

Mosier Elementary School

South Hadley, MA

Schematic Design

September 9, 2026



Schematic Design Phase

- Pre-Estimate Meeting with Both Estimators
 - Estimates Due 9/30/26, Reconciliation on 10/2/26
 - VE developed throughout estimate process.
- Upload Schematic Design Documents 10/07/26
- SD Submission to MSBA on 10/22/26
- Set Vote Dates – Special Town Meeting 2/22 - 2/24/2-27; Town Election 4/13/27
- SHEL D Discussions
 - Rates, PV Solar Array, Own vs. PPA
- Project Advisory 100 Pathways
 - Mixed-Fuel Building (Option 1)
 - All-Electric Building (Options 2 & 3)
 - ~~Zero Energy Building~~



Life Cycle Cost Analysis (LCCA)

System	Type	HVAC System First Costs	Annual Energy Use Cost	Annual Maintenance Cost	25-Year LCCA	Remarks
Gas Boiler & Chiller	Mixed Fuel	\$12,396,570	\$200,962	\$82,500	\$18,442,627	PV Required by Pathway* Additional MSBA 3% Reimbursement
Central ASHP	All Electric	\$14,881,000	\$135,642	\$101,805	\$18,885,047	PV included for comparison* Additional MSBA 3% Reimbursement
ASHP, Boiler & Chiller	All Electric	\$14,200,000	\$361,763	\$93,390	\$27,441,881	PV included for comparison* Additional MSBA 3% Reimbursement

1. The LCCA is based on a 113,730 sf new school and a 25-year duration. Year 1 energy costs are based on a blended utility cost rates of \$0.17/kWh + demand rate \$9.00/kW, \$1.66/therm.
2. Mixed-Fuel option includes \$111,000/year for natural gas (Eversource).
3. The LCCA includes escalation rates for the cost of electricity, natural gas, and maintenance.
4. *25-Yr LCCA figures for all options include the preliminary modelling assumption that 225,000 kWh/year of PV production reduces purchased electrical energy. PV production is based on minimum code-required system size of Approx. 171kWdc. PV costs and SHELD generation credits will continue to be refined as the project progresses.
5. PV system first-cost and O&M costs are not included in the LCCA totals but are consistent in all 3 options.

Gas Fired Boiler – Air Cooled Chiller

High efficiency gas fired boilers located in mechanical room produce hot water.

Air cooled chiller located on the roof produces chilled water.

Pros

- System is energy efficient
- Lowest First Cost not including PV

Cons

- Fossil Fuel
- Will require PV system to be installed



Central Air Source Heat Pump and Back up Electric Boiler

Central Heat Pump located on the roof produces hot or chilled water. System utilizes energy in the ambient air.

Electric boiler can be provided for back up and supplemental heat the during winter.

Pros

- System is very energy efficient
- All electric system
- Heat pump is modular to provide redundancy
- Electric boiler back up only.
- Lowest LCCA cost for all electrical option

Cons

- High operating costs for electric boiler when in use
- Roof space needed for heat pumps – may reduce available space for PV panels

Central ASHP recently installed at Newton Library



Air Source Heat Pump, Air Cooled Chiller and Electric Boiler

Multiple air source heat pumps located on the roof to provide ventilation air to the building.

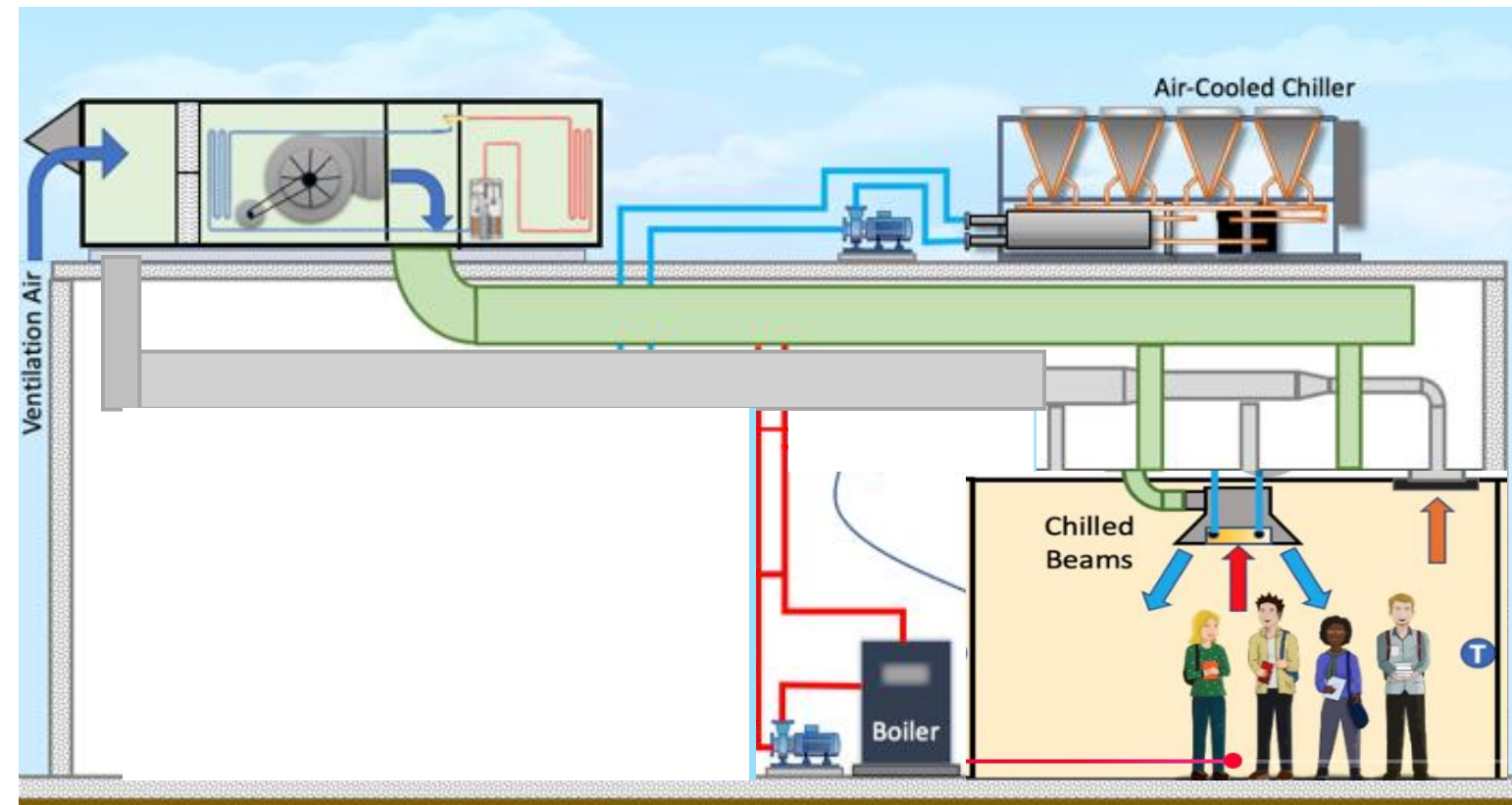
Electric boiler provides hot water, and air-cooled chiller provides chilled water.

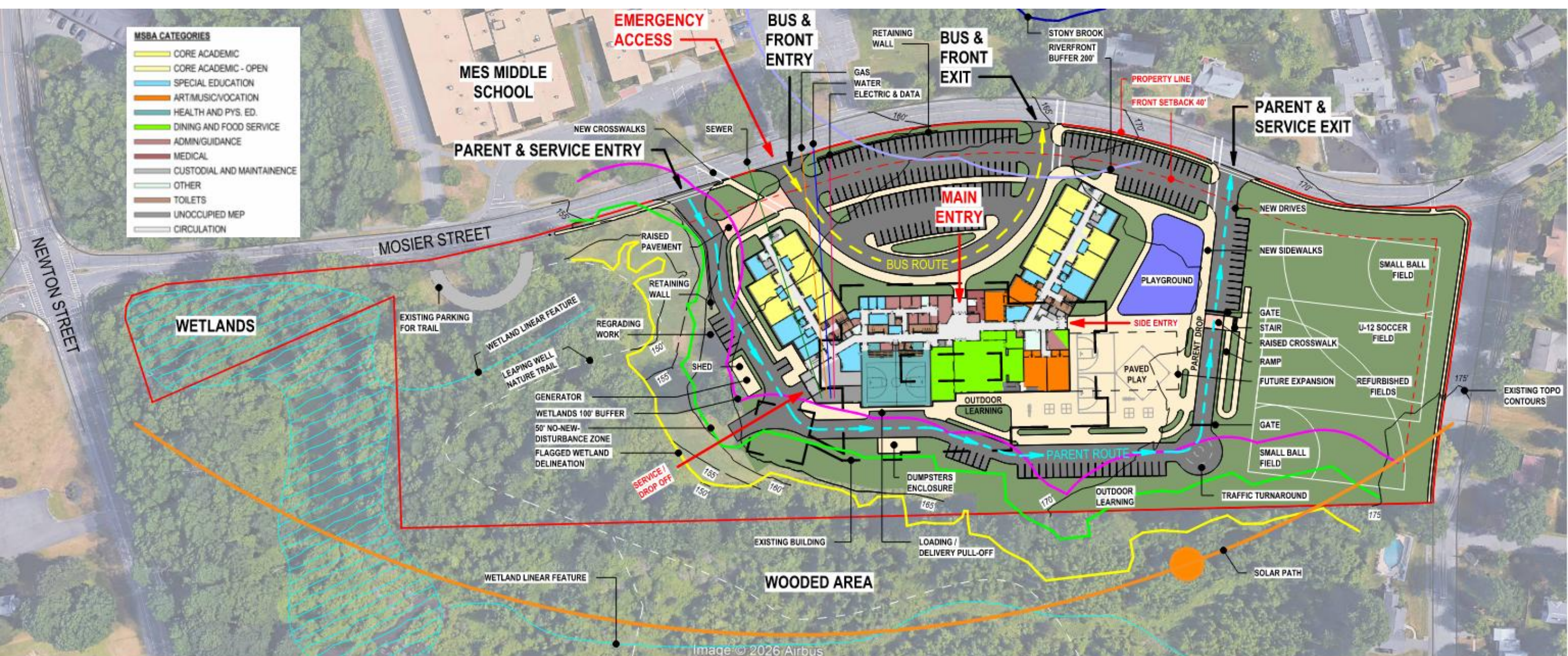
Pros

- All Electric System
- Heat pump is modular to provide redundancy

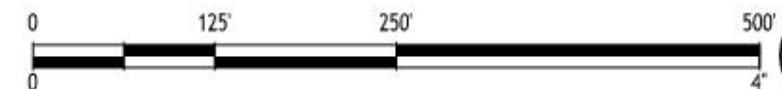
Cons

- High operating costs due to electric boiler
- Multiple different systems to maintain.





BUS QUEUE = APPROX. 390', 8 FULL SIZE
 PARENT QUEUE = APPROX. 1100', 50 VEHICLES
 PARKING = APPROX. 170 SPACES



Overall Site Plan

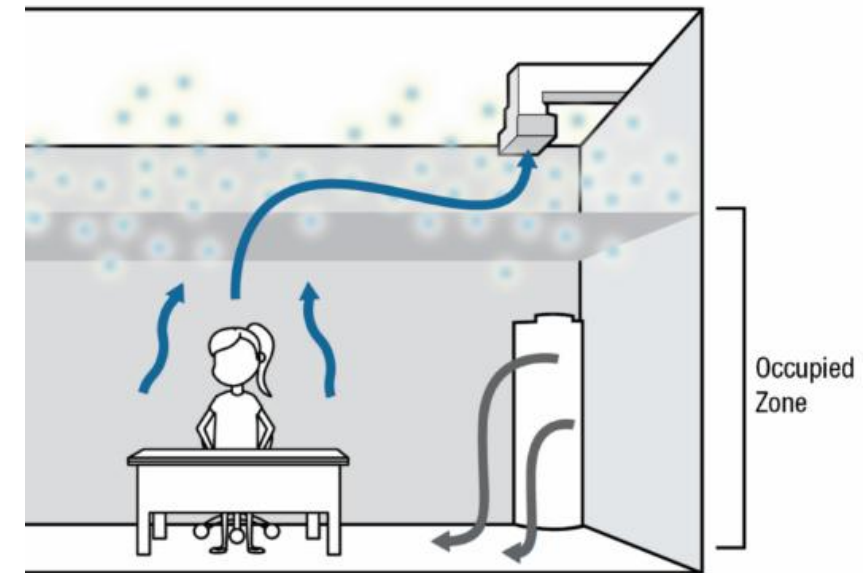
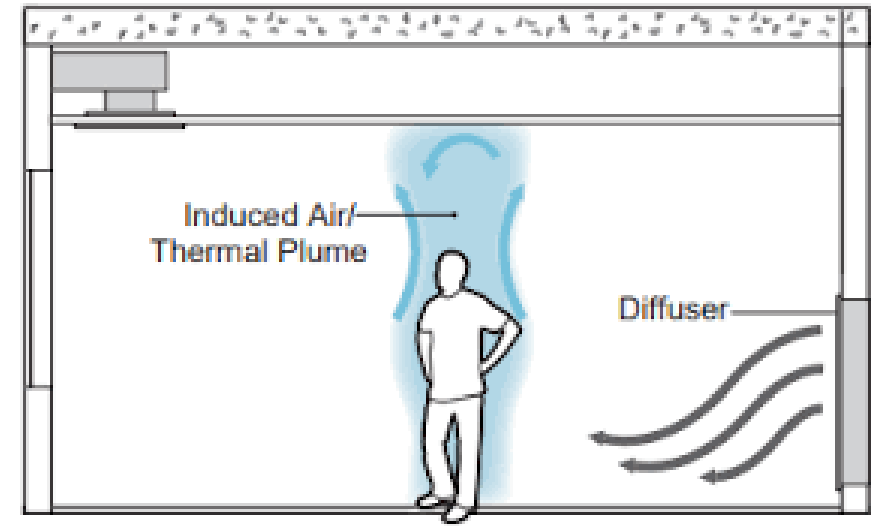
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CLASSROOM HVAC OPTIONS

Displacement Ventilation

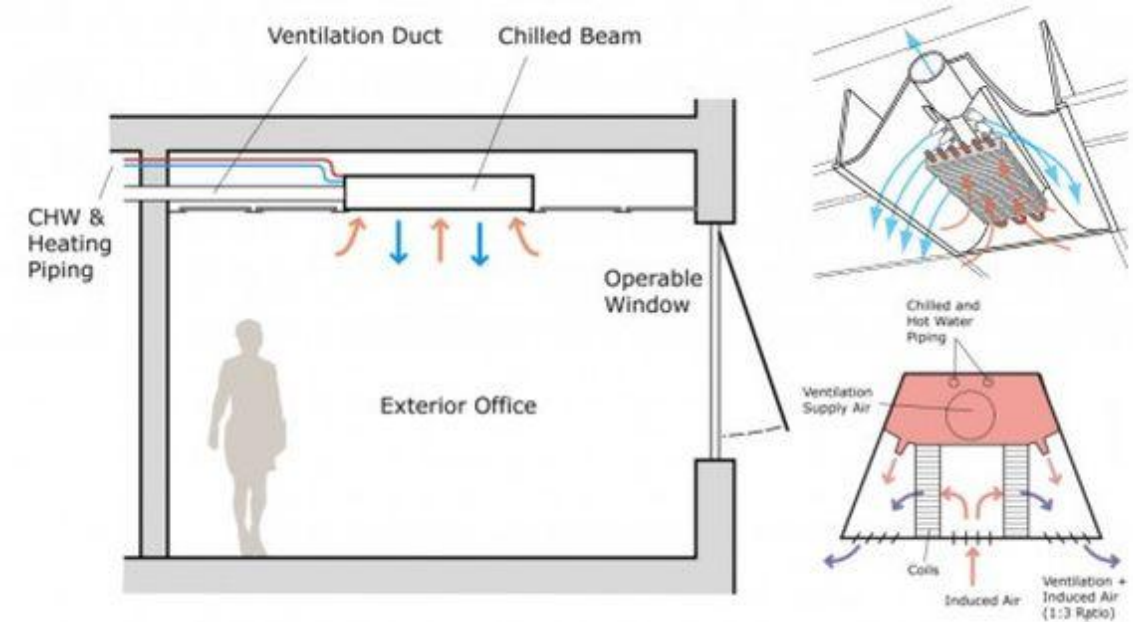
- Multiple roof mounted air handling units
- Gas fired boiler provides hot water for heating
- Supplies 100% fresh outdoor air to the classroom
- Tempered and dehumidified air enters the room low, rises and is exhausted at the ceiling
- Individual heating thermostat control for each room



CLASSROOM HVAC OPTIONS

Chilled Beams

- Multiple roof mounted air handling units
- Gas fire boiler and air-cooled chiller provide hot and chilled water
- Supplies 100% fresh outdoor air to the classroom
- Chilled/hot water coils at the ceiling that can provide full heating and cooling
- Individual heating and cooling thermostat control for each room



Full Air-Conditioning

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System (by Ranking)	Installation Costs	PROS	CONS
Gas Fired Boiler, Air Cooled Chiller, Chilled Beams	Range Approx. \$100 - \$105 sq/ft	• Provides full cooling • Provides individual temperature control for each classroom.	• Higher initial and operating costs
Gas Fired Boiler and Displacement *Not full cooling in classrooms	Range Approx. \$65 - \$70sq/ft	• Lowest initial costs • Improved Indoor air quality	• Does not provide full cooling



Finance Subcommittee Update

BUDGET, COMMITTED, SPENT (BCS) REPORT

TOTAL: \$2,069,465 \$1,357,587 66% \$994,820 73%

Cost Code	Cost Code Type	Cost Code Category	Budget	Committed / Approved	% Committed	Spent	% Spent
[0001-0000 - OPM - Feasibility Study]	Owner Cost	Base_Contract	\$350,000.00	\$335,840.00	96%	\$195,330.00	58%
[0002-0000 - A&E - Feasibility Study]	Owner Cost	Base_Contract	\$800,000.00	\$800,000.00	100%	\$609,962.30	76%
[0003-0000 - Environmental & Site]	Owner Cost	Base_Contract	\$400,000.00	\$219,747.00	55%	\$188,193.75	86%
[0004-0000 - Other]	Owner Cost	Base_Contract	\$519,465.00	\$2,000.00	0%	\$1,334.37	67%

- Submitted to MSBA: \$819,422
- MSBA Audited: \$819,422
- MSBA Pending Audit: \$0.00
- Audit Complete Pending MSBA Payment: \$20,131
- Ineligible Costs to Date: \$739
- Reimbursement to Date: \$489,672
- Effective Reimbursement Percentage: 61.26 (Reimbursement Rate 61.32%)

Communications Subcommittee Update

Upcoming Community Engagement / Meetings

- Communications Subcommittee Meeting on 09/24/26, 9:00 AM
- Invoice Review Subcommittee Meeting on 09/15/26 (time TBD)
- SBC – Next Meeting on 09/23/26, 5:30 pm
- SBC – Next Meeting on 10/07/26, 5:15 pm
- SBC – Next Meeting on 10/14/26, 5:30 pm

Tabeling Opportunities at Community Events (Volunteers Needed):

- End of Summer and Fall 2026 Community Outreach Events
- Cruise Nights and Friday Concerts at Bandshell
- 09/11 and 09/12
- Back to School Open Houses:
 - SHHS on 09/17/26, 6:00 – 8:00 pm
 - SKALA on 09/24/26, 5:30 – 7:00 pm (Diane & Elizabeth)
 - MESMS on 09/29/26, 6:00 – 8:00 pm
 - MOSIER on 09/29/26, 4:30 – 6:00 pm (Rudie & Tracie)

Stay tuned for more information events at Butter Brook:

[Buttery Brook Park | South Hadley, MA - Official Website](#)

Update on ongoing outreach:

- Tax insert created and coordinating of printing costs and logistics with Town of South Hadley (due by 09/18/26). Pending SBC approval, will be included in Q4, 2026 tax bill.
- Project update (Coffee, Cookies & Conversation) at Council on Aging, project team *is scheduled to present*:
 - Project Introduction / Overview on 10/08 at 1:00 PM
 - Revised Cost Overview on 11/19 at 1:00 PM
 - Lisa Wong to meet with seniors at SH COA on 09/26 and will bring one pagers with her for distribution. (attended on 09/08/26 also)
- Three power points created. Topics include: Educational Plan, Existing Conditions and Why Now. Recently posted on SH Elementary School Project website and as a Facebook post.
- One pager flyer created. Includes rendering and 3 talking points: Educational Vision, Community Benefits and MSBA Partnership
- Project website continues to be updated with all meeting materials / communications
- Social Media plan includes routine Facebook posts, Town News Flash (Press Releases) and Superintendent's Newsletter updates, Flyers/Pamphlets available at Town Offices, Library & Senior Center
- Coordinating with South Hadley Community Television
 - Mosier Tour Video by Dan Pease and narrated by former SHPS students

Tax Bill Insert



Mosier Elementary School Project

MSBA Partnership

- The Massachusetts School Building Authority (MSBA) helps communities build and renovate high-quality, cost-effective, and energy-efficient schools.
- South Hadley applied three times before Mosier Elementary School was accepted into the highly competitive MSBA Core Program.
- In 2023, Mosier Elementary School was selected as one of only 19 schools statewide from 63 applicants to enter the MSBA process.
- The MSBA is expected to reimburse approximately half of eligible project costs, helping to significantly reduce the local share for South Hadley taxpayers.
- Once a final project cost is determined, **the new school building project will need town approval through a ballot question, with a vote expected on April 13, 2027**



Rendering by: MVG, Architect

Stay Informed, Get Involved.
Vote on April 13, 2027

Learn More on our Project Website

<https://www.southhadleyschools.org/our-schools/south-hadley-elementary-building-project/home>
or Scan the QR



SCAN ME

Visit our website to learn more about the Mosier Elementary School Building Project's "Why Now", "Existing Conditions", "Educational Plan", and "Potential Tax Impact".

Stay Connected

Email: shbuilds@shschools.com | Facebook: @SouthHadleySchools



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\$600 approval needed for inserts to be printed and mailed.

Thank You



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