

November 30, 2017

Fernando Garcia Project Manager Massachusetts School Building Authority 40 Broad Street, Fifth Floor Boston, Massachusetts 02109

#### Re: W. Edward Balmer Elementary School

Northbridge, Massachusetts

District's Response to the Preliminary Design Program Review Comments SMMA No. 17020

Dear Fernando:

Please find the District's Response to the MSBA's Preliminary Design Program Review Comments of November 16, 2017.

Very truly yours,

**SMMA** 

Joel G. Seeley

Principal

cc: Joseph Strazzulla, Melissa Walker (MF)

enclosures: District's Response to the Preliminary Design Program Review Comments of November 16, 2017

1000 Massachusetts Avenue Cambridge, MA 02138 617.547.5400

www.smma.com

# ATTACHMENT A MODULE 3 – PRELIMINARY DESIGN PROGRAM REVIEW COMMENTS WITH OWNER/DESIGNER RESPONSES SUBMITTED NOVEMBER 30, 2017

District: Town of Northbridge

School: W. Edward Balmer Elementary School

Owner's Project Manager: Symmes Maini & McKee Associates

Designer Firm: Dore & Whittier Architects Inc.

Submittal Due Date: November 09, 2017 Submittal Received Date: October 06, 2017 Review Date: October 12 – November 13, 2017

Reviewed by: F. Garcia, C. Alles, J. Jumpe, S. Jimenez

#### MSBA REVIEW COMMENTS

The following comments<sup>1</sup> on the Preliminary Design Program (PDP) submittal are issued pursuant to a review of the project submittal document for the proposed project presented as a part of the Feasibility Study submission in accordance with the MSBA Module 3 Guidelines.

#### 3.1 PRELIMINARY DESIGN PROGRAM

Overview of the Preliminary Design Program Submittal	Complete	Provided; Refer to comments following each section	Not Provided; Refer to comments following each section	Receipt of District's Response; To be filled out by MSBA Staff
OPM Certification of Completeness and Conformity	$\boxtimes$			
Table of Contents	$\boxtimes$			
3.1.1 Introduction	$\boxtimes$			
3.1.2 Educational Program		$\boxtimes$		
3.1.3 Initial Space Summary		$\boxtimes$		
3.1.4 Evaluation of Existing Conditions		$\boxtimes$		
3.1.5 Site Development Requirements		$\boxtimes$		
3.1.6 Preliminary Evaluation of Alternatives		$\boxtimes$		
3.1.7 Local Actions and Approvals Certification(s)		$\boxtimes$		
3.1.8 Appendices	$\boxtimes$			

1

The written comments provided by the MSBA are solely for purposes of determining whether the submittal documents, analysis process, proposed planning concept and any other design documents submitted for MSBA review appear consistent with the MSBA's guidelines and requirements, and are not for the purpose of determining whether the proposed design and its process may meet any legal requirements imposed by federal, state or local law, including, but not limited to, zoning ordinances and by-laws, environmental regulations, building codes, sanitary codes, safety codes and public procurement laws or for the purpose of determining whether the proposed design and process meet any applicable professional standard of care or any other standard of care. Project designers are obligated to implement detailed planning and technical review procedures to effect coordination of design criteria, buildability, and technical adequacy of project concepts. Each city, town and regional school district shall be solely responsible for ensuring that its project development concepts comply with all applicable provisions of federal, state, and local law. The MSBA recommends that each city, town and regional school district have its legal counsel review its development process and subsequent bid documents to ensure that it is in compliance with all provisions of federal, state and local law, prior to bidding. The MSBA shall not be responsible for any legal fees or costs of any kind that may be incurred by a city, town or regional school district in relation to MSBA requirements or the preparation and review of the project's planning process or plans and specifications.

#### 3.1.1 INTRODUCTION

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Summary of the Facility Deficiencies and Current S.O.I.	$\boxtimes$			
2	Date of invitation to conduct a Feasibility Study and MSBA Board Action Letter	$\boxtimes$			
3	Executed Design Enrollment Certification	$\boxtimes$			
4	Narrative of the Capital Budget Statement and Target Budget	$\boxtimes$			
5	Project Directory with contact information	$\boxtimes$			
6	Updated Project Schedule	$\boxtimes$			

#### **MSBA Review Comments:**

No further review comments for this section.

## 3.1.2 EDUCATIONAL PROGRAM

Provide a summary and description of the existing educational program, and the new or expanded educational vision, specifications, process, teaching philosophy statement, as well as the District's curriculum goals and objectives of the program. Include description of the following items:

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Grade and School Configuration Policies		$\boxtimes$		
2	Class Size Policies	$\boxtimes$			
3	School Scheduling Method	$\boxtimes$			
4	Teaching Methodology and Structure				
	a) Administrative and Academic Organization/Structure		$\boxtimes$		
	b) Curriculum Delivery Methods and Practices	$\boxtimes$			
	c) English Language Arts/Literacy	$\boxtimes$			
	d) Mathematics	$\boxtimes$			
	e) Science		$\boxtimes$		
	f) Social Studies	$\boxtimes$			
	g) World Languages				
	h) Academic Support Programming Spaces	$\boxtimes$			
	i) Student Guidance and Support Services	$\boxtimes$			
5	Teacher Planning and Professional Development	$\boxtimes$			

6	Pre-kindergarten	$\boxtimes$		
7	Kindergarten	$\boxtimes$		
8	Lunch Programs	$\boxtimes$		
9	Technology Instruction Policies and Program	$\boxtimes$	П	
	Requirements		]	
10	Media Center/Library	$\boxtimes$		
11	Visual Arts Programs	$\boxtimes$		
12	Performing Arts Programs		$\boxtimes$	
13	Physical Education Programs		$\boxtimes$	
14	Special Education Programs	$\boxtimes$		
15	Vocation and Technology Programs			
	a) Non-Chapter 74 Programming			
	b) Chapter 74 Programming			
16	Transportation Policies	$\boxtimes$		
17	Functional and Spatial Relationships	$\boxtimes$		
18	Security and Visual Access Requirements	$\boxtimes$		

#### **MSBA Review Comments:**

1) In the summary of the visioning session, the information provided references the discussion of how to organize the school for the preferred grade configuration of PK-5. Please provide a clear and descriptive narrative and/or documentation and process that identifies the rationale for eliminating the 2-4 grade configurations.

## **Response:**

One main issue with operating a grade 2-4 building is the lack of educational continuity during key elementary years. Students experience two major transitions between grades PK-5. When entering grade 5, students are housed on the third floor of Northbridge Middle School—which was designed as a high school building—with students in grades 6-8. The school culture and climate is very different in each building, requiring students to become acclimated to new surroundings, expectations, routines, staff members, and transportation routines three times over the course of their elementary school experience. By eliminating the need for major transitions, many students would benefit socially and emotionally by consistent routines, continuity, and familiarity as they prepare for middle school.

With regard to state educational standards, grade 5 curriculum is more like grade 4/ elementary school curricula, and less like grade 6/ middle school. Also developmentally, 5<sup>th</sup> graders are more like 4<sup>th</sup> graders than they are like 6<sup>th</sup> graders. While there is much discussion and debate in the educational community about when are the appropriate transition points, we are convinced after much consideration that the benefits of including 5<sup>th</sup> grade with the elementary school would be considerable.

The district routinely plans professional development to review our curricula and integration of grade level standards. The district has an ongoing dilemma of a lack of alignment between grades 1-2 and 4-5. Each of these grade level spans divides students and teachers over three separate school buildings, each with varying operating hours. Staff members do not have an opportunity to collaborate and work together for vertical alignment unless we provide substitutes and remove them from their classes during the day. We prefer keeping our teachers in the classrooms to teach their students. Having all of the staff members on the same schedule in the same location would benefit the students by ensuring we had curricular alignment, as well as ability to work together to share student data and information across grade levels. Having a PK-5 school will also afford the district more flexibility and potential efficiencies in its staffing, because of the way licensure is structured for these grades.

We do not believe that maintaining our current grade span configuration works in the best interest of our students.

That said, we intend to go through an honest assessment of the grade 2-4 new construction option. We have continued to develop the site plan and conceptual floor plans, and will have the alternative cost-estimated. Cost and functional factors will be weighed with the educational implications as stated above, as well as the other cost implications of school buildings not addressed by the grade 2-4 Alternative. The School Building Committee will weigh the pros & cons, and will make its decision informed by, and based on these factors.

4a) Please address the following related to the academic organization:

• The submittal notes that the current Balmer school provides an enrichment program for students in which the students attend seminars once every six days. Please provide a brief description whether the program offers hands-on or investigative opportunities.

#### **Response:**

The Balmer Enrichment Program is designed as a project-based approach to learning. Students select a topic that they believe is important to the school or community. After researching the topic/issue, they work together to develop an action plan and develop strategies to address the identified problem.

One such example occurred last year with a group of fourth grade students. After reading a popular young adult novel concerning a character who became involved in the protection of owls, our students wanted to know more about such concerns in our area. They completed research, connected with local professionals, and arranged meetings with a local conservation officer to develop a plan that would enable our students to assist with protecting the owls in the Blackstone Valley.

Student groups developed their own projects with adult assistance. Some groups chose to write informational articles to encourage others to protect

owls; some students developed games to create awareness of owls and this issue; some students created an informational video to present; and others decided to build actual sanctuaries. These students used recycled materials brought from home and school supplies. They typically worked on the floor of the library. They needed to move their work to a windowsill in between work sessions. This would have been the perfect opportunity to incorporate a Maker Space or STEAM Lab.

• The information provided indicates the District is envisioning a building organized based on grade level academic "communities"; a community housing Pre-Kindergarten and Kindergarten, a second housing grades 1<sup>st</sup> and 2<sup>nd</sup>, a third housing 3<sup>rd</sup> and 4<sup>th</sup> and a fifth housing the 5<sup>th</sup> grade community. Please explain the rationale and benefits for creating a stand-alone 5<sup>th</sup> grade community.

#### **Response:**

A stated intent of the Education Program is that the District desires to create natural grade-level pairings to facilitate looping and possibly multi-age classrooms. With seven grades in the PK-5 scenario, it is apparent that one grade will be left alone. After some discussion, it was decided that PK-K, 1-2, and 3-4 were the most natural and educationally appropriate pairings for looping, which "theoretically" left grade 5 by itself. At the time the PDP submission was assembled, it was not clear yet how the grade level pairings would be accommodated in a building plan on the site.

The concept that came out of the visioning sessions and then the Programming/Working Group of the School Building Committee that a 5th grade that was near to, but still separate from 3rd and 4th grades would give the 5th grade both a sense of inclusion while fostering more independence and beginning their transition to the middle school building. The 5<sup>th</sup> graders might gain a sense of maturity and new responsibility, yet still stay active in the school community, acting as role models and peer mentors for younger students.

The intent of the PSR phase is to explore geometries that integrate grade 5 somewhat into 3-4, so it is not an island, but such that it can still have an identity of its own. As the design concepts have taken shape, the Working Group has expressed the preference that 5<sup>th</sup> grade should be aligned with and be adjacent to 3<sup>rd</sup> and 4<sup>th</sup> grades to form a cohesive upper elementary community within the school. These concepts are currently being developed in the PSR phase.

4e) The submittal indicates the District is proposing the integration of STEM/STEAM labs/ Maker Spaces. Please provide specific details such as adjacencies, desired features and/or layout considerations about these types of program spaces. In addition, please consider other types of facility design alternatives to maximize the flexibility for future and other program use including design strategies that would support delivery of the

proposed curriculum within the general classrooms. Please note these spaces will be further evaluated in subsequent submittals.

#### Response:

We are eager to provide a flexible, collaborative learning space to allow for project design and curricular integration. The District is in the process now of moving toward performance-based assessment in all areas. These lab spaces — "makers space/STEAM Lab/Innovation Lab" would be utilized throughout the day by both classroom groups and small groups of independent learners to provide the space, materials, and tools by which students can design and build projects to demonstrate the mastery of standards. The important distinction between these lab spaces and conventional classroom spaces are contained in the following factors:

- Time: Maker Spaces/STEAM labs can accommodate projects that are designed to run over multiple days or even weeks, and provide tools, specialized work surfaces, materials, and storage—all at the ready—so the classroom does not need to be reconfigured to work on a project, then configured back to work on more conventional studies.
- Space: Maker Spaces provide the necessary space for students to spread out, work on larger-scale projects or constructions, or to gather together for demonstrations and team discussions that require the specialized equipment of the room that would not be present in a conventional classroom.
- Specialty: Maker spaces or innovation labs have finishes designed for wet, messy projects, wall surfaces with marker board for brainstorming, and furniture designed for collaboration in many different forms and configurations. There are cabinets for elementary science lab equipment, tools, materials, and bins for project storage, none of which are present in a conventional classroom.

These proposed labs are centrally located to each extended learning area and would open out into the learning commons with large "garage" doors, allowing for an even larger work or demonstration place. The doors can be closed for a smaller, self-contained working area, enabling another group to work separately in the common learning space.

In terms of theme, we envision the Maker Space serving grades PK-K to be analogous to a "science and technology lab-meets-arts and crafts space". Close observation of nature and how we relate to it will be a thematic driver of projects incorporating outdoor observation and follow up inside projects, artistic construction projects that describe what we've seen and talked about, and minipresentations of results. Materials used might follow a "soft" theme of paper, cloth, felt, clay, craft, or natural items.

The Maker Space for Grades 1-2 will incorporate more equipment and furniture to allow beginning collaborative and/or small group work on a variety of natural, science-based, historical, and art based themes, incorporating outdoor/outside components with indoor preparation and/or follow-up work.

The Maker Space for Grades 3-4-5 will incorporate more equipment and furniture to sponsor intensive collaborative and/or small group work, more specialized hand tools for harder materials such as wood, metal, or plastic; beginning electronics and technology integration projects, basic science experiments and demonstrations, and possibly a 3-D printer and 2-D large-format plotter. Themes would continue to integrate a variety of natural, science, historical, mathematical, and art-based projects with technology providing a backbone or possible means to complete the work.

We discuss staffing and scheduling for the Maker/ STEAM spaces in section (12) below.

12) In response to these review comments please provide a more detailed narrative that includes justification of the proposed Technology Labs and if the proposed spaces differ from the proposed STEM/STEAM labs and/or Maker Spaces. If so, please provide information that describes how these spaces would be used, scheduled, integrated within the existing school schedule, staffed, and maintained. Describe why the proposed programming is not better delivered within the general classrooms.

#### **Response:**

In our current program, the students attend a computer science class in a technology lab (which is a repurposed teachers' lounge) outfitted with 25 desk top computers. This class is taught be a certified computer technology teacher.

In our program proposal, we are not proposing a separate computer lab where students attend a class to learn about computer science. Our proposal for the building project eliminates an actual computer lab space, and includes the infusion of technology in all areas of the building and curriculum so that students and staff may utilize technology as needed.

We envision access to Chromebook carts in the Maker Spaces and classroom spaces, where technology instruction will occur under the direction of the computer technology teacher, co-teaching with classroom teachers to infuse technical literacy skills in all areas of the curriculum.

If students are working in the common/ extended learning area and have a need to utilize a resource, we propose having access to a Chromebook cart. If teachers are working in a small group area and want to utilize a website for students, there will be a projector in the room to enable quick access.

With regard to the proposed Maker Spaces/STEAM labs, these are proposed as "specials" classrooms—one per grade level pairing: PK-K, 1-2, 3-4-5—that replace (1) computer technology lab, (1) art classroom, and (1) music classroom that are all "transformed" in our education program. The following calculation was detailed in the Performing Arts (Music) section of the Education Program in the PDP:

# **Scheduling Calculation for number of Art and Music teaching stations:**

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

<u>MSBA guidelines (1030 enroll)</u>

(2) Art (3) Art (2) Music (3) Music

To staff these three Maker Spaces/STEAM Labs, we plan to locate the technology teacher from the Balmer School, the technology/media teacher from NES, and the elementary instructional technology specialist in each of the Maker Spaces. This transformation is already in progress. The technology teacher will be attending seminars and is becoming educated on how to operate a maker space, and will be the designated leader for the new or reno/add school, and the other identified staff will be encouraged in this same path. As we are planning to incorporate technology, digital literacy, and systems design thinking into our PBL approach, these staff members will be vital to implementing a STEAM curriculum.

Furthermore, students in grade 5 currently receive a class in STEM instruction as part of their curriculum. We plan to incorporate this for all students in the Maker Space. This will be scheduled as a related arts class.

13) In response to these review comments please provide specific details about the program that includes the scheduling of the physical education program, how it would be integrated within the existing school schedule, and staffed for the preferred PK-5<sup>th</sup> grade configuration.

#### **Response:**

We propose maintaining our two PE teachers to co-teach gym classes. Each teacher will be assigned a class from the same grade level. Depending upon the skill or activity, teachers may divide the large group into two classes and use a gym divider curtain to create two separate teaching stations. They may also choose to differentiate the skills and have students work at stations for specific skill development.

# **Scheduling Calculation for number of PE teaching stations:**

311 minutes/day  $\div$  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) PE teaching stations

(2) PE

Arithmetic of specials based on current scheduling practices indicate there is only a need for 2 PE teaching stations for 1030 students.

In this manner, two teachers will be able to provide services for all students in grade K-5 each week.

No further review comments for this section.

#### 3.1.3 INITIAL SPACE SUMMARY

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Space summary; one per approved design enrollment	$\boxtimes$			
2	Floor plans of the existing facility	$\boxtimes$			
3	Narrative description of reasons for all variances (if any) between proposed net and gross areas as compared to MSBA guidelines	$\boxtimes$			

#### **MSBA Review Comments:**

The District has provided space summaries for both study enrollment options. Additionally, the District has provided existing floor plans for both the W. Edward Balmer Elementary School and the Northbridge Elementary School.

- 1) The MSBA has performed an initial review of the space summaries and offers the following:
  - Study Enrollment Options:
    - o Option 1: 510 students in grades 2-4
    - o Option 2: 1,030 students in grades K-5
  - Core Academic The overall square footage in this category exceeds the MSBA guidelines by 6,150 nsf for Option 1 'Grades 2-4' and 20,250 nsf for Option 2- 'Grades PK-5'. This overage is primarily due to the inclusion of Pre-K classrooms, Maker Spaces/STEAM Spaces, Extended Learning Areas, and six general classrooms in excess of the guidelines in 'Grades 2-4' and three in excess of the guidelines in 'Grades PK-5'. Based on the information provided, the following spaces are proposed in order for the District to deliver its educational program:

Anticipated Core Academic Spaces*	Option 1 - Grades 2-4	Option 2 - Grades PK-5
General Classrooms;	Proposes 6 classrooms above	Proposes (3) classrooms above
(24) – Option 1, (40) – Option 2	guidelines	guidelines
Teacher Planning/Collaboration Space (3) – Option 1, (7) – Option 2	Spaces unique to District	Spaces unique to District
Commons/Extended Learning Area*	Proposes (3) 1,200 nsf spaces**	Proposes (6) K-5 1,000 nsf spaces and (1) PK 400 nsf space**

Maker Space/STEM/STEAM*	Proposes (1) 1,200 nsf space**	Proposes (2) PK-2 1,000 nsf spaces and (1) 3-5 1,200 nsf space**
MSBA Comments	See Below	See Below

<sup>\*</sup>Please provide proposed scheduling information specific to these spaces.

#### **Response:**

\*Commons/Extended Learning Area: Our intent is that the common learning area is scheduled through the use of a Google Calendar to organize a routine and first-come/first-served pattern. This space will be an extension of the classroom area. Students needing a more flexible small group space for collaborative group work may move out into this space, since it will be visually open to teaching staff.

We plan to have small satellite "media center" locations placed in each common learning space/extended learning area. Students looking to use media resources may move out into this space.

Teachers looking for a larger project area for a class activity may schedule this space. Additionally, teachers who wish to co-teach or put classes together to present projects will also use this space as a large group classroom space.

We anticipate this space will be very popular and very busy, as an active, learning space for teachers and students alike. Early concept plans show spaces that are varied in form and may accommodate several small groups at once, providing added utility and flexibility.

In the absence of Extended Learning Areas, the District would advocate for classrooms at the upper end of the allowable range at 1,000 SF (now they are programmed at 900 SF, the lower end of the range). Doing so, however, would likely result in more student and teacher isolation. It would not allow for a wider variety of instructional environments for student or faculty choice, and would not provide a larger gathering space for an all-grade meeting, small assembly, or demonstration/presentation. We feel the best use of this square footage is to collect it together into an Extended Learning Area and provide students and teachers a wider variety, choice, and flexibility.

\*Maker Space/STEAM Lab/Innovation Lab: As stated above in 3.1.2(4e), this laboratory will be a multipurpose space. Although it may be used for science activities and experiments that take up a great deal of space, or may be messy, this unique space will be used as an "engineering design" space. Students engaged in project-based learning that need a different environment other than a classroom for its space, tools, materials, and storage space will use this laboratory to create physical representations and replicas. This is a space where independent creativity and risk-taking with materials, planned with a specific purpose and goal in mind, will be valued.

All students (except PK) will have a class in STEM instruction in a Maker Space as part of their curriculum. This will be scheduled as a related arts class. Any free periods or after-school use will be scheduled utilizing a Google Calendar to ensure equitable use.

As stated in Section (12) above, each Maker Space/STEAM Lab will be staffed with a dedicated educator who will often work hand-in-hand with the grade-level teacher to present team-taught programs of hands-on projects.

\*\*The MSBA will consider on the District's Educational Program, utilization rates, and additional information to understand how proposed spaces benefit delivery of the curriculum beyond what could be provided within the general classrooms.

In order for the MSBA to accept any proposed variations to the guidelines in subsequent submissions, the MSBA needs to better understand how the 'STEM' spaces are proposed to be scheduled in conjunction with the proposed General Classrooms how these spaces support the delivery of the proposed curriculum. Please provide a brief clarification regarding whether the proposed space will be flexible to accommodate other proposed curriculum or serve as an extension to science.

#### **Response:**

As stated above in 3.1.2(4e) and 3.1.3 (1), this laboratory will be a multipurpose flexible space with a variety of specialized, age-appropriate tools and materials, as well as furniture and technology that accommodate many forms and configurations of collaborative and independent work. The term laboratory is used purposefully to indicate a space that is easily configured for a longer-term project, with all necessary tools and materials close at hand, that can be easily reconfigured when that project is over.

It is the Designers' intent to create laboratory "containers" that are equipped with the FF&E that support the envisioned educational program, but are flexible and can be re-equipped later as educational needs change and new technologies and curricula emerge.

The acronym STEAM is used to denote the specific intent to integrate all the disciplines of science, technology, engineering, arts, and mathematics in hands-on, project-based learning projects and activities in these spaces.

Please refer to section 3.1.2 for additional information regarding Maker /STEM/STEAM spaces.

• Special Education – The overall proposed square footage for this category exceeds the MSBA guidelines by 885 nsf for Option 1 and 2,345 nsf for Option 2. Please note that the Special Education program is subject to approval by the Department of Elementary and Secondary Education ("DESE"). The District should provide the required information required with the Schematic Design submittal. Formal approval of the District's proposed Special Education program by the DESE is a prerequisite for executing a Project Funding Agreement with the MSBA.

#### **Response:**

The District and the Project Team acknowledge that the Special Education program is subject to approval by the Department of Elementary and Secondary Education and the

need for formal approval from the DESE as a prerequisite for executing a Project Funding Agreement with the MSBA.

• Art & Music – The overall square footage in this category for Option 1 aligns with the MSBA guidelines. However, in Option 2 the proposed spaces are below guidelines, by providing one less art room, one less music room, and five less practice rooms. Please confirm that the proposed square footage for the (1,030 students) PK-5 grade configuration is sufficient to meet the District's programmatic needs as part of the District's response to MSBA's PDP review comments.

# **Response:**

As demonstrated through the calculations provided below, the District confirms this space will meet its needs.

**Scheduling Calculation for number of Art and Music teaching stations:** 

311 minutes/day  $\div$  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

<u>District needs</u> <u>MSBA guidelines (1030 enroll)</u>

(2) Art (3) Art (2) Music (3) Music

The District is proposing to reallocate this allowable square footage of (1) Art and (1) Music room to create the grade-pairing-shared STEAM/Maker spaces identified in the Core Academic category. Doing so allows the District the opportunity to reimagine its "specials" and provide much needed variety of instructional spaces to support our project-based-learning approach.

*No further preliminary comments.* 

- *Health & Physical Education* The overall proposed square footage for Options 1 and 2 aligns with MSBA guidelines. No further action required.
- Media Center The overall proposed square footage for both options in this category aligns with MSBA guidelines. In Option 2 please further describe and provide clarification how the proposed square footage associated with the Satellite Reading Areas in the academic areas and the Extended Learning Areas differentiate from the curriculum being offered. Please provide as part of the District's response to MSBA's PDP review comments.

#### **Response:**

The idea for the satellite media area arose in the educational visioning sessions as proposed by the Media Teacher and supported by the larger group.

The concept of the Media Center is evolving both in Massachusetts and across the country. Similar to our proposal for other spaces and square footage, we believe there is value in decentralizing a portion of the media center. We intend to use the decentralized square footage of the Media Center to put media materials (leveled

libraries and printed materials associated with specific projects) at arm's reach to students, adjacent to their grade level classrooms rather than in a centralized destination/location. While we still believe the majority of the media center program needs to be centralized, we believe that a portion of this square footage best serves students, faculty, and staff if it is decentralized as part of the extended learning/common areas.

As previously referenced in 3.1.3(1) above, the satellite media areas in the learning commons will serve as a place for students and staff members to access resources. Media and technology teachers will coordinate with grade level teachers and rotate in materials using mobile shelving units that best address the current units of study. Having these materials within the learning communities reinforce the current units of study with serendipitous and structured access to media, displays media for easy access and demonstration, allows for wider use by more individuals, and saves time-on-learning for the students and teachers as it prevents unnecessary trips to the library. We feel this promotes utilizing resources and encouraging students to access a wider variety of materials when the materials are easier to access.

- **Dining & Food Service** The overall proposed square footage for both options in this category aligns with the MSBA guidelines. No further action required.
- *Medical* The overall proposed square footage for both options in this category aligns with the MSBA guidelines. No further action required.
- Administration & Guidance The overall proposed square footage for both options in this category aligns with the MSBA guidelines. However, in Option 2 please further describe the proposed Hoteling and Team Chair space as part of the District's response to MSBA's PDP review comments.

#### Response:

In our current schools, contracted related service providers and TEAM Chairs are scattered in offices through the buildings. Often "siloed" in isolated locations, precious time is spent by professionals going from office to office to locate staff members during prep periods. Limited consultation or collaboration takes place.

In our Hoteling Concept, each related service provider professional, including outside contracted professionals, the School Resource Officer, and a Board-Certified Behavior Analyst, would be provided with a personal space/home base in a larger office area, with access to technology, printers, projection, and space to sit together to meet and collaborate. The space of 200 SF is programmed for 5-6 small workstations to be used first-come-first served by these itinerant professionals. We are excited to promote this collaboration space to improve student services and save precious time for our service providers.

TEAM Chairs are two individuals—one each currently housed in Balmer and NES respectively—whose job is primarily to coordinate special education services and meet with parents, service providers, and professionals regarding IEPs and other special education issues. They regularly deal with highly sensitive information and require private offices, 2 @ 125 SF, to be located in the Administrative Suite, near the Conference Room.

- **Custodial & Maintenance** The overall proposed square footage for both options in this category aligns with the MSBA guidelines. No further action required.
- Other Based on the information provided, it appears that the District is proposing a Family and Community Resource Center of 500 net square feet for both proposed options. The MSBA does not object to including this space in the proposed project, however, it will be considered ineligible for reimbursement. No further action required.

Please note that upon selection of a preferred solution, the District may be required to adjust spaces/square footage that exceeds the MSBA guidelines and is not supported by the Educational Program provided.

No further review comments for this section.

#### 3.1.4 EVALUATION OF EXISTING CONDITIONS

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Confirmation of legal title to the property.	$\boxtimes$			
2	Determination that the property is available for development.	$\boxtimes$			
3	Existing historically significant features and any related effect on the project design and/or schedule.		$\boxtimes$		
4	Determination of any development restrictions that may apply.		$\boxtimes$		
5	Initial Evaluation of building code compliance for the existing facility.	$\boxtimes$			
6	Initial Evaluation of Architectural Access Board rules and regulations and their application to a potential project.				
7	Preliminary evaluation of significant structural, environmental, geotechnical, or other physical conditions that may impact the cost and evaluations of alternatives.		$\boxtimes$		
8	Determination for need and schedule for soils exploration and geotechnical evaluation.		$\boxtimes$		
9	Environmental site assessments minimally consisting of a Phase I: Initial Site Investigation performed by a licensed site professional.		$\boxtimes$		
10	Assessment of the school for the presence of hazardous materials.		$\boxtimes$		
11	Previous existing building and/or site reports, studies, drawings, etc. provided by the district, if any.	$\boxtimes$			

#### **MSBA Review Comments:**

The District has provided an evaluation of existing conditions for both the W. Edward Balmer Elementary School and Northbridge Elementary School.

2) The information provided indicates that a Project Notification Form (PNF) was submitted to Massachusetts Historical Commission (MHC) and includes a copy of the project notification form dated October 2, 2017. Please provide an updated project schedule that includes the timeline associated with filing with the Massachusetts Historical Commission (MHC) and obtaining MHC approval prior to construction bids.

#### Response:

An updated project schedule incorporating the MHC approval process is attached to this submission.

4) The District should keep the MSBA informed of any decisions and/or proposed actions that may require a variance associated with the height of the proposed building and the percentage of the total lot coverage. Please acknowledge.

#### **Response:**

The Designer and District acknowledge that any need to gain a Zoning variance for the height of the building will be disclosed and described in future submissions. Further detail on zoning requirements is provided on the "Utilities-Zoning Code" site plan attached to this submission.

7, 8, 9) Preliminary soils and geotechnical evaluations indicate additional subsurface explorations should be performed to obtain further information once the location and configuration of the proposed school has been determined. Please confirm this work will occur prior to and be accounted for in the District's Schematic Design submittal.

#### **Response:**

The Designer and District acknowledge that additional geotechnical exploration will be completed, and results and implications incorporated into the project as part of the Schematic Design submission.

Please note that all costs associated with abatement of contaminated soil from any source, and abatement and removal of fuel storage tanks must be itemized in the cost estimates and will be considered ineligible for MSBA reimbursement.

# **Response:**

The Designer and District acknowledge that all costs associated with abatement of contaminated soils, and abatement and removal of fuel storage tanks must be itemized in the cost estimates and will be considered ineligible for MSBA reimbursement.

10) Based on the findings of the hazardous materials report provided, it appears that the existing facilities include flooring and ceiling material containing asbestos. It should be noted that all costs associated with the removal of flooring and ceiling tiles containing asbestos are ineligible for MSBA reimbursement. Please describe how the District will account for potential costs in its total project budget at the conclusion of schematic design.

#### **Response:**

The estimated cost for abating the asbestos-containing flooring material is defined in the Hazardous Materials Determination Survey, dated July 31, 2017 by Universal Environmental Consultants and included in the PDP Submittal. The cost is included in the construction budget and total project budget. The cost is understood by the District to be ineligible.

No further review comments for this section.

## 3.1.5 SITE DEVELOPMENT REQUIREMENTS

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	A narrative describing project requirements related to site development to be considered during the preliminary and final evaluation of alternatives.	$\boxtimes$			
2	Existing site plan(s)		$\boxtimes$		

#### **MSBA Review Comments:**

- 2) Not provided. Please provide, a comprehensive existing site plan in 11x17 format that clearly identifies the following features for the proposed site in response to these review comments:
  - Structures and fences;
  - Site access and circulation;
  - Parking and paving;
  - Code requirements;
  - Zoning setbacks and limitations;
  - Accessibility requirements;
  - Easements;
  - Wetlands and/or flood restrictions;
  - Emergency vehicle access;
  - Safety and security requirements
  - o Utilities;
  - Athletic field and outdoor educational spaces; and
  - Site orientation and other location considerations.

#### **Response:**

Three comprehensive existing site plan drawings in 11x17 format are attached to this submission that clearly identify the features listed above, as follows:

- SP-E1 "Existing Conditions Site Plan Facilities-Parking-Circulation"
- SP-E2 "Existing Conditions Site Plan Utilities-Zoning"
- SP-E3 "Existing Conditions Site Plan Safety & Security"

No further review comments for this section.

#### 3.1.6 PRELIMINARY EVALUATION OF ALTERNATIVES

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Analysis of school district student school assignment practices and available space in other schools in the district	$\boxtimes$			
2	Tuition agreement with adjacent school districts	$\boxtimes$			
3	Rental or acquisition of existing buildings that could be made available for school use	$\boxtimes$			
4	Code Upgrade option that includes repair of systems and/or scope required for purposes of code compliance; with no modification of existing spaces or their function				
5	Renovation(s) and/or addition(s) of varying degrees to the existing building(s)	$\boxtimes$			
6	Construction of new building and the evaluation of potential locations	$\boxtimes$			
7	List of 3 distinct alternatives (including at least 1 renovation and/or addition option) are recommended for further development and evaluation.	$\boxtimes$			

#### **MSBA Review Comments:**

- 7) The submittal proposes four options for further consideration including:
  - New Construction Option B2: Grades 2-4, rear of the existing site;
  - Addition/Renovation Option C2: Grades PK-5, existing building, keep academic wing;
  - *New Construction Option C3: Grades PK-5, rear of the existing site;*
  - New Construction Option C5: Grades PK-5, front of the existing site.

For cost comparison purposes, please include a 'Base Repair Option' as part of the Preferred Schematic Report submission.

All options being considered for further evaluation are being proposed on the existing site. In addition, the information provided includes preliminary site plans for all options being considered for further development. However, the site plans provided do not clearly provide notation and do not include clear circulation patterns for the proposed alternatives. Please provide updated site plans accordingly in the response to these review comments.

# **Response:**

Proposed site plans for each Alternative in 11x17 format that provide annotations of major site features and proposed circulation patterns are attached to this submission.

Preliminary project costs for these options range from \$53 to \$107.9 million.

No further review comments for this section.

# 3.1.7 LOCAL ACTIONS AND APPROVAL

	Provide the following Items	Complete; No response required	Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff
1	Certified copies of the School Building Committee meeting notes showing specific submittal approval vote language and voting results, and a list of associated School Building Committee meeting dates, agenda, attendees and description of the presentation materials	$\boxtimes$			
2	Signed Local Actions and Approvals Certification(s):				
	a) Submittal approval certificate	$\boxtimes$			
	b) Grade reconfiguration and/or redistricting approval certificate (if applicable)				
3	[Applicable for Districts proposing grade reconfiguration and/or redistricting /consolidation] Provide the following items to document approval and public notification of school configuration changes associated with the proposed project				
	a) A description of the local process required to authorize a change to the existing grade configuration or redistricting in the district	$\boxtimes$			
	b) A list of associated public meeting dates, agenda, attendees and description of the presentation materials	$\boxtimes$			
	c) Certified copies of the governing body (e.g. School Building Committee) meeting notes showing specific grade reconfiguration and/or redistricting, vote language, and voting results if required locally	$\boxtimes$			
	d) A certification from the Superintendent stating the District's intent to implement a grade configuration or consolidate schools, as applicable. The certification must be signed by	$\boxtimes$			

the Chief Executive Officer, Superintendent of		
Schools, and Chair of the School Committee		

#### **MSBA Review Comments:**

No further review comments for this section.

# 3.1.8 APPENDICES

	Provide the following Items		Provided; District's response required	Not Provided; District's response required	Receipt of District's Response; To be filled out by MSBA Staff	
1	Current Statement of Interest	$\boxtimes$				
2	MSBA Board Action Letter including the invitation to conduct a Feasibility Study	$\boxtimes$				
3	Design Enrollment Certification	$\boxtimes$				

# **MSBA Review Comments:**

No further review comments for this section.

End

February 14, 2017 Updated November 27, 2017

# W. Edward Balmer Elementary School Feasibility Study Preliminary Project Schedule

PROJECT MANAGEMENT

SMMA

D	Task Name	Duration	Start	Finish	2016	2017	2018	2019	2020	2021	2022	2023
1	MSBA PREREQUISITES	434 days	3/9/2015	11/9/2016								
2	Original Statement of Interest (SOI) Submission	0 days	3/9/2015	3/9/2015								
3	MSBA Invite into Eligibility	0 days	11/9/2016	11/9/2016		<b>11/9/2016</b>						
4	RETAIN OPM	45 days	1/30/2017	4/3/2017								
5	Submit OPM Proposals	0 days	1/30/2017	1/30/2017		<ul><li>1/30/20</li></ul>	17					
6	OPM Interview	1 day	2/13/2017	2/13/2017		i i						
7	Negotiate OPM Contract	12 days	2/13/2017	2/28/2017								
8	Submit Documents to MSBA OPM Panel	0 days	3/8/2017	3/8/2017		3/8/20	17					
9	MSBA OPM Panel Meeting	0 days	4/3/2017	4/3/2017	4/3/	2017 🌑 MSB	A OPM Panel I	<b>Viceting</b>				
10	RETAIN DESIGNER	80 days	3/8/2017	6/27/2017								
1	Draft Designer RFS and Submit to MSBA	10 days	3/8/2017	3/21/2017								
2	MSBA Approve Draft RFS	11 days	3/21/2017	4/4/2017								
3	Submit to Central Register	0 days	4/6/2017	4/6/2017		<b>4/6/2</b>	017					
4	Notice in Central Register	0 days	4/12/2017	4/12/2017		<b>4/12</b>	/2017					
15	Briefing Session	0 days	4/18/2017	4/18/2017		<b>4/18</b>	/2017					
6	Submit Designer Proposals	0 days	5/2/2017	5/2/2017			2017					
7	MSBA DSP Proposal Review Meeting	0 days	6/6/2017	6/6/2017	6	6/6/2017 🌘 M	SBA DSP Prop	osal Review M	eeting			
8	MSBA DSP Interview Meeting	0 days	6/20/2017	6/20/2017	6	/20/2017 🌘 N	SBA DSP Inter	view Meeting				
9	Negotiate Designer Contract	6 days	6/20/2017	6/27/2017								
20	FEASIBILITY STUDY (FS)	166 days	6/27/2017	2/14/2018								
1	Develop Preliminary Design Program (PDP)	74 days	6/27/2017	10/6/2017								
2	Community Presentations	52 days	7/27/2017	10/6/2017								
3	Grade Reconfiguration Public Meetings	31 days	8/25/2017	10/6/2017								
4	Submit PNF to MHC	0 days	9/1/2017	9/1/2017		•	9/1/2017					
5	Receive MHC Clearance	0 days	10/2/2017	10/2/2017			10/2/2017					
6	Submit PDP to MSBA Staff	0 days	10/6/2017	10/6/2017		10/6/2017	Submit PDP	to MSBA Staff	f			
27	Develop Preferred Schematic Report (PSR)	64 days	10/6/2017	1/3/2018								
28	Community Presentations	64 days	10/6/2017	1/3/2018								
29	Grade Configuration Public Meetings	64 days	10/6/2017	1/3/2018								
30	Submit PSR to MSBA FAS	0 days	1/3/2018	1/3/2018		1/3/20	18 🌘 Submit I	PSR to MSBA F	FAS			
31	MSBA Board Meeting	0 days	2/14/2018	2/14/2018		2/14/2	2018 <b>MSBA</b>	<b>Board Meeting</b>	]			
32	SCHEMATIC DESIGN (SD)	95 days	2/14/2018	6/27/2018								
33	Develop Schematic Design	61 days	2/14/2018	5/9/2018								
34	Community Presentations	61 days	2/14/2018	5/9/2018								
35	Submit Schematic Design to MSBA	0 days	5/9/2018	5/9/2018		5	/9/2018 🌘 Sul	omit Schematic	c Design to MS	ВА		
36	MSBA Board Meeting	0 days	6/27/2018	6/27/2018			6/27/2018 🔵 N	ISBA Board Me	eeting			
37	LOCAL APPROPRIATION											
38	Town Meeting	21 days	9/17/2018	10/15/2018	$\neg$							
39	Debt Exclusion Vote	24 days	10/15/2018	11/15/2018								

February 14, 2017 Updated November 27, 2017

# W. Edward Balmer Elementary School Feasibility Study Preliminary Project Schedule

PROJECT MANAGEMENT

SMMA

D Task Name	Duration	Start	Finish	2016	2017	2018	2019	2020	2021	2022	2023
40 DESIGN AND CONSTRUCTION				l .							
Design Documentation	262 days	11/15/2018	11/15/2019								
42 Bidding and Award	22 days	11/15/2019	12/16/2019								
43 Construction	957 days		8/15/2023								
Option B1: Renovation and Addition - Grades 2-4	701 days	12/16/2019	8/22/2022								
Phased Renovations and Additions	701 days	12/16/2019	8/22/2022								
Option B2: New Construction - Back - Grades 2-4	524 days	12/16/2019	12/16/2021								
47 Building	436 days	12/16/2019	8/16/2021								
48 Demo/Site Work	88 days	8/17/2021	12/16/2021								
Option B3: New Construction - Front - Grades 2-4	524 days	12/16/2019	12/16/2021								
50 Building	436 days	12/16/2019	8/16/2021								
51 Demo/Site Work	88 days	8/17/2021	12/16/2021								
52 Option C1: Phased Renovation and Additions - Grades PreK-5 - New Classroom Wing	957 days	12/16/2019	8/15/2023								
53 Phased Renovations and Additions	957 days	12/16/2019	8/15/2023								
Option C2: Phased Renovation and Additions - Grades PreK-5 - Existing Classroom Wing	957 days	12/16/2019	8/15/2023								
55 Phased Renovations and Additions	957 days	12/16/2019	8/15/2023								
Option C3: New Construction - Back - PreK-5	784 days	12/16/2019	12/15/2022								
57 Building	696 days	12/16/2019	8/15/2022								
58 Demo/Site Work	89 days	8/15/2022	12/15/2022								
Option C4: New Construction - Side - Grades PreK-5	784 days	12/16/2019	12/15/2022								
60 Building	696 days	12/16/2019	8/15/2022								
61 Demo/Site Work	89 days	8/15/2022	12/15/2022								
Option C5: New Construction - Front - Grades PreK-5	784 days	12/16/2019	12/15/2022	1							
63 Building	696 days	12/16/2019	8/15/2022								
64 Demo/Site Work	89 days	8/15/2022	12/15/2022								































