# SMMA

#### **PROJECT MINUTES**

Project:	New W. Edward Balmer Elementary School	Project No .:	17020
Prepared by:	Joel Seeley	Meeting Date:	6/12/19
Re:	School Building Committee Meeting	Meeting No:	45
Location:	High School Media Center	Time:	6:30pm
Distribution:	School Building Committee Members, Attendees (MF)		

Attendees:

PRESENT	NAME	AFFILIATION	VOTING MEMBER
✓	Joseph Strazzulla	Chairman, School Building Committee	Voting Member
~	Melissa Walker	School Business Manager	Voting Member
	Alicia Cannon	Representative of the Board of Selectmen	Voting Member
✓	Michael LeBrasseur	Chairman, School Committee	Voting Member
$\checkmark$	Paul Bedigian	Representative of the Building, Planning, Construction Committee	Voting Member
$\checkmark$	Steven Gogolinski	Representative of the Finance Committee	Voting Member
$\checkmark$	Jeffrey Tubbs	Community Member with building design and/or construction experience	Voting Member
$\checkmark$	Peter L'Hommedieu	Community Member with building design and/or construction experience	Voting Member
	Jeff Lundquist	Community Member with building design and/or construction experience	Voting Member
	Andrew Chagnon	Community Member with building design and/or construction experience	Voting Member
✓	Spencer Pollock	Parent Representative	Voting Member
	Adam Gaudette	Town Manager	Non-Voting Member
✓	Amy McKinstry	Interim Superintendent of Schools	Non-Voting Member
✓	Richard Maglione	Director of Facilities	Non-Voting Member
✓	Karlene Ross	Principal, W. Edward Balmer Elementary School	Non-Voting Member
✓	Jill Healy	Principal, Northbridge Elementary School	Non-Voting Member
✓	Gregory Rosenthal	Director of Pupil Personnel Services	Non-Voting Member
✓	Lee Dore	D & W, Architect	
✓	Thomas Hengelsberg	D & W, Architect	
	David Fontaine	Fontaine Bros, CM	
✓	David Fontaine, Jr	Fontaine Bros, CM	
	David Barksdale	Fontaine Bros, CM	
	Jim Mauer	Fontaine Bros, CM	
✓	Joel Kent	Fontaine Bros, CM	
✓	Joel Seeley	SMMA, OPM	

PROVIDENCE, RHODE ISLAND

Item #	Action	Discussion			
45.1	Record	Call to Order, 6:40 PM, meeting opened.			
45.2	Record	Public Comment			
		<ol> <li>Erin Donohue spoke of the need for playing fields in the town and the importance of keeping the current designed playfields in the project.</li> </ol>			
		<ol> <li>Kate Tracey spoke of the numerous public meetings the School Building Committee hosted for community input and decisions leading up to the town voters approving the project as designed.</li> </ol>			
		<ol> <li>Robert Dziekiewicz spoke of the lengthy community outreach process of the School Building Committee and the support for the current designed playfields.</li> </ol>			
45.3	Record	<ul> <li>A motion was made by P. Bedigian and seconded by S. Pollock to approve the 5/29/19</li> <li>School Building Committee meeting minutes. No Discussion, motion passed unanimous by those attending.</li> <li>J. Seeley distributed and reviewed the Budget Tracking Form thru 5/31/19, attached, for</li> </ul>			
45.4	Record	the Total Project Budget			
45.5	Record	Warrant No. 27 was reviewed.			
		Committee Discussion:			
		1. M. LeBrasseur asked if there will be additional invoices from Graves Engineering? J.Seeley indicated yes, there could one final invoice.			
		A motion was made by M. LeBrasseur and seconded by P. Bedigian to approve Warrant No. 27. No discussion, motion passed unanimous.			
45.6	Record	J. Seeley distributed and reviewed Easement Application from Verizon, attached, in the amount of \$75.00 to be funded out of Utility Company Fees Budget ProPay Code 0601-0000, which has a balance of \$192,750.			
		A motion was made by J. Tubbs and seconded by S. Gogolinski to approve the Easement Application. No discussion, motion passed unanimous.			
45.7	Record	J. Seeley distributed and reviewed Designer Amendment No. 15, dated 6/12/19 for Geotechnical Engineering services during the Design and Construction Administration Phases, in the amount of \$57,695.00 to be charged against ProPay Budget 0204-0300, which has a balance of \$75,430.00, attached.			
		A motion was made by M. LeBrasseur and seconded by S. Pollock to approve Designer Amendment No. 15, dated 6/12/19 and recommend signature by A. Cannon. No discussion, motion passed unanimous.			
45.8	Record	J. Seeley distributed and reviewed Designer Amendment No. 16, dated 6/12/19 for Hazardous Materials Consultancy services during the Design Phases, in the amount of \$23,100.00 to be charged against ProPay Budget 0204-0200, which has a balance of \$100,000.00, attached.			
		A motion was made by J. Tubbs and seconded by S. Gogolinski to approve Designer Amendment No. 16, dated 6/12/19 and recommend signature by A. Cannon. No discussion, motion passed unanimous.			

Item #	Action	Discussion
45.9	Record	J. Seeley distributed and reviewed Designer Amendment No. 17, dated 6/12/19 for Geoenvironmental Engineering services during Construction Administration Phase, in the amount of \$16,170.00 to be charged against ProPay Budget 0204-0300, which has a balance of \$17,735.00, attached.
		A motion was made by P. Bedigian and seconded by M. LeBrasseur to approve Designer Amendment No. 17, dated 6/12/19 and recommend signature by A. Cannon. No discussion, motion passed unanimous.
45.10	Record	J. Seeley distributed and reviewed Designer Amendment No. 18, dated 6/12/19 for Horticultural Soils Testing, in the amount of \$4,257.00 to be charged against ProPay Budget 0203-9900, which has a balance of \$94,500.00, attached.
		A motion was made by S. Gogolinski and seconded by M. LeBrasseur to approve Designer Amendment No. 18, dated 6/12/19 and recommend signature by A. Cannon. No discussion, motion passed unanimous.
45.11	Record	J. Seeley distributed and reviewed OPM Amendment No. 2, dated 6/12/19 for Owner's Structural Peer Review, in the amount of \$3,250.00 to be charged against ProPay Budget 0102-0000, which has a balance of \$40,000.00, attached.
		A motion was made by P. Bedigian and seconded by J. Tubbs to approve OPM Amendment No. 2, dated 6/12/19 and recommend signature by A. Cannon. No discussion, motion passed unanimous.
45.12	J. Seeley	Committee to provide J. Seeley feedback on the listed meeting dates for the 90% Construction Documents Meetings and Agenda Schedule. J. Seeley will include on the next meeting agenda.
45.13	R. Maglione	R. Maglione will provide direction on the final list of Proprietary Specifications.
45.14	L. Dore	L. Dore to review fence or netting options for the left field line of the baseball field parallel to Crescent Street.
45.15	T. Hengelsberg	T. Hengelsberg to confirm appropriate working clearances for the boiler room equipment.
45.16	J. Seeley	J. Seeley indicated the flow meter to measure the existing infiltration and inflow (I/I) from the existing Balmer School on-site sanitary sewer distribution system was installed by DPW on 5/13/19. Based on the first-round of data, it appears that there is minimal infiltration (groundwater) entering the school's on-site sanitary sewer distribution system. JGS will follow-up with DPW in mid-July on the final results.
45.17	Record	J. Seeley provided an overview of the MSBA Design Status Review meeting held on 6/12/19 at D&W offices in Newburyport. The meeting went well and no issues were surfaced.
45.18	Record	T. Hengelsberg presented updated operational and testing information on the "Won-Door" VE Item A.09, attached.
		A motion was made by J. Tubbs and seconded by S. Pollock to approve VE Item A.09 to provide two pair of swinging doors on the second and third floors, but add an electronic door actuator to one leaf on each pair, in lieu of the "Won-Door", for a savings of approximately \$40,000. No discussion, motion passed unanimous.
		T. Hengelsberg to incorporate the VE item into the 90% Construction Documents.

Item #	Action	Discussion		
45.19	Record	T. Hengelsberg presented VE Item to provide a glue-lam and wood decking entry canopy in lieu of a metal framed entry canopy, attached.		
		A motion was made by S. Gogolinski and seconded by P. L'Hommedieu to approve VE Item glue-lam and wood decking entry canopy in lieu of a metal framed entry canopy, for a savings of \$47,673. No discussion, motion passed unanimous.		
		T. Hengelsberg to incorporate the VE item into the 90% Construction Documents.		
45.20	T. Hengelsberg	T. Hengelsberg to provide clarification on the lock-down versus egress function of the classroom locksets.		
45.21	T. Hengelsberg	T. Hengelsberg to provide the approximate cost on the two options that could be pursued relative to credits for Electric Charging Stations: 1) provide and install Electric Charging Stations, including the electrical conduits and cabling connected to the building, and 2) including just the electrical conduits to the building, with the Electric Charging Stations and cabling installed in the future under a separate project.		
45.22	Record	T. Hengelsberg distributed and reviewed the 4/10/19 Technology Design Meeting Minutes, 4/10/19 Mechanical Controls Meeting Minutes, 5/8/19 Technology Design Meeting Minutes, and 5/8/19 Salvage and Construction Phasing Meeting Minutes.		
A. McKinstry the cost impact of providing sod in lieu of s		J. Kent provided an overview of the updated the Site Logistics Plans. J. Kent reviewed the cost impact of providing sod in lieu of seed for the two U-6 playfields and the two U-8 playfields, the U-6 is an add of \$10,650 and the U-8 is an add of \$22,500.		
		Committee Discussion:		
		1. J. Kent to develop the NFPA 241 plan.		
		2. J. Kent to review the Site Logistics Plans with the Police and Fire Departments.		
		<ol> <li>J. Kent to provide a simplified version of the Site Logistics Plans for public distribution to A. McKinstry and J. Seeley. A. McKinstry to distribute to parents and J. Seeley to post on the project web-site.</li> </ol>		
		4. The Committee decided to defer any decision on adding the Sod until 2021.		
45.24	Record	J. Strazzulla provided an overview of the Neighborhood Informational Meeting held on 6/8/19 at the Balmer School, presentation attached. After the meeting, members of the SBC, FBI and SMMA walked the Mason Road property line with several of the Mason Road property owners. The property owners with personal property constructed on town-owned land were notified to relocate the constructed personal property by 6/28/19.		
45.25	Record	D. Fontaine Jr. distributed and reviewed the Reconciled 60% Construction Documents Construction Cost Estimates from FBI and PM&C, attached. The FBI estimate reflects a construction cost of \$79,117,606 and the PM&C estimate reflects a cost of \$78,714,975, both below the construction budget of \$79,492,663.		
45.26	Record	A Motion was made by M. LeBrasseur and seconded by P. Bedigian to approve the 60% Construction Documents Submittal and authorize submission to the MSBA. No discussion, motion passed unanimous.		
45.27	Record	J. Seeley provided an update from the Trade Contractor Prequalification Committee.		

Item #	Action	Discussion			
		Three Elevator Trade Contractor Qualification packages and six Waterproofing Trade Contractor Qualification packages were received and the Prequalification Committee will meet on 6/25/19 to review.			
45.28	Record	Site Permitting - J. Seeley provided an overview of the site permitting as follows:			
		Conservation Commission			
		1. NOI Hearing closed and draft Order of Conditions has been issued, attached.			
		Planning Board			
		1. Planning Board issued Final Site Plan Approval Conditions, attached.			
45.29	Record	J. Strazzulla provided an update from the Ground Breaking Ceremony Committee on the Ground Breaking Ceremony scheduled for 9:00am on 6/15/19. T. Hengelsberg distributed the Ground Breaking Ceremony Flyer, attached.			
45.30	Record	Committee Questions - none			
45.30	J. Seeley	Old or New Business			
	R. Maglione	1. J. Seeley to poll the Committee on availability for the 7/2/19 SBC meeting.			
		<ol> <li>J. Seeley distributed and reviewed the 4/23/19 School Committee minutes, attached, voting to name the school Northbridge Elementary School.</li> </ol>			
		3. T. Hengelsberg reviewed the existing electrical transformer and emergency generator issue, attached, that occurred on 4/28/19. R. Maglione will test the emergency generator under full load on 6/14/19.			
		4. T. Hengelsberg presented the Mass Notification System currently included in the project. After review, the Committee agrees to keep this system in the project.			
45.31	Record	Next <b>SBC Meeting: 6/18/19 at 6:30 pm</b> at the High School Media Center. The anticipated agenda item is to vote to approve the Early Site Package Amendment.			
45.32	Record	A Motion was made by S. Gogolinski and seconded by M. LeBrasseur to adjourn the meeting. No discussion, motion passed unanimous.			

Attachments: Agenda, Budget Tracking Form, Warrant No. 27, Easement Application from Verizon, Designer Amendment No. 15-18, OPM Amendment No. 2, 4/10/19 Technology Design Meeting Minutes, 4/10/19 Mechanical Controls Meeting Minutes, 5/8/19 Technology Design Meeting Minutes, and 5/8/19 Salvage and Construction Phasing Meeting Minutes, Neighborhood Informational Meeting presentation, Reconciled 60% Construction Documents Construction Cost Estimates from FBI and PM&C, draft Order of Conditions, Final Site plan Approval Conditions, Ground Breaking Ceremony Flyer, 4/23/19 School Committee minutes, Powerpoint

The information herein reflects the understanding reached. Please contact the author if you have any questions or are not in agreement with these Project Minutes

JGS/sat/P:2017\17020\04-MEETINGS\4.3 Mtg\_Notes\3-School Building Committee\2019\45\_2019\_12June\_Schoolbuildingcommittee\Schoolbuildingcommitteemeeting\_12June2019\_DRAFT.Docx

Project Management

# **PROJECT MEETING SIGN-IN SHEET**

**SMMA** 

Project: Prepared by: Re: Location: New W. Edward Balmer Elementary School Joel Seeley School Building Committee Meeting High School Media Center 427 Linwood Avenue, Whitinsville, MA

 Project No.:
 17020

 Meeting Date:
 6/12/2019

 Meeting No:
 45

 Time:
 6:30pm

Distribution:

Attendees, (MF)

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
for Aunto	Joseph Strazzulla	jstrazzulla@nps.org	Chairman, School Building Committee
Mulli	Melissa Walker	mwalker@nps.org	School Business Manager, MCPPO
	Alicia Cannon	cannonhome0927@gmail.com	Member, Board of Selectmen, CEO
morn	Michael LeBrasseur	mlebrasseur@nps.org	Chairman, School Committee
in Beturn /	Paul Bedigian	bedigianps@cdmsmith.com	Representative of the Building, Planning, Construction Committee
my Agen	Steven Gogolinski	steve@gogolinskicpa.com	Representative of the Finance Committee
Jole Tulk	Jeffrey Tubbs	jtubbs@charter.net	Member of community with architecture, engineering and/or construction experience
11 John	Peter L'Hommedieu	plhommedieu@shawmut.com	Member of community with architecture, engineering and/or construction experience
	Jeff Lundquist	Lundquist@charter.net.	Member of community with architecture, engineering and/or construction experience
<i>c n t -</i>	Andrew Chagnon	achagnon@vertexeng.com	Member of community with architecture, engineering and/or construction experience
sinter	Spencer Pollock	spencerpollock22@gmail.com	Parent Representative
a mail to	Adam Gaudette	agaudette@northbridgemass.org	Town Manager
tony mainery	Amy McKinstry	amckinstry@nps.org	Interim Superintendent
MASI	Richard Maglione	rmaglione@nps.org	Building Maintenance Local Official
arline 6 Cors	Karlene Ross	kross@nps.org	Principal, W. Edward Balmer Elementary School
Jul Alealy	Jill Healy	jhealy@nps.org	Principal, Northbridge Elementary School
Run	Gregory Rosenthal	grosenthal@nps.org	Director of Pupil Personnel Services
Kin	Lee P. Dore	Ipdore@DoreandWhittier.com	Dore & Whittier Architects
walny	Thomas Hengelsberg	thengelsberg@DoreandWhittier.com	Dore & Whittier Architects
a Cop	David Fontaine, Jr.	djr@fontainebros.com	Fontaine Bros., Inc.
2 0	David Barksdale	dbarksdale@fontainebros.com	Fontaine Bros., Inc.
JA	Jim Mauer	jmauer@fontainebros.com	Fontaine Bros., Inc.
AM	Joel Kent	jkent@fontainebros.com	Fontaine Bros., Inc.
	Joel Seeley	jseeley@smma.com	SMMA

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

#### Project Management

# ent SMMA

# Agenda

Project:
Re:
Meeting Location:

Prepared by: Distribution: New W. Edward Balmer Elementary School School Building Committee Meeting High School Media Center 427 Linwood Avenue, Whitinsville, MA Joel G. Seeley Committee Members (MF)

Project No.:	17020
Meeting Date:	6/12/2019
Meeting Time:	6:30 PM
Meeting No.	45

- 1. Call to Order
- 2. Public Comments
- 3. Approval of Minutes
- 4. Approval of Invoices and Commitments
- 5. Follow-up to VE Pricing WON Door
- 6. Proprietary Materials Update
- 7. Construction Logistics Plan Update
- 8. Neighborhood Informational Meeting Update
- 9. Review Reconciled 60% Construction Documents Cost Estimate
- 10. Decide Value Engineering Items
- 11. Vote to Submit 60% Construction Documents Package to MSBA
- 12. Groundbreaking Ceremony June 15, 2019 at 9:00 AM
- 13. New or Old Business
- 14. Committee Questions
- 15. Next Meeting: June 18, 2019
- 16. Adjourn

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

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Image         Control         Control <th< th=""><th></th><th>Symmes Maini &amp; McKee Associates, Inc. (SMMA) Northbridge School District Northbridge W. Edward Balmer Elementary School BUDGET SUMMARY</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></th<>		Symmes Maini & McKee Associates, Inc. (SMMA) Northbridge School District Northbridge W. Edward Balmer Elementary School BUDGET SUMMARY									
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Incode         Example         Control         Control <th< th=""><th>Pronav</th><th></th><th>8/ZU/ZU18</th><th>Dudget Kevisions</th><th>buager</th><th>Amount</th><th>Expended C</th><th>Contract Amount D</th><th>Amount</th><th>balance</th></th<>	Pronav		8/ZU/ZU18	Dudget Kevisions	buager	Amount	Expended C	Contract Amount D	Amount	balance	
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One-tool         Operation         Operation <th< th=""><th></th><th>Environmental and Site</th><th>150,000.00</th><th></th><th>150,000.00</th><th>146,753.50</th><th>145,543.50</th><th>1,210.00</th><th>1</th><th>3,246.50</th></th<>		Environmental and Site	150,000.00		150,000.00	146,753.50	145,543.50	1,210.00	1	3,246.50	
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0102-0700         > Construction         192.596.00         197.596.00         197.596.00         197.596.00         1		> Bidding	95,050.00		95,050.00	95,050.00		95,050.00		•	
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01002-1000         > Reinbursable & Other Services         40,0000         -		> Extra Services	100,000.00		100,000.00	•				100,000.00	
0103-0100         > Cost Estimates		> Reimbursable & Other Services	40,000.00		40,000.00	•				40,000.00	
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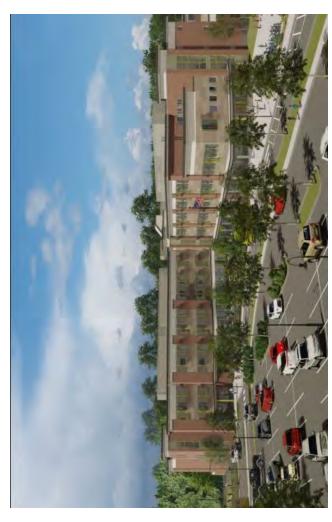
Northbridge Town of



Northbridge **Public Schools** 

June 15, 2019 9:00 a.m.









SYMMES, MAINI & MCKEE ASSOCIATES, INC.

1000 Massachusetts Avenue

Cambridge, MA 02138

OWNER'S PROJECT MANAGER:

**NORTHBRIDGE ELEMENTARY SCHOOL** 

THE NEW

WHITINSVILLE, MASSACHUSETTS

Project Management

260 Merrimac Street, Building 7 Newburyport, MA DORE & WHITTIER ARCHITECTS, INC. DESIGNER 01950



CONSTRUCTION MANAGER: FONTAINE BROTHERS, INC. Springfield, MA 01104 510 Cottage Street

MASSACHUSETTS SCHOOL BUILDING AUTHORITY THIS PROJECT IS FUNDED IN PART BY THE 40 Broad Street, Suite 500, Boston, MA 02109



Massachusetts School Building Authority Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities

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School Building Committee	Joseph Strazzulla, SBC Chair Alicia Cannon, Member of Board of Selectmen Michael LeBrasseur, Chair of School Committee Adam Gaudette, Town Manager Amy McKinstry, Superintendent of Schools	Melissa Walker, Director of Business and Finance Richard Maglione, Director of Facilities Karlene Ross, Principal, Balmer Elementary School Jill Healy, Principal, Northbridge Elementary School Gregory Rosenthal, Director of Pupil Personnel Services Steven Gogolinski, Member of Finance Committee	Paul Bedigian, Member of Building, Planning & Construction Committee Jeffrey Tubbs, Community Member Peter L'Hommedieu, Community Member Jeffrey Lundquist, Community Member Andrew Chagnon, Community Member Spencer Pollock, Parent Representative Dr. Catherine Stickney, Former Superintendent of Schools	Honorary Groundbreakers Autumn Francis - PreK Zachary Remillard - K <b>Klara L'Hommedieu</b> - Gr. 1 Jacob Ware - Gr. 2 James Tritone - Gr. 3 Zahra Rith - Gr. 4
School Built	Joseph Straz Alicia Cannon, Memb Michael LeBrasseur, ( Adam Gaudet Amy McKinstry, Su	Melissa Walker, Direct Richard Maglione Karlene Ross, Principal Jill Healy, Principal, Nor Gregory Rosenthal, Direct Steven Gogolinski, Mer	Paul Bedigian, Member of Building Jeffrey Tubbs, ( <b>Peter L'Hommedie</b> Jeffrey Lundquist Andrew Chagnon Spencer Pollock, Dr. Catherine Stickney, For	School Committee Mike LeBrasseur Brian Paulhus Bethany Cammarano Steve Falconer
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Groundbreaking Ceremony	The New Northbridge Elementary School Whitinsville, Massachusetts	Anthem—Kelly Heffernan, Vinc tion of Distinguished Guests s—NPS Superintendent Amy Mc breaking and Photo Opportunity	ments to follow Distinguished Guests an C. Fattman Senator Michael Moore	oard of Selectman s J. Melia - Chairperson Athanas - Vice Chairperson niel J. Nolan - Clerk mpagoomian, Jr Member M. Cannon - Member

Welcome

National Anthem—Ke

- Recognition of Disting •
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- Groundbreaking and •
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Senator Ryan C. Fattmar

James J. Athanas - Vic Charles Ampagoomian, Board of Sele Daniel J. Nolan Thomas J. Melia -Alicia M. Cannon

Page 10 of 43

Mackenzie Lavallee - Gr. 5

Project Management

## NEIGHBORHOOD MEETING SIGN-IN

Project: Prepared By: Location: Distribution: New W. Edward Balmer Elementary School Joel Seeley W. Edward Balmer Elementary School (MF) Project No.: 17020 Meeting Date: 6/8/2019

NAME	ADDRESS	Email	ADDRESS
Kyle Bigness	192 MASON RD		
michael Brooks	178 masan RD &	MBrook	5 9343 GT 6 M91
Kathre Collins	292 MASon Rel	Risty	C3Je hut
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Charles Cothy Baris	230 Mason Rd 510 COTTAGE ST	dave.	ĒĢ
DAVID FONTAINE SR-FBI	SPPOMA 01104	FONTAIN Tel7	iebros.com
Johnt MAM Armster	202 MASON ROAD		2349354
JOSEPH STRAZZING -SP	c		
MICHAEL LEBRASS ENR-SB			
AND PEH CHAGNON - SBC		4	

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

Date: June 8, 2019 Page: 2

-61

ADDRESS

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com



#### TOWN OF NORTHBRIDGE

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PLANNING BOARD 7 MAIN STREET

WHITINSVILLE, MASSACHUSETTS 01588

PHONE: (508) 234-2447

May 16, 2019

Doreen A. Cedrone, Town Clerk Town of Northbridge 7 Main Street, Whitinsville, MA 01588

#### **CERTIFICATE OF APPROVAL:**

#### SITE PLAN REVIEW - W. EDWARD BALMER ELEMENTARY SCHOOL

Title of Plan:	W. Edward Balmer Elementary School
Owner/Applicant:	Town of Northbridge/Dore & Whittier Architects, Inc.
Prepared By:	Dore & Whittier Architects, Inc.
Engineer:	Nitsch Engineering
Dated:	April 09, 2019 (& revised through May 14, 2019)
Property Location:	21 Crescent Street -Assessor Map 7 Parcels 138 & 141
Zoning District:	Residential-Five (R5)

Dear Mrs. Cedrone:

Please be advised at its meeting of <u>Tuesday, May 14, 2019</u> the Planning Board, upon motion duly made (H. Berkowitz) and seconded (A. Kafal) voted (5-0) to APPROVE WITH CONDITIONS the site development plan for the new W. Edward Balmer Elementary School. Conditions of Approval are listed on pages 2-5, attached hereto.

#### NORTHBRIDGE PLANNING BOARD - NORTHBRIDGE, MASSACHUSETTS

(Date)

Town Manager/BOS J. Sheehan, Building Inspector J. Walsh, Graves Engineering, Inc **Conservation Commission** Planning Board

/File

Cc:

J. Shuris, DPW Director Chief D. White, NFD Board of Health DPW –Sewer Division J. Luchini, Highway Superintendent Applicant/Engineer Chief W. Warchol, NPD Building Department Whitinsville Water Company School Building Committee

FAX: (508) 234-0821

#### CONDITIONS OF APPROVAL – W. EDWARD BALMER ELEMENTARY SCHOOL

In granting APPROVAL WITH CONDITIONS, the Planning Board has taken into consideration the standards for review set forth and described in the Town of Northbridge Zoning Chapter 173 §173-49.1 [Site plan review by Planning Board].

The Planning Board opened its site plan review (public meeting) for W. EDWARD BALMER ELEMENTARY SCHOOL on Tuesday, April 23, 2019 and concluded same on Tuesday, May 14, 2019.

- Pursuant to Section 173-49.1 B (2) [Application and review procedure], the Planning Board engaged the services of Graves Engineering, Inc. to perform engineering consulting services on its behalf. Reference is made to Community Planning & Development letter dated April 18, 2019 to Town Clerk.
- Reference is made to the following documents and correspondence received by the Planning Board from the Applicant/Engineer: Application for Site Plan Review dated April 09, 2019; Site Development Plan prepared by Dore & Whittier Architects, Inc. dated April 09, 2019 entitled "W. Edward Balmer Elementary School"; supplemental plan sheet(s) dated April 18, 2019; Stormwater Report prepared by Nitsch Engineering dated April 15, 2019; letter dated April 18. 2019 from Nitsch Engineering (revised stormwater report); Dore & Whitter Architects, Inc letter dated April 09, 2019; Certified List of Abutters dated April 09, 2019; copy of letter dated February 28, 2019 from Dore & Whittier Architects, Inc. to Building Inspector (Zoning Bylaw Analysis); copy of KP Law letter dated August 31, 2017 to the Northbridge School Building Committee (Affairs Article 97 -Land Disposition Policy); Proposed Parking Plan dated February 22, 2019; Proposed Event or Overflow Parking Plan dated February 22, 2019; Parking Analysis (Table 1) dated February 28, 2019; Parking Analysis (Table 2) dated February 28, 2019 (two sheets); site layout, DD Site & Landscape Design Plan and Building Elevation (Exterior 3D renderings); proposed project sign (brick monument-style w/LED); lighting specs; Transportation Impact Report prepared by Nitsch Engineering dated January 26, 2018; and copy of letter dated November 30, 2018 from Nitsch Engineering to Conservation Commission (filing of ANRAD).
- Reference is made to the following documents and correspondences received by the Planning Board: Review Report Form dated April 16, 2019; Site Plan Review Checklist prepared April 22, 2019; Community Planning & Development memorandum dated April 19, 2019 (site plan review); Conservation Commission initial questions/comments issued April 17, 2019; copy of letter dated April 24, 2019 from the Office of the Inspector of Buildings to Dore & Whittier Architects, Inc. (zoning bylaw parking & loading requirements); copy of letter correspondence dated April 23, 2019 from KP Law to Northbridge Inspector of Buildings (zoning bylaw parking & loading requirements); Whitinsville Water Company letter dated May 08, 2019; Conservation Commission (Agent) memorandum dated May 14, 2019; Board of Health memorandum dated May 14, 2019; Director of Public Works memorandum dated May 14, 2019; Graves Engineering, Inc. review/report dated May 07, 2019 (draft); and letter dated May 14, 2019 from the Fire Chief.
- Planning Board Site Development Plan approval shall be subject to the CONSERVATION COMMISSION ORDER OF CONDITIONS.

#### CONDITIONS OF APPROVAL:

- 1. Owner/Applicant shall comply with all applicable laws, bylaws, rules, regulations, and codes and obtain all the necessary permits and approvals; including but not limited to blasting, water/sewer, street excavation, and/or access to public-way (curb cut), if so required.
- 2. Planning Board Site Plan Approval shall be subject to recommendations identified by the NORTHBRIDGE SAFETY COMMITTEE (April 29, 2019).
- 3. Planning Board Site Plan Approval shall be subject to conditions, if any imposed by the NORTHBRIDGE CONSERVATION COMMISSION.
- 4. In making its decision to approve with conditions, the Planning Board reviewed proposed parking provisions and acknowledged that "educational use" may be subject to reasonable regulations. Reference is made to letter dated April 24, 2019 from the Office of the Inspector of Buildings to Dore & Whittier Architects, Inc. regarding zoning bylaw parking & loading requirements, where the Inspector of Buildings concluded the proposed parking provided was reasonable for the proposed new W. Edward Balmer Elementary School.
- 5. Any illumination, including security lighting shall be arranged so as to reflect away from abutting properties. Said lighting shall be directed in a manner to avoid glare and light trespass onto adjacent properties.
- 6. The two (2) project signs "W. Edward Balmer Elementary School" (monument-style w/internally lit LED) shall be setback from Crescent Street / site driveway and shall be arranged as to not conflict with sightlines of vehicles entering/existing the site.
- 7. Site driveway(s), parking aisles and vehicle access around the school building shall be a minimum of 24-feet wide as may be required by the Northbridge Fire Department.
- 8. Designated fire lanes, "no standing" and "no parking" signs shall be installed at locations as may be directed by the Fire Chief (Northbridge Fire Department).
- 9. Appropriate signage directing traffic during large school-sponsored gatherings & events shall be installed (overflow parking plan), as discussed with the Northbridge Safety Committee.
- 10. Owner/Applicant shall install 6-foot to 8-foot high commercial-grade white-vinyl privacy fencing along the northeasterly side of the site property; from Crescent Street (setback from road/sidewalk) through to the rear of the property, adjacent to the recreation field(s).
- 11. As part of the site development, Owner/Applicant has held several neighborhood meetings and met one on one with any interested property owners that abuts the eastern property line. The design team has noted concerns about runoff and groundwater and coordinated regarding cross property drainage. The retaining wall design incorporates surface and subsurface drains, as shown on the plans, to address these concerns.

- 12. Written confirmation from Applicant/Engineer shall be provided to the Planning Board confirming and certifying landscape plantings (proposed) are selections of appropriate native species (shade trees, shrubs, etc.). Reference is made to Northbridge's Best Development Practices Guidebook -Section 2 Landscape Design (December 2009).
- 13. It is the understanding of the Planning Board that the School Building Committee has expressed a willingness to continue to work with abutters along Mason Road in providing additional screening (landscaping) to the rear of individual properties. Such arrangements shall be finalized as part of the School Building Committee's ongoing discussions with abutters.
- 14. In accordance with requirements of the MSBA -Massachusetts School Building Authority the planned W. Edward Balmer Elementary School project shall undergo a full handicapped accessibility analysis.
- 15. PRIOR TO ENDORSEMENT the Site Development Plan shall be revised addressing the following:
  - a) Reference to this Planning Board Certificate of Approval;
  - b) Reference to Conservation Commission Order of Conditions;
  - c) Graves Engineering, Inc. review/report(s);
  - d) Revise/update landscaping plan sheet(s) as may be required; &
  - e) Other conditions noted herein.
- 16. Owner/Applicant shall coordinate Road Opening/Curb Cut Permits with the Department of Public Works –Highway Division (508-234-3581). Site Contactor shall work with the DEPARTMENT OF PUBLIC WORKS to ensure that water/sewer services are installed properly.
- 17. Owner/Applicant shall coordinate installation of the water service(s) with the Whitinsville Water Company (508-234-7358). Owner/Applicant shall coordinate installation of sewer service(s) with the Department of Public Works –Sewer Division (508-234-2154); materials to be used shall be sized and installed to the specifications of the Sewer Department.
- 18. Erosion control measures to prevent siltation into wetlands, neighboring properties and roadways during construction shall be implemented. The Erosion Control plan and documentation submitted shall be implemented and followed during construction. During construction, if these plans are found to be inadequate by the Planning Board or its designee, a new erosion control plan shall be submitted to the Board for review and approval. In the event erosion and sedimentation problems arise during construction, the Planning Board may require that all work cease until measures necessary to ensure prevention are implemented.
- 19. Prior to ISSUANCE OF BUILDING PERMIT, outstanding invoices, if any for services rendered by Graves Engineering, Inc shall be satisfied.
- 20. Prior to ISSUANCE OF A BUILDING PERMIT, the Applicant/Engineer shall submit the following to the Planning Board: five (5) complete prints of the endorsed Site Development Plan, two (2) fifty-percent (50%) reduced prints and one (1) electronic copy.

21. Prior to ISSUANCE OF A CERTIFICATE OF OCCUPANCY, all conditions of approval noted herein shall be satisfied. Project Engineer shall provide the Planning Board and BUILDING INSPECTOR with a letter describing status of site improvements. The Project Engineer shall provide the Planning Board written certification/verification that drainage system has been constructed as approved and working as designed. Said documentation shall be in the form of a letter signed/stamped by a Professional Engineer certifying and demonstrating that the drainage system has been constructed as approved and working as approved and working as designed. Copy of same shall be provided to the Building Inspector, Department of Public Works and Conservation Commission.

- 22. In order to secure the completion of landscaping shown on the approved plan, the Owner/Applicant may post a PERFORMANCE BOND in an amount to be reasonably determined by the Planning Board. Such bond shall be posted with the Town Treasurer and shall be released upon certification by the Planning Board that all required landscaping improvements associated with this Certificate of Approval have been satisfied. In the event any landscaping does not survive the Owner/Applicant shall be responsible for its replacement; within 60-days of notice from the Planning Board, unless not feasible or practical due to weather conditions. Failure to comply with this requirement shall result in a violation of this Certificate of Approval.
- 23. A copy of this Certificate of Approval endorsed Site Development Plan and Conservation Commission Orders of Conditions, if any shall be maintained onsite during construction. The Planning Board and its designee(s) shall be permitted to access the project site for the duration of the project.
- 24. Changes to the site development either prior to or during construction shall be administered through the Planning Board in accordance with Section 173-49.1 H of the Zoning Bylaw. Any amendments to this CERTIFICATE OF APPROVAL shall require a written description of the proposed modifications submitted to the Planning Board for review/approval. A significant alteration deemed by the Planning Board shall require the filing of a new site plan review.
- 25. Violation of any condition(s) noted herein or failure to comply with this site plan development approval shall subject the Owner/Applicant to zoning enforcement action in accordance with the remedies set forth in M.G.L. c. 40A and as otherwise provided in the Northbridge bylaws.
- 26. Pursuant to Section 173-49.1 I (2) of the Northbridge Zoning Bylaw this site plan approval shall lapse in one (1) year, if a substantial use thereof has not commenced, except to good cause, which shall not include such time required to pursue or await the determination of an appeal.

#### WAIVER:

Based on its finding, the Planning Board WAIVED the Development Impact Assessment; Section 173-49.1 E (2) of the Northbridge Zoning By-Laws. As provided for in Section 173-49.1 E (3) of the Northbridge Zoning By-Law the Planning Board may waive any requirements if it believes that the requirement is not necessary based upon the size and scope of the project.



# Northbridge Public Schools Northbridge School Committee

87 Linwood Avenue, Whitinsville, Massachusetts 01588 (508) 234-8156 FAX (508) 234-8469

Michael LeBrasseur, Chairperson, HYPERLINK "mailto:mlebrasseur@nps.org" mlebrasseur@nps.org Joseph Strazzulla, Vice-Chairperson, Michael Alden, Bethany Cammarano, Brian Paulhus

> Northbridge Public Schools School Committee Meeting Minutes Tuesday, April 23rd, 2019 7:00 PM Northbridge High School Media Center

I. Call to Order (7:00)

#### II. Attendance

nt
nt
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nt

Also in attendance were Interim Superintendent Amy McKinstry, Director of Business and Finance Melissa Walker, and Student Representative Wesley Mawn.

III. Call to Order (7:05)

#### IV. Pledge of Allegiance

#### V. Statement of Mission

#### VI. Public Comment

Wendy Timmons (Northbridge resident/AFCSME Council 93) and David Nagle (AFCSME Council 93) spoke in regards to the AFCSME 93 union, solidarity, and requested a SC member to join negotiations.

#### VII. Student Representative's Report

Things are still going great for the students at NHS following April Vacation. A large group of our students returned from a school trip that took place in London, Paris, and Barcelona on Thursday. They were able to experience the local culture, cuisine, see landmarks, and meet locals. And yes, we were able to see the Cathedral of Notre Dame the day before the tragic fire. Despite fighting the weather, our Spring Sports Teams are doing well and today the baseball team beat Tantasqua. Tomorrow our Unified Track and

Field team will have their first ever meet and there will be a pep-rally at the end of the day to get students excited for this new team to become an integral part of Northbridge High School. This team was a collaborative effort between senior Meghan Coughlin, our principal Mr McCormick, and our Athletic Director, Mr Kozik. Pre- registration for this year's AP Tests began today and AP Testing starts on May 6th. The High School will be hosting their annual Evening of the Arts this Thursday night to show off the work of all of our talented students and their accomplishments with art and music. The art show will begin at 6pm and the Concert begins at 7pm. The Schools are also collecting books to send to schools in the Philippines that were affected by Typhoon Yolanda, all schools are accepting donations until May 3rd. On this Friday April 26<sup>th</sup>, the Best Buddies Club will be hosting a Yoga Night with a professional instructor at 6:30pm and the cost is \$15. The High School is also accepting applications for Career Academies for the 2019-2020 school year. For more information about any of these events check out nps.org. The seniors have 18 days of school left and then they will begin their finals and then senior week. May 1<sup>st</sup>, is the National College Decision deadline so for seniors choosing College or the Military as their next step, they are encouraged to wear merchandise from their college or branch to school that day. Students will continue working hard as the year begins to come to a close.

#### VIII. Consent Agenda

a. School Committee Meeting Minutes from April 9, 2019

b. Warrant 39-40s 4/4/19 \$402,714.50

A motion was made **by** Joseph Strazzulla to accept items from the consent agenda as presented. The motion was seconded by Brian Paulhus. The vote was taken by roll call vote and the following votes were recorded:

Mike LeBrasseur	Yes			
Brian Paulhus	Yes			
Joseph Strazzulla	Yes			
Michael Alden	Yes			
Bethany Cammarano	Yes			
5 members having voted i	n the affirmative			
0 members having voted in the negative				
The motion was accepted with a roll call vote of 5-0.				

#### IX. Recognition/Presentation

Amy McKinstry recognized NHS Science Academy Students Cassie Letendre and Amelia Sadlon for their work. Amy also recognized Patrick Rossi for his leadership. The students presented their project.

#### X. Action Items:

a. New elementary School Name

A motion was made by Joseph Strazzulla to approve the name of the New Elementary School- Northbridge Elementary School. The motion was seconded by Brian Paulhus. The vote was taken by roll call vote and the following votes were recorded:

Mike LeBrasseur	Yes		
Brian Paulhus	Yes		
Joseph Strazzulla	Yes		
Michael Alden	No		
Bethany Cammarano	Yes		
4 members having voted in the affirmative			
1 members having voted in the negative			
The motion was accepted with a roll call vote of 4-1.			

#### b. ECC Job Description

A motion was made by Joseph Strazzulla to approve the ECC Job Description. The motion was seconded by Brian Paulhus. The vote was taken by roll call vote and the following votes were recorded:

Mike LeBrasseur	Yes	
Brian Paulhus	Yes	
Joseph Strazzulla	Yes	
Michael Alden	Yes	
Bethany Cammarano	Yes	
5 members having voted in the affirmative		

0 members having voted in the negative

The motion was accepted with a roll call vote of 5-0.

#### c. Last Day of School Proposed

A motion was made by Brian Paulhus to approve the last Day of School as June 13<sup>th</sup>, 2019. The motion was seconded by Bethany Cammarano. The vote was taken by roll call vote and the following votes were recorded:

Mike LeBrasseur	Yes	
Brian Paulhus	Yes	
Joseph Strazzulla	Y	es
Michael Alden	Yes	
Bethany Cammarano	Yes	

It is the policy of the Northbridge Public Schools not to discriminate on the basis of race, color, gender, religion, national origin, sexual orientation, gender identity, disability, age, or homelessness in its educational programs, services, activities, or employment.

5 members having voted in the affirmative0 members having voted in the negativeThe motion was accepted with a roll call vote of 5-0.

XI. Report of the Superintendent Screening Committee

Tracy Novak shared updated information regarding the Superintendent Search. Interviews will take place on May 6<sup>th</sup> and May 9<sup>th</sup> in a public setting. Site visits have been scheduled.

#### XII. Discussion:

- a. SEPAC News and Updates Sara Guerra and Eleni Braley shared updates and happenings for SEPAC.
- b. Athletic Fields Update

Michael LeBrasseur stated that there is work going on in terms of how to address Lasell Fields in the upcoming fall season. This will also depend upon the vote on May 7<sup>th</sup>.

c. School Building Update

Michael LeBrasseur stated that Joe is at the Planning Board meeting for the school tonight.

d. SC Self Evaluation

Michael LeBrasseur shared and went over the results of the SC Self Evaluation with the committee.

#### XIII. School Committee Individual Comments

Michael Alden- Wanted to explain why he voted no for the school name. He likes the camaraderie of having all Northbridge Schools. However, he was stuck on the sacrifice of Corporal Dawson. Bethany Cammarano- Wanted to recognize Mr. Rossi and his students for their great work, very impressive. Mike, thank you for putting together the evaluation.

Brian Paulhus- Thanked Mr. Rossi and the work the students did, it is great and I wish them luck. Brian thanked the chaperones from the MS and HS that attended the trip with the students. Without them the trip would not have taken place.

Michael LeBrasseur- Thanked the members of the Screening Committee. We still have some work to do! We meet again on May 14<sup>th</sup>! The town meeting warrant has our budget, a list of capital projects, and the Lasell Field Project.

#### XIII. Adjournment (7:55P.M.)

The motion was made by Michael Alden to adjourn the meeting at 7:55pm. The motion was seconded by Brian Paulhus. A vote was taken by roll call and the following votes were recorded:

Mike LeBrasseurPresentBrian PaulhusPresentJoseph StrazzullaPresentMichael AldenPresentBethany CammaranoPresent5 members having voted in the affirmative0 members having voted in the negative

The motion was accepted with a roll call vote of 5-0.

It is the policy of the Northbridge Public Schools not to discriminate on the basis of race, color, gender, religion, national origin, sexual orientation, gender identity, disability, age, or homelessness in its educational programs, services, activities, or employment.

#### **ATTACHMENT 1**

#### Worksheet for Orders of Conditions issued by the Conservation Commission (NCC)

Applicant: Town of Northbridge Project #(s): 248-666 Project: Balmer Elementary School Date: June 5, 2019

Conditions marked with a "X" ( $\boxtimes$ ) will be included in this order, in addition to those already stated in the Massachusetts Wetland Protection Act Form 5, for the subject project. Conditions not marked ( $\square$ ) do not apply to this Order:

- N1. A copy of this Order of Conditions shall be on site at all times with the Project Engineer or authorized foreman/supervisor.
- N2. This Order of Conditions shall expire on **June 5**, 2022

#### **BEFORE CONSTRUCTION**

- N3. The district of jurisdiction for condition #9 (see WPA Form 5) is Worcester County. The requirements of WPA Form 5, condition #9 must be met before a building permit will be issued.
- N4. At least 7 days prior to the start of construction, the following materials shall be provided to the Conservation Commission:
  - Copy of the construction drawings and/or plans;
  - A written narrative (prepared by the design engineer or other qualified individual) outlining any deviations between the construction drawings/plans and documents referenced in this Order that pertain to work in buffer zone, erosion/sedimentation control and drainage/stormwater control and treatment;
  - Copy of the final Stormwater Pollution Prevention Plan (SWPPP) prepared to comply with the USEPA NPDES Construction General Permit;
  - Construction sequencing/phasing plan for the relocation/replacement of the existing 36 inch culvert that provides details on flow maintenance/bypass measures that will be employed during the work period;
  - Contact information (including cell phone numbers) for the project foreman and the individuals specified in Condition N5 below.

If the construction drawings/plans appreciably differ from the documents referenced in this Order, the applicant may be required to request an Amended Order of Conditions or file a new Notice of Intent with the NCC.

- N5. A Professional Engineer, Certified Professional Erosion and Sediment Control Specialist, or similarly qualified individual shall be designated as the Erosion Control Monitor to oversee any emergency and/or regular inspection and replacement of erosion or sediment control devices. This person shall be given authority to stop construction for erosion control purposes. The erosion control monitor will be required to inspect all such devices and oversee cleaning and the proper deposition of waste products.
- N6A. Erosion control measures shall be installed according to approved plans. Placement shall be directed on-site by the Erosion Control Monitor in accordance with the design plans. Controls must be properly installed for maximum effectiveness and be

- N6B. PRIOR TO ANY SITE WORK BEING DONE in the BUFFER ZONE, including the clearing of vegetation, trees or the disturbance of soil, all erosion measures MUST be completely installed and have been inspected by the NCC and/or its Agent. Contact the NCC, verbally or in writing to allow the NCC ample time to conduct said inspection.
- N7. An adequate supply of erosion control materials shall be kept on site at all times for emergency and routine replacement and repair.

#### **DURING CONSTRUCTION**

- N8. A stabilized entrance shall be installed at the construction access to the site in accordance with the detail included with the plans referenced in this Order. The stabilized entrance shall be maintained/refreshed as needed to maintain effectiveness.
- N9. All buffer zones that will, according to the approved plans, remain undisturbed shall not be crossed or entered with equipment or any vehicles at any time during construction. If not marked by sedimentation controls, then these areas will be prominently, visibly marked every twenty (20) feet or encircled by construction fencing.
- N10. Permanent alterations of wetland resource areas is expressly prohibited. Temporary disturbances to resource areas are also prohibited unless they are necessary to rectify unforeseen issues that arise during construction and only if they have been reviewed/authorized by the NCC.
- N11. All materials and equipment shall be stored in a manner and location that will minimize the compacting of soils and the concentration of runoff. Vehicle refueling shall be conducted outside of the buffer zone. If a spill occurs, the Applicant shall retain a Licensed Site Professional to oversee cleanup in accordance with the provisions of local, state and federal regulations.
- N12. No soil, topsoil or other material may be stockpiled in the 100 foot buffer zone. All stockpiles will be stabilized and/or encircled with erosion control barriers to prevent erosion and runoff into the resource areas.
- N13. All waste products, grubbed stumps, slash, construction materials etc. shall be removed from the site to a licensed facility and shall not be in any manner incorporated into the project site with the exception of the reduction of stumps and slash to mulch.
- N14. All erosion control devices shall be regularly inspected and cleaned and/or replaced as needed, during construction in accordance with provisions specified in the SWPPP. The devices shall remain in place until all areas that may impact the resource areas are permanently stabilized. Erosion controls depicted on the approved plans are the minimum measures that must be utilized to protect wetland resource areas during construction. If deemed necessary, it is the responsibility of the applicant (in consultation with the Erosion Control Monitor) to devise, install and maintain additional controls to protect wetland resource areas and/or undeveloped portions of the buffer zone.
- N15. Temporarily altered and/or restored portions of the buffer zone shall be seeded in accordance with the specifications included on the plans referenced in this Order (see Sheet C1.00 − Wetland Resources Work Plan).
- N16. It shall be the responsibility of the applicant to repair, restore and/or replicate areas damaged as a direct result of this project to any wetland resource area or undeveloped

portions of the buffer zone. Sedimentation or erosion into these areas shall be considered damage. The NCC shall be contacted within 48 hours of incidents where damage has occurred in resource areas or undeveloped portions of the buffer zone. A plan to repair the damage and restore the affected areas shall be submitted for review/authorization at the next regularly scheduled meeting of the NCC. Failure to notify the NCC of damage and/or develop/implement restoration measures may result in the issuance of fines or other enforcement actions.

- N17. The NCC reserves the right to impose additional conditions during the project if deemed necessary to protect resource areas and interests as defined in MGL c131, s40 (310. CMR 10.00).
- N18. Members of the NCC and its Agent have the right to enter the property to assess compliance with this Order of Conditions throughout the construction period and until a final Certificate of Compliance has been issued.

#### AFTER CONSTRUCTION

- N19. All disturbed areas shall be permanently stabilized with healthy, vegetative ground cover of no less than 75% coverage within thirty (30) days of project completion. If conditions prohibit germination/growth, the seeded areas shall be stabilized with mulch or other suitable material to minimize erosion until the following growing season.
- N20. Within thirty (30) days of completion of this project, a Professional Engineer shall at the request of the applicant submit to the NCC a written statement, stamped and signed, which certifies that the project has been completed according to the approved plans and this Order. The applicant shall also request a Certificate of Compliance from the NCC for this Order of Conditions.
- N22. The Request for a Certificate of Compliance shall include an "as-built" plan (prepared by a Professional Land Surveyor) depicting portions of the project located within wetland resources and the buffer zone. The plan shall also depict all components of the stormwater management system.
- N23. Following completion of construction and prior to issuance of a Full Certificate of Compliance, a plan detailing maintenance procedures (particularly detailing irrigation, fertilization, pest/weed control measures) for the athletic fields and landscaped areas shall be submitted to the NCC for review and approval. Once approved, field/landscape maintenance shall proceed as outlined in the plan.
- N24. Components of the stormwater management/drainage system for the project shall be inspected/maintained in accordance with the Operation and Maintenance Plan (Attachment E) of the Stormwater Report referenced in this Order. The inlet to 36-inch culvert that extends beneath the site shall be inspected and cleaned (as needed) at least once annually and/or after storm events that produce more than 4 inches of rainfall over the course of 24 hours.
- N25. Conditions N23 and N24 shall remain in perpetuity and shall not be released with the issuance of a Certificate of Compliance.

## MEETING MINUTES CD #1



DATE OF MEETING: April 10, 2019

PROJECT: W. EDWARD BALMER ELEMENTARY SCHOOL

PROJECT NO.: 17-0759

SUBJECT: WORKING GROUP (WG) MEETING – Technology Design Meeting

ATTENDING:Tom Hengelsberg - DWAGreg Palmer – Director of IT, NPS<br/>Amy McKinstry – Acting Superintendent<br/>Karlene Ross – Principal, Balmer ES<br/>Greg Rosenthal - Dir of Pupil Personnel Svcs<br/>Richard Maglione – Dir Facilities & Operations

ITEM	MINUTES	ACTION/ WHO	STATUS/	
			DATE	
01-1	<ul> <li>The Network and Infrastructure: Discussions were had on the following, for the most part led by Greg.</li> <li>NPS IT has plans for the new network</li> <li>How does the new Balmer fit into those plans?</li> <li>Infrastructure owned in the bid docs by Electrical Contractor (EC), with a sub-sub for tech. We want qualified subs, managed by EC.</li> <li>Non-proprietary systems: clocks, speakers, etc. There are not currently district standards.</li> <li>Discussion of new building design - 3 IDF data closets, 1 MDF which is generally central to building, on Level 2.</li> <li>5400R switches, 40+ to each closet, Basis of Design</li> <li>Fast network: wireless speed will be the determining factor. Aerohive will be pushed to the limits</li> <li>Color of the cable: data (blue), voice (green), WAPS (white), surveillance video (yellow)</li> <li>Cable will be 100% patched and labeled – no labeling scheme now, prefer by room in new building, by room, number, port #</li> <li>All Cat 6a cabling</li> <li>New: Two entry points, 500 mb/sec up and down</li> <li>Concept: Balmer will be a new entry point; keep MS connected to HS, then out</li> <li>New building, new access</li> <li>Addition Networks owns the firewall</li> <li>Move pipe to new building, 500 or bigger</li> <li>Servers: power entire district, build network in parallel, new switch HP 8500? All assets cut over in the summer,</li> <li>Edge switches, core for traffic flow, no file server, in Google now, shared drive off server.</li> <li>New domain controller at HS, new B/u controller in Balmer?</li> <li>One server at Balmer, replicate second from HS, need to keep Balmer self-sufficient, build resiliency</li> <li>Buy a fire wall appliance? Yes, good Sonic Wall, use with VPN, Project reimbursable.</li> </ul>	Edvance to take note and incorporate requirements/ parameters into design.	Open	ARCHITECTS
	,			PROJECT MANAGERS
01-2	Wireless infrastructure: District currently uses Aerohive across all buildings. Greg stated, "It's not great, but it's also not bad." Whatever we are running in the district is what we are going to run at the new Balmer. We will have parity across the district.	Edvance to take note and incorporate requirements/	Closed	260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax
	וויש מניווים וופיי שמווויפו. איפ אווו וומיפ אמוונץ מנוטכא נוופ טוגנווט.	requirements/		212 Battery Street Burlington, VT 05401

Burlington, VT 05401 802.863.1428 ph 802.863.6955

	<ol> <li>Discussion of specifications, model numbers, etc.</li> <li>Purchasing new wireless gear for two schools that will not be in</li> </ol>	parameters into design.	
	<ol> <li>a densing new wrecess gear for two screots that will not be in existence in two years.</li> <li>New Aerohive, one in each space, two in library</li> </ol>	uesign.	
01-3	<ul> <li>Lit fiber and current connectivity status between the buildings and out to the cloud:</li> <li>1. We currently have two connection points out to the internet, at the MS and HS. We may move the MS one over to Balmer. Discuss.</li> <li>2. Details, specifications, etc.</li> </ul>	Edvance to take note and incorporate requirements/ parameters into decime	Open
01-4	<ol> <li>Classrooms Technology:</li> <li>Teacher's computers – 85 teacher chromebooks + 100 Dell core i5 i7 optiplex desktop in every CR, admin spaces – wherever there is a projection screen – assign to teacher for the year, goes back &amp; forth to home, portable</li> <li>Chromebooks for students – every grade level, 4 carts per grade x 600. Each cart has 30 CBs. + 2 CB carts in library + resource Room programs. HP or Acer machines, 11.6" or 14" – Scott noted pricing will be for 14". Google chrome license, + service –need proposal. May use 11.6" for small kids, 14" for bigger kids. Pay kids to do installs and maintenance over the summer. Add CBs to Maker Space. Preferred Vendor: Hubtech – on state contracts list.</li> <li>iPads for PK &amp; K: 84 12x 7 - see numbers attached</li> <li>Printers – (4) large-duty networked printer/copier/scanners in new building. (1) in office, (1) in library, (1) each in Student Services Suite (SSS) Level 2 and SSS Level 3.</li> <li>3-D printers – (2) Maker-bot 3-d printers + laser etching machine for wood</li> <li>Cafeteria Point of Sale system – locked-in to vendor – Greg will supply name.</li> <li>Visitor Management system – need a badge printing system – Scott pointed out this is fine if you have a person who can manage it. It may become too much for office personnel. Continue discussion.</li> </ol>	design. Edvance to take note and incorporate requirements/ parameters into design. Greg to supply name of Kitchen POS vendor Continue discussion of Visitor Management system.	Open
01-5	<ul> <li>Projection Systems:</li> <li>Greg is moving away from projectors in classrooms, moving toward touch monitors, interactive, remote keyboard and mouse. There was a cost comparison discussion.</li> <li>1. Scott: visual intelligibility is an issue at this early stage – size is a critical issue. Projector, 100" on a 5' high board – cannot beat that with flat panel.</li> <li>2. Projectors – no bulb. 25,000 hour 20 year life cycle!</li> <li>3. Flat panel may give you five years? What happens at 5 years? No good data yet. Jury still outcould do some spaces but not all?</li> <li>4. Full price of projector - \$3,100 plus cabling ~\$5K per room. Flat panels are around the same price. Projectors will have a less expensive replacement cycle – new are going in direction of interactive.</li> <li>5. Scott suggested setting up a test projector in a classroom at Balmer.</li> </ul>	Team to continue discussion, no firm decision made at this time. Scott will coordinate a test projector in a room at Balmer.	Open.
01-6	<ol> <li>Phone System:         <ol> <li>New District phone system is in place as of January 2019, which will be carried over to the new Balmer so there is phone system parity across all the schools in the district.</li> <li>New Phone system: VIA handsets, hybrid system, leveraging cat 5 + copper, non-admin phones in Balmer and NES, want to bring it over? Yes.</li> </ol> </li> </ol>	Edvance to incorporate new phone system parameters into Balmer design. Edvance will inventory "old"	Open

	<ol> <li>Teachers use phones less, handset is used to communicate to office, outgoing calls.</li> <li>Ordinary handsets in CRs, new phones will go to new building, supplement with new sets in new school.</li> <li>One appliance in Balmer, shared with NES, may need upgrade to handle 2x phones.</li> <li>Scott – do not bid, do not put in construction budget, work with existing, preferred vendor. On state bid list, under \$50K</li> <li>Distributed Communication system will interface with any phone system, need interface cards.</li> <li>Want one stop shop, no issues with Title Communications (Vendornew as of Feb 2019, N. Andover MA)</li> <li>Manage contract completely separate, Scott will provide new school inventory, match up with existing (will be 2.5 YO) items.</li> </ol>	phones and specify handsets for any rooms missing a phone in new building.	
01-7	<ol> <li>Bells and clocks:         <ol> <li>Currently using Bell Commander software for bells &amp; clocks</li> <li>Karlene pointed out they currently do not use bells. Scott replied the devices have the capability, you can turn it off, but makes sense to include in case you want it in the future.</li> <li>Display type – discussion of analog clock face versus digital</li> <li>Hours, minutes, (no seconds!)</li> <li>Details, specifications, etc. to be worked out</li> <li>Greg stated they want system unified with cell phone time, that supplies signal to remote clocks</li> <li>Digital is preferred for younger kids – table decision and bring in other key WG members not in attendance.</li> </ol> </li> </ol>	Poll other educators and administrators as to which interface is preferred: analog or digital	Open
01-8	<ol> <li>Building Access Control Systems (Methods for entering a building):         <ol> <li>New proximity readers are being installed this April in each of the 4 schools. That system will also need to move from the current Balmer and NES, and be installed in the new Balmer.</li> <li>Credential type – proximity cards on lanyard.</li> <li>The devices will have management features, data logging</li> <li>Lantel is vendor. Funding through Safe Schools.</li> <li>Prox card readers being installed (Greg to supply the manufacturer)</li> <li>Contract under \$50K, three quotes, Johnson, Centronix were other bidders</li> <li>Greg and Scott discussed moving AI phones move to new building. Scott noted we can't move the AI Phone out of the construction project as they are tied in with card readers, security – all related to EC scope. Project to provide new AI phones for the new building and pull the (newish) old Balmer AI phones as spares or use in other buildings where they have not been deployed.</li> <li>Scott counseled that we should write a proprietary contract for preferred manufacturer in the new building. Make proprietary the card readers and AI phones, as well as card printer for credential badges. We can't control who the sub-sub will be to install it.</li> <li>Scott: Vendor service contract will be for 1 year, want to turn over to District vendor to manage &amp; service.</li> <li>Greg will send Lantel contract to Scott to include in bid docs.</li> </ol> </li> </ol>	Edvance to include this family of products as proprietary in specifications.	Open
01-9	<ol> <li>Video Surveillance:         <ol> <li>Greg stated there is money to replace Genetech security software</li> <li>Current access not ideal; want access from phone, laptop</li> <li>Want police command center capability – from truck</li> <li>This spring, replacing Genetech with new system</li> <li>Replace old system with new cameras, Al-phones in existing Balmer,</li> </ol> </li> </ol>	Discussion to continue about system components and specifications.	Open.

	<ul> <li>which can be salvaged and moved</li> <li>New software integrated and moves with system to new Balmer</li> <li>Powered all off one server, feed cameras using network</li> <li>Landtel, Johnson Controls, Ochre are bidders on current project</li> <li>How many cameras? 76 cameras in Balmer &amp; NES. 70 cameras in current budget for new building.</li> <li>Video Storage – Edvance typically specifies a 30-day holding capacity</li> <li>Software handles the storage – cameras all feed to a central computer.</li> <li>Needs to be scalable, able to add on capacity</li> <li>Vendor will own providing all cameras, connection, testing, incorporation into existing system</li> <li>Scott: Balmer could be designed and set up to control the whole district. Build a great hub, bidder will connect cameras from other buildings.</li> <li>Pick the software we want now, put it in the existing schools now. Balmer will use that software when it goes on line.</li> <li>Discussion ensued about centralized versus dispersed systems</li> <li>Schedule – will have answers in a couple weeks.</li> </ul>	Edvance to incorporate what has been discussed so far in pricing documents.	
01-10	<ol> <li>Intrusion Detection:         <ol> <li>Simplex alarm system now. Johnson Controls vendor?</li> <li>Richard had done programming – Police get notified via a dialer</li> <li>Panic buttons in various places, typically main office</li> <li>Karlene does not use the current panic button – a lot of false alarms</li> <li>Panel – mfr. by Simplex? Need same manufacturer. Richard to forward spec docs.</li> <li>Scott will write new design around that equipment.</li> <li>Panels are Honeywell, still functional</li> <li>Scott: new project, level 1 panel manuf. No control over bidding unless District names the system proprietary.</li> <li>Motions sensors in every ground floor room with window</li> <li>Alarm arm/disarm panels in various locations around school at exterior doors.</li> </ol> </li> <li>Prox readers act as key, don't need as many exterior core keys</li> <li>New master exterior key system</li> </ol>	Richard to forward spec docs for Security System panel manufacturer. Technology WG must decide if this system is to be proprietary.	Open
01-11	Karlene suggested looking for an app for teacher communication during emergencies, a silent alternative to walkie-talkies. Greg noted this would be a software solution, not part of the project.		Closed.
01-12	<ol> <li>Sound Systems:         <ol> <li>As an example, in the Middle School: system is operated off an iPad. This would be similar in the new Balmer for Café and Gym systems.</li> <li>Sound system components to be located in lockable rack on stage</li> <li>Speech reinforcement system – yes, included in all classrooms and ELAs</li> <li>Karlene brought up students with cochlear implants: teachers will have to wear the belt pack for assistive listening devices. For ADA/MAAB compliance, in all large public meeting areas, we will need transmitters &amp; receivers. This is a function of seating capacity – will work as part of space sound system. In classrooms there is no requirement for listening assistance – this is more for non-hearing-impaired students, electronics allows appliances to connect to hearing impaired student – connect up to two transmitters at a time. Teacher needs to turn on mic/off – what about other children? They cannot hear. Need to provide wireless share mic. Scott stated there is not really a better way.</li> <li>ELAs will be the same equipment.</li> </ol> </li> </ol>	Edvance to incorporate what has been discussed so far in pricing documents. Discussion to continue.	
01-13	Electronic signage:	Signage to be	Open.

<ol> <li>Power &amp; data supplied underground thru conduit from the building</li> <li>Very simple spec, function. No animation, flashing, etc. Simple white LED lettering on black background.</li> <li>Software – on local computer.</li> <li>Signage to be discussed further, cost and appropriateness vetted. Possible Zoning issue.</li> </ol>	discussed with larger SBC.	

The above is intended to be an accurate summary of this meeting. Please contact me with any additions, deletions, and/or corrections, for incorporation into these minutes. After 10 days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of the project.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Managers

TOM HENGELSBERG, AIA, NCARB, LEED AP, MCPPO PROJECT MANAGER

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## MEETING MINUTES CD #2



DATE OF MEETING: April 10, 2019

W. EDWARD BALMER ELEMENTARY SCHOOL PROJECT:

PROJECT NO.: 17-0759

WORKING GROUP (WG) MEETING - Mechanical Controls Meeting SUBJECT:

Tom Hengelsberg - DWA Richard Maglione – Director of Facilities ATTENDING:

> Matt DiSalvo - GGD mechanical engineer

ITEM	MINUTES	ACTION/ WHO	STATUS/ DATE	
02-1	The purpose of this meeting was to discuss mechanical controls systems and their specification and to decide if the District wishes to specify a proprietary system.		Closed	
02-2	The specification will be to provide a separate computer that will house the controls software, to be located in the Maintenance office on Level 2 of the new building. The software will be remotely accessible through a smart-phone app. There was discussion about examples where remote access will be needed, such as programming the gym for an after-hours event remotely.	GGD to incorporate	Closed	
02-3	Matt asked if there is a desire or plan for town-wide BMS system. Richard said not to his knowledge, but there is a desire to develop a standard for the School District, but knows this will take time. Richard stated he would like the system to have an open protocol. Matt stated the controls are specified with BACNET open protocol. After more discussion it was agreed that the specification for Balmer will remain an open spec with no proprietary units or controls, which is how the specification is currently written. Richard does not have particular favorites at this time, and wants the competition for pricing. This system may become the standard for the District if it proves itself. This will also allow multiple vendors to service the systems.	GGD to incorporate	Closed	
02-4	Controllability in Classrooms and Office spaces: thermostats will be pre- programmed, and will have a manual override of +2 or -2 degrees. There was more discussion of functionality features, and automated logic.	GGD to incorporate	Closed	
02-5	High School refit: the high school is getting new controls software upgrade in the upcoming summer of 2019, but this is not necessarily the system that Richard wants to base the new Balmer on. HS is replacing (8) Java Auto Control Engines (JACE units), which will be viewable remotely. The HS will be bid out, and will be open protocol with JACE units.		Closed	
02-6	Matt asked if there are any plans for a central BMS Ops Center for the District. Richard said, again, not to his knowledge.		Closed	ARCHITECTS PROJECT MANAGERS
02-7	Service Contract: Richard stated that a contract will be desired for Balmer. Matt stated the specs typically include 40 hours by ATC contractor to come back, reprogram and adjust as necessary. There is a 1-year warranty to work out any bugs (which there typically are). There is a Cx agent on the project, part of whose	GGD to incorporate warranty language in	Closed	260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax 212 Battery Street Burlington, VT 05401

Dattery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955 www.'

	job it is to try and minimize any post-occupancy issues. The service contract is not included in the project spec and is typically procured by the Owner just prior to the one-year mark of the system.	specs	
02-8	Richard had to leave, but Tom and Matt continued to discuss sound control in the mechanical units. Matt stated there will be three options for sound control: ductwork options; unit exhaust sound dampers; and integral, curb-mounted sound shields. Tom urged Matt to make sure units are specified as quiet as possible without getting into proprietary conditions.	GGD to incorporate sound control and dialog with Acentech once they have completed acoustical review.	Open
02-9	Tom requested that GGD show service clearances on the mechanical drawings for all units. D&W is trying to reduce the size of RTU roof screens to save money, and having clearances noted will be a huge help.	GGD to incorporate	Open

The above is intended to be an accurate summary of this meeting. Please contact me with any additions, deletions, and/or corrections, for incorporation into these minutes. After 10 days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of the project.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Managers

TOM HENGELSBERG, AIA, NCARB, LEED AP, MCPPO PROJECT MANAGER

c: Attendees File

### MEETING MINUTES CD #3



DATE OF MEETING: May 8, 2019

PROJECT: W. EDWARD BALMER ELEMENTARY SCHOOL

Scott Goodrich - EdVance

PROJECT NO.: 17-0759

SUBJECT: WORKING GROUP (WG) MEETING – Technology Design Meeting 2

ATTENDING: Tom Hengelsberg - DWA

Greg Palmer – Director of IT, NPS Amy McKinstry – Acting Superintendent Karlene Ross – Principal, Balmer ES Greg Rosenthal - Dir of Pupil Personnel Svcs Richard Maglione – Dir of Facilities Melissa Walker – Dir of Finance Jill Healy – Principal, NES absent

ITEM	MINUTES	ACTION/ WHO	STATUS/ DATE
01-1	<ul> <li>The Network and Infrastructure: Discussions were had on the general characteristics of the infrastructure, for the most part led by Greg. [see MM CD #1 for previous content]</li> <li>4/10/19: Discussion continued reviewing notes and questions from the previous meeting.</li> <li>Internet - Scott does not do vendor selection, but provides the pathway. Greg noted there are five buildings in the District, with traffic to be served by two pipes in the future setup: <ul> <li>Connect MS and HS, connect out to internet from HS</li> <li>Connect Admin, with new pipe from Balmer out to internet.</li> </ul> </li> <li>Greg stated there is an agreement deal done with Charter Communications for 2 years. He will manage it for two years, may do a re-deal then.</li> <li>Melissa: MS and HS will be super-users compared with ES. Greg: largest number of devices will be at Balmer.</li> <li>Next negotiation will be adding a third pipe, one MS, one HS, one Balmer. End goal is for all services originating from one location – big Head end at HS</li> <li>Two new services this year, one backup domain controller – separate pipe will be a failsafe.</li> <li>Scott: (4) 4" conduits – 1 spare, 1 internet/ voice, 1 dedicated town network (lit fiber between buildings).</li> </ul>	Edvance to take note and incorporate requirements/ parameters into design.	Closed
01-2	<ul> <li>Wireless Infrastructure: District currently uses Aerohive across all buildings. Greg stated, "It's not great, but it's also not bad." Whatever we are running in the district is what we are going to run at the new Balmer. We will have parity across the district. <ol> <li>Discussion of specifications, model numbers, etc.</li> <li>Purchasing new wireless gear for two schools that will not be in existence in two years.</li> <li>New Aerohive, one in each space, two in library</li> </ol> </li> <li>4/10/19: Discussion continued: <ul> <li>36 new Aerohive 550 WAPS just put in to Balmer. Do they get moved to new building?</li> </ul> </li> </ul>	Edvance to take note and incorporate requirements/ parameters into design.	Closed

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212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955

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ives in the new		
ngs and out to the	Edvance to take note and	Closed
the internet, at the MS Ilmer. Discuss.	incorporate requirements/ parameters into design	

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01-3	<ul> <li>Scott: technology is changing, and it will be difficult to specify the install of 2.5 YO used units in the new building.</li> <li>Greg: the WAPS were free (by grant) and will be salvaged from Balmer and used as backup in MS and HS.</li> <li>Scott will build the spec around new Aerohives in the new Balmer.</li> </ul>	Edvance to take note and	Closed
	<ol> <li>We currently have two connection points out to the internet, at the MS and HS. We may move the MS one over to Balmer. Discuss.</li> <li>Details, specifications, etc.</li> <li>4/10/19: Discussion covered in 01-1 above.</li> </ol>	incorporate requirements/ parameters into design.	
01-4	<ul> <li>Classrooms Technology:</li> <li>Teacher's computers – 85 teacher chromebooks + 100 Dell core i5 i7 optiplex desktop in every CR, admin spaces – wherever there is a projection screen – assign to teacher for the year, goes back &amp; forth to home, portable</li> <li>Chromebooks for students – every grade level, 4 carts per grade x 600. Each cart has 30 CBs. + 2 CB carts in library + resource Room programs. HP or Acer machines, 11.6" or 14" – Scott noted pricing will be for 14". Google chrome license, + service – need proposal. May use 11.6" for small kids, 14" for bigger kids. Pay kids to do installs and maintenance over the summer. Add CBs to Maker Space. Preferred Vendor: Hubtech – on state contracts list.</li> <li>4/10/19: Discussion continued:</li> <li>Chromebooks - 11.6" or 14"? Greg asked about grade cut-off?</li> <li>Currently Grades 2-3-4 are using 14".</li> <li>Middle School is using all 11.6"</li> <li>Four new carts recently purchased are all 11.6" [for which grades?]</li> <li>HS replacing or adding 11.6". For the older kids they are nice, small and portable.</li> <li>Scott will base first pass using 14" as default.</li> <li>Greg: a few visually impaired will need 14"</li> <li>Scott will come in with program and budget to start equipment procurement.</li> <li>One Chromebook cart will be purchased per teaching pair, which aligns well with the floor plan.</li> <li>Charging storage will be provided in the "cart grage" in casework – included in project already.</li> <li>Scott will base standard on what is purchased -\$1100 - Greg will send most recent carts being purchased, on which Scott will base spec.</li> <li>iPads for PK &amp; K: 84 12x 7 - see numbers attached</li> <li>Printers – (4) large-duty networked printer/copier/scanners in new building. (1) in office, (1) in library, (1) each in Student Services Suite (SSS) Level 2 and (SSS) Level 3.</li> <li>4/10/19: Discussion continued:</li> <li>Large Copiers are leased – Melissa stated she does not intend to purchase them in the new building either.</li> &lt;</ul>	Edvance to take note and incorporate requirements/ parameters into design. Greg to supply name of Kitchen POS vendor Greg to send specs of most recent carts being purchased to Edvance.	Open
	wood 4/10/19: Discussion continued: • 3-D printing is coming under scrutiny for outgassing and particulate matter – ventilation should be employed.	TH to alert GGD to provide direct	

	<ul> <li>Cafeteria Point of Sale system – locked-in to vendor – Greg will supply name.</li> <li>Visitor Management system – need a badge printing system – Scott pointed out this is fine if you have a person who can manage it. It may become too much for office personnel. Continue discussion.</li> <li>4/10/19: Discussion continued:         <ul> <li>Raptor system discussed as possible BOD</li> <li>Greg: Who runs it?? That staff person must be 100% available at that moment in time. Can the technology be staffed?</li> <li>System: Computer with scanner, and small printer.</li> <li>How it works: Person at desk takes driver license, scans license against some databases, such as child abuse records, can load case management situations into the system, restraining order, sex offender, etc. Printer prints pass to stick on clothing. Strangers who do not have badge are suspect.</li> <li>Greg is not opposed to doing it, just need to look into details Must have discussion about this with admin, is it necessary?</li> <li>Scott will leave the system out for now</li> </ul> </li> </ul>	exhaust ventilation in Maker Space. Continue discussion of Visitor Management system.	
01-5	<ul> <li>Projection Systems: Greg is moving away from projectors in classrooms, moving toward touch monitors, interactive, remote keyboard and mouse. There was a cost comparison discussion.</li> <li>[see MM CD #1 for previous content]</li> <li>5. Scott suggested setting up a test projector in a classroom at Balmer.</li> <li>4/10/19: Discussion continued:</li> <li>Scott: basis of design is ultrashort throw projectors mounted on the wall. They have come down in price - \$3500 fully installed.</li> <li>If we decide to go with touchscreen, EC will install double gang box. Cable will be installed by projector vendor as part of that system.</li> <li>Scott: Summer 2019 is time-line to make decision between touchscreen and projector. He noted the trend is "both" – if you can afford both.</li> <li>Greg: replacement cycle is the issue. "Both" will last longer. 65" touchscreen on a stand is the sweet spot of size vs. price, can be moved anywhere in the room. Combined with fixed projector on teaching wall, creates two teaching stations.</li> <li>Greg threw out the idea of ordering two of the touch screens for each school, train teachers, as a pilot project.</li> <li>Clear Touch, Newline are brands.</li> <li>Melissa expressed the need to support the technology once it is implemented, and expressed deep concerns about the funding system and replacement cycle</li> <li>It was discussed to provide one or two touchscreens in ELAs shared between grade level CRs.</li> </ul>	Team to continue discussion, no firm decision made at this time. Scott will coordinate a test projector in a room at Balmer. Greg to look into touch screen pilot project.	Open.
01-6	<ol> <li>Phone System:         <ol> <li>New District phone system is in place as of January 2019, which will be carried over to the new Balmer so there is phone system parity across all the schools in the district.</li> <li>New Phone system: VIA handsets, hybrid system, leveraging cat 5 + copper, non-admin phones in Balmer and NES, want to bring it over? Yes.</li> <li>[see MM CD #1 for previous content]</li> <li>Manage contract completely separate, Scott will provide new school inventory, match up with existing (will be 2.5 YO) items.</li> </ol> </li> </ol>	Edvance to incorporate new phone system parameters into Balmer design. Edvance will <b>inventory "old"</b> phones and specify handsets for	Closed

	<ul> <li>4/10/19: Discussion continued:</li> <li>New phone service with Title (provider) - new copper or fiber.</li> <li>Verizon has some basic lines for security, elevator, emergency, etc.</li> <li>Companies need to be contacted by the Owner, who will need number of lines. 21-25 trunk lines across the district, to HS, feeding them all from HS.</li> <li>One VM server at HS; feeding out from there.</li> <li>Check with Verizon on how to handle elevator, security, fire, all dedicated lines.</li> <li>Service lines – pick up existing equipment from Balmer.</li> <li>Scott will be pulling the phone spec from the CD60 pricing set.</li> </ul>	any rooms missing a phone in new building.	
01-7	<ul> <li>Bells and Clocks: [see MM CD #1 for previous content]</li> <li>3. Display type – discussion of analog clock face versus digital [see MM CD #1 for previous content]</li> <li>7. Digital is preferred for younger kids – table decision and bring in other key WG members not in attendance.</li> <li>4/10/19: No new discussion, to be continued.</li> </ul>	Poll other educators and administrators as to which interface is preferred: analog or digital	Open
01-8	<ul> <li>Building Access Control Systems (Methods for entering a building): [see MM CD #1 for previous content]</li> <li>5. Prox card readers being installed (Greg to supply the manufacturer)</li> <li>[see MM CD #1 for previous content]</li> <li>10. Greg will send Lantel contract to Scott to include in bid docs.</li> <li>4/10/19: Discussion continued:</li> <li>Card Readers: Lantel to provide same Avigilon readers.</li> <li>Scott advises to make the system proprietary – same system.</li> <li>Moving away from Signet (Genetech), moving towards Johnson Controls (Exact Vision) or Lantel (Avigilon) proprietary system.</li> <li>Lantel providing card readers. Project happening in June 2019.</li> <li>Access control Engine – web based Pax Appliance. Sales rep is Mel at Lantel – need actual engine.</li> <li>Scott wants to build into spec. New NE Rep Scott Sebastian can call Greg.</li> <li>Scott will need an answer: Greg committed to select the system by June 2019.</li> </ul>	Edvance to include this family of products as proprietary in specifications. Greg will send Lantel contract to Scott to include in bid docs. Greg committed to select system by June 2019.	Open
01-9	Video Surveillance: [see MM CD #1 for previous content] 4/10/19: Security System – will not re-use old components. New systems in two years will be backup units.	Discussion to continue about system components and specifications. Edvance to incorporate what has been discussed so far in pricing documents.	Open.
01-10	Intrusion Detection: [see MM CD #1 for previous content] 4/10/19: Security System – will not re-use old components. New systems in two years will be backup units.	Richard to forward spec docs for Security System panel manufacturer. Technology	Open

		\\/C =====	
		WG must decide if this system is to be proprietary.	
01-12	<ol> <li>Sound Systems:         <ol> <li>As an example, in the Middle School: system is operated off an iPad. This would be similar in the new Balmer for Café and Gym systems.</li> <li>Sound system components to be located in lockable rack on stage</li> <li>Speech reinforcement system – yes, included in all classrooms and ELAs</li> <li>Karlene brought up students with cochlear implants: teachers will have to wear the belt pack for assistive listening devices. For ADA/MAAB compliance, in all large public meeting areas, we will need transmitters &amp; receivers. This is a function of seating capacity – will work as part of space sound system. In classrooms there is no requirement for listening assistance – this is more for non-hearing-impaired students, electronics allows appliances to connect to hearing impaired student – connect up to two transmitters at a time. Teacher needs to turn on mic/off – what about other children? They cannot hear. Need to provide wireless share mic. Scott stated there is not really a better way.</li> <li>ELAs will be the same equipment.</li> </ol></li> </ol>	Edvance to incorporate what has been discussed so far in pricing documents. Discussion to continue.	Open
01-13	<ol> <li>Electronic signage:         <ol> <li>Power &amp; data supplied underground thru conduit from the building</li> <li>Very simple spec, function. No animation, flashing, etc. Simple white LED lettering on black background.</li> <li>Software – on local computer.</li> <li>Signage to be discussed further, cost and appropriateness vetted. Possible Zoning issue.</li> </ol> </li> <li>4/10/19: No new discussion, to be continued.</li> </ol>	Signage to be discussed with larger SBC.	Open.
	NEW BUSINESS (4/10/19):		
03-01	<ol> <li>TV, CATV:         <ol> <li>Greg to keep on radar: phone, internet, cable TV</li> <li>TH pointed out need to have cable for CCTV broadcast, involve CATV for live stream specifications to feed out of the building.</li> <li>CATV Connection could occur at HS, feed Balmer to HS. Encode at Balmer, send signal to HS, decode at HS, sent to CATV.</li> <li>Greg to reach out to CATV and get conversation started.</li> <li>Run coaxial into building, terminate or not. If cable contract forces that to be done, take advantage of it. If its not part of the contract could be \$15K, is it worth it?</li> </ol> </li> </ol>	Greg to reach out to CATV	Open
03-02	<ol> <li>Review Technology Outlet Plans:         <ol> <li>Scott brought half size sets of 60% pricing set of technology, which he reviewed with the group.</li> <li>Phone near but NOT next to door.</li> <li>Data jacks for teacher desk diagonally opposite.</li> <li>CB – Call Box: This is an independent separate system governing communication with central main office, can be used away from window, door, etc. For an incident, to get someone outside the classroom involved – call button alerts issue, office calls into room using speaker, teacher can communicate hands-free with office. Intercom opens up talk path - \$25 device plus \$100 cable. Some schools have two in every room – we are going with one. Control is PA system, not phone system. Same system for all-school announcement.</li> </ol> </li> </ol>	Edvance to continue development of the CD60 pricing documents.	Open

<ol> <li>Can also get access to PA by dialing a code. Multi systems, multi modes. Also will have phone and call box in ELA space.</li> <li>Data – double in corner, another next to desk, plus one for projector, one in ceiling.</li> </ol>	

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Sincerely,

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# MEETING MINUTES CD #4



DATE OF MEETING: May 8, 2019

PROJECT: W. EDWARD BALMER ELEMENTARY SCHOOL

PROJECT NO .: 17-0759

WORKING GROUP (WG) MEETING - Salvage, Construction Phasing & SUBJECT: Logistics

ATTENDING: Tom Hengelsberg – D&W Melissa Walker – NPS Business Manager Karlene Ross – Principal, Balmer ES Jim Mauer – FBI, CM Amy McKinstry – Acting Superintendent Joel Seeley – SMMA (OPM) (Partial for Phasing Discussion-Jill Healy - Principal, NES item 04-8 onward): Greg Rosenthal - Dir of Pupil Personnel Svcs Dave Fontaine, Jr - FBI, CM Richard Maglione - Dir of Facilities absent Rob Day, FBI, CM Joel Kent, FBI, CM

ITEM	MINUTES	ACTION/ WHO	STATUS/ DATE	
04-1	<ul> <li>SALVAGE:</li> <li>TH discussed the upcoming need to specify which items will be salvaged from existing school. D&amp;W will need a salvage list for our specification, broken dow into the following categories. Items should be: <ul> <li>installed new less than 2-3 years ago,</li> <li>nearly new condition, and</li> <li><u>easy to remove</u>, to be used elsewhere in district, or something of significant material and sentimental value.</li> </ul> </li> <li>If it's not in very good to excellent condition, it's probably not worth saving it.</li> <li>A "90% Final" list will be needed before the 90% CD specs are done, which castill be edited, but must be pretty close by then.</li> </ul>	vn 7/15/19	Open	
04-2	<ul> <li>TH continued discussion: Our task will be to think about the contents of the buildings in terms of the following "piles":</li> <li>A. NEW OR NEARLY NEW, OF VALUE, WANT TO KEEP AND BRINT TO NEW SCHOOL</li> <li>B. OF VALUE AND WANT TO OFFER TO ANOTHER SCHOOL IN DISTRICT</li> <li>C. OF VALUE AND WANT TO OFFER TO ANOTHER TOWN DEPARTMENT (FIRE, POLICE, DPW, TOWN HALL, PARKS &amp; RID.</li> <li>WHAT'S LEFT: PUBLIC PROPERTY DISPOSITION AS SURPLUS I.E. OFFER TO THE PUBLIC. SMMA to advise. Joel stated:</li> </ul>	Selection process for used FF&E SMMA to develop Moving Specifications at appropriate	Open	ARCHITECTS PROJECT MANAGERS
	<ul> <li>Around November 2020, we will start thinking about exis FF&amp;E and hiring a moving company.</li> <li>The new building will have all-new FF&amp;E and Technology</li> <li>June 2021, the existing building will be in a state of not y ready to abate haz mat.</li> </ul>	l.		260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax 212 Battery Street Burlington, VT 05401

212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955

<ul> <li>June 2021 – most communities will donate unused furniture to countries in need – Movers know this protocol – put it in containers, clear out the building, allows abatement to commence.</li> <li>Schedule: June 20 school out, first 1 week for teachers, then 1 week for movers, then turn building over to contractor.</li> <li>NES would work on same schedule.</li> <li>Moving boxes will be included in RFP.</li> <li>April vacation is a good time to start. Both principals assented, and they are already starting to tell staff to start paring down.</li> <li>Moving – teachers will pack boxes. Movers will move boxes, teachers pack &amp; unpack. Narrow window of what teachers do.</li> </ul>		
E. LEAVE IN BUILDING AS DEMOLITION MATERIAL – Demo contractor may be able to glean value on the used furniture market, or as scrap/recycled material.		
In summary, we will need to develop a process—with Richard in the lead—of selecting what gets saved and can be used at other schools or town buildings, versus what gets donated.		
<ul> <li>BUILDING-RELATED OR FIXED ITEMS: [comments from meeting in bold]:</li> <li>A suggested list, not limited to: <ol> <li>Architectural, building-mounted items (Balmer only):</li> <li>Doors – Richard to survey</li> <li>Hardware– Richard to survey</li> <li>Specialties &amp; accessories– Richard to survey – not likely</li> <li>Visual display – white boards, tack boards, display cases, directories– Richard to survey</li> <li>Signage <ol> <li>Balmer building letters– Yes, disposition TBD SBC vote to keep and deploy?</li> <li>Room/ ADA signage - No</li> </ol> </li> <li>Balmer and Vail portraits - to be relocated to new building g. Bronze Plaque: Balmer – yes; NES - probably not</li> </ol></li></ul> <li>MEP Equipment?? (Balmer only) – Richard to survey, but probably not</li> <li>Kitchen Equipment – may be some pieces – Melissa to contact Aramark – could be written into contract to move into the Middle School.</li> <li>Building-mounted interior Athletic Equipment?? - No</li> <li>Playground equipment?? Richard to survey – would likely be Town Rec donation if so</li> <li>Site athletic equipment?? – Soccer goals, etc. belong to Town – to be removed by July 1 <ul> <li>Shipping Container in the woods on the east property line near Vail baseball field – who owns this? Probably Parks and Rec Baseball program – will ask to remove</li> </ul> </li>	Richard Maglione to survey as listed at left. Melissa to contact Aramark re. used KEQ District to contact Parks & Rec to remove equipment before July 1.	Open
<ul> <li>EXTERIOR ITEMS [comments from meeting in bold]:</li> <li>Any exterior site items, such as,</li> <li>1. Memorial Garden items - Memorial flowering tree - TH to check with LA about survival, as opposed to replacing with new similar tree and rededicating it. Also there are numerous perennial flower bulbs that should be relocated from the CY.</li> <li>2. Memorial trees or shrubs that we want re-planted in the new site, associated plaques if any Napa mentioned.</li> </ul>	TH to check with LA about tree transplant/ survival	Open
	<ul> <li>to countries in need – Movers know this protocol – put it in containers, clear out the building, allows abatement to commence.</li> <li>Schedule: June 20 school out, first 1 week for teachers, then 1 week for movers, then turn building over to contractor.</li> <li>NES would work on same schedule.</li> <li>Moving boxes will be included in RFP.</li> <li>April vacation is a good time to start. Both principals assented, and they are already starting to tell staff to start paring down.</li> <li>Moving – teachers will pack boxes. Movers will move boxes, teachers pack &amp; unpack. Narrow window of what teachers do.</li> <li>E. LEAVE IN BUILDING AS DEMOLITION MATERIAL – Demo contractor may be able to glean value on the used furniture market, or as scrap/recycled material.</li> <li>In summary, we will need to develop a process—with Richard in the lead—of selecting what gets saved and can be used at other schools or town buildings, versus what gets donated.</li> <li>BUILDING-RELATED OR FIXED ITEMS: [comments from meeting in bold]:</li> <li>A suggested list, not limited to:         <ul> <li>Architectural, building-mounted items (Baimer only):</li></ul></li></ul>	<ul> <li>to countries in need – Movers know this protocol – put it in containers, clear out the building, allows abatement to commence.</li> <li>Schedule: June 20 school out, first 1 week for teachers, then 1 week for movers, then trub building over to contractor.</li> <li>NES would work on same schedule.</li> <li>Moving boxes will be included in RFP.</li> <li>April vacation is a good time to start. Both principals assented, and they are already starting to tell staff to start paring down.</li> <li>Moving – teachers will pack boxes. Movers will move boxes, teachers pack &amp; unpack. Narrow window of what teachers do.</li> <li>E. LEAVE IN BUILDING AS DEMOLITION MATERIAL – Demo contractor may be able to glean value on the used furniture market, or as scrapfrecycled material.</li> <li>In summary, we will need to develop a process—with Richard in the tead—of selecting what gets saved and can be used at other schools or town buildings, versus what gets donated.</li> <li>BUILDING-RELATED OR FIXED ITEMS: [comments from meeting in bold]:         <ul> <li>Architectural, building-mounted items (Balmer only):</li></ul></li></ul>

3. 4. 5.	Modular H/C ramp in the courtyard of Balmer?? - No Memorial Bench – Yes, Balmer and NES have benches that will come to new Balmer. Gazebo – no		
Building-i and in ex	LOGY, [comments from meeting in bold]: nstalled items, easy to remove, nearly new, having some ongoing value, cellent condition: TH stated that Greg Palmer is aware of the salvage id schedule and will be reviewing IT equipment. Servers Mounting racks Routers & switches WAP devices- new this year, to be salvaged for back-stock for district, summer 2021 Security Cameras- relatively new, to be salvaged for back-stock for district, summer 2021 Patch Cables Phone equipment and switches – new this year, to be relocated to new building at switch-over time, summer 2021 Loose Technology – Greg Palmer is in conversation with Scott Goodrich as to what gets re-used in the new building, and will decide what gets re-distributed to other buildings.	Greg Palmer to develop transition plan along with Scott Goodrich/ Edvance	Open
bold]: Items purelsewher to come of decisions 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	IRE, FIXTURES, AND EQUIPMENT: [comments from meeting in chased new less than -5 years ago, good condition, to be used e in District. Identify by Building, Room Number/Name. You may want up with a tagging system for larger items – stickers? – to record .so you only do it once. A suggested list, including but not limited to: Student Desks and chairs – to Countries in Need – by Mover Teacher Desks and chairs – Richard to survey but likely will go to Countries in Need – by Mover Tables – Richard to survey but likely will go to Countries in Need – by Mover Shelving units – Richard to survey but likely will go to Countries in Need – by Mover File cabs – Richard to survey and cull better ones for re-use in other buildings in District. The rest will go to Countries in Need – by Mover Teaching aids ('weasels'', etc) – Principals to reserve and tag newer weasels for re-use in new building. Fabric-wrapped office partitions – Sp.Ed. rooms - to Countries in Need – by Mover Sensory furniture – Teachers/Principal/ Richard to survey but likely will go to Countries in Need – by Mover <b>OT/PT furniture and equipment (e.g. "standers", "walkers", swings,</b> padding, balls, etc.) – these go with the individual student and will be moved to new building Library Furniture – Old, but in reasonable shape; to be surveyed, and may go to other schools in district. Kitchen small-wares – unless it is nearly new, it should be recycled. Cafeteria furniture - to Countries in Need – by Mover Loose Athletic and Recess equipment – unless it is nearly new, it should be passed on to Parks and Rec or to Countries in Need – by Mover. Maintenance equipment & tools – Richard to survey and select items to save Maintenance furniture– Richard to survey and select items to save <b>Teachers' Items: now is the time to start weeding out what you don't</b> want to move, and to stop taking in unnecessary items acknowledged	Richard Maglione to survey as listed at left. Principals to tag better equipment as listed at left.	Open

	17. Curriculum Items – books, software, manipulatives, supplies, etc. acknowledged		
04-7	<ul> <li>MURALS: [comments from meeting in bold]:</li> <li>There has been discussion of a photography project to record the Balmer and NES murals, and production of high-quality prints of the murals for display in the new building.</li> <li>TH stated, this is a District initiative that must have a champion and leader, a schedule for completion, a production plan (materials, vendors for reproduction, digital editing required, desired outcome clearly defined), a budget, and willing staff and volunteers to carry it out.</li> <li>Karlene stated, the Art Teacher may take photos of the murals.</li> <li>Joel stated, he has seen the architect design a frame system of 3 x 5 squares, with photos applied to MDO board, and created a memorial wall. D&amp;W to consider.</li> </ul>	Karlene to coordinate photography of murals prior to demolition summer 2021	Open
	CONSTRUCTION PHASING AND LOGISTICS Review site phasing plans by Fontaine Brothers Inc.		
04-8	<ul> <li>PHASE 1:</li> <li>8' construction fence with scrim to be deployed around entire site</li> <li>At common line east and north of school, the fence will have a Jersey barrier base with 8' fence/ scrim on top of it.</li> <li>At the east emergency alley, the school will need to close off the former Pre-K room exit door. Karlene stated this is not used anyway – she wants occupants to egress out the north and south doors of the 2-story portion of the building.</li> <li>There was discussion about how this alleyway would be protected. Fontaine is considering plywood. To be discussed with the AHJ and Fire Chief.</li> <li>Teacher parking will be relocated to west side of building, with temp lighting, re-using existing boxes and wiring. Karlene requested that existing paving be repaired at the same time – it is substandard at this time.</li> <li>The west entrance to parking will be widened, and gate removed.</li> <li>Th noted that the transformer is in the way of the parking as drawn – D&amp;W to provide alt plan sketch.</li> <li>A snow maintenance plan will be eleveloped and reviewed in the future.</li> <li>The existing vehicular entrance will be widened by one lane</li> <li>Jim pointed out the trailer location, directly behind the hardscape playground. A gate will be placed in the construction fence here to facilitate easy access to site by adults.</li> <li>Joel specified that parking spaces for Design and OPM staff as well as AHJs visits must be provided next to trailers.</li> <li>There was some discussion of sequencing of stormwater provisions on the site. Dave Fontaine stated that FBI will cut some test pits to determine ground water level – TH added there is a monitoring well now, but this will be destroyed once excavation begins in earnest.</li> <li>Greg asked about timing of loud noises – concerned construction will adversely affect social/emotional kids. FBI will limit noise during sensitive periods such as testing, but there will be disruption.</li> </ul>	D&W to set up AHJ/ NFD meeting for late May/early June. FBI to develop phasing drawings for that meeting. D&W to provide plan sketch of temp facilities for Phase 1 FBI to pick up comments from this meeting on phasing plans.	Open
04-9	<ul> <li>Phase 2A – Early Summer 2021</li> <li>U-10 Field will be planted Spring 2020. Two growing seasons: FA'20, Sp'21, and it will be ready to play on.</li> <li>Principals realized they will need to move summer programs from Balmer and NES to other buildings in the District.</li> <li>The building is done, but not able to be moved into fully just yet.</li> </ul>	NPS to review summer programs for SU' 21 schedule.	Open

0			
	<ul> <li>Abatement/demo happens during summer, after staff move-out</li> <li>Discussion of soil stockpiles – Rob stated it may be better to export/import than to work around large piles of material on-site, as space is limited.</li> </ul>		
04-10	<ul> <li>Phase 2B – School Opening 2021</li> <li>Main feature of this plan is FBI will have to use a one-lane, two-way access to the site for demo and site work.</li> <li>New circulation: bus used car drop loop; cars circulate counter-clockwise around the back of the school and drop off at back door.</li> <li>Discussion of permanent fence installation on Vail Field to keep people off the growing grass.</li> <li>FBI may also leave construction fence up to protect seeded fields so they cannot be played on, in certain cases</li> <li>FBI to look into cost of sodding the (2) U-6 fields versus seeding – schedule advantage? Also (2) U-8 fields for that matter.</li> <li>Fontaine asked if it would be possible to move NES in December 2021? Jill and Karlene expressed that this would be nearly impossible to accommodate with the schedule, effort, and disruption of building transitions.</li> <li>Melissa wondered whether staggered start times might help with school opening crunch? To be considered.</li> </ul>	FBI to provide cost to sod (2) U-6 and (2) U-8 fields in lieu of seeding	Open
04-11	<ul> <li>Phase 2C – Final Setup Fall 2021</li> <li>Hypothetical if soils stockpiles not used.</li> <li>FBI will still have to utilize one-lane access.</li> <li>If SBC or AHJ is not OK with shared drive, Vail Field will get turned over later, as FBI will have to make a temp road through the outfields of the baseball complex. Late Fall (Thanksgiving) 2021 turnover versus Spring 2022.</li> </ul>	Acceptance depends on SBC/ AHJ review.	Open
04-12	<ul> <li>Mini Phase 3 – Temp parking to U-8 fields</li> <li>Discussed also looking at sodding these fields in lieu of seeding to save time getting them on-line.</li> </ul>	FBI to provide cost to sod (2) U-6 and (2) U-8 fields in lieu of seeding	Open

The above is intended to be an accurate summary of this meeting. Please contact me with any additions, deletions, and/or corrections, for incorporation into these minutes. After 10 days, we will accept these minutes as an accurate summary of our discussion and enter them into the permanent record of the project.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Managers

TOM HENGELSBERG, AIA, NCARB, LEED AP, MCPPO PROJECT MANAGER

c: Attendees File



#### **EASEMENT APPLICATION - VERIZON and/or ELECTRIC COMPANY**

Easement Application for Underground and/or Aerial Services. Please complete all applicable sections below so that we may prepare an easement for the project. If a section does not apply, enter "N/A" or simply leave blank. Incomplete or inaccurate information could delay service.

Property Owner:	Town of Northbridge
Contact Name:	Adam Gaudette, Town Manager
Mailing Address:	7 Main Street, Whitinsville, Massachusetts 01588
Phone Number:	<u>508-234-2095</u>

#### Project Address: 21 Crescent Street, Whitinsville, Massachusetts 01588

**REGISTRY OF DEEDS INFORMATION**: Provide a Copy of the Current Owner's (yours) Recorded Deed along with the following Registry of Deeds Information: Book <u>4369</u>, Page <u>342</u>. Note, if multiple deeds make up the whole parcel, please include all deeds. If this is Registered Land, please include a copy of the Land Court Certificate of Title.

If available, provide us with a copy of the Recorded Plan of Land showing the property or the Registry of Deeds Plan Book \_\_\_\_\_\_, and Page \_\_\_\_\_\_ numbers.

**ENTITY INFORMATION (if applicable)**: If the Property Owner is a Corporation/Trust/Partnership/LLC, please provide the following Information:

\*Corporation: Authorized to execute documents for the transfer of real estate:

Name:	Title:
Name:	
*Trust: Number of Trustees:	, Name(s): Declaration of Trust Date:
Registry of Deeds Book:, Page	
*LLC: Persons Authorized to execute docur (include an original "Certificate of Good S	ments for the transfer of real estate: Standing" with the easement application).
Name:	Title:
Name:	Title:
* <b>Partnership</b> : Number of partners: for the transfer of real estate:	. Persons Authorized to execute documents
Name:	
Name:	
<u>FILING FEE</u> : Enclose a \$75.00 check paya pay for the easement recording fee at the application and check to: Right of Way D MA 01105.	able to "Verizon New England, Inc." to Registry of Deeds. Return the

If you have any questions, please contact AI Bessette at (413) 787-0310 or email at albert.e.bessette.jr@verizon.com

# Memorandum

To:	W. Edward Balmer Elementary School Building Committee	Date:	6/12/2019
From:	Joel G. Seeley	Project No.:	17020
Project:	W. Edward Balmer Elementary School		
Re:	Designer Amendment No. 15: Geotechnical Engineering Se	rvices during [	DD-CA Phases
Distribution:	School Building Committee (MF)		

#### DESIGNER AMENDMENT NO. 15: GEOTECHNICAL ENGINEERING SERVICES DURING DD-CA PHASES

- **FEE:** \$57,695.00
- **REASON:** Provide Geotechnical Engineering Services during Design Development through Construction Administration Phases at the W. Edward Balmer Elementary School site.
- **BUDGET AVAILABILITY:** This Amendment would be funded out of the Geotechnical and GeoEnvironmental Services Costs Budget, ProPay Code 0204-0300 which has the current balance of \$75,430.00.

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

# ATTACHMENT F

#### CONTRACT FOR DESIGNER SERVICES

#### AMENDMENT NO. 15

**WHEREAS**, the <u>Town of Northbridge</u> ("Owner") and <u>Dore & Whittier Architects, Inc.</u>, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the <u>W.</u> <u>Edward Balmer Elementary School Project (Project Number 201502140001)</u> at the <u>W. Edward</u> Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of June 12, 2019, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
- 2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

	Original Contract	Prior Amendments	This Amendment	After this Amendment
Feasibility Study Phase	\$200,000.00	\$ 141,803.50	\$ 0.00	\$ 341,803.50
Schematic Design Phase	\$225,000.00	\$ 4,950.00	\$ 0.00	\$ 229,950.00
Design Development Phase	\$ 0.00	\$1,959,679.00	\$ 0.00	\$ 1,959,679.00
Construction Document Phase	\$ 0.00	\$2,657,249.00	\$ 57,695.00	\$ 2,714,944.00
Bidding Phase	\$ 0.00	\$ 227,830.00	\$ 0.00	\$ 227,830.00
Construction Phase	\$ 0.00	\$2,252,218.00	\$ 0.00	\$ 2,252,218.00
Completion Phase	\$ 0.00	\$ 164,136.00	\$ 0.00	\$ 164,136.00
Total Fee	\$425,000.00	\$7,407,865.50	\$ 57,695.00	\$7,890,560.50

#### Fee for Basic Services:

This Amendment is a result of: <u>Provide Geotechnical Engineering Services during Design Development</u> through Construction Administration Phases.

#### MSBA ProPay 0204-0300

3. The Construction Budget shall be as follows:

Original Budget:	\$ <u>79,492,662.00</u>
Amended Budget	\$ <u>79,492,662.00</u>

4. The Project Schedule shall be as follows:

Original Schedule:	December 20, 2021
Amended Schedule	December 20, 2021

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

#### OWNER

Alicia Cannon (print name) Board of Selectmen, Town of Northbridge (print title) By \_\_\_\_\_\_ (signature) Date June 12, 2019

DESIGNER

Lee P. Dore

Principal / Vice President, Dore & Whittier Architects
(print title)
By
(signature)
(signature)
(signature)

Date June 12, 2019

cc. DWA Dist.; file.

Mr. Joel Seeley, AIA COO, Executive Vice President Symmes Maini & McKee Associates Project Management 1000 Massachusetts Avenue Cambridge, MA 02138

Project: Balmer Elementary School - #17-0759

Subject: ASR #15

Dear Joel,

May 31, 2019

As it is time to activate the Geotechnical Engineer for DD – CA Phase services, we present this additional service request to perform that work.

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, billed on a Time and Expenses basis, not to exceed the fee amount as follows:

DD-CA Phase Services

LGCI, Inc.

\$52,450.00

\$57.695.00

- Prepare Earth Moving Specifications
- Review CD60 Drawings and provide comments
- Review Submittals and RFI's
- Attend Kickoff Meeting and supervise any required test pits
- Site Visits during Construction Administration Phase
- Reports and Project Management
- Expenses, if any, will be billed at cost plus 10% markup

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, Not To Exceed \$5,245.00

TOTAL, ASR #15, Not To Exceed

Please see the attached **consultant's** proposal which details scope of services and schedule. Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Manager

Lee P. Do Assoc, AIA, CSI, LEED AP, MCPPO re Principal



ARCHITECTS PROJECT MANAGERS

260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax

212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955



March 30, 2018 Revised May 30, 2019

Tom Hengelsberg, AIA, LEED AP, NCARB, MCPPO Dore & Whittier Architects, Inc. 212 Battery Street Burlington, VT 05401 Phone: (802) 863-1428 Mobile: (802) 238-9585 E-mail: thengelsberg@DoreandWhittier.com

# Re: Proposal for Geotechnical Field Services Proposed W. Edward Balmer Elementary School Northbridge, Massachusetts LGCI Proposal No. 18038-Rev. 1

Dear Mr. Hengelsberg:

Lahlaf Geotechnical Consulting, Inc. (LGCI) appreciates the opportunity to submit this proposal to provide geotechnical field services for the proposed W. Edward Balmer Elementary School in Northbridge, Massachusetts. Our proposal is based on information you provided to us on the phone on March 16, 2018.

# **Background and Project Understanding**

The existing W. Edward Balmer Elementary School is located at 21 Crescent Street in Whitinsville (Northbridge), Massachusetts. The site is bordered by Crescent Street on the southern side, by Overlook Street and North Main Street on the western side, by wooded land on the northern side, and by private properties on the eastern side.

We understand that the proposed building consists of an irregularly-shaped building to be located mostly in the wooded area to the east of the existing school and partially in the grass athletic fields on the northern side of the existing school building.

LGCI performed explorations at the site and submitted a geotechnical report dated February 23, 2018. In our geotechnical report, LGCI recommended supporting the proposed building on shallow foundations after the existing fill and organic soil are removed and installing an underslab drainage system.

The purpose of our services is to provide a geotechnical engineer to observe the removal of the existing fill and organic soil and the installation of the under-slab drainage system. LGCI will also be available for general consultation with regard to geotechnical issues during construction on an as-needed basis if requested by you.

# Scope of Work

- 1. <u>Review Drawings</u> LGCI will review the geotechnical aspect of the structural and civil drawings, and we will provide written comments. We have budgeted eight (8) hours for this task.
- Prepare Earth Moving Specifications We will prepare earth moving specifications or we will review and edit Earth Moving specifications prepared by others. We have budgeted eight (8) hours for this task.
- 3. <u>Contractor Submittals and RFIs</u> LGCI will assist Dore & Whittier Architects, Inc. in reviewing requests for information (RFIs) related to geotechnical issues. We have budgeted twenty-four (24) hours for this task.
- 4. <u>Kickoff Meeting and Observe Test Pits</u> An LGCI engineer will attend a kickoff meeting at the start of construction. Also, to delineate the extent of the existing fill, LGCI will provide a geotechnical representative at the start of the earthwork operations to observe test pits excavated by the contractor. We have budgeted eight (8) hours for this task.
- 5. <u>Site Visits to Observe for Subgrade of Footings and Slabs, and the installation of the under-slab Drainage System</u> We will provide a geotechnical engineer to observe the removal of the existing fill and organic material, and to observe the subgrade of footings and slabs. If the contractor elects to crush material onsite, we will work with the contractor to come up with a blend that produces fill meeting the gradation requirements of Structural Fill and/or Ordinary Fill. We will also observe the installation of the under-slab drainage system.

We have not included in this proposal time for observing the subgrade of roadways or utility trenches. Our engineer will provide recommendations about the suitability of backfill materials. In addition, we would be pleased to attend site meetings regarding the foundation work, if requested. Our scope does not include observation of backfilling operations and field density testing. We understand that the owner will retain a separate testing agency to perform these services. We have assumed that the earthwork operations will require thirty eight (38) visits. We have budgeted nine (9) hours per visit, including travel to and from the site.

6. <u>Field Observation Reports, Review, and Coordination</u> – We will provide a geotechnical engineer to consult with you and with the contractor during earthwork operations. While we are providing our services, our engineer will also review the earthwork-related daily field reports prepared by the testing agency engaged by you and which you request that we review. Our engineer will prepare daily field reports containing a summary of our observations and a summary of the geotechnical recommendations made in the field. Our reports will be submitted weekly at the beginning of the week following our visits. We have budgeted about one (1) hour per field report and five (5) hours per week for a senior engineer for coordination and review.



LGCI's scope of services does not include an environmental assessment for the presence or absence of wetlands, or analytical testing for hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements regarding odors, colors, or unusual or suspicious items or conditions are strictly for the information of the client.

Recommendations for unsupported slopes, stormwater management, erosion control, pavement design, and detailed cost or quantity estimates are not included in our scope of work.

### **Proposed Schedule**

LGCI will begin work upon receiving authorization in the form of a signed copy of this proposal. Generally, we require a one-week notice for the first visit. During construction, we will coordinate our work with the contractor. We request a minimum of a 2-day notice before each visit.

### **Project Fee**

We will perform our services on a time-and-expenses basis using rates of \$97/hour for a field engineer, \$105/hour for our geotechnical engineer, and \$133/hour for a senior geotechnical engineer. Expenses, if any, will be billed at cost plus 10 percent.

For your planning and budgeting purposes we recommend budgeting **\$52,450** for our services. The breakdown of our fee is shown below:

1	Review Drawings	\$1,000
2	Prepare/Review Earth Moving Specs	\$1,000
3	Contractor Submittals and RFIs	\$3,000
4	Kickoff Meeting and Test Pits	\$1,050
5	Site Visits	\$37,520
6	Reports and Management	<u>\$8,880</u>
		<b>\$</b> 52,450

No services beyond those described above would be provided without your prior knowledge and approval. If site conditions or your needs require a change in the scope of work, we will prepare for your approval a change order request that summarizes the changes to the project scope and fee.

#### Terms and Conditions

We propose performing our services in general accordance with our agreement for this project dated June 26, 2017 and signed by Mr. Lee P. Dore of Dore and Whittier Architects, Inc. Your acceptance of this proposal by signing and returning one complete copy will form our agreement



#### Proposal for Geotechnical Field Services Proposed W. Edward Balmer Elementary School Northbridge, Massachusetts LGCI Proposal No. 18038

for these services, and will serve as written authorization to proceed with the described scope of work.

LGCI trusts that the above proposal will be sufficient to meet your needs. If this proposal is acceptable, please sign and return a complete copy of this proposal to LGCI. If you have any questions, please call us at (978) 330-5912.

Sincerely,

LAHLAF GEOTECHNICAL CONSULTING, INC.

Abdelmadjid M. Lahlaf, Ph.D., P.E. Principal Engineer

Agreed to by (please type name): \_\_\_\_\_\_ on (date):\_\_\_\_\_

Company Name:

Signature:



# Memorandum

To: W	I. Edward Balmer Elementary School Building Committee	Date:	6/12/2019
From: Jo	oel G. Seeley	Project No.:	17020
Project: W	I. Edward Balmer Elementary School		
Re: D	esigner Amendment No. 16: Hazardous Materials Service	s during Design Pha	ases
Distribution: Se	chool Building Committee (MF)		

#### DESIGNER AMENDMENT NO. 16: HAZARDOUS MATERIALS SERVICES DURING DESIGN PHASES

- **FEE:** \$23,100.00
- **REASON:** Provide Hazardous Materials Services during Design Phases at the W. Edward Balmer Elementary School site.

**BUDGET AVAILABILITY:** This Amendment would be funded out of the Hazardous Materials Services Costs Budget, ProPay Code 0204-0200 which has the current balance of \$100,000.00.

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

# ATTACHMENT F

#### CONTRACT FOR DESIGNER SERVICES

#### AMENDMENT NO. 16

**WHEREAS**, the <u>Town of Northbridge</u> ("Owner") and <u>Dore & Whittier Architects, Inc.</u>, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the <u>W.</u> <u>Edward Balmer Elementary School Project (Project Number 201502140001)</u> at the <u>W. Edward</u> Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of June 12, 2019, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
- 2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

	Original Contract	Prior Amendments	This Amendment	After this Amendment
Feasibility Study Phase	\$200,000.00	\$ 141,803.50	\$ 0.00	\$ 341,803.50
Schematic Design Phase	\$225,000.00	\$ 4,950.00	\$ 0.00	\$ 229,950.00
Design Development Phase	\$ 0.00	\$1,959,679.00	\$ 0.00	\$ 1,959,679.00
Construction Document Phase	\$ 0.00	\$2,714,944.00	\$ 23,100.00	\$ 2,738,044.00
Bidding Phase	\$ 0.00	\$ 227,830.00	\$ 0.00	\$ 227,830.00
Construction Phase	\$ 0.00	\$2,252,218.00	\$ 0.00	\$ 2,252,218.00
Completion Phase	\$ 0.00	\$ 164,136.00	\$ 0.00	\$ 164,136.00
Total Fee	\$425,000.00	\$7,465,865.50	\$ 23,100.00	\$7,913,660.50

#### Fee for Basic Services:

This Amendment is a result of: <u>Provide Hazardous Materials Engineering Services during Design Phases.</u>

#### MSBA ProPay 0204-0200

3. The Construction Budget shall be as follows:

Original Budget:	\$ <u>79,492,662.00</u>
Amended Budget	\$ <u>79,492,662.00</u>

4. The Project Schedule shall be as follows:

Original Schedule:	December 20, 2021
Amended Schedule	December 20, 2021

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

#### OWNER

Alicia Cannon (print name) Board of Selectmen, Town of Northbridge (print title) By \_\_\_\_\_\_ (signature) Date June 12, 2019

DESIGNER

Lee P. Dore

Principal / Vice President, Dore & Whittier Architects (print title)
By

Date June 12, 2019

May 31, 2019

Mr. Joel Seeley, AIA COO, Executive Vice President Symmes Maini & McKee Associates Project Management 1000 Massachusetts Avenue Cambridge, MA 02138

Project: Balmer Elementary School - #17-0759

Subject: ASR #16

Dear Joel,

As it is time to activate the Hazardous Materials Consultant for DD – CA Phase services, we present this additional service request to perform that work.

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, for the lump sum fee amount as follows:

DD-CA Phase Services Universal Environmental Consultants, Inc.

- Task I Asbestos Inspection Services
- Task II Hazardous Materials Design Services

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, or \$2,100.00

TOTAL, ASR #16

Please see the attached **consultant's** proposal which details scope of services and schedule. Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Manager

Lee P. Dore, Assoc, AIA, CSI, LEED AP, MCPPO Principal

cc. DWA Dist.; file.



\$21,000.00

\$23,100.00

#### ARCHITECTS PROJECT MANAGERS

260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax

212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955

www.doreandwhittier.com



March 15, 2018

Mr. Tom Hengelsberg Dore & Whittier Architects 260 Merrimac Street Newburyport, MA 01950

Reference: Hazardous Materials Consulting Services Balmer School, Northbridge, MA

Dear Mr. Hengelsberg:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

We are pleased to submit our proposal for the above referenced project.

Should this proposal meet with your approval, kindly execute and return the enclosed proposal.

Please do not hesitate to call me at (508) 628-5486 if you have questions about this proposal or our services.

Very truly yours,

Universal Environmental Consultants

Ammar M. Dieb President

UEC:\Proposals\IDM\Dore-Balmer School-IDM Task I & II.DOC

Enclosure

#### PROPOSAL FOR HAZARDOUS MATERIALS CONSULTING SERVICES AT THE BALMER ELEMENTARY SCHOOL NORTHBRIDGE, MA

#### SCOPE OF SERVICES:

#### **TASK I (Asbestos Inspection Services):**

- A. Conduct an EPA NESHAP inspection of the School for Asbestos Containing Materials (ACM) and obtain data for final design.
- B. Retain the services of a demolition/site contractor (Contractor) to excavate around the foundations walls to expose any suspect ACM that might be found below grade. Backfill using the same excavated soil.
- C. The contractor will also perform selective destructive demolition of the exterior walls to expose any suspect ACM that might be found. Patch the exterior walls with similar or equivalent.
- D. Collect additional bulk samples from suspect materials and analyze these samples for asbestos by Polarized Light Microscopy (PLM) using the Point Count Method (if needed).

#### **TASK II (Hazardous Materials Design Services):**

- A. Prepare Contract Specifications based on the recommendations as accepted by the client to include the following:
  - Asbestos;
  - Environmental Procedures;
  - Indoor Air Quality;
- B. Prepare addenda and provide any additional information required during the bid period.

#### FEES FOR SERVICES:

<b>TASK I (Asbestos Inspection Services):</b> Lump Sum Fee including all sampling of	\$ 9,500.00
TASK II (Hazardous Materials Design Services): Lump Sum Fee of	\$ 11,500.00

Proposal Authorized By:

Ammar M. Dieb President

Proposal Accepted by:

Signature:

Name:



# Memorandum

To:	W. Edward Balmer Elementary School Building Committee	Date:	6/12/2019
From:	Joel G. Seeley	Project No.:	17020
Project:	W. Edward Balmer Elementary School		
Re:	Designer Amendment No. 17: Site Geo-Environmental Service	vices	
Distribution:	School Building Committee (MF)		

#### DESIGNER AMENDMENT NO. 17: SITE GEO-ENVIRONMENTAL SERVICES

**FEE:** \$16,170.00

**REASON:** Provide Site Geo-Environmental Services at the W. Edward Balmer Elementary School site.

**BUDGET AVAILABILITY:** This Amendment would be funded out of the Geotechnical and GeoEnvironmental Budget, ProPay Code 0204-0300 which has the current balance of \$75,430.00.

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

# ATTACHMENT F

#### CONTRACT FOR DESIGNER SERVICES

#### AMENDMENT NO. 17

**WHEREAS**, the <u>Town of Northbridge</u> ("Owner") and <u>Dore & Whittier Architects, Inc.</u>, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the <u>W.</u> <u>Edward Balmer Elementary School Project (Project Number 201502140001)</u> at the <u>W. Edward</u> Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of June 12, 2019, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
- 2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

	Original Contract	Prior Amendments	This Amendment	After this Amendment
Feasibility Study Phase	\$200,000.00	\$ 141,803.50	\$ 0.00	\$ 341,803.50
Schematic Design Phase	\$225,000.00	\$ 4,950.00	\$ 0.00	\$ 229,950.00
Design Development Phase	\$ 0.00	\$1,959,679.00	\$ 0.00	\$ 1,959,679.00
Construction Document Phase	\$ 0.00	\$2,738,044.00	\$ 16,170.00	\$ 2,754,214.00
Bidding Phase	\$ 0.00	\$ 227,830.00	\$ 0.00	\$ 227,830.00
Construction Phase	\$ 0.00	\$2,252,218.00	\$ 0.00	\$ 2,252,218.00
Completion Phase	\$ 0.00	\$ 164,136.00	\$ 0.00	\$ 164,136.00
Total Fee	\$425,000.00	\$7,488,660.50	\$ 16,170.00	\$7,929,830.50

#### Fee for Basic Services:

This Amendment is a result of: Provide Site GeoEnvironmental Services.

MSBA ProPay 0204-0300

3. The Construction Budget shall be as follows:

Original Budget:	\$ <u>79,492,662.00</u>
Amended Budget	\$ <u>79,492,662.00</u>

4. The Project Schedule shall be as follows:

Original Schedule:	December 20, 2021
Amended Schedule	December 20, 2021

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

#### OWNER

Alicia Cannon (print name) Board of Selectmen, Town of Northbridge (print title) By \_\_\_\_\_\_ (signature) Date June 12, 2019

DESIGNER

Lee P. Dore

Principal / Vice President, Dore & Whittier Architects (print title)
By

Date June 12, 2019



May 31, 2019

Mr. Joel Seeley, AIA COO, Executive Vice President Symmes Maini & McKee Associates Project Management 1000 Massachusetts Avenue Cambridge, MA 02138

Project: Balmer Elementary School - #17-0759

Subject: ASR #17

Dear Joel,

As it is time to activate the Site Geo-Environmental Consultant for DD – CA Phase services, we present this additional service request to perform that work.

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, for the lump sum fee amount as follows:

DD-CA Phase Services	F-S Engineers, Inc.	\$5,500.00
• Tasks 1.11-1.12 – L	Underground Storage Tank (UST) Closure	

The following additional services would only be activated in the event that contaminated soils were found at the UST. Please accept the following fee proposal for contingent additional consulting services, billed on a Time & Expense basis, not to exceed the amount as follows:

DD-CA Phase Services	F-S Engineers, Inc.	\$9,200.00
<ul> <li>Tasks 1.13-1.15 – Op</li> </ul>	tional UST Tank Closure Tasks	

Note that the following services listed on the proposal would only be activated as needed and will be dealt with on a later ASR:

• Task 1.2 – Soil Disposal Characterization

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, or NTE \$1,470.00

TOTAL, ASR #17, Not to Exceed

\$16,170.00

ARCHITECTS PROJECT MANAGERS

260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax

212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955

www.doreandwhittier.com

Mr. Joel Seeley, AIA SMMA OPM 5/31/2019 Page 2

Please see the attached **consultant's** proposal which details scope of services and schedule. Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Project Manager

Lee P. Dore, Assoc, AIA, CSI, LEED AP, MCPPO Principal

cc. DWA Dist.; file.



March 28, 2018

Mr. Thomas Hengelsberg, Project Manager Dore and Whittier Architects, Inc. 212 Battery Street Burlington, VT 05401

Re: Professional Services Relative to UST Removal and Soil Characterization at the Balmer Elementary School Site in Northbridge, Massachusetts

Dear Tom:

FS Engineers, Inc. (FSE) is pleased to present this proposal for professional services for the above referenced site. FSE is familiar with the Site and its conditions based upon soil characterization studies performed in October 2017. According to the available information there is an underground storage tank (UST) located adjacent to the school building.

In general, our proposed scope of services is to:

- (1) Observe the UST removal and visually assess the UST and surrounding soils for evidence of a petroleum (fuel oil) release;
- (2) Obtain six soil samples (four sidewall and two bottom samples) from the UST excavation after the UST is removed and before the excavation is backfilled;
- (3) Submit the samples for extractable petroleum hydrocarbon (EPH) and volatile petroleum hydrocarbon (VPH) analysis in order to evaluate if a petroleum release occurred from the UST; and,
- (4) Prepare a UST closure letter report describing the UST removal and soil sample analysis results.

The above scope of services assumes that no release of fuel oil has occurred from the UST. If it is determined during the removal that a release of fuel oil to soil has occurred from the UST, additional tasks and cost estimates have been included for oversight of the contaminated soil removal, transport of the soil to disposal/reuse facility under a Bill of Lading, and preparation of a Limited Removal Action (LRA) closure report.



In addition, FSE will collect soil samples from soil/fill stockpiles requiring offsite disposal/reuse. The stockpiles will be generated as excess soils from site grading and utilities installation. An estimated 1,000 cubic yards of soil will be characterized for offsite disposal/reuse.

FSE is prepared to commit the necessary resources to observe UST removal by the contractor retained by others. The project team will be led by Mr. Farooq Siddique, PE, LSP, as Principal-In-Charge. Mr. Siddique has more than 25 years of professional experience in environmental and civil engineering. He is a registered Professional Engineer and Licensed Site Professional in Massachusetts.

Our proposal includes the Scope of Services, Schedule of Services, Fee for Services, Basis of Proposal, and Agreement for Professional Services.

# **1.0 SCOPE OF SERVICES**

The following is a list of tasks to be performed under this Agreement:

# 1.1 UNDERGROUND STORAGE TANK CLOSURE

# 1.11 UST Removal and Soil Sampling

FSE personnel will be onsite during the UST removal to visually assess the UST, associated piping, and surrounding soils, for evidence of a petroleum release. The UST and buried piping (supply line) will be carefully examined for evidence of holes or other conditions that may indicate a historical release. FSE will document the UST removal with field notes and photographs. The piping between the UST and the building will be removed and examined as part of the closure process.

FSE personnel will obtain six soil samples from the open excavation immediately upon removal of the UST. Four composited sidewall samples and two composited bottom sample will be obtained. The soil samples will be field screened for total volatile organic compounds (VOCs) using a photoionization detector (PID). FSE will also field screen soil samples with the PID during the soil excavation to evaluate the excavated soils for evidence of a historical release from overfills and/or the supply line piping. The soil samples will be submitted to a MassDEP-certified laboratory for analysis for EPH with target PAH and VPH with target analytes. The analytical results will be tabulated and compared to MassDEP Reportable Concentrations for the EPH, PAH, VPH, and target analytes to establish if a release has occurred.

# 1.12 UST Closure Report Preparation

FSE will prepare a plan that shows the pertinent site features including the building, UST, UST piping, and soil sampling locations. FSE assumes that the client will provide a base existing conditions site plan. FSE will evaluate, validate and tabulate the soil analytical data. The UST closure report will include a site plan, photographs, laboratory certificates of analysis, and text describing the sampling procedures and sample analysis results.

# **Optional Tasks (if oil released from the UST)**

If it is determined based on soil sampling results that a release has occurred from the UST, the following tasks are proposed to oversee the excavation and offsite transport of contaminated soil.

# **1.13 Bill of Lading Preparation**

If contaminated soil is encountered in the UST excavation, and excavation and offsite disposal are required, FSE will prepare a Bill of Lading (BOL) for soil disposal at a disposal/reuse facility in Massachusetts. The BOL will include the results of soil disposal characterization sampling. FSE has assumed, per the LRA regulations contained in the Massachusetts Contingency Plan (MCP) at 340 CMR 40.0318, that no more than 100 cubic yards of soil will be excavated.

# 1.14 Oversight of Contaminated Soil Removal

FSE has budgeted two days of onsite oversight of contaminated soil removal. An additional six confirmatory soil samples will be obtained from the open excavation after the contaminated soil has been removed, in order to establish that closure conditions have been achieved.

# 1.15 Limited Removal Action Report

FSE will prepare a Limited Removal Action report that includes a site plan, photographs, laboratory certificates of analysis, Bill of Lading documentation, and text describing the sampling procedures and sample analysis results.

# 1.2 SOIL DISPOSAL CHARACTERIZATION

# 1.21 Soil Sample Collection

FSE will collect soil samples from soil stockpiles destined for offsite disposal/reuse for laboratory analyses. Number of samples to be collected is based upon 1 soil sample per 500 tons of soil/fill to be disposed at a landfill. It was assumed that less 1,500 tons of soil will require off-site disposal/reuse. Field screen soil samples for total volatile organic compounds (VOC) using a photoionization detector (PID). Based upon PID field screening, collect up to 3 soil samples representative of the soil stockpiles and submit for laboratory analysis for typical soil landfill disposal characterization.

# **1.22** Prepare Letter Report

Prepare a letter report that describes the sampling procedures, presents the tabulated laboratory soil sample analysis results, and contains the laboratory reports and a site plan.

# **1.23** Field Observation

Provide limited field observation during loading and/or transportation and disposal. One (1) day of field observation is included here. The purpose of the field observation is to coordinate with the site supervisor record keeping, compliance with appropriate regulation and requirements, and the progress of work.

The site supervisor will periodically communicate with FSE progress of excavation, transportation, and disposal. The site supervisor will maintain accurate logs for soil excavation, transportation, and disposal. Such logs will be provided to FSE at the end of the project for compliance reporting. The rate of work progress and schedule will also be maintained by the site supervisor.

# 1.24 Soil Disposal Documentation

Prepare Bill of Lading and related documentation for the selected soil receiving facility.

# 2.0 SCHEDULE OF SERVICES

FSE is prepared to commence work on this project upon receipt of written authorization to proceed.

# 3.0 FEES FOR SERVICES

For this project as defined in Article 1.0, "Scope of Services", compensation for UST closure Tasks 1.11 and 1.12 shall be the **Fixed Fee of Five Thousand Five Hundred Dollars** (\$5,500).

For this project as defined in Article 1.0, "Scope of Services", the additional estimated compensation for OPTIONAL UST closure Tasks 1.13, 11.4 and 1.15 shall be the **Estimated Fee of Nine Thousand Two Hundred Dollars (\$9,200)**.

For this project as defined in Article 1.0, "Scope of Services", compensation for Task 1.2 Soil Disposal Characterization shall be the **Fixed Fee of Nine Thousand Seven Hundred Dollars (\$9,700)**.

The amounts will not be exceeded without prior written authorization from the client.

# 4.0 BASIS OF PROPOSAL

- (a) We have assumed that all existing site information will be made available.
- (b) We have assumed that any previous studies conducted on the site will be made available.
- (c) We have assumed that access to the site will be provided by client.
- (d) We understand that the UST removal contractor is being retained directly by the Client.

# 5.0 AGREEMENT FOR PROFESSIONAL SERVICES - Attached herewith.

Please sign this Agreement. Retain a copy for your files and return the other to us; the receipt of which shall constitute Notice-to-Proceed. If you have any questions, please do not hesitate to contact us. We look forward to working with you on this important project. Thank you for considering FS Engineers, Inc.

Very truly yours,

FS ENGINEERS, INC. Digitally signed by Farooq Siddique DN: cn=Farooq Siddique, o=FS Engineers, Inc., ou, email=fsiddique@fsengrs.com, c=US Date: 2018.03.30 09:32:45 -04'00'	AGREED AND ACCEPTED BY CLIENT:
Farooq Siddique, PE, LSP	Name
Principal	
	Title

Date



# Memorandum

To:	W. Edward Balmer Elementary School Building Committee	Date:	6/12/2019
From:	Joel G. Seeley	Project No.:	17020
Project:	W. Edward Balmer Elementary School		
Re:	Designer Amendment No. 18: Horticultural Soil Testing		
Distribution:	School Building Committee (MF)		

#### DESIGNER AMENDMENT NO. 18: HORTICULTURAL SOIL TESTING SERVICES

- **FEE:** \$4,257.00
- **REASON:** Provide Horticultural Soil Testing Services at the W. Edward Balmer Elementary School site.

**BUDGET AVAILABILITY:** This Amendment would be funded out of the Other Reimbursable Costs Budget, ProPay Code 0203-9900 which has the current balance of \$94,500.00.

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

# ATTACHMENT F

#### CONTRACT FOR DESIGNER SERVICES

#### AMENDMENT NO. 18

**WHEREAS**, the <u>Town of Northbridge</u> ("Owner") and <u>Dore & Whittier Architects, Inc.</u>, (the "Designer") (collectively, the "Parties") entered into a Contract for Designer Services for the <u>W.</u> <u>Edward Balmer Elementary School Project (Project Number 201502140001)</u> at the <u>W. Edward</u> Balmer Elementary School on June 26, 2017 "Contract"; and

WHEREAS, effective as of June 12, 2019, the Parties wish to amend the Contract:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes the Designer to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
- 2. For the performance of services required under the Contract, as amended, the Designer shall be compensated by the Owner in accordance with the following Fee for Basic Services:

	Original Contract	Prior Amendments	This Amendment	After this Amendment
Feasibility Study Phase	\$200,000.00	\$ 141,803.50	\$ 0.00	\$ 341,803.50
Schematic Design Phase	\$225,000.00	\$ 4,950.00	\$ 0.00	\$ 229,950.00
Design Development Phase	\$ 0.00	\$1,959,679.00	\$ 0.00	\$ 1,959,679.00
Construction Document Phase	\$ 0.00	\$2,754,214.00	\$ 4,257.00	\$ 2,758,471.00
Bidding Phase	\$ 0.00	\$ 227,830.00	\$ 0.00	\$ 227,830.00
Construction Phase	\$ 0.00	\$2,252,218.00	\$ 0.00	\$ 2,252,218.00
Completion Phase	\$ 0.00	\$ 164,136.00	\$ 0.00	\$ 164,136.00
Total Fee	\$425,000.00	\$7,488,660.50	\$ 4,257.00	\$7,934,087.50

#### Fee for Basic Services:

This Amendment is a result of: Provide Horticultural Soils Testing Services

#### MSBA ProPay 0203-9900

3. The Construction Budget shall be as follows:

Original Budget:	\$ <u>79,492,662.00</u>
Amended Budget	\$ <u>79,492,662.00</u>

4. The Project Schedule shall be as follows:

Original Schedule:	December 20, 2021
Amended Schedule	December 20, 2021

5. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Designer have caused this Amendment to be executed by their respective authorized officers.

#### OWNER

Alicia Cannon (print name) Board of Selectmen, Town of Northbridge (print title) By \_\_\_\_\_\_ (signature) Date June 12, 2019

DESIGNER

Lee P. Dore

Principal / Vice President, Dore & Whittier Architects (print title)
By

Date June 12, 2019

June 4, 2019

Mr. Joel Seeley, AIA COO, Executive Vice President Symmes Maini & McKee Associates Project Management 1000 Massachusetts Avenue Cambridge, MA 02138

Project: Balmer Elementary School - #17-0759

Subject: ASR #18

Dear Joel,

At the request of the School Building Committee, we present this additional service request to perform Horticultural Soils testing services. The intent of this testing is to ascertain the loam topsoil composition so that amendments may be accurately specified for on-site topsoil re-use, and associated costs captured in the cost estimate.

In accordance with contract Article 8, please accept the following fee proposal for additional consulting services, for the lump sum fee amount as follows:

Loam Testing Services

LGCI, Inc.

- Obtain (10) soil samples using UMass standard procedures
- Package and Ship samples
- Laboratory Testing at UMass Amherst
- Forward results to Landscape Architect for interpretation and inclusion in project documents

In accordance with contract Article 9, Dore & Whittier Architects hereby submits a fee for coordination of these additional services in the amount of 10%, or \$387.00

TOTAL, ASR #18

\$4,257.00

\$3,870.00

Please see the attached **consultant's** proposal which details scope of services and schedule. Note that all other provisions of the prime contract remain in force.

Sincerely,

DORE & WHITTIER ARCHITECTS, INC. Architects • Rroject Manager

Lee P. Dore, Assoc, AIA, CSI, LEED AP, MCPPO Principal

cc. DWA Dist.; file.



260 Merrimac Street Bldg 7 Newburyport, MA 01950 978.499.2999 ph 978.499.2944 fax

212 Battery Street Burlington, VT 05401 802.863.1428 ph 802.863.6955





June 3, 2019

Tom Hengelsberg, AIA, LEED AP, NCARB, MCPPO Dore & Whittier Architects, Inc. 212 Battery Street Burlington, VT 05401 Phone: (802) 863-1428 Mobile: (802) 238-9585 E-mail: thengelsberg@DoreandWhittier.com

#### Re: Proposal for Loam Testing Proposed W. Edward Balmer Elementary School Northbridge, Massachusetts LGCI Proposal No. 19054

Dear Mr. Hengelsberg:

Lahlaf Geotechnical Consulting, Inc. (LGCI) appreciates the opportunity to submit this proposal to provide loam testing for the proposed W. Edward Balmer Elementary School in Northbridge, Massachusetts. Our proposal is based on information you provided to us on the phone on May 14, 2019.

The purpose of our services is to obtain samples of the topsoil at the site of the existing school and submit them for loam analyses.

#### Scope of Work

- 1. <u>Obtain Samples</u> We will provide an engineer to visit the site to obtain topsoil samples at ten (10) locations provided to us by you. We have budgeted one day for this task.
- 2. <u>Package and Ship Samples</u> We will label, pack, and ship the samples to the UMass Soil and Plant Tissue Testing Lab in Amherst, Massachusetts.
- 3. <u>Laboratory Tests</u> We will submit the samples for the following tests:
  - Routine Analysis, including pH, exchangeable acidity, Modified Morgan extractable nutrients (P, K, Ca, Mg, Fe, Mn, Zn, Cu, B, S), lead (Pb), and aluminum (Al), cation exchange capacity, and base saturation, as well as crop-specific lime and nutrient recommendations,
  - Organic Content,
  - Soluble Salts,
  - Soil Nitrate,
  - Comprehensive Particle Size Analysis and Grain-size Distribution Curve.

4. <u>Lab Results</u> – LGCI will forward the laboratory test results to you upon receipt from UMass. Our services do not include commenting on or interpreting the test results.

LGCI's scope of services does not include an environmental assessment for the presence or absence of wetlands, or analytical testing for hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site. Any statements regarding odors, colors, or unusual or suspicious items or conditions are strictly for the information of the client.

Recommendations for unsupported slopes, stormwater management, erosion control, pavement design, and detailed cost or quantity estimates are not included in our scope of work.

#### **Proposed Schedule**

LGCI will begin work upon receiving authorization in the form of a signed copy of this proposal. e will provide our field engineer to obtain the samples within one to two weeks of receiving the authorization to proceed. We will submit the results upon receiving them from UMass. The laboratory testing typically takes four (4) weeks to complete.

#### **Project Fee**

We will perform our services for a lump sum of \$3,870.

Additional approved services will be performed on a time-and-expenses basis using rates of \$97/hour for a field engineer, \$107/hour for our geotechnical engineer, and \$153/hour for a senior geotechnical engineer. Expenses, if any, will be billed at cost plus 10 percent.

No services beyond those described above would be provided without your prior knowledge and approval. If site conditions or your needs require a change in the scope of work, we will prepare for your approval a change order request that summarizes the changes to the project scope and fee.

#### Terms and Conditions

We propose performing our services in general accordance with our agreement for this project dated June 26, 2017 and signed by Mr. Lee P. Dore of Dore and Whittier Architects, Inc. Your acceptance of this proposal by signing and returning one complete copy will form our agreement for these services and will serve as written authorization to proceed with the described scope of work.

LGCI trusts that the above proposal will be sufficient to meet your needs. If this proposal is acceptable, please sign and return a complete copy of this proposal to LGCI. If you have any questions, please call us at (978) 330-5912.

Sincerely,



Proposal for Loam Testing Proposed W. Edward Balmer Elementary School Northbridge, Massachusetts LGCI Proposal No. 19054

LAHLAF GEOTECHNICAL CONSULTING, INC.

Pur

Abdelmadjid M. Lahlaf, Ph.D., P.E. Principal Engineer

Agreed to by (please type name): \_\_\_\_\_\_ on (date):\_\_\_\_\_\_

**Company Name:** 

Signature:

June 10, 2019

Ms. Melissa Walker Business Manager Northbridge Public Schools 87 Linwood Avenue Whitinsville, Massachusetts 01588

Re: New W. Edward Balmer Elementary School	Whitinsville, Massachusetts
Structural Peer Review Services Proposal	SMMA No. 17020

Dear Ms. Walker:

We are pleased to submit this proposal for the Owner's Structural Peer Review services for the new W. Edward Balmer Elementary School Project.

The Owner's Structural Peer Review is a requirement of the State Building Code and MSBA. We have requested proposals from three (3) companies that provide these services. The companies are:

- 1. Daigle Engineering
- 2. Souza True and Partners
- 3. RSV Associates

The proposal from RSV Associates dated June 6, 2019 is the most competitive. Their fee is \$3,200.00.

The Total Project Budget, ProPay Code 0102-1000, includes an allowance of Forty Thousand Dollars (\$40,000.00) for reimbursable and other services, which the Owner's Structural Peer Review will be applied to.

The cost for RSV Associates' services will be billed at our cost plus 10% in accordance with Article 10 of our Contract for a total fee of \$3,520.00.

I will call you to review.

Very truly yours,

#### SMMA | Symmes Maini & McKee Associates

oel G \$eeley Project Director

cc: contract file, Antone Dias, Sarah Traniello

enclosures: Proposals from Daigle Engineering, Souza True and Partners, RSV Associates

/ /P:\2017\17020\00-INFO\0.3 Contract\OPM Contract\OPM Amendments\Amendment No. 2 - Structural Peer Review\Structrural Peer Review Proposal.Doc

SYMMES MAINI & McKEE ASSOCIATES 1000 MASSACHUSETTS AVENUE CAMBRIDGE, MASSACHUSETTS 02138 T. 617.547.5400 F. 800.648.4920 www.smma.com

#### ATTACHMENT B

## CONTRACT FOR PROJECT MANAGEMENT SERVICES AMENDMENT NO. <u>2</u>

WHEREAS, the <u>Northbridge Public Schools</u> ("Owner") and <u>Symmes, Maini & McKee</u> <u>Associates, Inc. (SMMA)</u>, (the "Owner's Project Manager") (collectively, the "Parties") entered into a Contract for Project Management Services for the <u>W. Edward Balmer</u> <u>Elementary School Project (Project Number 201502140001)</u> at the <u>W. Edward Balmer</u> <u>Elementary School on February 14, 2017 "Contract"; and</u>

**WHEREAS**, effective as of <u>June 12, 2019</u>, the Parties wish to amend the Contract, as amended:

**NOW, THEREFORE**, in consideration of the promises and the mutual covenants contained in this Amendment, and other good and valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, the Parties, intending to be legally bound, hereby agree as follows:

- 1. The Owner hereby authorizes the Owner's Project Manager to perform services for the Design Development Phase, the Construction Phases, and the Final Completion Phase of the Project, pursuant to the terms and conditions set forth in the Contract, as amended.
- For the performance of services required under the Contract, as amended, the Owner's Project Manager shall be compensated by the Owner in accordance with the following Fee for Basic Services:

Fee for Basic Services:	Original Contract	Prior Amendments	This Amendment	After this Amendment
Feasibility Study Phase	\$ 60,000.00	\$ 0.00	\$ 0.00	\$ 60,000.00
Schematic Design Phase	\$ 45,000.00	\$ 0.00	\$ 0.00	\$ 45,000.00
Design Development Phase		\$ 180,250.00	\$ 0.00	\$ 180,250.00
Construction Document Phase		\$ 250,025.00	\$ 3,250.00	\$ 253,275.00
Bidding Phase		\$ 95,050.00	\$ 0.00	\$ 95,050.00
Construction Phase		\$1,912,599.00	\$ 0.00	\$ 1,912,599.00
Completion Phase		\$ 120,080.00	\$ 0.00	\$ 120,080.00
Total Fee	\$105,000.00	\$2,558,004.00	\$ 3,250.00	\$2,666,254.00

This Amendment is a result of: <u>Provide Structural Peer Review Services. Work to be</u> performed under ProPay Code 0102-0000.

3. The Construction Budget shall be as follows:

Original Budget:	\$ <u>79,492,662.00</u>
Amended Budget	\$ <u>79,492,662.00</u>

4. The Project Schedule shall be as follows:

Original Schedule:	December 20, 2021
Amended Schedule	December 20, 2021

- 5. These subconsultant services are being provided through the Owner's Project Manager for the convenience of the Owner. The Owner's Project Manager assumes no liability for the services of such subconsultant.
- 6. This Amendment contains all of the terms and conditions agreed upon by the Parties as amendments to the original Contract, as amended. No other understandings or representations, oral or otherwise, regarding amendments to the original Contract, as amended, shall be deemed to exist or bind the Parties, and all other terms and conditions of the Contract, as amended, remain in full force and effect.

IN WITNESS WHEREOF, the Owner, with the prior approval of the Authority, and the Owner's Project Manager have caused this Amendment to be executed by their respective authorized officers.

#### OWNER

Alicia Cannon (print name) Board of Selectmen, Town of Northbridge (print title) By \_\_\_\_\_(signature) Date June 12, 2019 **OWNER'S PROJECT MANAGER** Joel G. Seeley (print name) Project Director, Symmes Maini & McKee Associates, Inc. (SMMA) (print title)

By \_\_\_\_\_\_(signature) Date June 12, 2019

## RSV ASSOCIATES CONSULTING ENGINEERS

10 MAZZEO DRIVE, SUITE 201-G, RANDOLPH, MA02368\*PHONE (781)963-5786

June 6, 2019

Joel G. Seeley Project Director Symmes Maini & Mckee Associates, Inc. 1000 Massachusetts Ave. Cambridge, MA 02138

#### RE: New W. Edward Balmer Elementary School Whitinsville, MA Independent Structural Engineer Review

Dear Mr. Seeley :

Attached please find a copy of proposal for performing structural peer review for the above referenced project, affidavit for current registered professional engineer, resume, and partial list projects for which structural peer review services were provided. If we are selected to perform structural review for this project, we will provide you a copy of professional liability insurance.

Please call if you have any questions.

Yours truly,

Victor Verma, P.E., Principal RSV ASSOCIATES

## RSV ASSOCIATES CONSULTING ENGINEERS

#### 10 MAZZEO DRIVE, SUITE 201-G, RANDOLPH, MA02368\*PHONE (781)963-5786

June 6, 2019

Page: 1 of 2

Joel G. Seeley Project Manager Symmes Maini & Mckee Associates, Inc. 1000 Massachusetts Ave. Cambridge, MA 02138

#### RE: New W. Edward Balmer Elementary School Whitinville, MA Independent Structural Engineer Review

Dear Mr. Seeley:

We are pleased to provide the following proposal for structural peer review services for the above referenced project. We understand the scope of work to include the following:

- 1. Review all structural related specifications.
- 2. Review design criteria and assumptions used in design.
- 3. Review whether the Design Loads (Gravity and Lateral) used are in agreement with Governing Building Code.
- 4. Check if the organization of the structure is conceptually correct including structural load path.
- 5. Review Geotechnical report and its implementations in foundation design.
- 6. Review basic assumptions used for distributing the Lateral loads to main Lateral Resistance Systems.
- 7. Perform independent calculations for a typical bay, to investigate beams, columns, reinforced masonry walls, braced frames foundations design and other major structural members.
- 8. Meet with the structural Engineer of Record, as may be required in performance of the review.

10 MAZZEO DRIVE, SUITE 201-G, RANDOLPH, MA02368\*PHONE (781)963-5786

Page: 2 of 2

Our fee for the scope described in items 1 thru 8 (page 1), shall be a lump sum of \$3,200.00 included in the lump sum are attending meetings, travel time, expenses to review the comments on the structural design with structural engineer of record and writing a detail report after peer review is completed.

Should the term of this be acceptable, to you please return a signed copy formally authorizing to proceed with the work.

Yours truly,

Victor Verma, P.E., Principal RSV ASSOCIATES

Symmes Maini & Mckess Assoc, Inc.

CC:VV/DW

## RSV ASSOCIATES CONSULTING ENGINEERS

## 10 MAZZEO DRIVE, SUITE 201-G,RANDOLPH,MA02368\*PHONE (781)963-5786\*FAX (781)843-3752

Victor Verma

Page: 1 of 2

Professional Education	B.S.C.E M.S.C.E.	Kansas State University University of Michigan
Professional Registration	Massachusetts New York	
Professional Membership	American Institute of Boston Society of Civ	
Professional Experience	schools, condos, feasi March 1995 to July I Summer Schein Arch Cambridge, MA. Job Title : Structural Responsibilities invo schools & retail store coordinated all wor tower support, writte April 1993 to March Worked as independe buildings, design fram	n. / Engineers l Engineer olve conceptual design, final design of retail shopping center, es modification of exiting foundation for additional loads, k with architect's, checked structural shop drawings, cooling en field inspection report.

Nov 1989 to Jan. 1993 Badgers Engineers Cambridge, MA. Job Title: Structural Engineer Responsibilities involve design of industrial buildings, building & water treatment plants, mat design on piles, moment & braced frames analysis & design, structural framing, machine foundation design, checked design & shop drawings.

April 1984 to Nov. 1989 Macdonald Assoc. Braintree, MA. Job Title : Structural Engineer Responsibilities include conceptual design, final design for mid high rise commercial buildings, schools, apartments ,masonry walls design for lateral loads, flat slab analysis & design, composite beams design, resolved all field related problems.

June 1975 to April 1984. Stone & Webster Engineering Corp. Boston, MA. Job Title : Structural Engineer Responsibilities involve design of structural framing for various buildings in nuclear power Plants, checked steel & concrete shop drawings, truss bracing design, column

base plates design, resolved field related problems.

- 1. Middleborough High School, Middleborough, MA
- 2. South High Community School , Worcester, MA
- 3. Hildreth Elementary School, Harvard, MA
- 4. Minutemen Regional Voc Tech School, Lexington, MA
- 5. Hingham Middle School, Hingham, MA

Page 44 of 59



June 10, 2019

Joel G. Seeley Symmes Maini & McKee Associates, Inc. 1000 Massachusetts Avenue Cambridge, MA 02138

#### RE: W. EDWARD BALMER ELEMENTARY SCHOOL INDEPENDENT STRUCTURAL PEER REVIEW PROPOSAL 21 CRESCENT STREET ~ WHITINSVILLE, MA 01588 (DEI Project No. D4085)

Dear Mr. Seeley:

Per your request, we are submitting this proposal to you for conducting a "peer review" of the structural design for the above reference project in Whitinsville, MA. This proposal is in response to the RFP you submitted.

# GENERAL CONDITIONS

The project consists of new construction, which includes a new three-story building with approximately 171,530 square feet. The new W. Edward Balmer Elementary School will contain a gymnasium, kitchen and cafeteria, media center, three stories of classrooms, administrative offices, and support spaces. The proposed structure would bear on reinforced concrete spread footings; and, the perimeter foundation walls would bear on continuous reinforced concrete strip footings extending at least 4'-0" below grade. The foundations will be conventional shallow foundations with first floor construction slab on grade. The second and third floors will consist of concrete slabs and composite steel framing. The roof framing will consist of metal roof deck on steel beams, except in gymnasium where steel joists will be used, spanning between CMU bearing walls. The building will be primarily braced by concentrically loaded steel bracing members.

# OBJECTIVE OF REVIEW

The objective of this review is to determine if, generally, the structural plans and specifications for the above referenced project are in compliance with the structural requirements of the building code. This objective is limited to the extent necessary to render an opinion regarding the stability and integrity of the primary structural system of the building per the Massachusetts State Building Code's Peer Review criteria described below. This review does not address other structural systems nor does it address serviceability issues.

Daigle Engineers, Inc. 1 East River Place Methuen, MA 01844-3818

978 682 1748 978 682 6421 fax

www.daigleengineers.com.com

Over 35 Years in Business ~ Est. 1979 DEI + 6.10 19 + D4085-P-061019.docx + Page I of 6

Initialed by: \_\_\_\_\_



Our review will include performing the following services:

- 1) Check to assure that design loads conform to the Code;
- 2) Check other structural design criteria and assumptions conform to the Code and with accepted engineering practice;
- 3) Confirm that the structural design incorporates pertinent results and recommendations of geotechnical investigations;
   4) Observed and the structural design incorporates pertinent results and recommendations
- 4) Check that the organization of the structure is conceptually correct; and,
- 5) Make independent calculations for a representative fraction of systems, member, and details to check their adequacy. The number of representative systems, members, and details shall be as we deem necessary to form a basis for our conclusions.

# RESPONSIBILITY

At no time shall it be construed that the Structural Engineer Project Peer Reviewer (Daigle Engineers, Inc.) through their project peer review services, is supplanting, or joining with, the SER (Structural Engineer of Record) in his or her professional responsibility for the design of the Primary Structural System, or any other structural aspects of the project.

# SCOPE OF SERVICES

Our services under this contract would entail conducting a structural peer review in accordance with the Ninth Edition of the Massachusetts State Building Code, 780 CMR 105.9, using the review requirements described below.

During our review we will communicate with the SER as required to have any questions answered and concerns addressed with regard to our review. A copy of these issues will be forwarded to the SER for record purposes. Typically, this process results in either us accepting the SER's justification through supporting documentation or the SER adjusting the construction documents to accommodate our concerns.

Any changes to the construction documents that are deemed necessary shall be submitted to our office via a stamped letter by the SER including any applicable sketches or copies of revised details. If significant adjustments are required, a revised set of structural drawings would have to be resubmitted to us for verification that all issues noted have been properly addressed. Said revised drawings shall bear a revision date, along with the "wet seal" and original signature of the SER so that our final letter of acceptance can be issued with explicit reference being made to the approved drawings. If revisions are to be made, we will require that they be submitted to our office prior to issuing our final report.

Upon completion of our review and, if required, receipt of substantiating documentation of changes made by the SER, we will then issue our report. The report will state our professional opinion that the structural design is in compliance with Building Code requirements. If, on the other hand,

Page 46 of 59 Page 3 of 6 June 10, 2019 W. EDWARD BALMER ELEMENTARY SCHOOL Joel Seely

there are issues which cannot be ratified, we will note them in our report and arbitration may then be required. Any time associated with having to go to arbitration will be an additional charge to our contract.

Design delegated items such as pre-engineered trusses, stairs, curtain walls, skylights, specialty or deep foundations, steel connections, ground improvement systems, etc. will not be included in our peer review. Peer review of these items is assumed to be provided by the SER. Our final peer review letter would include a statement in this regard.

#### INFORMATION REQUIREMENTS

The following information will be needed for us to commence with this project:

 $\[ \] \]$  Signed authorization from your office to proceed.

.....

- ☑ Current geotechnical report for this specific project.
- ☑ Full size hard copies and PDF's of proposed Structural drawings. Drawings must be essentially complete and coordinated accordingly for each peer review phase so as not to hinder our review. If drawings are incomplete or poorly coordinated, we will return them without review or seek additional compensation for having to provide services in a fragmented manner.
- ☑ Full size hard copies and PDF's of select proposed Architectural drawings (basic floor plans, roof plans, elevations, sections and typical details).
- Existing and proposed site grading plan.
- Proposed structural specifications (hard copy).

Structural calculations may be required upon request. All drawings and specifications/reports shall be submitted to our office in hard copy and electronic (PDF) form as noted prior to initiating our review efforts.

## FEE FOR SERVICES

Our fee for conducting this review will be **\$6,725.00** (Six thousand, seven hundred and twenty-five dollars). This fee assumes DEI's involvement with the project will be completed by July 30, 2019, otherwise our fee may need to be adjusted.

Our proposal assumes that the structure (depicted on the construction documents submitted for peer review) is in substantial compliance with the building code and engineering standards consistent with buildings of this type in this geographic area. Discovering, documenting, discussing and mitigating an excessive number of deficiencies may require much more effort than what is included in a competitive proposal. Therefore, additional fees may result to accommodate such extra services. We will advise you of any extra services before we proceed with such services.



Payment for invoice(s) shall be received by this office within 15 days from our invoice date. Invoices extending beyond 45 days may result in a monthly late fee of 1.5% until payment is received and a possible suspension of services until payment is received. In the event any portion or all of an account remains unpaid 90 days after billing, Daigle Engineers, Inc (DEI) will pursue collection action for amount past due. DEI will be entitled to recover, in addition to the past due amounts, all court or other collection costs actually incurred by DEI or DEI's recovery agency and associated attorney's fees.

......

#### LIABILITY

DEI will furnish our standard insurance certificates for general and professional liability upon request. The Client agrees that DEI's total liability to the Client and the total liability to the Client of DEI's principals, officers, agents, and employees, for any and all injuries, claims, losses, expenses, or damages whatsoever, including attorney's fees, arising out of or in any way related to the Project or this Contract from any cause or causes, including, but not limited to, DEI's negligence, errors, omissions, strict liability, breach of contract, or breach of warranty shall not exceed DEI's total fee under this agreement or \$15,000, whichever is greater. In no event shall DEI be liable to Client for any indirect, incidental, special or consequential damages whatsoever (including but not limited to lost profits or interruption of business) arising out of or related to the services provided under the Agreement.

# LITIGATION

All costs and labor associated with compliance with any subpoena or other official request for documents, for testimony in a court of law (other than in connection with expert witness services), or for any other purpose relating to work performed by DEI in connection with work performed for the Client, shall be paid by the Client as a direct expense (actual cost plus 15%), based on DEI's standard rate schedule. Our charges to you for time spent in court, arbitration, hearings, depositions, or similar proceeding are 1.5 time the listed rates. The laws of the of the State of Massachusetts shall govern the validity and interpretation of this agreement.

\* \* \* \* \* \*

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Initialed by: \_\_\_\_\_



Page 48 of 59 Page 5 of 6 June 10, 2019 W. EDWARD BALMER ELEMENTARY SCHOOL Joel Seely

If this proposal is acceptable to you, please initial each page, sign the "Authorization to Proceed" section and return a copy of this proposal.

Should you have any questions with respect to the contents of this proposal, please do not hesitate to contact our office. We thank you for this opportunity to be of service to you and look forward to working with you on this project.

Very truly,

DAIGLE ENGINEERS INC.

m M July PE SECE

Jonathan M Longchamp PE, SECB (ext. 117) Principal/President jlongchamp@daigleengineers.com

encl.: DEI's Standard Rate Schedule (1 page) DEI Resume (2 pages) Key Staff Resumes (2 pages) JML PE Affidavit (1 page) DEI Sample Insurance Certificate (1 page) Representative Peer Review Projects (1 page)

JML/dei

AUTHORIZATION TO PROCH	CED
Company Name: (printed)	
Authorized Agent's Name: (printed)	
Agent's Signature:	
Date:	

Initialed by: \_\_\_\_



5

Page 49 of 59 Page 6 of 6 June 10, 2019 W. EDWARD BALMER ELEMENTARY SCHOOL Joel Seely

Daigle Engineers, Inc.

## Standard Hourly Rate Schedule (Effective October 01, 2018. Scheduled to change without notice)

<u>STAFF TYPE</u>	FEE
Principal	\$ <u>205.00</u>
Senior Structural Engineer	\$180.00
Structural Engineer	\$150.00
EIT III	\$135.00
EIT II	\$125.00
EITI	\$115.00
Engineer Intern	\$70.00
Business Manager	\$80.00
Reimb. Expenses	Cost plus 15%

DEI + 6/10/19 + D4085-P-061019 docx + Page 6 of 6

Initialed by: \_\_\_\_\_

## JONATHAN M. LONGCHAMP, PE, SECB

PRINCIPAL/PRESIDENT DAIGLE ENGINEERS, INC. 978-682-1748 EXT. 117 jlongchamp@daigleengineers.com

#### EDUCATION

University of Lowell | Bachelor of Science – Civil Engineering (Cum Laude) 1986 University of Lowell | Master of Science – Civil Engineering (Structural) 1987

#### **REGISTRATIONS AND CERTIFICATIONS**

Professional Engineer - CT, ME, MD, MA, NH, PA, RI, NY Structural Engineering Certification Board

#### **PROFESSIONAL EXPERIENCE**

Daigle Engineers, Inc. | Principal/Structural Engineer (1987 – Present) <u>Duties:</u> Perform structural analysis and design of industrial, municipal, commercial, and residential structures, failure analysis investigations, project and personnel management. <u>Representative Projects:</u>

- Andover Public Safety Complex Structural Investigation (Andover, MA)
- Atkinson Country Club Function Facility/Club House/Cart Barn (Atkinson, NH)
- Boston College Residences Independent Design Review (Brighton, MA)
- Hanscom AFB/Fort Devens Various Roof Projects (Various Locations)
- Heritage Place Structural Due Diligence Investigation (Lawrence, MA)
- o Jack Satter House Framed Slab Selective Removal & Replacement (Revere, MA)
- Lawrence General Hospital General Renovations (Lawrence, MA)
- Malden Mills Design of Upgrades to Mill Buildings (Lawrence, MA)
- o Nashua High School Independent Structural Peer Review (Nashua, NH)
- Phillips Square Condominiums Renovations & Addition (Boston, MA)
- TJX/Marshalls Dist. Center Mezzanine Reinforcing & Overlay (Woburn, MA)
- Winchendon School New Dining Hall (Winchendon, MA)
- Wheelabrator Technologies Repairs/Alterations (Resource Recovery Facilities)

#### **CONTINUING EDUCATION**

Various Seminars including: Sustainable Design/Green Building SE Role, Building Info. Modeling/Integrated Project Delivery, Deer Island Renewable Energy Initiatives, Our Aging Infrastructure Evaluation, Repair & Rehabilitation, Structural Provisions 7<sup>th</sup> Edition MA Building Code, Archaic/Historic Masonry Structures, Ethics and Engineers, Non-Destructive Testing and Evaluation.

#### **PROFESSIONAL MEMBERSHIPS**

American Society of Civil Engineers American Institute of Steel Construction Structural Engineers Association of MA Structural Engineers of NH

Boston Association of Structural Engineers Chi Epsilon National Honor Society Tau Beta Pi Engineering Honor Society

#### PUBLICATIONS

Contributor: Guidelines for the Structural Provisions for the Repair, Alteration, Addition and Change of Use of Existing Buildings for Compliance with the 6<sup>th</sup> Edition of the Massachusetts State Building Code. 2002 Boston Association of Structural Engineers, Boston, MA.

# **Representative Peer Review Projects**

Nashua High School South – Nashua, NH (369,000 sq. ft.)

Winchester High School - Winchester, MA (288,000 sq. ft.)

Bancroft Elementary School - Andover, MA (107,000 sq. ft.)

Glover Elementary School - Marblehead, MA (79,000 sq. ft.)

Kipp Academy - Lynn, MA (68,000 sq. ft.)

Boston College Residences - Chestnut Hill, MA (50,000 sq. ft.)

Paul Revere Elementary School - Revere, MA (50,000 sq. ft.)

CW Morey Elementary School - Lowell, MA (40,000 sq. ft.)

Fenn School - Concord, MA (20,000 sq. ft.)



265 Winter**科查爾 526 《中本** Waltham, Massachusetts 02451 Telephone: (617) 926-6100 Email: souzatrue@souzatrue.com

> TERRY A. LOUDERBACK, PE JEROME A. YURKOSKI, PE LISA A. BOHLIN, PE TODD P. BLAKE, PE, SECB

SOUZA, TRUE AND PARTNERS, INC. STRUCTURAL ENGINEERS

June 3, 2019

#### Symmes Maini & McKee Associates, Inc.

1000 Massachusetts Avenue Cambridge, MA 02138

- Attention: Mr. Joel G. Seeley
- **Reference:** W. Edward Balmer Elementary School Structural Peer Review Whitinsville, MA

#### Dear Mr. Seeley:

In response to your request for a fee proposal, we would be pleased to offer our services as your structural engineering consultant to perform a structural peer review of the structural design documents of the new W. Edward Balmer Elementary School located in Whitinsville, MA in accordance with the 9<sup>th</sup> edition of the Massachusetts State Building Code. We understand that the project consists of the following:

- A new 3-story structure which is a total of approximately 171,530 square feet.
- The foundation will be a conventional soil supported foundation system on improved soils.
- The primary structural framing system is a composite steel system with steel wide flange beams and columns.
- The Gymnasium will be constructed with long span open web steel joists.
- Other than at the Gymnasium where there will be 12" CMU walls, the lateral load resisting system will primarily be resisted with steel braced frames.
- Our review will be based on the "Progress Foundation and Building Structure Package" dated June 18, 2019.
- Our final comments and letter will be on July 16, 2019.
- The final drawings will be issued on July 30, 2019. However, our review will occur prior to these drawings being issued. We will only review this submission to verify our comments, if any, are incorporated in the final set.

Our structural review would follow the requirements in accordance with the guidance document found at <u>www.mass.gov/dps</u> with excerpts indicated below:

#### Mr. Joel G. Seeley W. Edward Balmer Elementary School – Structural Peer Review Proposal June 3, 2019 Page 2

#### INDEPENDENT STRUCTURAL ENGINEERING REVIEW GUIDANCE

# The purpose of this file is to provide guidance to those performing an independent structural engineering review in accordance with the building code (Code), specifically Section 780 CMR 105.9.

**Primary Structure**: For the purposes of the independent structural engineering review required in 780 CMR 105.9, the primary structure shall be defined as the structural frame, the load supporting parts of floors, roofs, and walls, and the foundations. Cladding, cladding framing, stairs, equipment supports, ceiling supports, non-load bearing partitions, and railings are excluded from this definition of primary structure.

**Reviewing Engineer Qualifications**: The reviewing engineer shall be engaged by the owner and shall be a Massachusetts registered professional engineer with structural design training and experience on structures similar to that covered by the building permit application. The engineer shall be impartial, and independent of the architect of record, structural engineer of record, and contractors and suppliers involved with the structure.

**Review Criteria**: The reviewing engineer shall review the plans and specifications submitted with the building permit application for compliance with the structural and foundation design provisions of the Code including the following tasks:

- 1. Check to assure that design loads conform to the Code;
- 2. Check that other design criteria and assumptions conform to the Code and with accepted engineering practice;
- 3. Confirm that the structural design incorporates pertinent results and recommendations of geotechnical and other engineering investigations.
- 4. Check that the organization of the structure is conceptually correct; and
- 5. Make independent calculations for a representative fraction of systems, members, and details to check their adequacy. The number of representative systems, members, and details shall be sufficient to form a basis for the reviewer's conclusions.

**Review of Structural Calculations**: The structural calculations prepared by the structural engineer of record shall be submitted to the reviewing engineer, upon request, for reference only. The reviewing engineer is not obligated to review or check these calculations. The structural engineer shall also provide a statement with the design criteria and design assumptions if they are not shown on the drawings or in the calculations.

Mr. Joel G. Seeley W. Edward Balmer Elementary School – Structural Peer Review Proposal June 3, 2019 Page 3

**Structural Responsibility**: The structural engineer of record shall retain sole responsibility for the structural design. The activities and reports of the reviewing engineer shall not relieve the structural engineer of record of this responsibility.

#### **Review Report and follow-up:**

- 1. The reviewing engineer shall prepare a report to the building official stating whether or not the structural design shown on the drawings and in the specifications conforms with the structural and foundation requirements of the Code, based on the review as prescribed in this guidance document, and shall include a summary of all deficiencies, if any, which cannot be resolved with the structural engineer of record.
- 2. The structural engineer of record shall review the report of the reviewing engineer and notify the building official in writing of agreement or of dispute with the conclusions and recommendations of the reviewing engineer.
- 3. Unresolved disputes between the structural engineer of record and the reviewing engineer shall be submitted by the building official, the owner, the structural engineer of record or the reviewing engineer to the Board of Building Regulations and Standards for resolution.
- 4. Any changes to the structural design subsequent to the original submission of the plans and specifications shall be shown on revised drawings and specifications, submitted with an amendment to the application for permit. The reviewing engineer shall review the changes on the revised drawings and specifications, and, if the original reviewing engineer report does not account for the changes in said drawings and specifications, a supplementary report relating to the changes and prepared by the reviewing engineer shall be made to the building official.

We propose to provide a structural peer review in accordance with the requirements stipulated in the guidance document of the Massachusetts State Building Code, Ninth Edition, based on the following schedule of services:

## Peer Review of the June 18 Progress Set (Total Fixed Fee)\$5,250.00

It is not anticipated that an in-person meeting or site visits will be required to complete this review.

In addition to the structural drawings, we will require a copy (PDF's) of the geotechnical engineering report for the proposed building, structural specifications, and the architectural design documents for our review and coordination. It is not necessary for the structural engineer-of-record to submit structural calculations. Calculations will only be required if information presented on the Contract Documents requires justification or additional explanation.

Mr. Joel G. Seeley W. Edward Balmer Elementary School – Structural Peer Review Proposal June 3, 2019 Page 4

Please understand that while we request copies of the geotechnical report and architectural design documents, these documents will only be used for reference. We will not perform a peer review on any portion of the geotechnical recommendations nor any portion of the architectural scope.

Any additional structural engineering services, if any, (beyond the general scope of this proposal), which is highly unlikely, will be billed separately on an hourly rate basis in accordance with our following current billing rates:

Senior Principals	\$ 225.00 per hour
Principals	\$ 190.00 per hour
Associates	\$ 160.00 per hour
Engineers	\$ 145.00 per hour
CAD Operators	\$ 95.00 per hour

Please note that additional services, if necessary, will only be executed following written authorization from you.

We thank you for considering and requesting a proposal from Souza, True and Partners, Inc. for this peer review project. Kindly countersign and return the enclosed copy of this letter, if this proposal is acceptable to you.

Please contact me if you have any questions or if you require additional information.

Sincerely,

SOUZA, TRUE AND PARTNERS, INC.

odel Pla

Todd P. Blake, P.E., SECB Principal

SM&M Associates, Inc.

Authorized Signature

D:\My Documents\Proposals\190603\_WEB Elem School PR Proposal.doc



## TODD P. BLAKE, P.E., SECB

PRINCIPAL



SOUZA, TRUE

STRUCTURAL ENGINEERS

#### **EXPERIENCE**



*Mr. Blake has experience encompassing a wide variety of building issues, including traditional structural engineering design for new construction with extensive experience in industrial, high-tech, health care and educational facilities. He is experienced in renovation structural engineering projects with an emphasis on the modification and design of high-tech and industrial buildings for both occupancy and load criteria as well as seismic retrofit of existing buildings. He excels in team collaboration and attention to detail.* 

#### **EDUCATION**

М. С. Е.	Masters of Civil Engineering, Tufts University, MA	2004
B. C. E.	Georgia Institute of Technology, Atlanta, GA	1996

#### PROFESSIONAL

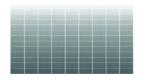
2012	Principal Souza, True and Partners, Inc. Waltham, Massachusetts
2007	Associate Souza, True and Partners, Inc. Watertown, Massachusetts
2002	Senior Engineer Souza, True and Partners, Inc. Watertown, Massachusetts
2000	Thornton-Tomasetti Group Boston, Massachusetts
1997	Willett Engineering Company Tucker, Georgia
1996	Frey Moss Structures Conyers, Georgia

#### REGISTERED PROFESSIONAL ENGINEER

Massachusetts	#43143
Georgia	#26657
Maine	#9909

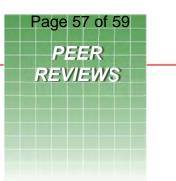
#### **PROFESSIONAL SOCIETIES**

*Member– American Concrete institute Member- American Institute of Steel Construction Member- American Society of Civil Engineers* 





SOUZA, TRUE AND PARTNERS, INC.



## REPRESENTATIVE LISTING OF INDEPENDENT STRUCTURAL ENGINEERING REVIEWS

201 Brookline Avenue, Boston, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Samuels & Associates

1 Congress Street, Boston, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: HYM Investment Group

250 Davies Street, Somerville, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Divco Wets

Dr. Martin Luther King, Jr. School, Cambridge, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: W.T Rich Company, Inc.

Zervas Elementary School, Newton, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: W.T Rich Company, Inc.

#### 69 HICKORY DRIVE, Waltham, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Dacey & Dacey, P.C.





# SOUZA, TRUE AND PARTNERS, INC.

STRUCTURAL ENGINEERS

#### PENTUCKET JUNIOR HIGH SCHOOL, Pentucket, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Mount Vernon Group

ADDITION AND RENOVATION TO FULTON HALL, WALLACE E. CARROLL SCHOOL OF MANAGEMENT, BOSTON COLLEGE, Chestnut Hill, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Boston College

AMBULATORY SURGICAL CENTER, Springfield, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Baystate Medical Center

#### GREAT OAK ELEMENTARY SCHOOL, Danvers, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Town of Danvers

BOSE CORPORATION, Framingham, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Bose Corporation

ADDITION TO WHITEHEAD INSTITUTE, Cambridge, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: The Whitehead Institute

HIGHLAND ELEMENTARY SCHOOL, Additions and Renovations, Danvers, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Town of Danvers



# SOUZA, TRUE AND PARTNERS, INC.

## BUILDING 104, CHARLESTOWN NAVY YARD, Charlestown, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: William Rawn Associates

#### NEW ENGLAND MEDICAL CENTER I-C PROJECT, Boston, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: New England Medical Center

TALBOT' STORE, Winter Park, Florida

Second engineering review of contract drawings and specifications. Review Performed For: Aberjona Engineering

#### STAPLES OUTLET STORE, Columbia, Maryland

Second engineering review of contract drawings and specifications. Review Performed For: Aberjona Engineering

GROSSMAN'S LUMBER, Scranton, Pennsylvania

Second engineering review of contract drawings and specifications. Review Performed For: Aberjona Engineering

#### EAST BOSTON MAINTENANCE FACILITY, East Boston, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Boston Public Facilities Department

JOSLIN DIABETES CENTER, RESEARCH AND CLINIC FACILITY EXPANSION, Boston, Massachusetts

Second engineering review of contract drawings and specifications. Review Performed For: Joslin Diabetes Center



	DD SUBMISSION 3/18/19			60% CD			60% CD				Del Fon PM	itaine to				
		F	Fontaine			Font	aine 6/7/19		Delta from		PM	&C 6/7/19		Delta from		
									DD					DD		
SF	167	7,352			167,	,352				16	7,352					
Building Foundations																
standard	\$	1,346,053		\$8	\$	1,455,051		\$9	\$108.998	\$	1,333,338		\$8	-\$12,715	Ś	121,713
slab on grade	\$	1,917,005		\$11	\$	1,895,707		\$11	-\$21,298	\$	1,933,089		\$12	\$16,084	\$	(37,382)
Superstructure	Ċ									·					\$	-
upper floor	\$	3,427,556		\$20	\$	4,277,072		\$26	\$849,516	\$	4,445,809		\$27	\$1,018,253	\$	(168,737)
roof structure	\$	3,246,148		\$19	\$	2,523,765		\$15	-\$722,383	\$	2,238,594		\$13	-\$1,007,554	\$	285,171
Exterior Closure															\$	-
exterior walls	\$	7,623,807		\$46		7,716,946		\$46	\$93,139	\$	7,688,061		\$46	\$64,254		28,885
windows	\$	2,056,705		\$12	\$	2,129,522		\$13	\$72,817	\$	2,095,992		\$13	\$39,287	\$	33,530
doors	\$	178,430		\$1	\$	170,093		\$1	-\$8,337	\$	175,070		\$1	-\$3,360		(4,977)
Roofing	\$	2,287,114		\$14	\$	2,214,823		\$13	-\$72,291	\$	2,219,207		\$13	-\$67,907	\$	(4,384)
Interior Construction partitions	\$	2 672 726		\$22	\$	2 876 102		\$23	\$203,377	ć	2 716 650		\$22	\$43,930	\$ \$	- 159,447
doors	\$ \$	3,672,726 1,231,881		\$22 \$7	\$ \$	3,876,103 1,285,209		\$23 \$8	\$203,377 \$53,328	\$ \$	3,716,656 1,275,274		\$22 \$8	\$43,930 \$43,393		159,447 9,935
millwork	ې \$	1,438,295		\$7 \$9		1,285,209		ەد \$11	\$55,328 \$466,304	ې \$	2,071,964		ەد \$12	\$43,393 \$633,669		9,935 (167,365)
Staircases	\$	521,026		\$3		622,676		\$4	\$101,650	\$	533,762		\$3	\$12,736		88,914
Interior Finishes	Ŷ	521,620		ψu	Ŷ	022,070		Ŷ.	<i><i><i>q</i><sub>101</sub>,000</i></i>	Ŷ	555), 52		ψU	<i><i><i>q</i><sup>2</sup>2,700</i></i>	Ś	
wall finishes	\$	815,629		\$5	\$	959,644		\$6	\$144,015	\$	913,999		\$5	\$98,370	\$	45,645
floor finishes	\$	1,498,152		, \$9		1,496,250		\$9	-\$1,902	\$	1,409,851		\$8	-\$88,301		86,399
ceiling finishes	\$	1,399,114		\$8	\$	1,342,001		\$8	-\$57,113	\$	1,448,727		\$9	\$49,613	\$	(106,726)
Conveying Systems	\$	159,153		\$1	\$	159,153		\$1	\$0	\$	152,950		\$1	-\$6,203	\$	6,203
Plumbing	\$	1,774,949		\$11	\$	2,243,688		\$13	\$468,739	\$	2,311,454		\$14	\$536,505	\$	(67,766)
HVAC	\$	6,837,481		\$41		7,182,509		\$43	\$345,028	\$	7,105,214		\$42	\$267,733		77,295
Fire Protection	\$	824,699		\$5		922,977		\$6	\$98,278	\$	923,770		\$6	\$99,071		(793)
Electrical	\$	5,548,366		\$33		5,156,457		\$31	-\$391,909	\$	5,197,730		\$31	-\$350,636		(41,273)
Equipment	\$	742,130		\$4	\$	753,435		\$5	\$11,305	\$	733,654		\$4	-\$8,476		19,781
Furnishings	\$	2,221,405		\$13		2,263,471		\$14	\$42,066	\$	2,296,196		\$14	\$74,791		(32,725)
Building HazMat	\$ \$	1,025,442 557,000			\$ \$	1,088,926		\$7	\$63,484 -\$17,967	\$ \$	1,088,926			\$63,484		-
Building Demolition Building Trade Cost	Ş	557,000	\$ 52,350,266	\$313	Ş	539,033	\$ 54,179,110	\$324	\$1,828,844	Ş	503,097	\$ 53,812,384	\$322	-\$53,903 \$1,462,118	Ş	35,936
Building Trade Cost			\$ 52,550,200	3212			\$ 54,179,110	<b>Ş</b> 524	ş1,020,044			\$ 55,812,584	332Z	Ş1,402,110		
Sitework																
Site Preparation	\$	1,713,218			\$	2,061,834			\$348,616	\$	2,061,834			\$348,616	\$	-
Site Improvements	\$	5,159,548			\$	5,298,035			\$138,487	\$	5,096,943			-\$62,605	\$	201,092
Mechanical Utilities	\$	3,391,151			\$	3,188,449			-\$202,702	\$	3,223,429			-\$167,722	\$	(34,980)
Electrical Utilities	\$	708,611			\$	709,616			\$1,005	\$	672,100			-\$36,511	\$	37,516
Site Trade Cost			\$ 10,972,528				\$ 11,257,934		\$285,406			\$ 11,054,306		\$81,778		
Total Trade Cost		-	\$ 63,322,794				\$ 65.437.044	-				\$ 64.866.690				
							,,,.,.					, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
General Conditions	\$	5,364,384			\$	5,364,384			\$0	\$	5,364,384			\$0		-
General Requirements	\$	2,065,736			\$	2,065,736			\$0	\$	2,065,736			\$0		-
Bonds	\$		w GCs		\$	-	w GCs		\$0	\$		w GCs		\$0		
Insurance	\$	-	w GCs		\$	-	w GCs		\$0	\$	-	w GCs		\$0		
Permit	\$ \$	1 625 000			\$ ¢	1 625 000			\$0 \$0	\$ ¢	1 625 000			\$0 \$0		
Fee Design Contingency	\$ \$	1,625,000			\$ \$	1,625,000			\$0	\$ \$	1,625,000			\$0 \$1,875,180-		(191,806)
Design Contingency GMP Contingency	\$ \$	3,923,312 1,192,207			\$ \$	1,856,326 1,186,764			-\$2,066,986 -\$5,443	ې \$	2,048,132 1,406,384			\$1,875,180 \$214,177		(191,806) (219,620)
Escalation	ې \$	1,192,207			ې S	1,582,352			-\$404,659	ې \$				-\$648,362		243,703
Estalation	Ŷ	1,507,011	\$ 16,157,650		Ŷ	1,502,552	\$ 13,680,562		-\$2,477,088	Ŷ	1,550,045	\$ 13,848,285		-\$2,309,365	Ý	243,703
Total Construction Cost			\$ 79,480,444	\$475			\$ 79,117,606	\$473	-\$362,838			\$ 78,714,975	\$470	-\$765,469		
Accepted Post DD VE			\$ (629,476)													
Adjusted DD Total			\$ 78,850,968	\$471			\$ 79,117,606	\$473				\$ 78,714,975	\$470			



# **60% Construction Documents Estimate**

# W. Edward Balmer **Elementary School**

Whitinsville, MA



Prepared for:

**Dore + Whittier Architects, Inc.** 

June 7, 2019

PM&C LLC 20 Downer Ave, Suite 5 Hingham, MA 02043 (T) 781-740-8007 (F) 781-740-1012



# **W. Edward Balmer Elementary School** Whitinsville, MA

#### 60% Construction Documents Estimate

07-Jun-19

MAIN	CONSTRUCTION	COST	SUMMARY
	construction	0001	00mmmm

	Construction Start	Gross Floor Area	\$/sf	Estimated Construction Cost
	Sep-19			
NEW BUILDING	Sep-13	167,352	\$312.04	\$52,220,361
DEMOLISH EXISTING SCHOOL		71,871	\$7.00	\$503,097
REMOVE HAZARDOUS MATERIALS				\$1,088,926
GENERAL REQUIREMENTS				\$2,065,736
SITEWORK				\$11,054,306
SUB-TOTAL		167,352	\$399.95	\$66,932,426
ESCALATION	2.00%			\$1,338,649
DESIGN AND PRICING CONTINGENCY	3.0%			\$2,048,132
SUB-TOTAL		167,352	\$420.19	\$70,319,207
GENERAL CONDITIONS				\$5,364,384
BONDS				Included w/ GC's
INSURANCE PERMIT				Included w/ GC's Waived
CM CONTINGENCY	2%			\$1,406,384
CM FEE				\$1,625,000
TOTAL OF ALL CONSTRUCTION		167,352	\$470.36	\$78,714,975
ALTERNATES (includes all markups):				
Wood canopy ILO metal exterior canopy		DEDUCT		(\$58,563)



#### **W. Edward Balmer Elementary School** Whitinsville, MA

#### 60% Construction Documents Estimate

This 60% Construction Documents cost estimate was produced from drawings, specifications and other documentation prepared by Dore and Whittier Architects Inc. and their design team dated May 17, 2019. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, Construction Managers overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

#### ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Land acquisition, feasibility, and financing costs All professional fees and insurance Site or existing conditions surveys investigations costs, including to determine subsoil conditions All Furnishings, Fixtures and Equipment Items identified in the design as Not In Contract (NIC) Items identified in the design as by others Owner supplied and/or installed items as indicated in the estimate Utility company back charges, including work required off-site Work to City streets and sidewalks, (except as noted in this estimate) Construction contingency Contaminated soils removal

<b>PMSC</b> W. Edward Balmer Elementary School							07-Jun-19
Whitinsville, MA 60% Construction Documents Estimate						GSF	167,352
	CONSTRUCTION COST	COST SUMMARY IN CSI FORMAT	I CSI FORMA	L			
		SUILDING	SITEWORK		TOTAL		Cost/SF
DIV. 2 EXISTING CONDITIONS 024120 Demolition - Bulk 028200 HazMat Remediation	See Front Summary See Front Summary						
DIV. 3 CONCRETE 033000 Cast-in-Place Concrete 033005 Water Vapor Reducing Admixture	\$2,388,185 \$145,868	\$2,534,053	\$65,260	\$65,260	\$2,453,445 \$145,868	\$2,599,313	\$15.53
DIV.4 MASONRY 040001 Masonry - FSB	\$2,497,301	\$2,497,301			\$2.497.301	\$2,497,301	\$14.92
DIV. 5 METALS 051000 Structural Steel 054000 Cold-Formed Metal Framing 055000 Metal Fabrications - FSB	\$5,869,360 \$218,849 \$740,709	\$6,832,818	\$4,800	\$4,800	\$5,869,360 \$218,849 \$745,509	\$6,837,618	\$40.86
055305 Metal Gratings and Floor Plates	\$3,900				\$3,900		l
DIV. 6 WOODS & PLASTICS 061000 Rough Carpentry 062000 Finish Carpentry 064020 Interior Architectural Woodwork 064216 Wood-Veneer Paneling	\$463,150 \$19,200 \$334,043 \$242,705	\$1,059,098			\$463,150 \$19,200 \$334,043 \$242,705	\$1,059,098	\$6 <b>.</b> 33
DIV. 7 THERMAL & MOISTURE PROTECTION		\$6,384,601				\$6,384,601	\$38.15
070001 Waterprooting, Dampprooting & Caulking - FSB 070002 Roofing and Flashing - FSB	\$1,026,814 \$1,807,693				\$1,026,814 \$1,807,693		Page
072100 Building Insulation 076400 Cladding Panels 077200 Roof Accessories 078100 Fireproofing & Firestopping	\$482,678 \$2,892,452 \$9,000 \$165,964				\$482,678 \$2,892,452 \$9,000 \$165,964		6 of 120
DIV. 8 DOORS & WINDOWS 080001 Windows - FSB 080002 Glass and Glazing - FSB	\$469,175 \$167,694	\$3,950,753			\$469,175 \$167,694	\$3,950,753	\$23.61
081110 HM Doors and Frames 082110 Wood Doors	\$258,155 \$168,375				\$258,155 \$168,375		
Balmer ES School 60% CD Estimate 6-7-19		Page 4				PMC - Project Management Cost	nt Cost

PMC - Project Management Cost

Page 4

Balmer ES School 60% CD Estimate 6-7-19

167,352		Cost/SF		\$45.73			Page 7 of 120 ଙ୍କୁ
GSF				\$7,653,342			\$1,370,172
	1 FLACE	IUIAL	\$10,000 \$232,144 \$27,720 \$1,624,905 \$211,180 \$211,180 \$211,180 \$211,180 \$317,550 \$317,550 \$317,550 \$1,950 \$3195,805		\$541,663 \$793,357	\$1,028,374 \$413,102	\$4,130,078 \$280,085 \$20,640 \$132,368 \$123,280 \$94,011 \$6,770 \$89,614 \$6,770 \$89,614 \$6,770 \$89,614 \$1,850 \$114,300 \$124,000 \$114,300 \$100 \$100 \$100 \$100\$\$100\$\$100\$\$100\$\$
	T COST SUMMARY IN CSI FORMAT	SHEWOKK					
	SUMMARY IN	501171105		\$7,653,342			\$1,370,172
	CONSTRUCTION COST	NEW SCHOOL BUILDING	\$10,000 \$232,144 \$27,720 \$1,624,905 \$211,180 \$211,180 \$211,180 \$211,180 \$317,550 \$317,550 \$1,000 \$317,550 \$31,950 \$339,805		\$541,663 \$793,357	\$1,028,374 \$413,102	\$4,130,078 \$280,085 \$20,640 \$132,368 \$132,368 \$132,368 \$132,368 \$132,369 \$114,300 \$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$124,100\$\$1
Whitinsville, MA 60% Construction Documents Estimate	0		Access Doors Folding Doors (Nana) Overhead Doors Aluminum Framed-Storefronts Glazed Aluminum Curtainwalls Sky Lights Door Hardware Mirrors Exterior Louvers Louvered Equipment Enclosures	VISHES	<ul> <li>Tile - FSB</li> <li>Acoustical Tile - FSB</li> </ul>	5 Resilient Floors - FSB 7 Painting - FSB	Gypsum Wallboard Wood Ceiling Wood Flooring Fluid-Applied Flooring Carpeting Wall Coverings Acoustic Room Components Acoustic Room Components Acoustic Room Components Signage Visual Display Surfaces Signage Toilet Compartments and Cubicles Wire Mesh Partitions Folding Panel Partitions Folding Panel Partitions Display cases Wall And Corner Guards Display cases Wall Lockers Fire Protection Specialties Privacy Curtains Metal Lockers Fixed Sun Screens
Whitinsville, MA 60% Constructio			083100 083513 084113 084313 084413 086300 087100 088300 088300 089100 089200	DIV. 9 FINISHES	090002 090003	000060 2000007	092900 Gypsum Wi 095000 Wood Floo 096100 Wood Athle 096723 Fluid-Appli 096820 Carpeting 097200 Wall Coveri 098400 Acoustic Rc 098400 Acoustic Rc 098100 Visual Displ 101100 Visual Displ 101400 Signage 102100 Toilet Comp 102239 Folding Pan 102239 Folding Pan 102230 Display case 102400 Display case 102400 Display case 102400 Privacy Cur 102606 Digitally Pri 102606 Digitally Pri 102606 Digitally Core 104600 Privacy Cur 105100 Metal Locke 107113 Fixed Sun Sc

07-Jun-19

W. Edward Balmer Elementary School

Whitinsville, MA

PM&C

Balmer ES School 60% CD Estimate 6-7-19

Page 5

PMC - Project Management Cost

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Whitinsville, MA

60% Construction Documents Estimate

GSF 167,352

07-Jun-19

	CONSTRUCTION COST NEW SCHOOL	COST SUMMARY IN CSI FURMAT school building strework	IN CSI FUKMA sitework	UAT DRK	TOTAL	C	Cost/SF
DIV. 11 EQUIPMENT 111313 Loading Dock Bumpers 113013 Appliances 114000 Food Service Equipment 115213 Projection Screens 116050 Theatrical Drapery and Rigging	\$750 \$750 \$36,016 \$499,435 \$10,101 \$28,000 \$115,252	\$694,654			\$750 \$750 \$36,016 \$499,435 \$10,101 \$28,000 \$115,200	\$694,654	\$4.15
<ul> <li>DIV. 12 FURNISHINGS</li> <li>DIV. 12 FURNISHINGS</li> <li>119513 Kilns</li> <li>DIV. 12 FURNISHINGS</li> <li>122410 Window Treatments</li> <li>122420 Manufactured Wood Casework</li> <li>124810 Entrance Floor Mats and Frames</li> <li>126613 Telescoping Bleachers</li> </ul>	\$5,000 \$139,526 \$2,100,135 \$26,535 \$39,000	\$2,335,196			\$5,000 \$139,526 \$2,100,135 \$56,535 \$39,000	\$2,335,196	\$13.95
DIV. 13 SPECIAL CONSTRUCTION No work assumed DIV. 14 CONVEYING SYSTEMS 142400 Hydraulic Elevators - FSB	\$150,000	\$150,000			\$150,000	\$150,000	\$0.90
DIV. 21 FIRE SUPPRESSION 210000 Fire Protection - FSB	\$923,770	\$923,770			\$923,770	\$923,770	\$5.52
DIV. 22 PLUMBING 220000 Plumbing - FSB	\$2,311,454	\$2,311,454			\$2,311,454	\$2,311,454	Page 8
DIV.23 IIVAU 230000 HVAC - FSB DIV. 26 ELECTRICAL 260000 Electrical - FSB	\$7,105,214 \$5,197,730	\$7,105,214 \$5,197,730	\$672,100	\$672,100	\$7,105,214 \$5,869,830	\$7,105,214 \$5,869,830	of 120
DIV. <b>31 EARTHWORK</b> 311000 Site Preparation 312000 Earthwork 312500 Erosion and Sedimentation Control	\$1,220,205	\$1,220,205	\$2,061,834	\$2,061,834	\$2,061,834 \$1,220,205	\$3,282,039	\$19.61

Balmer ES School 60% CD Estimate 6-7-19

Page 6

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Whitinsville, MA

	Cost/SF		\$30.04				\$19.26		\$378.09
	AL		\$5,026,883	)			\$3,223,429		\$63,274,667 \$378.09
	TOTAL			\$2,448,555	\$1,443,584	\$1,134,744		\$3,223,429	
MAT	ЭRК		\$5,026,883	)			3,223,429		\$11,054,306
IN CSI FOR	SITEWORK			\$2,448,555	\$1,443,584	\$1,134,744		\$3,223,429	
CONSTRUCTION COST SUMMARY IN CSI FORMAT	NEW SCHOOL BUILDING								\$52,220,361
		316600 Shoring/SOE	DIV. 32 EXTERIOR IMPROVEMENTS	320000 Paving	323000 Site Improvements	329200 Landscaping	DIV. 33 UTILITIES	330000 Civil Utilities	SUBTOTAL DIRECT (TRADE) COST

07-Jun-19

167,352

GSF



Whitinsville, MA

# 60% Construction Documents Estimate

07-Jun-19

GFA 167,352

			ION COST SUMM			
	BUILDING	G SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
NEW BU						
A10		DATIONS				
	A1010	Standard Foundations	\$1,333,338			
	A1020	Special Foundations	\$0	the off 10-	010 59	<b>C D</b> 0/
	A1030	Lowest Floor Construction	\$1,933,089	\$3,266,427	\$19.52	6.3%
A20	BASEN	IENT CONSTRUCTION				
	A2010	Basement Excavation	\$0			
	A2020	Basement Walls	\$0	<b>\$0</b>	\$0.00	0.0%
B10	SUPER	STRUCTURE				
210	B1010	Upper Floor Construction	\$4,445,809			
	B1020	Roof Construction	\$2,238,594	\$6,684,403	\$39.94	12.8%
B20	EVTED	IOR CLOSURE				
D20	B2010	Exterior Walls	\$7,688,061			
	B2020	Windows	\$2,095,992			
	B2020	Exterior Doors	\$175,070	\$9,959,123	\$59.51	19.1%
B30	ROOFI		60.010.007			
	B3010	Roof Coverings	\$2,219,207	<b>\$</b> 2,210,227	010.00	4.90/
	B3020	Roof Openings		\$2,219,207	\$13.26	4.2%
C10		IOR CONSTRUCTION				
	C1010	Partitions	\$3,716,656			
	C1020	Interior Doors	\$1,275,274			
	C1030	Specialties/Millwork	\$2,071,964	\$7,063,894	\$42.21	13.5%
C20	STAIR	CASES				
	C2010	Stair Construction	\$428,950			
	C2020	Stair Finishes	\$104,812	\$533,762	\$3.19	1.0%
C30	INTER	IOR FINISHES				
	C3010	Wall Finishes	\$913,999			
	C3020	Floor Finishes	\$1,409,851			
	C3030	Ceiling Finishes	\$1,448,727	\$3,772,577	\$22.54	7.2%
D10	CONVE	EYING SYSTEMS				
	D1010	Elevator	\$152,950	\$152,950	\$0.91	0.3%
D20	PLUMI	RING				
020	D20	Plumbing	\$2,311,454	\$2,311,454	\$13.81	4.4%
D30	HVAC		67 407 04 A	<b>A</b>	040.40	10.007
	D30	HVAC	\$7,105,214	\$7,105,214	\$42.46	13.6%
D40	FIRE P	ROTECTION				
	D40	Fire Protection	\$923,770	\$923,770	\$5.52	1.8%



Whitinsville, MA

# 60% Construction Documents Estimate

07-Jun-19

GFA 167,352

		CONSTRUCTIO				
	BUILDING	SYSTEM	SUB-TOTAL	TOTAL	\$/SF	%
EW BU	ILDING					
D50	ELECT	RICAL				
	D5010	Complete System	\$5,197,730	\$5,197,730	\$31.06	10.0%
E10	EQUIPI	MENT				
	E10	Equipment	\$733,654	\$733,654	\$4.38	1.4%
E20	FURNIS	SHINGS				
	E2010	Fixed Furnishings	\$2,296,196			
	E2020	Movable Furnishings	NIC	\$2,296,196	\$13.72	4.4%
F10	SPECIA	L CONSTRUCTION				
	F10	Special Construction	\$0	<b>\$0</b>	\$0.00	0.0%
F20	HAZMA	AT REMOVALS				
	F2010	<b>Building Elements Demolition</b>	\$0			
	F2020	Hazardous Components Abatement	\$0	<b>\$0</b>	\$0.00	0.0%
TOTA		CT COST (Trade Costs)		\$52,220,361	\$312.04	100.0%





07-Jun-19

SI				UNIT	EST'D	SUB	TOTAL
ODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
EW BUI							
GRO	OSS FLOOR AREA CALCULATION						
	First F	loor		72,910			
	Second Fle			45,825			
	Third Fle	oor		48,617			
	TOTAL GROSS FLOOR AREA (GFA)				167,352	sf	
					//00		
A	o FOUNDATIONS						
A10	010 STANDARD FOUNDATIONS	]					
0330							
0330		106	CY				
	Strip Footings Foundation Walls	196	CY				
	Spread Footings	455 642	CY				
	Additional concrete at stepped footings	73	CY				
	Piers	73 103	CY				
	Total Foundation Conc	-	CY	-			
	Strip footings						
	Formwork	4,324	sf	15.00	64,860		
	Re-bar	6,643	lbs.	1.20	7,972		
	Concrete material; 4,500 psi	196	су	125.00	24,500		
	Placing concrete	196	су	70.00	13,720		
	Foundation walls		-5				
	Formwork	16,860	sf	18.00	303,480		
	Re-bar	33,720	lbs.	1.20	40,464		
				125.00	56,875		
	Concrete material; 4,500 psi	455	су				
	Placing concrete	455	cy IC	70.00	31,850		
	Form shelf	1,920	lf	10.00	19,200		
	Spread Footings						
	Formwork	9,360	sf	17.00	159,120		
	Re-bar	69,576	lbs.	1.20	83,491		
	Concrete material; 4,500 psi	642	cy	125.00	80,250		
	Placing concrete	642	cy	70.00	44,940		
	Set anchor bolts grout plates	196	ea	150.00	29,400		
	<u>Piers/Pilasters</u>						
	Formwork	2,660	sf	20.00	53,200		
	Re-bar	7,725	lbs	1.15	8,884		
	Concrete material; 4,500 psi	103	cy	125.00	12,875		
	Placing concrete	103	су	80.00	8,240		
	Additional concrete at footings along path of undergrour drain pipe	nd 73	су	750.00	54,750		
0700	01 WATERPROOFING, DAMPPROOFING AND CAULKIN	G					
0/00	Damp proofing at brick shelf at gym		sf	3.00	9 409		
	Damp prooning at DITCK SHELL AT GALL	801	51	3.00	2,403		
0721	DO THERMAL INSULATION						
	Insulation	7,888	sf	3.00	23,664		
3120	DO EARTHWORK						
0210			le.	200 200 00	900 900		
	Earthwork foundations - bid	1	ls	209,200.00	209,200		
	Strip footings						
	Excavation	1,435	су	18.00	Early Bid		
	Store on site	1,435	су	15.00	Early Bid		
	Backfill with onsite material	784	су	18.00	Early Bid		
	Spread footings				Early Bid		
	Excavation	1,926	cy	20.00	Early Bid		



07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUILDI							
	Additional excavation at lower footings along path of underground drain pipe	3,911	cy	18.00	Early Bid		
	Store on site	5,837	су	15.00	Early Bid		
	Backfill with onsite material	5,122	су	18.00	Early Bid		
	Miscellaneous	0,	5		Early Bid		
	Temporary support/protection at 36" diameter pipe - 410 lf	1	ls	150,000.00	Early Bid		
	Premium for rock blasting -10% of total excavation	727	су	60.00	Early Bid		
	Gravel fill beneath footings, 12"	514	cy	40.00	Early Bid		
	Perimeter drain	1,920	lf	20.00	Early Bid		
	Dewatering for foundation work (per Geotech report)	1	ls	25,000.00	Early Bid		
	SUBTOTAL			-,	5	1,333,338	
						_,	
A1020	SPECIAL FOUNDATIONS						
	No work in this section						
	SUBTOTAL						
<b>.</b>	LOMERT EL OOD CONORDUCTION						
A1030	LOWEST FLOOR CONSTRUCTION						
033000	CONCRETE						
	<u>Slab on grade, 5" thick</u>						
	Vapor barrier	74,336	sf	1.00	74,336		
	Mesh reinforcing 15% lap	85,486	sf	1.10	94,035		
	Concrete - 5" thick; 4,000 psi	1,214	су	115.00	139,610		
	Premium for blind side waterproofing	17,771	sf	7.50	NR		
	Placing concrete	1,214	су	45.00	54,630		
	Finishing and curing concrete	74,336	sf	2.50	185,840		
	Control joints - saw cut	74,336	sf	0.10	7,434		
	Elevator Pit						
	Wall						
	Formwork	240	sf	20.00	4,800		
	Re-bar	480	lbs.	150.00	72,000		
	Concrete material; 3,000 psi	9	cy	115.00	1,035		
	Placing concrete	9	су	20.00	180		
	20" Mat slab w/ sump pit	175	sf	35.00	6,125		
	Thickened slab at CMU walls	341	lf	25.00	8,525		
	Slab depression premium	800	lf	25.00	20,000		
	Sitework undeslab utilities - bid	1	ls	226,500.00	226,500		
	Underslab drainage at B $\&$ C wings per supplement #4	55,472	sf	4.00	Early Bid		
	Ramp to gym	75	sf	20.00	1,500		
	Equipment pads	1	ls	15,000.00	15,000		
	Concrete to stair treads at loading dock	35	lfr	190.00	6,650		
00000-	WATER VADOR REDUCING ADMIVTURE						
033005	WATER VAPOR REDUCING ADMIXTURE			F0 00	00.100		
	Water vapor reducer admixture	1,214	су	52.00	63,128		
072100	THERMAL INSULATION						
	Rigid insulation	74,336	sf	2.25	167,256		
	0				-		
312000	EARTHWORK			#00			
	Earthwork Slab on Grade - Bid	1	ls	709,505.00	709,505		
	Adjustment to bid for underslab drainage	1	ls	75,000.00	75,000		
	Removal of unsuitables under the building included in site						
	<u>Slab on grade</u>						
	E+B for UG plumbing	1	ls	40,000.00	Early Bid		
	Structural fill under the building	13,254	cy	30.00	Early Bid		
	12" Structural fill	2,753	cy	30.00	Early Bid		



07-Jun-19



W. Edward Balmer Elementary School Whitinsville, MA

NEW B	BUILDI	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDI							
		NG					<u>.</u>	
		Compact sub-grade	74,336	sf	0.50	Early Bid		
[		SUBTOTAL					1,933,089	
L		TOTAL - FOUNDATIONS						\$3,266,4
Γ		TOTAL - FOUNDATIONS						ə3,200,4
Ľ								
	A20	BASEMENT CONSTRUCTION						
	10010	BASEMENT EXCAVATION						
	A2010	No Work in this section						
		SUBTOTAL						
	A2020	BASEMENT WALLS						
		No Work in this section SUBTOTAL						
		SUBIUTAL						
Г		TOTAL - BASEMENT CONSTRUCTION						
Г	B10	SUPERSTRUCTURE						
L	<b>D10</b>	SULEXSTRUCTORE	15.0	lbs/sf				
	B1010	FLOOR CONSTRUCTION	1,254	tns	Excluding roof s	creen steel		
(	033000	CONCRETE						
	55000	Concrete on Metal Deck						
		WWF reinforcement	108,753	sf	1.10	119,628		
		Concrete fill to metal deck; 4-1/2" normal weight	1,379	cy	130.00	179,270		
		Place and finish concrete	-,379 94,568	sf	2.00	189,136		
		Rebar to decks	28,370	lbs	1.20	34,044		
		Ferro clips at CMU fire wall; S1.33	30	lf	50.00	1,500		
C	033005	WATER VAPOR REDUCING ADMIXTURE			00.00	00 740		
		Water vapor reducer admixture	1,379	су	60.00	82,740		
С	051000	STRUCTURAL STEEL FRAMING						
		Steel beams and bracing	538	tns	3,800.00	2,044,400		
		Steel columns	172	tns	3,800.00	653,600		
		Premium for HSS	265	tns	350.00	92,750		
		Misc. angles, plates, lintels etc - 15%	107	tns	3,800.00	406,600		
		Shear studs	18,914	ea	2.50	47,285		
		2", 20ga Metal floor deck	94,568	sf	3.90	368,815		
		Moment connections Full welds	21	ea	500.00 900.00	10,500 85,500		
		Expansion joints	95 150	ea lf	75.00	11,250		
		Zapazion Jonito	190		10100	11,200		
С	078100	FIREPROOFING/FIRESTOPPING						
		Columns, beams & underside of deck receive spray applied	31,083	sf	3.50	108,791		
		fireproofing per GC1.10/GC1.20		1.	10,000,00	10,000		
		Fire stopping floors SUBTOTAL	1	ls	10,000.00	10,000	4,445,809	
		SUBIOTAL					4,445,809	
	B1020	ROOF CONSTRUCTION						
C	033000	CONCRETE	. (1					
		Concrete on metal deck at rooftop equipment & select low ro WWF reinforcement	-	et.	1 10	7 0.61		
		WWF reinforcement Concrete fill to metal deck; 7" light weight	6,419 127	sf	1.10 175.00	7,061 22,225		
		Place and finish concrete	127 5,582	cy sf	2.00	22,225		
		Rebar to decks	5,582 1,926	lbs	2.00 1.20	2,311		



07-Jun-19

CSI				[	UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI							
	051000	STRUCTURAL STEEL FRAMING						
		Steel beams/columns	363	tns	3,800.00	1,379,400		
		Joists at gym roof - DLH series	17	tns	3,500.00	59,500		
		Premium for HSS	20	tns	350.00	7,000		
		Misc. angles, plates, lintels etc - 15%	57	tns	3,800.00	216,600		
		Galv steel at roof screen framing, 55#/LF	25	tns	4,900.00	122,500		
		Premium for AESS steel - exterior columns only		<u>,</u>		NR		
		Acoustic deck at gym	6,400	sf	9.00	57,600		
		3" type N galvanized metal roof deck, typical	81,407	sf	3.50	284,925		
		Uplift bridging at gym roof	188	lf	50.00	9,400		
		X-bridging at gym roof	3,055	lbs	2.00	6,110		
		Expansion joints	75	lf	75.00	5,625		
	078100	FIREPROOFING/FIRESTOPPING						
		Columns, beams & underside of deck receive spray applied	13,478	sf	3.50	47,173		
		fireproofing GC1.30						
		SUBTOTAL					2,238,594	
		TOTAL - SUPERSTRUCTURE						\$6,684,4
	B20	EXTERIOR CLOSURE						
	Paoro		65.055	of				
		EXTERIOR WALLS MASONRY	67,975	sf				
	040001		- (	. 6	20.00	1 007 410		
		Brick veneer	36,774	sf	38.00	1,397,412		
		Ground face CMU veneer at gym A24/A4.14	400	sf	30.00	12,000		
		Premium for brick pier construction type X1.11A	8,903	sf	3.00	26,709		
		Premium for brick 8" soldier course	375	lf	5.00	1,875		
		Brick to columns at entry vestibule #1214	682	sf	40.00	27,280		
		Cast stone base	4,426	sf	62.00	274,412		
		Stone cap at base	1,044	lf	75.00	78,300		
		Stone cap above brick; profile A 6" deep	1,901	lf	60.00	114,060		
		Stone cap above brick piers at upper level; profile B 9" deep	215	lf	75.00	16,125		
		4" CMU at roof to wall flashing below brick veneer; R11/A3.50	301	sf	20.00	6,020		
		12" CMU backup, reinforced @ Gym	5,625	sf	32.00	180,000		
		Staging to exterior wall	42,282	sf	4.00	169,128		
	062000	FINISH CARPENTRY						
	002000	2x Hardwood insert each side of web at canopy support	16	loc	1,200.00	19,200		
		columns; 9'-2" high detail A26/A6.51	10	100	1,200.00	19,200		
	101400	SIGNAGE						
	101400		-	la	10,000.00	10.000		
		Exterior signage	1	ls	10,000.00	10,000		
	070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
		Air barrier; spray barrier	67,975	sf	6.50	441,838		
		Air barrier; spray barrier at soffit and cornice	17,614	sf	6.50	114,491		
		Air barrier/flashing at windows	9,042	lf	6.75	61,034		
		Miscellaneous sealants & flashings at closure	67,975	sf	1.00	67,975		
	072100	THERMAL INSULATION						
	.,	Insulation; 3" rigid at masonry	42,583	sf	3.00	127,749		
		Insulation, 3 figle at masonry Insulation; 4" mineral wool at metal & phenolic panel	42,583 25,392	sf	4.15	105,377		
		Insulation; 4" mineral wool at metal soffits	25,392 6,136	sf	4.15	25,464		

075200 CLADDING



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W. Edward Balmer Elementary School Whitinsville, MA 07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAI
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUILDI			0	<b>70.00</b>			
	Metal composite material panel rain screen system with back ventilation @ roof level; LYMO architectural systems	12,950	sf	70.00	906,500		
	Pre-finished phenolic panel rainscreen system (3 colors); Trespa "Meteon"	12,442	sf	68.00	846,056		
	Prefinished MCM metal cornice; A6.70	1,913	lf	280.16	535,946		
	Metal soffit panel at overhang and canopy soffits, including framing, sheathing, insulation (ATAS)	6,136	sf	65.00	398,840		
	Insulated metal column covers at exterior 9'-2" high; A27/A6.60	2	loc	5,135.20	10,270		
	Mockups; per specifications	1	ls	50,000.00	50,000		
089200	LOUVEDED FOUNDMENT ENCLOSUDES						
089200	LOUVERED EQUIPMENT ENCLOSURES Aluminum horizontal louvered roof screen Centria or similar	7,251	sf	55.00	398,805		
090007	PAINTING						
	Paint exposed exterior canopy support columns 9'-2" high $$ - A26/A6.51 $$	16	loc	250.00	4,000		
092900	GYPSUM BOARD ASSEMBLIES						
	12 GA. CFMF angle at roof cornice	1,913	lf	35.00	66,955		
	2-1/2" CFMF between struct. Channels at cornice	3,028	sf	9.00	27,252		
	3-1/2" CFMF horizontal z-girt at cornice	3,501	sf	6.00	21,006		
	6" CFMF vertical z-girt behind cornice and fascia	5,617	sf	9.50	53,362		
	Vertical z-girt at cornice roof edge and fascia	5,292	sf	9.50	50,274		
	Framing system @ overhangs and canopies	5,292 6,136	sf	14.00	85,904		
	6" metal stud backup	62,350	sf	9.50	592,325		
	Gypsum Sheathing Drywall lining to interior face of stud backup (furred	62,350 58,380	sf sf	2.75 3.30	171,463 192,654		
	partitions at inside of exterior walls taken below)	<b>30,300</b>	51	3.50	132,034	7 099 001	
	SUBTOTAL					7,688,061	
B2020	WINDOWS	16,844	sf				
061000	ROUGH CARPENTRY						
	Wood blocking at openings	9,042	lf	12.00	108,504		
070001	WATERPROOFING, DAMPPROOFING AND CAULKING	<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,		
	Backer rod & double sealant	9,042	lf	9.00	81,378		
080001	METAL WINDOWS						
	Aluminum framed windows	1,185	sf	95.00	112,575		
084313	ALUMINUM-FRAMED STOREFRONTS						
	Storefront	13,929	sf	95.00	1,323,255		
	Premium for operable hopper panels in storefront	155	loc	300.00	46,500		
	Premium for 1" school guard coating at storefront SGS-1	790	sf	35.00	27,650		
084413	GLAZED ALUMINUM CURTAINWALLS						
	Curtainwall, double glazed (EFCO 5600 or equal) 7-1/2" system	1,700	sf	120.00	204,000		
	Premium for spandrel glass; IG-6	718	sf	10.00	7,180		
089100	LOUVERS						
	Louvers	30	sf	65.00	1,950		
	FIXED SUN SCREENS						
107110							
107113			16	950.00	100 000		
107113	Pre-finished aluminum sunshades SUBTOTAL	732	lf	250.00	183,000	2,095,992	

B2030 EXTERIOR DOORS



07-Jun-19

	onstructio	n Documents Estimate					GFA	167
CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW	BUILDI	NG						
	061000	ROUGH CARPENTRY						
		Wood blocking at openings	475	lf	11.00	5,225		
		THERMAL INCLUSION						
	072100	THERMAL INSULATION		10	0.00	0.050		
		Fill frames with low rise insulation; details page A8.50	475	lf	6.00	2,850		
	079200	JOINT SEALANTS						
		Backer rod & double sealant	475	lf	9.00	4,275		
	081110	HOLLOW METAL						
		Frames, single	2	ea	450.00	900		
		Frames, double	4	ea	600.00	2,400		
		Type F - Single leaf hollow metal door	2	ea	500.00	1,000		
		Type F - Double leaf hollow metal door	4	pr	1,000.00	4,000		
	084113	OVERHEAD DOORS						
	0040	Overhead door; 8' x 7'	1	ea	3.920.00	3,920		
					·	·		
	083513	FOLDING DOORS						
		No items in this section						
	089000	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS						
		Glazed aluminum entrance door and hardware in CW frame; $3^{\prime}x^{\prime}$	7	ea	4,000.00	28,000		
		Glazed aluminum entrance door and hardware in CW frame; $6^{\prime} x^{7^{\prime}}$	11	pr	8,500.00	93,500		
		Auto openers - allow	3	ea	5,000.00	15,000		
	087100	DOOR HARDWARE						
		Hardware	10	leaf	1,200.00	12,000		
	090007	PAINTING						
	09000/	Finish doors and frames	10	ea	200.00	2,000		
		SUBTOTAL	10	ea	200.00	2,000	175,070	
							110,010	
		TOTAL - EXTERIOR CLOSURE						\$9,959,
	<i>B30</i>	ROOFING						
	B3010	ROOF COVERINGS						
	055000	MISC. METALS						
		Roof ladder	4	ea	5,000.00	20,000		
					-,	-,		
	061000	ROUGH CARPENTRY		10				
		Rough blocking	9,291	lf In	8.00	74,328		
		Rough blocking at mechanical penetrations	1	ls	5,000.00	5,000		
	070002	ROOFING AND FLASHING						
		TPO roofing, 60mil, complete	74,546	sf	17.50	1,304,555		
		Extend roof membrane over top and back of parapet	988	sf	11.00	10,868		
		Self adhered base sheet at cornice backup	3,195	sf	6.00	19,170		
		Stone ballast roofing, R1B & R3B, complete	12,273	sf	22.00	270,006		
		Premium for tapered insulation	35,940	sf	2.00	71,880		
		2 layers 3/4" PPT plywood at fascia backup 1/2" exterior grade plywood at cornice and fascia backup	3,122 5,771	sf sf	9.00 4.00	28,098 23,084		
		1/2" exterior grade plywood at confice and fasting	5,771 1,697	sf	2.75	4,667		
		Walkway pads	1,980	sf	12.00	23,760		
		Roof to wall through wall flashing	1,697	lf	20.00	33,940		
		Roof scupper: R27/A3.50	24	loc	350.00	8.400		

Roof scupper; R27/A3.50

24 loc

350.00

8,400



07-Jun-19

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI	NG Miscellaneous roof flashings & sealants	86,819	sf	0.75	65,114		
		miscenaneous roor nasinings & seatants	80,819	51	0.75	05,114		
	072100	THERMAL INSULATION						
		3" rigid insulation at cornice and fascia	9,118	sf	3.00	27,354		
		3" rigid insulation at over top and back of parapet	988	sf	3.00	2,964		
	075200	CLADDING PANELS						
	,,,	Preformed fascia/gravel stop edge detail at canopy/ ballast roofs/ parapet 18" high; Q27/A6.70	1,704	lf	85.00	144,840		
		SUBTOTAL					2,138,028	
	077200	ROOF ACCESSORIES						
		Roof hatch including access ladder	1	ea	4,000.00	4,000		
		Elevator penthouse	1	ls	5,000.00	5,000		
	086300	METAL FRAMED SKYLIGHTS						
		Sloped skylights	414	sf	150.00	62,100		
	092900	GYPSUM BOARD ASSEMBLIES	o (( -	-6	0.75	10.070		
		Gypsum Sheathing at roof edge SUBTOTAL	3,665	sf	2.75	10,079	91 170	
		SUBTOTAL					81,179	
		TOTAL - ROOFING						\$2,219,
	C10	INTERIOR CONSTRUCTION						
	C1010	PARTITIONS						
	042000	MASONRY						
		D; 4" CMU	80	sf	20.00	1,600		
		E1; 8" CMU, reinforced, 1 hr @ elevator shaft	1,682	sf	24.00	40,368		
		G1; 12" CMU shear wall, reinforced, 1 hr @ gym	2,131	sf	32.00	68,192		
		G2; 8" CMU shear wall, reinforced, 2 hr fire wall	2,552	sf	29.00	74,008		
		H; 6" CMU	446	sf	22.00	9,812		
	055000	MISCELLANEOUS METALS						
		Seismic clips	86	ea	140.00	12,040		
		Misc. metals to CMU	6,891	sf	1.00	6,891		
		Painted steel plate column covers at CMU wall locations; per J series details/A1.50	1	ls	5,000.00	5,000		
		Support at fire door & overhead doors	205	lf	130.00	26,650		
	064000							
	061000	ROUGH CARPENTRY		. (	0.50	00.070		
		Wood blocking at interiors	167,352	gsf 1f	0.50	83,676		
		Rough blocking at partitions	34,920	lf	3.00	104,760		
	070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
		Miscellaneous sealants at partitions	199,027	sf	0.30	59,708		
	080001	METAL WINDOWS						
	-	Interior storefront	1,208	sf	75.00	90,600		
		Interior storenom Interior Storenom Interior curtainwall at stair 5, 1hr fire rated 7-1/2" frame	1,200	sf	250.00	262,500		
		Premium for 5/16" school guard coating at SF-9, SF-31 & door 1102	1,050	sf	35.00	3,500		
	080002	GLASS AND GLAZING						
	555002	GLASS AND GLAZING Glazing to borrowed lite HM frames	1 000	sf	35.00	35,770		
		Giazing to borrowed life film frames	1,022					
		Wall mirror at PT	<u> </u>	ct.	A(\ / \/\	1 000		
		Wall mirror at PT Premium for 1 hr glass at library open to above	25 98	sf sf	40.00 35.00	1,000 3,430		





07-Jun-19

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI	NG	J					
		Glazed HM borrowed lite frames	1,022	sf	40.00	40,880		
	088300	MIRRORS						
	000300	Wall mirror at PT	95	sf	40.00	1,000		
			25	51	40.00	1,000		
	092900	GYPSUM BOARD ASSEMBLIES						
		A; 6" Metal stud, 1 layer 5/8" e.s., insulation	100,826	sf	15.00	1,512,390		
		A1; 6" Metal stud, 1 layer 5/8" e.s., insulation, 1 hr	7,024	sf	17.00	119,408		
		A2; 6" Metal stud, 2 layers 5/8" e.s., insulation	834	sf	19.00	15,846		
		B; 3-5/8" Metal stud, 1 layer 5/8" e.s., insulation	<b>3,279</b>	sf	13.00	42,627		
		B1; 3-5/8" Metal stud, 1 layer 5/8" e.s., insulation (1 hr)	493	sf	15.00	7,395		
		F - 2 1/2" Metal stud, 1 layer 5/8" o.s, insulation	17,698	sf	7.50	132,735		
		F4; 3 5/8" Metal stud, 1 layer 5/8" o.s., insulation	36,287	sf	9.50	344,727		
		F6; 6" Metal stud, 1 layer 5/8" o.s., insulation	24,574	sf	11.50	282,601		
		F10; 1-5/8" Metal stud, 1 layer 5/8" o.s., insulation	200	sf	6.00	1,200		
		S1 - 2 1/2" CH stud, 1 layer 1" GWB coreboard o/s, 1 layers	7,666	sf	13.70	105,024		
		5/8" GWB o/s, insulation S7 - 6" CH stud, 1 layer 1" GWB coreboard o/s, 2 layers	146	sf	19.50	2,847		
		5/8" GWB o/s, insulation Premium for abuse resistant GWB at all walls up to 10' per	174,600	sf	0.50	87,300		
		AG0.02			4.0.0	0.000		
		Premium for water-resistant GWB	3,696	sf	1.00	3,696		
		Additional layer of GWB on FRT blocking at shower	99	sf	5.30	525		
		Cleanup for drywall/logistics	1	ls	90,000.00	90,000		
	102213	WIRE MESH PARTITIONS						
		Wire mesh partition at stair 2 level 3; 8' high	9	lf	150.00	1,350		
		Wire mesh door; single	1	ea	500.00	500		
	102239	FOLDING PANEL PARTITIONS						
		Modernfold partition btwn Platform & Gym	26	lf	1,350.00	35,100		
		SUBTOTAL					3,716,656	
	C1020	INTERIOR DOORS						
	061000	ROUGH CARPENTRY						
	001000	Wood blocking at openings	5,664	lf	4.00	22,656		
		wood blocking at openings	5,004	п	4.00	22,050		
	070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
		Backer rod & double sealant	5,664	lf	2.50	14,160		
	-0							
	080002	GLASS AND GLAZING		c		105 104		
		Glass in door, transoms & sidelights 5/16" S3 safety glazing	2,768	sf	38.00	105,184		
		S-2 fire resistant safety glazing in glass openings in fire rated partitions	1	ls	20,000.00	20,000		
		Premium for 5/16" school guard glazing at interior doors and frames at pre-k entrance and main entrance	66	sf	35.00	2,310		
	081110	HOLLOW METAL DOORS AND FRAMES						
		Type F door, sgl leaf	2	ea	500.00	1,000		
		Type F door, dbl leaf	3	pr	1,000.00	3,000		
		Type F door, sgle mesh door	1	ea	750.00	750		
		Frame type 1, single	7	ea	450.00	3,150		
		Frame type 2, double	4	ea	600.00	2,400		
		Frame type 3, single	- 149	ea	450.00	67,050		
		Frame type 4, double	149 29	ea	600.00	17,400		
		Frame type 4, double Frame type 5, single w/ sidelight	29 19	ea	750.00	14,250		
		Frame type 6, single w/ transom & sidelight	88	ea	1,050.00	92,400		
		Frame type 0, single w/ transom a sidengitt	8		850.00	92,400 6,800		
		Frame type 7, double w/ transom	o	ea	775.00	0,800		

Frame type 8, single w/ sidelight

454

1 ea 775.00



07-Jun-19

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI	NG						
	081400	WOOD DOORS						
		Type F, sgl leaf	142	ea	450.00	63,900		
		Type F, dbl leaf	34	pr	900.00	30,600		
		Type FG, sgl leaf, glazed upper & lower	84	ea	600.00	50,400		
		Type FG, dbl leaf, glazed upper & lower	2	pr	1,200.00	2,400		
		Type G, sgl leaf, glazed upper	1	ea	525.00	525		
		Type N, sgl leaf w/ vision panel	36	ea	500.00	18,000		
		Premium for 60 min fire rated doors	15	ea	100.00	1,500		
		Premium for 90 min fire rated doors	7	ea	150.00	1,050		
			,					
	083000	OVERHEAD DOORS						
		Overhead door; 17' x 10' at Servery	2	ea	11,900.00	23,800		
	083110	ACCESS DOORS AND FRAMES						
		Access doors	1	ls	10,000.00	10,000		
	083513	FOLDING DOORS, GLAZED						
	000010	FD; Nana wall, 8' x 8' at Classrooms	10	ea	14,080.00	140,800		
		FD; Nana wall, 12' x 8' at Media Center			21.120.00	21,120		
		HSD Folding wall doors; 15'-4" x 8', 90 min at fire wall,	1	ea ea	23,408.00	70,224		
		WON or equal	3	ea	23,400.00	10,224		
	089000	ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS						
		Glazed aluminum entrance door, frame and hardware, type FG, single leaf	3	ea	4,000.00	12,000		
		Glazed aluminum entrance door, frame and hardware, type FG, double leaf	8	pr	8,000.00	64,000		
		Auto openers - allow	3	ea	5,000.00	15,000		
	087100	DOOR HARDWARE						
		Hardware	343	leaf	850.00	291,550		
		Premium for STC 52 rated doors at Music rooms	7	ea	2,000.00	14,000		
	090007	PAINTING						
		Finish doors and frames	343	ea	200.00	68,600		
		Painted surface at door transoms at grade entrances; similar to K14/A9.52	84	sf	30.00	2,520		
		SUBTOTAL					1,275,274	
	C1030	SPECIALTIES / MILLWORK						
	055000	MISCELLANEOUS METALS						
		Miscellaneous metals throughout building	167,352	gsf	1.50	251,028		
		Double handrail at platform ramp	35	lf	150.00	5,250		
		Double ballet bar at PT	5	lf	150.00	750		
		PT swing misc. steel beam	2	loc	2,000.00	4,000		
	061000	ROUGH CARPENTRY						
	001000			la	2 500 00	2 500		
		Backer panels in electrical closets	1	ls	2,500.00	2,500		
		3/4" millwork grade plywood backup at lego wall	163	sf	4.00	652		
	064020	INTERIOR ARCHITECTURAL WOODWORK						
		Library light well decorative acrylic sculptural elements; 3-form	2	ea	9,100.00	18,200		
		Library decorative acrylic sculptural element above shelving; 3-form	2	ea	7,000.00	14,000		
		Alcove seating at Corridor 1101; G23/A9.71	36	lf	350.00	12,600		
		Built in upholstered benches at library; T19/A9.71	22	lf	800.00	17,600		
		Built in upholstered benches at cafeteria; G6/A9.71	27	lf	800.00	21,600		



07-Jun-19

CSI				UNIT	EST'D	SUB	TOTA
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUIL	DING						
	Counter at general office/waiting	14	lf	900.00	12,600		
	Desk at media center/Reading room including shelving at	18	lf	1,200.00	21,600		
	front						
	Vanity at gang bathroom corridor sinks				NIC		
	Window seat at corridor	113	lf	350.00	39,550		
	Countertop at corridor 3109	11	lf	250.00	2,750		
	Stage nosing $$ - 1x hardwood trim with bullnose; 9/A9.60 $$	25	lf	50.00	1,250		
	3-1/2" maple trim at lego wall	143	lf	35.00	5,005		
	Hardwood window sill and apron	1,779	lf	50.00	88,950		
	Plam cap at lockers; 15" deep	817	lf	50.00	40,850		
	Plam sides at lockers; 15" deep	365	lf	50.00	18,250		
06421			c	75.00			
	Hardwood veneer plywood panel at Proscenium	444	sf	75.00	33,300		
	Laminate front wall panel with MDF substrate and laser cut letters at entry to gang toilet rooms	98	sf	70.00	6,860		
	Hardwood veneer plywood wainscoting at locations noted	1,437	sf	75.00	107,775		
	on DD supplement #4; details SK-DD-01						
	Chair rail above wainscoting at locations noted on DD supplement #4; details SK-DD-01	389	lf	30.00	11,670		
	3/4" maple veneer plywood at lobby 1101 and corridor 1135 per details on A9.72	665	sf	75.00	49,875		
	3/4" maple veneer plywood at cafeteria per details on A9.72	443	sf	75.00	33,225		
07000	01 WATERPROOFING, DAMPPROOFING AND CAULKING						
	Miscellaneous sealants throughout building	167,352	gsf	1.00	167,352		
10110	O VISUAL DISPLAY SURFACES						
101100		( 0	c	00.00	151.070		
	Marker boards	6,908	sf	22.00	151,976		
	Tack board	3,432	sf	20.00	68,640		
	Tack strips at teaching walls and corridors	9,312	lf	8.00	74,496		
10240	o DISPLAY CASES						
	Glass display case with bi-parting sliding glass doors on BB rail hardware, jewelry case lock at bottom	4	loc	6,000.00	24,000		
	Glass display case at media center (shown dashed)	1	loc	10,000.00	10,000		
	Recessed display cases with lockable sliding glass doors; Q19/A9.72	4	loc	9,587.50	38,350		
10140	o SIGNAGE						
	Building directory	1	loc	3,000.00	3,000		
	Room Signs			120.00			
	Room Signs Acrylic back painted circle with grade symbol at corridor	321 8	loc loc	120.00	38,520 800		
	door transom	0	100	100.00	800		
	Acrylic cutout letters, back painted white	8	loc	200.00	1,600		
	Other signage/graphics	1	ls	25,000.00	25,000		
		1	10	20,000.00	20,000		
102110							
	ADA, solid part-recycled plastic	12	ea	2,000.00	24,000		
	Standard, solid part-recycled plastic	48	ea	1,800.00	86,400		
	Urinal screen, solid part-recycled plastic	6	ea	650.00	3,900		
10280	0 TOILET ACCESSORIES						
	Combo paper towel dispenser & waste units	12	ea	380.00	4,560		
	Trash receptacle units at pre-k	4	ea	250.00	1,000		
	Framed mirrors	- 60	ea	200.00	12,000		
				200.00	12,000		
		57	sets	200.00	11 400		
	Grab bars	57 84	sets	200.00	11,400 8,400		
		57 84 60	sets ea ea	200.00 100.00 750.00	11,400 8,400 45,000		



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W. Edward Balmer Elementary School Whitinsville, MA

ODE				UNIT	EST'D	SUB	TOTAL
	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
EW BUIL							
	Shower curtain and rod	1	ea	200.00	200		
	Shower grab bars	1	set	300.00	300		
	Soap dispenser	51	ea	70.00	By owner		
	Toilet paper dispensers	93	ea	150.00	By owner		
	Paper towel dispensers	48	ea	150.00	By owner		
	Paper towel dispensers at pre-k	4	ea	150.00	By owner		
	Bench with changing table at SPED toilet 6' wide Changing table	1	ea ea	1,700.00 800.00	1,700 1,600		
	Janitors Closet Accessories	6	rms	300.00	1,800		
		0	1115	000.00	1,000		
104600	PRIVACY CURTAINS						
	Curtain track in exam rooms	60	lf	50.00	3,000		
104400	FIRE PROTECTION SPECIALTIES						
	Fire extinguisher cabinets	56	ea	350.00	19,600		
	AED cabinets	3	ea	350.00	1,050		
105100	LOCKERS						
105100	Double tier HDPE student lockers, 12"x15"x60"	604	ope	360.00	217,440		
	Single tier HDPE lockers on level 2	439	ea	400.00	175,600		
	Staff metal lockers		ope	190.00	1,140		
		-	Ι.				
102800							
	Stainless steel corner guards at corridor 1153	2	ea	200.00	400		
	Corner guards elsewhere SUBTOTAL	1	ls	20,000.00	20,000	2,071,964	
						-,	
	TOTAL - INTERIOR CONSTRUCTION						\$7,063
C20	STAIRCASES						
	o STAIR CONSTRUCTION						
	o STAIR CONSTRUCTION						
C201	o STAIR CONSTRUCTION	9	flt	2,100.00	18,900		
C201	<ul> <li><b>STAIR CONSTRUCTION</b></li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> </ul>	9	flt	2,100.00	18,900		
C201	STAIR CONSTRUCTION     CONCRETE     Concrete to stairs     MISCELLANEOUS METALS						
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> </ul>	9.0	flt	34,000.00	306,000		
C201	STAIR CONSTRUCTION     CONCRETE     Concrete to stairs     MISCELLANEOUS METALS						
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> </ul>	9.0 2	flt flt	34,000.00 50,000.00	306,000 100,000		
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> </ul>	9.0 2 5	flt flt lf	34,000.00 50,000.00 30.00	306,000 100,000 150		
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i> Metal grate at stair 2 roof penthouse</li> </ul>	9.0 2 5 20	flt flt lf sf	34,000.00 50,000.00 30.00 75.00	306,000 100,000 150 1,500		
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i> Metal grate at stair 2 roof penthouse Handrail at stair 2 roof penthouse steps</li> </ul>	9.0 2 5	flt flt lf	34,000.00 50,000.00 30.00	306,000 100,000 150	428 950	
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i> Metal grate at stair 2 roof penthouse Handrail at stair 2 roof penthouse steps SUBTOTAL</li> </ul>	9.0 2 5 20	flt flt lf sf	34,000.00 50,000.00 30.00 75.00	306,000 100,000 150 1,500	428,950	
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i> Metal grate at stair 2 roof penthouse Handrail at stair 2 roof penthouse steps</li> </ul>	9.0 2 5 20	flt flt lf sf	34,000.00 50,000.00 30.00 75.00	306,000 100,000 150 1,500	428,950	
C201	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> <ul> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> </ul> </li> </ul>	9.0 2 5 20	flt flt lf sf	34,000.00 50,000.00 30.00 75.00	306,000 100,000 150 1,500	428,950	
C201 033000 055000 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> <ul> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> </ul> </li> <li><b>STAIR FINISHES</b></li> </ul>	9.0 2 5 20	flt flt lf lf lf	34,000.00 50,000.00 30.00 75.00	306,000 100,000 150 1,500	428,950	
C201 033000 055000 055303	<ul> <li><b>STAIR CONSTRUCTION</b></li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i></li> </ul>	9.0 2 5 20 12	flt flt lf sf lf	34,000.00 50,000.00 30.00 75.00 200.00	306,000 100,000 150 1,500 2,400	428,950	
C201 033000 055000 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i></li> <li>Rubber tile at stairs - landings</li> <li>Rubber tile at stairs - treads</li> </ul>	9.0 2 5 20 12 3,500	flt flt lf lf lf	34,000.00 50,000.00 30.00 75.00 200.00	306,000 100,000 150 1,500 2,400 52,500	428,950	
C201 033000 0555000 055303 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i></li> <li>Rubber tile at stairs - landings</li> <li>Rubber tile at stairs - treads</li> </ul>	9.0 2 5 20 12 3,500	flt flt lf lf lf	34,000.00 50,000.00 30.00 75.00 200.00	306,000 100,000 150 1,500 2,400 52,500	428,950	
C201 033000 0555000 055303 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i></li> <li>Rubber tile at stairs - landings</li> <li>Rubber tile at stairs - treads</li> <li><i>PAINTING</i></li> </ul>	9.0 2 5 20 12 3,500 1,328	flt flt lf lf sf lf sf lft	34,000.00 50,000.00 30.00 75.00 200.00 15.00 19.06	306,000 100,000 150 1,500 2,400 52,500 25,312	428,950	
C201 033000 0555000 055303 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i> Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i> Egress stairs 1,2,3,4 w/ mesh rails Egress stairs 5 w/ glass infill panel rails Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i> Metal grate at stair 2 roof penthouse Handrail at stair 2 roof penthouse steps SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i> Rubber tile at stairs - landings Rubber tile at stairs - treads</li> <li><i>PAINTING</i> Paint to staircases including underside</li> </ul>	9.0 2 5 20 12 3,500 1,328	flt flt lf lf sf lf sf lft	34,000.00 50,000.00 30.00 75.00 200.00 15.00 19.06	306,000 100,000 150 1,500 2,400 52,500 25,312		\$533
C201 033000 0555000 055303 055303	<ul> <li><b>o</b> STAIR CONSTRUCTION</li> <li><i>CONCRETE</i></li> <li>Concrete to stairs</li> <li><i>MISCELLANEOUS METALS</i></li> <li>Egress stairs 1,2,3,4 w/ mesh rails</li> <li>Egress stairs 5 w/ glass infill panel rails</li> <li>Steps at stair 2 roof penthouse</li> <li><i>METAL GRATINGS AND FLOOR PLATES</i></li> <li>Metal grate at stair 2 roof penthouse</li> <li>Handrail at stair 2 roof penthouse steps</li> <li>SUBTOTAL</li> <li><b>STAIR FINISHES</b></li> <li><i>RESILIENT FLOORS</i></li> <li>Rubber tile at stairs - landings</li> <li>Rubber tile at stairs - treads</li> <li><i>PAINTING</i></li> <li>Paint to staircases including underside</li> <li>SUBTOTAL</li> </ul>	9.0 2 5 20 12 3,500 1,328	flt flt lf lf sf lf sf lft	34,000.00 50,000.00 30.00 75.00 200.00 15.00 19.06	306,000 100,000 150 1,500 2,400 52,500 25,312		\$533



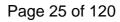
07-Jun-19

CSI					UNIT	EST'D	SUB	TOTAI
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI							
	064020	INTERIOR ARCHITECTURAL WOODWORK						
		FRP wall panels in janitor's closet	967	sf	14.00	13,538		
		FRP at kitchen & storage	1,914	sf	14.00	NR		
	090002	TILE						
	- ,	Wall tile at gang toilet rooms; 7'-8" high	9,312	sf	24.00	223,488		
		Wall tile at single toilet rooms; 7'-8" high	7,464	sf	24.00	179,136		
		Porcelain wall tile at Servery/Cafeteria area, full height	363	sf	24.00	8,712		
		Porcelain wall tile at front of kitchen area, full height; kitchen area	2,600	sf	24.00	62,400		
		Wall tile at corridor drinking fountains	196	sf	22.00	4,312		
	090007	PAINTING						
	- ,000/	Paint to GWB	306,297	sf	0.80	245,038		
		Paint to CMU	13,633	sf	1.25	17,041		
		Paint to columns in media center	13,033	loc	75.00	225		
		Green screen wall paint	з 145	sf	5.00	725		
			-40	51	0.00	160		
	102601	WALL AND CORNER GUARDS						
		Wall protection at corridor 1153	677	sf	10.00	6,770		
	098413	SOUND ABSORBING PANELS						
	070413	AWP-1; 1" acoustic fabric wrapped panel	152	sf	28.00	4,256		
		AWP-2-5; 2" acoustic fabric wrapped panel	1,069	sf	32.00	34,208		
		Gymnasium - acoustic panel	3,100	sf	16.50	51,150		
	102606	DIGITALLY PRINTED WALL COVERINGS	3,100	51	10.00	51,150		
	102000	DIGITALIT FRINTED WALL COVERINGS DPW; Digitally printed protective wall coverings; Koroseal; locations per A9.62	1,800	sf	35.00	63,000		
		SUBTOTAL					913,999	
							010,000	
	C3020	FLOOR FINISHES						
	033000	CONCRETE						
		Sealed concrete	5,270	sf	2.50	13,175		
			0,-,0			,		
	070001	WATERPROOFING, DAMPPROOFING AND CAULKING						
		Waterproofing membrane throughout all toilet rooms at elevated slab on deck; note 20/A1.71	3,050	sf	4.00	12,200		
	096000	INTERIOR ARCHITECTURAL WOODWORK						
		Wood flooring at Platform	860	sf	24.00	20,640		
	090002	TILE		•		<u>.</u>		
		Floor patching or self leveling compound allowance where necessary, per floor finish general note 15	2,230	sf	0.50	1,115		
		Quarry tile 6x6	1,850	sf	26.00	48,100		
			380	sf	20.00	7,600		
		Compressed Quartz tile	300			0.000		
		Compressed Quartz tile Quarry tile base	380 340	lf	20.00	6,800		
	0077	Quarry tile base	•	lf	20.00	0,800		
	090005	Quarry tile base RESILIENT FLOORS	340					
	090005	Quarry tile base	•	lf sf	20.00 0.75	86,038		
	090005	Quarry tile base <i>RESILIENT FLOORS</i> Floor patching or self leveling compound allowance where	340					
	090005	Quarry tile base <i>RESILIENT FLOORS</i> Floor patching or self leveling compound allowance where necessary, per floor finish general note 15	340 114,717	sf	0.75	86,038		
	090005	Quarry tile base RESILIENT FLOORS Floor patching or self leveling compound allowance where necessary, per floor finish general note 15 Sheet linoleum (including premium for patterns)	340 114,717 112,067	sf sf	0.75 7.00	86,038 784,469		
	090005	Quarry tile base RESILIENT FLOORS Floor patching or self leveling compound allowance where necessary, per floor finish general note 15 Sheet linoleum (including premium for patterns) Luxury vinyl tile	340 114,717 112,067 110	sf sf sf	0.75 7.00 5.50	86,038 784,469 605		
	090005	Quarry tile base RESILIENT FLOORS Floor patching or self leveling compound allowance where necessary, per floor finish general note 15 Sheet linoleum (including premium for patterns) Luxury vinyl tile Luxury vinyl tile - checkerboard pattern	340 114,717 112,067 110 360	sf sf sf sf	0.75 7.00 5.50 6.50	86,038 784,469 605 2,340		
	090005	Quarry tile base RESILIENT FLOORS Floor patching or self leveling compound allowance where necessary, per floor finish general note 15 Sheet linoleum (including premium for patterns) Luxury vinyl tile Luxury vinyl tile - checkerboard pattern Rubber flooring at art rooms	340 114,717 112,067 110 360 2,010	sf sf sf sf sf	0.75 7.00 5.50 6.50 12.00	86,038 784,469 605 2,340 24,120		



07-Jun-19

	60% Constructio	on Documents Estimate					GFA	167,352
	CSI				UNIT	EST'D	SUB	TOTAL
	CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
682	NEW BUILDI 096100	NG ATHLETIC FLOORING						
683	0y0100	Floor patching or self leveling compound allowance where necessary, per floor finish general note 15	6,865	sf	0.75	5,149		
684		Wood athletic flooring	5,995	sf	19.00	113,905		
685		Wood athletic flooring vented base	360	lf	7.50	2,700		
686 687		Resilient athletic floor; Taraflex sports M plus	870	sf	12.20	10,614		
688	096700	FLUID APPLIED FLOORING						
689		Epoxy floor at toilet rooms with 6" integral base	5,640	sf	18.00	101,520		
690		Epoxy floors elsewhere (no integral base)	1,360	sf	16.00	21,760		
691 692	096810	TILE CARPETING						
693	090810	Floor patching or self leveling compound allowance where necessary, per floor finish general note 15	13,675	sf	0.75	10,256		
694		Carpet	9,405	sf	5.00	47,025		
695		Carpet at media center - including premium for patterning	9,405 4,270	sf	7.00	29,890		
696		per A9.63 Carpet, waste	1,368	sf	5.00	6,840		
697		Area rugs	1,308	sí	5.00	0,840 NIC		
698		Moisture mitigation -admixture included w/ concrete slabs	10,049	51		1110		
699		SUBTOTAL					1,409,851	
700 701	0							
702	C3030	CEILING FINISHES						
703	095000	INTERIOR ARCHITECTURAL WOODWORK						
704		WD-1; linear wood slats w/ black felt scrim above; Armstrong woodworks grille	6,331	sf	40.00	253,240		
705		6" wood trim at wood ceiling to ACT transition; P12/A2.50	475	lf	30.00	14,250		
706 707		Wood veneer trim on mdf with 2-1/2" mtl studs at proscenium opening; detail 3/A2.50	229	sf	55.00	12,595		
708	090003	ACOUSTICAL TILE						
709	0,0000	ACP-1, 2x4 Armstrong Calla	82,435	sf	5.00	412,175		
710		ACP-1A, 2x2 Armstrong Calla	32,373	sf	5.80	187,763		
711		ACP-2; 2x4	225	sf	5.00	1,125		
712		ACP-2A; 2x2 Armstrong Calla at Quiet room	318	sf	5.80	1,844		
713		ACP-4; 2x4 Armstrong optima healthzone	2,340	sf	6.50	15,210		
714		ACP-6; 2x4 Armstrong serpentina waves at proscenium; white and maple unperforated finish; curved metal clouds	539	sf	60.00	32,340		
715		ACP-6; 2x4 Armstrong serpentina waves - curved metal clouds at cafeteria; micro perforated with acoustical fill	2,158	sf	50.00	107,900		
716		ACP-6; 2x4 Armstrong serpentina waves - curved metal clouds at corridor 1135 and vestibule 1136; micro perforated with acoustical fill	700	sf	50.00	35,000		
717 718								
718 719	090007	PAINTING Point to CWP collings		-£	1 50	00.040		
720		Paint to GWB ceilings Paint ceiling tile and grid black in Green screen & video	15,760 200	sf sf	1.50 2.00	23,640 NR		
721		Paint to exposed ceilings including at gym		sí	2.50	22,313		
722		· unit to exposed connigs including at gym	8,925	31	2.50	~~,010		
723	092900	GYPSUM BOARD ASSEMBLIES						
724		GWB ceiling	3,075	sf	15.00	46,125		
725 726		GWB ceiling to underside of stair runs/landings	2,339	sf	18.00	42,102		
120		GWB cap above cafeteria bumpouts and deep window sills	243	sf	15.00	3,645		
727		Premium for sound isolation ceiling type B at general office/waiting	615	sf	22.00	13,530		
728		GWB soffits - horizontal	5,954	sf	15.00	89,310		
729		GWB soffits - vertical	6,731	sf	20.00	134,620		
730								



07-Jun-19



**W. Edward Balmer Elementary School** Whitinsville, MA

					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
	BUILDI							
	098400	SOUND ABSORBING PANELS Direct attached tectum panels between structure at gym per note on A2.23 (60% of ceiling)	3,597	sf	18.00	Removed from c	ontract	
		SUBTOTAL					1,448,727	
		TOTAL - INTERIOR FINISHES						\$3,772,
1	D10	CONVEYING SYSTEMS	7					
	055000	MISCELLANEOUS METALS	4					
	0,5000	Pit ladder	1	ea	2,500.00	2,500		
		Sill angle	18	lf	2,000.00	450		
	142000	ELEVATOR	_		150 000 00	150.000		
		Hydraulic elevator; 3 stop; 3,500 lbs SUBTOTAL	1	ea	150,000.00	150,000	152,950	
							152,950	
		TOTAL - CONVEYING SYSTEMS						\$152,9
I	D20	PLUMBING	7					
		rlonding	_					
	D20	PLUMBING, GENERALLY Equipment						
		Gas fired domestic HW heater 500 MBH with storage	2	ea	28,000.00	56,000		
		Hot water pump 1.5 GPM	1	ea	1,200.00	1,200		
		Water meter assembly	1	ea	3,500.00	3,500		
		Reduced pressure backflow preventer	1	ea	3,000.00	3,000		
		Connection to gas valve	1	ea	1,200.00	1,200		
		Mixing valve	1	ea	4,500.00	4,500		
		Expansion tank	2	ea	2,000.00	4,000		
		Grease trap	1	ea	3,500.00	3,500		
		Floor drains	12	ea	650.00	7,800		
		Roof drains	78	ea	750.00	58,500		
		Elevator sump pump	1	ea	3,500.00	3,500		
		Gas solenoid control panel Hot water heater flues	1	ea ls	2,500.00 2,000.00	2,500 2,000		
		Exterior grease trap system	1	ls	10,000.00	10,000		
		Plumbing Fixtures & Specialties	-	15	10,000.00	10,000		
		Water closet	<b>8</b> 7	ea	1,200.00	104,400		
		Lavatory	57	ea	950.00	54,150		
		Classroom sink	30	ea	975.00	29,250		
		Stainless steel sink	9	ea	975.00	8,775		
		Art room sinks interceptor	4	ea	1,100.00	4,400		
		Urinal	12	ea	1,400.00	16,800		
		Drinking fountain	13	ea	2,500.00	32,500		
		Janitor sink	5	ea	975.00	4,875		
		Domestic Water Type L Copper Pipe	10.000	16	40.00	480.000		
		Domestic water pipe with fittings & hangers	12,000	lf lf	40.00 9.00	480,000 108,000		
		Domestic water pipe insulation Sanitary Waste And Vent Pipe w/ Hangers	12,000	п	9.00	100,000		
		Sanitary waste And Vent Fife W/ Hangers	10,500	lf	44.00	462,000		
		Kitchen waste pipe with fittings & hangers	1,150	lf	46.00	52,900		
		Storm Drainage, Hubless Cast Iron Pipe	,-09			,		
		Storm water pipe with fittings & hangers	3,700	lf	48.00	177,600		
		Pipe insulation on horizontal runs	3,700	lf	12.00	44,400		



07-Jun-19

	structio	n Documents Estimate	1		111100	Fourto	GFA	167
CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW BU	UILDI	NG						
		<u>Miscellaneous</u>						
		Coordination & BIM	1	ls	62,000.00	62,000		
		Coring, sleeves & firestopping	1	ls	15,000.00	15,000		
		Commissioning support	1	ls	12,000.00	12,000		
		Testing and sterilization	1	ls	10,000.00	10,000		
		Market adjustment	167,352	sf	2.00	334,704		
		Fees & permits	1	ls	21,000.00	21,000		
		SUBTOTAL					2,311,454	
		TOTAL - PLUMBING						\$2,311,
								÷-, <b>0</b> ,
_	Dee	WAG	1					
	D30	HVAC						
	D30	HVAC, GENERALLY						
		HVAC Equipment						
		Gas fired HW boiler 2500 MBH	3	ea	60,000.00	180,000		
		Chemical treatment system	1	ls	15,000.00	15,000		
		Expansion tank	1	ea	3,000.00	3,000		
		Air separator	1	ea	2,000.00	2,000		
		Radiant ceiling panel	3,470	lf	130.00	451,100		
		Unit heater HW	25	ea	650.00	16,250		
		Ductless AC unit with ACCU	10	ea	7,500.00	75,000		
		Pumps						
		Hot water pump 500 gpm	2	ea	12,500.00	25,000		
		Boiler pump 240 GPM	3	ea	6,000.00	NIC		
		<u>Air distribution</u>						
		RTU's gas fired heating with DX cooling & ERW	75,940	cfm	15.00	1,139,100		
		Kitchen make-up air unit	4,500	cfm	6.00	27,000		
		Kitchen heating & ventilation unit	1,960	cfm	10.00	19,600		
		VAV unit	141	ea	1,200.00	169,200		
		VRF outdoor unit	10	ton	2,000.00	20,000		
		VRF indoor unit	20	ea	2,800.00	56,000		
		Branch controller	3	ea	4,000.00	12,000		
		Displacement ventilation system	225	ea	700.00	157,500		
		Exhaust fans						
		Exhaust fans	11	ea	3,000.00	33,000		
		Sheet metal & Accessories						
		Supply & return galvanized ductwork distribution system	131,000	lbs	11.50	1,506,500		
		Duct insulation	79,000	sf	4.00	316,000		
		Combustion air galvanized ductwork distribution system	2,600	lbs		W/ Plumbing		
		Kitchen hood exhaust ductwork system	4,000	lbs	14.00	56,000		
		Sound attenuators	22	ea	5,000.00	110,000		
		Registers, grilles & diffusers	164	ea	125.00	20,500		
		Sheet metal accessories	1	ls	50,000.00	50,000		
		Mechanical louvers	1	ls	5,000.00	5,000		
		Piping				2		
		Hot Water Piping						
		Hot water piping with fittings & hangers	16,500	lf	40.00	660,000		
		Refrigerant Piping	- ,0 - 0		2120	,		
		Refrigerant piping with fittings & hangers	7,200	lf	26.00	187,200		
		Condensate Drain Piping	,,_00			,~~~		
		Condensate drain piping with fittings & hangers	3,000	lf	20.00	60,000		
		Dining Inculation	3,300		20.00	00,000		

Piping Insulation



07-Jun-19

CSI		n Documents Estimate		1	UNIT	EST'D	GFA SUB	167, <b>TOTAL</b>
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW F	BUILDI	NG			1 1			
		Piping insulation	26,700	lf	9.00	240,300		
		Automatic Temperature Controls						
		Automatic temperature controls DDC	167,352	sf	6.00	1,004,112		
		Balancing						
		System testing & balancing	167,352	sf	1.00	167,352		
		Miscellaneous	,,					
		Work to extend stair 2 to roof	1	ls	9,000.00	NIC		
		Coordination & BIM	1	ls	190,000.00	190,000		
		Commissioning support	1	ls	25,000.00	25,000		
		Coring, sleeves & fire stopping	1	ls	15,000.00	15,000		
		Equipment start-up and inspection	1	ls	3,500.00	3,500		
		Rigging & equipment rental	1	ls	60,000.00	60,000		
					28,000.00	28,000		
		Vibration & seismic restraints	1	ls	28,000.00	28,000	7 105 914	
		SUBTOTAL					7,105,214	
Г		TOTAL - HVAC						\$7,105,2
L								. , , 0,-
F								
	D40	FIRE PROTECTION						
	D40	FIRE PROTECTION, GENERALLY						
	240	Equipment & valves						
		Double check valve assembly	1	ea	8,500.00	8,500		
		Wet alarm check valve assembly	1	ea	4,000.00	4,000		
		Fire department connection	2		4,000.00	4,000 3,300		
		Control valve & TS (each floor)		ea	2,500.00	25,000		
			10	ea				
		Fire hose valve	12	ea	700.00	8,400		
		Sprinkler heads	1,482	ea	85.00	125,970		
		Sprinkler Piping						
		Main sprinkler piping with fittings & hangers	6,800	lf	40.00	272,000		
		Branch sprinkler piping with fittings & hangers	13,300	lf	26.00	345,800		
		Fire standpipes with fittings & hangers	5	ea	3,600.00	18,000		
		Drain piping with fittings & hangers	2	ea	2,400.00	4,800		
		Valves & Specialties	1	ls	40,000.00	40,000		
		<u>Miscellaneous</u>						
		Coordination & BIM	1	ls	20,000.00	20,000		
		Hydraulic calculations	1	ls	8,000.00	8,000		
		Coring, sleeves & firestopping	1	ls	15,000.00	15,000		
		Shop drawings	1	ls	5,000.00	5,000		
		Commissioning of system	1	ls	12,000.00	12,000		
		Fees & permits	1	ls	8,000.00	8,000		
		SUBTOTAL					923,770	
Г		TOTAL - FIRE PROTECTION						\$923,7
								<b>Ψ9~3</b> ,7
L	D50	ELECTRICAL						
	D5010	ELECTRICAL SYSTEMS Gear & Distribution						
		Normal Power						
		Meter Sockets	1	ea	400.00	400		
		CT/PT cabinet	1	ea	3,500.00	400 3,500		
		3000A 277/480V main switchboard	1	ea	75,000.00	75,000		
		225A 277/480V panelboard	8		2,400.00	19,200		
				ea	2,400.00	19,200		
					14(1)(1)			
		100A 277/480V panelboard 45KVA K-13 type transformer	8 18	ea ea	8,000.00	144,000		



07-Jun-19

CSI	1			UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUIL	LDING			II			
	225A 208/120V double tub panelboard	9	ea	4,800.00	43,200		
	225A 208/120V panelboard	2	ea	2,400.00	4,800		
	100A 208/120V panelboard	2	ea	1,400.00	2,800		
	100A fused disconnect switch	15	ea	1,000.00	15,000		
	SPD	43	ea	750.00	32,250		
	225A feed	1,280	lf	45.00	57,600		
	100A feed	2,200	lf	20.00	44,000		
	90A feed	1,800	lf	18.00	32,400		
	Grounding	1	ls	20,000.00	20,000		
	Emergency power						
	250kW diesel generator w/125kW resistive load bank including fuel for testing	1	ea	100,000.00	100,000		
	600A 277/480V ATS	1	ea	12,000.00	12,000		
	100A 277/480V ATS	1	ea	3,800.00	3,800		
	225A 277/480V panelboard	8	ea	2,400.00	19,200		
	100A 277/480V panelboard	1	ea	1,400.00	1,400		
	112.5 KVA K-13 type transformer	3	ea	15,400.00	46,200		
	45KVA dry type transformer	2	ea	5,200.00	10,400		
	400A 208/120V quadruple panelboard	4	ea	11,850.00	47,400		
	225A 208/120V double tub panelboard	2	ea	4,800.00	9,600		
	SPD	7	ea	750.00	5,250		
	600A feed	60	lf	120.00	7,200		
	400A feed	60	lf	80.00	4,800		
	225A feed	100	lf	45.00	4,500		
	200A feed	1,200	lf	40.00	48,000		
	150A feed	60	lf	24.00	1,440		
	100A feed	450	lf	20.00	9,000		
	UPS System	10 -			- ,		
	16kW UPS	2	ea	15,000.00	30,000		
	225A 208/120V double tub panelboard	2	ea	4,800.00	9,600		
	100A fused disconnect switch	2	ea	996.00	1,992		
	70A feed	400	lf	20.00	8,000		
	Note: Risers and panelboard schedule do not match. Panelb				0,000		
	Photovoltaic system	ouru scheuu	ic useu je	or estimate			
	PV equipment & installation						
	Future PV system rough in including 1" & 2" conduit to roof	2	loc	5,000.00	10,000		
	Future FV system rough in including F & 2 conduct to roof	2	IOC	3,000.00	10,000		
	Equipment Wiring						
	BC 20A feed, connection & 30A NFSS	3	ea	935.00	2,805		
	Boiler 20A feed, connection & TS	3	ea	715.00	2,145		
	Gas fired domestic HW heater 500 MBH with storage feed and connection	2	ea	1,250.00	2,500		
	Chiller 60A feed, connection & 60A FSS WP	1	ea	2,780.00	2,780		
	CP 20A feed, connection & TS	1	ea	1,095.00	1,095		
	DCU 20A feed, connection & 30A FSS	10	ea	1,420.00	14,200		
	DCU 30A feed, connection & 30A FSS	10	ea	1,465.00	14,650		
	DWH 20A feed, connection & TS	2	ea	1,095.00	2,190		
	EF 20A feed, connection & TS	6	ea	1,095.00	6,570		
	EUH 20A feed, connection & 30A NFSS	1	ea	1,320.00	1,320		
	GF 20A feed & connection	1	ea	1,020.00	1,020		
	HV 20A feed, connection & 30A NFSS	1	ea	1,320.00	1,320		
	KEF 20A feed, connection & 30A NFSS	1	ea	1,510.00	1,510		
	MAU 20A feed, connection & 30A NFSS	1	ea	1,520.00	1,520		
	Hot water pump 500 gpm feed and connection	2	ea	1,100.00	2,200		
	Boiler pump 240 GPM feed and connection	3	ea	950.00	2,850		
		-					



W. Edward Balmer Elementary School Whitinsville, MA

60% Construction Documents Estimate

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167,352

TOTAL COST

GFA

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL
	NEW	BUILDI	NG					
953			RP 20A feed, connection & TS	2	ea	1,095.00	2,190	
954			RTU 100A feed, connection & 100A FSS WP	8	ea	3,930.00	31,440	
955			RTU 30A feed, connection & 30A FSS WP	1	ea	1,820.00	1,820	
956			SV 20A feed, connection & TS	1	ea	905.00	905	
957			UH 20A feed, connection & TS	22	ea	1,290.00	28,380	
958			VAV 20A feed, connection & TS	136	ea	600.00	81,600	
959			VRF outdoor unit feed and connection	8	ton	940.00	7,520	
960			VRF indoor unit feed and connection	20	ea	940.00	18,800	
961			Chemical treatment system feed and connection	1	ls	2,500.00	2,500	
962			Kitchen:					
963			20A feed & connection	2	ea	500.00	1,000	
964			20A feed, connection & TS	13	ea	500.00	6,500	
965			20A feed, connection & 30A NFSS	6	ea	650.00	3,900	
966			20A feed, connection & 30A FSS	2	ea	650.00	1,300	
967			60A feed, connection & 60A FSS	1	ea	1,300.00	1,300	
968			70A feed, connection & 100A FSS	1	ea	1,400.00	1,400	
969			Elevator 125A feed, connection & 200A FSS	1	ea	3,500.00	3,500	
970			Elevator cab 20A feed, connection & 30A FSS	1	ea	1,500.00	1,500	
971			SUBTOTAL					1,188,012
972 973		-						
973		D5020	LIGHTING & POWER Lighting & Branch Power					
975			Exit sign	67	ea	220.00	14,740	
976			J	11	ea	250.00	2,750	
977			LG3	32	ea	500.00	16,000	
978			LK24	32 26	ea	320.00	8,320	
979			LP4	111	ea	320.00	35,520	
980			LP8	402	ea	650.00	261,300	
981			LPD2	4°- 1	ea	400.00	400	
982			LPD3	1	ea	500.00	500	
983			LPG	29	ea	1,000.00	29,000	
984			LR2	17	ea	200.00	3,400	
985			LR4	166	ea	280.00	46,480	
986			LR4A	18	ea	300.00	5,400	
987			LR6	56	ea	400.00	22,400	
988			LR8	46	ea	550.00	25,300	
989			LR8A	3	ea	600.00	1,800	
990			LR10	6	ea	900.00	5,400	
991			LR24	57	ea	260.00	14,820	
992			LRD2	74	ea	400.00	29,600	
993			LRD3	5	ea	500.00	2,500	
994			LRD4	2	ea	600.00	1,200	
995			LS2	1	ea	280.00	280	
996			LS4	39	ea	350.00	13,650	
997			LS4A	2	ea	350.00	700	
998			LS8	47	ea	500.00	23,500	
999			LS8A	20	ea	550.00	11,000	
1000			LSV4	5	ea	300.00	1,500	
1001			LV4	8	ea	300.00	2,400	
1002			LWS	570	lf	120.00	68,400	
1003			PC1	12	ea	750.00	9,000	
1004			PC2	21	ea	750.00	15,750	
1005			RC1	342	ea	320.00	109,440	
1006			RC2	20	ea	320.00	6,400	
1007			RCW	6	ea	350.00	2,100	
1008			SL4	13	ea	750.00	9,750	
	Balmer E	S School 60%	6 CD Estimate 6-7-19	Page 27				PMC - Project Manag



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SI Re M M Lii Ne Sir Sir Sir Sir Sir Sir Sir Sir Ph	25 eccessed fixture not labelled iedia Center Track edia Center track heads ghting controls etworked lighting control system ngle pole switch TS ngle pole low voltage switch ngle pole low voltage switch ngle pole switch wp c cccupancy sensor noto sensor LC canch devices	21 26 9 1 7 1 207 11 8 282 88	ea lf ea ls ea ea ea ea ea ea	500.00 45.00 250,000.00 22.00 650.00 25.00 32.00 45.00	10,500 $1,170$ $4,050$ $250,000$ $154$ $650$ $5,175$ $352$		
Re M Li, Ne Sir Sir Sir Sir Sir Sir Sir Sir Sir Sir	eccessed fixture not labelled feedia Center Track edia Center track heads ghting controls etworked lighting control system ngle pole switch TS ngle pole low voltage switch ngle pole switch wp c cccupancy sensor noto sensor LC ranch devices	21 26 9 1 7 1 207 11 8 282 88	ea lf ea ls ea ea ea ea ea ea	500.00 45.00 250,000.00 22.00 650.00 25.00 32.00 45.00	10,500 $1,170$ $4,050$ $250,000$ $154$ $650$ $5,175$ $352$		
M M Li, Ne Sii Sii Sii Sii Sii Sii Sii Sii Sii Si	edia Center Track iedia Center track heads ghting controls etworked lighting control system ngle pole switch TS ngle pole low voltage switch ngle pole switch wp c ccupancy sensor noto sensor LC ranch devices	26 9 1 207 11 8 282 88	lf ea ls ea ea ea ea ea ea	$\begin{array}{c} 45.00\\ 450.00\end{array}$ $\begin{array}{c} 250,000.00\\ 22.00\\ 650.00\\ 25.00\\ 32.00\\ 45.00\end{array}$	1,170 4,050 250,000 154 650 5,175 352		
M Li, Ne Sin Sin Sin Sin Sin Sh Oc	edia Center track heads <u>ghting controls</u> etworked lighting control system ngle pole switch TS ngle pole low voltage switch ngle pole switch wp c ccupancy sensor noto sensor LC ranch devices	9 1 207 11 8 282 88	ea ls ea ea ea ea ea ea	450.00 250,000.00 22.00 650.00 25.00 32.00 45.00	4,050 250,000 154 650 5,175 352		
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M Sir Sir Sk Oc Ph	TS ngle pole low voltage switch ngle pole switch wp c ccupancy sensor noto sensor LC ranch devices	1 207 11 8 282 88	ea ea ea ea	650.00 25.00 32.00 45.00	650 5,175 352		
Sir Sir Sk Oc Pl	ngle pole low voltage switch ngle pole switch wp c ccupancy sensor noto sensor LC <u>ranch devices</u>	207 11 8 282 88	ea ea ea ea	25.00 32.00 45.00	5,175 352		
Sii Sk Oo Pł	ngle pole switch wp c cccupancy sensor noto sensor LC ranch devices	11 8 282 88	ea ea ea	32.00 45.00	352		
Sk Oo Ph	ccupancy sensor noto sensor LC ranch devices	8 282 88	ea ea	45.00			
Oc Pł	ccupancy sensor noto sensor LC r <u>anch devices</u>	282 88	ea		360		
Ph	noto sensor LC ranch devices	88		220.00			
	LC ranch devices		ea		62,040		
AI	ranch devices	1		150.00	13,200		
			ea	1,500.00	1,500		
	uplex receptacle						
		810	ea	23.00	18,630		
Do	ouble duplex receptacle	430	ea	46.00	19,780		
Do	ouble duplex receptacle in floor box	6	ea	46.00	276		
GI	FI duplex receptacle	316	ea	38.00	12,008		
Sp	pecial purpose receptacle	<b>3</b> 7	ea	75.00	2,775		
Co	ord reel	8	ea	600.00	4,800		
2 8	gang floor box	6	ea	300.00	1,800		
Li	ghting and branch circuitry						
W	'P device plate	23	ea	16.00	368		
De	evice plate	1,750	ea	4.00	7,000		
De	evice box	3,334	ea	20.00	66,680		
3/	/4" EMT	30,000	lf	6.50	195,000		
#1	12 THHN	135,000	lf	0.75	101,250		
Ca	at cabling	11,000	lf	2.00	22,000		
12	2-2 MC cable	30,000	lf	3.85	115,500		
12	2-3 MC cable	12,000	lf	4.60	55,200		
1"	conduit in slab	200	lf	9.00	1,800		
Lo	ow voltage lighting control circuitry	15,000	lf	2.00	30,000		
	UBTOTAL	0/				1,809,268	
						_,,	
D5030 C	OMMUNICATION & SECURITY SYSTEMS						
<u>Fi</u>	<u>re Alarm</u>						
Fi	re alarm control panel	1	ea	30,000.00	30,000		
Fi	re alarm remote annunciator	2	ea	1,200.00	2,400		
Fi	re alarm terminal cabinet	2	ea	1,200.00	2,400		
Kr	nox box	2	ea	600.00	1,200		
Ex	xterior beacon	2	ea	300.00	600		
Μ	aster box	1	ea	1,600.00	1,600		
Be	ell	2	ea	320.00	640		
Μ	anual pull station	24	ea	100.00	2,400		
Sn	noke/heat detector	129	ea	135.00	17,415		
CC	O detector	21	ea	135.00	2,835		
Du	uct smoke detector, allow	21	ea	400.00	8,400		
Au	udio/visual device	35	ea	135.00	4,725		
	udio/visual device with A, not scheduled, allow amber ass notification device	75	ea	150.00	11,250		
Sp	beaker light	81	ea	140.00	11,340		
	ceiling, not scheduled, allow amber mass notification evice	81	ea	135.00	10,935		
Vi	isual device	66	ea	120.00	7,920		
FF	P equipment connection	17	ea	150.00	2,550		



07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUI							
	Kitchen connection	1	ea	150.00	150		
	Elevator recall connection	2	ea	150.00	300		
	Gas detection monitor	9	ea	150.00	1,350		
	Wireguard	4	ea	35.00	140		
	Control/monitor module	61	ea	150.00	9,150		
	Device box	640	ea	20.00	12,800		
	3/4" EMT	6,500	lf	6.50	42,250		
	#14 THHN	19,000	lf	0.61	11,590		
	FA cable	3,200	lf	0.65	2,080		
	MC cable	22,000	lf	3.85	84,700		
	Testing and programming	1	ls	11,000.00	11,000		
	Bi-Directional Amplification System						
	BDA	1	ls	75,000.00	75,000		
	Security System						
	Head-end and mics. increases per engineer	1	ls	100,000.00	100,000		
	AI, video intercom/door release station	4	ea	750.00	3,000		
	CCTV camera	78	ea	750.00	58,500		
	CCTV camera WP	17	ea	950.00	16,150		
	Card reader	32	ea	350.00	11,200		
	Keypad	5	ea	350.00	1,750		
	Panic button	1	ea	120.00	120		
	Motion button	55	ea	120.00	6,600		
	Device box with conduit stub	192	ea	85.00	16,320		
	Security cabling	11,000	lf	1.25	13,750		
	Telephone/Data/CATV						
	Telecommunications rough in:		1.	70,000,00	70.000		
	Telecommunications increase per engineers comments MDF fit out	1	ls I-	70,000.00 2,500.00	70,000		
	IDF fit out	1	ls		2,500 7,500		
		3	ea	2,500.00 2,000.00	24,000		
	System rack Backboard	12	ea	2,000.00	24,000		
	Closet grounding	4	ea	350.00	2,000 1,400		
		4	ea				
	4" conduit sleeves, allow 4" conduit, allow 2-4" from MDF to each IDF	12	ea 16	150.00	1,800		
		1,000	lf If	22.00	22,000		
	Cable tray, allow 1 gang box with 1" conduit	325	lf	35.00 95.00	11,375 6,650		
	1 gang box with 2-1" conduit	70	ea	95.00 160.00	72,800		
	1 gang box with 1" & 1.25" conduit	455 216	ea ea	200.00	43,200		
	WAP back box	104	ea	55.00	5,720		
	Telecommunications devices & cabling:	104	ca	55.00	5,720		
	Telephone port	87	ea	18.00	1,566		
	1 port device	2	ea	18.00	36		
	2 port device	316	ea	36.00	11,376		
	3 port device	50	ea	54.00	2,700		
	AV, blank cover plate	216	ea	5.00	1,080		
	Call button	210 70	ea	18.00	1,260		
	WAP 2 port device	104	ea	300.00	31,200		
	Cat cabling	175,000	lf	1.25	218,750		
	School wide local area network switches, allow per engineers budget	1/5,000	ls	180,000.00	180,000		
	Digital signage system per engineers budget	1	ls	20,000.00	20,000		
	Computer network equipment				FF&E		
	Mobile computer carts and lockers				FF&E		
	Network printer equipment				FF&E		
	Cafeteria point of sale equipment				FF&E		
	Visitor management system				FF&E		



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CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW BUIL	DING						
	Wireless				FF&E		
	PA/Clock System						
	Head-end	1	ls	20,000.00	20,000		
	Clock	132	ea	120.00	15,840		
	Speaker ceiling mount	265	ea	120.00	31,800		
	Speaker with volume control	113	ea	160.00	18,080		
	Speaker wall mount	4	ea	150.00	600		
	Speaker back box	378	ea	65.00	24,570		
	Device box with conduit stub	136	ea	95.00	12,920		
	MC cable	8,000	lf	3.85	30,800		
	Speaker cabling	19,000	lf	1.10	20,900		
	Audio/Visual systems						
	AV equipment				By Owner		
	Instructional video presentation equipment				FF&E		
	Portable video presentation system equipment				FF&E		
	Rack, gym/café	1	ea		By Owner		
	HS, horn speaker	3	ea		By Owner		
	M, microphone	5	ea		By Owner		
	M2, microphone	1	ea		By Owner		
	PC, AV interface outlet	2	ea		By Owner		
	Projector	1	ea		By Owner		
	S4 Gym interface outlet	8	ea		By Owner		
	S4 Ceiling speaker	8	ea		By Owner		
	W, assisted listening and microphone antenna	1	ea		By Owner		
	WA, assisted listening and microphone antenna	2	ea		By Owner		
	Allowance for Gym system per engineers budget	1	ls	15,000.00	15,000		
	Rough-In conduit and backboxes only	32	ea	350.00	11,200		
	Classroom audio system	66	rooms	2,200.00	145,200		
	Cafeteria sound system per engineers budget	1	ls	25,000.00	25,000		
	<u>Gymnasium</u>	-	10	20,000100	20,000		
	Scoreboard with feed and connection	2	ea	15,000.00	30,000		
	Backstop feed and connections	2	ea	1,500.00	3,000		
	Equipment feed and connections		ea	1,500.00	4,500		
	Sound system	3	ls	20,000.00	20,000		
	Auditorium	1	15	20,000.00	20,000		
	Dimmer system/ stage lighting		le	35,000.00	35,000		
	Performance lighting rough-in & power	1	ls ls	15,000.00	15,000		
	TH1	1		13,000.00	Included		
	TH2	6	ea		Included		
	Audio visual system equipment		ea ls	75,000.00	75,000		
	• • •	1			30,000		
	Audio/visual rough-in & power SUBTOTAL	1	ls	30,000.00	30,000	1 010 000	
	SUDIVIAL					1,919,833	
D504	40 OTHER ELECTRICAL SYSTEMS						
-	<u>Miscellaneous</u>						
	Temp power and lights	167,352	sf	0.50	83,676		
	Commissioning support	1	ls	15,000.00	15,000		
	Coordination and studies	1	ls	50,000.00	50,000		
	Seismic restraints	1	ls	10,000.00	10,000		
	UL Master Label Lightning Protection System	167,352	sf	0.40	66,941		
	Fees & Permits	1	ls	55,000.00	55,000		
	SUBTOTAL					280,617	

E10 EQUIPMENT

1173 1174



07-Jun-19

CSI					UNIT	EST'D	SUB	TOTAL
CODE		DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW	BUILDI	ING						
	E10	EQUIPMENT, GENERALLY						
	113013	APPLIANCES						
		Microwave	6	loc	800.00	4,800		
		Refrigerator - side by side	5	loc	2,000.00	10,000		
		Washer/dryer pair, locate in Recycling Room #1164	1	pr	5,000.00	5,000		
				-				
		Washer/dryer pair, locate in Custodial Storage #2115	1	pr	5,000.00	5,000		
		Defibrillator units	4	ea	1,500.00	6,000		
		Lego plate wall; B20/A9.71	163	sf	32.00	5,216		
		FF&E Items						
		Ride-on floor scrubber machines ; (220 volt power)	2	ea		FF&E		
		Backpack vacuums	2	ea		FF&E		
		Man-lift/ scissor lift – max 32" wide x 6'-8" tall (Door opening sized)	1	ea		FF&E		
		Pallet jack – max 32" wide	1	ea		FF&E		
		Desk lifter/ jack/ mover	1	ea		FF&E		
		Floor buffer machines	2	ea		FF&E		
		Carpet Extractors	2	ea		FF&E		
		Rolling metal ladder-stairs - 6' standing height (re. Lowes)	2	ea		FF&E		
		Type IA Ladders – (1) 24' extension; (1) 18' extension; (1) 10' scissor type	3	ea		FF&E		
		Pottery wheel	2	ea		FF&E		
		Hoyer lift at rise toilet	1	ea		FF&E		
				cu		ITUL		
	111313	LOADING DOCK BUMPERS						
		Loading dock bumpers	1	ls	750.00	750		
	114000	FOOD SEVERVICE EQUIPMENT						
		Food Service equipment (dated 5/14/19)	1	ls	499,435.00	499,435		
	115213	PROJECTION SCREENS						
		Projection screen at platform room facing Café 227" diagonal per specifications	1	ls	4,490.10	4,490		
		Projection screen at platform room facing Gym 272" diagonal per specifications	1	ls	5,610.60	5,611		
		Projection screen at media/library				none shown		
	116050	THEATRICAL EQUIPMENT		,				
		Stage curtain and rigging	1	ls	28,000.00	28,000		
	116623	GYM EQUIPMENT						
		Basketball backstops; swing up; electric operated	6	ea	10,000.00	60,000		
		Gym wall pads (north and south walls)	696 -88	sf	18.00	12,528		
		Wall pads at de-esc rooms	588	sf	18.00	10,584		
		Gymnasium roll-up fabric divider; electrically operated	1	loc	30,240.00	30,240		
		Telescoping bleachers motorized; 300 person capacity	1	ls	39,000.00	39,000		
		Miscellaneous equipment; climbing wall, volley ball stanchions etc.	1	ls	2,000.00	2,000		
	4490							
	118227	WASTE COMPACTORS						
		Waste compactor; per specifications	1	loc		Assumed FF&E		
	110510							
	119513	KILN			F 00			
		Kiln	1	ea	5,000.00	5,000		

SUBTOTAL

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1282

W. Edward Balmer Elementary School Whitinsville, MA

	n Documents Estimate		<u> </u>	UNIT	EST'D	GFA SUB	167,3 <b>TOTAL</b>
	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
V BUILDI	NG		1				
	TOTAL - EQUIPMENT						\$733,65
L							
E20	FURNISHINGS						
E2010	FIXED FURNISHINGS						
123200	CASEWORK						
Ū	Art						
	Base cabinet with epoxy resin counter; per note 13/AQ1.23	82	lf	500.00	41,000		
	TS 24	4	ea	1,000.00	4,000		
	Upper cabinets - 32" high	46	lf	285.00	13,110		
	Cafeteria						
	Recycling counter at cafeteria 7'-0" wide	3	ea	600.00	1,800		
	Collaboration						
	2 tier wall shelving	137	lf	120.00	16,440		
	3 tier wall shelving	69	lf	160.00	11,040		
	Base cabinet with 4 drawers and counter	10	lf	420.00	4,200		
	Base cabinet with plam counter	68	lf	400.00	27,200		
	Open base shelving with counter 2 tier	11	lf	360.00	3,960		
	TS 30 with markerboard surface on face of door	12	ea	1,400.00	16,800		
	TS 33 with markerboard surface on face of door	3	ea	1,600.00	4,800		
	TS 33 with peg board on inside of door and markerboard surface on face of door	1	ea	1,800.00	1,800		
	TW 36	1	ea	1,800.00	1,800		
	TW 36 marker board fronts, lockable	14	ea	2,000.00	28,000		
	TW 39	2	ea	2,000.00	4,000		
	Wall hung counter	126	lf	250.00	31,500		
	Copy / Mail room						
	Base cabinet with plam counter	15	lf	400.00	6,000		
	Island counter with base cabinet 4'-0" wide	10	lf	750.00	7,500		
	Upper cabinets - 30" high	3	lf	285.00	855		
	Upper mail slots at copy mail room	12	lf	700.00	8,400		
	Connect 2220						
	Base cabinet with 5 drawers and counter	2	lf	440.00	880		
	Base cabinet with plam counter	16	lf	400.00	6,400		
	Laptop cart cabinet 36	1	ea	1,700.00	1,700		
	Open base shelving with counter 2 tier	19	lf	5,000.00	95,000		
	TS 36	2	ea	1,500.00	3,000		
	Upper cabinets - 24" high	3	lf	250.00	750		
			10	005.00	1 077		

15

2

19

1

9

8

1 ea

2

2

1 ea

3

18

12

159

lf

lf

lf

ea

lf

lf

ea

ea

lf

lf

lf

lf

285.00

420.00

400.00

1,700.00

360.00

300.00

1,400.00

1,600.00

2,000.00

1,800.00

250.00

285.00

600.00

550.00

4,275

840

7,600

1,700

3,240

2.400

1,400

3,200

4,000

1,800

750

5,130

7.200

87,450

Upper cabinets - 32" high

Laptop cart cabinet 36

Upper cabinets - 24" high

Upper cabinets - 32" high

Custodial shop

Work bench

ELA

Base cabinet with plam counter

Base cabinet with 4 drawers and counter

Open base shelving with counter 2 tier

Shallow base cabinet with plam counter

Island - base cabinet with solid surface countertop

Connect 3219

TS 33

TS 36

TS 42

TW 36



07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
NEW BUI	Ensemble						
	Base cabinet with plam counter	12	lf	400.00	4,800		
	Exam						
	Base cabinet with plam counter	6	lf	400.00	2,400		
	TS 30	1	ea	1,200.00	1,200		
	TS 33	1	ea	1,400.00	1,400		
	Upper cabinets - 24" high	6	lf	250.00	1,500		
	Wall hung counter	4	lf	250.00	1,000		
	IT office/repair						
	2 tier wall shelving	19	lf	120.00	2,280		
	Base cabinet with plam counter	19	lf	400.00	7,600		
	Kindergarten ; typical Q7/A1.51	9	rms				
	2'-9"x56" Double cubbie	99	lf	750.00	74,250		
	Base cabinet with plam counter	99	lf	400.00	39,600		
	Laptop cart cabinet 36	9	ea	1,700.00	15,300		
	Open base shelving with counter 2 tier	99	lf	360.00	35,640		
	Open base shelving, 3 tier	27	lf	265.00	7,155		
	Shallow base cabinet with plam counter	72	lf	300.00	21,600		
	TS 36	9	ea	1,600.00	14,400		
	TW 36	9	ea	1,800.00	16,200		
	Upper cabinets - 24" high	27	lf	250.00	6,750		
	Upper cabinets - 32" high	90	lf	285.00	25,650		
	Upper cabinets above cubbies 32"	99	lf	230.00	22,770		
	Maker space						
	Base cabinet with 4 tier open shelving above	12	lf	700.00	8,400		
	Base cabinet with plam counter	28	lf	400.00	11,200		
	TS 33 with markerboard surface on face of door	6	ea	1,600.00	9,600		
	TS 33 with peg board on inside of door and markerboard surface on face of door	2	ea	1,800.00	3,600		
	Upper cabinets - 24" high	6	lf	250.00	1,500		
	Upper cabinets - 30" high	15	lf	285.00	4,275		
	Wall hung counter	7	lf	250.00	1,750		
	Music	2	rms				
	Base cabinet with plam counter	14	lf	400.00	5,600		
	Music instrument storage	48	lf	800.00	38,400		
	Open base shelving with counter 2 tier	68	lf	360.00	24,480		
	Upper cabinets - 32" high	14	lf	285.00	3,990		
	OT 1134						
	TW 48	2	ea	2,400.00	4,800		
	Music practice						
	TS 36	2	ea	1,600.00	3,200		
	Pre-K ; typical F7/AQ1.50	4	rms				
	2'-9"x56" Double cubbie	44	lf	750.00	33,000		
	Base cabinet with plam counter	40	lf	400.00	16,000		
	Laptop cart cabinet 36	4	ea	1,700.00	6,800		
	Open base shelving with counter 2 tier	40	lf	360.00	14,400		
	Shallow base cabinet with plam counter	52	lf	300.00	15,600		
	TS 36	4	ea	1,600.00	6,400		
	TW 33	4	ea	1,650.00	6,600		
	Upper cabinets - 24" high	12	lf	250.00	3,000		
	Upper cabinets - 32" high	32	lf	285.00	9,120		
	Upper cabinets above cubbies 32"	44	lf	230.00	10,120		
	Pre-K rise						
	2'-9"x56" Double cubbie	16	lf	750.00	12,000		
	Base cabinet with 6 drawers and counter	3	lf	460.00	1,380		

Base cabinet with plam counter

1337

lf

15

400.00

6,000



60% Construction Documents Estimate

GFA 167,352

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW BUIL							
	TS 36	2	ea	1,600.00	3,200		
	TW 36	1	ea	1,800.00	1,800		
	Upper cabinets - 24" high	3	lf	250.00	750		
	Upper cabinets - 32" high	14	lf	285.00	3,990		
	Upper cabinets above cubbies 32"	16	lf	230.00	3,680		
	PT 1132						
	3 tier wall shelving	10	lf	160.00	1,600		
	Open base shelving with counter 2 tier	18	lf	360.00	6,480		
	TS 48	3	ea	2,200.00	6,600		
	Upper cabinets - 24" high	2	lf	250.00	500		
	Upper cabinets - 32" high	2	lf	285.00	570		
	Resource room						
	2 tier wall shelving	11	lf	120.00	1,320		
	Base cabinet with plam counter	5	lf	400.00	2,000		
	Wall hung counter	11	lf	250.00	2,750		
	Rise 2227						
	Base cabinet with plam counter	29	lf	400.00	11,600		
	Open base shelving with counter 2 tier	8	lf	360.00	2,880		
	TS 36	2	ea	1,600.00	3,200		
	Upper cabinets - 24" high	3	lf	250.00	750		
	Upper cabinets - 32" high	18	lf	285.00	5,130		
	Rise 3221						
	Base cabinet with plam counter	18	lf	400.00	7,200		
	Laptop cart cabinet 36	1	ea	1,700.00	1,700		
	Open base shelving with counter 2 tier	17	lf	360.00	6,120		
	TS 36	2	ea	1,600.00	3,200		
	TS 39	1	ea	1,800.00	1,800		
	Upper cabinets - 24" high	15	lf	250.00	3,750		
	Upper cabinets - 32" high	14	lf	285.00	3,990		
	Staff dining						
	Base cabinet with 6 drawers and counter	3	lf	460.00	1,380		
	Base cabinet with plam counter	9	lf	400.00	3,600		
	Upper cabinets - 24" high	3	lf	250.00	750		
	Upper cabinets - 32" high	9	lf	285.00	2,565		
	Storage						
	5 tier wall shelving	13	lf	250.00	3,250		
	Storage/copy						
	5 tier wall shelving	10	lf	250.00	2,500		
	Base cabinet with plam counter	10	lf	400.00	4,000		
	Student services vestibule/copy						
	3 tier wall shelving	15	lf	160.00	2,400		
	Base cabinet with plam counter	18	lf	400.00	7,200		
	TS 33	2	ea	1,400.00	2,800		
	TS 36	- 5	ea	1,600.00	8,000		
	TW 36	3	ea	1,800.00	5,400		
	Upper cabinets - 32" high		lf	285.00	5,130		
	Wall hung counter	18	lf	250.00	3,500		
	Student services	14		£30.00	0,000		
	2 tier wall shelving	106	lf	120.00	19 790		
	C C	106			12,720		
	Wall hung counter	106	lf	250.00	26,500		
	Title 1 office		10	100.05			
	3 tier wall shelving	25	lf	160.00	4,000		
	TS 36	6	ea	1,600.00	9,600		
	TW 36	2	ea	1,800.00	3,600		
	TW 36 Wall hung counter Typical 2nd floor classroom ; A8/AQ1.55	2 25	ea lf	1,800.00 250.00	3,600 6,250		



I				UNIT	EST'D	SUB	TOTAL
DDE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
EW BUILD							
	Base cabinet with plam counter	288	lf	400.00	115,200		
	Laptop cart cabinet 36	16	ea	1,700.00	27,200		
	Open base shelving with counter 2 tier	176	lf	360.00	63,360		
	Open base shelving with counter, 3 tier	80	lf	385.00	30,800		
	TS 36	16	ea	1,600.00	25,600		
	TW 36	16	ea	1,800.00	28,800		
	Upper cabinets - 32" high	176	lf	285.00	50,160		
	Typical 3rd floor classroom ; J8/AQ1.55	24	rms	100.00	170.000		
	Base cabinet with plam counter	432	lf	400.00	172,800		
	Laptop cart cabinet 36	24	ea	1,700.00	40,800		
	Open base shelving with counter 2 tier	264	lf	360.00	95,040		
	Open base shelving with counter, 3 tier	120	lf	385.00	46,200		
	TS 36 TW 36	24	ea	1,600.00	38,400		
		24	ea 1£	1,800.00	43,200		
	Upper cabinets - 32" high Mobile units	264	lf	285.00	75,240 assume FF+E		
			la	10,000.00			
	Closet shelving	1	ls	10,000.00	10,000		
012410	WINDOW TREATMENT						
012410	Window shades at interior doors, sidelights, storefront and borrowed light openings; light filtering	4,998	sf	7.00	34,986		
	Window shades at exterior glazing; light filtering and room darkening	10,454	sf	10.00	104,540		
	Premium for motorized shades		sf	20.00	none shown		
124810	ENTRANCE FLOOR MAT AND FRAMES						
	Foot grilles	1,005	sf	55.00	55,275		
	Walk off mat	105	sf	12.00	1,260		
126613	TELESCOPING BLEACHERS						
	SUBTOTAL					2,296,196	
E2020	MOVABLE FURNISHINGS All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						\$2,296,1
F10	SPECIAL CONSTRUCTION						
F10	SPECIAL CONSTRUCTION						
	No items in this section						
	SUBTOTAL						
	TOTAL - SPECIAL CONSTRUCTION						
F20	SELECTIVE BUILDING DEMOLITION						
F2010	BUILDING ELEMENTS DEMOLITION						
	No items in this section						
	SUBTOTAL						
F2020	HAZARDOUS COMPONENTS ABATEMENT						
	See main summary for HazMat allowance SUBTOTAL				See Summary		



W. Edward Balmer Elementary School Whitinsville, MA

60% Construction Documents Estimate

		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
WOI	RK				I			
	G	SITEWORK	1					
			J					
	G10	SITE PREPARATION & DEMOLITION		,	4 000 00 4 00	1 000 00 1		
		Sitework preparation bid	1	ls	1,228,394.00	1,228,394		
		Sitework earthwork bid	1	ls	833,440.00	833,440		
		<u>Site Demolitions and Relocations</u> Site construction fence/barricades allowance	5,500	lf	25.00	Early Bid		
		Site construction fence/barricades allowance phase allowance	2,640	lf	25.00	Early Bid		
		Jersey barriers	1	ls	29,600.00	Early Bid		
		Allowance for clearing & grubbing at North wood area	5	acres	6,500.00	Early Bid		
		Clearing existing shrubs	500	sf	3.00	Early Bid		
		Demolition of existing concrete sidewalks / pads / etc.	17,363	sf	1.25	Early Bid		
						•		
		Demolition of existing bituminous concrete / crush and re use for base	107,450	sf	1.25	Early Bid		
		Demolition of existing wooded fiber mulch	12,920	sf	1.00	Early Bid		
		Sawcut existing pavement	70	lf	8.00	Early Bid		
		Demolition of existing overhead electric and pole	525	lf	12.00	Early Bid		
		Demolition of existing hydrant	2	ea	400.00	Early Bid		
		Demolition of existing sewer line	815	lf	10.00	Early Bid		
		Demolition of existing water line	1,400	lf	10.00	Early Bid		
		Demolition of existing drainage lateral	52	lf	10.00	Early Bid		
		Demolition of existing gas service line	300	lf	10.00	Early Bid		
		Cut and cap gas service	1	loc	1,500.00	Early Bid		
		Cut and cap water service	2	loc	1,500.00	Early Bid		
		Cut and cap sewer service	1	loc	1,500.00	Early Bid		
		Demolition of existing 2" metal guardrail	130	lf	10.00	Early Bid		
		Demolition of existing backstop	1	loc	1,000.00	Early Bid		
		Demolition of existing dugouts and footings	2	loc	1,200.00	Early Bid		
		Demolition of existing gazebo and footings	1	loc	1,200.00	Early Bid		
		Demolition of existing concessions stand and steps	1	loc	1,500.00	Early Bid		
		Demolition of existing infield mix	19,550	sf	1.00	Early Bid		
		Demolition of existing concrete feature Demolition of existing trees	1	loc	500.00 1,000.00	Early Bid		
		0	3 10	ea ea	1,000.00	Early Bid Early Bid		
		Demolition of existing benches Demolition of existing sign	10	ea	500.00	Early Bid		
		Demolition of existing bleachers	1	loc	750.00	Early Bid		
		Demolition of existing bollards	3	ea	75.00	Early Bid		
		Demolition of existing boulder	1	ea	200.00	Early Bid		
		Demolition of existing concrete walls	90	lf	15.00	Early Bid		
		Demolition of existing steps	80	lf	10.00	Early Bid		
		Demolition of existing segmental retaining walls	225	lf	15.00	Early Bid		
		Demolition of existing drain manhole	1	ea	250.00	Early Bid		
		Demolition of existing catch basin	3	ea	200.00	Early Bid		
		Demolition of existing flagpole	1	ea	500.00	Early Bid		
		Demolition of existing 36" RCP drainage line	1,018	lf	20.00	Early Bid		
		Demolition of existing fence	1,465	lf	10.00	Early Bid		
		Remove existing rocks	15	ea	75.00	Early Bid		
		Demolition of existing railings	110	lf	10.00	Early Bid		
		Demolition of existing landscape timber wall	505	lf	10.00	Early Bid		
		Demolition of existing play equipment	1	ls	3,500.00	Early Bid		
		Misc. site demo - fencing, retaining walls, etc.	1	ls	25,000.00	Early Bid		
		Site Earthwork				Early Bid		
		Strip topsoil	11,448	су	7.00	Early Bid		
		Cut unsuitables under building	4,849	су	10.00	Early Bid		
		Cut	25,829	су	10.00	Early Bid		
		Fill w/ existing material; general; geotechnical report indicates existing material may be suitable for general fill	18,205	cy	14.00	Early Bid		



60% Construction Documents Estimate

07-Jun-19

CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK			-				
SILEWORK	Remove excess material off site; assumed clean material	12,473	су	16.00	Early Bid		
			-				
	Reconciled cost for ledge removal	1	ls	150,000.00	Early Bid		
	Sheeting along retaining wall	1	ls	200,000.00	Early Bid		
	Allowance for boulder removal	1	ls	50,000.00	Early Bid		
	Fine grading	73,955	sy	1.25	Early Bid		
	Silt fence/erosion control	4,094	lf	12.00	Early Bid		
	Silt fence/erosion control	2,600	lf	12.00	Early Bid		
	Construction entrances	1,250	sf	6.00	Early Bid		
	Inlet protection	110	ea	325.00	Early Bid		
	Erosion control maintenance	1	ls	30,000.00	Early Bid		
	Hazardous Waste Remediation		,	100.000.00			
	Contaminated soil allowance	1	ls	100,000.00	NIC	0.001.004	
	SUBTOTAL					2,061,834	
G20	SITE IMPROVEMENTS						
	Sitework improvements earthwork bid	1	ls	1,684,347.00	1,684,347		
	Roadways and Parking Lots	181,166	sf				
	gravel base; 8" thick	4,496	cy	40.00	Early Bid		
	gravel base; 4" thick	2,214	cy	40.00	Early Bid		
	Asphalt paving; 4" thick	20,130	sy	28.00	Early Bid		
	VGC	9,215	lf	39.00	Early Bid		
	Flush VGC	66	lf	38.00	Early Bid		
	Concrete curb	290	lf	22.00	Early Bid		
	Cape Cod Berm - 2"	1,580	lf	14.00	Early Bid		
	Single solid lines, 4" thick	<b>2</b> 34	spc	20.00	Early bid		
	Single solid lines, 4" thick	8	spc	75.00	Early bid		
	Other road markings	1	ls	7,500.00	Early bid		
	Crosswalk	9	ea	1,200.00	Early bid		
	Tactile warning surface	4	ea	350.00	1,400		
	Curb cut	18	ea	350.00	Early Bid		
	Signage	55	ea	350.00	Early Bid		
	Pedestrian paving						
	Bituminous concrete paving - play area / basketball court	5,900	sf	12.00	Early Bid		
	Bituminous concrete paving - color seal coat and line striping; 2 surface colors & markings	5,900	sf	4.00	23,600		
	gravel base; 12" thick	219	су	40.00	Early Bid		
	Precast Pavers		-6	2.00	E-al- Did		
	Bituminous base material for precast pavers - 3"	1,150	sf	3.00	Early Bid		
	Precast unit pavers	1,150	sf	20.00	23,000		
	Paving band	225	lf -f	18.00	4,050		
	Stone dust paths	810	sf	7.50	6,075		
	Mulch paths	1,675	sf	4.00	NIC		
	Concrete paving			40.00	E-ul- Did		
	concrete sidewalk gravel base - 6"	941	cy -f	40.00	Early Bid		
	concrete; 4" thick Bit concrete walkway	50,787	sf	9.00	457,083		
	Bit concrete walkway			10.00	Earle Did		
	gravel base - 6"	31	cy sf	40.00	Early Bid Early Bid		
	bit concrete; 3" thick	1,700	sf	8.00	Early Bid		
	HD concrete paving	-		10.00	Earle Did		
	HD concrete gravel base - 12"	7	cy sf	40.00 12.00	Early Bid 2,400		
	HD concrete pads; 6" thick	200					
	Generator crushed stone bed	400	sf	6.00 18.00	Early Bid		
	Playground - poured rubber play surface	13,700	sf	18.00	246,600		
	Site Masonry Maconwingst wells	<i>t</i> -	10	405 00	05 500		
	Masonry seat walls	60	lf la	425.00	25,500		
	Masonry seat walls; skate deterrents	1	ls	5,000.00	5,000		
	•	-		4 000 00	00.000		
	Masonry piers at ornamental fence along Centre street	7	ea	4,000.00	28,000		
	•	7 6	ea ea	4,000.00 20,000.00	28,000 120,000		



60% Construction Documents Estimate

07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SITEWORK							
	Guardrail at top of retaining wall	190	lf	65.00	12,350		
	Stairs, Retaining walls and Ramps				10.000		
	Concrete walls at loading dock	1	ls	48,000.00	48,000		
	Concrete to stair treads	74	lfr	190.00	14,060		
	Cheek walls	16	lf	200.00	3,200		
	Ornamental metal hand railings w/ light - galv at stairs	30	lf	160.00	4,800		
	Fencing						
	Vinyl clad CLF - 4' high @ baseball	432	lf	40.00	17,280		
	Vinyl clad CLF - 4' high	3,558	lf	40.00	142,320		
	Vinyl clad CLF - 4' high gates, single	12	ea	800.00	9,600		
	Vinyl clad CLF - 4' high gates, double	2	ea	1,600.00	3,200		
	Ornamental Fencing - 4' high	312	lf	90.00	28,080		
	Ornamental Fencing - 4' high gates	2	ea	2,500.00	5,000		
	Ornamental Fencing - 6' high	582	lf	100.00	58,200		
	Ornamental Fencing - 6' high gates	2	ea	8,000.00	16,000		
	Vinyl clad CLF at basketball - 6'	190	lf	50.00	9,500		
	Vinyl clad CLF - 6' high gates, single	1	ea	1,000.00	1,000		
	Vinyl clad CLF - 6'	642	lf	50.00	32,100		
	Wood fence type B- cedar	113	lf	150.00	16,950		
	Wood fence type A- stockade	626	lf	150.00	93,900		
	Wood and wire fence	172	lf	55.00	NIC		
	Wood and wire fence gates, single	1	ea	800.00	NIC		
	Wood and wire fence gates, double	1	ea	1,600.00	NIC		
	Wood fence allowance	1,000	lf	75.00	75,000		
	Site Improvements						
	50' high flagpole	1	ea	10,000.00	10,000		
	36" Pipe rail @ loading dock North wall	55	lf	150.00	8,250		
	Utility Bollards	12	ea	800.00	9,600		
	Trash receptacles	4	ea	1,750.00	7,000		
	Bike Racks	20	ea	1,500.00	30,000		
	Wood round seats	20	ea	600.00	NIC		
	Benches	4	ea	2,800.00	11,200		
	Café tables and chairs	15	ea	3,500.00	52,500		
	Garden raised beds - field built	12	ea	1,200.00	NIC		
	Garden ADA beds - field built	3	ea	1,200.00	NIC		
	Utility Shed	360	sf	25.00	NIC		
	Baseball backstop, bleachers & benches	1	loc	40,000.00	40,000		
	Softball backstop, bleachers & benches	1	loc	25,000.00	25,000		
	Basketball hoops	1	ea	2,500.00	2,500		
	Poles with nylon sports net adjacent to baseball backstops; 24' high	240	lf	160.00	38,400		
	Soccer Goals	12	ea	1,500.00	18,000		
	Playground equipment (per D&W email 3/13/19)	1	ls	492,154.00	492,154		
	Landscaping + Sports Fields						
	gravel base; assume 12" thick	5,446	cy	35.00	Early Bid		
	Baseball/softball fields; seed	68,000	sf	0.35	23,800		
	Infield mix	17,000	sf	1.00	17,000		
	Foul poles / pitcher mound / bases	2	loc	10,000.00	20,000		
	Soccer fields; seed	62,042	sf	0.35	21,715		
	Soil amend existing stockpiled soil; assumed amend (spec calls for new topsoil)	12,448	cy	30.00	373,440		
	Planter beds topsoil - 18"	1,095	су	50.00	54,750		
	Upland Seed Mix	230,900	sf	0.25	57,725		
	Wetland Seed Mix	33,540	sf	0.25	8,385		
	Swale	1,100	lf	6.00	6,600		
	Evergreen Trees						
	Eastern Red Cedar 7' - 8' ht	30	ea	1,000.00	30,000		
				1,500.00	106,500		
	White Spruce 10' - 12' ht	71	ea	1,500.00	100,000		

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# W. Edward Balmer Elementary School Whitinsville, MA

PM&C

60% Construction Documents Estimate

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEW	VORK							
)		Deciduous Trees						
		October Glory' Red Maple 3 - 3.5" cal	56	ea	1,000.00	56,000		
		Autumn Gold' Maidenhair Tree 2.5 - 3.0" cal	3	ea	937.50	2,813		
•		Shademaster' Thornless Honeylocust 3 - 3.5" cal	76	ea	1,000.00	76,000		
		Ornamental Trees						
		Allegheny Serviceberry 7' - 8'	8	ea	1,000.00	8,000		
<b>,</b>		Japanese Maple - Upright Green 2 - 2.5" cal	2	ea	750.00	1,500		
3		Seven Son Flower 7' - 8'	1	ea	1,000.00	1,000		
9		Arnold Promise' Witch Hazel 25gal	1	ea	1,000.00 625.00	1,000 12,500		
0		Donald Wyman' Crabapple 1.5 - 2" cal Sugar Tyme' Crabapple 1.5 - 2" cal	20 1	ea ea	625.00	625		
L		Deciduous Trees	1	ea	025.00	025		
		Rose Creek' Compact Abelia 3gal	68	ea	187.50	12,750		
		Arnold Dwarf' Forsythia 3gal	50	ea	187.50	9,375		
l		Berry Poppins' Dwarf Winterberry 3gal	6	ea	187.50	1,125		
5		Mr Poppins' Dwarf Male Winterberry 3gal	2	ea	187.50	375		
6		California Privet 7gal	78	ea	375.00	29,250		
7		Gro-low Fragrant Sumac 2gal	162	ea	125.00	20,250		
3		Miss-Kim' Compact Lilac 5gal	11	ea	300.00	3,300		
9		Bailey Compact' Cranberrybush Viburnum 5gal	22	ea	300.00	6,600		
0		Evergreen Shrubs						
1		Shamrock' Compact Inkberry 5gal	178	ea	300.00	53,400		
2		Blue Pacific' Shore Juniper 3gal	402	ea	187.50	75,375		
3		Green Sargent' Shore Juniper 3gal	18	ea	187.50	3,375		
4		Perennials. Groundcover & Vines						
5		Blue Ice' Compact Bluestar 1gal	68	ea	15.00	1,020		
6		Hay-Scented Fern 1gal	18	ea	15.00	270		
7		Native Trumpet Honeysuckle 2gal	4	ea	30.00	120		
8		Total planting for bioretention #1 & #2	1	ls	19,306.00	19,306		
0		Irrigation SUBTOTAL				not required	5,096,943	
1		SOBIOTAL					3,030,343	
2 3	G30	CIVIL MECHANICAL UTILITIES Water supply						
4		Sitework Water Supply Bid	1	ls	395,750.00	395,750		
5		Connect to existing water	2	ea	6,000.00	Early Bid		
6		Corporation stop	3	ea	800.00	Early Bid		
7		Gate valves	15	ea	1,200.00	Early Bid		
9		Hose bib	1	ea	600.00	Early Bid		
) A		Hydrant	2	ea 16	5,000.00	Early Bid		
		2" copper Yard hydrant in 2 x 2 concrete box	870	lf	45.00 3,000.00	Early Bid Early Bid		
		DI Water line - 6"	4 230	ea lf	3,000.00 80.00	Early Bid		
3		DI Water line - 10"	2,630	lf	130.00	Early Bid		
1		Storm Sewer	2,030		150.00	Larry Did		
i.		Sitework Bid Storm Sewer	1	ls	2,576,394.00	2,576,394		
3		Bio retention basins	12,545	sf	10.00	Early Bid		
7		Drain Manholes 4' dia	51	ea	4,500.00	Early Bid		
8		Drain Manholes 5' dia	4	ea	5,000.00	Early Bid		
9		Drain Manholes 5' dia bypass	2	ea	5,500.00	Early Bid		
0		Drain Manholes 6' dia	2	ea	5,800.00	Early Bid		
1		Drain Manholes - 6' Doghouse	1	ea	6,000.00	Early Bid		
2		Drain Manholes 8' dia	1	ea	7,500.00	Early Bid		
3		Catch Basins	60	ea	4,200.00	Early Bid		
l		Double Catch Basins	1	sf	7,500.00	Early Bid		
5		DCO	10	sf	2,600.00	Early Bid		
3		Area Basin	3	ea	1,750.00	Early Bid		
7		Area Drains	42	ea	1,750.00	Early Bid		
8		Swale inlet	7	ea	1,600.00	Early Bid		
9		Roof Drain connections	8	ea	600.00	Early Bid		





W. Edward Balmer Elementary School Whitinsville, MA

60% Construction Documents Estimate

07-Jun-19

CSI	ion Documents Estimate		,	UNIT	EST'D	SUB	TOTAL
CSI CODE	DESCRIPTION	QTY	UNIT	COST	EST D COST	SUB TOTAL	COST
SITEWORK	I		1				I
birizitional	Reducer	1	ea	600.00	Early Bid		
	WYE	8	ea	600.00	Early Bid		
	FES - Flared End Sections	4	ea	1,250.00	Early Bid		
	WQI - Water Quality Inlet	2	ea	4,500.00	Early Bid		
	WQS - Water Quality Structures	4	ea	15,000.00	Early Bid		
	OCS - Outlet Control Structures	3	ea	10,000.00	Early Bid		
	Connect to existing drain	1	ea	3,500.00	Early Bid		
	Connect to existing headwall	1	ea	2,500.00	Early Bid		
	UD	2,561	lf	50.00	Early Bid		
	Perf CPP - 6"	2,975	lf	48.00	Early Bid		
	CPP - 6"	72	lf	48.00	Early Bid		
	CPP - 8"	185	lf	52.00	Early Bid		
	CPP - 12"	4,300	lf	55.00	Early Bid		
	CPP - 15"	70	lf	60.00	Early Bid		
	CPP - 18"	1,775	lf	65.00	Early Bid		
	CPP - 24"	535	lf	80.00	Early Bid		
	CPP - 30"	240	lf	90.00	Early Bid		
	CPP - 36"	740	lf	115.00	Early Bid		
	DI - 36"	325	lf	160.00	Early Bid		
	Trench drain	15	lf	120.00	Early Bid		
	Underground Detention #2				Early Bid		
	Excavate and dispose on site for detention systems	3,087	cy	12.00	Early Bid		
	Back-fill infiltration bed with 3/4" crushed stone wrapped in	1,852	cy	50.00	Early Bid		
	filter fabric SC - 740 chambers	374	ea	650.00	Early Bid		
	Underground Detention #3	3/4	cu	000.00	Early Bid		
		1.005	01	12.00	·		
	Excavate and dispose on site for detention systems Back-fill infiltration bed with 3/4" crushed stone wrapped in	1,025 615	cy cy	12.00 50.00	Early Bid Early Bid		
	filter fabric	0	-5				
	SC - 740 chambers	150	ea	650.00	Early Bid		
	Underground Detention #4				Early Bid		
	Excavate and dispose on site for detention systems	826	cy	12.00	Early Bid		
	Back-fill infiltration bed with 3/4" crushed stone wrapped in	496	су	50.00	Early Bid		
	filter fabric SC - 740 chambers	96	ea	650.00	Early Bid		
	Underground Detention #5	90	ca	030.00	Early Bid		
		0.51	<i>C</i> 1/	12.00	·		
	Excavate and dispose on site for detention systems Back-fill infiltration bed with 3/4" crushed stone wrapped in	251 151	cy cy	12.00 40.00	Early Bid Early Bid		
	filter fabric	-0-	cy	10.00	Lung Dia		
	SC - 740 chambers	36	ea	650.00	Early Bid		
	Sanitary Sewer						
	Sitework Bid Sanitary Sewer	1	ls	216,305.00	216,305		
	Connect to existing sewer	1	ea	7,500.00	Early Bid		
	Sanitary Sewer Manholes	10	sf	3,800.00	Early Bid		
	E&B Grease tank	1	ea	4,000.00	Early Bid		
	Sanitary Sewer line - 4"	10	lf	40.00	Early Bid		
	Sanitary Sewer line - 6"	130	lf	45.00	Early Bid		
	Sanitary Sewer line - 8"	1,340	lf	60.00	Early Bid		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service from Centre street	1,000	lf	22.00	22,000		
	New telecom service from Centre Street	590	lf	22.00	12,980		
	SUBTOTAL					3,223,429	
G4	0 ELECTRICAL UTILITIES						
	Power riser	1	ea	2,000.00	2,000		
	Primary ductbank AA 2-5" empty conduit	920	lf	45.00	41,400		
	Pad mount transformer	1	ea		Utility co		
	Secondary ductbank BB 4-4" with 2500A feed	240	lf	410.00	98,400		
	Generator ductbank EE with feeders	230	lf	320.00	73,600		
	Communication riser	1	ea	2,500.00	2,500		



W. Edward Balmer Elementary School Whitinsville, MA

#### 60% Construction Documents Estimate

07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
COD	E DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SIT	EWORK						
288	Communication handhole	3	ea	1,200.00	3,600		
289	Site lighting circuitry: 2#8 & #10 in 1"c	6,000	lf	9.00	54,000		
290	Fixture SL1/3	20	ea	2,800.00	56,000		
291	Fixture SL2/3	14	ea	3,800.00	53,200		
292	Fixture SL3/4	15	ea	2,500.00	37,500		
293	Pole base grounding and bonding	47	ea	150.00	7,050		
294	Pull box	1	ls	450.00	450		
295	1" conduit from PB	500	lf	9.00	4,500		



W. Edward Balmer Elementary School Whitinsville, MA

60% Construction Documents Estimate

07-Jun-19

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
SITE	WORK						
296	Civil:						
297	Excavation, DB AA, BB, EE, CC	2,180	lf	20.00	43,600		
298	Concrete, DB AA, BB, EE, CC	2,180	lf	25.00	54,500		
299	Excavation, site lighting & PB circuitry	6,500	lf	5.00	32,500		
300	Pad mount transformer pad	1	ea	2,200.00	2,200		
301	Power manhole	2	ea	4,500.00	9,000		
302	Pole base	47	ea	700.00	32,900		
303	SUBTOTAL					672,100	
304							
305	TOTAL - SITE DEVELOPMENT						\$11,054,306



**W. Edward Balmer Elementary School** Whitinsville, MA 07-Jun-19

60% Construction Documents Estimate

CSI				UNIT	EST'D	SUB	TOTAL
CODE	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
WOO	D CANOPY ALTERNATE						

A1010	STANDARD FOUNDATIONS				
033000	CONCRETE				
	Added spread footings due to increase in colum	n locations			
	Formwork	920	sf	14.00	12,880
	Re-bar	2,781	lbs.	1.50	4,172
	Concrete material; 4,000 psi	47	су	115.00	5,405
	Placing concrete	47	су	70.00	3,290
	Set anchor bolts grout plates	29	ea	150.00	4,350
	Piers/Pilasters				
	Formwork	322	sf	20.00	6,440
	Re-bar	975	lbs	1.15	1,121
	Concrete material; 4,000 psi	13	су	115.00	1,495
	Placing concrete	13	cy	80.00	1,040
312000	EARTHWORK				
	Spread footings				
	Excavation	141	су	20.00	2,820
	Store on site	141	cy	15.00	2,115
	Backfill with onsite material	128	су	18.00	2,304
	Gravel fill beneath footings, 12"	21	cy	40.00	840
	SUBTOTAL				

\$48,272

48,272

B10	SUPERSTRUCTURE	]					
B1010	FLOOR CONSTRUCTION						
051000	STRUCTURAL STEEL FRAMING						
	Steel columns	(16)	tns	4,150.00	(66,400)		
	Galv steel knife plate base pedestal connection into spread footing at wood column	33	loc	550.00	18,150		
	Galv steel gusset plate connection each side of wood column to beam	66	loc	500.00	33,000		
	Metal deck	(2,835)	sf	3.50	(9,923)		
	SUBTOTAL					(25,173)	
	TOTAL - SUPERSTRUCTURE						(\$25,173)
B20	EXTERIOR CLOSURE	]					
B2010	EXTERIOR WALLS						

062000	FINISH CARPENTRY				
	2x Hardwood insert each side of web at canopy support columns; 9'-2" high detail A26/A6.51	(16)	loc	1,200.00	(19,200)
	Douglas Fir wood canopy decking and glu lam structure material, per Smartlam quote dated 6/3/19	1	ls	108,041.81	108,042
	Installation of CLT decking	2,509	sf	30.00	75,270
	Glulam columns; 9'-4" high	33	loc	900.00	29,700
	Glulam main and infill beams	753	lf	90.00	67,770

07-Jun-19



**W. Edward Balmer Elementary School** Whitinsville, MA

#### 60% Construction Documents Estimate

				UNIT	EST'D	SUB	TOTAL
Е	DESCRIPTION	QTY	UNIT	COST	COST	TOTAL	COST
OD CANO	DPY ALTERNATE						
070001	WATERPROOFING, DAMPPROOFING AND CAULKI	NG					
	Air barrier; spray barrier at soffit	(3,146)	sf	6.50	(20,449)		
072100	THERMAL INSULATION						
	Insulation; 4" mineral wool at metal soffits	(3,146)	sf	4.15	(13,056)		
075200	CLADDING						
	Metal soffit panel at overhang and canopy soffits, including framing, sheathing, insulation (ATAS	(3,146)	sf	79.00	(248,534)		
090007	PAINTING						
	Paint exposed exterior canopy support columns 9'-2" high - A26/A6.51	(16)	loc	250.00	(4,000)		
092900	GYPSUM BOARD ASSEMBLIES						
	Framing system @ overhangs and canopies	(3,146)	sf	included w/ soffit			
	SUBTOTAL					(24,457)	
	TOTAL - EXTERIOR CLOSURE						(\$24,45
	TOTAL - ALTERNATE DEDUCT						(\$49,63





# Northbridge Elementary School 60 % Construction Development Estimate Post - Reconciliation

June 07, 2019

FONTAINE BROS., INC. | T: 413.781.2020 | 510 COTTAGE STREET SPRINGFIELD, MA 01104 | 12 E. WORCESTER STREET WORCESTER, MA 01604



UNI



#### Fontaine Bros., Inc.

## Northbridge Elementary Schoo Page 49 of 126/10/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

#### **Estimate Totals**

Description	Amount	Totals	Rate	Cost per Unit	
Direct Cost	67,502,778	67,502,778		403.358 /sf	85.32%
Design Contingency	1,856,326		2.750 %		
Escalation	1,582,352		2.000 %		
Construction Contingency	1,186,764		1.500 %		
Subtotal	4,625,442	72,128,220			
General Conditions & Requirements					
Staff/ General Conditions	5,364,384				
Subtotal	5,364,384	77,492,604			
Permits & Insurance Requirements					
General Liability Insurance					
Performance & Payment Bonds					
Builders Risk Insurance					
Permits - By Town					
Subtotal		77,492,604			
CM Fee (OH&P)	1,625,000				
Subtotal	1,625,000	79,117,604			
PROJECT GSF 167,352					

Total	79,117,604	472.762 /sf

#### ALTERNATES:

Timber Canopy Alternate - Deduct (\$47,673.00)	

Sod At U6 Fields Alternate - Add	\$10,650.00
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Sod At U8 Fields Alternate - Add \$22,500.00

Fittings

## Northbridge Elementary Schoo Page 50 of 126/10/2019 6:49 РМ

#### Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

		Total	
Description	Quantity	Unit Cost	Amount
SUBSTRUCTURE			
FOUNDATIONS			
Standard Foundations	167,352.00 sf	8.695/sf	1,455,051
Slab on Grade	167,352.00 sf	11.328/sf	1,895,707
A10 FOUNDATIONS		20.022/sf	3,350,758
167,352.00 sf			
A SUBSTRUCTURE		20.022/sf	3,350,758
			0,000,700
167,352.00 sf			
SHELL			
SHELL			
SUPERSTRUCTURE			
Floor Construction Roof Construction	167,352.00 sf 167,352.00 sf	25.557/sf 15.081/sf	4,277,072 2,523,765
B10 SUPERSTRUCTURE	107,332.00 31	40.638/sf	6,800,837
167,352.00 sf			
EXTERIOR VERTICAL ENCLOSURES			
Exterior Walls	167,352.00 sf	46.112/sf	7,716,946
Exterior Windows Exterior Doors	167,352.00 sf 167,352.00 sf	12.725/sf 1.016/sf	2,129,522 170,093
B20 EXTERIOR VERTICAL ENCLOSURES	107,332.00 31	59.853/sf	10,016,561
167,352.00 sf			
EXTERIOR HORIZONTAL ENCLOSURES			
Roof Coverings	167,352.00 sf	12.461/sf	2,085,338
Roof Openings B30 EXTERIOR HORIZONTAL ENCLOSURES	167,352.00 sf	0.774/sf 13.235/sf	129,485 <b>2,214,823</b>
167,352.00 sf			, , ,
B SHELL		113.726/sf	19,032,220
			.0,002,220
167,352.00 sf			
INTERIORS			
INTERIOR CONSTRUCTION			
Interior Partitions Interior Doors	167,352.00 sf 167,352.00 sf	23.161/sf 7.68 /sf	3,876,103 1,285,209
Fittings	167,352.00 st	7.00 /Si 11.381/sf	1,205,209

11.381/sf

1,904,599

## Northbridge Elementary Schoo Page 51 of 126/10/2019 6:49 РМ

Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

			Total	
Description	Quantity		Unit Cost	Amount
C10 INTERIOR CONSTRUCTION			42.222/sf	7,065,911
167,352.00 sf				
STAIRS				
Stair Construction Stair Finishes	167,352.00 167,352.00	sf sf	3.06 /sf 0.66 /sf	512,170 110,506
C20 STAIRS	107,352.00	51	3.721/sf	<u>622,676</u>
167,352.00 sf				
INTERIOR FINISHES				
Wall Finishes Floor Finishes	167,352.00 167,352.00	sf sf	5.734/sf 8.941/sf	959,644 1,496,250
Ceiling Finishes	167,352.00	sf	8.019/sf	1,342,001
C30 INTERIOR FINISHES			22.694/sf	3,797,895
167,352.00 sf				
C INTERIORS			68.637/sf	11,486,482
167,352.00 sf				
SERVICES				
CONVEYING				
Vertical Conveying Systems	167,352.00	sf	0.951/sf	159,153
D10 CONVEYING			0.951/sf	159,153
167,352.00 sf				
PLUMBING				
Plumbing Fixtures	167,352.00	sf	3.936/sf	658,651
Domestic Water Distribution Sanitary Waste	167,352.00 167,352.00	sf sf	1.983/sf 1.572/sf	331,918 263,161
Rain Water Drainage	167,352.00	sf	2.803/sf	469,061
Other Plumbing Systems	167,352.00	sf	3.113/sf	520,897
D20 PLUMBING			13.407/sf	2,243,688
167,352.00 sf				
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)	407 050 00	-		
Heat Generating Systems Cooling Generating Systems	167,352.00 167,352.00	sf sf	1.51 /sf 0.454/sf	252,750 76,000
Distribution Systems	167,352.00	si	8.097/sf	1,355,110
Other HVAC Systems And Equipment	167,352.00	sf	32.857/sf	5,498,649
D30 HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)			42.919/sf	7,182,509

## Northbridge Elementary School age 52 of 126/10/2019 6:49 РМ

## Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

		Total	
Description	Quantity	Unit Cost	Amount
FIRE PROTECTION			
Sprinklers	167,352.00 sf	0.765/sf	127,991
Other Fire Protection Systems	167,352.00 sf	4.75 /sf	794,986
D40 FIRE PROTECTION		5.515/sf	922,977
167,352.00 sf			
ELECTRICAL			
Electrical Service And Distribution	167,352.00 sf	11.798/sf	1,974,470
Lighting & Branch Wiring	167,352.00 sf	7.393/sf	1,237,310
D5031 Fire Alarm Systems	167,352.00 sf 167,352.00 sf	1.05 /sf 1.75 /sf	175,720 292,866
D5038	167,352.00 sf	1.369/sf	229,088
D5039	167,352.00 sf	5.486/sf	918,150
Other Electrical System	167,352.00 sf	1.965/sf	328,853
D50 ELECTRICAL			5,156,457
167,352.00 sf			
D SERVICES		93.604/sf	15,664,784
167,352.00 sf			
EQUIPMENT AND FURNISHINGS			
EQUIPMENT			
Commercial Equipment	167,352.00 sf	3.211/sf	537,435
Institutional Equipment	167,352.00 sf	1.291/sf	216,000
E10 EQUIPMENT		4.502/sf	753,435
167,352.00 sf			
FURNISHINGS			
Fixed Furnishings	167,352.00 sf	13.525/sf	2,263,471
E20 FURNISHINGS		13.525/sf	2,263,471
167,352.00 sf			
E EQUIPMENT AND FURNISHINGS		18.027/sf	3,016,906
167,352.00 sf			
SPECIAL CONSTRUCTION AND DEMOLITION			
SELECTIVE BUILDING DEMOLITION		0.004/-/	F00 000
Building Elements Demolition Hazardous Components Abatement	167,352.00 sf 167,352.00 sf	3.221/sf 6.507/sf	539,033 1,088,926
F20 SELECTIVE BUILDING DEMOLITION	101,002.00 51	9.728/sf	1,627,959
		5.120/51	1,027,309

## Northbridge Elementary Schood age 53 of 126/10/2019 6:49 РМ

Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

		Total			
Description	Quantity	Unit Cost	Amount		
F SPECIAL CONSTRUCTION AND		<b>9.72</b> 8/sf	1,627,959		
DEMOLITION					
167,352.00 sf					
SITEWORK					
SITE PREPARATION					
Site Clearing	167,352.00 sf	7.34 /sf	1,228,394		
Site Earthwork G10 SITE PREPARATION	167,352.00 sf	4.98 /sf <b>12.32 /s</b> f	833,440 <b>2,061,834</b>		
GIU SITE PREPARATION		12.32 /51	2,001,034		
167,352.00 sf					
SITE IMPROVEMENTS					
Pedestrian Paving	167,352.00 sf	3.269/sf	547,097		
Site Developement	167,352.00 sf 167,352.00 sf	21.09 /sf 5.87 /sf	3,529,494		
Landscaping Landscaping	167,352.00 sf 141,600.00 sf	1.688/sf	982,430 239,015		
G20 SITE IMPROVEMENTS	,	31.658/sf	5,298,035		
167,352.00 sf					
SITE MECHANICAL UTILITIES					
Water Supply	167,352.00 sf	2.365/sf	395,750		
Sanitary Sewer	167,352.00 sf	1.293/sf	216,305		
Storm Sewer G30 SITE MECHANICAL UTILITIES	167,352.00 sf	15.395/sf <b>19.052/sf</b>	2,576,394 <b>3,188,449</b>		
		10.002/31	0,100,440		
167,352.00 sf					
SITE ELECTRICAL UTILITIES					
	167,352.00 sf	4.24 /sf	709,616		
G40 SITE ELECTRICAL UTILITIES		4.24 /sf	709,616		
167,352.00 sf					
G SITEWORK		67.271/sf	11,257,934		
167,352.00 sf					
GENERAL					
GENERAL REQUIREMENTS					
Temporary Facilities and Controls	167,352.00 sf	12.344/sf	2,065,736		
Z10 GENERAL REQUIREMENTS		12.344/sf	2,065,736		

## Northbridge Elementary School<sup>age 54 of 126</sup>/10/2019 6:49 РМ

Whitinsville, MA

		Total	
Description	Quantity	Unit Cost	Amount
Z10 GENERAL REQUIREMENTS		12.344/sf	2,065,736
167,352.00 sf			
Z GENERAL		12.344/sf	2,065,736
167,352.00 sf			

## Northbridge Elementary Schood age 55 of 126/10/2019 6:05 РМ

Whitinsville, MA

Item	Description	Takeoff Qty		Total Unit Cost	Amount
A	SUBSTRUCTURE				
A10	FOUNDATIONS				
A1010	Standard Foundations				
03-0000.000	CONCRETE				
10 20	Forms, Place Footings Form And Place Strip Footings Form And Place Strip Footings At Loading Dock Form And Place BF Grade Beams Form And Place Interior Spread - F FTG'S Forms, Place Footings 167,352.00 sf	3,335.00 95.00 1,888.00 9,148.00	sf sf sf sf	17.75 /sf 17.75 /sf 17.75 /sf <u>17.75 /</u> sf <u>1.534/sf</u>	59,196 1,686 33,512 162,377 256,772
2	Forms, Place Columns/Piers Form And Place Concrete Piers Square Form And Place Concrete Piers Square - Pipe Form And Place Concrete Piers Round Forms, Place Columns/Piers 167,352.00 sf	278.00 1,680.00 428.00	sf sf sf	17.75 /sf 17.75 /sf <u>17.75 /</u> sf 0.253/sf	4,935 29,820 7,597 42,352
03-1113.180 a 4 a 4	<i>Forms, Place Walls</i> Form And Place Foundation Frost Walls/Low Walls Form And Place Foundation At Loading Dock	14,147.00 741.00	sf sf	17.75 /sf 17.75 /sf	251,109 13,153
	Forms, Place Walls 167,352.00 sf			1.579/sf	264,262
<i>03-1113.635</i> 20	Rigid Insulation Rigid Foundation Insulation 2.0" At Frost Wall Rigid Insulation 167,352.00 sf	8,623.00	sf	<u>3.00</u> /sf 0.155/sf	25,869 25,869
202 202 202 210 210 210 210	Rebar At Interior Spread - F FTG'S Rebar At Concrete Piers Square Rebar At Concrete Piers Square - Pipe Rebar At Concrete Piers Round	12.79 6.00 55.00 0.45 3.60 0.90 41.00 1.75	ton ton ton ton ton ton	2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 2,200.00 /ton 1.597/sf	28,138 13,200 121,000 990 7,920 1,980 90,200 3,850 267,278
03-3000.100 40 40 40 40	Concrete 4500 PSI Concrete At Building Wall Footings 4500 PSI Concrete At Building F Grade Beams 4500 PSI Concrete At Interior Spread - F FTG'S 4500 PSI Concrete At Concrete Piers Square	173.25 78.75 638.00 7.00	cy cy cy cy	120.00 /cy 120.00 /cy 120.00 /cy 120.00 /cy	20,790 9,450 76,560 840

# Northbridge Elementary Schoo Pge 56 of 126/10/2019 6:05 РМ

## Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
03-3000.100	Concrete				
40	4500 PSI Concrete At Concrete Piers Square Pipe	41.00	су	120.00 /cy	4,920
40	4500 PSI Concrete At Concrete Piers Round	11.00	су	120.00 /cy	1,320
40	4500 PSI Concrete At Foundation Frost Walls/Low Walls	470.00	су	120.00 /cy	56,400
40	4500 PSI Concrete At Loading Dock Foundation	20.00	су	120.00 /cy	2,400
40		16,178.00	sf	0.70 /sf	11,325
40		10.00	cd	2,250.00 /cd	22,500
40	0 0 1	15.00	су	980.00 /cy	14,700
40	Logistics, safety, cleanup and protection	167,352.00	sf	0.75_/sf	125,514
	Concrete			2.072/sf	346,719
	167,352.00 sf				
	CONCRETE			7.19 /sf	1,203,251
	167,352.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
07-1100.100	Damproofing				
2	Damproofing At Frost Walls - Top of Walls Only Damproofing	1,200.00	sf	<u>3.00</u> /sf 0.022/sf	3,600 3,600
	167,352.00 sf				
	THERMAL & MOIST PROTECT			0.022/sf	3,600
	167,352.00 sf				
31-0000.000	EARTHWORK				
31-2316.215	Footing Excavation				
105		1.00	Bid	209,200.00 /Bid	209,200
105	Earthwork Foundations - Bid S Drawing Footing	1.00	Bid	39,000.00 /Bid	39,000
	Elevations			4.402/66	2 40 20
	Footing Excavation			1.483/sf	248,200
	167,352.00 sf				
	EARTHWORK			1.483/sf	248,200
	167,352.00 sf				
	A1010 Standard Foundations			8.695/sf	1,455,051
	167,352.00 sf				
A1030	Slab on Grade				
03-0000.000	CONCRETE				
03-0010.165	Concrete - Equipment Pads				
125		400.00	sf	28.00 /sf	11,200

## Northbridge Elementary Schoo Page 57 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
	Concrete - Equipment Pads			0.067/sf	11,200
	167,352.00 sf				
03-1113.102	Forms, Place Footings Form And Place Elevator Spread Footing/Slab	60.00	sf	22.00 /sf	1,320
20	Forms, Place Footings	00.00	31	0.008/sf	1,320
	167,352.00 sf				
03-1113.180	Forms, Place Walls				
a 4	Form And Place Elevator Walls	280.00	sf	25.00 /sf	7,000
a 4	Form And Place Platform Stairs	50.00	lf	175.00 /lf	8,750
a 4	Form And Place Loading Dock Stairs Forms, Place Walls	35.00	lf	175.00_/lf 0.131/sf	6,12 2 <i>1,</i> 87
	167,352.00 sf				
03-1113.630	Vapor Barrier				
12	Vapor Barrier WIth Lap	83,677.23	sf	1.00 /sf	83,677
	Vapor Barrier			0.50 /sf	83,67
	167,352.00 sf				
03-1113.635	Rigid Insulation				
	Rigid Insulation under Slab 2.0"	71,519.00	sf	2.50 /sf	178,79
	Rigid Insulation			1.068/sf	178,79
	167,352.00 sf				
03-1513.110 6	Waterstop Waterstop At Elevator	40.00	lf	12.00 /lf	480
0	Waterstop	40.00		0.003/sf	480
	167,352.00 sf				
03-2100.110	Rebar	_, _, _ , _			
	SOG Rebar	71,519.00	sf	0.30 /sf	21,450
	Rebar Elevator Spread Footing	0.64	ton	2,200.00 /ton	1,408
	Rebar Elevator Walls Rebar Loading Dock	0.40 1.13	ton ton	2,200.00 /ton 2,200.00 /ton	880 2,480
210	Rebar	1.15	ton		26,23
	167,352.00 sf				
03-2200.110	Wire Mesh				
	WWF Reinforcement with Lap SOG	83,677.23	sf	0.90 /sf	75,31
	WWF Reinforcement with Lap SOG Platform	982.00	sf	0.90 /sf	884
110	WWF Reinforcement with Lap SOG Loading Dock	182.00	sf	0.90 /sf	16
	Wire Mesh			0.456/sf	76,35
	167,352.00 sf				
03-3000.100 40	Concrete 4000 PSI Concrete SOG And Haunch/Columns	1,390.20	су	115.00 /cy	159,873
10	Infill	1,000.20	~,	. 10.00 /09	100,010

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## Whitinsville, MA

				Total			
Item	Description	Takeoff Qty		Unit Cost	Amount		
03-3000.100	Concrete						
40	4000 PSI Concrete Platform SOG And Stairs/Ramp	22.00	су	115.00 /cy	2,530		
40	4000 PSI Concrete Elevator	16.00	су	115.00 /cy	1,840		
	Barrier One Moisture Additive SOG	1,670.55	су	52.00 /cy	86,869		
45	4500 PSI Concrete Loading Dock Foundation SOG And Stairs	22.00	су	125.00 /cy	2,750		
	Concrete			1.517/sf	253,862		
	167,352.00 sf						
03-3500.110	Finish Flatwork						
	Place And Finish SOG	71,519.00	sf	3.00 /sf	214,557		
	Place And Finish SOG At Platform	840.00	sf	9.00 /sf	7,560		
10	Place And Finish SOG At Loading Dock Finish Flatwork	346.00	sf	9.50 /sf 1.347/sf	3,287		
	167,352.00 sf				-, -		
	CONCRETE			E 2E 4/05	970 000		
	CONCRETE			5.254/sf	879,202		
	167,352.00 sf						
07-0000.000	THERMAL & MOIST PROTECT						
07-1200.100	Waterproofing						
2	Cementitious Waterproofing At Elevator Pit	1.00	ls	5,500.00 /ls	5,500		
	Waterproofing			0.033/sf	5,500		
	167,352.00 sf						
	THERMAL & MOIST PROTECT			0.033/sf	5,500		
	167,352.00 sf						
31-0000.000	EARTHWORK						
21 2212 110	Site Creding						
31-2213.110 120	Site Grading Earthwork Slab On Grade - Bid	1.00	Bid	709,505.00 /Bid	709,505		
	Site Grading			4.24 /sf	709,50		
	167,352.00 sf						
	EARTHWORK			4.24 /sf	709,505		
				4.24 /\$1	709,503		
	167,352.00 sf						
33-0000.000	UTILITIES						
33-0550.010	Pipe Trenching		D' 1		000 500		
2	Sitework Underslab Utilities UD - Bid	1.00	Bid	226,500.00 /Bid	226,500		
2	Sitework Underslab Utilities - Bid Pipe Trenching	1.00	Bid	75,000.00 /Bid 1.802/sf	75,000 301,500		
				1.002/81	301,300		
	167,352.00 sf						

## Northbridge Elementary Schoo Page 59 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total		
Item	Description	Takeoff Qty		Unit Cost	Amount	
	UTILITIES			1.802/sf	301,500	
	167,352.00 sf					
	A1030 Slab on Grade			11.328/sf	1,895,707	
	167,352.00 sf					
	A10 FOUNDATIONS			20.022/66	2 250 759	
				20.022/sf	3,350,758	
	167,352.00 sf					
	A SUBSTRUCTURE			20.022/sf	3,350,758	
	167,352.00 sf					
В	SHELL					
B10	SUPERSTRUCTURE					
B1010	Floor Construction					
03-0000.000	CONCRETE					
03-0010.165	Concrete - Equipment Pads Concrete - Equipment Pads	400.00	ef	28.00_/sf	11,200	
125	Concrete - Equipment Pads	400.00	51		11,200	
	167,352.00 sf					
03-0022.140	Concrete - Place & Finish SOD					
100	Place & Finish - SOMD 4.5" NW 2" 20 Ga W/6X6 - W2.1 W 2.1 WWF	90,671.00	sf	2.50 /sf	226,678	
	Concrete - Place & Finish SOD			1.354/sf	226,678	
	167,352.00 sf					
03-2100.110	Rebar			/ /	- / /00	
210	Rebar At SOD <i>Rebar</i>	90,671.00	ST	0.60 /sf 0.325/sf	54,403 54,403	
	167,352.00 sf					
03-2200.110	Wire Mesh					
	WWF Reinforcement with Lap W/6X6 - W2.1 W 2.1	106,085.07	sf	1.00 /sf	106,085	
	Wire Mesh			0.634/sf	106,085	
	167,352.00 sf					
03-3000.100	Concrete	4 000 00			400.007	
40	4000 PSI Concrete SOMD NW	1,399.00 <b>Page 5</b>	су	115.00 /cy	160,885	

## Northbridge Elementary Schoo Page 60 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
<i>03-3000.100</i> 40	Concrete Barrier 1 Concrete	1,399.00	су	45.00_/cy	<u>62,955</u> 223,840
	167,352.00 sf				
	CONCRETE			3.718/sf	622,205
	167,352.00 sf				
05-0000.000	METALS				
<i>05-1200.110</i> a 01	<i>Structural Steel</i> Structural Steel, Bracing, Angles,Studs,Connections And Joist	829.00	ton	3,900.00 /ton	3,233,100
a 01	Fero Clips	76.00	ea	550.00 /ea	41,800
	Structural Steel			19.569/sf	3,274,900
	167,352.00 sf				
05-3100.114 618	<i>Steel Floor Decking</i> Metal Floor Deck - 2'' 20 Ga	90,671.00	sf	3.00 /sf	272,013
	Steel Floor Decking	00,01 1100	0.	1.625/sf	272,013
	167,352.00 sf				
	METALS			21.194/sf	3,546,913
	167,352.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
07-8100.100 2	Fireproofing Fireproofing GC1.1B,G1,2B Fireproofing	32,225.00	sf	3.35_/sf	<u> </u>
	167,352.00 sf				
	THERMAL & MOIST PROTECT			0.645/sf	107,954
	167,352.00 sf				
	B1010 Floor Construction			25.557/sf	4,277,072
	167,352.00 sf				
B1020	Roof Construction				
03-0000.000	CONCRETE				
03-0022.140	Concrete - Place & Finish SOD				
	Place & Finish - SOMD 7" LW W/6X6 - W2.1 W 2.1 WWF	5,520.00	sf	4.75 /sf	26,220
	Concrete - Place & Finish SOD			0.157/sf	26,220
	167,352.00 sf				

Fontaine Bros., Inc.

## Northbridge Elementary Schoo Page 61 of 126/10/2019 6:05 РМ Whitinsville, MA

Item	Description	Takeoff Qty		Total Unit Cost	Amount	
nom		Tukcon Qty				
	Concrete - Place & Finish SOD			0.157/sf	26,220	
	167,352.00 sf					
03-2100.110	Rebar	5 500 00	af.	0.70. /cf	2.004	
212	Rebar At SOMD - Roof <i>Rebar</i>	5,520.00	51	0.70 /sf 0.023/sf	<u>3,864</u> 3,864	
	167,352.00 sf					
03-2200.110	<i>Wire Mesh</i> WWF Reinforcement with Lap Roof W/6X6 -	6,458.40	of	1.00 /sf	6,458	
110	W2.1 W 2.1 Wire Mesh	0,400.40	31	0.039/sf	6,458	
	167,352.00 sf			0.039/5/	0,400	
03-3000.100	Concrete					
I 40	4000 PSI LW Concrete SOMD Sound Atten Concrete	136.00	су	148.00 /cy 0.12 /sf	20,128 20,128	
	167,352.00 sf					
	CONCRETE			0.339/sf	56,670	
	167,352.00 sf					
05-0000.000	METALS					
<i>05-1200.110</i> a 01	Structural Steel Structural Steel, Bracing,	437.00	ton	3,900.00 /ton	1,704,300	
a 01	Angles, Studs, Connections And Joist Structural Steel Canopy/Screen/MEP Framing -	79.00	ton	4,800.00 /ton	379,200	
a 01	Support Fero Clips	38.00	ea	550.00 /ea	20,900	
	Structural Steel	00100	<u>o</u> u	12.575/sf	2,104,400	
	167,352.00 sf					
05-3100.110	Steel Roof Decking	70 500 00	,	0.05.44	000.000	
120 320	Metal Roof Deck 3" 20 ga. Metal Deck 3" 20 ga Cellular Acoustical	73,529.00 6,776.00		3.25 /sf 	238,969 77,924	
	Steel Roof Decking			1.894/sf	316,893	
	167,352.00 sf					
	METALS			14.468/sf	2,421,293	
	167,352.00 sf					
07-0000.000	THERMAL & MOIST PROTECT					
07-8100.100 2	Fireproofing Fireproofing - Cementitous	13,672.00	sf	3.35 /sf	45,801	

## Northbridge Elementary Schoo Page 62 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
	Fireproofing			0.274/sf	45,801
	167,352.00 sf				
	THERMAL & MOIST PROTECT			0.274/sf	45,801
	167,352.00 sf				
	B1020 Roof Construction			15.081/sf	2,523,765
	167,352.00 sf				
	B10 SUPERSTRUCTURE			40.638/sf	6,800,837
	167,352.00 sf				
B20	EXTERIOR VERTICAL ENCLOSURES				
B2010	Exterior Walls				
04-0000.000	MASONRY				
04-0000.110 212	Block 12" CMU Back - Up Backup Wall 12" At 26' Type X4 / 9 And L.4	3,711.00	sf	34.00 /sf	126,174
212	Lines Backup Wall 12" At 12' Type X4 Roof Level /	1,579.00	sf	34.00 /sf	53,686
212	12, J.5 And L.4 Lines Backup Wall 12" At 6' Type X4 Roof Level / J.5	312.00	sf	34.00 /sf	10,608
212	Between 9.6 And 11.2 Lines Build-up 4" CMU At Roof To Support Brick A3.50	1,474.00	sf	24.00_/sf /sf	35,376
	Block 12" CMU Back - Up 167,352.00 sf			1.33781	225,844
04-2113.140	Brick				
10	Brick Veneer - Wall Type X1.11,1.11a And X4.11	37,784.00	sf	34.50 /sf	1,303,548
	Brick			7.789/sf	1,303,548
	167,352.00 sf				
04-7200.120	Architectural Cast Stone				
	Cast Unit Veneer Masonry Ground Face Veneer Masonry AT East Wall	4,544.00 420.00	sf sf	60.00 /sf 42.00 /sf	272,640 17,640
050	Gymnasium Stone Cap 5" w +- x 4" h +- At Brick Veneer	1,075.00	lf	70.00 /lf	75,250
050	A6.60 Stone Cap 10" w +- x 4" h +- At Brick Veneer A6.60	2,081.00	lf	74.00 /lf	153,994
	Architectural Cast Stone			3.104/sf	519,524
	167,352.00 sf				
04-9590.110	Staging				
5	Masonry Staging	46,873.00	sf	3.50 /sf	164,056

## Northbridge Elementary Schoo Page 63 of 126/10/2019 6:05 РМ Whitinsville, MA

ltem	Description	Takeoff Qty		Total Unit Cost	Amount
nem	Description			Unit Cost	Amoun
	Staging			0.98 /sf	164,056
	167,352.00 sf				
	MASONRY			13.223/sf	2,212,972
	167,352.00 sf				
05-0000.000	METALS				
05-4100.010	LGMF Framing				
080	LGMF At Masonry And Precast (43,748 - 5,602 Minus CMU Back - Up -Brick shelf 1200)	36,946.00	sf	11.00 /sf	406,406
	LGMF At Metal Wall Panel	12,800.00	sf	11.00 /sf	140,800
	LGMF At Prefinished Phenolic Panels	10,850.00	sf	11.00 /sf	119,350
	LGMF At A6.70 Roof Edge Metal Soffit 1'-11-5/8"	3,870.00	sf	14.00 /sf	54,180
080	LGMF At A6.70 Prefinished Fascia At Overhang 3'-5" +-	6,490.00	sf	14.00 /sf	90,860
080	LGMF At Exterior Linear Metal Ceiling Southwest Canopy/Cafe Entry 1100	3,146.00	sf	14.00 /sf	44,044
080	LGMF At Exterior Metal Panel Ceilings Corridor 1136 /Gym Entry	316.00	sf	14.00 /sf	4,424
080	LGMF At Exterior Linear Metal Ceiling Lobby 1101 / Cafe Entry	1,892.00	sf	14.00 /sf	26,488
	LGMF At Exterior Linear Metal Panel Ceiling Receiving 1158	36.00	sf	14.00 /sf	504
080	LGMF At Exterior Exterior Metal Panel Ceilings Entries/Stairs	200.00	sf	14.00 /sf	2,800
	LGMF Framing 167,352.00 sf			5.317/sf	889,856
05-5820.120	Misc Steel				
40	Column Covers At 8' +- Under Soffit 8" Exposed Con Col.	2.00	ea	5,800.00 /ea	11,600
	Seismic Clips L5x5x5/16 x 1'6" Long At 4" OC Staggered / Expan Bolts	162.00	Ea	225.00 /Ea	36,450
140	Exterior Lintels	1,270.00	lf	28.00 /lf	35,560
	Misc Steel			0.50 /sf	83,610
	167,352.00 sf				
	METALS			5.817/sf	973,460
	167,352.00 sf				
06-0000.000	ROUGH CARPENTRY				
<i>06-1610.110</i> 62	Sheathing At Walls Sheathing At Masonry And Precast 41,886 - 5,602 Minus CMU Back - Up)	36,946.00	sf	3.00 /sf	110,838
62	Sheathing At Metal Wall Panel	12,800.00	sf	3.00 /sf	38,400
	Sheathing At Prefinished Phenolic Panels	10,850.00	sf	3.00 /sf	32,550
	Sheathing At At A6.70 Roof Edge Metal Soffit 1'-11-5/8"	3,870.00	sf	2.995 /sf	11,59
				a aa= / /	10 420
62	Sheathing At A6.70 Prefinished Fascia At Overhang 3'-5" +-	6,490.00	sf	2.995 /sf	19,438

## Northbridge Elementary School age 64 of 126/10/2019 6:05 РМ

Whitinsville, MA

tem	Description	Takeoff Qty		Total Unit Cost	Amou
tem	Description	Takeon Qty		onit cost	Anou
06-1610.110 62	Sheathing At Walls Sheathing At Exterior Metal Panel Ceilings Corridor 1136 /Gym Entry	316.00	sf	2.995 /sf	94
62	Sheathing At Exterior Linear Metal Ceiling Entry Vestibule 1214 A2.11,A6.10	1,892.00	sf	2.995 /sf	5,66
62	Sheathing At Exterior Metal Panel Ceiling Receiving 1158	36.00	sf	2.995 /sf	10
62	Sheathing At Exterior Metal Panel Ceilings Entries/Stairs	200.00	sf	2.995 /sf	59
	Sheathing At Walls			1.372/sf	229,55
	167,352.00 sf				
	ROUGH CARPENTRY			1.372/sf	229,55
	167,352.00 sf				
06-2000.000	FINISH CARPENTRY				
06-2000.010 2	Finish Carpentry 2" x 10" x 9'+-h Stained HDWD Incert ES Web	342.00	lf	55.00 /lf	18,8
	SS Through Bolts A26/A6.51 Finish Carpentry			-	18,8
	FINISH CARPENTRY				18,8
07-0000.000	THERMAL & MOIST PROTECT				
)7-2113.230	Insulation Board				
2	3" Rigid Insulation At Masonry And Precast - Brick Shelf	38,146.00	sf	3.00 /sf	114,4
	4" Mineral Wool Insulation At Metal Wall Panel	12,800.00	sf	4.00 /sf	51,2
2	4" Mineral Wool Insulation At Prefinished Phenolic Panels	10,850.00	sf	4.00 /sf	43,4
2	4" Mineral Wool Insulation At A6.70 Roof Edge Metal Soffit 1'-11-5/8"	3,870.00	sf	4.00 /sf	15,4
2	4" Mineral Wool Insulation At A6.70 Prefinished Fascia At Overhang 3'-5" +-	6,490.00	sf	4.00 /sf	25,9
2	4" Mineral Wool Insulation At Exterior Linear Metal Ceiling Southwest Canopy/Cafe Entry	3,146.00	sf	4.00 /sf	12,5
2	1100 4" Mineral Wool Insulation At Exterior Metal Panel Ceilings Corridor 1136 /Gym Entry	316.00	sf	4.00 /sf	1,2
2	4" Mineral Wool Insulation At Exterior Linear Metal Ceiling Entry Vestibule 1214 A2.11,A6.10	1,892.00	sf	4.00 /sf	7,5
2	4" Mineral Wool Insulation At Exterior Metal Panel Ceiling Receiving 1158	36.00	sf	4.00 /sf	1
2	4" Mineral Wool Insulation At Exterior Metal Panel Ceilings Entries/Stairs	200.00	sf	4.00 /sf	8
	Insulation Board			1.63 /sf	272,8
	167,352.00 sf				
07-2129.265 201	Sprayed Insulation 3" Sprayed Foam Insulation (SF Inc Vert ) A6.10	2,270.40	sf	4.00 /sf	9,0
	Linear Metal Ceiling Entry Vestibule 1214 3" Sprayed Foam Insulation (SF Inc Vert ) @	969.60	sf	4.00 /sf	3,8

## Northbridge Elementary Schoo Page 65 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amou
	Sprayed Insulation			0.077/sf	12,90
	167,352.00 sf				
07-2700.100	Air Barriers				
	Air Vapor Barrier At Masonry And Precast - Brick Shelf	38,146.00	sf	6.75 /sf	257,48
10	Air Vapor Barrier At Metal Wall Panel Basis - Basis ATAS International, Inc; Design Wall DWF	12,800.00	sf	6.75 /sf	86,40
10	Air Vapor Barrier At Prefinished Phenolic Panels	10,850.00	sf	6.75 /sf	73,23
10	Air Vapor Barrier At A6.70 Roof Edge Metal Soffit 1'-11-5/8" - Basis ATAS International, Inc; Design Wall DW	3,870.00	sf	6.75 /sf	26,12
10	Air Vapor Barrier At A6.70 Prefinished Fascia At Overhang 3'-5" +- Basis ATAS International, Inc; Design Wall DW	6,490.00	sf	6.75 /sf	43,8
10	Air Vapor Barrier At Exterior Linear Metal Ceiling Southwest Canopy/Cafe Entry 1100	3,146.00	sf	6.75 /sf	21,2
10	Air Vapor Barrier At Exterior Metal Panel Ceilings Corridor 1136 /Gym Entry	316.00	sf	6.75 /sf	2,1
10	Air Vapor Barrier At Exterior Linear Metal Ceiling Entry Vestibule 1214 A2.11,A6.10	1,892.00	sf	6.75 /sf	12,7
10	Air Vapor Barrier At Exterior Metal Panel Ceiling Receiving 1158	36.00	sf	6.75 /sf	2
10	Air Vapor Barrier At Exterior Metal Panel Ceilings Entries/Stairs	200.00	sf	6.75 /sf	1,3
	Strip in AVB At Windows	9,304.00	sf	6.75 /sf	62,8
10	Strip in AVB At Doors Air Barriers	114.00	sf	<u> </u>	7 588,3
	167,352.00 sf				
07-4616.100	Composite Wall Panel				
	Metal Wall Panel	12,800.00	sf	67.00 /sf	857,6
	Metal Panel A6.70 Roof Edge Metal Soffit 1'-11-5/8"	3,870.00	sf	67.00 /sf	259,2
2	Metal Panel A6.70 Prefinished Fascia At Overhang 3'-5"	6,490.00	sf	67.00 /sf	434,8
2	Linear Metal Ceilings Southwest Canopy/Cafe Entry 1100	3,146.00	sf	70.00 /sf	220,2
2	Metal Panel Ceilings Corridor 1136 /Gym Entry	316.00	sf	67.00 /sf	21,1
2	Linear Metal Ceiling Entry Vestibule 1214 A2.11,A6.10	1,892.00	sf	70.00 /sf	132,4
2	Metal Panel Ceilings Receiving 1158	36.00	sf	67.00 /sf	2,4
2	Metal Panel Ceilings Building Entry / Stairs A3.10	200.00	sf	67.00 /sf	13,4
2	Prefinished Phenolic Panels Composite Wall Panel	10,850.00	sf	68.00_/sf 16.009/sf	737,8 2,679,1
	167,352.00 sf				
7-9200.200	Exterior Caulking				
2	Exterior Joint/Control Joint sealants - Ext Wall & MP/Linear Ceilings Exterior Caulking	77,746.00	Allo	1.00 /Allo 	77,7
	167,352.00 sf			0.700/01	,,,,
07-9513.100	Expansion Covers				

## Northbridge Elementary Schoo Page 66 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total		
Item	Description	Takeoff Qty		Unit Cost	Amount	
	Expansion Covers			0.14 /sf	23,400	
	167,352.00 sf					
	THERMAL & MOIST PROTECT			21.837/sf	3,654,465	
	167,352.00 sf					
08-0000.000	OPENINGS					
<i>08-9200.100</i> 100	Louvered Equipment Enclosures Roof Top Equipment Screen - Verta-A-Cade 301	7,258.00	sf	55.00 /sf	399,190	
	(Basis of Design) Louvered Equipment Enclosures	,		2.385/sf	399,190	
	167,352.00 sf					
	OPENINGS			2.385/sf	399, 190	
	167,352.00 sf					
09-0000.000	FINISHES					
<i>09-2000.010</i> 100	Drywall Partitions Drywall At Interior LGMF Drywall Partitions	59,886.00	sf	3.50_/sf	209,601 209,601	
	167,352.00 sf					
<i>09-9113.100</i> 30 30	Painting- Exterior Paint Exterior Structural Steel Stained HDWD Incert 2" x 10" x 9'+-h ES Web SS Through Bolts A26/A6.51 Painting- Exterior	342.00 285.00	sf sf	12.00 /sf 8.00 /sf	4,104 2,280 	
	FINISHES			1.291/sf	215,985	
	167,352.00 sf					
10-0000.000	SPECIALTIES					
<i>10-1400.110</i> 100	Signs - Exterior Signs - Building ID Allowance	1.00	ALLO	12,500.00 /ALLO	12,500	
	Signs - Exterior		W	W 0.075/sf	12,500	
	167,352.00 sf					
	SPECIALTIES			0.075/sf	12,500	
	167,352.00 sf					
	B2010 Exterior Walls			46.112/sf	7,716,946	
	167,352.00 sf					

## Northbridge Elementary Schoo Page 67 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	A 4	
ltem	Description	Takeoff Qty		Unit Cost	Amount	
	B2010 Exterior Walls			46.112/sf	7,716,946	
	167,352.00 sf					
B2020	Exterior Windows					
06-0000.000	ROUGH CARPENTRY					
06-0000.010	Carpentry					
2	Exterior Blocking At Storefront, Curtainwall and Windows	9,304.00	lf	15.00 /lf	139,560	
2	Exterior Blocking At Prefinished Aluminum Sun Shades	134.00	loc	125.00 /loc	16,750	
	Carpentry			0.934/sf	156,310	
	167,352.00 sf					
	ROUGH CARPENTRY			0.934/sf	156,310	
	167,352.00 sf					
07-0000.000	THERMAL & MOIST PROTECT					
07-9200.200	Exterior Caulking					
20	Exterior Caulking At Storefront, Curtainwall and Windows	9,304.00	lf	6.50 /lf	60,476	
	Exterior Caulking			0.361/sf	60,476	
	167,352.00 sf					
	THERMAL & MOIST PROTECT			0.361/sf	60,476	
	167,352.00 sf					
08-0000.000	OPENINGS					
08-4100.100	Storefronts - Aluminum					
	SF-1 Alum. Storefront 5-4w x 9-4h 69	3,435.00	sf	95.00 /sf	326,325	
	SF-2 Alum. Storefront 5-4w x 6-8h 64	2,276.00	sf	95.00 /sf	216,220	
	SF-3 Alum. Storefront 5-4w x 6-8h 31 SF-4 Alum. Storefront 5-4w x 6-8h 30	2,170.00	sf sf	95.00 /sf	206,150	
	SF-5 Alum. Storefront 8-4w x 6-8h 4	2,100.00 222.00	sf	95.00 /sf 95.00 /sf	199,500 21,090	
	SF-7 (2)Pr. Drs. Alum Storefront 20 w x 10h 1	200.00	sf	95.00 /sf	19,000	
10	SF-8 (1)Pr. Drs. Alum Storefront 12-2 w x 10h 1	120.00	sf	95.00 /sf	11,400	
10					,	
10	SF-10 Alum Storefront 20-6 w x 6-4h 1	130.00	sf	95.00 /sf	12,350	
10	SF-11 Alum Storefront 17-4 w x 6-4h 1	110.00	sf	95.00 /sf	10,450	
	SF-12 Alum Storefront 23-4 w x 6-4h 1	148.00	sf	95.00 /sf	14,060	
	SF-13 Alum Storefront 23-4 w x 6-4h 2	296.00	sf	95.00 /sf	28,120	
	SF-14 Alum Storefront 23-4 w x 6-4h 1	148.00	sf	95.00 /sf	14,060	
	SF-15 Alum Storefront 23-4 w x 6-4h 1	148.00	sf	95.00 /sf	14,060	
	SF-16 Alum Storefront 36-6 w x 6-8h 1 SE 17* Padius Alum Storefront 40 w x 7 4h - 1	243.00	sf	95.00 /sf	23,085	
	SF-17* Radius Alum Storefront 40 w x 7-4h 1 SF-18* (1)Pr Drs Radius Alum Storefront 20 w x	293.00	sf	95.00 /sf	27,835	
	7-2h 1	143.00	sf	95.00 /sf	13,585	
	SF-21 Alum Storefront Sng Dr 11-9 w x 10 1	118.00	sf	95.00 /sf	11,210	
	SF-27 Alum Storefront 12-0 w x 7-4h 1 SE-28 Alum Storefront 14-10 w x 4 h 1	88.00	sf	95.00 /sf	8,360	
	SF-28 Alum Storefront 14-10 w x 4 h 1 SF-29 Alum Storefront 27 w x 4 h 6	59.00 648.00	sf sf	95.00 /sf 95.00 /sf	5,605 61,560	

## Northbridge Elementary Schoo Page 68 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
08-4100.100	Storefronts - Aluminum				
10	SF-30 Alum Storefront 27 w x 4 h3	324.00	sf	95.00 /sf	30,780
10	SF-31 Alum Storefront 13 w x 7-21	93.00	sf	95.00 /sf	8,835
10	SF-32 (2) Pr Drs Alum Storefront 14-6 w x 9-4 h 1	135.00	sf	95.00 /sf	12,825
10	SF-33 (1)/(1)Sgl Pr Drs Alum Storefront 25-8 w x 9-4 h1	240.00	sf	95.00 /sf	22,800
	SF-34 (1)Sgl Dr Alum Storefront 10-11 w x 7-2 h	78.00	sf	95.00 /sf	7,410
	SF-35 (1)Sgl Dr Alum Storefront 10-11 w x 7-2 h	78.00	sf	95.00 /sf	7,410
10	SF-36 Alum Storefront 10-10 w x 8 h 2	173.00	sf	95.00 /sf	16,435
10	SF-37 Alum Storefront 10-10 w x 8 h2	173.00	sf	95.00 /sf	16,435
10	SF-38 (1)Pr Drs Alum Storefront 6-4 w x 9-4 h 5	296.00	sf	95.00_/sf	28,120
	Storefronts - Aluminum			8.336/sf	1,395,075
	167,352.00 sf				
08-4400.110	Curtain Wall				
	CW 1 10w x 42-8h [1ea]	427.00	sf	115.00 /sf	49,105
1000	CW 2 (1) Pr Drs 12hw x 42-8h [1ea]	512.00	sf	115.00 /sf	58,880
1000	CW 3 5w x 39-8h [2ea]	397.00	sf	115.00 /sf	45,655
1000	CW 4 19-06w x 20-08h [1ea]	403.00	sf	115.00 /sf	46,345
	Curtain Wall			1.195/sf	199,985
	167,352.00 sf				
08-5113.100	Windows - Aluminum				
10	W1 2-0 x 2-0 10	40.00	sf	92.00 /sf	3,680
10	W2 2-8 x 2-8 14	100.00	sf	92.00 /sf	9,200
10	W3 4 x 4 16	256.00	sf	92.00 /sf	23,552
10	W4 6 x 6 12	432.00	sf	92.00 /sf	39,744
	W5 8 x 8 1	64.00	sf	92.00 /sf	5,888
	W6 3-4 x 6-0 7	140.00	sf	92.00 /sf	12,880
	W7 3w x 5-2 2	31.00	sf	92.00 /sf	2,852
	W8 5w x 6-4 6	190.00	sf	92.00 /sf	17,480
10	Windows - Aluminum	190.00	51	0.689/sf	115,276
	167,352.00 sf				
	OPENINGS			10.22 /sf	1,710,336
	167,352.00 sf				
10-7000.000	EXTERIOR SPECIALITIES				
10-7113.000	Sun Control Devices				
	Prefinished Aluminum Sun Shades	736.00	lf	275.00 /lf	202,400
	Sun Control Devices			1.209/sf	202,400
	167,352.00 sf				
	EXTERIOR SPECIALITIES			1.209/sf	202,400
	167,352.00 sf				
	B2020 Exterior Windows			12.725/sf	2,129,522
				0,0.	_,0,022
	167,352.00 sf				

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Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
B2030	Exterior Doors				
05-0000.000	METALS				
<i>05-5820.120</i> 80		1.00	ea	2,500.00 /ea	2,500
80	H+-) Overhead Support(s) - Ext. OH Door (8' W x 7' H+-)	1.00	ea	3,200.00 /ea	3,200
	Misc Steel			0.034/sf	5,700
	167,352.00 sf				
	METALS			0.034/sf	5,700
	167,352.00 sf				
06-0000.000	ROUGH CARPENTRY				
	<i>Carpentry</i> Exterior Door Blocking	92.00	lf	15.00 /lf	1,380
2	Exterior Door Blocking At Ext. at OH Door(s) (8' W x 7'H+-)	22.00	lf	15.00 /lf	330
	Carpentry 167,352.00 sf			0.01 /sf	1,710
	ROUGH CARPENTRY			0.01 /sf	1,710
	167,352.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
<i>07-9200.200</i> 10	Exterior Caulking Caulking Exterior Doors	92.00	lf	7.00 /lf	644
	Caulking Exterior Overhead Coiling Doors	92.00 22.00	lf	7.00_/lf	154
	Exterior Caulking			0.005/sf	798
	167,352.00 sf				
	THERMAL & MOIST PROTECT			0.005/sf	798
	167,352.00 sf				
08-0000.000	OPENINGS				
<i>08-1100.300</i> 10	Doors - Hollow Metal Doors And Frames S2-1 (Roof Stair) HM Door,Frame, Hardware &	1.00	ea	2,500.00 /ea	2,500
10	Installation - Single 1212 HM Door,Frame, Hardware & Installation -	1.00	ea	2,500.00 /ea	2,500
10	Single 1131A HM Door,Frame, Hardware & Installation	1.00	pr	3,500.00 /pr	3,500
10	- Pair 1158A HM Door,Frame, Hardware & Installation	1.00	pr	3,500.00 /pr	3,500
10	- Pair		P	0,000.00 /pi	-,

## Northbridge Elementary Schoo Page 70 of 126/10/2019 6:05 РМ Whitinsville, MA

### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amoun
	Doors - Hollow Metal Doors And Frames			0.093/sf	15,500
	167,352.00 sf				
<i>08-3300.100</i> 110	<i>Doors- Overhead</i> 1155A Exterior Overhead Door (8' W x 7' H +-) -	1.00	ea	9,800.00 /ea	9,800
110	Overhead Door Corporation; Series 596 Doors- Overhead	1.00	ou		9,800
	167,352.00 sf				- ,
08-4200.100	Storefront Entrances				
	1141 SF Entrance, hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
	1214 SF Entrance, hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
001	1214B SF Entrance, hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
001	1222 SF Entrance, hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
001	1231B SF Entrance,hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
010	1246 SF Entrance, hardware & Insallation - Single	1.00	ea	4,400.00 /ea	4,400
010	1100 SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	1100A SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	1100B SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
010	1126B SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
010	1136 SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
010	1136A SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
010	1137A SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	1211 SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	1233B SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	S2-1B SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
	S3-1B SF Entrance, hardware & Insallation - Pair	1.00	pr	8,800.00 /pr	8,80
010	S4-1B SF Entrance,hardware & Insallation - Pair Storefront Entrances	1.00	pr	8,800.00_/pr 0.789/sf	8,800
	167,352.00 sf				,
	OPENINGS			0.94 /sf	157,300
	167,352.00 sf				
09-0000.000	FINISHES				
09-9113.100	Painting- Exterior				
	Paint Exterior Door and Frame	2.00	ea	175.00 /ea	350
30	Paint Exterior Pair of Doors and Frame	3.00	pr	275.00 /pr	825
30	Paint Exterior OH Door Frame(s) Painting- Exterior	1.00	ea	275.00 /ea 0.009/sf	275 1,450
	167,352.00 sf				.,
				0.000/66	A 45.
	FINISHES			0.009/sf	1,450
	167,352.00 sf				

10-0000.000 SPECIALTIES

## Northbridge Elementary Schoo Page 71 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
<i>10-1400.120</i> 110	Signs - Interior Signage - GC1.1Provide 3" Vinyl #'s At Each Ext Door x2- Ext & Int Face(Where Dble or Bank Of Doors 1# Only)	19.00	ea	165.00 /ea	3,135
	Signs - Interior				3,135
	SPECIALTIES				3,135
	B2030 Exterior Doors			1.016/sf	170,093
	167,352.00 sf				
	<b>B20 EXTERIOR VERTICAL ENCLOSURES</b>			59.853/sf	10,016,561
	167,352.00 sf				
B30	EXTERIOR HORIZONTAL ENCLOSURES				
B3010	Roof Coverings				
06-0000.000	ROUGH CARPENTRY				
	Carpentry Vertical Roof Sheathing Roof Blocking Carpentry	916.00 13,789.00	sf If	4.00 /sf /lf 	3,664 206,835 210,499
	167,352.00 sf			1.200/31	210,433
	ROUGH CARPENTRY			1.258/sf	210,499
	167,352.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
07-5300.100 2	Roofing - Membrane Roof R-1 And Flashing	73,892.00	sf	18.00 /sf	1,330,056
2		916.00	sf	18.00 /sf	16,488
2	5	9,999.00	sf	24.00 /sf	239,976
2	5	875.00 78.00	sf sf	24.00 /sf 225.00 /sf	21,000 17,550
2	•	85,682.00	sf	0.20 /sf	17,136
	Walkway Pads	2,040.00	sf	15.00 /sf	30,600
2	Protection of completed roofing.	85,682.00	sf	0.20 /sf	17,136
	Roofing - Membrane 167,352.00 sf			10.098/sf	1,689,943
07-6200.100	Flashing- Aluminum	4 000 00	14	00.00 ///	40.070
	Roof Edge Metal		lf If	22.00 /lf	42,372
2	1'-2" Fascia W/1'-6" Coping Flashing Flashing- Aluminum	1,926.00	п	74.00 /lf 1.105/sf	<u>142,524</u> 184,896
	167,352.00 sf				

## Northbridge Elementary Schoo Page 72 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
	THERMAL & MOIST PROTECT			11.203/sf	1,874,839
	167,352.00 sf				
	B3010 Roof Coverings			12.461/sf	2,085,338
	167,352.00 sf				
B3020	Roof Openings				
05-0000.000	METALS				
<i>05-5820.120</i> 140	5	26.00	sf	250.00 /sf	6,500
140	A6.17 Metal Framing Roof Stair Access Form Stair 2	480.00	lbs	12.00 /lbs	5,760
140	-	12.00	lbs	175.00 /lbs	2,100
	Misc Steel			0.101/sf	14,360
	141,600.00 sf				
	METALS			0.101/sf	14,360
	141,600.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
07-7200.100	Roof Accessories				
	Manufactured Curbs, Equipment Rails, and Pedestals.	1.00	Allow	25,000.00 /Allow	25,000
12	Roof Access Hatches	1.00	ea	2,500.00 /ea	2,500
12	1 Roof Access Ladders 9' +- J1.6 Line / A4.15	1.00	ea	3,600.00 /ea	3,600
	2 Roof Access Ladders 9' +- W6.1 Line / A4.15	1.00	ea	3,600.00 /ea	3,600
	3 Roof Access Ladders 14' +- Z2 Line / A4.15 4 Roof Access Ladders 16' +- 10 Line / A4.15	1.00	ea	5,600.00 /ea	5,600
	Elevator Hoistway Vent. [Basis-of-Design	1.00 1.00	ea ea	6,400.00 /ea 4,200.00 /ea	6,400 4,200
	Manufacturer / Product: Greenheck, Model		0u	.,200.00 , 00	.,200
	ESJ-401P Stationary Blade Louver Penthouse ] Roof Accessories			0.304/sf	50,900
	167,352.00 sf			0.004/01	00,000
	THERMAL & MOIST PROTECT			0.304/sf	50,900
	167,352.00 sf				
08-0000.000	OPENINGS				
08-6200.100	Skylights				
20		234.00	sf	175.00 /sf	40,950
20	Skylight - Metal Framed	133.00	sf	/sf	23,275
	Skylights			0.384/sf	64,225
	167,352.00 sf				

## Northbridge Elementary Schoo Page 73 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
	OPENINGS			0.384/sf	64,225
	167,352.00 sf				
	B3020 Roof Openings			0.774/sf	129,485
	167,352.00 sf				
	B30 EXTERIOR HORIZONTAL ENCLOSURES			13.235/sf	2,214,823
	167,352.00 sf				
	B SHELL			113.726/sf	19,032,220
	167,352.00 sf				
С	INTERIORS				
C10	INTERIOR CONSTRUCTION				
C1010	Interior Partitions				
04-0000.000	MASONRY				
<i>04-2200.080</i> 102	Block- 8" CMU E1 8" CMU 1 HR. Grouted Solid S0.02 [Includes Staging/Access]	1,450.00	sf	32.00 /sf	46,400
	E1 8" CMU 1 HR. Elevator Machine Room	364.00	sf	28.00 /sf	10,192
102	G1 12" CMU 26' HT 1 HR Gym G1 6" CMU 25' HT.	2,130.00 452.00	sf sf	32.00 /sf 26.00 /sf	68,160 11,752
	G1 4" CMU 25' HT. G2 12" CMU 43' HT 2 HR Sep Wall	156.00 3,401.00	sf sf	24.00 /sf 36.00 /sf	3,744 122,436
102	Block- 8" CMU	0,401.00	51	00.00_/si 1.57 /sf	262,684
	167,352.00 sf				
	MASONRY			1.57 /sf	262,684
	167,352.00 sf				
05-0000.000	METALS				
05-5820.120	Misc Steel			/	10
	Seismic Clips Support for Operable Partition	54.00 55.00	ea If	250.00 /ea 200.00 /lf	13,500 11,000
140	Interior Lintels	1.00	ls	5,500.00 /ls	5,500
140	Misc interior Misc Steel	167,352.00	ls	0.30 /ls 0.479/sf	50,206 80,206
	167,352.00 sf				
	METALS			0.479/sf	80,206
	167,352.00 sf				

## Northbridge Elementary Schoo Page 74 of 126/10/2019 6:05 РМ Whitinsville, MA

		<b>T</b> 1 (10)		Total			
Item	Description	Takeoff Qty		Unit Cost	Amount		
	METALS			0.479/sf	80,206		
	167,352.00 sf						
06-0000.000	ROUGH CARPENTRY						
06-0000.010	Carpentry						
2	In Wall And Misc. Blocking	167,352.00	sf	1.25 /sf	209,190		
2	Backer Boards At Elec/Tel/Data <i>Carpentry</i>	500.00	Sf	8.00 /Sf 1.274/sf	4,000		
	Carpenity			1.274/31	210,190		
	167,352.00 sf						
	ROUGH CARPENTRY			1.274/sf	213,190		
	167,352.00 sf						
07-0000.000	THERMAL & MOIST PROTECT						
07-9200.100	Interior Caulking						
40	Caulking Interior Window Openings Interior Caulking	2,220.00	lf	6.50 /lf 0.086/sf	14,430 14,430		
	167,352.00 sf			0.060/3/	14,43		
	101,002.00 01						
07-9513.100	Expansion Covers						
12	Interior Expansion Joints Expansion Covers	167,352.00	lf	0.40 /lf 0.40 /sf	66,941 66,941		
				0.40731	00,94		
	167,352.00 sf						
	THERMAL & MOIST PROTECT			0.486/sf	81,37		
	167,352.00 sf						
08-0000.000	OPENINGS						
08-1100.500	HM Frames						
	BL1 5-4 w x 2-4 / HM Borrowed Lite Frames BL2 3 w x 4 / HM Borrowed Lite Frames	5.00 47.00	ea ea	150.00 /ea 180.00 /ea	750 8,460		
	BL3 4-8 w x 4 / HM Borrowed Lite Frames	9.00	ea	280.00 /ea	2,520		
	BL4 3w x 3 / HM Borrowed Lite Frames	4.00	ea	135.00 /ea	540		
100	BL5 4 w x 4 / HM Borrowed Lite Frames HM Frames	12.00	ea	200.00 /ea 0.088/sf	2,400		
	167,352.00 sf				, -		
<i>08-4100.100</i> 10	Storefronts - Aluminum SF-06 Alum. Storefront And Glazing	64.00	sf	80.00 /sf	5,120		
	SF-09 Alum. Storefront Frames And Glazing	103.00	sf	80.00 /sf	8,240		
10	SF-19 Alum. Storefront And Glazing	95.00	sf	80.00 /sf	7,600		
	SF-20 Alum. Storefront And Glazing 21 w x 10h	215.00	sf	80.00 /sf	17,200		
	SF-22 Alum. Storefront And Glazing 13-8 w x 10h SF-23 Alum. Storefront And Glazing 23-5 w x 10h	137.00 234.00	sf sf	80.00 /sf 80.00 /sf	10,960 18,720		
	SF-24 Alum. Storefront Frames And Glazing 9-0	81.00	sf	80.00 /sf	6,480		
	w x 9-0h						

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### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
00 4400 400					
<i>08-4100.100</i> 10	Storefronts - Aluminum SF-25/26 Alum. Storefront Frames And Glazing	648.00	sf	80.00 /sf	51,840
	9-0 w x 6-0h Storefronts - Aluminum			0.754/sf	126,160
				0.104/01	120,100
	167,352.00 sf				
08-4400.110	Curtain Wall				
1000	CW 5 *FR 17-2 x 10 Frames And Glazing [STAIR 5]	172.00	sf	245.00 /sf	42,140
1000	CW 6 *FR 9-5 x 10 Frames And Glazing [STAIR 5]	188.00	sf	245.00 /sf	46,060
1000	CW 7 *FR 2-4 x 10h Frames And Glazing	47.00	sf	245.00 /sf	11,515
1000	[STAIR 5] CW 8 *FR 9-10 x 10 Frames And Glazing [STAIR	98.00	sf	245.00 /sf	24,010
1000	5] CW 9 *FR 17-3 x 10 Frames And Glazing [STAIR	173.00	sf	245.00 /sf	42,385
1000	5] CW 10 *FR 27-2 x 10 Frames And Glazing	543.00	sf	245.00 /sf	133,035
	[STAIR 5] Curtain Wall			1.788/sf	299,145
				1.766/31	299,140
	167,352.00 sf				
08-8100.100	Glazing- Glass				
100	BL1 5-4 w x 2-4 / HM Borrowed Lite Glass & Glazing	55.00	sf	32.00 /sf	1,760
	BL2 3 w x 4 / HM Borrowed Lite Glass & Glazing	564.00	sf	32.00 /sf	18,048
100	BL3 4-8 w x 4 / HM Borrowed Lite Glass & Glazing	112.00	sf	32.00 /sf	3,584
100	BL4 3w x 3 / HM Borrowed Lite Frames Glass & Glazing	36.00	sf	32.00 /sf	1,152
100	BL5 4w x 4 / HM Borrowed Lite Frames Glass & Glazing	192.00	sf	32.00 /sf	6,144
	Glazing- Glass			0.183/sf	30,688
	167,352.00 sf				
	OPENINGS			2.812/sf	470.663
	167,352.00 sf				
09-0000.000	FINISHES				
<i>09-2000.010</i> 100	Drywall Partitions A 14' HT- Non Rated w/ 6" Metal Studs 1 Layer	102,325.00	sf	11.80 /sf	1,207,435
100	of Gyp Each Side, Batt Insul. A 27'-6"HT- w/ 6" Metal Studs 1 Layer of Gyp	6,632.00	sf	12.50 /sf	82,900
	Each Side, Batt Insul.				
	A1 14' HT- 1 HR. w/ 6" Metal Studs 1 Layer of Gyp Each Side, Batt Insul.	1,992.00	sf	13.50 /sf	26,892
100	A2 14' HT- 2 HR. w/ 6" Metal Studs 2 Layers of Gyp Each Side, Batt Insul.	965.00	sf	16.00 /sf	15,440
100	B 14' HT- w/ 3 5/8" Metal Studs 1 Layer of Gyp Each Side, Batt Insul.	141.00	sf	10.80 /sf	1,523
100	F 14' HT- Non Rated w/ 2 1/2" Metal Stud, 1	20,290.00	sf	7.00 /sf	142,030
100	Layer of Gyp, Batt Insul. F 27" HT- Non Rated w/ 2 1/2" Metal Stud, 1	3,518.00	sf	7.50 /sf	26,385
100	Layer of Gyp, Batt Insul. F4 14' HT- 1 Layer Gyp. One Side w/ 3 5/8"	25,379.00	sf	8.75 /sf	222,066
	Metal Studs, Batt Insul.				,
		Dago 21			

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				Total	
tem	Description	Takeoff Qty		Unit Cost	Amour
09-2000.010	Drywall Partitions				
100	F4 14' HT- 1 Layer Gyp. One Side w/ 3 5/8" Metal Studs, No Batt	3,378.00	sf	8.25 /sf	27,86
100	F6 14' HT- Non Rated Furring w/ 6" Metal Stud, 1 Layer of Gyp, Batt Insul.	22,559.00	sf	9.80 /sf	221,07
100	A1 Stair 1 1 HR RATED SEPARATION 6" 1 +1	5,608.00	sf	13.85 /sf	77,67
	F4 Stair 1 2-1/2" 1+0	2,731.00	sf	7.00 /sf	19,11
	F6 Stair 2 6" 1+0	513.00	sf	10.00 /sf	5,13
100	S1 Stair SHAFTWALL 2-1/2" STUD 1 HR RATED W/ (1) LAYER 5/8" GYP BD (UL U415	7,867.00	sf	24.00 /sf	188,80
	SYSTEM A)				
100	Scaffolding/Lifts/Logistics	167,352.00	sf	0.75 /sf	125,51
	Cleanup	167,352.00	sf	1.75 /sf	292,86
100	Install Hollow Metal Door Frames	305.00	sf	210.00 /sf	64,05
	Drywall Partitions			16.413/sf	2,746,77
	167,352.00 sf				
	FINISHES			16.413/sf	2,746,77
	167,352.00 sf				
0-0000.000	SPECIALTIES				
10-2226.100 2	Partitions Folding 1137 Operable Partition at Platform - Manual	312.00	sf	68.00 /sf	21,21
	(26w +- x 12'h +-) A5.14 Partitions Folding			0.127/sf	21,2
	167,352.00 sf				
	SPECIALTIES			0.127/sf	21,21
	167,352.00 sf				
	C1010 Interior Partitions			23.161/sf	3,876,10
	167,352.00 sf				
21020	Interior Doors				
5-0000.000	METALS				
5-5820.120		47.00	14	075 00 14	4.07
80	Overhead Support(s) - OH Coiling Grille at	17.00	lf	275.00 /lf	4,67
80	Kitchen (17 'w x 10'h) Overhead Support(s) - OH Coiling Grille at	17.00	lf	275.00 /lf	4,67
80	Kitchen (17 w x 10'h) Overhead Support(s) - 1102 HSD Folding	50.00	lf	275.00 /lf	13,75
	15'-4w" x 8'h x 11-1/2"thk 90 Min Overhead Support(s) - 1202C FD Media 12'w x	12.00	 If	275.00 /lf	3,3
	8'h				
	Overhead Support(s) - 1222B FD Kinder 8'w x 8'h	8.00	lf	275.00 /lf	2,2
80		8.00	lf	275.00 /lf	2,2
	Overhead Support(s) - 2215A FD Alum. 8'w x 8'h	8.00	lf	275.00 /lf	2,2
80		8.00	lf	275.00 /lf	2,2
80	Overhead Support(s) - 2227A FD Alum. 8'w x 8'h	8.00	lf	275.00 /lf	2,2
		0.00	14	075 00 //	2,2
80	Overhead Support(s) - 2228A FD Alum. 8'w x 8'h	8.00	lf	275.00 /lf	
	Overhead Support(s) - 2228A FD Alum. 8'w x 8'h Overhead Support(s) - 3214A Alum. FD 8'w x 8'h	8.00	lf If	275.00 /lf	2,2

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Item	Description	Takeoff Qty		Total Unit Cost	Amoun
05-5820.120	Misc Steel	0.00		075.00 ///	0.00
80	Overhead Support(s) - 3226A Alum. FD 8'w x 8'h	8.00	lf	275.00 /lf	2,20
80	Overhead Support(s) - 3227A Alum. FD 8'w x 8'h	8.00	lf	275.00 /lf	2,20
	Misc Steel			0.289/sf	48,40
	167,352.00 sf				
	METALS			0.289/sf	48,40
	167,352.00 sf				
07-0000.000	THERMAL & MOIST PROTECT				
07-9200.100	Interior Caulking				
30	Caulking Interior Doors	12,856.00	lf	6.096 /lf	78,372
	Interior Caulking			0.468/sf	78,37
	167,352.00 sf				
	THERMAL & MOIST PROTECT			0.468/sf	78,37
	167,352.00 sf				
08-0000.000	OPENINGS				
08-1100.300	Doors - Hollow Metal Doors And Frames				
	HM Doors	0.00	NAM		
			Е		
10	Door F - 3' X 7' HM -Single	2.00	ea	245.00 /ea	49
10	Door F - 3' X 7' HM -Single (90 MIN)	1.00	ea	300.00 /ea	30
	Door F - 6' X 7' HM - Pair	6.00	pr	600.00 /pr	3,60
	Door F - 6' X 7' HM - Pair (60 MIN.)	2.00	pr	650.00 /pr	1,30
	Door F - 6' X 7' HM - Pair (90 MIN.)	1.00	pr	800.00 /pr	80
220	FRAMES	0.00	NAM		
220	Frame 1 - HM 3'-4" x 7'-4"	7.00	E	220.00 /ea	1 5 4
	Frame 1 - HM 3'-4" x 7'-4" (60 Min)	1.00	ea ea	250.00 /ea	1,54 25
	Frame 2 - HM 6'-4" x 7'-4"	7.00	ea	250.00 /ea	1,75
	Frame 3 - HM 3'-4" x 7'-2"	146.00	ea	220.00 /ea	32,12
	Frame 3 - HM 3'-4" x 7'-2" (60 Min)	1.00	ea	250.00 /ea	25
	Frame 3 - HM 3'-4" x 7'-2" (90 Min)	2.00	ea	275.00 /ea	55
	Frame 4 - HM 6'-4" x 7'-2"	13.00	ea	220.00 /ea	2,86
220	Frame 4 - HM 6'-4" x 7'-2" (60 Min)	13.00	ea	250.00 /ea	3,25
220	Frame 4 - HM 6'-4" x 7'-2" (90 Min)	1.00	ea	275.00 /ea	27
220	Frame 5 - HM 4'-8" x 7'-2" w/Side Light	19.00	ea	500.00 /ea	9,50
	Frame 6 - HM 5' x 8'-10" w/Side Light & Transom	88.00	ea	550.00 /ea	48,40
	Frame 7 - HM 3'-4" x 8'-10" w/Transom	1.00	ea	500.00 /ea	50
	Frame 7 - HM 7'-4" x 8'-10" w/Transom	7.00	ea	550.00 /ea	3,85
	Frame 8 - HM 4'-10" x 7'-4" w/Side Light	1.00	ea	475.00 /ea	47
220	Frame 9 - HM 6'-4" x 9'-2" w/Transom Doors - Hollow Metal Doors And Frames	1.00	ea	475.00 /ea 0.672/sf	47 112,53
	167,352.00 sf				
08-1400.200	Doors - Wood				
102	WOOD DOORS				
102	Door F - 2'-10" x 7' Wood -Single	1.00	ea	500.00 /ea	50

102	Door F - 2'-10" x 7' Wood -Single	1.00	ea	500.00 /ea	500
102	Door F - 3' X 7' Wood -Single	130.00	ea	500.00 /ea	65,000
102	Door F - 3' X 7' Wood -Single (90 Min)	1.00	ea	575.00 /ea	575

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				Tota	l
Item	Description	Takeoff Qty		Unit Cost	Amou
08-1400.200	Doors - Wood				
	Door F - 3' X 7' Wood -Single (STC 52)	5.00	ea	500.00 /ea	2,50
	Door F - 6' x 7' Wood Pair	20.00	pr	900.00 /pr	18,00
	Door F - 6' x 7' Wood Pair (60 Min)	12.00	pr	1,000.00 /pr	12,00
	Door F - 7' x 7' Wood Pair	2.00	pr	1,000.00 /pr	2,00
	Door FG - 3' x 7' Wood Single	81.00	ea	550.00 /ea	44,55
	Door FG - 3' x 7' Wood Single (STC 52)	3.00	ea	575.00 /ea	1,72
	Door FG - 6' x 7' Wood Pair	1.00	pr	1,100.00 /pr	1,10
	Door FG - 7' x 7' Wood Pair	1.00	pr	1,100.00 /pr	1,10
	Door G - 3' x 7' Wood Single Door N - 3' x 7' Wood Single	1.00 37.00	ea ea	500.00 /ea 500.00 /ea	50 18,50
102	Doors - Wood	37.00	ea		168,0
	167,352.00 sf				
08-3500.100	Doors- Coiling				
	OH Coiling Grille 17' x 10'-6"	2.00	ea	21,250.00 /ea	42,50
	Doors- Coiling			0.254/sf	42,5
	167,352.00 sf				
08-3513.230	Acordian Folding Fire Door				
60	1125 HSD Folding WON 15'-4w" x8'h x 11-1/2"thk 90 Min	122.64	sf	225.00 /sf	27,59
60	2112 HSD Folding WON 15'-4w" x8'h x	122.64	sf	225.00 /sf	27,59
60	11-1/2"thk 90 Min 31025 HSD Folding WON 15'-4w" x8'h x	122.64	sf	225.00 /sf	27,5
	11-1/2"thk 90 Min Acordian Folding Fire Door			0.495/sf	82.7
	167,352.00 sf				- , .
00.4000.400	Oleveland Folgeneous				
08- <i>4</i> 2 <i>00.100</i> 150	Storefront Entrances 1101 SF Entrance,hardware & Insallation -	1.00	ea	4,000.00 /ea	4,00
450	Single	4.00		0.000.00. /	0.0
	1101A SF Entrance, hardware & Insallation - Pair	1.00	ea	8,200.00 /ea	8,20
150	1214A SF Entrance, hardware & Insallation - Pair Storefront Entrances	1.00	ea	8,200.00 /ea 0.122/sf	8,20
				0.122/31	20,4
	167,352.00 sf				
08-4450.100 005	<i>Curtain Wall Entrances</i> S5-1 *FR Stair 5 Pair Doors, Hardware 6w x 7h	1.00	pr	10,500.00 /pr	10,50
	+-		-	10,500.00 /pr	
	S5-1A *FR Stair 5 Pair Doors, Hardware 6w x 7h	1.00	pr	, i	10,5
005	S5-2 *FR Stair 5 Pair Doors, Hardware 6w x 7h +-	1.00	pr	10,500.00 /pr	10,5
005	S5-3 *FR Stair 5 Pair Doors, Hardware 6w x 7h	1.00	pr	10,500.00 /pr	10,5
	Curtain Wall Entrances			0.251/sf	42,0
	167,352.00 sf				
08-7100.090 10	Finish Hardware FURNISH 8∥NSTALL HARDWARE	0.00	NAM		
			Е		
10	Hardware Material Install Single	272.00	ea	975.00 /ea	265,20
10	Hardware Material Install Pair	33.00	pr	1,800.00 /pr	59,40
	Llandurana Matarial Install Carned Assamphic Cingle	8.00	ea	1 050 00 /00	8,40
10	Hardware Material Install Sound Assembly Single	0.00	ea	1,050.00 /ea	0,40

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				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
08-7100.090	Finish Hardware	1.00			4.045
10	Toilet 2247 DOOR SCHEDULE Finish Hardware	1.00	ea	1,645.00 /ea	1,645 334,645
	T mish Hardware			2.00731	004,040
	167,352.00 sf				
08-8100.100	Glazing- Glass				
	Door Frame 5 Glass - 8SqFt ea = 19 Frames	152.00	sf	28.00 /sf	4,256
	Door Frame 6 Glass - 16SqFt ea = 88 Frames Door Frame 7 Glass - 11SqFt ea = 8 Frames	1,408.00 88.00	sf sf	28.00 /sf 28.00 /sf	39,424 2,464
	Door Frame 8 Glass - 8SqFt ea = 1 Frame	12.00	sí	28.00 /si	2,402
	Door Frame 9 Glass - 12SqFt ea	920.00	sf	28.00 /sf	25,760
	Door N Glass - 1SqFt ea = 37 Doors	37.00	sf	28.00 /sf	1,036
	Door G Glass - 5SqFt ea = 1 Door	5.00	sf	28.00 /sf	140
	Door FG Glass - 8SqFt ea = 115 Doors	920.00	sf	28.00 /sf	25,760
100	Mirror 7648	26.00	sf	44.00 /sf	1,144
	Glazing- Glass			0.599/sf	100,320
	167,352.00 sf				
	OPENINGS			5.397/sf	903,232
	167,352.00 sf				
09-0000.000	FINISHES				
09-9123.200	Painting- Interior				
	Paint Frame(s) - Single HM	272.00	ea	230.00 /ea	62,560
40		33.00	ea	275.00 /ea	9,075
40	Paint Door(s) HM	21.00	ea	330.00_/ea	6,930
	Painting- Interior			0.469/sf	78,565
	167,352.00 sf				
	FINISHES			0.469/sf	78,565
	167,352.00 sf				
10-0000.000	SPECIALTIES				
10-2226.100	Partitions Folding				
	1205A FD Alum. Media 12'w x 8'h	96.00	sf	240.00 /sf	23,040
		64.00	sf	240.00 /sf	15,360
	1247A FD Alum. Kinder 8'w x 8'h 2214A FD Alum. 8'w x 8'h	64.00 64.00	sf sf	240.00 /sf 240.00 /sf	15,360 15,360
		64.00	sí	240.00 /si	15,360
	3216A FD Alum. 8'w x 8'h	64.00	sf	240.00 /sf	15,360
	2217A FD Alum. 8'w x 8'h	64.00	sf	240.00 /sf	15,360
2	2231A Alum. FD 8'w x 8'h	64.00	sf	240.00 /sf	15,360
	2235A Alum. FD 8'w x 8'h	64.00	sf	240.00 /sf	15,360
	3229A Alum. FD 8'w x 8'h	64.00	sf	240.00 /sf	15,360
2	3233A Alum. FD 8'w x 8'h	64.00	sf	240.00 /sf	15,360
	Partitions Folding			1.055/sf	176,640

167,352.00 sf

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#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

		<b>T</b> 1 (10)		Total	A 4	
ltem	Description	Takeoff Qty		Unit Cost	Amount	
	SPECIALTIES			1.055/sf	176,640	
	167,352.00 sf					
	C1020 Interior Doors			7.68 /sf	1,285,209	
				7.00731	1,200,200	
	167,352.00 sf					
C1030	Fittings					
05-0000.000	METALS					
05-5820.120	Misc Steel					
10	Platform Rails (4 - 1 Upper One Lower Each Side) A7.12	80.00	lf	165.00 /lf	13,200	
	Ladder to Roof Hatch	1.00	ea	3,500.00 /ea	3,500	
	Ballet Bar 1/8" Column Plate 1'-8"w x 32' A1.53 / Column	10.00 1.00	lf Is	125.00 /lf 7,500.00 /ls	1,250 7,500	
	Closures		10	1,000100 /10	.,	
	Bench Supports OT/PT Support	60.00	ea	175.00 /ea	10,500	
10	Misc Metals Allowance Misc Steel	167,352.00	lf	/lf 	251,028 286,978	
	167,352.00 sf				,	
	METALS			1.715/sf	286,978	
	167,352.00 sf				200,070	
06-2000.000	FINISH CARPENTRY					
06-2000.010	Finish Comonta					
	Finish Carpentry Media Bench 5' +-	3.00	ea	2,200.00 /ea	6,600	
2	Cafe Benches	4.00	ea	3,200.00 /ea	12,800	
2	Window Seats Inspiration AQ1.51	12.00	ea	2,800.00 /ea	33,600	
	Media 3Form Wall Features 1 Media 3Form Wall Features 2	60.00 60.00	sf sf	175.00 /sf 175.00 /sf	10,500 10,500	
	Media 3Form Wall Features 3	60.00	sf	175.00 /sf	10,500	
2	Media 3Form Wall Features 4	60.00	sf	175.00 /sf	10,500	
	Lego Wall WIndow Sills & Aprons HRWD Shop Finished 7"	286.00 1,925.00	sf If	36.00 /sf 48.00 /lf	10,296 92,400	
	+- w x 2-1/4"	.,			,	
	Media Center desk	1.00	ea	12,500.00 /ea	12,500	
2	Plam Lockers Finish Carpentry	1.00	ea	49,000.00 /ea 1.549/sf	49,000	
	167,352.00 sf				,	
	FINISH CARPENTRY			1.549/sf	259,196	
	167,352.00 sf				-,	
06-4100.000	ARCHITECTURAL WOOD CASEWORK					
06-4210.120	Wood Veneer Panels					
00-4210.120					404.400	
c 10	Wood Veneer Wainscot Per - Supplement #4	1,305.00	sf	80.00 /sf	104,400	

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#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amoun
	Wood Veneer Panels			1.636/sf	273,72
	167,352.00 sf				
	ARCHITECTURAL WOOD CASEWORK			1.636/sf	273,72
	167,352.00 sf				
10-0000.000	SPECIALTIES				
10-1113.100	Chalkboards/Markerboards				
	MB 4' x 5'	3,340.00	sf	22.00 /sf	73,48
2	MB 6' x 5'	90.00	sf	22.00 /sf	1,98
2	MB 8'x 5'	3,520.00	sf	22.00 /sf	77,44
2	TB 4' X 5'	1,960.00	sf	20.00 /sf	39,20
2	TB 6' X 5'	420.00	sf	20.00 /sf	8,40
2	TB 8' X 5'	440.00	sf	20.00 /sf	8,80
2	Tack Strip At 3" +-	9,000.00	lf	8.00 /lf	72,00
2	Wardrobe MB Surface	660.00	sf	22.00 /sf	14,52
	Chalkboards/Markerboards			1.768/sf	295,82
	167,352.00 sf				
10-1133.100	Display Cases				
10	Glass Display Cases 6' x 8' x 1'-7"	10.00	ea	8,500.00 /ea	85,00
	Display Cases			0.508/sf	85,00
	167,352.00 sf				
10-1400.120 110	Signs - Interior Building Directory - Signage Allowance	167,352.00	sf	0.55 /sf	92,04
	Signs - Interior	.01,002100	0.	0.55 /sf	92,04
	167,352.00 sf				
10-2113.110	Toilet Partitions	0.00		1 800 00 (cc	40.00
2	ADA Toilet Compartment (Solid Polymer Resin, Radiused Edges, Solid Color)	9.00	ea	1,800.00 /ea	16,20
2	Standard Toilet Compartment (Solid Polymer Resin, Radiused Edges, Solid Color)	45.00	ea	1,400.00 /ea	63,00
2	Urinal Screen (Solid Polymer Resin, Radiused Edges, Solid Color)	6.00	ea	375.00 /ea	2,25
	Toilet Partitions			0.487/sf	81,45
	167,352.00 sf				
10-2123.200 2	<i>Curtains &amp; Track</i> Cubicle Curtains and Track	80.00	lf	75.00 /lf	6,00
2	Curtains & Track	00.00		0.036/sf	6,00
	167,352.00 sf				
10-2613.100	Corner Guards	450.00	05	175.00 /00	00.05
2	CG Allowance	150.00	ea	<u> </u>	26,25
	Corner Guards			0.157/sf	26,25
	167 352 00 sf				

167,352.00 sf

## Northbridge Elementary Schoo Page 82 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
	Corner Guards			0.157/sf	26,250
	167,352.00 sf				
10-2813.100	Toilet Accessories				
	Waste Receptacle (WR)(20 Gallons 11.5" x 20.6")	44.00	ea	200.00 /ea	8,800
	Mirrors, Framed (MIR, CLD-MIR, PK-MIR)	56.00	ea	450.00 /ea	25,200
	Sanitary Napkin Disposal Unit (SND)	12.00	ea	95.00 /ea	1,140
2	Sanitary Napkin Double-Disposal Unit (SND)	24.00	ea	185.00 /ea	4,44(
2	Shower Curtain Rod and Curtain (SC)	1.00 1.00	ea	386.00 /ea 575.00 /ea	386 575
	Folding Shower Seat (FSS) Towel bar (TB)	1.00	ea ea	250.00 /ea	25
	Robe Hook (RB HK)	1.00	ea ea	250.00 /ea	250
2	Hook Strip (HS)	1.00	ea	170.00 /ea	17
2	Baby Changing Table (CHGTB)	2.00	ea	785.00 /ea	1,570
2	Utility Shelf/Mop and Broom Holder (MH)	4.00	ea	225.00 /ea	900
2	Grab Bar 42"	79.00	ea	185.00 /ea	14,61
2	Grab Bar 36"	9.00	ea	155.00 /ea	1,395
2	OFOI Toilet Paper Dispenser (TPD)	92.00	Other	55.00 /Other	5,060
2		52.00	S	s	5,00
2	OFOI Paper Towel Dispenser (PTD)	44.00	Other	375.00 /Other	16,500
2	OFOI Soap Dispenser (SD)	50.00	s Other	s 55.00 /Other	2,750
	Toilet Accessories		S	\$ 0.501/sf	83,84
	167,352.00 sf				
10-4413.100	Fire Cabinets				
30	Fire Extinguisher and Cabinet	39.00	ea	548.077 /ea	21,37
30	Fire Extinguisher at Mechanical Area(s)	14.00	Allow	225.00 /Allow	3,150
	A.E.D. With Cabinet	2.00	ea	2,200.00 /ea	4,40
	Fire Cabinets			0.173/sf	28,92
	167,352.00 sf				
10-5100.100	Lockers Metal				
10	Double Tier HDPE Student Lockers 12" x 15" x 60"	300.00	ea	775.00 /ea	232,50
	Single Tier HDPE Lockers Level 2	362.00	ea	420.00 /ea	152,04
10	Staff Metal Lockers	5.00	ea	165.00 /ea	82
	Lockers Metal			2.303/sf	385,36
	167,352.00 sf				
	SPECIALTIES			6.482/sf	1,084,70
	167,352.00 sf				
	C1030 Fittings			11.381/sf	1,904,59
	167,352.00 sf				
	C10 INTERIOR CONSTRUCTION			42.222/sf	7,065,91
	167,352.00 sf				

## Northbridge Elementary Schoo Pge 83 of 126910/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

Item	Description	Takeoff Qty		Total Unit Cost	Amoun
item	Description	Takeon Quy		onit cost	Anoun
	C10 INTERIOR CONSTRUCTION			42.222/sf	7,065,911
	167,352.00 sf				
C20	STAIRS				
C2010	Stair Construction				
03-0000.000	CONCRETE				
03-0010.160	Concrete - Stairs And Landings				
	Stair 1	2.00	Flt	2,200.00 /Flt	4,400
	Stair 2 To Roof	3.00	Flt	2,200.00 /Flt	6,600
	Stair 3 Stair 4	2.00	Flt	2,200.00 /Flt	4,400
	Stair 4 Stair 5	2.00 2.00	Flt Flt	2,200.00 /Flt 2,200.00 /Flt	4,400 4,400
105	Concrete - Stairs And Landings	2.00	гιι	2,200.00 /Fit	24,20
	-			0.143/81	24,20
	167,352.00 sf				
	CONCRETE			0.145/sf	24,20
	167,352.00 sf				
05-0000.000	METALS				
05-5113.100	Stairs & Ladders				
	Stair 1	2.00	Flt	20,000.00 /Flt	40,00
	Stair 2 To Roof	3.00	Flt	20,000.00 /Flt	60,00
	Stair 3	2.00	Flt	20,000.00 /Flt	40,00
	Stair 4	2.00	Flt	20,000.00 /Flt	40,00
10	Stair 5	2.00	Flt	20,000.00 /Flt	40,00
	Stairs & Ladders			1.315/sf	220,00
	167,352.00 sf				
05-5213.200	Handrails - Guardrails	100.00		400.00 ///	10.00
	Stair 1 Wall Railings	108.00	lf If	120.00 /lf	12,96
10	Stair 2 Wall Railings Stair 3 Wall Railings	152.00	lf 14	120.00 /lf	18,24
10	Stair 4 Wall Railings	108.00 108.00	lf If	120.00 /lf 120.00 /lf	12,96 12,96
	Stair 5 Wall Railings	100.00	lf	120.00 /lf	12,00
10	Stair 1 Wire Mesh Railings Type 2	80.00	lf	275.00 /lf	22,00
	Stair 2 Wire Mesh Railings Type 2	102.00	lf	275.00 /lf	28,05
10	Stair 2 8' Wire Mesh With Mesh Door/Hardware	13.00	lf	750.00 /lf	9,75
10	Stair 4 Wire Mesh Railings Type 2	80.00	lf	275.00 /lf	22,00
	Stair 5 Glass Railings Type 1	90.00	lf	500.00 /lf	45,00
	Stair 2 Wire Mesh Railings Type 2	102.00	lf	275.00 /lf	28,05
10	Stair 3 Wire Mesh Railings Type 2	80.00	lf	275.00 /lf	22,00
	Stair 4 Wire Mesh Railings Type 2	80.00	lf	275.00_/lf	22,00
10				1.601/sf	267,97
10	Handrails - Guardrails				- /-
10	Handrails - Guardrails 167,352.00 sf				- ,-

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#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				T- (-)	
Item	Description	Takeoff Qty		Total Unit Cost	Amount
		-			
	METALS			2.916/sf	487,970
	167,352.00 sf				
	C2010 Stair Construction			3.06 /sf	512,170
	167,352.00 sf				
C2020	Stair Finishes				
09-0000.000	FINISHES				
09-6500.200	Flooring- Resilient Stair				
	RFL Rubber Sheet Flooring At Stairs	3,050.00	sf	14.00 /sf	42,700
2	RRT Rubber Treads And Risers Stair 1	248.00	lf	22.00 /lf	5,456
2	RRT Rubber Treads And Risers Stair 2	378.00	lf	22.00 /lf	8,316
2	RRT Rubber Treads And Risers Stair 3	248.00	lf	22.00 /lf	5,456
2	RRT Rubber Treads And Risers Stair 4	248.00	lf	22.00 /lf	5,456
2	RRT Rubber Treads And Risers Stair 5	248.00	lf	22.00 /lf	5,456
2	RFL Rubber Sheet Flooring Minor Preparation	4,420.00	sf	0.75 /sf	3,315
2	RFL Rubber Sheet Flooring Initial Cleaning Per	4,420.00	sf	0.80 /sf	3,536
	Manu. Require.				
2	RFL Rubber Sheet Flooring Protection Per	4,420.00	sf	0.75 /sf	3,315
	Manu.Require.				
	Flooring- Resilient Stair			0.496/sf	83,006
	167,352.00 sf				
09-9123.200	Painting- Interior				
	Paint Stair Well 1	2.00	Flt	2,500.00 /Flt	5,000
	Paint Stair Well 2	3.00	Flt	2,500.00 /Flt	7,500
30	Paint Stair Well 3	2.00	Flt	2,500.00 /Flt	5,000
30	Paint Stair Well 4	2.00	Flt	2,500.00 /Flt	5,000
30	Paint Stair Well 5	2.00	Flt	2,500.00 /Flt	5,000
	Painting- Interior			0.164/sf	27,500
	167,352.00 sf				
	FINISHES			0.66 /sf	110,506
	167,352.00 sf				
	C2020 Stair Finishes			0.66 /sf	110,506
	167,352.00 sf				
	C20 STAIRS			3.721/sf	622,676
				0.121/31	022,010
	167,352.00 sf				
C30	INTERIOR FINISHES				
C3010	Wall Finishes				
06-2000.000	FINISH CARPENTRY				

06-2000.010 Finish Carpentry

## Northbridge Elementary Schoo Page 85 of 126/10/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
06-2000.010	Finish Carpentry				
	FRP at Janitors Closet per A9.01 & A9.02 10' HT (ALT)	800.00	sf	12.00 /sf	9,600
	Finish Carpentry			0.057/sf	9,600
	167,352.00 sf				
	FINISH CARPENTRY			0.057/sf	9,600
	167,352.00 sf				
09-0000.000	FINISHES				
09-3116.100	Tile- Quarry	0 700 00	,	00 00 <i>/ /</i>	00.400
	T - Glazed Wall Tile 8" x 8" LVL 1 Tile Mix = T14-27% & T2-17% & T15-7%	3,780.00 9,202.00	sf sf	22.00 /sf 24.00 /sf	83,160 220,848
2	& T3-30% & T1-19%	9,202.00	51	24.00 /SI	220,040
2	LVL 2 Tile Mix = T14-27% & T4-17% & T16-7% & T5-30% & T1-19%	4,056.00	sf	24.00 /sf	97,344
2	LVL 3 Tile Mix = T14-27% & T6-17% & T17-7% & T7-30% & T1-19%	4,074.00	sf	24.00 /sf	97,776
	Tile- Quarry			-	499, 128
09-7216.110	Wall Covering Vinyl				
2	Wall Coverings	1,600.00	ls	38.00 /ls	60,800
	Wall Covering Vinyl			0.363/sf	60,800
	167,352.00 sf				
09-8400.100	Acoustical Panels	0.444.00	-1	47.00 /-6	50.007
	Acoustical Wall Panels Gym Acoustical Wall Panels Cafeteria - Curved	3,111.00 111.00	sf sf	17.00 /sf 50.00 /sf	52,887 5,550
	Acoustical Wall Cafeterial - Flat	940.00	sf	40.00 /sf	37,600
	Acoustical Wall Panel Ensemble/Music/Practice	832.00	sf	40.00 /sf	33,280
	Acoustical Panels			0.773/sf	129,317
	167,352.00 sf				
09-9123.200	Painting- Interior				
10		296,855.00	sf	0.80 /sf	237,484
10		8,400.00	sf	1.10 /sf	9,240
20	Paint Green Screen	150.00	sf	4.00 /sf	600 12 475
20	Paint Borrowed Lites HM Painting- Interior	77.00	ea	175.00_/ea 	13,475 260,799
	167,352.00 sf				
	FINISHES			5.677/sf	950,044
	167,352.00 sf				
	C3010 Wall Finishes			5.734/sf	959,644
	167,352.00 sf				
	,				

C3020 Floor Finishes

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### Whitinsville, MA

Item	Description	Takeoff Qty		Total Unit Cost	Amoun
09-0000.000	FINISHES				
00 0000.000	, woned				
09-3116.100	Tile- Quarry	0.040.00	- 1	04.00	50.000
	Quarry Tile Quarry Tile Base	2,243.00 425.00	sf If	24.00 /sf 22.00 /lf	53,83
	Quarry Tile Minor Preparation	2,243.00	" sf	0.75 /sf	9,35 1,68
2	Quarry Tile Initial Cleaning Per Manu.Require	2,243.00	sf	0.30 /sf	67
	Quarry Tile Protection With Red-Rosin Paper (Part 3)	2,243.00	sf	0.75 /sf	1,68
2	Quarry Tile Owner Exta Materials at 5% (Package,Deliver)	112.00	sf	24.00 /sf	2,68
	Quarry Base Owner Exta Materials at 5% (Package,Deliver)	21.00	lf	20.00 /lf	42
	Quarry Tile Mock-up Minimum 25 sf In Place	25.00	sf	24.00 /sf	60
2	Quarry Base Mock-up Minimum 25 sf In Place <i>Tile- Quarry</i>	25.00	lf	20.00 /lf 0.427/sf	50 71,42
	167,352.00 sf				
09-6400.100	Flooring- Wood				
	Gymnasium Wood Athletic Floor , Robbins, Inc, Bio-Channel Star	6,000.00	sf	18.75 /sf	112,50
	Gymnasium Wood Athletic Floor Vented Base	320.00	lf	7.25 /lf	2,32
	Floor Minor Preparation	6,000.00	sf	0.75 /sf	4,50
145	Gymnasium Wood Athletic Flooring Polish and	6,000.00	sf	0.50 /sf	3,00
145	Clean Per Manufactures Requirements Gymnasium Wood Athletic Flooring Protection With Red-Rosin Paper (Part 3)	6,000.00	sf	0.75 /sf	4,50
145	Gymnasium Wood Athletic Floor Owner Extra Materials at 5% (Package,Deliver)	300.00	sf	18.75 /sf	5,62
145	Platform Wood Strip and Plank Flooring - Sleeper System	874.00	sf	22.00 /sf	19,22
145	Platform Wood Strip and Plank Flooring Vented Base	140.00	lf	7.251 /lf	1,01
145	Floor Minor Preparation	874.00	sf	1.25 /sf	1,09
	Platform Wood and Plank Flooring Polish and Clean Per Manufactures Requirements	874.00	sf	0.50 /sf	43
145	Platform Wood and Plank Flooring Protection With Red-Rosin Paper (Part 3)	874.00	sf	0.75 /sf	65
145	Platform Wood and Plank Flooring Owner Extra Materials at 5% (Package,Deliver)	44.00	sf	22.00 /sf	96
	Flooring- Wood			0.931/sf	155,84
	167,352.00 sf				
09-6500.100 2	Flooring- Resilient Luxury Vinyl Tile				
	Luxury Vinyl Tile	473.00	sf	6.50 /sf	3,07
	Luxury Vinyl Tile - Flooring Flooring Minor Preparation	473.00	sf	1.25 /sf	59
	Luxury Vinyl Tile - Intial Cleaning Per Manu. Require	473.00	sf	0.50 /sf	23
	Luxury Vinyl Tile - Protection per Manu. Require	473.00	sf	0.75 /sf	35
	Owner Exta Materials At 5% (Package,Deliver) Resilient Athletic Flooring In Place Mock-up	24.00 25.00	sf sf	6.50 /sf 6.50 /sf	15 16
2	Resilient Athletic Flooring	20.00	51	0.00 /3	
2	Resilient Athletic Flooring	874.00	sf	14.00 /sf	12,23
2	Resilient Athletic Flooring Minor Preparation	874.00	sf	1.25 /sf	1,09
	Resilient Athletic Flooring Initial Cleaning Per	874.00	sf	0.50 /sf	43
	Manu.Require				

## Northbridge Elementary School age 87 of 126/10/2019 6:05 РМ

### Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amour
09-6500.100	Flooring- Resilient				
2	Resilient Athletic Flooring Protection Per Manu.Require. Flooring	874.00	sf	0.75 /sf	65
2	Owner Exta Materials At 5% (Package,Deliver)	44.00	sf	14.00 /sf	61
2	Resilient Athletic Flooring In Place Mock-up	25.00	sf	14.00 /sf	35
2	SDT - 1 Flooting				
2	SDT -1 Flooring	546.00	sf	11.00 /sf	6,00
2	SDT -1 Flooring Flooring Minor Preparation	546.00	sf	1.25 /sf	68
	SDT -1 Flooring Flooring Initial Cleaning Per Manu.Require	546.00	sf	0.50 /sf	27
	SDT -1 Flooring Flooring Protection Per Manu.Require. Flooring	546.00	sf	0.75 /sf	4
	Owner Exta Materials At 5% (Package, Deliver)	28.00	sf	110.00 /sf	3,08
	SDT - 1 Flooring 25SqFt Mock-Up	25.00	sf	11.00 /sf	2
2	Linoleum Flooring				
2	Linoleum - 1	89,192.00	sf	6.85 /sf	610,9
	Linoleum - 2	3,628.00	sf	6.85 /sf	24,8
	Linoleum - 3	4,628.00	sf	6.85 /sf	31,7
	Linoleum - 4	5,869.00	sf	6.85 /sf	40,2
	Linoleum - 5	4,296.00	sf	6.85 /sf	29,4
	Linoleum Floor Minor Preparation	107,548.00	sf	0.75 /sf	80,6
	Linoleum Flooring Initial Cleaning Per Manu.Require	107,548.00	sf	0.30 /sf	32,2
	Linoleum Flooring Protection Per Manu.Require. Flooring	107,548.00	sf	0.35 /sf	37,6
	Linoleum Mock-up Minimum 25 sf In Place	25.00	sf	6.85 /sf	1
	Rubber Flooring	2 0 2 7 0 0	~	11.00 /05	20.5
	Rubber Flooring	2,037.00	sf	14.00 /sf	28,5
	Rubber Flooring Minor Preparation Rubber Flooring Initial Cleaning Per	2,037.00 2,037.00	sf sf	1.25 /sf 0.50 /sf	2,5 1,0
	Manu.Require Rubber Flooring Protection Per Manu.Require.	2,037.00	sf	0.75 /sf	1,0
	Flooring Owner Exta Materials At 5% (Package,Deliver)	1,167.00	sf	14.00 /sf	16,3
	Rubber Flooring In Place Mock-up	25.00	sf	14.00 /sf	3
2	Flooring- Resilient	23.00	31	5.789/sf	968,8
	167,352.00 sf				
09-6500.110	Flooring Base				
2		17,601.00	lf	3.35 /lf	58,9
2	Resilient Base -1 - Owner Exta Materials at 5%	880.00	lf	2.25 /lf	1,9
_	(Package,Deliver)				
	Resilient Base - 2	411.00	lf	3.35 /lf	1,3
2	Resilient Base - 2 Owner Exta Materials at 5% (Package,Deliver)	21.00	lf	2.25 /lf	
	Flooring Base			0.373/sf	62,3
	167,352.00 sf				
9-6700.110	Epoxy Flooring	0.040.00	of		400 -
	Epoxy Applied Flooring	6,949.00	sf	14.50 /sf	100,7
	Expoxy Applied Flooring Integral Base	685.00	sf	16.00 /sf	10,9
10	Epoxy Flooring Minor Preparation	6,949.00	sf	0.75 /sf	5,2
	Epoxy Flooring Initial Cleaning Per Manu.Require	6,949.00	sf	0.30 /sf	2,0
	Epoxy Flooring Protection Per Manu.Require. Flooring	6,949.00	sf	0.25 /sf	1,7
	Owner Exta Materials At 5% (Package, Deliver)	382.00	sf	14.50 /sf	5,5
10	Epoxy Flooring In Place Mock-up	25.00	sf	14.50 /sf	3

## Northbridge Elementary Schoo Page 88 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
	Epoxy Flooring			0.757/sf	126,656
	167,352.00 sf				
09-6800.100	Flooring - Carpet				
f 10	Carpet Tile	13,075.00	sf	5.70 /sf	74,528
f 10	Floor Minor Preparation	13,075.00	sf	0.75 /sf	9,806
f 10	Floor Protection / Cover with not less than 6-mil thick polyethylene covering with taped joints	13,075.00	sf	0.35 /sf	4,576
f 10	Clean and Vacuum Carpet Surfaces Upon Completion of The Installation.	13,075.00	sf	0.18 /sf	2,354
f 10	Carpet Tile Mock-up Minimum 25 sf In Place	654.00	sf	5.70 /sf	3,728
f 10	Carpet Tile Owner Exta Materials at 5%	25.00	sf	5.70 /sf	143
	(Package,Deliver)			·	
	Flooring - Carpet			0.568/sf	95,134
	167,352.00 sf				
09-9101.100	Painting - Sealing Floors				
	Paint - Seal Concrete Slabs	5,800.00	sf	1.50 /sf	8,700
	Floor Minor Preparation Floor Protection (Part 3)	5,800.00	sf sf	0.50 /sf	2,900
120	Painting - Sealing Floors	5,800.00	SI	0.75 /sf 0.095/sf	4,350
	167,352.00 sf			0.000/31	10,000
	FINISHES			8.941/sf	1,496,250
	167,352.00 sf				
	C3020 Floor Finishes			8.941/sf	1,496,250
	167,352.00 sf				
C3030	Ceiling Finishes				
06-4100.000	ARCHITECTURAL WOOD CASEWORK				
06-4210.120	Wood Veneer Panels				
c 10	WD-1 Ceilings	6,256.00	ST	40.00 /sf	250,240
	Wood Veneer Panels			1.495/sf	250,240
	167,352.00 sf				
	ARCHITECTURAL WOOD CASEWORK			1.495/sf	250,240
	167,352.00 sf				
09-0000.000	FINISHES				
09-2000.014	Drywall Ceilings				
2499		10,903.00	sf	15.00 /sf	163,545
	GWB Vertical Soffits	5,331.00	sf	15.00 /sf	79,965
	Drywall Ceilings			1.455/sf	243,510
	167,352.00 sf				
	101,002.00 01				

## Northbridge Elementary Schood age 89 of 126/10/2019 6:05 РМ

### Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
09-5000.110	Ceilings - ACT				
	ACP - 1	85,115.00	sf	5.00 /sf	425,575
	ACP - 1A ACP - 1A Black Ceiling Tile Green Room	33,229.00 200.00	sf sf	5.25 /sf 5.25 /sf	174,452 1,050
	ACP - 2A	332.00	sf	5.25 /sf	1,743
	ACP - 4	2,656.00	sf	6.50 /sf	17,264
	ACP - 6 Serpentina Waves / Cafe Curved Curved Metal Soffit At Platform	2,578.00 245.00	sf sf	60.00 /sf 70.00 /sf	154,680 17,150
2	Ceilings - ACT	245.00	51	70.00 /si 4.732/sf	791,914
	167,352.00 sf				
09-9123.200	Painting- Interior				
	Paint GWB Ceilings/Soffits	16,234.00		1.50 /sf	24,351
20	Paint Exposed Ceilings Painting- Interior	10,662.00	sf	3.00 /sf 0.337/sf	<u>31,986</u> 56,337
	-			0.337/81	50,557
	167,352.00 sf				
	FINISHES			6.524/sf	1,091,761
	167,352.00 sf				
	C3030 Ceiling Finishes			8.019/sf	1,342,001
	167,352.00 sf				
	C30 INTERIOR FINISHES			22.694/sf	3,797,895
	167,352.00 sf				
	C INTERIORS			68.637/sf	11,486,482
	167,352.00 sf				
	107,332.00 51				
D	SERVICES				
D10	CONVEYING				
D1010	Vertical Conveying Systems				
03-0000.000	CONCRETE				
<i>03-6110.100</i> 500	Hand Grout Equip Grout Elevator Sill Angles Hand Grout Equip	3.00	ea	250.00_/ea /ea	750 750
	167,352.00 sf				
	CONCRETE			0.004/sf	750
	167,352.00 sf				

## Northbridge Elementary Schood age 90 of 126/10/2019 6:05 РМ

### Whitinsville, MA

				Total		
ltem	Description	Takeoff Qty		Unit Cost	Amoun	
05-0000.000	METALS					
05-5113.100	Stairs & Ladders					
102	Elevator Pit Ladder	1.00	ea	2,800.00 /ea	2,80	
	Stairs & Ladders			0.017/sf	2,80	
	167,352.00 sf					
05-5820.125	Misc. Steel					
	Sill Angles	3.00	ea	583.333 /ea	1,75	
	Sump Pit Frame Grate Hoist Beam	1.00 1.00	ea ea	950.00 /ea 1,800.00 /ea	95 1,80	
	Misc. Steel	1.00	cu	0.027/sf	4,50	
	167,352.00 sf					
	METALS			0.044/sf	7,30	
	167,352.00 sf				.,	
09-0000.000	FINISHES					
09-6500.100		0.00	1.00			
	ELEVATOR RUBBER SHEET FLOORING RFL Rubber Sheet Flooring At Elevator	0.00 55.00	LOC sf	18.00 /sf	9	
	RFL Rubber Sheet Flooring Minor Preparation At Elevator	55.00	sf	0.75 /sf		
2	RFL Rubber Sheet Flooring Initial Cleaning Per	55.00	sf	0.55 /sf	:	
2	Manu.Require At Elevator RFL Rubber Sheet Flooring Protection Per Manu.Require. At Elevator	55.00	sf	0.75 /sf		
	Flooring- Resilient			0.007/sf	1,1	
	167,352.00 sf					
	FINISHES			0.007/sf	1,10	
	167,352.00 sf					
14-0000.000	CONVEYING SYSTEMS					
14-2000.100	Elevator Hydraulic					
2	Passenger Elevator(s) Holess Hydraulic, 3500	3.00	stp	50,000.00 /stp	150,0	
	lbs, 100 ftpm [Canton Elevator, Incorporated:] Elevator Hydraulic			0.896/sf	150,0	
	167,352.00 sf					
	CONVEYING SYSTEMS			0.896/sf	150,0	
	167,352.00 sf					
	D1010 Vertical Conveying Systems			0.951/sf	159,1	
	Divid venical Conveying Systems			0.901/81	109,1	
	167,352.00 sf					

# Northbridge Elementary School age 91 of 126/10/2019 6:05 PM

Whitinsville, MA

				Total		
Item	Description	Takeoff Qty		Unit Cost	Amour	
	-					
	D10 CONVEYING			0.951/sf	159,15	
	167,352.00 sf					
	,					
D20	PLUMBING					
D2010	Plumbing Fixtures					
22-0000.000	PLUMBING					
22-1000.000	Plumbing					
	Fixtures	0.00	ITEM			
	P-1, 1A, 1B (Water Closets)	87.00	ea	1,100.00 /ea	95,70	
10	P-1A (Water Closet ADA)	0.00	Abov			
10	P-1B (Small Lavatory)	0.00	e Abov			
10		0.00	e			
10	P-2 (Lavatory)	17.00	ea	1,080.00 /ea	18,36	
	P-2A (Lavatory ADA)	26.00	ea	1,080.00 /ea	28,08	
	P-2B (Small Lavatory)	14.00	ea	980.00 /ea	13,72	
	P-3 (Urinal)	12.00	ea	700.00 /ea	8,40	
10	P-3A (Urinal)	0.00	ea			
10	P-4 (Classroom Sink)	29.00	ea	1,250.00 /ea	36,25	
10	P-4A (Hall Sink)	2.00	ea	1,250.00 /ea	2,50	
	P-4B (Dining Sink)	1.00	ea	1,250.00 /ea	1,25	
	P-4C (Sink)	14.00	ea	1,200.00 /ea	16,80	
	P-5 (Drinking Fountain)	13.00	ea	1,250.00 /ea	16,25	
	P-6 (Janitor Sink)	5.00	ea	1,200.00 /ea	6,00	
	P-8 (Shower) FD-1	1.00 13.00	ea	3,000.00 /ea 750.00 /ea	3,00	
	RD-1	32.00	ea ea	850.00 /ea	9,75 27,20	
	Rd-2	14.00	ea	850.00 /ea	11,90	
	RD-3	4.00	ea	850.00 /ea	3,40	
	OD-1	16.00	ea	850.00 /ea	13,60	
	OD-2	16.00	ea	850.00 /ea	13,60	
10	OD-3	2.00	ea	850.00 /ea	1,70	
10	HB	11.00	ea	550.00 /ea	6,05	
10	Eco-Floor Cleanout	0.00	ea			
	Storm	8.00	ea	800.00 /ea	6,40	
	Sanitary	5.00	ea	800.00 /ea	4,00	
	Electronic flush valves (WC's & Lav's)	162.00	ea	450.00 /ea	72,90	
	Kitchen Connections:	0.00	ITEM	000.00. /	0.00	
	Water	30.00 24.00	ea	200.00 /ea 250.00 /ea	6,00 6,00	
	Waste Gas	9.00	ea ea	350.00 /ea	3,15	
	Equipment	0.00	ITEM	550.00 /ea	0,10	
	DWH-1	1.00	ea	28,624.00 /ea	28,62	
	DWH-2	1.00	ea	28,624.00 /ea	28,62	
10	XT-1	1.00	ea	480.00 /ea	48	
10	XT-2	1.00	ea	480.00 /ea	48	
	RCP-1	1.00	ea	1,600.00 /ea	1,60	
	GI-1	1.00	ea	19,872.00 /ea	19,87	
	SI-2	2.00	ea	960.00 /ea	1,92	
	6" Back Flow Preventer	1.00	ea	4,816.00 /ea	4,81	
	Cold Water Meter	1.00	ea	3,500.00 /ea	3,50	
	Thermostatic Mixing Valve	1.00	ea	1,250.00 /ea	1,25	
	GAS SYSTEM	0.00	ITEM	2 500 00 /22	0.50	
	Gas Meter 6" GAS PIPING	1.00	ea	3,500.00 /ea	3,50	
	6" Under slab	25.00	lf	150.00 /lf	3,75	
	4"	173.00	lf	135.00 /lf	23,35	
	3"	410.00	lf	120.00 /lf	49,20	

## Northbridge Elementary Schoo Page 92 of 126/10/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

Unit Cost	Total Amount
lf 1	08.00 /lf 14,580
	00.00 /lf 31,600
	85.00 /lf 1,700
	80.00 /lf 7,840
	3.936/sf 658,651
	3.936/sf 658,651
	3.936/sf 658,651
ITEM	
	00.00 /lf 15,000
ls 5,0	00.00 /ls 10,000
ITEM	
lf 1:	24.00 /lf 43,276
lf	81.00 /lf 3,159
lf	67.00 /lf 36,448
lf .	47.00 /lf 22,372
lf	36.00 /lf 3,816
lf	31.00 /lf 4,030
lf	25.00 /lf 22,325
lf	20.00 /lf 15,840
	18.00 /lf 12,096
	22.00 /lf 32,076
lf	8.00 /lf 43,680
ea2	00.00 /ea 67,800
	1.983/sf 331,918
	1.983/sf 331,918
	1.983/sf 331,918
ITEM	
	90.00 /lf 37,890
	83.00 /lf 85,158
	9

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### Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
22-1000.000	Plumbing				
	Above Slab	0.00	ITEM		
	4" Waste	487.00	lf	67.00 /lf	32,629
10	2" Waste	234.00	lf	33.00 /lf	7,722
10	<ul> <li>branch distribution piping &amp; drop connection to fixtures (1-1/2")</li> </ul>	1,912.00	lf	26.00 /lf	49,712
10	VTR; Vent through roof - 4"	3.00	ea	750.00 /ea	2,250
	Final connections to fixtures	239.00	ea	200.00 /ea	47,800
	Plumbing			1.572/sf	263,161
	167,352.00 sf				
	PLUMBING			1.572/sf	263,161
	167,352.00 sf				
	D2030 Sanitary Waste			1.572/sf	263,161
	167,352.00 sf				
D2040	Rain Water Drainage				
22-0000.000	PLUMBING				
22-1000.000	Plumbing				
	Under slab (trench/backfill excluded)	0.00	ITEM		
	12" Storm	31.00	lf	150.00 /lf	4,650
10	10" Storm	257.00	lf	130.00 /lf	33,410
10	8" Storm	367.00	lf	120.00 /lf	44,040
10	6" Storm	158.00	lf	107.00 /lf	16,906
10	5" Storm	222.00	lf	90.00 /lf	19,980
10	4" Storm	531.00	lf	83.00 /lf	44,073
10	Elevator sump pump	1.00	ea	3,500.00 /ea	3,500
10	Above Slab	0.00	ITEM		
10	8" Storm	72.00	lf	140.00 /lf	10,080
	6" Storm	806.00	lf	107.00 /lf	86,242
	5" Storm	1,388.00	lf	80.00 /lf	111,040
10	4" Storm	1,420.00	lf	67.00_/lf	95,140
	Plumbing			2.803/sf	469,061
	167,352.00 sf				
	PLUMBING			2.803/sf	469,061
	167,352.00 sf				
	D2040 Rain Water Drainage			2.803/sf	469,061
	167,352.00 sf				
D2090	Other Plumbing Systems				
22-0000.000	PLUMBING				
22-1000.000 2	<i>Plumbing</i> Plumbing systems	167,352.00	sf	2.00 /sf	334,704
10	Water Treatment / testing/ Sign off /shutdowns Sub-trade on costs	1.00 1.00	ls Is	12,500.00 /ls 173,693.00 /ls	12,500 173,693

## Northbridge Elementary Schoo Page 94 of 126/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
	Plumbing			3.113/sf	520,897
	167,352.00 sf				
	PLUMBING			3.113/sf	520,897
				0.110/01	020,007
	167,352.00 sf				
	D2090 Other Plumbing Systems			3.113/sf	520,897
	167,352.00 sf				
	D20 PLUMBING			13.407/sf	2,243,688
	167,352.00 sf				
D30	HEATING, VENTILATION, AND AIR CONDITIONING	(HVAC)			
D3020	Heat Generating Systems				
23-0000.000	HVAC				
23-0100.110	HVAC				
	Heating equipment B-1,2 & 3, Boilers, 2500 MBH each, Lochinvar	7,500.00	mbh	25.00 /mbh	187,500
2	(FBN-2501)	7,500.00	mon	25.00 /11011	167,500
	P-1 & 2, HHW Pump, 500 GPM	1,000.00	ea	25.00 /ea	25,000
	Boiler intake flue - allow	27.00	lf	250.00 /lf	6,750
	Boiler exhaust breeching - allow CF-1, Chemical Shot Feeder serving HHW, 5.0	27.00 1.00	lf	500.00 /lf 15,000.00 /ea	13,500 15,000
2	GAL	1.00	ea	15,000.00 /ea	15,000
2	AS-1, Air Separator, 250 GPM, dosing	1.00	ea	2,000.00 /ea	2,000
	ET-1, Expansion Tank, 80L Capacity	1.00	ea	3,000.00_/ea	3,000
	HVAC			1.51 /sf	252,750
	167,352.00 sf				
	HVAC			1.51 /sf	252,750
	167,352.00 sf				
	D3020 Heat Generating Systems			1.51 /sf	252,750
	167,352.00 sf				
D3030	Cooling Generating Systems				
23-0000.000	HVAC				
23-0100.110	HVAC Condenser Units	0.00	ITEM		
	Condenser units for VRF units - allow	20.00	ea	2,800.00 /ea	56,000
	VRFc-1 & 2 VRF Outdoor Units, 96 MBH	5.00	ton	2,000.00 /ton	10,000
2	Condenser units for DX cooling	5.00	ea	2,000.00 /ea	10,000
	HVAC			0.454/sf	76,000
	167,352.00 sf				
	101,002.00 31				

## Northbridge Elementary Schoo Page 95 of 126910/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
	HVAC			0.454/sf	76,000
					- / /
	167,352.00 sf				
	HVAC			0.454/sf	76,000
	167,352.00 sf				
	D3030 Cooling Generating Systems			0.454/sf	76,000
	167,352.00 sf				
D3040	Distribution Systems				
20040	Distribution Cystoms				
23-0000.000	HVAC				
23-0100.110	HVAC				
	Air distribution				
2		8,750.00	cfm	15.00 /cfm	131,25
	RTU - 2	13,380.00	cfm	15.00 /cfm	200,70
2	RTU - 3 RTU - 4 Serving North CR - Part A	3,740.00 11,090.00	cfm cfm	15.00 /cfm 15.00 /cfm	56,10
2	5	11,410.00	cfm cfm	15.00 /cfm	166,35 171,15
2	0	1,740.00	cfm	15.00 /cfm	26,10
2	-	12,430.00	cfm	15.00 /cfm	186,45
	RTU-8 Serving Gym	7,280.00	cfm	15.00 /cfm	109,20
	RTU - 9 Serving Cafe & Stage	6,300.00	cfm	15.00 /cfm	94,50
2	HV-1 w/1 Supply & 1 Return Fan, Natural gas	1,960.00	cfm	10.00 /cfm	19,60
0	heating coil MAU-1	4 500 00	afaa		20.00
2		4,500.00 22.00	cfm ea	6.80 /cfm 5,500.00 /ea	30,60 121,00
2		0.00	ITEM	3,300.00 /ea	121,00
2		5,520.00	cfm	3.00 /cfm	16,56
2		825.00	cfm	1.25 /cfm	1,03
2	EF-2	1,125.00	cfm	1.25 /cfm	1,40
2	EF-3	3,150.00	cfm	1.25 /cfm	3,93
2	EF-4 - Allow	1.00	ea	1,500.00 /ea	1,50
2		2,400.00	cfm	1.25 /cfm	3,00
2	EF-6, 7, 8, 9, 10, 11 - Allow	6.00	ea	1,500.00 /ea	9,00
	Grilles	4.00	ea	250.00 /ea	1,00
2	Supply Grilles 10 x 10 HVAC	17.00	ea	275.00 /ea 8.097/sf	4,67
				0.007/01	1,000,11
	167,352.00 sf				
	HVAC			8.097/sf	1,355,11
	167,352.00 sf				
	D2040 Distribution Oustance			0.007/64	1 055 11
	D3040 Distribution Systems			8.097/sf	1,355,11
	167,352.00 sf				
D3090	Other HVAC Systems And Equipment				
23-0000.000	HVAC				
23-0100.110	HVAC				
	RTUs	18.00	ea	8,500.00 /ea	153,00
_				,	,

## Northbridge Elementary Schoo Page 96 of 126/10/2019 6:05 РМ

### Whitinsville, MA

				Total		
Item	Description	Takeoff Qty		Unit Cost	Total	Amoun
23-0100.110	HVAC					
20 0 1001110	MAU	1.00	ea	8,500.00	/ea	8,500
2	HV	2.00	ea	6,500.00	/ea	13,000
2	EF	12.00	ea	2,500.00	/ea	30,000
2	Pumps	3.00	ea	4,500.00	/ea	13,500
2	Energy Metering Allowance	1.00	ea	15,000.00	/ea	15,000
2	Radiant ceiling panels - quantity allowance	3,482.00	lf	125.00	/lf	435,250
2	VRFe indoor Units, PLFY	0.00	Abov e			
2	CP-1 Condensate pump for VRF Units INC	0.00	Abov			
0	ABOVE		е			
	Branch Circuit Controllers for VRFs above	4.00		F 000 00	1	5.000
2	BC-1 serving VRFe 1-6	1.00	ea	5,000.00		5,000
2	0	1.00	ea	5,000.00		5,000
	BC-1 serving VRFe 13-19	1.00	ea	5,000.00	/ea	5,000
	Split AC unit	0.00	ITEM	0 000 00	1	40.000
2	DCUe-1-8 Ductless Cooling Units, 320 CFM, Mitsubishi (PKA) served by DCUc-1, 2, 3, 7 & 8 Condenser units, Mitsubishi (PUY)	8.00	ea	6,000.00	/ea	48,000
2	DCUe-9 & 10 Ductless Cooling Units, 635 CFM, Mitsubishi (PKA) served by DCUc-9 & 10	2.00	ea	12,000.00	/ea	24,000
	Condenser units, Mitsubishi (Puz)					
	Unit Heaters	0.00	ITEM		,	
	UH, Unit Heaters	25.00	ea	700.00		17,500
	EUH-1, Electric unit heaters, 5.0 KW, 17.1 MBH	1.00	ea	1,100.00	/ea	1,100
	Air terminals	0.00	ITEM			
	VAV units	141.00	ea	1,200.00	/ea	169,200
	Pipe, Valves & Connections					
	Heating piping					
2	6"	60.00	lf	80.00		4,800
2	4"	90.00	lf	73.00		6,570
2	3"	98.00	lf	58.00		5,684
	2-1/2"	1,695.00	lf	49.00		83,05
2	2"	650.00	lf	34.00		22,100
	1-1/2"	900.00	lf	27.00		24,300
	1"	1,791.00	lf	25.00		44,775
2	3/4"	8,058.00	lf	20.00		161,160
2	Branch piping to unit heaters	404.00	lf	19.00		7,670
2	Branch piping to VAVs	2,218.00	lf	34.00		75,41
2	Branch Connection to Terminals	4,370.00	lf	34.00	/lf	148,580
2	Refrigerant Piping - VRF	0.00	ITEM			
2	Refrigerant Piping, RL/RS (from VRFe to Branch Selectors)	2,067.00	lf	30.00	/lf	62,01
2	Refrigerant Piping, RL/RS (from VRFc to Branch Selectors)	439.00	lf	30.00	/lf	13,170
	Branch connections to terminals	230.00	lf	30.00		6,900
	Secondary valve sets for VRF heat pumps	69.00	ea	600.00	/ea	41,40
2	Dx piping for IT cooling	0.00	ITEM			
	Dx piping	3,000.00	lf	27.00	/lf	81,00
2	Secondary valve sets; including isolation, commissioning & non return valves	10.00	ea	600.00	/ea	6,00
	Secondary control valves	10.00	ea	300.00	/ea	3,00
2	DX condensate	300.00	lf	27.00	/lf	8,10
2	Sheetmetal & Accessories	0.00	ITEM			
2	Ductwork - Galvanized	129,116.00	lbs	11.00	/lbs	1,420,27
	Allowance for Stainless Steel Kitchen exhaust ductwork	4,050.00	lbs	20.00	/lbs	81,00
2	Accessories	0.00	ITEM			
2	Fire dampers for main supply extract risers (Assume)	2.00	ea	750.00	/ea	1,50
2	Volume Dampers, control dampers & access panels	1.00	ls	5,400.00	/ls	5,40
2	CVD Final Connections	5.00	ea	800.00	/ea	4,00

## Northbridge Elementary Schoo Page 97 of 126/10/2019 6:05 РМ Whitinsville, MA

				Tatal	
Item	Description	Takeoff Qty		Total Unit Cost	Amoun
		·			
23-0100.110 2	HVAC Dedicated plenum connections for VAVs, S/R Diffusers	452.00	ea	200.00 /ea	90,400
2	Displacement Diffusers	0.00	ITEM		
2	DD-1	143.00	ea	700.00 /ea	100,10
2	DD-7	28.00	ea	700.00 /ea	19,60
2	DD-8	7.00	ea	700.00 /ea	4,900
2	DD-X	28.00	ea	700.00 /ea	19,600
	S-A Supply Air Diffusers 12 x 12	0.00	ITEM	200.00 /22	40
	9 x 9	2.00 4.00	ea ea	200.00 /ea 180.00 /ea	40 72
	6 x 6	5.00	ea	170.00 /ea	85
	R-1, Registers	0.00	ITEM		
	24 x 24	1.00	ea	300.00 /ea	300
2	18 x 18	2.00	ea	250.00 /ea	500
	16 x 16	56.00	ea	240.00 /ea	13,440
	14 x 14	23.00	ea	220.00 /ea	5,060
	10 x 10	8.00	ea	190.00 /ea	1,520
	8 x 8 B 2 Bosistore	38.00 0.00	ea ITEM	175.00 /ea	6,650
	R-2, Registers 36 x 12	8.00	ea	350.00 /ea	2,800
	24 x 12	8.00	ea	320.00 /ea	2,560
	22 x 10	4.00	ea	300.00 /ea	1,200
	E-1 Exhaust Grilles	0.00	ITEM		, -
2	6 x 6	2.00	ea	225.00 /ea	450
	8 x 8	64.00	ea	250.00 /ea	16,000
	L-1 Intake Louver 36 x 36 (EHH-601)	1.00	ea	1,350.00 /ea	1,350
	Insulation	0.00	ITEM	0.00 ///	105 11
2	Piping insulation	23,139.00	lf of	8.00 /lf	185,112
2	Ductwork insulation Acoustic lining for duct systems NA	80,697.00 0.00	sf NA	4.00 /sf	322,788
	Fire wrap on kitchen exhaust ductwork	3,115.00	sf	18.00 /sf	56,070
-	HVAC	0,110.000	01	731 24.579/sf	4,113,28
	167,352.00 sf				
23-0900.100	Controls				
20	Building Management Systems	0.00	ITEM		
20	RTU	135.00	pts	900.00 /pts	121,500
20	MAU/HV	30.00	pts	900.00 /pts	27,000
20	Extract Fans	24.00	pts	900.00 /pts	21,60
	Condenser units Pumps	120.00 6.00	pts pts	900.00 /pts 900.00 /pts	108,000 5,400
20	•	1.00	ls	35,000.00 /ls	35,000
20		0.00	ITEM	00,000.00 //0	00,000
	VRF Heat pump units	36.00	ea	600.00 /ea	21,600
	VAVs	560.00	ea	600.00 /ea	336,000
	RCPs	562.00	ea	600.00 /ea	337,200
20	Testing & Commissioning	1.00	ls	108,000.00 /ls	108,000
20		1.00	ls	264,061.00_/ls	264,06
	Controls			8.278/sf	1,385,36
	167,352.00 sf				
	HVAC			32.857/sf	5,498,64
	167,352.00 sf				
	D3090 Other HVAC Systems And Equipment			32.857/sf	5,498,64

## Northbridge Elementary Schoo Page 98 of 126/10/2019 6:05 РМ Whitinsville, MA

M	Description	T-1	Total	
Item	Description	Takeoff Qty	Unit Cost	Amount
			00 077 <i>/ /</i>	= (00.0/0
	D3090 Other HVAC Systems And Equipment		32.857/sf	5,498,649
	167,352.00 sf			
	D30 HEATING, VENTILATION, AND AIR		42.919/sf	7,182,509
	CONDITIONING (HVAC)			
	167,352.00 sf			
D40	FIRE PROTECTION			
D4040	Sprinklers			
21-0000.000	FIRE SUPRESSION			
21-0000.000				
21-1300.120	Sprinkler Systems	1.00	2 500 00 /00	2 500
	MACV: Main wet alarm check valve SCV- Supervised Control valve	1.00 ea 1.00 ea	2,500.00 /ea 1,858.00 /ea	2,500 1,858
	6" Back Flow Preventer	1.00 ea	4,816.00 /ea	4,816
	6" Control Valve	5.00 ea	7,635.20 /ea	38,176
	4" Control Valve	6.00 ea	5,356.80 /ea	32,141
	Riser shut off valve	3.00 ea	2,250.00 /ea	6,750
	FDC- Fire department connection	4.00 ea	1,500.00 /ea	6,000
	FDV - Fire department Valve 2 1/2"	15.00 ea	1,500.00 /ea	22,500
	FDVC - Fire department valve cabinet - 18" x18"	15.00 ea	750.00 /ea	11,250
2	x 10" (CROKER 1710) - 2 1/2"	10.00 64	100.00 /04	11,200
2	Incoming fire main from utility (10' from threshold of the building)	10.00 lf	200.00 /lf	2,000
	Sprinkler Systems		0.765/sf	127,991
	167,352.00 sf			
	FIRE SUPRESSION		0.765/sf	127,991
	167,352.00 sf			
	101,002.00			
	D4040 Sprinklers		0.765/sf	127,991
	167,352.00 sf			
	107,552.00 51			
D4090	Other Fire Protection Systems			
21-0000.000	FIRE SUPRESSION			
21-1300.120	Sprinkler Systems			
	Fire standpipe - Risers	0.00 ITE		11000
	- 6" w/ 2 1/2" drain	4.00 ea	3,500.00 /ea	14,000
	- 4" drain	6.00 ea	2,500.00 /ea	15,000
	Fire standpipe - Horizontal	0.00 ITE		07
2	•	501.00 lf	55.00 /lf	27,555
	Sprinkler Heads	0.00 ITE		140.000
	Sprinkler heads (assumed quantity)	1,400.00 ea	85.00 /ea	119,000
	Upright Heads (Assumed Quantity) Side Wall	48.00 lf	85.00 /lf	4,080
2		2.00 ea 56.00 ea	85.00 /ea 85.00 /ea	170 4,760
	Sprinkler Piping Distribution	0.00 Ea		4,700
	4" Piping	1,998.00 lf	50.00 /lf	99,900
	3" Piping	170.00 lf	48.00 /lf	8,160
2		110.00 11	-0.00 /11	0,100

# Northbridge Elementary Schoot 99 of 126/10/2019 6:05 PM

### Whitinsville, MA 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
21-1300.120	Sprinkler Systems				
2	2-1/2" Piping	115.00	lf	45.00 /lf	5,175
2	2" Piping	4,594.00	lf	40.00 /lf	183,760
	1-1/2" Piping	969.00	lf	30.00 /lf	29,070
	1-1/4" Piping	3,045.00	lf	22.00 /lf	66,990
	1' Piping	6,777.00	lf	20.00 /lf	135,540
	Branch piping for head not shown(assume	565.00	lf	22.00 /lf	12,430
2	10lf/per head @ 1-1/2") ANSUL System	0.00	Other		
2		0.00	S		
2	Hydraulic Calculations, Hydrant Flow Tests, As-builts	1.00	ls	5,000.00 /ls	5,000
2	Sub-trade temp requirements & GC's Sprinkler Systems	1.00	ls	64,396.00 /ls 4.75 /sf	64,396 794,986
	167,352.00 sf				- ,
	101,002.00 01				
	FIRE SUPRESSION			4.75 /sf	794,980
	167,352.00 sf				
	D4090 Other Fire Protection Systems			4.75 /sf	794,98
	167,352.00 sf				
	D40 FIRE PROTECTION			5.515/sf	922,977
	167,352.00 sf				
D50	ELECTRICAL				
D5010	Electrical Service And Distribution				
26-0000.000					
	ELECTRICAL				
26-0000.100	Electrical	1.00	le	60.000.00 //s	60.00
2 <i>6-0000.100</i> 10		1.00 0.00	ls Abov	60,000.00 /ls	60,000
2 <i>6-0000.100</i> 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC			60,000.00 /ls	60,00
26- <i>0000.100</i> 10 10	<i>Electrical</i> Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault		Abov e Abov	60,000.00 /ls	60,00
26-0000.100 10 10 10	<i>Electrical</i> Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection	0.00	Abov e	60,000.00 /ls	60,00
26- <i>0000.100</i> 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus	0.00 0.00	Abov e Abov e	60,000.00 /ls	60,00
2 <i>6-0000.100</i> 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device	0.00 0.00 0.00	Abov e Abov e Abov e	60,000.00 /ls	60,00
26-0000.100 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000	0.00 0.00 0.00	Abov e Abov e Abov e Abov	60,000.00 /ls 12,500.00 /ea	
26-0000.100 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series	0.00 0.00 0.00 0.00	Abov e Abov e Abov e Abov		12,50
26-0000.100 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA	0.00 0.00 0.00 0.00 1.00	Abov e Abov e Abov e Abov e ea	12,500.00 /ea	12,50 79,20
26-0000.100 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA	0.00 0.00 0.00 1.00 16.00	Abov e Abov e Abov e Abov e ea ea	12,500.00 /ea 4,950.00 /ea	12,50 79,20 6,60
26-0000.100 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge	0.00 0.00 0.00 1.00 16.00 2.00	Abov e Abov e Abov e Abov e ea ea ea	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea	12,50 79,20 6,60
26-0000.100 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00	Abov e Abov e Abov e Abov e ea ea ea ITEM	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea	12,50 79,20 6,60 5,25
26-0000.100 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-5, 45kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices - MHP2C, 225A, 84cts	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00 1.00	Abov e Abov e Abov e ea ea ea ITEM	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea 4,500.00 /ea	12,50 79,20 6,60 5,25 4,50
26-0000.100 10 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices - MHP2C, 225A, 84cts - MHP1A/1B/1B2/1C2/2B/3A/3B, 225A, 42cts	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00 1.00 7.00	Abov e Abov e Abov e ea ea ea ITEM ea ea	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea 4,500.00 /ea	12,50 79,20 6,60 5,25 4,50 31,50
26-0000.100 10 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices - MHP2C, 225A, 84cts - MHP1A/1B/1B2/1C2/2B/3A/3B, 225A, 42cts - LP1A/1C2/2C/3A, 100A, 42cts	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00 1.00 7.00 4.00	Abov e Abov e Abov e ea ea ea ITEM ea ea ea	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea 4,500.00 /ea 2,000.00 /ea	12,50 79,20 6,60 5,25 4,50 31,50 8,00
26-0000.100 10 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices - MHP2C, 225A, 84cts - MHP1A/1B/1B2/1C2/2B/3A/3B, 225A, 42cts - LP1A/1C2/2C/3A, 100A, 42cts - LP1B/1B2/2B/3B, 100A, 30cts Panelboards, 208V, 3P/4W, 10KAIC w/ surge	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00 1.00 7.00	Abov e Abov e Abov e ea ea ea ITEM ea ea	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea 4,500.00 /ea	12,50 79,20 6,60 5,25 4,50 31,50 8,00
26-0000.100 10 10 10 10 10 10 10 10 10 10 10 10	Electrical Main Switchboard, 480V, 3P 4W, 100KAIC - Main breaker,3000A 65 KAIC w/ ground fault protection - Ground bus - Surge Protection Device - Digital monitoring meter, Power Logic CM4000 Series - 112.5 KVA - T-5, 45kVA - T-5, 45kVA - T-4, 30kVA Disconnect Switches, 100A Panelboards, 480V, 3P/4W, 65KAIC w/ surge protection devices - MHP2C, 225A, 84cts - MHP1A/1B/1B2/1C2/2B/3A/3B, 225A, 42cts - LP1A/1C2/2C/3A, 100A, 42cts - LP1B/1B2/2B/3B, 100A, 30cts	0.00 0.00 0.00 1.00 16.00 2.00 15.00 0.00 1.00 7.00 4.00 4.00	Abov e Abov e Abov e ea ea ea ITEM ea ea ea ea ea	12,500.00 /ea 4,950.00 /ea 3,300.00 /ea 350.00 /ea 4,500.00 /ea 2,000.00 /ea	60,00 12,50 79,20 6,60 5,25 4,50 31,50 8,00 8,00 13,50

## Northbridge Elementary Schood be 100 of 126/10/2019 6:05 РМ

Whitinsville, MA

				Total		
ltem	Description	Takeoff Qty		Unit Cost	- otur	Amount
26-0000.100	Electrical					
10	- Double tub panelboards, PP1A/3A, MP2B/3B, MP1B/1B2/1C2, KP1C2, 225A, 84cts	8.00	ea	4,500.00	/ea	36,000
10	- Double tub panelboards, PP1C/1C2, MP1A/3A, 225A, 42cts	4.00	ea	4,500.00	/ea	18,000
10	- PP3B, 225A, 126cts	1.00	ea	4,500.00	/ea	4,500
10	- PP2C & MP2C, 125A assume	2.00	ea	2,500.00	/ea	5,000
10	FB-1, Field Box Panel, 100A @ Concession Bldg	1.00	ea	2,000.00	/ea	2,000
10	Feeders					
10	3000A; 7 Sets of 4#600Kcmil in (7) 4"C plus (1)	216.00	Abov			
	4"C spare w/ pull line		е			
	600A; To ATS-OS	25.00	lf	150.00		3,750
	225A; 4#3/0 + #6 in 2-1/2"C	85.00	lf	56.25		4,781
	225A; 4#250kcmil+#4G in 2-1/2"C - Al Conductor	755.00	lf	56.25		42,469
	225A; 3#1/0+2#1(N)+1#1(IG)+1#6(EG) in 3"C	50.00	lf	56.25		2,813
	125A; 3#2+#3/0(N)+1#2(IG)+1#8(EG)	25.00	lf	31.25		781
	125A; 3#1/0+2#1(N)+1#1(IG)+1#6(EG)in 3"C 100A; Under ground feeder to panel FB-1 @	350.00	lf 14	31.25 25.00		10,938
10	concessional bldg	392.00	lf	25.00	/11	9,800
10	100A; 3#2+#8EG in 1-1/4" C	1,983.00	lf	25.00	/lf	49,575
10	100A; 4#1+#6 in 1-1/2" C	825.00	lf	25.00	/lf	20,625
10	100A; To ATS-LS	25.00	lf	25.00	/lf	625
10	100A; 3#6+#10EG in 3/4"C	105.00	lf	25.00	/lf	2,625
10	Connection/Wiring to MMU units	1.00	ls	1,000.00	/ls	1,000
10	Conduit In aboveINC ABOVE					
	Mechanical / Equipment power					
	HVAC					
	Rooftop units, RTU-1 thru 9, 100A/3P	11.00	ea	7,500.00		82,500
	Boilers, B-1/2/3, 20A/1P	3.00	ea	7,500.00		22,500
	Branch controller, BC-1/2/3, 20A/1P	3.00	ea	1,500.00		4,500
	KEF-1, 5520 CFM	1.00	ea	1,500.00		1,500
	EF-1, Roof above Vestibule 3201, 825	1.00	ea	1,500.00		1,500
	EF-, Roof above Toilers 3247,1125 EF-3, Roof above Toilets 3248, 3150	1.00 1.00	ea	1,500.00		1,500
	EF-4, Roof above CR 3104, Unsized	1.00	ea ea	1,500.00 1,500.00		1,500 1,500
	EF-5, roof above toilet 3123, 2400	1.00	ea	1,500.00		1,500
	EF-6, roof above corridor 1158, unsized	1.00	ea	1,500.00		1,500
	EF-7/8/9/10/11, unsized fans from schedule	5.00	ea	1,500.00		7,500
	- Condensate Pump, 20A/1P	1.00	ea	1,500.00		1,500
	- Water pump, 7.5hp each	2.00	ea	3,500.00		7,000
	Condensors	10.00	ea	1,500.00		15,000
10	Terminal Units					
10	Split AC Units	10.00	ea	1,500.00	/ea	15,000
10	Unit Heaters, 1/10hp each	25.00	ea	1,500.00	/ea	37,500
10	Electric Unit Heaters	1.00	ea	1,500.00	/ea	1,500
10	VRF heating/cooling units	20.00	ea	1,500.00	/ea	30,000
10	VRF outdoor unit	1.00	ea	1,500.00	/ea	1,500
	VAV boxes	140.00	ea	350.00	/ea	49,000
	Plumbing	0.00	ITEM			
10		2.00	ea	1,500.00		3,000
10	Recirculation pump, 1/8hp each	1.00	ea	750.00	/ea	750
10	Thermal switch with piolt lightINC ABOVE	0.00	Abov e			
	Elevator sump pump	1.00	ea	750.00		750
	Electronic Flush Valves	162.00	ea	280.00	/ea	45,360
	Miscellaneous	0.00	ITEM			
	Elevator motor connection	2.00	ea	1,500.00		3,000
	Allowance for institutional equipment	10.00	ls	575.00	/ls	5,750
	Emergency Service & Distribution	0.00	ITEM			
10	Diesel generator 250kW/312.5kVA, 277Y/480V, 3-Phase, 4-Wire, 0.8pf	250.00	kw	350.00	/kw	87,500
10	Acoustic enclosure allowance	1.00	ea	50,000.00	/ea	50,000
10						

## Northbridge Elementary Schood De 101 of 126/10/2019 6:05 РМ Whitinsville, MA

ltem	Description	Takeoff Qty			Total	
		Takeon day		Unit Cost		Amount
26-0000.100	Electrical					
	ESL Storm switch 3042 series model	1.00	ea	15,000.00	/ea	15,000
	#SFD4-2005-2005-480-311-S-C w/ interlocked			-,		-,
	switched & Cam-lock connectors					
10	Automatic Transfer Switches	0.00	ITEM			
10	- ATS-OS, 600A	1.00	ea	60,000.00	/ea	60,000
10	- ATS-LS, 100A	1.00	ea	10,000.00	/ea	10,000
10	Uninterrupted Power Supply, 16kW, 20kVA	2.00	ea	23,200.00	/ea	46,400
10	Interior Distribution Transformers, 480V, K-13	0.00	ITEM			
	rated					
10	- T-5, 45kVA	6.00	ea	4,950.00	/ea	29,700
10	Distribution Panelboards, 480V, 3P/4W, 65KAIC	0.00	ITEM			
	w/ surge protection devices					
10	- EHP1A/1B/2B/3B, ELP1C2/2A/3B, 225A, 42cts	7.00	ea	4,500.00	/ea	31,500
10	- ELP1B, 225A, 42cts	1.00	ea	4,500.00	/ea	4,500
10	Panelboards, 208V, 3P/4W, 10KAIC w/ surge	0.00	ITEM			
	protection devices					
10	EP1C2, 400A, 84cts	1.00	ea	8,000.00	/ea	8,000
	EP1A, 225A, 84cts	1.00	ea	8,000.00	/ea	8,000
	EP1B/1B2/2B/2C/3B, 225A, 168cts	5.00	ea	8,000.00	/ea	40,000
10	Double tub panelboards, TEP2A/2C, 225A/2C,	2.00	ea	4,500.00	/ea	9,000
	225A, 84cts					
10	Feeders (MI Cable)	0.00	ITEM			
10	600A; description unknown	222.00	lf	150.00	/lf	33,300
10	225A; 4#3/0+1#6G in 2-1/2"C	25.00	lf	56.25	/lf	1,406
10	225A; 4#3/0+#6G in 2"C	25.00	lf	56.25	/lf	1,406
10	225A; 3#4+1/0 Neutral +1#8G in 2"C	50.00	lf	56.25	/lf	2,813
10	225A; description unknown	956.00	lf	56.25	/lf	53,775
10	150A; 3#350+#4EG in 3"C	75.00	lf	52.50	/lf	3,938
10	150A; description unknown	222.00	lf	37.50	/lf	8,325
10	125A; 3#1/0+2#1(N)+1#1(IG)+1#6(EG) in 3"C	25.00	lf	31.25	/lf	781
10	100A; 4#3/0&6G in 3"C	25.00	lf	25.00	/lf	625
10	100A; 3#2+#8EG in 1-1/4"C	216.00	lf	25.00	/lf	5,400
10	100A; description unknown	72.00	lf	25.00	/lf	1,800
10	4#4+#8G in 1-1/2"C	215.00	lf	25.00	/lf	5,375
10	3#3/0 & #6G in 2"C	25.00	lf	25.00	/lf	625
10	Conduit for above INC ABOVE					
10	Convenience Power	0.00	ITEM			
10	Double Duplex Receptacle	463.00	ea	550.00	/ea	254,650
10	Duplex Receptacles	742.00	ea	280.00	/ea	207,760
10	Duplex Receptacles for computer use	26.00	ea	280.00	/ea	7,280
	Duplex Receptacles, weatherproof	20.00	ea	300.00	/ea	6,000
10	Duplex Receptacle, 20A, Unistrut grid mtd,	9.00	ea	300.00	/ea	2,700
	Hubbell Model					
10	Duplex Receptacle, GFI	217.00	ea	300.00	/ea	65,100
10	Flush Mtd poke thru device w/ (2) duplex	3.00	ea	750.00	/ea	2,250
	receptacles & (3) comm. outlets					
10	Flush mounted 2hr rated poke thru w/1 double	1.00	ea	1,000.00	/ea	1,000
	duplex receptacle & 3 communication devices					
10	Special Receptacles	35.00	ea	350.00	/ea	12,250
10	Single Receptacle	1.00	ea	180.00	/ea	180
10	Three function push button switch	2.00	ea	350.00	/ea	700
10	Control Panel	15.00	ea	500.00	/ea	7,500
10	Handicap Door Activate Switches - F&I by	8.00	lf	3,000.00	/lf	24,000
	System Supplier					
10	Uni Strut p1000 w/plain finish, to be painted	198.00	lf	60.00	/lf	11,880
10	Junction Boxes	127.00	ea	250.00	/ea	31,750
10	Convenience Power Devices for Kitchen	0.00	ITEM			
10	Duplex Receptacle 20A	8.00	ea	280.00	/ea	2,240
10	Duplex Receptacles, GFC	8.00	ea	280.00	/ea	2,240
10	Double Duplex Receptacles, 20A	2.00	ea	280.00	/ea	560
10	EPO - Emergency Power Off	3.00	ea	2,000.00	/ea	6,000
				250.00	100	5,250
	Junction Box	21.00	ea	250.00	/ea	0,200

## Northbridge Elementary Schood<sup>be 102 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

				Total	]
ltem	Description	Takeoff Qty		Unit Cost	Amount
26-0000.100 10	Electrical Single Receptacle	39.00	ea	180.00 /ea	7,020
	Electrical			11.798/sf	1,974,470
	167,352.00 sf				
	ELECTRICAL			11.798/sf	1,974,470
	167,352.00 sf				
	D5010 Electrical Service And Distribution			11.798/sf	1,974,470
	167,352.00 sf				
D5020	Lighting & Branch Wiring				
26-0000.000	ELECTRICAL				
26-0000.100	Electrical				
10	Lighting, inclusive of conduit, fitting and wiring (allowances included for fixture material prices)	0.00	ITEM		
10	LG3: 30" Acrylic Globe Fixture, 0-10V, Dimming	32.00	ea	350.00 /ea	11,200
10	Capable, G Lighting LK24; 2'X4' Fixture With Prismatic Acrylic Lens,	24.00	ea	300.00 /ea	7,200
10	Mct Series LP4; 4' Linear Direct / Indirect Fixture With	115.00	ea	440.00 /ea	50,600
	Frosted Acrylic Diffuser. 0-10V Dimming				,
10	Capable, Finelite, S16 Series LP8; 8' Linear Direct / Indirect Fixture With	422.00	ea	880.00 /ea	371,360
	Frosted Acrylic Diffuser, 0-10V Dimming Capable, Finelite, S16 Series				
10	LPD2; 2' Diameter Round Direct/Indirect Pendant	41.00	ea	660.00 /ea	27,060
10	Fixture. LPD3; 3' Diameter Round Direct/Indirect Pendant	29.00	ea	990.00 /ea	28,710
	Fixture.				
10	LPD4; 4' Diameter Round Direct/Indirect Pendant Fixture.0-10V Dimming Capable	12.00	ea	1,250.00 /ea	15,000
10	LPG; Pendant Hi-Bay Fixture. 0-10V Dimming Capable, With Wire Guard, Meteor, WSSeries	5.00	ea	500.00 /ea	2,500
10	LR10; 10' X 2"W Recessed Fixture. 0-10V	5.00	ea	1,000.00 /ea	5,000
10	Dimming Capable LR2; 2' X 2"W Recessed Fixture. 0-10V Dimming	18.00	ea	200.00 /ea	3,600
	Capable. Ceiling Type, Finelite, HP-2 Series	61.00		200.00 /00	18 200
10	LR24; 2' X 4' Led Flat Panel. 0-10V Dimming Capable, Oracle, Flp1 Series	61.00	ea	300.00 /ea	18,300
10	LR4; 4' X 2"W Recessed Fixture. 0-10V Dimming Capable, Finelite, Hp-2 Series	165.00	ea	300.00 /ea	49,500
10	LR4A; 4' X 2"W Recessed Fixture. 0-10V	27.00	ea	300.00 /ea	8,100
10	Dimming Capable LR6; 6' X 2"W Recessed Fixture. 0-10V Dimming	57.00	ea	400.00 /ea	22,800
	Capable	42.00	00	500.00 /00	
	LR8; 8' X 2"W Recessed Fixture. 0-10V Dimming LR8A; 8' X 2"W Recessed Fixture. 0-10V	42.00 3.00	ea ea	500.00 /ea 500.00 /ea	21,000 1,500
10	Dimming LRD2; 2' Diameter Round Recessed Fixture.	67.00	ea	660.00 /ea	44,220
	0-10V Dimming Capable				
10	LRD3; 3' Diameter Round Recessed Fixture. 0-10V Dimming Capable	5.00	ea	990.00 /ea	4,950
10	LRD4; 4' Diameter Round Recessed Fixture. 0-10V Dimming Capable	2.00	ea	1,250.00 /ea	2,500

## Northbridge Elementary Schood<sup>ge 103 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

					Total	
ltem	Description	Takeoff Qty		Unit Cost		Amount
26-0000.100	Electrical					
	LS2; 2' Surface Mounted Fixture With Acrylic	1.00	ea	350.00	/00	350
10		1.00	ea	350.00	/ea	350
	Lens. 0-10V Dimming Capable, Elite, 2-Oc1-Led					
	Series					
10	LS4; 4' Surface Mounted Fixture With Acrylic	39.00	ea	440.00	/ea	17,160
	Lens. 0-10V Dimming Capable, Elite, 4-Oc1-Led					
	Series					
10	LS8; 8' Surface Mounted Fixture With Acrylic	56.00	ea	750.00	/ea	42,000
	Lens. 0-10V Dimming Capable, Elite, 8-Oc1-Led					
	Series					
10	LS8A; 8' Surface Mounted Fixture With Acrylic	20.00	ea	750.00	/ea	15,000
	Lens. 0-10V Dimming Capable, He Williams,	20100	04		, ou	
	Lims Series					
10	LSV4; 4' Wet Location Fixture With Acrylic Lens.	10.00	00	350.00	/00	2 500
10	•	10.00	ea	550.00	/ea	3,500
	0-10V Dimming Capable, Birchwood, Vanessa					
	Series					
	LV4; no description given	8.00	ea	350.00		2,800
10	LWS; Continuous Linear Wall Slot Fixture	542.00	lf	110.00	/lf	59,620
10	PC1; 10" Cylinder Fixture With Semi-Specular	12.00	ea	500.00	/ea	6,000
	Reflector, Cree, Esa Series					
10	RC1; 4" Round Downlight Fixture With	355.00	ea	300.00	/ea	106,500
	Semi-Specular Reflector, Maxilume, Hh4 Series					
10	RC2; 4" Square Downlight Fixture With	53.00	ea	300.00	/ea	15,900
10	Semi-Specular Reflector, Maxilume, Hh4 Series	00.00	ou	000.00	/0 <b>u</b>	10,000
10	RCW; 4" Round Wall Wash Fixture With	6.00	00	300.00	/00	1,800
10	-	0.00	ea	300.00	/ea	1,800
10	Semi-Specular Reflector, Maxilume, Hh4 Series	40.00		050.00	1	0.050
	SL4; Led Wall Pack. 0-10V Dimming Capable	13.00	ea	250.00		3,250
	SL5; Led Wall Pack. 0-10V Dimming Capable	7.00	ea	240.00		1,680
	Track for light TH1 & TH2	60.00	ea	150.00	/ea	9,000
10	- TH1 light on track	12.00	ea	500.00	/ea	6,000
10	- TH2 light on track	6.00	ea	500.00	/ea	3,000
10	Exit signs	65.00	ea	350.00	/ea	22,750
	Lighting fixture for elevator, Lightoiler 6770 or	3.00	ea	250.00	/ea	750
	Hubbell #NVB15GG w/ 150W					
10	Labor to install fixtures/ supports IN ABOVE	2,513.00	Abov			
10		2,010.00	e			
10	Winner and awitches for fivewas IN ADOVE	2 542 00				
10	Wiring and switches for fixtures IN ABOVE	2,513.00	Abov			
			e			
10	Daylight dimming ballasts for fixtures IN ABOVE	251.00	Abov			
			е			
10	RSH:4" Round Wall Wash Fixture	1.00	ea	300.00	/ea	300
	w/Semi-Specular Reflector. 0-10V Dimming					
	Capable					
10	SLV4:4' In-Grafe Flag Pole Lighting. 0-10V	18.00	ea	500.00	/ea	9.000
	Dimming Capable Birchwood					,
10	Lighting controls	0.00	ITEM			
	Occupancy Sensor	284.00	ea	500.00	/02	142,000
	Photocell Sensor	92.00				
			ea	500.00		46,000
	Emergency Stop Switch	1.00	ea	350.00		350
	Stage DMX Lighting Control	1.00	ea	25,000.00		25,000
10	NES; 24 Port Ethernet Switch	1.00	ea	2,500.00	/ea	2,500
	Electrical			7.393	i/sf	1,237,310
	167,352.00 sf					
	ELECTRICAL			7.393	a/ef	1,237,310
				7.393	7.01	1,237,310
	167,352.00 sf					
	D5020 Lighting & Branch Wiring			7.393	3/sf	1,237,310

167,352.00 sf

## Northbridge Elementary Schood <sup>be 104 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

ltem D5031	Description D5020 Lighting & Branch Wiring 167 252 00 of	Takeoff Qty		Unit Cost	Total	Amount
	D5020 Lighting & Branch Wiring	Takeon wiy		01111 0031		Anount
D5031						
D5031	167 252 00 of				7.393/sf	1,237,310
D5031	167,352.00 sf					
27-0000.000	COMMUNCIATIONS					
27-5000.000 100	Distributed Communications & Monitoring PA System - allow Distributed Communications & Monitoring	167,352.00	Allow			175,720 175,720
	167,352.00 sf					
	COMMUNCIATIONS				1.05 /sf	175,720
	167,352.00 sf					
	D5031				1.05 /sf	175,720
	167,352.00 sf					
D5037	Fire Alarm Systems					
28-0000.000	ELECTRONIC SAFETY & SECURITY					
	Life Saftey Fire Alarm System Complete FACP - Fire Alarm Control Panel - IN ABOVE	167,352.00 1.00	sf Abov e		1.75 /sf	292,866
100	FATC - Fire Alarm Terminal Cabinet - IN ABOVE	2.00	Abov e			
100	ANN - Generator Remote Annunciator - IN ABOVE	2.00	e Abov e			
100	Flush mounted Sigcom Wireless 16 Zone Master box - IN ABOVE	1.00	Abov e			
100	Elevator Recall Control Module - IN ABOVE	7.00	Abov			
100	Monitor Module - IN ABOVE	32.00	e Abov			
100	Digital Dialer for trouble & supervisory - IN ABOVE	1.00	e Abov e			
100	Carbon Monoxide Detector - IN ABOVE	11.00	Abov e			
100	Drill Key Switch	1.00	Abov			
100	Fire Alarm Graphic Map	115.00	e Abov			
100	Photoelectric smoke detector	9.00	e Abov			
100	Smoke Detector for elevator	3.00	e Abov			
100	Heat Detector for Elevator	1.00	e Abov e			
100	Speaker/Visual ADA compliant Signal	66.00	Abov			
100	Speaker/Visual ADA compliant Signal, WG	38.00	e Abov e			
100	Isolation Module	2.00	e Abov e			

## Northbridge Elementary Schoop 105 of 126/10/2019 6:05 РМ

Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

					Total	
Item		Description	Takeoff Qty		Unit Cost	Amount
28-4000.00		Life Saftey				
	100	Knox box	1.00	Abov e		
	100	Manual Pull Station	27.00	Abov e		
	100	Pressure Switch	1.00	Abov		
	100	Flow Switch	9.00	e Abov		
	100	Red fire alarm beacon, WP	1.00	e Abov		
	100	Box Support Assembly	331.00	e Abov		
	100	EMT 3/4" w/ fittings	8,275.00	e Abov		
	100	FA Cable	24,825.00	e Abov		
	100	FA Device Testing	331.00	e Abov		
		Life Saftey		е	1.75 /sf	292,866
		167,352.00 sf				
		ELECTRONIC SAFETY & SECURITY			1.75 /sf	292,866
		167,352.00 sf				
		D5037 Fire Alarm Systems			1.75 /sf	292,866
		167,352.00 sf				
D5038						
28-0000.00	00	ELECTRONIC SAFETY & SECURITY				
28-3000.00		Electronic Detection & Alarm				
	100 100		167,352.00	sf	0.25 /sf	41,838
		Access Control System, Manufacturer; Avigilon	4.00		5 000 00 /	5 000
		Access Control Panel Panel for intrusion detection system	1.00 1.00	ea	5,000.00 /ea 5,000.00 /ea	5,000 5,000
	100	Network Video Recorder Panel	1.00	ea ea	20,000.00 /ea	20,000
		Access Panel, allow	1.00	ea	350.00 /ea	350
	100	Card Reader, Proximity	36.00	ea	350.00 /ea	12,600
		Door Contact	29.00	ea	350.00 /ea	10,150
	100	Electrified Hinge	29.00	ea	350.00 /ea	10,150
	100	PIR sensor	64.00	ea	350.00 /ea	22,400
	100	Keypad	5.00	ea	350.00 /ea	1,750
	100	Push Button	1.00	ea	350.00 /ea	350
	100	Fixed Dome Camera	76.00	ea	750.00 /ea	57,000
	100	Video intercom/door release station	4.00	ea	350.00 /ea	1,400
		Alarm panic button	1.00	ea	350.00 /ea	350
		CB-Call Button	71.00	ea	350.00 /ea	24,850
		Camera 180Deg	6.00	ea	750.00 /ea	4,500
		Camera 270Deg	11.00	ea	750.00 /ea	8,250
		Camera 150Deg	1.00	ea	750.00 /ea	750
	100	Wall Speaker	4.00	ea	600.00 /ea	2,400
		Electronic Detection & Alarm			1.369/sf	229,088

167,352.00 sf

## Northbridge Elementary Schood<sup>be 106 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				Total		
ltem	Description	Takeoff Qty		Unit Cost	Amoun	
	Electronic Detection & Alarm				229,088	
	167,352.00 sf					
	ELECTRONIC SAFETY & SECURITY			1.369/sf	229,088	
					220,000	
	167,352.00 sf					
	D5038			1.369/sf	229,088	
	167,352.00 sf					
D5039						
27-0000.000	COMMUNCIATIONS					
27-2000.000	Data Communications					
	Tel / Data	0.00				
	Wire Management (Backbone cabling)	0.00	ITEM	O EO /of	00.070	
100	Wire management; vertical wire manager, cabletray, conduit and sleeves	167,352.00	sf	0.50 /sf	83,676	
100	1#1/0-1"C Backbone Cable	342.00	lf	20.00 /lf	6,840	
	Grounding Busbar (#6AWG @ each IDF & MDF	4.00	ea	3,000.00 /ea	12,000	
100	room)		ou	0,000.00 /04	12,000	
100	Tel/data outlets inc. conduit drop from cable tray					
	- WAP; Wireless access point	109.00	ea	350.00 /ea	38,150	
100	- Data Outlets, 2 ports	332.00	ea	350.00 /ea	116,200	
100	- Tel/data outlet, 2ports (1) voice & (1) data	49.00	ea	350.00 /ea	17,150	
	outlets					
	<ul> <li>Telephone data outlet, 2ports</li> </ul>	13.00	ea	350.00 /ea	4,550	
	- Wall phone outlet	91.00	ea	350.00 /ea	31,850	
	Data outlets, 1 port	23.00	ea	250.00 /ea	5,750	
100	Cabling & jacks (Category 6A, UTP, 8 conductor copper cable)					
	- 2 port	332.00	ea	400.00 /ea	132,800	
	- 1 port	223.00	ea	200.00 /ea	44,600	
	Backbone & Equipment - allow					
100	Server Room & IDF Rooms	4.00	0.1			
100	Main equipment rack w/ (1) Phone system rack, (1) Telecom rack, (2) Server racks, (1) Video Surveillance rack & (1) Public address rack	1.00	Other s			
100	- Vertical cable managers	3.00	Abov			
100	Vertical cable managers	0.00	e			
100	- Horizontal cable managers	3.00	Abov			
	- Patch Panels	3.00	e Abov			
	- Data switches -	3.00	e Abov			
100	- Power Strip	3.00	e Abov			
	Telecom rack @ each IDF room	3.00	e Abov			
100	- Vertical cable managers	8.00	e Abov			
100	- Horizontal cable managers	8.00	e Abov			
100	- Patch Panels	8.00	e Abov			
100	- Data switches	8.00	e Abov			

## Northbridge Elementary Schood<sup>be 107 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
27-2000.000	Data Communications				
	- Power Strip	8.00	Abov		
100	CATV System - allow	167,352.00	e sf	0.50 /sf	83,676
	CATV rough-in, empty raceway, Series 11 Quad				
100	Shielded Coax cable Allowance for CATV fit-out; equipment, devices,				
100	wiring & testing Speech Reinforcement system, Lightspeed	66.00	ea	2,000.00 /ea	132,000
100	Topcat System	0.00	ls		
100	Digital Antenna System	167,352.00	sf	0.45 /sf	75,308
100		1.00	Abov		
			е		
100	Remote Device	3.00	Abov e		
100	Bi-Directional Amplifiers (BDA)	2.00	Abov e		
100	Allowance for antenna	2.00	Abov		
100		2.00	e		
100	Wiring for DAS System	1.00	Abov		
(			e		
100	Digital signage system	0.00	Other s		
100	Audio visual allowances		3		
	Audio junction box	32.00	ea	150.00 /ea	4,800
100	AV	0.00	ITEM		
100	Rough-in allowance only (Approximate locations).	644.00	ea	100.00 /ea	64,400
100	Power for AV	644.00	ea	100.00 /ea	64,400
	Data Communications			5.486/sf	918,150
	167,352.00 sf				
	COMMUNCIATIONS			5.486/sf	918,150
	167,352.00 sf				
	D5039			5.486/sf	918,150
	167,352.00 sf				
D5090	Other Electrical System				
26-0000.000	ELECTRICAL				
20 0000000					
26-0000.050	Electrical - Other				
	Testing & bonding	1.00	ls	74,316.00 /ls	74,316
	Sub-trade temps/ gcs	1.00	ls	154,126.00 /ls	154,126
20	Lighting Protection/Grounding	167,352.00	sf		100,411
	Electrical - Other			1.965/sf	328,853
	167,352.00 sf				
	ELECTRICAL			1.965/sf	328,853
					,0
	167,352.00 sf				
	D5090 Other Electrical System			1.965/sf	328,853
	167,352.00 sf				

## Northbridge Elementary Schoop<sup>be 108 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				Total		
ltem	Description	Takeoff Qty		Unit Cost	Amoun	
	D5090 Other Electrical System			1.965/sf	328,853	
	167,352.00 sf					
	D50 ELECTRICAL			30.812/sf	5,156,457	
	167,352.00 sf					
	D SERVICES			93.604/sf	15,664,784	
	167,352.00 sf					
Ē	EQUIPMENT AND FURNISHINGS					
E10	EQUIPMENT					
E1010	Commercial Equipment					
11-0000.000	EQUIPMENT					
10	Residential Food Equip Appliance Allowance Loading Dock Equipment Kiln Residential Food Equip	1.00 1.00 1.00	Allow Is ea	30,000.00 /Allow 2,200.00 /ls 5,800.00 /ea 0.227/sf	30,000 2,200 5,800 38,000	
	167,352.00 sf					
11-4000.110 2	Food Service Food Service Budget - Crabtree McGrath Food Service	1.00	ls	499,435.00_/ls 2.984/sf	499,435 499,435	
	167,352.00 sf					
	EQUIPMENT			3.211/sf	537,43	
	167,352.00 sf					
	E1010 Commercial Equipment			3.211/sf	537,43	
	167,352.00 sf					
E1020	Institutional Equipment					
1-0000.000	EQUIPMENT					
1-52 <i>00.100</i> 10	Projection Screens - Projectors Projection Screens Projection Screens - Projectors	2.00	ea	6,800.00 /ea 0.081/sf	13,600 13,600	
	167,352.00 sf					
<i>11-6050.000</i> 010	<i>Stage Curtains</i> Stage Curtain 32'-6''4 x 13' h	1.00 <b>Page 54</b>	ea	28,000.00 /ea	28,000	

## Northbridge Elementary Schood <sup>be 109 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

				Total			
ltem	Description	Takeoff Qty		Unit Cost	Amoun		
	Stage Curtains			0.167/sf	28,00		
	167,352.00 sf						
11-6833.110	Athletic Equipment						
10		1,596.00	sf	20.00 /sf	31,92		
	Basketball Backboards and Hoop Floor Mounted Sleeves for Posts	6.00	ea	8,200.00 /ea	49,20		
	Scoreboards 35" x 144" by IPI Bison/Shot	1.00 1.00	ls ea	3,500.00 /ls 14,000.00 /ea	3,50 14,00		
	Clocks (SC450 by IPI Bison)		σu		,		
10	Gym Wall Padding 24" x 72" (PEP Supp. #4) Athletic Equipment	939.00	sf	///	18,78 117,40		
	167,352.00 sf						
	EQUIPMENT			0.95 /sf	159,00		
	167,352.00 sf						
12-0000.000	FURNISHINGS						
12-6600.100	Stands & Bleachers						
	Telescoping Bleachers 3 Rows Motorized	300.00	ea	190.00 /ea	57,00		
	Stands & Bleachers			0.341/sf	57,00		
	167,352.00 sf						
	FURNISHINGS			0.341/sf	57,00		
	167,352.00 sf						
	E1020 Institutional Equipment			1.291/sf	216,00		
	167,352.00 sf						
	E10 EQUIPMENT			4.502/sf	753,43		
	167,352.00 sf						
E20	FURNISHINGS						
E2010	Fixed Furnishings						
12-0000.000	FURNISHINGS						
12-2113.100	Shades - Blinds						
	SW1	12,206.00		10.00 /sf	122,06		
2	SW3 Shades - Blinds	4,998.00	sf	7.00 /sf 0.938/sf	34,98 157,04		
	167,352.00 sf			0.936/81	157,04		
12-3000.130	Casework- Misc						
	Pre-Kindergarden Class Rooms	0.00	LOC	075 00 14			
	Pre-K - Base Cabinets w/P-Lam Countertops	121.00	lf	375.00 /lf	45,37		
	Pre-K - Base Open Shelving w/P-Lam	66.00	lf	325.00 /lf	21,45		

## Northbridge Elementary Schood Pe 110 of 126/10/2019 6:05 РМ

### Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total		
ltem	Description	Takeoff Qty		Unit Cost	Amoun	
12-3000.130	Casework- Misc					
	Pre-K - Upper Cabinets	71.00	lf	250.00 /lf	17,750	
30	Pre-K - Wardrobe	39.00	ea	1,550.00 /ea	60,450	
	Kindergarden Class Rooms	0.00	LOC	,	,	
	K - Base Cabinets w/P-Lam Countertops	217.00	lf	375.00 /lf	81,375	
	K - Base Open Shelving w/P-Lam Countertops	83.00	lf	325.00 /lf	26,975	
	K - Upper Cabinets	125.00	lf	250.00 /lf	31,250	
	K - Wardrobe	63.00	ea	1,550.00 /ea	97,650	
	Class Rooms	0.00	LOC	1,000100 700	01,000	
	ClassRoom - Base Cabinets w/P-Lam Countertops	889.00	lf	375.00 /lf	333,375	
30	Class Room - Base Open Shelving w/P-Lam Countertops	784.00	lf	325.00 /lf	254,800	
30	Class Room - Upper Cabinets	462.00	lf	250.00 /lf	115,500	
	Class Room - Wardrobe	115.00	ea	1,550.00 /ea	178,250	
	Specialty Rooms	0.00	LOC	1,000100 700		
	Specialty Room - Base Cabinets w/P-Lam	612.00	lf	375.00 /lf	229,500	
00	Countertop	012.00		070.00 ///	220,000	
30	Specialty Room - Base Open Shelving w/P-Lam Countertop	193.00	lf	325.00 /lf	62,725	
30	Specialty Room - Upper Cabinets	242.00	lf	250.00 /lf	60,500	
	Specialty Room - Wardrobe	78.00	ea	1,550.00 /ea	120,900	
	Specialty Room - Wall Mounted P-lam	413.00	lf	275.00 /lf	113,575	
	Countertop	150.00				
	Specialty Room - Wall Mounted Shelving	453.00	lf	225.00 /lf	101,925	
	Specialty Room - Instrument Storage Cabinet	9.00	ea	800.00 /ea	7,200	
30	Casework Casework- Misc	1.00	ea	100,000.000 /ea 12.313/sf	2,060,52	
	167,352.00 sf					
12-4813.100	Floor Mats					
10	Walk-Off Mats/Grilles at Vestibules	1,020.00	sf	45.00 /sf	45,900	
	Floor Mats	.,		0.274/sf	45,900	
				0.27 1/01	10,000	
	167,352.00 sf					
	FURNISHINGS			13.525/sf	2,263,471	
	167,352.00 sf					
	E2010 Fixed Furnishings			13.525/sf	2,263,471	
	167,352.00 sf					
	E20 FURNISHINGS			13.525/sf	2,263,471	
	167,352.00 sf					
	E EQUIPMENT AND FURNISHINGS			18.027/sf	3,016,906	
	167,352.00 sf					
	101,002.00 31					

#### F SPECIAL CONSTRUCTION AND DEMOLITION

F20 SELECTIVE BUILDING DEMOLITION

## Northbridge Elementary School<sup>ge 111 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

#### 60% Construction Development Budget Estimate Uniformat 2019\_06\_07 Reconciled

				Total		
ltem	Description	Takeoff Qty		Unit Cost	Amount	
		· · · · · · · · · · · · · · · · · · ·				
F2010	Building Elements Demolition					
02-0000.000	EXISTING CONDITIONS & DEMO					
<i>02-4116.100</i> 110	5	71,871.00	sf	7.50 /sf	539,033	
	Building Demolition			3.221/sf	539,033	
	167,352.00 sf					
	EXISTING CONDITIONS & DEMO			3.221/sf	539,033	
	167,352.00 sf					
	F2010 Building Elements Demolition			3.221/sf	539,033	
	167,352.00 sf					
F2020	Hazardous Components Abatement					
02-0000.000	EXISTING CONDITIONS & DEMO					
<i>02-8200.110</i> 30	Asbestos Removal Asbestos Removal - Allowance 00 31 00.40	1.00	Allow	1,025,442.00 /Allow	1,025,442	
	UST Tank Soils - Contaminated Soil Allow Carried in Bid Per Spec Site Bid	300.00	Bid	150.00 /Bid	45,000	
30	UST Tank Removal - Site Bid	1.00	Bid	18,484.00 /Bid	18,484	
	Asbestos Removal 167,352.00 sf			6.507/sf	1,088,926	
	101,002.00 01					
	EXISTING CONDITIONS & DEMO			6.507/sf	1,088,926	
	167,352.00 sf					
	F2020 Hazardous Components Abatement			6.507/sf	1,088,926	
	167,352.00 sf					
	F20 SELECTIVE BUILDING DEMOLITION			9.728/sf	1,627,959	
	167,352.00 sf					
	F SPECIAL CONSTRUCTION AND DEMOLITION			9.728/sf	1,627,959	
	167,352.00 sf					
G	SITEWORK					

#### G SITEWORK

#### G10 SITE PREPARATION

G1010 Site Clearing

## Northbridge Elementary School pe 112 of 126/10/2019 6:05 РМ

Whitinsville, MA

				Total			
ltem	Description	Takeoff Qty		Unit Cost	Amount		
31-0000.000	EARTHWORK						
31-1100.100 10	Site Preparation Sitework Preparation Bid Site Preparation	1.00	Bid	1,228,394.00 /Bid 7.34 /sf	1,228,394 1,228,394		
	167,352.00 sf			1.54/51	1,220,33		
	EARTHWORK			7.34 /sf	1,228,394		
	167,352.00 sf						
	G1010 Site Clearing			7.34 /sf	1,228,394		
	167,352.00 sf						
G1070	Site Earthwork						
31-0000.000	EARTHWORK						
31-2213.110 110	<i>Site Grading</i> Sitework Earthwork Bid	1.00	Bid	833,440.00 /Bid	833,440		
	Site Grading 167,352.00 sf			4.98 /sf	833,44		
				4.00./cf	000 444		
	EARTHWORK 167,352.00 sf			4.98 /sf	833,440		
	G1070 Site Earthwork			4.98 /sf	833,440		
	167,352.00 sf				,		
	G10 SITE PREPARATION			12.32 /sf	2,061,834		
	167,352.00 sf						
G20	SITE IMPROVEMENTS						
G2030	Pedestrian Paving						
32-0000.000	EXTERIOR IMPROVEMENTS						
8 8 8	Site Concrete 4" Concrete Paving 4" Concrete Base at Pavers 4500PSI Concrete Stairs Concrete Walls Near Loading Split & Radius Concrete Walls At Seating Site Concrete	41,185.00 1,370.00 2.00 40.00 30.00	sf sf ea cy cy	9.90 /sf 6.50 /sf 8,960.00 /ea 1,200.00 /cy <u>980.00</u> /cy <u>3.059/sf</u>	407,732 8,905 17,920 48,000 29,400 511,957		
	167,352.00 sf						
32-1400.100	Site Pavers		sf				

## Northbridge Elementary Schood<sup>be 113 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				<b></b>		
Item	Description	Takeoff Qty		Total Total	Amount	
	Site Pavers			0.18 /sf	30,140	
	167,352.00 sf					
32-1713.120	Paving					
110	Tactile Warning Surfacing Paving	250.00	sf	20.00 /sf 0.03 /sf	<u>5,000</u> 5,000	
	167,352.00 sf			0.03731	3,000	
	107,002.00 31					
	EXTERIOR IMPROVEMENTS			3.269/sf	547,097	
	167,352.00 sf					
	G2030 Pedestrian Paving			3.269/sf	547,097	
	167,352.00 sf					
G2040	Site Developement					
04-0000.000	MASONRY					
04-4000.010	Masonry	2 400.00	-1	075 00 /-4	50.000	
2	Stone Masonry Seat Wall 2" Granite With St Rail Skate Deter	S 192.00	sf	275.00 /sf	52,800	
	Brick Masonry Entry Features 6'-6" Brick Pier	115.00	lf	500.00 /lf	57,500	
2	Masonry	7.00	ea	5,500.00_/ea 0.889/sf	38,500 148,800	
	167,352.00 sf					
	MASONRY			0.889/sf	148,800	
	167,352.00 sf				·	
05-0000.000	METALS					
05-5820.120	Misc Steel					
	Loading Dock Rails A7.12 ( 2 Double Rails)	20.00	lf	225.00 /lf	4,500	
	Guardrail At CIP Wall Loading Area Site Stair Rails SS	56.00	lf If	275.00 /lf	15,400	
	Bollards	28.00 20.00	Allow	225.00 /lf 1,200.00 /Allow	6,300 24,000	
	Misc Steel			0.30 /sf	50,200	
	167,352.00 sf					
	METALS			0.30 /sf	50,200	
	167,352.00 sf					
10-7000.000	EXTERIOR SPECIALITIES					
10-7500.100	Flagpoles					
130	Flagpole	1.00	ea	14,000.00 /ea	14,000	

## Northbridge Elementary Schood <sup>be 114 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amount
	Flagpoles			0.084/sf	14,000
	167,352.00 sf				
	EXTERIOR SPECIALITIES			0.084/sf	14,000
	167,352.00 sf				
12-0000.000	FURNISHINGS				
12-9300.110	Site Furnishings				
	Backless Aluminum Players Bench (21' each)	84.00	lf	400.00 /lf	33,600
120	•	16.00	ea	1,800.00 /ea	28,800
120		15.00	ea	3,500.00 /ea	52,500
	Soccer Goals	12.00	ea	1,800.00 /ea	21,600
	Bench w/ Stainless Steel Wedge Anchor Bolts Baseball/Softball Base	8.00	ea	3,400.00 /ea 250.00 /ea	27,20
	Trash Receptacle	8.00 4.00	ea ea	1,700.00 /ea	2,000 6,800
	4 Row Salvaged Bleacher	4.00	ls	1,500.00 /ls	6,000
	Pitchers Rubber	2.00	ea	250.00 /ea	500
	Basketball Goal	1.00	ea ea	8,800.00 /ea	8,800
	KOPMAN # - Playground Equipment	1.00	ea	493,000.00 /ea	493,000
120	3PK2/Playground Equipment 3-5 grades	1.00	ca		
	Site Furnishings			4.068/sf	680,80
	167,352.00 sf				
	FURNISHINGS			4.068/sf	680,800
	167,352.00 sf				
31-0000.000	EARTHWORK				
31-2316.210	Structure Excavation				
105	Sitework Improvements Earthwork Bid	1.00	Bid	1,684,347.00 /Bid	1,684,347
	Structure Excavation			10.065/sf	1,684,347
	167,352.00 sf				
	EARTHWORK			10.065/sf	1,684,347
	167,352.00 sf				
32-0000.000	EXTERIOR IMPROVEMENTS				
32-0523.130	Exterior Concrete				
	Concrete - Set For Bollards Supplied by Others	20.00	ea	500.00 /ea	10,000
110	Loading Area Separation & Radius Walls	40.00	су	1,200.00 /cy	48,000
	Concrete - Footings - Walls				
	Exterior Concrete			0.347/sf	58,000
	167,352.00 sf				
32-1823.110	Athletic Surfaces	44.040.00	<u>c</u> ť		000 47-
	Rubber Safety Surfacing	14,242.00	sf	18.50 /sf	263,477
20	Coating & Lines Play Surface Acrylic Color	5,500.00	sf	4.00 /sf	22,000
	Coating System With Line Paint Min Two Appl. Coats				
	UUAIS				

## Northbridge Elementary Schood<sup>be 115 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amoun
	Athletic Surfaces			1.706/sf	285,47
	167,352.00 sf				
32-3113.110	Ornamental Metal Fence				
102	6' HT. Ornamental Fence	414.00	lf	110.00 /lf	45,54
	4' HT. Ornamental Fence	323.00	lf	90.00 /lf	29,07
	Double Gate at Ornamental Fence 4'	2.00	ea	5,400.00 /ea	10,80
	Single Gate at Ornamental Fence 4'	1.00 1.00	ea	2,850.00 /ea	2,85
102	Single Gate at Ornamental Fence 6' Ornamental Metal Fence	1.00	ea	3,250.00 /ea 0.547/sf	3,25 91,51
	167,352.00 sf				
32-3113.200	Fence Rails				
4	4' HT. Vinyl-Clad Chain Link Fence	3,573.00	lf	55.00 /lf	196,51
4	6' HT. Vinyl-Clad Chain Link Fence	1,185.00	lf	65.00 /lf	77,02
4	6' Wood Fence 'A'	1,299.00	lf	70.00 /lf	90,93
4	8' Wood Fence 'B'	170.00	lf	125.00 /lf	21,25
4	8' Wood Fence 'B' Gates	2.00	ea	1,500.00 /ea	3,00
4	Single Gate at Vinyl-Clad Chain Link Fence 4' Double Gate at Vinyl-Clad Chain Link Fence 4'	14.00 2.00	ea ea	950.00 /ea 1,800.00 /ea	13,30 3,60
	4'HT. Plastic Chain-Link Fence Topper at	432.00	ea lf	70.00 /lf	30,24
-	Baseball Field	402.00	"	70.00 /11	00,24
4	Vinyl-Clad Chain Link Main Backstop	76.50	lf	250.00 /lf	19,12
4	Vinyl-Clad Chain Link Backstop	73.50	lf	250.00 /lf	18,37
4	24' HT. Nylon Netting (PER Supp. #3)	200.00	lf	165.00 /lf	33,00
4	Foul Pole	4.00	ea	2,500.00_/ea	10,00
	Fence Rails			3.085/sf	516,360
	167,352.00 sf				
	EXTERIOR IMPROVEMENTS			5.685/sf	951,34
	167,352.00 sf				
	G2040 Site Developement			21.09 /sf	3,529,494
	167,352.00 sf				
G2050	Landscaping				
32-0000.000	EXTERIOR IMPROVEMENTS				
32-9113.120	Soil Preparation				
10	Supply/Screen/Test/Ammend/Spread Loam	11,800.00	Bid	30.00 /Bid	354,00
10		1,400.00	Bid	55.00 /Bid	77,000
	Soil Preparation			2.575/sf	431,00
	167,352.00 sf				
32-9219.110	Lawns & Grasses				
5	Lawn Restoration	1.00	ls	15,000.00 /ls	15,00
5	Grass Native Mix	98,701.00	sf	0.30 /sf	29,610
5	Skinned Infield 4"(Adjusted PER. Supp. #3)	9,165.00	sf	0.50 /sf	4,58
5	Grass Lawn Mix Grass Infield at Softball Field (PER Supp. #3)	287,274.00 9,149.00	sf sf	0.30 /sf 0.50 /sf	86,182 4,575

## Northbridge Elementary Schood<sup>be 116 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

				Total	
ltem	Description	Takeoff Qty		Unit Cost	Amour
	Lawns & Grasses			0.836/sf	139,95
	167,352.00 sf				
32-9313.110	Groundcover Plants				
	AB Compact Bluestar (Perennials, Groundcover, Vines)	68.00	ea	25.00 /ea	1,70
	DP Hay-Scented Fern (Perennials, Groundcover, Vines)	18.00	ea	25.00 /ea	45
	LS Native Trumpet Honeyuckle (Perennials, Groundcover, Vines)	4.00	ea	45.00 /ea	18
110	Bioretention Groundcover Plants	1.00	ea	19,600.00_/ea 0.131/sf	<u> </u>
	167,352.00 sf				
32-9343.110	Trees				
	JV Eastern Red Cedar (Evergreen Trees)	30.00	ea	1,200.00 /ea	36,00
	PG White Spruce (Evergreen Trees) TG Green Giant (Evergreen Trees)	71.00 13.00	ea ea	1,700.00 /ea 1,700.00 /ea	120,70 22,10
	AR Red Maple (Deciduous Trees)	56.00	ea ea	1,200.00 /ea	67,2
	GB Maidenhair Tree (Deciduous Trees)	3.00	ea	1,100.00 /ea	3,3
120		76.00	ea	1,200.00 /ea	91.2
	AL Allegheny Serviceberry (Ornamental Trees)	8.00	ea	1,200.00 /ea	9,6
	AP Upright Green (Ornamental Trees)	2.00	ea	1,000.00 /ea	2,0
	HM Seven Son Flower (Ornamental Trees)	1.00	ea	1,150.00 /ea	1,1
	HX Witch Hazel (Ornamental Trees)	1.00	ea	1,200.00 /ea	1,2
130	MD Donald Crabapple (Ornamental Trees)	20.00	ea	1,700.00 /ea	34,0
130	MS Sugar Tyme Grabapple (Ornamental Trees)	1.00	ea	1,100.00 /ea	1,1
	Trees			2.328/sf	389,5
	167,352.00 sf				
	EXTERIOR IMPROVEMENTS			5.87 /sf	982,43
	167,352.00 sf				
	G2050 Landscaping			5.87 /sf	982,43
	167,352.00 sf				
G2080	Landscaping				
32-0000.000	EXTERIOR IMPROVEMENTS				
32-9333.110	Shrubs & Hedges				
110	AX Compact belia (Deciduous Shrubs)	68.00	ea	200.00 /ea	13,6
110	, , , , , , , , , , , , , , , , , , , ,	50.00	ea	200.00 /ea	10,00
110	, , , , , , , , , , , , , , , , , , , ,	6.00	ea	200.00 /ea	1,20
	IV Male Winterberry (Deciduous Shrubs)	2.00	ea	200.00 /ea	4(
	LO California Privet (Deciduous Shrubs) RA Gr-Low Fragrance Sumac ( Deciduous Shrubs)	78.00 162.00	ea ea	425.00 /ea 120.00 /ea	33,15 19,44
110	SP Compact Lilac (Deciduous Shrub)	11.00	ea	325.00 /ea	3,57
	VT Cranberrybush (Deciduous Shrubs)	22.00	ea	325.00 /ea	7,15
		178.00	ea	350.00 /ea	62,30
110		.,0.00	54		
110 110	JB Blue Pacific Shore Juniper (Evergreen	402.00	ea	210.00 /ea	84.4
110	JB Blue Pacific Shore Juniper (Evergreen Shrubs) JC Green Seargent Junioer	402.00	ea	210.00 /ea	84,42

## Northbridge Elementary Schood <sup>be 117 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

			Total	
ltem	Description	Takeoff Qty	Unit Cost	Amount
	Shrubs & Hedges		1.428/sf	239,015
	167,352.00 sf			
	EXTERIOR IMPROVEMENTS		1.428/sf	239,015
	167,352.00 sf			
	G2080 Landscaping		1.688/sf	239,015
	141,600.00 sf			
	G20 SITE IMPROVEMENTS		31.658/sf	5,298,035
	167,352.00 sf			
G30	SITE MECHANICAL UTILITIES			
G3010	Water Supply			
33-0000.000	UTILITIES			
33-1002.101 c 6	DI Push On Pipe Sitework Bid Water DI Push On Pipe	1.00 Bid	395,750.00_/Bid	395,750 395,750
	167,352.00 sf		2.000/01	000,700
	UTILITIES		2.365/sf	395,750
	167,352.00 sf			
	G3010 Water Supply		2.365/sf	395,750
	167,352.00 sf			
G3020	Sanitary Sewer			
33-0000.000	UTILITIES			
33-1004.901 8	SDR 35 Pipe Sitework Bid Sanitary Sewer SDR 35 Pipe	1.00 Bid	216,305.00_/Bid 1.293/sf	216,305 216,305
	167,352.00 sf			,
	UTILITIES		1.293/sf	046 005
			1.293/81	216,305
	167,352.00 sf			
	G3020 Sanitary Sewer		1.293/sf	216,305
	167,352.00 sf			

## Northbridge Elementary Schood<sup>ge 118 of 12</sup>6/10/2019 6:05 РМ Whitinsville, MA

Description	Takaaff Otu		Total	Amount
Description			Unit Cost	Amount
G3020 Sanitary Sewer			1.293/sf	216,305
167,352.00 sf				
Storm Sewer				
UTILITIES				
DI Push On Pipe Sitework Bid Storm Sewer	1.00	Bid	2,576,394.00 /Bid	2,576,394
DI Push On Pipe			15.395/sf	2,576,394
167,352.00 sf				
UTILITIES			15.395/sf	2,576,394
167,352.00 sf				
G3030 Storm Sewer			15.395/sf	2,576,394
167,352.00 sf				
G30 SITE MECHANICAL UTILITIES			19.052/sf	3,188,449
167,352.00 sf				
SITE ELECTRICAL UTILITIES				
Site Electrical Utilities				
ELECTRICAL				
Electrical Ductbanks and feeders - Incoming secondary	179.00	lf	1.014.525 /lf	181,600
feeder to MSB from utility transformer in			,	- ,
40 PVC Conduit & (1) 4" spare Schedule 40				
SIte Lights	1.00	ls	208,755.00 /ls	208,755
			2.333/sf	390,355
167,352.00 sf				
ELECTRICAL			2.333/sf	390,355
167,352.00 st				
167,352.00 st EXTERIOR IMPROVEMENTS				
	63.00	sf	25.00 /sf	1,575
	Interface of the second	G3020 Sanitary Sewer 167,352.00 sf Storm Sewer UTILITIES DI Push On Pipe 167,352.00 sf UTILITIES 167,352.00 sf G3030 Storm Sewer 167,352.00 sf G303 Storm Sewer 167,352.00 sf SITE ELECTRICAL UTILITIES Site Electrical Utilities ELECTRICAL Electrical Ductbanks and feeders - Incoming secondary econduit & (1) 4" spare Schedule 40 Conduit &	G3020 Sanitary Sewer 167,352.00 sf Storm Sewer UTILITIES DI Push On Pipe Sitework Bid Storm Sewer DI Push On Pipe 167,352.00 sf UTILITIES 167,352.00 sf G303 Storm Sewer 167,352.00 sf SITE ELECTRICAL UTILITIES Site Electrical Utilities ELECTRICAL Electrical Ductbanks and feeders - Incoming secondary Puctbanks and	Description         Takeoff Qty         Unit Cost           G3020 Sanitary Sewer         1.293/sf         1.293/sf           167,352.00 sf         1.293/sf         1.293/sf           Storm Sewer         UTILITIES         1.00 Bid         2.576,394.00 /Bid           DI Push On Pipe         1.00 Bid         2.576,394.00 /Bid         15.395/sf           167,352.00 sf         15.395/sf         15.395/sf         15.395/sf           167,352.00 sf         15.395/sf         15.395/sf         15.395/sf           167,352.00 sf         15.395/sf         15.395/sf         15.395/sf           G303 Starm Sewer         15.395/sf         15.395/sf         15.395/sf           167,352.00 sf         19.052/sf         19.052/sf         15.395/sf           STE ELECTRICAL UTILITIES         19.052/sf         19.052/sf         19.052/sf           Site Electrical Utilities         1.00 is         2.08,755.00 /is         2.33/sf           Electrical         1.00 is         2.08,755.00 /is         2.33/sf           I 07.352.00 sf         1.00 is         2.08,755.00 /is         2.33/sf           I 07.352.00 sf         1.00 is         2.08,755.00 /is         2.33/sf           Electrical         1.00 is         2.08,755.00 /is         2.3

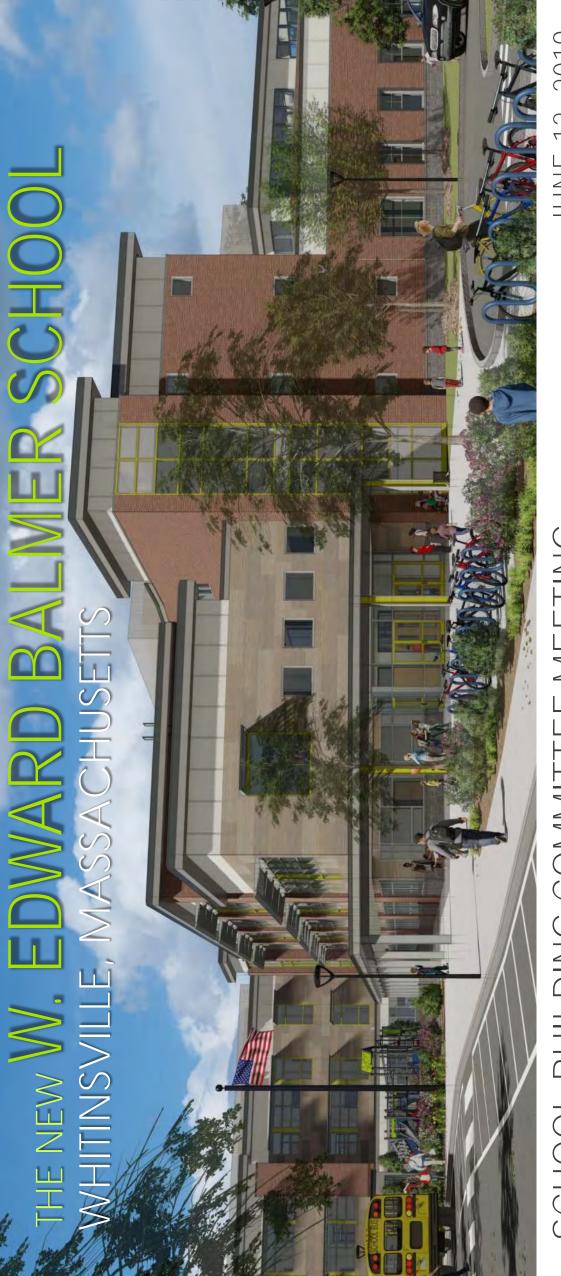
## Northbridge Elementary Schood <sup>be 119 of 126</sup>/10/2019 6:05 РМ Whitinsville, MA

Item	Description	Takeoff Qty	Total Unit Cost	Amount
nom				
	Site Concrete		0.03 /sf	5,103
	167,352.00 sf			
	EXTERIOR IMPROVEMENTS		0.03 /sf	5,103
	167,352.00 sf			
33-0000.000	UTILITIES			
33-0550.010	Pipe Trenching			
	Sitework Bid Utilities Pipe Trenching	1.00 Bid	314,158.00 /Bid 1.877/sf	<u> </u>
	167,352.00 sf			
	UTILITIES		1.877/sf	314,158
	167,352.00 sf			
	G4010 Site Electrical Utilities		4.24 /sf	709,616
	167,352.00 sf			
	G40 SITE ELECTRICAL UTILITIES		4.24 /sf	709,616
	167,352.00 sf			
	G SITEWORK		67.271/sf	11,257,934
	167,352.00 sf			
z	GENERAL			
Z10	GENERAL REQUIREMENTS			
Z1050	Temporary Facilities and Controls			
01-5000.000	TEMPORARY FACILITIES AND CONTROLS			
<i>01-5000.010</i> 200	Temp Requirements Temporary Facilities and Controls			
200		1.00 ls	1,200.00 /ls	1,200
	Field Engineering/Building Layout (Survey and Control)	1.00 ls	7,000.00 /ls	7,000
200	Temporary Toilets	27.00 mos	1,500.00 /mos	40,500
200	Temporary Egress Stairs	1.00 ls	8,000.00 /ls	8,000
	Pest Control	1.00 ls	1,500.00 /ls	1,500
	Project Signs / Wayfinding	1.00 ls	12,000.00 /ls	12,000
200 200	Field First Aid Safety / Temporary Protection	1.00 ls	276,318.00 /ls	276,318
	Fire Protection - Extinguishers (4 Re-Charges)	5.00 ls	276,318.00 /ls 500.00 /ls	276,318 2,500
	Site Security	1.00 ls	15,000.00 /ls	15,000
200		1.00 ls	25,000.00 /ls	25,000

## Northbridge Elementary School 120 of 126/10/2019 6:05 РМ

## Whitinsville, MA

				Total	
Item	Description	Takeoff Qty		Unit Cost	Amount
01-5000.010	Temp Requirements Temporary Provisions				
		1.00	le.	20,000,00 //-	20.000
	Temporary Fire Protection	1.00	IS	30,000.00 /ls	30,000
	Temporary Light and Power	4.00		05 000 00 "	05 000
	Temporary Power - Trailers	1.00	ls	25,000.00 /ls	25,000
	Temporary Water	1.00	ls	15,000.00 /ls	15,000
	Water Consumption	1.00	ls	5,000.00 /ls	5,000
	Energy Consumption (fuel)	1.00	ea	102,000.00 /ea	102,000
	Energy Consumption (power)	1.00	ea	150,000.00 /ea	150,000
200	Trash Chutes	2.00	ea	15,000.00 /ea	30,000
200	Temporary Enclosures	1.00	ls	167,352.00 /ls	167,352
200	Temporary Heat - Equipment/Distribution	6.00	mos	7,500.00 /mos	45,000
200	Temporary Heat - Equipment - Electric Hookup	1.00	ls	25,000.00 /ls	25,000
	Winter Conditions (SITE)	1.00	winter	55,000.00 /winter	55,000
	Winter Conditions (CONCRETE)	1.50	winter	55,000.00 /winter	82,500
	Dumpsters	232.00	pulls	750.00 /pulls	174,000
	Emergency Generator Fuel	1.00	ls	10,000.00 /ls	10,000
	Noise Control	1.00	ls	10,000.00 /ls	10,000
	Pest Control	1.00	ls	2,500.00 /ls	2,500
		1.00	15	2,500.00 /15	2,300
	Cleaning Progress / Final	4.00	1-	405 040 05 //-	405 000
	Progress Cleaning	1.00	ls	495,219.65 /ls	495,220
		26.00	mos	4,000.00 /mos	104,000
	Final Cleaning - 1st pass at turn over	167,352.00	sf	0.70 /sf	117,146
200	5 5				
	Layout/Staking	1.00	ls	10,000.00 /ls	10,000
200	As-Built Survey	1.00	ls	12,000.00 /ls	12,000
200	Mobilization & Building Demo				
200	Mobilize / Coordination / Survey Existing	1.00	ea	10,000.00 /ea	10,000
	Conditions				
	Temp Requirements			12.344/sf	2,065,736
	167,352.00 sf				
	TEMPORARY FACILITIES AND CONTROLS			12.344/sf	2,065,736
	167,352.00 sf				
	Z1050 Temporary Facilities and Controls			12.344/sf	2,065,736
	167,352.00 sf				
	Z10 GENERAL REQUIREMENTS			12.344/sf	2,065,736
	167,352.00 sf				
	107,332.00 51				
	Z GENERAL			12.344/sf	2,065,736
	167,352.00 sf				



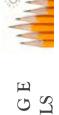
## SCHOOL BUILDING COMMITTEE MEETING



ORE & WHITTIER RCHITECTS, INC

FONTAINE BROS.,

Massachusetts School Building Authority



N O R T H B R I D G E PUBLIC SCHOOLS



Project Management

SMMA

## AGENDA

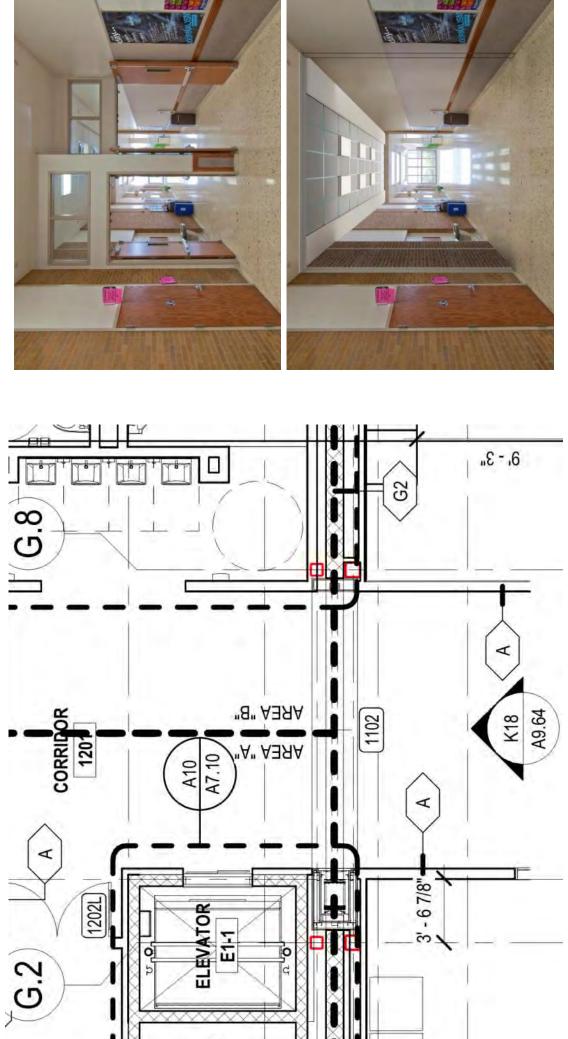
- CD Progress Report
- Follow up to VE Pricing Won-Door
- Proprietary Items no new update
- Existing Balmer Electrical Issues
- Emergency Mass Notification System
- Construction Logistics Plan Update
- 60% CD Cost Estimate Update



	5/30	Code Officials Meeting
	6/3	Electric Vehicles Telecon
PROGRESS	6/4	Teachers and Parents Information Meetings - Construction
	6/4	60% Cost Estimates submitted – Fontaine and PM&C
	9/2	Conservation Commission – closed hearing, approved project with
		conditions
	6/7	60% CD Estimate Reconciliation at SMMA
	6/8	Neighborhood Information Meeting
	6/10	Site Subcontractor De-Scoping Meetings
	6/11	Foundation coordination conference call with Fontaine
	6/12	MSBA Design Status Meeting
	Ongoi	Ongoing: Internal coordination, consultant coordination, conference
		calls. Drawing & specification progress.
	Next D	Next Deadline: 6/18/19 – 60% CD MSBA submission



## VE LIST: "WON-DOOR"



Won-Door open position

Accepted by Fire Chief and Building Inspector

Double egress fire doors in open position

## VE LIST: "WON-DOOR"

	Architectural, Interior Items:		
409	Provide swinging full-height fire doors [(2) pairs @ 4' w x 9' tall] ILO "Won-Door" sliding fire door (3 levels)	(\$66,932)	DW TO PROVIDE MAINTENANCE INFO

 $\triangleleft$ 

- Annual maintenance estimate ~\$650-\$700
- Typical repair cost service call average <\$500.
- Won-door offers maintenance agreements
- Annual testing required part of maintenance
- Life expectancy 25-30 years similar to major mechanical equipment

## "WON-DOOR" OWNER COMMENTS

Holbrook School, Holbrook, MA

Michael Bolger, Director of Facilities

- Non-fire rated horizontal door, used for security
- Same push-to-egress function, opens 4'-0" with green push par
  - Need to manually reset
- This door is wired to open when the alarm is activated, opposite of our design, but similar circuitry
- Very reliable, used 60-70 days/year, no trouble
  - Service yearly, about \$400/ year
- Advice: write master key system into Hardware spec
- Happy to have anyone come and see it

## RTHBRIDGE ELEMENTARY SCHOOL WHITINSVILLE, MASSACHUSETTS



## **NEIGHBORS INFORMATION PRESENTATION**



Massachusetts School Building Authority



Project Management

SMMA



- Site Plan Overview
- Exterior Design Images
- Site Safety
- Schedule & Logistics
- Project Phasing & Site
- Circulation Diagrams
- Project Management
- Communication Channels



## DESIGN PLAN LANDSCAPE SITE &

- Two site entrances
- Two-way circulation
- Emergency access behind school
- 246 parking spaces
- All athletic amenities reconstituted on-site - no net loss of fields





## SITE DESIGN PLAN (DETAIL)

- Separate bus and parent drop-off loops, Pre-K park-and-drop lot
- Protected pedestrian circulation,
  - minimal crossings
- Lower and Upper age-specific

playgrounds

Outdoor learning spaces



## EXTERIOR MATERIALS

APPROACH TO MAIN ENTRANCE









## WE WILL ENSURE

0 SAFETY WILL BE A TOP PRIORITY

O CONSTRUCTION WILL BE SEPARATED FROM SCHOOL ACTIVITIES

O CURRENT SCHOOL TRAFFIC WILL CONTINUE UNINTERRUPTED

O DAILY COMMUNICATION WITH THE SCHOOL AND NEIGHBORS

0 WE WILL CLOSELY MONITOR AND MINIMIZE THE IMPACT OF ALL DUST, NOISE, AND VIBRATION FOR THE

NEIGHBORS AND THE SCHOOL

0 ALL CONSTRUCTION TRAFFICAND DELIVERIES WILL BE PROHIBITED DURING SCHOOL DROP OFF AND

PICK UP HOURS

0 ALL CONSTRUCTION PARKING WILL BE ON-SITE, WITHIN THE CONSTRUCTION ZONE 0 ONLY CORI APPROVED WORKERS WILL BE ON-SITE

## CONSTRUCTION TIMELINE

## June 2019

o Mobilize

o Install erosion controls, site fence o Begin clearing and grubbing

\*\* Please relocate any items beyond property line by June 28, 2019

July 2019

o Continue earthwork, logistics work around existing school

August 2019

o Complete logistical reconfiguration, continue earth moving

September 2019 – December

o Earthwork, foundations

December 2019 – March 2020

o Foundations, steel erection

March 2020 – April 2021

o Complete Phase 1 Construction / New Building

June 2021 – December 2021

o Abate / demolish Balmer, complete Vail Restoration

Spring 2022

o Plant final fields





Town of Northbridge Northbridge Elementary School Logistics Setup 1: New Building Construction Summer 2019 - Spring 2021 LEGEND

1 - Main construction entrance

2 - 8' Construction fence w/ scrim

3 - 6' Construction fence w/ scrim on top of jersey barriers

4 - New school building footprint

5 - Connection pathway for electrical and tel/com

6 - School muster area

FONTAINE BROS., INC.

CONSTRUCTION MANAGERS GENERAL CONTRACTORS



Town of Northbridge Northbridge Elementary School Logistics Setup 2A: New School Substantial Completion & Existing School Demo Start of Summer 2021

LEGEND

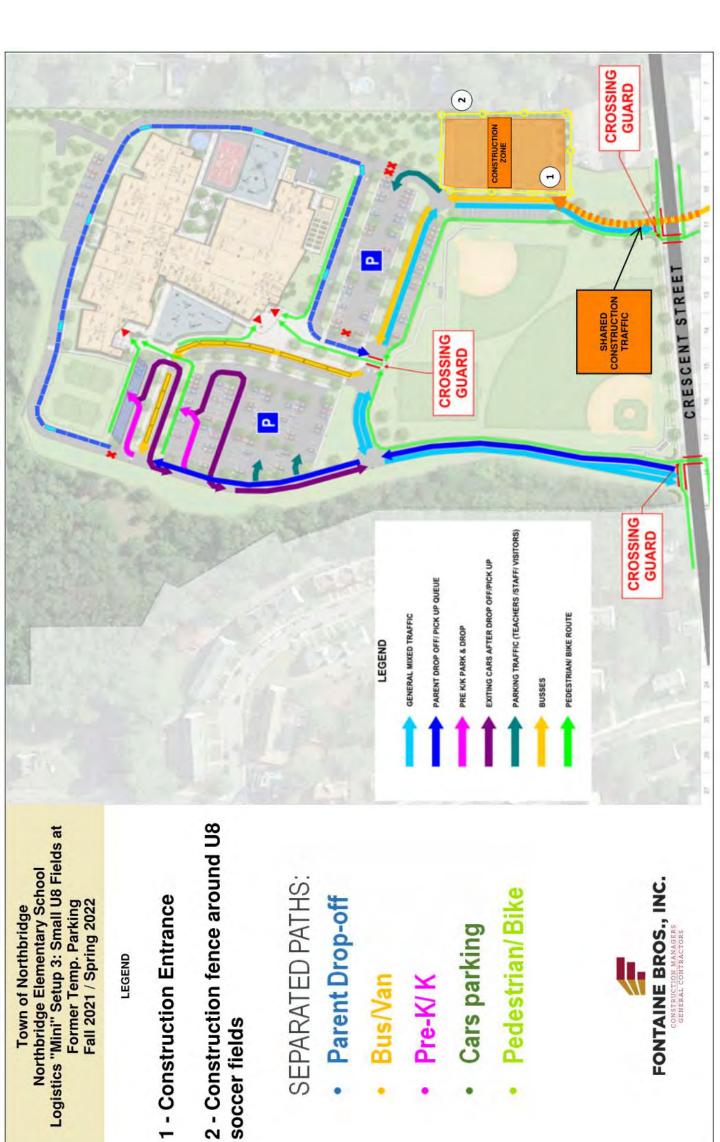
- 1 Main construction entrance
- 2 Construction fence
- 3 6' Construction fence w/ scrim on top of jersey barriers
- 4 Temporary school parking
- 5 Existing school abatement / demolition
- 6 Secondary / emergency access gate
- 7 New school building footprint

FONTAINE BROS., INC.

CONSTRUCTION MANAGERS GENERAL CONTRACTORS



**TRAFFIC (BLUE) BUS TRAFFIC** PEDESTRIAN (VELLOW) ONE WAY ONE WAY PARENT TRAFFIC (GREEN) SCHOOL TRAFFIC TWO WAY PARENT DROP OFF 4 ٩. 8 CONSTRUCTION CONSTRUCTION ONE LANE, ZONE TWO-WAY TRAFFIC 9 **TRAFFIC (BLUE) BUS DROP OFF** ONE WAY PARENT completes to provide full loop for 3 - 6' Construction fence w/ scrim 5 - West side of south parking lot 7 - New loop road is complete for 8 - New school building footprint Logistics Setup 2B: School Opening & 1 - Main construction entrance End of Summer into Early Fall 2021 6 - Existing school building is 4 - Temporary school parking Northbridge Elementary School Continuation of Site Finishes FONTAINE BROS., INC. **Town of Northbridge** on top of jersey barriers CONSTRUCTION MANAGERS GENERAL CONTRACTORS 2 - Construction fence LEGEND start of school year start of school year demolished



60%CD **ESTIMATED CONSTRUCTION** COST COMPARISON -

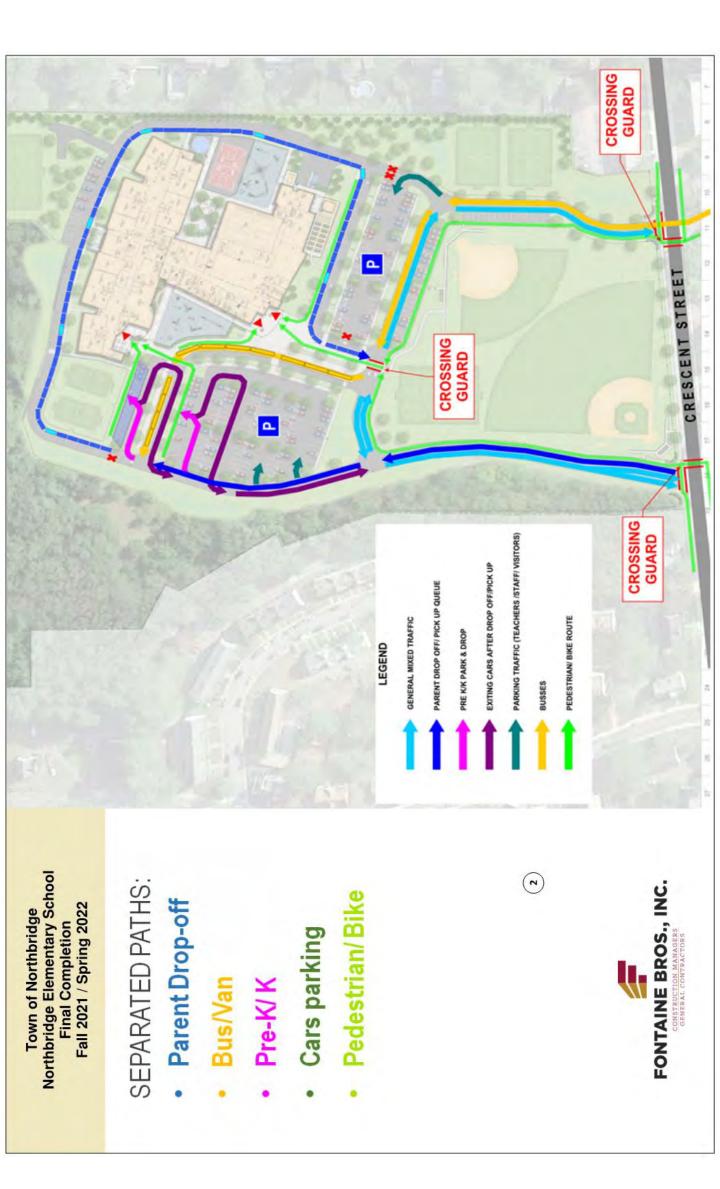
	DD PHASE	60% CD PHASE	60% CD PHASE
	FONTAINE BROS. INC. (CM)	PM&C INC. (Designer's Estimator)	FONTAINE BROS. INC. (CM)
AREA (GSF)	167,352	167,352	167,352
BUILDING	\$50,767,822	\$53,812,348	\$54,179,110
SITE WORK	\$12,554,970	\$11,054,306	\$11,257,934
MARK-UPS	\$16,157,650	\$13,848,285	\$13,680,562
Post-DD VE	(\$629,476)		
TOTAL	\$78,850,968	\$78,714,975	\$79,117,606
Unit Cost (\$/SF)	\$471	\$470	\$473



## / 60% CD **ESTIMATED CONSTRUCTION** COST COMPARISON -

60% CD PHASE FONTAINE BROS. INC. (CM)	167,352	\$54,179,110	\$11,257,934	\$13,680,562		\$79,117,606	\$473
DD PHASE FONTAINE BROS. INC. (CM)	167,352	\$50,767,822	\$12,554,970	\$16,157,650	(\$629,476)	\$78,850,968	\$471
SD PHASE FONTAINE BROS. INC. (CM)	167,352	\$47,191,265	\$10,956,995	\$21,344,403		\$79,492,663	\$475
	AREA (GSF)	BUILDING	SITE WORK & DEMO	MARK-UPS	Post-DD VE	TOTAL	Unit Cost (\$/SF)





## POINTS OF CONTACT

Fontaine Bros., Inc. – Construction Manager

Mike Cavanaugh – Lead Superintendent

<u>MCavanaugh@FontaineBros.com</u> | 413-246-4007

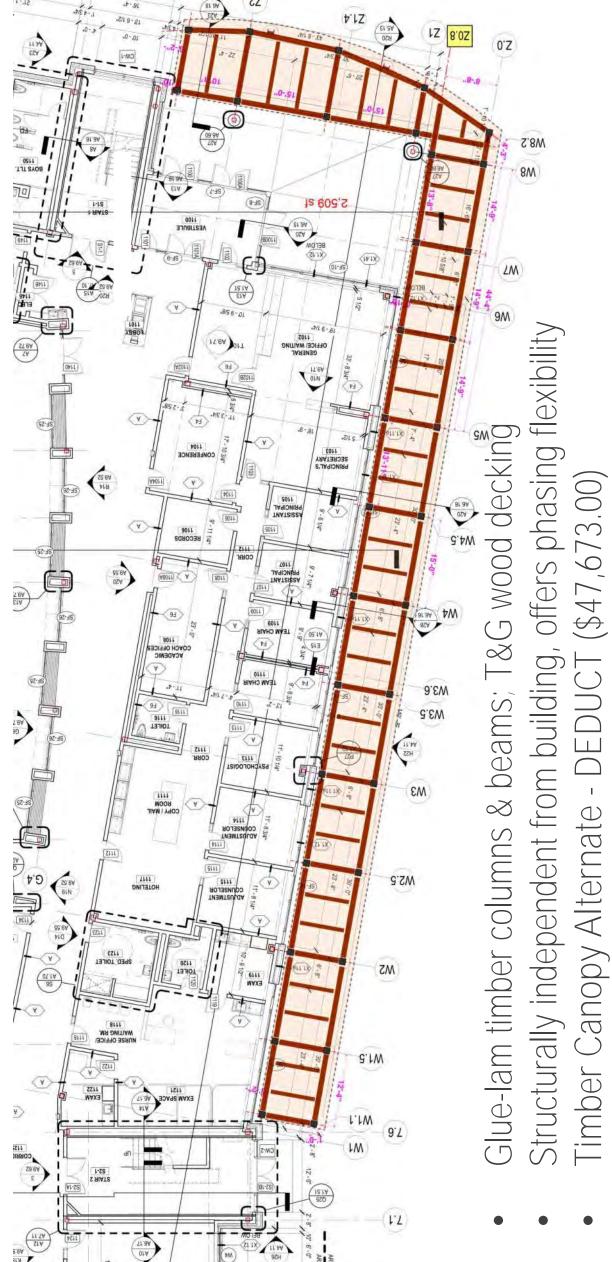
SMMA – Owner's Project Manager

Tony Dias - On Site Representative

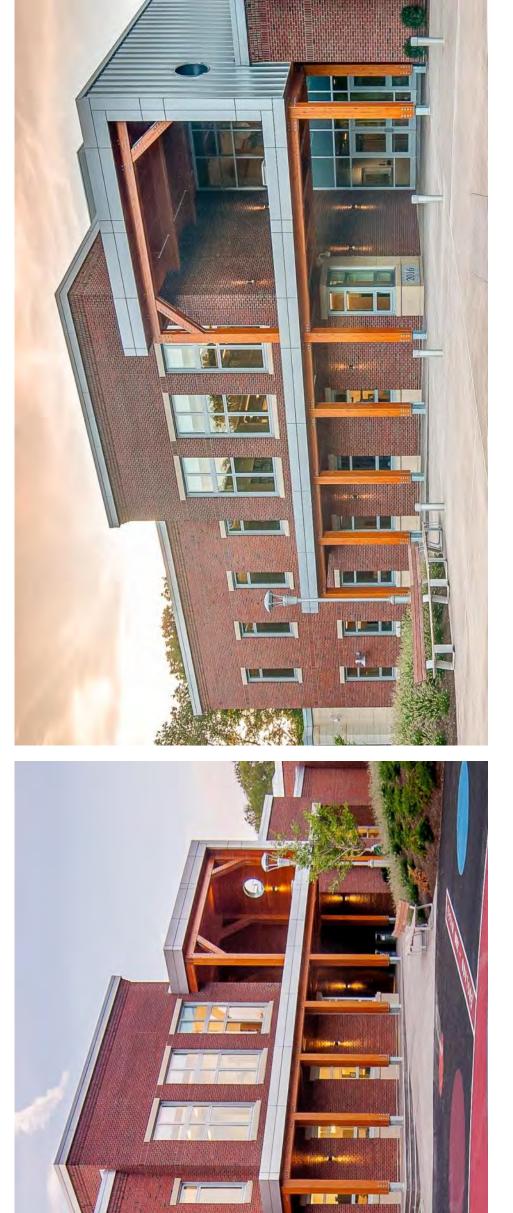
<u>adias@smma.com</u> || 508-951-2229







## ALTERNATE: WOOD CANOPY OPTION



West Parish School, Gloucester

## ALTERNATE: SODDING SOCCER FIE

- Ready in 1 growing season, BUT DEPENDS HEAVILY on season planted, weather, wetness, etc.
- Not able to guarantee success without landscape sub on board
- (2) U-6 Fields for Phase 2B play area for PK-K ADD \$10,650
- (2) U-8 Fields for speedier finish to job, save General Conditions: ADD \$22,500
  - ADD \$33,150 TOTAL

## EXISTING BALMER ELECTRICAL UPDATE TRANSFORMER FAILED ON 4/28

- Generator blew as a result
- While replacing the transformer, existing conductors were too old to be re-used
- Utility and contractor had to run temp power overhead to new poles, trees needed to be cleared. Significant funds spent.
- repaired, but confidence not high in success will require hour-long Generator has problems with radiator and thermostat – being test at full load. If it fails, the school is without backup power.
- The existing generator is a 50KW 120/208 3phase.



# EXISTING BALMER ELECTRICAL UPDATE

POSSIBLE SCENARIOS:

- PRE-PURCHASE THE NEW BUILDING GENERATOR
- costs to connect and relocate
- phasing issue need the new generator connected to the new building in advance of the existing building demo.
- generator lead time is approximately 12-15 weeks.
- A temp generator will be required for a period of time in this scenario to cover phasing. All-in ROM estimate would be:
- Install pad and provide temp wiring to existing ATS \$14,000 (12-15 week lead time)
- Rigging and coordination for relocation \$5,000
- Temp gen for 3 months \$10,700
- Total = \$29,700
- RENT A GENERATOR FOR BALMER: Recent pricing for a 60KW unit, included connecting and disconnecting the wiring -\$1400 per month, plus connect/disconnect cost, so for two years the cost would be roughly \$40,000 (not including fuel).
- INSTALL A NEW GENERATOR FOR BALMER: new exterior pad mounted generator would be approximately \$75,000 construction cost (may require design services and will also have lead time issues)
  - The generator would have some value in the used market afterwards, but cost not justified.
- PURCHASE A MOBILE GENRATOR ON A TRAILER: temp gen on a trailer, town could use afterwards in emergency scenarios. A 50KW trailer mounted generator would cost approximately \$33,000



# EMERGENCY MASS NOTIFICATION SYSTEM

WHAT IT IS:

- A Mass Notification System has been specified and is currently part of the project – cost is included in CD60 estimate ~\$22,000 for devices.
- Basically an adjunct to the Fire Alarm system
- Allows PA-like notification in the event of an emergency/ crisis situation.
- Definition:
- "The capability to provide real-time information to all building occupants or persons in the To reduce the risk of mass casualties, there must be a timely means to notify building immediate vicinity of a building during emergency situations.
  - occupants of threats and what should be done in response to those threats.
- Pre-recorded and live-voice emergency messages tell occupants what to do in the event of an emergency."



# EMERGENCY MASS NOTIFICATION SYSTEM

HOW IT WORKS:

- System has an autonomous control unit, used to monitor and control the notification network, and provides consoles for local operation.
- Using a console, personnel in the building can:
- initiate delivery of pre-recorded voice messages,
- provide live voice messages and instructions, and
- initiate visual strobe and (optional) textual message notification appliances.
- The autonomous control unit will temporarily deactivate audible fire alarm devices while delivering voice messages to ensure they are intelligible.
- Different messages can be broadcast to different areas of the building or campus based on the proximity to the emergency.



