SMS Community Forum #1

Ai3 Architects, LLC

September 25, 2019
School Committee
Andrew Crook, Chair
Christopher Godet, Vice Chair
Victor Machado, Jr.
Michael McDonald
Melissa Terra

School Building Committee
Michael Botelho Resident & Former School Committee Member
Richard Brown Town Administrator
Kathleen Byers Middle School Teacher
Dr. Pauline Camara Middle School Principal
Carlos Campos Supervisor of Buildings and Grounds
Chris Godet School Committee Member
Robert Lima Resident & Former Water Department Superintendent
Victor Machado Chairman of Building Committee & School Committee Member
Holly McNamara Selectman
Steven Medeiros Resident & Project Architect
Nicole Mello Middle School Content Coordinator
Cassey Monte Middle School Teacher
Nick Raffa Advisory and Finance Committee Chairman
Kevin Scanlon Resident & Licensed Massachusetts Construction Supervisor
Jeffrey Schoonover Superintendent of Schools
Ronald Tarro Director of Business and Finances

Project Team & Introductions
Community Forum #1 – September 25, 2019
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Chairman of Building Committee & School Committee Member
Selectman
Resident & Project Architect
Middle School Content Coordinator
Middle School Teacher
Advisory and Finance Committee Chairman
Resident & Licensed Massachusetts Construction Supervisor
Superintendent of Schools
Director of Business and Finances
March 9, 2017
The Town of Somerset submitted a Statement of Interest (SOI) to the MSBA

October 31, 2018
The MSBA invited the Town of Somerset to prepare a
Feasibility Study for the Somerset Middle School

Somerset has an opportunity to receive a
Grant reimbursement from the MSBA
to pay costs associated with a new school facility project.
## OPM Relevant School Experience

### Middle Schools

- Mulcahey Elementary School, Taunton MA
- READS Collaborative, Middleboro MA
- Barrington Middle School, Barrington RI
- Westport Middle-High School, Westport MA
- Belmont Middle School, Saugus MA
- Easton Middle School, Easton MA
- Freetown-Lakeville Middle School, Lakeville MA
- Hyannis Middle School, Hyannis MA
- Chenery Middle School, Belmont MA
- Sharon Middle School, Sharon MA (QC)
- Westerly Middle School, Westerly RI (QC)
- Lincoln K-8 School, Lincoln MA
- Bournedale Elementary School, Bourne MA
- Martin Elementary School, Seekonk MA (SBC)
- Millis Middle-High School, Millis MA

### High Schools

- Somerset-Berkley Regional High School
- Monomoy Regional High School, Harwich MA
- Oliver Ames High School, Easton MA
- Apponequet Regional High School, Lakeville MA
- Barnstable High School, Barnstable MA
- Seekonk High School, Seekonk MA (SBC)
- East Providence High School, East Providence RI

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**CGA/Dan Tavares Design Experience**  
Community Forum #1 - September 25, 2019
17 Middle Schools
- Memorial Middle School
- Wilson Middle School
- Seoul Middle School
- Lincoln Middle School
- Hingham Middle School
- Villanova Street Middle School
- Hamlet Ave Middle School
- Nathan Bishop Middle School
- Lynnfield Middle School
- Quincy Central Middle School
- Quincy Sterling Middle School
- Abington Middle / High School
- Christa McAuliffe Charter School
- Foxborough Regional Charter School
- Beverly Middle School
- East Bridgewater Middle / High School
- Kennedy Middle School

12 High Schools
- Somerset-Berkley Regional High School
- Natick High School
- Norwood High School
- Plymouth North High School
- Plymouth South High School
- Franklin High School
- Marshfield High School
- Abington Middle / High School
- Whitman-Hanson Regional High School
- Westerly High School
- Reading High School
- Hull High School
Over 50 Professionals
MSBA Process Overview

MSBA partnership with the Town of Somerset
The Massachusetts School Building Authority (MSBA) offered Somerset a Grant opportunity for the following reasons:

- “Open concept” general classrooms and educational spaces
- Lack of educational space for team teaching and collaboration
  - Science classrooms do not meet the state guidelines; most of the 7/8th grade instruction & laboratory experiments are limited to teacher demo and are not student-centered
- Undersized student dining area
- Undersized Library Media Center
- Lack of special education space for remedial and tutorial programs
  - SPED services requiring separate areas are being delivered in the classroom
- Elementary schools are at or above enrollment capacity
- Poor and/or ineffective acoustics within the instructional classrooms and team teaching spaces
  - SPED sub-separate classroom for autistic children does not have separate therapy rooms
  - Auditorium is being utilized as educational space
  - Lack of student exhibit space
- Lack of small group work, study, and testing areas
  - Lack of adequate administration and support space
  - Lack of integrated project labs
  - Lack of collaborative learning spaces
The Massachusetts School Building Authority (MSBA) offered Somerset a Grant opportunity for the following reasons:

- **Condition of existing building infrastructure**
- **Lack of Building Code compliance**
- **Lack of Energy Conservation Code compliance**
- **Lack of Seismic Structural Code compliance**
- **Lack of modern technology infrastructure at the Somerset Middle School**
- **Lack of handicap accessibility (building and site) at the Somerset Middle School**
  - Poorly planned building organization
  - Inefficient artificial lighting
  - Lack of natural ventilation and outdated mechanical systems
  - Lack of performance, presentation, and instructional space
  - Poorly organized middle school building that deters interdisciplinary or collaborative learning
- **Existing Somerset Middle School does not support modern middle school educational programming**
  - Inadequate / inefficient / poorly distributed HVAC systems
  - Poor on-site vehicular/bus circulation
  - Ineffective stormwater retention system
  - Nondescript main entrance
  - Lack of outdoor educational spaces (indoor-outdoor connections)
Where does this Grant money come from and has it been provided to other communities?

The money comes from taxes paid by Somerset residents and taxpayers throughout the Commonwealth.

1 penny of the State’s 6.25% Sales Tax

Your state tax dollars have already been spent in hundreds of local towns for their new schools. Somerset once again has been granted the opportunity to accept state grant money for investment in Somerset’s current and future needs!
What are the initial requirements to receive a Grant from the MSBA?

**Complete a comprehensive Feasibility Study** in collaboration with the MSBA to determine the most fiscally responsible and educationally appropriate long-term solution.
Over the past three months, Somerset has been completing this comprehensive Feasibility Study with very specific guidance from the MSBA.

Over 1,500 collective hours of meetings, planning, and discussion by Somerset analysis, investigation, and reporting by the engineering, design, educational team, and the MSBA!

- Haz-Mat Inspection & Report
- Phase 1 Environmental Assessment
- Plumbing Evaluation
- Electrical Evaluation
- Technology Systems Evaluation
- Educational Program
- Visioning Program
- Building Evaluation
- Structural Evaluation
- Heating & Ventilation Evaluation
- Space Summary Spreadsheets
- Site Evaluation
- Geotechnical Investigations
- Site Utility Review
- Permitting Review
- Comparison Matrix
- Sustainable Design Review
Upcoming Milestones & Dates
Somerset Middle School Schedule Overview

1. Feasibility Study Phase
   - Preliminary Design Program (PDP) (December 2019 SBC Vote to approve submission to the MSBA) → DEC. 2019
   - Preferred Schematic Report (PSR) (April 2020 SBC Vote to approve submission to MSBA) → APR. 2020

2. Schematic Design Phase (SD) (October 2020 SBC Vote to approve submission to MSBA) → OCT. 2020

3. Town Meeting Vote & Referendum → NOV. 2020

4. Project Scope & Budget and Project Funding Agreements → 2021

5. Design Development, Construction Documents and Bidding → 2021

6. Construction Completion → 2023

Upcoming Milestones & Dates
Community Forum #1 – September 25, 2019
Somerset Elementary Schools Analysis
What is the current enrollment at each elementary school?

**North**
- 461\* students

**South**
- 268 students

**Chace**
- 363 students

Total students: 1,092

*Excluding pre-kindergarten population - 38 students.*
How are the grades currently distributed at each elementary school?

Current Grade-Level Distribution per Somerset Elementary School

*Excluding pre-kindergarten population - 38 students.
What are the schools' current Gross Floor Area?

North Elementary School
Current GFA: 137,300

North

<table>
<thead>
<tr>
<th>Category</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current GFA</td>
<td>137,300</td>
</tr>
<tr>
<td>Non-Educational Space</td>
<td>21,600 GSF</td>
</tr>
<tr>
<td>Educational Space</td>
<td>115,700 GSF</td>
</tr>
</tbody>
</table>
How are the grades currently distributed at each elementary school?

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Pre-K Classes</th>
<th>Kindergarten Classes</th>
<th>Grade 1 Classes</th>
<th>Grade 2 Classes</th>
<th>Grade 3 Classes</th>
<th>Grade 4 Classes</th>
<th>Grade 5 Classes</th>
<th>Total General Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.5</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>21</td>
</tr>
</tbody>
</table>

*11 Interior classrooms **WITHOUT** natural daylighting or views to the outside.
How do the current quantity of classrooms compare to MSBA recommended quantity?

North Elementary School
Current GFA: 137,300

K - 5th Grade

<table>
<thead>
<tr>
<th>Description</th>
<th>Current Enrollment</th>
<th>MSBA Recommended Quantity of General Classrooms</th>
<th>Current Quantity of General Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>w/o Pre-K</td>
<td>461</td>
<td>22</td>
<td>21*</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>20-22</td>
</tr>
</tbody>
</table>

*11 Interior classrooms WITHOUT natural daylighting or views to the outside.
How many pupils per classroom are there currently?

Current Enrollment: 461
MSBA Recommended Quantity of General Classrooms: 22
Current Quantity of General Classrooms: 21*
District Classroom Policy: 20–22
Current Average Pupils per Classroom: 24

*11 Interior classrooms without natural daylighting or views to the outside.
What are the schools’ current Gross Floor Area?

South Elementary School
Current GFA: 29,900

South
Current GFA 29,900
How are the grades currently distributed at each elementary school?
### K - 5th Grade

<table>
<thead>
<tr>
<th>Current Enrollment</th>
<th>MSBA Recommended Quantity of General Classrooms</th>
<th>Current Quantity of General Classrooms</th>
<th>Average District Classroom Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>268</td>
<td>13</td>
<td>12</td>
<td>20–22</td>
</tr>
</tbody>
</table>
How many pupils per classroom are there currently?

South Elementary School
Current GFA: 29900

K - 5th Grade

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Enrollment</td>
<td>268</td>
</tr>
<tr>
<td>MSBA Recommended Quantity of General Classrooms</td>
<td>13</td>
</tr>
<tr>
<td>Current Quantity of General Classrooms</td>
<td>12</td>
</tr>
<tr>
<td>District Classroom Policy</td>
<td>20-22</td>
</tr>
<tr>
<td>Current Average Pupils per Classroom</td>
<td>21</td>
</tr>
</tbody>
</table>

OVERCROWDED
AT CAPACITY
What are the schools' current Gross Floor Area?

Chace
Current GFA  53,800
How are the grades currently distributed at each elementary school?

Chace Elementary School

<table>
<thead>
<tr>
<th></th>
<th>Kindergarten Classes</th>
<th>Grade 1 Classes</th>
<th>Grade 2 Classes</th>
<th>Grade 3 Classes</th>
<th>Grade 4 Classes</th>
<th>Grade 5 Classes</th>
<th>Total General Classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chace Main Level</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>17</td>
</tr>
</tbody>
</table>
Chace Elementary School
Current GFA: 53,800

How do current quantity of classrooms compare to MSBA recommended quantity?

<table>
<thead>
<tr>
<th>Grade</th>
<th>Current Enrollment</th>
<th>MSBA Recommended Quantity of General Classrooms</th>
<th>Current Quantity of General Classrooms</th>
<th>District Classroom Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>K - 5th Grade</td>
<td>363</td>
<td>18</td>
<td>17</td>
<td>20–22</td>
</tr>
</tbody>
</table>
How many pupils per classroom are there currently?

Chace Elementary School
Current GFA: 53,800

K - 5th Grade

- Current Enrollment: 363
- MSBA Recommended Quantity of General Classrooms: 18
- Current Quantity of General Classrooms: 17
- District Classroom Policy: 20-22
- Current Average Pupils per Classroom: 22

OVERCROWDED

AT CAPACITY
What is the current quantity of 5th grade students for each elementary school?

<table>
<thead>
<tr>
<th>5th Grade Student Population</th>
<th>North</th>
<th>South</th>
<th>Chace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Enrollment</td>
<td>99</td>
<td>47</td>
<td>64</td>
</tr>
</tbody>
</table>
### Potential Future Capacity

<table>
<thead>
<tr>
<th>School</th>
<th>Potential Future Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>60-66 pupils</td>
</tr>
<tr>
<td>South</td>
<td>20-22 pupils</td>
</tr>
<tr>
<td>Chace</td>
<td>40-44 pupils</td>
</tr>
</tbody>
</table>

What would the future capacity for each Elementary School be with 5th grade relocated to the Middle School?

#### 5th Grade Population

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>South</th>
<th>Chace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Enrollment</td>
<td>99</td>
<td>47</td>
<td>64</td>
</tr>
</tbody>
</table>

#### K - 4th Grade

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>South</th>
<th>Chace</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted Enrollment</td>
<td>362</td>
<td>221</td>
<td>299</td>
</tr>
<tr>
<td>MSBA Recommended Quantity of Gen. Classrooms</td>
<td>18</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Current Quantity of General Classrooms</td>
<td>21*</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>District Classroom Policy</td>
<td>Average 20-22</td>
<td>Average 20-22</td>
<td>Average 20-22</td>
</tr>
</tbody>
</table>

*11 Interior classrooms WITHOUT natural daylighting or views to the outside.
Potential ADVANTAGES of a 5-8 middle school model:

1. Provides relief to the three elementary schools’ educational programs and facility space challenges.

2. The 5-8 model would provide opportunity for fifth graders to be in classes that are structured to the student’s teaching and learning styles; instead of one to four 5th grade classrooms in each school, the total of eight to ten 5th grade classrooms would be in one school.

3. The 5-8 model would provide opportunity for 5th graders (academics structured to the student’s ability level) to take higher level courses without traveling to another school.

4. 5th grade faculty and staff would be located in the same building, providing an opportunity for collaboration, common planning time, and sharing of educational resources.

5. The 5-8 model allows 5th grade teachers to collaborate more closely with 6th-8th grade teachers, enhancing the ability of teachers to work on vertical teams to increase student achievement.

6. The 5-8 model extends to the 5th grade students much-needed support services such as language, technical education, art, music, and other specialties that are part of the Town of Somerset’s middle school curriculum offerings.

7. Research shows that transitioning to middle school is extremely difficult for students who are already undergoing social, emotional, and physical changes. Placing 5th grade in the middle school helps ease student transition from an elementary school to a middle school environment; reducing transitional stresses for the children at the elementary school level, with 5 years in elementary (K-4), 4 years in middle (5-8), and 4 years in high school (9-12).
Potential **ADVANTAGES** of a 5-8 middle school model (continued):

8. The 5-8 model would group pupils who are more alike than either elementary or secondary age pupils. This middle age group would need personal attention which they would not receive sufficiently in any of the other organizations. These students are at a pre-adolescence stage and would benefit to be together with excellent teaching personnel.

9. Students in a 5-8 model are at an academic age where they need reinforcement and extension of skills through hands-on learning and application. **Students would be exposed to various areas of specialization at an earlier age in an exploratory basis.** Specialists would be available to help 5th graders branch out easier than they might be able to in an elementary school. 5th graders would be provided the opportunity to use specialized facilities such as virtual reality labs, engineering/robotics labs, industrial arts shops, science labs, and collaboration space.

10. The 5-8 model would provide an orderly transition from elementary school methods and materials to secondary school methods, materials, and complete departmentalization (i.e. from self-contained to a departmentalized environment).

11. 5th grade students would have the opportunity to **participate in middle school athletic programs.**

12. The 5-8 model would provide **5th grade students the opportunity to participate in middle school music programs,** thereby allowing the District to create 5/6 band and 7/8 band programs and establish an entry music program for 3rd grade students.

13. The 5-8 model would result in a **reduction in transportation costs.**
Potential **DISADVANTAGES** of a 5-8 middle school model:

1. Some 5th graders might be better suited in the protective environment of an elementary school (sense of security) than in a middle school with a 5-8 grade structure.

2. Social and emotional changes are a challenge for middle school age students (11-14 years old).

3. The 5-8 model assumes that the maturation patterns of 5th grade pupils are more like those of the 6th, 7th, and 8th graders than they are like those of the 3rd and 4th graders.

4. Additional specialized faculty and staff would be required at the middle school in a 5-8 grade structure.
Existing Conditions Analysis
Existing Middle School Building Conditions

Exterior

- Non-compliant (energy code) single pane exterior window systems
- Exterior Brick veneer water infiltration, movement, and failure
- Brick Spalling
- Inadequate bearing of brick on steel lintel
Existing Middle School Building Conditions

Exterior
Existing Middle School Building Conditions
Exterior
Existing Middle School Building Conditions

Exterior
Existing Middle School Building Conditions

Exterior
Existing Middle School Building Conditions

Interior

Asbestos Containing Floor & Adhesive Material (ACM)

Moisture issues resulting in delaminating floor material
Existing Middle School Building Conditions

Interior

Non-compliant (ADA) lockers and benches

Water infiltration resulting in plant material growth

Water infiltration, floor buckling, and material failure
Existing Middle School Building Conditions

Interior

- Non-compliant (ADA) Ramp (slope, handrails, entries, etc.)
- Non-compliant (ADA) HC sink & accessories
Existing Middle School Building Conditions

Interior

Non-compliant (ADA) clear opening

Non-compliant (ADA) HC sinks & accessories
Existing Middle School Building Conditions

Interior

Non-compliant (ADA) drinking fountain

Non-compliant (ADA) Fire Extinguisher “Cabinet”

Non-compliant (ADA) HC stalls & accessories

Non-compliant (ADA) urinals
Existing Middle School Building Conditions

Interior

Non-compliant (ADA) base cabinets

Base cabinet & countertop material breakdown

Non-compliant (ADA) sink and faucets
Existing Middle School Building Conditions

Interior
Existing Middle School Building Conditions

Interior
Existing Middle School Building Conditions

Interior
21st Century Middle School Design
What is 21st Century Middle School Design?

- Multi-Use Student Commons Environments
- Indoor/Outdoor Connections
- Greenhouse/Science
- Collaborative Teacher Workrooms
- Project Based Learning Labs
- Expressed MEP Systems
Small learning communities and collaborative student opportunities
outdoor learning courtyard - indoor / outdoor connections
Multifunctional performance / lecture spaces
Instructional classroom REDEFINED: Collaborative Huddle Spaces
Display of student artwork - personalization of space
Independent reading areas
Somerset Middle School Site
26.2 Acres of Land

Original Middle School, open 1965
Next Steps & Discussion

1. Development of Conceptual Site & Building Plan Options

2. Final Evaluation of Existing Conditions

3. Evaluation of Cost Alternatives
For more info, please go to:
http://www.somerset schools.org/District-Info/
Somerset-Middle-School-Building-Project/index.html
Follow link off Somerset Public Schools Website

Community Forum #2: November 13, 2019