PROJECT MINUTES

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	9/13/2017
Re:	School Building Committee Meeting	Meeting No:	10
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**
✓	James Marzec	Representative of the Board of Selectmen	**Voting Member**
	Michael LeBrasseur	Chairman, School Committee	**Voting Member**
✓	Paul Bedigian	Representative of the Building, Planning, Construction Committee	**Voting Member**
✓	Steven Gogolinski	Representative of the Finance Committee	**Voting Member**
✓	Jeffrey Tubbs	Community Member with building design and/or construction experience	**Voting Member**
✓	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
✓	Dr. Catherine Stickney	Superintendent of Schools	Non-Voting Member
✓	Steve Von Bargen	Building Maintenance Local Official	Non-Voting Member
✓	Karlene Ross	Principal, W. Edward Balmer Elementary School	Non-Voting Member
✓	Jill Healy	Principal, Northbridge Elementary School	Non-Voting Member
✓	Kathleen Perry	Director of Pupil Personnel Services	Non-Voting Member
✓	Lee Dore	D & W, Architect	
	Don Walter	D & W, Architect	
	Jason Boone	D & W, Architect	
✓	Thomas Hengelsberg	D & W, Architect	
✓	Joel Seeley	SMMA, OPM	

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Item #	Action	Discussion
10.1	Record	Call to Order, 6:30 PM, meeting opened.
10.2	Record	J. Strazzulla announced the meeting will be video and audio recorded with live broadcast and future re-broadcast.
10.3	Record	A motion was made by J. Marzec and seconded by A. Chagnon to approve the 8/29/2017 School Building Committee meeting minutes. Motion passed unanimous by those attending.
10.4	Record	Warrant No. 3 was reviewed. Committee Questions: 1. M. Walker indicated the First Night Uxbridge invoice is for $360, not $630. *J. Seeley to correct the Warrant cover sheet.* 2. S. Gogolinski disclosed his sister works for Graffiti Works. 3. A. Chagnon asked if the percentage completion reflects the stage of the Feasibility phase? *J. Seeley indicated yes, the percentage completion reflects the stage of the feasibility phase.* A motion was made by J. Marzec and seconded by A. Chagnon to approve Warrant No. 3. No discussion, motion passed unanimous.
10.5	Record	J. Seeley distributed and reviewed the Meetings and Agendas Schedule for the PSR Phase, attached.
10.6	Record	J. Seeley distributed and reviewed the Opinion Letter from Town Counsel on the Balmer and Vail Field property, attached, indicating there are no Article 97 and any other restrictions to using either for school use. Town Counsel opinion on the Riverdale Memorial Field, High School Play Fields and the Linwood Playground sites with respect to Article 97 and any other restrictions is on hold and will only be asked for if the Balmer site has a fatal flaw.
10.7	Record	Hill Street Site Follow-up 1. L. Dore indicated the town sanitary sewer main ends approximately one mile south of the Hill Street Farm site. L. Dore indicated the Hill Street Farm site is not in the wellhead protection zone. 2. Future research into the Hill Street Site is on hold and will only be asked for if the Balmer site has a fatal flaw.
10.8	Record	T. Hengelsberg distributed and reviewed the Playground and Recreation Committee 8/29/2017 meeting minutes, attached.
10.9	Record	T. Hengelsberg presented and reviewed an overview of the tours to the Park Avenue Elementary School, Gates Middle School and the Woodland Elementary School, attached. Committee Discussion: 1. J. Strazzulla thanked the tour attendees. 2. J. Healy indicated the Woodland School was a large school but did not feel large. The design for small learning communities was very good.

Item #	Action	Discussion
		3. C. Stickney indicated the Woodland School had a good storage solution for the chrome book carts. 4. C. Stickney indicated the Woodland School playground was well designed.
10.10	L. Dore	T. Hengelsberg presented and reviewed the Sustainable Design strategies for the project, including a preliminary LEED-S Version 4 scorecard. Committee Discussion: 1. P. Bedigian asked if MSBA has a minimum LEED-S-Version 4 score requirement? *T. Hengelsberg indicated the project must achieve "certified" using LEED-S-Version 4 and must exceed the level of energy efficiency required by the Massachusetts Energy Code by 20% for the additional 2% reimbursement.* 2. J. Strazzulla asked if there is a cost to achieve the additional 2% reimbursement? *L. Dore indicated yes, but since Northbridge is a Stretch Code community, the project will be required to meet the energy efficiency requirements already and many of the other points are no-to-low cost elements.* 3. C. Stickney asked if the Park Avenue and Gates Schools were LEED certified? *L. Dore indicated they were certified to LEED Gold, however he will provide direction if they were under the LEED-S-Version 4 or the LEED-S version*.
10.11	L. Dore	T. Hengelsberg presented and reviewed the US EPA Preliminary Energy Target analysis. The project is on target. Committee Discussion: 1. J. Strazzulla asked if D&W can prepare the same analysis for Balmer and NES? *L. Dore indicated yes, D&W will prepare the same analysis for Balmer and NES.*
10.12	Record	T. Hengelsberg distributed and reviewed the Educational Working Group 8/29/2017 meeting minutes, attached.
10.13	T. Hengelsberg	T. Hengelsberg distributed and reviewed the Updated Space Templates, attached, for the Grades 2-4 Option and Grades PreK-5 Option, reflecting a building size of 89,463 GSF and 172,845 GSF respectively. Committee Discussion: 1. J. Strazzulla asked if the Updated Space Templates include the Central Office space? *L. Dore indicated no, the Updated Space Templates do not include the Central Office space.* D&W to continue to refine the Space Templates with the Educational Working Group.
10.14	Record	T. Hengelsberg presented the updated Space Analysis for Central Administration, attached. The current Central Administration office has 4,718 NSF and the proposed would have 5,485 NSF, calculating to a GSF of 8,228.
10.15	C. Stickney L. Dore	T. Hengelsberg presented the Updated Middle School capacity analysis, attached and the following reconfiguration options once the 5th grade is moved to the elementary school, as follows:

Item #	Action	Discussion
		1. Case 1 – Move 5th grade to elementary school, move Central Office to Middle School – achievable within existing Middle School GSF 2. Case 2 - Move 5th grade to elementary school, keep Central Office at 87 Linwood, take1908 Wing off-line – not achievable within existing Middle School GSF Committee Discussion: 1. P. Bedigian recommends using the existing 1.70 efficiency factor in the analysis and confirm if Case 1 is still achievable. *T. Hengelsberg will confirm Case 1 with the 1.70 efficiency factor.* 2. A. Chagnon asked if the net spaces in the 1905 Wing are fully utilized, or could they be replicated in a smaller net square feet in the remaining Middle School under Case 2? *C. Stickney indicated the school administration will provide a listing of the net spaces and their minimum size. L. Dore indicated D&W will re-evaluate Case 2 with those spaces.* 3. J. Tubbs asked what is driving the desire to take the 1905 Wing off-line? *C. Stickney reviewed the facility, systems, finishes and programmatic issues of the 1905 Wing.* D&W will continue its evaluation of the Capacity findings.
10.16	Committee L. Dore	L. Dore distributed and reviewed a draft Evaluation Definitions, Rubric and Matrix, attached. Committee Discussion: 1. J. Strazzulla asked if criteria 7.4 is for the Cost to Northbridge or Total Project Cost? *L. Dore indicated it should be the Town Cost, D&W will update the form.* 2. A. Chagnon asked if criteria 7.4 is to take into account both the Grade 2-4 option Town Cost plus the future NES Repair Only work? *L. Dore indicated yes, it should be the total Town Cost, D&W will update the form.* The Committee to review the draft Evaluation Definitions, Rubric and Matrix for any other edits/changes for next Committee meeting.
10.17	T. Hengelsberg	T. Hengelsberg presented and reviewed the updated Design Options, attached, as follows: 1. Option A1 - Repair Only – Balmer Elementary School 2. Option A2 - Repair Only – Northbridge Elementary School 3. Option B1 – Grade 2-4 Renovation/Addition 4. Option B2 – Grade 2-4 New Construction - Back 5. Option B3 – Grade 2-4 New Construction - Front 6. Option C1 – Grade PK-5 Renovation/Addition – New CR Wing 7. Option C2 – Grade PK-5 Renovation/Addition – Exist CR Wing 8. Option C3 – Grade PK-5 New Construction - Back 9. Option C4 – Grade PK-5 New Construction - Side 10. Option C5 - Grade PK-5 New Construction - Front

Item #	Action	Discussion
		Committee Discussion: 1. J. Seeley distributed and reviewed comments received from J. Lundquist, attached. *A. Chagnon cautioned the Committee to refrain from providing written directives in their comments that could be interpreted as scope directives.* 2. T. Hengelsberg to flip the bus and parent drop-off locations in Options B3 and C5. 3. J. Tubbs asked if D&W can review the settlement issues in the existing building and determine if renovating the classroom wing is viable. *T. Hengelsberg to review and provide direction.* D&W will continue refining the Options.
10.18	Record	L. Dore distributed and reviewed the Construction Cost estimates, attached for each of the Options. J. Seeley distributed and reviewed the Total Project Cost, Reimbursement Rate, MSBA Grant and Cost to Town, and Tax Impact estimates for each option.
10.19	Committee	J. Seeley distributed and reviewed a draft Community Survey to assist the Committee in deciding the preferred option. The Committee to review and provide edits/comments and finalize the survey questions at the next Committee meeting.
10.20	PR subcommittee Committee T. Hengelsberg J. Seeley	The PR subcommittee update: 1. J. Strazzulla distributed and reviewed the Community Forum No. 3 Flyer, attached. 2. J. Strazzulla distributed and reviewed the PR Subcommittee 9/5/2017 and 9/12/2017 Meeting Minutes, attached. 3. J. Strazzulla distributed and reviewed the PR Subcommittee 9/11/2017 Press Release, attached. 4. J. Strazzulla provided an update on the Project Website. A link to the NPS YouTube page has been added and an Email Contact for the PR Subcommittee will be added. 5. J. Strazzulla indicated the NCTV video tour of Balmer and NES is complete and accessible on the Project Website NPS YouTube link. 6. J. Strazzulla provided a listing of upcoming meetings/events and asked for Committee Volunteers to attend: a. 9/14/2017 Balmer Curriculum Night b. 9/25/2017 Selectmen Meeting c. 9/27/2017 Finance Committee meeting d. 9/29/2017 PTA Meeting e. 10/2/2017 Historical Society *Committee volunteers to coordinate with M. LeBrasseur*. 7. J. Strazzulla to coordinate a joint meeting with the Selectmen, School Committee and Finance Committee. 8. C. Stickney to coordinate a meeting with the Council on Aging.

Item #	Action	Discussion
		9. C. Stickney asked Committee members to provide a listing of any upcoming events that can be added to the PR Calendar. *Committee members to send their events list to C. Stickney.* 10. T. Hengelsberg to develop a handout flyer for distribution at upcoming events. 11. J. Seeley to develop a FAQ for the project website. 12. J. Strazzulla to review if there is a Seniors Tax Abatement.
10.21	Record	Public Comments - None
10.22	Record	Old or New Business - None
10.23	Record	Next **SBC Meeting: September 19, 2017 at 6:30 pm** at the High School Media Center.
10.24	Record	**Community Forum No. 3: September 18, 2017 at 6:00 pm** at the Balmer Elementary School Library.
10.25	Record	A Motion was made by A. Chagnon and seconded by J. Tubbs to adjourn the meeting. No discussion, voted unanimously.

Attachments: Agenda, Meetings and Agendas Schedule for the PSR Phase, Opinion Letter from Town Counsel, Playground and Recreation Committee 8/29/2017 meeting minutes, Educational Working Group 8/29/2017 meeting minutes, Updated Space Templates, draft Evaluation Definitions, Rubric and Matrix, Construction Cost estimates, Total Project Cost, Reimbursement Rate, MSBA Grant and Cost to Town, and Tax Impact estimates, Community Forum No. 3 Flyer, PR Subcommittee 9/5/2017 and 9/12/2017 Meeting Minutes, PR Subcommittee 9/11/2017 Press Release 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

Project Management | SMMA

PROJECT MEETING SIGN-IN SHEET

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Prepared by:	Joel Seeley	Meeting Date:	9/13/2017
Re:	School Building Committee Meeting	Meeting No:	10
Location:	High School Media Center 427 Linwood Avenue, Whitinsville, MA	Time:	6:30pm
Distribution:	Attendees, (MF)		

SIGNATURE	ATTENDEES	EMAIL	AFFILIATION
	Joseph Strazzulla	jstrazzulla@nps.org	Chairman, School Building Committee
	Melissa Walker	mwalker@nps.org	School Business Manager, MCPPO
	James Marzec	james.r.marzec@gmail.com	Member, Board of Selectmen, CEO
	Michael LeBrasseur	mlebrasseur@nps.org	Chairman, School Committee
	Paul Bedigian	bedigianps@cdmsmith.com	Representative of the Building, Planning, Construction Committee
	Steven Gogolinski	steve@gogolinskicpa.com	Representative of the Finance Committee
	Jeffrey Tubbs	jtubbs@charter.net	Member of community with architecture, engineering and/or construction experience
	Peter L'Hommedieu	PLHommedieu@shawmut.com	Member of community with architecture, engineering and/or construction experience
	Jeff Lundquist	jlundquist@therichmondgroup.com	Member of community with architecture, engineering and/or construction experience
	Andrew Chagnon	achagnon@parecorp.com	Member of community with architecture, engineering and/or construction experience
	Spencer Pollock	spencerpollock22@gmail.com	Parent Representative
	Adam Gaudette	agaudette@northbridgemass.org	Town Manager
	Dr. Catherine Stickney	cstickney@nps.org	Superintendent of Schools, NPS
	Steve Von Bargen	svonbargen@nps.org	Building Maintenance Local Official
	Karlene Ross	kross@nps.org	Principal, W. Edward Balmer Elementary School
	Jill Healy	jhealy@nps.org	Principal, Northbridge Elementary School
	Kathleen Perry	kperry@nps.org	Director of Pupil Personnel Services
	Lee P. Dore	lpdore@DoreandWhittier.com	Dore & Whittier Architects
	Donald M Walter	dwalter@DoreandWhittier.com	Dore & Whittier Architects
	Jason Boone	jboone@DoreandWhittier.com	Dore & Whittier Architects
	Thomas Hengelsberg	thengelsberg@DoreandWhittier.com	Dore & Whittier Architects
	Rani Philip	rphilip@DoreandWhittier.com	Dore & Whittier Architects
	Joel Seeley	jseeley@smma.com	SMMA

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Agenda

Project:	W. Edward Balmer Elementary School Feasibility Study	Project No.:	17020
Re:	School Building Committee Meeting	Meeting Date:	9/13/2017
Meeting Location:	High School Media Center 427 Linwood Avenue, Whitinsville, MA	Meeting Time: Meeting No.	6:30 PM 10
Prepared by:	Joel G. Seeley		
Distribution:	Committee Members (MF)		

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices and Commitments
4. Review School Tour Findings
5. Discussion of Sustainable Design Goals
6. Space Template Update
7. Design Alternatives Update
8. Review Preliminary Cost Models
9. PR Subcommittee Update
10. New or Old Business
11. Committee Questions
12. Public Comments
13. Next Meeting:
    - Community Forum No. 3 – September 18, 2017 – 6:00 to 8:00 PM
    - September 19, 2017
14. Adjourn

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SCHOOL BUILDING COMMITTEE
W. EDWARD BALMER ELEMENTARY SCHOOL

All meetings held at the
High School Media Center at 6:30 PM
unless otherwise noted

MEETINGS SCHEDULE AND AGENDAS
August 29, 2017

DATE	AGENDA
Feasibility Study Phase (PSR)	
October 17, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Review Preferred Alternative Goals
	Update on Construction Alternatives
	Prepare for Community Forum
October 30, 2017	COMMUNITY FORUM NO. 4 - 6:00 to 8:00 PM - NORTHBRIDGE ELEMENTARY SCHOOL CAFETERIA
November 7, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Review Community Forum Comments
	Update on Construction Alternatives
	Structural Narrative Review
	MEP Systems Narrative Review
	Review MSBA Comments on PDP Submission
November 21, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Update on Sustainable Design Goals
	Update on Construction Alternatives
	Review Cost Models
	Prepare for Community Forum
November 27, 2017	COMMUNITY FORUM NO. 5 - 6:00 to 8:00 PM - W. EDWARD BALMER ELEMENTARY SCHOOL CAFETERIA
December 5, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Update on Construction Alternatives
	Discuss the One Preferred Option
	Review Cost Models
December 19, 2017	SCHOOL BUILDING COMMITTEE MEETING
	Decide the One Preferred Construction Alternative
	Vote to Submit Preferred Schematic Report to MSBA
January 3, 2018	*SUBMIT PREFERRED SCHEMATIC REPORT PACKAGE TO MSBA*
	ADDITIONAL MEETINGS TO BE SCHEDULED

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August 31, 2017

David J. Doneski
ddoneski@k-plaw.com

Northbridge School Building Committee
Town Hall
7 Main Street
Whitinsville, MA 01588

Re: W. Edward Balmer Elementary School, Executive Office of Energy and Environmental Affairs Article 97 Land Disposition Policy

Dear Members of the School Building Committee:

I have reviewed the identified deed for the Balmer School site – deed of Whitin Machine Works to Town of Northbridge dated April 24, 1963 and recorded with the Worcester Registry of Deeds in Book 4369, Page 342. The deed conveyed 4 parcels to the Town. Parcel 1 is land on the northwesterly side of Crescent Street and the northeasterly side of North Main Street, said to contain 9.04 acres and Parcel 2 is a parcel northwesterly of Parcel 1 said to contain 21.04 acres. The copy of the deed provided by the Assessors' office includes the annotation that the land conveyed encompasses Assessors' Map 7, parcels 138 and 141. According to the Assessors' property card record for the Balmer School property, the school site has an address of 11 Crescent Street, is shown as parcel 138 on Assessors' Map 7, and contains 30.04 acres. (Assessors' Map 7 shows parcel 138 as containing 21.04 acres, with the designation "Balmer School" and parcel 141 as containing 9.04 acres.) Accordingly, it is my understanding that the school site is Parcel 1 and Parcel 2 described in the deed. (Parcel 3 is described as land on the northerly side of Plummer Road a/k/a Church Street, between Providence Road and Quaker Street, consisting of 2.51 acres; and Parcel 4 is described as land on the westerly side of Linwood Avenue, consisting of 30,014 square feet.)

The deed to the Balmer School site includes no statement of use limitations or restriction on Town use of the land. Therefore, it is my opinion that the deed does not impose a limitation that would make the site subject to Article 97 of the Amendments to the Massachusetts Constitution, which includes a prohibition against the sale or change in use of public parkland without special approval by a two-thirds roll call vote of the Legislature.

Article 97 can apply when land acquired without any use restriction is subsequently subjected to a restriction by a document recorded with the Registry of Deeds. See Smith v. City of Westfield, 90 Mass. App. Ct. 80, 82 (2016). It is my understanding that the Town is not aware of any such recorded restriction or similar action for the Balmer School site. My on-line search of Worcester Registry of Deeds records, by street – Crescent Street, did not reveal any subsequent recorded restriction.

You have also informed me that a portion of the Balmer School site contains a recreational field area, known as Vail Field. In that regard, I reviewed certain votes taken at the March 12, 1963 Annual Town Meeting regarding the Town's acceptance of land from Whitin Machine Works – one parcel of approximately 6.22 acres "known as Vail Field . . . to be used for recreational purposes only" (Article 13) and one parcel of approximately 23.25 acres "adjacent to Vail Field . . . to be used as a school site only" (Article 16). Although the stated acreage for these two parcels is different from the parcel sizes reflected in the deed referenced above and the parcel sizes being carried on the Northbridge Assessors' records, it is my understanding that the votes refer to the parcels conveyed by that deed. The Vail Field designation for the smaller parcel appears to pre-exist any transfer to the Town from Whitin Machine Works. In any event, though, creation of a restriction for purposes of Article 97 of the Amendments to the Massachusetts Constitution requires an instrument recorded at the Registry of Deeds. See Mahajan v. Department. of Environmental Protection, 464 Mass. 604, 615 – 616 (2013), citing Selectmen of Hanson v. Lindsay, 444 Mass. 502 (2005). No such instrument has been identified. Accordingly, the existence of these votes, with no restrictive instrument recorded at the Registry of Deeds, does not alter the opinion that the Balmer School site is not subject to Article 97.

In accordance with the foregoing, and in response to your further question of August 28, 2017, it is my view that the so-called Vail Field portion of the site may be used for non-recreational purposes and that the other portions of the site may be used for recreational purposes.

Please contact me if you have any further questions on this matter.

Very truly yours,

David J. Doneski

DJD/man
cc: Board of Selectmen

589268 v.2/NBRI/0001

MEETING MINUTES

DORE & WHITTIER ARCHITECTS, INC.

DATE OF MEETING: August 29, 2017

PROJECT: W. EDWARD BALMER ES FEASIBILITY STUDY

PROJECT NO.: 17-0759

SUBJECT: PROGRAMMING SUBCOMMITTEE MEETING #2
High School Health Conference Rm. 4:30PM

ATTENDING:

Lee Dore - DWA
Tom Hengelsberg - DWA
Jason Boone - DWA

Steve Von Bargen – Dir Facilities & Ops.
Kathy Perry - Dir of Pupil Personnel Svcs
Karlene Ross – Principal, Balmer ES
Catherine Stickney – Superintendent
Melissa Walker – Business Mgr.

ITEM	MINUTES	ACTION/ WHO	STATUS / DATE
02-1	LD noted that he had received edits from previous meeting minutes from Jill and Melissa and that they had been incorporated into revised minutes that were distributed to the group.		Closed
02-2	Group discussed school schedule for "Specials". 311 minutes/day ÷ 44 Minutes/section = 7 sections per day Assume 1 prep period/per day = 6 sections per day 49 K-5 sections needed 49 sections – 24 sections/room = 2 rooms (teaching stations) needed District needs — MSBA guidelines (1030 enroll) (2) Art — (3) Art (2) Music — (3) Music (2) PE teaching stations — (2) PE (2) Technology — (0) Technology District is utilizing Technology as 'Special' now – in future, for more flexibility and to support program needs consider utilization of the 'extra' Art and Music classroom in guidelines for 1030 students as space to house the Districts maker/project room space. These spaces can be designed and outfitted to also provide further flexibility to support a science curriculum better than general classrooms. Arithmetic of specials based on current scheduling practices indicate there is only a need for 2 PE teaching stations for 1030 students. PK does not attend 'Specials'.		Closed
02-3	Group discussed that with only 2 teaching stations at PE classes will need to be conducted simultaneously. Gym will need some type of		Open

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	divider curtain to separate teaching stations. There will also be 2 PE teachers. MSBA guidelines allow for only one office space for PE teacher. DW to design this one office to house two teachers.		
02-4	Group discussed the Visioning group's desire to expand the 'Specials' to include a room to house a Maker Space. This room should be flexible enough to accommodate Maker Space, science curriculum and potentially STEAM curriculum. A flexible project lab space. It is desired to have one room serving PK-K; 1 room for grades 1-2 and a larger room central to grades 3-5. It was discussed that potentially this NSF could come from the additional Art/Music rooms that MSBA guidelines allow for. Special mention should be highlighted in ed program narrative. DW noted obtaining this NSF as part of the gross multiplier could prove difficult if NSF request not agreed to by MSBA.		Open
02-5	Library/Media Center – it was noted that currently there are 1.5 FTE librarians between BES/NES. It is desired to have a teaching area located within the traditional 'reading room/stack' area. The space summary will have a 400 nsf carve out for this teaching area. It is desirable to have satellite library space available at the Extended Learning Centers/Commons that could be utilized to bring in resource materials from the central library that are in direct support of the curriculum being taught at different times of the year. 800 nsf of space will be noted in space summary as being available to allocate to satellite library areas located in the Extended Learning Centers. The group discussed the need to see how the layout/geometry of the ELC goes during the design process. Additional library space may need to be carved out to support satellites in ELC's. If any changes occur group will be updated.		Open
02-6	Cafeteria/Dining – The District would like to break down the large traditional dining hall into a couple of distinct areas. At least two quiet zones (maybe broken out further to 4 quiet zones) that are carved out of the available dining nsf. These quiet areas would be visually connected to main dining but acoustically separate to assist with students who may need a quieter environment as well as support for a school lunch buddy program. They could also be used for adhoc meeting space. Desired to have platform in the cafeteria space. Group discussed a kidney shaped dining area directly adjacent to kitchen serving lines with a platform in the middle that potentially could be subdivided with an operable wall to two distinct areas. PK-2 dining and potentially an upper dining area for grades 3-5 in a PK-5 solution.		Open
02-7	Discussed need for SPED bathrooms in addition to a larger 'in room' bathroom for the dedicated substantially separate PK classroom. 2 120 nsf bathrooms containing an ADA toilet, sink, and large changing table are desired with one located near 1-2 suite and another by 3-5 classroom suite. A third bathroom at 130 nsf is desired to be located near, but not in the nurses suite. This third bathroom needs everything the other two have but also should include a shower.		Open
02-8	Instructional Technologist – Group decided that this staff member should be located in the 'hoteling' space discussed at the last meeting.		Open
02-9	Academic Coaches – group discussed that there will only be two staff members one for PK-2 and one for grades 3-5. These should be located near central administration.		Open
02-10	Based on feedback from staff and others it was decided that the District would need teacher planning areas to collaborate, utilize as a home base and conference space. 1 room of 500 nsf for each grade level – 7 rooms at 500 nsf each located at each SLC by grade level.		Open

02-11	It was noted that the next Programming Subcommittee meeting will be held at 4:30PM on September 13th. The previously scheduled 9/5 meeting is cancelled.		Open

The above is intended to be an accurate summation 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

Lee Dore
Principal

c: Attendees
File

MEETING MINUTES

DATE OF MEETING: August 29, 2017

PROJECT: W. EDWARD BALMER ES FEASIBILITY STUDY

PROJECT NO.: 17-0759

SUBJECT: Meeting with Northbridge Recreation Director

ATTENDING: Mike Proto – NB Rec Director
Joe Strazzulla – Chair, SBC
Tom Hengelsberg – PM, DWA
Joel Seeley – SMMA (OPM)

ITEM	MINUTES	ACTION/ WHO	STATUS / DATE
01-1	This meeting was intended to be an informal meet-and-greet with Mike to introduce him to the team, get him up to speed on the project, and open lines of communication.		Closed
01-2	Joel explained to Mike where the project is in the process, that the Balmer site had been chosen as the primary study site, and what is coming next in the process, generally.		Closed
01-3	Mike explained which Northbridge teams/programs use the Vail Field facilities: • Babe Ruth Baseball (large diamond) and Youth Baseball (small diamond)– outfield circles are tangent so they can be used simultaneously • Youth soccer in the outfield of the old baseball diamond • Youth Soccer practices on the rear field behind Balmer; Joe mentioned this can also be divided into two U-6 or U-8 fields • Sides of the back field are used for practice and drill simultaneously with the central part of that field • The eastern field behind Balmer paved playground is in such bad shape, it is only used when there are no other alternatives. In summary, all suitable grass areas of the site are used heavily, and all fields and facilities need to be reconstituted in the proposed plan, at minimum.		Closed
01-4	Tom showed Mike the five site plan options that had been prepared for the other meetings, and pointed out the major features of each. Mike noted that, for example, in Option PK-5 A, the scheme was short one U-8 play field. Tom explained that the way this option was laid out, more woods would have to be cleared in the back of the proposed building to make way for this field.	DWA to review all options going forward and confirm	Open

DORE & WHITTIER ARCHITECTS, INC.

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PROJECT MANAGERS

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		all fields are replicated.	
01-5	Tom showed the Draft soil boring plan to Mike to explain the boring program, proposed locations, working hours, expectations with treatment of fields and turf, and schedule. Mike was fine with all items, and pointed at that these fields are not used until 5:00 PM at the earliest on weekdays, so there should be no conflicts.		Closed
01-6	Meeting recessed to allow SBC meeting.		
01-7	Tom, Mike, and Joe met briefly after the SBC meeting to exchange emails, and confirm next steps. Mike stressed that field space is at a premium in town and that if net increases in field numbers can be achieved that would be preferable. Joe and Tom discussed the 8% cap on MSBA-reimbursable site costs, which was put in place so that only educationally-necessary athletic costs are included in the project, and that costs above that are fully borne by the Town.	DWA to email current Site Plan Options to Mike for further review and comment.	Open

The above is intended to be an accurate summation 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
Project Manager

c: Attendees
File

DRAFT

Evaluation Criteria Definitions & Scoring Rubric

GENERAL INSTRUCTIONS

This document is meant to be a companion to the Evaluation Matrix and to aid in the evaluation of preliminary alternatives. Its primary objective is to allow those participating in the evaluation process to compare each alternative to the others in order to identify a short list of alternatives for further development.

What follows is a series of short narratives describing the evaluation criteria and their respective scoring rubrics. Each criterion has been assigned a weight in the companion document, the Evaluation Matrix, in recognition that not all these evaluation criteria are of equal importance. Although evaluating alternatives is a subjective exercise, this document is intended to ensure that each person participating in the evaluation process is doing so with the same understanding.

We find it easiest to evaluate one criterion at a time by comparing how well each alternative performs. Examine how well each alternative performs relative to a single criterion and generate scores for each alternative on that one criterion. Move on to the next criterion and repeat.

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1. EDUCATION

1.1 Benefit to Students – This criterion evaluates how many students are positively impacted by the project. Alternatives that accommodate the 1030-student design enrollment are preferential to those that only accommodate the 510-student design enrollment.

5 points – Alternatives designed to accommodate 1030 students
4 points – Not used
3 points – Alternatives designed to accommodate 510 students
2 points – Not used
1 point – Alternatives that address capital improvements only

1.2 Space Program – Alternatives that fully accommodate the idealized Preliminary Space Summary (e.g. target sizes and counts of individual spaces) will score highest. Alternatives that only partially accommodate the idealized Preliminary Space will score lowest. Scoring rubric is a relative scale reflecting how much of the idealized space summary each alternative accommodated.

5 points – Alternatives that fully accommodate the Preliminary Space Summary
4 points –
3 points –
2 points –
1 point – Alternatives that accommodate almost none of the Preliminary Space Summary.

1.3 Spatial Adjacencies – Alternatives that fully reflect the desired spatial adjacencies (e.g. separation of public and private spaces, proximity of administration to main entry and parking, grade level teams, etc.) will score highest. Alternatives that are incapable of reflecting the desired spatial adjacencies will score lowest. Scoring rubric is a relative scale reflecting how much of the idealized space summary each alternative accommodated.

5 points – Alternatives that fully reflect the desired spatial adjacencies.
4 points –
3 points –
2 points –
1 point – Alternatives that are incapable reflecting the desired spatial adjacencies.

1.4 Impact to Students During Construction – Refers to the disruption to the student learning experience because of noise, dust, and the proximity of construction to the occupied building. Alternatives that position the new construction a greater distance from the existing building will score highest.

Alternatives that position new construction or renovation attached to or within the existing building will score the lowest.

5 points – New construction occurs as far from the existing building as possible and in the shortest timeframe.
4 points – New construction occurs near, but not attached to, the existing building as possible but still in the shortest timeframe.
3 points – New construction in the location of the existing building but without students in the existing facility and in multiple phases.
2 points – New construction occurs attached to and/or within the existing building and in multiple phases.
1 point – Construction occurs only within the existing building while students continue to occupy the building and over multiple phases.

1.5 Classroom Solar Orientation – Access to high-quality natural daylight has been demonstrated to improve student performance and to positively impact the building's energy efficiency. This criterion refers to the orientation of windows in classroom spaces. Alternatives that orient classroom windows to face North and South score highest. Alternatives that orient classroom windows to face East and West score lowest.

5 points – All classroom windows are oriented North or South.
4 points – Most classroom windows are oriented North or South.
3 points – Classroom windows are evenly distributed between a North/South orientation and an East/West orientation.
2 points – Most classroom windows are oriented East or West.
1 point – All classroom windows are oriented East or West.

2. SCALE TO NEIGHBORHOOD CONTEXT, SWING SPACE, AND PERMITTING

2.1 Building Scale to Site – Refers to number of stories and the proximity of multi-story portions to residential abutters. Alternatives that have fewer stories and are furthest from residential abutters will score highest. Alternatives that have more stories and are in close proximity to residential abutters will score lowest.

5 points – Single story alternatives
4 points – Two story alternatives where two-story portions are long distances from residential abutters.
3 points – Two story alternatives where two-story portions are in close proximity to residential abutters. Three story alternatives where three story portions are long distances from residential abutters.
2 points – Three story alternatives where three-story portions are in close proximity to residential abutters.
1 point – Three story alternatives where three-story portions are in close proximity to residential abutters and Crescent Street.

2.2 Swing Space NOT Required – Refers to the need to temporarily relocate students to modular or off-site swing space as a result of the alternatives' position on the site. Alternatives that do NOT require swing space will score the highest. Alternatives that require relocating students in modular construction on-site will score lower. Alternatives that require relocating students off-site will score lowest.

5 points – Alternatives that do NOT require swing space (i.e. students can continue to occupy the existing building during construction.)
4 points – Alternatives that require a portion of the students to be relocated to modular units on-site during construction.
3 points – Alternatives that require a most of the students to be relocated to modular units on-site during construction.
2 points – Alternatives that require a portion of the students to be relocated off-site during construction.
1 point – Alternatives that require all students to be relocated off-site during construction.

2.3 Permitting – Refers to the difficulty and time associated with the permitting process. Typically, alternatives that encroach on wetlands, property line set-backs, or other zoning restrictions require more extensive permitting. Alternatives that do not encroach on these zoning restrictions will score highest. Alternatives that not only encroach, but violate these restrictions will score lowest. Scoring rubric is a relative scale reflecting the difficulty of the permitting process.

5 points – Alternatives that conform to zoning restrictions and are easiest to permit.
4 points –
3 points –
2 points –
1 point – Alternatives that do not conform to zoning restrictions and are most difficult to permit.

3. SITE CIRCULATION

3.1 Separation of Vehicles & Pedestrians – Refers to how vehicles and pedestrians enter, circulate through, and exit the site. Alternatives that provide multiple site access points, clearly and completely separate bus vehicles, vans, parent vehicles, and pedestrians each from the others will score highest. Rubric is a relative scale from highly effective to least effective.

5 points – Clear separation of bus vehicles, parent vehicles, vans, and pedestrians.
4 points –
3 points –
2 points –

1 point – Little to no separation of bus vehicles, parent vehicles, vans, and pedestrians.

3.2 Parking – Refers to how many parking spaces are accommodated. Alternatives that achieve the desired number of parking spaces for faculty, staff, visitors, and event parking will score highest. Alternatives that cannot provide enough parking for even faculty and staff will score lowest.

5 points – Enough parking exists to accommodate the FTE faculty & staff, visitor, and event parking.
4 points – Enough parking exists to accommodate the FTE faculty & staff, and visitor parking but not event parking.
3 points – Enough parking exists to accommodate the FTE faculty & staff parking but not visitor parking.
2 points – Enough parking exists to accommodate the only a portion of the faculty & staff and some but not all visitor parking.
1 point – Enough parking exists to accommodate the only a portion of the faculty & staff but not visitor parking.

3.2 Parent Queuing Length – Refers to the length available for parent vehicles to queue on site for pick-up time. Alternatives with the longest queue lengths will score highest. Alternatives with the shortest queue lengths will score lowest. Rubric is a relative scale from longest queue to shortest queue.

5 points – Accommodates more queued parent vehicles (i.e. longest queuing length).
4 points –
3 points –
2 points –
1 point – Accommodates fewer queued parent vehicles (i.e. shortest queuing length).

4. SITE FEATURES

4.1 Outdoor Play Fields – Refers to how well each alternative accommodates open & mown play fields for educational purposes. Additional recreational sports fields would be considered a bonus. Alternatives that provide the most open, play fields will score highest. Alternatives that provide few or no play fields will score lowest.

5 points – Alternatives that provide multiple open areas for play fields plus opportunity for at least one recreational sports field.
4 **points –** Alternatives that provide more than two open areas for play fields.
3 points – Alternatives that provide two open areas for play fields
2 points – Alternatives that provide only one open play field.
1 point – Alternatives that provide no open play fields.

4.2 Hardscape Play Areas– Refers to how well each alternative accommodates hardscaped play areas for student recess. Rubric is a relative scale from most hardscaped play area to least hardscaped play area.

5 points – Alternatives that provide more square feet of hardscaped play area.
4 **points –**
3 points –
2 points –
1 point – Alternatives that provide least square feet of hardscaped play area.

4.3 Outdoor Learning Places – Refers to how well each alternative accommodates outdoor learning environments for educational purposes (e.g. arts plaza, sensory garden, amphitheater, etc). Alternatives that provide the most opportunities to accommodate outdoor learning environments will score highest. Alternatives that provide the few or no opportunities to accommodate outdoor learning environments will score lowest.

5 points – Alternatives that provide multiple areas for outdoor learning environments.
4 **points –** Alternatives that provide more than two for outdoor learning environments.
3 points – Alternatives that provide two for outdoor learning environments
2 points – Alternatives that provide only one for outdoor learning environments.
1 point – Alternatives that provide no for outdoor learning environments.

4.4 Play Structures – Refers to how well each alternative accommodates age-appropriate play structures (i.e. playground equipment). Alternatives that provide a designated play structure for each grade grouping (PK & K, 1st & 2nd, 3rd 4th & 5th) will score highest. Alternatives that provide only one structure to accommodate all age groups will score lowest.

5 points – Alternatives that provide dedicated play structures for each of the grade level groupings.
4 **points –** Not used.
3 points – Alternatives that provide two dedicated play structures, but not for all three grade level groupings.
2 points – Not used.
1 point – Alternatives that provide one play structures shared for all grade level groupings.

4.5 Location of Site Features – Refers to adjacencies of site features (pkg, playgrounds, hardscapes, outdoor learning areas) to the building. Alternatives that place most or all of the site features closest to the alternative (bldg.) will score

highest. Alternatives that place most or all of the site features furthest away from the alternative (bldg.) will score lowest.

5 points – Alternatives that place all site features directly adjacent with ease of access to the proposed building.
4 points – Not used
3 points – Alternatives that place some site features close and some site features further way from the proposed building.
2 points – Not used
1 point – Alternatives that place no site features directly to the proposed building.

5. SAFETY & SECURITY – Refers to an alternative's ability to reflect the desired architectural safety and security features. Alternatives that fully express the desired architectural safety & security features score highest. Alternatives that can not fully express the desired safety & security features score lowest.

5 points – Alternatives that fully express the desired architectural safety & security features
4 points –
3 points –
2 points –
1 point – Alternatives that can not fully express the desired safety & security features

6. TIME TO COMPLETION – Refers to the length of time needed to fully execute an alternative. Scoring rubric is a relative scale with the highest scoring alternatives having the fewest phases. Alternatives with the most phases will score the lowest.

5 points – Solution that could be executed in the fewest number of phases
4 points –
3 points –
2 points –
1 point – Solution that could be executed in the highest number of phases

7.1 Total Project Cost – Refers to the full and complete cost necessary to execute an alternative prior to MSBA contribution. These costs include both construction costs (labor, materials, overhead and profit for the GC or CM) and soft costs (professional fees, contingencies, swing space). Scoring is a simple ranking of the alternatives in order. Least expensive alternatives will score highest. Most expensive alternatives will score lowest. Since scores are only on a five point scale, alternatives in close proximity to one another should be scored identically.

5 points – Least expensive.
4 **points –**
3 points –

2 points –
1 point – Most expensive.

7.2 Total Construction Cost – Refers to construction costs only (labor, materials, overhead and profit for the GC or CM). Scoring is a simple ranking of the alternatives in order. Least expensive alternatives will score highest. Most expensive alternatives will score lowest. Since scores are only on a five point scale, alternatives in close proximity to one another should be scored identically.

5 points – Least expensive.
4 **points –**
3 points –
2 points –
1 point – Most expensive.

7.3 Swing Space Cost – Refers to portion of soft costs associated with swing space should it be necessary (e.g. modular classroom units, rental or renovation costs associated with off-site space, etc.) Scoring is a simple ranking of the alternatives in order. Alternatives with no swing space costs will score highest. Most expensive swing space alternatives will score lowest. Since scores are only on a five point scale, alternatives in close proximity to one another should be scored identically.

5 points – Least expensive.
4 **points –**
3 points –
2 points –
1 point – Most expensive.

7.4 Total Cost to Town – Refers to the full and complete cost to the Town of Northbridge necessary to execute an alternative once MSBA's contribution is taken into account. MSBA's contribution may vary by alternative depending on what may be deemed ineligible for reimbursement. Least expensive alternatives to the Town will score highest. Most expensive alternatives to the Town will score lowest. Since scores are only on a five point scale, alternatives in close proximity to one another should be scored identically.

5 points – Least expensive.
4 **points –**
3 points –
2 points –
1 point – Most expensive.

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

Revised 8-25-17

DRAFT

WEIGHT			Option A CIP Only	Option B1 510 Students Renovation/ Addition @ Balmer	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option B3 510 Students New Construction @ Balmer - FRONT OF SITE	Option C1 1030 Students Renovation/ Addition @ Balmer - DEMO EXIST ACADEMIC WING	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3 1030 Students New Construction @ Balmer REAR OF SITE	Option C4 1030 Students New Construction @ Balmer EAST EDGE OF SITE/REAR	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE	Option C6 1030 Students New Construction @ Balmer Gen. Description TBD
30	**1. Education**											
13	1.1	Provides greatest benefit to most number of students										
6	1.2	Satisfies the Space Program										
6	1.3	Satisfies the Spatial Adjacencies										
2	1.4	Impact to Students During Construction										
3	1.5	Classroom Solar Orientation										
		Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	**2. Scale to Neighborhood Context, Swing Space, and Permitting**											
3	2.1	Building Scale to Site										
5	2.2	Swing Space Not Required										
2	2.3	Permitting (time, difficulty)										
		Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	**3. Site Circulation**											
5	3.1	Separation of Cars, Buses, Vans, and Pedestrians										
3	3.3	Parking										
2	3.4	Provides Sufficient Space for Parent Queue										
		Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	**4. Site Features**											
2	4.1	Provides Outdoor Play Fields / Area										
2	4.2	Provides an Opportunity / Location for a Hardscape Play Area										
2	4.3	Provides an opportunity for outdoor learning places										
2	4.4	Provides Area for Age-appropriate Play Structure(s)										
2	4.5	Location of Site Features										
		Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Preliminary Evaluation of Alternatives - Balmer School

(1 = least successful, 5 = Most Successful)

Revised 8-25-17

DRAFT

WEIGHT		Option A CIP Only	Option B1 510 Students Renovation/ Addition @ Balmer	Option B2 510 Students New Construction @ Balmer - REAR OF SITE	Option B3 510 Students New Construction @ Balmer - FRONT OF SITE	Option C1 1030 Students Renovation/ Addition @ Balmer - DEMO EXIST ACADEMIC WING	Option C2 1030 Students Renovation/ Addition @ Balmer - KEEP & RENO ACADEMIC WING	Option C3 1030 Students New Construction @ Balmer REAR OF SITE	Option C4 1030 Students New Construction @ Balmer EAST EDGE OF SITE/REAR	Option C5 1030 Students New Construction @ Balmer FRONT OF SITE	Option C6 1030 Students New Construction @ Balmer Gen. Description TBD
10	**5. Safety & Security Features**										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	**6. Time to Completion**										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	SUB-TOTALS	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
20	**7. Cost**										
5	7.1 Total Project Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Score										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
3	7.2 Total Construction Cost	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Score										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
2	7.3 Swing Space	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Score										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
10	7.4 Total Cost to Town	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Score										
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	Weighted Score	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
100	**GRAND TOTALS**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

FINAL RANKINGS

From: Lundquist, Jeff
To: Joseph Strazzulla; Traniello, Sarah; Seeley, Joel
Subject: JDL comments - Balmer School siteplans
Date: Monday, September 4, 2017 10:38:03 PM

Joe/Sarah/Joel:

Please find below a few of my initial comments on the siteplans provided at our last meeting for your use. Please note I will not be able to make the next meeting on 9/13 due to a project commitment in Cambridge.

1) New Facility Layout comments -
    a. I believe we need to see a couple layouts of the new PK-5 facility on the Balmer site (in the back) with a simple one-way flow from Crescent to N. Main Street.
        i. The traffic of the new facility will be increased (almost double) from what we currently experience at Balmer (which is a challenge). I do not believe that Crescent/Swift Street (even with two entrances), Lake Street, and Arcade Street can remotely handle the increased two-way (and left-turning) traffic, even if multiple traffic lights are installed. Lets keep in mind that due to bussing we'll need grades K-5 to all start school at the same time, not staggered as we have it now, and it will be closely followed by the PK drop-off, which requires parking and not "drop-and-go." N. Main Street would be much better suited to handling that traffic volume than Crescent, Lake, and Arcade, and a layout with the school in the "back" of the site would provide for more parking.
        ii. As for the access to North Main Street, with our 40' right-of-way, we could install a one-way vehicular exit, with sidewalks. The sight distance at the intersection with N. Main isn't great, and will likely require a traffic light ($60k). I'd also expect we'll need a traffic light at the N. Main Street / Main Street intersection to address the increased traffic, which are typically included in a project. This one-way exit could be directionally lighted, fenced, and have appropriate cameras to address the security concern in that area that has surfaced several times, and operationally the fence could be closed/locked at the end of after-school activities.
        iii. We will definitely need the N. Main Street access for construction logistics. I'd expect that ultimately we'd require the contractors to hire a NPD detail for this entrance when deliveries are expected.
        iv. Should we have a separate drop off and entrance for the pre-k? Logistically it's different than the general drop-off, as the parents park and wait with the students until the doors are opened.
    b. I do not believe that any layout with the new facility on the current Vail field will be viable due to the need to separate construction and school traffic, and the need for appropriate laydown areas for construction. This will particularly be an issue at the end of the school/workday as the traditional construction shift will end at the same time that school will end. Contractor parking will further restrict this option. I'd expect a facility of this size should peak at around 70-80 workers, for which parking

will take up a significant amount of space (unless we get into satellite parking – which is a possibility).

   c. We should be careful about the landscaping that is shown at the public meetings and ultimately designed onto the site. Keeping in mind that a few parents have been the ones pulling weeds from the flower-gardens before school started at both schools over the last few years, we need to choose as maintenance free landscaping as we can, even if it doesn't look as nice originally (potentially including drainage swales, etc…)

2) Renovation logistics
   a. I realize the initial renovation plans are conceptual, however – the challenge we'd have in this facility is that any new classroom wings will need to be supported by appropriate mechanical infrastructure – such as new boilers, condensers/chillers (depending on the mechanical system chosen), head-end for the sprinkler system (which may need a pump and/or tank, depending on if we have adequate pressure and volume), etc. These would likely need to be addressed in the first phase of any renovation, since they'd be needed to support a new classroom wing to become "swing space". This (coupled with item b) would likely lead to us having to renovate the core over a summer to have adequate utilities for when school re-starts.
   b. From a phasing perspective, the volume and location of the asbestos abatement will be a driver of any sequence. I do not see any way that we will be able to do large-scale abatement while school is in session (I've tried it and it just doesn't work), and could be a deal-breaker if we're trying to get support for the project. This leads us to having to do abatement in the summer(s) (barely 10 weeks), followed by trying to ensure adequate finishes are in place before school re-starts. I expect that we'll find that the existing roofing mastic is asbestos containing as well, which will also be a phasing challenge, as it will also need to be addressed in the summer, along with a complete roof replacement.
   c. Would the district consider starting school for Balmer a week or two early in 2019 or 2020, to allow for extra weeks of abatement/construction in the core in the summer of 2020 or 2021? If we choose the renovation option, this is likely a decision we'd have to consider due to items a and b above.

3) Timing
   a. The only time to effectively complete a new school is in the summer (ideally early July). I've tried mid-year and vacation week move-ins, and they get done, but they typically are a disaster. Finishing the facility before July is not helpful to us, as then we just have to maintain another building. What this means is that if we pass our bond issue in the fall of 2018, and based upon the new PK-5 option (say 175,000 SF) – we'd need a 14-16 month construction duration (I've built similar size facilities in as little as 10 months, but on average they've taken 12-14 months). Since the MSBA program doesn't allow us to fast-track the project, we're likely looking at a fall 2021 opening, leading to an early 2020 construction start.

4) FF&E
   a. I'd recommend that we be cautious at the public meetings in showing elaborate furniture, keeping in mind the MSBA cap on FF&E/Technology expenditures. I'd prefer not to raise the expectation that we'll be getting something fancy, then we

find out that we can't afford it from a budgetary standpoint.

b. I also believe we should be careful on presenting the "New Albany, OH" schools as an example of what can be done at the public meetings. We used to live about 20 minutes away from New Albany, and it is one of the wealthiest communities in the country. I believe their schools were funded by one individual (who is one of the wealthiest individuals in the country) that purchased a 200 acre campus and paid for the school to have the best facilities in the country. While I wish that was our situation, reality tells me that the features shown will likely be significantly over our budget. I'd like to make sure we manage expectations on this.

5) Other comments

a. I thought the comments by the individual who spoke during the public comments portion of the meeting were interesting. I believe we should definitely consider working with the selectmen to implement his suggestion of doubling the senior tax abatement. I believe that would potentially generate considerably more support amongst a group that would typically support the schools, but may find themselves in a fixed income situation, tempering their backing.

b. I'd like to see the preliminary estimates before the 9/13 meeting, so I can review them and provide my comments to you before the meeting.

Those are my comments for now – if you have any questions, please do not hesitate to contact me.

Thank you,

Jeff Lundquist, LEED AP+
Senior Project Manager

The Richmond Group 77 Main Street Hopkinton, MA 01748
T 508.435.9700 • **F** 508.435.9718 • **C** 774.278.1592

W. Edward Balmer Elementary School Feasibility Study

School Building Committee Community Survey

As the School Building Committee prepares its recommendation for a Preferred Schematic Design to the Massachusetts School Building Authority, it is important that we hear from you.

Please complete the following short survey; the results will help guide the decision-making process as the School Building Committee continues its important work.

1. **Please select all stakeholder groups that apply to you.**
   - ❑ Student
   - ❑ Parent
   - ❑ Northbridge Resident
   - ❑ Northbridge Registered Voter
   - ❑ Northbridge Business Owner
   - ❑ Northbridge Elected Official
   - ❑ Northbridge Public Schools employee
   - ❑ Other (please specify) _____

2. **Does the current W. Edward Balmer Elementary School building hold sentimental value to you?**
   - ❑ Yes
   - ❑ No

3. **Which of the following options do you support as being the most needed?**
   - ❑ Keep a separated Grades PreK-1 school, a Grades 2-4 school and the 5th Grade in the Middle School
   - ❑ Consolidate Grades PreK-5 into one school

4. **What is the most important consideration in the decision-making process for recommending a capital school building project to the Northbridge Community for approval? Please rank the following priorities with 1 being the most important and 6 being the least important.**

	Cost – minimal impact to taxpayers
	Education – greatest benefit to all learners
	Separate Schools – maintain separate Grades PreK-1 and Grades 2-4 schools
	Consolidation – one consolidated PreK through Grade 5 elementary school
	Grade 5 – relocation from Northbridge Middle School to an elementary school setting
	Grade 5 – maintain current Grade 5 through Grade 8 at the Northbridge Middle School

5. **Is there another important consideration that is not listed above? If so, please explain.**

6. **How can the School Building Committee improve communication with the public regarding this project and state grant?**

NORTHBRIDGE PUBLIC SCHOOLS

W. EDWARD BALMER SCHOOL

Join us for our third community meeting on

September 18, 2017

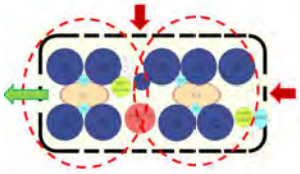
To learn about progress and share your thoughts on a new or renovated school project!

We want to hear from you!

QUICK RECAP

Catch up on what you might have missed:

- Condition of the Facilities
- Space Needs
- Educational Needs
- Educational Vision for the Future



REVIEW DESIGN ALTERNATIVES

Give feedback on ideas for:

- site and building diagrams
- site circulation: busses, cars, people, bikes
- how the design works, inside and out

SHARE YOUR THOUGHTS

Tell us what you think of the options:

- what are advantages and disadvantages
- which meet educational needs the best

LEARN ABOUT PROJECT COSTS

Evaluate the preliminary cost models:

- information on cost of each option
- projections of tax impact
- discuss State reimbursement and Town share

MEETING LOCATION:

Balmer Elementary School Cafeteria

21 Crescent Street, Whitinsville

September 18 - 6:00 – 8:00 PM

CHILD CARE WILL BE PROVIDED

Project Website: https://www.nps.org/w-edward-balmer-school-building-project Project Email: BalmerSBC@smma.com

SMMA Project Management

SPONSORED BY THE BALMER SCHOOL BUILDING COMMITTEE

SMMA – Owner's Project Manager Dore & Whittier Architects

IN PARTNERSHIP WITH THE MASSACHUSETTS SCHOOL BUILDING AUTHORITY

Northbridge School Building Committee – PR Subcommittee

September 5, 2017

Meeting called to order at 6:00pm

In attendance: Peter L'Hommedieu, Andrew Chagnon (departed 7:10pm), Mike LeBrasseur and Superintendent Catherine Stickney

Not present: Spencer Pollock, Kathy Perry

Reviewed Goal and Mission of PR Subcommittee:

Goal: Successful town acceptance of recommended Balmer School Project

Mission: Create a strategy and implement a plan to keep the voters and parents of Northbridge informed about this project, its importance to the town and children of Northbridge.

Discussed segments of community to reach:

- Parents
- Future parents – discussed the many new neighborhoods still in construction in town (including Camelot, Presidential, Highland between Benson and Fowler, Off Carpenter, Shining Rock, Off Sutton)
- Likely voters
- Seniors
- Recent graduates/voting age students
- Who can help us spread the word…boards and commissions (BOS, Fincom, Conservation, planning) – important to meet and gain input/acceptance of these committees

Discussed channels to reach community:

- Newspapers – Letters to the editor, articles, Press Releases
    - Telegram, BV Tribune, Uxbridge Times
    - Inserts (fee)
- Facebook – Agreed the SBC did not need a separate FB account, but discussed encouraging members to follow and share content from "Northbridge Public Schools" and "Mike for Schools" and other school related pages to extend the reach of information
- Twitter – Did not feel is necessary for SBC.
- YouTube – Maintain current NPS Channel to share/promote meetings and videos
- NPS.org/SBC – School Building Community direct link – continue to drive people to hear as main source in information
- Public events – Identify various events in the community at which SBC members could be present to answer questions/share information – including all school activities,

sporting events, concerts, and other community events (WCC Event, St. Patrick's Festival)
    - Action: Superintendent Stickney to provide list of all scheduled school events through October
    - Action: Once we have the list, will be asking for SBC members to volunteer to staff events
    - Question: Joel/D&W can we have some time of information Pop Up Sign made to bring to events?
- Other community organizations – Outreach to attend meetings/share updates/answer questions with these groups, such PTA, Booster clubs, sports leagues, scouts, church groups
    - Action: SBC Members identify organizations you can work with
- Message boards – Promote meetings/events through message boards at Town Hall, Middle School…Sandwich boards outside Balmer/NES/HS
- Businesses – Can we engage businesses to be a part of the process?
    - Action: SBC member suggestions/recommendations?

Discussed message development/talking points:

- Key points include:
    - MSBA "criteria" -- Project must be sustainable, educationally appropriate and financially responsible
    - The MSBA is not interested in spending tax dollars on whatever we or any other community wants to build – they have a rigorous process with checks and balances which protects taxpayer's money (at state and local levels)
    - The town has been submitting SOIs for nearly 10 years for this opportunity. We are invited in and will receive at least 57% reimbursement of eligible expenses. If this project does not pass, we will not have this opportunity again in the near future.
    - If project does not pass, we will still have two old schools in serious need of repair/renovations
    - Combining both schools provides the most "bang for our buck" and addresses two schools with serious deficiencies, avoids another major project not further down the road
    - Must discuss Tax abatement opportunities for seniors/fixed income residents to minimize their impact

Other actions/items discussed

- Action: Joel, can we have a digestible timeline of all the steps we've gone through so far to show the process/due diligence along the way
- Action: Research other major capital projects for the schools over the past 20-30 years
- Action: Status of the FAQ? How can we get this out, continue to evolve update
- Action: Mike to contact members involved in HS project for advice/input

Motion to adjourn by Peter L'Hommedieu, seconded by Mike LeBrasseur. Motion carried 3-0. Meeting adjourned at 7:30pm

TO: Director of Capital Planning

FROM: Dr. Catherine Stickney

Northbridge Public Schools

W. Edward Balmer School Project

MSBA Project ID Number: 201502140001

DATE: July 31, 2017

RE: Feasibility Study Agreement (FSA) Budget Revision Request, NUMBER: 1

Pursuant to the Feasibility Study Agreement between the TOWN OF NORTHBRIDGE of Northbridge, Massachusetts (the "District") and the MASSACHUSETTS SCHOOL BUILDING AUTHORITY (the "Authority"), the District hereby requests a revision to the Feasibility Study Budget, Exhibit A, dated March 22, 2016, for the W. Edward Balmer School Project. As required, the District has provided the information outlined in the table below to indicate the Feasibility Study Budget categories (line items) affected, the amounts needed and the reasons for the proposed revision.

The District acknowledges and agrees that it will not seek reimbursement from the Authority for any costs that exceed the already approved line item limits set forth in Exhibit A until after the Authority has accepted this Feasibility Study Budget Revision Request, and the Authority's ProPay system has been adjusted accordingly.

The District further acknowledges and agrees that in accordance with Section 3.3 of the Feasibility Study Agreement, any revisions to the Feasibility Study Budget will not result in an increase to the grant amount set forth in Section 2.1 of the Feasibility Study Agreement.

The District further acknowledges and agrees that the need for these revisions to the Feasibility Study Budget will be identified in the OPM monthly report as required pursuant to the Contract for Owner's Project Management Services between the District and the OPM.

The District further acknowledges and agrees that all of the information contained in this Feasibility Study Agreement Budget Revision Request has been reviewed and approved by the Town of Northbridge and Northbridge School Building Committee, and it further certifies and acknowledges that the funds to pay for the costs associated with these proposed revisions are available as indicated by the signatures noted below.

The Total Budget in the Current Feasibility Study Budget, Exhibit A of the FSA dated March 22, 2016 is $775,000.00.

From Class' Code	From Classification Name	To Class' Code	To Classification Name	Budget Revision Amount	Reason for transfer (Attach all supporting documentation, e.g., executed contracts, amendments and or supporting invoices for reimbursable expenses)	Amount Remaining in Other	Ineligible/Cost/Scope Items excluded from the Total Facilities Grant
00010000	OPM – Feasibility Study	00040000	Other	$75,000	Final Negotiated Fee	$75,000.00	
00020000	A&E – Feasibility Study	00030000	Environmental & Site	$100,000	Final Negotiated Fee	$75,000.00	
00040000	Other	00030000	Environmental & Site	$10,000	Final Negotiated Fee	$75,000.00	

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **James Marzec**

Title: **Chief Executive Officer**

Date: **July 31, 2017**

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **Dr. Catherine Stickney**

Title: **Superintendent of Schools**

Date: **July 31, 2017**

By signing this Total Project Budget Revision Request, I hereby certify that I have read and understand the terms of this Request and further certify that the information supplied by the District in the tables is true, accurate and complete.

By: **Michael LeBrasseur**

Title: **Chair of the School Committee**

Date: **July 31, 2017**

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

By: John J Lumpe, Jr

Title: **Director of ~~Capital Planning~~** Project mgt.

Date: 9/6/17

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Proposed Space Summary- Elementary Schools

updated 9-5-17

Grades PK - 5 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**25,060**			**0**			**66,000**			**0**		**45**	**44,750**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet			0			0	1,200	4	4,800				1,200		-	1,100 SF min - 1,300 SF max
Kindergarten w/ toilet			0			0	1,200	9	10,800				1,200	8	9,600	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-5			0			0	900	40	36,000				950	37	35,150	900 SF min - 1,000 SF max
LEVEL 1																
General Classrooms - Grade 1-6 - 2	790	1	790													
General Classrooms - Grade 1-6 - 3	793	1	793													
General Classrooms - Grade 1-6 - 4	1,126	1	1,126													
General Classrooms - Grade 1-6 - 5	942	1	942													
General Classrooms - Grade 1-6 - 6	931	1	931													
General Classrooms - Grade 1-6 - 7	1,123	1	1,123													
General Classrooms - Grade 1-6 - 8	867	1	867													
General Classrooms - Grade 1-6 - 9	931	1	931													
General Classrooms - Grade 1-6 - 10	875	1	875													
General Classrooms - Grade 1-6 - 11	1,022	1	1,022													
General Classrooms - Grade 1-6 - 12	941	1	941													
General Classrooms - Grade 1-6 - 13	905	1	905													
General Classrooms - Grade 1-6 - 14	938	1	938													
LEVEL 2																
General Classrooms - Grade 1-6 - 15	1,099	1	1,099													
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General Classrooms - Grade 1-6 - 20	909	1	909													
General Classrooms - Grade 1-6 - 21	866	1	866													
General Classrooms - Grade 1-6 - 22	891	1	891													
General Classrooms - Grade 1-6 - 23	866	1	866													
General Classrooms - Grade 1-6 - 24	882	1	882													
General Classrooms - Grade 1-6 - 25	875	1	875													
General Classrooms - Grade 1-6 - 26	1,207	1	1,207													
General Classrooms - Grade 1-6 - 27	1,079	1	1,079													
			0													
Computer Lab	540	1	540													
Teacher Planning/Collaboration							500	7	3,500							
K-5 Extended Learning Area/Commons							1,000	7	7,000							
PK Extended Learning Area/Commons							400	1	400							
Maker Space/Project Room PK-K; 1-2							1,000	2	2,000							
Project Room Storage							75	2	150							
Maker Space/Project Room 3-4-5							1,200	1	1,200							
Project Room Storage							150	1	150							

Proposed Space Summary- Elementary Schools

updated 9-5-17

Grades PK - 5 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
SPECIAL EDUCATION			**3,896**			**0**			**13,415**			**0**			**11,070**	
(List rooms of different sizes separately)																
Self-Contained Sped for PK							1,300	1	1,300							
Self-Contained SPED - toilet for PK							120	1	120							
Self-Contained SPED - toilets							120	2	240							
Self-Contained SPED - toilet/ chang/ shwr/Hoya							130	1	130							
Self-Contained SPED (Intensive) - CR1	1,018	1	1,018				1,000	4	4,000				950	7	6,650	8% of pop. in self-contained SPED
Self-Contained SPED - toilet (Girls)	108	1	108				60	0	0				60	7	420	
									0							
OT/PT Room	587	1	587						0							
OT/PT Storage	214	1	214						0							
Toilet (Boys)	157	1	157						0							
PT / Adaptive PE							500	1	500							
OT Room							200	1	200							
Self-Contained SPED CR2	581	1	581													
SPED Storage	47	1	47													
Toilet	30	1	30													
Speech Room	228	1	228													
SPED CR 3	597	1	597													
Speech Therapy	241	1	241													
Title I Office (6 teachers)							400	1	400							
Student Support Services Suite: ELL(1) /SPED (6)/ Speech (2) (PK-2)							880	1	880							
Student Support Services Suite: ELL (1) /SPED (7)/ Speech (2) (3-5)							980	1	980							
De-Escalation Rooms			0				125	3	375							
Resource Room (PK-K; 1-2; 3-4-5)			0				350	3	1,050				500	5	2,500	1/2 size Genl. Clrm.; conf room set up
Small Group Room / Reading	88	1	88				120	27	3,240				500	3	1,500	1/2 size Genl. Clrm.
ART & MUSIC			**943**			**0**			**5,150**			**0**			**7,575**	
Art Classroom - 25 seats			0				1,000	2	2,000				1,000	3	3,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln			0				150	2	300				150	3	450	
Music Classroom / Large Group - Rm 1	874	1	874				1,200	2	2,400				1,200	3	3,600	assumed schedule 2 times / week / student
Music Practice / Ensemble			0				75	2	150				75	7	525	
Music Storage	69	1	69													
Music Ensemble							300	1	300							
HEALTH & PHYSICAL EDUCATION			**4,184**			**0**			**6,300**			**0**			**6,300**	
Gymnasium	3,701	1	3,701				6,000	1	6,000				6,000	1	6,000	6000 SF Min. Size
Gym Storeroom	351	1	351				150	1	150				150	1	150	
Health Instructor's Office w/ Shower & Toilet	132	1	132				150	1	150				150	1	150	
Movement Studio/ Small Gym							3,500	0	0							
PE Storage							150	0	0							
									0							

Proposed Space Summary- Elementary Schools

updated 9-5-17

Grades PK - 5 Option

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MEDICAL CENTER			**3,246**			**0**			**5,305**			**0**			**5,305**	
Media Center / Reading Room	2,430	1	2,430				3,225	1	3,225				5,305	1	5,305	
Audio/Visual	386	1	386						0							
Project Sm Group Rm	140	1	140				120	2	240							
Library Storage	142	1	142				180	1	180							
Office/Work Room	148	1	148				140	1	140							
Teaching Area							400	1	400							
Green Screen Video Room							200	1	200							
Audio/ Edit Booth							120	1	120							
Satellite Reading Areas - in academic areas							200	4	800							
Maker Space							0	0	0							this is in academic now
DINING & FOOD SERVICE			**7,705**			**0**			11,955			**0**			**11,956**	
Cafeteria / Dining	3,377	1	3,377				7,725	1	7,725				7,725	1	7,725	2 seatings - 15SF per seat
Stage	965	1	965				1,000	1	1,000				1,000	1	1,000	
Chair / Table / Equipment Storage	287	1	287				550	1	550				543	1	543	
Kitchen	1,707	1	1,707				2,330	1	2,330				2,330	1	2,330	1600 SF for first 300 + 1 SF/student Add'l
Dishwashing	215	1	215						0							
Managers Office	92	1	92						0							
Dry/Cold Storage	546	1	546						0							
Locker/Toilet	96	1	96						0							
Storage	106	1	106						0							
Subtotal Kitchen	2,762								0							
Staff Lunch Room	314	1	314				350	1	350				358	1	358	20 SF/Occupant
MEDICAL			**698**			**0**			**810**			**0**			**810**	
Medical Suite Toilet	23	1	23				60	1	60				60	1	60	
Nurses' Office / Waiting Room	105	1	105				250	1	250				250	1	250	
Examination Room / Resting	315	1	315				100	5	500				100	5	500	
Dental Exam Rm	82	1	82													
Office	86	1	86													
Storage	87	1	87													

Proposed Space Summary- Elementary Schools

updated 9-5-17

Grades PK - 5 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
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ADMINISTRATION & GUIDANCE			**2,560**			**0**			**3,165**			**0**			**3,165**	
General Office / Waiting Room / ~~Toilet~~	555	1	555				625	1	625				665	1	665	
Toilet	29	2	58						0							
Closet	28	1	28						0							
Closet	12	1	12						0							
Teachers' Mail and Time Room			0				100	1	100				100	1	100	
Duplicating Room			0				150	1	150				150	1	150	
Records Room			0				110	1	110				110	1	110	
Principal's Office w/ Conference Area	214	1	214				275	2	550				375	1	375	
Principal's Secretary / Waiting			0				125	1	125				125	1	125	
Assistant Principal's Office	208	1	208				120	2	240				120	1	120	
Supervisory / Spare Office			0				120	0	0				120	1	120	
Conference Room	236	1	236				250	1	250				250	1	250	
Guidance Office	332	1	332				150	0	0				150	3	450	
Planning Room	233	1	233													
Guidance Storeroom			0				35	0	0				35	1	35	
SPED Coord Office	168	1	168				150	0	0							
Teachers' Work Room (Level 2)	516	1	516				665	0	0				665	1	665	
Psychologist							150	1	150							
Adjustment Counselor							150	2	300							
Hoteling Space							200	1	200							
Academic Coaches Office							120	2	240							
Team Chair Office							125	1	125							
Instructional Technologist							0	0	0							
CUSTODIAL & MAINTENANCE			**1,220**			**0**			**2,630**			**0**			**2,630**	
Custodian's Office	125	1	125				150	1	150				150	1	150	
Custodian's Workshop	178	1	178				375	1	375				375	1	375	
Custodian's Storage	68	1	68				375	1	375				375	1	375	
Recycling Room / Trash			0				400	1	400				400	1	400	
Receiving and General Supply	849	1	849				450	1	450				443	1	443	
Storeroom			0				680	1	680				687	1	687	
IT Office - Instructional Technologist							150	0	0							
Network / Telecom Room			0				200	1	200				200	1	200	

Proposed Space Summary- Elementary Schools

updated 9-5-17

Grades PK - 5 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
OTHER			**1,003**			**0**			**500**			**0**			**0**	
Book/Supply Storage (Level 1)	498	1	498													
Book/Supply Storage (Level 2)	505	1	505													
Parents/ Community Room							500	1	500							
			0													
			0													
Total Building Net Floor Area (NFA)			**50,515**			**0**			**115,230**			**0**			**93,561**	
Proposed Student Capacity / Enrollment															**1030**	PROPOSED ENROLLMENT
Total Building Gross Floor Area (GFA)[2]			71,871						***172,845***						**149,350**	
Grossing factor (GFA/NFA)			**1.42**						***1.50***			**#DIV/0!**			**1.60**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Proposed Space Summary- Elementary Schools

revision 9-5-17

Grades 2-4 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**25,060**			**0**			**28,050**			**0**		**22**	**21,900**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet			0			0							1,200		-	1,100 SF min - 1,300 SF max
Kindergarten w/ toilet			0			0							1,200	4	4,800	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-6			0			0	900	24	21,600				950	18	17,100	900 SF min - 1,000 SF max
LEVEL 1																
General Classrooms - Grade 1-6 - 2	790	1	790													
General Classrooms - Grade 1-6 - 3	793	1	793													
General Classrooms - Grade 1-6 - 4	1,126	1	1,126													
General Classrooms - Grade 1-6 - 5	942	1	942													
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General Classrooms - Grade 1-6 - 7	1,123	1	1,123													
General Classrooms - Grade 1-6 - 8	867	1	867													
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General Classrooms - Grade 1-6 - 10	875	1	875													
General Classrooms - Grade 1-6 - 11	1,022	1	1,022													
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General Classrooms - Grade 1-6 - 13	905	1	905													
General Classrooms - Grade 1-6 - 14	938	1	938													
LEVEL 2																
General Classrooms - Grade 1-6 - 15	1,099	1	1,099													
General Classrooms - Grade 1-6 - 16	1,049	1	1,049													
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General Classrooms - Grade 1-6 - 25	875	1	875													
General Classrooms - Grade 1-6 - 26	1,207	1	1,207													
General Classrooms - Grade 1-6 - 27	1,079	1	1,079													
			0													
Computer Lab	540	1	540													
Commons/extended learning area							1,200	3	3,600							
Teacher Planning Space							500	3	1,500							
Maker Space/Project Room							1,200	1	1,200							
Project Room Storage							150	1	150							

Proposed Space Summary- Elementary Schools

revision 9-5-17

Grades 2-4 Option

W. EDWARD BALMER SCHOOL

ROOM TYPE	Existing Conditions			PROPOSED: Existing to Remain/Renovated			PROPOSED: New			PROPOSED: Total			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
SPECIAL EDUCATION			**3,896**			**0**			**6,925**			**0**			**6,040**	
(List rooms of different sizes separately)																
Self-Contained SPED (Intensive) - CR1	1,018	1	1,018				1,000	2	2,000				950	4	3,800	8% of pop. in self-contained SPED
Self-Contained SPED - toilet (Girls)	108	1	108				130	1	130				60	4	240	
OT/PT Room	587	1	587				1,000	1	1,000							
OT/PT Storage	214	1	214						0							
Toilet (Boys)	157	1	157						0							
Self-Contained SPED CR2	581	1	581						0							
SPED Storage	47	1	47						0							
Toilet	30	1	30						0							
Speech Room	228	1	228						0							
SPED CR 3	597	1	597						0							
Speech Therapy	241	1	241						0							
Title I Office (3 teachers)							200	1	200							
Student Support Services Suite: ELL (1) /SPED (6)/ Speech (2) (2-4)							980	1	980							
De-Escalation Room			0				125	1	125							
Resource Room			0				350	3	1,050				500	3	1,500	1/2 size Genl. Clrm
Small Group Room / Reading	88	1	88				120	12	1,440				500	1	500	1/2 size Genl. Clrm.
ART & MUSIC			**943**			**0**			**2,575**			**0**			**2,575**	
Art Classroom - 25 seats			0				1,000	1	1,000				1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln			0				150	1	150				150	1	150	
Music Classroom / Large Group - Rm 1	874	1	874				1,200	1	1,200				1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble			0				75	3	225				75	3	225	
Music Storage	69	1	69													
HEALTH & PHYSICAL EDUCATION			**4,184**			**0**			**6,300**			**0**			**6,300**	
Gymnasium	3,701	1	3,701				6,000	1	6,000				6,000	1	6,000	6000 SF Min. Size
Gym Storeroom	351	1	351				150	1	150				150	1	150	
Health Instructor's Office w/ Shower & Toilet	132	1	132				150	1	150				150	1	150	
									0							
MEDIA CENTER			**3,246**			**0**			**2,965**			**0**			**2,965**	
Media Center / Reading Room	2,430	1	2,430				1,570	1	1,570				2,965	1	2,965	
Audio/Visual	386	1	386						0							
Project Sm Group Rm	140	1	140				120	1	120							
Library Storage	142	1	142				75	1	75							
Office/Work Room	148	1	148				120	1	120							
Teaching Area							800	1	800							
Green Screen Video Room							200	1	200							
Audio/ Edit Room							80	1	80							
Maker Space							550	0	0							

Proposed Space Summary- Elementary Schools

revision 9-5-17

Grades 2-4 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
DINING & FOOD SERVICE			**7,705**			**0**			**7,232**			**0**			**7,232**	
Cafeteria / Dining	3,377	1	3,377				3,825	1	3,825				3,825	1	3,825	2 seatings - 15SF per seat
Stage	965	1	965				1,000	1	1,000				1,000	1	1,000	
Chair / Table / Equipment Storage	287	1	287				370	1	370				370	1	370	
Kitchen	1,707	1	1,707				1,810	1	1,810				1,810	1	1,810	1600 SF for first 300 + 1 SF/student Add'l
Dishwashing	215	1	215						0							
Managers Office	92	1	92						0							
Dry/Cold Storage	546	1	546						0							
Locker/Toilet	96	1	96						0							
Storage	106	1	106						0							
Subtotal Kitchen	2,762								0							
Staff Lunch Room	314	1	314				227	1	227				228	1	228	20 SF/Occupant
MEDICAL			**698**			**0**			**610**			**0**			**610**	
Medical Suite Toilet	23	1	23				60	1	60				60	1	60	
Nurses' Office / Waiting Room	105	1	105				250	1	250				250	1	250	
Examination Room / Resting	315	1	315				100	3	300				100	3	300	
Dental Exam Rm	82	1	82													
Office	86	1	86													
Storage	87	1	87													
ADMINISTRATION & GUIDANCE			**2,560**			**0**			**2,375**			**0**			**2,375**	
General Office / Waiting Room / ~~Toilet~~	555	1	555				405	1	405				405	1	405	
Toilet	29	2	58						0							
Closet	28	1	28						0							
Closet	12	1	12						0							
Teachers' Mail and Time Room			0				100	1	100				100	1	100	
Duplicating Room			0				150	1	150				150	1	150	
Records Room			0				110	1	110				110	1	110	
Principal's Office w/ Conference Area	214	1	214				300	1	300				375	1	375	
Principal's Secretary / Waiting			0				125	1	125				125	1	125	
Assistant Principal's Office	208	1	208				120	1	120				120	0	-	
Supervisory / Spare Office			0				120	0	0				120	1	120	
Conference Room	236	1	236				250	1	250				250	1	250	Shared with SPED
Guidance Office	332	1	332				150	0	0				150	2	300	
Planning Room	233	1	233						0							
Guidance Storeroom			0				35	0	0				35	1	35	
SPED Coord Office	168	1	168				120	1	120							
Teachers' Work Room (Level 2)	516	1	516				405	0	0				405	1	405	
Psychologist							150	1	150							
Adjustment Counselor							150	1	150							
Student Support Services							120	1	120							
Academic Coaches Office							150	1	150							
Team Chair Office							125	1	125							
IT Office - Instructional Technologist							120	0	0							

Proposed Space Summary- Elementary Schools

revision 9-5-17

Grades 2-4 Option

W. EDWARD BALMER SCHOOL	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CUSTODIAL & MAINTENANCE			**1,220**			**0**			**2,110**			**0**			**2,110**	
Custodian's Office	125	1	125				150	1	150				150	1	150	
Custodian's Workshop	178	1	178				375	1	375				375	1	375	
Custodian's Storage	68	1	68				375	1	375				375	1	375	
Recycling Room / Trash			0				400	1	400				400	1	400	
Receiving and General Supply	849	1	849				270	1	270				270	1	270	
Storeroom			0				340	1	340				340	1	340	
IT Office - Instructional Technologist							120	0	0							
Network / Telecom Room			0				200	1	200				200	1	200	
OTHER			**1,003**			**0**			**500**			**0**			**0**	
Book/Supply Storage (Level 1)	498	1	498													
Book/Supply Storage (Level 2)	505	1	505													
Parents/ Community Room			0				500	1	500							
			0													
			0													
Total Building Net Floor Area (NFA)			**50,515**			**0**			**59,642**			**0**			**52,107**	
Proposed Student Capacity / Enrollment															**510**	PROPOSED ENROLLMENT
Total Building Gross Floor Area (GFA)[2]			**71,871**						***89,463***						**79,305**	
Grossing factor (GFA/NFA)			**1.42**						***1.50***			**#DIV/0!**			**1.52**	

[1] **Individual Room Net Floor Area (NFA)** Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

[2] **Total Building Gross Floor Area (GFA)** Includes the entire building gross square footage measured from the outside face of exterior walls

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: _____

Name of Principal Architect: _____

Signature of Principal Architect: _____

Date: _____

PDP Estimate

Northbridge - Balmer ES

Design Options

Northbridge, MA

Prepared for:

Dore + Whittier

September 13, 2017

Northbridge - Balmer ES
Design Options
Northbridge, MA

13-Sep-17

PDP Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	$/sf	Estimated Construction Cost
OPTION B1 - GRADE 2-4 (510 STUDENTS)				
RENOVATION TO BALMER ES		71,871	$260.00	$18,686,460
NEW ADDITION		11,292	$340.00	$3,839,280
HAZMAT REMOVALS				$1,185,000
SITEWORK				$4,803,386
SUB-TOTAL	Jan-20	83,163	$342.87	$28,514,126
ESCALATION	9.33%			$2,660,368
DESIGN AND PRICING CONTINGENCY	10%			$2,851,413
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	83,163	$409.15	$34,025,907
GENERAL CONDITIONS - 3 YRS				$2,880,000
GENERAL REQUIREMENTS	4.00%			$1,361,036
BONDS	1.00%			$340,259
INSURANCE	1.75%			$595,453
PERMIT				NIC
GMP CONTINGENCY	2%			$680,518
CM FEE	3%			$1,196,495
TOTAL OF CONSTRUCTION - OPTION B1	Jan-20	83,163	$493.97	**$41,079,668**

PM&C

Northbridge - Balmer ES
Design Options
Northbridge, MA

13-Sep-17

PDP Estimate

OPTION B2 - GRADE 2-4 (510 STUDENTS)

NEW SCHOOL		83,163	$310.00	$25,780,530
HAZMAT REMOVALS				$1,185,000
DEMOLISH EXISTING BUILDING		71,871	$6.00	$431,226
SITEWORK				$4,716,068
SUB-TOTAL	Jan-20	83,163	$386.14	$32,112,824
ESCALATION	9.33%			$2,996,126
DESIGN AND PRICING CONTINGENCY	10%			$3,211,282
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	83,163	$460.78	$38,320,232
GENERAL CONDITIONS - 2 YRS				$1,920,000
GENERAL REQUIREMENTS	4.00%			$1,532,809
BONDS	1.00%			$383,202
INSURANCE	1.75%			$670,604
PERMIT				NIC
GMP CONTINGENCY	2%			$766,405
CM FEE	3%			$1,307,798
TOTAL OF CONSTRUCTION - OPTION B2	Jan-20	83,163	$539.92	**$44,901,050**

Northbridge - Balmer ES
Design Options
Northbridge, MA

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PDP Estimate

OPTION B3 - GRADE 2-4 (510 STUDENTS)

NEW SCHOOL		83,163	$310.00	$25,780,530
HAZMAT REMOVALS				$1,185,000
DEMOLISH EXISTING BUILDING		71,871	$6.00	$431,226
SITEWORK				$4,229,462
SUB-TOTAL	Jan-20	83,163	$380.29	$31,626,218
ESCALATION	9.33%			$2,950,726
DESIGN AND PRICING CONTINGENCY	10%			$3,162,622
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	83,163	$453.80	$37,739,566
GENERAL CONDITIONS - 2 YRS				$1,920,000
GENERAL REQUIREMENTS	4.00%			$1,509,583
BONDS	1.00%			$377,396
INSURANCE	1.75%			$660,442
PERMIT				NIC
GMP CONTINGENCY	2%			$754,791
CM FEE	3%			$1,288,853
TOTAL OF CONSTRUCTION - OPTION B3	Jan-20	83,163	$532.10	**$44,250,631**

Northbridge - Balmer ES
Design Options
Northbridge, MA

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PDP Estimate

OPTION C1 - GRADE PK-5 (1030 STUDENTS)

RENOVATION TO BALMER ES		25,354	$260.00	$6,592,040
NEW ADDITIONS		147,491	$320.00	$47,197,120
HAZMAT REMOVALS				$1,185,000
DEMOLISH EXISTING BUILDING		46,517	$6.00	$279,102
SITEWORK				$4,378,665
SUB-TOTAL	Jan-20	172,845	$345.00	$59,631,927
ESCALATION	9.33%			$5,563,659
DESIGN AND PRICING CONTINGENCY	10%			$5,963,193
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	172,845	$411.69	$71,158,779
GENERAL CONDITIONS - 4 YRS				$3,840,000
GENERAL REQUIREMENTS	4.00%			$2,846,351
BONDS	1.00%			$711,588
INSURANCE	1.75%			$1,245,279
PERMIT				NIC
GMP CONTINGENCY	2%			$1,423,176
CM FEE	3%			$2,436,755
TOTAL OF CONSTRUCTION - OPTION C1	Jan-20	172,845	$484.03	**$83,661,928**

Northbridge - Balmer ES
Design Options
Northbridge, MA

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PDP Estimate

OPTION C2 - GRADE PK-5 (1030 STUDENTS)

RENOVATION TO BALMER ES		71,871	$260.00	$18,686,460
NEW ADDITIONS		100,974	$310.00	$31,301,940
HAZMAT REMOVALS				$1,185,000
SITEWORK				$5,070,742
SUB-TOTAL	Jan-20	172,845	$325.40	$56,244,142
ESCALATION	9.33%			$5,247,578
DESIGN AND PRICING CONTINGENCY	10%			$5,624,414
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	172,845	$388.30	$67,116,134
GENERAL CONDITIONS - 4 YRS				$3,840,000
GENERAL REQUIREMENTS	4.00%			$2,684,645
BONDS	1.00%			$671,161
INSURANCE	1.75%			$1,174,532
PERMIT				NIC
GMP CONTINGENCY	2%			$1,342,323
CM FEE	3%			$2,304,864
TOTAL OF CONSTRUCTION - OPTION C2	Jan-20	172,845	$457.83	**$79,133,659**

Northbridge - Balmer ES
Design Options
Northbridge, MA

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PDP Estimate

OPTION C3 - GRADE PK-5 (1030 STUDENTS)

NEW SCHOOL		172,845	$300.00	$51,853,500
DEMOLISH EXISTING BUILDING		71,871	$6.00	$431,226
HAZMAT REMOVALS				$1,185,000
SITEWORK				$4,979,056
SUB-TOTAL	Jan-20	172,845	$338.16	$58,448,782
ESCALATION	9.33%			$5,453,271
DESIGN AND PRICING CONTINGENCY	10%			$5,844,878
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	172,845	$403.52	$69,746,931
GENERAL CONDITIONS - 3 YRS				$2,880,000
GENERAL REQUIREMENTS	4.00%			$2,789,877
BONDS	1.00%			$697,469
INSURANCE	1.75%			$1,220,571
PERMIT				NIC
GMP CONTINGENCY	2%			$1,394,939
CM FEE	3%			$2,361,894
TOTAL OF CONSTRUCTION - OPTION C3	Jan-20	172,845	$469.16	**$81,091,681**

Northbridge - Balmer ES
Design Options
Northbridge, MA

13-Sep-17

PDP Estimate

OPTION C4 - GRADE PK-5 (1030 STUDENTS)

NEW SCHOOL		172,845	$330.00	$57,038,850
DEMOLISH EXISTING BUILDING		71,871	$6.00	$431,226
HAZMAT REMOVALS				$1,185,000
SITEWORK				$5,025,747
SUB-TOTAL	Jan-20	172,845	$368.43	$63,680,823
ESCALATION	9.33%			$5,941,421
DESIGN AND PRICING CONTINGENCY	10%			$6,368,082
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	172,845	$439.64	$75,990,326
GENERAL CONDITIONS - 3 YRS				$2,880,000
GENERAL REQUIREMENTS	4.00%			$3,039,613
BONDS	1.00%			$759,903
INSURANCE	1.75%			$1,329,831
PERMIT				NIC
GMP CONTINGENCY	2%			$1,519,807
CM FEE	3%			$2,565,584
TOTAL OF CONSTRUCTION - OPTION C4	Jan-20	172,845	$509.62	**$88,085,064**

Northbridge - Balmer ES
Design Options
Northbridge, MA

13-Sep-17

PDP Estimate

OPTION C5 - GRADE PK-5 (1030 STUDENTS)

NEW SCHOOL		172,845	$300.00	$51,853,500
DEMOLISH EXISTING BUILDING		71,871	$6.00	$431,226
HAZMAT REMOVALS				$1,185,000
SITEWORK				$4,567,734
SUB-TOTAL	Jan-20	172,845	$335.78	$58,037,460
ESCALATION	9.33%			$5,414,895
DESIGN AND PRICING CONTINGENCY	10%			$5,803,746
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	172,845	$400.68	$69,256,101
GENERAL CONDITIONS - 3 YRS				$2,880,000
GENERAL REQUIREMENTS	4.00%			$2,770,244
BONDS	1.00%			$692,561
INSURANCE	1.75%			$1,211,982
PERMIT				NIC
GMP CONTINGENCY	2%			$1,385,122
CM FEE	3%			$2,345,880
TOTAL OF CONSTRUCTION - OPTION C5	Jan-20	172,845	$465.98	**$80,541,890**

PDP Estimate

This PDP cost estimate was produced from outline drawings produced by Dore + Whittier dated September 9, 2017. 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 manager's overhead and profit and design contingency. Cost escalation assumes start dates indicated above.

We have assumed procurement will utilize a public bid under C.149a of the MGL with public bidding to pre-qualified Construction Managers and subcontractors, open specifications for materials and manufactures.

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

PDP Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION B1							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	2,500.00	75,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**59,267**	sy	1.00	59,267		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$490,267	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*221,000*			-		
	gravel base; 12" thick	**8,185**	cy	40.00	327,400		
	asphalt; 4" thick	**24,556**	sy	25.00	613,900		
	VGC	**13,500**	lf	38.00	513,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**571**	cy	40.00	22,840		
	color concrete; 5" thick @ outdoor learning	**13,000**	sf	9.50	123,500		
	concrete; 5" thick	**10,000**	sf	7.00	70,000		
	Playground	**11,000**	sf	18.00	198,000		
	Playground equipment	**1**	ls	100,000.00	100,000		
	Fence @ playground	**850**	lf	35.00	29,750		
	Nature trail	**10,600**	sf	5.00	53,000		
	Miscellaneous site improvements	**1**	ls	100,000.00	100,000		
	Landscaping/Fields						
	gravel base; 12" thick	**8,259**	cy	35.00	289,065		
	Vail fields; grass	**147,000**	sf	1.50	220,500		
	Football fields; grass	**76,000**	sf	1.50	114,000		
	Wetland	**43,400**	sf	4.00	173,600		
	Rain garden	**12,400**	sf	6.00	74,400		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,333**	cy	8.00	26,664		
	Seed	**180,000**	sf	0.25	45,000		
	Landscaping allowance	**1**	ls	75,000.00	75,000		
	SUBTOTAL					$3,229,119	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	50,000.00	50,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	20,000.00	20,000		
	Storm Sewer						
	Storm allowance	**221,000**	sf	4.00	884,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**300**	lf	22.00	NIC		
	New telecom service	**300**	lf	22.00	NIC		
	SUBTOTAL					$954,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$130,000	
TOTAL - SITE DEVELOPMENT OPTION B1							**$4,803,386**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION B2							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	2,500.00	75,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**60,656**	sy	1.00	60,656		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$491,656	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*186,000*			-		
	gravel base; 12" thick	**6,889**	cy	40.00	275,560		
	asphalt; 4" thick	**20,667**	sy	25.00	516,675		
	VGC	**10,500**	lf	38.00	399,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**1,104**	cy	40.00	44,160		
	color concrete; 4" thick @ outdoor learning	**16,500**	sf	9.50	156,750		
	concrete; 4" thick	**28,000**	sf	7.00	196,000		
	Playground	**11,000**	sf	18.00	198,000		
	Playground equipment	**1**	ls	100,000.00	100,000		
	Fence @ playground	**450**	lf	35.00	15,750		
	Nature trail	**10,600**	sf	5.00	53,000		
	Miscellaneous site improvements	**1**	ls	100,000.00	100,000		
	Landscaping						
	gravel base; 12" thick	**8,641**	cy	35.00	302,435		
	Vail fields; grass	**164,800**	sf	1.50	247,200		
	Football fields; grass	**68,500**	sf	1.50	102,750		
	Wetland	**51,000**	sf	4.00	204,000		
	Rain garden	**20,500**	sf	6.00	123,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,704**	cy	8.00	29,632		
	Seed	**200,000**	sf	0.25	50,000		
	Landscaping allowance	**1**	ls	75,000.00	75,000		
	SUBTOTAL					$3,248,412	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	50,000.00	50,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	30,000.00	30,000		
	Storm Sewer						
	Storm allowance	**186,000**	sf	4.00	744,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$846,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$130,000	
TOTAL - SITE DEVELOPMENT OPTION B2							**$4,716,068**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION B3							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	2,500.00	75,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**54,249**	sy	1.00	54,249		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$485,249	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*160,000*			-		
	gravel base; 12" thick	**5,926**	cy	40.00	237,040		
	asphalt; 4" thick	**17,778**	sy	25.00	444,450		
	VGC	**8,500**	lf	38.00	323,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**948**	cy	40.00	37,920		
	color concrete; 4" thick @ outdoor learning	**9,000**	sf	9.50	85,500		
	concrete; 4" thick	**29,200**	sf	7.00	204,400		
	Playground	**11,000**	sf	18.00	198,000		
	Playground equipment	**1**	ls	100,000.00	100,000		
	Fence @ playground	**250**	lf	35.00	8,750		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	100,000.00	100,000		
	Landscaping						
	gravel base; 12" thick	**8,315**	cy	35.00	291,025		
	Vail fields; grass	**160,000**	sf	1.50	240,000		
	Football fields; grass	**64,500**	sf	1.50	96,750		
	Wetland	**41,500**	sf	4.00	166,000		
	Rain garden	**15,000**	sf	6.00	90,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,241**	cy	8.00	25,928		
	Seed	**175,000**	sf	0.25	43,750		
	Landscaping allowance	**1**	ls	75,000.00	75,000		
	SUBTOTAL					$2,872,213	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	50,000.00	50,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	30,000.00	30,000		
	Storm Sewer						
	Storm allowance	**160,000**	sf	4.00	640,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$742,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$130,000	
TOTAL - SITE DEVELOPMENT OPTION B3							**$4,229,462**

PDP Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C1							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	2,500.00	75,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**69,838**	sy	1.00	69,838		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$500,838	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*166,000*			-		
	gravel base; 12" thick	**6,148**	cy	40.00	245,920		
	asphalt; 4" thick	**18,444**	sy	25.00	461,100		
	VGC	**10,500**	lf	38.00	399,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**422**	cy	40.00	16,880		
	color concrete; 4" thick @ outdoor learning	**7,000**	sf	9.50	66,500		
	concrete; 4" thick	**10,000**	sf	7.00	70,000		
	Playground	**16,000**	sf	18.00	288,000		
	Playground equipment	**1**	ls	120,000.00	120,000		
	Fence @ playground	**450**	lf	35.00	15,750		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	200,000.00	200,000		
	Landscaping						
	gravel base; 12" thick	**6,667**	cy	35.00	233,345		
	Vail fields; grass	**180,000**	sf	1.50	270,000		
	Wetland	**41,500**	sf	4.00	166,000		
	Rain garden	**15,000**	sf	6.00	90,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,704**	cy	8.00	29,632		
	Seed	**200,000**	sf	0.25	50,000		
	Landscaping allowance	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$2,926,827	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	100,000.00	100,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	5,000.00	5,000		
	Storm Sewer						
	Storm allowance	**166,000**	sf	4.00	664,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$791,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	130,000.00	130,000		
	SUBTOTAL					$160,000	
TOTAL - SITE DEVELOPMENT OPTION C1							**$4,378,665**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C2							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	5,000.00	150,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**57,304**	sy	1.00	57,304		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$563,304	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*200,000*			-		
	gravel base; 12" thick	**7,407**	cy	40.00	296,280		
	asphalt; 4" thick	**22,222**	sy	25.00	555,550		
	VGC	**12,600**	lf	38.00	478,800		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**948**	cy	40.00	37,920		
	color concrete; 4" thick @ outdoor learning	**9,000**	sf	9.50	85,500		
	concrete; 4" thick	**29,200**	sf	7.00	204,400		
	Playground	**16,000**	sf	18.00	288,000		
	Playground equipment	**1**	ls	120,000.00	120,000		
	Fence @ playground	**800**	lf	35.00	28,000		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	200,000.00	200,000		
	Landscaping						
	gravel base; 12" thick	**8,074**	cy	35.00	282,590		
	Vail fields; grass	**144,000**	sf	1.50	216,000		
	Football fields; grass	**74,000**	sf	1.50	111,000		
	Wetland	**40,000**	sf	4.00	160,000		
	Rain garden	**10,500**	sf	6.00	63,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,056**	cy	8.00	24,448		
	Seed	**165,000**	sf	0.25	41,250		
	Landscaping allowance	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$3,397,438	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	100,000.00	100,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	50,000.00	50,000		
	Storm Sewer						
	Storm allowance	**200,000**	sf	4.00	800,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	NIC		
	New telecom service	**500**	lf	22.00	NIC		
	SUBTOTAL					$950,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	130,000.00	130,000		
	SUBTOTAL					$160,000	
TOTAL - SITE DEVELOPMENT OPTION C2							**$5,070,742**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C3							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	2,500.00	75,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**59,116**	sy	1.00	59,116		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$490,116	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*201,500*			-		
	gravel base; 12" thick	**7,463**	cy	40.00	298,520		
	asphalt; 4" thick	**22,389**	sy	25.00	559,725		
	VGC	**10,500**	lf	38.00	399,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**583**	cy	40.00	23,320		
	color concrete; 4" thick @ outdoor learning	**3,500**	sf	9.50	33,250		
	concrete; 4" thick	**20,000**	sf	7.00	140,000		
	Playground	**16,000**	sf	18.00	288,000		
	Playground equipment	**1**	ls	120,000.00	120,000		
	Fence @ playground	**820**	lf	35.00	28,700		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	200,000.00	200,000		
	Landscaping						
	gravel base; 12" thick	**8,741**	cy	35.00	305,935		
	Vail fields; grass	**144,000**	sf	1.50	216,000		
	Football fields; grass	**92,000**	sf	1.50	138,000		
	Wetland	**40,000**	sf	4.00	160,000		
	Rain garden	**22,000**	sf	6.00	132,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**4,130**	cy	8.00	33,040		
	Seed	**223,000**	sf	0.25	55,750		
	Landscaping allowance	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$3,335,940	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	100,000.00	100,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	50,000.00	50,000		
	Storm Sewer						
	Storm allowance	**201,500**	sf	4.00	806,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$978,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	350.00	35,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	130,000.00	130,000		
	SUBTOTAL					$175,000	
TOTAL - SITE DEVELOPMENT OPTION C3							**$4,979,056**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C4							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	5,000.00	150,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	350,000.00	350,000		
	Fine grading	**53,282**	sy	1.00	53,282		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$709,282	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*191,000*			-		
	gravel base; 12" thick	**7,074**	cy	40.00	282,960		
	asphalt; 4" thick	**21,222**	sy	25.00	530,550		
	VGC	**10,500**	lf	38.00	399,000		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**1,166**	cy	40.00	46,640		
	color concrete; 4" thick @ outdoor learning	**14,000**	sf	9.50	133,000		
	concrete; 4" thick	**33,000**	sf	7.00	231,000		
	Playground	**16,000**	sf	18.00	288,000		
	Playground equipment	**1**	ls	120,000.00	120,000		
	Fence @ playground	**750**	lf	35.00	26,250		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	200,000.00	200,000		
	Landscaping						
	gravel base; 12" thick	**6,389**	cy	35.00	223,615		
	Vail fields; grass	**144,000**	sf	1.50	216,000		
	Football fields; grass	**28,500**	sf	1.50	42,750		
	Wetland	**40,000**	sf	4.00	160,000		
	Rain garden	**20,000**	sf	6.00	120,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**4,000**	cy	8.00	32,000		
	Seed	**216,000**	sf	0.25	54,000		
	Landscaping allowance	**1**	ls	10,000.00	10,000		
	SUBTOTAL					$3,220,465	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	100,000.00	100,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	50,000.00	50,000		
	Storm Sewer						
	Storm allowance	**191,000**	sf	4.00	764,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$936,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	130,000.00	130,000		
	SUBTOTAL					$160,000	
TOTAL - SITE DEVELOPMENT OPTION C4							**$5,025,747**

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK OPTION C5							
	G SITEWORK						
G10	**SITE PREPARATION & DEMOLITION**						
	Site Demolitions and Relocations						
	Site construction fence/barricades allowance	**6,000**	lf	15.00	90,000		
	Miscellaneous demolition	**30**	acre	5,000.00	150,000		
	Site Earthwork						
	Cuts/Fills allowance	**1**	ls	200,000.00	200,000		
	Fine grading	**70,421**	sy	1.00	70,421		
	Silt fence/erosion control allowance	**6,000**	lf	11.00	66,000		
	Hazardous Waste Remediation						
	No work in this section						
	SUBTOTAL					$576,421	
G20	**SITE IMPROVEMENTS**						
	Roadways and Parking Lots	*158,000*			-		
	gravel base; 12" thick	**5,852**	cy	40.00	234,080		
	asphalt; 4" thick	**17,556**	sy	25.00	438,900		
	VGC	**8,600**	lf	38.00	326,800		
	Road markings	**1**	ls	7,500.00	7,500		
	Signage	**1**	ls	10,000.00	10,000		
	Pedestrian paving						
	Bituminous concrete paving						
	gravel base; 8" thick	**912**	cy	40.00	36,480		
	color concrete; 4" thick @ outdoor learning	**6,750**	sf	9.50	64,125		
	concrete; 4" thick	**30,000**	sf	7.00	210,000		
	Playground	**16,000**	sf	18.00	288,000		
	Playground equipment	**1**	ls	120,000.00	120,000		
	Fence @ playground	**950**	lf	35.00	33,250		
	Nature trail	**9,040**	sf	5.00	45,200		
	Miscellaneous site improvements	**1**	ls	200,000.00	200,000		
	Landscaping						
	gravel base; 12" thick	**6,852**	cy	35.00	239,820		
	Vail fields; grass	**144,000**	sf	1.50	216,000		
	Football fields; grass	**41,000**	sf	1.50	61,500		
	Wetland	**40,000**	sf	4.00	160,000		
	Rain garden	**20,000**	sf	6.00	120,000		
	Fence allowance	**1,200**	lf	35.00	42,000		
	Spread topsoil	**3,426**	cy	8.00	27,408		
	Seed	**185,000**	sf	0.25	46,250		
	Landscaping allowance	**1**	ls	100,000.00	100,000		
	SUBTOTAL					$3,027,313	
G30	**CIVIL MECHANICAL UTILITIES**						
	Water supply						
	Water allowance	**1**	ls	100,000.00	100,000		
	Sanitary sewer						
	Sanitary allowance	**1**	ls	50,000.00	50,000		
	Storm Sewer						
	Storm allowance	**158,000**	sf	4.00	632,000		
	Gas and Telecom service						
	E&B trench for new lines, pipe and install by utilities						
	New gas service	**500**	lf	22.00	11,000		
	New telecom service	**500**	lf	22.00	11,000		
	SUBTOTAL					$804,000	
G40	**ELECTRICAL UTILITIES**						
	Primary electric 2-4" conduits & conductors	**100**	lf	200.00	20,000		
	Secondary electric 4-4" conduits & conductors	**25**	lf	400.00	10,000		
	Site lighting	**1**	ls	130,000.00	130,000		
	SUBTOTAL					$160,000	
TOTAL - SITE DEVELOPMENT OPTION C5							**$4,567,734**

PDP Estimate

Northbridge ES
CIP Pricing

Northbridge, MA

Prepared for:

Dore + Whittier

September 13, 2017

Northbridge ES
CIP Pricing
Northbridge, MA

13-Sep-17

PDP Estimate

MAIN CONSTRUCTION COST SUMMARY

	Construction Start	Gross Floor Area	$/sf	Estimated Construction Cost
CIP PRICING				
NORTHBRIDGE ES CIP UPGRADES		56,560	$196.52	$11,115,238
HAZMAT REMOVALS				$970,000
SITEWORK				$365,306
SUB-TOTAL	Jan-20	56,560	$220.13	$12,450,544
ESCALATION				$1,507,792
DESIGN AND PRICING CONTINGENCY	15%			$1,867,582
SUB-TOTAL WITH CONTINGENCY & ESCALATION	Jan-20	56,560	$279.81	$15,825,918
GENERAL CONDITIONS				Included in Rates
GENERAL REQUIREMENTS				Included in Rates
BONDS				Included in Rates
INSURANCE				Included in Rates
PERMIT				NIC
GMP CONTINGENCY				Included in Rates
CM FEE				Included in Rates
TOTAL OF CONSTRUCTION - NORTHBRIDGE CIP	Jan-20	56,560	$279.81	**$15,825,918**

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PDP Estimate

This PDP cost estimate was produced from outline drawings produced by Dore + Whittier dated September 9, 2017. 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 manager's overhead and profit and design contingency. Cost escalation assumes start dates indicated above.

We have assumed procurement will utilize a public bid under C.149a of the MGL with public bidding to pre-qualified Construction Managers and subcontractors, open specifications for materials and manufactures.

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

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
1	**Site & Civil**				
	1.01	Aerate and slice seed lawn areas, and treat for weed growth. Provide regular maintenance.	15,000 sf	$14,490	$2,174
	1.02	Expand ornamental plantings to other parts of campus, provide regular maintenance. (allowance)	1 ls	$11,500	$1,725
	1.03	There are a number of large shade trees on site-Elm, Oak, Maple and Beech were observed. At least one of these trees was observed to be in declining condition, but most appear to be in good health. Have trees evaluated by a certified arborist and follow the recommendations provided. Likely maintenance will include edging and mulching, and airspading at base of tree, pruning of dead and dying limbs, and fertilization as needed.	1 ls	$11,500	$1,725
	1.04	There is a galvanized chain link fencing around the school property. There were instances of rusting fabric, bent rails, and missing hardware components (10%). Replace all missing or broken fence components to match existing galvanized construction. Consider cost for replacing all fencing with black vinyl coated for greater longevity (4,328 LF).	400 LF	$29,900	$4,485
	1.05	Furnish and install more trash and recycling receptacles of suitable quality for exterior use and of a uniform style and performance standards.	5 ea	$4,600	$690
	1.06	Remove old benches. Furnish and install new benches (6) and picnic tables (2).	6 ea	$17,250	$2,588
	1.07	Provide more high quality bicycle racks to encourage student to bike to school and sports. Place bicycle racks on level, undamaged concrete pads for safety and accessibility. Provide bike racks at appropriate areas.	3 ea	$5,175	$776
	1.08	Perform a playground safety inspection by a certified CPSI. Refurbish and repaint all properly functioning equipment displaying visual wear. (allowance)	1 ls	$5,750	$863
	1.09	Provide regular maintenance of wood chip surfacing at playground. Rake chips to avoid bare areas and prevent excessive mounding. Consider replacing wood chips with poured in place rubberized safety surfacing for increased safety and visual appeal, and reduced maintenance.	4,000 sf	$92,000	$13,800
	1.10	Provide 1 additional swingset just north of playground to allow more and older children to use them simultaneously. Provide adequate safety surfacing in fall zone surrounding swingset (which may require reducing some pavement).	1 ea	$17,250	$2,588
	1.11	Provide a more painted games and graphics with for varying ages and levels of skill, including four square, hopscotch, maps, and other games or graphics.	8,500 sf	$4,600	$690
	1.12	Repair and repave all vehicular bituminous concrete surfaces. Repaint and restripe traffic markings.	13,000 sf	$67,899	$10,185
	1.13	Repair and replace all failing drainage structures. Notably, 2 locations to the southeast and southwest of school. Look to connect them to storm sewer if possible.	See below		
	1.14	Repair and replace all failing drainage structures. Notably, 2 locations to the southeast (45 lf to Cross Street) and southwest (240 lf to Cross street) of school. Look to connect them to storm sewer if possible.	285 lf	$40,998	$6,150
	1.15	Repair or replace all damaged concrete sidewalks. Provide accessible routes where necessary.	3,500 sf	$39,721	$5,958
	1.16	Repair or replace all damaged bituminous concrete sidewalks. Provide accessible routes where necessary.	500 sf	$2,673	$401
	1.17				
	1.18				
	1.19				
	1.20				
		TOTAL		$365,306	$54,798
2	**Structural Elements**				
	2.01	Provide new connections for all unreinforced masonry walls.	1 ls	$115,000	$17,250
	2.02				
		TOTAL		$115,000	$17,250
3	**Exterior Architectural Elements**				
	3.01	1983 wing - Undertake a concrete restoration program at all unit vent louvers where cracking exists. Remove all loose and unstable concrete material, and install new concrete repair mortar or patching cement. Consider applying an elastomeric coating or water repellant sealer to all exposed concrete to prevent further damage due to exposure to the elements. approx 10 locations	10 ea	$15,525	$2,329

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
	3.02	Either as part of the concrete repairs, or as a separate project, clean the concrete surface with a masonry cleaning product. Consider including application of an elastomeric coating or a water repellent sealer. Approx 200 LF Qty: 600 SF.	600 sf	$10,005	$1,501
	3.03	There are a few cracked bricks, most notably a section at the NW corner of the '83 wing where brick are displaced from the corner. Directly above that issue, there is a vertical crack at the corner indicative of stress due to temperature expansion of the large field of west-facing brick with no expansion/relief joints Remove and repair damaged brick; tooth-in areas of repair. Repoint or repair crack above displaced brick. Assume 30 SF.	30 sf	$5,175	$776
	3.04	Several precast concrete sills are cracked, which will allow water to penetrate and cause further spalling and breakup of the concrete if left untreated Remove loose and spalling material, clean crack to remove dust and debris, prep exposed concrete per manufacturer's instructions, and seal with elastomeric concrete crack repair product. Consider coating entire sill to match foundation, using a similar finish material. Approx 20 window sills	80 lf	$6,900	$1,035
	3.05	Undertake a building-wide masonry repointing program to identify and repoint all deteriorated joints. Assume 10,000 SF.	1 ls	$402,500	$60,375
	3.06	The "garage" attached to the original building is in poor condition. At the base, repaint the CMU with an elastomeric paint. Install a downspout to control the gutter discharge to grade and direct the water away so as to limit splashing.	1 ls	$1,863	$279
	3.07	Alternatively, remove the existing garage in its entirety and replace with new construction with brick veneer to match the adjacent school building.	85 sf	$23,949	$3,592
	3.08	The soffit above the overhead door is rotted and is missing a section adjacent to the original building, suggesting a leak at the roof or roof edge. Inspect the roof and gutter mounting detail to verify if any leaks are present, and make repairs as necessary.	85 sf	$5,376	$806
	3.09	At modular classrooms, Remove entire section of T-111 siding board that is rotten and replace with new siding; paint to match existing. Reinstall loose trim, and replace missing, sealing all joints between trim and siding with a durable exterior caulking. (506 LF, approx 10' high)	5,060 sf	$180,389	$27,058
	3.10	At corner of Modular building, Replace the downspout to extend it to grade, with a neck angled to direct water away from the skirting.	15 lf	$690	$104
	3.11	At 1983 building, Remove old caulking and completely clean out the control joint. Install new caulking with a bond breaker or backer rod within the joint.	12 lf	$345	$52
	3.12	1983 building - Replace all aluminum window and curtainwall systems with new thermally broken, high-performance window and curtainwall systems with insulated Low-E glazing.	790 sf	$85,320	$12,798
	3.13	1983 building - If not replaced with new windows, perform maintenance on screens by installing new fabric and splines.	790 sf	$22,713	$3,407
	3.14	1952 building - Replace all wood window with new thermally broken, high-performance window and curtainwall systems with insulated Low-E glazing.	2,200 sf	$273,240	$40,986
	3.15	Undertake a building-wide maintenance program for all exterior caulking; replace all sealants that have been in place for 5 or more years, or which show failure. (Allowance)	1 ls	$115,000	$17,250
	3.16	Replace 1952 aluminum storefront door and frame with a new, thermally broken door and frame, with insulating safety glass in transom and vision panels	1 loc	$11,190	$1,679
	3.17	Replace all exterior hollow metal doors and frames with new thermally broken frames and insulated door panels, with insulating safety glass in transom and vision panels. (9 locations - 8 double, 1 single)	9 ea	$32,890	$4,934
	3.18	Replace overhead door with new steel or aluminum door assembly with corrosion resistant construction and finish.	1 loc	$6,969	$1,045
	3.19	Replace vertical blade louvers with prefinished horizontal blade louvers that are resistant to wind-driven rain.	20 ea	$16,100	$2,415
	3.20	Undertake a building-wide maintenance program for all exterior caulking; replace all sealants that have been in place for 5 or more years, or which show failure. (Allowance)	See 3.15		
	3.21	Replace glass block with a new high performance thermally broken window system with insulated glazing.	144 sf	$20,700	$3,105
	3.22	Replace the 1952 roof with a new roofing system, with new insulation board meeting or exceeding Stretch Energy Code requirements and meeting the intent of the Town's Green Community initiatives. A recommended R value for insulation is R-50.	5,740 sf	$150,547	$22,582
	3.23	Replace the 1983 roof with a new roofing system, with new insulation board meeting or exceeding Stretch Energy Code requirements and meeting the intent of the Town's Green Community initiatives. A recommended R value for insulation is R-50. At the time of the replacement, verify the integrity of underlying roof decking, which appears to be wood fiber or gypsum based. Increase slope of tapered insulation to 1/4" per foot or more to resolve ponding issues. With reroofing, replace existing skylight units with energy efficient high performance units.	31,257 sf	$873,504	$131,026

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
	3.24	At the time of roof replacement, consider installation of new through-wall flashing at the high walls, to extend to the face of the CMU backup wall. Include removal of brick in sections, shoring of the brick above, and reinstallation of brick after placement of the new flashing .	140 lf	$40,250	$6,038
		TOTAL		$2,301,140	$345,172
4		**Interior Architectural Elements**			
	4.01	Replace flooring throughout, abating any asbestos-containing flooring; especially broken and chipped tile. A low maintenance product such as sheet linoleum is recommended in high traffic areas and classrooms; mosaic tile in toilet rooms. Replace missing sections of base. As part of any major flooring replacement, consider replacing all damaged base throughout both buildings.	51,200 sf	$869,716	$130,457
	4.02	At gym, Install a sheet or poured resilient athletic sports floor system. Prior to covering slab, determine slab humidity and moisture emissivity levels. Remediate any moisture vapor drive issues by applying a moisture remediation topping compound to the slab prior to installation of the sports floor.	3300 sf	$68,310	$10,247
	4.03	In rooms with floor drains, if flooring replacement is warranted, install new flooring sloped to provide positive drainage to the floor drains.	See 4.01		$0
	4.04	In areas with concrete floors, Repair and fill significant cracks in floors with an appropriate crack remediating grout or sealant. Apply new sealer or floor coating, bead-blasting the surface of the floor to remove existing applied coatings. Test slabs for humidity and moisture vapor emissivity and if warranted, include a moisture vapor reducing coating to limit vapor drive.	800 sf	$12,880	$1,932
	4.05	Strip and refinish the wood flooring and steps to the stage. Note that some alterations of the stage front will be required to provide either a ramp or a vertical wheel chair lift to access the stage. Refer to the Accessibility portion of Regulatory Assessment for discussion.	1,000 sf	$13,800	$2,070
	4.06	In CMU walls, Repair cracks with grout or sealant as part of building-wide painting program. Monitor cracks on a periodic basis to determine if cracks are worsening. (Allowance)	58,630 sf	$67,425	$10,114
	4.07	Repaint walls throughout the building, removing all loose paint that is not properly adhered to the substrate.	58,630 sf	$134,849	$20,227
	4.08	In 1952 building, Verify that the sources of ceiling leaks are resolved. Remove all loose and damaged plaster and lath. Patch underlying materials and plaster or install new gypsum wall board patches with veneer plaster to match appearance of adjacent ceiling. Repaint ceilings in their entirety (and adjacent damaged walls) to provide a consistent "like new" appearance.	3,800 sf	$124,545	$18,682
	4.09	In 1982 and 1952 spaces with ACP systems, Verify the sources of all leaks are resolved. Replace all acoustic panel ceiling systems in the building. Humidity-resistant ceiling panels are recommended. Utilize grid types that are compatible with existing light fixtures.	30,000 sf	$310,500	$46,575
	4.10	Replace doors. With any significant renovations, include replacement of doors and frames where fire ratings are required. (18 double, 70 single)	50 each	$257,784	$38,668
	4.11	Regardless of any planned renovations, consider replacement of all vision panels and glazing in the building with tempered or laminated safety glass. Provide fire rated safety glazing in vision panels and glazed openings at corridors and stairs. (11 locations)	11 loc	$9,804	$1,471
	4.12	Glazing needs to be replaced in the borrowed lite systems to tempered or laminated glazing.	1 ls	$11,500	$1,725
	4.13	Give the toilet partitions a good deep cleaning with cleaner recommended by the manufacturer. A thorough code analysis needs to be performed to verify that toilet partition layout meet ADA chapter 604 and MAAB requirements. (Allowance)	10 loc	$5,750	$863
	4.14	Mount fire extinguishers in semi-recessed wall cabinets in public areas per current code, mounting fire extinguishers in wall brackets in areas not accessible by the public is acceptable. Also add more quantity of fire extinguishers per current code requirements.	19 loc	$9,833	$1,475
	4.15	Replace classroom casework throughout and provide accessible sinks.	1,020 lf	$686,205	$102,931
	4.16	In 1952 bldg, Strip original finish off of the sill down to raw wood. Prep wood as per finish manufacturer's instructions, apply new finish to the wood window sills.	300 lf	$6,210	$932
	4.17	Replace display boards in all classrooms with two 8' marker boards and two 4' tack boards. Marker boards in grades PK-3 shall be mounted at 18" AFF with heads at 6'-8" AFF. (35 spaces)	3617 sf	$103,989	$15,598
	4.18	In gym, Remove all of the old wall padding hardware and Velcro. Clean thoroughly surface of all the walls, at each end of the gymnasium at the basketball hoops install padding along entire length of wall. On the sides add sections of wall padding as required by code.	185 lf	$34,040	$5,106
	4.19	in 1952 bldg, Remove old shelf and coat hook system in their entirety. Patch old screw holes in the walls. Install new cubby and coat hook system with protection on the sides of each of the units for the coat hooks.	70 lf	$33,166	$4,975
	4.20	Remove old unit ventilators from classrooms and replace with new unit ventilator systems.	18 ea	See Below	

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
	4.21	Provide new, basic-level LED stage lighting and digital controls drivable from a tablet PC. Professionally re-hang battens, checked and sized for loads. Professionally clean and re-hang stage curtains, and adjust travelers for smooth operation. Provide a large-format projection screen and hang in front of main traveler, but behind head curtain of proscenium.	1 ls	$17,000	$2,550
		TOTAL		$2,777,306	$416,598
5	**Mechanical - HVAC**				
	5.01	Test/remove abandoned fuel-oil system as required.	1 ls	$65,000	$9,750
	5.02	Test/abate all insulation as required	1 ls	$260,176	$39,026
	5.03	Add/replace hot water and steam piping insulation as required for complete system coverage.	1 ls	$230,000	$34,500
	5.04	Classrooms, Admin, Media Center- Replace existing unit ventilators and associated control systems with current technologies for compliance with the current building code and general energy efficiency.	32,300 sf	$826,758	$124,014
	5.05	Classrooms, Admin, Media Center- Provide supplemental hot water heating terminal units within the space as the primary occupied and unoccupied heating source.	32,300 sf	$371,450	$55,718
	5.06	In Gym, Replace existing air-handling and control systems with current technologies for compliance with the current building code and general energy efficiency.	2,653 sf	$85,000	$12,750
	5.07	In Gym, Provide supplemental hot water heating terminal units within the space as the primary occupied and unoccupied heating source.	2,653 sf	$20,000	$3,000
	5.08	In Cafetorium, Replace unit ventilators and associated control systems for complaince with the current building code and general energy efficiency.	1,992 sf	$30,000	$4,500
	5.09	In Cafetorium, provide supplemental Hot Water HTU within the space as primary occupied and unoccupied heating source.	1,992 sf	$20,000	$3,000
	5.10	Provide code required ventilation in corridors. Replace existing equipment including convectors, baseboards, and unit heaters.	24,470 sf	$185,500	$27,825
	5.11	Replace Pneumatic ATC with Direct Digital Control System.	56,560 sf	$455,308	$68,296
		TOTAL		$2,549,192	$382,379
6	**Electrical**				
	6.01	Switchgear is beyond its serviceable life. Upgrade service equipment and provide with transient voltage surge suppression and replace all panelboards throughout the facility. Extend and reconnect existing branch circuits to new panelboards located in new dedicated electrical closets.	ls	$350,000	$52,500
	6.02	Battery units and exit sign condition vary and require maintenance on each unit. There is no generator at the facility. Provide a new emergency stand-by generator and a normal/emergency distribution system that will serve emergency lighting, life safety loads, and optional stand-by loads. The existing battery units can be eliminated and maintenance will be limited to the generator and transfer equipment only.	ls	$150,000	$22,500
	6.03	Interior lighting fixtures are not energy efficient. Replace existing lighting throughout the building with LED fixtures and provide an automated lighting control system with occupancy sensors to reduce energy usage and comply with the latest energy code.	ls	$455,308	$68,296
	6.04	Provide LED cut-off fixtures for roadway and parking areas.	ls	$75,000	$11,250
	6.05	Provide building mounted LED sconces over all exterior doors. Connect to emergency power or provide remote battery back-up.	ls	$5,500	$825
	6.06	Under a renovation program, the entire fire alarm system should be replaced.	ls	$260,176	$39,026
	6.07	Add GFI outlets/breakers for devices within 6' of a water source and protect all 15A and 20A devices in the kitchen.	ls	$1,750	$263
	6.08	Add receptacles for computer equipment and A/V that has been added over the years.	ls	$6,000	$900
	6.09	Paging system wiring and speakers are in poor condition. Replace speakers and wiring with new and connect to existing Rauland Telecenter headend.	ls	$60,000	$9,000
	6.10	Vodavi PBX Phone system is obsolete. Upgrade to a new district standard Voice Over IP System (VOIP).	ls	$100,000	$15,000

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
	6.11	There are no dedicated data closets, and the backbone is 1 Gig. Build new dedicated conditioned MDF room and install 10 Gig lazer optimized fiber backbone to all IDFs and install enclosed wall racks in existing IDF locations with rack mounted UPS units.	Per Loc	$30,000	$4,500
	6.12				
	6.13				
		TOTAL		$1,493,734	$224,060
7	**Plumbing**				
	7.01	Roof drains?	Allow	$50,000	$7,500
	7.02	Replace existing hot water heater with high efficiency, gas fired domestic hot water plant.	1 ls	$90,000	$13,500
	7.03	Replace all toilets with low-flow flush valves.	21 ea	$147,000	$22,050
	7.04	Replace all urinals with ow-flow urinals	2 ea	$15,000	$2,250
	7.05	Relocate chemical dispenser from lavatory.	1 ea	$3,500	$525
	7.06	Install backflow preventers at janitor's sink.	3 ea	$8,550	$1,283
	7.07	Classroom sink in modular building shall be piped to potable water and sanitary systems.	5 ea	$30,000	$4,500
		TOTAL		$344,050	$51,608
8	**Fire Protection**				
	8.01	Install a new fire suppression system throughout the building in compliance with NFPA 13.	56,560 GSF	$365,950	$54,893
		TOTAL		$365,950	$54,893
9	**Technology**				
	9.01	Install all new data cabling with multiple drops per room to accommodate future wireless, instructional AV, and other network services. Cable should be Category 6A to future proof the school's infrastructure.	ls	$175,000	$26,250
	9.02	Create new intermediate distribution frame rooms that are dedicated and secure for housing network terminations and switch equipment, with dedicated power and environmental conditioning.	Per Loc	$10,000	$1,500
	9.03	Upgrade to fiber OM4 50 micron multimode as well as single mode between IDF's and MDF, to support future bandwidth demands.	ls	$50,000	$7,500
	9.04	Upgrade and replace the 5400zl series with the replacement 5400R series of chassis switches. Existing Switches can be redeployed elsewhere.	ls	$25,000	$3,750
	9.05	Chassis switches should be equipped with SFP+ fiber optic modules, GbE and Gb PoE network ports and management modules.	ls	$20,000	$3,000
	9.06	Minimum backbone optics between MDF and IDF should be 20GbE over fiber.	Per LF	See 9.03 ABOVE	
	9.07	Replace with a new public address system, with a new main equipment and speakers throughout. Move main equipment to MDF.	ls	$125,000	$18,750
	9.08	Replace with a new master clock synchronized with new secondary analog clocks throughout.	ls	$100,000	$15,000
	9.09	Utilize telephone handsets that connect them to the public address system to provide both internal and external communications. Add call switches to the rooms for separate independent calling capability.	ls	$30,000	$4,500
	9.10	PA system handsets (Figure 5) exist in all rooms that tie to main office, but do not provde outside dialing. Add call switches and telephone handsets.	ls	$30,000	$4,500
	9.11	Telephone system should be upgraded with telephone handsets distributed throughout the school with voicemail capability provided for all administrators, staff and teachers. Voicemail should also be integrated with email, so that messages are received via both the telephone system and email.	ls	$70,000	$10,500
	9.12	Newer and standardized ultrashort projection technology should be deployed.			$0
	9.13	Update to newer interactive projection technology, which can be used with standard porcelain on steel marker boards and not screens. Newer projectors are brighter and use less energy and have less expensive lamps.	35 loc	$210,000	$31,500

		NORTHBRIDGE ELEM SCHOOL	Quantity	Cost of Repair / Replacement (XX/2017 $)	Designer / Pricing Contingency (15%)
		56,560 GSF			
	9.14	Deploy cost effective document camera technology for the classroom	35 loc	$36,225	$5,434
	9.15	Deploy modern classroom voice reinforcement technology throughout all classrooms and learning spaces to serve all students and teachers. This equipment can also be linked to personal hearing aid equipment for the hearing impaired.	35 loc	$105,000	$15,750
	9.16	Install new permeant sound equipment in assembly spaces	ls	$30,000	$4,500
	9.17	Install a permanent mounted high lumen projector with connections to new audio system and inputs at the state for presentations. Upgrade screen.	ls	$20,000	$3,000
	9.18	Install new audio system and projection screen on the wall. Upgrade portable cart with high lumen projector for use in the Gym.	ls	$10,000	$1,500
	9.19	Chromebooks are an excellent platform for delivery one-to-one and additional Chromebook technology should be considered.			$0
	9.20	Furniture or built-in counters with power and cable distribution technology is required in the ComputerLab.			$0
	9.21	Upgrade the Aruba wireless access point network to the District Aerohive network.	ls	$50,000	$7,500
	9.22	Consider digital flat panel signage for strategic areas in the school for school patron notifications.			
		TOTAL		$1,096,225	$164,434
10	**Foodservice**				
	10.01	Renovation of kitchen space, complete with modern equipment, sanitation, and storage facilities is needed.	642 sf	$164,641	$24,696
	10.02	The cold food serving counter is ice cooled. Replace with a modern mechanically cooled unit.	1 loc	$23,000	$3,450
		TOTAL		$187,641	$28,146
11	**Hazardous Material**				
	11.01	Hazardous Materials Removals	ls	$970,000	$145,500
	11.02				
		HAZMAT ALLOWANCE		$970,000	$145,500
	TOTALS			**$12,565,544**	**$1,884,838**

GENERAL NOTES

1. Refer to each section of the Report for more detailed information. Before moving forward with a specific project, a detailed review of the scope of work and a re-assessment of the cost estimate for that scope should be performed.

2. Some items should be completed in combination with other items. Some of these suggestions may be noted above. We recommend that once a scope of work is desired to be pursued, a mini-study should be done to confirm which work should be done together. See the next general note below for additional information.

$15,799,084.32

3. Due to the conceptual nature of these recommendations and estimates and the complexity of existing conditions, several solutions may be provided to achieve the end result. Existing conditions in some areas may limit the ability to fully implement the proposed scope of work. Part or all of this work may trigger other renovation requirements related to code, seismic, sprinklers or handicap accessibility. Once a determination is made to move forward with a specific improvement line item, a mini study specific to the scope of work should be done to confirm the scope of work, prepare sketches as necessary and prepare a refined cost estimate.

DRAFT

PM&C Estimate
Dated 9/12/17

SF	Option	Costs			Cost/SF
	Option A1 - Repair Only				
71,871	**Balmer ES**	Construction Cost		$26,136,536	
		Fees,Testing, Utilities, and Expenses		$4,748,432	
		FFE/Technology		$0	
		Contingencies		$1,829,558	
			total	**$32,714,526**	**$455**
	Option A2 - Repair Only				
56,560	**NES**	Construction Cost		$15,825,918	
		Fees,Testing, Utilities, and Expenses		$3,326,499	
		FFE/Technology		$0	
		Contingencies		$1,107,814	
			total	**$20,260,231**	**$358**
	Option B1 - Grade 2-4				
83,163	**Renovation/Addition**	Construction Cost		$41,079,668	
		Fees,Testing, Utilities, and Expenses		$7,905,755	
		FFE/Technology		$1,734,000	
		Contingencies		$2,875,577	
			total	**$53,595,000**	**$644**
	Option B2 - Grade 2-4				
83,163	**New Construction - Back**	Construction Cost		$44,901,050	
		Fees,Testing, Utilities, and Expenses		$8,501,642	
		FFE/Technology		$1,734,000	
		Contingencies		$3,143,074	
			total	**$58,279,766**	**$701**
	Option B3 - Grade 2-4				
83,163	**New Construction - Front**	Construction Cost		$44,250,631	
		Fees,Testing, Utilities, and Expenses		$8,413,835	
		FFE/Technology		$1,734,000	
		Contingencies		$3,097,544	
			total	**$57,496,010**	**$691**
	Option C1 - Grade PK-5				
172,845	**Renovation/Addition - New CR wing**	Construction Cost		$83,661,928	
		Fees,Testing, Utilities, and Expenses		$14,829,360	
		FFE/Technology		$3,502,000	
		Contingencies		$5,856,335	
			total	**$107,849,623**	**$624**
	Option C2 - Grade PK-5				
172,845	**Renovation/Addition - Exist CR Wing**	Construction Cost		$79,133,659	
		Fees,Testing, Utilities, and Expenses		$14,218,044	
		FFE/Technology		$3,502,000	
		Contingencies		$5,539,356	
			total	**$102,393,059**	**$592**
	Option C3 - Grade PK-5				
172,845	**New Construction - Back**	Construction Cost		$81,091,681	
		Fees,Testing, Utilities, and Expenses		$14,442,377	
		FFE/Technology		$3,502,000	
		Contingencies		$5,676,418	
			total	**$104,712,476**	**$606**
	Option C4 - Grade PK-5				
172,845	**New Construction - Side**	Construction Cost		$88,085,064	
		Fees,Testing, Utilities, and Expenses		$15,386,484	
		FFE/Technology		$3,502,000	
		Contingencies		$6,165,954	
			total	**$113,139,502**	**$655**
	Option C5 - Grade PK-5				
172,845	**New Construction - Front**	Construction Cost		$80,541,890	
		Fees,Testing, Utilities, and Expenses		$14,368,155	
		FFE/Technology		$3,502,000	
		Contingencies		$5,637,932	
			total	**$104,049,977**	**$602**

DRAFT

	Option A1 - Repair Only Balmer ES	Option A2 - Repair Only NES	Option B1 - Grade 2-4 Renovation/ Addition	Option B2 - Grade 2-4 New Construction - Back	Option B3 - Grade 2-4 New Construction - Front	Option C1 - Grade PK-5 Renovation/ Addition - New CR wing	Option C2 - Grade PK-5 Renovation/ Addition - Exist CR Wing	Option C3 - Grade PK-5 New Construction - Back	Option C4 - Grade PK-5 New Construction - Side	Option C5 - Grade PK-5 New Construction - Front
Base Reimbursement Rate	**NA**	**NA**	**57.11**	**57.11**	**57.11**	**57.11**	**57.11**	**57.11**	**57.11**	**57.11**
Maintenance	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
CM @ Risk	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Renovation	0.00	0.00	4.32	0.00	0.00	0.73	2.08	0.00	0.00	0.00
Green Schools	0.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total Reimbursement Rate	**0**	**0**	**65.43**	**61.11**	**61.11**	**61.84**	**63.19**	**61.11**	**61.11**	**61.11**

DRAFT

PM&C Estimate
Dated 9/12/17

	Option A1 - Repair Only Balmer ES	Option A2 - Repair Only NES	Option B1 - Grade 2-4 Renovation/ Addition	Option B2 - Grade 2-4 New Construction - Back	Option B3 - Grade 2-4 New Construction - Front	Option C1 - Grade PK-5 Renovation/ Addition - New CR wing	Option C2 - Grade PK-5 Renovation/ Addition - Exist CR Wing	Option C3 - Grade PK-5 New Construction - Back	Option C4 - Grade PK-5 New Construction - Side	Option C5 - Grade PK-5 New Construction - Front
Total Project Cost	$32,714,526	$20,260,231	$53,595,000	$58,279,766	$57,496,010	$107,849,623	$102,393,059	$104,712,476	$113,139,502	$104,049,977
Approximate MSBA Reimbursement	$0	$0	$24,573,878	$23,710,519	$23,662,857	$46,518,887	$46,814,054	$45,800,346	$46,501,839	$45,745,225
Approximate Cost to the Town	**$32,714,526**	**$20,260,231**	**$29,021,122**	**$34,569,247**	**$33,833,153**	**$61,330,736**	**$55,579,005**	**$58,912,130**	**$66,637,663**	**$58,304,752**
Summary of Approximate Ineligible Costs										
Site Costs	na	na	$4,403,267	$3,782,055	$3,103,893	$178,504	$1,581,059	$1,222,348	$708,916	$651,896
Building Costs	na	na	$9,101,664	$12,983,967	$13,010,350	$27,574,225	$22,030,958	$23,769,077	$31,281,881	$23,789,221
Asbestos Flooring Abatement	na	na	$180,000	$180,000	$180,000	$180,000	$180,000	$180,000	$180,000	$180,000
FFE/Technology over $2,400/student	na	na	$510,000	$510,000	$510,000	$1,030,000	$1,030,000	$1,030,000	$1,030,000	$1,030,000
Legal Fees, Moving Expenses, Contingencies	na	na	$1,843,187	$1,996,042	$1,970,025	$3,666,477	$3,485,346	$3,563,667	$3,843,403	$3,541,676
	$0	$0	$16,038,118	$19,452,064	$18,774,268	$32,629,206	$28,307,363	$29,765,092	$37,044,200	$29,192,793

Northbridge W. Edward Balmer Elementary School Feasibility Study
Average Homeowner Tax Impact
September 12, 2017

PROJECT MANAGEMENT SMMA

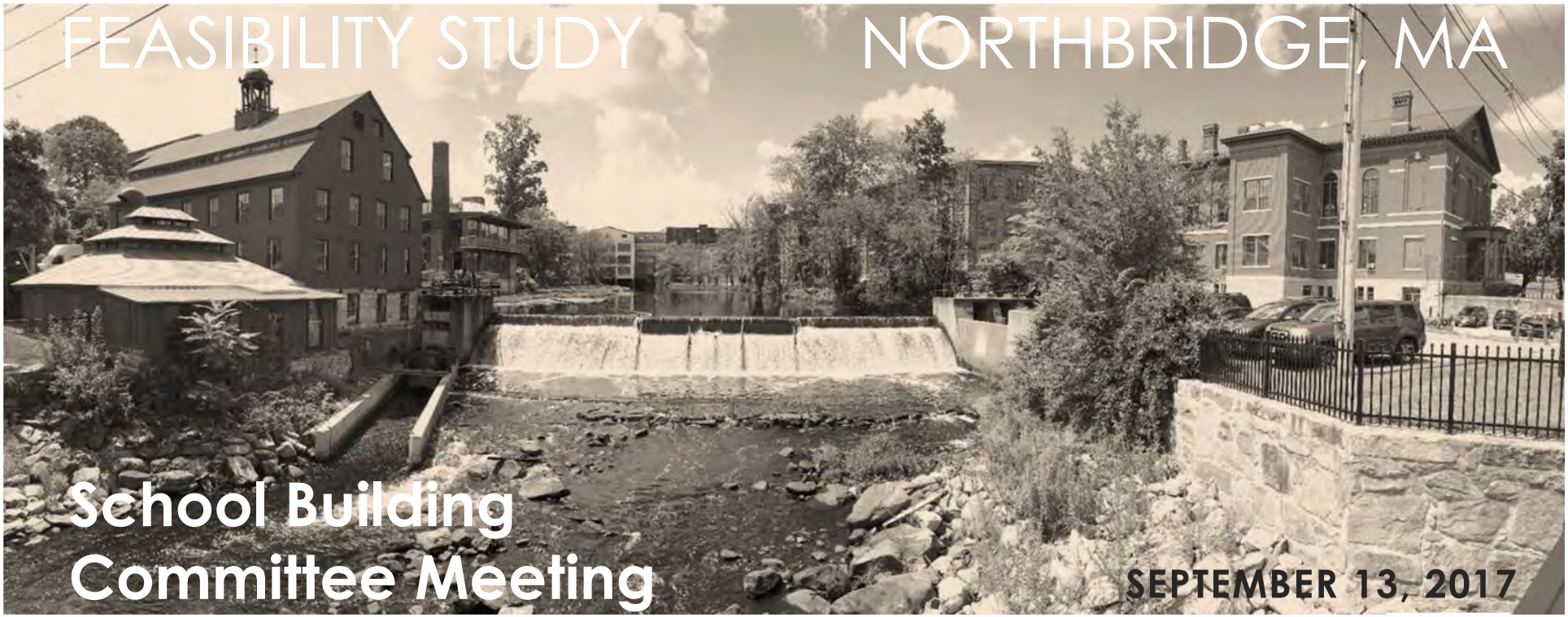
DRAFT - FOR DISCUSSION PURPOSES ONLY

	Option A1 - Repair Only Balmer ES	Option A2 - Repair Only NES	Option B1 - Grade 2-4 Renovation/ Addition	Option B2 - Grade 2-4 New Construction - Back	Option B3 - Grade 2-4 New Construction - Front	Option C1 - Grade PK-5 Renovation/ Addition - New CR wing	Option C2 - Grade PK-5 Renovation/ Addition - Exist CR Wing	Option C3 - Grade PK-5 New Construction - Back	Option C4 - Grade PK-5 New Construction - Side	Option C5 - Grade PK-5 New Construction - Front
Northbridge Share	**$32,714,526**	**$20,260,231**	**$29,021,122**	**$34,569,247**	**$33,833,153**	**$61,330,736**	**$55,579,005**	**$58,912,130**	**$66,637,663**	**$58,304,752**
Rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Term (years)	20	20	20	20	20	20	20	20	20	20
Yearly Payment-20 yr Average	$ 2,494,483	$ 1,544,843	$ 2,212,861	$ 2,635,905	$ 2,579,778	$ 4,676,469	$ 4,237,899	$ 4,492,050	$ 5,081,122	$ 4,445,737
Average Home Value	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000	$ 284,000
Annual Tax Increase Average Home-20 yr Average	**$ 457.77**	**$ 283.50**	**$ 406.09**	**$ 483.73**	**$ 473.43**	**$ 858.20**	**$ 777.72**	**$ 824.36**	**$ 932.46**	**$ 815.86**
Annual Tax Increase per $1,000 Valuation	$ 1.6119	$ 0.9982	$ 1.4299	$ 1.7033	$ 1.6670	$ 3.0218	$ 2.7384	$ 2.9027	$ 3.2833	$ 2.8727
Impact Average Home-20 Years	$ 9,155	$ 5,670	$ 8,122	$ 9,674	$ 9,468	$ 17,163	$ 15,554	$ 16,487	$ 18,649	$ 16,317

Assumptions: Tax rate based on Fiscal 2017 assessed valuation and AVERAGE house value of $284,000.
Yearly impact will change based upon subsequent year tax rates and valuations.

W. EDWARD BALMER SCHOOL

FEASIBILITY STUDY NORTHBRIDGE, MA



School Building Committee Meeting

SEPTEMBER 13, 2017

SMMA
Project Management

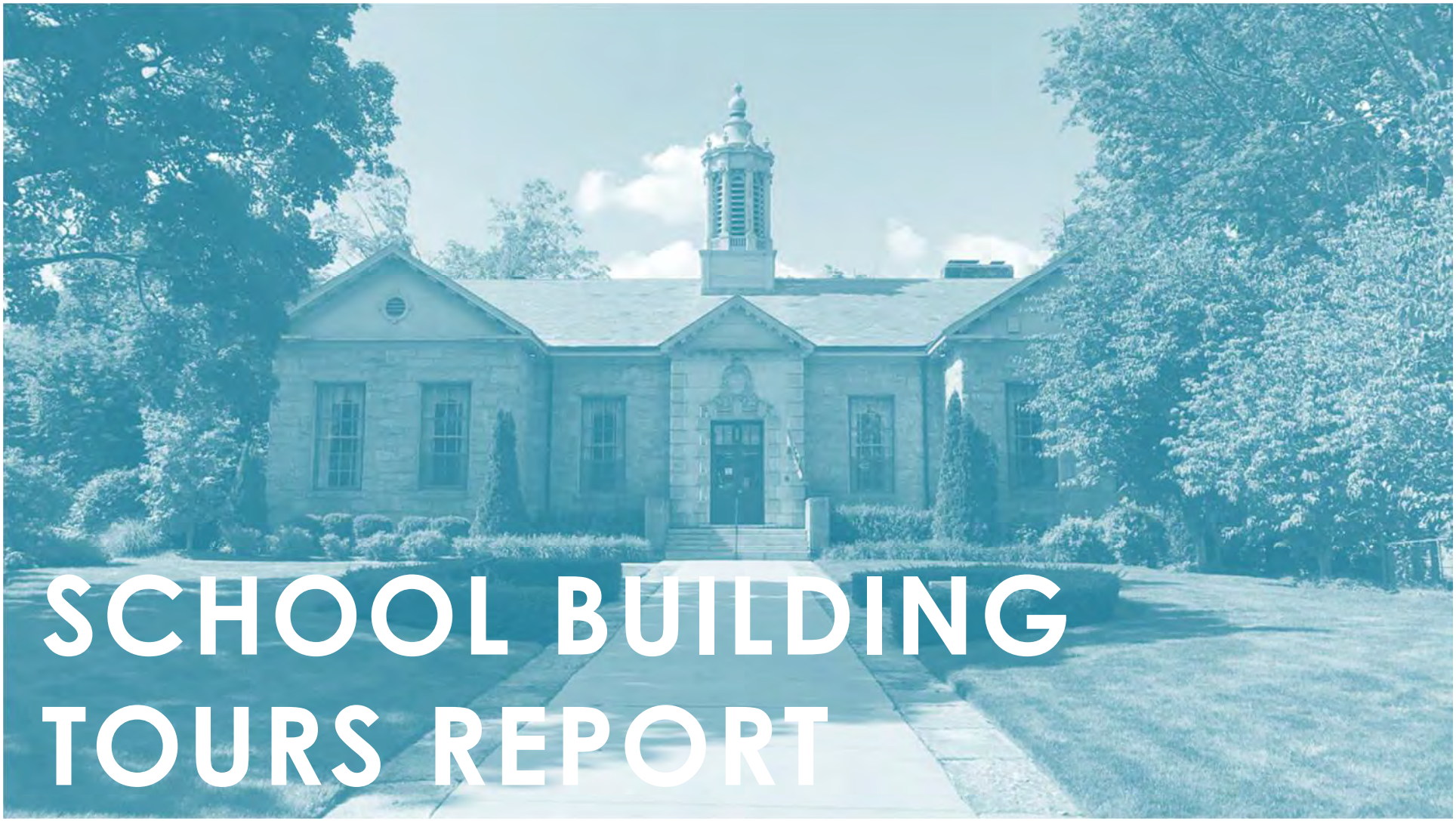
NORTHBRIDGE PUBLIC SCHOOLS

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

D&W
DORE & WHITTIER ARCHITECTS, INC.

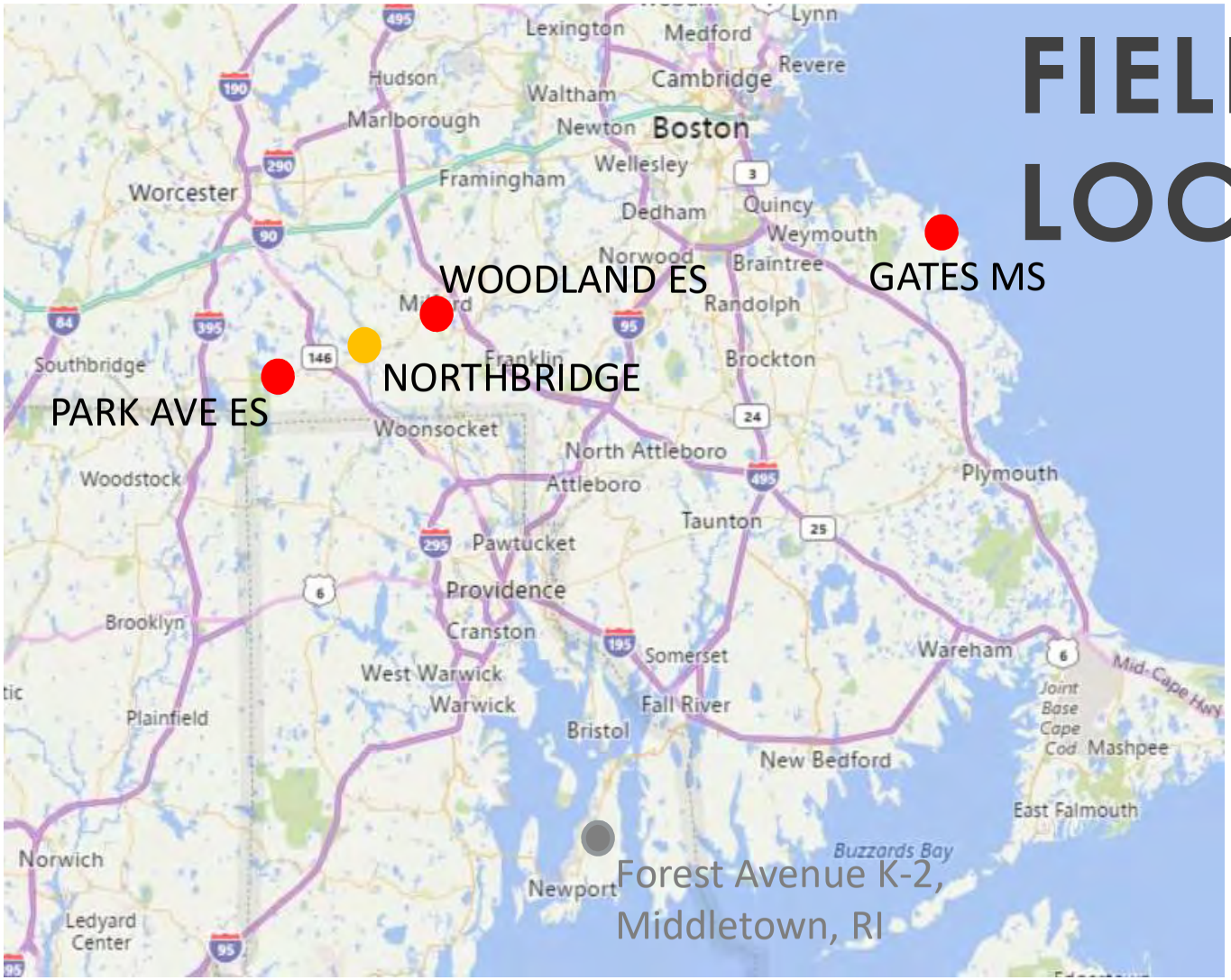
agenda

1. School Building Tours Report
2. Green Building & Sustainability Strategy
3. Space Summary (Program) Update
4. Design Alternatives Update
5. Review Preliminary Cost Models
6. Questions, Comments, Feedback



SCHOOL BUILDING TOURS REPORT

FIELD TRIP LOCATIONS



FRIDAY
SEPT 8
FULL DAY

PARK AVENUE ELEMENTARY SCHOOL, WEBSTER, MA

Grade PK-4 (700 enrollment)

Building Area	109,000 GSF
Total Project Cost	$43.3M
Project Unit Cost	$397.25/SF

Dore & Whittier Architects
Opened 2015

field trip report

PARK AVENUE ELEMENTARY SCHOOL, WEBSTER, MA

Reactions:

- Liked use of large areas for presentation
- Liked classroom furniture
- Liked outdoor learning area
- Traditional plan – “silos”
- Sterile, not colorful enough
- Needs more student work displayed
- No teacher collaboration space
- No color navigation

PARK AVENUE ELEMENTARY SCHOOL, WEBSTER, MA

- Liked corridor wood panels
- Liked displacement ventilation
- Liked “airport-style” toilet rooms
- In-classroom cubbies interesting

- Playgrounds seemed small
- No accessible playground modules
- Play fields too distant from school
- Liked resilient rubber gym floor

field trip report

GATES MIDDLE SCHOOL, SCITUATE, MA

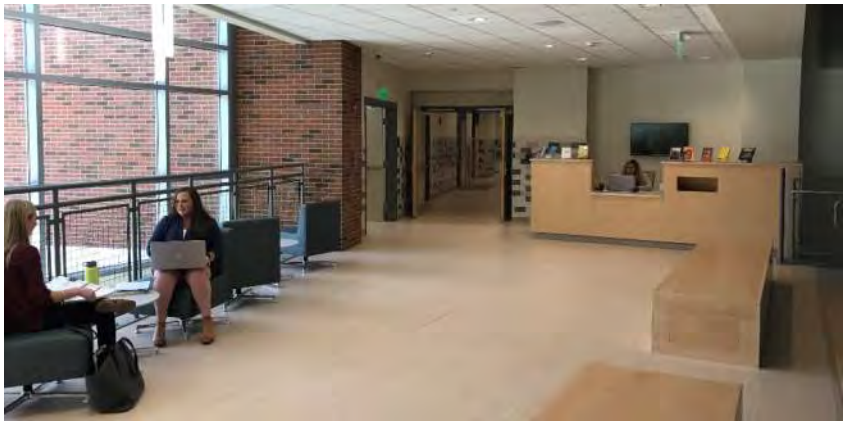
field trip report

GATES MIDDLE SCHOOL, SCITUATE, MA

- Flexible plan
- Hallerup stair
- Railing concerns
- Liked color palette

field trip report

GATES MIDDLE SCHOOL, SCITUATE, MA



- Liked teacher collaboration spaces
- Liked sliding glass doors on classrooms
- 1:1 technology BYOD works well
- 2-story “holes” seem wasted – would rather have the floor space
- Principal wants closers off classroom doors

field trip report

field trip report

WOODLAND ELEMENTARY SCHOOL, MILFORD, MA

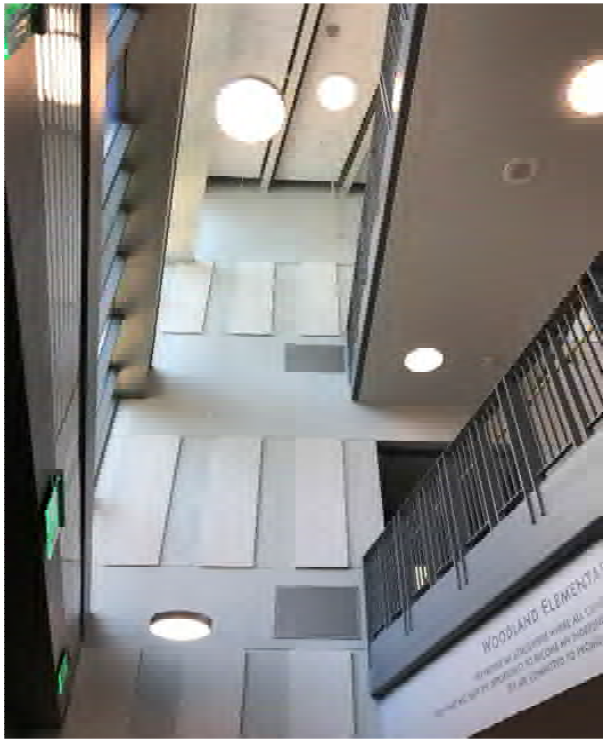
HMFH Architects
Opened 2016

Grade 3-5 (985 enrollment)

Building Area	132,500 GSF
Total Project Cost	$60.9M
Project Unit Cost	$459.49/SF

field trip report

WOODLAND ELEMENTARY SCHOOL, MILFORD, MA



- Flooded with light
- Liked many interior materials
- Liked vibrant colors

- Welcoming
- Lots of sound control
- Well thought-out and intentional

field trip report

WOODLAND ELEMENTARY SCHOOL, MILFORD, MA

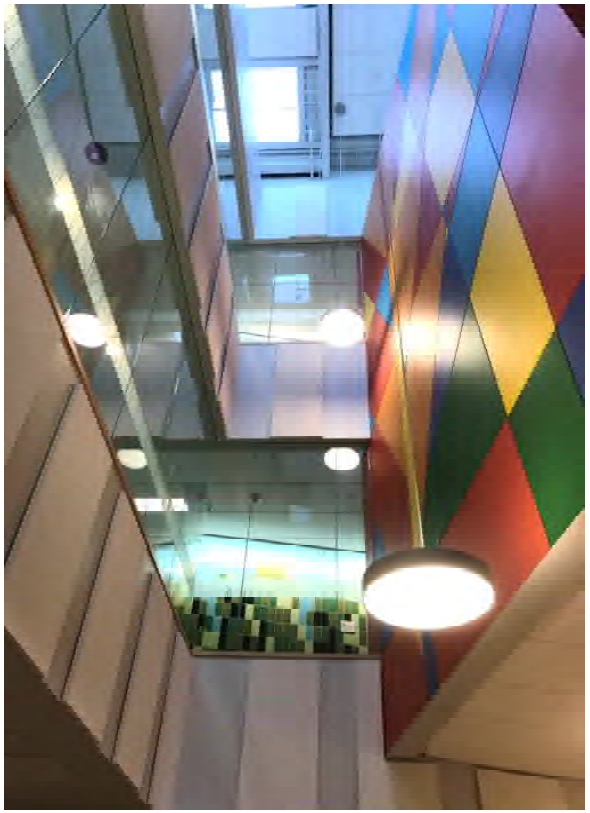
- Liked triangular desks
- Hokki stools as option in classrooms
- Liked built-in features, bay window
- Vibrant colors!
- Sloped ceilings to capture daylight
- Airport-style toilet rooms work well

field trip report

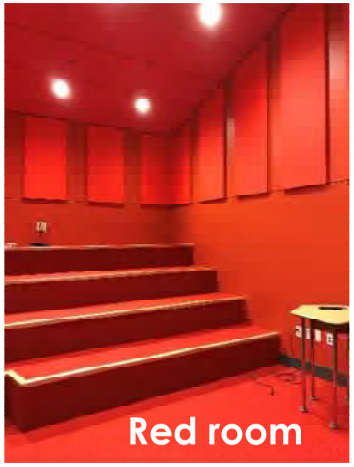
WOODLAND ELEMENTARY SCHOOL, MILFORD, MA


Glass partition


Extended learning area


Use of vertical dimension/ natural light deep into plan


Locker/counter partition


Red room

GREEN & SUSTAINABLE STRATEGIES

PROPOSED GREEN BUILDING RATING SYSTEM: LEED BD+C for Schools

Credits or Points in Six Key Categories + *Enhancements*

- Location and Transportation
- Sustainable Site Planning
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality

- *Innovation*
- *Regional Priority*

Four Levels:

Certified, Silver, Gold, Platinum

green strategies

LEED v4 -Preliminary Credit Checklist

LEED v4 for BD+C: Schools
Preliminary Project Checklist

Project Name: **W. Edward Balmer Elementary School**
Date: **9.8.17**

Y	?	N			
1			Credit	Integrative Process	1

Y	?	N	Location and Transportation	15
			Credit LEED for Neighborhood Development Location	16
1			Credit Sensitive Land Protection	1
		2	Credit High Priority Site	2
		5	Credit Surrounding Density and Diverse Uses	5
		4	Credit Access to Quality Transit	4
	1		Credit Bicycle Facilities	1
	1		Credit Reduced Parking Footprint	1
	1		Credit Green Vehicles	1

Y	?	N	Sustainable Sites	12
Y			Prereq Construction Activity Pollution Prevention	Required
Y			Prereq Environmental Site Assessment	Required
1			Credit Site Assessment	1
	2		Credit Site Development - Protect or Restore Habitat	2
1			Credit Open Space	1
	3		Credit Rainwater Management	3
	2		Credit Heat Island Reduction	2
1			Credit Light Pollution Reduction	1
		1	Credit Site Master Plan	1
1			Credit Joint Use of Facilities	1

Y	?	N	Water Efficiency	12
Y			Prereq Outdoor Water Use Reduction	Required
Y			Prereq Indoor Water Use Reduction	Required
Y			Prereq Building-Level Water Metering	Required
2			Credit Outdoor Water Use Reduction	2
2	1	4	Credit Indoor Water Use Reduction	7
		2	Credit Cooling Tower Water Use	2
1			Credit Water Metering	1

Y	?	N	Energy and Atmosphere	31
Y			Prereq Fundamental Commissioning and Verification	Required
Y			Prereq Minimum Energy Performance	Required
Y			Prereq Building-Level Energy Metering	Required
Y			Prereq Fundamental Refrigerant Management	Required
5	1		Credit Enhanced Commissioning	6
2	3	6	Credit Optimize Energy Performance	18
	1		Credit Advanced Energy Metering	1
	2		Credit Demand Response	2
	3		Credit Renewable Energy Production	3
1			Credit Enhanced Refrigerant Management	1
	2		Credit Green Power and Carbon Offsets	2

Y	?	N	Materials and Resources	13
Y			Prereq Storage and Collection of Recyclables	Required
Y			Prereq Construction and Demolition Waste Management Planning	Required
	3	5	Credit Building Life-Cycle Impact Reduction	5
1	1		Credit Building Product Disclosure and Optimization - Environmental Product Declarations	2
1			Credit Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1		1	Credit Building Product Disclosure and Optimization - Material Ingredients	2
1			Credit Construction and Demolition Waste Management	2

Y	?	N	Indoor Environmental Quality	16
Y			Prereq Minimum Indoor Air Quality Performance	Required
Y			Prereq Environmental Tobacco Smoke Control	Required
Y			Prereq Minimum Acoustic Performance	Required
2			Credit Enhanced Indoor Air Quality Strategies	2
1	2		Credit Low-Emitting Materials	3
1			Credit Construction Indoor Air Quality Management Plan	1
2			Credit Indoor Air Quality Assessment	2
	1		Credit Thermal Comfort	1
1	1		Credit Interior Lighting	2
	3		Credit Daylight	3
1			Credit Quality Views	1
		1	Credit Acoustic Performance	1

Y	?	N	Innovation	6
1			Credit Innovation: TBD	1
1			Credit Innovation: TBD	1
	1		Credit Innovation: TBD	1
	1		Credit Innovation: TBD	1
	1		Credit Innovation: TBD	1
1			Credit LEED Accredited Professional	1

Y	?	N	Regional Priority	4
1			Credit Regional Priority: LTc5, LTc4, WEc1, EAc2, EAc5, MRc1	1
1			Credit Regional Priority: LTc3, LTc4, WEc1, EAc2, EAc5, MRc1	1
1			Credit Regional Priority: LTc3, LTc4, WEc1, EAc2, EAc5, MRc1	1
	1		Credit Regional Priority: LTc3, LTc4, WEc1, EAc2, EAc5, MRc1	1

Y	?	N		Possible Points: 110
43	39	28	**TOTALS**	

Certified: 40 to 49 points, **Silver:** 50 to 59 points, **Gold:** 60 to 79 points, **Platinum:** 80 to 110

MSBA Requirements

- Minimum LEED "Certified" level
- Exceed MA Energy Code by 10%
- **Bonus reimbursement points (+2%) : exceed energy code by 20%**

green strategies

US EPA- Preliminary Energy Target

Building Characteristics Assumptions				
City: Northbridge			**State:** MA	
Space Type	**Gross Floor Area**	**Number of Students**	**Number of Workers**	**Months in use**
K-12 School	173,000 *	1030	165	12 (assumed)
	Wkend Operation	**Cooking Facilities**	**% Heated**	**% Cooled**
	No	Yes	100	50

ENERGY TARGETS (1)				
Energy Performance Rating	**50 (Median)**	**90**	**95**	**100**
Energy Use Reduction (%)	**0%**	**38.0%**	**45.9%**	**61.8%**
Source Energy Use Intensity (kBtu/sf/yr)	107.1	66.5	57.9	40.9
Site Energy Use Intensity (kBtu/sf/yr)	**67.3**	**41.7**	**36.4**	**25.7**
Total Annual Source Energy (MBtu)	18,534	11,497	10,019	7,075
Total Annual Site Energy (MBtu)	11,641	7,221	6,293	4,444
Energy Cost Reduction (%)	**0%**	**38.0%**	**45.9%**	**61.8%**
Total Annual Energy Cost ($)	$ 216,577	$ 134,350	$ 117,078	$ 82,675
Δ (change in energy cost)	n/a	**$ (82,227)**	**$ (99,499)**	**$ (133,902)**
co2 Emissions (Metric Tons CO2e /yr)	689.5	427.7	372.7	263.2
Δ (change in CO2 emission)	n/a	(262)	(317)	(426)
CO2 Emissions Reduction (%)	**0%**	**38.0%**	**45.9%**	**61.8%**

* Assumes [26]% electricity and [74]% natural gas. Baseline Energy Star Median / CBECS data.

***Larger PK-5 building option shown; smaller option similar**

MSBA Requirements

- Minimum Energy Performance Rating = 95
- Translates to Energy Use Intensity (EUI) of mid-30's
- Recent D&W project: EUI 37.7

green strategies

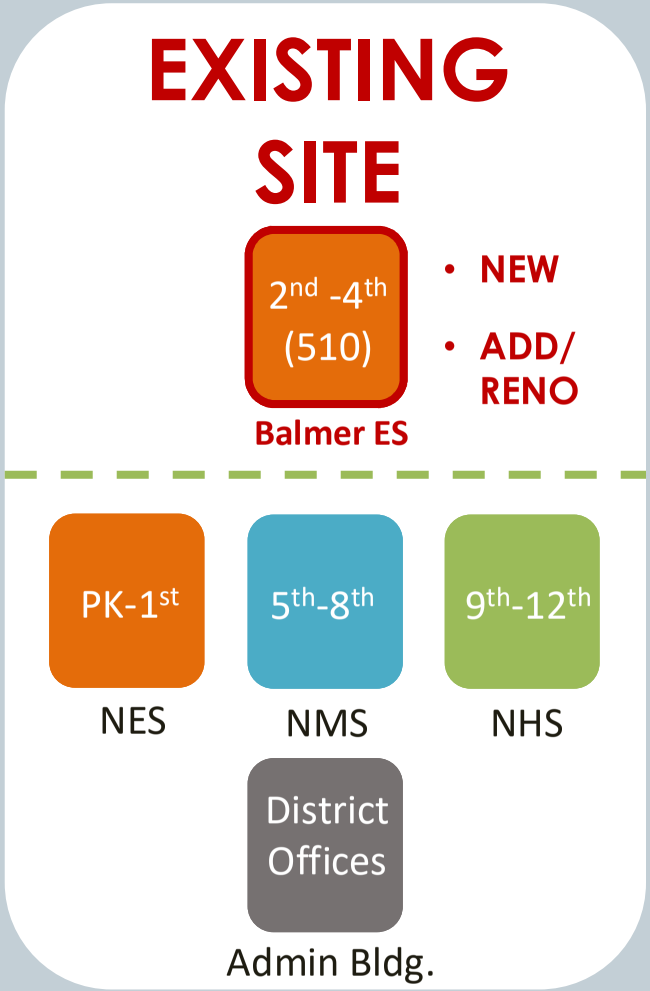
SPACE TEMPLATE UPDATE

DESIGN ALTERNATIVES

Grade 2-4 Option

MSBA-Reimbursed Project

Future Projects



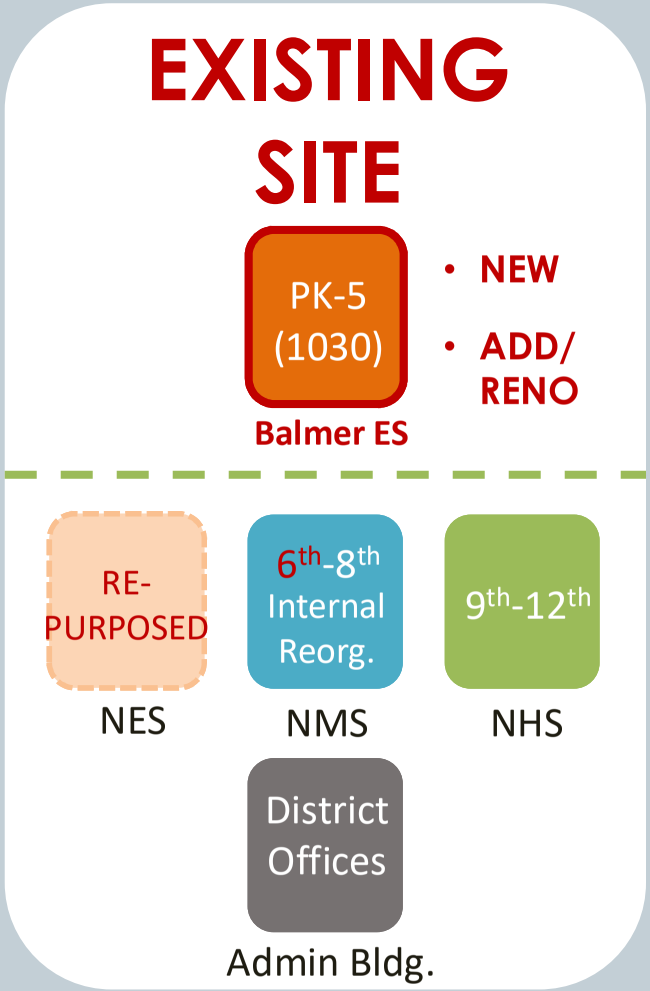
feasibility study

DESIGN ALTERNATIVES

Grade PK-5 Option

MSBA-Reimbursed Project

Future Projects



feasibility study

PROPOSED SPACE SUMMARY *(UPDATED DRAFT)*

Grade 2-4 Option (510 enrollment):

- **Existing (Balmer): 71,871 GSF**
- **Proposed (meets MSBA standard): 83,163 GSF**
- **Existing Balmer School is 13.5% undersized**

Grade PK-5 Option (1030 enrollment):

- **Existing (Balmer + NES) 128,431 GSF**
- **Proposed (meets MSBA standard): 172,845 GSF**
- **Existing Balmer + NES space is 25.7% undersized**

space planning

PROPOSED SPACE SUMMARY HIGHLIGHTS

Grade PK-5 Option (1030 enrollment):

- 4 PK, 9 K, and 8 per grade 1-5 classrooms
- Extended Learning Spaces
- Teacher Planning Spaces
- Maker Spaces (3)
- Special Education:
  - Classrooms
  - Small group support spaces
  - Resource Rooms
  - OT/PT, Adaptive PE
  - Teacher spaces
- Art Rooms (2)
- Music Rooms (2)
- (1) 6,000 SF Gym w/ 3-row bleacher
- Media Center – central and distributed
- Cafeteria with differentiated sections
- Nurse's office
- School Administration Offices including mail, copy, conference room, etc.
- Counseling Offices
- Custodial/ Maintenance/ Mechanical
- Parents/Community Room

PROPOSED SPACE SUMMARY HIGHLIGHTS

Grade 2-4 Option (510 enrollment):

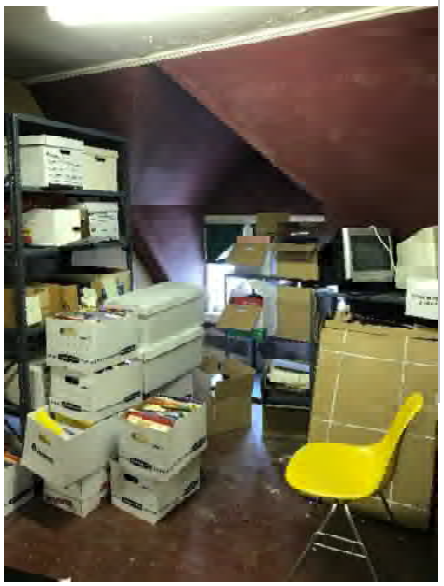
"Generally the same, but less/smaller"

- 8 per grade 2-4 classrooms
- Extended Learning Spaces
- Teacher Planning Spaces
- Maker Space (1)
- Special Education:
  - Classrooms
  - Small group support spaces
  - Resource Rooms
  - OT/PT
  - Teacher spaces
- Art Room (1)
- Music Room (1)
- (1) 6,000 SF Gym w/ 3-row bleacher
- Media Center – central and distributed(?)
- Cafeteria with differentiated sections
- Nurse's office
- School Administration Offices including mail, copy, conference room, etc.
- Counseling Offices
- Custodial/ Maintenance/ Mechanical
- Parents/Community Room

DISTRICT ADMINISTRATION SPACE ANALYSIS

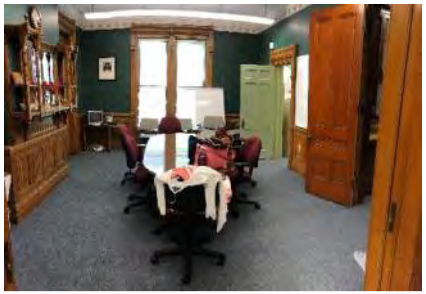
ASSESSMENT AND PROGRAM HIGHLIGHTS

- Stately Residential Building, but ill-equipped for Office use
- Serious Issues: Client Privacy, Handicapped Accessibility, meeting space, file space, safe storage space for vital records, indoor environment (hot/cold), no sprinkler, possible structural concerns…



RESULTS:

- Existing space, totals — 4,718 Net SF
- Recommended proposed space, totals — 5,485 Net SF
- Proposed total required space — 8,228 Gross SF



MIDDLE SCHOOL CAPACITY ANALYSIS (UPDATED)

EXISTING MS SPACE UTILIZATION

Existing Overall Building area:	**176,340 GSF**
District Maintenance/Storage	**- 11,476 GSF**
Effective Middle School use:	**164,864 GSF**
Existing MS Educational Program area:	**96,979 NSF**

1.70 Grossing Factor (ratio of gross to net SF) – indicates an older, less-space-efficient building.

MSBA benchmark is (1.5) .

MIDDLE SCHOOL CAPACITY ANALYSIS (UPDATED)

CASE 1 - Existing Grades 5-8 (735 enrollment);

Proposed Grades 6-8 (~551 enrollment):

Existing Educational Program:	96,979 NSF
← 5th Grade moves to Balmer	- 7,536 NSF
Subtotal	89,443 NSF
→ Add Central Admin Offices	+ 5,485 NSF
Existing District Maintenance/Storage	+ 7,651 NSF
Total Net Area Occupied	102,579 NSF
Grossing Factor	X 1.5
Total Gross Area Occupied	153,869 GSF
Existing MS Area:	176,340 GSF
Delta (underutilized or additional capacity)	*22,471 GSF*

space planning

MIDDLE SCHOOL CAPACITY ANALYSIS (UPDATED)

Option discussed:

- move 5th grade to Balmer
- relocate all classes in 1905 wing to the rest of the Middle School
- "mothball" 1905 wing, due to its poor condition.

Taking 1905 building offline	42,079 GSF
Delta (additional capacity) from previous slide	**22,471 GSF**

Therefore, there is not enough space in the building to accommodate a Grade 6-8 program, AND add Central Administration, AND keep District Maintenance, AND mothball the 1905 wing.

MIDDLE SCHOOL CAPACITY ANALYSIS (UPDATED)

CASE 2 - TRY TO TAKE 1905 WING OFFLINE:

Existing Educational Program:	96,979 NSF
→ Renovate Maint/Stor. to Educational Space	+ 7,651 NSF
← 5th Grade moves to Balmer	- 7,536 NSF
Subtotal	97,094 NSF
← Keep Central Admin Offices in 87 Linwood Ave	0
Total Net Area Occupied	97,094 NSF
Grossing Factor	X 1.5
Total Gross Area Occupied	145,641 GSF
Existing MS Area:	176,340 GSF
Delta (underutilized or additional capacity)	*30,699 GSF*
Taking 1905 building offline	42,079 GSF – still not enough space

space planning

MIDDLE SCHOOL CAPACITY ANALYSIS (UPDATED)

CONCLUSIONS:

- This space analysis is high-level, base purely on gross and net area (SF) and does not address detail-level realities in the building.
- There is often program mismatch in Middle School educational spaces; e.g. small-sized class meeting in a large room.
- The District should do a room-by-room study of the Case 2 scenario:
  - Move out 5th grade to new/renovated Balmer ES
  - Renovate storage/underutilized space on ground level C wing to educational space (keep District Maintenance shops)
  - Relocate all classes in 1905 wing to the rest of the Middle School on a room by room basis, with intent to mothball 1905 wing.

Maybe it can work?

DESIGN ALTERNATIVES UPDATE

DESIGN ALTERNATIVES

preliminary design

A SERIES (RENO ONLY)

A1 2 - 4
Balmer ES

A2 PK-1st
NES

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- NO EDUCATIONAL IMPROVEMENTS

NON- MSBA-Reimbursed Projects

B SERIES (GRADE 2-4)

B1 RENO/ ADD
Balmer ES

B2 NEW/ REAR

B3 NEW/ FRONT

MSBA-Reimbursed Projects

C SERIES (GRADE PK-5)

C1 RENO/ADD DEMO CR
Balmer ES

C2 RENO/ADD KEEP CR
Balmer ES

C3 NEW/ REAR

C4 NEW/ EAST-REAR

C5 NEW/ FRONT

MSBA-Reimbursed Projects

OPTION A – CODE AND DEFERRED MAINTENANCE UPGRADES

To extend the life of the building, this option addresses:

- deferred maintenance
- code deficiencies
- life safety issues
- basic functional deficiencies

- Assumes projects will be undertaken over time, with like items grouped together, but still not as cost-efficient as wholesale renovation.
- Does not address any educational program issues
- **This work is not MSBA-reimbursable**

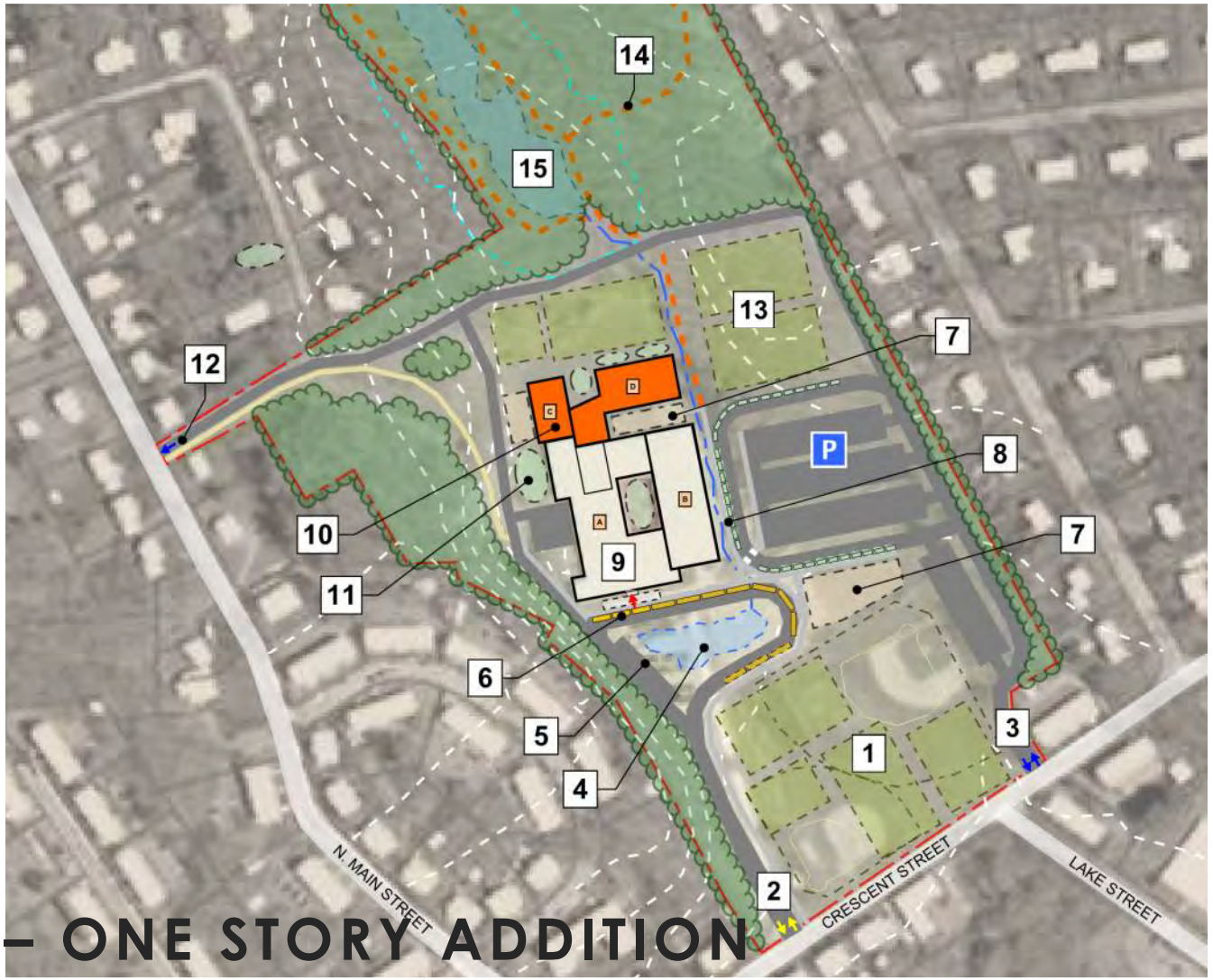
preliminary design

OPTION B1

2-4 (510)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP-OFF
7. PLAYGROUND
8. CAR DROP-OFF
9. EXISTING BLDG.
10. ADDITION
11. OUTDOOR LEARNING
12. ONE-WAY EXIT
13. PLAY FIELDS
14. NATURE TRAIL
15. WETLAND



ADD/RENO – ONE STORY ADDITION

preliminary design

OPTION B1 – 2-4 RENO/ADD

PRELIMINARY PHASING PLAN:

1. Y1 Q2-4, Y2 Q1: Build new addition – one grade, one story – as swing space.
2. Y2 Q2-3: Move one grade to addition, renovate vacant existing space
3. Y2 Q4: Small reno projects on vacations
4. Y3 Q2-3: Move another grade to addition, renovate vacant existing space
5. Y3 Q4: Small reno projects on vacations
6. Y4 Q2-3: Renovate all remaining core spaces; all site work; turn over

OPTION B2

2-4 (510)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. GRADE 2 (1 ST.)
6. CORE SPACES
7. GRADE 3-4 (2 ST)
8. DRY SWALE
9. CAR DROP OFF
10. BUS DROP OFF
11. PLAY FIELD
12. PLAYGROUND
13. WETLAND
14. NATURE TRAIL
15. OUTDOOR LEARNING
16. BIKE-PED PATH

NEW CONSTRUCTION – TWO STORIES

preliminary design

OPTION B3

2-4 (510)

LEGEND

1. PLAY FIELDS
2. BUS ENTRANCE
3. CAR ENTRANCE
4. LEARNING GARDEN
5. PLAYGROUND
6. GRADE 2 (1 ST.)
7. CORE SPACES
8. GRADE 3-4 (2 ST.)
9. CAR DROP OFF
10. BUS DROP OFF
11. RAIN GARDEN
12. NEW VAIL FIELD
13. WETLAND
14. NATURE TRAIL
15. BIKE-PED PATH

NEW CONSTRUCTION – TWO STORIES

preliminary design

OPTION C1

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP OFF
7. PLAYGROUND
8. CAR DROP OFF
9. EXISTING BUILDING
10. ADDITIONS
11. OUTDOOR LEARNING
12. ONE-WAY EXIT
13. PLAYFIELDS
14. NATURE TRAIL
15. WETLAND

ADD/ RENO – TWO and THREE STORIES

preliminary design

OPTION C1 – PK-5 RENO/ADD

PRELIMINARY PHASING PLAN:

1. Y1 Q2-4, Y2 Q1: Enabling site work; Build new addition for grades 2-5; Includes new mechanical room for all.
2. Y2 Q2-3: Move grades 2-4 to addition, use Grade 5 addition space for specials temporarily; demolish existing 2-story classroom wing
3. Y2 Q4, Y3 Q1-2: Build new addition for grades PK-1 plus new gym addition; small reno/enabling projects over vacations
4. Y3 Q3-4, Y4 Q1: use lower school addition as temp swing space for specials and admin; renovate existing core space
5. Y4 Q2-3: Summer to complete core reno, move PK-1 from NES, and tie together; all remaining site work; turn over.

OPTION C2

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP OFF
7. PLAYGROUND
8. CAR DROP OFF
9. EXISTING BLDG.
10. ADDITIONS
11. OUTDOOR LEARNING
12. EXIT (ONE-WAY)
13. PLAY FIELDS
14. NATURE TRAIL
15. WETLAND

ADD/RENO – THREE STORIES

preliminary design

OPTION C3

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. ENTRY/EXIT
3. RAIN GARDEN
4. DRY SWALE
5. PLAY FIELDS
6. NEW SCHOOL
7. CAR DROP OFF
8. PK-K DROP-OFF
9. PLAYGROUND
10. BUS DROP OFF
11. OUTDOOR LEARNING
12. NATURE TRAIL
13. WETLAND
14. BIKE-PED PATH

NEW CONSTRUCTION – THREE STORIES

preliminary design

OPTION C4

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. CAR ENTRANCE
3. BUS ENTRANCE
4. RAIN GARDEN
5. DRY SWALE
6. PLAY FIELD
7. CAR DROP OFF
8. PLAYGROUND
9. PK-K DROP OFF
10. NEW BUILDING
11. BUS DROP OFF
12. OUTDOOR LEARNING
13. WETLAND
14. NATURE TRAIL
15. ONE-WAY EXIT

NEW CONSTRUCTION – TWO STORIES

preliminary design

OPTION C5

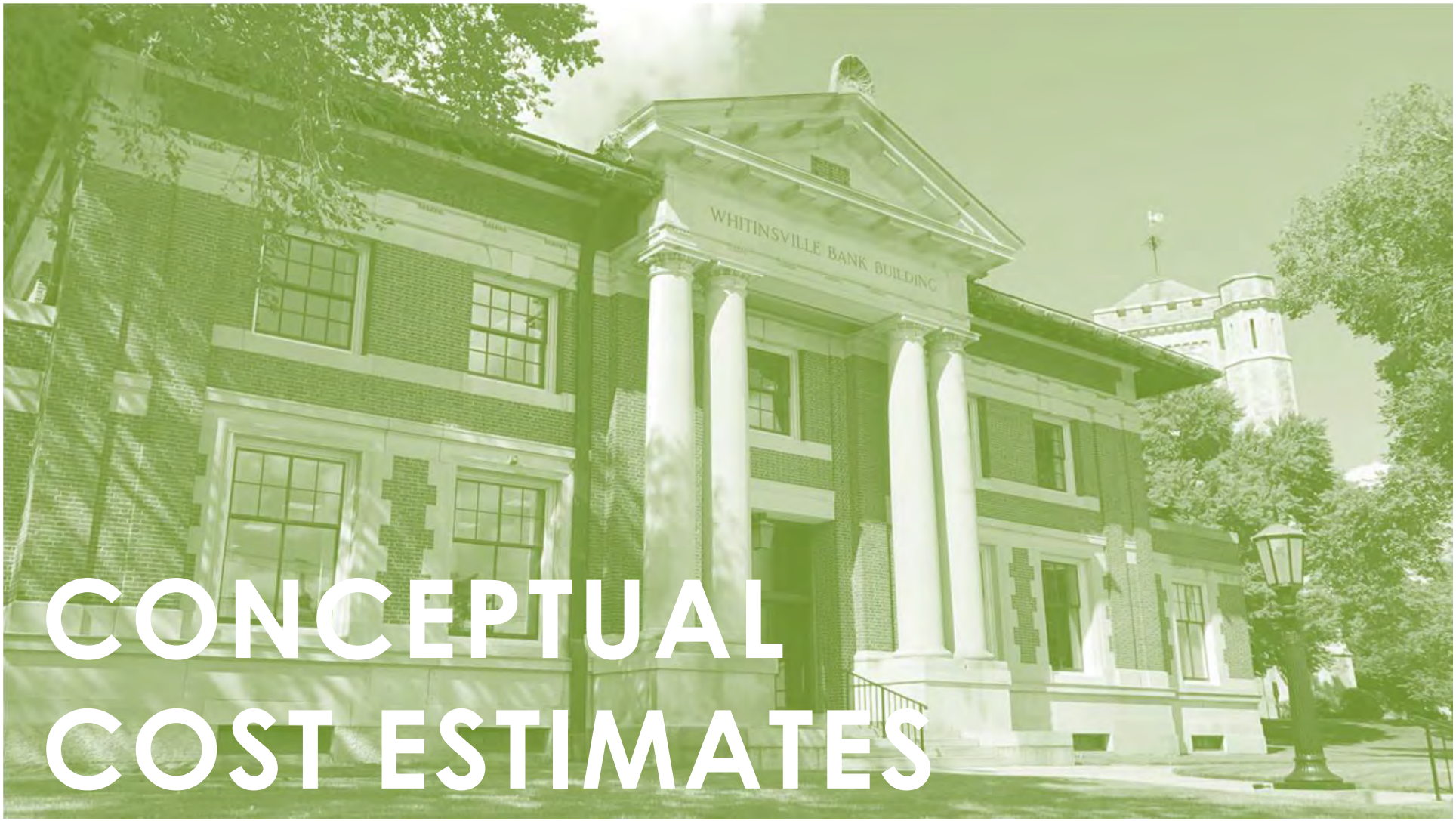
PK-5 (1030)

LEGEND

1. PLAY FIELDS
2. PLAYGROUND
3. OUTDOOR LEARNING
4. UPPER SCHOOL
5. CORE SPACES
6. LOWER SCHOOL
7. BUS DROP OFF
8. CAR DROP OFF
9. RAIN GARDEN
10. NEW VAIL FIELD
11. WETLAND
12. NATURE TRAIL
13. PATHWAY

NEW CONSTRUCTION – THREE STORIES

preliminary design



CONCEPTUAL COST ESTIMATES

A SERIES (RENO ONLY)

A1
2 - 4
Balmer ES
$32.7M

A2
PK-1st
NES
$20.3M

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- NO EDUCATIONAL IMPROVEMENTS

$ 53.0M total

NON-MSBA-Reimbursed Project(s)

B SERIES (GRADE 2-4)

B1
RENO/ ADD
$53.6M

B2
NEW/ REAR
$58.3M

B3
NEW/ FRONT
$57.5M

MSBA-Reimbursed Project

C SERIES (GRADE PK-5)

C1
RENO/ADD DEMO CR
$107.9M

C2
RENO/ADD KEEP CR
$102.4M

C3
NEW/ REAR
$104.7M

C4
NEW/ EAST-REAR
$113.1M

C5
NEW/ FRONT
$104.1M

MSBA-Reimbursed Project

preliminary costs

CONCEPTUAL TOTAL PROJECT COST ESTIMATES


THANK YOU
D&W
DORE & WHITTIER
ARCHITECTS, INC.