 5/20/10	Wed 5/9/12	Q4	Q1	Q2	Q3
...	...	30 days	Fri 3/23/12	Thu 5/3/12	Q4	Q1	Q2	Q3
...	...	18 days	Tue 2/28/12	Thu 3/22/12	Q4	Q1	Q2	Q3
...	...	18 days	Fri 3/30/12	Tue 4/24/12	Q4	Q1	Q2	Q3
...	...	14 days	Thu 5/10/12	Tue 5/29/12	Q4	Q1	Q2	Q3
...	...	18 days	Tue 3/6/12	Thu 3/29/12	Q4	Q1	Q2	Q3
...	...	28 days	Fri 3/23/12	Tue 5/1/12	Q4	Q1	Q2	Q3
...	...	63 days	Thu 1/26/12	Mon 4/23/12	Q4	Q1	Q2	Q3
...	...	169 days	Thu 12/8/11	Tue 7/31/12	Q4	Q1	Q2	Q3
...	...	10 wks	Thu 12/8/11	Wed 2/15/12	Q4	Q1	Q2	Q3
...	...	10 wks	Thu 12/8/11	Wed 2/15/12	Q4	Q1	Q2	Q3
...	...	10 wks	Thu 12/8/11	Wed 2/15/12	Q4	Q1	Q2	Q3
...	...	10 wks	Thu 12/8/11	Wed 2/15/12	Q4	Q1	Q2	Q3
...	...	20 days	Thu 12/8/11	Wed 1/4/12	Q4	Q1	Q2	Q3
...	...	45 days	Thu 3/22/12	Wed 5/31/12	Q4	Q1	Q2	Q3
...	...	47 days	Tue 2/28/12	Wed 5/2/12	Q4	Q1	Q2	Q3
...	...	6 wks	Fri 3/30/12	Thu 5/10/12	Q4	Q1	Q2	Q3

NV5

WOODLAND ELEMENTARY SCHOOL
MILFORD, MA

Monthly Project Update Report
December 2016

Fs/SD DD CD Bidding Construction Closeout

CITY OF LYNN
School Building Committee
THURGOOD MARSHALL MIDDLE SCHOOL PROJECT

OPM: Joslin, Lesser + Assoc., Inc.
Architect: Raymond Design Associates
CM: Walsh Brothers, Inc.

Project Schedule: 12/28/13 to 06/19/15

Construction Progress

- New access roadways and pedestrian paths are in place and functional
- Turf Field 1 is complete and in use by the school and community
- Culvert relocation is complete and operational
- Building A is enclosed for winter interior construction
- Masonry materials have been delivered with brick installation beginning
- Building C Foundations are in Progress
- Structural Steel for Building C has been arriving on site

Project Budget

Budget Allocation	Original
Construction (incl. Pre Cost)	\$ 59,896.5
A/E	5,488.4
FF&E/Technology	2,568.0
Other Costs (incl. OPM)	2,243.0
Contingency (incl. & Cont'd)	3,764.3
Total	\$ 73,960.3

Deferred Items

Turf Field #2	\$ -
Sports Lights for Turf Field #2	\$ -
Theater Rigging	3,024.3
Additional Trees	15,416
Total	\$ 15,416

Contingency Allocation

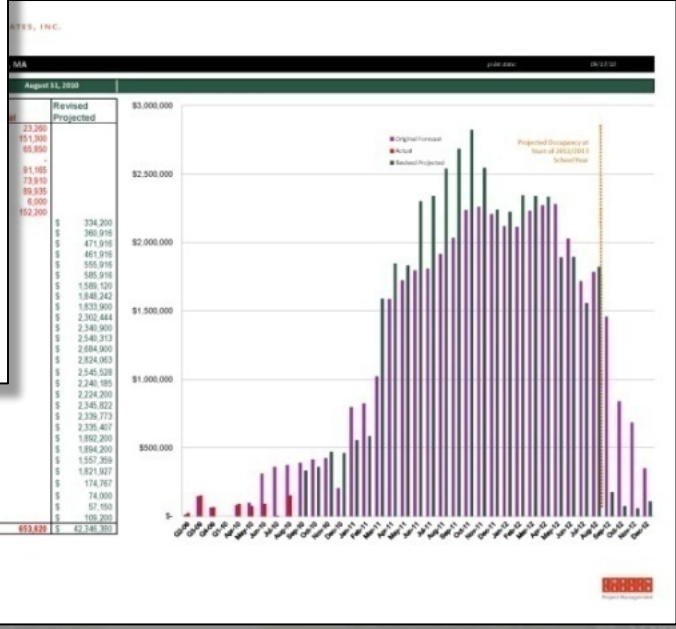
Contingency Type	Allocation
GMP	\$ 625.7
Construction	3,024.3
Project	740.0
Total	\$ 4,390.0

Construction Photos

Building B Structural Steel Erection

Building A Interior Construction

Project Cost



Leicester Middle School
Leicester, Massachusetts



Community Support & Engagement



Establish a Communications Plan

<http://www.leicester.projects.nv5.com/>

<https://sites.google.com/leicester/buildingproject/home>

Engage the Community through Public Forums and Meetings

Provide Accessible Information

ZERVAS ELEMENTARY SCHOOL PROJECT
Newton Highlands and Waban Neighborhood Area Council
Zervas Project Update

CABOT ELEMENTARY SCHOOL PROJECT
Community Update
Cabot Construction Project
Thursday, May 18, 2017 at 7:00PM
Cabot Elementary School
229 Cabot Street, Newtonville, MA 02459

CABOT ELEMENTARY SCHOOL PROJECT
Newtonville Area Council Construction Project Update
Thursday, March 8, 2016 - 6:30PM
Newton City Hall Room 211

NEW PARKER ELEMENTARY SCHOOL

CABOT

Home Meeting Agenda Meeting Minutes Presentations Cabot Project Team Contact

Welcome

Welcome to the Cabot Elementary School Design and Construction Phases. This site is devoted to informing the community about the project with important announcements and supporting documents. Please note that construction is scheduled to begin in early July. There is a Community Update meeting scheduled for Thursday, May 18, at 7:00 PM. The meeting will be in the Cabot Elementary School. The meeting is open to the public and will be held on the 2nd Thursday of each month, one 1/2 hour before the monthly Newtonville Area Council meetings. Locations will be announced.

Also note that the Cabot School Building Committee (SBC) and Design Review Committee (DRC) are scheduled to meet on Thursday, June 29. The meeting will be held in the Newton City Center (100 Walnut Street, South City, and West Newton) to be announced.

CABOT ELEMENTARY SCHOOL LOCATION

Hildreth Elementary School Project

WELCOME

Welcome to the Hildreth Elementary School Building Project website devoted to informing the Harvard community about the Hildreth Elementary School Building Project. Here you will find important information, announcements, and supporting documents.

Please visit frequently to find up-to-date information about the project and to learn more about opportunities to get involved.

To receive emailed updates about the Building Project, please provide your email on this form or send a request to Josh Myler (jmyler@ph.harvard.edu).



Leicester Middle School
Leicester, Massachusetts



Delivery Method - DBB vs CMR



Construction Management At Risk (M.G.L. c. 149A) Amherst Wildwood Elementary School Project

CM at Risk Advantages:

- Ability to select contractor based on qualifications as well as fee
- Ability to release early packages under same contractor to accelerate schedule and time to market (potential significant construction cost reductions in this economic climate)
- Contractor involved early in the design process prior to bid release to provide preconstruction services such as constructability reviews, phasing analysis, cost estimates, and value engineering
- Trade contractors know the contractor prior to submitting bids

CM at Risk Disadvantages:

- Less competition from non-trade subcontractors
- Up-front cost of preconstruction services (0-1% of estimated GMP)
- GMP may not be executed until after construction begins thus reducing options if pricing comes in over budget

Construction Management At Risk (M.G.L. c. 149A) Amherst Wildwood Elementary School Project

Comparison of Construction Delivery Methods

Design - Bid - Build	Construction Manager at Risk
<ul style="list-style-type: none"> ▪ Design and construction stages proceed sequentially ▪ Owner completes design, issues bids on completed design ▪ General Contractor with lowest bid is selected ▪ Owner executes lump sum contract with General Contractor ▪ Change orders resulting from scope changes and unanticipated site conditions will increase the final construction cost. 	<ul style="list-style-type: none"> ▪ CM at Risk selected early in the design stage ▪ CM at Risk selected on qualifications and fee ▪ Owner first executes preconstruction contract with CM for constructability reviews, construction scheduling, and project cost estimates during the design process ▪ Owner negotiates Guaranteed Maximum Price for the project – contract becomes a cost plus fixed fee contract for construction phase ▪ CM is a partner in developing the bid documents which generally results in fewer change orders. Change orders from scope changes and unanticipated site conditions may still increase the final construction cost. ▪ Additional 1% reimbursement from the MSBA



Leicester Middle School
Leicester, Massachusetts

N | V | 5

QUESTIONS & ANSWERS

Why NV5?

- **30+ year Massachusetts public sector focus**
- **Substantial MSBA & Elementary School Experience**
- **Experienced PM Team with Diverse Expertise**
- **Core Team is Backed by Deep Bench of Resources**
- **Personal Service; Attention to Detail**



Leicester Middle School
Leicester, Massachusetts

NV5

Cost Analysis of Options



Angier Elementary School: Newton, MA
 Design Development Phase Value Engineering Summary 1/28/2014

Values shown are for the Construction Manager, WT Rich, which is the record estimate at this phase

SITE	Accepted	Considered	Rejected
Simplify materials/detailing for trellis at front plaza: design target	\$ 20,000		
Simplify exterior sign wall, substitute masonry for stone veneer			\$ 46,071
Substitute chainlink for PVC fence at abutter	\$ 4,290		
Delete exterior stair at Gym ramp	\$ 6,971		
Delete concrete benches under building overhang: Carry in Alternates	\$ 12,012		
Delete exterior wood bench outside Cafeteria: Carry in Alternates	\$ 13,943		
Delete 16' Bench at gym face/plaza: Carry in Alternates	\$ 3,754		
Substitute regular for colored concrete and bituminous for vehicular pavement			\$ 35,176
Reduce concrete border at playground	\$ 8,848		
Relocate future charging station for electric cars closer to building, reduce conduit	\$ 1,609		
Delete power and data to trellis at front plaza	\$ 2,145		

BUILDING	Accepted	Considered	Rejected
Substitute ladder & hatch for stairwell & headhouse to roof			\$ 65,652
Use crushed foundations instead of imported material as structural fill	\$ 6,435		
Substitute concrete for stone below grade: not visible, no impact	\$ 3,604		
Substitute 16" wider gym w/bleachers for bump out w/bleachers	\$ 57,739		
Reduce parapet height at upper roof	\$ 26,813		
Reduce height of mechanical penthouse screenwall by 12"	\$ 12,773		
Delete (3) unisex toilets: repurpose space for storage/other			\$ 25,740
Delete light wells and clerestory	\$ 91,876		
Substitute 4 fixed for retractable back boards at gym	\$ 19,305		
Delete upper window into gym from stair	\$ 10,725		
Delete upper storage shelving above classroom sinks			\$ 34,749
Substitute stock wood cubbies for custom and simplify	\$ 91,967		
Delete custom storage at music room curved wall			\$ 1,970
Delete storage above cubbies throughout			\$ 38,396
Redesign and simplify classroom storage with sliding marker boards: design target	\$ 125,000		
Substitute manual for electric overhead doors at server and simplify	\$ 8,178		

BUILDING ENERGY EFFICIENCY	Accepted	Considered	Rejected
Delete extra steel for PV ready main roof			\$ 17,696
Delete extra steel for PV ready mechanical penthouse			\$ 17,696
Substitute standard for PV ready roof membrane			\$ 34,382
Reduce exterior spray foam wall insulation by 1": no real impact on energy model	\$ 23,798		
Delete all exterior solar shading devices; minimal impact on energy model	\$ 148,413		

INTERIOR FINISHES	Accepted	Considered	Rejected
Substitute linoleum or rubber for porcelain tile at first floor cafeteria and corridor	\$ 68,785		
Substitute VET for linoleum at upper floors			\$ 47,401
Substitute epoxy flooring for quarry tile at kitchen		\$ 19,279	
Reduce area of glass in stairwells: design target	\$ 100,000		
Substitute painted CMU for glazed CMU			\$ 12,967
Substitute standard (Armstrong) wood ceiling product for ipe wood	\$ 6,571		
Substitute acoustic tile for wood ceilings throughout interior			\$ 44,530
Reduce painted wood ceiling trim by 50%	\$ 13,406		
Substitute painted hollow metal for factory pre-finished storefront framing	\$ 14,479		
Substitute plastic laminate for wood casework/cabinets			\$ 21,450



Leicester Middle School
 Leicester, Massachusetts



Options Analysis

- Living Document Populated with YOUR Priorities
- Guiding Principles
- Focused on the Education Plan

ALTERNATIVE SITE SELECTION MATRIX										
<p> Feasible Not feasible Not available </p> <p> ● Favorable ○ Neutral ○ Unfavorable </p>		IN CABOT DISTRICT				OUTSIDE OF DISTRICT				
CRITERIA	1	2	3	4	5	6	7	8		
<p>Angier ES Comparison: Current usable site: 1.76 acres Reclaimed site area: .08 acres Total size of new site: 1.84 acres Note: SF data does not include reclaimed area for parking and play space.</p>										
SITE	Existing Cabot site	Cabot Park (1.01 Eastside Parkway)	Edmonds Park (Blake St)	255-257 Newtonville Ave	Education Center (100 Walnut Street)	PW Garage (90 Crafts Street)	48 & 34 Crafts Street	Aquinas College (15 Walnut Park)		
1	Newtown village	Newtonville	Newtonville	Newtonville	Newtonville	Nonantum	Nonantum	Nonantum	Nonantum	
2	Walking distance from district center (miles)	0.4	0.6	0.8	0.7	1.0	0.9	0.9	1.3	
3	Size of site (acres)	1.8	11.6	12.7	1.8	3.8	4.1	1.8	6.0	
4	Legal restrictions, City owned land	X	X	X	-	X	X	-	-	
5	Site acquisition/legal issues, privately owned land	-	-	-	X	-	-	X	X	
6	Publicly owned	X	X	X	-	X	X	-	-	
7	Privately owned	-	-	-	X	-	-	X	X	
8	Maintains neighborhood 'walkability'	●	●	●	○	○	○	○	○	
9	Minimizes busing	●	●	●	○	○	○	○	○	
10	Degree of redistricting required	●	●	●	○	○	○	○	○	
11	Optimizes parking and play capacity	●	○	●	○	●	○	○	○	
12	Minimizes building height	○	○	○	○	○	○	○	○	
13	Does not increase demand for on street parking	○	○	○	○	●	○	○	●	
COST										
1	Site acquisition cost	●	○	○	○	●	○	○	○	
2	Minimizes phasing logistics	●	●	●	○	○	○	○	○	
3	Minimizes busing	●	●	●	○	○	○	○	○	
4	Reduces need for swing space/busing	●	●	●	○	○	○	○	○	
5	Collateral budget implications *	●	○	○	○	○	○	○	○	
RECREATIONAL IMPACT										
1	Minimizes recreational impact	○	○	○	○	○	○	○	○	
TOTALS										
1	Favorability	●	○	○	○	○	○	○	○	
within current Cabot district										

CABOT ELEMENTARY SCHOOL - Newton, MA					
Options and Criteria Evaluation Matrix					
	1	2	3	4	
<p> ● Favorable ○ Neutral ○ Unfavorable </p> <p>Costs: \$0, \$, \$\$, \$\$\$</p>					
<p>Note: All design options will meet current building codes. Renovation 2 and 4 assumes demolition of single story structure.</p> <p>Criteria</p>	Repair/Code Upgrade	Renovation /Addition	New Construction	New Construction (Alt. site)	
Building and Site Facts					
1	Student enrollment population	480	480	480	NA
2	Size of site (acres)	1.78 acres	1.78 acres	1.78 acres	NA
3	Site acquisition cost + Potential legal issues	\$0			NOT VIABLE
Cost and Schedule					
1	Relative capital cost		○	●	
2	Relative operating cost		●	○	
3	Allows students to move in to new school 2019	NOT VIABLE	●	○	NOT VIABLE
4	Minimizes disruptions to school + neighbors during construction		○	○	
5	Maintains project approvals schedule		●	○	
Educational					
1	Meets educational program for all students + design enrollment		●	●	
2	Provides flexibility for future growth	NOT VIABLE	○	○	NOT VIABLE
3	Provides flexibility for educational innovations		○	○	
4	Optimizes configuration and adjacency of teaching spaces		●	●	
Community					
1	Provides accessibility to community used space				
2	Accommodates community program needs	NOT VIABLE	●	●	NOT VIABLE
3	Accommodates Cabot After School Program (CASP)		●	●	
Building					
1	Allows for a contextually sensitive design		●	○	
2	Acknowledges historical features		○	○	
3	Allows efficient attainment of Green School/Stretch Code requirements		●	●	
4	Optimizes use of natural light and daylighting		○	○	
5	Optimizes connection of outdoor/indoor space, integration with site		●	●	
6	Provides reasonable and appropriate height and number of stories	NOT VIABLE	●	●	NOT VIABLE
7	Meets ADA requirements efficiently		○	○	
8	Incorporates an open and inviting accessible entry		○	○	
9	Maximizes security		●	●	
10	Connects interior/exterior spaces; integration of building with site		○	○	
11	Fosters a sense of school community		○	○	
12	Maximizes operable windows and indoor air quality		○	○	
Site					
1	Maximizes building set backs and lot lines (MSDA, Street, Fields)		○	●	
2	Accommodates outdoor program space		○	○	
3	Provides adequate green space		○	○	
4	Meets program for site drop off		○	○	
5	Meets program for off site drop off	NOT VIABLE	○	○	NOT VIABLE
6	Separates bus and automobile circulation		○	○	
7	Provides sufficient parking for teachers, staff + visitors		○	○	
8	Accommodates additional parking and circulation for special events		○	○	
9	Optimizes circulation		○	○	
10	Optimal impact on adjacent park space		○	○	



Leicester Middle School
Leicester, Massachusetts

N | V | 5

Define Roles and Responsibilities



CABOT ELEMENTARY SCHOOL

NEWTON, MA

COMMUNICATION AND DOCUMENT CONTROL PROTOCOL

MSBA GRANT FUNDED SCHOOL CONSTRUCTION PROJECTS

December 15, 2014

NV5 Consultants, Inc

NV5

Project Role/Responsibility Matrix

Designer	OPM	CxA	CMR	OWNER	MSBA
S	S		L	R	
S	L	R	S	R	
S	L		S	R	
S	S		L	R	R
S	S		L	S	
S	L		S	R	R
L	L				R
L	S		R	R	
R			L	R	
R	R		L	R	
L	S		R		
L			S	R	
L	S		S	R	
S	L		S	S	
S	S		L	R	
S	L		S	R	
S	L				
S	S		L		
S	L		L		
S			S	L	
S	L		L		
L	S	R	S	R	
L	S	S	R	R	
R	S	L	R		
L	S	S	S	S	
S	S	L	S	S	
S	S	L	S	S	S
L	S	S	L	S	
S	S		L	S	
S	L		S	S	
S	L		S	S	
S	L			S	
L	L			L	S
R	R		L		

... MA

PROTOCOL

... information during process and final issuance of document or ...

... information during process or otherwise supports Lead Role ...

... interim opinion and final review

Designer	OPM	CxA	CMR	OWNER	MSBA
	L			R	R

... MA

PROTOCOL

Designer	OPM	CxA	CMR	OWNER	MSBA
	L			R	R

... to the MSBA and the Owner throughout the Design Development, ...

... ruction and Close-Out phases of the project.

... Design Development phases, these reports will include Tasks ...

... Month Look Ahead and a Project Schedule. This Monthly Progress ...

... will be distributed to the MSBA and the Owner.

... ort will be reformatted to include an Executive Summary, Project ...

... ites and Supplemental Information including project photographs. ...

... ed to the MSBA and the Cabot School Building Committee and a ...

...

	S	L		R
		L		R

... in a systematic filing system for all project documents issued to ...

... g ASiis, CCDs, RFIs, Submittals, PCOs and COs shall be monitored ...

... nager. All logs will be distributed by the Construction Manager for ...

... ticular software in which the data will be tracked will be reviewed ...

... conference.

... QD/Risk Log to track these changes in relation to the Total Project ...

	S	L		R
		L		R

... budget, JIA will review all project invoices on behalf of the Owner. ...

... ces to the MSBA Pro-Pay system. JIA will review and sign hard ...

... ns. JIA will verify that the Pro-Pay submittals are consistent with ...

... tains.

	R	L	S
	R	L	S

... ge certified payroll reports on behalf of the Owner. The CMR will ...

... ure that all reports have been submitted and are in compliance

NV5



Leicester Middle School
Leicester, Massachusetts

NV5