# Coakley Middle School Norwood Public Schools

### **Community Forum #2**

March 18, 2021

### **School Building Committee**

Alan Slater	Chair
Cathy Carney	MCPPO – Contract Administrator
David Catania	School Committee member
Diane Ferreira	Principal of Balch Elementary School
Dr. Margo Fraczek	Principal of Coakley Middle School
Matt Lane	Selectman
Tom Maloney	Selectman
Tony Mazzucco	General Manager
Paul Riccardi	Director of Buildings and Grounds
Terresa Stewart	School Committee member
Dr. David Thomson	Superintendent
Matthew Walsh	Building Commissioner

#### Architect Ai3 Architects, LLC

OPM COMPASS Project Management, Inc.

In partnership with the **Massachusetts School Building Authority** 







Compass Project Management

#### March 18, 2021

Introductions

Agenda

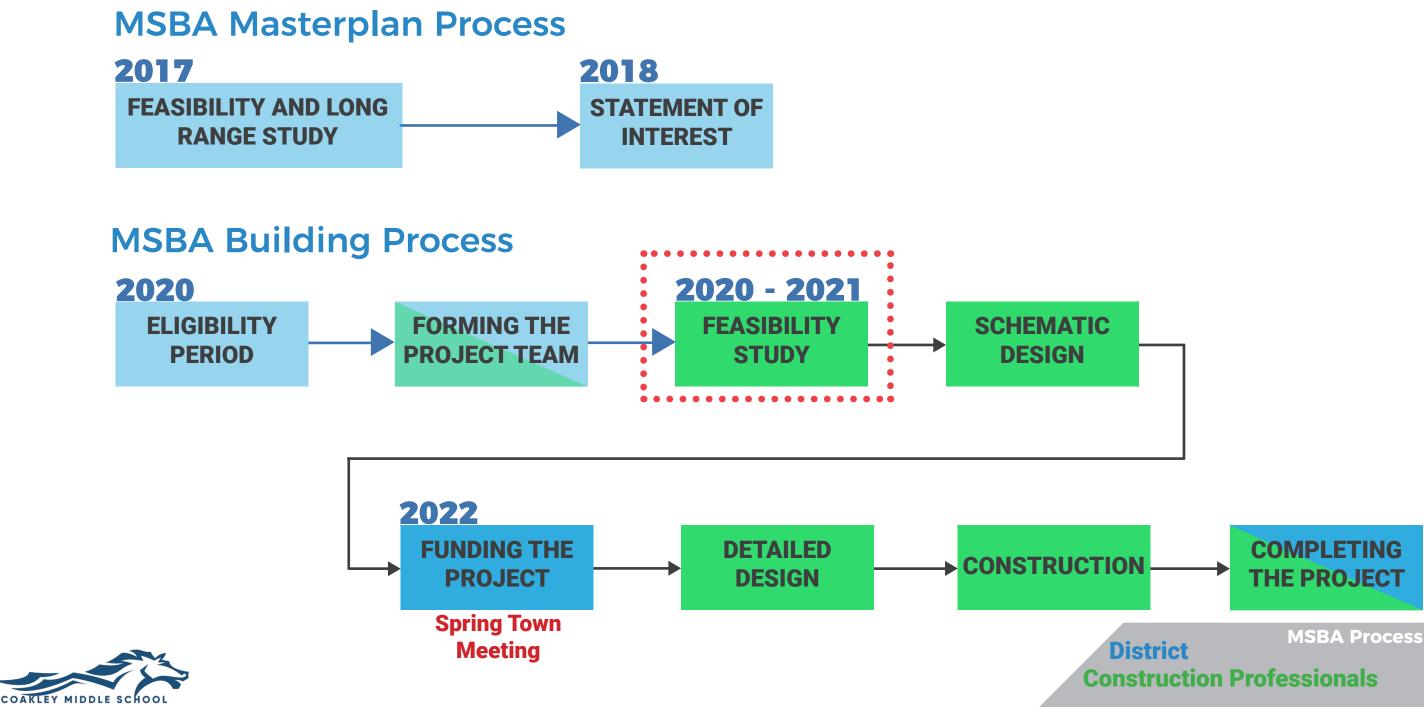
Project Schedule

Site Selection

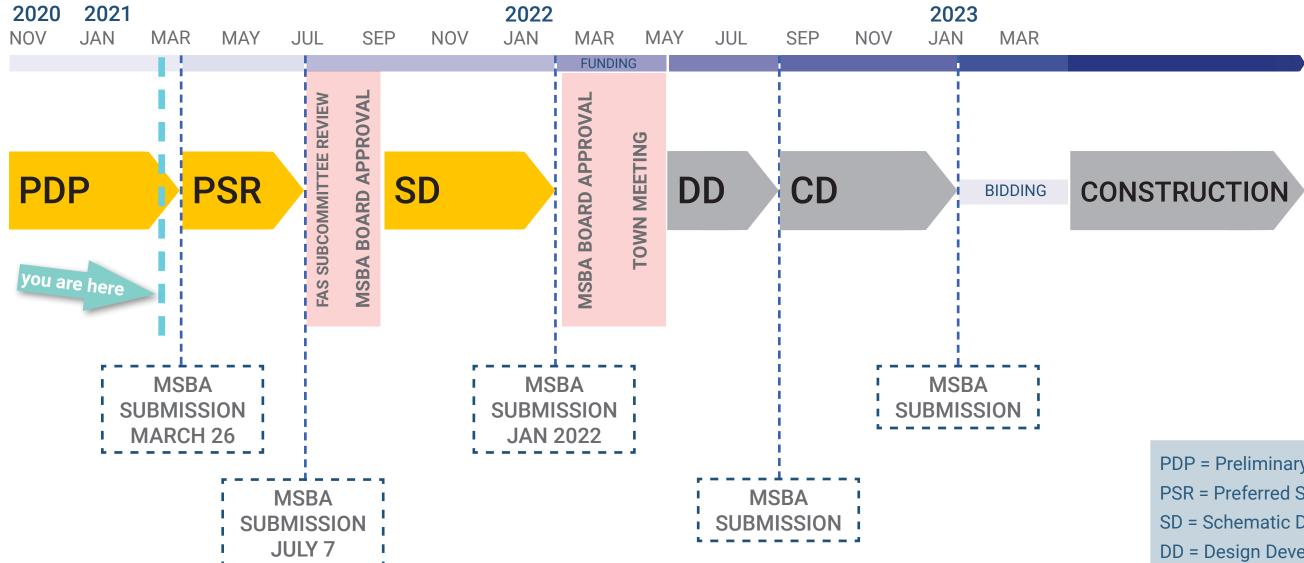
- **Existing Conditions Evaluation**
- Educational Visioning and Planning
- Space Summary & Building Size
- **Design Options**
- Questions & Answers



# **MSBA Masterplan & Building Process**



# **Project Schedule**



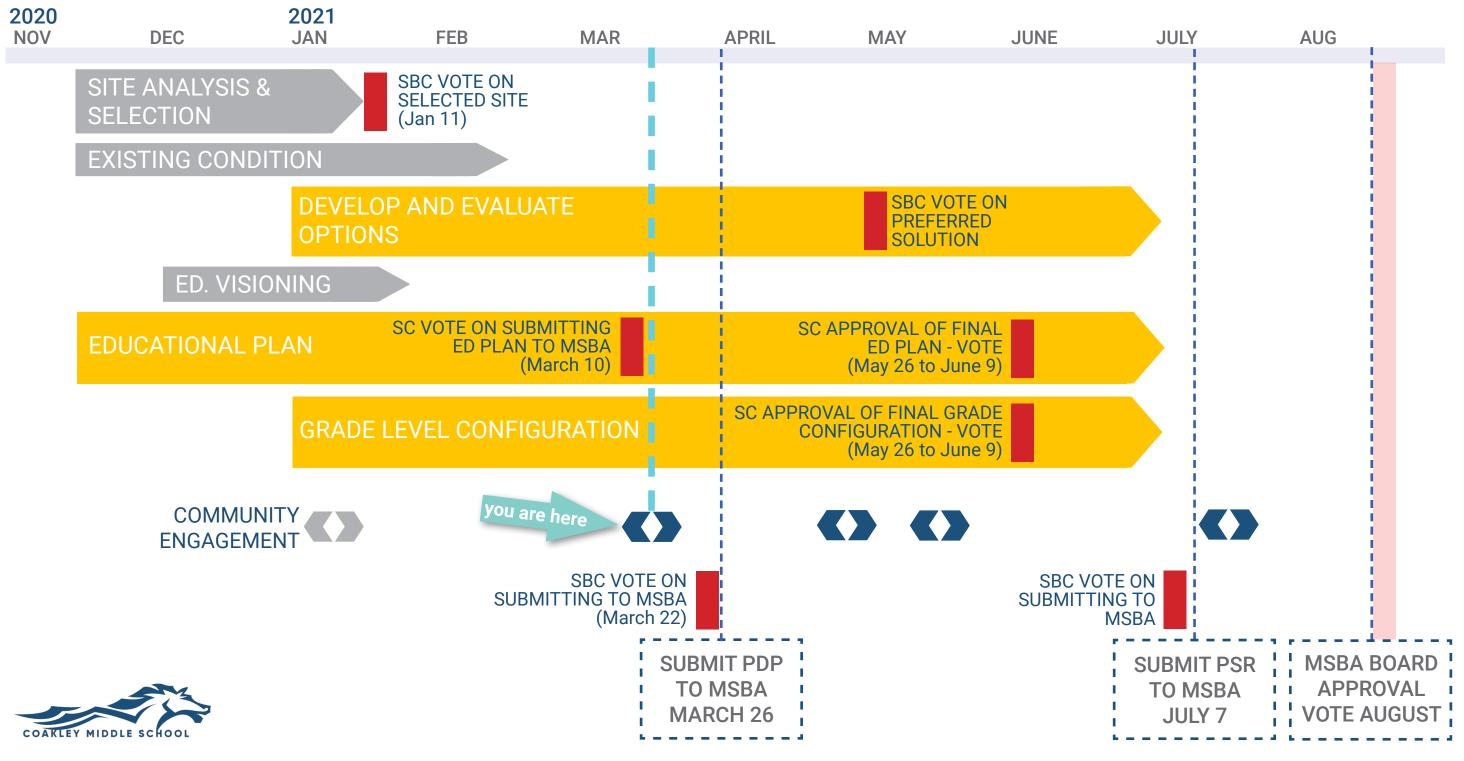


- PDP = Preliminary Design Program
- PSR = Preferred Schematic Report
- SD = Schematic Design
- DD = Design Development
- **CD = Construction Documents**

**Project Schedule** 

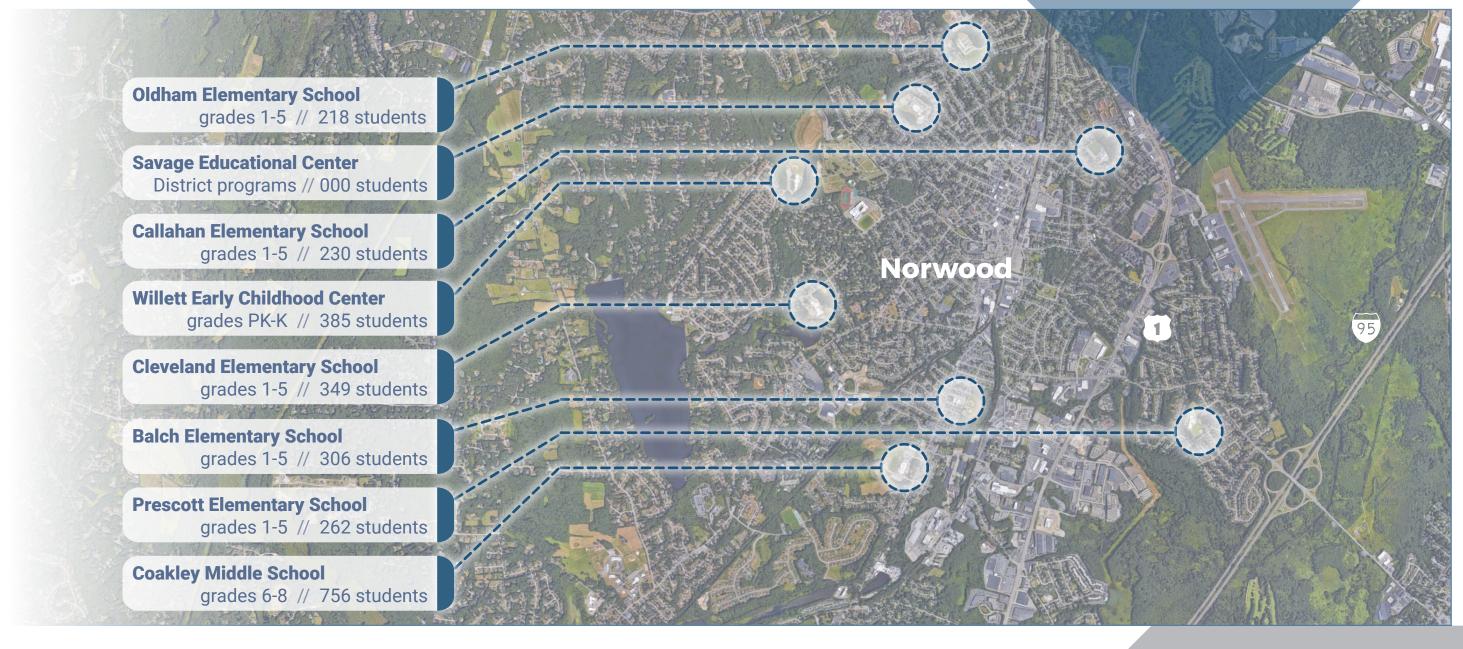
# **Project Schedule:**

#### PDP and PSR Schedule



# Feasibility Study Evaluation: RECAP

**Completed by a design team of 30+ professionals** 



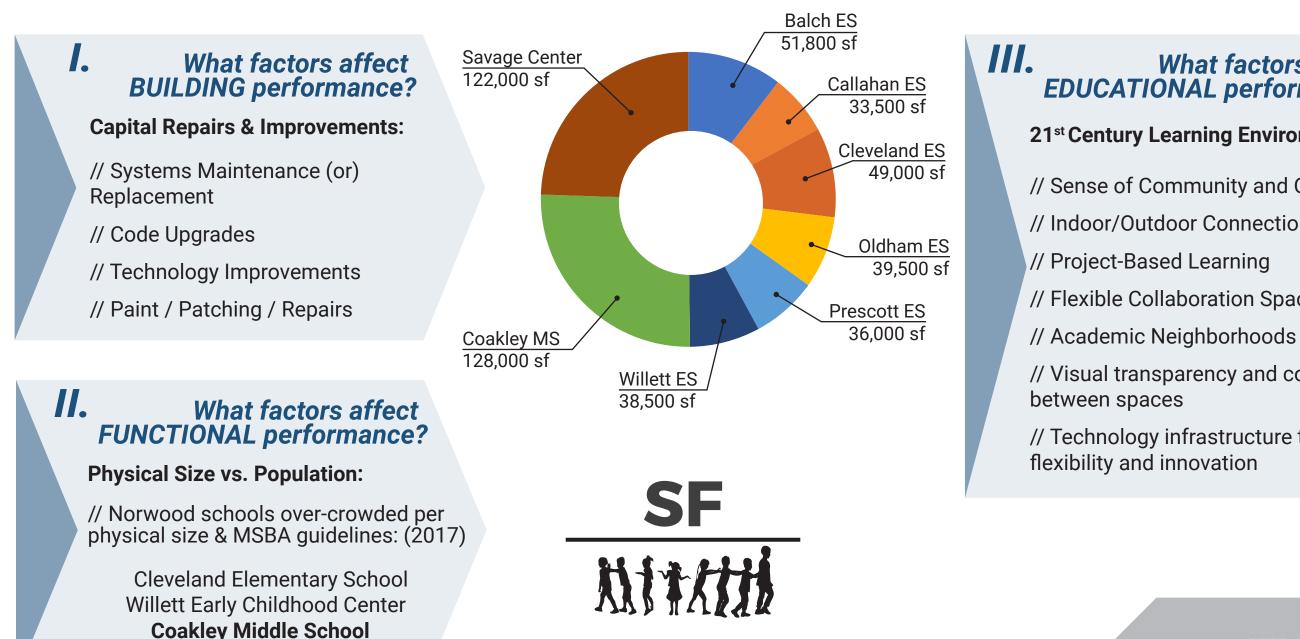


## We analyzed each building & met with every principal to obtain insight

**MSBA Process Overview** feasibility & long range study 2017

# Feasibility Study Evaluation: RECAP

Identified factors that affect Building, Functional, & Educational Performance



### What factors affect **EDUCATIONAL performance?**

### 21<sup>st</sup> Century Learning Environment:

- // Sense of Community and Ownership
- // Indoor/Outdoor Connections
- // Flexible Collaboration Spaces
- // Visual transparency and connection
- // Technology infrastructure to support

**MSBA Process Overview** feasibility & long range study 2017

# **Coakley MS underperformed in ALL Categories**







# **Site Selection**

**28** SITE CRITERIA QUESTIONS

- PREREQUISITE: Buildable area
- **GENERAL:** Location & Ownership
- <u>TECHNICAL:</u> Zoning, Topography, Soils, Wetlands
- EDUCATIONAL: Green space, athletic fields, outdoor classrooms



### **SITES STUDIED:**

MS Site Center		Hennessey Field	Forbes Hill	Savage Education Center	Balch ES	Callahan ES	Cleveland ES	Oldham ES
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#### Prescott ES

Winsmith Mills

Site Selection selection matrix

	Site Options Selection Matrix	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Remark
	Coakley Middle School Project	Existing Coakley Middle School Site 1315 Washington Street	Hennessey Field Pleasant St & Lennox Ave	Forbes Hill Upland Road	Savage Center 275 Prospect Street	Winsmith Mills - Endicott Street	Balch Elementary School	Callahan Elementary School	Cleveland Elementary School	Oldham Elementary School	Prescott Elementary School	
REREQUISITE	Does the available site acreage and configuration allow for an appropriately configured 1,070 pupil middle school and the necessary site amenities to comply with MSBA regulations and guidelines?	Ø	Ø	Ø	Ø	SITES DO NOT HAVE AVAILABLE ACREAGE REQUIRED FOR A NEW MIDDLE SCHOOL NO FURTHER EVALUATION PURSUED ON THESE SITES					SCHOOL	Buildable area includes the building footprint, parking, site circulation, and athletic fields and learning areas.
	Available buildable area:	15 acres	11 acres	22 acres	14 acres	3 acres	2 acres	4 acres	7 acres	5 acres	2 acres	Buildable area required to support a middle school is 11 acres.
1	Is the site <u>currently</u> owned by the School Department/Town of Norwood and thus avoids requiring a Town Meeting to approve funds for site ownership?	Ø	Ø	Ø	Ø							Upon submission of the Schematic Design documents in January 2022, th control of the site. Failure to comply with this requirement would prevent the second
2	Does the site avoid the elimination of an existing Town owned resources, i.e. playfields, ball fields, and parking?	Ø	Ø	Ø								
3	Can the site accommodate necessary outdoor educational program space for physical education and avoid significant site development costs associated with ledge removal and/or earth support features such as retaining walls?	Ŋ			Ø							Minimum outdoor educational spaces would consist of what is currently a
4	Can the site accommodate expanded outdoor space for both school and community activities such as additional ball fields, tennis courts, soccer fields, practice fields and avoid significant site development costs associated with ledge removal and/or earth support features such as retaining walls?	Ŋ										Expanded outdoor opportunities include fields/courts above the minimum
5	Can the site accommodate an enhanced outdoor 21st Century educational environment with amenities such as nature trails, outdoor biology labs, outdoor science classrooms, and outdoor amphitheaters?	Ø		Ø	Ø							21st century middle schools are incorporating outdoor learning environme and technology curriculum
6	Does the site allow for close proximity of shared educational and community space with other schools? (i.e. collaboration with an elementary school or high school)	Ø	Ø	A	Ø							Districts have identified educational and community benefits for students,
7	Does the site avoid disruption to existing educational environments?		Ø	Ø	R							Sites currently occupied by students which require phased demolition and educational environment. However, it is important to note that the Norwoo occupied and there was minimal disruption. In fact the construction activit as a learning opportunity.
8	Will the site avoid additional development costs such as tree clearing, ledge, grading, removal of undesirable soils which would increase the unreimbursed cost to the Town of Norwood when compared to an already developed site?	Ø			Ø							Undeveloped wooded sites and sites with steep slopes require significant currently developed. The MSBA will cap the site development cost at 8% o
9	If there are existing structures on site which will need to be demolished/abated would the costs be reimbursed by the MSBA?	Ø										If a new site is pursued, the MSBA will not reimburse Districts for the costs associated with remediation or demolition.
10	Is the site compatible with the Town's future plans for the site's development?	Ŋ										
11	Is the site convenient for parents, teachers, and students?	Ŋ										
12	Is the site capable of supporting adequate parking, bus drop off, parent drop off, and safe vehicle circulation?	Ø										Norwood Zoning bylaw establishes parking capacity requirements for sch every three (3) persons capacity based on the Massachusetts State Buildii 107 faculty resulting in a total occupancy of 1177 or 393 parking spots. No on building area, therefor the parking capapcity would be a minimum of 39 developed.
13	Is the site located in an area where the community will be supportive with respect to traffic impacts and accessibility via existing residential streets?	Ø	Ø	Ø	Ø							
14	Is the site convenient for walkers?	M	Ø		Ø							Consideration was given to roads servicing the site requiring sidewalks. F neighborhoods.
15	Is the site currently zoned for educational use?	Ŋ	Ŋ	ß	Ø							
16	Does the site allow space for future facility expansion?	Ø										
17	Is the site free of natural features that would negatively impact the ideal placement of a new Middle School such as ledge, vernal pools, soils?	Ø			Ø							Town Study on Forbes Hill identifies "environmentally sensitive" areas - do identified ledge.
18	Is the site accessible from a sufficiently sized public roadway?	R		ß								
19	Is the site currently connected to Town water supply?	Ŋ	Ø	ß	Ø							Information was obtained from drawings and maps available from the No Information System (GIS)
20	Is the site currently connected to Town sewer system?	Ŋ	Ø	ß	Ø							Information was obtained from drawings and maps available from the No Information System (GIS)
21	Is the site currently connected to Gas service?	Ø	Ø	Ø	Ø							Information was obtained from drawings and maps available from the No Information System (GIS)
22	Does the site have adequate frontage for unrestricted access?	M	Ø	A	Ø							
23	Would the site avoid purchase of other properties or land for required access; would the site avoid the need for obtaining easements for access?	Ø	Ø	Ŋ	Ø							
24	Is the site free of Town recognized use restrictions; i.e. recreational use restrictions? Article 97?	Ø	Ø	Ŋ	Ø							In 1972 Massachusetts voters approved Article 97. Article 97 was intende conservation purposes were not converted to other inconsistent uses.
25	Is the site located in an appropriate context for a school environment?	Ø	Ø		Ø							Consideration was given to the use groups (manufacturing, retail, comme
26	Is the site free of restrictions as a result of the Aquifer Protection District?	Ø	Ø	Ŋ	Ø							
27	Is the site free of significant habitat areas identified by MASSGIS Rare Species and Priority Habitats recorded by NHESP in the State Registry?	Ø	Ø	Ŋ	Ø							Data was obtained from MassGIS Rare Species and Priority Habitat data
28	Does the site's former or current use avoid potential environmental concerns?	M	Ø	A	Ø							
29	Is the site not part of a development or construction plan already established or identified by the Town?	N										
	•	97%	59%	59%	72%							

Existing Coakley MS Site Hennessey Field

y Field Forbes Hill

Savage Education Center Balch ES

Callahan ES

**Cleveland ES** 

Oldham ES





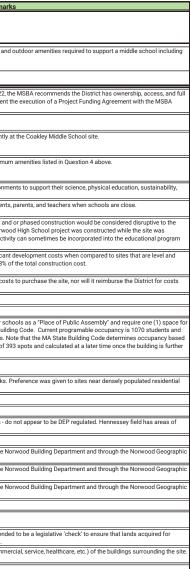












ta layer showing data recorded by NHESP in the State Registry

Prescott ES







# Site Selection



## **Forbes Hill**

- Requires extensive amounts of site work steep slope, identified ledge, forested area with mature trees
- Geometry of site makes circulation patterns very difficult long and narrow
- Demolition of the existing Coakley would not be reimbursed by the MSBA
- Not centrally located



### **Hennessey Field**

- The Town Masterplan identifies the site for a regional stormwater detention facility
- A Middle School building and required site support (circulation, parking, fields) would consume the ENTIRE property
- Remove 85% of forested areas and mature trees
- Demolition of the existing Coakley would not be reimbursed by the MSBA

### **Savage Education Center**

- A Middle School building and required site support (circulation, parking, fields) would require the Senior Center to be relocated
- Existing programs in the Savage Center would need to be relocated
- Demolition of the Savage Center would not be reimbursed by the MSBA
- Demolition of the existing Coakley would not be reimbursed by the MSBA
- Existing fields at the Coakley site could not be replicated at the Savage site
- Not centrally located



## **Existing Coakley MS Site**

Construction would occur on an occupied site



Not centrally located



Site Selection site ranking overview

	Site Options Selection Matrix	Existing Coakley	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Remarks
	Coakley Middle School Project	Middle School Site 1315 Washington Street	Hennessey Field Pleasant St & Lennox Ave	Forbes Hill Upland Road	Savage Center 275 Prospect Street	Winsmith Mills - Endicott Street	Balch Elementary School	Callahan Elementary School	Cleveland Elementary School	Oldham Elementary School	Prescott Elementary School	
EREQUISITE	Does the available site acreage and configuration allow for an appropriately configured 1,070 pupil middle school and the necessary site amenities to comply with MSBA regulations and guidelines?	M	Ø	Ø	V	SITES DO	NOT HAVE AVA	ILABLE ACREAG			SCHOOL	Buildable area includes the building footprint, parking, site circulation, and outdoor amenities required to support a middle sche athletic fields and learning areas.
	Available buildable area	: 15 acres	11 acres	22 acres	14 acres	3 acres	2 acres	4 acres	7 acres	5 acres	2 acres	Buildable area required to support a middle school is 11 acres.
1	Is the site <u>currently</u> owned by the School Department/Town of Norwood and thus avoids requiring a Town Meeting to approve funds for site ownership?	V	Ø	Ø	Ø							Upon submission of the Schematic Design documents in January 2022, the MSBA recommends the District has ownership, as control of the site. Failure to comply with this requirement would prevent the execution of a Project Funding Agreement with the second second secon
2	Does the site avoid the elimination of an existing Town owned resources, i.e. playfields, ball fields, and parking?	V	Ø	1 1 1 1								
3	Can the site accommodate necessary outdoor educational program space for physical education and avoid significant site development costs associated with ledge removal and/or earth support features such as retaining walls?	V			V							Minimum outdoor educational spaces would consist of what is currently at the Coakley Middle School site.
4	Can the site accommodate expanded outdoor space for both school and community activities such as additional ball fields, tennis courts, soccer fields, practice fields and avoid significant site development costs associated with ledge removal and/or earth support features such as retaining walls?	V										Expanded outdoor opportunities include fields/courts above the minimum amenities listed in Question 4 above.
5	Can the site accommodate an enhanced outdoor 21st Century educational environment with amenities such as nature trails, outdoor biology labs, outdoor science classrooms, and outdoor amphitheaters?	V		Ø	Ø							21st century middle schools are incorporating outdoor learning environments to support their science, physical education, s and technology curriculum
6	Does the site allow for close proximity of shared educational and community space with other schools? (i.e. collaboration with an elementary school or high school)	Ø	Ø	Ø	Ø							Districts have identified educational and community benefits for students, parents, and teachers when schools are close.
	Does the site avoid disruption to existing educational environments?		V	V	Ø							Sites currently occupied by students which require phased demolition and or phased construction would be considered dist educational environment. However, it is important to note that the Norwood High School project was constructed while the occupied and there was minimal disruption. In fact the construction activity can sometimes be incorporated into the educat and earning opportunity.
8	Will the site avoid additional development costs such as tree clearing, ledge, grading, removal of undesirable soils which would increase the unreimbursed cost to the Town of Norwood when compared to an already developed site?	V										eveloped wooded sites and sites with steep slopes require significant development costs when compared to sites that intly developed. The MSBA will cap the site development cost at 8% of the total construction cost.
9	If there are existing structures on site which will need to be demolished/abated would the costs be reimbursed by the MSBA?	R		Jar	niarv	11, 2	021 -	SBC	unani	mous	slv	ew site is pursued, the MSBA will not reimburse Districts for the costs to purchase the site, nor will it reimburse the Dis ociated with remediation or demolition.
10	Is the site compatible with the Town's future plans for the site's development?	1		Jui	iuui y	, 2			unan	mout	, y	
11	Is the site convenient for parents, teachers, and students?	V		14	atad t	to pro	aaad	with t	ho E	liatin		
12	Is the site capable of supporting adequate parking, bus drop off, parent drop off, and safe vehicle circulation?			•••		akley					9	wood Zoning bylaw establishes parking capacity requirements for schools as a "Place of Public Assembly" and require g three (3) persons capacity based on the Massachusetts State Building Code. Current programable occupancy is 1077 faculty resulting in a total occupancy of 1177 or 393 parking spots. Note that the MA State Building Code determines or uilding area, therefor the parking capapcity would be a minimum of 393 spots and calculated at a later time once the bu- aloped.
13	Is the site located in an area where the community will be supportive with respect to traffic impacts and accessibility via existing residential streets?	2										
14	Is the site convenient for walkers?	Ø										Sideration was given to roads servicing the site requiring sidewalks. Preference was given to sites near densely popula
	Is the site currently zoned for educational use?		Ø	Ø	Ø							
16	Does the site allow space for future facility expansion? Is the site free of natural features that would negatively impact the ideal placement of a new Middle School such as	<u></u>										Town Study on Forbes Hill identifies "environmentally sensitive" areas - do not appear to be DEP regulated. Hennessey field
- /	ledge, vernal pools, soils?				Ø							identified ledge.
	Is the site accessible from a sufficiently sized public roadway?	Ø		Ø								
18				$\checkmark$	1							Information was obtained from drawings and maps available from the Norwood Building Department and through the Norv Information System (GIS)
18 19	Is the site currently connected to Town water supply?	Ø	Ø		12.1							
		2 2 2	2 2 2									Information was obtained from drawings and maps available from the Norwood Building Department and through the Nor Information System (GIS)
	Is the site currently connected to Town water supply?											Information System (GIS)
19 20	Is the site currently connected to Town water supply? Is the site currently connected to Town sewer system?	Ø	Ø	Ø	Ø							Information System (GIS) Information was obtained from drawings and maps available from the Norwood Building Department and through the Norw
19 20 21 22	Is the site currently connected to Town water supply? Is the site currently connected to Town sewer system? Is the site currently connected to Gas service?	<u></u>	R	R								Information System (GIS) Information was obtained from drawings and maps available from the Norwood Building Department and through the Norw
19 20 21 22 23	Is the site currently connected to Town water supply? Is the site currently connected to Town sewer system? Is the site currently connected to Gas service? Does the site have adequate frontage for unrestricted access? Would the site avoid purchase of other properties or land for required access; would the site avoid the need for	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	전 전 전	2 2 2 2 2 2	2 2 2 2 2 2							Information System (GIS) Information was obtained from drawings and maps available from the Norwood Building Department and through the Norv Information System (GIS)
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19       20       21       22       23       24       25       26	Is the site currently connected to Town water supply?         Is the site currently connected to Town sewer system?         Is the site currently connected to Gas service?         Does the site have adequate frontage for unrestricted access?         Would the site avoid purchase of other properties or land for required access; would the site avoid the need for obtaining easements for access?         Is the site free of Town recognized use restrictions; i.e. recreational use restrictions? Article 97?         Is the site free of Town recognized context for a school environment?         Is the site free of restrictions as a result of the Aquifer Protection District?         Is the site free of significant habitat areas identified by MASSGIS Rare Species and Priority Habitats recorded by				Image: Constraint of the sector of							Information System (GIS) Information was obtained from drawings and maps available from the Norwood Building Department and through the Norw Information System (GIS) Information System (GIS) In 1972 Massachusetts voters approved Article 97. Article 97 was intended to be a legislative 'check' to ensure that lands as conservation purposes were not converted to other inconsistent uses. Consideration was given to the use groups (manufacturing, retail, commercial, service, healthcare, etc.) of the buildings sure
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**Existing Coakley** MS Site

**Hennessey Field** 

Forbes Hill

**Savage Education** Center

**Balch ES** 

Callahan ES

**Cleveland ES** 

**Oldham ES** 



















Winsmith

Mills

#### Prescott ES

# **Existing Conditions Evaluation**

THE DESIGN TEAM REVISITED THE ELEMENTARY SCHOOLS AND MIDDLE SCHOOL IN DECEMBER 2020 TO CONFIRM CONDITIONS REPORTED IN THE 2017 MASTERPLAN.







#### **Existing Conditions**

# **Educational Visioning Process**



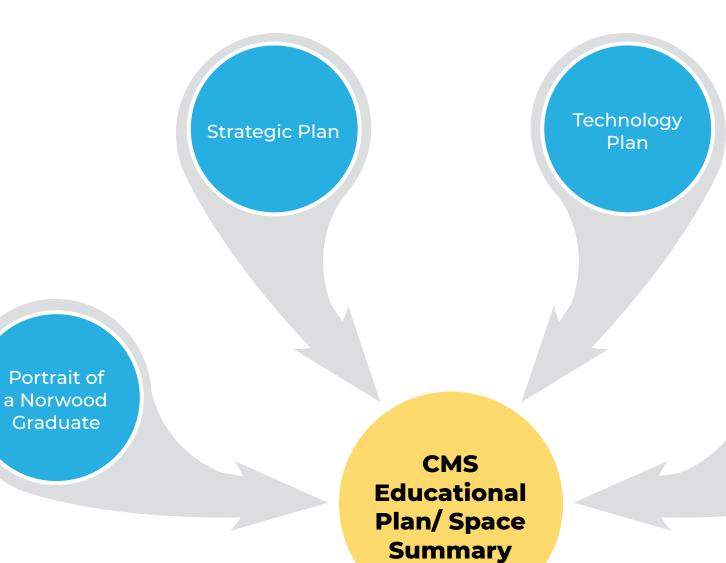


# Educational Program Initial Space Summary/ Adjacencies Grade Level Configuration

#### Educational Visioning process

# **Educational Plan Process**

- Discusses how the Coakley Middle School will funciton and what spaces will be needed.
- Rooted in previous planning documents and efforts
- Iterative process with CMS faculty and staff
- Ed plan forms basis for Space Summary
- In process of refining, based on comments received and space summary overages





#### Educational Visioning

Educational Plan process

# **Educational Plan Highlights**

- Either 6-8 grade configuration or 5-8
- A 5-8 School would be organized into an Upper and Lower School
- Modified team teaching model for 5th Grade, but in a developmentally appropriate way.
- Separation between the oldest and youngest grades through
  - Team teaching model
  - Scheduling
  - Design features

- New 21st Century / Project-Based Learning spaces:
  - Project-Based Learning Labs Performance Technology Lab and Virtual Reality Lab
  - Student Collaboration Spaces/Commons
  - Teacher Collaboration Spaces
- Designed to support the teaming structure, with academic neighborhoods
- Special education integration is a key feature



# **Educational Plan Highlights**

- Communal spaces organized around a central spine:
  - Creates a hub for activity
  - Provides controlled access to spaces used by the larger Norwood community
- Multiple opportunities to connect students to the outdoors
- Both indoor and outdoor facilities at the current Coakley play a major role in the larger community. The new building should continue to fill this need.



Educational Plan highlights

# **Space Summary**

Norwood - Coakley Middle School 6-8	Ex	isting Conditi	ons
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
CORE ACADEMIC SPACES			35,031
(List classrooms of different sizes separately)			00,001
Classroom - General			
Small Group Seminar (20-30 seats) / Resource			
Grade 6 classroom	598	1	598
Grade 6 classroom	742	1	742
Grade 6 classroom	772	1	772
Grade 6 classroom	782	1	782
Grade 6 classroom	790	1	790
Grade 6 classroom	792	1	792
Grade 6 classroom	832	1	832
Grade 6 classroom	868	1	868
Grade 6 classroom Grade 7 classroom	896 774	1	896 1,548
Grade 7 classroom Grade 7 classroom	774	2	1,546
Grade 7 classroom	787	2	1,574
Grade 7 classroom	791	1	791
Grade 7 classroom	793	2	1,586
Grade 8 classroom	773	1	773
Grade 8 classroom	781	3	2,343
Grade 8 classroom	785	1	785
Grade 8 classroom	787	2	1,574
Grade 8 classroom	791	2	1,582
Literacy Storage/Book room	201	1	201
STE Room- Grade 6			
STE Storage			
Science Classroom / Lab- Grades 7-8			
Prep Room			
Central Chemical Storage Rm	740		7.10
Science Classroom / Lab- Grade 6	749	1	749
Science Classroom / Lab- Grade 6 Science Classroom / Lab- Grade 6	991	1	991 1,195
Science Classroom / Lab- Grade 7	1,195 787	1	787
Science Classroom / Lab- Grade 7	801	1	801
Science Classroom / Lab- Grade 7	1,032	1	1,032
Prep Room	263	1	263
Science Classroom / Lab- Grade 8	791	1	791
Science Classroom / Lab- Grade 8	955	1	955
Science Classroom / Lab- Grade 8	979	1	979
Prep Room	209	1	209
Foreign Language	965	1	965
Foreign Language Collaboration			
Foreign Language (portion of library)	1,262	1	1,262
Foreign Language	801	1	801
Foreign Language Lab	842	1	842
Foreign Language Teachers Rooms	153	1	153
ELL ELL Starage	386	2	772
ELL Storage Teacher Collaboration	93	1	93
Student Collaboration			
Health Classroom			
SPECIAL EDUCATION			4,979
(List classrooms of different sizes separately)			
Self-Contained SPED			
Self-Contained SPED Toilet			
Resource Room			

				PROPOSEI					
Existing	to Remain	/Renovated		New		Total			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	ROOM NFA <sup>1</sup>	# OF RMS	area totals	ROOM NFA <sup>1</sup>	# OF RMS	area totals	
		0	45,740					45,740	
		0	850	29	24,650		29	24,650	
		0	200 1,080	1 1	200 1,080		1 1	200	
		0	1,080 120 1,440	1 6	120 8,640		1 6	120	
		0	200	6	1,200		6	8,640 1,200	
		0	150	1	150		1	150	
			050		0.400			0.400	
			850 500	4	3,400 500		4	3,400 500	
							0		
			450	3	4.050		0	1 350	
					1,350 1,800			1,350	
			600 600	3	1,800		3	1,800	
			850	1	850		1	850	
		0			10,680			10,680	
		0			0		0	0	
		0	450	3	0 1,350		0 3	0 1,350	

Difference to MSBA Guidelines								
ROOM NFA1	# OF RMS	area totals						
		6,940						
	-2	-4,800						
	-2	-1,000						
		-						
	1	1,440						
	1	200						
	0	0						
		1,620						
	-6	-5,700						
	-6	-360						
	-1	-650						

950 60 500

4

ROOM NFA<sup>1</sup>

> 950 500

1,080 120 1,440 200

150

	Date:	2/17/2021	Preliminary Design Program					
			Guidelines					
(refer	to MSBA E	ducational Pro	gram & Space Standard Guidelines)					
OOM NFA <sup>1</sup>	# OF RMS	area totals	Comments					
	44	38,800						
950	31		850 SF min - 950 SF max					
500	2	1,000						
1,080			nes for Additional information					
120			nes for Additional information					
1,440	5		1 period / day / student					
200	5	1,000						
150	1	150						
		0.060						
		9,060						
950	6	5,700	850-950 SF equal to surrounding classrooms					
60	6	360						

2,000 1/2 size Genl. Clrm.

#### Date: 2/17/2021 Preliminary Design Program

# NORWOOD SPECIFIC MIDDLE SCHOOL PROGRAM REQUIREMENTS

6 THRU 8 GRADE LEVEL CONFIGURATION

	Coakley MS areas	Allowable area per MSBA requirements (800 students)	Over/Under MSBA template
Core Academic	45,740	38,800	6,940 fore
Special Education	10,680	9,060	1,620 🔨 📃
Art & Music	4,600	4,600	0 ADI
Vocations & Technology	2,880	4,320	-1440 Edu
Health & Physical Education	11,400	8,400	3,000 — ADI
Media Center	4,980	4,980	0 Tota
Dining & Food Service	8,867	10,467	-1,600
Medical	710	710	0 an a
Administration & Guidance	3,600	3,600	0
Custodial & Maintenance	2,275	2,275	0
Other (auditorium)	6,350	0	6,350 ADI
* 400 seat auditorium			sf s & 1

Area INCLUDING grossing factor (1.47)



128,000 sf

22,060 sf



D classrooms to support de configuration and eign language

District specific Special cation requirements

D halfcourt gym @ 3,000 sf al 1.5 full courts

00 sf stage does not qualify because auditorium is being included

D 4,500 sf auditorium, 1,600 stage, 100 sf mother's room, 50 sf SRO office

# **75%** Utilization for teaching spaces

Space Summary category review

# NORWOOD SPECIFIC MIDDLE SCHOOL PROGRAM REQUIREMENTS

**<u>5 THRU 8</u> GRADE LEVEL CONFIGURATION** 

Space Summary Categories	Coakley MS area (sf)	Allowable area per MSBA requirements (1070 students)	Over/Under MSB template	AD
Core Academic	57,490	51,650	5,840	gra for
Special Education	14,530	12,080	2,450 🔨	
Art & Music	5,000	5,000	0	AD
Vocations & Technology	2,880	5,760	-2,880	Edu
Health & Physical Education	11,400	8,400	3,000 —	AD
Media Center	6,533	6,533	0	Tot
Dining & Food Service	11,319	12,919	-1,600	1,6
Medical	810	810	0	an
Administration & Guidance	4,320	4,320	0	
Custodial & Maintenance	2,545	2,545	0	
Other (auditorium)	7,100	0	7,100 ——	AD
* 535 seat auditorium				& 1
Area INCLUDING grossing factor (1.50)	185,890 sf	171,200 sf	14,690 sf	



ADD classrooms to support grade configuration and oreign language

ADD District specific Special Education requirements

ADD halfcourt gym @ 3,000 sf Total 1.5 full courts

,600 sf stage does not qualify because In auditorium is being included

ADD 5,500 sf auditorium & 1,600 sf stage

# 81% Utilization for teaching spaces

Space Summary category review

# **NEW Middle Schools in Massachusetts**

Enrollment of 800 or more

	Natick	Lynn	Beverly	Leicester	Braintree	Weymouth	Dennis- Yarmouth	Haverhill	Wachusett	Lynn	Peabody
School	Kennedy MS	West Lynn MS	Beverly MS	Leicester MS	South MS	Chapman MS	Mattacheese MS	Hunking MS	Mountain View MS	Thurgood Marshall	Higgins MS
Enrollment	1,000	1,008	1,395	930	800	1,470	940	1,005	800	1,100	1,340
Building Size	182,195 SF	185,444 SF	231,509 SF	152,464 SF	145,846 SF	252,170 SF	186,500 SF	147,996 SF	126,200 SF	181,847 SF	211,982 SF
sf/student	182	184	166	164	182	172	198	147	158	168	158
						Ma	erage NEW mic ssachusetts (8 = 171 sf/st Average of bott Braintree midd = 182 sf/st	00+ students) tudent h Natick & le schools			



New Middle School comparison

# **NORWOOD SPECIFIC MIDDLE SCHOOL PROGRAM REQUIREMENTS**

**Building Area** 



	(SF)	(SF)
MSBA Guidelines	171,200	160
NMS no auditorium or larger gym (base)	173,140	162
NMS including just larger gym	177,640	166
NMS including both larger gym and auditorium * 535 seat auditorium	185,890	174



800 students	Building Area (SF)	Area per Student (SF)
MSBA Guidelines	128,000	160
NMS no auditorium or larger gym (base)	139,035	174
NMS including just larger gym	143,445	179
NMS including both larger gym and auditorium * 400 seat auditorium	150,060	188

Average of both Natick & Braintree middle schools = 182 sf/student

Area per Student



#### Average NEW middle school in Massachusetts (800+ students) = 171 sf/student

#### Average NEW middle school in Massachusetts (800+ students) = 171 sf/student

**Space Summary** MSBA / NMS comparison

# **Design Options**

MSBA Requirements

### **CODE UPGRADE / BASE REPAIR**

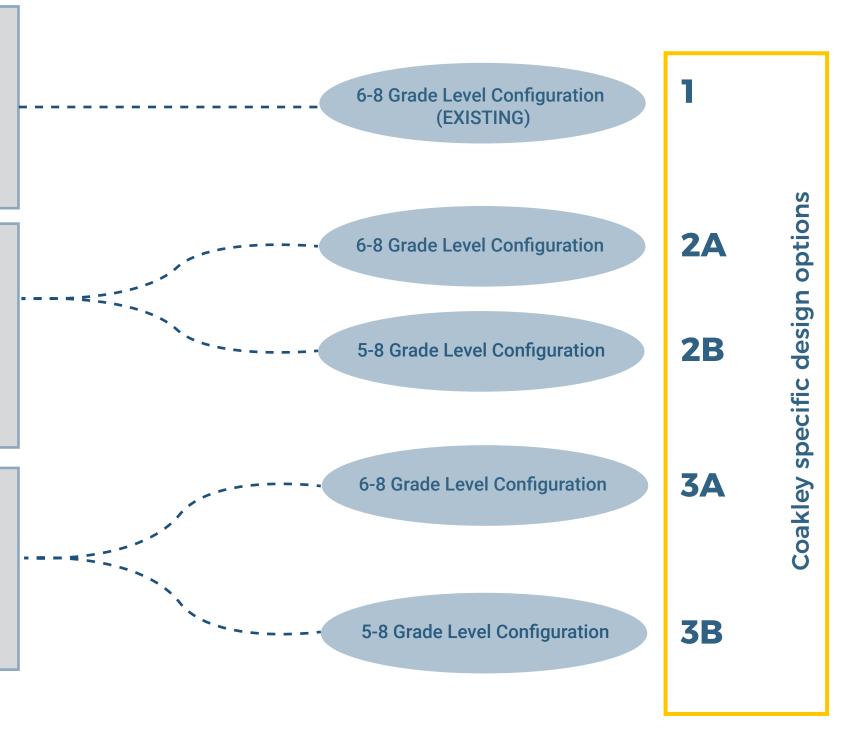
- Code upgrades
- Systems repairs
- Exterior repairs
- Interior repairs
- NO Sitework
- NO increase to building size
- NO Educational upgrades

#### **RENOVATION / ADDITION**

- Code & Systems upgrades
- Exterior & Interior repairs
- Limited reconfiguring of the existing building
- Building addition for added teaching space
- Can only address 21st Century Learning in some of the spaces (addition)
- Many of the existing deficiencies will remain (layout and building support for teaching pedagogy)

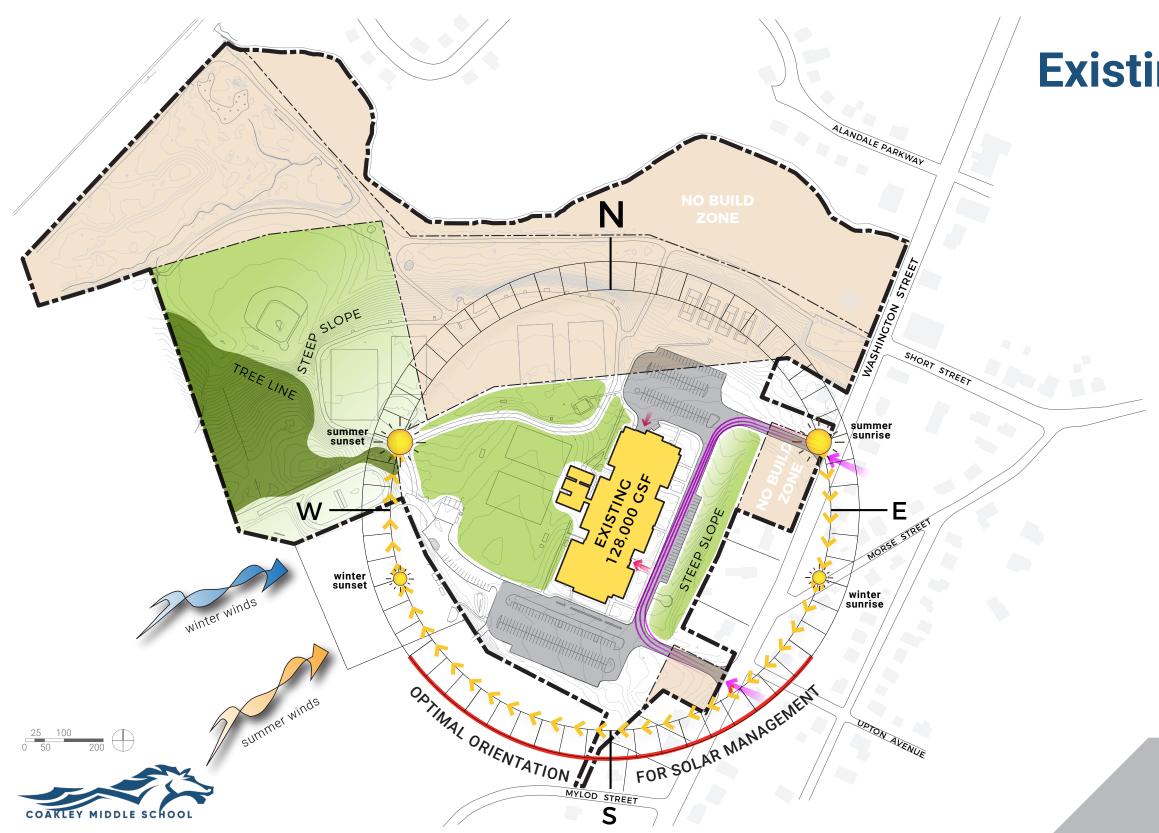
#### **NEW CONSTRUCTION**

- Appropriately sized building for student enrollment
- Spaces designed for 21st Century Learning
- Building layout that supports staff in delivering 21st Century Learning
- Code compliant
- Modern, efficient building system





2

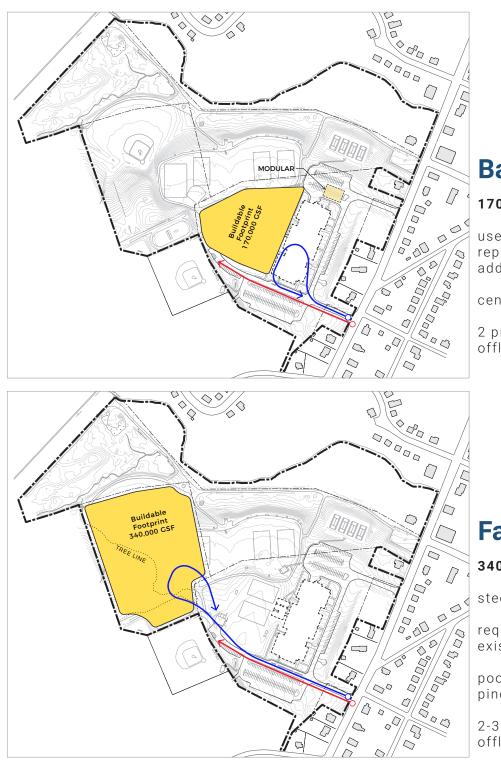


# Existing Conditions site analysis

- large areas of the site are restricted from having built structures added
  - building orientation to consider solar orientation for optimal solar management

- building orientation to consider southwest prevailing winds for ventilation and open space
- consider all natural buffers
   between site and residential
   neighbors

Design Options existing



## Back

#### 170,000 GSF

uses the modular replacement to gain additional GSF

centrally located on site

2 practice fields would be offline during construction

# Far Back

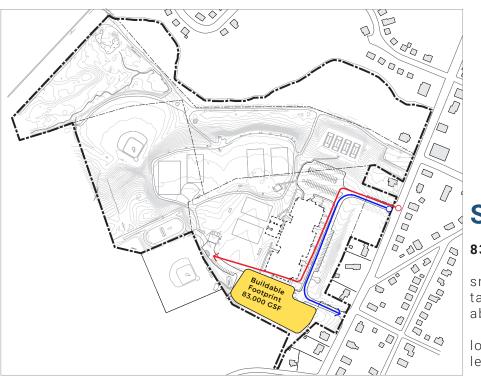
#### 340,000 GSF

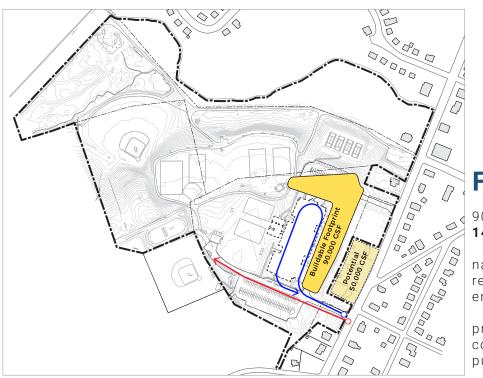
steep slopes

requires the removal of existing established trees

poor access through site pinch-point

2-3 structured fields would be offline during construction







# New Options buildable area

school accesslittle league access

## South

83,000 GSF

smallest footprint results in tallest building closest to abutters

longest access drive to little league field

## Front

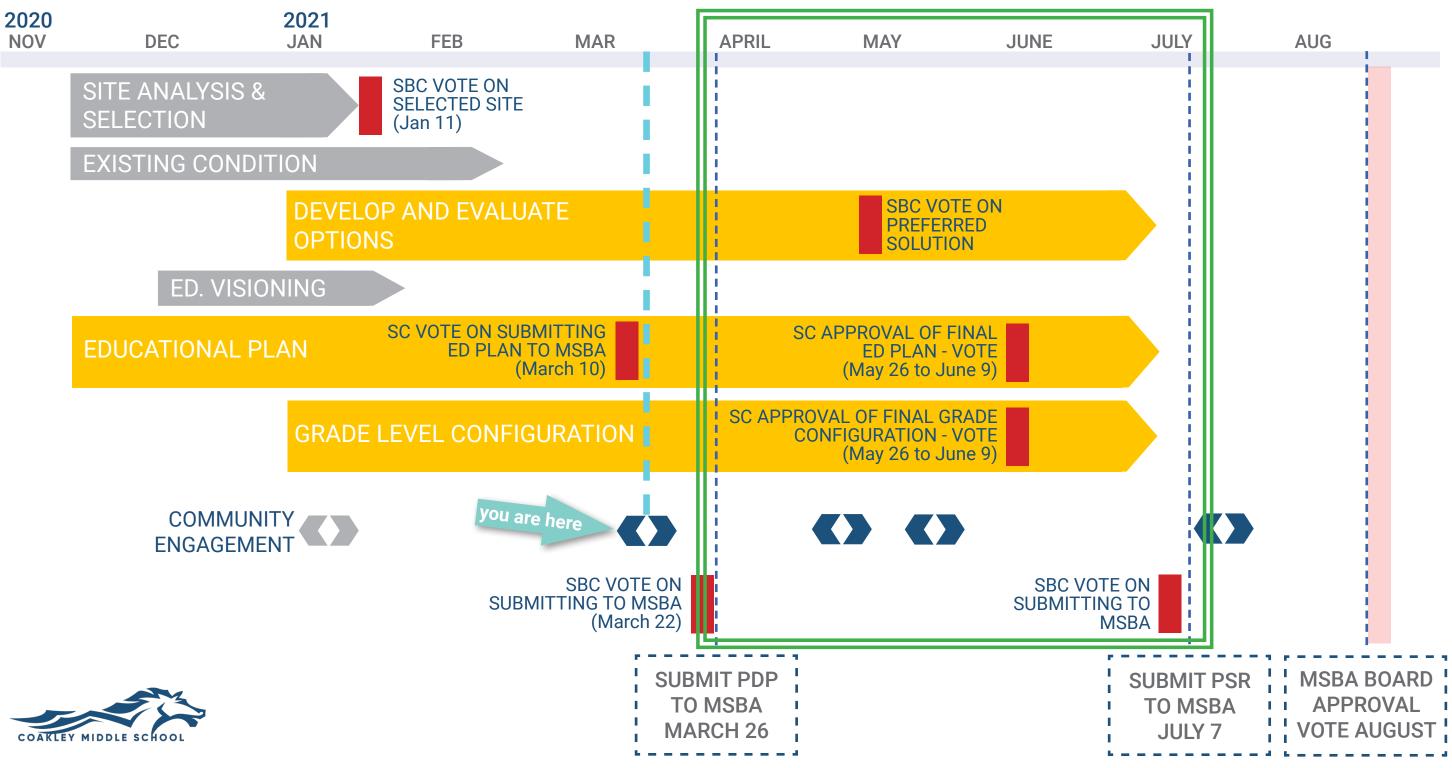
90,000 GSF + 50,000 GSF = **140,000 GSF** 

narrow lot with steep slopes results in long building and entry/circulation at back

project would incure added cost if 3 properties were purchased

# **Next Steps:**

#### PDP and PSR Schedule



# **Question & Answer**

# Future Community Forums

- Next up: April 2021
- May 2021
- Project Website
  - https://newcmsproject.org/
- Project Email
  - cmsproject@norwoodma.gov



