JONES WHITSETT ARCHITECTS

In association with

SMMA

2-1
INTRODUCTION

a. Summary of MSBA Approved Preferred Solution

The District's preferred solution is a New 9th – 12th grade high school at the East Longmeadow High School site - for 800 high school students. The proposed building consists of 191,796 proposed square feet.

The new school is sited to be constructed on the same parcel as the existing East Longmeadow High School, to the southeast of the existing school. The existing High School can remain in full operation during the construction of this new facility, eliminating the need for any temporary classrooms. The siting will temporarily displace the varsity baseball field, and practice fields for football, lacrosse, and soccer.

There are a total of 464 parking spaces being provided on-site, dispersed around the building and site amenities to serve the intended user groups. Bus and parent circulation routes will be separate and segregated to improve safety and efficiency during drop-off and pick-up operations.

Primary design goals include:

- Orient the classroom wings in an east-west manner to capitalize on northern and southern light
- Create four classroom neighborhoods with cross-disciplinary offerings in each neighborhood
- Take advantage of the site to the south of the building – and bring the building closer to the woods and outdoor resources beyond the playing fields
- Preserve as much of the playing field space as possible
- Improve site circulation, provide more definition, and separate pedestrians, cars, busses, and deliveries as much as possible

b. Community Outreach Overview

Key steps taken by the SBC to engage the local community since the PSR submission include the following:

- School Building Committee Meetings: All SBC meetings have been conducted in accordance with the state's open meeting law. The meetings were conducted at the District Central Offices with a remote option offered over zoom, and were televised on community TV.
- The City's website provides a link to the SBC agendas and meeting minutes. There is also a project webpage:
    - https://www.eastlongmeadowma.gov/elhsbuildingproject
- Presented at a **Community Forum** on March 16th.
- Met with **Students from 3 class periods at Birchland Park Middle School** on April 25th to share progress and gather input. All groups were engaged and provided valuable feedback.
- Presented at a **Community Forum** on May 4th.
- Conducted a series of **Programming Meetings with Faculty** from April 26th through May 24th
- **Eco-Charrette** on June 7th
- **Site Focus Group** meeting on June 15th
- **Technology Planning** meeting on June 29th
- Participated in **East Longmeadow's National Night Out** event on August 1st
- Presented to the Town Council on August 8th

Future outreach events include:

- 9/6 – Open House at Mapleshade Elementary School
- 9/13 – Open House at Birchland Park Middle School
- 9/14 – Open House at Mountain View Elementary School
- 9/21 – Community Forum
- 9/27 – Open House at East Longmeadow High School
- 10/4 – Open House at Meadowbrook Elementary School
- 10/19 – Community Forum

The SBC and Design Team will continue to work together to solicit more community input as the project is developed.

c. District's Total Project Budget for the Proposed Project

Preliminary Cost Information:
Skanska ("the OPM") has received two Schematic Design construction cost estimates for the East Longmeadow High School project (the "Project"), and offers the following:

Designer's Estimated Construction Cost (PM&C):	$ 155,688,338
Revised since to:	***$ 147,283,566***

OPM's Independent Estimated Construction Cost (PCM):	$ 154,746,343
Revised since to:	***$ 147,792,248***
OPM's Estimate of Project Cost:	**$177,460,645**
District's Project Budget:	**$177,500,000**

The estimated project cost is within the District's project budget and the District and its consultant will be forwarding a reconciled and complete Schematic Design Submittal, for which the Total Project Budget is based, on the schematic design documentation to the MSBA on August 25th, 2023, in anticipation of consideration at the MSBA Board of Directors Meeting scheduled for October 25th, 2023.

The District and its consultants understand that the MSBA will not accept Schematic Design Submittals for which the estimated project costs exceed the District's budget or Total Project Budget updates that do not reflect the project scope included in the Schematic Design Submittal documentation. The District and its consultants further understand that all value engineering activities must be complete and the results incorporated into all of the Schematic Design Submittal documentation prior to submitting to the MSBA.

d. Updated Description of the Project

The proposed school has not changed in scope from the PSR. It remains a school for 800 pupils for the High School.

GSF of building: 191,796 sq ft

Total Project Budget: The Total Project Budget is estimated at $177,460,645. Please see the Total Project Budget worksheet included in this report for more detail.. The total project budgetdoes not exceed $180,000,000 – as indicated in PSR.

List of Add Alternates:
The following add alternates were considered and priced by the cost estimators. The School Building Committee has elected to remove this scope from the base project scope, but will continue to evaluate each of these discreet items as the project moves forward. A few of the add alternates listed might be included in the final construction documents if the future cost estimates indicate that inclusion is possible. The order of the add alternates does not indicate

importance, or a preference from the School Building Committee at this time. They will be prioritized in order of importance at the end of the Construction Document phase:

1. Add lighting to baseball & softball varsity fields
2. Add sports field storage building
3. Add irrigation at the JV baseball, softball and practice fields
4. Provide sod in lieu of seed at athletic fields
5. Add athletic field safety netting adjacent to abutting residences
6. Provide ground source heat pumps in lieu of basis of design VRF system

Project Delivery Methodology:

The project will be constructed under the Construction Manager at Risk methodology in accordance with M.G.L. Chapter 149A.

e. Site Plan, Floor Plans and Elevations

Please see the images included below. These files are included with this electronic submission as PDFs and JPEGs for your use.

Colored Site Plans:

Colored North Elevation:

Colored Floor Plans:

Birdseye Views:

Perspective Views:

f. Copy of MSBA PSR Comments and District Responses

Please see the Appendix.

2-2-a
FINAL DESIGN PROGRAM: ARCHITECTURAL CHARACTERISTICS

The schematic design of the new East Longmeadow High School adjacent to the existing high school solves many of the district's needs and fulfills the vision of the Educational Program by constructing an all-new facility located at this site. The new school, totaling approximately 191,796 gross square feet, is proposed to be sited to the southeast of the current school in proximity to a wooded area to the south and the existing track and turf field to the east. The building location will allow for an expansive area of playing fields to the west of the school and in the location where the current high school now stands.

The massing of the Schematic Design embodies a four-winged approach to address multiple goals of the Educational Program that the current facility cannot. It features two, two-story academic wings oriented to the south, facing playing fields and a wooded area. The Health & Wellness and Fine & Performing Arts wings are oriented towards the north. The Dining Commons and Media Center are located within a central spine that runs from the main school entry at the north to the student terrace at the south. The spine has several double height areas, ample daylighting, and serves to connect the four wings while serving as a vibrant social hub for the school. This spine is legible from the exterior of the building and helps to denote the primary entrance to the school.

Both massing and materiality of the building draw inspiration from East Longmeadow's historic brown and red sandstone quarries. The "wedge" form that is highlighted in the building spine as well as in the tapered academic wings is inspired by a common configuration of the abandoned quarries found throughout the town. The primary cladding material will be brick masonry in contrasting warm tones to create a horizontal banding effect. Likewise, interior wall treatments along the core of the building will likely incorporate elements of striations and seaming, and a combination of organic and more regular patterning. Gulam beams at the main entry gallery, a wood learning stair, and selective wood ceilings will help bring a warm and welcoming organic quality to the space – much as the overgrowth of trees and organic-matter have softened and complicated the otherwise austere quarries over time.

The layout of the academic wings has been optimized with respect to solar orientation such that natural daylighting and energy performance can be optimized. Windows and internal borrowed lights, as well as a monitor over the core of each academic wing will be utilized to allow maximum penetration of natural light and visual connection between adjacent spaces in a relatively compact building form. In the Arts and Health Wings, single-story spaces surround larger and taller program areas including the Gym, PE Alternatives, Weight Room, Auditorium, Band and Chorus Rooms, allowing for clerestory light to reach these internal spaces.

Additionally, skylights over corridors in the Health and Arts wings will help bring daylight into these wings.

The Schematic Design includes a substantial overhaul of the athletics fields and courts and includes a new concessions building at the existing turf field among other site amenities. Varied natural features in the Schematic Site Design offer opportunities to include exterior classrooms, both formal and informal as well as a student dining terrace.

Following site clearing, the building will be constructed in one major phase entirely clear of the existing High School site, allowing construction to occur without disruption to ongoing educational activities. A move-in date of 2026 is targeted for construction of the building, however, this is still under review. An additional year of work to complete the recreation of athletic fields and complete parking and site circulation and other amenities is anticipated.

General Information:

Area:	191,796 SF
Floors:	2
Construction Type:	IIA (non-combustible, protected)
Occupancy Type:	E - Educational

Proposed Space Summary - High School

Date: 8/25/2023 Schematic Design Submittal

East Longmeadow School District East Longmeadow High School	EXISTING CONDITIONS			PROPOSED PROGRAM: EXISTING TO REMAIN / RENOVATED			PROPOSED PROGRAM: NEW CONSTRUCTION			PROPOSED PROGRAM: TOTAL			VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
CORE ACADEMIC			**39,290**			**0**			**44,075**			**44,075**			**4,395**			**39,680**	Science Lab Guidelines
(List rooms of different sizes separately)																			
General Classroom	varies	33	25,415		0	0	830	1	830	830	1	830	-70	-26	-23,470	900	27	24,300	825 NSF (minimum size) - 950 NSF (maximum size)
							840	4	3,360	840	4	3,360							
							845	4	3,380	845	4	3,380							
							850	6	5,100	850	6	5,100							
							855	5	4,275	855	5	4,275							
							860	2	1,720	860	2	1,720							
							865	1	865	865	1	865							
							870	1	870	870	1	870							
Teacher Planning	400	1	400		0	0	620	1	620	620	1	620	520	-26	-2,080	100	27	2,700	
							650	1	650	650	1	650							
							655	1	655	655	1	655							
							665	1	665	665	1	665							
Small Group Seminar (20-30 seats)		0	0			0	150	4	600	150	4	600	-350	2	-400	500	2	1,000	
							240	1	240	240	1	240							
							335	1	335	335	1	335							
Science Classroom / Lab	varies	10	9,345		0	0	1,445	1	1,445	1,445	1	1,445	5	-6	-8,635	1,440	7	10,080	Assumed schedule: 3 x 85% utilization = 20 seats; 1 period per day per student; 1,440 NSF (minimum size); refer to the Science Lab Guidelines for additional information
							1,450	1	1,450	1,450	1	1,450							
							1,455	1	1,455	1,455	1	1,455							
							1,470	1	1,470	1,470	1	1,470							
							1,475	4	5,900	1,475	4	5,900							
Prep Room	varies	4	1,285		0	0	405	2	810	405	2	810	205	-5	-590	200	7	1,400	(1) 200 NSF Prep Room required per Science Classroom / Lab
							410	2	820	410	2	820							
Central Chemical Storage Room		0	0		0	0	205	1	205	205	1	205	5	0	5	200	1	200	(1) 200 NSF Central Chemical Storage Room required
Greenhouse	245	1	245		0	0	220	1	220	220	1	220	220	1	220				
Business Classrooms	varies	3	2,600			0	860	2	1,720	860	2	1,720	860	2	1,720				
							845	2	1,690	845	2	1,690	845	2					
EL Classroom			0			0	525	1	525	525	1	525	525	1	525				
Large Group Instruction			0			0	2,200	1	2,200	2,200	1	2,200	2,200	1	2,200				
SPECIAL EDUCATION			**8,780**			**0**			**11,575**			**11,575**			**2,515**			**9,060**	Special Education spaces require DESE review and approval.
(List rooms of different sizes separately)																			
Self-Contained Special Education Classroom	varies	4	2,910																
Self-Contained Medically Fragile	805	1	805			0	935	1	935	935	1	935	-15	-5	-4,765	950	6	5,700	825 NSF (minimum size) - 950 NSF; equal to the size of the proposed General Classrooms that serve the same student population.
Self-Contained Medically Fragile Toilet Room			0			0	105	1	105	105	1	105	45	-5	-255	60	6	360	
Self-Contained Life Skills	785	1	785				1,260	1	1,260	1,260	1	1,260							
Self-Contained Life Skills Toilet Room			0				60	1	60	60	1	60							
Self-Contained Life Skills 18-22			0				860	1	860	860	1	860							
Self-Contained Life Skills 18-22 Toilet-Room			0				60	1	60	60	1	60							
ASD Classroom/De-escalation	845	1	845				1,290	1	1,290	1,290	1	1,290							
Self-Contained ASD Toilet Room			0				60	1	60	60	1	60							
Resource Room	varies	2	1,645			0	525	2	1,050	525	2	1,050	25	-1	-450	500	3	1,500	1/2 size of a General Classroom
							545	2	1,090	545	2	1,090							
Small Group Room			0			0	195	1	195	195	1	195	-305	-2	-1,305	500	3	1,500	1/2 size of a General Classroom
							200	1	200	200	1	200							
							205	1	205	205	1	205							
							300	1	300	300	1	300							
							360	2	720	360	2	720							
SEL Classroom			0			0	870	1	870	870	1	870	870	1	870				
Willie Ross Deaf Program	varies	2	1,530			0	525	1	525	525	1	525	525	1	525				
							535	1	535	535	1	535							
Willie Ross Deaf Program Suport			0			0	125	2	250	125	2	250	125	2	250				
SPED Conference Room			0			0	350	1	350	350	1	350	350	1	350				
Speech Pathologist	150	1	150			0	150	1	150	150	1	150	150	1	150				
OT/PT (shared with ASD in Existing)							505	1	505	505	1	505	505	1	505				
Testing	110	1	110																
ART & MUSIC			**8,425**			**0**			**6,625**			**6,625**			**0**			**6,625**	
Art Classroom (25 seats)	varies	2	3,765			0	1,195	1	1,195	1,195	1	1,195	-5	-1	-1,205	1,200	2	2,400	Assumed schedule: 25% total enrollment; 5 times per week
							1,215	1	1,215	1,215	1	1,215							
Art Workroom with Storage and w/o Kiln	440	1	440			0	235	1	235	235	1	235	85	-1	-65	150	2	300	
Art Storage	675	1	675				65	1	65	65	1	65							
Art Office	100	1	100																
Band (50-100 seats)	1,290	1	1,290			0	1,520	1	1,520	1,520	1	1,520	20	0	20	1,500	1	1,500	Assumed schedule: 25% total enrollment; 5 times per week
Chorus (50-100 seats)	1,230	1	1,230			0	1,435	1	1,435	1,435	1	1,435	-65	0	-65	1,500	1	1,500	
Music Tech/Keyboard	430	1	430																
Ensemble			0			0	205	1	205	205	1	205	5	0	5	200	1	200	
Music Practice Room	varies	2	190			0	75	3	225	75	3	225	0	0	0	75	3	225	
Music Storage	varies	3	305			0	530	1	530	530	1	530	30	0	30	500	1	500	
VOCATIONS & TECHNOLOGY			**5,460**			**0**			**7,200**			**7,200**			**0**			**7,200**	
Non-Chapter 74 Programs (List rooms separately below)																			STE Guidelines Policy
Technology / Engineering Rooms	1,010	1	1,010			0			0	0	0	0	-1,440	-5	-7,200	1,440	5	7,200	Assumed schedule: 100% total enrollment; 5 times per week; 825 NSF (minimum size) - 2,000 NSF (maximum size)
STEM Lab with Robotics							2,005	1	2,005	2,005	1	2,005							
Graphic Design Lab	1,100	1	1,100			0	1,015	1	1,015	1,015	1	1,015	1,015	1	1,015				
Printing	485	1	485			0	200	1	200	200	1	200	200	1	200				
Culinary Arts Lab	1,130	1	1,130			0	1,575	1	1,575	1,575	1	1,575	1,575	1	1,575				
PK-Child Care Lab	1,130	1	1,130			0	1,225	1	1,225	1,225	1	1,225	1,225	1	1,225				
Video Production		0	0			0	1,180	1	1,180	1,180	1	1,180	1,180	1	1,180				
Robotics	605	1	605																
HEALTH & PHYSICAL EDUCATION			**22,030**			**0**			**21,270**			**21,270**			**590**			**20,680**	Excess PE Spaces Policy
Gymnasium	8,565	1	8,565			0	12,000	1	12,000	12,000	1	12,000	0	0	0	12,000	1	12,000	
PE Alternatives	3,950	1	3,950			0	2,000	1	2,000	2,000	1	2,000	-1,000	0	-1,000	3,000	1	3,000	
Weight Room	1,255	1	1,255				1,000	1	1,000	1,000	1	1,000							
Gym Storeroom			0			0	300	1	300	300	1	300	0	0	0	300	1	300	
Locker Rooms - Boys and Girls with Toilets	varies	2	3,420			0	2,240	2	4,480	2,240	2	4,480	-2,240	1	0	4,480	1	4,480	5.6 NSF per student (total enrollment)
PE Storage	varies	13	1,825			0	205	1	205	205	1	205	-295	0	-295	500	1	500	
							320	1	320	320	1	320							
Athletic Director's Office	280	1	280			0	150	1	150	150	1	150	0	0	0	150	1	150	
PE Instructor's Office with Shower and Toilet	varies	5	800			0	505	1	505	505	1	505	255	0	255	250	1	250	
Trainer's Room	varies	3	845			0	310	1	310	310	1	310	310	1	310				
Shower	varies	2	525			0			0	0	0	0	0	0	0				
Uniform Drying Room	145	1	145			0			0	0	0	0	0	0	0				
Toilet Rooms - PE	30	2	60			0			0	0	0	0	0	0	0				
Physical Education Outdoor Storage	360	1	360																
MEDIA CENTER			**3,140**			**0**			**4,900**			**4,900**			**0**			**4,900**	
Media Center / Reading Room	2,825	1	2,825			0	2,185	1	2,185	2,185	1	2,185	-2,715	0	-2,715	4,900	1	4,900	
Media Center / Stacks			0			0	2,360	1	2,360	2,360	1	2,360	2,360	1	2,360				
Computer Lab	315	1	315			0			0	0	0	0	0	0	0				
Library Office			0			0	145	1	145	145	1	145	145	1	145				
Student Activity			0			0	105	2	210	105	2	210	105	2	210				
AUDITORIUM / DRAMA			**9,285**			**0**			**8,180**			**8,180**			**-3**			**8,183**	Excess Auditorium Spaces Policy
Auditorium	6,855	1	6,855			0	5,305	1	5,305	5,305	1	5,305	-28	0	-28	5,333	1	5,333	2/3 total enrollment at 10 NSF per seat (750 seats maximum)
Stage	2,140	1	2,140			0	1,590	1	1,590	1,590	1	1,590	-10	0	-10	1,600	1	1,600	
Auditorium Storage	90	2	180			0	410	1	410	410	1	410	-40	0	-40	450	1	450	
Make-up / Dressing Rooms			0			0	290	2	580	290	2	580	-10	0	-20	300	2	600	
Controls / Lighting / Projection	110	1	110			0	295	1	295	295	1	295	95	0	95	200	1	200	
DINING & FOOD SERVICE			**8,235**			**0**			**8,690**			**8,690**			**1,190**			**7,500**	
Cafeteria / Dining / Student Lounge	5,140	1	5,140			0	2,050	1	2,050	2,050	1	2,050	-1,950	0	-1,950	4,000	1	4,000	Based on 3 lunch seatings - 15 NSF per seat
							1,930	1	1,930	1,930	1	1,930							
Chair / Table Storage			0			0	365	1	365	365	1	365	15	0	15	350	1	350	
Scramble Servery			0			0	1,290	1	1,290	1,290	1	1,290	690	0	690	600	1	600	
Kitchen	1,600	1	1,600			0	2,515	1	2,515	2,515	1	2,515	415	0	415	2,100	1	2,100	1,600 NSF for first 300 students + 1 NSF per additional student
Staff Lunch Room	725	1	725			0			0	0	0	0	-450	-1	-450	450	1	450	20 NSF per student
Freezer	215	1	215			0			0	0	0	0	0	0	0				
Dry Storage	180	1	180			0			0	0	0	0	0	0	0				
Kitchen Toilet	65	1	65			0	55	2	110	55	2	110	55	2	110				
Kitchen Office	310	1	310			0	150	2	300	150	2	300	150	2	300				
Can Washing			0			0	130	1	130	130	1	130	130	1	130				
MEDICAL			**765**			**0**			**910**			**910**			**0**			**910**	
Medical Suite Toilet	30	2	60			0	60	1	60	60	1	60	0	0	0	60	1	60	
Nurses' Office	310	1	310			0	100	2	200	100	2	200	-150	1	-50	250	1	250	
Waiting Room							150	1	150	150	1	150							
Interview Room	275	1	275			0	100	2	200	100	2	200	0	0	0	100	2	200	
Examination Room / Resting	120	1	120			0	100	3	300	100	3	300	0	-1	-100	100	4	400	
ADMINISTRATION & GUIDANCE			**4,210**			**0**			**4,560**			**4,560**			**865**			**3,695**	
General Office / Waiting Room with Toilet	550	1	550			0	400	1	400	400	1	400	0	0	0	400	1	400	
Teachers' Mail and Time Room			0			0	100	1	100	100	1	100	0	0	0	100	1	100	
Copy Room			0			0	200	1	200	200	1	200	0	0	0	200	1	200	
Records Room	300	1	300			0	200	1	200	200	1	200	0	0	0	200	1	200	
Principal's Office with Conference Area	140	1	140			0	250	1	250	250	1	250	-125	0	-125	375	1	375	
Principal's Secretary			0			0	250	1	250	250	1	250	125	0	125	125	1	125	
Assistant Principal's Office - AP1	140	1	140			0	150	1	150	150	1	150	0	0	0	150	1	150	
Assistant Principal's Office - AP2	170	1	170			0	150	1	150	150	1	150	0	1	150	150	0	-	
Spare Office / Counselling Room	100	2	200			0	120	1	120	120	1	120	0	0	0	120	1	120	
Conference Room	710	1	710			0	400	1	400	400	1	400	-50	0	-50	450	1	450	
Guidance Office	varies	4	360			0	150	4	600	150	4	600	0	0	0	150	4	600	
Guidance Waiting Room	260	1	260			0	105	1	105	105	1	105	5	0	5	100	1	100	
Career Center	260	1	260			0	230	1	230	230	1	230	-120	0	-120	350	1	350	
Records Room	35	1	35			0	130	1	130	130	1	130	5	0	5	125	1	125	
Teachers' Work Room	445	1	445			0	100	4	400	100	4	400	-300	3	0	400	1	400	
SRO Office	260	1	260			0	150	1	150	150	1	150	150	1	150				
Grad Coach			0			0	425	1	425	425	1	425	425	1	425				
Adjustment Counselor	115	1	115			0	150	1	150	150	1	150	150	1	150				
Psychologist	200	1	200			0	150	1	150	150	1	150	150	1	150				
Kitchenette	65	1	65			0			0	0	0	0	0	0	0				
CUSTODIAL & MAINTENANCE			**2,605**			**0**			**2,225**			**2,225**			**0**			**2,225**	
Custodian's Office	195	1	195			0	120	1	120	120	1	120	-30	0	-30	150	1	150	
Custodian's Workshop	615	1	615			0	250	1	250	250	1	250	0	0	0	250	1	250	
Custodian's Storage	varies	4	1,025			0	115	1	115	115	1	115	-260	0	-260	375	1	375	
							100	1	100	100	1	100							

Proposed Space Summary - High School

Date: 8/25/2023 Schematic Design Submittal

East Longmeadow School District East Longmeadow High School	EXISTING CONDITIONS			PROPOSED PROGRAM									VARIATION TO MSBA GUIDELINES			MSBA GUIDELINES (DO NOT MODIFY) (Refer to Educational Facility Planning for additional information)			
				EXISTING TO REMAIN / RENOVATED			NEW CONSTRUCTION			TOTAL									
ROOM TYPE	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	ROOM NFA[1]	# OF ROOMS	AREA TOTALS	COMMENTS
							85	1	85	85	1	85							
							80	1	80	80	1	80							
							65	1	65	65	1	65							
Recycling Room / Trash			0			0	355	1	355	355	1	355	-45	0	-45	400	1	400	
Receiving and General Supply			0			0	355	1	355	355	1	355	5	0	5	350	1	350	
Storeroom			0			0	500	1	500	500	1	500	0	0	0	500	1	500	
Network / Telecom Room	115	1	115			0	200	1	200	200	1	200	0	0	0	200	1	200	
Outside Equipment Storage	655	1	655			0			0	0	0	0	0	0	0				
OTHER			**10,025**			**0**			**7,985**			**7,985**			**7,985**			**0**	
(List rooms separately below)																			
ELCAT Office	1,090	1	1,090			0	170	1	170	170	1	170	170	1	170				
ELCAT Edit	730	1	730			0	145	1	145	145	1	145	145	1	145				
District SPED Staff Offices	varies	5	625			0	150	3	450	150	3	450	150	3	450				
Consult RM			0			0	200	1	200	200	1	200	200	1	200				
District SPED Conference Room	190	1	190			0			0	0	0	0	0	0	0				
District SPED Waiting	670	1	670			0	280	1	280	280	1	280	280	1	280				
District SPED Admin			0			0	350	1	350	350	1	350	350	1	350				
Superintendent	190	1	190			0	285	1	285	285	1	285	285	1	285				
District Accounts/ Bookeeping	345	1	345			0	345	1	345	345	1	345	345	1	345				
District CFO	80	1	80			0	170	1	170	170	1	170	170	1	170				
Director of Curriculum & Instruction	105	1	105			0	170	1	170	170	1	170	170	1	170				
Central Office Admin	715	1	715			0	295	1	295	295	1	295	295	1	295				
Central Office Storage/Safe	95	1	95			0	340	1	340	340	1	340	340	1	340				
Central Office Conference Room	680	1	680			0	560	1	560	560	1	560	560	1	560				
District Spare Office	240	1	240			0			0	0	0	0	0	0	0				
Large Conference Room	680	1	680			0			0	0	0	0	0	0	0				
IT Open Office	765	1	765			0	810	1	810	810	1	810	810	1	810				
IT Storage/Computers/Repair	165	1	165			0	820	1	820	820	1	820	820	1	820				
IT Director			0			0	170	1	170	170	1	170	170	1	170				
IT AD			0			0	170	1	170	170	1	170	170	1	170				
IT Tech Support			0			0	365	1	365	365	1	365	365	1	365				
Kitchenette			0			0	195	1	195	195	1	195	195	1	195				
Garage	1,215	1	1,215			0			0	0	0	0	0	0	0				
Health Classrooms	varies	2	1,445			0	865	1	865	865	1	865	865	1	865				
							830	1	830	830	1	830	830	1					
Total Building Net Floor Area (NFA)			**122,250**			**0**			**128,195**			**128,195**			**17,537**			**110,658**	**Total Building Net Floor Area (NFA)**
Proposed Student Capacity / Enrollment																		**800**	**Enter Total Enrollment**
NON-PROGRAMMED SPACES					% of GFA	**0**		% of GFA	**63,601**		% of GFA	**63,601**							Complete this category with Schematic Design Submittal
Other Occupied Rooms (List rooms separately below)																			
Unoccupied MEP / FP Spaces				-	#DIV/0!		-	1.6085%	3,085	-	1.6085%	3,085							
Unoccupied Closets, Supply Rooms, and Storage Rooms				-	#DIV/0!		-	0.3963%	760	-	0.3963%	760							
Toilet Rooms				-	#DIV/0!		-	1.8275%	3,505	-	1.8275%	3,505							
Circulation (corridors, stairs, ramps and elevators)				-	#DIV/0!		-	20.8242%	39,940	-	20.8242%	39,940							
Remaining[3]				-	#DIV/0!	**0**	-	8.5043%	**16,311**	-	8.5043%	**16,311**							
Total Building Gross Floor Area (GFA)[2]			**186,890**			**0**			**191,796**			**191,796**			**#N/A**			**#N/A**	**Total Building Gross Floor Area (GFA)[2]**
Grossing Factor (GFA / NFA)			**1.53**			**#DIV/0!**			**1.50**			**1.50**			**#N/A**			**#N/A**	**Grossing Factor (GFA / NFA)**

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

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

[3] **Remaining** Includes exterior walls, interior partitions, chases, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for. above.

Architect Certification

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

Name of Architecture Firm: Jones Whitsett Architects

Name of Principal Architect: Dorrie Brooks, AIA

Signature of Principal Architect:

Date: 8/25/2023

2-2-c
SPACE SUMMARY NARRATIVE

The space summary has stayed largely consistent with what was submitted as part of the Preferred Schematic Report. Deviations from the previous submittal are addressed below. The details below compare the SD Space Summary with the PSR and PDP submission and MSBA Guidelines.

Core Academic Space:

MSBA Guidelines:	39,680*
PDP Submission:	46,270
PSR Submission:	45,870
SD Submission:	44,075
Difference to MSBA	4,395

Difference: Reduction of 1,795 sf

The total number of classrooms has decreased by one classroom. That change is because of a clarification from the District that the Social Emotional Learning Classroom is a SPED classroom serving students on IEPs. 870sf has been shifted to SPED program. Additionally, the General Ed classrooms have been scaled up and structural bracing and chases accounted for such that no classroom is below 830sf.

At PSR the Business and Large Group Instruction space were approved.

Per MSBA guidance the Health Classrooms were relocated to the "Other" program category.

The Greenhouse space was noted as ineligible for reimbursement. The Greenhouse space is 220sf to make the space useful to two different biology classrooms.

Special Education:

MSBA Guidelines:	9,060
PDP Submission:	10,650
PSR Submission:	10,190
SD Submission:	11,575sf

Difference: Increase of 1,385

Difference to MSBA	2,515

The square footage of the SPED programs has increased to account for the shift of the 870 sf SEL sub separate classroom from the Core Academic program. Additionally, the District SPED Director, new to the position, has requested a larger ASD Classroom, up by 420sf, and a smaller Medically Fragile Classroom, down by 275sf. The organization of the schematic design plan positioned the Life Skills 18-22 CR and the Medically Fragile Classroom near to each other in the forward wing of the school. Additionally, a 150sf increase was made with the relocation of the District's speech pathologist to SPED because this staff person works directly and therapeutically with high school students. These revisions account for the changes between PSR and SD and have been reviewed and approved by the District.

Art & Music:

MSBA Guidelines:	6,625
PDP Submission:	6,625
PSR Submission:	6,625
SD Submission:	6,625

Difference: No Change

Difference to MSBA	0

The District has not had a kiln previously and has decided the operating costs of ceramics does not warrant having a kiln program. The space has been revised to serve as an Art Workroom w/o kiln.

Vocations & Technology:

MSBA Guidelines:	7,200
PDP Submission:	7,200
PSR Submission:	7,200
SD Submission:	7,200

Difference: No Change

Difference to MSBA	0

The District has asked that the Graphics Lab include a specially vented printing room. This has been accounted for. Similarly, the STEM Classroom supports both engineering electives and robotics clubs and physics programs. The room is further defined by these two uses.

Health and Physical Education:

MSBA Guidelines:	20,680
PDP Submission:	21,830
PSR Submission:	21,730
SD Submission:	21,270

Difference: Increase of 460sf

Difference to MSBA 590

This program has remained the same. Because the school has three PE instructors, the final layout of offices is slightly larger and accounts for a shared office area and a separate shower room for instructors. A storage room was relocated to thenon-programmed spaces area of the space summary.

Media Center:

MSBA Guidelines:	4,900
PDP Submission:	4,900
PSR Submission:	4,900

Difference: No Change

Difference to MSBA 0

Auditorium / Drama:

MSBA Guidelines:	8,183
PDP Submission:	8,183
PSR Submission:	8,183
SD Submission:	8,180

Difference: A reduction of 3 ft.

Difference to MSBA -3

Dining & Food Service:

MSBA Guidelines: 7,500
PDP Submission: 8,800
PSR Submission: 8,850

SD Submission: 8,690

Difference: Reduction of 160sf

Difference to MSBA 1,190

The location of the kitchen is central and was easy to lay out to meet the District's needs. The Dining area is also spacious because it adjoins circulation space. The reduction of square footage was advantageous to other utility needs.

Medical:

MSBA Guidelines: 910
PDP Submission: 970
PSR Submission: 910

SD Submission: 910

Difference: No Change

Difference to MSBA 0

The District has requested that one of the exam rooms be outfitted as a second nurses office and is exploring this as a staff change.

Administration & Guidance:

MSBA Guidelines:	3,795
PDP Submission:	4,945
PSR Submission:	4,570
SD Submission:	4,560

Difference: Decrease of 10ft

Difference to MSBA	+865

Reviewing spaces with the guidance and administration resulted in a flip of square footage from the Career Center to the Grad Coach. These two staff work closely and are positioned centrally where they interact with many students as supportive academic advisors. The Grad Coach teaches within her room while the Career Center director uses his office for one-on-one meetings and uses the conference rooms and LGI for larger gatherings. These spaces have been adjusted to 230sf for career and 425 for Grad Coach. Additionally, the space summary picked up an additional error in not counting the school psychologist. Finally, the Principal's Office was reduced in order to provide more space for the school's three administrative secretaries who prefer to share space in the reception area. A storage closet was moved to the non-programmed category.

Custodial & Maintenance:

MSBA Guidelines:	2,225
PDP Submission:	2,225
PSR Submission:	2,225
SD Submission:	2,225
Difference to MSBA	0

Difference: No change.

Difference to MSBA	0

Other:

MSBA Guidelines:	0
PDP Submission:	7,000
PSR Submission:	6,600
SD Submission:	7,985

Difference: Increase of 1,385

The District requested that the speech pathologist be included the SPED Program allotment because this staff person does work with the high school students. Additionally, the MSBA staff guidance was to locate the Health Classrooms in the "Other" Category. Finally, an ELCAT storage room was relocated to the Non-categorized Spaces designation.

Net Square Footage:

MSBA Guidelines:	110,758*
PDP Submission:	129,598
PSR Submission:	127,853
SD Submission:	128,955

Difference to MSBA: 18,197*

Difference PDP to PSR: Reduced 1,745

Grossing Factor:

Existing:	1.4
PDP Submission:	1.50
PSR Submission:	1.50
SD Submission:	1.49

Gross Floor Area:

Existing:	186,890

PDP Submission:	194,397
PSR Submission:	191,780
SD Submission:	191,796

Difference: Increase of 16 sf

**Note that the space summary is the new version which alters the MSBA Guidelines relative to core academic classrooms. These values have changed as a result of design changes and the revision of the template.*

2-2-d
INSTRUCTIONAL TECHNOLOGY

East Longmeadow High School operates on a 1:1 personal computing device to student ratio. All students are equipped with Chromebook technology and teachers use laptop computers. Chromebooks and laptops are purchased via capital budgets and updated on a regular basis and will not be provided using project funds.

Cisco network switches and a new VoIP system including handsets will be provided per the school district standard. Meraki wireless access points are also the district standard for network access.

Meraki wireless access points are distributed in classrooms and in other designated areas to provide network connectivity. This system will be fully upgraded to the latest enterprise class wireless technology to provide maximum coverage throughout the new facility.

Although proprietary, the network switches, wireless access and VoIP systems will be procured using a Technology Equipment budget that is established for purchasing these and other classroom technology systems. Prior to the end of construction, the equipment intended to be procured using the Technology Equipment funds will be bid to pre-approved vendors on the State Contract list. Specifying and purchasing these systems close to occupying the school ensures that the most current components will be installed.

The high school utilizes a mixture of older visual instructional technology including outdated projection technology. The district will work with State listed vendors to evaluate the latest display technologies to assess the best options for the new School. The project will then seek to standardize on the most appropriate display technologies including a combination of interactive and non-interactive flat panel technology for use in educational environments where it is more suitable than projection technology. This will include areas such as classrooms, science labs and other areas as the design dictates.

An estimated eight high-volume printers/copiers will be purchased using the Technology Equipment fund. These are planned for use in the academic wings and the Administrative suite. Smaller, network connected printers will be utilized as necessary for those offices that need additional privacy. A large format plotter is intended for use in the Technology Education/Engineering/CADD lab.

Up to ten document cameras will be purchased for instructors to reserve for classroom use.

All computer information and visual instructional technology will be supported by a new state-of-the-art infrastructure based on a new high speed 10 GbE Category 6A cabling and fiber optic backbone cabling. Refer to Section 3.H, OUTLINE OF INFORMATION TECHNOLOGY SYSTEMS, for a description of the network cable and equipment that will be purchased under base building contract.

The base building contract will specify a number of speech reinforcement systems for selected learning spaces to enhance speech intelligibility while reducing teacher strain during instructional sessions. This technology will also interface with assisted listening devices of the hearing impaired. The system will integrate with both the public address system and fire alarm systems that will override the local sound systems in the event of an announcement or emergency.

2-2-e
FUNCTIONAL RELATIONSHIPS & CRITICAL ADJACENCIES

East Longmeadow High School values and supports each student and their individual learning pathway. The school community is remarkably tight knit with teachers playing important mentoring roles for students. The school offers an exceptionally flexible set of course options and a broad variety of electives to encourage learner autonomy. ELHS also has vibrant athletics, engineering and arts programs, strong afterschool clubs, and a robust coop work program. All of these aspects of the ELHS experience reflect the school's commitment to Universal Design for Learning or UDL.

The formal characteristics and organizational relationships of ELHS are meant to support this strongly student-centered culture and rich, UDL-focused learning experience. In plan, the school sits at the center of the site which is itself a vibrant recreational campus to which the entire community is welcome. The four wings of the school splay outward from a central spine. The spine is oriented north to south creating a transect from the busy, public entrance to the quiet, protected space of the undeveloped woodlands that bound the property on the south.

Below the roof form of the central spine is a main corridor that contains the school's entry lobby ("Gathering Point"), the entry area to the auditorium, and the Dining Commons areas. The four masses that branch away from the spine are, at the north, the Arts and PE wings, and at the south, the West Academic and East Academic wings.

Students and guests arriving at the school enter at a secure vestibule and pass into the Gathering Point from which one will have views down the PE wing along the Gymnasium and down the spine towards the Commons. Guidance and Admin offices flank the entry. Directly in front of the entry are the Grad Coach and Career Center spaces. These two staffed spaces are intentionally set to greet students and make students feel valued and welcome. The Grad Coach space is warm, flexible and inviting and is used as a teaching space for collaborative learning led by the Grad Coach. Beyond this space there is a Learning Stair that draws students up to the Media Center, the largest flexible study space in the school.

To the west of the Learning Stair there is another open area with double doors that lead into the Auditorium, the largest seated assembly space in the school. South of this point in the spine the ceiling drops down over the first floor (below the Media Center) to create a café style seating area enhanced by a wood ceiling, acoustic wall treatment and smaller, flexible tables meant to

encourage gathering and conversation. This is the first of two dining areas in sequence. To the east of the café area are openings into the servery.

Beyond this intentionally calm dining area is a more expansive Dining Commons that also serves as the heart of the school and a major assembly space for multipurpose events. The Commons is a two-story space looking directly into the woodlands to the south and lit from above by clerestory windows.

A second stair in the Commons delivers students to a landing and bridge that connects the two academic wings at the second floor. Students moving from west to east classrooms or to the second story Media Center can look down into the Commons from above.

The design aims to make enrichment experiences more visible and available to all students. With this intent in mind the Commons is surrounded at each level by larger studio teaching spaces. At the first floor the Large Group Instruction Space and Graphics Studio are on the west side of the Commons. The Culinary Arts Classroom is on the east. These spaces are more transparent than typical classrooms and benefit from the opportunity to connect to the Commons. The Graphics Classroom is the primary computer lab for the school and has enhanced higher grade computer equipment and printing facilities. The LGI is a large instruction space where fairs, college recruiting events, debates, and joint teaching will take place. It is also likely to be used for community meetings, parent nights, and professional development events and benefits from access to the Commons for spill over space.

On the second floor, an Engineering/Robotics Studio is above the graphics room while the Media Center and anchors the north side of the double height commons space. Students can look down from the Media Cante into the Gathering Point or the Commons. The Media Center itself is divided into two spaces. The west will contain open study space and periodicals. The east side will contain stacks, AV, a librarian's office and two student activity rooms.

Branching off from the Commons to the east and west are the academic wings. Each is two-stories and composed of the same mix of classrooms, small group rooms, science labs, a teacher planning room and core toilet and utility spaces. The academic wings each have a prominent central stair that connects the two floors, creating a stronger sense of community and offering more openness and daylight, a response to the current school's condition. The academic wings are intentionally flexible with only the science labs and some of the SPED spaces dedicated to specific classes and faculty. Two of the eight labs are chemistry. Two are biology. Four are flexible. Biology labs are on the first floor and connect to a south facing greenhouse that opens onto the Terrace.

Returning to the central spine, behind the cafeteria, the MEP spaces and loading dock are oriented to the east in the nook between the east academic wing and the PE wing. This back-of-house location allows for central delivery of supplies and shorter utility piping routes. A rear hallway from the loading dock area connects to the rear corridor encircling the Gym. This

corridor serves the locker rooms which are located with close proximity to the Game Field and will also serve the needs of the school's substantial PE program offering valuable storage space to student athletes (extra lockers) as well as access to the shared office of the PE Instructors. This location provides visual control to the instructors of this athletic hallway and locker room area.

The Gym sits firmly in the middle of this PE/Guidance wing. Its higher ceiling brings light into the space from above. On the east side of the gym significant glazing visually connects the space to Alt PE and the Weight Room. These rooms are connected to each other by a large overhead door to allow them to be supervised by a single teacher. The Gym itself is dividable with a curtain partition.

Beyond the gym, on the southeast, are additional storage rooms, and on the northeast, the vestibule that separates the school from the East Longmeadow Community Pool being constructed under a separate contract. The Athletic Trainer's office and Athletic Director's office are between the vestibule and the Gym to provide adult supervision of this secondary point of entry from the front parking lot. The guidance and medical suite are on the north side of this hallway with windows to the front plaza and parking area.

Branching off to the west from the spine from the main entry are the Administrative Offices and Arts wing. Like the Gym, the Auditorium is central to the wing with Band and Chorus behind the large space so that they can enjoy high ceilings and have direct access to the Auditorium stage. The Art Classrooms are to the South of the Auditorium, across a hallway. Beyond the Arts and Admin spaces at the western edge of this wing are the District Pupil Services Offices, the District Administrative Offices, Town IT Offices and the office of the Town's cable TV staff person. Two additional secured entrances support this wing of the building to limit visitors to the High School entrance.

The Early Education Studio anchors the western terminus of this wing, beyond the Art, and TV production spaces. In this studio 3-4 year olds are taught by supervised high school students in an Early Education elective education class. The EE room enjoys access to a nearby vestibule associated with a branch parking area. This wing of the school also has its own fenced toddler play area.

A final word about bathrooms. Like all schools, ELHS has a need for unisex individual bathrooms to support staff as well as students who are uncomfortable in gendered gang restrooms, as are required by code in Massachusetts. The design presents six gang facilities. At each there is an accompanying unisex restroom. Two additional unisex bathrooms are located outside the locker rooms to support students who may prefer privacy for changing clothes.

Additional single bathrooms are located in District Offices, Administration, Kitchen and Medical Suite.

2-2-f
SECURITY & VISUAL ACCESS REQUIREMENTS

The security design for the school is multi-layered, including active and passive measures. The layers include perimeter security, interior and exterior surveillance cameras, controlled and secure entry points, access control at appropriate interior doors, intrusion detection with multiple zones, intercommunication, classroom wing lock down capability, and individual classroom lock down capability.

OUTREACH

The Design Team has had a security meeting with District and Town emergency personnel on 6/23/23 to review the project. This meeting was to discuss the overall security philosophy and to review the crime prevention through environmental design (CPTED) requirements.

Based on the feedback garnered from the District and Town representatives, the security and visual access requirements are as follows.

SITE PERIMETER

Parking areas, parent drop off and pick up, and bus drop off and pick up will be clearly identified. Buses and cars will have separate paths to maximize safe transport of students. After a predetermined time at the beginning of school, only the front Main Entry will be open, via a secure visitor entry sequence.

Perimeter camera surveillance will include high resolution, lowlight and infrared fixed and multi-lens cameras in concert with video analytics, including motion detection, to establish a virtual perimeter and monitor activity within the site. Camera surveillance will be used to cover the driveways, parking areas, playgrounds andand outdoor classrooms. Cameras will be aesthetically mounted to the school façade, soffits and light poles in order to provide maximum coverage of the perimeter.

All exterior building cameras will be power over Ethernet (PoE), specified for the environment in which they are located and will include surge suppression. All PoE power supplies will be on UPS and emergency power.

The benefit of utilizing a PoE solution not only supplies low voltage rather than high voltage power to these devices, but also more importantly provides the means to control power to the device. Central control of the PoE devices allows for devices to be turned on or off based on a predetermined schedule, a sensor, or an event, such as motion detection. The result can be reduced consumption of power to devices, reduced power usage and a greener building. In addition, PoE reduces the use of materials, eliminating the need to provide a power cable to the device.

BUILDING PERIMETER

The proposed school has a main entry secure vestibule. These doors will be electronically controlled by a proximity card reader, door position switch and monitored by camera surveillance on both on the interior and exterior of the school. Each of these entry doors includes 2-way communication with the main office through the use of a video intercom system whereby a visitor will request access into the school.

All exterior doors not used for normal entry but for emergency egress only will be equipped with hardware on the interior side of the door only and door position switches. Alarms will be generated for unauthorized access and can be silent alarms, generated only on the access control workstation, and/or audible alarms for local annunciation.

A designated entrance will be provided for delivery vehicles. This door will be controlled through the access control system in addition to a video intercom, located outside of the delivery door, to allow the driver of the delivery vehicle to communicate with the main office or custodian office to request access into the school.

BUILDING INTERIOR

Card access will be employed at the inner and outer doors of the entry vestibule, designated interior doors, the entry doors into the administrative suite, tel/data and IT closets. All controlled and monitored doors, and motion detectors will communicate with access control field panels and an intrusion detection system mounted in a climate controlled secure closet inside the school. This location will also house the access control and video management server and PoE switches that power the cameras and video intercom system. These panels will transmit the access control data to an access control system, controlled through a workstation over the school network. The system will have the capability to receive and acknowledge various types of facility alarm conditions to include door-propped-open and door-forced open. All alarms will be displayed on a facility map indicating specific location and type of alarm.

Through the access control system and associated equipment, personnel in the administrative office suite will have the capability to lockdown the school, rendering all card access doors only to be operated by pre-authorized credentials, i.e., the administrative team, and kept in the Knox Box on the exterior of the school for first responders. The system panels will also include a fire alarm module to support a connection with the fire alarm system.

As the school will welcome community use, the doors located at the classroom wings will have the ability to secure, disallowing access to visitors during non-school hours. Intrusion detection keypads will be located in the secure vestibule and admin vestibule for after-hours door status and motion detection monitoring. These keypads will be used to arm and disarm the intrusion system. Motion detection devices will be installed in all ground floor spaces with direct access to the exterior and in hallways on upper floors.

The access control system database will be linked to the district human resource database, which will allow new employee data to be passed to the system for pre-population of card holder data, which will allow personnel to quickly create a new access control credentials. Access control credentials will be produced with badging software within, or integrated with, the access control system and allow for multi-colored badges with a photograph and permit full user design of style, logo, fonts and data placement. The system will be part of, or integrated with, the access control system in order to permit tracking of individual badge usage, activation or deactivation of badges at any time or based upon user defined rule sets, and provide both standard and custom reporting capability.

Cameras will be employed within hallways, the gymnasium, cafeteria and other group gathering areas. The video management system will be capable of recording and storing all video, including the exterior cameras, for a minimum of 30 days at high definition resolution. The video management system will transmit video to a video management workstation located in the administrative office suite, and/or at alternate locations, where live viewing will be permitted of any camera image. All cameras will be capable of transmitting in color and exterior cameras will have low light capability where needed (based upon lighting design and configuration). Software for motion based as well as object based and/or forensic video detection will be used in order to provide discrimination of unwanted versus normal events. Interior cameras will be powered via PoE.

The dedicated reception desk in the administrative suite will house a master video intercom, a badge printer, lockdown button and duress button. It is from this desk that visitors requesting access into the building will communicate through the video intercom system. Once allowed into the school's entry vestibule, through the remote unlocking capability from the master intercom, visitors will be identified and properly entered into a visitor management system. This desk will also have a workstation and monitor to view the access control and video management system and provide credentials to staff.

Similarly, the reception desks in the Sped Admin and CO Admin offices will house a master video intercom, a lockdown and duress button, and workstation and monitor to view the access control and video management system.

Inside the administrative suite, the principal's office will contain a master video intercom station, a lockdown and duress button and a workstation to view the access control and video management system.

Consistent with contemporary educational research and thinking, classrooms and as much of the school as possible will be infused with ample daylight, views of nature, connection to natural materials, in an environment with fresh air and friendly acoustic properties. This commitment requires north south orientation for as many classrooms as possible, with windows on the long wall of the room wherever feasible. The classrooms and other learning spaces will be provided with a classroom type lockset, or similar functionality, where the corridor handle is always secure, only unlocked by a key, and the interior handle remains free. Ground floor windows with direct view from the exterior and all classrooms and offices with visibility from interior corridors will be fitted with easily controlled shades to allow teachers, staff and students to properly shelter in place while decreasing visibility.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN

Crime Prevention through Environmental Design (CPTED) is a multi-disciplinary approach to deter criminal behavior through environmental design. The major guidelines to follow when designing and creating policies and procedures for a building include natural surveillance, natural access control, natural territorial reinforcement, maintenance and activity support.

NATURAL SURVEILLANCE

Natural surveillance deters criminal activity by giving the perception that people can be seen. This includes designing the placement of the building against the built and unbuilt environment, locating landscaping features to dictate where activities occur, and how people utilize the exterior spaces. Maximizing visibility will also assist in creating an inviting atmosphere and building positive interactions among users. The design:

- increases pedestrian and non-vehicular traffic as a surveillance asset,
- provides windows and maintains natural surveillance by keeping exterior windows unobstructed,
- creates landscape designs that provide surveillance, especially in proximity to designated points of entry and entrances,
- uses topography to allow visibility, and
- provides consistent lighting to decrease shadows, blind spots and entrapment areas.

NATURAL ACCESS CONTROL

Natural Access Control utilizes the built environment to guide vehicles and pedestrians onto the site and into the building. This not only includes clear wayfinding, but also perimeter fencing, lighting and pathways. Directing the flow of traffic to and from the building will decrease the opportunity for criminal activity. The design:

- provides clear entrances into the building,
- uses building features to direct people to authorized areas,

- uses landscaping to prohibits climbing and intrusion into the building,
- eliminate landscaping and other design features that provide access to roofs or upper levels, and
- promotes interaction with neighbors.

NATURAL TERRITORIAL REINFORCEMENT

Natural territorial reinforcement makes the normal users feel safe and promotes a sense of ownership. This allows staff members to be more apt to challenge intruders or report suspicious activity to the police. In this design public areas are clearly defined from private areas, through the use of fences, signs, pavement, lighting and the landscape. People looking to engage in criminal activity recognize this distinction and are likely discouraged, as they will be more easily identified. The design:

- maintains the premises so that it is perceived as an occupied environment,
- restricts private activities to defined private areas and public activities to public areas,
- displays security system equipment and signage at conspicuous places,
- utilizes topography and natural elements to communicates the absence of a physical presence and an increase in the risk of being detected, and
- includes motion sensor lighting at all entry points.

MAINTENANCE

Maintenance is an important aspect of CPTED because it expresses a sense of ownership. Deterioration or neglect of a space may encourage acts of vandalism or crime. For example, the "Broken Window Theory" suggests that vandalism or criminal acts leads to similar acts and potentially the rapid decline of not only the site but also the entire neighborhood. Properties known to be neglected are more likely to encourage criminal activity. The design includes:

- procedures for repairing and replacing damaged property.

ACTIVITY SUPPORT

Activity support increases the safe usage of the area by increasing the detection of criminal activities. Natural surveillance is casual, however through the use of signage the users of the area will be more involved and aware of their surroundings. This will increase their vigilance to challenge intruders or report suspicious activity to the police. The design includes:

- proper identification and signage of site activities.

2-2-g
SITE DEVELOPMENT REQUIREMENTS

The proposed school will be located on the site of the existing East Longmeadow High School, located at 180 Maple Street (the Site). The Site measures approximately 61.4 acres, is identified by the Town Assessor as Parcel 17-33-10, and is zoned as Residence B District. The property is bounded by Maple Street and residential properties to the North, Saint Michael's Parish and the Redstone Rail Trail to the east, industrial and residential properties to the south, and residential properties to the west. The Site is currently accessed from three (3) curb cuts along Maple Street and a singular point from Norden Street, with a large parking lot located northeast of the building and smaller parking areas located south and southeast of the building. The existing school utilizes a track and synthetic turf field with bleachers (the stadium) along the eastern edge of the property, two (2) natural turf baseball fields, and natural turf practice fields south and west of the building.

There are wetland resources interspersed within the wooded areas in the southeast portion of the Site, and beyond the south and southeast property lines. A maintained stormwater collection pond is located just north of the wetlands and is connected to the wetlands via an earthen channel. According to Flood Insurance Rate Map (FIRM) for Hampden County (Map 25013C0417E), the Site is not located within a floodplain area. A review of the Massachusetts Natural Heritage & Endangered Species Program online mapping indicates that no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife are located on or in close proximity to the Site. There are no Areas of Critical Environmental Concern (ACECs) that impact the Site.

Approximately 30 feet of grade change exists across the Site, which generally slopes down from north to south. More moderate slopes occur in the northern portion of the Site, while the central and south portions of the Site (where the existing and proposed buildings are located) are considerably flatter. Site elevations, per NAVD 88, range from approximately Elevation 242 at the northwest corner of the property, to approximately Elevation 240 at the existing primary site entrance on Maple Street, to approximately Elevation 224 at the existing easternmost site entrance on Maple Street, down to approximately Elevation 212 at the existing drainage pond near the southeastern work limit. Generally, the higher elevations exist along Maple Street and the lower elevations exist in the southern and eastern portions of the site. The existing school sits approximately 14 feet below the northwest access point elevation on Maple Street. The existing synthetic turf and track are set at approximately elevation 221.

Phase 1 site preparatory work will consist of the demolition of paved surfaces, natural turf athletic fields, existing site improvements, and existing above and below ground utilities within the proposed building footprint. The existing East Longmeadow High School is to remain functional, including vehicle access, utilities, parking, and all other functions critical to the use of the school during Phase 1, until such time that the existing school building has been vacated and all operations have been moved into the new school building. The existing building and remaining utilities, pavement, etc. will then be demolished as part of Phase 2.

The proposed sitework includes new vehicular and pedestrian circulation from Maple Street and Norden Street. School buses and service vehicles will enter and exit the site from Maple Street at the reconfigured driveway at the northeast corner of the property. School buses will utilize a two-way drive with a counterclockwise circulation loop located at the end of the drive at the front of the building, while service vehicles will be directed to a two-way service driveway and loading dock on the east side of the building. Passenger vehicles, specifically for student drop off/pick up, staff, and visitors, will primarily enter and exit the site via a new site entrance located at the Maple Street / Melwood Avenue intersection and utilize a one-way counterclockwise circulation loop that extends to the front of the building. The proposed circulation system will serve to better segregate school buses and passenger vehicles while on the Site. Student vehicles will primarily enter the site at the reconfigured driveway at the northeast corner of the property and may exit to Maple Street via either driveway. Norden Street will now terminate at a small parking lot located adjacent to the western limit of the property. Emergency vehicles will primarily access the site from Maple Street via either driveway and will have access around the entire perimeter of the proposed building. Police and ambulance access to the natural turf athletic fields to the west and south of the building will be provided via Norden Street.

Pedestrian circulation is accommodated by ADA compliant connections to existing sidewalks on the north side of Maple Street and to the parking lot located at the terminus of Norden Street. At Maple Street, new crosswalks, curb cut ramps, and rectangular rapid flashing beacons are proposed at new pedestrian crossings. The existing pedestrian signal located east of Melwood Avenue will be maintained. The internal site pedestrian circulation network connects to all accessible doors in the proposed building with ADA compliant circulation routes, including connections to the accessible parking spaces in the proposed parking lots, the outdoor learning and dining spaces, the accessible seating in the existing stadium area, and the natural turf athletic fields. There is a total of approximately 464 parking spaces, with 282 spaces in the student lot, 106 spaces in the staff/visitor lot at the front of the building, 40 spaces in the secondary staff lot west of the building, 33 spaces in the custodial lot near the loading dock east of the building, and 3 accessible spaces in the lot located at the terminus of Norden Street.

The area to the north of the main building entrance will support an entrance plaza containing a mixture of hardscape and softscape elements designed to create transition from the parking and drop off areas to the building interior. Outdoor learning environments are located adjacent to the Arts and Science wings of the building to support the educational plan, while an outdoor

dining area is provided off the south end of the cafeteria. A small playground is provided to support the Little BIG Kids Nursery School program.

The area south and west of the proposed building will support new natural turf varsity baseball, junior varsity baseball, soccer/lacrosse, football, and practice fields to replace the fields displaced by construction of the proposed building. This area will also support the addition of new natural turf varsity softball and junior varsity softball fields. The area northeast of the proposed building, between the school bus drop-off loop and the service driveway, will support two (2) new basketball courts with sport court lighting. The area at the northeast corner of the property, north of the Stadium and adjacent to the eastern property line, will support six (6) new tennis courts with sport court lighting to replace the existing courts displaced by construction of the proposed building. At the existing Stadium, a new concession/ticketing building, complete with restrooms and interior storage, and an ADA compliant press box with ramp system are provided.

Hardscape and softscape features that are complimentary to the building design, including seat walls, shade canopies, lawns, and plantings, will be incorporated throughout the site to add scale, color, and seasonal interest to the building surroundings. New energy efficient site lighting will be incorporated throughout the site.

The new site stormwater management system and utility services are described in Section 2.7.

2-2-h
DESIRED FEATURES

Again, the intent of the design is to provide a sense of community, belonging and well-being to East Longmeadow High School's students and their teachers and support staff.

In form the shape of the school invites the exterior rather than walls it away. This is intentional. The school is the connection point between recreational spaces. A clear roof structure that acts as a spine running north to south connects this arrival/gathering space to the Commons and the South Terrace. The academic wings, the Arts Wing and the PE wing converge at this spine. Ribbon windows along the spine bring daylight down into this important main access.

Coming through the doors in the morning students and guests will be greeted by an inviting, wood-lined learning stair lit from above by clearstory windows. The stair connects the arrival space to the media center. The arrival space is one of two major crossroads of the school.

A gallery of student work and event exhibits occupies the free space of the gathering point and additional benches provide seating for students waiting for pickup, for guidance meetings or for next afterschool practice. Colors are natural but include red accents reflective of East Longmeadow's team colors.

Warm wood panels and acoustic panels balance the harder floor surfaces of porcelain tile flooring in the entry, along the spine and in the Commons. The wood is an intentional choice meant to provide biophilic impact and meant to maintain the sense of indoor/outdoor connection that is central to a school situated in the center of a highly active recreational campus setting.

Beyond the learning stair and the commons another key design feature is the south terrace visible from the Commons and Bridge through a large, shaded curtain wall. The South Terrace is an important outdoor space meant to invite outdoor teaching, social gathering and outdoor dining.

Between the west academic wing and the arts wing another key feature is the smaller, more intimate terrace that adjoins the Large Group Instruction space. This courtyard style space includes raised seating, planting and shade areas to encourage quieter student outdoor work and gatherings.

A deep overhang at the South Terrace makes this space welcoming on hot days and protects students from wind and weather. Nearby a student greenhouse also connects to a section of the terrace making use of the southern exposure.

Within the school the two most dominant enclose spaces are the auditorium and the gymnasium. The auditorium is intentionally a multi-purpose space acoustically designed to support music events, films and speeches with a less common use as a theater. There are high windows to the north and a noticeable absence of a proscenium. Again, warm wood, acoustic treatment and organic patterns reflect the school's connection to nature.

East Longmeadow High School Schematic Design Phase Initial Traffic Assessment

TO: Kristian Whitsett, AIA, NCARB, LEED AP BD+C, Jones Whitsett Architects

FROM: Greg Lucas, PE, PTOE, RSP1, Tighe & Bond
Matt Stoutz, PE, PTOE, RSP1, Tighe & Bond

COPY: Chris Racine, PE, SMMA

DATE: December 16, 2022

This memorandum outlines the initial traffic review that has been conducted as part of the East Longmeadow High School Schematic Design Phase in accordance with the Massachusetts School Building Authority (MSBA) Schematic Design traffic analysis guidelines and MassDOT Standards. This initial traffic analysis includes a review of existing traffic volumes, operations and safety; a review of future volumes under a reconfigured school access; and a traffic signal warrant analysis under both existing and future conditions. The following study area intersections were reviewed as part of the study:

- Maple Street at Marshall Street
- Maple Street at East Longmeadow High School Entrance Driveway
- Maple Street at Melwood Avenue
- Maple Street at East Longmeadow High School Exit Driveway
- Maple Street at East Longmeadow High School Sports Fields Driveway
- Norden Street at East Longmeadow High School Administration Driveway

Existing Conditions

East Longmeadow High School is located on the south side of Maple Street, approximately ½ mile west of the town center. Maple Street provides a single lane of traffic in each direction with a posted speed of 30 miles per hour (mph). Sidewalk is provided on the north side of the roadway only in the vicinity of the school. The posted speed limit decreases to 25 mph east of the sports fields driveway. Pedestrian crossings are provided at a marked uncontrolled crossing west of the school entrance driveway and a pedestrian signal just east of the school exit driveway.

Vehicular access to East Longmeadow High School is currently provided via four driveways. The main entrance and exit driveways are one-way entering and one way exiting, respectively, and serve as the primary drop-off and pick-up location for both parents and buses. The sports fields driveway provides full access for both students and staff. Finally, the Norden Street driveway in the rear of the school provides access to the district administration and special education transportation services. The study area is shown in Figure 1.

Traffic Volumes

Turning movement counts (TMCs) were collected at the study area intersections on October 25, 2022 during the weekday morning (6:30 AM to 8:30 AM) and afternoon peak periods (1:30 PM to 3:30 PM) to align with the morning arrival and afternoon dismissal periods, for

the school's typical daily schedule of 7:25 AM to 1:45 PM. The 2022 Existing Conditions traffic volumes are shown in Figures 2 and 3 for the weekday morning and weekday afternoon peak hours, respectively. Automatic traffic recorder (ATR) data was collected on Maple Street, east of Melwood Avenue during a 72-hour period from October 25, 2022 to October 27, 2022. The 85th percentile speed, also known as the operating speed of the roadway, was found to be approximately 35 mph in the eastbound direction and 40 mph in the westbound direction. The raw traffic count data is available upon request.

Existing Traffic Operations

Capacity and queue analyses were performed for the study intersections for the 2022 Existing Conditions during the weekday morning and weekday afternoon peak hours using Trafficware Synchro Studio 11 – Traffic Analysis Software. The software conducts the analyses based on the methodology provided in the *Highway Capacity Manual (HCM), 6th Edition*. The analysis results are categorized in terms of Level of Service (LOS), which describes the qualitative intersection operational conditions based on the calculated average delay per vehicle. The queue analysis results are summarized based upon the length of vehicle queueing on an intersection approach. The queues are quantified for 95th percentile (design queues). Tables 1 and 2 summarize the capacity and queue analyses results, respectively. The full capacity analysis worksheets with full inputs, settings, and results are available upon request.

As shown in Table 1, all intersection approaches experience acceptable operations of LOS D or better, while design queues are accommodated within available storage during both the morning and afternoon peak hours. It is important to note that queues observed during a field visit on November 3, 2022 indicate queues at the entrance driveway westbound approach of approximately 16 vehicles between 7:15 AM and 7:30 AM. Similarly, queues of 8 to 10 vehicles were experienced during the afternoon peak hour at the exit driveway. The observed queues dissipated quickly, as is typical with school arrival and dismissal periods. Congestion during short time frames is typical at school entry and exit points during arrival and dismissal periods.

Safety Analysis

A collision history analysis was conducted using data available from the MassDOT IMPACT Crash Data Portal for the five-year period from January 1, 2018 to November 1, 2022 for the study area intersections. There were 11 total collisions reported in the study area during this period. Of the 11 reported collisions, 3 were rear-end, 2 angle, 2 sideswipe (same direction), 1 head-on, and 1 fixed object. There was one reported collision involving a pedestrian and one collision involving a bicyclist, both of which resulted in a personal injury. One motor vehicle collision also resulted in a personal injury. There were no reported fatalities during the time period reviewed. Collision data is summarized in Table 3.

Crash rates for each of the study area intersections were calculated based on MassDOT Crash Rate procedures. Crash rates at each intersection were found to be below the MassDOT statewide and District 2 average crash rates for unsignalized intersections. The crash rate worksheets are available upon request.

While there is no clear trend or pattern in vehicular collisions, the two collisions involving pedestrians indicate potential safety deficiencies. The following safety improvements may be considered under future design alternatives to improve safety for pedestrians:

- Intersection sight distance improvements at new and/ or existing driveways

- Pedestrian crossing enhancements
- Alignment of school driveway directly opposite roadway where possible
- Installation of school and pedestrian advance warning signage, devices, and/ or pavement markings
- Implementation of a formalized school zone
- Relocation of pedestrian crossing(s) to maximize visibility

Traffic Signal Warrant Analysis

A traffic signal warrant analysis was conducted to determine if a traffic control signal is warranted under both the existing configuration and under a potential driveway reconfiguration. The signal warrant analysis was conducted in accordance with methodology outlined in the Manual of Uniform Traffic Control Devices (MUTCD) for the following warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 7, Crash Experience

The traffic signal warrant analysis indicates a traffic signal met the requirements under Warrant 5, School Crossing based on the high number of pedestrians crossing and assumed low frequency of gaps during the afternoon dismissal period. This confirms the existing pedestrian signal located just east of the main driveway exit is warranted.

Under a future proposed reconfiguration, the existing main entrance and exit driveways are currently planned to be consolidated into a single full-access driveway across from Melwood Avenue. The Norden Street driveway is proposed to be closed under this configuration. The eastern-most driveway is maintained and proposed to be reconfigured with access more proximate to the school building. The proposed site circulation patterns are based on current conceptual site plans provided by SMMA and preferred circulation discussed during a Site Circulation meeting with representatives from the Town, school, and the project team on December 2, 2022.

Based on these proposed circulation changes, a traffic signal warrant analysis was conducted under this potential driveway reconfiguration to assess the need for intersection control. Because school enrollment is not expected to increase, existing traffic volumes were used in the analysis. Existing traffic volumes were then redistributed based on anticipated access and circulation for buses, staff, parents, and students. During the morning arrival period, parent drop-off will occur at the consolidated main driveway across from Melwood Avenue. Students and buses will utilize the reconfigured eastern driveway. During the afternoon dismissal period, students, parents, and staff will exit via the reconfigured main driveway with buses exiting the eastern driveway. Based on the signal warrant analysis methodology used under the existing condition, it was determined that a traffic signal is again only warranted under Warrant 5, School Crossing. The vehicular traffic signal warrants are not met under the proposed site reconfiguration even with the additional traffic added to the main driveway. Based on the results of the signal warrant analysis, it is recommended to maintain the existing

pedestrian signal at its current location. Full signalization of the intersection of Maple Street, the reconfigured main school driveway, and Melwood Avenue is not warranted based on vehicular volumes.

Conclusion

Based on the existing conditions safety and operations assessment, and existing and future signal warrant analysis, it was determined that a traffic signal is warranted under Warrant 5, School Crossing. Therefore, it is recommended that the existing pedestrian signal on Maple Street be maintained as part of any future reconfiguration. Safety enhancements to address existing pedestrian safety deficiencies such as signage, pavement markings, and/ or crossing improvements should be considered under any future site configurations.

Attachments:

Figure 1 – Site Location Map

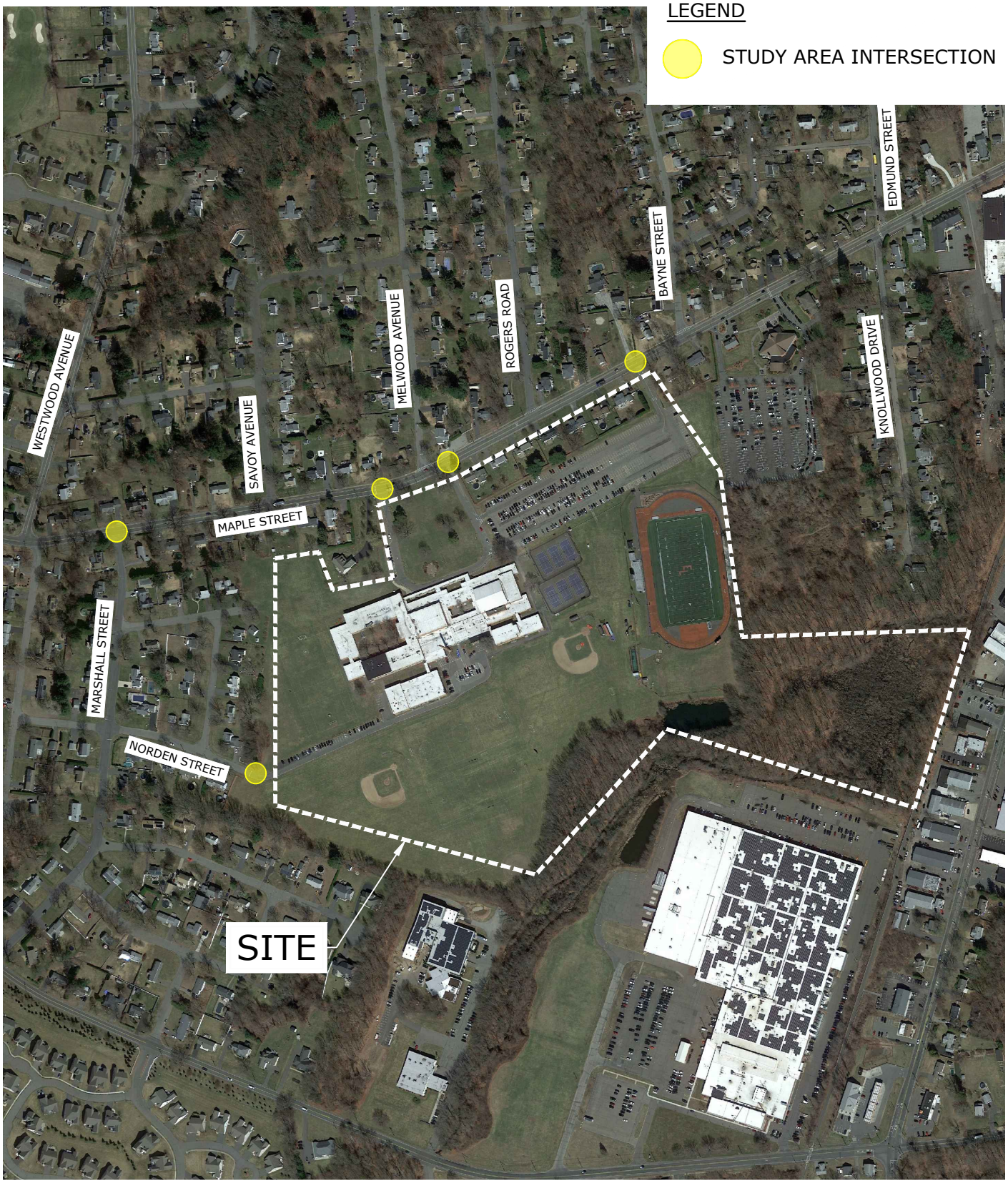
Figures 2 to 5 – Existing & Future Conditions Traffic Volumes

Table 1 – LOS Summary

Table 2 – Queue Summary

Table 3 – Collision History Summary

Signal Warrant Analysis Worksheets



EAST LONGMEADOW HIGH SCHOOL SCHEMATIC DESIGN

EAST LONGMEADOW, MA

SITE LOCATION MAP

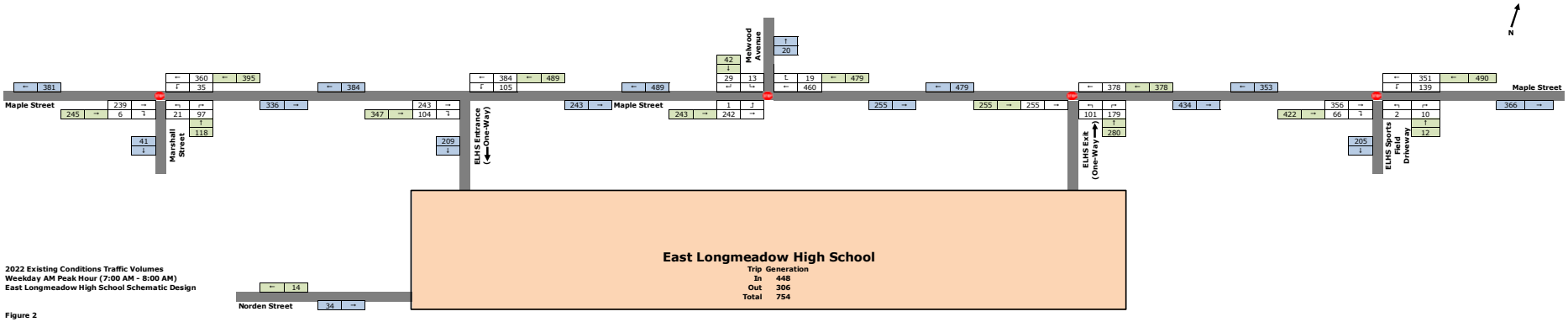
NORTH

1" = 500'

FIGURE 1

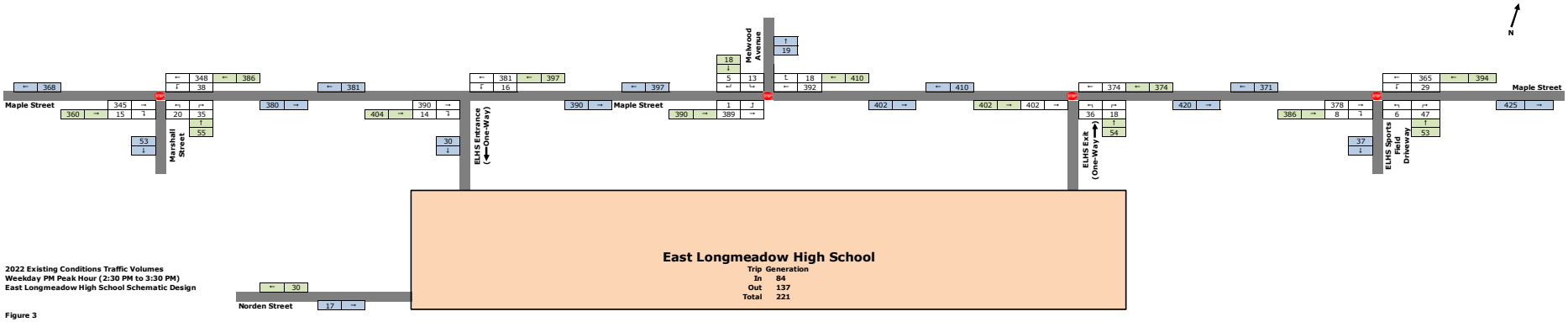
Tighe&Bond

Dec 15, 2022-10:37am Plotted By: MStoutz
Tighe & Bond, Inc. J:\E\E0714 East Longmeadow Engineering Services\062 - East Longmeadow High School\Drawings\AutoCAD\Sheet\Site Location Map.dwg



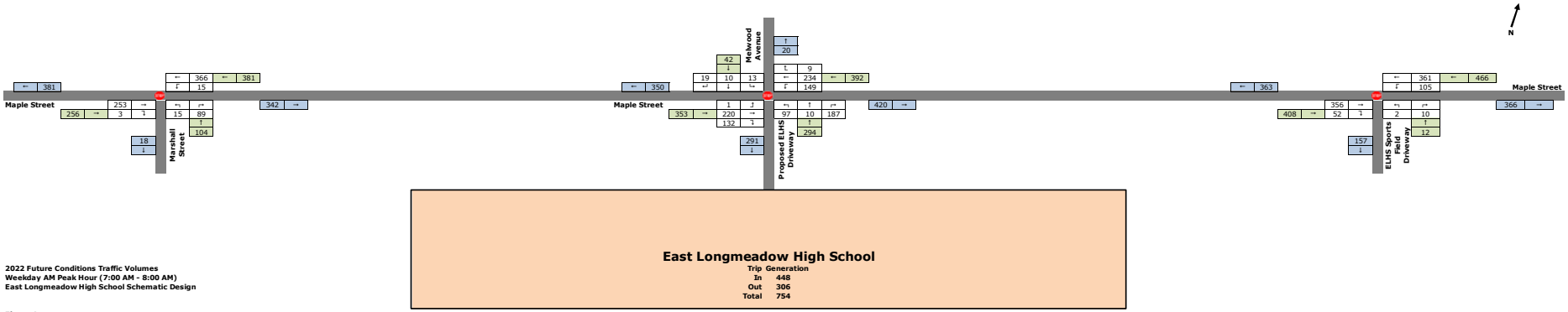
2022 Existing Conditions Traffic Volumes
Weekday AM Peak Hour (7:00 AM - 8:00 AM)
East Longmeadow High School Schematic Design

Figure 2



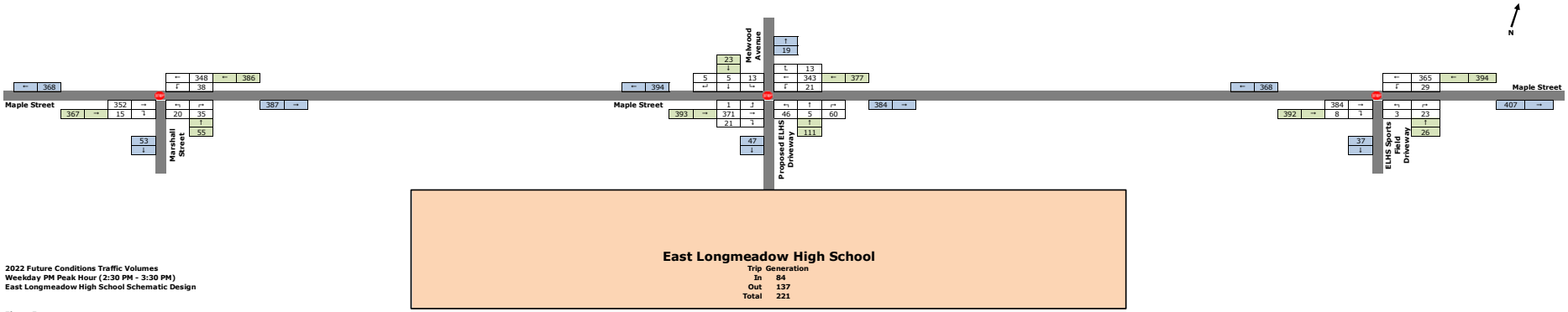
2022 Existing Conditions Traffic Volumes
Weekday PM Peak Hour (2:30 PM to 3:30 PM)
East Longmeadow High School Schematic Design

Figure 3



2022 Future Conditions Traffic Volumes
Weekday AM Peak Hour (7:00 AM - 8:00 AM)
East Longmeadow High School Schematic Design

Figure 4



2022 Future Conditions Traffic Volumes
Weekday PM Peak Hour (2:30 PM - 3:30 PM)
East Longmeadow High School Schematic Design

Figure 5

TABLE 1
Intersection Operation Summary - Capacity

	Lane Use	Weekday Morning Peak Hour 2022 Existing			Weekday Afternoon Peak 2022 Existing		
		LOS	Delay	V/C	LOS	Delay	V/C
Unsignalized TWSC - Maple Street at Marshall Street							
Marshall Street	NB	B	13.9	0.34	C	15.0	0.16
Maple Street	WBL	A	8.0	0.04	A	8.5	0.04
Unsignalized TWSC - Maple Street at East Longmeadow High School Entrance Driveway							
Maple Street	WBL	A	2.1	0.15	A	0.2	0.02
Unsignalized TWSC - Maple Street at Melwood Avenue							
Maple Street	EBL	A	9.1	0.00	A	8.2	0.00
Melwood Avenue	SB	C	16.8	0.18	C	16.5	0.10
Unsignalized TWSC - Maple Street at East Longmeadow High School Exit Driveway							
East Longmeadow High School	NBL	D	29.7	0.63	C	17.9	0.13
Exit Driveway	NBR	C	15.4	0.55	B	11.1	0.03
Unsignalized TWSC - Maple Street at East Longmeadow High School Sports Field Driveway							
East Long Meadow High School Sports Field Driveway	NB	C	16.2	0.05	B	13.3	0.17
Maple Street	WBL	A	9.6	0.18	A	8.4	0.03

TABLE 2
Intersection Operation Summary - Queues (In Feet)

	Lane Use	Available Storage	Weekday Morning Peak Hour 2022 Existing		Weekday Afternoon Peak Hour 2022 Existing	
			50th	95th	50th	95th
Unsignalized TWSC - Maple Street at Marshall Street						
Marshall Street	NB	650	--	38	--	15
Maple Street	WBL	515	--	3	--	3
Unsignalized TWSC - Maple Street at East Longmeadow High School Entrance						
Maple Street	WBL	100	--	13	--	1
Unsignalized TWSC - Maple Street at Melwood Avenue						
Maple Street	EBL	100	--	0	--	0
Melwood Avenue	SB	735	--	18	--	8
Unsignalized TWSC - Maple Street at East Longmeadow High School Exit						
East Longmeadow High School	NBL	190	--	102	--	10
Exit	NBR	100	--	85	--	3
Unsignalized TWSC - Maple Street at East Longmeadow High School Sports Field Driveway						
East Longmeadow High School Sports Field Driveway	NB	165	--	3	--	15
Maple Street	WBL	155	--	18	--	3

TABLE 3
Study Area Collision History Summary

COLLISION TYPE

	2018	2019	2020	2021	2022	Total	Percent
Rear-End	0	1	1	1	0	**3**	**27.3%**
Angle	0	1	1	0	0	**2**	**18.2%**
Sideswipe, Same Direction	1	0	0	0	1	**2**	**18.2%**
Bicycle	1	0	0	0	0	**1**	**9.1%**
Fixed Object	0	0	0	1	0	**1**	**9.1%**
Head-On	0	0	0	1	0	**1**	**9.1%**
Pedestrian	0	0	0	1	0	**1**	**9.1%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

CONTRIBUTING FACTOR

	2018	2019	2020	2021	2022	Total	Percent
None	1	1	2	3	1	**8**	**72.7%**
Unknown	1	1	0	0	0	**2**	**18.2%**
Traffic congestion related	0	0	0	1	0	**1**	**9.1%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

COLLISION EVENT

	2018	2019	2020	2021	2022	Total	Percent
Motor Vehicle	1	2	2	3	1	**9**	**81.8%**
Pedestrian / Cyclist	1	0	0	1	0	**2**	**18.2%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

SEVERITY

	2018	2019	2020	2021	2022	Total	Percent
Property Damage Only (PDO)	1	2	1	3	1	**8**	**72.7%**
Personal Injury	1	0	1	1	0	**3**	**27.3%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

DAY & TIME

	2018	2019	2020	2021	2022	Total	Percent
Weekday 6-9 A.M.	0	0	1	1	0	**2**	**18.2%**
Weekday 3-6 P.M.	1	0	1	1	1	**4**	**36.4%**
Weekday Off-Peak	1	2	0	2	0	**5**	**45.5%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

WEATHER

	2018	2019	2020	2021	2022	Total	Percent
Clear	2	2	2	4	0	**10**	**90.9%**
Rain	0	0	0	0	1	**1**	**9.1%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

ROAD SURFACE CONDITION

	2018	2019	2020	2021	2022	Total	Percent
Dry	2	2	2	3	0	**9**	**81.8%**
Wet	0	0	0	1	1	**2**	**18.2%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

LIGHT CONDITIONS

	2018	2019	2020	2021	2022	Total	Percent
Light	2	2	2	3	1	**10**	**90.9%**
Dark	0	0	0	1	0	**1**	**9.1%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

CRASHES BY STUDY AREA INTERSECTION

	2018	2019	2020	2021	2022	Total	Percent
Maple Street at ELHS Entrance Driveway	1	0	0	0	0	**1**	**9.1%**
Maple Street at Melwood Avenue	0	0	0	1	1	**2**	**18.2%**
Maple Street at ELHS Exit Driveway	0	0	1	2	0	**3**	**27.3%**
Maple Street at Sports Field Driveway	1	1	1	0	0	**3**	**27.3%**
School Bus Loop/Parking	0	1	0	1	0	**2**	**18.2%**
TOTAL	**2**	**2**	**2**	**4**	**1**	**11**	**100%**

HCS7 Warrants Report

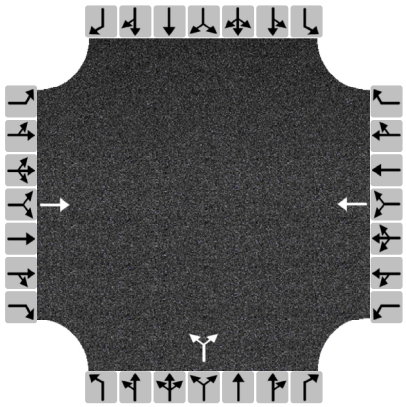
Project Information

Analyst	Tighe & Bond	Date	11/10/2022
Agency		Analysis Year	2022 Existing
Jurisdiction		Time Period Analyzed	
Project Description	East Longmeadow High School Traffic Study		

General

Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	1
Major Street Speed (mi/h)	30	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	3000		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	0	1	0	0	0	0	0	0	0
Lane Usage		T			T			LR				
Vehicle Volumes Averages (veh/h)	0	318	0	0	335	0	24	0	28	0	0	0
Pedestrian Averages (peds/h)	0			8			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	0.0			0.0			0.0			0.0		
Delay (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	73	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	0

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HCS7 Warrants Report

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (100%)	4A (100%)	4B (100%)
07 - 08	532	275	807	5	0	Yes	Yes	No	No	Yes	No	No	No	No
08 - 09	599	29	628	0	0	No	No	No	No	No	No	No	No	No
09 - 10	588	3	591	1	0	No	No	No	No	No	No	No	No	No
10 - 11	638	10	648	0	0	No	No	No	No	No	No	No	No	No
11 - 12	588	28	616	1	0	No	No	No	No	No	No	No	No	No
12 - 13	650	20	670	4	0	No	No	No	No	No	No	No	No	No
13 - 14	652	25	677	0	0	No	No	No	No	No	No	No	No	No
14 - 15	664	106	770	73	0	No	No	No	Yes	No	No	No	No	No
15 - 16	732	62	794	9	0	No	No	No	Yes	No	No	No	No	No
16 - 17	761	13	774	1	0	No	No	No	No	No	No	No	No	No
17 - 18	753	37	790	0	0	No	No	No	No	No	No	No	No	No
18 - 19	683	25	708	5	0	No	No	No	No	No	No	No	No	No
Total	7840	633	8473	99	0	1	1	0	2	1	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	✓
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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HCS7 Warrants Report

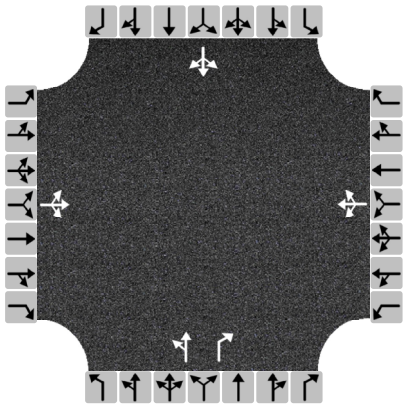
Project Information

Analyst	Tighe & Bond	Date	11/10/2022
Agency		Analysis Year	2022 Reconfigured
Jurisdiction		Time Period Analyzed	6:30 AM to 6:30 PM
Project Description	East Longmeadow High School Traffic Study		

General

Major Street Direction	East-West	Population < 10,000	No
Starting Time Interval	7	Coordinated Signal System	No
Median Type	Undivided	Crashes (crashes/year)	1
Major Street Speed (mi/h)	30	Adequate Trials of Crash Exp. Alt.	No
Nearest Signal (ft)	3000		

Geometry and Traffic



Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Number of Lanes, N	0	1	0	0	1	0	0	1	1	0	1	0
Lane Usage		LTR			LTR			LT	R		LTR	
Vehicle Volumes Averages (veh/h)	0	302	0	0	321	5	32	0	41	3	1	4
Pedestrian Averages (peds/h)	0			8			0			0		
Gap Averages (gaps/h)	0			0			0			0		
Delay (s/veh)	0.0			0.0			0.0			0.0		
Delay (veh-hrs)	0.0			0.0			0.0			0.0		

School Crossing and Roadway Network

Number of Students in Highest Hour	73	Two or More Major Routes	No
Number of Adequate Gaps in Period	0	Weekend Counts	No
Number of Minutes in Period	0	5-year Growth Factor (%)	0

Railroad Crossing

Grade Crossing Approach	None	Rail Traffic (trains/day)	0
Highest Volume Hour with Trains	Unknown	High Occupancy Buses (%)	0
Distance to Stop Line (ft)		Tractor-Trailer Trucks (%)	0

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HCS7 Warrants Report

Volume Summary

Hour	Major Volume	Minor Volume	Total Volume	Peds/h	Gaps/h	1A (100%)	1A (80%)	1B (100%)	1B (80%)	2 (100%)	3A (100%)	3B (100%)	4A (100%)	4B (100%)
07 - 08	477	276	805	5	0	No	Yes	No	No	No	No	No	No	No
08 - 09	585	32	648	0	0	No	No	No	No	No	No	No	No	No
09 - 10	576	9	585	1	0	No	No	No	No	No	No	No	No	No
10 - 11	625	21	646	0	0	No	No	No	No	No	No	No	No	No
11 - 12	579	36	615	1	0	No	No	No	No	No	No	No	No	No
12 - 13	640	34	674	4	0	No	No	No	No	No	No	No	No	No
13 - 14	640	32	672	0	0	No	No	No	No	No	No	No	No	No
14 - 15	637	159	820	73	0	No	No	No	Yes	No	No	No	No	No
15 - 16	720	119	856	9	0	No	No	No	Yes	No	No	No	No	No
16 - 17	712	46	758	1	0	No	No	No	No	No	No	No	No	No
17 - 18	736	50	786	0	0	No	No	No	No	No	No	No	No	No
18 - 19	632	71	703	5	0	No	No	No	No	No	No	No	No	No
Total	7559	885	8568	99	0	0	1	0	2	0	0	0	0	0

Warrants

Warrant 1: Eight-Hour Vehicular Volume	
A. Minimum Vehicular Volumes (Both major approaches --and-- higher minor approach) --or--	
B. Interruption of Continuous Traffic (Both major approaches --and-- higher minor approach) --or--	
80% Vehicular --and-- Interruption Volumes (Both major approaches --and-- higher minor approach)	
Warrant 2: Four-Hour Vehicular Volume	
Four-Hour Vehicular Volume (Both major approaches --and-- higher minor approach)	
Warrant 3: Peak Hour	
A. Peak-Hour Conditions (Minor delay -- and-- minor volume --and-- total volume) --or--	
B. Peak-Hour Vehicular Volumes (Both major approaches --and-- higher minor approach)	
Warrant 4: Pedestrian Volume	
A. Four Hour Volumes --or--	
B. One-Hour Volumes	
Warrant 5: School Crossing	
Gaps Same Period --and--	
Student Volumes	✓
Nearest Traffic Control Signal (optional)	✓
Warrant 6: Coordinated Signal System	
Degree of Platooning (Predominant direction or both directions)	
Warrant 7: Crash Experience	
A. Adequate trials of alternatives, observance and enforcement failed --and--	
B. Reported crashes susceptible to correction by signal (12-month period) --and--	
C. 80% Volumes for Warrants 1A, 1B, --or-- 4 are satisfied	
Warrant 8: Roadway Network	
A. Weekday Volume (Peak hour total --and-- projected warrants 1, 2, or 3) --or--	
B. Weekend Volume (Five hours total)	
Warrant 9: Grade Crossing	
A. Grade Crossing within 140 ft --and--	
B. Peak-Hour Vehicular Volumes	

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LIMITED INSPECTION REPORT FOR
Asbestos-Containing Building Materials, Lead-Based Paint, Polychlorinated Biphenyls, Mercury Containing Components and Miscellaneous Hazardous Materials

East Longmeadow High School
180 Maple Street
East Longmeadow, Massachusetts

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Project 22054

July 27, 2022

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INTRODUCTION

SMMA retained Smith & Wessel Associates, Inc. (SWA) to conduct a limited inspection feasability study for asbestos-containing building materials (ACBM), lead-based paint (LBP), polychlorinated biphenyls (PCBs), mercury containing components and miscellaneous hazardous materials at the East Lonmeadow High School located at 180 Maple Street in East Longmeadow, Massachusetts.

SWA conducted the site inspection from June 17th through July 21, 2022 to accommodate the feasibility study. The feasibility study was limited in scope and concentrated on identifying "large ticket items" that, if present, would require significant costs for their handling and disposal as hazardous or special waste materials. In addition, the 3 year AHERA plan inspection information was reviewed and verified. A more comprehensive, intrusive follow-up inspection would be required prior to any renovation and/or demolition of the school.

Asbestos

The purposes of the limited inspection were to evaluate the types, locations, and extent of suspect large ticket ACBM and to provide appropriate recommendations for its abatement and or management as well as determining estimated remediation costs. SWA's inspection addressed both friable (materials that can be easily crumbled, crushed, or pulverized by hand pressure) and non-friable suspect materials present in large quantities.

SWA identified and assumed friable and non-friable ACBM at the site in the form of the following materials:

- Pipe fitting insulation
- Floor tile and mastic adhesive
- Window glazing compound
- Carpet mastic adhesive
- Ceiling glue daubs and associated tiles
- Wall/window/canopy/fume hood panels
- Vapor/moisture barriers
- Fire door insulation
- Wall panel glue
- Chalkboard/whiteboard glue

Lead-Based Paint

The purpose of the limited lead paint inspection was to evaluate the types, locations, and extent of suspect LBP present on large ticket items in the building, to evaluate potential hazards associated with LBP, and to provide appropriate recommendations for its abatement and management.

The United States Department of Housing and Urban Development (HUD) and the Massachusetts Department of Public Health have established a standard for lead-based paint, as tested using an X-ray Fluorescence Analyzer (XRFA), of 1.0 milligram per square centimeter (mg/cm^2). Although this standard only applies to housing where children under the age of six reside, it is a useful reference concentration for assessing hazards associated with lead in paint in other settings. Thus, when paint contains greater than 1.0 mg/cm^2, special care should be taken when conducting activities that impact these paints.

The lead content of paints surveyed at the site ranged from less than 0.1 mg/cm^2 to 3.8 mg/cm^2 as measured with the XRFA. If LBP are impacted by demolition in a manner that may generate dust or fumes, compliance with United States Occupational Safety and Health Administration (US OSHA) regulations regarding worker exposure to lead may be necessary. Additionally, United States Environmental Protection Agency (US EPA) and Massachusetts Department of Environmental Protection (MA DEP) regulations relative to waste disposal may apply.

PCBs

SWA's limited investigation for PCBs in light fixture ballasts was visual only. Typically, ballasts installed after 1978 do not contain PCBs and are marked as such. Ballasts that do not have the "No PCBs" wording on the label are assumed to contain PCBs. SWA inspected the labels on representative ballasts throughout the building. Ballasts representative of various types of light fixtures contained the "No PCBs" wording on the affixed labels and therefore are assumed to not contain PCBs in their capacitor oils. However, all individual ballasts must be inspected for the "No PCB" wording on affixed labels to determine proper disposal/recycling requirements.

Typically, SWA would collect building materials such as window caulk, door caulk, wall expansion, sealants, etc., to be analyzed for PCB concentrations. However, during this phase of work, no sampling for PCBs was conducted.

SWA observed an electrical transformer at the exterior front section of the school that may contain PCBs in dialectric fluids. All interior transformers that were observed were the dry type, which are assumed to not contain PCB oils based on identification tags adhered to the transformers.

Mercury Filled Fluorescent Light Fixtures

SWA observed fluorescent light bulbs that if impacted by renovations must be collected and recycled in accordance with the "Universal Waste" regulatory requirements. The fluorescent bulbs are located throughout the space.

SWA estimates that there are 2,565 (4') fluorescent bulbs that would require recycling. No heat regulating thermostats with associated mercury tubes was observed in at the site.

Miscellaneous Hazardous Materials
SWA inspected for miscellaneous hazardous materials including, but not limited to, stored solvents, chlorofluorocarbons (CFCs), batteries, emergency exit signs, fire extinguishers, etc. No confirmatory sampling was conducted.

Exclusions

SWA's inspection was limited and the following exclusions are warranted. Because our inspection was not intrusive and addressed a limited number of areas, it is likely that the locations that we inspected were not fully representative of materials found in other areas. In particular, SWA made observations for large ticket items that if present would be of significant costs to remediate. Additional sampling and analysis will be necessary to comply with NESHAP and MA DEP requirements to accommodate renovation and/or demolition projects.

Our inspection included building areas only; no assessment of soil, debris, or subterranean areas was conducted. Additional limitations may have impacted our ability to inspect all locations such as poor lighting, height constraints, unusual building features, occupancy, and stored materials that block access to suspect materials. Stored goods, debris, and building materials that were removed and were either stored or loose were not inspected, but if observed were assessed and quantified.

SWA did not conduct roof sampling at this time. Reportedly, the original roof was stripped and replaced some 15 years ago, but SWA has no documentation to support this supposition. The roof system will need to be further evaluated prior to any renovations or demolition activities.

Because SWA's inspection was mainly limited to large ticket items, we do not warrant that all suspect hazardous building materials were identified in or on the buildings and shall not be held liable related to future abatement costs related to hazardous materials that are either not discovered or not appropriately characterized. This is due in part to inherent problems with every building inspection, such as, but not limited to:

- Seemingly homogeneous materials that are not in fact homogeneous;
- Seemingly representative locations that are not in fact representative;
- Layered materials that are not uniformly present or are isolated;
- Materials that are present and accessible but were not considered to be hazardous,
- Materials that are present in an isolated and limited quantity; and
- Material that is present in locations that are unsafe or otherwise difficult to access.

Client acknowledges that SWA's inspection is inherently limited and that a comprehensive room by room and full exterior inspection will be required prior to

renovation or demolition of the structures. During the course of future renovation/demolition work, it is likely that additional hazardous materials or materials suspected of being hazardous will be identified. Such materials should be assumed to be hazardous unless appropriate evaluation or sampling and analysis demonstrate otherwise. Contracts, specifications and plans should advise contractors to conduct controlled demolition work and stop immediately should any hazardous building materials be encountered during the course of their work.

Due to the occupancy of the school, some areas were sensitive in terms of SWA conducting intrusive inspection activities. Therefore, full access was neither feasible or allowed during this limited study.

1.0 ASBESTOS CONTAINING BUILDING MATERIALS

1.1 Scope of Work

SWA's Massachusetts certified Asbestos Inspectors, Ted Sherry (Cert. # AI-32572), Richard Bourassa (Cert. # AI-901081) and assistant performed the limited asbestos inspection of readily accessible and observable areas throughout the interior and exterior of the school. SWA inspected for the following types of suspect ACBM:

- Thermal system insulation (TSI), such as insulation on pipes, boilers, tanks and related equipment;
- Surfacing material, acoustical and decorative plasters, fireproofing and other sprayed or trowel applications; and
- Miscellaneous materials, such as window caulking, wallboard, floor tile, adhesives, and other building materials that are not TSI or surfacing materials.

To determine the asbestos content of suspect ACBM, SWA collected and analyzed representative bulk samples by extracting a small but representative portion of suspect material from the substrate. The samples, typically measuring one cubic centimeter, were collected using a variety of methods. The extracted samples were then placed into labeled, individual sealed plastic bags for transport to the laboratory.

EMSL Analytical, Inc. (EMSL) of Woburn, Massachusetts, a fully accredited asbestos analytical laboratory, analyzed the bulk samples utilizing Polarized Light Microscopy (PLM) in accordance with the requirements of 40 CFR Part 763, Subpart F, Appendix A (see Appendix A of this report). Because PLM is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials, when a negative result is obtained by PLM (less than one percent asbestos), the laboratory was instructed to analyze the sample by Transmission Electron Microscopy (TEM) to confirm the results.

For each homogeneous sampling group, the laboratory analyzed samples until a positive result was obtained (i.e. greater than one percent asbestos) or until all samples were analyzed. If one sample indicates an asbestos content greater than one percent, the entire homogenous area must be considered to be an ACBM even if one or more samples in the group indicates an asbestos content of less than one percent.

1.2 Regulatory Guidance

The US EPA, US OSHA, Massachusetts Department of Labor Standards (MA DLS) and MA DEP are responsible for regulating the release of asbestos into the environment and protecting workers from exposure to airborne asbestos fibers.

US OSHA and MA DLS are responsible for the health and safety of workers who may be exposed in connection with their jobs including custodial activities, renovation work, and asbestos abatement. These agencies specify requirements for the work practices and engineering controls that must be utilized during asbestos abatement projects. They also require that ACBM be repaired, removed, or otherwise appropriately abated before maintenance, renovation, or demolition work disturbs them. Thermal system insulation, surfacing materials, and floor tile installed before 1980 must be presumed to be ACBM unless appropriate inspection and sampling analysis prove otherwise.

The EPA and MA DEP are responsible for developing and enforcing regulations necessary to protect the general public from airborne contaminants that are known to be hazardous to human health. They regulate ACBM associated with renovation, demolition, and asbestos abatement projects via the NESHAP Title 40 CFR Part 61 regulation and MA DEP Chapter 141-E Asbestos Management and Control. These regulations require that buildings be inspected for ACBM prior to renovation/demolition projects. They stipulate that all friable ACBM as well as non-friable ACBM that are in poor condition or will be made friable by renovation or demolition activity be removed or otherwise appropriately abated before they are disturbed.

1.3 Findings

SWA identified the following friable and non-friable ***suspect*** ACBM:

• Pipe fitting insulation	• Window glazing compound
• Carpet mastic	• Ceiling glue daubs
• Floor tile/mastic	• Chalkboard/whiteboard glue
• Wall/window/canopy/fume hood panels	• Wall panel glue
• Vapor/moisture barriers	• Fireproofing
• Fire door insulation	• Plaster
• Mudded fittings	• Wall expansion
• Window caulking	• Ceiling tile
• Door caulking	• Window sill

SWA collected a total of 61 representative bulk samples of the above materials to determine asbestos content, of which 57 were analyzed via PLM. Four of the samples did not require analysis as the first sample in the homogeneous sampling group tested positive for asbestos (i.e. contain greater than one percent asbestos). In addition, 3 of the samples were further analyzed using the TEM method.

SWA has listed in **Table 1**, the location and estimated quantity, by square foot (sf), linear foot (lf), or other appropriate unit, of each type of ACBM identified at the site.

Table 1 • List of Materials Testing Positive for Asbestos

Type of Material	Location	Quantity	Sample number
Tan/gray decorative upper panels	Throughout various upper walls of building additions *(see photos)*	6,800 sf	01A
Gray window panel *(painted red)* and associated gray glazing compound	Throughout building C *(Art/Tech/Music/Offices)*	26 window/panel systems	04A, 05A
Black window glazing compound *(1980's black metal frame repalcement windows)*	Throughout classroom wings, front building sections and the main cafeteria	660 windows	07A
Transite ceiling panel board	Throughout exterior front canopy ceiling	3,400 sf	11A
Black wall/foundation vapor barrier	Assumed to be throughout school *(extensive intrusive investigation necessary)*	20,000 sf *(estimate)*	12A
Black foundation moisture barrier coating *(assumed)*	Throughout school	15,000 sf *(estimate)*	Assumed
Brown ceiling glue daubs associated with 1' x 1' ceiling tiles *(additional exploration under 1' x 1' ceiling tiles necessary to adequately confirm)*	Throughout school *(The original 1989 AHERA inspection results were positive & the Atlas reinspection calls out the glue daubs throughout)*	32,670 sf *(estimate)*	89A05291 (HIW-12), 89A05306 (HIW-27)
Off-white w/black & brown streaks 12" x 12" floor tile and associated black mastic adhesive & multiple color/same vintage 12″ floor tiles/black mastic	Throughout school	44,263 sf	15A, 16A, 32A,33A, 34A, 38A
Wall panel glue *(assumed)*	Main administration hall and large gym main hall	2,600 sf	Assumed
Transite fume hoods/lab counter tops *(assumed)*	Class D-105, D106, D-107 & D-108	910 sf	Assumed
Block insulation associated with wood doors *(fire doors)*	Throughout school	280 doors *(estimate)*	Assumed
Gray mudded pipe fittings associated with fiberglass insulated pipes	Throughout school *(observed)*	932 fittings	18A, 36A
Gray mudded pipe fittings associated with fiberglass insulated pipes	Throughout school *(observed in plenum areas & assumed behind fixed walls and ceilings)*	1,200 fittings *(assumed)*	18A, 36A

Table 1 • List of Materials Testing Positive for Asbestos			
Type of Material	**Location**	**Quantity**	**Sample number**
Salmon w/white & red streaks 9" x 9" floor tile and associated black mastic adhesive & multiple color/same vintage 9″ floor tiles/black mastic	Throughout school *(primarily classroom wings)*	35,506 sf	23, 24A, 28A, 29A
Chalkboard/white board glue daubs *(assumed)*	Throughout school *(primarily in classroom wings)*	170 ea.	Assumed
Black mastic adhesive beneath carpet	Superintendent's office/hall areas	1,672 sf	Assumed
Roofing materials *(beneath newer roofing)*	Throughout school	175,000 sf *(estimate)*	Assumed
Window glazing compound associated with large original windows	Main large gym	16 windows	Assumed
Vapor barrier beneath wood floor	Assumed throughout main large gym	8,600 sf	Assumed
Vapor barrier beneath wood floor & mastic beneath rubber floor	Assumed throughout small gym *(based on our limited view, we observed a rubber floor beneath the wood floor)*	3,950 sf	Assumed
Gray window glazing compound *(associated with original windows)*	Small cafeteria, boiler room and general arts class	20 ea.	41A

In **Table 2**, SWA has listed all materials that tested negative for asbestos, including the locations where these materials were observed and the corresponding bulk sample reference number(s). Those sample #'s presented in ***italics*** were further analyzed using the TEM method.

Table 2 • List of Materials Testing Negative for Asbestos		
Type of Material	**Location**	**Sample No.**
Black wall/foundation vapor barrier	Throughout building C *(Art/Tech/Music/Offices)*	***02A***, 02B
Gray door caulking	Throughout building C exterior *(Art/Tech/Music/Offices)*	03A, 03B
Gray window caulking	Throughout building C exterior *(Art/Tech/Music/Offices)*	06A
Brown/tan wall expansion	1975 building exterior classroom wing	08A, 08B
Black window sill and foundation vapor barrier	1975 building exterior classroom wing	09A

Table 2 • List of Materials Testing Negative for Asbestos		
Type of Material	**Location**	**Sample No.**
Gray window caulking	B wing exterior	***10A***
Yellow/brown baseboard mastic adhesive	Class E -126, 133 and various locations throughout school	13A, 17A
White 2' x 4' ceiling tile	1975 building	14A, 14B
White 2' x 4' ceiling tile	Hall at E -17 and various locations throughout school	19A
White 2' x 2' ceiling tile	Floor 2 class E-218	20A, 20B
White/gray plaster walls	Throughout D & E-wing	21A, 21B, 21C, 25A, 25B
Black window sill	Throughout school	22A, 35A
White/gray 12" x 12" ceiling tile and associated glue daubs	Throughout school *(additional sampling necessary due to past asbestos positive analytical results)*	26A, 26B, ***27A***, 27B
Gray fireproofing	Throughout floor 1 classoom wing E	30A, 30B, 30C, 30D, 30E
Pink w/white & tan specks 12" x 12" floor tile *((treat as asbestos as the underlying mastic is asbestos containing and cannot be separated from the floor tile)*	Floor 1 classroom D-111	31A
Brown w/white 12" x 12" floor tile *(treat as asbestos as the underlying mastic is asbestos containing and cannot be separated from the floor tile)*	Throughout hall at maintenance, hall at auditorium and front of building classroom wing hall	37A
White joint compound	Throughout Art, Tech Ed, Music, offices	39A, 39B
White wall seam expansion	Throughout small gym interior	40A, 40B

1.4 Conclusions and Recommendations

On the basis of our findings, SWA offers the following conclusions and recommendations:

1. Both friable and non-friable ACBM were identified at the site during SWA's limited inspection. A more comprehensive room by room and full exterior inspection, including intrusive investigations will be necessary prior to any renovation and or demolition activities. ACBM that will be impacted by renovation or demolition work must be removed prior to being disturbed. SWA recommends that this work be conducted in accordance with a project design as prepared by a licensed Asbestos

Abatement Project Designer. ***This report is not intended for use as an abatement design.***

2. Where conventional asbestos abatement cannot occur, the MA DEP requires that an application for ″Non-Traditional Asbestos Abatement Work Practices Approval″ be submitted in accordance with 310 CMR 7.00 and 310 7.15 regulations. There is a form to be completed along with a written Plan as to how the Non-Traditional Work Practice will be implemented. The MA DEP reviews and subsequently approves Plans if they meet their requirements. The potential for a NTWP scenario at this site would be for bulk-loading brick or CMU that is coated with a tar based damp proofing.

3. SWA reviewed the AHERA file that detailed what asbestos-containing materials were identified during development of the initial Management Plan. It also contained 3-year reinspection reports and other information pertaining to asbestos at the site. Only limited materials were sampled during the initial AHERA inspection.

4. Because SWA's inspection include only limited destructive investigation techniques using hand tools only, and due to inherent limitations of any building inspection, it is likely that some suspect ACBM is present that were not identified. Controlled demolition work should be performed in the event that suspect ACBM may be enclosed behind fixed components at the site. If suspect ACBM are identified at a later date that are not addressed in this inspection report, they should be assumed to be ACBM unless appropriate sampling and analysis demonstrate otherwise.

5. SWA believes the total cost estimate will likely be reduced because of the multiple assumptions related to supect asbestos building materials. Those suspect building materials assumed to present and contain asbestos include fire doors, vapor/moisture barriers, chalkboard/whiteboard glue, wall panel glue, roofing, etc.

1.5 Cost Estimates

In **Table 3**, SWA has provided estimates of abatement costs associated with all identified ACBM in the inspected areas. These estimates are based on current industry standards that may fluctuate rapidly based on a variety of factors: the prevailing economic climate, seasonal differences, union labor considerations, scale of the abatement, occupancy of the building, and so on. SWA recommends that qualified abatement contractors be solicited to determine actual pricing involved. In addition to pricing for abatement, SWA has considered anticipated industrial hygiene costs associated with abatement, including air monitoring and oversight of the abatement.

Table 3 • Estimated Costs for Removal of ACBM		
Type of Material	**Quantity/Unit cost ($)**	**Total Cost ($)**
Tan/gray decorative upper panels	6,800 sf @ 7/sf	47,600.
Gray window panel *(painted red)* and associated gray glazing compound	26 window/panel systems @ 550/ea.	14,300.
Black window glazing compound *(1980's black metal frame repalcement windows)*	660 windows @ 250/ea.	165,000.
Transite ceiling panel board	3,400 sf @ 7/sf	23,800.
Black wall/foundation vapor barrier	20,000 sf @ 10/sf *(estimate)*	200,000.
Black foundation moisture barrier coating *(assumed)*	15,000 sf @ 10/sf *(estimate)*	150,000.
Brown ceiling glue daubs associated with 1' x 1' ceiling tiles *(additional testing necessary to adequately confirm limits)*	32,670 sf @ 5/sf *(estimate)*	163,350.
Off-white w/black & brown streaks 12" x 12" floor tile and associated black mastic adhesive & multiple color/same vintage 12" floor tiles/black mastic	44,263 sf @ 4/sf	177,052.
Wall panel glue *(assumed)*	2,600 sf @ 6/sf	15,600.
Transite fume hoods/lab counter tops *(assumed)*	910 sf @ 12/sf	10,920.
Block insulation associated with wood doors *(fire doors)*	280 doors *(estimate)* @ 200/ea.	56,000.
Gray mudded pipe fittings associated with fiberglass insulated pipes	932 fittings @ 26/ea.	24,232.
Gray mudded pipe fittings associated with fiberglass insulated pipes	1,200 fittings *(assumed)* @ 26/ea.	31,200.
Salmon w/white & red streaks 9" x 9" floor tile and associated black mastic adhesive & multiple color/same vintage 9" floor tiles/black mastic	35,506 sf @ 4/sf	142,024.
Chalkboard/white board glue daubs *(assumed)*	170 ea. @ 230/ea.	39,100.
Black mastic adhesive beneath carpet	1,672 sf @ 5/sf	8,360.
Roofing materials *(assumed to be beneath newer roofing)*	175,000 sf @ 3/sf *(estimate)*	525,000.
Window glazing compound associated with large original windows	16 windows @ 600/ea.	9,600.
Vapor barrier beneath wood floor	8,600 sf @ 7/sf	60,200.
Vapor barrier beneath wood floor & mastic beneath rubber floor	3,950 sf @ 7/sf	27,650.

Table 3 • Estimated Costs for Removal of ACBM		
Type of Material	**Quantity/Unit cost ($)**	**Total Cost ($)**
Gray window glazing compound *(associated with original windows)*	20 ea. @ 350/ea.	7,000.
	Total Abatement Cost	$1,897,988.
	Total Industrial Hygiene Fee	150,000.
	Total Fee	**$ 2,047,988.**

2.0 LEAD-BASED PAINTS

2.1 Scope of Work

SWA's accredited lead paint inspector tested limited representative painted surfaces throughout the school. SWA analyzed paints for lead content using the NITON XLS-303, X-ray fluorescence analyzer (XRFA) following the manufacturer's instructions for initial calibration and operation. The XRFA uses a radioactive source to excite the electrons of lead atoms (if present) in paint. As the lead atom electrons return to their normal state, they emit x-rays that are measured by the XRFA, then processed and the results converted to milligrams of lead per square centimeter of sampled surface area. On most substrates, the XRFA is precise to +0.1 mg/cm^2.

Surfaces tested included, but were not limited to walls, ceilings, columns, windows, doors, casings/jambs, trim, and other miscellaneous surfaces.

2.2 Regulatory Guidance

In all areas where LBP is disturbed by renovation work and where components covered by LBP are disposed of, applicable OSHA and EPA regulations apply.

OSHA

Renovation or demolition activities that disturb surfaces that contain lead must be conducted in accordance with the OSHA regulation 29 CFR 1926.62 "Lead Exposure in Construction: Interim Final Rule." This regulation requires that a site-specific health and safety plan be prepared before conducting activities that create airborne lead emissions. Such a plan should include the identification of lead components, an exposure assessment, and, if applicable, the required work procedures and personnel protection to be used.

An exposure assessment in the form of personal air monitoring must be performed if there is the potential for employees to be exposed to lead due to the renovation or demolition activity. If demolition is being conducted that will disturb lead-based paints, the employer must assume that employee exposure is in excess of the Permissible Exposure Limit (PEL) of 50 micrograms per cubic meter of air ($\mu g/m^3$) until the exposure assessment is completed. If the PEL is exceeded, employees are required to use half-face mask respirators with HEPA filter cartridges. Furthermore, a written respirator program is required per 29 CFR 1910.134. The lead standard also requires the following protective measures be taken until the exposure assessment is completed:

- Isolation of the work area;
- appropriate personal protective clothing and equipment;
- change areas and hand washing facilities;

- biological monitoring; and
- training

The results of the initial exposure assessment will determine the protective measures that must be followed for the remainder of the project. OSHA may allow air-monitoring data from previous projects conducted under conditions closely resembling the present project to be used for the exposure assessment. If the exposure assessment indicates that exposure levels are below the Action Level of 30 μ/m^3, there are no additional requirements under the standard if the conditions remain the same.

EPA
In addition to the worker protection requirements stipulated by OSHA, MA DEP and the EPA regulate the disposal of wastes that are potentially hazardous. Such wastes may include paint chips and residue generated during abatement or repainting work, or whole components, such as wood windows, doors, and trim that are coated with LBP and that are disposed of as the result of renovation or demolition work. Metal components are not regulated if they will be recycled and not disposed of in a landfill.

To determine the required method for disposing of permeable items coated with LBP, the MA DEP and the EPA require representative sampling of the debris to determine the quantity of lead that would be expected to leach into the environment if the debris were disposed of in a landfill. The representative sample(s) must be analyzed by the Toxicity Characteristic Leaching Process (TCLP). If the result of this procedure indicates that the sample leaches a lead concentration below five parts per million (ppm), the debris is not regulated and can be disposed of in a traditional construction landfill. However, the debris must be disposed of as hazardous waste if the TCLP result exceeds 5 ppm. To minimize the total volume of hazardous waste, segregating hazardous from nonhazardous waste is advisable.

HUD
HUD has established a standard for lead-based paint, as tested using an XRF analyzer, of 1.0 mg/cm^2. Although this standard only applies to housing funded by the federal government, it is a useful reference concentration for assessing hazards associated with lead in paint in other settings. Thus, when paint contains greater than 1.0 mg/cm^2, special care should be taken when conducting activities that impact these paints. When conducting abrasive blasting, torch burning, or similar activities that generate significant dust or fume, hazards can be caused even at concentrations below the HUD standard.

2.3 Findings

Analysis of painted surfaces throughout the site indicate that lead levels range from <0.1 mg/cm^2 to 3.8 mg/cm^2. A summary of paints with elevated concentrations of lead (greater than 1.0 mg/cm^2) is presented in **Table 4**, and the results of all testing are presented in Appendix B.

Table 4 • Summary of Surfaces Coated With LBP				
Location	**Substrate**	**Color**	**Component**	**Approx. Quantity**
Exterior	Metal	Brown	Structural canopy	1.3
Classroom Wings (Floors 1 & 2)	Terracotta glaze	Multi-color	Walls	0.8 – 2.3
Cafeteria	Terracotta glaze	Blue	Walls	3.8

2.4 Conclusions and Recommendations

Based on our findings, SWA offers the following conclusions and recommendations:

1. Limited lead-based paint and lead in terracotta glaze is present at the site. Handling or impacting components that are covered by LBP may require compliance with the OSHA lead standard. To minimize exposure to airborne dust or fumes, torch burning, cutting, grinding, or similar high impact work on components covered by LBP should be avoided. Such work would need to be conducted by properly trained workers using appropriate worker protection and engineering controls.

2. For work activities that may generate airborne lead, the contractor(s) must perform an initial exposure assessment (personal air monitoring) for each individual task (e.g. demolition, abrasive blasting, and painting) that has the potential for causing worker exposure to be at or above the OSHA Action Level. In lieu of monitoring, historical data from similar operations may be used to comply with OSHA requirements.

3. In order to determine proper disposal requirements, samples of the building materials that will best represent the waste stream must be collected for TCLP testing to determine the level of lead that will leach into the landfill soil. Based on SWA's XRF test results, it is likely that all waste can be disposed as general construction debris.

4. SWA conducted limited testing for LBP at the site concentrating on large ticket items that if impacted could be of significant costs. If renovations and or demolition are proposed, a more comprehensive LBP inspection would be required.

2.5 Cost Estimates

SWA estimates that costs associated with OSHA and EPA compliance relative to lead paint at approximately **$5,000** for this site.

3.0 POLYCHLORINATED BIPHENYLS (PCBs)

3.1 Scope of Work

SWA's investigation for PCBs in light fixture ballasts was visual only. Typically, ballasts installed after 1978 do not contain PCBs and are marked as such. Ballasts that do not have the "No PCBs" wording on the label are assumed to contain PCBs. SWA did not collect any suspect buildings materials for PCBs at this time.

3.2 Background/Regulatory Guidance

According to the EPA, PCBs are toxic and persistent chemicals that were used primarily as insulating fluid in heavy-duty electrical equipment. They were also utilized in a wide variety of products including paints, caulks, light fixture ballast, oils, plastics, adhesives, tapes, carbonless copy paper, floor finishes and related products. Because PCBs are suspected carcinogens and may cause other adverse health effects, the EPA banned their manufacture and installation starting in 1979.

Any materials containing PCBs equal to or greater than 50 parts per million (ppm) are regulated under the Toxic Substance Control Act and the PCB regulation found at 40 CFR Part 761. Further, EPA policy, as described in "Current Best Practices for PCBs in Caulk Fact Sheet" updated in September, 2009, is that PCBs at concentrations greater than 50 ppm are not authorized for use and must be removed and properly disposed of.

Additionally, where <50 ppm caulk or PCB remediation waste is present, it may be regulated for removal and/or cleanup unless the <50 ppm PCB caulk meets the definition of an Excluded PCB Product as defined under 40 CFR Part 761.3. Excluded products would include those legally installed before October 1, 1984 and the resulting PCBs concentration is not the result of dilution or leaks or spills from other products. Thus, if a formerly installed PCB caulk containing greater than 50 ppm had been removed and replaced by a non-PCB caulk, the non-PCB caulk could be contaminated from the residue of the former caulk. In this instance, if the non-PCB caulk tested at a concentration above one ppm, it would be regulated as PCB containing.

Further, because PCBs may have leached into surrounding substrates, such as brick, CMU, and cement, or may have degraded and contaminated adjacent soil, assessment of masonry and soils is necessary on instances where PCBs are present in caulk or other building materials. Where analysis indicates contaminant concentrations above one ppm in masonry or soils, remedial actions are required.

3.3 Findings

SWA inspected the labels on representative ballasts throughout the building. Those representative ballasts inspected did contain the "No PCBs" wording on their affixed

labels and therefore are assumed not contain PCBs in their capacitor oils. During renovations or demolition, all individual ballasts must be inspected for the "No PCB" wording on affixed labels to determine proper disposal/recycling requirements. One transformer at the exterior front of the school was observed that may contain PCB oils.

Those suspect PCB building materials observed at the school include window caulking, window glazing compound, wall expansion joint caulk and door caulking.

3.4 Conclusions and Recommendations

Based on our observations, SWA concludes the following:

1. Prior to renovation or demolition all ballasts should be inspected for the "No PCB" wording on the label to determine appropriate segregation and recycling requirements. The ballasts that do not contain the "No PCBs" wording on the affixed label are assumed to contain PCB oils and must be segregated for proper disposal/recycling.

2. SWA's inspector did not sample suspect PCB building materials at the site. Based on our observations, the only suspect materials that would be sampled for PCBs are window caulk, window glazing compound, wall expansion joint caulk and door caulk.

3. The transformer located exterior to the building may be the property of the local power company. If so, they would be responsible for the decommissioning of the transformer. If the city owns the transformer, it would be necessary to further research and or test to determine whether the dielectric fluids contain PCBs.

3.5 Cost Estimates

SWA estimates that the cost to inspect and remove individual ballasts and other components at the site should not exceed **$10,000**. The fee for conducting further assessments and analysis for suspect PCBs building materials is expected to be in the range of **$3,000** to **$5,000**.

4.0 MERCURY COMPONENTS

4.1 Scope of Work

Typically, when fluorescent light fixtures, thermostats, or switches will be removed and disposed of, SWA makes a conservative assumption that they contain mercury and must be handled as a regulated waste. These materials are classified as "Universal Wastes" and must be appropriately handled and packaged for disposal or recycling. SWA inventoried these materials at the site. No confirmatory testing occurred.

4.2 Findings

SWA estimates that there are 2,565 (4') fluorescent bulbs that would require recycling or storage for reuse prior to renovation or demolition activities at the school. No heat regulating thermostats with associated mercury tubes were observed in at the site.

4.3 Conclusions and Recommendations

Based on our observations, SWA offers the following conclusions and recommendations.

1. Prior to being impacted, all fluorescent light bulbs must be collected and properly packaged for reuse or disposal/recycling in a facility permitted to accept Universal Wastes. If electrical switch-gears are decommissioned they must be assessed for mercury components and all identified materials recycled.

4.4 Cost Estimates

The cost to collect and dispose/recycle the fluorescent light bulbs at this site is not expected to exceed **$8,000**.

5.0 MISCELLANEOUS HAZARDOUS MATERIALS

5.1 Scope of Work

SWA inspected for miscellaneous hazardous materials including, but not limited to, stored solvents, chlorofluorocarbons (CFCs), batteries, emergency exit signs, etc. No confirmatory sampling was conducted.

5.2 Findings

SWA observed miscellaneous materials throughout the school, some of which may be considered hazardous. However, it is assumed that most of these materials will remain on site to be used in their current locations.

SWA observed the following miscellaneous hazardous materials that would require special handling throughout the building:

- Exit signs = 48 each
- Emergency lights = 24 each
- Box air conditioners = 12 each
- Batteries = 2 each
- Fire extinguishers = 18 each
- Solvents/paints/cleaners = 55 each

5.3 Conclusions and Recommendations

Based on our observations, SWA offers the following conclusions and recommendations.

1. Miscellaneous hazardous materials are present at the site and must be collected and properly packaged for disposal or recycling in a facility permitted to accept hazardous waste if they do not remain on site to be used at their various locations.

5.4 Cost Estimates

The cost to collect and dispose/recycle the miscellaneous hazardous materials at this site is not expected to exceed **$8,000**.

APPENDIX A

Certificates of Asbestos Bulk Sample Analysis
(PLM & TEM)

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132204442
Customer ID:	SMIT50B
Customer PO:	
Project ID:	

Attention:	Ted Sherry	**Phone:**	(978) 994-3643
	Smith & Wessel Associates, Inc.	**Fax:**	(978) 346-7265
	188 Greenville Street	**Received Date:**	06/27/2022 8:55 AM
	Spencer, MA 01562	**Analysis Date:**	06/29/2022
		Collected Date:	

Project: 22054 / East Longmeadow High School; 180 Maple Street; East Longmeadow, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
01A *132204442-0001*	Exterior C Wing at Dark Room - Tan/Gray Upper Panel Board	Gray Fibrous Homogeneous		82% Non-fibrous (Other)	18% Chrysotile
02A *132204442-0002*	Exterior C Wing at Dark Room - Black Wall/Foundation VB	Black Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
02B *132204442-0003*	Exterior C Wing at AC Condenser - Black Wall/Foundation VB	Black Fibrous Homogeneous	10% Cellulose 5% Glass	85% Non-fibrous (Other)	None Detected
03A *132204442-0004*	Exterior C Wing at Dark Room - Gray Door Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03B *132204442-0005*	Exterior C Wing Main Entrance - Gray Door Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04A *132204442-0006*	Exterior C Wing near Graphics Room - Gray Window Panel	White Fibrous Homogeneous		88% Non-fibrous (Other)	12% Chrysotile
05A *132204442-0007*	Exterior C Wing at AC Condenser - Gray Window Glazing	Gray Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
05B *132204442-0008*	Exterior C Wing Courtyard North Side - Gray Window Glazing				Positive Stop (Not Analyzed)
06A *132204442-0009*	Exterior C Wing North Side - Gray Window Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07A *132204442-0010*	Exterior B Wing South Side - Black Window Glazing	Black Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
07B *132204442-0011*	Exterior 1975 Wing West Side - Black Window Glazing				Positive Stop (Not Analyzed)
08A *132204442-0012*	Exterior 1975 Wing South Side - Brown Wall Expansion	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08B *132204442-0013*	Exterior 1975 Wing North - Brown Wall Expansion	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09A *132204442-0014*	Exterior 1975 Wing West Side - Black Sill & Foundation VB	Black Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
10A *132204442-0015*	Exterior B Wing NW Corner - Gray Window Caulking	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 06/29/2022 10:25:26

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
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EMSL Order: 132204442
Customer ID: SMIT50B
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
11A *132204442-0016*	Exterior Front Canopy - White Ceiling Panel	Gray Fibrous Homogeneous		82% Non-fibrous (Other)	18% Chrysotile
12A *132204442-0017*	Exterior Front at Left (E) Entrance - Black Wall/Foundation VB	Black Fibrous Homogeneous	15% Cellulose	82% Non-fibrous (Other)	3% Chrysotile
13A *132204442-0018*	E-126 (SPED SC) 1st Floor - Yellow Baseboard Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A *132204442-0019*	Room E-126 (SPED SC) 1st Floor - 2x4 Ceiling Tile	Gray/White Fibrous Homogeneous	55% Cellulose	10% Perlite 35% Non-fibrous (Other)	None Detected
14B *132204442-0020*	Room E-133 (Biology) - 2x4 Ceiling Tile	Gray/White Fibrous Homogeneous	55% Cellulose	10% Perlite 35% Non-fibrous (Other)	None Detected
15A *132204442-0021*	Room E-130 (SPED Hearing) - 12x12 Off White w/ Black & Brown Streaks FT	White Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
15B *132204442-0022*	Room E-133 (Biology) - 12x12 Off White w/ Black & Brown Streaks FT				Positive Stop (Not Analyzed)
16A *132204442-0023*	Room E-130 (SPED Hearing) - Black Mastic	Black Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
16B *132204442-0024*	Room E-133 (Biology) - Black Mastic				Positive Stop (Not Analyzed)
17A *132204442-0025*	Room E-133 (Biology) - Brown Baseboard Mastic	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Ramon Buenaventura (21)

Steve Grise, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 “Interim Method”) but augmented with procedures outlined in the 1993 (”final”) version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 06/29/2022 10:25:26

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

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http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132204961
Customer ID:	SMIT50B
Customer PO:	
Project ID:	

Attention:	Ted Sherry	**Phone:**	(978) 994-3643
	Smith & Wessel Associates, Inc.	**Fax:**	(978) 346-7265
	188 Greenville Street	**Received Date:**	07/18/2022 8:30 AM
	Spencer, MA 01562	**Analysis Date:**	07/19/2022
		Collected Date:	

Project: 22054 / East Longmeadow High School; 180 Maple Street; E. Longmeadow, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
18A *132204961-0001*	Floor 2 - Hall at E17 - Gray Mud Fitting	Tan Fibrous Homogeneous	50% Min. Wool	30% Non-fibrous (Other)	20% Chrysotile
19A *132204961-0002*	Floor 2 - Hall at E17 - 2'x4' White Ceiling Tile	Gray Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
20A *132204961-0003*	Floor 2 - Class E218 - 2'x2' White Ceiling Tile	Gray Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
20B *132204961-0004*	Floor 2 - Class E218 - 2'x2' White Ceiling Tile	Gray Fibrous Homogeneous	40% Cellulose 40% Min. Wool	20% Non-fibrous (Other)	None Detected
21A *132204961-0005*	Floor 2 - Hall at E229 - White/Gray Plaster Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21B *132204961-0006*	Floor 2 - Class E219 - White/Gray Plaster Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
21C *132204961-0007*	Floor 2 - Hall at E226 - White/Gray Plaster Wall	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
22A *132204961-0008*	Floor 2 - Class E223 - Black Window Sill	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
23A *132204961-0009*	Floor 2 - Class D213 - 9" Salmon FT w/ WT & Red Streaks	Tan Non-Fibrous Homogeneous		95% Non-fibrous (Other)	5% Chrysotile
24A *132204961-0010*	Floor 2 - Class D213 - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
25A *132204961-0011*	Floor 2 - Class D205 - White/Gray Plaster Wall	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
25B *132204961-0012*	Floor 2 - Hall at D213 - White/Gray Plaster Wall	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
26A *132204961-0013*	Floor 2 - Class D212 - 12"x12" White Ceiling Tile	White Fibrous Homogeneous	80% Min. Wool	20% Non-fibrous (Other)	None Detected
26B *132204961-0014*	Floor 2 - Class D209 - 12"x12" White Ceiling Tile	White Fibrous Homogeneous	80% Min. Wool	20% Non-fibrous (Other)	None Detected
27A *132204961-0015*	Floor 2 - Class D212 - Brown CT Glue Daubs	Brown Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected
27B *132204961-0016*	Floor 2 - Class D209 - Brown CT Glue Daubs	Brown Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected

Initial report from: 07/21/2022 13:13:01

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EMSL Order: 132204961
Customer ID: SMIT50B
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos % Fibrous	Non-Asbestos % Non-Fibrous	Asbestos % Type
28A *132204961-0017*	Floor 2 - Class E220 - 9" Light Gray FT w/ WT Streaks	Gray Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
29A *132204961-0018*	Floor 2 - Class E220 - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
30A *132204961-0019*	Floor 1 - Jan Closet at E116 - Gray Fireproofing	Gray Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
30B *132204961-0020*	Floor 1 - Hall at E117 - Gray Fireproofing	Gray Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
30C *132204961-0021*	Floor 1 - Hall at E125 - Gray Fireproofing	Gray Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
30D *132204961-0022*	Floor 1 - Class E125 - Gray Fireproofing	Gray Fibrous Homogeneous	35% Cellulose 5% Glass	60% Non-fibrous (Other)	None Detected
30E *132204961-0023*	Floor 1 - Class E120 - Gray Fireproofing	Gray Fibrous Homogeneous	35% Cellulose 5% Min. Wool	60% Non-fibrous (Other)	None Detected
31A *132204961-0024*	Floor 1 - Class D111 - 12" Pink w/ WT & Tan Speck FT	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
32A *132204961-0025*	Floor 1 - Class D111 - Black/Yellow Mastic	Black Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
33A *132204961-0026*	Floor 1 - Class D109 - 12" Tan w/ BN & WT Streak FT	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile
34A *132204961-0027*	Floor 1 - Class D109 - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
35A *132204961-0028*	Floor 1 - Class D106 - Black Window Sill	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
36A *132204961-0029*	Floor 1 - Hall at D114 - White Mud Fitting	White Fibrous Homogeneous		90% Non-fibrous (Other)	10% Amosite

Analyst(s)
Kevin Pine (29)

Steve Grise, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 07/21/2022 13:13:01

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EMSL Order:	132205137
Customer ID:	SMIT50B
Customer PO:	
Project ID:	

Attention:	Ted Sherry	**Phone:**	(978) 994-3643
	Smith & Wessel Associates, Inc.	**Fax:**	(978) 346-7265
	188 Greenville Street	**Received Date:**	07/26/2022 9:50 AM
	Spencer, MA 01562	**Analysis Date:**	07/27/2022
		Collected Date:	

Project: 22054 / East Longmeadow High School; East Lognmeadow, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
37A *132205137-0001*	Floor 1 Hall at Maint. - Brown w/ WT 12" FT (Newer)	Brown Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
38A *132205137-0002*	Floor 1 Hall at Maint. - Black Mastic	Black Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile
39A *132205137-0003*	Chorus Room - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
39B *132205137-0004*	Admin Area - White Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40A *132205137-0005*	Small Gym Interior - White Wall Seam Exp.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
40B *132205137-0006*	Small Gym Interior - White Wall Seam Exp.	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
41A *132205137-0007*	Small Caf Orig. Windows - Gray Window Glaze	Gray Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Chrysotile

Analyst(s)

Kevin Pine (7)

Steve Grise, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA NVLAP Lab Code 101147-0, CT PH-0315, MA AA000188, RI AAL-139, VT AL998919, ME LB-0039

Initial report from: 07/27/2022 13:36:22

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EMSL Order: 132204442
Customer ID: SMIT50B
Customer PO:
Project ID:

Attention: Ted Sherry
Smith & Wessel Associates, Inc.
188 Greenville Street
Spencer, MA 01562

Phone: (978) 994-3643
Fax: (978) 346-7265
Received Date: 06/27/2022 8:55 AM
Analysis Date: 07/27/2022
Collected Date:

Project: 22054 / East Longmeadow High School; 180 Maple Street; East Longmeadow, MA

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
02A *132204442-0002*	Exterior C Wing at Dark Room - Black Wall/Foundation VB	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
10A *132204442-0015*	Exterior B Wing NW Corner - Gray Window Caulking	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Steve Grise (2)

Steve Grise, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA

Initial report from: 07/27/2022 11:50:32

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EMSL Order: 132204961
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Customer PO:
Project ID:

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Phone: (978) 994-3643
Fax: (978) 346-7265
Received Date: 07/18/2022 8:30 AM
Analysis Date: 07/27/2022
Collected Date:

Project: 22054 / East Longmeadow High School; 180 Maple Street; E. Longmeadow, MA

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
27A *132204961-0015*	Floor 2 - Class D212 - Brown CT Glue Daubs	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Analyst(s)

Steve Grise (1)

Steve Grise, Laboratory Manager
or other approved signatory

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Samples analyzed by EMSL Analytical, Inc. Woburn, MA

Initial report from: 07/27/2022 11:52:53

APPENDIX B

Results of Testing for Lead Based Paint (LBP)

Lead Based Paint Testing Results 180 Maple Street East Longmeadow, MA				
Location	**Substrate**	**Color**	**Component**	**Result mg/cm^2**
Exterior	Metal	Brown	Door/frame	<0.1
	Metal	Black	Window frames	<0.1
	Metal	Yellow	Upper flashing	<0.1
	Wood	Salmon	Doors	<0.1
	Metal	White	Sliding door	<0.1
	Metal	Brown	Structural canopy	**1.3**
	Metal	Black	Door/frame	<0.1
	Transite	Tan	Upper panel	0.2
	Transite	White	Canopy ceiling	0.4
Art/Tech. Ed/Music/Offices Wing	Cinderblock	Gray	Walls	<0.1
	Cinderblock	White	Walls	<0.1
	Sheetrock	White	Walls	<0.1
	Concrete	Gray	Floor	<0.1
	Metal	White	Structural steel	<0.1
Classroom Wings (Floors 1 & 2)	White	Plaster	Walls	<0.1 – 0.2
	Terracotta glaze	Multi-color	Walls	**0.8 – 2.3**
	Sheetrock	White	Walls	<0.1
	Metal	Black	Structural steel	<0.1 – 0.4
	Metal	Red	Structural steel	0.2 – 0.5
	Metal	Black	Window frames	<0.1
	Metal	Brown	Door frame	<0.1
	Wood	Tan	Doors	<0.1
	Metal	Blue	Door frames	<0.1
	Cinderblock	White	Walls	<0.1
	Plaster	Blue	Walls	<0.1
	Plaster	White	Walls	<0.1
	Plaster	Pink	Walls	<0.1
	Metal	Tan	Lockers	<0.1
Auditorium	Plaster	White	Ceiling	<0.1

Lead Based Paint Testing Results 180 Maple Street East Longmeadow, MA				
Location	**Substrate**	**Color**	**Component**	**Result mg/cm^2**
	Cinderblock	White	Walls	<0.1
Cafeteria	Terracotta	Blue	Walls	**3.8**
	Metal	Black	Door frame	<0.1
Gyms/halls/locker areas	Cinderblock	White	Walls	<0.1
	Wood	Tan	Walls	<0.1
	Metal	Black	Structural steel	<0.1
	Metal	Black	Structural steel	0.4
	Metal	Black/white	Window frames	<0.1

Note: Testing for lead was conducted using x-ray fluorescence analyzer. Limit of detection = 0.1 mg/cm^2.

:

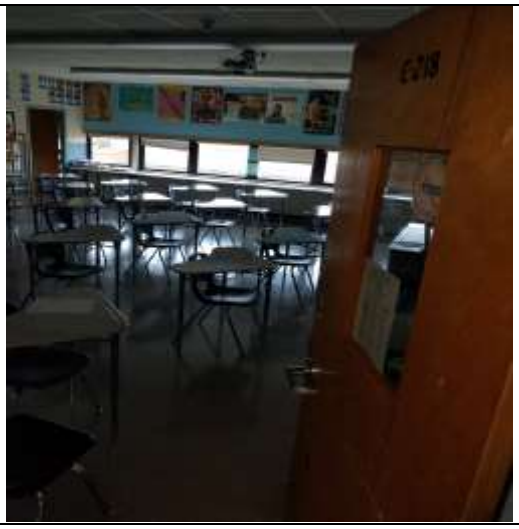
APPENDIX C

Photographs

East Longmeadow High School – East Longmeadow, MA

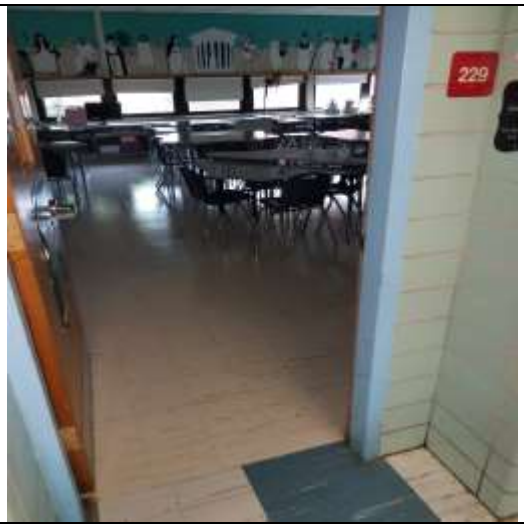
Bldg. C asbestos upper panel walls	Bldg. C exposed vapor barrier, not asbestos
Bldg. C asbestos panel walls & window panel	Bldg. C view
Bldg. B, asbestos black glazing	Bldg. E, asbestos black glazing

East Longmeadow High School – East Longmeadow, MA

Front asbestos canopy	Front asbestos vapor barrier
Rear of bui9lding, asbestos upper panels	E-130 asbestos floor tile/mastic
	

East Longmeadow High School – East Longmeadow, MA

E-130 asbestos floor tile/mastic	Wood door with assumed insulation

	
Floor 2 class wing w/multi-color floor tile	Floor 2 classroom floor tile
Fitting in plenum	Wet wall with fittings

East Longmeadow High School – East Longmeadow, MA

2’ x 2’ ceiling tile in class	Older floor tile in class

9” floor tile/mastic, asbestos	Ceiling tile/glue daubs, tested negative

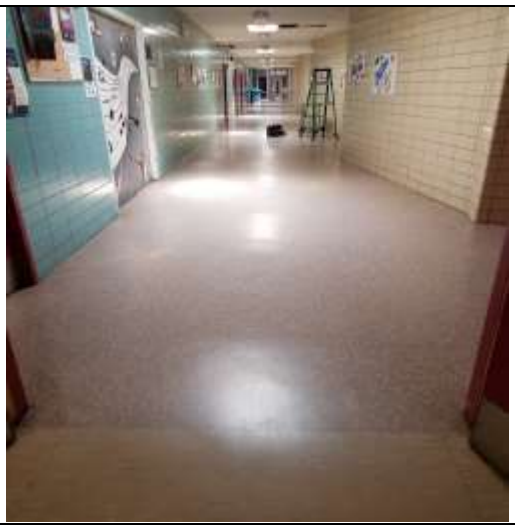
East Longmeadow High School – East Longmeadow, MA

Ceiling tile/glue daubs, tested negative	Floor 1 freshman wing, fireproofing
Fireproofing on beam, not asbestos	Fireproofing on beam, not asbestos

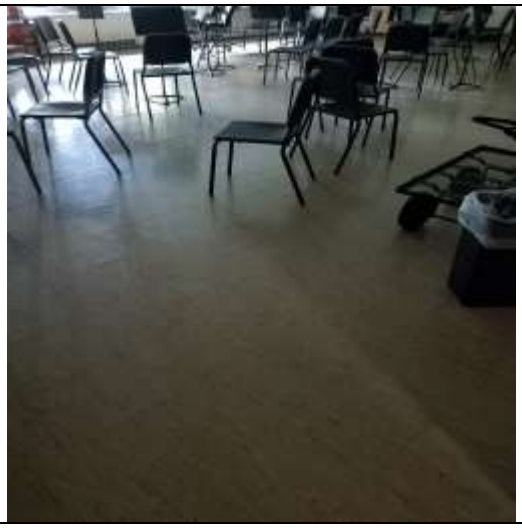
Wing with fireproofing, not asbestos	Floor tile, white board & door in class

East Longmeadow High School – East Longmeadow, MA

Asbestos floor tile in class	Hall, newer floor tile
9” floor tile in auditorium	Auditorium view

East Longmeadow High School – East Longmeadow, MA

Pipe fitting in plenum hall at auditorium	Old floor tile below & newer in hall
	
Music room floor tile, asbestos	Fittings in plenum
Graphics, older 12” floor tile	Newer boilers

East Longmeadow High School – East Longmeadow, MA

Fittings in plenum in cafeteria

Wall panel glue, assumed asbestos

Main cafeteria

Main gym, older upper windows & assumed VB

Original windows in small cafeteria

December 19, 2022

Mr. Kristian Whitsett
Jones Whitsett Architects
308 Main Street
Greenfield, Massachusetts 01301

Re: Preliminary Geotechnical Engineering Recommendations
East Longmeadow High School
180 Maple Street
East Longmeadow, Massachusetts

Dear Mr. Whitsett:

O'Reilly, Talbot & Okun Associates, Inc. (OTO) is pleased to provide this letter report summarizing our preliminary geotechnical engineering recommendations for the proposed East Longmeadow High School, to be constructed immediately southeast of the existing school. The Site is located at 180 Maple Street in East Longmeadow, Massachusetts. A Site Locus is provided as Figure 1. A Boring Location Plan is provided as Figure 2.

This report provides our preliminary findings regarding subsurface conditions at the Site, an opinion of the suitability of the Site for the proposed project, and our preliminary geotechnical recommendations. We understand this information will be used to develop schematic design plans and cost estimates. Additional explorations and analyses will be required for final design.

Our geotechnical findings and preliminary recommendations are based upon subsurface conditions observed in six soil borings and upon subsurface information available from project drawings for the 1973 building additions. Our services consisted of the full-time observation of the borings, review of the logs and soil samples, engineering analyses, and preparation of this report. This report is subject to the attached limitations.

EXECUTIVE SUMMARY

In general, subsurface conditions are favorable for the proposed construction. Based upon the information collected, the following preliminary recommendations are provided:

- Subsurface conditions at the Site consist of a thin layer of topsoil over natural granular soils. A thin layer of fill consisting of reworked Site soils is present at some locations. However, this fill layer is relatively thin and should not significantly affect the proposed construction. Little to no debris and other deleterious materials were observed in the near surface soils. Bedrock is present at depth and should not be encountered during the proposed construction.
- The proposed building can be supported on normal spread footings, bearing on the natural granular soils present in the upper 10 feet. A moderate bearing pressure of 4,000 pounds per square foot should be achievable. Post-construction settlement of the proposed building should be on the order of one inch or less.

- The seismic site classification of the subsurface profile at the Site would be Class D. Based upon existing data, the saturated granular soils at the Site would not experience liquefaction during the design earthquake.
- The groundwater table is present at a depth of approximately 10 feet. The near surface soils consist of a fine to medium sand with trace silt. Based upon the depth to groundwater and the nature of the soils in the upper 10 feet, conditions are favorable for the infiltration of stormwater.
- If should be possible to reuse Site soils as engineered fill on the project. However, the Site soils may not be suitable for use as Sand and Gravel fill beneath footings and slabs or as Gravel Base Course beneath pavements, unless they are amended by adding gravel.

PROJECT DESCRIPTION

The Site is located at 180 Maple Street in East Longmeadow, Massachusetts. It is bounded to the north by the East Longmeadow High School and Maple Street, to the east and south by wetlands and wooded areas, and to the west by residential properties. The location of the Site is shown on Figure 1.

The existing East Longmeadow High School building, parking lots, and recreation fields are currently located at the Site. The existing building consists of a one- to two-story masonry building. The original building was constructed in 1959 with additions constructed in 1964, 1973, and 2012. Prior to the development of the school and recreation fields, the Site was occupied by farm fields.

According to conceptual design plans, the proposed structure will be located to the southeast of the existing building. The new building will have an approximate footprint of 156,000 square feet and may be up to three stories high. We anticipate that the proposed building will be slab on grade, and that cuts of up to five feet will be required to construct footings. Topography within the proposed building footprint slopes gently down from the existing building (elevation 224 feet) to the southeast (elevation 220 feet). The approximate location of the proposed building is shown on Figure 2. We understand that the location of the new building will likely not change significantly, but the final layout has yet to be determined. Figure 2 shows two possible configurations being considered.

SUBSURFACE EXPLORATIONS

Subsurface investigations conducted for this study consisted of six soil borings (HS-1 through HS-6). The recent borings were performed between November 10 and 11, 2022 by Seaboard Drilling of Chicopee, Massachusetts. In addition, six borings were performed near the proposed new school building by Chicopee Test Borings in 1973 for additions to the existing school.

The recent borings for this study were performed using a Mobile B-53 truck mounted drill rig with hollow stem or drive and wash drilling techniques. Each boring was performed within or near the footprint of the proposed building and extended to a depth of between 22 and 32 feet below ground surface. The proposed boring locations were adjusted in the field due to the presence of subsurface utilities. Boring locations are shown on Figure 2. Boring logs for both the recent and past soil borings are attached.

Soil samples were generally collected continuously from the ground surface to a depth of four feet below ground surface, at a depth of five feet, and every five feet thereafter. The headspace of each soil sample was screened using a photo-ionization detector (PID). PID screening provides an assessment of volatile organic content (VOC) of the samples. PID readings are provided on the boring logs.

Soil samples were collected using a two-inch diameter split spoon sampler, driven 24 inches with a 140-pound safety hammer falling 30 inches (American Society for Testing and Materials Test Method D1586 "Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils"). The number of blows required to drive the sampler each six inches was recorded. The standard penetration resistance, or N-value, is the number of blows required to drive the sampler the middle 12 inches. Soil properties, such as strength and density, are related to the N-value. For engineering calculations and analysis, the field N-values are corrected to a standard 60% hammer efficiency, known as N_{60}. The N-values presented on the boring logs are field values, which are not adjusted for hammer efficiency. However, the adjusted N_{60} values were used in our engineering calculations and analysis.

An O'Reilly, Talbot & Okun Associates, Inc. (OTO) engineer observed and logged the recent borings. Samples were classified according to a modified version of the Burmister Soil Classification System. Upon completion, the boreholes were backfilled with soil cuttings.

SUBSURFACE CONDITIONS

Subsurface conditions were interpreted based upon the soil borings, both those performed for this study and those performed for the 1973 building additions. Conditions observed in the recent OTO borings and those in the 1973 borings were similar. In general, subsurface conditions consisted of:

- A surface layer of topsoil
- A thin layer of reworked soils or fill
- Native granular soils
- Glacial till

Bedrock was not encountered in any of the subsurface investigations conducted at the Site, but is likely present at a depth of between 35 and 50 feet below ground surface.

Soil Conditions

Topsoil: Approximately five to eight inches of topsoil was present at the ground surface. The topsoil generally consisted of dark brown, fine sand with some medium sand, little silt and organics (roots), and trace amounts of coarse sand and fine gravel.

Reworked Site Soils/Fill: Between 1.5 and 3 feet of reworded Site soils or fill was encountered beneath the surficial layer in each boring. The fill consisted of loose to dense, fine to medium sand with little to trace coarse sand, varying amounts of silt, and trace gravel and organics (roots). This layer contained little or no debris and other deleterious materials and was likely present during the construction of the existing high school.

Native Granular Soils: Native soils were encountered starting at a depth of approximately three feet below ground surface. These soils consisted of medium dense to very dense, fine to medium sand or medium to coarse sand with trace amounts of silt and gravel. With the exception of HS-3 and HS-4, borings were terminated within this layer at a depth of between 22 and 32 feet below ground surface, corresponding to approximate elevations of 200.5 and 190.5 feet.

Glacial Till: The native granular soils were underlain by sandy glacial till at a depth of 28 to 29 feet (elevation 194 to 192.5 feet). Glacial till is a very dense, heterogeneous mixture of silt, clay, sand, and gravel that was lain down at the base of the continental glaciers which once covered all of New England. Glacial Till is generally present immediately above bedrock and is commonly less than ten feet tick in the project vicinity, based upon nearby explorations. Therefore, we estimate that bedrock is present within approximately 50 feet below ground surface.

Environmental Field Screening

The headspace of each soil sample was screened using a photoionization detector (PID). PID screening provides an assessment of volatile organic compounds (VOCs) of the samples. The PID readings were generally below the instrument detection limits. VOC concentrations were detected at 0.2 parts per million (ppm) in boring HS-5 (sample S-6, 20 to 22 feet) and 0.1 ppm in boring HS-6 (sample S-7, 25 to 27 feet). These readings are consistent with background conditions and do not indicate an environmental concern regarding VOCs. PID readings are presented on the boring logs.

Groundwater Conditions

Groundwater was encountered in borings HS-1, HS-2, HS-5, and HS-6 at a depth of between 9 and 12 feet below ground surface, corresponding to approximate elevations of 210.5 to 213 feet. Assuming a slab on grade building, groundwater is not expected to be encountered during construction or during the service life of the building. The groundwater level could not be determined in borings HS-3 and HS-4 due to the wash drilling techniques (addition of water) used to advance these soil borings.

SIGNIFICANT GEOTECHNICAL ISSUES

The significant geotechnical issues for the proposed construction addressed in this report include the following: the presence of non-engineered fill; foundation bearing capacity; seismic design considerations; pavement design; and the suitability of on-Site materials for use as engineered fill.

PRELIMINARY DESIGN RECOMMENDATIONS

The following recommendations are provided for the preliminary design of the proposed building and refer to the 9th Edition of the Massachusetts State Building Code (MSBC), which includes amendments to the 2015 International Building Code (IBC).

Additional explorations will be required during the design phase, as discussed below. The recommendations provided in this report should be reviewed and revised (as appropriate) after the design phase explorations have been completed.

Overall Site Conditions and Geotechnical Issues

Subsurface conditions appear favorable for the proposed construction. The near surface fill layer is thin and can be densified using surface compaction techniques. The proposed building can be supported on traditional spread footings. Groundwater was encountered at a depth of 9 to 12 feet. We note that the depth to groundwater will vary seasonally. Therefore, it is unlikely that groundwater will impact either construction excavations nor should it impact the proposed building unless the new structure contains either a below grade swimming pool or a basement. It should be possible to infiltrate surface water runoff into the ground, given the depth to groundwater and the granular nature of the near surface soils. The fill present in the upper three feet does not contain significant amount of debris or other deleterious materials. It should be possible to reuse these materials as engineered fill, although they may not be suitable for use as Sand and Gravel beneath slabs and footings or as Gravel Base Course under pavements. The project estimator should assume that these materials will need to be imported.

Demolition of Existing Building

We understand that the existing school building will be demolished once the new building has been completed. Abandoned buried utilities containing asbestos (such as electrical conduit insulation or transite pipe) are commonly found during construction excavations. Furthermore, former structures (pipes, conduits, foundations walls) may contain or be covered with materials containing asbestos. Such materials should be handled in accordance with MassDEP's asbestos regulations (310 CMR 7.15). We recommend that suspect materials be managed appropriately and tested by a Department of Labor Standards (DLS) certified asbestos inspector prior to disturbances.

Foundation Recommendations

Based upon the observed subsurface conditions, new building can be supported on normal spread footings bearing on the densified native granular soils or compacted engineered fill. Any unsuitable soils (debris), topsoil, asphalt, or concrete layers should be removed from beneath the building footprint. It may be possible to reuse some of the existing fill material. Excavations resulting from the removal of structures or unsuitable soil should be backfilled with compacted, engineered fill.

We recommend that a maximum bearing capacity of 4,000 pounds per square foot be used for preliminary design of a slab on grade building. Exterior footings should be embedded at least four feet for frost protection. Other requirements of the MSBC should be followed.

Seismic Considerations

Earthquake loadings must be considered under requirements in Section 1613 and 1806 of the 9th Edition (October 2017) of the Massachusetts State Building Code (MSBC), which

is based upon the International Building Code 2015 (IBC) with Massachusetts amendments. Note that the IBC refers to ASCE-7 (2010), *Minimum Design Loads for Buildings and Other Structures*.

Site Class and Earthquake Design Factors

Section 1613 of the IBC covers lateral forces imposed on structures from earthquake shaking and requires that every structure be designed and constructed to resist the effects of earthquake motions in accordance with ASCE-7. Lateral forces are dependent on the type and properties of soils present beneath the Site, along with the geographic location. Per Table 1604.11, the maximum considered earthquake spectral response acceleration at short periods (S_s) and at 1-sec (S_1) was determined to be 0.174 and 0.065, respectively, for East Longmeadow, Massachusetts.

Soil properties are represented through Site Classification. Procedures for the Site-specific determination of Site Classification are provided in Chapter 20 of ASCE-7. At this Site, we evaluated Site Classification using one of the parameters allowed, Standard Penetration Resistance (N-value). The Site Class was determined to be Class D based upon soil data collected. Furthermore, the Site coefficients F_a and F_v were determined according to Tables 1613.3.3(1) and 1613.3.3(2) of the IBC (2015), using both the S_s and S_1 values and the Site Class. For this Site, F_a and F_v were determined to be 1.6 and 2.4, respectively.

Liquefaction

Section 1806.4 relates to the liquefaction potential of the underlying soils. The liquefaction potential was evaluated for saturated Site soils, using Figure 1806.4b of the MSBC. However, based upon the observed density, it appears unlikely that liquefaction would occur under the design earthquake. In addition, loose soil layers below the maximum depth explored are not anticipated.

Stormwater Infiltration

Subsurface conditions appear to be favorable for the infiltration of stormwater for the new project. The groundwater table is present at a depth of approximately 10 feet below ground surface and the near surface soils consist of a fine to medium sand with little to trace silt. We recommend that the civil engineer use a permeability value of 10 feet per day for preliminary design of the stormwater infiltration systems. We note that backhoe test pits will need to be performed within infiltration areas during Design Development (DD). A soil scientist should determine the estimated seasonal high groundwater table (ESHGWT) and in-situ permeability testing should be performed for final design.

Earthwork Considerations

We anticipate that earthwork for this project will include the following: removal and replacement of non-engineered fill (if present) and existing structures; excavations for footings; placement of compacted engineered fill beneath the building, floor slab and pavements (as needed); and the treatment of the existing soils to address any localized loose areas that may be present.

FURTHER INVESTIGATIONS AND TESTING

This preliminary study indicates that conditions are favorable for the project. However, design phase explorations will be necessary prior to final design. The number and scope of additional explorations will depend upon the location and footprint of the new building. Typically, design phase borings should be completed at 100-foot center-to-center spacing, or less. The design phase geotechnical study should include supplemental testing to evaluate the estimated seasonal high groundwater table (ESHGWT) and the hydraulic conductivity at proposed stormwater disposal locations.

If significant quantities of soil are to be removed from the Site, environmental testing of soils would also be appropriate.

We appreciated the opportunity to be of service on this project. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely yours,
O'Reilly, Talbot & Okun Associates, Inc.

Dustin A. Humphrey, P.E.
Project Manager

Michael J. Talbot, P.E.
Principal

Attachments: Limitations, Site Locus, Boring Location Plan, 1973 Site Plan, Boring Logs

LIMITATIONS

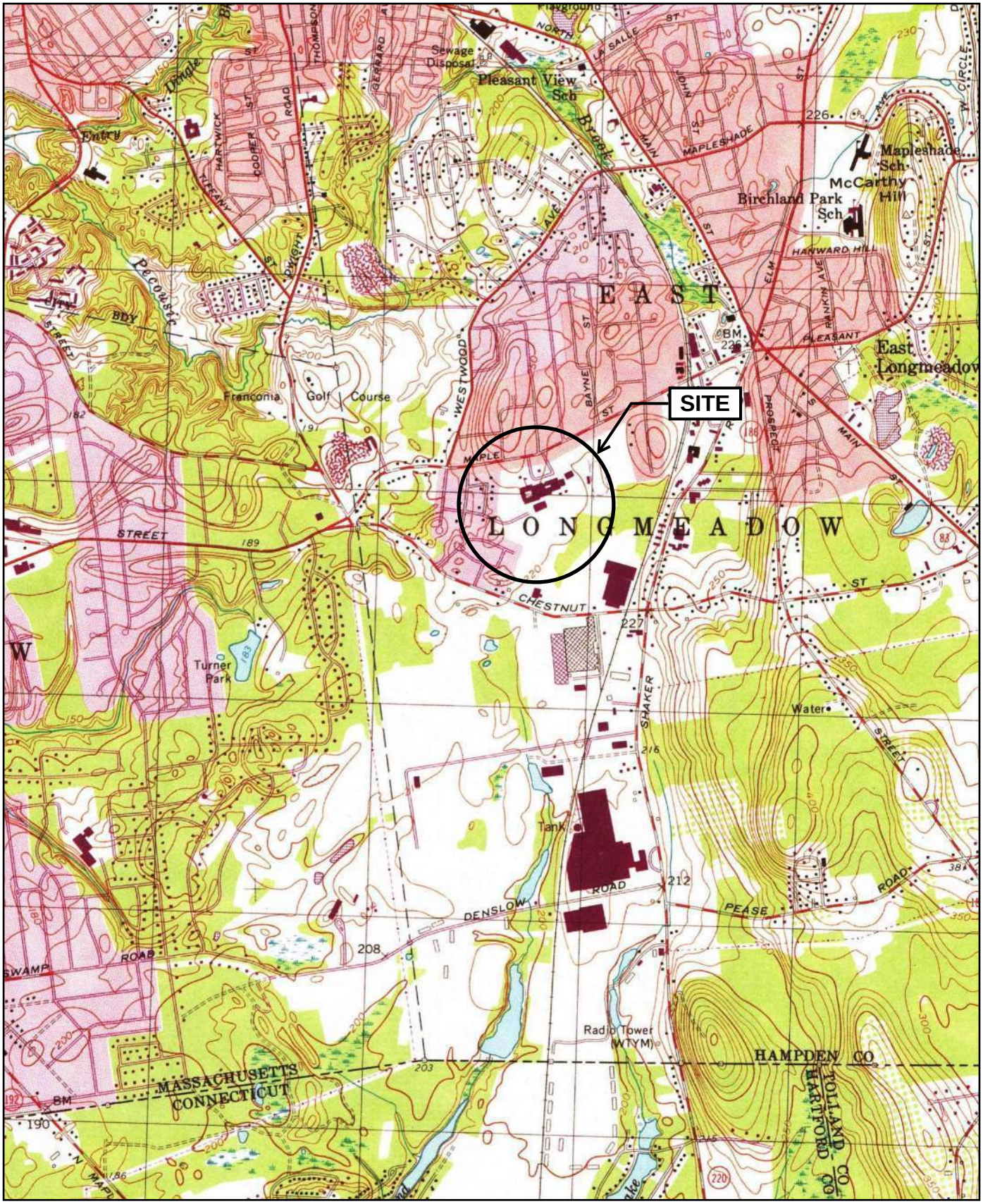
1. The observations presented in this report were made under the conditions described herein. The conclusions presented in this report were based solely upon the services described in the report and not on scientific tasks or procedures beyond the scope of the project or the time and budgetary constraints imposed by the client. The work described in this report was carried out in accordance with the Statement of Terms and Conditions attached to our proposal.

2. The analysis and recommendations submitted in this report are based in part upon the data obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, it may be necessary to reevaluate the recommendations of this report.

3. The generalized soil profile described in the text is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the boring logs.

4. In the event that any changes in the nature, design or location of the proposed structures are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and conclusions of this report modified or verified in writing by O'Reilly, Talbot & Okun Associates Inc. It is recommended that we be retained to provide a general review of final plans and specifications.

5. Our report was prepared for the exclusive benefit of our client. Reliance upon the report and its conclusions is not made to third parties or future property owners.



0 1000 FEET

0 0.5 1.0 MILES

0 0.5 1 KILOMETERS

1:25,000 SCALE NATIONAL GEODETIC VERTICAL DATUM 1929 10 FOOT CONTOUR INTERVAL

O:\J1800\1843 Jones Whitsett Architects Inc\21-01 East Longmeadow High School - Ph I ESA & Geotech\Figures\Figure 1 - Site Locus 1843-21-01.pdf

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES
293 Bridge Street, Suite 500 Springfield, MA 01103 413.788.6222
www.OTO-ENV.com

EAST LONGMEADOW HIGH SCHOOL

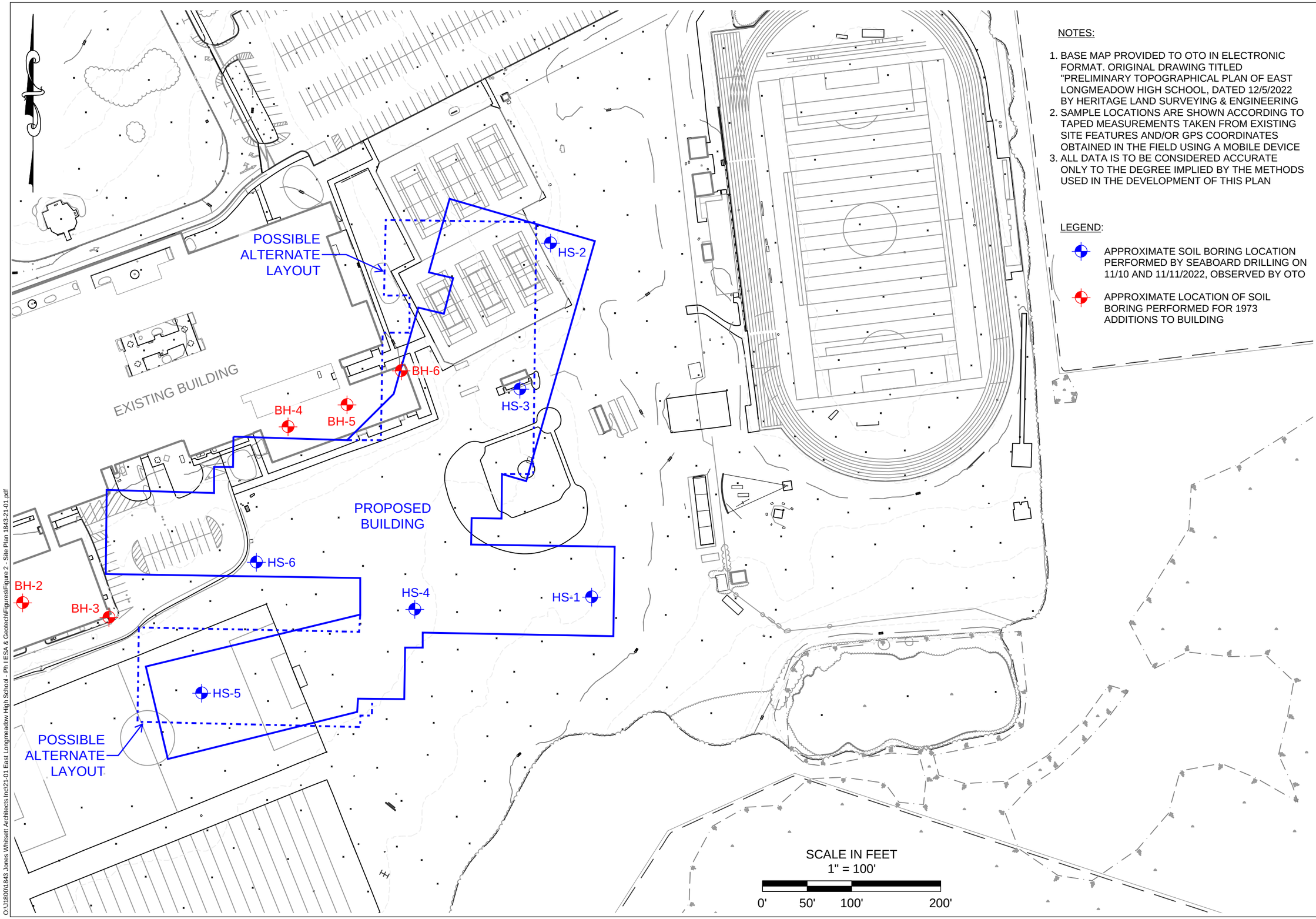
180 MAPLE STREET
EAST LONGMEADOW, MASSACHUSETTS

SITE LOCUS

Topographic Map Quadrant: SPRINGFIELD SOUTH, MA
Map Version: 1958
Current As Of: 1979
Date: NOVEMBER 2022

PROJECT No. J1843-21-01

FIGURE No. 1



NOTES:

1. BASE MAP PROVIDED TO OTO IN ELECTRONIC FORMAT. ORIGINAL DRAWING TITLED "PRELIMINARY TOPOGRAPHICAL PLAN OF EAST LONGMEADOW HIGH SCHOOL, DATED 12/5/2022 BY HERITAGE LAND SURVEYING & ENGINEERING
2. SAMPLE LOCATIONS ARE SHOWN ACCORDING TO TAPED MEASUREMENTS TAKEN FROM EXISTING SITE FEATURES AND/OR GPS COORDINATES OBTAINED IN THE FIELD USING A MOBILE DEVICE
3. ALL DATA IS TO BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHODS USED IN THE DEVELOPMENT OF THIS PLAN

LEGEND:

APPROXIMATE SOIL BORING LOCATION PERFORMED BY SEABOARD DRILLING ON 11/10 AND 11/11/2022, OBSERVED BY OTO

APPROXIMATE LOCATION OF SOIL BORING PERFORMED FOR 1973 ADDITIONS TO BUILDING

SCALE IN FEET
1" = 100'

0' 50' 100' 200'

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293 Bridge Street, Suite 500 Springfield, MA 01103 413.788.6222
www.OTO-ENV.com

DESIGNED BY: SLR
DRAWN BY: SLR
CHECKED BY: DAH
DATE: 11/14/2022
REV. DATE:

EAST LONGMEADOW HIGH SCHOOL
180 MAPLE STREET
EAST LONGMEADOW, MASSACHUSETTS

BORING LOCATION PLAN

PROJECT NO.
J1843-21-01

FIGURE NO.
 2

O:\J1800\1843 Jones Whitsett Architects Inc\21-01 East Longmeadow High School - Ph I ESA & Geotech\Figures\Figure 2 - Site Plan 1843-21-01.pdf

DATUM: INDUSTRIAL ARTS WING F.F. EL. = 225.00

BORING HOLE #1 6-8-73

	A	B	C	G.L. = 224.00
1		ASPHALT & ROADFILL	7-10	223.50
		BROWN COARSE TO FINE SAND AND GRAVEL	10-18	
5		BROWN FINE SAND, SOME SILT	8-13	
			19-17	
		BROWN COARSE TO FINE SAND & GRAVEL	11-17	
10	W		31-27	

BORING HOLE #2 6-8-73

	A	B	C	G.L. = 223.00
1		BROWN LOAM	3-5	
			7-10	
		BROWN FINE MED. SAND TRACE COA. SAND	11-18	
5		RED BROWN MEDIUM TO FINE SAND AND GRAVEL TRACE OF COBBLES	31-46	
			40-38	
		TRACE OF SILT		
10	W		21-38	
		RED BROWN COARSE TO FINE SAND AND GRAVEL	30-46	
15		TRACE OF SILT		
			18-21	
			38-57	
20		RED, BROWN SAND SHALE, COBBLES AND MEDIUM GRAVEL	11-17	
			21-30	
25		BROWN FINE SAND, TRACE OF SILT	7-10	
			10-15	

BORING HOLE #3 6-8-73

	A	B	C	G.L. = 224.25
1		BROWN SANDY LOAM, LITTLE SILT	3-7	
			7-10	
		BROWN, FINE TO MEDIUM SAND, LITTLE SILT		
5			11-10	
			7-10	
10	W	RED, BROWN COARSE TO FINE SAND & GRAVEL	11-21	
			18-19	

DATUM: GYMNASIUM WING F.F. EL. = 226.00

BORING HOLE #4 6-8-73

	A	B	C	G.L. = 224.25
1		TOPSOIL, TRACE GRAVEL		224.2
		BROWN FINE SAND SOME, BROWN SILT, COMPACT	15-17	
5			15-16	
		RED, BROWN FINE SAND	16-14	
			16-19	
		BROWN MEDIUM TO FINE SAND	19-15	
10	W		15-18	

BORING HOLE #5 6-8-73

	A	B	C	G.L. = 224.2
1		TOPSOIL, TRACE ROOTS		
		BROWN, FINE SAND, SOME, BROWN SILT, TRACE FINE GRAVEL.	10-18	
5			19-15	
		RED, BROWN, COARSE TO FINE SAND, SOME MED. GRAVEL, TRACE OF RED SILT	26-89	
			22-27	
		BROWN, MEDIUM TO FINE SAND	14-12	
10	W		15-15	
15		BROWN COARSE TO FINE SAND	9-9	
			13-11	
		TRACE OF FINE GRAVEL.		
		RED BROWN WASH FROM 17' TO 19'		
20		BROWN, MEDIUM TO FINE SAND	9-15	
			11-11	
25			12-15	
			17-15	

BORING HOLE #6 6-8-73

	A	B	C	G.L. = 225.50
1		TOPSOIL, ROOTS, SANDY		
		SOME SILT, COBBLES	55-56	
5			21-15	
		BROWN, COARSE TO FINE SAND, TRACE OF MEDIUM TO FINE GRAVEL	4-6	
			8-9	
10	W		18-23	
			17-14	

BORING HOLE #7 6-8-73

	A	B	C	G.L. = 224.75
1		TOPSOIL & ROOTS BLACK SILT	7-6	225.50
		BROWN SILT SOME BROWN FINE SAND	6-6	
5		RED BROWN COARSE TO FINE SAND & MEDIUM TO FINE GRAVEL, COBBLES	35-58	
			34-28	
		BROWN SILT TRACE OF RED FINE SAND SOME BROWN FINE SAND	15-9	
10	W		12-10	

DATUM: SCIENCE WING F.F. EL. = 226.00

BORING HOLE #8 6-8-73

	A	B	C	G.L. = 225.50
1		BROWN SANDY LOAM	3-5	
		BROWN FINE SAND, LITTLE SILT.	6-7	
5		RED BROWN COARSE TO FINE SAND TRACE OF COBBLES	11-13	
			17-20	
		RED BROWN FINE SAND	21-13	
10			26-40	
		LITTLE SILT AND MEDIUM TO FINE GRAVEL COBBLES & BOULDERS	14-17	
15			21-20	
			11-21	
20			56-71	
			41-26	
25			38-56	

BORING HOLE #9 6-8-73

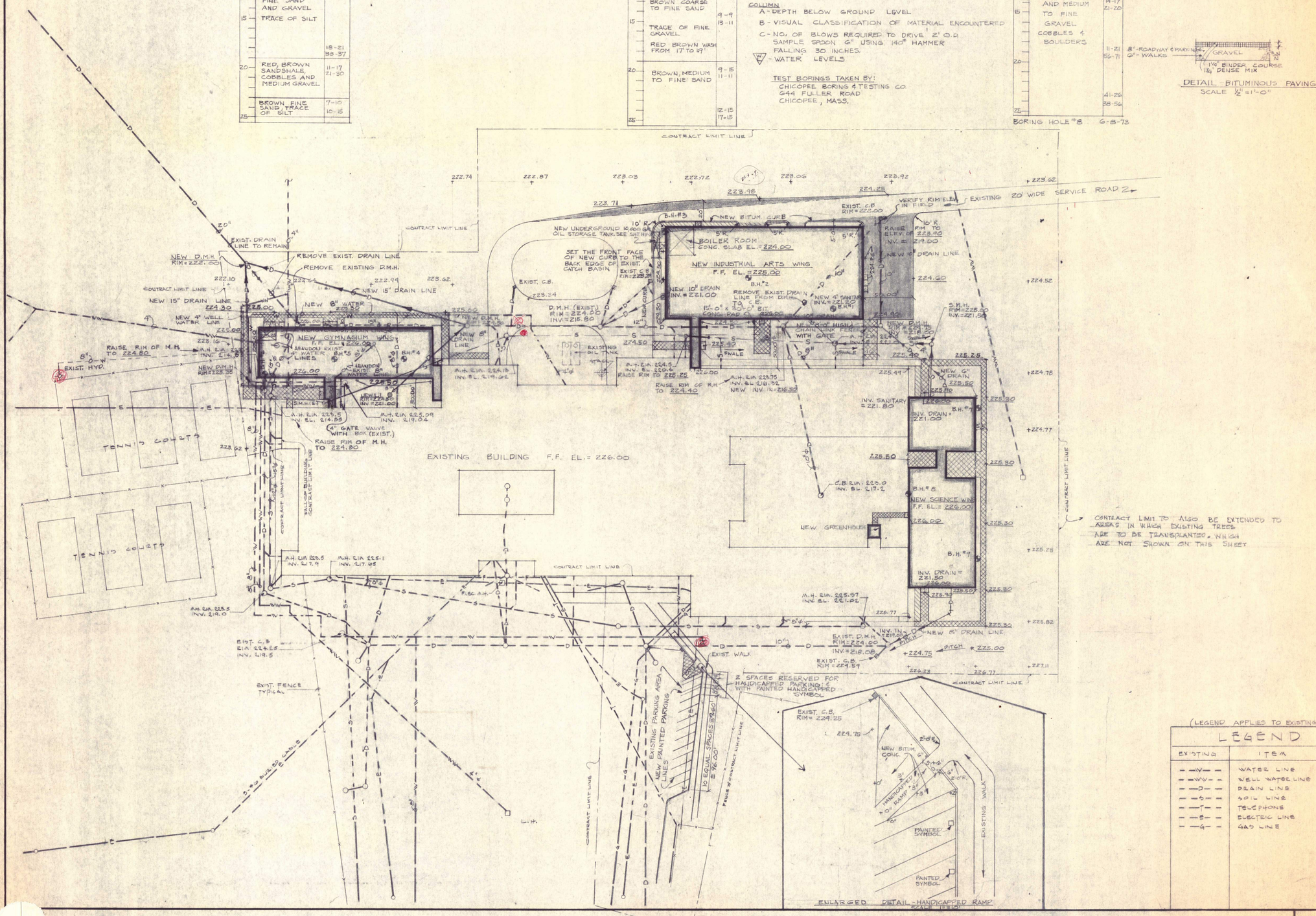
	A	B	C	G.L. = 226.00
1		TOPSOIL & ROOTS		
		RED COARSE TO FINE SAND SOME RED SILT TRACE OF FINE GRAVEL	7-7	
			7-8	
5	W		13-17	
			20-24	
10			17-25	
			26-30	

COLUMN
- A - DEPTH BELOW GROUND LEVEL
- B - VISUAL CLASSIFICATION OF MATERIAL ENCOUNTERED
- C - NO. OF BLOWS REQUIRED TO DRIVE 2" O.D. SAMPLE SPOON 6" USING 140# HAMMER FALLING 30 INCHES.
- W - WATER LEVELS

TEST BORINGS TAKEN BY:
CHICOPEE BORING & TESTING CO.
644 FULLER ROAD
CHICOPEE, MASS.

8" - ROADWAY & PARKING
6" - WALKS
GRAVEL
1½" BINDER COURSE, ½" DENSE MIX

DETAIL BITUMINOUS PAVING
SCALE ½" = 1'-0"


CONTRACT LIMIT LINE
NEW D.M.H. RIM = 222.20
REMOVE EXIST. DRAIN LINE
REMOVE EXISTING D.M.H.
NEW 15" DRAIN LINE
NEW 8" WATER LINE
NEW 4" WELL WATER LINE
EXIST. DRAIN LINE TO REMAIN
NEW GYMNASIUM WING F.F. EL. = 226.00
ABANDON EXIST. WATER LINES
ABANDON WATER B.H. #5
B.H. #4
RAISE RIM OF M.H. TO 224.80
EXIST. HYD.
NEW D.M.H. RIM = 228.38
NEW 8" DRAIN LINE
M.H. EL.A. 224.13 INV. EL. 219.62
M.H. EL.A. 224.5 INV. EL. 220.4
RAISE RIM OF M.H. TO 225.25
M.H. EL.A. 223.75 INV. EL. 210.52
NEW INV. IN 216.52
M.H. EL.A. 225.5 INV. EL. 214.85
M.H. EL.A. 225.09 INV. 219.84
4" GATE VALVE WITH BOX (EXIST.)
RAISE RIM OF M.H. TO 224.80
M.H. #67
NEW D.M.H. RIM = 226.85 INV. = 221.00
EXISTING BUILDING F.F. EL. = 226.00
TENNIS COURTS
TENNIS COURTS
WALL OF BUILDING
M.H. EL.A. 223.5 INV. EL. 217.9
M.H. EL.A. 225.1 INV. EL. 217.05
M.H. EL.A. 223.5 INV. 219.0
EXIST. C.B. EL.A. 224.65 INV. 219.5
EXIST. FENCE TYPICAL
EXIST. WALK
EXIST. D.M.H. RIM = 224.00 INV. = 218.08
EXIST. C.B. RIM = 229.64
NEW 8" DRAIN LINE
PITCH
+224.75
+225.00
227.11
226.23
226.77
CONTRACT LIMIT LINE
2 SPACES RESERVED FOR HANDICAPPED PARKING WITH PAINTED HANDICAPPED SYMBOL
EXISTING PARKING AREA
NEW PAINTED STRIPES
10 EQUAL SPACES @ 9'-0" = 90.00
FENCE
CONTRACT LIMIT LINE
EXIST. C.B. RIM = 229.25
229.78
NEW BITUM. CONC.
HANDICAPPED RAMP
PAINTED SYMBOL
PAINTED SYMBOL
EXISTING WALK
ENLARGED DETAIL - HANDICAPPED RAMP
SCALE 1/8" = 1'-0"
CONTRACT LIMIT LINE
L.H.
NEW UNDERGROUND 10,000 GAL. OIL STORAGE TANK. SEE SHT. M-3
SET THE FRONT FACE OF NEW CURB TO THE BACK EDGE OF EXIST. CATCH BASIN
EXIST. C.B.
D.M.H. (EXIST.) RIM = 224.00 INV. = 218.80
NEW 10" DRAIN INV. = 221.00
B.H. #3
B.H. #2
NEW BITUM. CURB
BOILER ROOM CONC. SLAB EL. = 224.00
NEW INDUSTRIAL ARTS WING F.F. EL. = 225.00
EXIST. C.B. RIM = 223.21
REMOVE EXIST. DRAIN LINE FROM DMH TO C.B.
NEW 4" SANITARY INV. = 221.00
15'-0" x 53'-0" BIT. CONC. PAD
NEW 6'-0" HIGH CHAIN LINK FENCE WITH GATE
NEW D.M.H. RIM = 225.20 INV. = 221.00
S.M.H. RIM = 225.00 INV. = 221.54
EXISTING STACK
EXIST. C.B.
NEW 6" DRAIN
INV. SANITARY = 221.80
INV. DRAIN = 221.00
B.H. #1
B.H. #8
NEW SCIENCE WING F.F. EL. = 226.00
NEW GREENHOUSE
B.H. #9
INV. DRAIN = 221.50
M.H. EL.A. 225.97 INV. EL. 221.92
INV. IN 221.60
EXIST. D.M.H. RIM = 224.00 INV. = 218.08
EXIST. C.B. RIM = 229.64
CONTRACT LIMIT TO ALSO BE EXTENDED TO AREAS IN WHICH EXISTING TREES ARE TO BE TRANSPLANTED, WHICH ARE NOT SHOWN ON THIS SHEET
EXISTING 20' WIDE SERVICE ROAD
VERIFY RIM ELEV. IN FIELD
EXIST. C.B. RIM = 222.00
RAISE RIM TO ELEV. = 223.90 INV. = 219.00
NEW 10" DRAIN LINE
10' R
5' R.
+223.62
+224.52
+224.78
+224.77
+225.78
+225.82
+224.60
+224.40
+225.30
+225.80
+225.90
+225.49
+225.25
+225.50
+225.30
+225.80
+225.30
+225.80
+225.30
+225.80

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

BORING LOGS

SUMMARY OF THE BURMISTER SOIL CLASSIFICATION SYSTEM (MODIFIED)

RELATIVE DENSITY (of non-plastic soils) OR CONSISTENCY (of plastic soils)

STANDARD PENETRATION TEST (SPT)
Method: Samples were collected in accordance with ASTM D1586, using a 2" diameter split spoon sampler driven 24 inches. If samples were collected using direct push methodology (Geoprobe), SPTs were not performed and relative density/consistency were not reported. N-Value: The number of blows with a 140 lb. hammer required to drive the sampler the middle 12 inches. WOR: Weight Of Rod (depth dependent) WOH: Weight Of Hammer (140 lbs.)

COHESIONLESS SOILS		COHESIVE SOILS	
BLOWS/FOOT (SPT N-Value)	RELATIVE DENSITY	BLOWS/FOOT (SPT N-Value)	CONSISTENCY
0-4	Very loose	<2	Very soft
4-10	Loose	2-4	Soft
10-30	Medium dense	4-8	Medium Stiff
30-50	Dense	8-15	Stiff
>50	Very dense	15-30	Very stiff
*Based upon uncorrected field N-values		>30	Hard

MATERIAL: (major constituent identified in CAPITAL letters)

COHESIONLESS SOILS		
MATERIAL	FRACTION	GRAIN SIZE RANGE
GRAVEL	Coarse	3/4" to 3"
	Fine	1/4" to 3/4"
SAND	Coarse	1/16" to 1/4"
	Medium	1/64" to 1/16"
	Fine	Finest visible & distinguishable particles
SILT/CLAY	see adjacent table	Cannot distinguish individual particles
COBBLES	3" to 6" in diameter	
BOULDERS	> 6" in diameter	
Note: Boulders and cobbles are observed in test pits and/or auger cuttings.		

COHESIVE SOILS		
SMALLEST DIAMETER	PLASTICITY	IDENTITY
None	Non-plastic	**SILT**
1/4" (pencil)	Slight	**Clayey SILT**
1/8"	Low	**SILT & CLAY**
1/16"	Medium	**CLAY & SILT**
1/32"	High	**Silty CLAY**
1/64"	Very High	**CLAY**
Wetted sample is rolled in hands to smallest possible diameter before breaking.		

ORGANIC SILT: Typically gray to dark gray, often has strong H2S odor. May contain shells or shell fragments. Light weight.

Fibrous PEAT: Light weight, spongy, mostly visible organic matter, water squeezed readily from sample. Typically near top of layer.

Fine grained PEAT: Light weight, spongy, little visible organic matter, water squeezed from sample. Typically below fibrous peat.

DEBRIS: Detailed contents described in parentheses (wood, glass, ash, crushed brick, metal, etc.)

BEDROCK: Underlying rock beneath loose soil, can be weathered (easily crushed) or competent (difficult to crush).

ADDITIONAL CONSTITUENTS

TERM	% OF TOTAL
and	35-50%
some	20-35%
little	10-20%
trace	1-10%

COMMON TERMS

Glacial till: Very dense/hard, heterogeneous mixture of sand, silt, clay, sub-angular gravel. Deposited at base of glaciers, which covered all of New England.

Varved clay: Fine-grained, post-glacial lake sediments characterized by alternating layers (or varves) of silt, sand and clay.

Fill: Material used to raise ground, can be engineered or non-engineered.

COMMON FIELD MEASUREMENTS

Torvane: Undrained shear strength is estimated using an E285 Pocket Torvane (TV). Values in tons/ft2.

Penetrometer: Unconfined compressive strength is estimated using a Pocket Penetrometer (PP). Values in tons/ft2.

RQD: Rock Quality Designation is determined by measuring total length of pieces of core 4" or greater and dividing by the total length of the run, expressed as %. 100-90% excellent; 90-75% good; 75-50% fair; 50-25% poor; 25-0% very poor.

PID: Soil screened for volatile organic compounds (VOCs) using a photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-1

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	25.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	221.0	FOREMAN	Mike G.	CASING	
START DATE	11/10/2022	DISTURBED SAMPLES	6	HELPER	Ben B.	CASE DIAMETER	N/A
FINISH DATE	11/10/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Hollow Stem Auger	HAMMER WGT	N/A
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	A (1 5/8" O.D.)	HAMMER DROP	N/A
BORING LOCATION	Southeast of Existing Baseball Field	FIRST (ft)	10.0	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	SAMPLES: FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	2/5/6/10	18/24	S-1 (0'-2')	0.0	Top 5" : Medium dense, brown, fine SAND, some to little medium sand, little silt, little organics (roots), dry (TOPSOIL) Bottom 13" : Medium dense, brown, fine SAND, some medium sand, little silt, trace fine gravel, trace (-) coarse sand, trace organics (roots), dry	TOPSOIL FILL/REWORKED SOILS	1.
	17/14/14/12	15/24	S-2 (2'-4')	0.0	Top 10" : Medium dense, red brown, fine SAND, some medium sand, some to little silt, trace (+) gravel, trace coarse sand, dry Bottom 5" : Medium dense, grey brown, fine to medium SAND, little to trace silt, trace (-) coarse sand, dry	3.5 217.5 FINE TO MEDIUM SAND	2. , 3. 4.
5'							
	10/12/17/16	24/24	S-3 (5'-7')	0.0	Medium dense, grey brown, fine to medium SAND, trace (+) silt, trace coarse sand, moist (little rust staining throughout)		
10'						▽ 211.0	
	11/13/17/18	13/24	S-4 (10'-12')	0.0	Medium dense, light brown, fine to medium SAND, trace (+) silt, trace coarse sand, wet (little rust staining throughout)		5.
15'							
	12/13/13/13	14/24	S-5 (15'-17')	0.0	Medium dense, light brown, fine to medium SAND, trace (+) silt, trace coarse sand, wet (little rust staining throughout)		
20'							
	10/13/22/22	24/24	S-6 (20'-22')	0.0	Dense, light brown, fine to medium SAND, little silt, trace coarse sand, wet (some rust staining in bottom 11")		
25'						25.0 196.0	6.
					End of Exploration at 25'		

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Auger refusal at 2.5 feet below ground surface upon likely cobble.
3. Offset boring 5 feet south.
4. Auger grinding between 2.5 and 3 feet upon likely cobbles and gravel.
5. Slow drilling between 10 and 25 feet, to prevent disturbance to saturated coarse-grained soils.
6. Sample was not taken at 25 feet due to excessive soil blow-in.

PROJECT NO.
1843-21-01

LOG OF BORING
HS-1

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-2

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	22.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	222.0	FOREMAN	Mike G.	CASING	
START DATE	11/10/2022	DISTURBED SAMPLES	6	HELPER	Ben B.	CASE DIAMETER	N/A
FINISH DATE	11/10/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Hollow Stem Auger	HAMMER WGT	N/A
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	A (1 5/8" O.D.)	HAMMER DROP	N/A
BORING LOCATION	East of Existing Tennis Courts	FIRST (ft)	9.0	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	SAMPLES: FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	1/5/6/7	20/24	S-1 (0'-2')	0.0	Top 6" : Medium dense, dark brown, fine SAND, some medium sand, some to little silt, trace (-) coarse sand, little organics (roots), dry (TOPSOIL) Bottom 14" : Medium dense, dark brown, fine SAND, some medium sand, little silt, trace gravel, trace coarse sand, trace organics (roots), dry	TOPSOIL FILL/REWORKED SOILS	1.
	9/19/20/18	19/24	S-2 (2'-4')	0.0	Top 8" : Dense, grey brown, fine SAND, some medium sand, little silt, trace gravel, trace coarse sand, dry Bottom 11" : Dense, light grey brown, medium SAND, some fine sand, little coarse sand, trace fine gravel, trace (-) silt, dry	3.0 219.0 MEDIUM TO COARSE SAND	
5'							
	12/20/24/20	18/24	S-3 (5'-7')	0.0	Dense, light brown, medium to coarse SAND, some fine sand, little gravel, trace silt, dry (little rust staining throughout)	▽ 213.0	
10'							2.
	5/6/12/14	20/24	S-4 (10'-12')	0.0	Medium dense, light brown, medium to coarse SAND, some fine sand, little to trace gravel, trace silt, wet	15.0 207.0	
15'							
	5/6/9/17	14/24	S-5 (15'-17')	0.0	Medium dense, light brown, fine to medium SAND, trace (+) coarse sand, trace silt, wet	FINE TO MEDIUM SAND	
20'							
	6/11/11/12	15/24	S-6 (20'-22')	0.0	Medium dense, light brown, fine to medium SAND, trace silt, trace (-) coarse sand, wet	22.0 200.0	
					End of Exploration at 22'		
25'							

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Slow drilling between 10 and 20 feet, to prevent disturbance to saturated coarse-grained soils.

PROJECT NO.
1843-21-01

LOG OF BORING
HS-2

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-3

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	32.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	221.5	FOREMAN	Mike G.	CASING	
START DATE	11/10/2022	DISTURBED SAMPLES	8	HELPER	Ben B.	CASE DIAMETER	4"
FINISH DATE	11/10/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Roller Bit with Wash	HAMMER WGT	300 lb
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	N (2 3/8" O.D.)	HAMMER DROP	30"
BORING LOCATION	North of Existing Baseball Field	FIRST (ft)	N/A	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	SAMPLES: FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	2/9/14/18	15/24	S-1 (0'-2')	0.0	Top 5" : Medium dense, dark brown, fine SAND, some medium sand, some to little silt, little organics (roots), dry (TOPSOIL) Bottom 10" : Medium dense, brown, fine SAND, some medium sand, little silt, trace coarse sand, trace gravel, dry	TOPSOIL FILL/REWORKED SOILS 2.0 ▼ 219.5	1.
	19/13/14/20	16/24	S-2 (2'-4')	0.0	Medium dense, red brown, fine to medium SAND, little coarse sand, trace (+) gravel, trace silt, dry	FINE TO MEDIUM SAND	
5'	22/20/25/21	17/24	S-3 (4'-6')	0.0	Dense, light grey brown, fine to medium SAND, some to little coarse sand, trace (+) fine gravel, trace silt, damp		2.
10'	6/9/10/14	12/24	S-4 (10'-12')	0.0	Medium dense, light brown, fine to medium SAND, some to little coarse sand, trace silt, trace fine gravel (some rust staining in bottom 3")		
15'	6/11/10/17	6/24	S-5 (15'-17')	0.0	Medium dense, light brown, fine to medium SAND, trace coarse sand, trace silt		
20'	14/19/18/24	10/24	S-6 (20'-22')	0.0	Dense, brown, fine to medium SAND, trace gravel, trace silt, trace (-) coarse sand		
25'	18/30/38/41	18/24	S-7 (25'-27')	0.0	Very dense, brown, fine to medium SAND, trace silt, trace (-) coarse sand		3.

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Began casing and drilling with wash after sample S-3.
3. Difficulty driving casing between 25 and 30 feet below ground surface, upon likely very dense soils.
4. Difficult drilling between 29 and 30 feet.

PROJECT NO. 1843-21-01

LOG OF BORING HS-3

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

Job No. 1843-21-01

LOG OF BORING HS-3

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
						FINE TO MEDIUM SAND (continued) 29.0 192.5	
30'	32/33/30/26	13/24	S-8 (30'-32')	0.0	Very dense, brown red, fine SAND, some silt, little medium sand, little to trace coarse sand, trace (+) gravel	GLACIAL TILL 32.0 189.5	4.
					End of Exploration at 32'		
35'							
40'							
45'							
50'							
55'							
60'							

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-4

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	32.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	222.0	FOREMAN	Mike G.	CASING	
START DATE	11/11/2022	DISTURBED SAMPLES	8	HELPER	Ben B.	CASE DIAMETER	4"
FINISH DATE	11/11/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Roller Bit with Wash	HAMMER WGT	300 lb
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	N (2 3/8" O.D.)	HAMMER DROP	30"
BORING LOCATION	Southwest of Existing Baseball Field	FIRST (ft)	N/A	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	REC. (in)	TYPE/ NO.	FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	2/5/3/4	15/24	S-1 (0'-2')	0.0	Top 6" : Loose, dark brown, fine SAND, some medium sand, little silt, trace coarse sand, trace fine gravel, little organics (roots), damp (TOPSOIL) Bottom 9" : Loose, brown, fine to medium SAND, little to trace coarse sand, trace (+) silt, trace fine gravel, trace organics (roots), dry	TOPSOIL FILL/REWORKED SOILS 2.0 ▼ 220.0	1.
	6/8/8/10	17/24	S-2 (2'-4')	0.0	Medium dense, red brown, fine to medium SAND, little to trace coarse sand, trace gravel, trace silt, dry	FINE TO MEDIUM SAND	
5'	10/11/11/10	20/24	S-3 (4'-6')	0.0	Top 12" : Medium dense, red brown, fine to medium SAND, little to trace coarse sand, trace gravel, trace silt, dry Bottom 8" : Medium dense, light brown, fine to medium SAND, trace (+) coarse sand, trace silt, dry		2.
10'	9/9/11/11	11/24	S-4 (10'-12')	0.0	Medium dense, light brown, fine to medium SAND, trace (+) coarse sand, trace silt, trace (-) fine gravel		
15'	11/11/9/14	16/24	S-5 (15'-17')	0.0	Medium dense, light brown, fine to medium SAND, trace (+) coarse sand, trace silt trace (-) fine gravel		
20'	11/15/16/17	13/24	S-6 (20'-22')	0.0	Dense, light brown, fine to medium SAND, trace coarse sand, trace silt (trace rust staining throughout)		
25'	9/11/14/17	15/24	S-7 (25'-27')	0.0	Medium dense, brown, fine to medium SAND, trace silt (some rust staining in top 5")		3.

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Began casing and drilling with wash after sample S-3.
3. Began open hole drilling at 25 feet below ground surface.
4. Difficult drilling between 28 and 30 feet.

PROJECT NO. 1843-21-01

LOG OF BORING HS-4

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

Job No. 1843-21-01

LOG OF BORING HS-4

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
30'						FINE TO MEDIUM SAND (continued)	
						GLACIAL TILL	4.
	21/26/33/37	16/24	S-8 (30'-32')	0.0	Very dense, brown red, fine SAND, some medium sand, some to little silt, trace (+) coarse sand, trace gravel	32.0 190.0	
					End of Exploration at 32'		
35'							
40'							
45'							
50'							
55'							
60'							

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-5

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	22.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	222.5	FOREMAN	Mike G.	CASING	
START DATE	11/11/2022	DISTURBED SAMPLES	6	HELPER	Ben B.	CASE DIAMETER	N/A
FINISH DATE	11/11/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Hollow Stem Auger	HAMMER WGT	N/A
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	A (1 5/8" O.D.)	HAMMER DROP	N/A
BORING LOCATION	East Portion of Existing Soccer Field, South of Existing Parking Lot	FIRST (ft)	12.0	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	SAMPLES: FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	2/6/6/6	18/24	S-1 (0'-2')	0.0	Top 5" : Medium dense, dark brown, fine SAND, some medium sand, some to little silt, trace (-) gravel, little organics (roots), dry (TOPSOIL) Middle 5" : Medium dense, brown, fine SAND, some medium sand, little silt, trace coarse sand, trace organics (roots), dry Bottom 8" : Medium dense, light brown, fine to medium SAND, little coarse sand, trace silt, dry	TOPSOIL FILL/REWORKED FINE TO MEDIUM SAND	1.
	9/10/21/50	20/24	S-2 (2'-4')	0.0	Dense, light red brown, fine to medium SAND, little coarse sand, trace (+) gravel, trace silt, dry		2.
5'							
	12/13/17/13	16/24	S-3 (5'-7')	0.0	Top 9" : Medium dense, light brown, fine to medium SAND, trace coarse sand, trace silt, trace (-) gravel, damp (gravel at top ; trace rust staining throughout) Middle 3" : Medium dense, brown, fine to medium SAND, little silt, moist (little rust staining throughout) Bottom 4" : Medium dense, light brown, fine to medium SAND, trace coarse sand, trace silt, trace (-) gravel, moist		
10'							
	4/6/7/6	14/24	S-4 (10'-12')	0.0	Medium dense, light brown, medium to coarse SAND, some fine sand, trace fine gravel, trace silt, moist (bottom 3" wet)	▽ 210.5	3.
15'							4.
	11/11/12/10	12/24	S-5 (15'-17')	0.0	Medium dense, light brown, fine to medium SAND, trace silt, trace coarse sand, wet		
20'							4.
	8/12/24/28	24/24	S-6 (20'-22')	0.2	Dense, light brown, fine to medium SAND, trace silt, trace coarse sand, wet	22.0 200.5	
					End of Exploration at 22'		
25'							

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Auger grinding significantly between 3.5 and 4 feet below ground surface, upon likely cobble or gravel.
3. Slow drilling between 10 and 20 feet, to prevent disturbance to saturated, coarse-grained soils.
4. Auger grinding from 14.5 to 15 feet and 19 to 20 feet, upon likely gravel or cobble.

PROJECT NO.
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LOG OF BORING
HS-5

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

LOG OF BORING HS-6

PROJECT	East Longmeadow High School			CONTRACTOR	Seaboard Environmental Drilling		
JOB NUMBER	1843-21-01	FINAL DEPTH (ft)	32.0	DRILLING EQUIPMENT	B-53 Truck Mounted Rig		
LOCATION	East Longmeadow, MA.	SURFACE ELEV (ft)	222.5	FOREMAN	Mike G.	CASING	
START DATE	11/11/2022	DISTURBED SAMPLES	8	HELPER	Ben B.	CASE DIAMETER	N/A
FINISH DATE	11/11/2022	UNDISTURBED SAMPLES	0	BIT TYPE	Hollow Stem Auger	HAMMER WGT	N/A
ENGINEER/SCIENTIST	Shannon Raymond	WATER LEVEL		ROD TYPE	A (1 5/8" O.D.)	HAMMER DROP	N/A
BORING LOCATION	Southeast of Existing Parking Lot	FIRST (ft)	10.0	SAMPLER	2" O.D. Split Spoon	ROCK CORING INFORMATION	
		LAST (ft)	N/A	HAMMER TYPE	Safety	TYPE	N/A
		TIME (hr)	N/A	HAMMER WGT/DROP	140 lb / 30" Wire Line	SIZE	N/A

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	SAMPLES: FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
	9/16/17/21	17/24	S-1 (0'-2')	0.0	Top 8" : Dense, dark brown, fine SAND, some medium sand, little silt, trace coarse sand, trace gravel, trace organics (roots), damp Bottom 9" : Dense, brown, fine to medium SAND, little coarse sand, trace (+) silt, trace gravel, dry	TOPSOIL FILL/REWORKED SOILS 2.0 ▼ 220.5	1.
	35/34/37/28	15/24	S-2 (2'-4')	0.0	Very dense, red brown, fine to medium SAND, little coarse sand, trace (+) silt, trace (+) gravel, dry	FINE TO MEDIUM SAND	2.
5'							3.
	18/18/16/16	18/24	S-3 (5'-7')	0.0	Top 3" : Dense, light brown, fine to medium SAND, little coarse sand, trace silt, trace fine gravel, damp Middle 6" : Dense, brown, fine to medium SAND, little silt, moist Bottom 9" : Dense, light brown, fine to medium SAND, little coarse sand, trace silt, trace fine gravel, damp		
10'						▽ ▼ 212.5	
	8/10/14/12	13/24	S-4 (10'-12')	0.0	Medium dense, light brown, medium to coarse SAND, some fine sand, little to trace gravel, trace silt, wet	MEDIUM TO COARSE SAND	4.
15'							
	3/5/9/8	15/24	S-5 (15'-17')	0.0	Medium dense, light brown, medium to coarse SAND, some fine sand, little gravel, trace silt, wet		
20'							
	6/9/13/17	20/24	S-6 (20'-22')	0.0	Medium dense, light brown, fine to medium SAND, trace coarse sand, trace silt, trace (-) fine gravel, wet	20.0 ▼ 202.5 FINE TO MEDIUM SAND	
25'							
	21/23/19/25	24/24	S-7 (25'-27')	0.1	Dense, light brown, fine to medium SAND, trace silt, trace coarse sand, wet (trace rust staining throughout)		

Remarks:
1. Soil screened in field using MiniRAE Lite photoionization detector (PID) referenced to benzene in air. Readings in parts per million by volume.
2. Auger grinding between 2 and 5 feet below ground surface, upon likely gravel and cobbles.
3. Slow drilling between 4 and 10 feet, upon dense soils.
4. Slow drilling between 10 and 20 feet, to prevent disturbance to saturated, coarse-grained soils.

PROJECT NO. 1843-21-01

LOG OF BORING HS-6

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

Job No. 1843-21-01

LOG OF BORING HS-6

DEPTH (ft)/ SAMPLES	SAMPLES: PENETR. RESIST. (bl / 6 in)	SAMPLES: REC. (in)	SAMPLES: TYPE/ NO.	FIELD TEST DATA	SAMPLE DESCRIPTION (MODIFIED BURMISTER)	PROFILE DEPTH (ft) ELEV.	REMARKS/ WELL CONSTRUCTION
30'	12/19/29/36	15/24	S-8 (30'-32')	0.0	Dense, light brown, fine to medium SAND, trace silt, trace coarse sand, wet	FINE TO MEDIUM SAND (continued) 32.0 190.5	
					End of Exploration at 32'		
35'							
40'							
45'							
50'							
55'							
60'							

O'Reilly, Talbot & Okun
ENGINEERING ASSOCIATES

J1843-21-01
August 9, 2023

Ms. Dorrie Brooks
Jones Whitsett Architects
308 Main Street
Greenfield, Massachusetts 01301

Re: Supplemental Geotechnical Engineering Recommendations
East Longmeadow High School
180 Maple Street
East Longmeadow, Massachusetts

Dear Ms. Brooks:

This letter summarizes information we provided in the August 8, 2023 conference call with the project team. It is intended to supplement preliminary recommendations provided in our December 19, 2022 report for the proposed East Longmeadow High School.

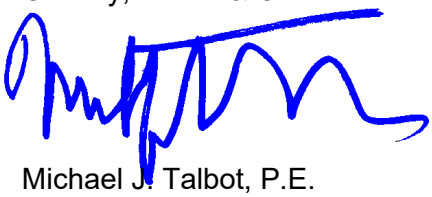
The significant comments and recommendations provided include:

- A surface layer of topsoil is underlain by a thin layer of reworked site soils or non-engineered is present at the ground surface.
- The deeper natural soils are relatively dense and conditions are favorable for the proposed construction.
- The topsoil layer should be stripped from beneath the building footprint and below pavements. The topsoil can be reused in future construction; however, it may be necessary to amend the existing topsoil so that it is suitable for use in athletic fields. We recommend additional measurements of topsoil thickness and nutrient testing during final design. The thickness of topsoil in future playing fields and landscaped areas should be determined by the landscape architect.
- The reworked soils/fill consists of a loose to dense, fine to medium sand with little to trace coarse sand, varying amounts of silt, and trace gravel and organics (roots). This layer is on the order of three feet. It contains little or no debris and other deleterious materials and it should be possible to reuse this soil as engineered fill in landscaped areas and beneath the building and pavements. Given the nature of the material and limited thickness, the existing reworked soil/fill can remain in place provided the entire building and pavement footprint is proof compacted prior to placing any additional fill. Therefore, it should not be necessary to excavate and replace the existing fill layer.
- The building slab should be underlain by a minimum of eight inches of sand and gravel.
- We note that the existing site soil may not meet requirements for sand and gravel below slabs or gravel base course below pavements. Therefore, these materials will need to be imported.
- The materials excavated from footings for the new building can be reused as common fill.

- The footings for the new building should be supported on 6-inches of either sand and gravel or ¾-inch crushed stone over a proof-compacted subgrade.
- Depending on the timing of the project it may be possible to supplement existing site soil with crushed building materials.
- We recommend that playing fields be proof compacted to compact any loose areas created during the demolition of the existing school building.

We appreciated the opportunity to be of service on this project. If you have any questions, please do not hesitate to contact the undersigned.

Sincerely yours,
O'Reilly, Talbot & Okun Associates, Inc.



Michael J. Talbot, P.E.
Principal

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2-6
Building Code Analysis & List of Permitting Requirements

Applicable Codes

Code Type	Applicable Code (Model Code Basis)
Building	780 CMR: Massachusetts State Building Code, 10th Edition[A] • Amended 2021 International Building Code (IBC) • Amended 2021 International Existing Building Code (IEBC)
Fire Prevention	527 CMR: Massachusetts Fire Prevention Regulations
Accessibility	521 CMR: Massachusetts Architectural Access Board Regulations 2010 ADA Standards
Electrical	527 CMR 12.00: Massachusetts Electrical Code • Amended 2023 National Electrical Code
Elevators	524 CMR: Massachusetts Elevator Code • Amended ASME A17.1-2013/CSA B44-13
Mechanical	2021 International Mechanical Code (IMC)[A]
Plumbing	248 CMR: Massachusetts Plumbing Code
Energy Conservation	2021 International Energy Conservation Code (IECC) & Stretch Energy Code (225 CMR 23)

A. The 10th Edition of 780 CMR is expected to take effect in 2023, although a specific date has yet to be announced. The 10th Edition will be based on the 2021 International Codes.

Occupancy Classification

- Use Group E (School)
- Use Group A-1 (Auditorium – Non-School Function)
- Use Group A-3 (Gym & Cafeteria – Non-School Function)
- Use Group A-4 (Gym with Spectator Seating)

For the purposes of this report, it has been assumed that the Gym, Cafeteria and Auditorium could be used for non-school events and therefore must be considered a Use Group A occupancies rather than part of the primary Use Group E occupancy (IBC 303.1.3).

Construction Type

- Type IB (2-hour, non-combustible)

Height and Area Limitations

The following tables summarize the height and area limitations for the primary Use Group E and the most restrictive Use Group A-1 occupancy:

Construction Type IB

Code Reference	Use Group E		Use Group A-1	
	Height	**Area**	**Height**	**Area**
IBC Tables 504.3, 504.4 & 506.2: Tabular Value	6 St. (180 ft)	Unlimited	6 St. (180 ft)	Unlimited
Height and Footprint Area Allowed	**6 St. (180 ft)**	**Unlimited**	**6 St. (180 ft)**	**Unlimited**
Actual Height and Footprint Area	**2 St. 141,320 ft^2**			

As indicated in the table above, the building will comply with the height and area limitations for Type IB construction.

Fire Department Access

All newly constructed facilities, buildings, or portions thereof are required to be provided with a fire department access road which may consist of roadways, fire lanes, parking lot lanes, or some combination thereof (527 CMR 1 Section 18.2.3.1). These access roads must have the following features,

- Must extend to within 50’ of an exterior door that can be opened from the outside and provide access to the interior of the building.
- No portion of the facility or exterior wall on the first story of a building is greater than 250’ from fire department access roads measured along an approved route.
- Multiple access roads can be required by the AHJ if it is determined that a single road can be significantly impaired by external factors.
- Unobstructed minimum width of 20’ unless constructed boulevard-style which a 10’ minimum width is permitted.
- Unobstructed vertical clearance of 13’-6”.

Fire Resistance Ratings

The following fire resistance ratings are required in accordance with IBC Table 601 and various sections of the code.

Building Element	Fire Resistance Rating (Hrs)
	Type IB
Primary Structural Frame[A]	2
Exterior Bearing Walls	2
Interior Bearing Walls	2
Exterior Non-Bearing Walls	0 Based on Fire Separation Distance > 20 feet
Interior Non-Bearing Walls	2
Floor Construction	2
Roof Construction (not including Primary Structural Frame)	1[B]

A. Includes beams, trusses, floor members, etc. having a direct connection to the columns (IBC 202).

The primary structural frame shall include all of the following structural members:

a) The columns;
b) Structural members having direct connections to the columns, including girders, beams, trusses and spandrels;
c) Members of the floor construction and roof construction having direct connections to the columns; and
d) Bracing members that are essential to the vertical stability of the primary structural frame under gravity loading shall be considered part of the primary structural frame whether or not the bracing member carries gravity loads.

B. Fire protection of structural members shall not be required, including protection of roof framing and decking where every part of the roof construction is 20 feet or more above any floor immediately below. Heavy timber is allowed in roof construction where a 1-hour or less fire-resistance rating is required. Note that under the current code these exceptions do not apply to the structural members that are considered part of the primary structural frame as defined by IBC 202. However, in the 10th Edition (2021 IBC) all structure located entirely more than 20 feet above the floor below (including primary structural framing) does not require a

fire rating and all roof structure (including primary members) can be of heavy timber regardless of the height above the floor below.

Building Element		Fire Resistance Rating (Hrs)	Opening Protectives (Hrs)
Exit Access Corridors & Stairs (IBC Table 1020.1)		0	0
Shafts (IBC 713.4 – Not less than the floor rating)		2	1½
Elevator Machine Room (IBC 3005.4)		2	1½
Storage Room Under Stairs (IBC 1011.7.3)		1	¾
Stage and Appurtenant Rooms (IBC 410)		See Stage Section of Code Report	
Emergency Electrical Room (527 CMR 12.00 700-10(D)(2))		2[A]	1½
Electrical Rooms	With Sprinklers	0	
	Without Sprinklers (NFPA 13)	2	

A. No rating is required for the room when fully sprinklered, however a 2-hr rating is still required for the emergency feeder-circuit wiring and rooms containing an emergency generator (NFPA 110 Section 7.2.1.1).

Incidental Accessory Occupancies (IBC Table 509)	
Room or Area	**Separation and/or Protection***
Furnace room where any piece of equipment is over 400,000 Btu per hour input	Smoke Resistant
Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower	Smoke Resistant
Laboratories and vocational shops not classified as Group H in Group E occupancies	Smoke Resistant

*Where an automatic fire-extinguishing system without a fire barrier is permitted, accessory occupancies shall be separated from the remainder of the building by construction capable of resisting the passage of smoke and doors shall be self- or automatic-closing upon detection of smoke.

Fire walls, fire barriers, fire partitions, smoke barriers, and smoke partitions, or any other wall required to have protected openings or penetrations must be identified with signs or stenciling within accessible concealed spaces (i.e. above suspended ceiling assemblies, in attic spaces) at 30 ft intervals (IBC 703.7).

Exterior Wall Openings & Fire Resistance Ratings

The nonbearing exterior wall rating requirements and opening limitations are based on the fire separation distance for each wall. The fire separation distance is measured perpendicular to the exterior wall to the centerline of a public street, an interior lot line, or an imaginary lot line between two buildings on the same lot (IBC 702.0). Where the fire

separation distance is more than 20 ft the wall is not required to be rated and the allowable area of openings is not limited (IBC Table 602 Note g and Table 705.8).

Vertical Floor Openings

Vertical openings are required to comply with IBC 712. The proposed plans include various two-story floor openings that can be completely open in accordance with IBC Section 712.1.9 and open exit access stairs permitted by IBC Section 1019.3 that can be used for egress without requiring any enclosure or further protection.

Finishes

Interior Finish

The interior finish of walls and ceilings must comply with the table below.

Walls & Ceilings (IBC Table 803.11) - Sprinklered

Building Component	Use Group E	Use Group A
Exit Enclosures and Passageways	Class B	Class B
Corridors	Class C	Class B
Rooms & Enclosed Spaces	Class C	Class C

Note that where exit stairs and exit access corridors serve all use groups, the most restrictive interior finish is required.

Floor Finishes

Since the building will be equipped with an automatic sprinkler system, traditional floor coverings such as wood, vinyl and other resilient floor coverings as well as carpeting passing the DOC FF-1 pill test are allowed throughout the building, including all exits, exit passageways and exit access corridors (IBC Section 804.4.2).

Exterior Finish

Exterior wall finishes must fully comply with the requirements of IBC Chapter 14. Combustible materials are permitted to be used as an exterior wall finish for this building in accordance with IBC Section 1406.0; however, all exterior wall finishes and architectural trim located greater than 40 feet above grade plane must be constructed of approved noncombustible materials and must be secured to the wall with metal or other approved noncombustible brackets (IBC Section 1406.2.2). Additionally, combustible exterior wall

finish is limited to 10% of the exterior wall surface area where the fire separation distance is 5 ft or less.

The use of plastic materials as part of the exterior wall assembly (i.e. foam plastic insulation) must comply with 780 CMR 26 (IBC 1404.8). The wall assembly must be tested in accordance with NFPA 285 or one of the alternative standards listed in IBC Section 2603.9.

Stage Requirements

The stage areas must comply with IBC 410 which includes the following requirements:

a. Stages must be constructed of materials as required for floors for the type of construction of the building unless the finished floor is constructed of wood or approved non-combustible materials and openings through stage floors shall be equipped with tight-fitting, solid wood trap doors with approved safety locks (410.3.1).
b. Galleries, gridirons, and catwalks shall be constructed of approved materials consistent with the requirements of the type of construction of the building (i.e. non-combustible) but do not require structural fire ratings (410.3.2).
c. Combustible materials used for sets and scenery shall meet NFPA 701 fire propagation performance criteria (410.3.6).
d. If the height of the stage is greater than 50 feet, a 2-hour rated proscenium wall and proscenium fire curtain are required (IBC 410.3.4 & 410.3.5).
e. Emergency ventilation is required since the stage is larger than 1,000 square feet. It must comply with one of the following options (410.3.7).
    i. Two or more heat activated roof vents with aggregate opening of not less than 5% of stage area.
    ii. Smoke control system that maintains a smoke layer interface not less than 6 feet above the highest level of the assembly seating.
f. Stage must be separated from other parts of the building including dressing rooms and scene docks by 1 hour-rated construction (410.5.1).
g. Appurtenant rooms to the stage, such as dressing rooms, scene shop, and storerooms, must be separated by 1 hour-rated construction for each other and other parts of the building (410.5.2).
h. Exit access doors must be provided on each side of the stage (410.6.1).
i. Standpipe hose connections in accordance with IBC 905.3.4 are required on the stage since the stage is more than 1,000 ft^2 in area (410.8).
j. Technical production areas (i.e. catwalks) only require a single means of access and egress provided the common path of travel does not exceed 100 feet (IBC 410.6.3.3).

Means of Egress

a. Maximum exit access travel distance must be less than 250 feet (IBC Table 1017.2).

b. Maximum dead-end corridor length must be less than 20 ft or 2.5 times the least width of space on the First Floor due to the Use Group A occupancy (IBC 1020.4). On the Second Floor (Use Group E) dead end corridors are permitted up to 50 feet in length (IBC 1020.4 Exception 2).

   The proposed plans don't include any dead-ends exceeding the allowed limits.

c. Corridors serving 100 or more occupants must have a minimum width of 72 inches. Corridor serving 50-99 occupants must have a minimum width of 44 inches. Corridors serving 49 occupants or less may have a minimum width of 36 inches. (IBC Table 1020.2).

d. All rooms or spaces with an occupant load greater than 49 people or a common path of travel distance over 75 ft must be provided with two egress doors swinging in the direction of egress and illuminated exit signs at each exit (IBC Table 1006.2.1 & Sections 1010.1.2.1 & 1013.1). Boiler rooms require two means of egress if the room is greater than 500 sqft. and includes individual fuel-fired equipment greater than 400,000 Btuh input capacity.

   This includes the Gym, Auditorium, Cafeteria, and Stage which all have multiple means of egress as required. **The two egress doors directly from the stage currently do not swing in the direction of egress as required however.**

   Individual classrooms with an area over 980 ft^2 have a calculated occupant load exceeding 49 people and require two means of egress, except for classrooms that can be considered "vocational" (typically applied to science classrooms, art classrooms, etc.) which can be up to 2,450 ft^2 with a single means of egress. The plans indicate that the majority of the rooms with a calculated occupant load greater than 49 people will be provided with two means of egress. **The two egress doors directly from the Chorus and Band rooms currently do not swing in the direction of egress as required however.**

e. Doors serving assembly or educational rooms with more than 49 people and doors along the path of egress travel from such rooms must be provided with panic hardware (IBC 1010.1.10). Doors from main electrical rooms must swing in the direction of egress with panic hardware and have high/low exit signs where required by the Electrical Code (NFPA 70).

f. All means of egress lighting and exit signs throughout the building must be provided with an emergency power supply to assure continued illumination for not less than 1.5 hours in case of primary power loss (IBC 1008.2 & 1008.3.4).

g. Remote means of egress must be separated by ⅓ of the diagonal dimension of the room or space they serve (IBC 1007.1.1). The distance between exits must be measured in a straight line between exit doors.

   Both floors and all rooms and spaces which require two means of egress are provided with remote egress routes.

h. Stairway with a required width over 60 inches must have an intermediate center handrail (IBC 1014.9).

   Although the proposed plans include stairs greater than 60 inches in width, based on the occupant load served none of the proposed stairways have a required width greater than 60 inches. Therefore a center handrail is not required.

   i. A stair or alternating tread device must be provided to any main roof surface four or more stories above grade (IBC 1011.12). Roofs and penthouses containing elevator equipment that must be accessed for maintenance are required to be accessed by a stairway (IBC 1011.12.1). Permanent means of access to any roof containing mechanical equipment must be provided in accordance with the Mechanical Code.

   j. A two-way communication system is required at each elevator landing on each floor above the level of exit discharge (780 CMR 1009.8).

   k. The passenger elevator must be sized to accommodate the loading and transportation of an ambulance gurney or stretcher sized 24" wide by 84" long with 5" radius corners (524 CMR 35.00(2.27.12)).

Required Fire Protection Systems

a. NFPA 13 sprinkler system (780 CMR Table 903.2 & M.G.L. c148 s26G)

b. Voice/Alarm signaling system (IBC 907.2.3)

c. Standpipe system – at the stage only (IBC 410.8). Since the 2nd Floor elevation is less than 30 feet above the lowest level of fire department vehicle access additional standpipe hose connections are not required within the building (IBC 905.3.1)

d. Fire extinguishers (527 CMR 1, Table 13.6.2(a) & IBC 906.1).
   Fire extinguishers must be located throughout the building so that the maximum travel distance to an extinguisher is less than 75 feet (527 CMR 1, Table 13.6.2(a)).

e. Carbon monoxide detection in accordance with IBC 915 and 527 CMR 1 chapter 13.

f. Emergency responder radio coverage (IBC 916)

Energy Code Provisions

The Massachusetts Stretch Code as adopted by the City of East Longmeadow adopts the 2021 International Energy Conservation Code (IECC) with Massachusetts Amendments (225 CMR 23) that will apply to this project.

Accessibility for Persons with Disabilities

Massachusetts Architectural Access Board Regulations

All areas open to students or the general public are required to comply with the requirements of the Massachusetts Architectural Access Board (521 CMR), and in particular Section 12: Educational Occupancies and Section 14: Places of Assembly. 521 CMR includes the following major provisions:

a. All public entrances must be accessible (521 CMR 25.1).
b. All public and common use areas must be accessible and provided with an accessible route thereto (521 CMR Section 12.2.2 and 20.1).
c. Accessible toilet rooms and bathing fixtures must be provided in each toilet room and bathing room location (521 CMR 30.1).
d. Where tables, study carrels, computer workstations, sinks or counters provided in classrooms, at least 5% with a minimum of one of each item must be accessible (521 CMR Section 12.2.2).
e. Wheelchair accessible seating locations integrated into the seating plan must be provided in the Audtorium and Gym (521 CMR 14.4.1).
f. Wheelchair access directly from the Auditorium seating area to the stage is required (521 CMR 14.6).

American's with Disabilities Act

The ADA Guidelines are not enforced by the Commonwealth of Massachusetts, they can only be enforced through a civil lawsuit or complaint filed with the U.S. Department of Justice. Although the provisions of the MAAB do not apply to employee only areas, the ADAAG requires that employee only workspaces must be designed to allow employees to approach, enter, and exit the work area. However, the work areas are not required be provided with accessible features (i.e. shelves, etc.).

List of Permitting Requirements

Town of East Longmeadow

Planning Board

Site Plan Review

A Site Plan Review (SPR) application package will be filed with the Town Planning Board, as required by the Zoning Bylaw for new school construction. The SPR application package shall conform to the Town of East Longmeadow Instructions for Site Plan Review Application and will be filed approximately 4 weeks prior to the next scheduled Planning Board meeting. The Design Review Committee shall first review the application package and make recommendations to the Planning Board within 35 days of receiving the application, prior to the public hearing. The Planning Board shall schedule a public hearing within 65 days of receipt of the application. Within 90 days of the hearing, a decision will be rendered by the Planning Board. Written conditions, if any, shall be forwarded to the client within 14 days of the decision. An appeal may be filed with the Town's Zoning Board of Appeals within 30 days of the date of the decision. A Building Permit can be applied for at the conclusion of the appeal period.

Special Permit – Earth Removal Operations

A Special Permit application package will be filed with the Town Planning Board, as required by the Zoning Bylaw for earth removal operations associated with the new school construction. The Special Permit application package shall conform to the Town of East Longmeadow Instructions for Special Permit Application and will be filed approximately 4 weeks prior to the next scheduled Planning Board meeting. The Planning Board shall schedule a public hearing within 65 days of receipt of the application. Within 90 days of the hearing, a decision will be rendered by the Planning Board. Written conditions, if any, shall be forwarded to the client within 14 days of the decision. An appeal may be filed with the Town's Zoning Board of Appeals within 30 days of the date of the decision. A Building Permit can be applied for at the conclusion of the appeal period.

Building Department

Building Permit

A building permit application will be submitted to the East Longmeadow Building Department prior to the start of construction and after other applicable permits are obtained. If the proposed work conforms to the requirements of the state building code and all pertinent laws under the building inspector's jurisdiction, it is expected that the building inspector will issue a permit within approximately 30 days of the filing date.

Department of Public Works

Application for Curb Cut, Water and Sewer Services

An application for curb cut, water and sewer services will need to be filed with the East Longmeadow Department of Public Works for modifying or creating a new curb cut, new water connections, and new sewer connections. The application will be submitted at the start of Construction Documents. The anticipated period of review is estimated to be a maximum of 30 days.

Trench Permit Application

A Trench Permit application will need to be filed with the East Longmeadow Department of Public Works. The application will be submitted at the start of Construction Documents.

Conservation Commission

Notice of Intent

A Notice of Intent Application will likely need to be filed with the East Longmeadow Conservation Commission due to the presence of wetland resource buffer areas within close proximity of the project disturbance limits. The application package will be submitted during the Design Development phase. The Commission shall hold a public hearing within 21 days of receipt of the filing. A decision will be rendered within 21 days of the close of the hearing. An aggrieved party may file an appeal to the Town Board of Appeals within 10 days of the date of the decision, and a decision on the appeal shall be rendered within 30 days of the commencement of the appeal proceedings.

State of Massachusetts

Massachusetts Department of Environmental Management

Notice of Intent

The Notice of Intent application filed with the East Longmeadow Conservation Commission will also be submitted to the Massachusetts Department of Environmental Management (MA DEP) for their review and comment.

Federal

Environmental Protection Agency (EPA)

NPDES Construction General Permit

Construction activities which disturb an acre or more of land are regulated under the National Pollutant Discharge Elimination System (NPDES) administered by the Environmental Protection Agency (EPA). Most of these activities are regulated under the Construction General Permit, which outlines provisions that construction operators must follow to comply with the NPDES storm water regulations. A Notice of Intent (NOI) must be filed with the EPA for projects seeking coverage under the Construction General Permit. The NPDES permit is filed approximately one month prior to construction and will take 14 days to receive permit coverage.

2-7
UTILITY & SOILS ANALYSIS

UTILTIES

Water

The existing water services will be removed up to the existing water meter pit south of Maple Street. The existing meter pit and the 8" ductile iron water pipe that connects the water main on Maple Street to the meter pit will remain in place for proposed use. The proposed water distribution system will consist of Class 52 cement-lined ductile iron (CLDI) water lines. A new 8" water pipe will be installed from the existing water meter pit and looped around the new building.

New 4" domestic and 6" fire protection service lines for the building will be installed and fed off of the new 8" water loop. New hydrants will be provided and served by 6" water lines off of the 8" loop. The fire protection service will include a post-mounted indicator valve outside of the building, as required by NFPA.

Sewer

The entire existing sanitary sewer service will be removed, with only an existing sewer manhole just beyond the western property line remaining to connect the proposed service into. A portion of the new sewer system will consist of 4", 6", and 8" polyvinyl chloride pipe (PVC) Schedule 40 pressure pipe for gravity routing, while the remaining portion of the new system will consist of 3" force main. The gravity lines will converge at a pump chamber containing two (2) 5-horsepower grinder pumps with a connected valve pit. The 3" force main will exit the valve pit and then run towards the aforementioned existing manhole just beyond the western property line where it will tie into the existing gravity-run municipal sewer main.

A new precast concrete grease trap will be installed to treat wastes generated from the kitchen in accordance with the Plumbing Code. Floor drains from within the building will be routed through a precast gas/sand trap prior to entering the sewer system. Lab wastes will also be routed into the sanitary system. Typical sewer manholes will consist of precast concrete and have exterior surfaces painted with two coats of bitumastic paint.

Drainage

A majority of the existing drainage system will be removed, with only a section of existing 24" pipe along the east edge of the site being maintained for re-use. Portions of existing drainage discharge pipe outside the limit of disturbance will remain, including concrete end walls at the stormwater pond.

The proposed storm drain system will consist of a series of deep-sump hooded catch basins, areas drains, water quality units, and manholes located in new parking areas, driveways, and around the perimeter of the building. A trench drain routed to an oil/grit separator will be installed to treat runoff from the loading dock area. The new drainage system will receive and treat stormwater runoff prior to discharge. The new drainage system will connect to and utilize the existing drainage discharge points into the existing stormwater pond. Piping will consist of high-density polyethylene pipe, and manhole structures will consist of precast concrete.

Low impact design (LID) elements that include bioretention areas, porous pavement, and permeable pavers, will be utilized for stormwater management to infiltrate, detain, and treat stormwater runoff. A subsurface infiltration system consisting of pre-molded polyethylene chambers embedded in crushed stone will also be installed to capture portions of parking lot runoff for detaining and infiltration. The design will be based on detailed subsurface geotechnical investigations, including the existing groundwater elevation and soil permeability. Treatment of stormwater runoff will be provided in accordance with the Massachusetts Stormwater Management Handbook.

Gas

The existing gas service will be removed, including service connections and the gas meter. No new gas service is currently proposed for the new school building.

Electric &Telecommunications

Existing electrical services will be removed, including primary and secondary underground services, portions of existing overhead wiring, and utility poles. Existing light poles will be removed, with the exception of the existing track and field stadium lighting to remain.

New underground primary and secondary electric services will be installed, as well as new telecommunication services. The new electric service will originate from the existing overhead line on Maple Street and will extend underground towards a new outdoor pad-mounted utility transformer on the east side of the building. A new emergency generator will be provided adjacent to the transformer. Separate transformer equipment will be installed for the various tennis court, basketball court, and stadium lighting. Site light poles will have full cut-off LED fixtures with programmable settings and photocells. Refer to Outline of Electrical Systems in Section 2.9 for additional information.

The new primary fiber communications service will originate from the existing underground line in the southeast corner of the Site and will extend underground towards the new building's main electric room. Additional communication lines will originate from the existing overhead lines on Maple Street and extend underground towards the new building. Refer to Outline of Information Technology in Section 2.9 for additional information.

SOILS

Based on preliminary geotechnical investigations, subsurface soil conditions appear favorable for the proposed construction. In general, subsurface conditions consisted of a layer of surficial topsoil, underlain by a thin layer of fill, then underlain by sandy, native soils, and then glacial till. It is anticipated that the proposed building can be supported on traditional spread footings. Groundwater was encountered fairly low, at depths ranging from 9 to 12 feet and infiltration of stormwater surface runoff appears feasible. A majority of existing soils should be able to be re-used in some capacity on-site, whether for landscaping areas, general raises in grade as common fill, or engineered fill. See Section 2.5 for the preliminary geotechnical report.

2-8
MASSING STUDY

The design team has worked closely with the School Building Committee to design and refine the massing of the building. In the framework of an all-new construction approach, the new East Longmeadow High School was sited in a location that achieves educational, infrastructural and civic goals simultaneously, while allowing the building construction to be completed without disrupting the ongoing life of the current school. This new location, immediately to the southwest of the existing high school building, affords the ability in Phase II to efficiently replace within the limits of school property the considerable athletic fields and other site amenities displaced by the new building, while also respecting adjacent wetland resources to the southeast. A large driver of the overall shape of the building was the concern for optimal east-west solar orientation for classroom wings, which is an overriding feature of the design.

Careful consideration was given to establishing the finished floor elevation of the building and the elevations at the new athletic fields to integrate the building and open space amenities, to best utilize existing soil conditions, provide efficient earthwork management, and to create a comfortable relationship between the new building and proposed site features. Although the site appears flat, there is a gentle drop in elevation of approximately nine feet between the vehicle entrance at Maple Street and the new, more distant entrance of the proposed school, which prompted careful studies at eye level to understand the scale of the civic expression as well as the visibility of rooftop elements that may require screening.

Site Plan

Architecturally, the building massing is reflective of the desire to locate the large community-based programs containing the gym and auditorium at the front of the building, and to house the classrooms in two stacked levels on the quieter southern side of the site. These halves are expressed as clusters of consistent form and materiality that are split by a glassy wedge containing the stacked Dining Commons and Media Center hubs.

This wedge element emerges above and echoes the form of the main building entry to broadcast its central location and its importance as a civic corridor that unifies all of the other clusters within the school. In relating to the history of East Longmeadow, the design of this central unifying space was inspired by early Twentieth Century images of the space hewn from the sandstone quarries that operated nearby and that served as the economic generator of the town.

Aerial View from Northwest

The massing design is sensitive to the abutting residential neighborhoods along Maple Street to the north, as well as those wrapping the western and partial southern boundaries, as it seeks to keep the school structure at a safe distance near the center of the site that is least likely to create new, adverse visual or acoustic conditions on these nearby neighbors. Relative to existing conditions, the proposed location of the new school moves slightly closer to the southwestern property border, which is well buffered by forested land and is adjacent to an industrial zoning district rather than residential.

The northern facades of the building facing the community are both shaped to provide a welcoming "embrace" of splayed arms to gather circulation approaches from the widest possible angles toward the main entry. The approach to vehicular circulation improves accessibility and community use, while creating a pedestrian-friendly realm that is safe and welcoming. The high-bay spaces in front are modulated in scale by the presence of single-story classrooms and administrative offices forming a low masonry apron in front of the tall gymnasium and auditorium volumes that are wrapped in lighter metal and glass cladding materials.

Approach to the School

Meanwhile, the "arms" of the academic wings are shaped to provide east-west solar orientation and articulated to create distinct outdoor gathering and learning environments, one dining terrace linked to the rear of the Dining Commons and another Academic Commons located between academic and arts wings. A greenhouse with a small outdoor terraced area is located adjacent to science classrooms facing south, further extending outdoor learning opportunities and connections to nature.

Dining Terrace

Outdoor Academic Commons

The images above illustrating the approach to massing are included as both PDFs and JPEGS in the digital version of this submission.

2-9-a
BUIDING SYSTEM – SUSTAINABLE DESIGN ELEMENTS

The following enclosure parameters are high performance criteria to ensure the building meets energy efficiency goals.

- High-performance and airtight building envelope:
- Highly insulated walls and roofs: R-37 at walls and R-53 at roof.
- High-performance triple glazing system with an assembly U-value of 0.23 or better, Glazing U-value: 0.14 or better, SHGC: 0.35 or better.
- Air Infiltration Reduction of 0.25 cfm/SF @ 75 PA or better.

2-9-b
BUIDING SYSTEM – BUILDING STRUCTURE

New construction will consist of shallow foundations and primarily a structural steel floor and roof system. Please reference the structural drawing set for the project for additional information. The ground floor will consist of 5" slab on grade. Elevated floors will have 6.25" slab on metal deck, and roofs will use 3" metal roof deck. For pricing assume new structure to be 13 psf (pounds per square foot) of structural steel at floors & 11 psf at roofs. Spaces requiring column-free clear spanning such as the gymnasium, auditorium, and over the main entry will use long span open web steel joists (assume 6 psf of steel tonnage at joist conditions). The lateral system of the building will consist of steel braced frames.

There is also interest in strategic use of exposed mass timber structure to achieve both an aesthetic goal and promote a low carbon footprint. Assume for pricing that the double height central space encompassing the main entry, and cafeteria will use mass timber in the roof framing in the form of glulam beams supporting exposed cellular acoustical metal deck.

The roof will support mechanical units and mechanical screens. Discrete concrete pads will be used on the roof deck under the units for the purposes of mitigating acoustical and vibration concerns.

The building will have at least one structural expansion joint, strategically located based on geometry.

An additional small concessions building is planned. Its structure will involve shallow foundations, 5" slab on grade, load bearing 8" CMU walls and its roof structure will consist of steel beams & metal roof deck. Assume 8 psf steel weight of roof structure.

2-9-c
BUIDING SYSTEM – PLUMBING

PLUMBING

The new plumbing systems will be designed in accordance with 780 CMR Tenth Edition (IBC 2021 with Massachusetts amendments), and 248 CMR 10.00 Massachusetts Uniform State Plumbing Code. All plumbing fixtures, materials, and equipment shall be listed as accepted by the Massachusetts Plumbing Board. All wetted components shall meet the lead free requirements of the Reduction of Lead in Drinking Water Act of 2011.

The building will be serviced by a new 6" domestic water supply that will enter the facility in the water service room. The service will be provided with a strainer, main shut off valve, water meter, and backflow preventer. The backflow preventer, a reduced pressure backflow preventer, will be provided on the main domestic water supply to protect the service (per the DEP regulation 310 CMR 22). Based on the current flow test data, a domestic booster pump system is not anticipated. Final determination will be confirmed during design development.

Domestic cold water will be piped with lead-free type L hard drawn copper with lead-free soldered joints. Domestic cold-water piping will be insulated and distributed throughout the building serving all fixtures and equipment. Additional backflow preventers will be provided as needed for equipment and systems such as HVAC make-up and dust collection system, ice machines, dishwashers, coffee makers, icemakers and protected hot and cold-water systems.

Domestic hot water will be provided by two 800 gallon electric resistance water heaters. Each estimated at 180 kW. Each heater will be sized to provide 66% of the demand. Water will be heated to 140 deg. F. for delivery to the kitchen. A central, master thermostatic mixing valve will reduce the temperature to 120 deg. F. for delivery to all other fixtures throughout the school. Digital mixing valves will be provided in lieu of mechanical types. Hand wash lavatories and showers will have integral temperature limit stops and/or point-of-use mixers to provide 110 deg. F. maximum temperature.

Domestic hot water will be piped with lead-free type L hard drawn copper with lead-free soldered joints. Domestic hot water piping will be insulated and distributed throughout the building serving all fixtures and equipment requiring hot water. Emergency shower and eyewash units will be fed from domestic potable water systems and point-of-use thermostatic mixing valves will be provided in each area. Thermostatic mixing valves shall be no further away than 10 feet from recirculated hot water. All domestic water supply systems will be circulated using circulating pumps controlled by immersion aquastats; Hot water will be circulated directly behind all lavatories and other low-flow fixtures.

Insulation for cold water piping will be 1/2" thick. For hot water and hot water return piping, insulation shall be 1" thick. Insulation shields will be installed to protect insulation at all pipe hangers.

A new sanitary waste system will drain by gravity and connect to the site sewer system. A dedicated kitchen waste line will be installed to collect grease-laden wastewater from the kitchen appliances and fixtures. The kitchen waste line will exit the building adjacent to the sanitary sewer and will be connected to a new exterior grease interceptor exterior to the building. Chamber vents from the interceptor will be routed to the roof independent of the sanitary waste and vent system. Localized, interior grease traps will be provided at the source for individual grease-laden drainage fixtures and drains in the kitchen. Art room sinks will be provided with solids interceptors. All above ground sanitary drainage and vent will be piped in cast iron with "no-hub" joints. Piping smaller than 2 inches may be piped in DWV copper (excluding urinal waste lines). Piping below slab (buried) will be cast iron hub and spigot type. All floor drains will have wet trap primer connection with electronic trap primer. All vents will discharge through the roof, at a minimum of 25 feet away from fresh air intakes.

Cast Iron Garage waste, serving drains from overhead doors (auto shop classrooms), and discharge from elevator sump pumps, will flow by gravity to a Mass approved exterior gas oil interceptor in site.

Polypropylene Laboratory Waste Piping, serving science room equipment and drains will flow through 5 gallon point of use chip tanks below each sink. The discharge from each chip tank will gather and drain by gravity out of the building as a dedicated line. The treated waste discharge will tie into the sanitary main outside of the building. Venting functions as its own system and will discharge through the roof under the same stipulations as ordinary venting systems.

Storm drainage systems will include dual function drains with primary and secondary outlets. The drains will be flashed into the waterproofing membrane. Where required, overflow drainage systems will be provided. Overflow drains will be extended to exterior wall and spill to grade. Storm drainage systems will be sized to handle a rainfall rate of 4 inches per hour, with a total runoff from the main roof and the roof deck of just under 1 cubic foot per second. The storm drainage system will be comprised of cast iron piping with all horizontal piping insulated to prevent condensation. The storm system will exit at various locations of the building and connect to the site storm water collection system.

Plumbing fixtures will be provided in the facility to accommodate the projected population of male students and female students and shall be in accordance with 248 CMR Paragraph 10.10, Table 1. Plumbing fixtures will be equipped with water conserving features. Water closets and urinals will be commercial vitreous China, wall hung (ADA compliant.) Lavatories will be multi-station units or wall mounted China. Each floor will include a janitor's closet with a corner mop service basin. Toilet cores on each floor will include alcove-recessed electric water cooler with bottle filling station and, in a high-low handicapped accessible configuration to meet MAAB requirement. All toilet and mechanical rooms will have floor drains complete with trap primers and chrome plated wall mounted hose bibbs.

Plumbing equipment and HVAC equipment will be electric. A natural gas system Is not required.

A radon test will be conducted in the Design Development phase of the project. However, at this phase, a new passive radon system has been assumed to be required. A new passive radon system will be installed for the facility. Vent stacks from the system will run through the building via schedule 40 PVC piping, confined within chases and walls. The vents will exit independently through the roof. Plenum boxes will be required underground within the building footprint to help with the collection of Radon. In addition to the underground plenum boxes, there will be perforated PVC trunk lines extended throughout the underslab. Connecting to these trunk lines will be geovent lines, or vapor mats. Design of Radon system will be based upon ANSI/AARST CC-1000 (2017).

BUIDING SYSTEM – PLUMBING

HVAC

The proposed East Longmeadow High School will include a new Heating, Ventilating and Air Conditioning system to serve the various program spaces and will meet current codes and energy standards.

An air-Source Variable Refrigerant Flow (VRF) system will provide heating and cooling to the classroom, administration, and other support spaces. The VRF systems will be heat recovery type systems, which accommodate simultaneous heating and cooling for the spaces common to a VRF zone. The VRF zones will be by area and by floor. For example the 1st floor classrooms in a given wing will be supported by a single VRF heat pump zone, whereby each space in the zone is served by a dedicated fan coil unit. Smaller spaces will be served by ceiling-mounted cassette type fan coil units, whereas classrooms will be supported by ducted fan coil units.

The Air-Source VRF heat recovery system will be configured with modular outdoor air-source condensing units (ACCU), Branch Distribution Control Units and distributed indoor heat pump fan coil units to provide heating and cooling to the building.

Refrigerant piping and control wiring will be provided between the ACCUs and Branch Distribution Control Units and between the Branch Distribution Control Units and indoor heat pump fan coil units. Condensate drain piping will be provided for ACUs and Branch Distribution Control Units.

Dedicated outdoor air systems (DOAS) will provide ventilation to the classrooms, Administration, and other teaching spaces. The DOAS units will provide conditioned and filtered fresh air as supply and after recovering energy from the air returned from the zones served before exhausting it. The DOAS units will be configured as packaged heat pump units and will be roof-mounted. Distribution of ventilation supply air will be through variable air volume boxes, which will be controlled to maintain carbon dioxide levels within the typical spaces served. Return air from the zones served will also be controlled with VAV boxes to manage space pressurization.

AHUs will support large single-zone spaces, including the Auditorium, gymnasium, cafeteria, media center and Large Group Instruction. The AHUs will operate as Variable Air Volume (VAV) systems to maintain space temperature. The AHUs will be configured as packaged heat pump units, mounted on the roof. The Auditorium HVAC system is proposed as a displacement ventilation system, which is appropriate for the high-volume space type with variable occupancy.

All auxiliary heating terminals cabinet unit heaters, unit heaters, finned tube radiation & ceiling radiant panels will be electric.

The kitchen system will include exhaust fans to support proposed grease and/or heat exhaust hoods, as well as exhaust for the dishwasher. Makeup air will be provided through a roof mounted, packaged heat pump unit ducted directly to the kitchen exhaust hoods. The hood exhaust fan(s) and makeup air unit will be variable volume, controlled by a Kitchen Demand Control Ventilation (DCV) system. The DCV will vary the amount of kitchen exhaust and make-up air flow as required for the cooking demand. The kitchen will be negatively pressurized for odor control, and the balance of the makeup air will come from adjacent spaces (Cafeteria). A VRF fan coil unit will provide space temperature control in the kitchen.

Exhaust fans will be provided for special exhaust requirements, such as the Art Room kiln.

Independent, split-type air conditioning systems will be provided for data closets and electrical rooms.

Acoustic attenuation and vibration control will be provided to minimize noise and vibration transmission to occupied spaces in the form of in-duct attenuators, duct lagging, vibration isolators and/or roof-level slabs beneath HVAC equipment.

The heating system will be powered from the emergency generator for freeze protection during a loss of normal power.

The school facility will be provided with a web-accessible, microprocessor-based, direct digital control (DDC) building management system (BMS) for control of HVAC systems & equipment and for monitoring of selected other building systems. The BMS is proposed to be a proprietary system by Stuxureware (Schneider Electric) to match other existing installation in East Longmeadow. The BMS will be integrated into the Town-wide networked system for energy management and monitoring.

The following HVAC systems will continue to receive exploration in Schematic Design and were priced as alternates at this PSR phase for information:

- Option M1: Geothermal ground source heat pumps
- Option M2: Air-cooled heat recovery chillers with water source heat pumps

2-9-d
BUIDING SYSTEM – FIRE PROTECTION

FIRE SUPPRESSION

The entire building will be protected throughout with a wet automatic fire suppression system. The system will be designed in accordance with NFPA 13 (2013 ed), 780 CMR Tenth Edition (IBC 2021 with Massachusetts amendments), 527CMR 1.00 Massachusetts Comprehensive Fire Safety Code, & Local Jurisdictional regulations.

A new 8-inch fire protection service from the street will be provided. The service will enter the room and include a double check valve assembly, test header for full flow testing of the double check, and sprinkler floor control valves. Each valve will be supervised by the fire alarm system. A fire department Siamese (or storz type if required by the fire department) pumper connection will be provided at the exterior wall within 100 feet of a site hydrant. The fire department connection will either be wall-mount or free-standing, depending on the final architectural details and the preference of the Fire Department. The fire department connection will be provided with a check valve with an automatic ball drip. Exterior fire service to be equipped with a post indicator valve, located approximately 40 feet from the building wall, equipped with a supervisory switch, and wired to the building fire alarm system.

A hydrant flow test is required to confirm that the available water supply (pressure and flow) is sufficient for the new sprinkler system. An initial flow test was performed for the basis of this report. Based on the flow test data, a fire pump is not required. Note: a hydrant flow test is required to be within 12 months of the fire protection sub-contractor's working plan submittal. This future test will be used for the contractor's final calculations.

Since the height of the highest occupiable floor is less than 30 feet from the level of fire department access, standpipe systems are not required. However, firefighting operations may require standpipes with hose valves. Final determination will be coordinated with the East Longmeadow Fire Department during design. If required, standpipes will be designed in accordance with NFPA Standard 14, 2013, and local Fire Department requirements. Each standpipe will be equipped with a 2-1/2" fire department hose valve with 1-1/2" reducer. The standpipe system will be manual wet (required flow/pressure provided through the fire department connection).

Floor control valve assemblies, with monitored shut-off valve, flow switch, and an inspector's test valve, will be provided for each sprinkler zone. The sprinkler system will be zoned per floor to monitor water flow. Each zone will be limited to protect a maximum of 52,000 square feet. Four sprinkler zones are anticipated for the first floor and three for the second floor (7 zones

total). The test valves for each zone shall be accessible, and their discharge lines are directed outside the building to a safe location.

Sprinklers will be supplied from distribution piping off the floor control valve assemblies described in the paragraph above. The building will primarily be protected as light hazard with some areas of ordinary hazard group 1, and ordinary hazard group 2.

Light hazard design shall have sprinkler spacing no more than 225 square feet (15' x 15' pattern) per sprinkler. The system will be hydraulically calculated to provide 0.10 GPM per square foot over the most hydraulically remote 1500 square feet. Areas to be protected as light hazard: general classrooms, fitness rooms, common areas, gymnasiums, offices, and toilet rooms.

Ordinary hazard (group 1) design shall have sprinkler spacing no more than 130 square feet (10' x 13' pattern) per sprinkler. The system will be hydraulically calculated to provide 0.15 GPM per square foot over the most hydraulically remote 1500 square feet. Areas to be protected as ordinary hazard (group 1): kitchens, storage rooms, electrical closets.

Ordinary hazard (group 2) design shall have sprinkler spacing no more than 130 square feet (10' x 13' pattern) per sprinkler. The system will be hydraulically calculated to provide 0.20 GPM per square foot over the most hydraulically remote 1500 square feet. Areas to be protected as ordinary hazard (group 2): stages.

Areas not to be provided with wet-pipe sprinkler protection: areas below raised floors, noncombustible concealed spaces above suspended ceilings, elevator shaft and pit, elevator machine room, and electrical transformer vaults (if meeting the conditions outlined in 780 CMR).

Dry Sprinkler systems will be provided for all enclosed areas that are unheated (includes loading dock areas with overhead doors). A supervised dry pipe valve with flow and tamper switches, and an air compressor sized to fill the system.

Sprinkler heads in areas with finished ceilings will be concealed pendant type. In areas with no suspended ceilings, there will be upright sprinkler heads. All sprinklers will be quick response heads. Sprinkler heads in mechanical rooms and gymnasiums will be provided with wire guards.

2-9-e
BUIDING SYSTEM – WATER CAPACITY

A hydrant flow test was performed on April 5th, 2023. Two tests were performed. The first test included a gauge hydrant (#3070) and a flow hydrant (#3070) on Maple Street. The test resulted in a static pressure of 92 psi and a residual pressure of 88 psi while flowing 1030 gpm. The second test resulted in similar pressures (slight difference for elevation) but the flowrate was only 450 gpm. Based on the pressure/flow rate available, preliminary calculations show that a fire pump and domestic water booster pump are not required. Final confirmation will be determined/confirmed during Design Development.

2-9-f
BUIDING SYSTEM – FIRE PUMP

Initial hydrant flow test results show that a fire pump is not required. To be confirmed during design development.

2-9-g
BUIDING SYSTEM – ELECTRICAL

The new utility service will be provided by the Utility Co., National Grid, as adequate to accommodate the new High School building program. The new service will originate from the existing street overhead line and will extend underground towards a new outdoor pad-mounted utility transformer. The utility transformer will be provided by the Utility Company and will be installed adjacent to the building near the Main Electric room. The transformer's secondary feeder will run underground towards the Transclosure Cabinet serving as Point of Interconnection (POI) between the utility service and the photovoltaic (PV) system power equipment. From the Transclosure Cabinet power will extend underground towards the Main Electric room and will terminate in a 4,000 Amp 277/480V 3ph 4w Main Switchboard.

The Main Electric room will house the main power distribution equipment such as the main switchboard, panelboards, stepdown transformers, disconnect switches, etc. Power from the main switchboard will be distributed to five secondary electric rooms – three on the 1st floor and two on the 2nd floor. The secondary electric rooms will contain distribution panels, lighting panels, and "small power" panels supporting various building loads in respective building areas.

Kitchen panels will be provided to support kitchen equipment. Power will be provided to HVAC and plumbing equipment, Gym equipment, Auditorium stage equipment, motorized window treatments, door operators, special equipment in labs and Art rooms, etc.

A minimum of 50% of 120v duplex receptacles ("plug-in loads") will be controlled by local occupancy sensors or an automatic time-scheduled control system.

Power for outdoor EV dual charging stations will be provided in compliance with applicable MA Amendments to the latest Building and Energy Codes.

A networked power monitoring system will be provided. Approximately 35 energy sub-meters will be monitoring the energy use of various panelboards and building loads representing 10% or more of the total annual consumption of the building. The metering system will be recording Consumption (kWH) and Demand (kW) values and transmitting the collected data at intervals to DDC (BMS).

The infrastructure will be provided to take advantage in future of the Utility Co Demand Response programs or dynamic, real-time pricing program. A comprehensive Demand Response SOO (Sequence of Operations) for shedding at least 10% of building estimated peak electricity demand will be developed.

An outdoor diesel-fired 277/480V 3ph 4w Emergency Generator (preliminary estimated as up to 900KW/ 1,125KVA) will be provided to support building equipment and loads requiring a back-up power source. A skid-based fuel tank will be sized for 24 hours of the generator operation without re-fueling. Standby and Life-safety ATS's and downstream panels will be provided. "Critical" loads such as the elevator, sewage pump station, heating system equipment, refrigeration equipment, HVAC serving the IDF/MDF rooms will be power fed from emergency "standby" power panels. The Life-safety equipment will be installed in dedicated 2-hr fire-rated emergency closets.

The energy-efficient lighting system will be provided in compliance with the Energy Code and IESNA recommendations. The lighting system will consist mostly of linear LED pendants and various recessed LED lights. The overall lighting design goal is to achieve the Lighting Power Density (LPD) of 0.5W/SF or less.

Auditorium stage will be equipped with LED Performance lighting system consisting of track-mounted LED multi-color lights and dimming multi-scene preset controls.

A wireless type networked lighting control system will be provided to control the interior and exterior lights, as well as to control the "plug-in loads". The lighting control system will incorporate manual dimming and multi-scene control stations and automatic devices such as occupancy sensors and photocells. Classrooms, labs, administration offices, conference rooms, bathrooms, storage rooms, and other spaces will be equipped with occupancy sensors (and photocells where applicable). For the building areas without occupancy sensors a time-programmable lighting control concept will be implemented to facilitate automatic lighting shutoff on a scheduled basis with an occupant override. The lighting control system will be connected to DDC (BMS).

Exterior lights will consist of building-mounted LED lights and pole-mounted LED lights at parking lots and along the access roads. The exterior lights will provide a minimum maintained lighting level 0.5 FC at grade level, and 1FC minimum maintained for walkways.

All exterior lights will be controlled by the networked programmable lighting control system and a photocell for additional energy savings.

A Lightning protection system will be provided. It will consist of roof mounted air terminals, grounding conductors, down leads, ground rods and bonding conductors.

The photovoltaic (PV) system will be installed. The roof-mounted PV system is preliminary estimated at 450 KWAC. Several roof-mounted PV inverters, the PV switchboard and PV battery storage will be installed to support this system. The PV system will be interconnected with the utility power via the Transclosure Cabinet.

An addressable Fire Alarm system will be provided. Fire alarm system will consist of a Fire Alarm Control Panel (FACP) with microphone assembly, LCD type remote annunciator(s), event printer, automatic smoke and heat detectors, manual pull stations, audible and visible alarm signals, connections to automatic fire suppression systems. The system will transmit the alarm signals to the Fire Department via a radio type master box.

Distributed Antenna System (DAS) with Bi-Directional Amplifier (BDA) will be provided for Police and Fire Fighters use.

2-9-h
BUILDING SYSTEM – INFORMATIONAL TECHNOLOGY

A Category 6A horizontal cable solution will provide high-speed voice and data connectivity from the work area voice/data outlets to their respective Telecommunication Rooms (TRs). A network of wireless access outlets will be distributed throughout the facility to ensure robust and reliable connectivity for mobile device users. Backbone cables will provide connectivity from each TR to the Main Telecommunications Equipment Room (TER). The TER will be constructed to serve as the primary hub of communications. Laser optimized, OM4, fiber optic and multi-pair copper backbone cables will be provided to connect the TER with the TRs throughout the building. Wiring, outlets and terminations will be installed to comply with EIA/TIA 568 standards.

A system of underground duct banks and maintenance holes will be provided as a cable pathway for Telecom service providers to use for extending outside plant cabling from a riser pole on Maple Street into a Telecommunications Service Entry Room.

An existing underground duct bank that enters the facility from the southeast side of the existing facility carries the Municipal fiber optic network cables to the High School. The duct bank will be intercepted and routed overhead to maintain connectivity in the existing High School throughout construction. This duct bank will be extended from the interception point to the new High School to provide an underground cable path to connect the new High School with the Municipal fiber optic network.

A new Atlas IP based public address and clock system will be installed with wired PoE end points. The system will integrate with the existing district VoiP phone technology to enable paging an individual room, initiate two-way communications with classrooms or offices or make a facility-wide announcement and broadcast emergency notifications. Classrooms will be equipped with speakers, clocks, emergency strobe lights, and call buttons.

Sound Field systems will be installed in up to 20 selected academic spaces. The Sound Field Systems will be made ready to interface with classroom displays to provide full sound distribution within the classroom. Sound field systems will also be installed in the Gymnasium and the Stadium to support sporting events and educational programs.

Audio visual systems will be provided in larger presentation and event spaces including the Gymnasium, Auditorium, Dining Commons, Band and Chorus rooms, and Large Group Instruction room. A new digital signage system will be designed to provide students and staff pertinent and timely school community information.

Emergency call stations will be provided at elevator landings above the first floor to provide voice communications between rescue team personnel and people who are unable to use the stairways for evacuation.

A two-way radio system consisting of distributed antennas, donor antennas, a dedicated cable infrastructure and radio amplifiers will be provided per code requirements for Fire and other Emergency Responders use.

A separate Technology Equipment budget has been developed to provide non-interactive large format televisions in the majority of Learning Spaces. As many as eight large format interactive video displays will be provided and distributed among selected rooms. A new VoIP telephone system and network electronic equipment (switches, firewalls, wireless access points) and related electronic educational peripheral equipment will be purchased as part of the Technology Equipment budget.

nextstage design

Schematic Design Narrative

PROJECT
East Longmeadow High School

LOCATION
East Longmeadow MA

August 21, 2023

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INTRODUCTION

Performing arts facilities have unique and sometimes unusual requirements. The purpose of this report is to define and describe these requirements for the owner, users, OPM, CM, and design team members.
This report is divided into two main sections with appendices.

Performance equipment and accommodation

The first section describes the proposed theater equipment and seating that will be designed and specified by Nextstage Design. This section also explains how the equipment interacts with other systems and elements in the building. The equipment is listed by Construction Specification Institute (CSI) specification section numbers. A budget for this equipment is provided in the appendix.

Special building elements

The second section describes building elements that will be designed and specified by the architect and engineers. These items are unique to performing arts facilities or have unusual requirements when found in performing arts facilities. Nextstage Design does not design these elements, but we provide advice and suggested details and products to the design team concerning these elements.

Appendices

Additional information can be found in appendices as follows:

Theater equipment budget

Heat load estimate

Electrical demand estimate

Structural loads from rigging

Standard lighting catwalk details

LIMITATIONS OF ADVICE

Our recommendations are meant to guide and inform the architect's and engineers' design work. These recommendations obviously do not take precedence over the building and electrical codes or other mandatory requirements. And they do not relieve the architect and engineers of responsibility for their designs.

Dynamic and impact loads

This document provides information on static loading only. The structural engineer shall also consider dynamic and impact loading.

Fault current protection

The devices recommended or specified herein have varying Short Circuit Current Ratings (SCCRs). It is the electrical engineer's responsibility, when incorporating these devices into the complete electrical system, to ensure that the available fault current at any point in the system does not exceed the SCCR of the equipment installed at that point.

PROGRAM NOTES

The auditorium will be used for music concerts (chorus, band, and orchestra), meetings, *Thrills and Chills*, and other types of performances and assemblies. The school has no theater program and currently has no plans to

add one. The school has an active video/media program, and six-camera shoots of performances in the auditorium will be common.

Given the expected uses, the auditorium is proposed to take the form of a small concert hall rather than a proscenium theater with a large fly space. The stage will consist of a permanent concert surround that can be separated from the seating by a stage curtain. To provide staging flexibility, the concert surround will have pivoting doors on the lower side walls and catwalk access between fixed acoustic reflectors overhead. A sunken orchestra pit is not included, but the “pit” area at the front of the stage can be used for performances and meetings.

The stage, auditorium entrances, and the side aisles of the auditorium are all at the first-floor elevation to facilitate movement. A crossaisle provides access to wheelchair seating locations. The longitudinal aisles forward of the crossaisle provide an accessible route to the “pit” described above and to additional wheelchair seating. The seating to the rear of the crossaisle is tiered.

Daylighting is provided by clerestory windows.

An enclosed control room at the rear of the auditorium is accessible from the second floor. Video camera locations are provided at both the first and second floor levels.

THEATER EQUIPMENT AND ACCOMMODATION

11 61 11 Adjustable acoustics

Motorized tracked curtains will be used to adjust the amount of absorptive material within the auditorium, to tune the acoustics to suit different types of performances. All curtains will generally be retracted (stored) for a performance by a chorus, small string orchestra, or similar, and all or most curtains will be extended (exposed) for a large, loud (possibly amplified) ensemble, such as concert band or jazz band. The chorus and small string orchestra (or similar) benefit from a longer reverberation time and greater acoustical support, and the concert band and jazz band (or similar) benefit from a shorter reverberation time and greater control of loudness.

Curtain machine controls will be simple open/close pushbuttons without preset ability.

Architectural and structural accommodation

Support steel and/or blocking are required for curtain track and curtain machine mounting.

Curtain ”closets” should be provided to separate the curtains from the auditorium volume when they are retracted to storage. Doors on the closets are not necessary.

Electrical accommodation

Services, standard gang back boxes, standard wireways, power and signal wiring, and final connections for the curtain machine motors must be specified by the electrical engineer and provided by the electrical contractor.

11 61 33 Theater rigging

Description

The rigging consists of two elements:

The main curtain (house curtain) near the front of the stage will be dead hung on a traveler track. The curtain can be opened and closed horizontally (traverse operation) by a variable speed motorized curtain machine.

A motorized batten at the rear of the stage will allow a backdrop or similar scenic element to be raised and lowered. The batten will be suspended by a fixed speed motorized pile-on hoist.

Architectural and structural accommodation

Rigging loads

The rigging imposes both vertical and lateral loads on the overhead steel. See the Drawings for loading diagrams.

Rigging beams

The rigging loft blocks are clamped to the bottom flanges of a series of wide flange beams running parallel to the centerline of the auditorium and stage. These beams may also support the overhead catwalks, the suspended acoustic reflectors, and the stagehouse roof. The bottom flanges of the loft beams shall be level and aligned in a single horizontal plane. The flanges shall have a minimum width of 6 inches to allow the clamping of the loft blocks. All obstructions (gussets, lateral bracing, electrical and fire protection fittings, roof leaders, etc.) shall be held a minimum of 3 inches above the bottom flanges of the loft beams.

Rigging beams must be free of fireproofing. Per 780 CMR 410.3.2 a fire-resistance rating is not required for beams designed only to support equipment. Even if these beams double as roof framing, fireproofing is usually not required. Fire protection of structural members is not required if the members are 20 feet or more above the floor immediately below—almost always the case for a stage. See 780 CMR Table 601 Note b. Also, per 780 CMR 410.3.2 galleries and catwalks are not considered floors for this purpose.

Plumbing accommodation

Roof drains and leaders shall be arranged to avoid conflict with the theater rigging. This usually can be accomplished by routing the leader to the rear wall of the stage while keeping it above the bottom flange of the roof steel or loft beams. The leader can then be run along the rear wall to a corner of the stagehouse and down. The acoustician may require that leaders be lagged and/or routed outside of the auditorium and stage volumes.

Fire protection accommodation

Sprinkler piping and heads shall be arranged to avoid conflict with the theater rigging. The mains shall be run across the width of the stage at the rear wall (in the same location as the roof leaders described above). Branch lines are run between each roof or loft beam, and lines and heads shall be kept above the bottom flange. To avoid accidental discharge, guards should be specified for sprinklers on stage and in technical work areas.

Electrical accommodation

Services, standard gang back boxes, standard wireways, power and signal wiring, and final connections for the roll tube motors shall be specified by the electrical engineer and provided by the electrical contractor.

11 61 43 STAGE CURTAINS

Description

House curtain

The house curtain is the decorative fabric curtain near the front of the stage. The house curtain is constructed of inherently flame-retardant polyester velour and may have applied or painted decorative elements. The curtain in provided in two equal-width panels, sized for an overlap at center. The curtain is specified with minimum 75 percent additional fabric for fullness and sewn with box pleats. The curtain is lined and provided with a weight chain in a canvas chain pocket.

Drop

A drop is a flat drapery panel that completely fills that stage picture and serves as a "backdrop" to the performance on stage. A drop is typically sewn of flame retardant treated scenery muslin in one piece without intermediate seams. The top is unfinished and attaches directly to the roll tube. The sides may be finished to facilitate stretching to achieve a wrinkle-free appearance. The bottom finish includes a canvas pipe pocket to accept a steel pipe weight.

Storage

Stackable, rolling laundry hampers or canvas storage bags may be provided for drapery storage.

11 61 91 THEATER LIGHTING FIXTURES

Description

An inventory of LED lighting fixtures will be provided for stage lighting, including four-color profile spots, wash fixtures and cyc. Two white LED followspots will be provided. A few ETC Lonestar fixtures will be provided for specials that can be refocused from the lighting desk. Lens barrels, accessories, and cable complete the package.

12 61 11 FIXED AUDIENCE SEATING

Description

The fixed seating will be quality auditorium chairs with upholstered seats and backs, wood or poly arm rests, and self-rising seat pans. Row letters, seat numbers, and integral DMX-compatible LED aisle lighting fixtures will be provided. All fabric and upholstery will meet relevant fire and building codes, and the acoustician's requirements for acoustic performance. Designated aisle seats (transfer seats) will be provided as required. Seats will vary from 20 to 23 inches in width to provide horizontal stagger.

Architectural and structural accommodation

We recommend 60 PSF minimum uniformly distributed live loads in the floor areas under the fixed chairs. Chairs will be mounted on a new concrete seating slope, built upon the existing slab. Chairs will be floor mounted with 2-inch-deep anchors. To receive these anchors, new concrete floors must have a minimum compressive strength of 3,000 PSI. The minimum concrete slab thickness for floor mounting is 3 inches, and the surface 1-1/2 inches of concrete shall be free of wire mesh or rebar. Fiberglass mesh is acceptable.

Electrical accommodation

The end standards of the fixed auditorium chairs will be supplied with aisle light fixtures to light the adjacent aisles. The aisle lights are typically supplied with a loose whip for attachment to a recessed junction box located

below the chair. Junction boxes, wireways, wiring, and final connections for chair mounted aisle lights shall be specified by the electrical engineer and provided by the electrical contractor.

26 55 61 THEATER LIGHTING CONTROLS

Description

The Auditorium lighting control system will provide integrated controls for all lighting within or serving:

- Auditorium
- Stage
- Control rooms
- Catwalks
- Vestibules (sound and light locks) serving the above spaces

These lighting systems will control the following types of lighting fixtures specified under other CSI Sections:

- Theater ("stage") lighting
- Architectural lighting, including "house" lighting in the audience space and "work" lighting on stage and in backstage areas
- Egress path lighting, including step lights and chair mounted aisle lights
- Running light, including task lighting and blue step lights in backstage areas that allow personnel to work and move about safely during performance conditions
- Safety lighting such as LED stage edge markers in the Auditorium

The theater lighting control system consists of the following major elements:

- Relay breaker panels for remote switching of stage lighting power outlets serving the portable cord and plug connected spotlights provided by 11 61 91. Additional relay breaker circuits will furnish remotely switched power or 0-10V dimming to architectural lighting fixtures.
- Dedicated stage lighting power outlets are located at all spotlight mounting locations throughout the Auditorium, and Stage.
- Stand-alone Ethernet system for theater lighting control in the. Dedicated Ethernet taps are located near all stage lighting power outlets and at all likely control positions. The Ethernet system is used to connect control devices (portable control desk, architectural control processor, and handheld devices) to the relay breaker panels and (via portable DMX gateways) to spotlights mounted throughout the Auditorium.
- Portable control desks to control the intensity, color, and grouping of the stage spotlights via the Ethernet system.
- Lighting aux rack housing the architectural control processor, Ethernet switches, and rack-mounted gateways which provide DMX control signals to the architectural lighting fixtures.
- UL-924 compliant emergency bypass devices monitor normal power and bring all emergency fixtures to full intensity upon loss of normal power.
- Wall-mounted controls and occupancy sensors provide programmable control of house, work, and blue lights and can recall stage lighting presets.

Electrical accommodation

Section 26 55 61 is usually a sub (or sub sub) to the Electrical Contractor. The Work of this Section includes supply of equipment described herein and manufacturer's services only. Architectural lighting fixtures, electrical services, distribution panels, normal and emergency breaker panels, standard gang back boxes, conduit and

wireways, power and signal wiring, line voltage connections, and labor and equipment needed for installation are not included herein and must be provided by the Electrical Contractor.

Coordination of disciplines and trades

See the charts below for coordination of design disciplines and trades:
ALD = Architectural Lighting Designer
EC = Electrical Contractor
EE = Electrical Engineer
TC = Theater Consultant

Stage lighting—specified by TC

Device type	Location	Power circuiting	Control wiring	Purpose
Provided under Section 11 61 91				
LED spotlight	Portable	Spotlights cord-and-plug-connected to relay-controlled outlets	Spotlights receive DMX signal from portable (“touring”) DMX gateways	Illumination of the stage picture and performers
Supplied under Section 26 55 61				
Relay-controlled power outlet	Auditorium, and stage	Outlets home run by EC to relay breaker panel	None	Remote controlled branch circuits for spotlight power
Relay breaker panel	See Drawings	Electrical service by EC from normal distribution panel	Ethernet home run by EC to lighting aux rack	Remote switching of spotlight power
Portable (“touring”) DMX gateway	Portable	None	Plugs into lighting Ethernet tap	Converts Ethernet protocol to DMX protocol
Lighting Ethernet tap	Auditorium, stage, control rooms, and catwalks	None	Ethernet home run by EC to lighting aux rack	Communication backbone for stage lighting controls
Lighting Ethernet wireless access point	Auditorium, and stage	None	Ethernet home run by EC to lighting aux rack by	Allows use of handheld controllers
Aux rack	See Drawings	Home run by EC to normal building panel specified by EE	Various as described in these tables	Houses lighting Ethernet switches, architectural control processor, and DMX gateways for architectural lighting fixtures
Portable control desk	Portable	Cord and plug connected to convenience outlet	Plugs into lighting Ethernet tap	Control of stage lighting
Portable handheld devices	Portable	None	Connects to lighting Ethernet Wi-Fi	Control of stage lighting

Architectural lighting controls—specified by TC and supplied by 26 55 61

Device type	Location	Power circuiting	Control wiring	Purpose
Push button wall switch	Auditorium, stage, control room, catwalks, and vestibules	None	Proprietary LAN loop by EC to lighting aux rack	Local control of house and work lighting
Touchscreen controller	Auditorium and stage	None	Ethernet home run by EC to lighting aux rack	Remote control of house, work, blue, and stage lighting
Portable touchscreen controller	Portable	None	Plugs into lighting Ethernet tap	Remote control of house, work, blue, and stage lighting
Occupancy sensor	Vestibules	None	Proprietary LAN loop by EC to lighting aux rack	Automatic control of vestibule lighting during non-performance times
Emergency bypass detection kit (EBDK)	Emergency electrical room	Connection by EC to normal building panel specified by EE	By EC; contact closures to DEBC, restore switch, and relay breaker panels	Senses loss of normal power and activates emergency lighting bypass
DMX emergency bypass controller (DEBC)	Emergency electrical room	Home run by EC to emergency building panel specified by EE	By EC; contact closures from EBDK; DMX from aux rack; DMX loops to emergency lighting fixtures	Brings emergency fixtures to full intensity
Manual restore switch	Control rooms	None	By EC; contact closures to EBDK	Restores system to operation after normal power is restored

Architectural lighting fixtures—specified and provided as noted

Lighting type	Location	Fixtures	Power circuiting	Control wiring
Architectural “house” lighting (DMX control)	Auditorium and vestibules	Specified by ALD; provided by EC; fixtures shall have DMX drivers	Home run by EC to normal or emergency building panel specified by EE	DMX loop by EC to lighting aux rack or UL-924 bypass controller
Egress lighting (DMX control)	Auditorium and vestibules	Specified by ALD; provided by EC; fixtures shall have DMX drivers	Home run by EC to normal or emergency building panel specified by EE	DMX loop by EC to lighting aux rack or UL-924 bypass controller
Chair-mounted aisle lights (DMX control)	Auditorium	Specified by TC; provided by 12 61 11; LED fixtures with remote DMX drivers	Home run by EC to normal or emergency building panel specified by EE	DMX loop by EC to lighting aux rack or UL-924 bypass controller
Work lighting (DMX control)	Stage, control rooms, catwalks, and vestibules	Specified by ALD/EE/TC; provided by EC; fixtures shall have DMX drivers	Home run by EC to normal or emergency building panel specified by EE	DMX loop by EC to lighting aux rack or UL-924 bypass controller
Work lighting (non-dim or 0-10V dimming)	Stage, control rooms, and catwalks	Specified by ALD/EE/TC; provided by EC	Home run by EC to relay breaker panel supplied by 26 55 61	0-10V control wire by EC to relay breaker panel supplied by 26 55 61
Blue running light (DMX control)	Stage, catwalks, and vestibules	Specified by ALD/TC; provided by EC; shall have DMX drivers	Home run by EC to normal building panel specified by EE	DMX loop by EC to lighting aux rack
Stage edge marker (DMX control)	Stage	Specified by ALD/TC; provided by EC; shall have remote DMX driver	Home run by EC to normal building panel specified by EE	DMX loop by EC to lighting aux rack

SPECIAL BUILDING ELEMENTS

This section of this report covers building elements designed and specified by the architect and engineers that are unique to performing arts facilities or that have unusual requirements when found in performing arts facilities. Nextstage Design provides advice to the design team concerning these elements.

ARCHITECTURAL AND STRUCTURAL

See also architectural and structural accommodation under Theater Equipment and Accommodation above.

Floors

We recommend the following minimum design loads:

Room	Uniformly distributed live load (PSF)	Concentrated load (pounds)	Example of concentrated load
Stage	150	2,000	4-wheel, self-propelled scissors lift
Control rooms	100	500	Followspot or projector

The stage will have a built-up sprung floor for performance uses. Refer to the Appendix for a proposed detail.

Stage edge marker

An LED stage edge marker shall be embedded in the stage floor at the apron edge. Its purpose is to enhance the safety of performers by demarking the edge of the stage in low lighting conditions and blackouts. The marker consists of colored LED sources spaced 12 inches on center. The sources are designed to be visible to persons standing onstage but not readily visible by persons in the audience.

Stage ventilation

The stage has a floor area greater than 1,000 square feet so it must be provided with emergency ventilation (780 CMR 410.3.7). The most common ventilation method is to provide automatically opening roof vents (smoke hatches) having a total clear area equal to five percent of the stage area (780 CMR 410.3.7.1). The vents are heat activated and can also be controlled manually. We recommend motorized vents for simplicity and ease of use.

The vents must be located above the highest part of the stagehouse, and the vent doors shall remain well above the bottom flange of the loft beams. The acoustician may recommend a vent with a certain Sound Transmission Class (STC). Some vents have two sets of doors for greater sound isolation—one opening up and one opening down—and these vents may need a higher curb to avoid conflict with the stage rigging.

Catwalks

Open work platforms above the auditorium and stage will be used to mount, adjust, and operate spotlights and other equipment. These work platforms may also be used to provide access to house light fixtures or building equipment.

Hangers

Catwalks are typically hung from the roof steel or intermediate structural supports on 7- to 9-foot centers. The structural design shall support the imposed loads and provide a secure work platform that does not shake or

vibrate. The hangers should be spaced left and right of centerline, so that there is an open bay on the centerline of the auditorium. This allows a spotlight, say, to be mounted exactly on center.

Railings

See appendix for details of the catwalk railings. Catwalks used only for circulation and the non-working sides of lighting catwalks (typically the side away from the stage) shall have conventional OSHA-compliant 42-inch-high guardrails with a 4-inch kick plate and an intermediate railing. These guardrails are subject to typical guardrail loads.

All horizontal railings shall by nominal 1 1/2-inch (1.9-inch actual) schedule 40 (or greater) steel pipe, to accommodate use of standard theatrical hardware, and shall support the loads noted below.
The working side of the followspot perch shall have an angled mesh guardrail to allow safe operation of the followspots without interference with the followspot light beams.

Floor

The catwalk floor shall be steel diamond plate or steel grating. Diamond plate is preferred, but the acoustician may recommend an open steel grating.

Item	Uniformly distributed live load	Concentrated load (pounds)	Example of concentrated load
Catwalk floor	40 PSF	500	Floor mounted spotlight
Each outrigged horizontal railing member	30 PLF	250	Automated stage lighting fixture or projector

Provisions for working at height

Workers in the entertainment industry are subject to the OSHA fall protection standards for general industry (found in Subpart D of 29 CFR at 1910.21 through 1910.32) as well as the personal protective equipment standards (found in Subpart I of 29 CFR at 1910.132 through 1910.138). Here we are concerned with the steps needed to protect those working at height. The ANSI fall prevention hierarchy of controls provides a framework for addressing the risk of working at height. The hierarchy consists of five levels of controls for eliminating or reducing risk, ordered from most to least preferred. Level 1 controls provide the highest level of safety with the least dependence on individual behavior, while level 5 controls are most dependent on individual behavior and provide the lowest level of safety. Note that it may be necessary to use several types of controls to address a particular hazard.

Level 1—Elimination or substitution

The most preferred solution to any fall hazard is to eliminate the exposure, by adjusting the location of the equipment to be serviced or by providing means of servicing the equipment that does not require working at height. Nextstage recommends this approach when it is possible to eliminate the fall hazard while still satisfying the project requirements. In many cases elimination of the hazard is not an option, and our focus is on the second level of controls—passive fall protection.

Level 2—Passive fall protection

Passive fall protection means mitigating the fall hazard through the architectural design so that further protective measures are not required. Our design recommendations for catwalks, galleries, stage edges, and other elevated work areas are intended to fulfill the program requirements and comply with the building code and OSHA standards, without the need for active fall restraint or fall arrest.

Level 3—Active fall restraint

Active fall restraint becomes necessary when the hazard cannot be mitigated by passive fall protection. Fall restraint involves workers using harnesses with fixed tethers or other equipment that stops movement before a fall can occur. Nextstage can help identify situations that require fall restraint, provide advice on the design of a fall restraint system, and guidance to the structural engineer on the design of connections to the building structure. The architect, structural engineer, or other retained design professional remains responsible for the design of the system. The owner and users remain responsible for designing and implementing a protocol for the use of the fall restraint system.

Level 4—Active fall arrest

Active fall arrest systems are designed to stop a falling worker with an acceptable level of force before they impact the floor or other obstruction. A complete fall arrest program must include the equipment, protocols, and training both to arrest falls and to rescue workers who have fallen and are suspended mid-air. It is unlikely that any performing arts areas of this facility will require fall arrest, and Nextstage does not design fall arrest programs or equipment. If fall arrest is needed, we recommend the owner retain one of the several vendors who offer turnkey fall arrest services for the performing arts.

Level 5—Administrative controls

As a last resort, administrative controls serve to create awareness of a fall hazard. Controls may include work practices that reduce the risk of falls, training to avoid fall hazards, or installation of signage to warn of fall risks. Nextstage does not recommend administrative controls.

MECHANICAL

See also mechanical accommodation under Theater Equipment and Accommodation above.

Design considerations

Background noise level

The performance spaces will have very low levels of background noise, typically between RC-15 and RC-25. The acoustical consultant will determine the exact requirements. This stipulated RC (Room Criteria) level will dictate appropriate measures to reduce and control noise and vibration.

Heat gain

The impact of theater lighting on cooling loads has been reduced in recent years by the rapid adoption of LED sources. However, the performance spaces (and some support spaces) still experience significant heat gain from theater equipment. Please see the appendix for an estimate of these loads.

Performance needs

There can be no pressure differential between the auditorium and stage, which would cause the house curtain to billow or stage smoke effects to migrate into the auditorium.

The performers may require very different conditions than would suit the comfort of the audience. This is especially true for dance companies, which may contractually require a temperature between 70 and 75 degrees on the stage and in backstage areas. In addition, singers may have difficulty performing in spaces with low relative humidity.

Musical instruments

Musical instruments can be damaged or go out of tune in conditions of low relative humidity. Most important is a stable environment, one with little change—and no rapid change—in temperature and humidity. Stage, backstage, practice, and instrument storage areas should be maintained in as close a range of temperature and relative humidity as feasible. Since instruments will be moved between these areas, all should have similar environments at any given time. The ideal is a temperature range of 65 to 75 degrees with relative humidity between 45 and 55 percent.

Stagehouse HVAC design

The stagehouse may be very high and a few technical personnel may be working high within the volume, but most activity takes place at the stage floor level. The conventional approach is to condition the lower portion of the stagehouse and to allow the air in the upper portion to stratify.
Supply air is typically introduced by diffusers spaced along one or both sides of the stage. If there are stage galleries, the supply ductwork and diffusers are usually located above and within the footprints of the galleries. The diffusers are placed at an elevation somewhat higher than the proscenium opening and above the height of scenery and masking draperies. This helps ensure that air delivery is not blocked by these items. Coupled with a relatively low supply velocity, this location also avoids air movement sufficient to move curtains or scenery, disturb sheet music, or cause drafts on stage. Return is typically at the stage floor.

PLUMBING

See also plumbing accommodation under Theater Equipment and Accommodation above.

Utility sinks

A utility sink should be provided in close proximity to the stage to allow the cleaning of paint supplies, and filling mop buckets.

FIRE PROTECTION

See also fire protection accommodation under Theater Equipment and Accommodation above.

Standpipes

Standpipes are required on each side of the stage by 780 CMR 905.3.4.

ELECTRICAL

See also electrical accommodation under Theater Equipment and Accommodation above.
Please see the appendix for an estimate of electrical loads.

Convenience power

A higher density of convenience outlets is needed in the performance areas and support spaces than may be required by code or found in other occupancies. These areas will need 120-volt convenience outlets for specific functions—control devices, power tools, etc. The panel boards feeding these receptacles shall be easily

accessible to the users of the facility, located in or adjacent to the areas served, not in locked utility closets inaccessible to the building occupants.

Fire alarm

The fire alarm detection shall be designed so that the use of theatrical effects—smoke, haze, and mist—does not cause nuisance alarms. (Containment of these effects onstage is discussed above.) One approach is to use of intelligent detectors employing multiple sensing technologies (smoke, carbon monoxide, heat, and light) to reduce or eliminate nuisance alarms.

Appendices

THEATER EQUIPMENT BUDGET

Inclusions and exclusions

Budget numbers are provided only for the equipment and furnishings described as theater equipment above. The budget is organized by CSI division. The following inclusions and exclusion apply to the budget as noted:

Item	Division 11 Equipment	Division 12 Furnishings	Division 26 Electrical
Trade materials delivered to jobsite	Included	Included	Included
Labor and equipment for installation	Included	Included	Excluded
Trade contractor O&P	Included	Included	Excluded
Electrical services, raceways, Class I and Class II wiring	Excluded	Excluded	Excluded
General conditions, general contractor O&P, CM fees, taxes, permits, fees, bond premiums, escalation, and contingencies	Excluded	Excluded	Excluded

Summary

	Division 11 Equipment	Division 12 Furnishings	Division 26 Electrical
11 61 11 Adjustable Acoustics	99,000		
11 61 33 Theater Rigging	55,500		
11 61 43 Stage Curtains	23,500		
11 61 91 Theater Lighting Fixtures	731,000		
12 61 11 Fixed Audience Seating		225,000	
26 55 61 Theater Lighting Controls			141,000
Subtotal by Division	$909,000	$225,000	$141,000
Total			**$1,275,000**

HEAT LOAD ESTIMATE

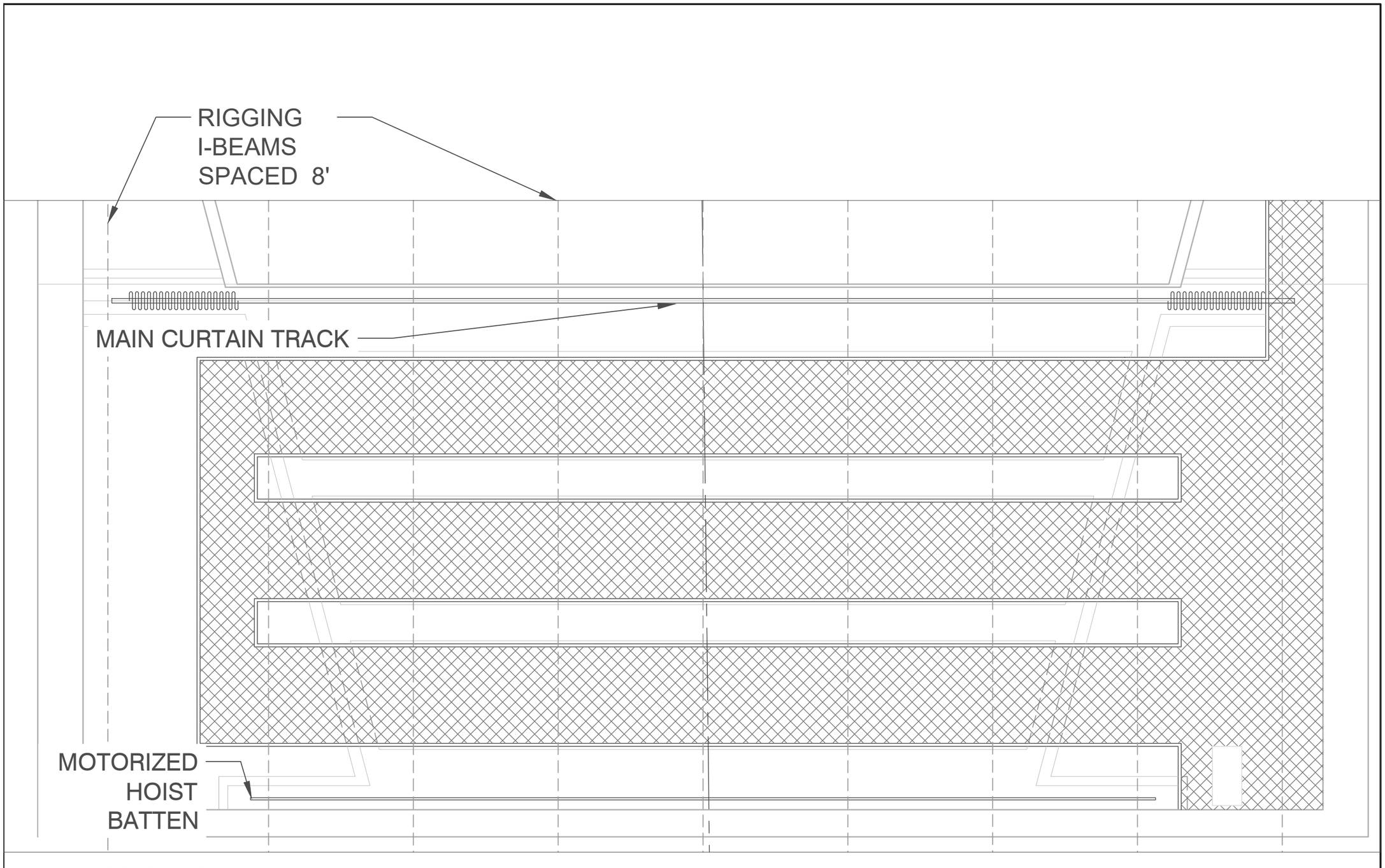
These estimated heat loads are based on manufacturers information of listed equipment and on accepted standard calculations.

Heat Load Estimate Detail

Space	Load type	HP	Watts	Qty	Total watts	Estimated diversity	Estimated watts
Auditorium							
	Theater lighting fixtures						
	Source Four LED Series 3 Lustr, light engine with shutter barrel, black		307	85	26,095		
	D60X Lustr+, black		124	35	4,340		
	D60 Studio HD, black		161	22	3,542		
	Aurora LED strip, 12-cell		321	11	3,531		
	Oz - 600w Cool White LED 7° - 14.5° Followspot w/ GT1000 Tripod		641	2	1,282		
	ETC SolaFrame Studio, Black		608	5	3,040		
	Lighting total				**41,830**	**60%**	**25,098**
Space total							25,098

ELECTRICAL DEMAND ESTIMATE

Space	Load Type	Termination	Circuit Qty	Outlet Qty	Horsepower	Amps	Phase	Voltage	kW	Estimated Diversity	Estimated Demand kW	Group Diversity	Group Demand kW
Auditorium													
Theater Machinery													
	Adjustable acoustics curtain machine	Motor control center	6	6	.5	5.7	1	120	8	100%			
	House curtain machine	Inverter	1	1	1	11.3	1	120	3	100%			
	Pile wind hoist	Motor starter	1	1	1.5	5.7	3	208	3	100%			
	Group total								**14**		**14**	**100%**	**15**
Theater Lighting Controls													
Rack Room	Stage relay panels (48 ckt)	Main breaker	2	2		200	3	120	144	40%	58		
Rack Room	Auxiliary control Rack	Duplex receptacle	1	1		20	1	120	3	100%	3		
Rack Room	DMX emergency bypass controller	Normal/emergency power	1	1		20	1	120	3	100%	3		
	Group total								**150**		**64**	**94%**	**60**
Convenience Power													
Stage platform	General service	Quad receptacle	8	16		20	1	120	20	25%	5		
Overstage catwalks	General service	Quad receptacle	6	12		20	1	120	15	25%	4		
Front of house catwalks	General service	Quad receptacle	4	8		20	1	120	10	25%	3		
Auditorium	Cleaning outlets	Duplex receptacle	2	4		20	1	120	5	25%	1		
Auditorium	Tech table outlets	Quad receptacle	4	4		20	1	120	10	25%	3		
Control room	General service	Quad receptacle	6	6		20	1	120	15	25%	4		
Rack room	General service	Quad receptacle	1	1		20	1	120	3	25%	1		
	Group total								**78**		**20**	**77%**	**15**
									Space	**total**			**90**



1 RIGGING LAYOUT
3/16"=1'-0"

nextstage design
nextstage-online.com

PROJECT NAME
East Longmeadow
High School

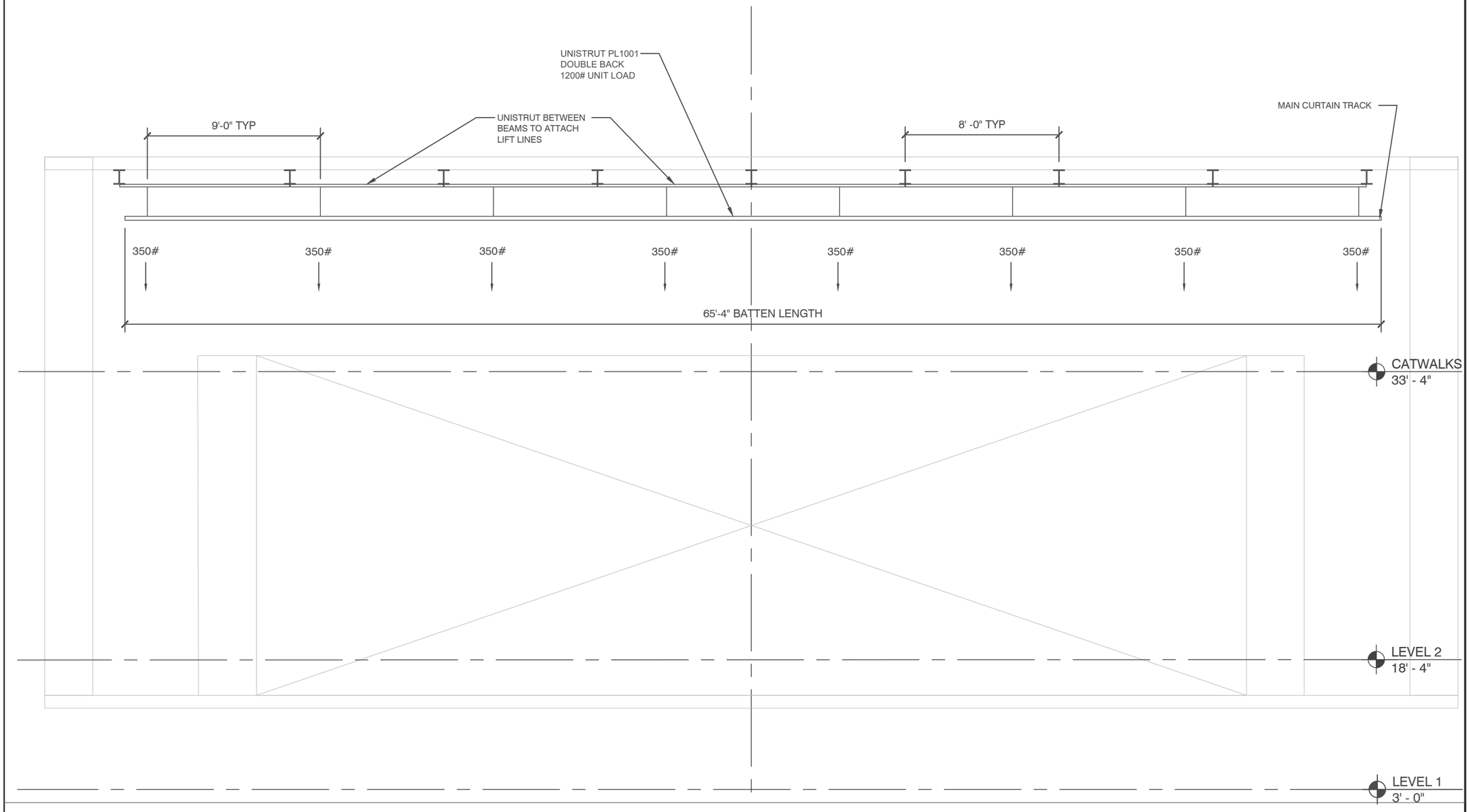
PROJECT NUMBER
22020

DATE
08/16/2023

SCALE
3/16"=1'-0"

SHEET TITLE
RIGGING LAYOUT

SHEET NUMBER
SK-09



2 MAIN CURTAIN TRACK LOADING DIAGRAM

3/16"=1'-0"

nextstage design

nextstage–online.com

PROJECT NAME

East Longmeadow
High School

PROJECT NUMBER

22020

DATE

08/16/2023

SCALE

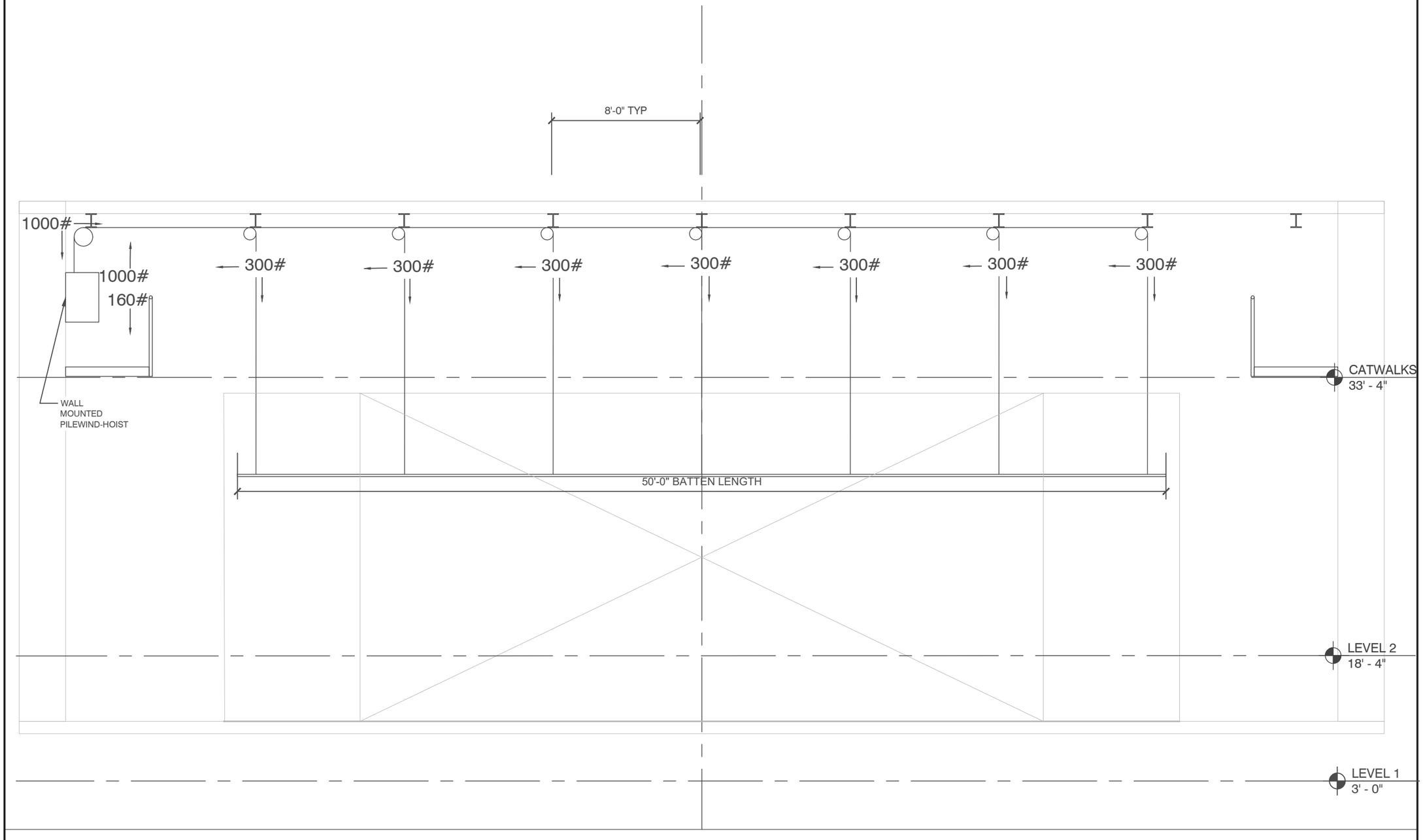
3/16"=1'-0"

SHEET TITLE

MAIN CURTAIN TRACK
LOADING DIAGRAM

SHEET NUMBER

SK-10



3 MOTORIZED HOIST LOADING DIAGRAM

3/16"=1'-0"

nextstage design

nextstage—online.com

PROJECT NAME

East Longmeadow High School

PROJECT NUMBER

22020

DATE

08/16/2023

SCALE

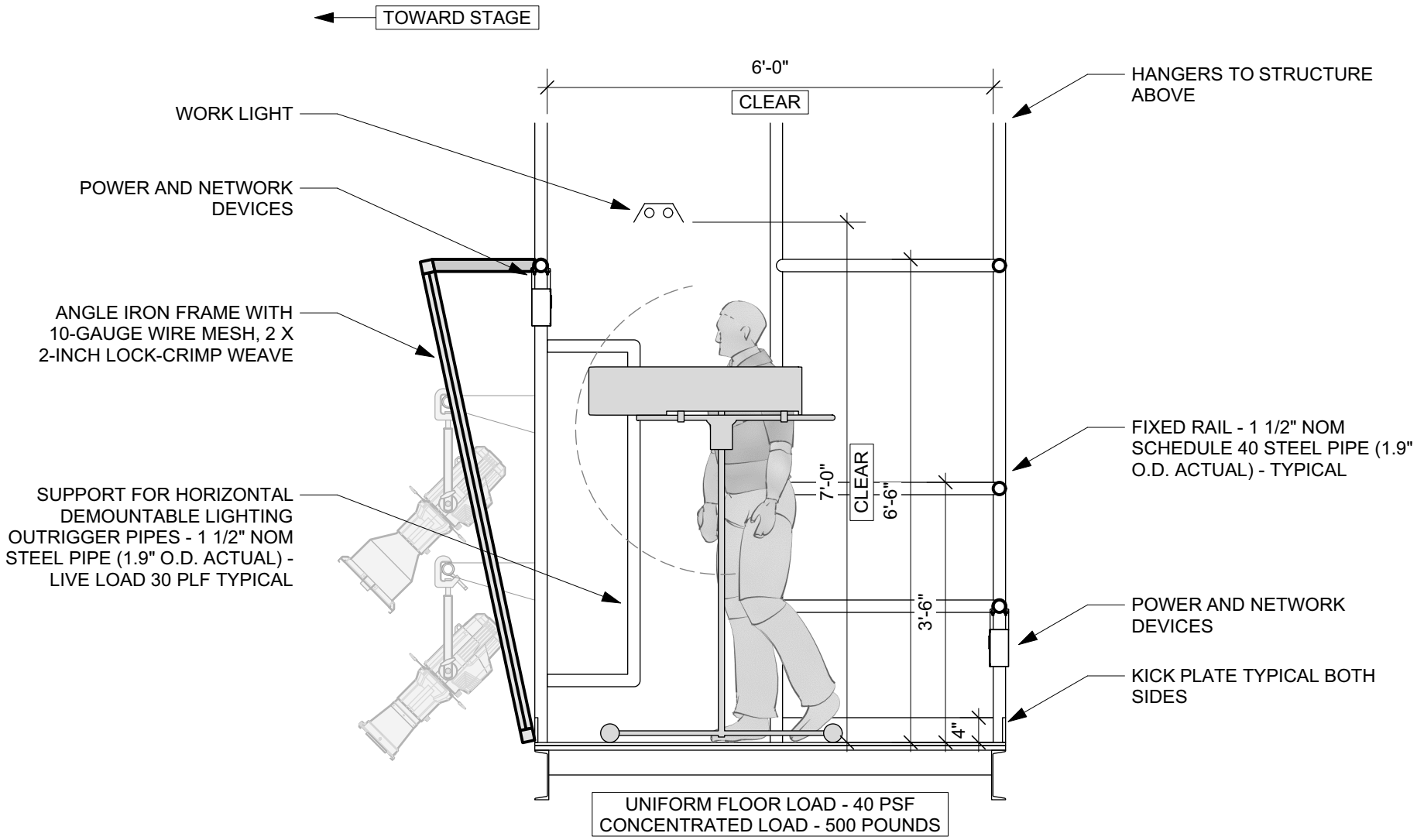
3/16"=1'-0"

SHEET TITLE

MOTORIZED HOIST LOADING DIAGRAM

SHEET NUMBER

SK-11



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.

nextstage design

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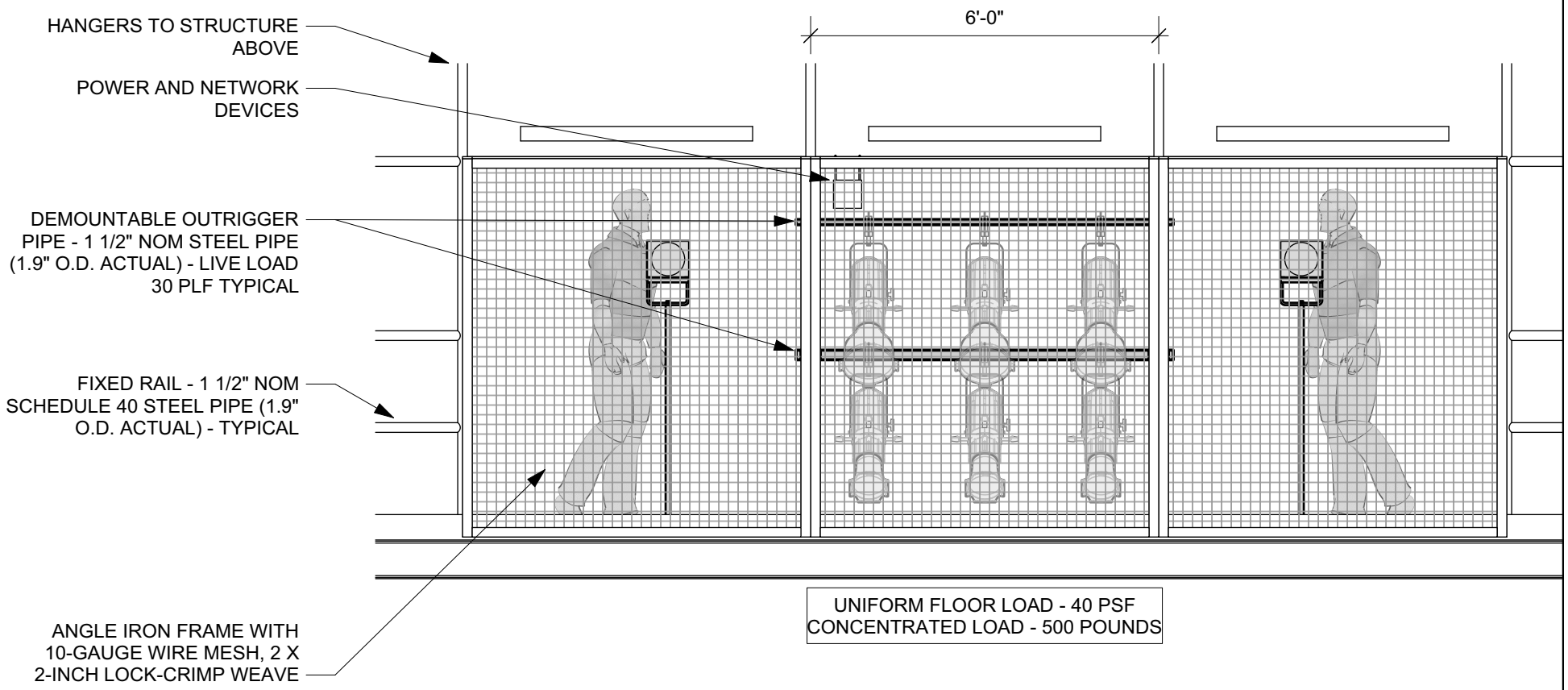
April 8, 2022

1/2" = 1'-0"

Catwalk follow spot perch section

ND-504



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.

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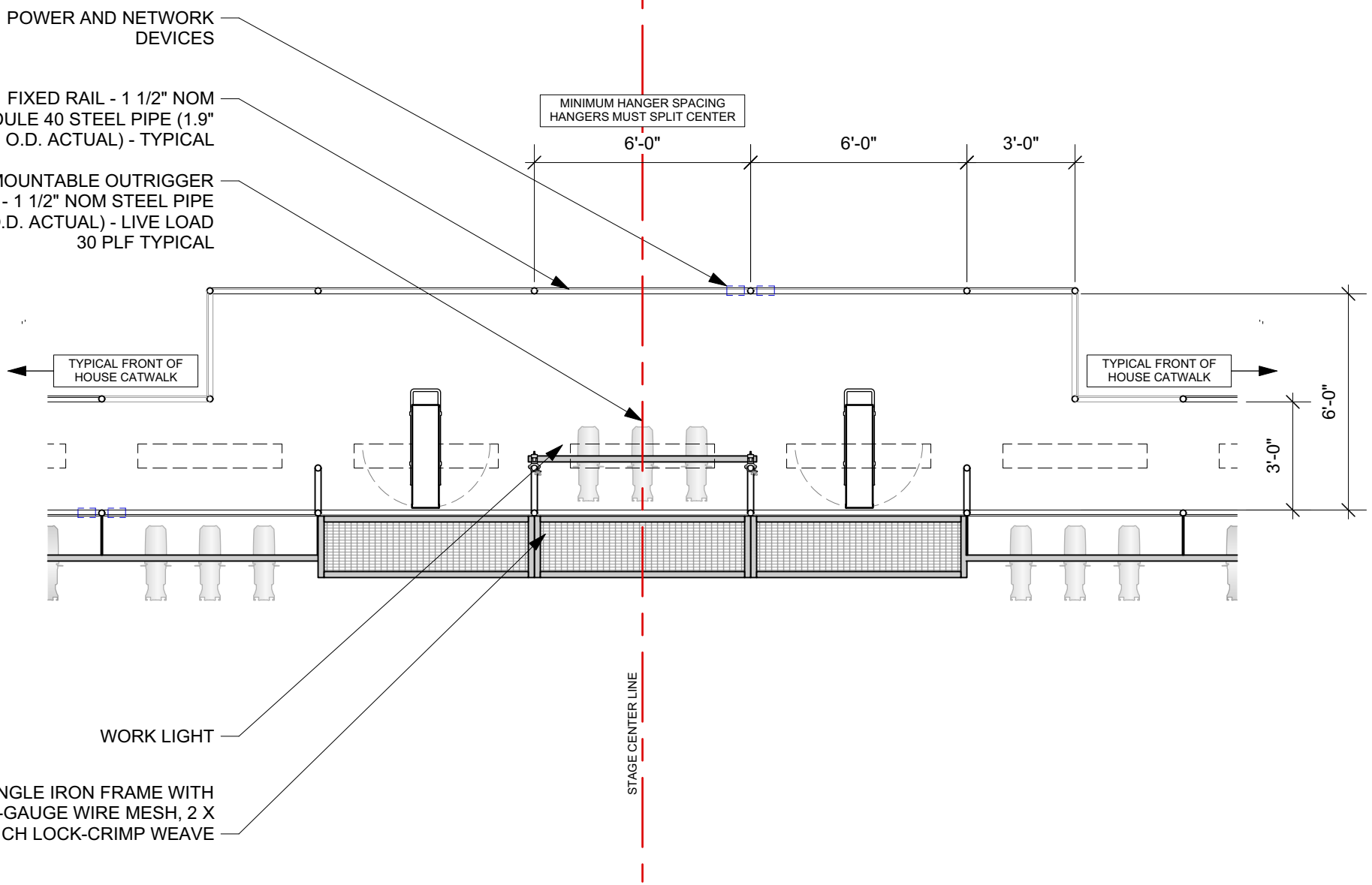
April 8, 2022

3/8" = 1'-0"

Catwalk follow spot perch elevation

ND-505



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.

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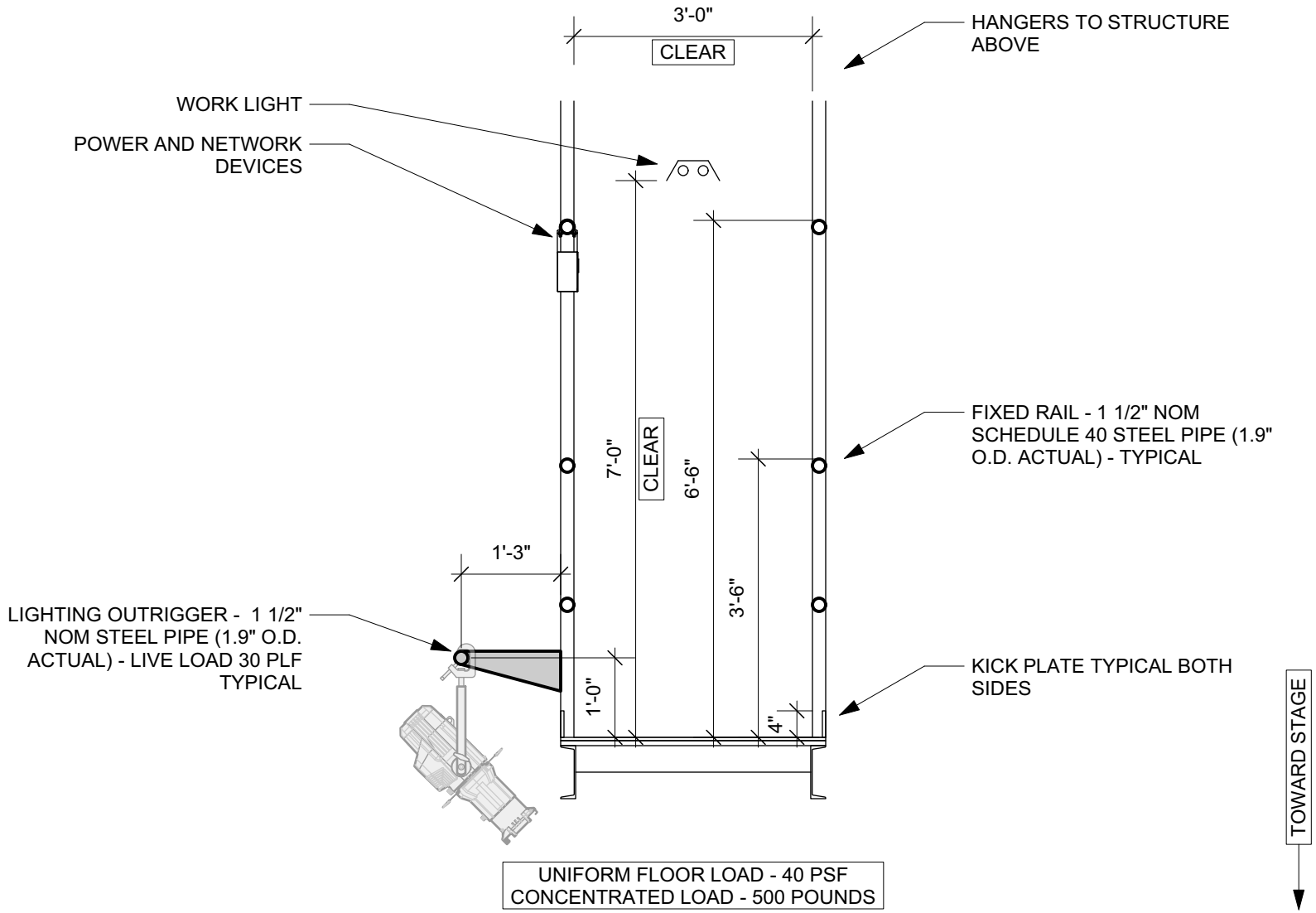
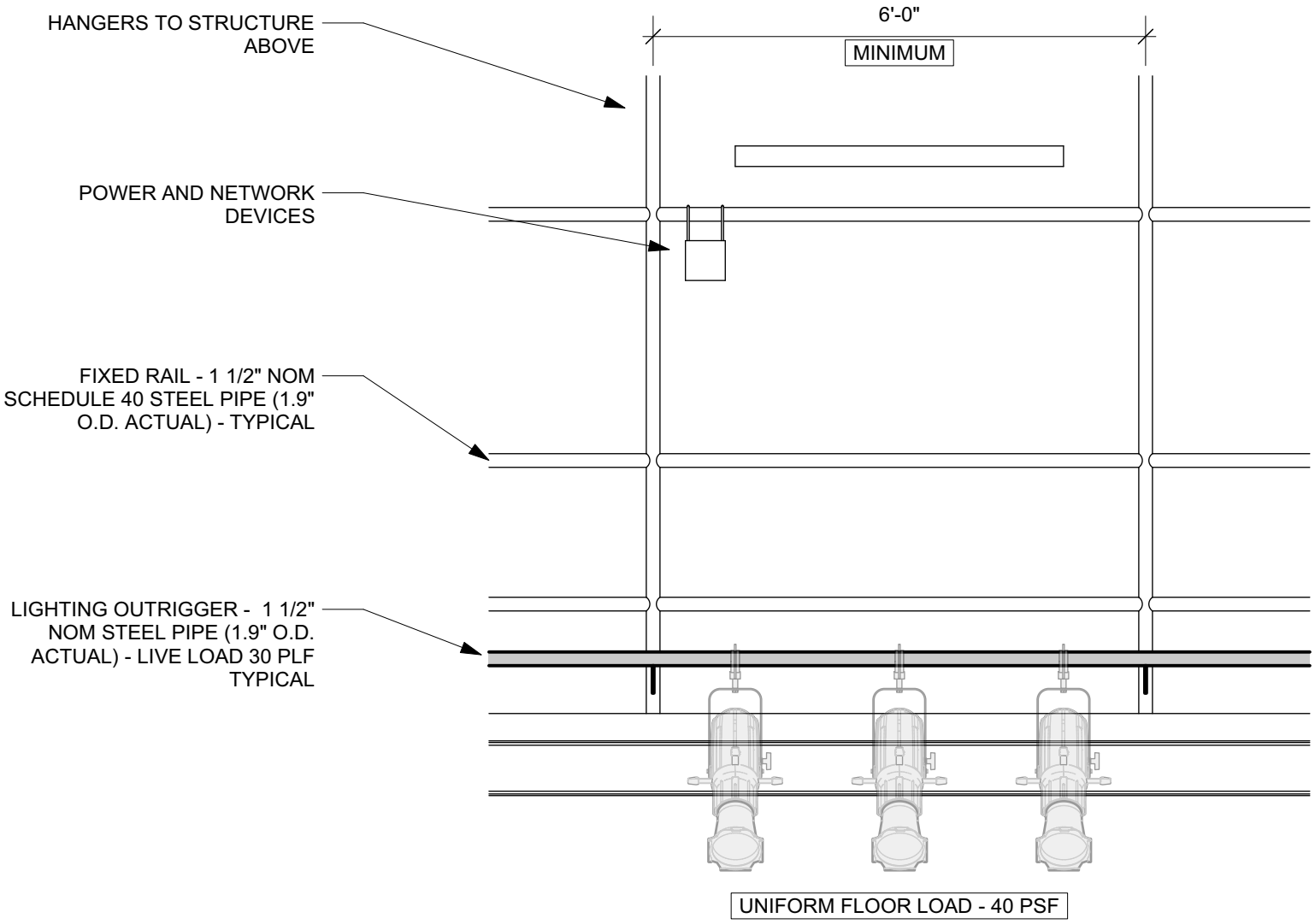
April 8, 2022
1/4" = 1'-0"

Catwalk follow spot perch plan

ND-506



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.

nextstage design

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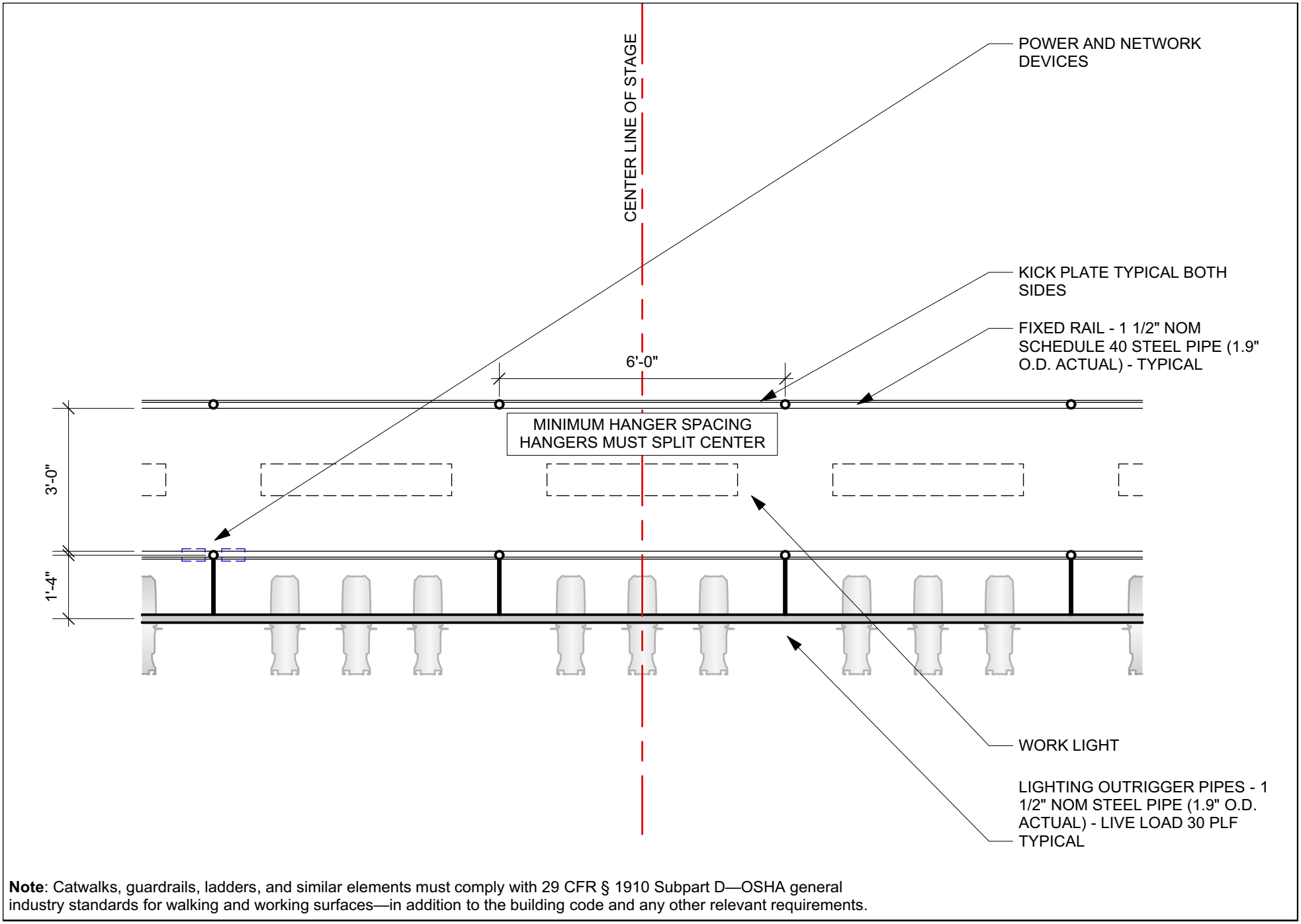
April 8, 2022

1/2" = 1'-0"

Proscenium overhead catwalk elevation

ND-508



Note: Catwalks, guardrails, ladders, and similar elements must comply with 29 CFR § 1910 Subpart D—OSHA general industry standards for walking and working surfaces—in addition to the building code and any other relevant requirements.

nextstage design

nextstage-online.com

April 8, 2022

3/8" = 1'-0"

Proscenium overhead catwalk elevation

ND-509

2-10
SUSTAINABLE BUILDING DESIGN GUIDELINE DOCUMENTS

MSBA 2023 Green Policy and Stretch Code

This is an acknowledgement that the Town of East Longmeadow has identified a goal of attaining the High Efficiency Green School Program, under the new 2023 Green Policy. The Town of East Longmeadow elected to pursue the 3% additional reimbursement available to projects that meet the requirements of the MA 2023 Specialized [Opt-in] Code and the additional 1% reimbursement for achieving 5 of 7 LEED Materials and Resources (MR)/Indoor Air Quality (IAQ) points.

The Town of East Longmeadow is a Stretch Code Community. The Project includes a high performance all-electric heating and cooling system (VRF/ASHP) with a DOAS system for ventilation, electric domestic hot water (DHW) and all-electric kitchen, in compliance with MA 2023 Specialized (Opt-In) Energy Code, All-Electric Systems Pathway.

- MSBA Green Policy (2023): Compliance with the 2023 MA Stretch Code (estimated to pursue the ASHRAE 90.1 Pathway) and Specialized (Opt-in) Code All-Electric Systems Pathway (3% additional reimbursement).
- Project Construction Permit (2024): East Longmeadow is a Stretch Code Community. The Construction Documents will be permitted in 2024 under the 2023 Massachusetts Stretch Code (IECC 2021 with MA Stretch Code Amendments) and will also meet the MA 2023 Specialized (Opt-In) Code requirements for the All-Electric Pathway.
- Project energy performance goals: EUI 30 kBtu/SF/yr. or better.

The East Longmeadow High School Project LEEDv4 For Schools Scorecard shows 58 attempted points with a goal of LEEDv4 Silver Certification, including the 20% Water Efficiency and the Enhanced Commissioning MSBA requirements. The Project Design includes the following LEED MR and IAQ credits criteria, striving to achieve a minimum total of 5 points (from 7 points available) to qualify for the 1% additional reimbursement:

- MR Building Product Disclosure and Optimization - Material Ingredients -v4.1 (1 point)
- IEQ - Low Emitting Materials – v4.1 (3 points)
- IEQ – Indoor Air Quality Assessment – v4.1 (1 point)

The preliminary energy model reflects the Schematic Design documents and compliance with the 2023 MA Energy Stretch Code. The energy performance analysis used the Stretch Code's ASHRAE 90.1-2019 Pathway to provide a true representation of the facility's design energy systems, in order to best inform the HVAC system selection. In addition, the final HVAC design may result in a ventilation rate of => 0.5 cfm/SF, in compliance with this pathway, to be confirmed in the Construction Documents Design phase.

A preliminary energy analysis was conducted for the Schematic Design Report estimating the preliminary energy performance in compliance with the 2023 MA Stretch Code (ASHRAE 90.1 Pathway) and Specialized (Opt-in) Code (All-Electric Systems Pathway).

The proposed schematic design preliminary energy analysis demonstrates an estimated 44.7% energy savings and 44.7% energy cost savings relative to MA Energy Code (IECC 2021 with MA amendments) all electric baseline (ASHRAE system #8). The estimated preliminary 44.7% energy savings results comply with the Code's ASHRAE 90.1-2019 Pathway, as required under the MSBA 2023 Green School Policy. The building is modeled with the preferred conditioned air HVAC system: high performance all-electric heating and cooling system (VRF/ASHP) with a DOAS system for ventilation. The facility proposed design is seeking a predicted EUI (pEUI) of 30 kBtu/SF/yr. or better.

Please note that the 44.7% estimated energy savings are subject to change during the Design Development and Construction Documents phases, due to more detailed performance of building enclosure, lighting and HVAC systems. Relative to the LEEDv4 EAc2-energy performance credit predicted points, the GBCI review and EIA based electricity rates at the time of the final LEED design review will impact final EAc2 points approval.

Please note that the predicted annual energy savings and energy costs savings are not representative of actual annual energy costs upon building occupancy. Many variables such as operational practices, actual occupancy schedules additional equipment and occupant behaviors will likely impact the actual energy usage of the facility.

Table 1 summarizes the schematic design estimated proposed design energy savings relative to the MA energy code (IECC 2021) baseline and estimated LEEDv4 points, including the preferred HVAC system (VRF/ASHP)

Table 1 – Estimated Energy Savings

	MA Energy Code IECC 2021/ ASHRAE (as modified per MA amendments)	**LEEDv4** EAc2 Optimize Energy Performance
	%	Estimated Points
Estimated Energy Savings	44.7%	
Energy Costs Savings	44.7%	16 (see note 2)

Notes:

1. *East Longmeadow Utilities energy costs, based on $0.2177/kWh.*

2. *LEED EAc2 points are based on LEEDv4 Optimize Energy Performance, with 16 points. The 44.7% represents an early energy analysis. Estimated points are pending GBCI final approval of electrical energy costs rates at the time of the LEED design documentation submissions and the USGBC/GBCI final review may impact the final energy costs savings results and final LEEDv4 certification credit/points awarded. The project may pursue the ACP95 pilot credit as needed for additional points, with a minimum goal of 14 pts and up to 16 points.*

Table 2 shows the predicted Energy Use Intensity (kBtu/SF/yr.) relative to the Massachusetts Energy Code baseline.

Table 2 - Predicted Energy Use Intensity (pEUI)

Predicted EUI (kBtu/SF/YR)	
MA energy Code IECC 2021 (baseline- All-Electric HVAC)	48.1
Base System - VRF: VRF Heat Pumps Heating & Cooling + DOAS	26.6
Option M1: Geothermal Heat Pumps Heating & Cooling + DOAS	24.0
Option M2: Heat Recovery Chiller + WSHP Heating and Cooling + DOAS	31.3

Green Building Certification

The East Longmeadow High School will be designed and constructed in accordance with the principles and criteria of the LEED v4.0 BD+C: New Construction and Major Renovations for Schools. The project will strive to meet the threshold of 50-59 points, equivalent to a Silver Certification. An Eco-Charette was held by JWA and SMMA on June 7th, 2023. The meeting supported community education and consensus based decision making relative to the Project's Sustainable Design and LEED goals.

A preliminary LEED scorecard is attached in the Appendix Section. The scorecard identifies the project design criteria and associated credits which are under consideration for this project, tracking 58 points. Specifications will include instructions to Contractor regarding waste management and waste diversion goals (95%), sustainable material procurement goals, and construction indoor air quality goals. The

scope of work for this project will include the construction elements and performance tasks to achieve that goal, and all subsequent documents, including but not limited to, specifications, drawings, cost estimates will match the scope of work indicated in the submitted scorecard and energy performance goal.

The sustainable design criteria and goals included (but not limited to) in the project's schematic design are summarized below:

Sustainable Sites (SS) / Location and Transportation (LT)

- Storm water runoff will be captured and treated through storm water treatment structures improving the storm waters quality.
- Impervious surfaces limited as much as is practical on the site open space areas.
- Sidewalks and walkways connect to a public way. Bike racks will be provided for 5% of building occupants.
- Roof will be designed to reduce heat island effect by using a light-colored roof membrane.
- Low-emitting and fuel-efficient vehicle preferred parking spaces will be provided with preferred access to the school entrances.
- Electric vehicle charging stations for at least 2% of parking spaces and EV readiness for future EV installations per code.
- Exterior light fixtures and layout are to meet IES TM-15-11 (BUG rating method) and "dark sky" requirements. Cut-off and glare-free exterior fixtures will reduce light spillage from the site (light pollution reduction). High efficiency, long-life LED building-mounted and pedestrian type lights will be used to illuminate school façade and walkways.

Water Efficiency (WE)

- Limited irrigation for outdoor water usage reduction at landscaped and lawn areas.
- Drought resistant plants to minimize irrigation demand.
- Low flow urinals, toilets, showerheads and faucets, 20% minimum water efficiency with a goal of 30%.
- Process water use reduction where applicable, including water efficient kitchen equipment and appliances.
- Water metering and sub-metering will provide feedback on water consumption end uses.

Energy and Atmosphere (EA)

- The total building energy consumption reduction shall exceed the Massachusetts Energy Code (IECC 2021). High performance building components including but not limited to Building Enclosure, HVAC and Electrical systems will contribute to achieving the project goal.
- Project Construction Permit (2024): East Longmeadow is a Stretch Code Community. The Construction Documents will be permitted in 2024 and will therefore be designed to be in compliance with the 10th Edition of the Building Code and the 2023 DOER Stretch Code and MA [Opt-in] Specialized Code under the All-Electric compliance pathway.
- Ventilation rates per ASHRAE 62.1 – 2013.
- No CFC refrigerants in HVAC or refrigeration system.
- High performance all-electric heating and cooling system.
- DOAS (Direct Outside Air System) ventilation system to optimize use of 100% fresh air.
- CO2 sensors to optimize ventilation effectiveness in densely occupied spaces (compliant with LEEDv4).
- Combination of mechanical and natural ventilation (operable windows) in classrooms.
- High efficiency energy recovery at air handling units where applicable.
- High efficiency all electric domestic water heaters.
- Unoccupied setback for classroom airflow.
- Nighttime setbacks for heating and cooling systems
- Building management system to control and monitor energy use, HVAC system components, lighting system, security system.
- Third party commissioning of Electrical, Mechanical & Plumbing systems and building enclosure, provided by MSBA.
- Whole Building Air Infiltration reduction and testing.
- High-efficiency, long-life and energy-saving LED interior lighting fixtures.
- Extensive networked digital automatic lighting control system consisting of programmable time-controlled systems, occupancy and daylight control devices. Dedicated groups of lighting fixtures will turn off when spaces are not occupied. Dedicated groups of lighting

fixtures will be dimmed or turned off when appropriate daylight levels are achieved (task tuning).

- Low Light Power Density (LPD): 0.50 watts / square foot or better (goal) for the entire building.
- Night-time shut-off of lighting system.
- Advanced Energy Metering to monitor energy systems.
- Capacity to participate in a utility Demand Response program.
- Plug load controls: a goal for 75% of electrical outlets (beyond Code) programmed to shut off at unoccupied mode and at night.
- Facility staff training on Operations and Maintenance for Electrical, HVAC, and Plumbing systems.
- High-performance and airtight building envelope
- Highly insulated walls and roofs: R-37 at walls and R-53 at roof.
- High-performance triple glazing system with an assembly U-value of 0.23 or better, Glazing U-value: 0.14 or better, SHGC: 0.35 or better.
- Air Infiltration Reduction of 0.25 cfm/SF @ 75 PA or better.
- Energy Star equipment and appliances for eligible equipment.
- Solar PV-readiness at roof and future parking canopies, including structure's capacity, electrical conduits, and dedicated space for electrical inverters and equipment
- Energy Storage Readiness for the future installation of battery storage.

Materials and Resources (MR):

- Designated recycling collection areas and recycling separation area.
- Minimum 75% diversion with a goal of 95% for construction and demolition waste.
- Maximal use of high recycled content materials and finishes, such as acoustical ceiling panels.
- Forest Stewardship Council certified wood for 50% or more of wood and wood products, at minimum, with a goal of 95%.

- Environmental Product Declaration and Healthy Product Declaration for materials and finishes (compliant with LEEDv4 exemplary performance).
- Use of regional materials (within 100 miles), as feasible.
- Building Life Cycle Impact Analysis for embodied carbon of the building structure and enclosure (compliant with LEEDv4 LCA credit)

Indoor Environmental Quality (IEQ):

- Indoor Air Quality plan required during construction to minimize contamination, including best practices such as using containment barriers, sealing ducts and protecting building materials from moisture.
- Permanent indoor air quality design features such as walk-off mats and isolation of areas of chemical use using partitions and negative air pressure.
- Daylight modeling to support daylight harvesting design optimization.
- Optimized access to views for all regularly occupied spaces.
- All classrooms and other learning spaces will have a high-performance lighting system consisting of direct/indirect high efficiency glare-free pendant lights, local “general” and “task” switches, occupancy and daylight sensors – to enable automatic and manual adjustments to suit individual task needs and performances. Classroom finishes will include materials reflectance compliant with the LEEDv4 criteria.
- Ventilation rates per ASHRAE 62.1-2013.
- All electric kitchen equipment.
- Air intakes located away from contaminant sources.
- Low VOC (volatile organic compound) materials and finishes selected for interior paints, coatings, adhesives, sealants, resilient flooring and adhesives, carpet and adhesives, floor finishes, tile setting adhesives and grout, acoustical wall and ceiling panels, wall board, cabinetry and furniture.
- Formaldehyde-free, low-VOC particleboard and composite wood products.
- Pollutant control using high efficiency MERV filters (MERV 13 or better).
- Building ventilation flush-out performed prior to occupancy.
- HEPA vacuuming prior to substantial completion.

- High performance acoustical design for classrooms.
- Operable windows in classrooms.

Innovation in Design (ID):

- Goal for Exemplary Performance in various categories, such as 95% FSC wood and 95% construction and demolition waste diversion.
- Goal for Exemplary Performance for both EPDs and HPDs.
- Innovation in Design for Low mercury content lamps.
- Innovation in Design for Green Housekeeping and Integrated Pest Management policies, including COVID Cleaning Pilot LEEDv4 credit.
- Innovation in Design for Green Educational Program.
- LEED AP BD+C on project.

Regional Priority (RP):

The LEEDv4 for Schools rating system rewards teams already pursuing specific LEED criteria with considerable regional environmental impact. An additional point is awarded for the following credit within the East Longmeadow High School's Zip Code:

- WEc1 – Outdoor Water Use Reduction (pending on achieving the 2 points threshold)
- EAc2 – Optimizing Energy Performance (pending on achieving the 8 points threshold)
- MRc1 - Building Life Cycle Assessment (pending on achieving the LEEDv4.1 2 points threshold)
- EAc5 or EAc7 - LEEDv4.1 Green Energy pending Solar PV installation through separate municipal project

Utility Incentives Programs

The project will pursue the applicable MassSave utility incentives program. The project is located in National Grid's utility territory, The project team has engaged with National Grid's team and plans to pursue MassSave's incentives

program Pathway for High School, with a goal for Tier 1 (EUI 25). Note: pending on final Design Documents and Utility's Post-Verification, the project may result under Tier 2.

Table 1: EUI Targets & Incentives

K-12 Schools	Site EUI Range	Incentives				
		Payable at end of Construction		Payable at end of 1 yr. post occupancy		
		Construction Incentive $/sf	Heat Pump Adder*	Post Occ. Inc. $/sf	Adder for getting under ZNE EUI target	Certification Incentive
Tier 2 (high schools only)	26-29	$1.50	Air Source Heat Pumps: $800/ton	$ 1.50	Not applicable	$3,000
Tier 1 - Net Zero Level (all Schools)	25 or less	$2.00	Variable Refrigerant Flow (VRF): $1200/ton Ground Source Heat Pumps: $4500/ton		$0.05/ EUI point reduction/sf	

* Equipment must be used as a primary heating source to qualify. The heat pump adder is only available for equipment that transfers heat from a source outside of the

LEED v4 for BD+C: Schools
Project Checklist

DRAFT

Project Name: **East Longmeadow High School**
Date: 22-Aug-23

THE CREDITS INDICATED BY "YES" TO BE INCLUDED IN THE SCHEMATIC DESIGN BUDGET

Y	?	N			
1			Credit	Integrative Process	1

1	5	24	**Location and Transportation**	**Preliminary**	15
		15	Credit	LEED for Neighborhood Development Location	15
	1		Credit	Sensitive Land Protection	1
	1	1	Credit	High Priority Site	2
	1	4	Credit	Surrounding Density and Diverse Uses	5
		4	Credit	Access to Quality Transit	4
	1		Credit	Bicycle Facilities	1
	1		Credit	Reduced Parking Footprint	1
1			Credit	Green Vehicles	1

5	7	1	**Sustainable Sites**	**Preliminary**	12
Y			Prereq	Construction Activity Pollution Prevention	Required
Y			Prereq	Environmental Site Assessment	Required
1			Credit	Site Assessment	1
	2		Credit	Site Development - Protect or Restore Habitat	2
	1		Credit	Open Space	1
2	1	1	Credit	Rainwater Management	3
1	1		Credit	Heat Island Reduction	2
	1		Credit	Light Pollution Reduction	1
	1		Credit	Site Master Plan	1
1			Credit	Joint Use of Facilities	1

4	2	6	**Water Efficiency**	**Preliminary**	12
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
1	1		Credit	Outdoor Water Use Reduction	2
2	1	4	Credit	Indoor Water Use Reduction	7
		2	Credit	Cooling Tower Water Use	2
1			Credit	Water Metering	1

24	4	3	**Energy and Atmosphere**	**Preliminary**	31
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
6			Credit	Enhanced Commissioning	6
16		0	Credit	Optimize Energy Performance	16
1			Credit	Advanced Energy Metering	1
1	1		Credit	Demand Response	2
	2	1	Credit	Renewable Energy Production	3
	1		Credit	Enhanced Refrigerant Management	1
		2	Credit	Green Power and Carbon Offsets	2

6	1	4	**Materials and Resources**	**Preliminary**	13
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
1	1	3	Credit	Building Life-Cycle Impact Reduction	5
1			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations - v4.1	2
1		1	Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
1			Credit	Building Product Disclosure and Optimization - Material Ingredients - v4.1	2
2			Credit	Construction and Demolition Waste Management	2

10	4	2	**Indoor Environmental Quality**	**Preliminary**	16
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
Y			Prereq	Minimum Acoustic Performance	Required
2			Credit	Enhanced Indoor Air Quality Strategies	2
3			Credit	Low-Emitting Materials -v4.1	3
1			Credit	Construction Indoor Air Quality Management Plan	1
1	1		Credit	Indoor Air Quality Assessment	2
1			Credit	Thermal Comfort	1
1	1		Credit	Interior Lighting	2
	1	2	Credit	Daylight	3
1			Credit	Quality Views	1
	1		Credit	Acoustic Performance	1

6	0	0	**Innovation**	**Preliminary**	6
5			Credit	Innovation: Green Edu, Low Merc. Lamps, Exempl. HPDs & EPDs, pilot cr.	5
1			Credit	LEED Accredited Professional	1

1	2	1	**Regional Priority**	**Preliminary**	4
	1		Credit	Regional Priority: Building LCA - MR credit (Tally)	1
1			Credit	Regional Priority: Optimize Energy Performance (8 points min)	1
		1	Credit	Regional Priority: Renewable Energy Production (2 points min)	1
	1		Credit	Regional Priority: Outdoor Water Use Reduction (2 points min)	1

58	25	41	**TOTALS**	Possible Points:	110

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

Note: Renewable Energy and Green Power Credits - project PV/renewable procurement only qualifies if school district owns the RECs through owning system or through PPA agreement/RE purchase agreement.

LEED v4 Construction Submittal Cover Sheet

THIS FORM IS REQUIRED TO BE SUBMITTED *WITH Product Data Submittals*

Include documentation to backup each claim made below with product specific data such as Product Data Sheets, Cut Sheets, Product Specific Letter from Manufacturer, EPDs, HPDs, Cradle to Cradle Certificates, Declare Labels, FSC Chain of Custody Certificate, and VOC content and emissions detail.

PROJECT NAME: _____
SUBCONTRACTOR: _____
SPEC SECTION: _____
SUBMITTAL NUMBER: _____

Materials & Resources (MR)
Building Product Disclosure and Optimization (BPDO) Credits

This Form is REQUIRED TO BE SUBMITTED WITH Product Data Submittals in Divisions 3 -10, any VOC material regardless of Division, and for 31 Foundations, 32 Paving, 32 Site Improvements, and 32 Plantings.

	Product	Manufacturer	Product Costs[1] (exclude labor & equipment) ($)	MRc2 EPD's	MRc3 Sourcing of Raw Materials: Recycled Content		MRc3: Material Reuse	MRc3: Regional	MRc3	MRc4 Material Ingredients			
									FSC	hpd VERSION 2.2	Declare.		Furniture
			$ XX,XXX	EPD[2] (Env. Product Declaration) **Product Specific (PS) or Industry Wide (IW)**	Post-Consumer (% by weight)	Pre-Consumer (% by weight)	Is Material reused, salvaged, or refurbished? **Yes/No**	Extracted, Manufactured, & Purchased within 100 miles **Yes/No[3]** Include Location	FSC Certified Wood Products[4] (%)	HPD[7] (Health Product Declaration) Fully Delcared to 1000ppm? **Yes/No**	Delclare Label[10] w/ ingredient disclosure greater than 1000 ppm **Yes/No**	UL Product Lens Certification? **Yes/No**	Does Furniture meet ANSI/BIFMA e3 Standard[11]? **Yes/No/NA**
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													

This Form is REQUIRED TO BE SUBMITTED WITH Product Data Submittals in Divisions 3 -10, any VOC material regardless of Division, and for 31 Foundations, 32 Paving, 32 Site Improvements, and 32 Plantings.

	Product	Manufacturer	Product Costs[1] (exclude labor equipment) ($)	EQc2 Low- Emitting Materials: Adhesives, Sealants, Paints, & Coatings — VOC Content Evaluation[12]			VOC Emissions	Flooring, Wall Panels, Ceilings, Insulation	Composite Wood
			$ Cost	Wet-applied Products: Volume Used **# Liters**	VOC Content **(g/L)**	**CARB/ SCAQMD** Rule 1113 or 1168?	**CDPH** Emissions testing compliant? **Yes/No[13]**		**No added formladehyde NAF, ULEF,** (or **CARB** exempt?)
1									
2									
3									
4									
5									
6									
7									

NOTES / DEFINITIONS:

1. Product costs include all expenses to deliver the material to the project site, including taxes, transport, fabrication and profit. Do not include site labor or installation.

2. Environmental Product Declarations which conform to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and have cradle to gate scope min.

3. Product sourcing (extracted, manufactured, purchased) w/in 100 miles of project site, defined as travel by air to the project site not by road.

4. Wood products must be certified by the Forest Stewardship Council (FSC) and must be provide proof of vendor FSC Chain-of-Custody with this Product Data Submittal. IF NOT FSC AND IT IS CERTIFIED BY ANOTHER AGENCY -INCLUDE INFORMATION.

5. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for take back of their product (e.g. Closed Loop or Take Back Program)

6. Bio-based raw materials other than wood must be tested usingASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material.

7. The end use product has a published, complete Health Product Declaration with full disclosure of known hazards in compliance with the Health Product Declaration open Standard.

8. Manufacturer has an inventory of all ingredients: GreenScreen List translator (LT) score and/or Full GreenScreen Benchmark (BM) are acceptable.

9. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Bronze level or higher

10. Declare labels designated as Red List Free, LBC Red List Free, or Declared. Declare labels designated as LBC Red List Approved or LBC Compliant that demonstrate content inventory to 0.1% (1000 ppm). Living Product Challenge that demonstrate content inventory to 0.1% (1000 ppm)

11. ANSI/BIFMA e3 Furniture Sustainability Standard. The documentation from the assessor or scorecard from BIFMA must demonstrate the product earned at least 3 points under 7.5.1.3 Advanced Level in e3-2014 or 3 points under 7.4.1.3 Advanced Level in e3-2012.

12. All paints and coatings need to meet VOC content limits CARB 2007 or SCAQMD Rule 113, effective Feb 5, 2016. Adhesives and Sealants need to meet content limits SCAQMD Rule 1168. UL Greenguard Certification, UL Greenguard Gold, Indoor Advantage Gold, ClearChem Berkeley Ana., Intertek Clean Air

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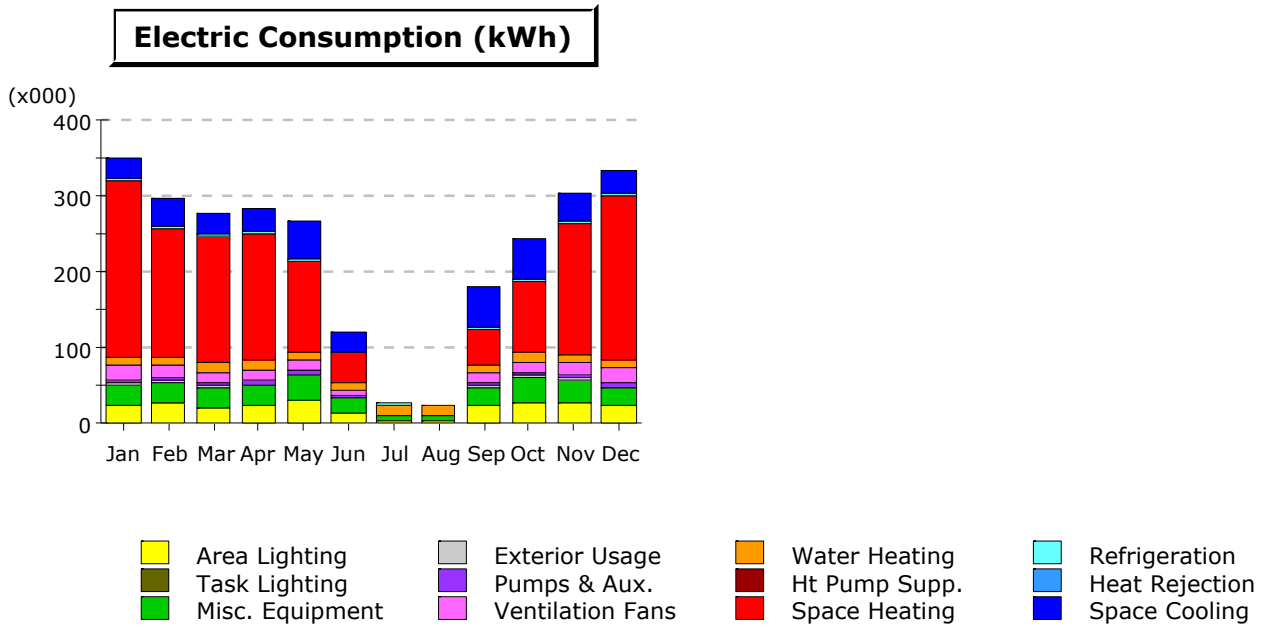
I, _____ a duty authorized representative of _____ hereby certify that the material information submitted here is an accurate representation of the material to be provided under our contract.

EMAIL CONTACT FOR AUTHORIZED REPRESENTTIVE: _____ Direct Phone:_____

SIGNATURE OF AUTHORIZED REPRESENTATIVE: _____ Date:_____

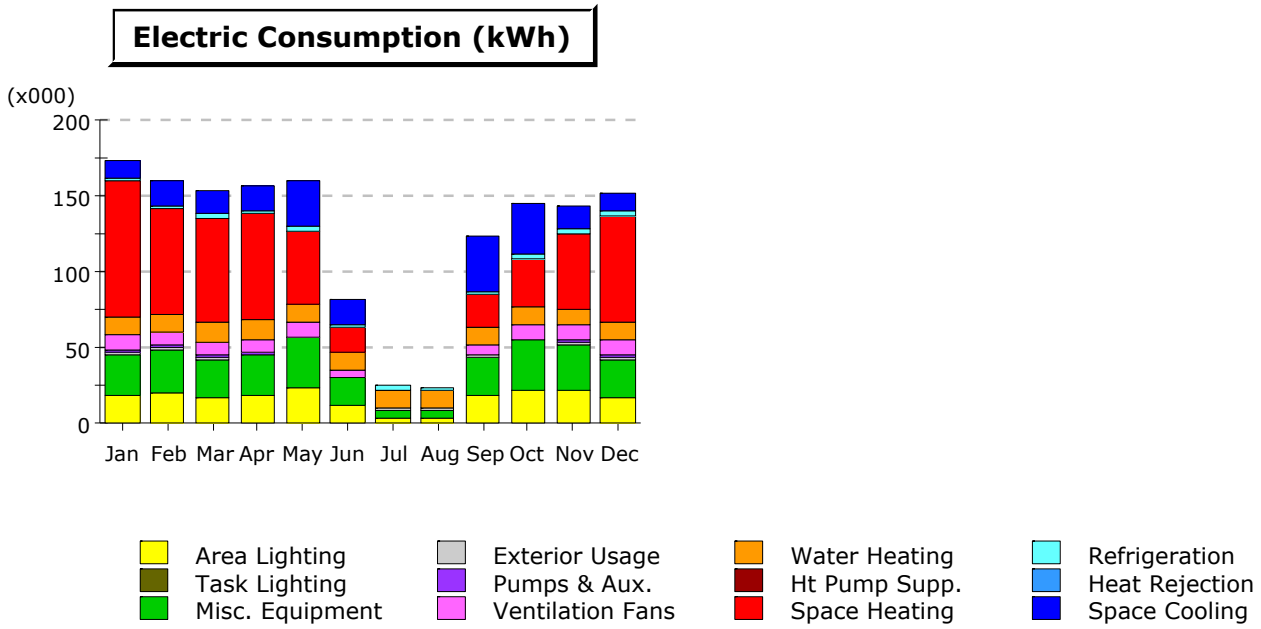


Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	28.7	37.4	27.8	30.0	50.3	26.6	-	-	53.0	54.8	36.4	30.6	375.6
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	2.6	2.6	2.6	2.6	2.9	2.3	1.9	1.9	2.6	2.8	2.7	2.6	30.0
Space Heat	232.3	171.4	165.9	168.4	118.9	38.4	-	-	48.2	95.1	171.9	215.6	1,426.2
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	12.2	11.0	12.2	11.8	12.2	11.8	12.2	11.5	11.0	11.5	11.5	12.2	141.0
Vent. Fans	18.5	14.7	14.6	15.3	12.7	5.7	-	-	10.8	13.3	15.8	18.8	140.1
Pumps & Aux.	5.0	5.3	5.1	4.7	5.6	2.6	-	-	4.7	5.4	5.1	5.4	48.9
Ext. Usage	1.5	1.3	1.5	1.4	1.5	1.4	1.5	1.5	1.4	1.5	1.4	1.5	17.5
Misc. Equip.	26.9	28.9	25.5	26.4	33.1	17.8	5.4	5.4	25.4	31.9	30.6	24.7	282.2
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	23.3	25.6	21.4	22.6	28.9	14.5	4.1	4.4	22.8	28.3	27.2	22.0	245.2
Total	351.0	298.3	276.6	283.3	266.2	121.1	25.1	24.7	179.9	244.7	302.5	333.3	2,706.5

Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool													
Heat Reject.													
Refrigeration													
Space Heat													
HP Supp.													
Hot Water													
Vent. Fans													
Pumps & Aux.													
Ext. Usage													
Misc. Equip.													
Task Lights													
Area Lights													
Total													



Electric Consumption (kWh x000)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool	11.8	16.1	15.3	16.6	29.8	16.6	-	-	35.7	33.2	15.4	11.9	202.4
Heat Reject.	-	-	-	-	-	-	-	-	-	-	-	-	-
Refrigeration	2.6	2.6	2.6	2.6	2.9	2.3	1.9	1.9	2.6	2.8	2.7	2.6	30.0
Space Heat	88.9	69.4	69.5	70.3	48.0	16.0	-	-	21.7	32.5	50.0	70.7	537.0
HP Supp.	-	-	-	-	-	-	-	-	-	-	-	-	-
Hot Water	12.2	11.0	12.2	11.8	12.2	11.8	12.2	11.5	11.0	11.5	11.5	12.2	141.0
Vent. Fans	10.3	9.7	9.4	9.6	9.5	4.1	-	-	7.2	9.2	9.8	9.8	88.5
Pumps & Aux.	1.0	0.6	0.6	0.6	0.1	-	-	-	-	0.0	1.0	1.1	5.0
Ext. Usage	1.5	1.3	1.5	1.4	1.5	1.4	1.5	1.5	1.4	1.5	1.4	1.5	17.5
Misc. Equip.	26.9	28.9	25.5	26.4	33.1	17.8	5.4	5.4	25.4	31.9	30.6	24.7	282.2
Task Lights	-	-	-	-	-	-	-	-	-	-	-	-	-
Area Lights	18.3	20.2	16.8	17.8	22.7	11.5	3.4	3.6	17.9	22.3	21.4	17.3	193.3
Total	173.6	159.8	153.3	157.1	159.7	81.5	24.3	23.9	122.9	144.9	143.8	151.8	1,496.8

Gas Consumption (Btu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Space Cool													
Heat Reject.													
Refrigeration													
Space Heat													
HP Supp.													
Hot Water													
Vent. Fans													
Pumps & Aux.													
Ext. Usage													
Misc. Equip.													
Task Lights													
Area Lights													
Total													

2-11
ANALYSIS OF DESIGN'S COMPLIANCE WITH ADA AND THE MAAB

Massachusetts Architectural Access Board Regulations

All areas open to students, or the general public, are required to comply with the requirements of the Massachusetts Architectural Access Board (521 CMR), and in particular Section 12: Educational Occupancies and Section 14: Places of Assembly. 521 CMR includes the following major provisions:

a. All public entrances must be accessible (521 CMR 25.1).

b. All public and common use areas must be accessible and provided with an accessible route thereto (521 CMR Section 12.2.2 and 20.1).

c. Accessible toilet rooms must be provided in each toilet room location (521 CMR 30.1).

d. Service counters must be accessible (521 CMR 7.2.2).

e. Where tables, study carrels, computer workstations, sinks or counters provided in classrooms, at least 5% with a minimum of one of each item must be accessible (521 CMR Section 12.2.2).

The current plans appear to provide access to all areas and compliant accessible elements as required.

American's with Disabilities Act

The ADA Guidelines are not enforced by the Commonwealth of Massachusetts, they can only be enforced through a civil lawsuit or complaint filed with the U.S. Department of Justice. Although the provisions of the MAAB do not apply to employee only areas, the ADAAG requires that employee only work spaces must be designed to allow employees to approach, enter, and exit

the work area. However, the work areas are not required be provided with accessible features (i.e. shelves, etc.).

RECEIVED

FEB 10 2023

MASS. HIST. COMM
RC.72825

APPENDIX A

MASSACHUSETTS HISTORICAL COMMISSION
220 MORRISSEY BOULEVARD
BOSTON, MASS. 02125
617-727-8470, FAX: 617-727-5128

PROJECT NOTIFICATION FORM

Project Name: East Longmeadow High School

Location / Address: 180 Maple Street

City / Town: East Longmeadow, MA 01028

Project Proponent

Name: Jones Whitsett Architects

Address: 308 Main Street

City/Town/Zip/Telephone: Greenfield, MA 01301 413-773-5551

After review of MHC files and the materials you submitted, it has been determined that this project is unlikely to affect significant historic or archaeological resources.

RC. 72825

2.27.23

Elizabeth Sherva
Preservation Planner
Massachusetts Historical Commission

Date

cc: MSBA

Agency license or funding for the project (list all licenses, permits, approvals, grants or other entitlements being sought from state and federal agencies).

Agency Name	Type of License or funding (specify)
Massachusetts School Building Authority	MSBA Core Project

Project Description (narrative):
Proposed demolition of the existing East Longmeadow High School - and proposed construction of a new high school on the same site, including vehicular parking and circulation, pedestrian walkways and plazas, rereconfigured athletic fields, and associated utilities.

Does the project include demolition? If so, specify nature of demolition and describe the building(s) which are proposed for demolition.
Yes. The project is proposing to demolish the entirety of the existing East Longmeadow High School.

Does the project include rehabilitation of any existing buildings? If so, specify nature of rehabilitation and describe the building(s) which are proposed for rehabilitation.
No.

Does the project include new construction? If so, describe (attach plans and elevations if necessary).
Yes. Please see attached site plan, floor plan, and perspective views.

APPENDIX A (continued)

To the best of your knowledge, are any historic or archaeological properties known to exist within the project's area of potential impact? If so, specify.

No.

What is the total acreage of the project area? 61.4 acres

* Woodland	6.9	acres	Productive Resources:		
Wetland	9.4	acres	Agriculture	0.0	acres
Floodplain	0.0	acres	Forestry	0.0	acres
Open space	30.8	acres	Mining/Extraction	0.0	acres
Developed	14.3	acres	Total Project Acreage	61.4	acres

*Note that portions of woodland area are within wetlands. Only woodlands outside of wetland limits are included in this number.

What is the acreage of the proposed new construction? 42.3 acres (This number accounts for total land disturbance)

What is the present land use of the project area?

High School, with associated parking, access drives, walkways, natural turf athletic fields, track w/ synthetic field, and utilities.

Please attach a copy of the section of the USGS quadrangle map which clearly marks the project location.

This Project Notification Form has been submitted to the MHC in compliance with 950 CMR 71.00.

Signature of Person submitting this form: _____ Date: 2/7/2023

Name: Dorrie Brooks, Principal, Jones Whitsett Architects

Address: 308 Main Street

City/Town/Zip: Greenfield, MA 01301

Telephone: 413-773-5551, x14

REGULATORY AUTHORITY

950 CMR 71.00: M.G.L. c. 9, §§ 26-27C as amended by St. 1988, c. 254.

2-13
ROOM DATA SHEETS

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CR

FUNCTIONAL CRITERIA

Room Area:	850
Quantity:	26
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Small Group Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

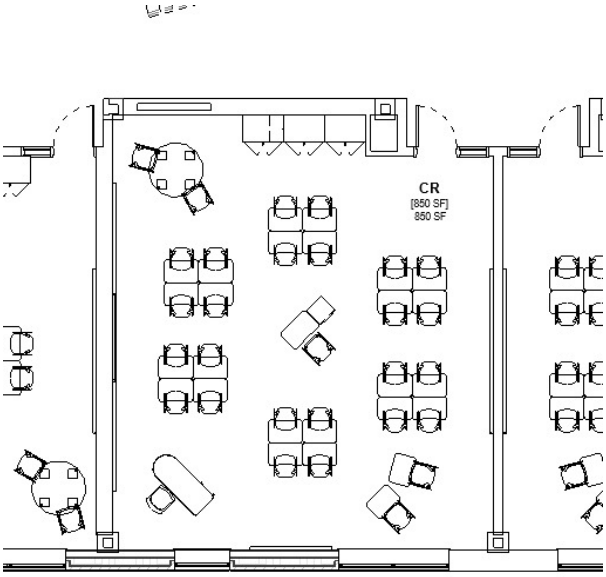
TECHNICAL CRITERIA

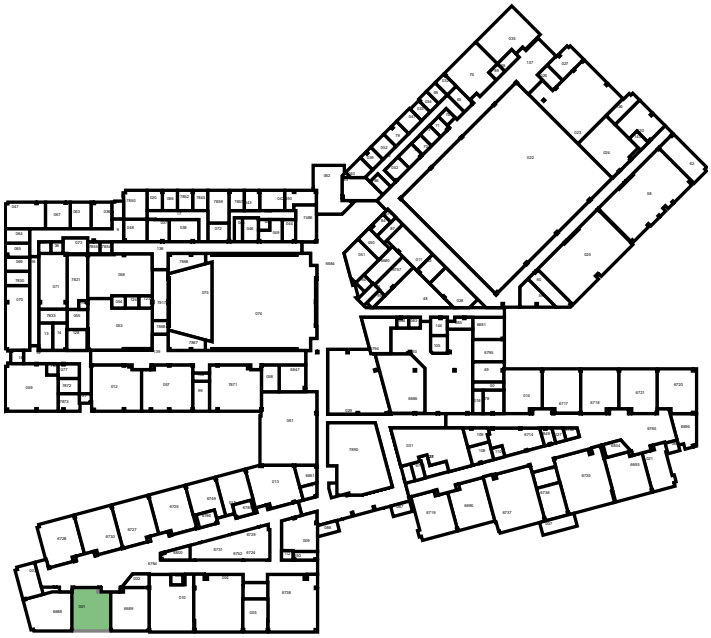
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 8x4
1	Whiteboard 12x4
1	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	SEM

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	4
Occupancy:	Assembly, Unconcentrated (tables and chairs)
Occupancy Factor:	15
Proposed Occupancy:	10

LOCATION CRITERIA

Adjacencies:	Learning Commons; General Classrooms - Grade 1-6 (1-5)
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

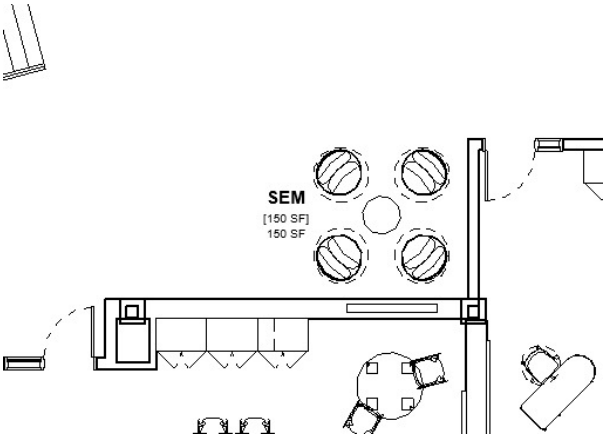
TECHNICAL CRITERIA

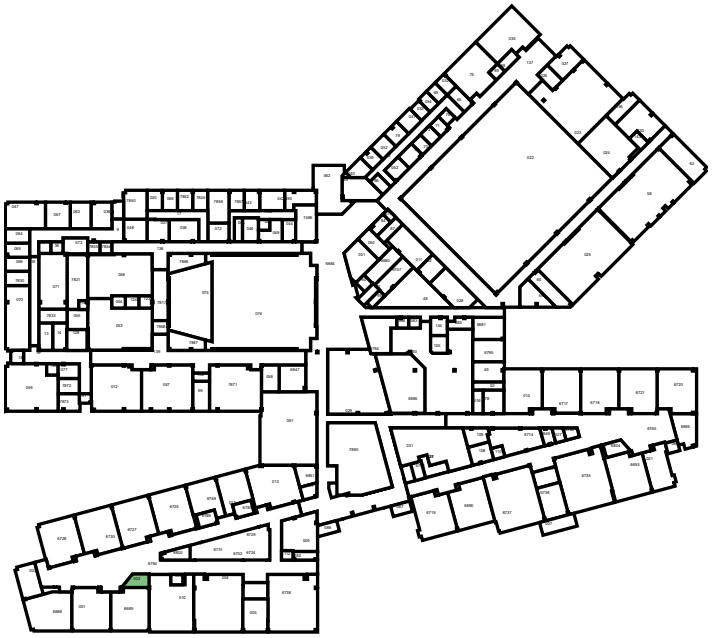
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: SG

FUNCTIONAL CRITERIA

Room Area:	300
Quantity:	6
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	12

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

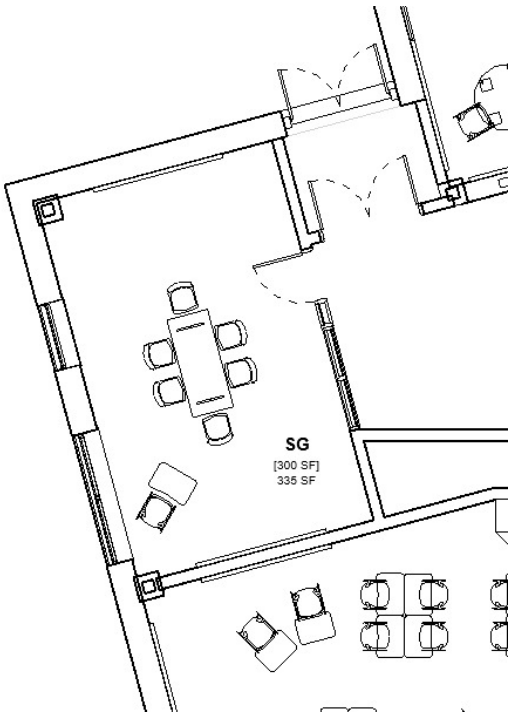
TECHNICAL CRITERIA

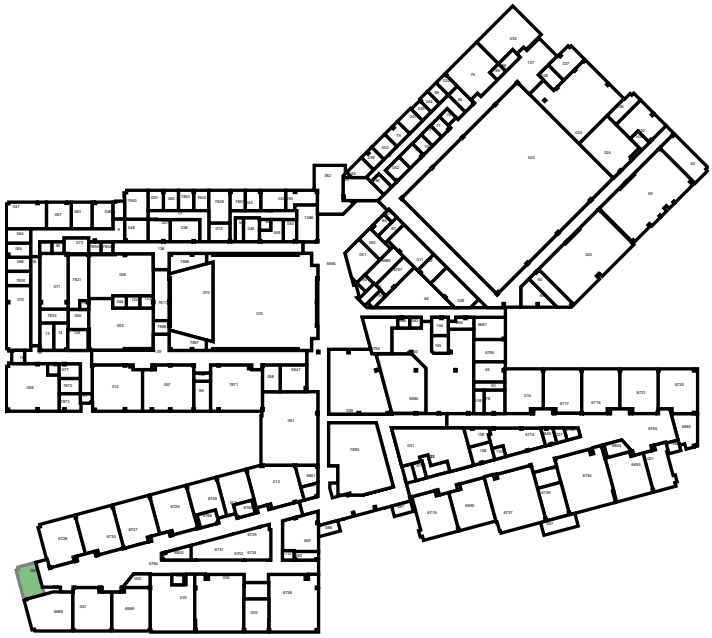
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 8x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: LAB

FUNCTIONAL CRITERIA

Room Area:	1440
Quantity:	8
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Prep Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	Yes
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

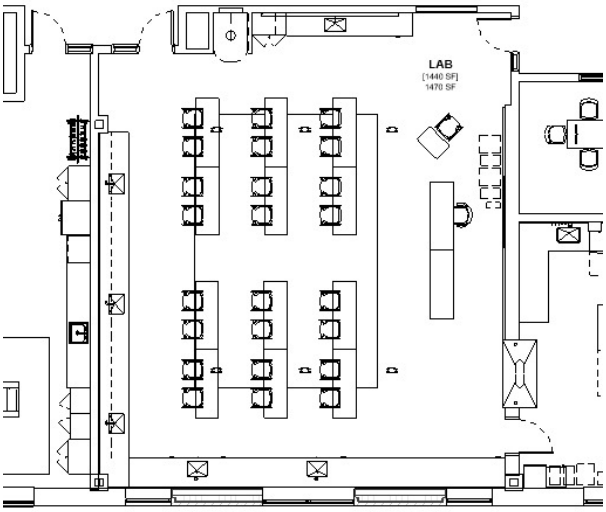
TECHNICAL CRITERIA

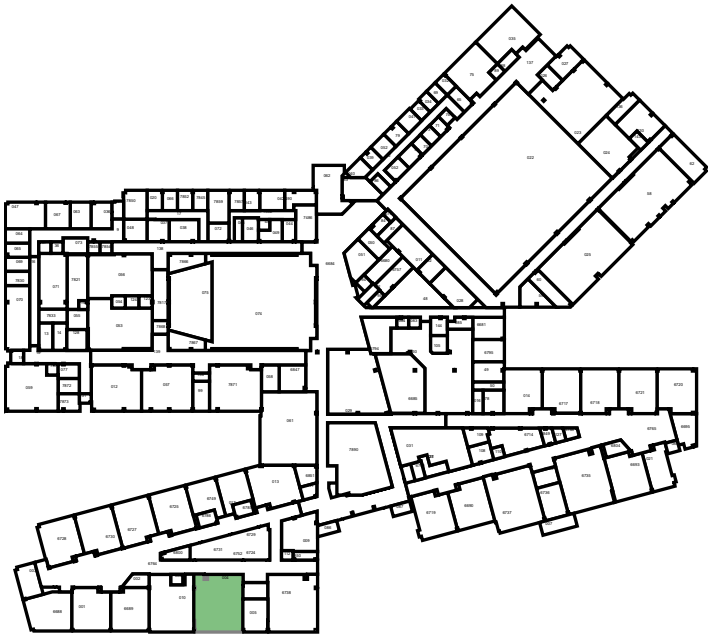
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments: *Biology (2): - Display Shelving for Plants at Window Chem (2): - Added Power to Support Electric Burners Other Labs (4): - Unistrut Rail Overhead for Physics Weight Bearing*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
6	Sink - Counter Mounted, Deep Basin
1	Emergency Shower
1	Whiteboard 8x4
1	Whiteboard 12x4
1	Whiteboard 6x4
6	Cord Reel
1	General Waste Container
1	Recyclable Waste Container
1	Biohazard Waste Container
1	Sharps Waste Container
1	Chemical Waste Container
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H

Quantity	Description
2	Epoxy Resin Counter Top 36H
1	ADA Sink Base 30"Wx25"Dx34"H
3	Upper Cabinet 36"Wx12"Dx24"H
5	Upper Cabinet 36"Wx12"Dx30"H
3	Upper Cabinet 18"Wx12"Dx30"H
1	Base Cabinet 30"Wx24"Dx34"H
7	Base Cabinet 18"Wx24"Dx36"H
1	Wardrobe Cabinet 36"Wx84"H
5	Base Cabinet - Faux Drawer - 36"Wx24"Dx36"H
2	Base Cabinet 36"Wx24"Dx34"H
12	Base Cabinet 36"Wx24"Dx36"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PREP

FUNCTIONAL CRITERIA

Room Area:	400
Quantity:	4
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	7

LOCATION CRITERIA

Adjacencies:	Science Labs
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	Yes
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

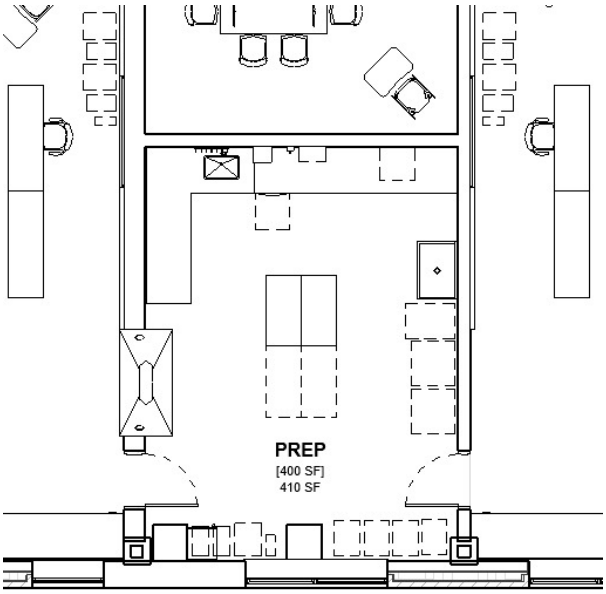
TECHNICAL CRITERIA

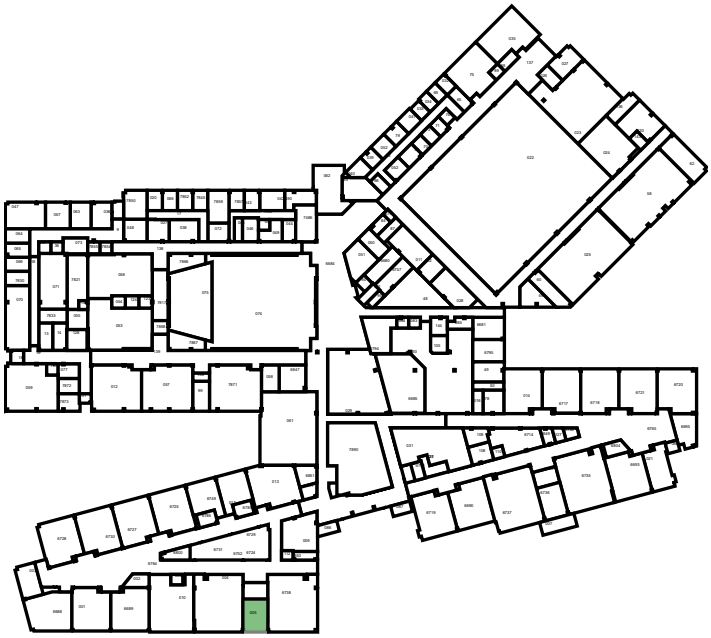
Acoustics:	0.7 NRC
Fire Rated Construction:	No
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Paper Towel Dispenser
1	Sink - Counter Mounted, Deep Basin
1	Dishwasher
2	Mini-Fridge
1	Scullery Sink - 24"Dx36"W
1	Lab Refrigerator
1	Ice Machine with Bin
2	Lab Equipment Cart
1	Lab Freezer
1	Point-of-Use Water Polisher
1	Electronic Benchtop Autoclave - 24"Wx20"H
1	General Waste Container
1	Recyclable Waste Container
1	Biohazard Waste Container
1	Sharps Waste Container

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H
1	Epoxy Resin Counter Top 36H
2	Tall Cabinet 24"Wx84"H
1	ADA Sink Base 42"Wx25"Dx34"H
2	Base Cabinet 18"Wx24"Dx36"H
1	Fume Hood
2	Base Cabinet 36"Wx24"Dx36"H
2	Base Cabinet 36"Wx24"Dx34"H
1	Peg Board - 24"Wx36"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CHEM STORAGE

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	5

LOCATION CRITERIA

Adjacencies:	Fitness Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

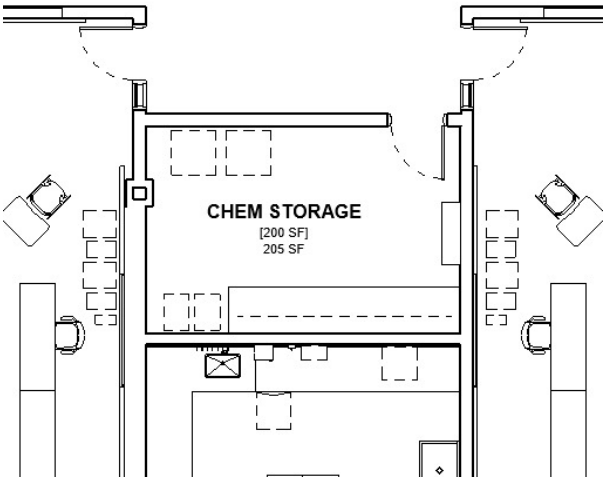
TECHNICAL CRITERIA

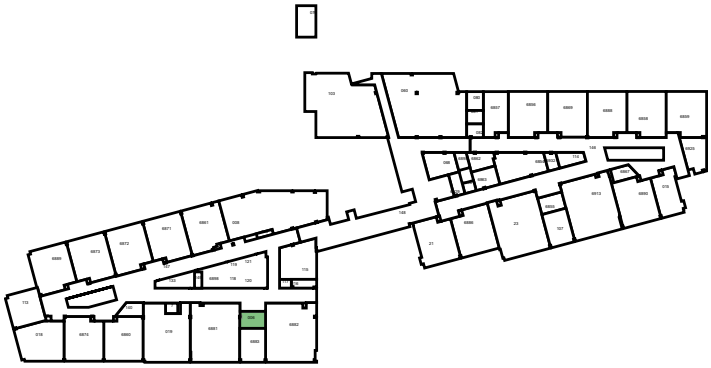
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	ETS, GWB, ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

Quantity	Description
1	Lab Freezer
1	Lab Refrigerator

FURNITURE

CASEWORK

Quantity	Description
1	Epoxy Resin Counter Top 36H
4	Upper Cabinet 36"Wx12"Dx24"H
2	Base Cabinet 15"Wx24"Dx36"H
2	Base Cabinet 18"Wx24"Dx36"H
1	Base Cabinet 30"Wx24"Dx36"H
1	Wall Shelf - 12"Dx42"Wx72"H
1	Acid Cabinet 30"Wx22"Dx30"H
1	Flam Cabinet 30"Wx22"Dx36"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: STEM/ ROBOTICS

FUNCTIONAL CRITERIA

Room Area:	2000
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Near Commons
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

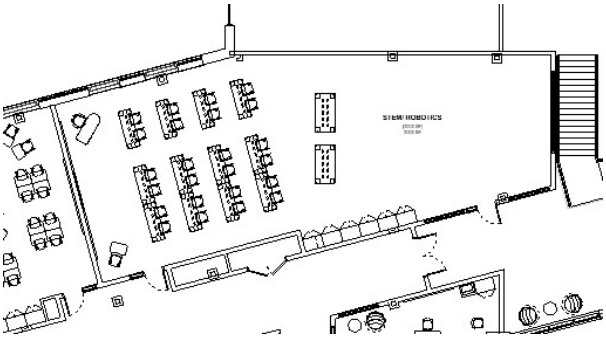
TECHNICAL CRITERIA

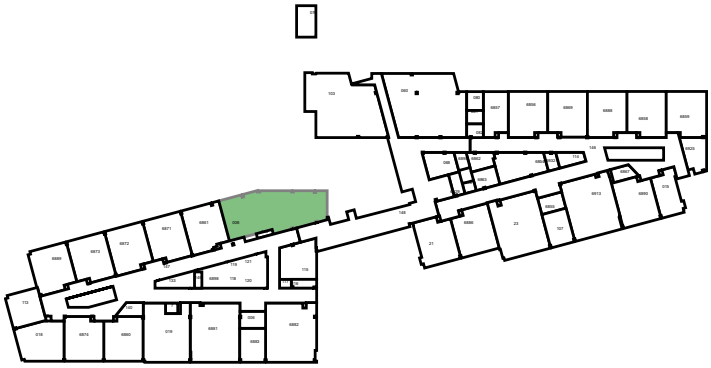
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	K13
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments: *Robotics Field*

ROOM LAYOUT





LEVEL 2

EQUIPMENT

Quantity	Description
2	Whiteboard 8x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
5	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PLAN

FUNCTIONAL CRITERIA

Room Area:	625
Quantity:	4
Occupancy:	Assembly, Unconcentrated (tables and chairs)
Occupancy Factor:	15
Proposed Occupancy:	12

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

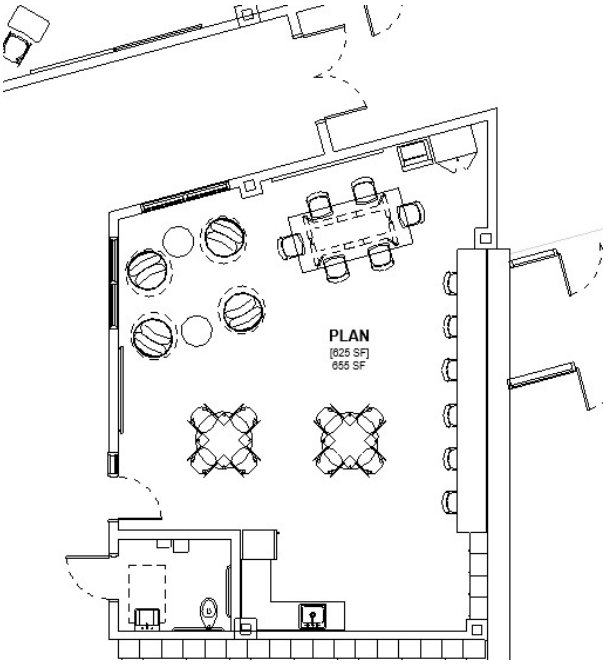
TECHNICAL CRITERIA

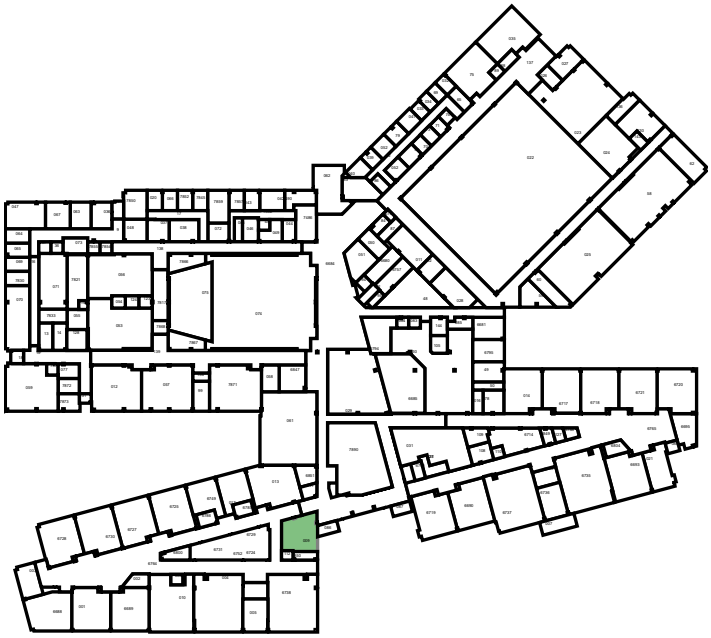
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Cart-Based
Voice Amplification	No

OTHER INFORMATION

Comments: *Flat Screen*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Copier
1	Flat Screen - 80"
1	Whiteboard 8x4

FURNITURE

Quantity	Description
1	Gym Locker - 2 Tier - 1-3x1-6

CASEWORK

Quantity	Description
1	Counter Top 34H
1	Tall Cabinet 36"Wx84"H
6	Base Cabinet 36"Wx24"Dx34"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: LIFE SKILLS

FUNCTIONAL CRITERIA

Room Area:	1200
Quantity:	2
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	63

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

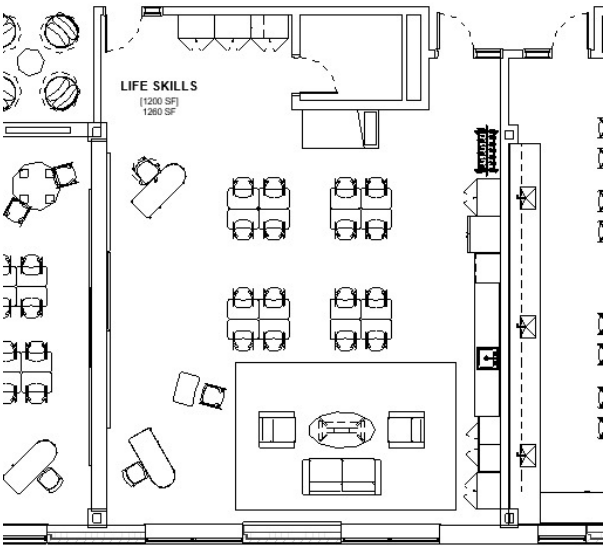
TECHNICAL CRITERIA

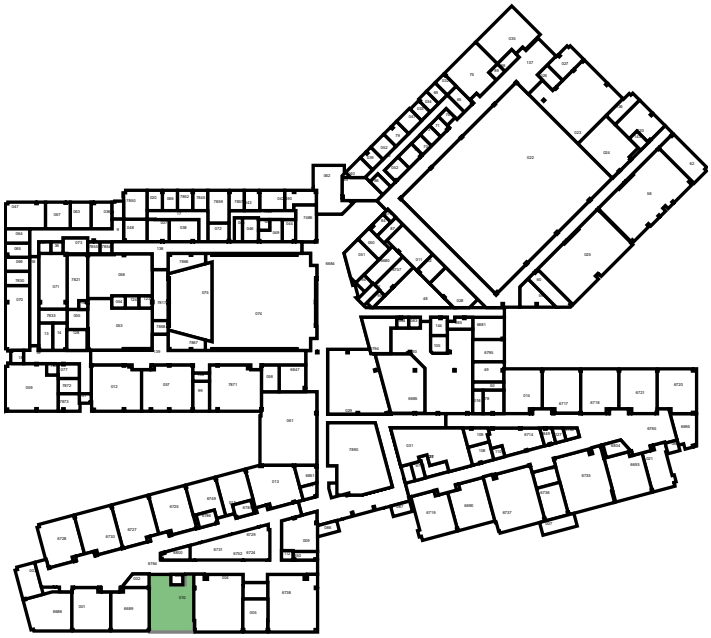
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Refrigerator - Side by Side
1	Dryer
1	Washer
3	Whiteboard 8x4
1	Sink - Counter Mounted
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 30H
1	Microwave Cabinet
4	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: OT/PT

FUNCTIONAL CRITERIA

Room Area:	500
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	6

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

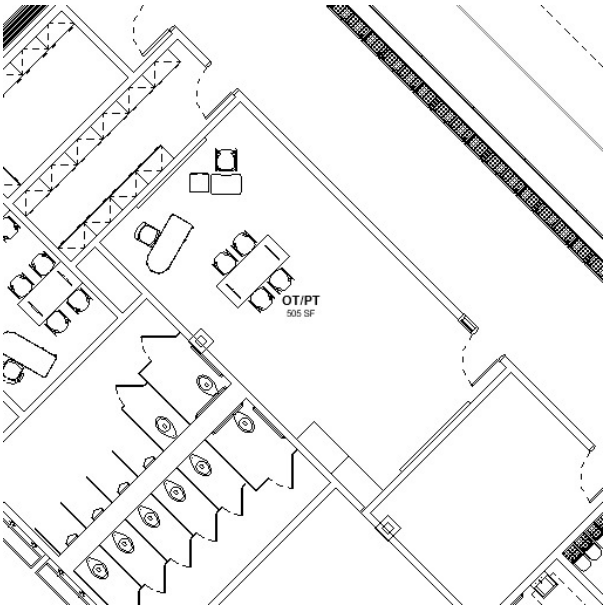
TECHNICAL CRITERIA

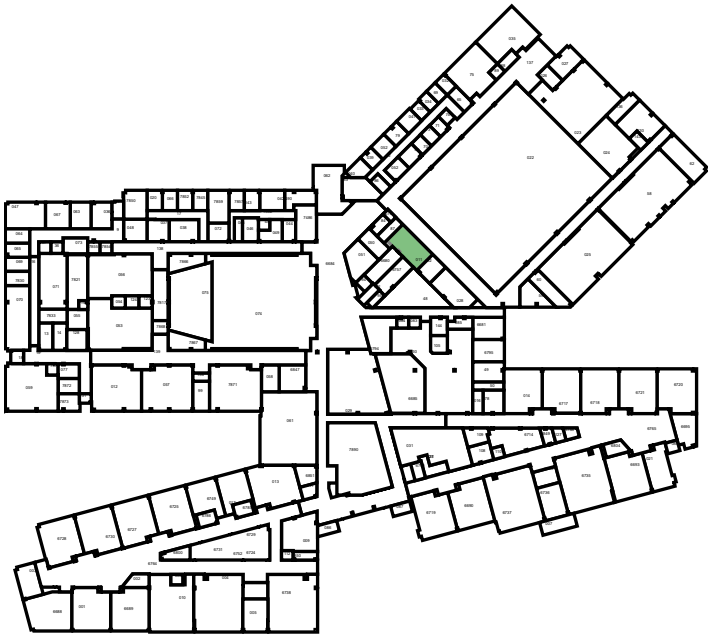
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 8x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: VIDEO

FUNCTIONAL CRITERIA

Room Area:	1200
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Small Group Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

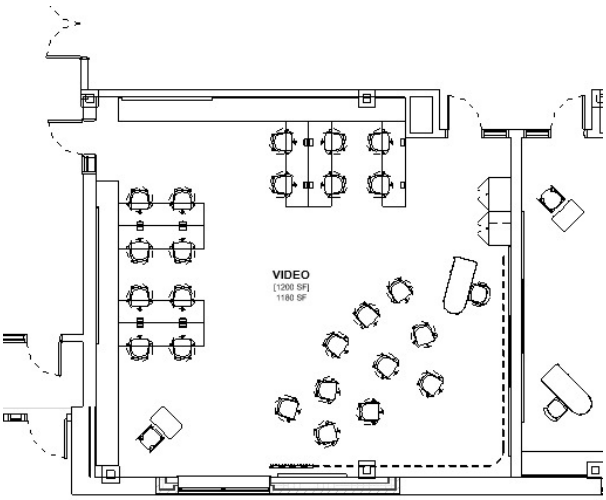
TECHNICAL CRITERIA

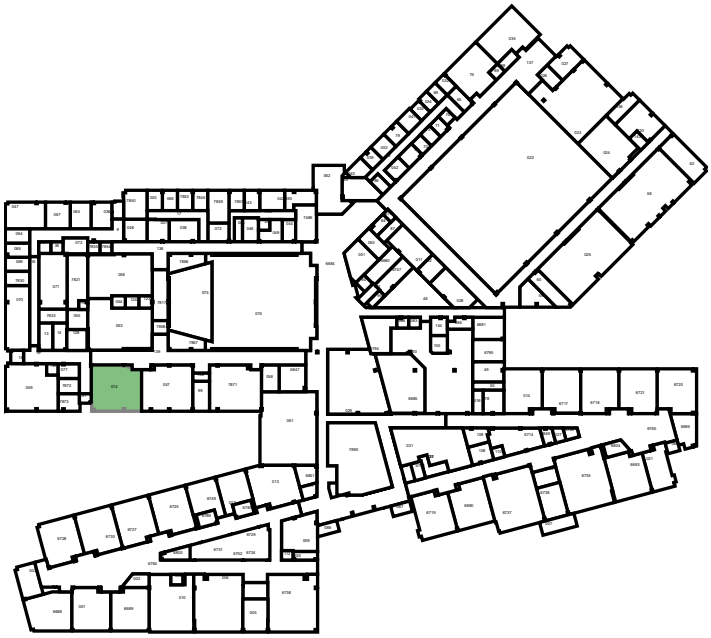
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments: *Separate Equipment Budget: - 3 SLR Cameras - 3 Tripods or Wheels - 3 Field Microphones - Lighting Equipment - Overhead Lighting Grid - Curtain Track*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 8x4
1	Whiteboard 12x4
3	Whiteboard 6x4
1	Curtain Track
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
2	Counter Top 34H
1	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: GRAPHICS

FUNCTIONAL CRITERIA

Room Area:	1000
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

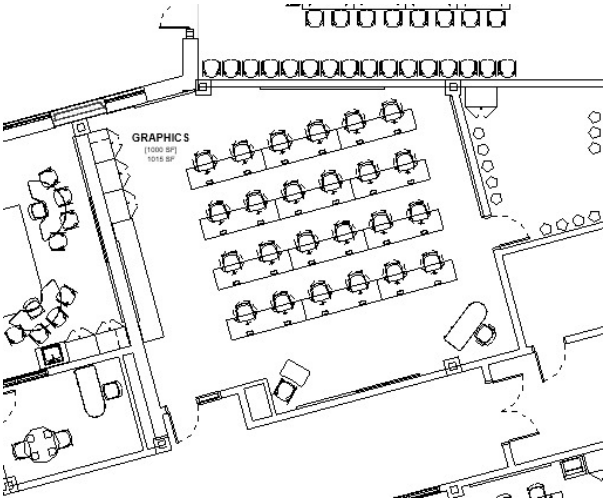
TECHNICAL CRITERIA

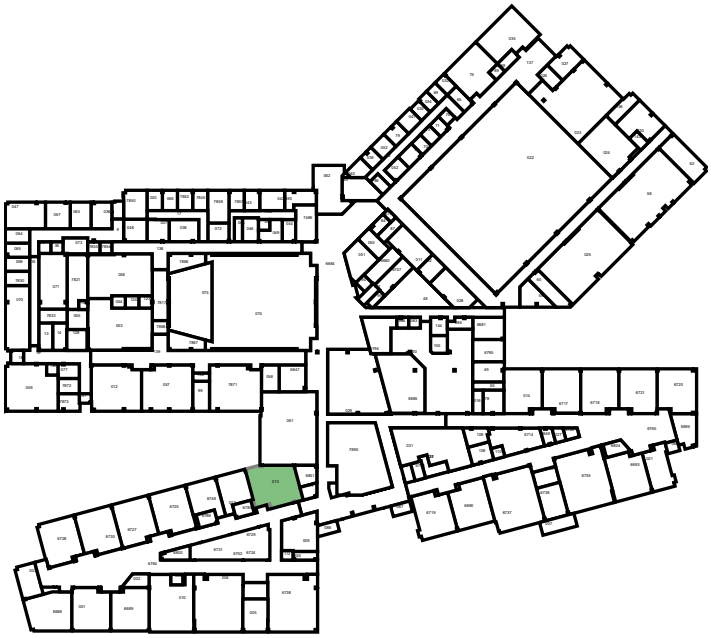
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT, CONC
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 8x4
2	Whiteboard 12x4
2	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: BUSINESS

FUNCTIONAL CRITERIA

Room Area:	850
Quantity:	4
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Small Group Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

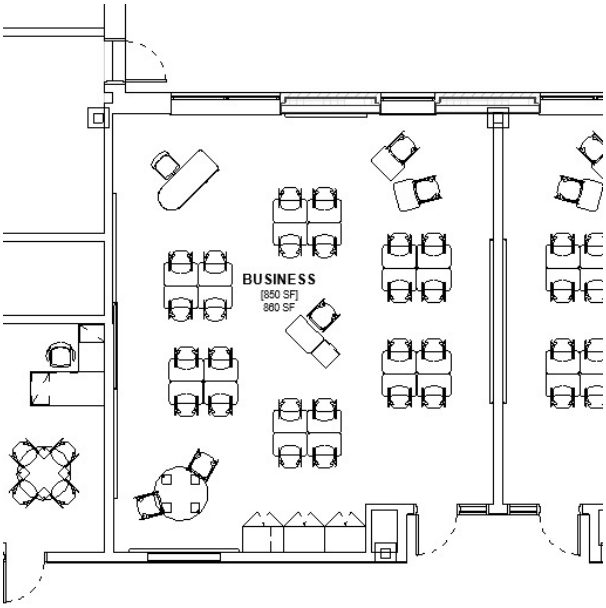
TECHNICAL CRITERIA

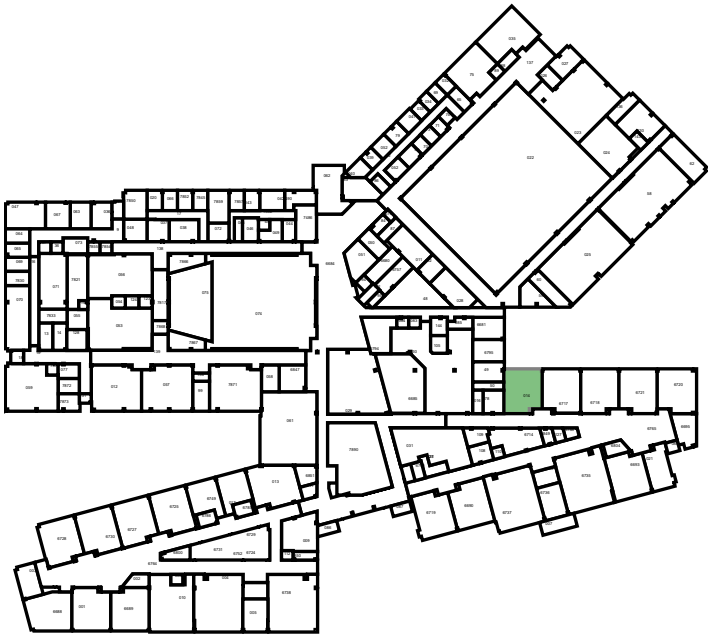
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
3	Whiteboard 8x4
1	Whiteboard 12x4
1	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ELL

FUNCTIONAL CRITERIA

Room Area:	500
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	16

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

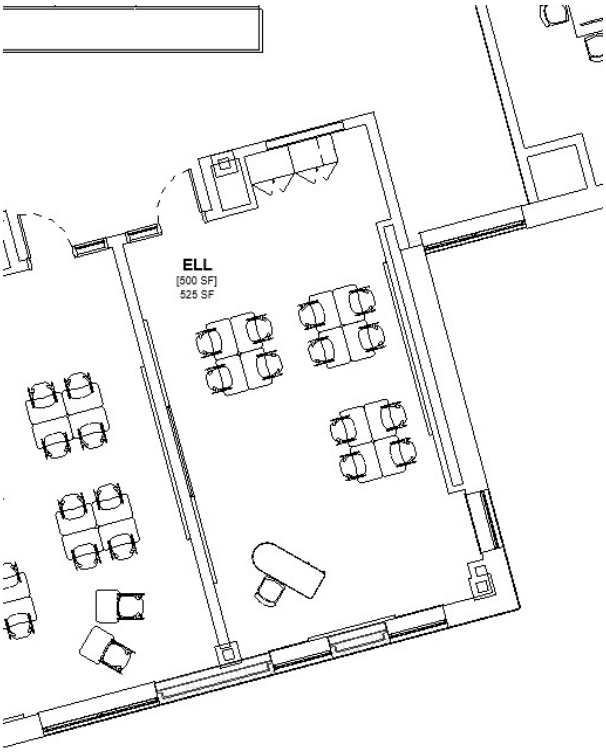
TECHNICAL CRITERIA

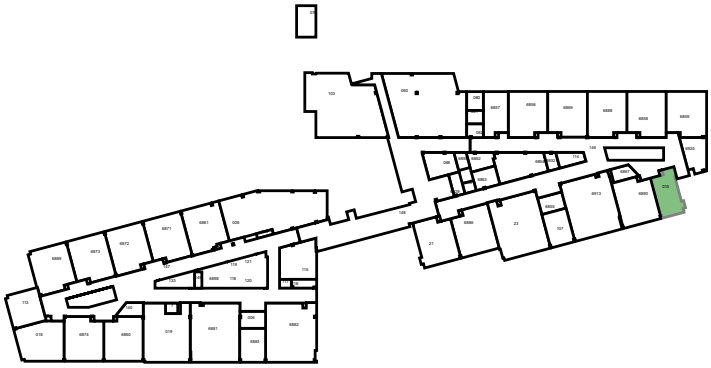
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4
3	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: WR

FUNCTIONAL CRITERIA

Room Area:	500
Quantity:	2
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	32

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

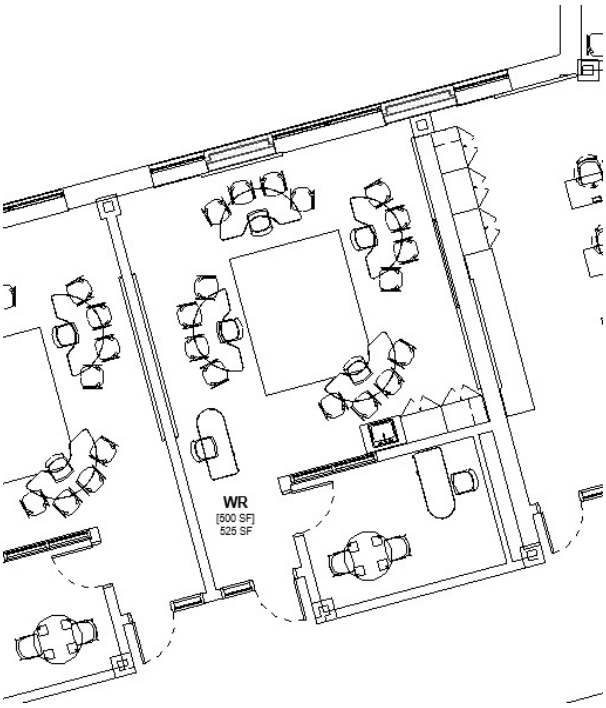
TECHNICAL CRITERIA

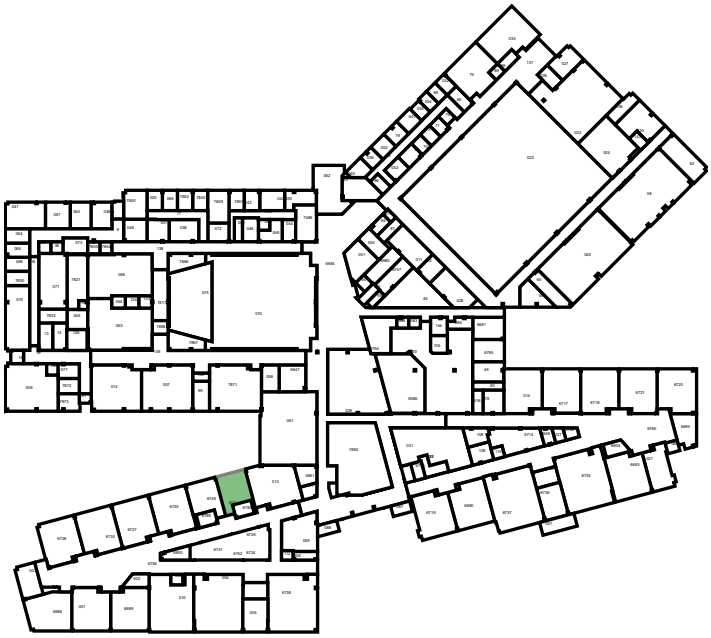
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4
3	Whiteboard 6x4
1	Sink - Counter Mounted, Deep Basin
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H
1	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	SEL

FUNCTIONAL CRITERIA

Room Area:	850
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	16

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

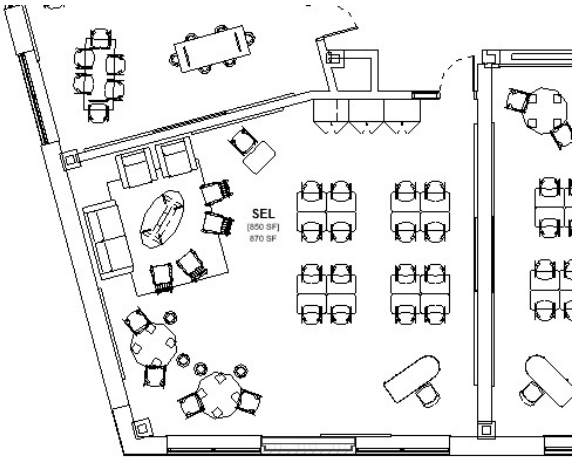
TECHNICAL CRITERIA

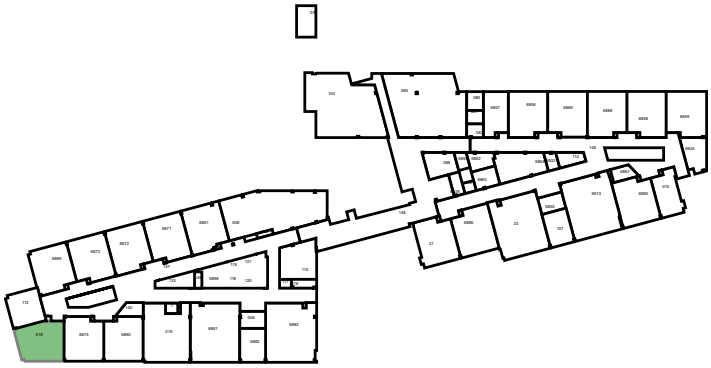
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

Quantity	Description
4	Whiteboard 8x4
1	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	ASD

FUNCTIONAL CRITERIA

Room Area:	1200
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	12

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

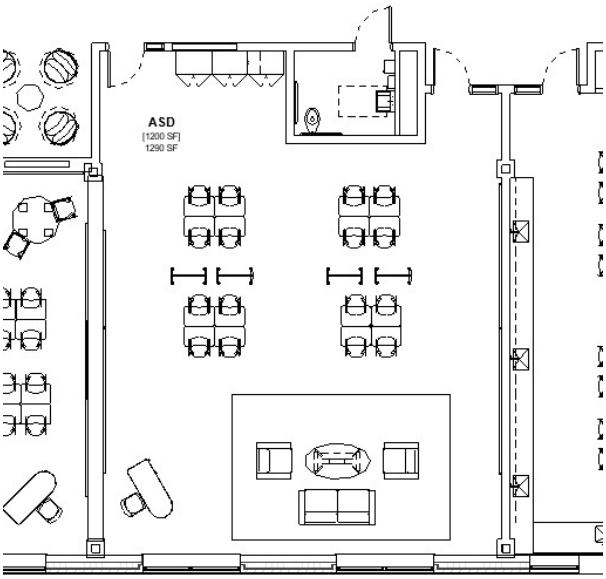
TECHNICAL CRITERIA

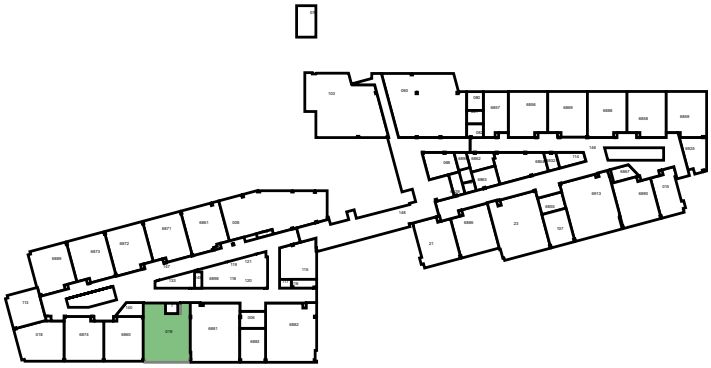
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

Quantity	Description
1	Whiteboard 8x4
3	Whiteboard 12x4

FURNITURE

CASEWORK

Quantity	Description
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: SPEECH

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	Speech Language Pathologist (SLPA) Office
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

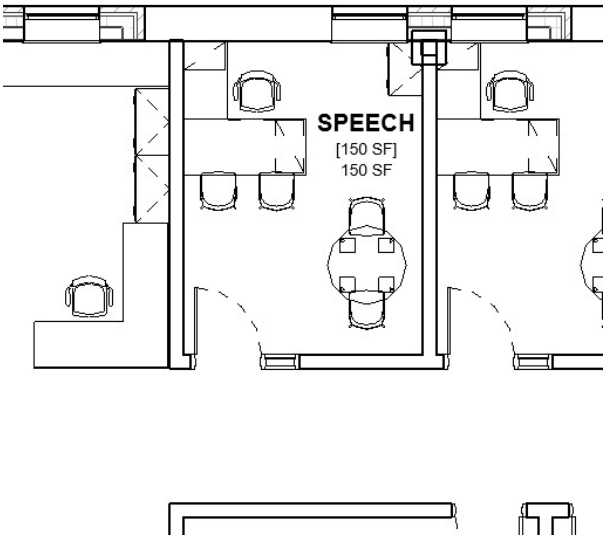
TECHNICAL CRITERIA

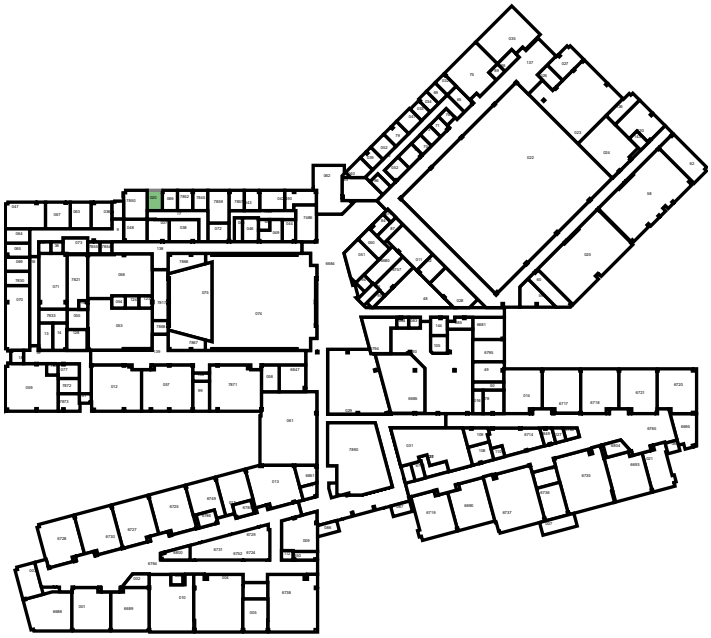
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: RES

FUNCTIONAL CRITERIA

Room Area:	500
Quantity:	3
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	8

LOCATION CRITERIA

Adjacencies:	General Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

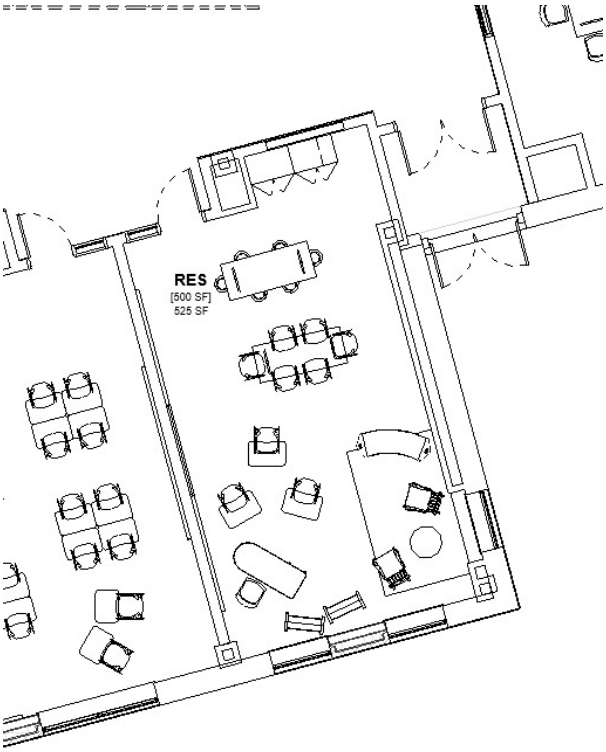
TECHNICAL CRITERIA

Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT



LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 8x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
1	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: GYM

FUNCTIONAL CRITERIA

Room Area:	12000
Quantity:	1
Occupancy:	Exersize rooms
Occupancy Factor:	50
Proposed Occupancy:	800

LOCATION CRITERIA

Adjacencies:	Alt PE
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	Yes
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

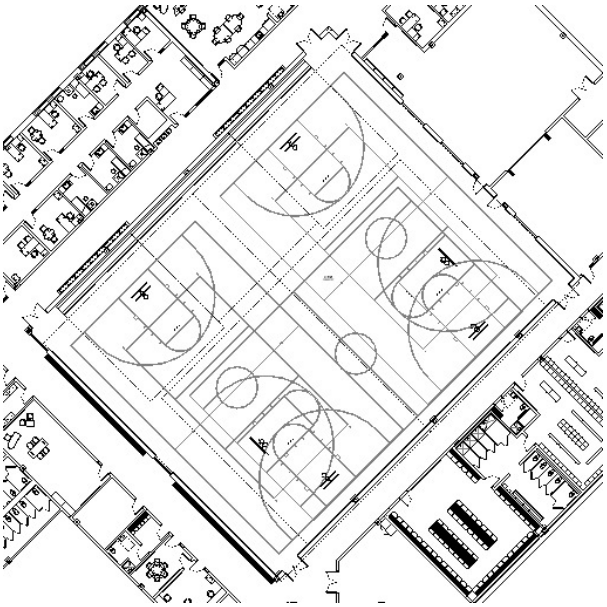
TECHNICAL CRITERIA

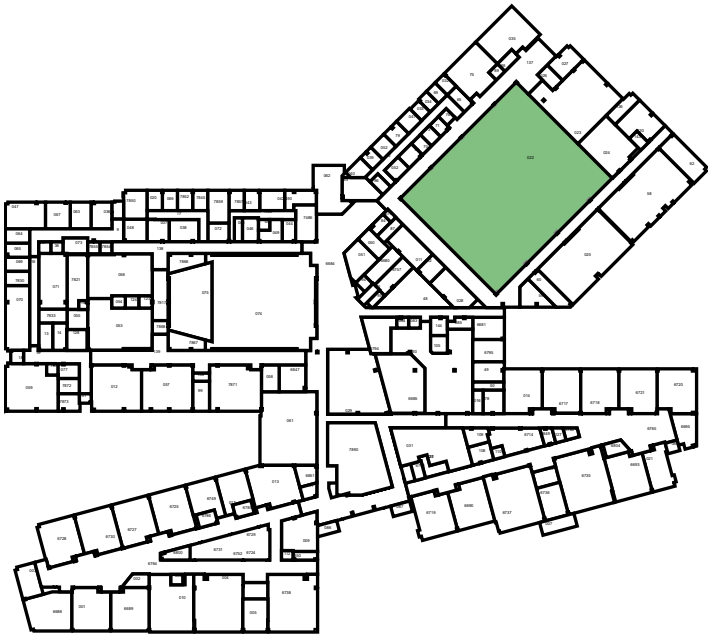
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	CMU, GWB/PT
Floor Finish:	WD
Ceiling Finish:	ETS, PT
Base Finish:	VB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Projection
Voice Amplification	No

OTHER INFORMATION

Comments: *Bleachers*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
6	Suspended Basketball Hoop
117	Wall Pad

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ALT PE

FUNCTIONAL CRITERIA

Room Area:	2000
Quantity:	1
Occupancy:	Exersize rooms
Occupancy Factor:	50
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Gymnasium
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	Yes
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

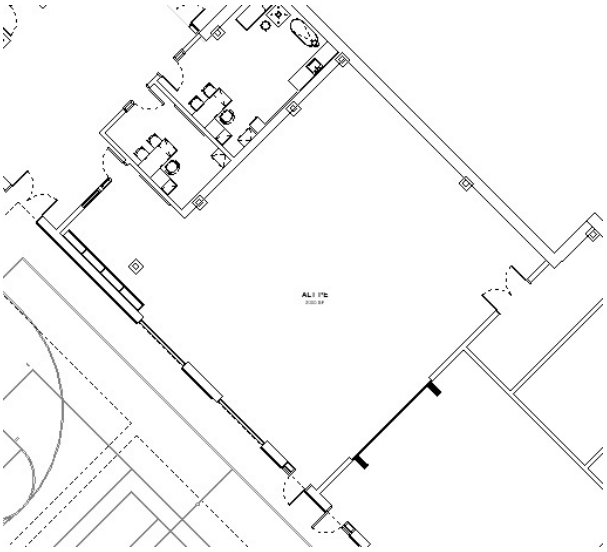
TECHNICAL CRITERIA

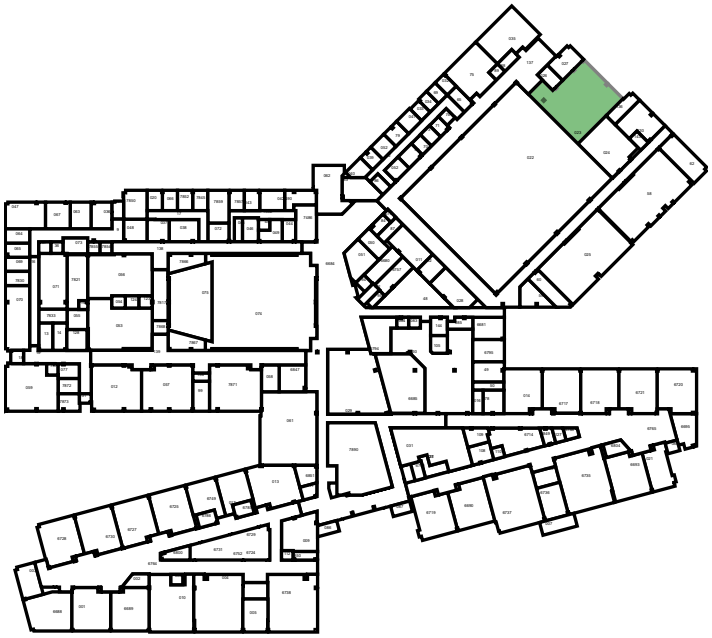
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	CMU, GWB/PT
Floor Finish:	WD
Ceiling Finish:	ETS, PT
Base Finish:	VB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 6x4

FURNITURE

CASEWORK

Quantity	Description
4	Cubby with Seat

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: WEIGHTS

FUNCTIONAL CRITERIA

Room Area:	1000
Quantity:	1
Occupancy:	Exersize rooms
Occupancy Factor:	50
Proposed Occupancy:	16

LOCATION CRITERIA

Adjacencies:	Gymnasium, Alt PE Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

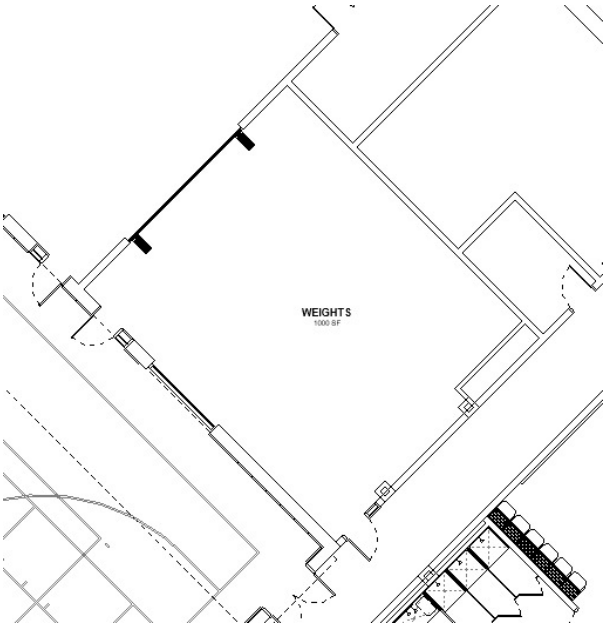
TECHNICAL CRITERIA

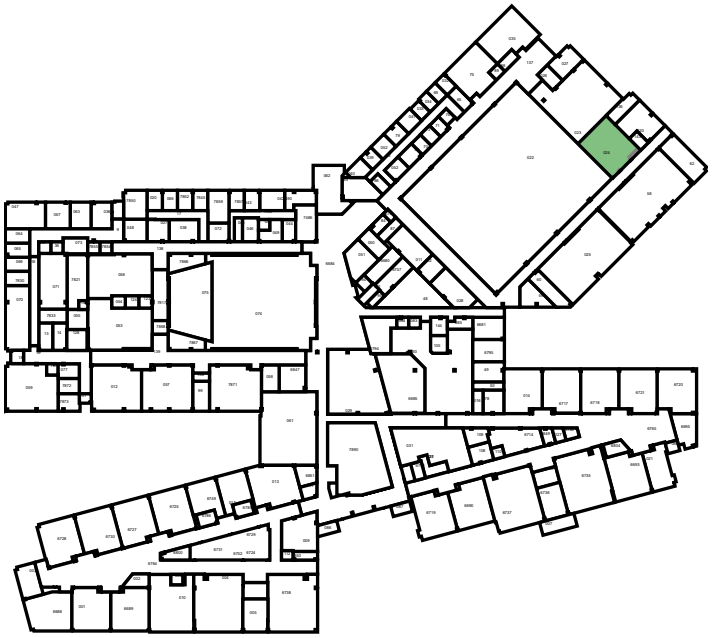
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	ETS, GWB, ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Overhead Door to Alt PE*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: LOCKERS

FUNCTIONAL CRITERIA

Room Area:	2240
Quantity:	2
Occupancy:	Locker rooms
Occupancy Factor:	50
Proposed Occupancy:	30

LOCATION CRITERIA

Adjacencies:	Multipurpose Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

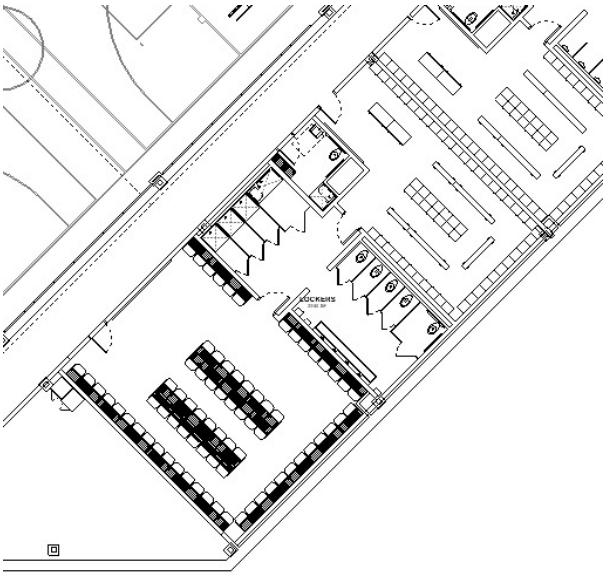
TECHNICAL CRITERIA

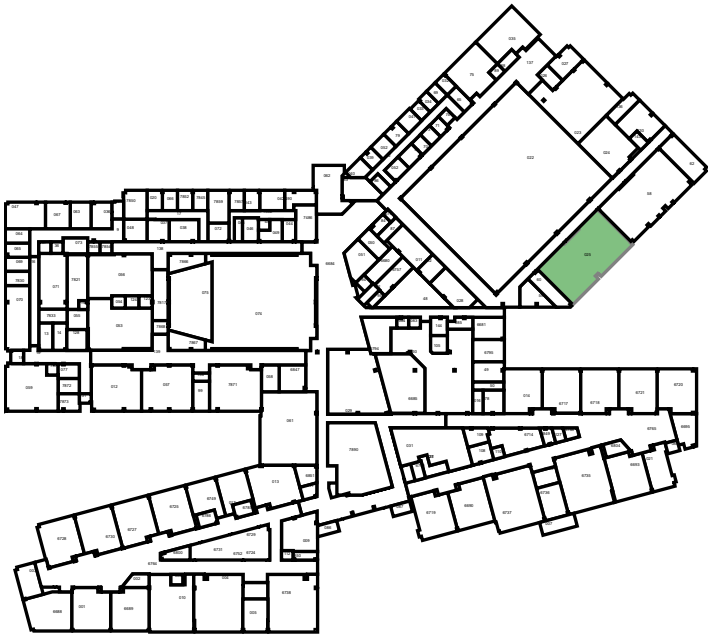
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	RF
Ceiling Finish:	ETS, GWB, ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
4	3-0x3-0 Shower
1	60x30 Shower
1	Trough Sink
2	Electric Hand Dryer
1	Paper Towel Dispenser
1	Whiteboard 8x4
1	Whiteboard 12x4
6	Toilet Fixture
1	Bathroom Sink - 30"H
60	Sports Locker 2-0x1-3

FURNITURE

Quantity	Description
57	Gym Locker - 2 Tier - 1-3x1-6

CASEWORK

Quantity	Description
2	ADA Locker Room Bench

Quantity	Description
1	72 Inches Wide
2	96 Inches Wide
2	48 Inches Wide

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: AD

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

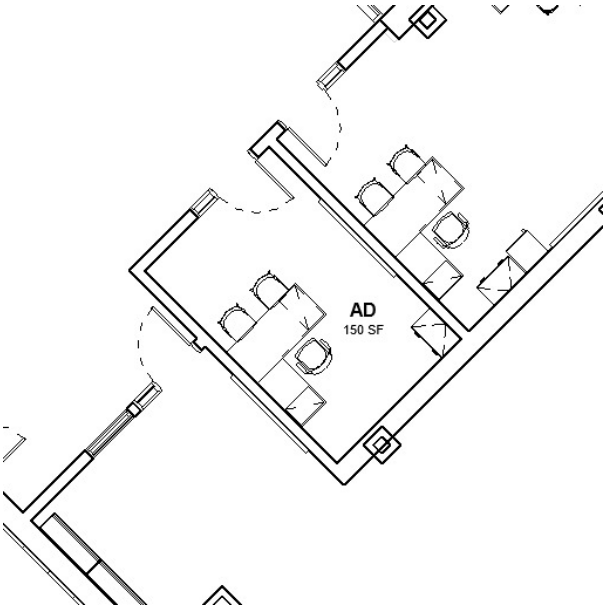
TECHNICAL CRITERIA

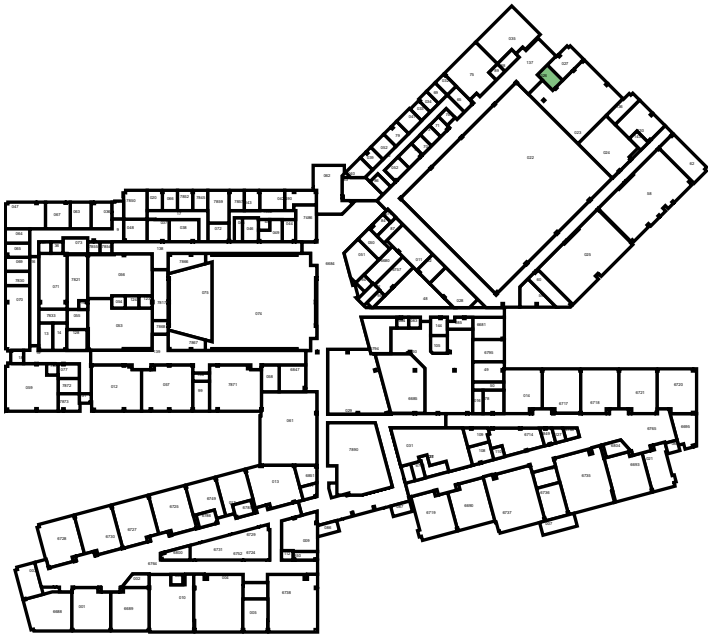
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 6x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: TRAINER

FUNCTIONAL CRITERIA

Room Area:	300
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	Gymnasium
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

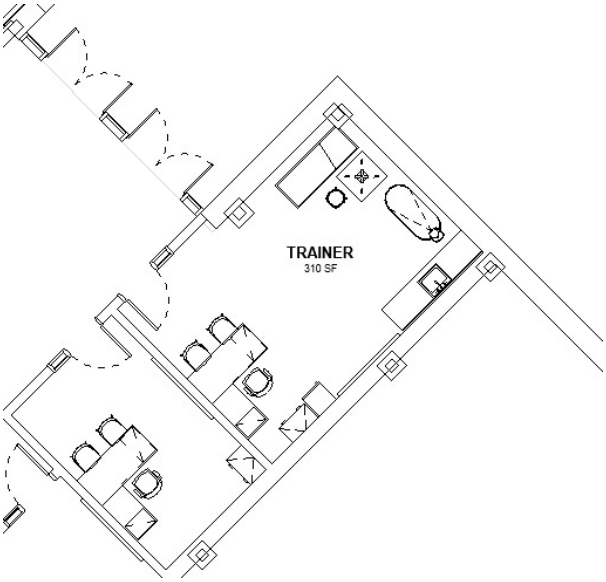
TECHNICAL CRITERIA

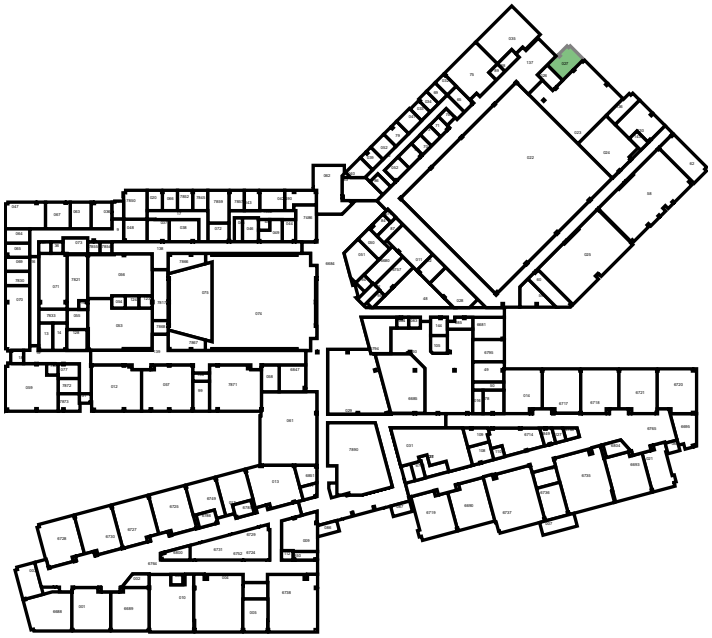
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Whirlpool*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Mini-Fridge
1	Hydrotherapy Tub
1	Whiteboard 6x4
1	Sink - Counter Mounted

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PE INSTR

FUNCTIONAL CRITERIA

Room Area:	500
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	3

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

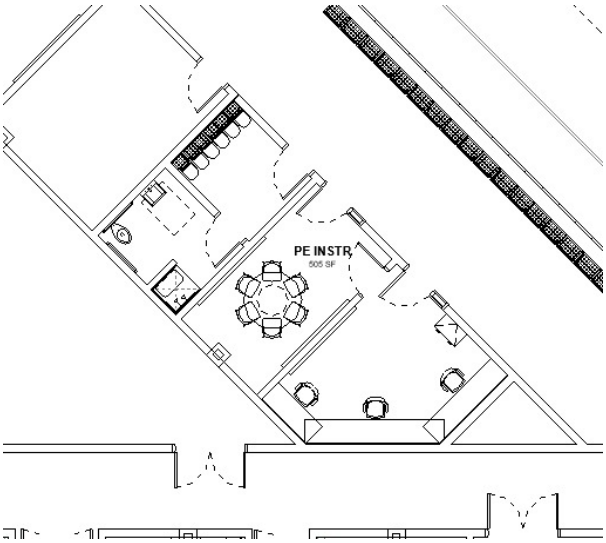
TECHNICAL CRITERIA

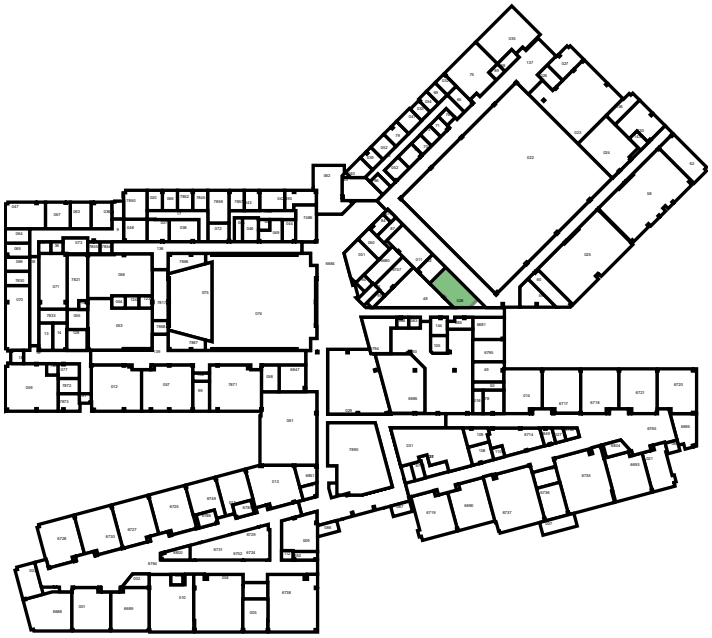
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	3-0x3-0 Shower
3	Whiteboard 8x4
1	Toilet Fixture
1	Bathroom Sink - 30"H
6	Sports Locker 1-3x1-3

FURNITURE

CASEWORK

Quantity	Description
3	Counter Top 34H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CAF A

FUNCTIONAL CRITERIA

Room Area:	1930
Quantity:	1
Occupancy:	Assembly, Unconcentrated (tables and chairs)
Occupancy Factor:	15
Proposed Occupancy:	129

LOCATION CRITERIA

Adjacencies:	Gymnasium
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	30-40 FC
Network Access:	Wireless/Hardwired Internet

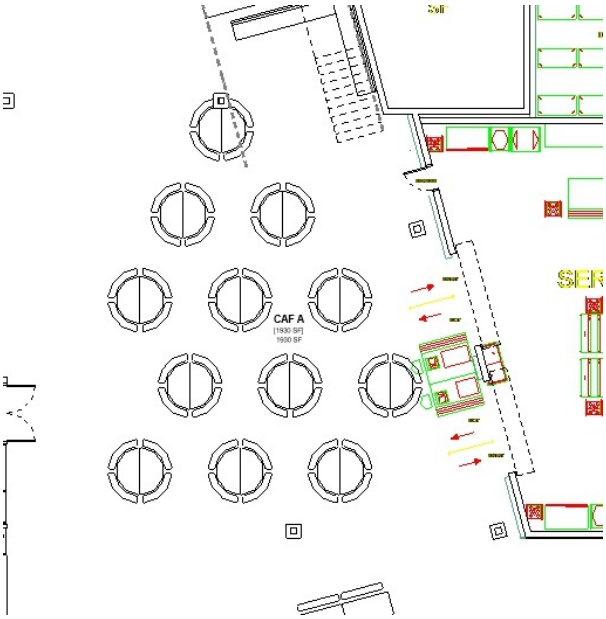
TECHNICAL CRITERIA

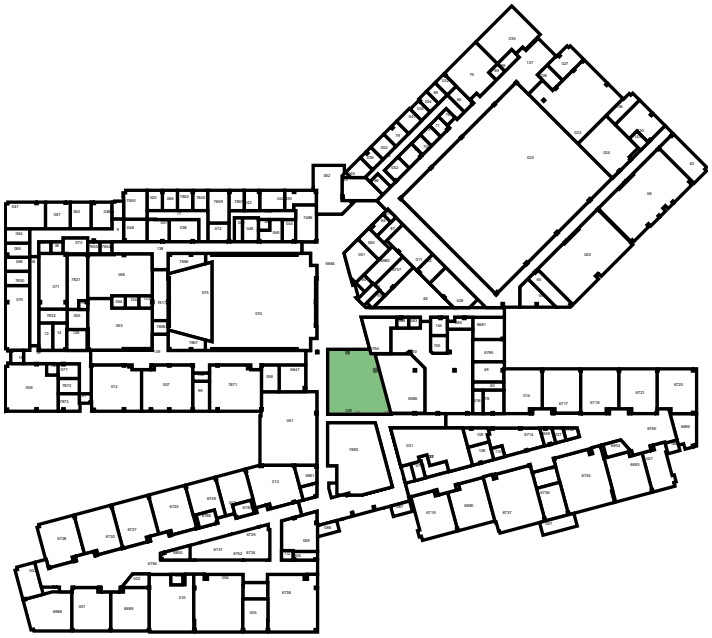
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT/WD
Floor Finish:	EPX TERRAZZO
Ceiling Finish:	ETS, GWB, ACP
Base Finish:	EPX TERRAZZO
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Projection
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CAF B

FUNCTIONAL CRITERIA

Room Area:	2050
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	Gymnasium
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	30-40 FC
Network Access:	Wireless/Hardwired Internet

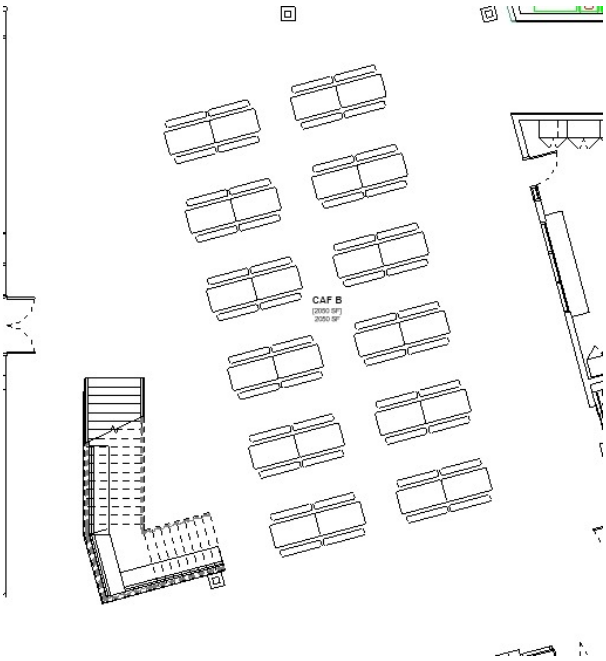
TECHNICAL CRITERIA

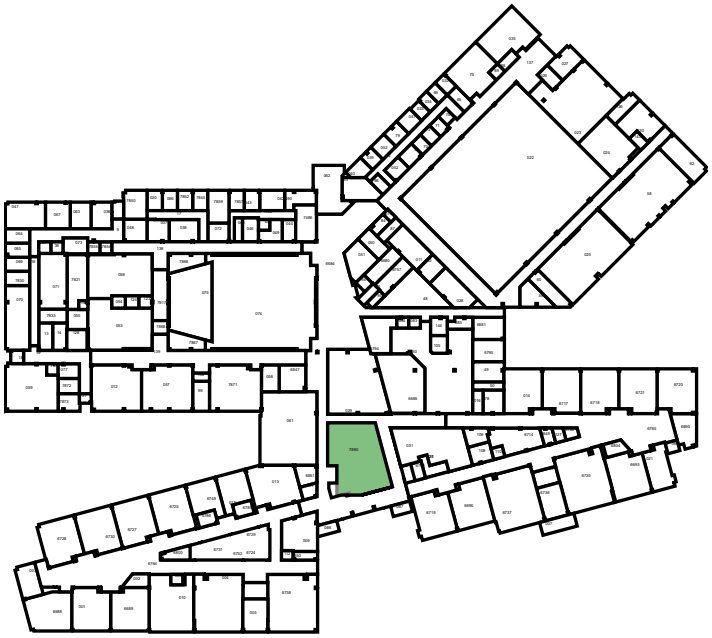
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT/WD
Floor Finish:	EPX TERRAZZO
Ceiling Finish:	ETS, GWB, ACP
Base Finish:	EPX TERRAZZO
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Projection
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

Quantity	Description
1	Booth Seating

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: KITCHEN

FUNCTIONAL CRITERIA

Room Area:	3000
Quantity:	1
Occupancy:	Kitchens, commercial
Occupancy Factor:	200
Proposed Occupancy:	22

LOCATION CRITERIA

Adjacencies:	Cafeteria
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-50 FC
Network Access:	Wireless/Hardwired Internet

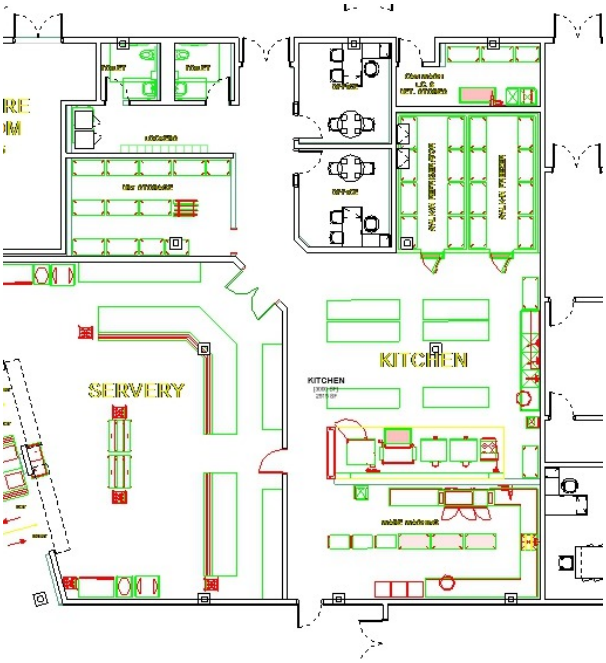
TECHNICAL CRITERIA

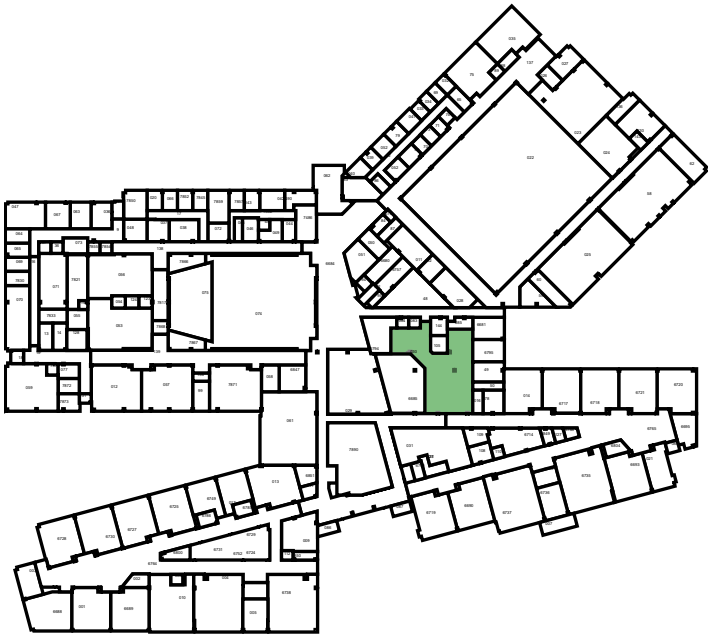
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB CT
Floor Finish:	EPX
Ceiling Finish:	WACP
Base Finish:	EPX
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Overhead Doors to Commons*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Dryer
1	Washer

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CULINARY

FUNCTIONAL CRITERIA

Room Area:	1600
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	Wireless/Hardwired Internet

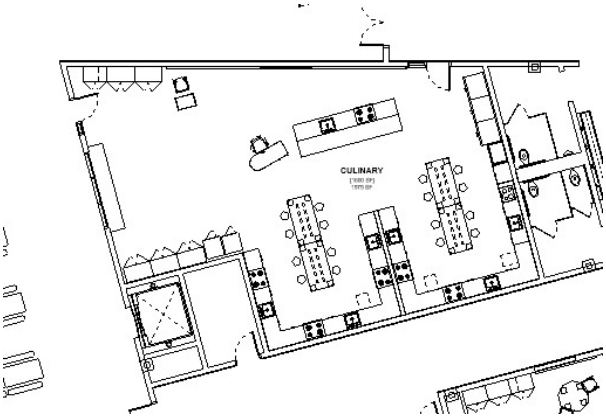
TECHNICAL CRITERIA

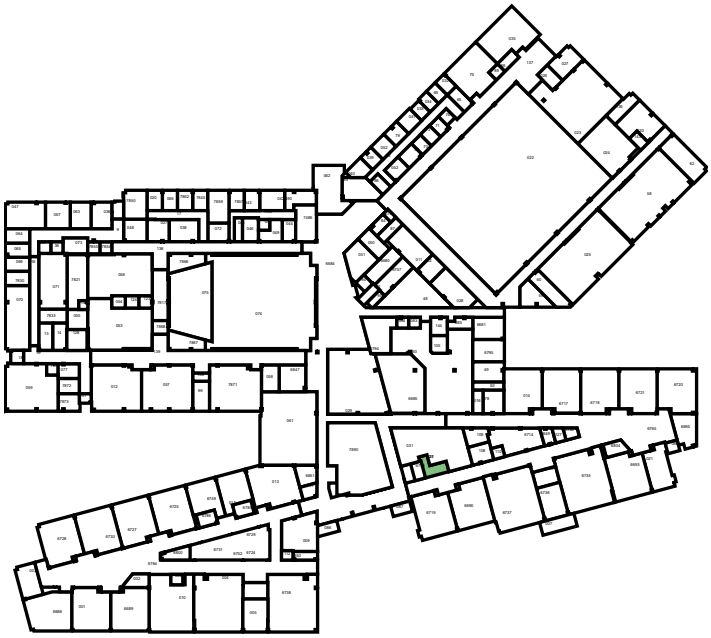
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CONC
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	Yes

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
6	Cooking Range
3	Refrigerator - Side by Side
3	Dishwasher
1	Dryer
1	Washer
2	Whiteboard 12x4
7	Sink - Counter Mounted
1	Flat Panel Display - 86" Diagonal
1	Cooktop
4	Toilet Fixture
4	

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 30H
1	Counter Top 34H

Quantity	Description
10	Base Cabinet 30"Wx24"Dx36"H
6	Base Cabinet - Faux Drawer - 30"Wx24"Dx36"H
1	ADA Sink Base 30"Wx25"Dx30"H
2	Counter Top 36H
1	Microwave Cabinet with Oven
1	Microwave Cabinet
2	Paneled Base Cabinet - 3 Drawers - 15"Wx24"Dx30"H
2	Paneled Base Cabinet - 3 Drawers - 15"Wx24"Dx36"H
5	Tall Cabinet 42"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: NURSE

FUNCTIONAL CRITERIA

Room Area:	100
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	Nurse Waiting Room; Examination Room / Resting
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	None

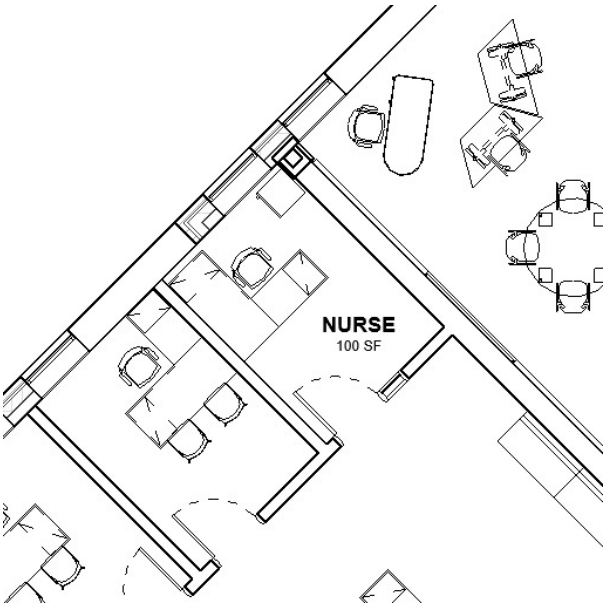
TECHNICAL CRITERIA

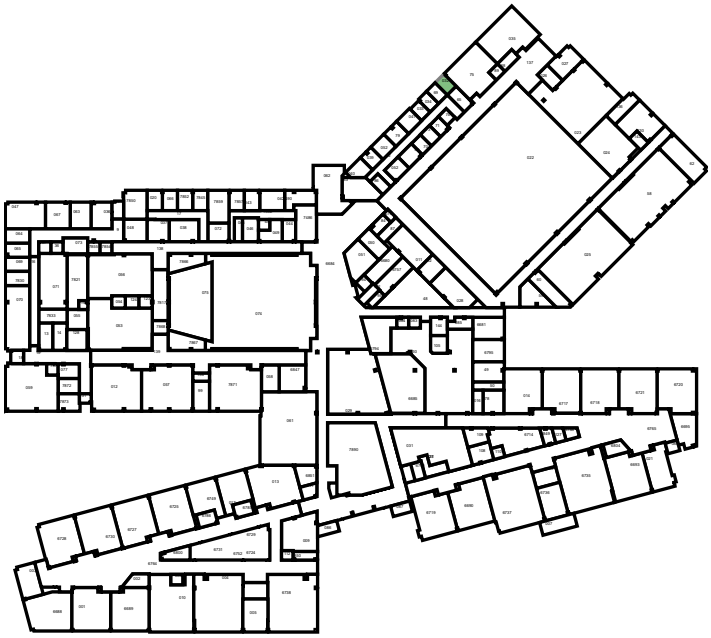
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Mini-Fridge

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: NURSE

FUNCTIONAL CRITERIA

Room Area:	100
Quantity:	4
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	Nurses' Office; Nurse Waiting Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

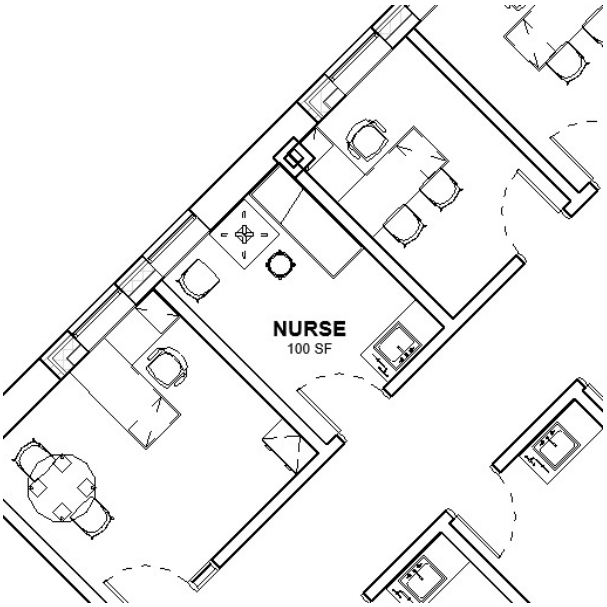
TECHNICAL CRITERIA

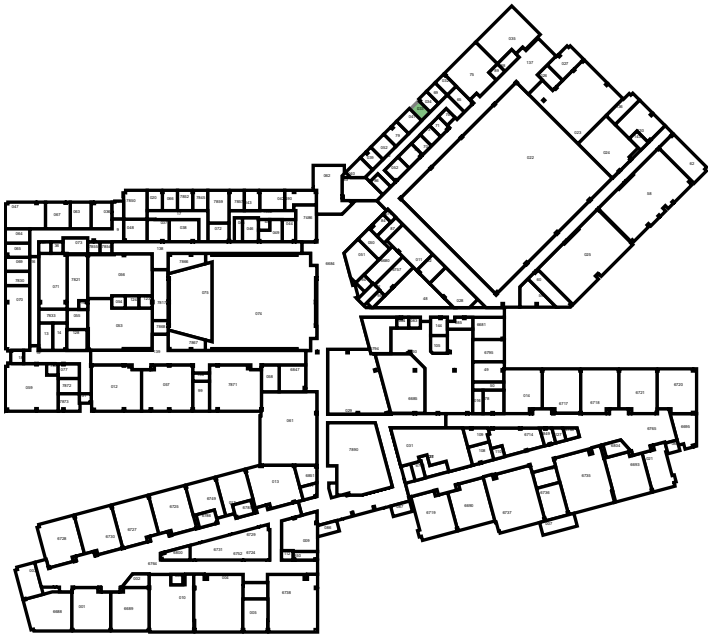
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Eyewash, Deck Mounted, 90º Swivel, Right Hand Mounting, Flag Handle Activation
1	Sink - Counter Mounted

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: INT

FUNCTIONAL CRITERIA

Room Area:	100
Quantity:	2
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	Wireless/Hardwired Internet

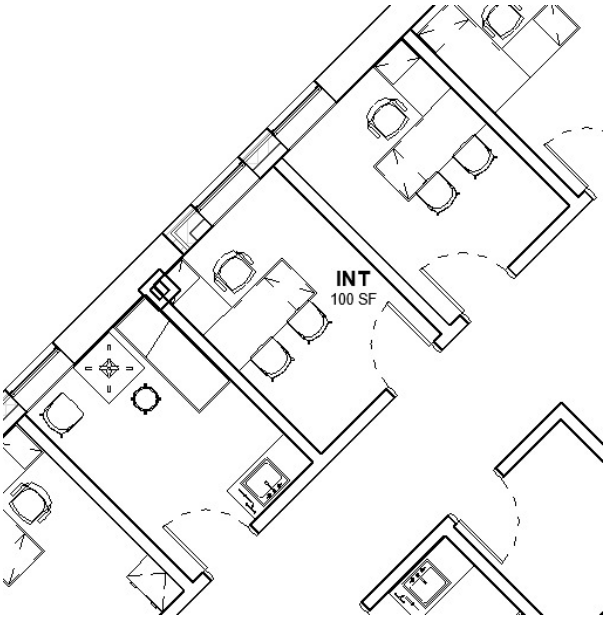
TECHNICAL CRITERIA

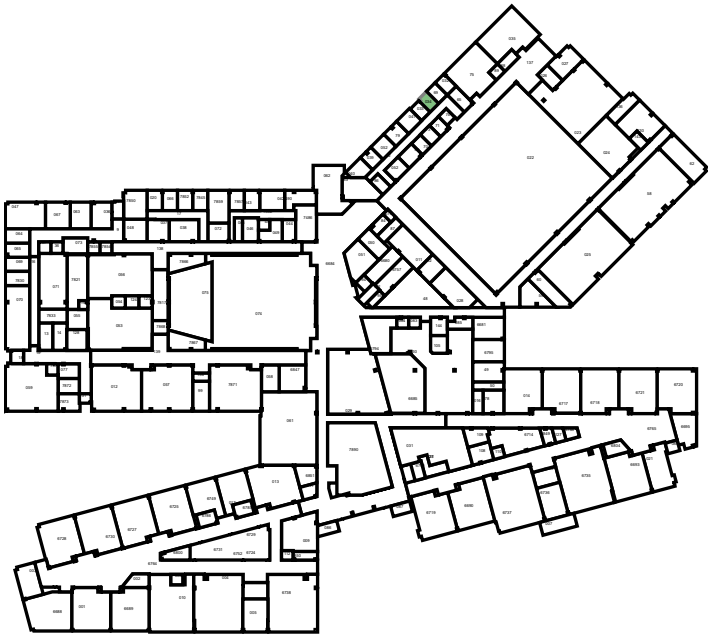
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: MEDIC FRAGILE

FUNCTIONAL CRITERIA

Room Area:	940
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	44

LOCATION CRITERIA

Adjacencies:	General Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

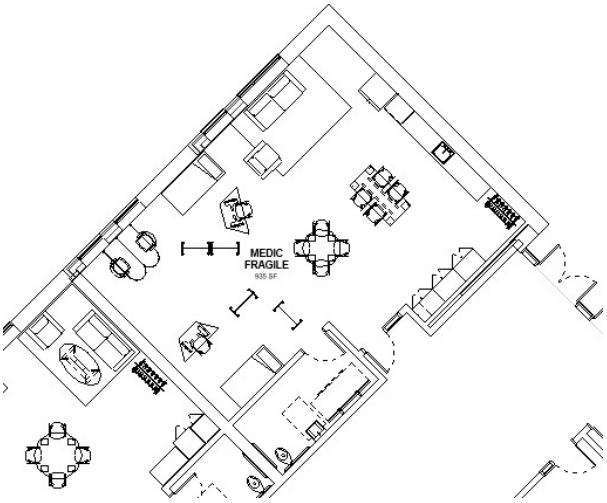
TECHNICAL CRITERIA

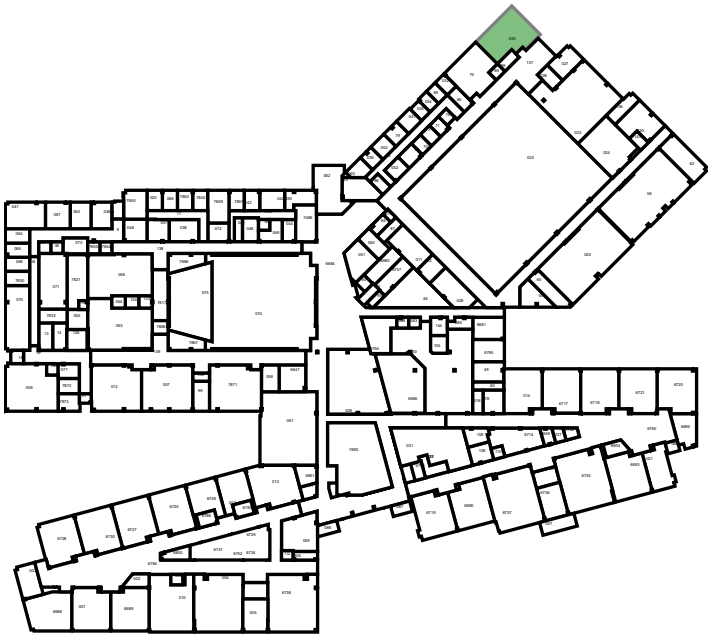
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	4'-6"CT/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	CT/RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Cart-Based
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Refrigerator - Side by Side
1	Whiteboard 8x4
1	Sink - Counter Mounted

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 30H
1	Microwave Cabinet
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CO ADMIN

FUNCTIONAL CRITERIA

Room Area:	290
Quantity:	3
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	3

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

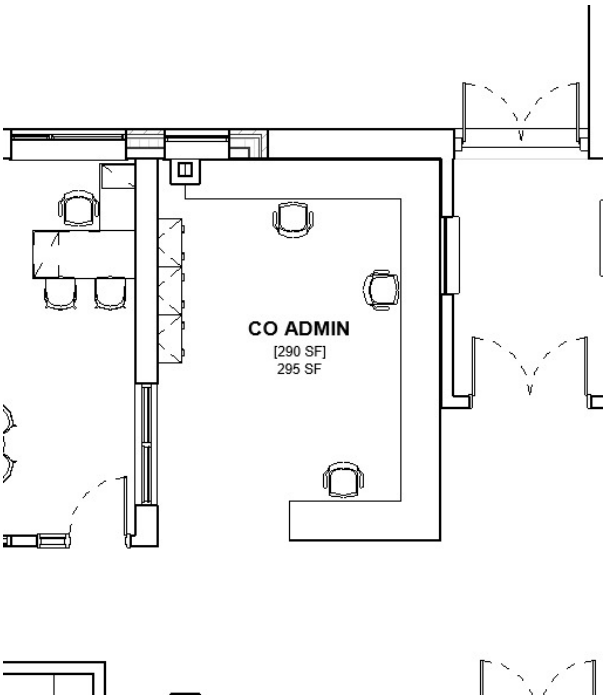
TECHNICAL CRITERIA

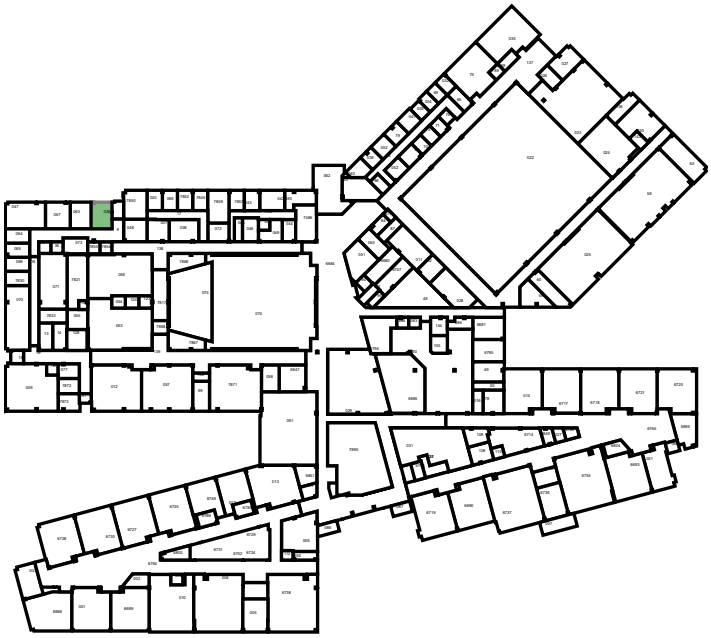
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 30H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CO REC

FUNCTIONAL CRITERIA

Room Area:	225
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

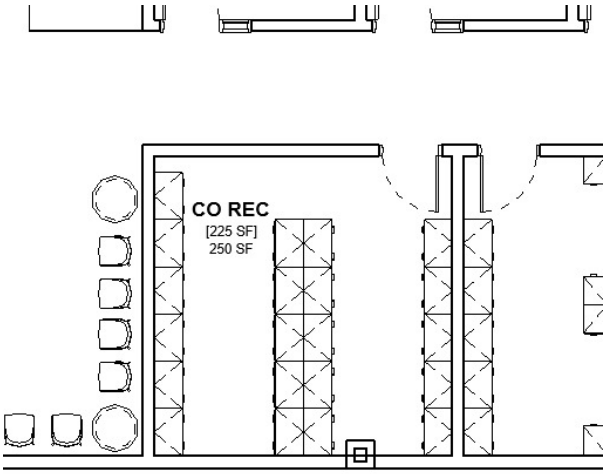
TECHNICAL CRITERIA

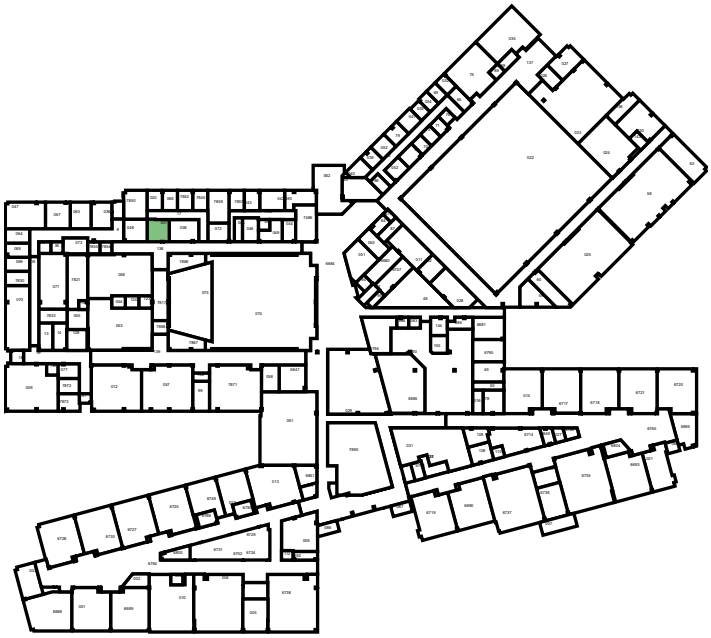
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CO STOR-SAFE

FUNCTIONAL CRITERIA

Room Area:	335
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

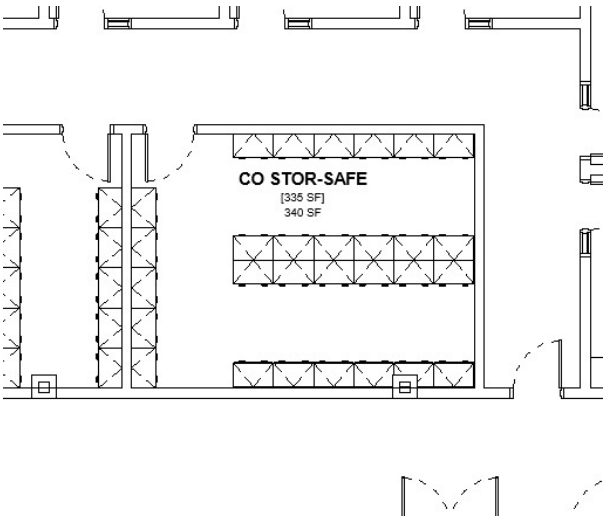
TECHNICAL CRITERIA

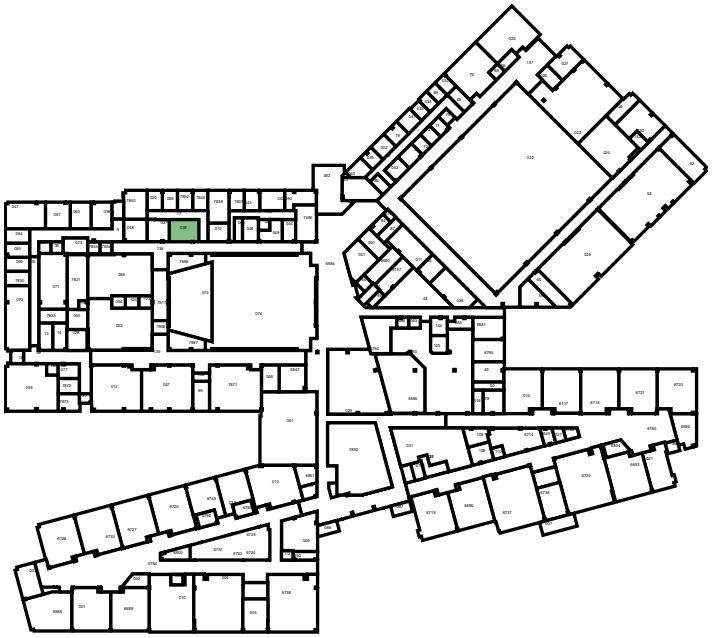
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: SPARE COUNS

FUNCTIONAL CRITERIA

Room Area:	120
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

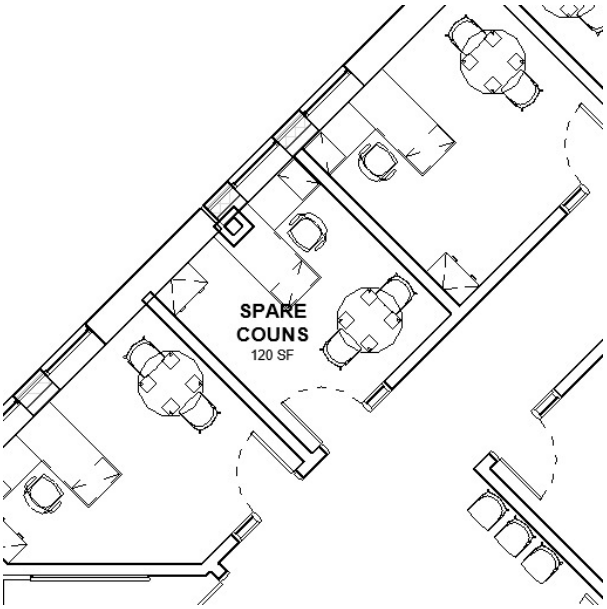
TECHNICAL CRITERIA

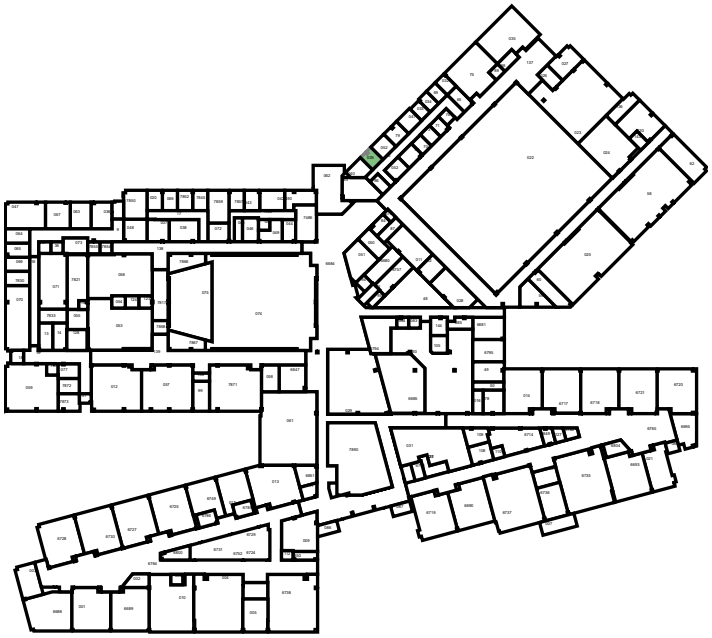
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ADJUST COUN

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

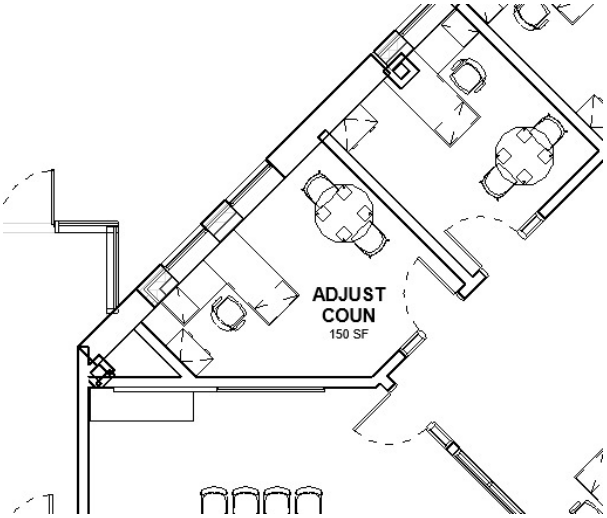
TECHNICAL CRITERIA

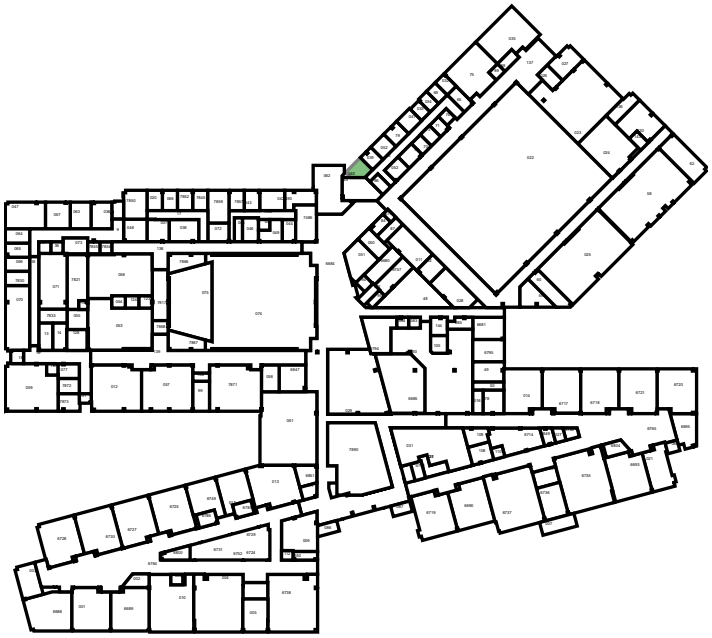
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PSYCH

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

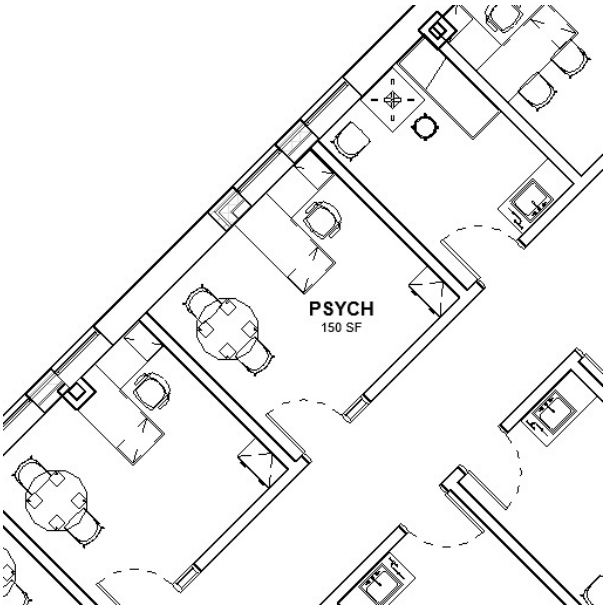
TECHNICAL CRITERIA

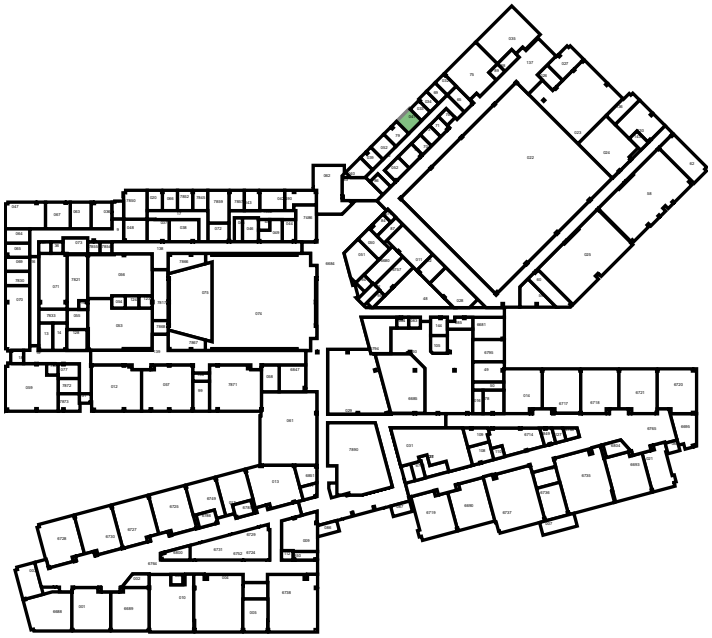
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PRINCIPAL

FUNCTIONAL CRITERIA

Room Area:	250
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	3

LOCATION CRITERIA

Adjacencies:	General Office / Waiting Room; Principal's Secretary
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

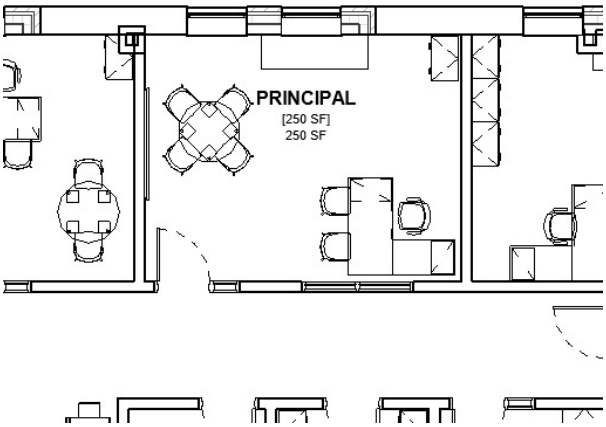
TECHNICAL CRITERIA

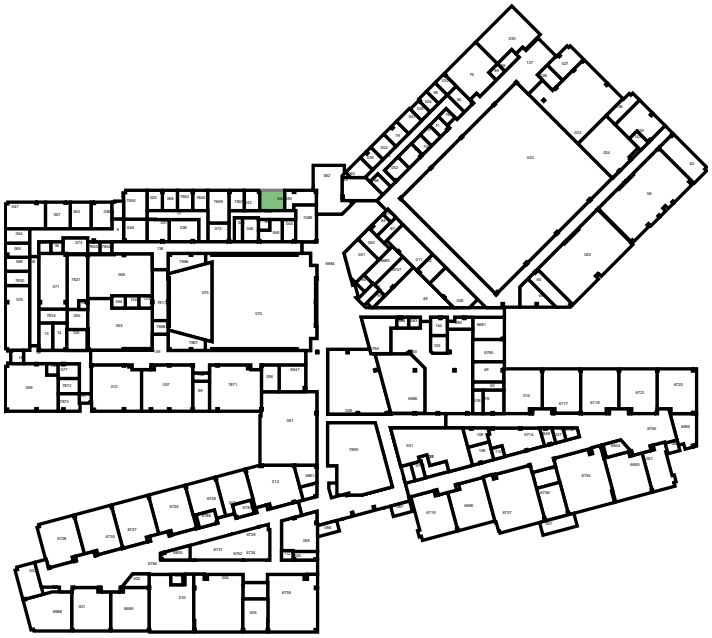
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: AP 1

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	2
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

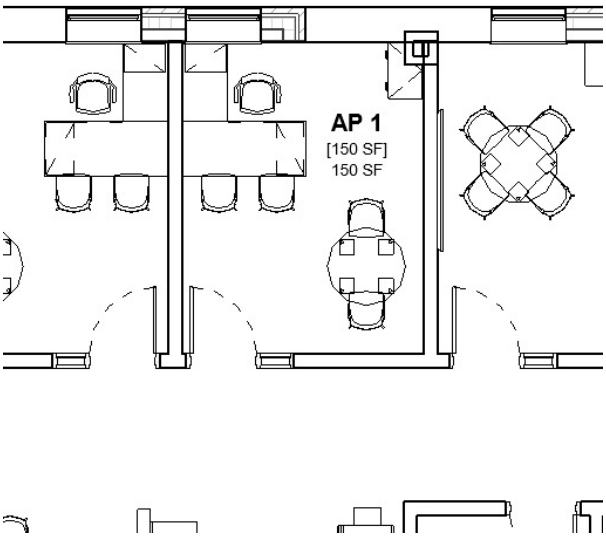
TECHNICAL CRITERIA

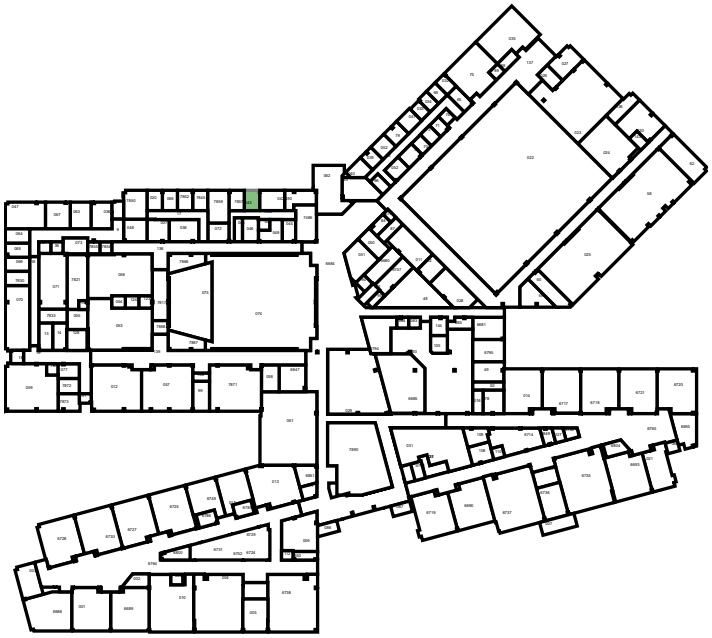
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	SRO

FUNCTIONAL CRITERIA

Room Area:	125
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

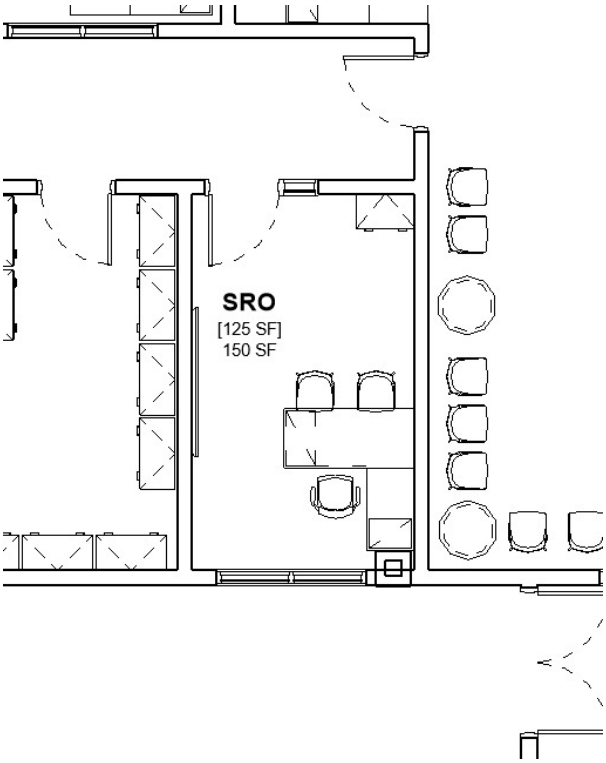
TECHNICAL CRITERIA

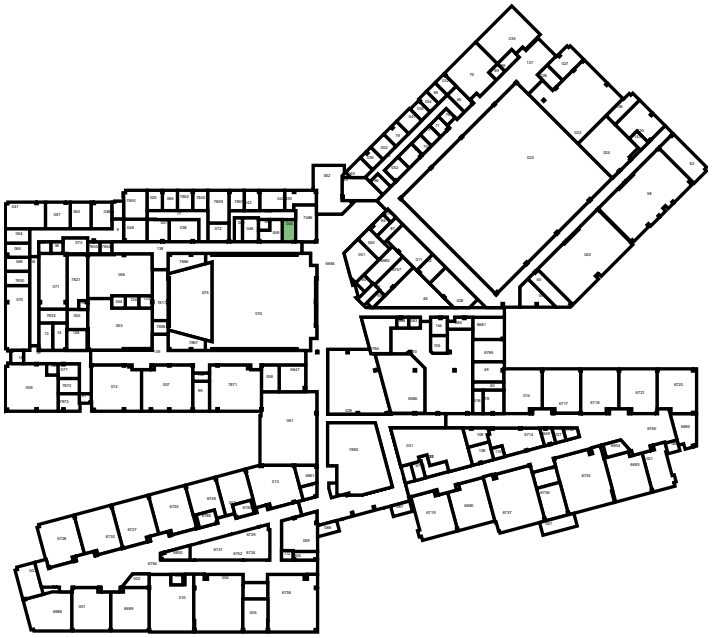
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	MAIL TIME

FUNCTIONAL CRITERIA

Room Area:	100
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

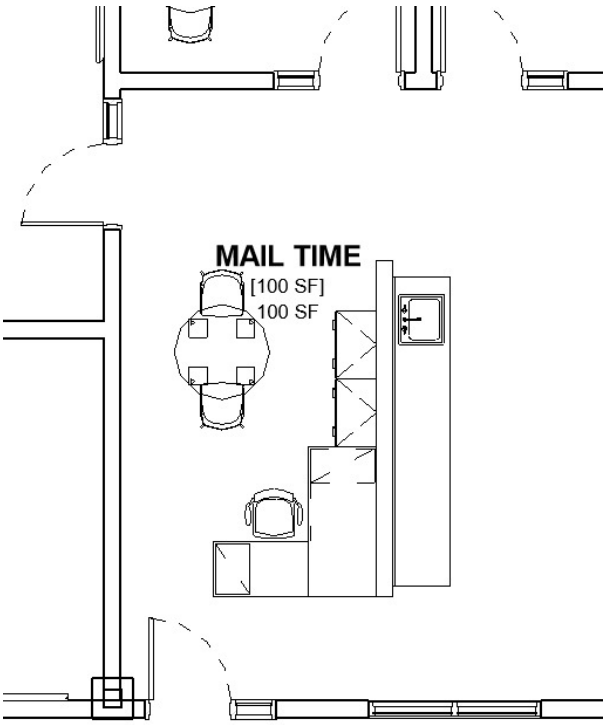
TECHNICAL CRITERIA

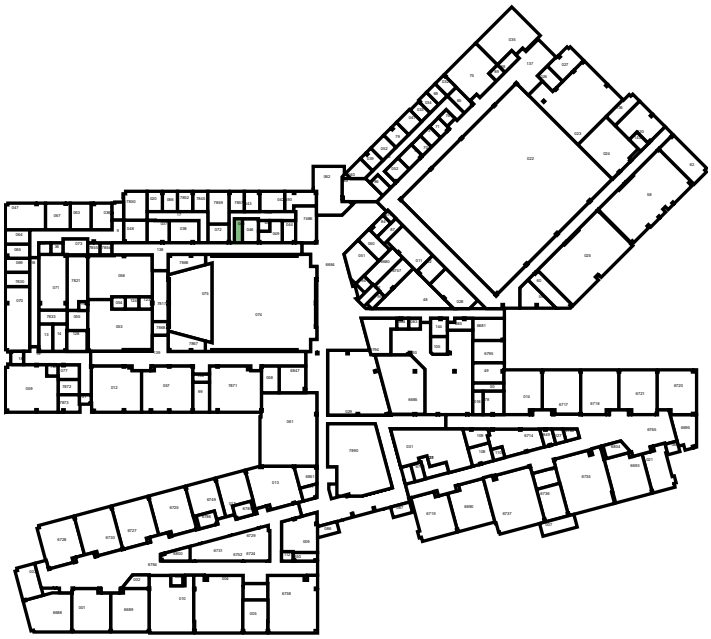
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	COPY

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

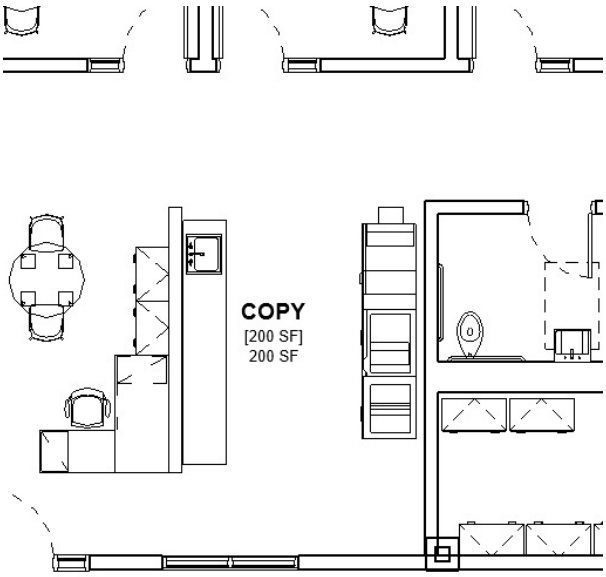
TECHNICAL CRITERIA

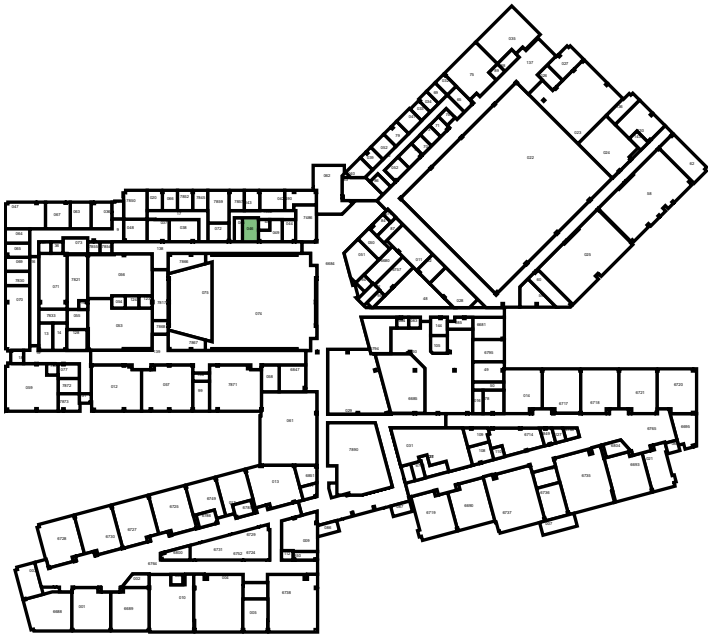
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Large Copier
1	Sink - Counter Mounted, Deep Basin

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CO CONF RM

FUNCTIONAL CRITERIA

Room Area:	550
Quantity:	3
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	6

LOCATION CRITERIA

Adjacencies:	Principal's Office
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

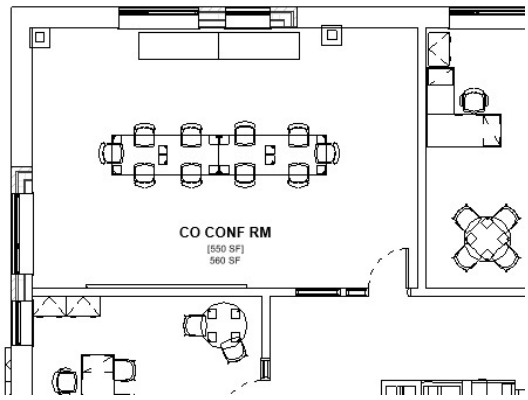
TECHNICAL CRITERIA

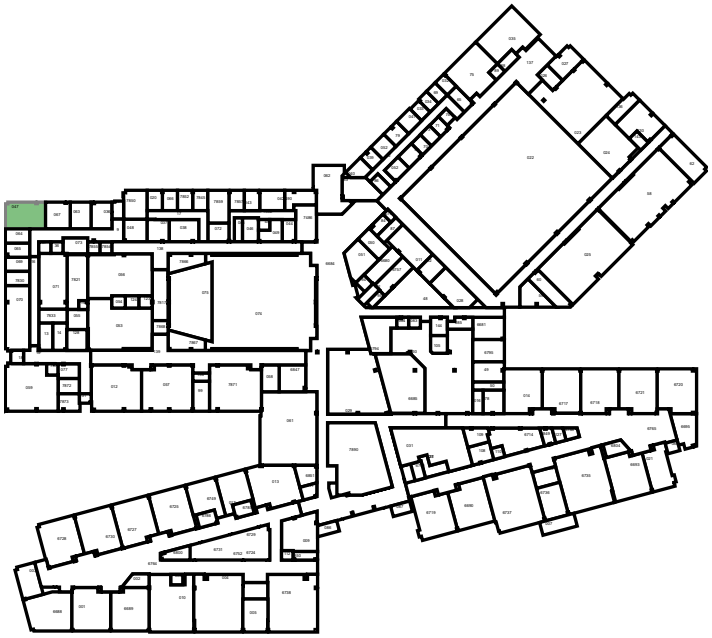
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: WAIT

FUNCTIONAL CRITERIA

Room Area:	165
Quantity:	4
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	8

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

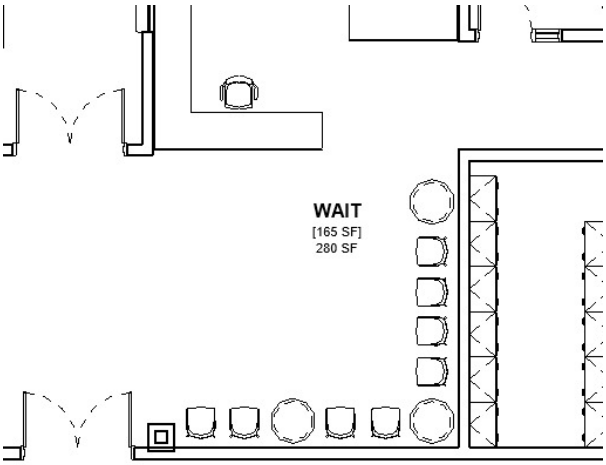
TECHNICAL CRITERIA

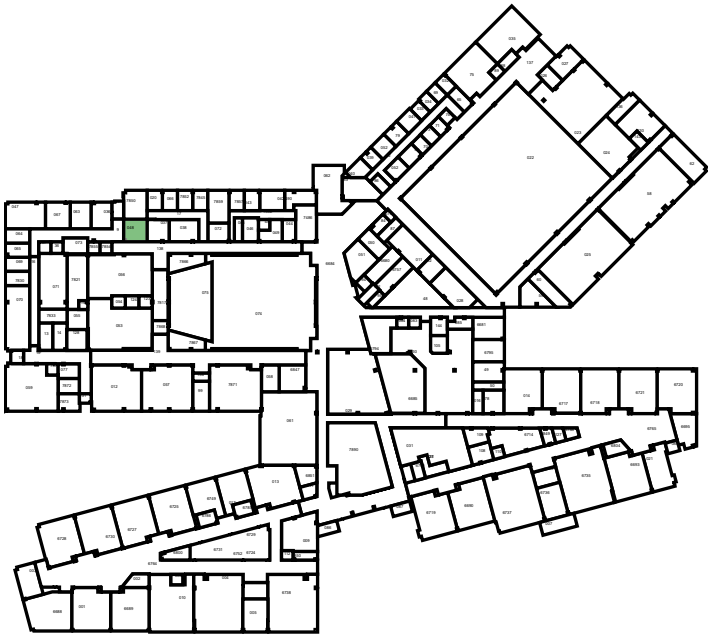
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 30H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	REC

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	0
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

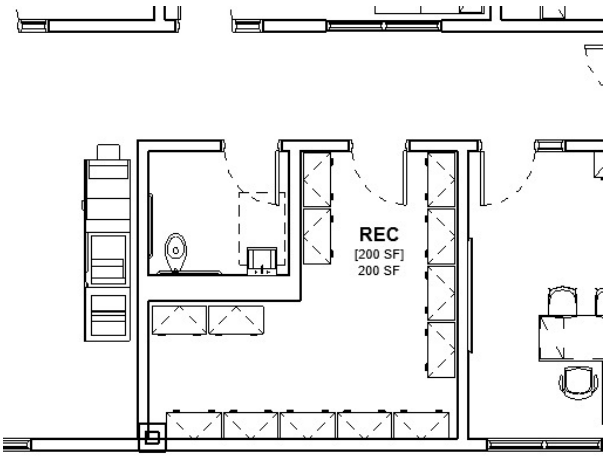
TECHNICAL CRITERIA

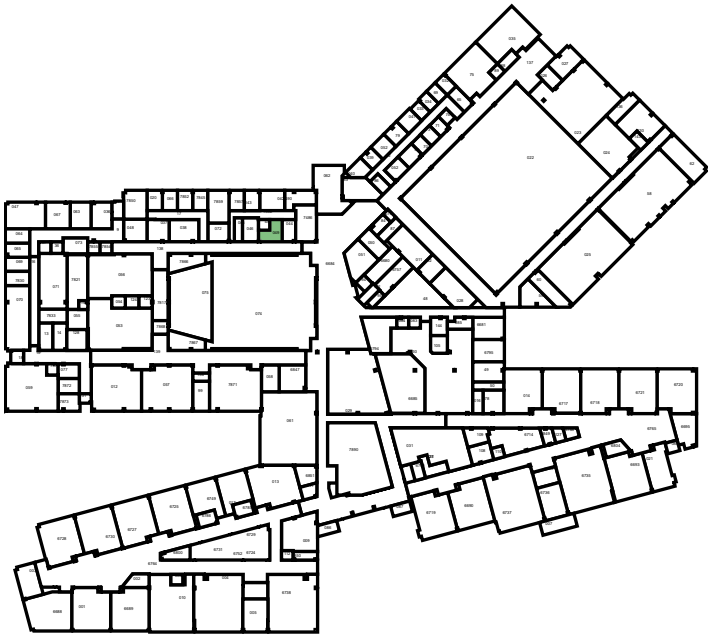
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CAREER CENTER

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

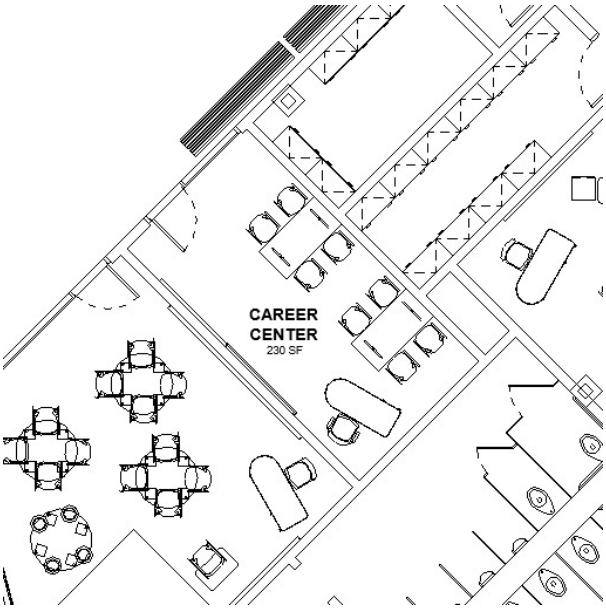
TECHNICAL CRITERIA

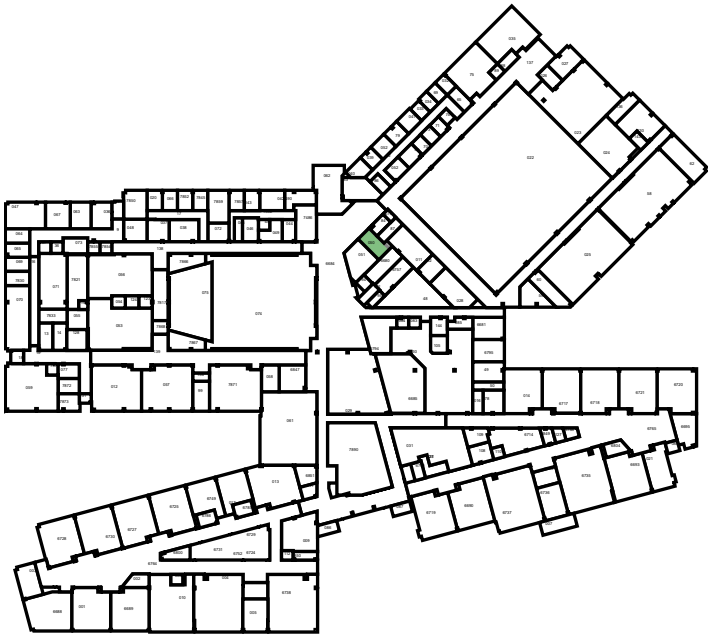
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 6x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: GRAD COACH

FUNCTIONAL CRITERIA

Room Area:	400
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	5

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

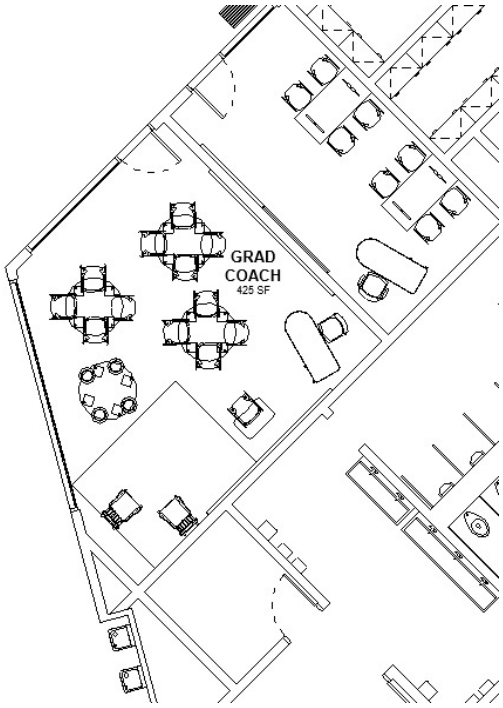
TECHNICAL CRITERIA

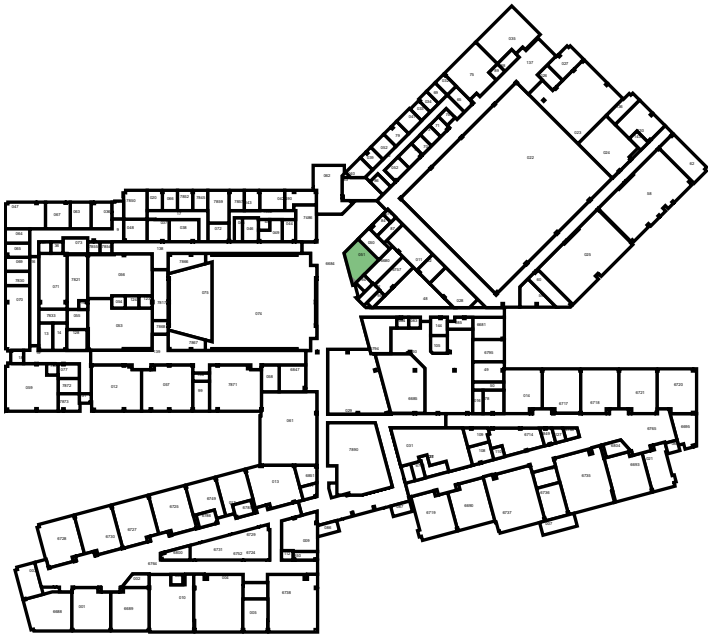
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 12x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: GUID

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	4
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

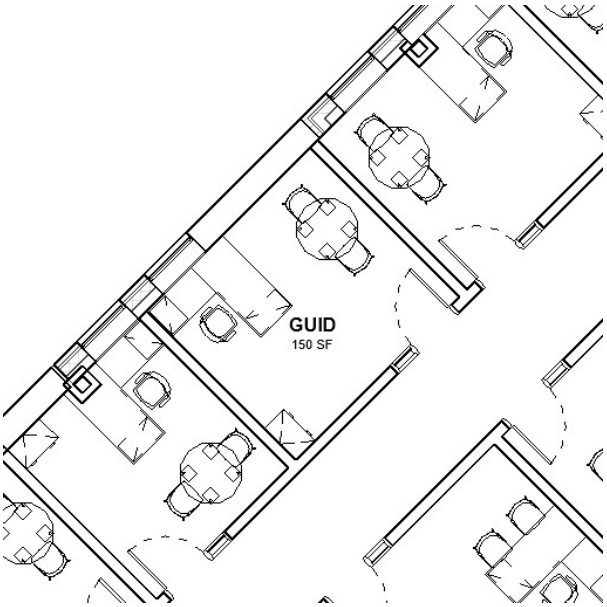
TECHNICAL CRITERIA

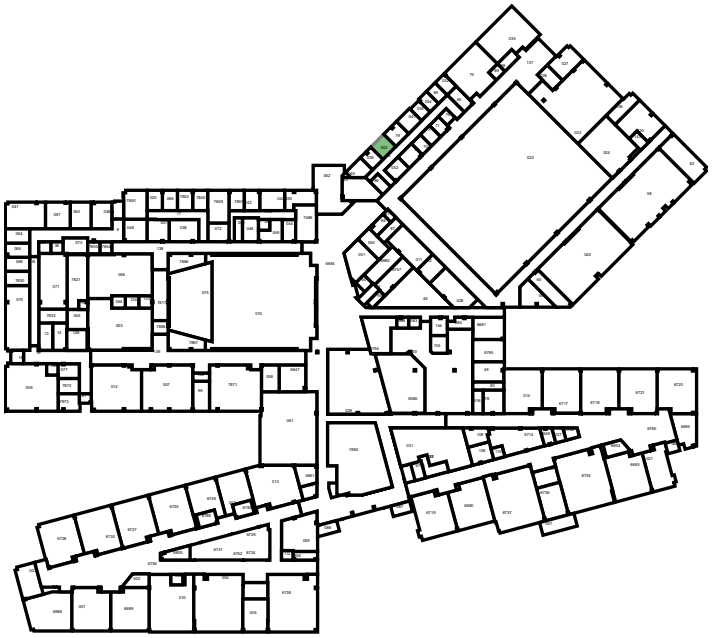
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: BAND

FUNCTIONAL CRITERIA

Room Area:	1500
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	31

LOCATION CRITERIA

Adjacencies:	Music Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

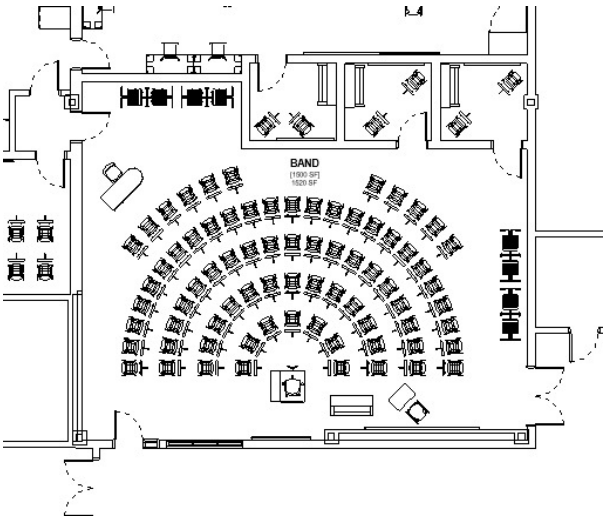
TECHNICAL CRITERIA

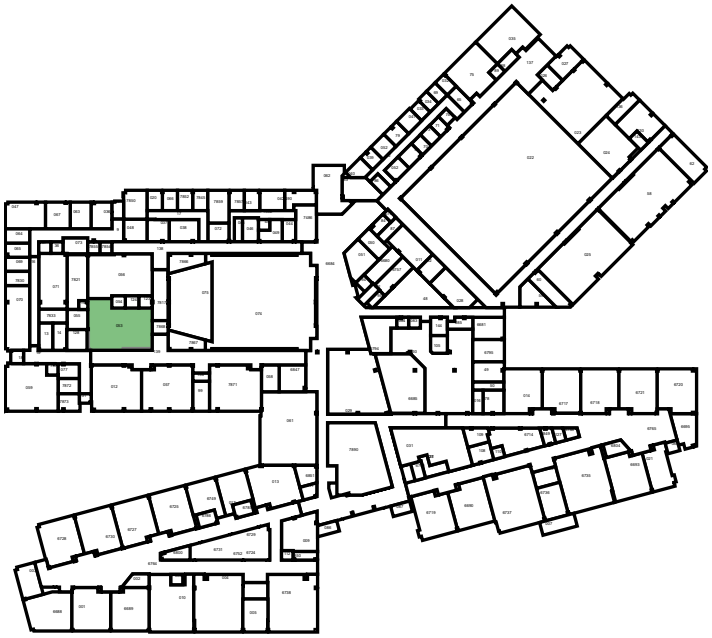
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	LINO
Ceiling Finish:	ACP, GWB
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Reflective Acoustic Ceiling, Acoustic Wall Treatment*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PR

FUNCTIONAL CRITERIA

Room Area:	75
Quantity:	3
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	4

LOCATION CRITERIA

Adjacencies:	Band Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

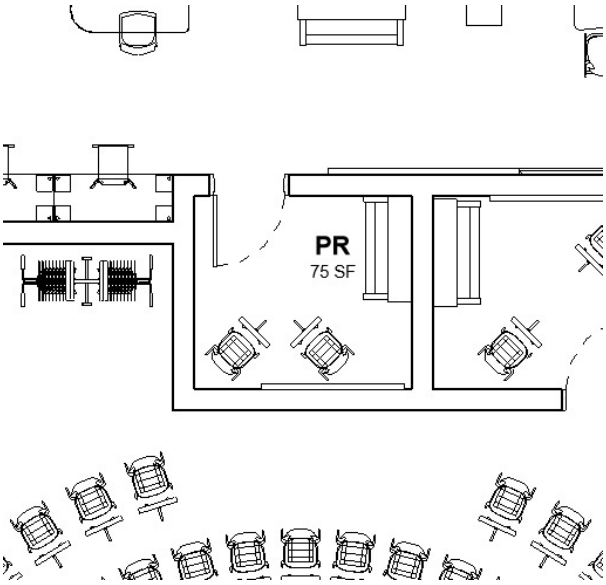
TECHNICAL CRITERIA

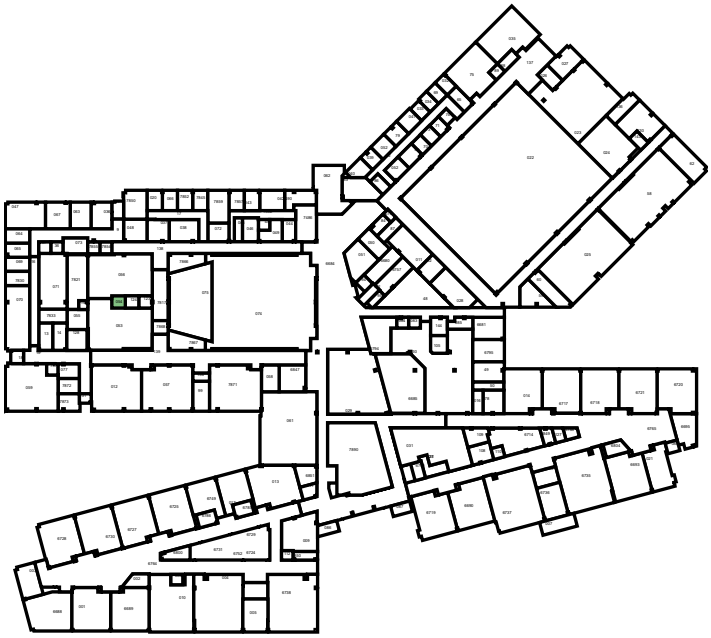
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP, GWB
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 6x4

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ENSEMBLE

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	4

LOCATION CRITERIA

Adjacencies:	Music Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

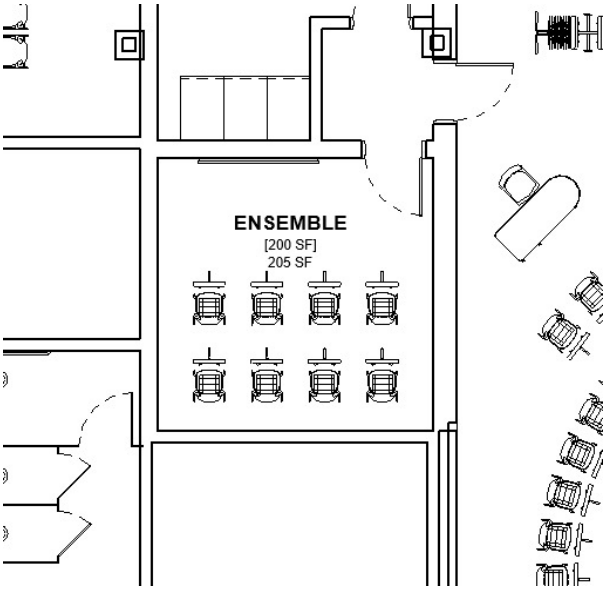
TECHNICAL CRITERIA

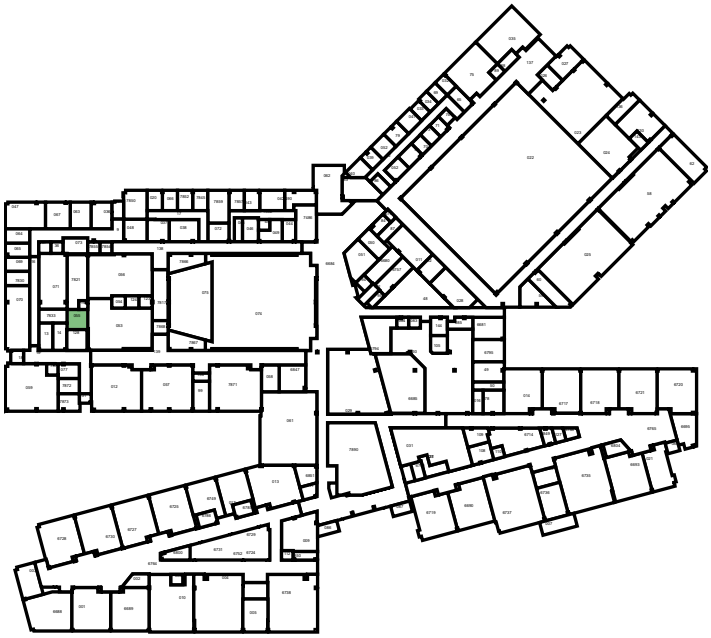
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP, GWB
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CHORUS

FUNCTIONAL CRITERIA

Room Area:	1500
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	29

LOCATION CRITERIA

Adjacencies:	Band Classroom
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

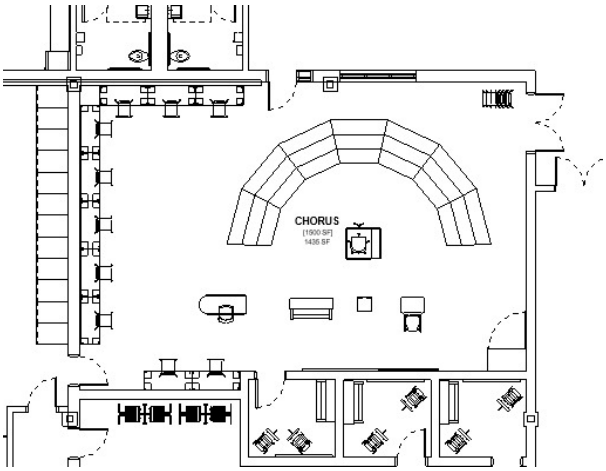
TECHNICAL CRITERIA

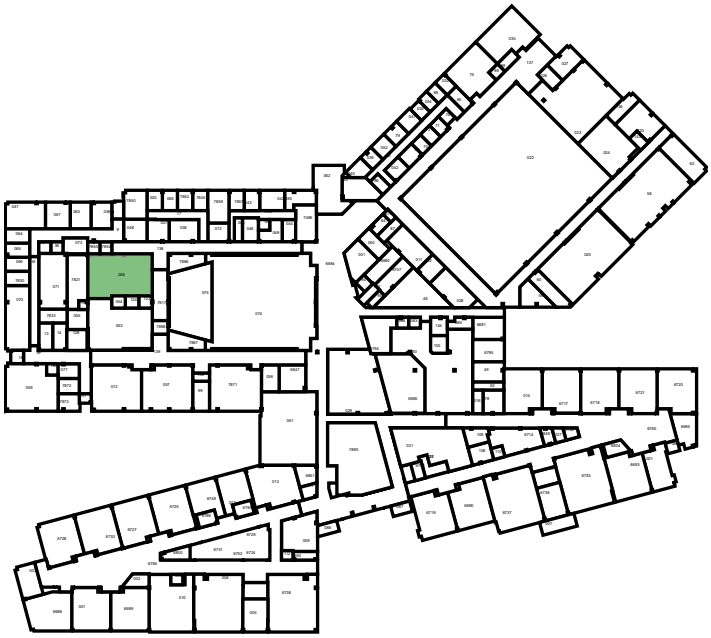
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP, GWB
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Reflective Acoustic Ceiling, Acoustic Wall Treatment*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 8x4
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ART

FUNCTIONAL CRITERIA

Room Area:	1200
Quantity:	2
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	25

LOCATION CRITERIA

Adjacencies:	Art Storage Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

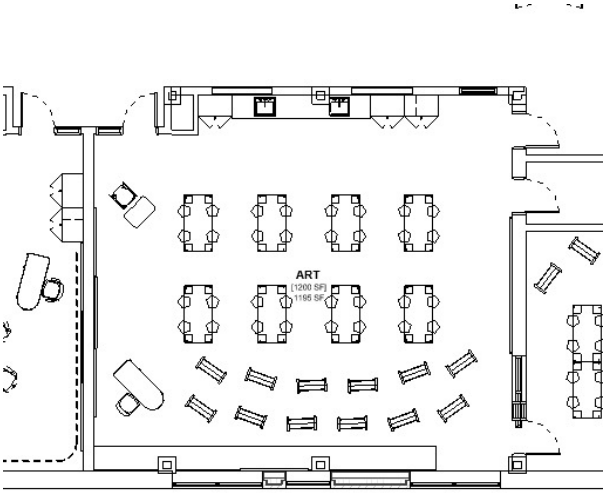
TECHNICAL CRITERIA

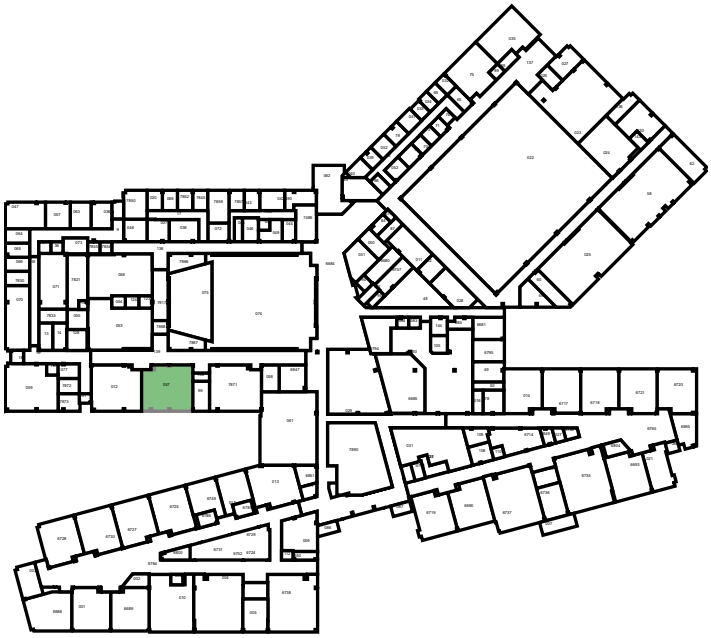
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB, WT
Floor Finish:	POLISHED CONC
Ceiling Finish:	ETS, ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4
3	Whiteboard 6x4
2	Sink - Counter Mounted, Deep Basin
1	Flat Panel Display - 86" Diagonal

FURNITURE

CASEWORK

Quantity	Description
2	Counter Top 34H
2	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	ART ST

FUNCTIONAL CRITERIA

Room Area:	300
Quantity:	1
Occupancy:	
Occupancy Factor:	300
Proposed Occupancy:	1

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

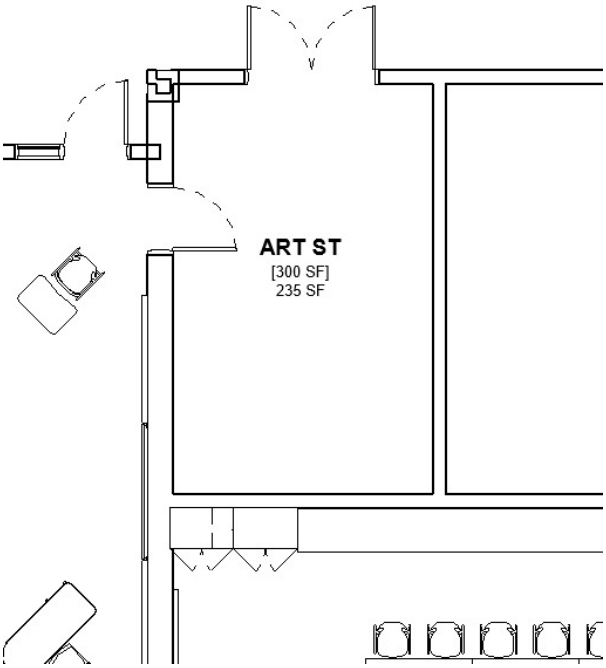
TECHNICAL CRITERIA

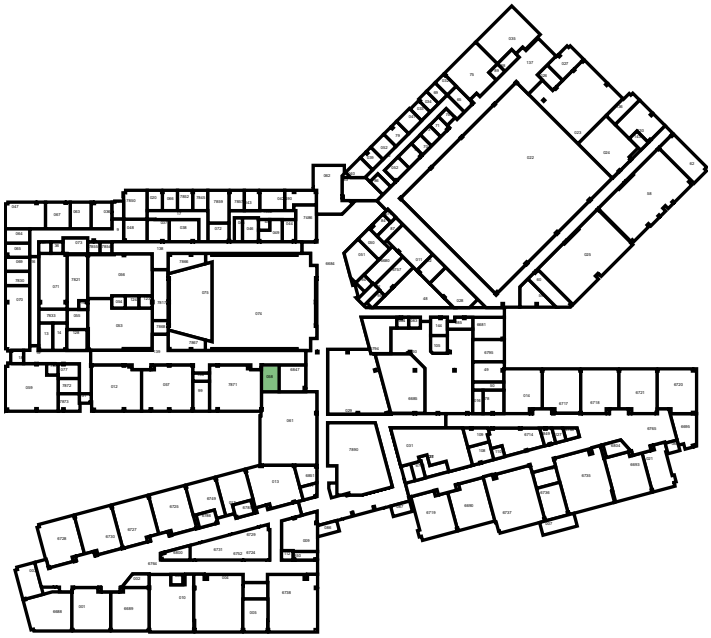
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: PRE-K

FUNCTIONAL CRITERIA

Room Area:	1200
Quantity:	1
Occupancy:	Educational, Shops and other vocational room areas
Occupancy Factor:	50
Proposed Occupancy:	24

LOCATION CRITERIA

Adjacencies:	Learning Commons; Small Group Room; Resource Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	Yes
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

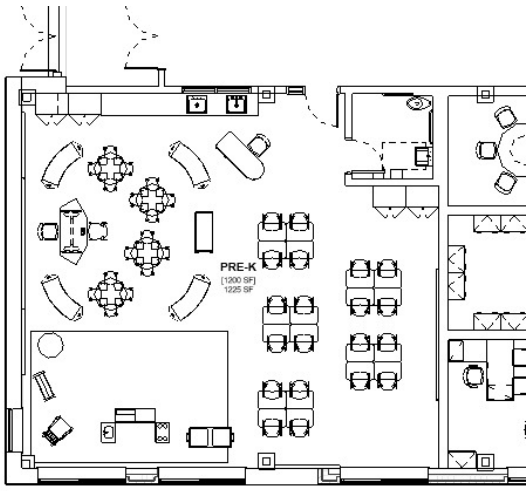
TECHNICAL CRITERIA

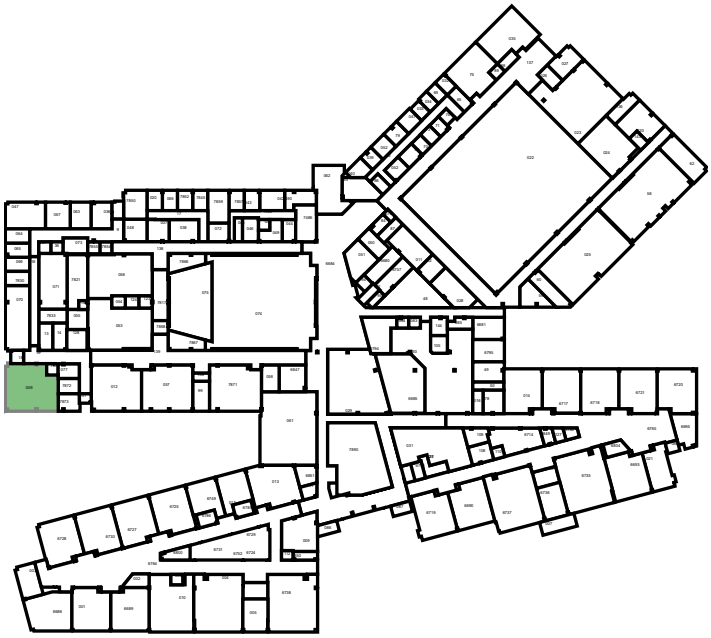
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	4'-6"CT/PT
Floor Finish:	LINO
Ceiling Finish:	ACP
Base Finish:	CT/RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Cart-Based
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
2	Whiteboard 12x4
3	Whiteboard 6x4
2	Sink - Counter Mounted, Deep Basin

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H
3	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	MEDIA CENTER STACKS

FUNCTIONAL CRITERIA

Room Area:	4900
Quantity:	1
Occupancy:	Assembly, Unconcentrated (tables and chairs)
Occupancy Factor:	15
Proposed Occupancy:	60

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

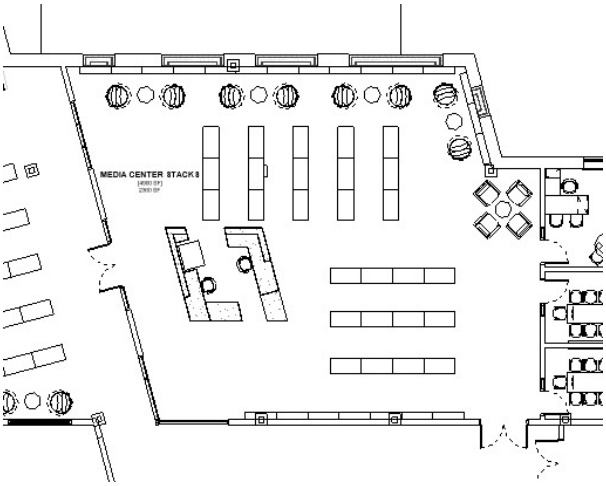
TECHNICAL CRITERIA

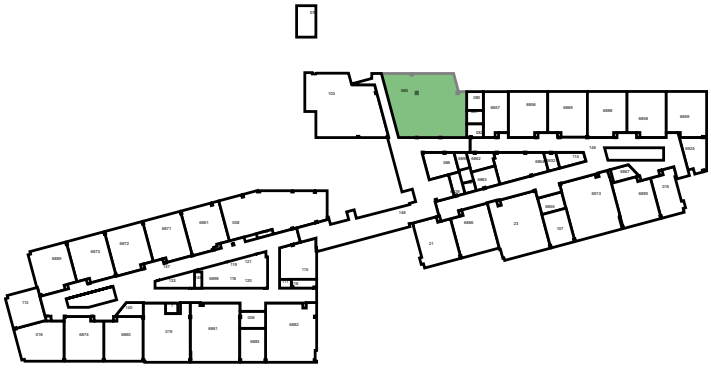
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB/PT/WD
Floor Finish:	CPT
Ceiling Finish:	ACP/GWB
Base Finish:	WD
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

FURNITURE

Quantity	Description
6	Bookshelf - 48"Wx42"H

CASEWORK

Quantity	Description
1	Media Center Desk

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: LGI

FUNCTIONAL CRITERIA

Room Area:	2000
Quantity:	1
Occupancy:	Educational, Classrooms
Occupancy Factor:	20
Proposed Occupancy:	75

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	Yes
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

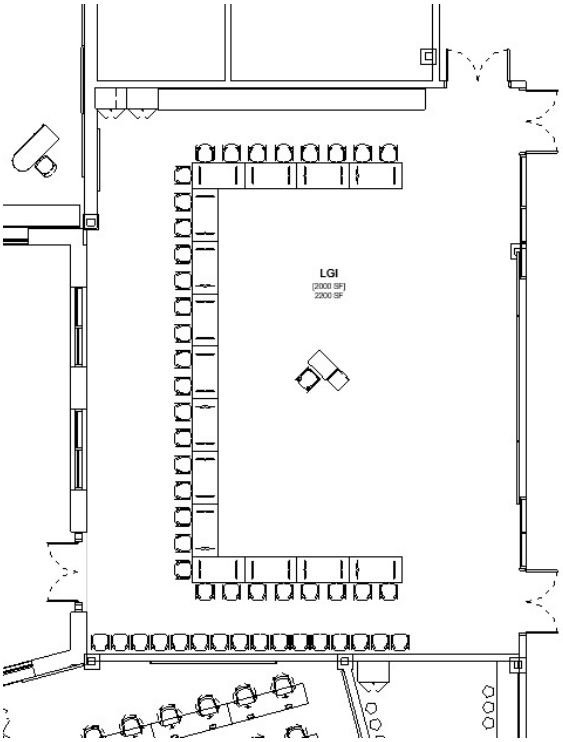
TECHNICAL CRITERIA

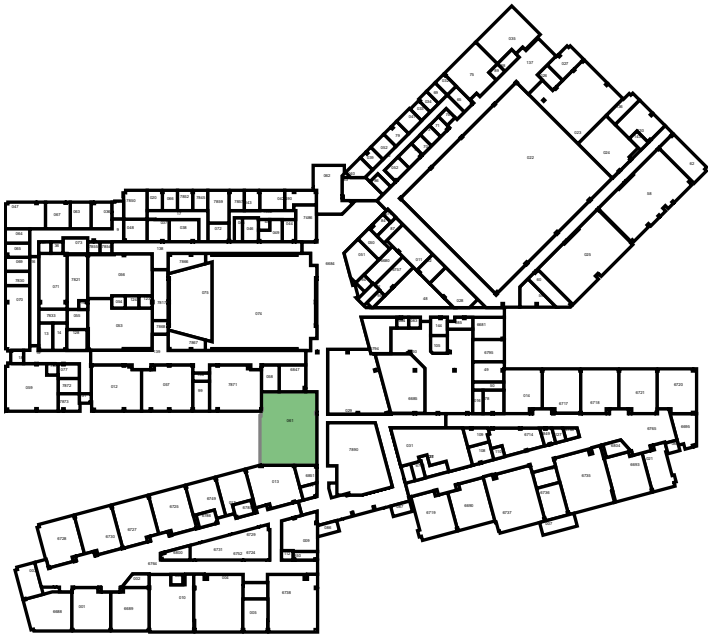
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP, GWB
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Projection
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4
3	Whiteboard 6x4

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H
1	Tall Cabinet 36"Wx84"H
1	Wardrobe Cabinet 36"Wx84"H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: SUPER

FUNCTIONAL CRITERIA

Room Area:	290
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	3

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

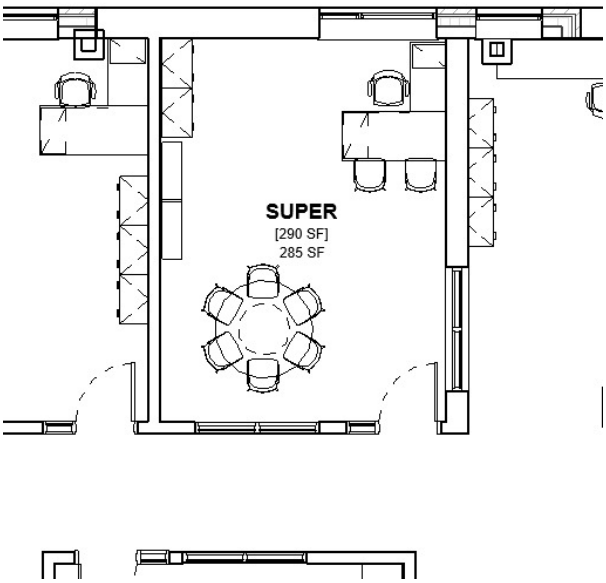
TECHNICAL CRITERIA

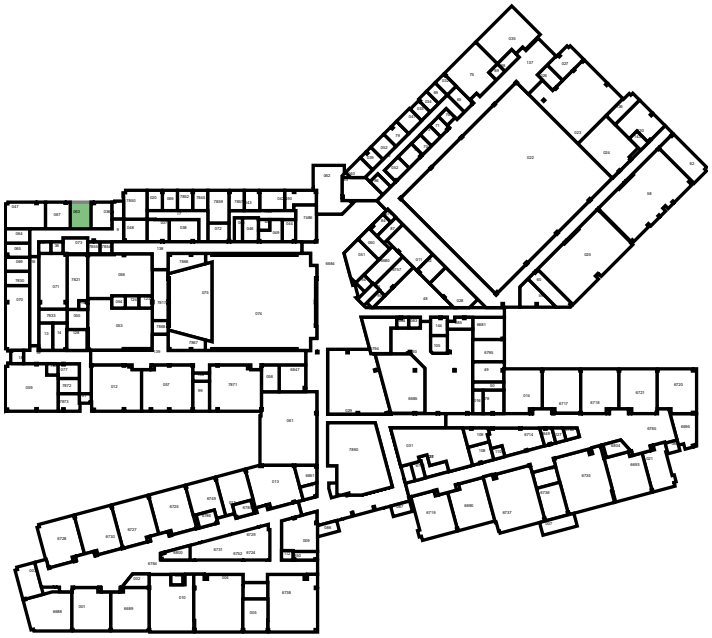
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CFO

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

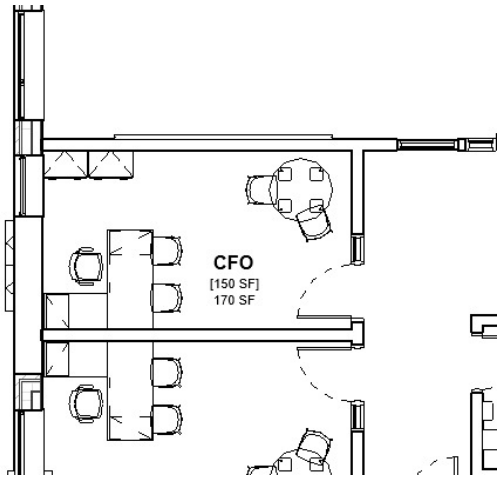
TECHNICAL CRITERIA

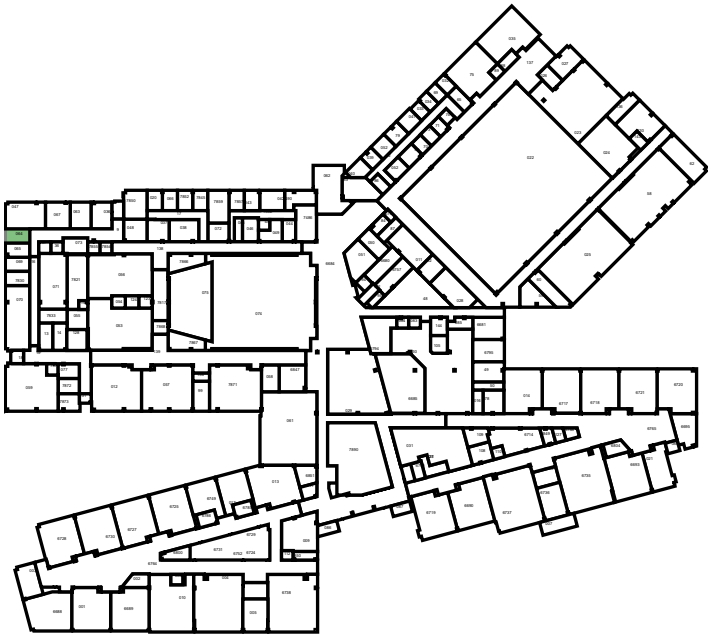
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: DIR CUR

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

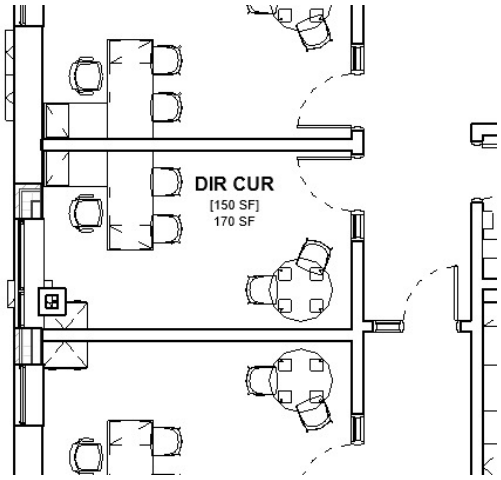
TECHNICAL CRITERIA

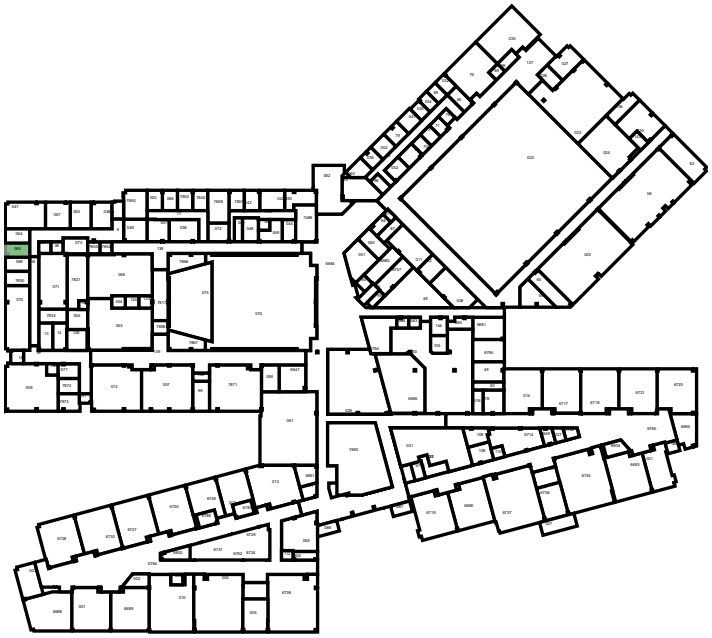
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: SPED OF

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	10
Occupancy:	
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

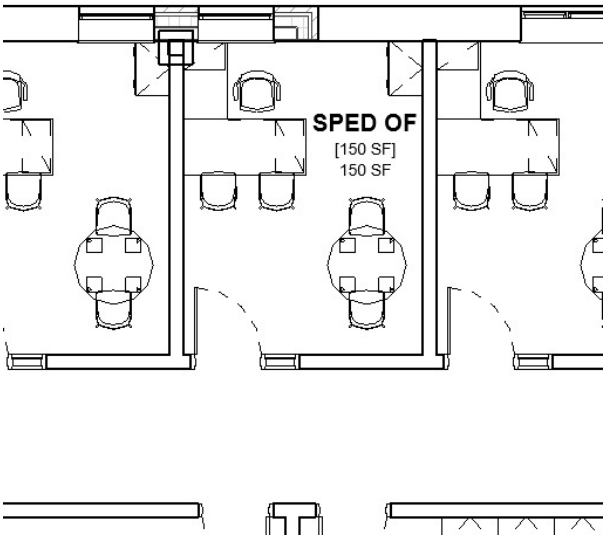
TECHNICAL CRITERIA

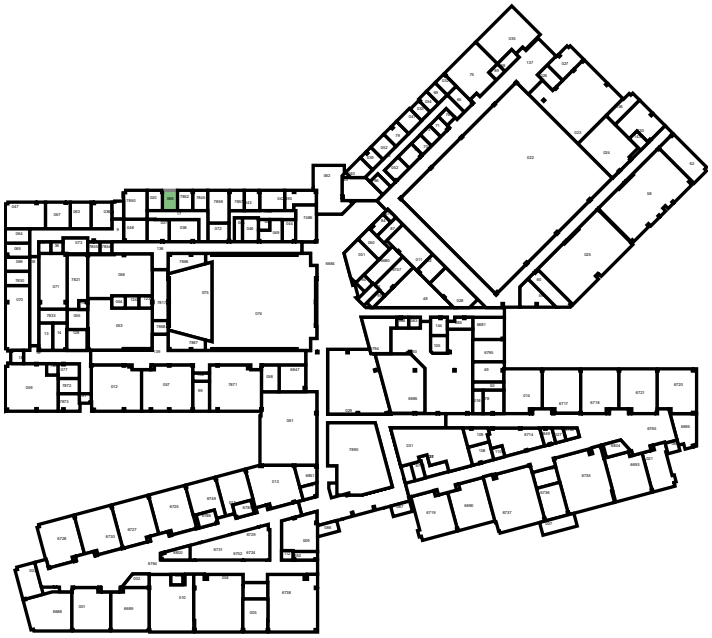
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ACCNT/BOOK

FUNCTIONAL CRITERIA

Room Area:	300
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	4

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

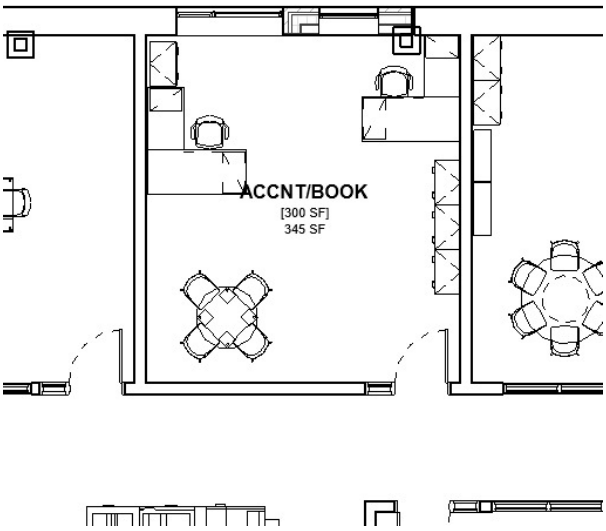
TECHNICAL CRITERIA

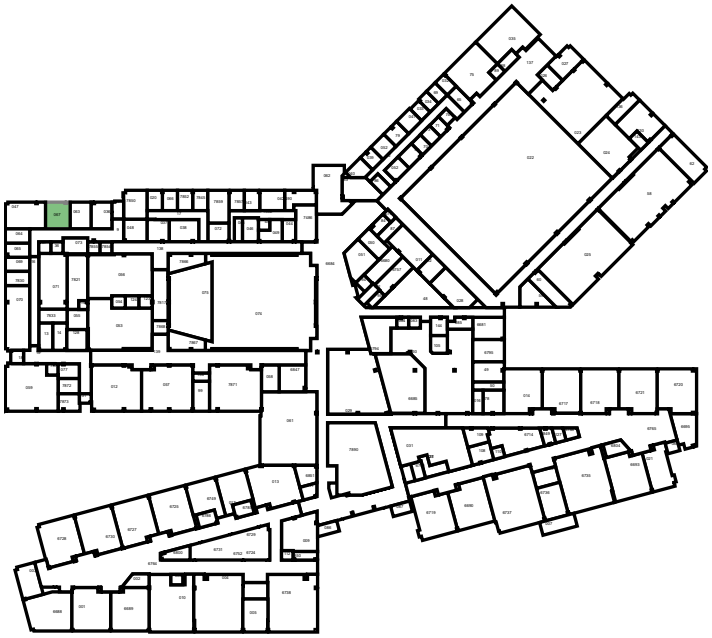
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: TECH SUPT

FUNCTIONAL CRITERIA

Room Area:	350
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	4

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

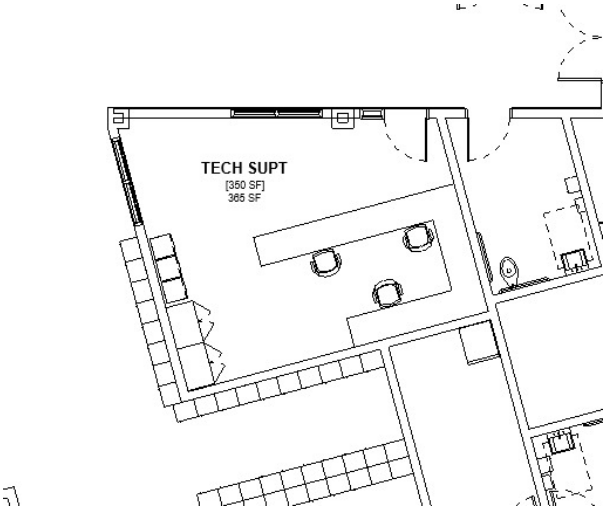
TECHNICAL CRITERIA

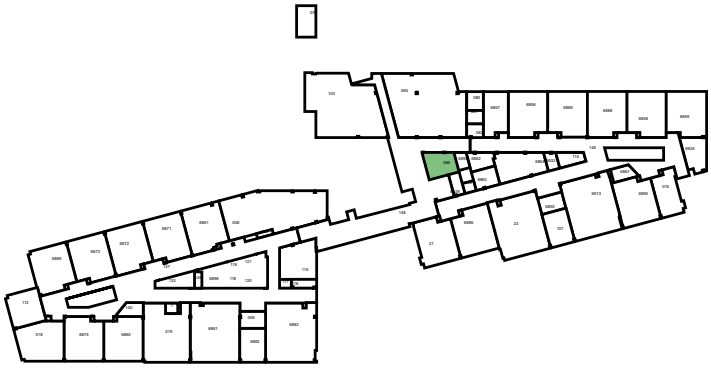
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 2

EQUIPMENT

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 36H
2	Tall Cabinet 36"Wx84"H

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	IT DIR

FUNCTIONAL CRITERIA

Room Area:	150
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

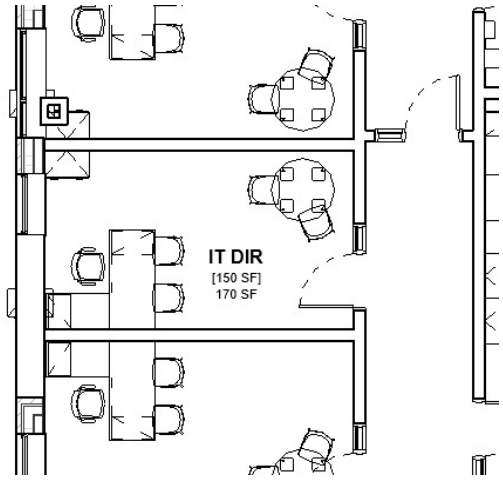
TECHNICAL CRITERIA

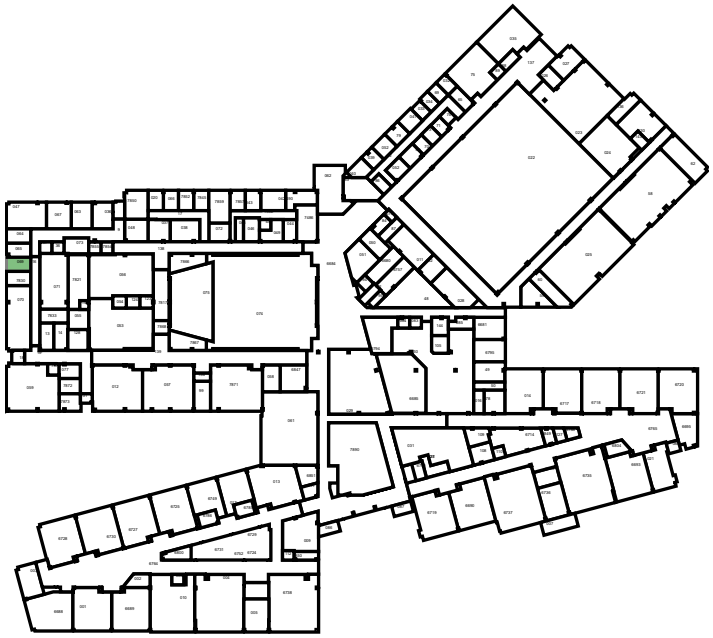
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: IT OPEN OFF

FUNCTIONAL CRITERIA

Room Area:	800
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	9

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

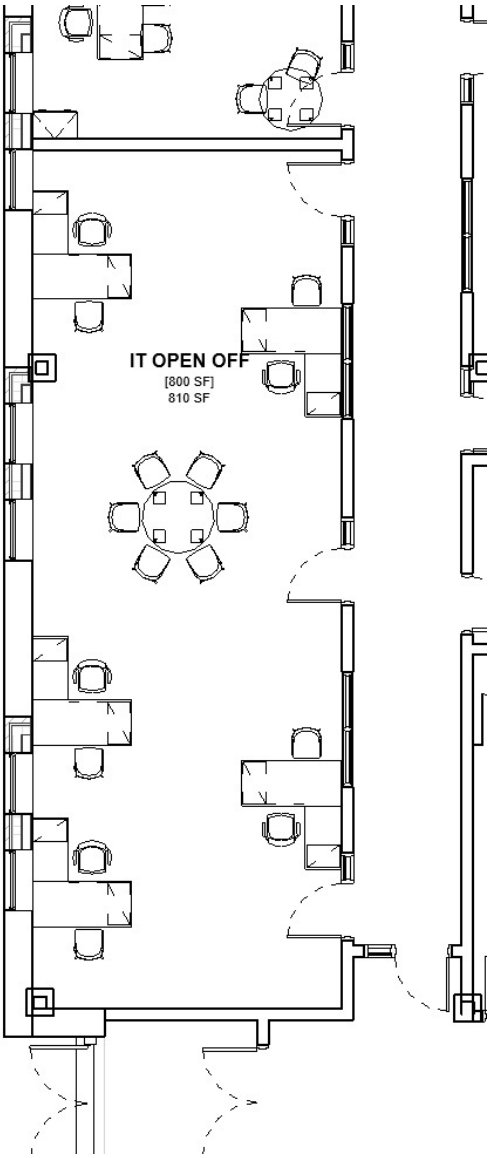
TECHNICAL CRITERIA

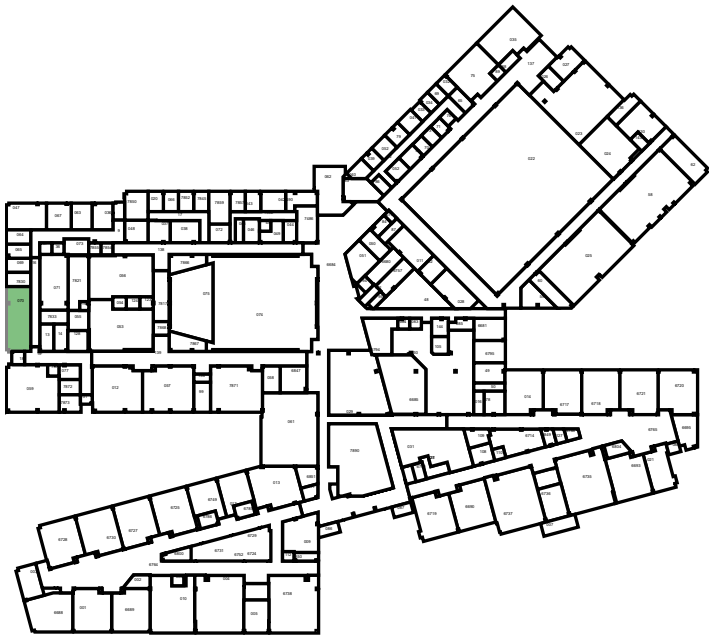
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: IT STORAGE/ REPAIR

FUNCTIONAL CRITERIA

Room Area:	750
Quantity:	1
Occupancy:	Accessory storage areas, mechanical equipment room
Occupancy Factor:	300
Proposed Occupancy:	3

LOCATION CRITERIA

Adjacencies:	Receiving
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	None

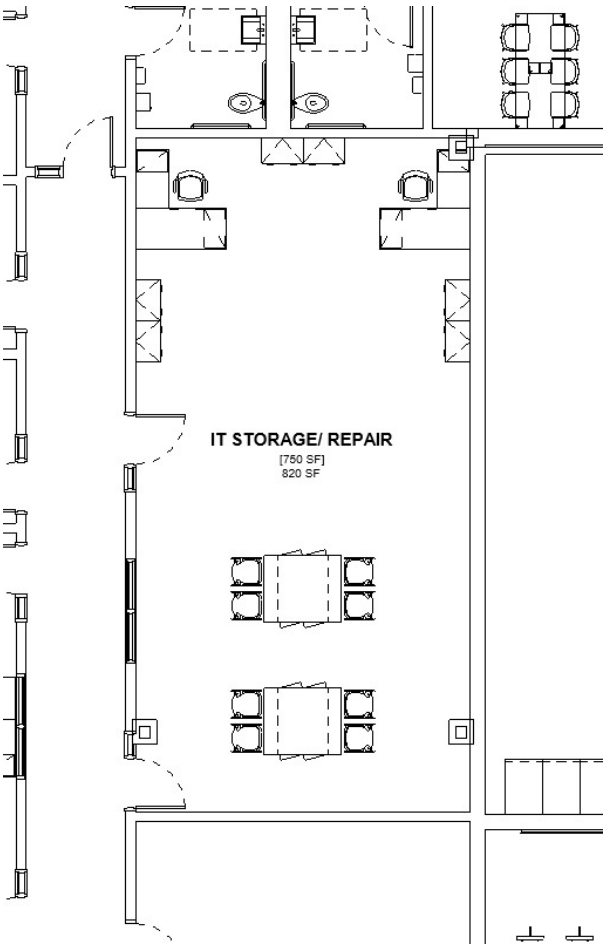
TECHNICAL CRITERIA

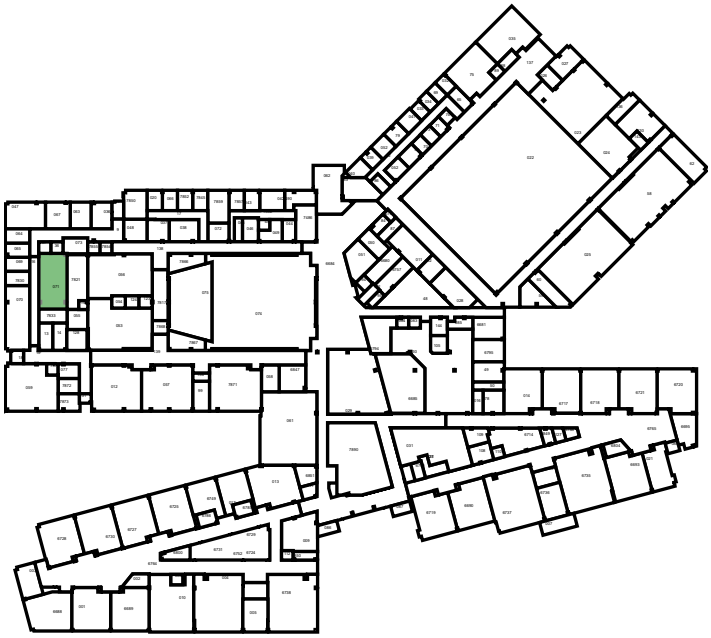
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	CMU PT'D
Floor Finish:	CONC
Ceiling Finish:	ETS
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: CONSULT

FUNCTIONAL CRITERIA

Room Area:	200
Quantity:	1
Occupancy:	Business areas
Occupancy Factor:	100
Proposed Occupancy:	2

LOCATION CRITERIA

Adjacencies:	Principal's Office
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	Yes
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	35-45 FC
Network Access:	Wireless/Hardwired Internet

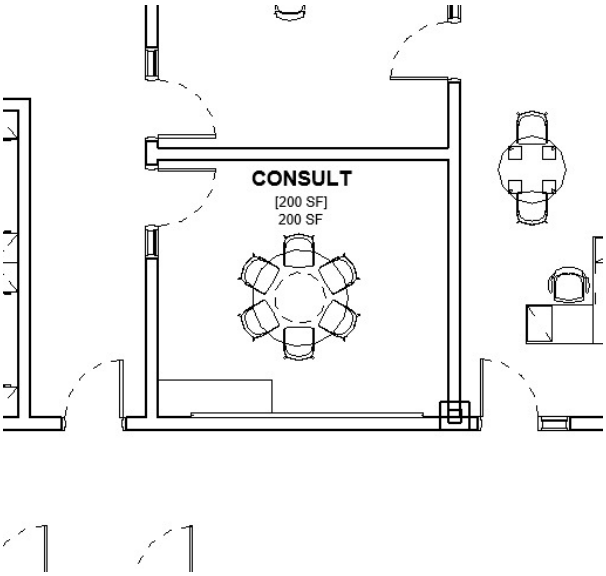
TECHNICAL CRITERIA

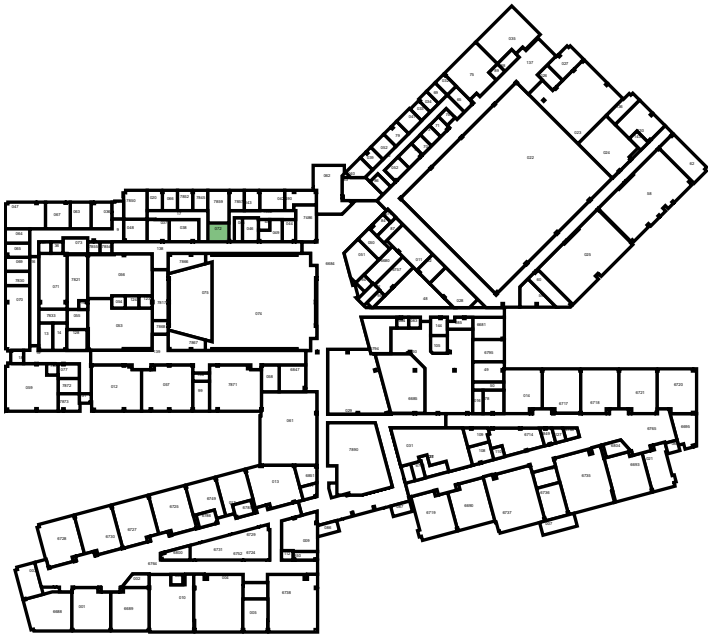
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	Yes
Wall Finish:	GWB/PT
Floor Finish:	CPT
Ceiling Finish:	ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	Wall-Mounted
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Whiteboard 12x4

FURNITURE

CASEWORK

Project Name:	EAST LONGMEADOW HIGH SCHOOL
Project No.:	2206
Room Name:	KITCH

FUNCTIONAL CRITERIA

Room Area:	160
Quantity:	0
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	No
Network Access:	No

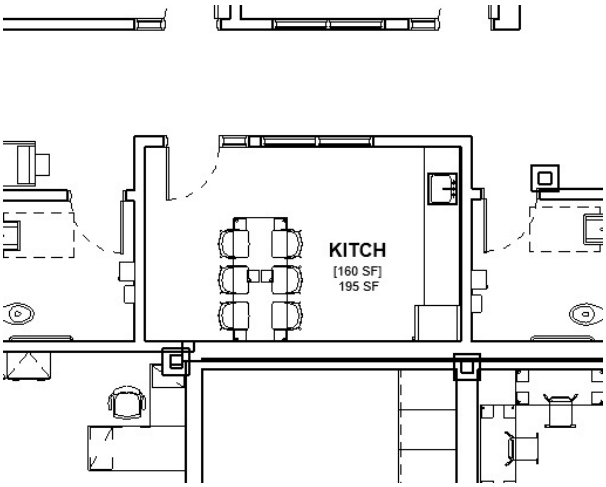
TECHNICAL CRITERIA

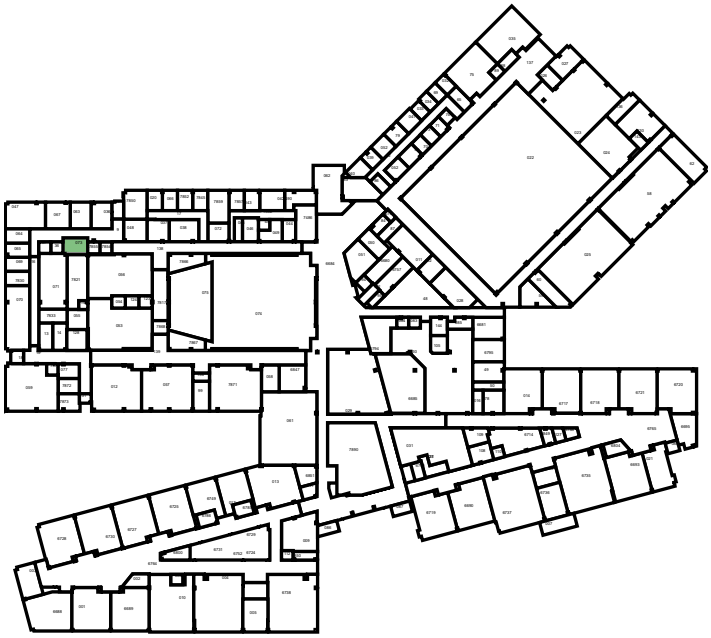
Acoustics:	No
Fire Rated Construction:	No
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	
Floor Finish:	
Ceiling Finish:	
Base Finish:	
Door Material:	
Door Hardware:	
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

Quantity	Description
1	Refrigerator
1	Sink - Counter Mounted, Deep Basin

FURNITURE

CASEWORK

Quantity	Description
1	Counter Top 34H

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: AUDITORIUM

FUNCTIONAL CRITERIA

Room Area:	5333
Quantity:	1
Occupancy:	Assembly with fixed seats
Occupancy Factor:	6
Proposed Occupancy:	390

LOCATION CRITERIA

Adjacencies:	Multipurpose Room
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	Yes
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

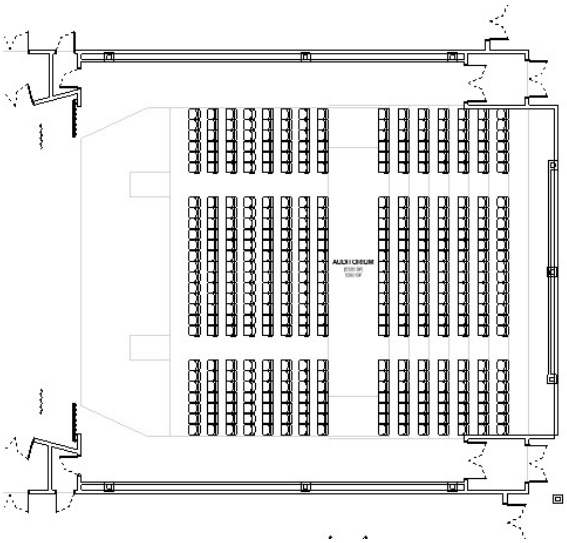
TECHNICAL CRITERIA

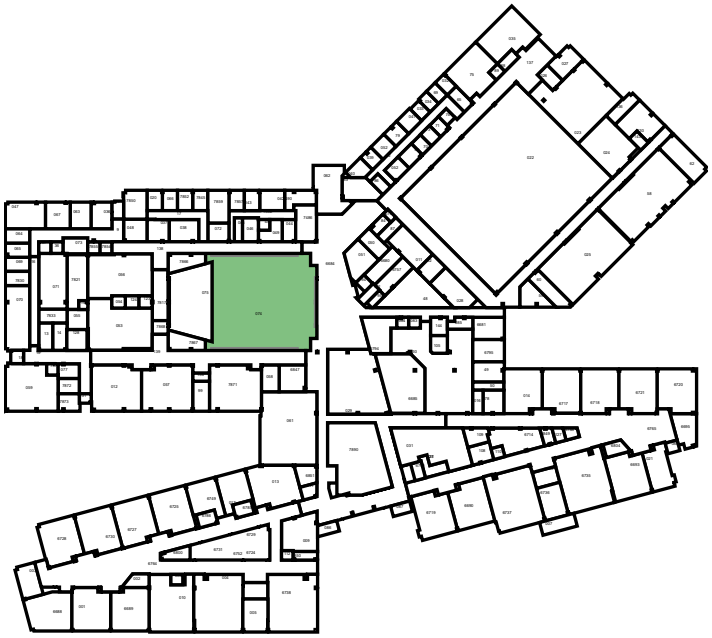
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	Yes
Natural Ventilation:	No
Wall Finish:	GWB, WT
Floor Finish:	CONC
Ceiling Finish:	ETS, ACP
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities:	Projection
Voice Amplification	No

OTHER INFORMATION

Comments: *Acoustic Wall Treatment*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

Quantity	Description
624	Auditorium Seating

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: STAGE

FUNCTIONAL CRITERIA

Room Area:	1600
Quantity:	1
Occupancy:	Stages and platforms
Occupancy Factor:	15
Proposed Occupancy:	106

LOCATION CRITERIA

Adjacencies:	Auditorium
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	Yes
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	Yes

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	40-45 FC
Network Access:	Wireless/Hardwired Internet

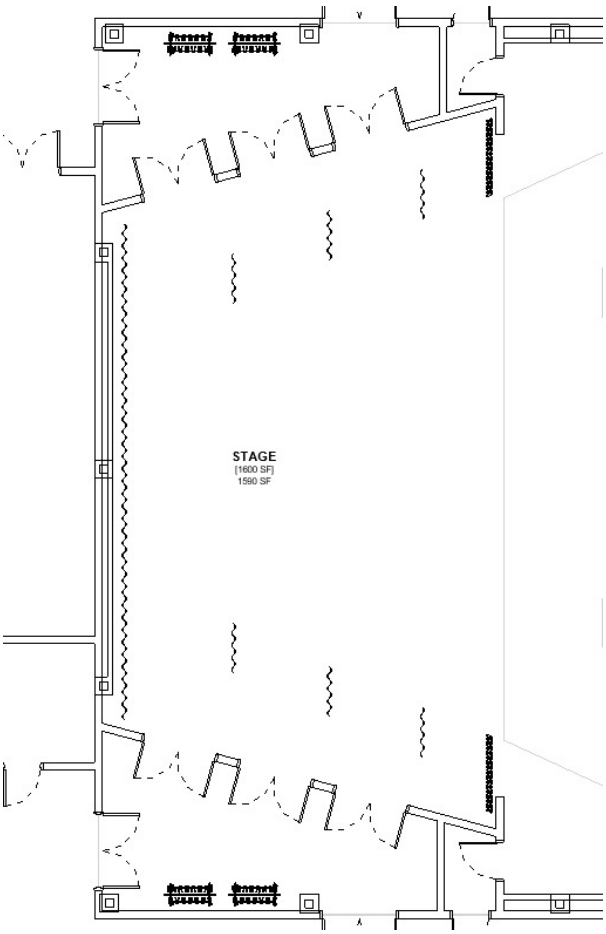
TECHNICAL CRITERIA

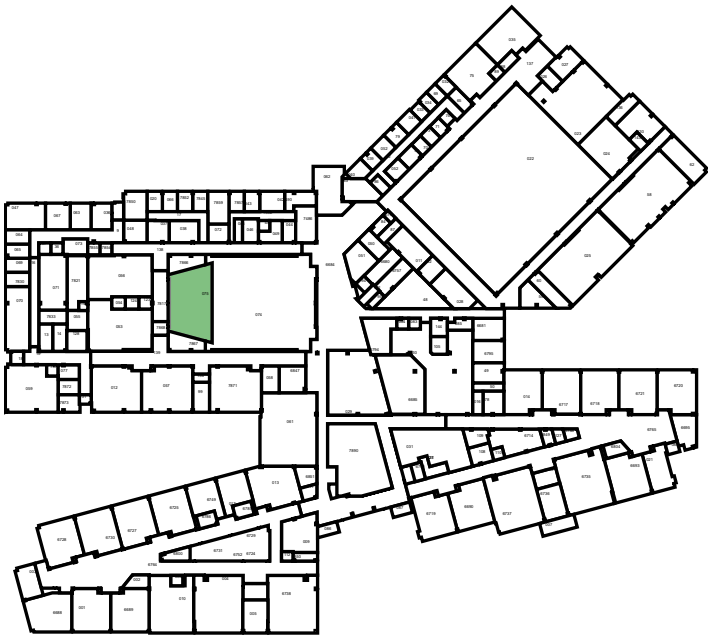
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	WD
Floor Finish:	WD
Ceiling Finish:	ETS, WD, ACP
Base Finish:	WD
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	No
Telephone:	No
PA Speaker:	No
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: ELCAT EDIT

FUNCTIONAL CRITERIA

Room Area:	0
Quantity:	1
Occupancy:	Accessory storage areas, mechanical equipment room
Occupancy Factor:	300
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	Yes
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	Wireless/Hardwired Internet

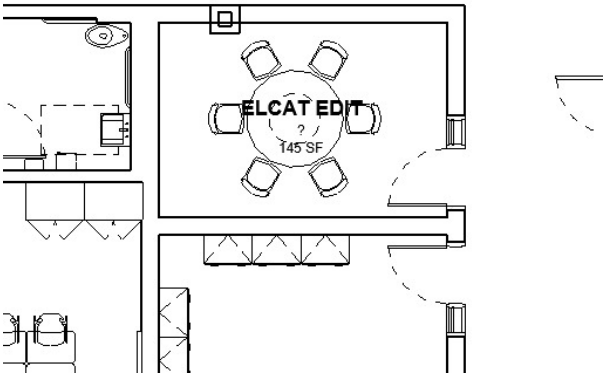
TECHNICAL CRITERIA

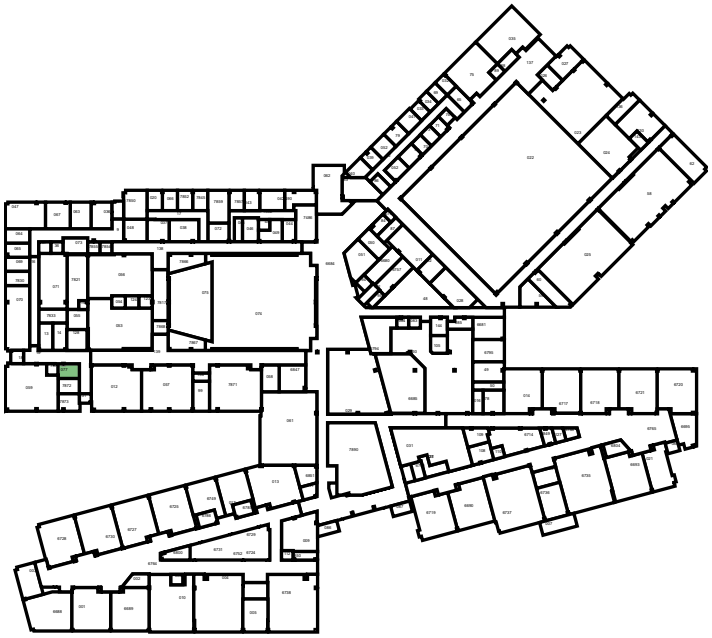
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	CMU PT'D
Floor Finish:	CPT
Ceiling Finish:	ETS
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities: Voice Amplification	No

OTHER INFORMATION

Comments: *Floor Box, Acoustic Wall Treatment*

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

Project Name: EAST LONGMEADOW HIGH SCHOOL

Project No.: 2206

Room Name: WKSHP

FUNCTIONAL CRITERIA

Room Area:	250
Quantity:	1
Occupancy:	
Occupancy Factor:	0
Proposed Occupancy:	0

LOCATION CRITERIA

Adjacencies:	
After Hours Access:	No

FIXTURES & FURNISHINGS

Interior Solar Control Devices:	No
Interior Room Darkening Devices:	No
Interior Vision Control Devices:	No
Powered Solar/Room Darkening:	No

SYSTEMS CRITERIA

Acid Waste:	No
Domestic Water:	No
Non-Potable Water:	No
Target Illumination Level:	20-25 FC
Network Access:	Wireless/Hardwired Internet

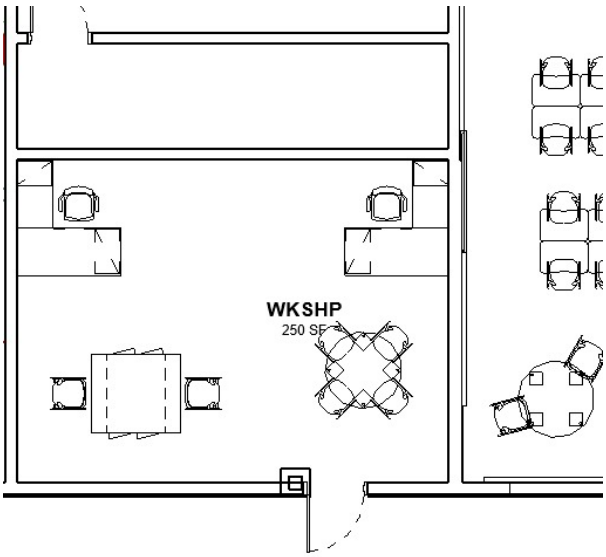
TECHNICAL CRITERIA

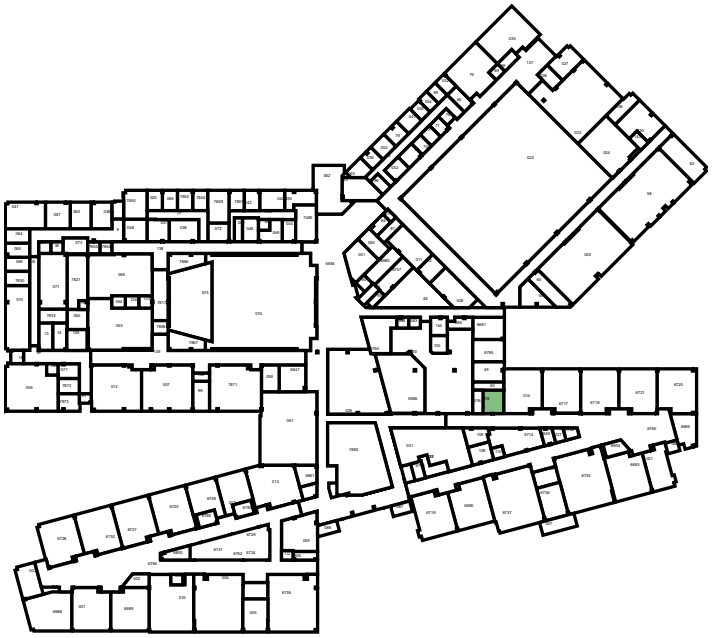
Acoustics:	0.7 NRC
Fire Rated Construction:	0
Natural Light:	No
Natural Ventilation:	No
Wall Finish:	CMU PT'D
Floor Finish:	CONC
Ceiling Finish:	ETS
Base Finish:	RB
Door Material:	WD
Door Hardware:	Compatible w/district related to lockdown
Masterclock:	Yes
Telephone:	Yes
PA Speaker:	Yes
Projection Capabilities:	
Voice Amplification	No

OTHER INFORMATION

Comments:

ROOM LAYOUT





LEVEL 1

EQUIPMENT

FURNITURE

CASEWORK

2-14
PROPOSED CONSTRUCTION METHODOLOGY

(Updated since 8/15 with more detail below)

Construction Delivery Method – Chapter 149A

CM-at-Risk is a team-oriented and "open book" approach to project delivery. This is a good fit for the East Longmeadow High School Project which includes critical schedule goals and construction of a new building closely located to an occupied high school. The East Longmeadow High School project team has significant experience with the CM-at-Risk construction delivery method and is in complete alignment with the process. From our experience, other inherent benefits to Owners can include:

- expedited project schedule and transparent project delivery;
- implementation of early release packages;
- early cost input/validation from Construction Manager (CM);
- improved control of the quality of work;
- enhanced value engineering review;
- flexibility in adjusting building elements as design is completed;
- mitigate subcontractor claims on the project;
- CM input regarding constructability;
- increased on-site project management;
- site safety and logistics plans developed/implemented early with Owner's input.

The CM-at-Risk delivery method was selected by the East Longmeadow School Building Committee in March of 2023 (see March 9th, 2023 SBC minutes). The CMR application was submitted to the MA Office of the Inspector General (OIG) in July 2023 and is currently under review.

The project team expects to receive Notice to Proceed (NTP) approval from the OIG by the end of September 2023. Following the NTP, the district will issue a Request for Qualifications (RFQ) in October 2023. The SBC will designate a CM Application Review Subcommittee. The Subcommittee will work alongside the project team to review CM qualifications. The district will issue a Request for Proposal (RFP) to the qualified CM firms in November 2023. CM interviews will be conducted in December 2023. Selection and negotiation will occur in early January 2024.

East Longmeadow Public School District
East Longmeadow High School

Total Project Budget: All costs associated with the project are subject to 963 CMR 2.16(5)	Estimated Budget	Scope Items Excluded from the Estimated Basis of Maximum Facilities Grant or Otherwise Ineligible	Estimated Basis of Maximum Total Facilities Grant[1]	Estimated Maximum Total Facilities Grant[1]
Feasibility Study Agreement				
OPM Feasibility Study	$324,880	$0	$324,880	
A&E Feasibility Study	$785,000	$0	$785,000	
Environmental & Site	$125,000	$0	$125,000	
Other	$25,120	$0	$25,120	
Feasibility Study Agreement Subtotal	**$1,260,000**	**$0**	**$1,260,000**	**$780,570**
Administration				
Legal Fees	$50,000	$0	$50,000	**$30,975**
Owner's Project Manager				
Design Development	$1,000,000	$0	$1,000,000	
Construction Contract Documents	$1,300,000	$23,754	$1,276,246	
Bidding	$270,000		$270,000	
Construction Contract Administration	$2,000,000	$1,448,000	$552,000	
Closeout	$268,947		$268,947	
Extra Services	$0	$0	$0	
Reimbursable & Other Services	$100,000	$0	$100,000	
Cost Estimates	$30,000	$0	$30,000	
Advertising	$10,000	$0	$10,000	
Permitting	$0	$0	$0	
Owner's Insurance	$125,000	$0	$125,000	
Other Administrative Costs	$0	$0	$0	
Administration Subtotal	**$5,153,947**	**$1,471,754**	**$3,682,193**	**$2,281,119**
Architecture and Engineering				
Basic Services				
Design Development	$3,492,198	$0	$3,492,198	
Construction Contract Documents	$4,889,077	$67,867	$4,821,210	
Bidding	$698,440		$698,440	
Construction Contract Administration	$4,609,701	$4,137,144	$472,557	
Closeout	$279,376	$0	$279,376	
Other Basic Services	$0	$0	$0	
Basic Services Subtotal	**$13,968,791**	**$4,205,011**	**$9,763,780**	
Reimbursable Services				
Construction Testing	$70,000	$0	$70,000	
Printing (over minimum)	$0	$0	$0	
Other Reimbursable Costs	$200,000	$0	$200,000	
Hazardous Materials	$50,000	$0	$50,000	
Geotechnical & Geo-Environmental	$800,000	$0	$800,000	
Site Survey	$10,000	$0	$10,000	
Wetlands	$10,000	$0	$10,000	
Traffic Studies	$100,000	$0	$100,000	
Architectural / Engineering Subtotal	**$15,208,791**	**$4,205,011**	**$11,003,780**	**$6,816,842**
CM at Risk Pre-Construction Services				
Pre-Construction Services	$300,000	$0	**$300,000**	**$185,850**
Site Acquisition				
Land / Building Purchase	$0	$0	$0	
Appraisal Fees	$0	$0	$0	
Recording fees	$0	$0	$0	
Site Acquisition Subtotal	**$0**	**$0**	**$0**	**$0**
Construction Costs				
SUBSTRUCTURE				
Foundations	$5,693,237			
Basement Construction	$0			
SHELL				
Super Structure	$8,478,362			
Exterior Closure				
Exterior Walls	$8,588,560			
Exterior Windows	$4,813,841			
Exterior Doors	$201,930			
Roofing	$4,842,389			
INTERIORS				
Interior Construction	$9,333,005			
Staircases	$453,893			
Interior Finishes	$6,229,010			
SERVICES				
Conveying Systems	$176,438			
Plumbing	$4,435,669			
HVAC	$14,772,081			
Fire Protection	$1,566,429			
Electrical	$12,758,574			
EQUIPMENT & FURNISHINGS				
Equipment	$4,153,420			
Furnishings	$1,992,529			
SPECIAL CONSTRUCTION & DEMOLITION				
Special Construction	$38,500			

Template Revised: March 2023
Incorporates revisions to MSBA's project funding limits policy, which was approved at the December 21, 2022 MSBA Board of Directors Meeting.

Soft Cost Reimbursement

Category	Estimated Budget	Excluded Costs	Eligible Soft Costs
Administration:	$5,503,947	$1,471,754	$4,032,193
A/E Services:	$16,118,791	$4,205,011	$11,913,780
Site Acquisition:	Ineligible, therefore not included in calculation		
Miscellaneous Project Costs:	$500,000	$0	$500,000
FFE:	$3,360,000	$1,440,000	$1,920,000
Owners Contingency:	Not included in this calculation		
		Total Eligible Soft Costs =	$18,365,973

Construction Costs associated with Soft Cost Cap Calculation

Category	Estimated Budget	
CM Pre-Construction Services:	$300,000	
Construction Cost:	$147,537,907	
Construction Contingency:	Not included in this calculation	
Total Construction Cost:	$147,837,907	
Soft Cost Allowance:	20%	
Reimbursable Soft Cost:	$29,567,581	
Eligible minus Reimbursable =	-$11,201,609	If >0 enter into Cell C116

-If Eligible minus Reimbursable is negative; OK.
-If Eligible minus Reimbursable is positive enter value into "Soft Costs that exceed 20% of Construction Cost" below in the Ineligible column.

Scope Excluded OPM & Designer Costs associated with Scope Excluded Building Costs

Scope Excluded Aud/PE (GSF):		885	(0.4600%)
Total (GSF):		191,796	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$5,163,827	0.4600%	$23,754
Designer Basic Services:	$14,753,791	0.4600%	$67,867

Scope Excluded OPM & Designer Costs associated with Scope Excluded Site Work

Scope Excluded Direct Construction Cost ($):		$0	(0.0000%)
Total Direct Construction Costs ($):		$114,253,272	
	Estimated Budget	Excluded (%)	Scope Excluded Costs
OPM Basic Services:	$5,163,827	0.0000%	$0
Designer Basic Services:	$14,753,791	0.0000%	$0
Total Scope Excluded OPM Fees ($):			$0 Enter in Cell C13
Total Scope Excluded Designer Fees ($):			$0 Enter in Cell C28

Ineligible Fees associated with OPM (3.5%) & Designer (10%) Fee Caps

Upper Limit:	$105,487,800	191,796	**$550 /sf**	
Construction Budget:	$147,537,907			
Basis of OPM & Designer Fee Caps:	$105,487,800			
OPM Services	Estimated Budget	Ineligible Costs	Eligible Costs	OPM Value @ 3.50%	Value > 3.5%
Basic Services:	$5,163,827	$1,471,754	$3,692,073	$3,692,073	$0
Extra Services:	$155,120	$0	$155,120		If >0 enter into Cell C15
Designer Services	Estimated Budget	Ineligible Costs	Eligible Costs	Designer Value @ 10.00%	Value > 10%
Basic Services:	$14,753,791	$4,205,011	$10,548,780	$10,548,780	$0
Extra Services:	$1,365,000	$0	$1,365,000		If >0 enter into Cell C30

Ineligible Building Area	Ineligible NSF	Ineligible Aud/PE GSF	Other Ineligible GSF	Estimated District Cost
Core Academic:	220		330	$253,849
Special Education:			-	$0
Art & Music:			-	$0
Vocations & Technology:			-	$0
Chapter 74 CTE:			-	$0
Health & Physical Education:	590	885		$680,777
Media Center:			-	$0
Auditorium / Drama:		-		$0
Dining & Food Service:	1,190		1,785	$1,373,093
Medical:			-	$0
Administration & Guidance:	870		1,305	$1,003,858
Custodial & Maintenance			-	$0
Other:	6,290		9,435	$7,257,779
	Total:	**885**	**12,855**	**$10,569,356**
Grossing Factor:	1.50			

Mark Up Ratio

Construction Budget	$147,537,907	1.291323251	= Mark Up Ratio
Construction Trades Subtotal	$114,253,272		

Existing Building Demolition	$1,705,776	$0		
In-Building Hazardous Material Abatement	$1,507,702	$0		
Asbestos Containing Floor Material / Ceiling Tile Abatement	$415,286	$415,286		
Other Hazardous Material Abatement	$125,000	$125,000		
BUILDING SITE WORK				
Site Preparation	$4,734,654	$0		
Site Improvements	$12,251,093	$0		
Site Civil / Mechanical Utilities	$2,647,298	$0		
Site Electrical Utilities	$2,338,601	$0		
Scope Excluded Site Work	$0	$642,460		
Construction Trades Subtotal	$114,253,272	$1,182,746		
Contingencies (Design and Pricing)	$8,568,996	$88,706		
Sub-Contractor Bonds	$704,298	$7,291		
D/B/B Insurance	$0	$0		
General Conditions	$9,847,252	$101,938		
D/B/B Overhead & Profit	$0	$0		
GMP Insurance	$2,137,678	$22,129		
GMP Fee	$2,824,776	$29,242		
GMP Contingency	$2,641,461	$27,344		
Escalation to Mid-Point of Construction	$6,560,175	$67,911		
Construction Cost over Funding Cap		$64,940,769		
Construction Budget	**$147,537,907**	**$66,468,076**	**$81,069,831**	**$50,222,760**
Alternates				
Ineligible Work Included in the Base Project		$0	$0	
Alternates Included in the Total Project Budget	$0	$0	$0	
Alternates Excluded from the Total Project Budget	$12,882,147		$12,882,147	
Subtotal to be Included in Total Project Budget	**$0**	**$0**	**$0**	**$0**
Miscellaneous Project Costs				
Utility Company Fees	$200,000	$0	$200,000	
Testing Services	$200,000	$0	$200,000	
Swing Space / Modulars	$0	$0	$0	
Other Project Costs (Mailing & Moving)	$100,000	$0	$100,000	
Miscellaneous Project Costs Subtotal	**$500,000**	**$0**	**$500,000**	**$309,750**
Furnishings and Equipment				
Furniture, Fixtures, and Equipment	$2,160,000	$1,200,000	$960,000	
Technology	$1,200,000	$240,000	$960,000	
FF&E Subtotal	**$3,360,000**	**$1,440,000**	**$1,920,000**	**$1,189,440**
Soft Costs that exceed 20% of Construction Cost		$0	$0	
Project Budget	**$173,320,645**	**$73,584,841**	**$99,735,804**	**$61,786,330**

Author:
This value is representative of the removal of Asbestos Containing Floor Material

Author:
This value is representative of the removal of Underground Storage Tanks (UST)

Demolition and Abatement Costs

Total Demolition and Abatement Costs:	$3,753,764
Ineligible Demolition and Abatement Costs:	-$540,286
Eligible Demolition and Abatement Costs:	$3,213,478
Marked Up Eligible Costs:	**$4,149,639**

Eligible Site Work Cost

Total Direct Site Work Costs:	$21,971,646		
Ineligible Site Work Costs:	-$642,460	178,056	Eligible Building GSF
Potentially Eligible Direct Site Work Costs:	$21,329,186	**$39**	**Site Work Cost Limit ($/sf) includes Mark Up**
Potentially Eligible Marked Up Site Work Costs:	$27,542,874	$6,944,184	Site Work Cost Allowance includes Mark Up
Marked Up Eligible Site Work Costs:		**$6,944,184**	

Construction Costs and Funding Cap

Total Building Area (GSF):	191,796
Ineligible Excess Auditorium/PE Areas (GSF):	-885
Other Ineligible Building Areas (GSF):	-12,855
Eligible Building GSF:	178,056
Building Cost Funding Limit ($/sf):	**$393**
Eligible Building Costs:	$69,976,008
Eligible Site Work Costs:	$6,944,184
Eligible Demolition & Abatement Costs:	+ $4,149,639
Basis of Construction Costs:	**$81,069,831**
Construction Budget:	$147,537,907
Basis of Construction Costs:	-$81,069,831
Ineligible Construction Costs:	$66,468,076
Construction Cost over Funding Cap:	$0
	If > 0 enter value into Cell C98

Ineligible Cost Breakdown

Scope Excluded Site Work:	$829,623
Site Work Cost beyond Funding Limit:	$20,598,690
Ineligible Demo & Abatement:	$697,684
Scope Excluded Aud/PE Areas:	$680,777
Other Ineligible Building Areas:	$9,888,579
Construction Cost over Funding Cap:	$33,772,723

Construction Cost Breakdown

Total Construction Cost ($/sf):	$769
Reimbursable Construction Cost ($/sf):	$455
Marked Up Building Costs ($/sf):	$596
Marked Up Site, Building Takedown & Haz Mat ($/sf):	$173
Direct Building Cost ($/sf):	$496

FF&E Reimbursement

Eligible Enrollment: 800 Enter Eligible Enrollment

	Funding Limit	Estimated Budget	Eligible Costs	Ineligible Costs
Furniture, Fixtures & Equipment:	$1,200/student	$2,160,000	$960,000	$0 If >0 enter in Cell C112
Technology:	$1,200/student	$1,200,000	$960,000	$0 If >0 enter in Cell C113

Incentive Points

1.47	(0-2) Maintenance		
0.00	(0-6) Newly Formed Regional School District		
0.00	(0-5) Major Reconstruction or Reno/Reuse type in rounded to 2 decimal places		
#DIV/0!	0 gsf	Renovated or Existing to Remain	If Cell G117 > 0 enter value into Cell F116
	0 gsf	Total at Conclusion of Project	
0.00	(0-1) Overly Zoning 40R and 40S		
0.00	(0-0.5) Overlay Zoning 100 units or 50% of units 1,2, or 3 family structures		
4.00	(0-4) Energy Efficiency - "Green Schools"		
			Owner's Contingency Cap: 0.50%
5.47	**Total Incentive Points**		Construction Contingency Cap: 1.00%

Commissioning (Cx) Costs associated with Ineligible Building Area

Building GSF:	191,796
Cx Fee per GSF:	$0.85
Ineligible GSF:	13,740
Ineligible Cx Costs:	$11,679 If >0 enter in Cell B128

Commissioning Fee Schedule

Cost Recovery associated with Prior Projects

Prior Project ID Number:	
Prior Project Total Grant:	
Propose School Opens:	
Prior Project Substantial Completion:	
Beneficial use (years):	0.00
Unused Years:	20.00
Unused Years as % of 20:	100.00%
Prior Project Cost Recovery:	$0 If >0 enter in Cell B128

Board Authorization

Design Enrollment	800
Total Building Gross Floor Area (GSF)	191,796
Total Project Budget (excluding Contingencies)	$173,320,645
Scope Items Excluded or Otherwise Ineligible	- $73,584,841
Third Party Funding (Ineligible)	- $0
Estimated Basis of Maximum Total Facilities Grant[1]	$99,735,804
Reimbursement Rate[1]	61.95%
Est. Max. Total Facilities Grant (before recovery)[1]	$61,786,331
Cx Costs associated with Ineligible Building Area[2]	- $11,679
Cost Recovery associated with Prior Projects[2]	- $0
Estimated Maximum Total Facilities Grant[1]	$61,774,652

Construction Contingency[3]	$2,760,000
Ineligible Construction Contingency[3]	$1,284,621
"Potentially Eligible" Construction Contingency[3]	$1,475,379
Owner's Contingency[3]	$1,380,000
Ineligible Owner's Contingency[3]	$642,310
"Potentially Eligible" Owner's Contingency[3]	$737,690
Total Potentially Eligible Contingency[3]	$2,213,069
Reimbursement Rate	61.95%
Potential Additional Contingency Grant Funds[3]	$1,370,996
Maximum Total Facilities Grant	$63,145,648
Total Project Budget	$177,460,645
District Share:	$114,314,997

56.48	Reimbursement Rate Before Incentive Points
5.47	Total Incentive Points
61.95%	MSBA Reimbursement Rate

NOTES

This template was prepared by the MSBA as a tool to assist Districts and consultants in understanding MSBA policies and practices regarding potential impact on the MSBA's calculation of a potential Basis of Total Facilities Grant and potential Total Maximum Facilities Grant. This template does not contain a final, exhaustive list of all evaluations which the MSBA may use in determining whether items are eligible for reimbursement by the MSBA. The MSBA will perform an independent analysis based on a review of information and estimates provided by the District for the proposed school project that may or may not agree with the estimates generated by the District using this template.

1 - The Estimated Basis of Total Facilities Grant and Estimated Maximum Facilities Grant amounts do not include any potentially eligible contingency funds and are subject to review and audit by the MSBA.

2 - Costs associated with the commissioning of ineligible building area is estimated to result in the recovery of a portion of the overall commissioning cost. The OPM has estimated this recovery of funds to be $_____. The proposed demolition of the _____ School is expected to result in the MSBA recovering a portion of state funds previously paid to the District for the _____ project at the existing facilities completed in ____. The MSBA will perform an independent analysis based on a review of its records and information and estimates provided by the District for the proposed school project that may or may not agree with the estimated cost recovery generated by the District and its consultants using this template.

3 - Pursuant to Section 3.21 of the Project Funding Agreement and the applicable policies and guidelines of the Authority, any project costs associated with the reallocation or transfer of funds from either the Owner's contingency or the Construction contingency to other budget line items shall be subject to review by the Authority to determine whether any such costs are eligible for reimbursement by the Authority. All costs are subject to review and audit by the MSBA.

East Longmeadow Public School District
East Longmeadow High School

	Proposed Budget	Total Construction Cost at Schematic Design
Construction Mark-ups Costs		
Contingencies (Design and Pricing)[1]	$8,568,996	
Escalation to Mid-Point of Construction[1]	$6,560,175	
Subtotal	$15,129,170	
Construction Costs		
GMP Fee[1]	$2,824,776	$2,824,776
GMP Insurance[1]	$2,137,678	$2,137,678
GMP Contingency[1]	$2,641,461	$2,641,461
Division 1 - General Requirements[1]	$10,551,550	$10,551,550
Division 2 - Existing Conditions	$3,753,764	$4,250,830
Division 3 - Concrete	$4,712,217	$5,336,198
Division 4 - Masonry	$2,791,326	$3,160,947
Division 5 - Metals	$8,309,828	$9,410,197
Division 6 - Woods, Plastics and Composites	$889,437	$1,007,214
Division 7 - Thermal and Moisture Protection	$9,667,764	$10,947,948
Division 8 - Openings	$6,480,370	$7,338,487
Division 9 - Finishes	$13,174,975	$14,919,576
Division 10 - Specialties	$1,109,298	$1,256,189
Division 11 - Equipment	$4,675,345	$5,294,444
Division 12 - Furnishings	$2,285,029	$2,587,607
Division 13 - Special Construction	$113,500	$128,529
Division 14 - Conveying Systems	$175,000	$198,173
Division 21 - Fire Suppression	$1,771,237	$2,005,780
Division 22 - Plumbing	$4,435,669	$5,023,031
Division 23 - HVAC	$14,772,081	$16,728,168
Division 25 - Integrated Automation	$0	$0
Division 26 - Electrical	$11,863,601	$13,434,554
Division 27 - Communications	$958,980	$1,085,966
Division 28 - Electronic Safety and Security	$772,090	$874,328
Division 31 - Earthwork	$7,382,910	$8,360,539
Division 32 - Exterior Improvements	$10,802,890	$12,233,385
Division 33 - Utilities	$3,355,964	$3,800,354
Construction Trades Subtotal	**$114,253,273**	
CSI Construction Budget {w/ mark-ups}[2]	**$132,408,737**	**{$147,537,907}**
Uniformat Construction Budget[2]		**$147,537,907**

[1] *Markup based on Construction Cost Estimates at the conclusion of Schematic Design*

[2] *Provide Reconciled CSI Construction Cost Estimates that align with the Uniformat Estimates*

Proposed Schedule of Alternates

East Longmeadow Public Schools
East Longmeadow High School

Description of Item	Ineligible Work & Alternates to be included in District's Total Project Budget	Alternates Excluded From the Total Project Budget that are to be funded through Bid Savings	District Rationale	Eligibility for Reimbursement
S1: Add lighting to baseball & softball varsity fields		$1,273,490	Expands hours of use	To Be Completed by MSBA
S2: Add sports field storage building		$46,022	Meets athletic storage needs on east side of site	To Be Completed by MSBA
S3: Add irrigation at the JV baseball, softball and practice fields		$513,026	Expands the use and conditions of fields	To Be Completed by MSBA
S4: Provide sod in lieu of seed at athletic fields		$975,051	Accelerates usefulness of new field layout	To Be Completed by MSBA
S5: Add athletic field safety netting adjacent to abutting residences		$269,112	Addresses safety concern to abbutters	To Be Completed by MSBA
M1: Provide ground source heat pumps in lieu of basis of design VRF system		$9,805,447	Higher efficiency heating and cooling source	To Be Completed by MSBA
Total	$0	$12,882,147		

By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete

By: _____
Title: Chair of the School Building Committee
Date: 8/24/23

By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete

By: _____
Title: Chief Executive Officer
Date: 8/24/23

By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete

By: Marion C. Smith
Title: Superintendent of Schools
Date: 8/24/23

By signing this Total Project Budget, I hereby certify that I have read and understand the form and further certify, to the best of my knowledge and belief, that the information supplied by the District in the table above is true, accurate, and complete

By: Greg T. Lyon
Title: Chair of the School Committee
Date: 8/24/23

Commissioning Fees by Building Area

Building GSF:	191,796
Cx Fee per GSF:	$0.85

GSF of Facility	Fee per GSF
10	$1.77
50,000	$1.73
55,000	$1.65
60,000	$1.58
65,000	$1.51
70,000	$1.46
75,000	$1.40
80,000	$1.34
85,000	$1.29
90,000	$1.24
95,000	$1.19
100,000	$1.14
105,000	$1.09
110,000	$1.05
115,000	$1.00
120,000	$0.96
125,000	$0.94
130,000	$0.93
135,000	$0.92
140,000	$0.91
145,000	$0.90
155,000	$0.89
160,000	$0.88
170,000	$0.87
175,000	$0.86
185,000	$0.85
195,000	$0.84
205,000	$0.83
220,000	$0.82
235,000	$0.81
250,000	$0.80
270,000	$0.79
290,000	$0.78

SKANSKA

Skanska USA Building Inc.
1350 Main St. Suite 1209
Springfield, MA 01003
usa.skanska.com

August 25th, 2023

Veatriki Dagkalakou
Project Manager
Massachusetts School Building Authority
40 Broad St. Suite 500
Boston, MA 02109

Cost Estimate Analysis / Reconciliation

Dear Ms. Dagkalakou,

There were two independent estimates performed for the East Longmeadow High School (ELHS) Schematic Design submission.

1. The Architect, Jones Whitsett Architects in association with SMMA, engaged PM&C to estimate the value of the project.

2. Skanska USA Building, the Owner's Project Manager, engaged PCM Company to estimate the value of the project.

On Friday, August 4th, 2023, Skanska USA Building, Jones Whitsett Architects, SMMA, PCM Company, PM&C, and District representatives held a virtual meeting to reconcile the two estimates. Skanska moderated the meeting. Discussions regarding materials, quantities, and approach occurred during the meeting. At the end of the day, the two estimates were within $508,602 of each other which is a .35% separation. The team feels that these two estimates are accurate and that the separation is well within norms for a project of this size and complexity.

The team is satisfied with the results of the Schematic Design estimate reconciliation and we feel that we have a great understanding of the potential project cost.

The Town of East Longmeadow has been thoroughly briefed on the estimate and all costs included in it. Please contact me should you have any questions or comments.

Sincerely,

Benjamin Murphy
Program Manager
617-275-6422
Ben.murphy@skanska.com

SKANSKA

Schematic Design Reconciled Estimates
Uniformat

		PCM	PM&C	Reconciled Avg.
A10	Foundation	$5,789,966.17	$5,596,507.00	$5,693,236.59
A20	Basements	$0.00	-	
B10	Superstructure	$8,658,373.81	$8,298,350.00	$8,478,361.91
B20	Exterior Closure	$13,439,082.25	$13,769,577.00	$13,604,329.63
B30	Roofing	$4,842,884.00	$4,841,894.00	$4,842,389.00
C10	Interior Construction	$9,370,117.25	$9,295,892.00	$9,333,004.63
C20	Stairs	$438,785.00	$469,000.00	$453,892.50
C30	Interior Finishes	$5,962,751.06	$6,495,268.00	$6,229,009.53
D10	Conveying	$170,000.00	$182,875.00	$176,437.50
D20	Plumbing	$4,198,346.00	$4,672,992.00	$4,435,669.00
D30	HVAC	$14,918,909.69	$14,625,252.00	$14,772,080.85
D40	Fire Protection	$1,552,368.00	$1,580,490.00	$1,566,429.00
D50	Electrical	$12,503,159.59	$13,013,988.00	$12,758,573.80
E10	Equipment	$4,183,900.00	$4,122,940.00	$4,153,420.00
E20	Furnishings	$2,077,657.00	$1,907,400.00	$1,992,528.50
F10	Special Construction	$38,500.00	$38,500.00	$38,500.00
F20	Selective Construction	$3,776,720.50	$3,730,808.00	$3,753,764.25
	Total Building Cost	**$91,921,520.32**	**$92,641,733.00**	$92,281,626.66
G10	Site Preparation	$4,749,725.00	$4,719,583.00	$4,734,654.00
G20	Site Improvements	$12,353,879.57	$12,148,307.00	$12,251,093.29
G30	Site Mechanical utilities	$2,710,506.02	$2,584,089.00	$2,647,297.51
G40	Site Electrical Utilities	$2,322,417.10	$2,354,785.00	$2,338,601.05
	Total Site Cost	**$22,136,527.69**	**$21,806,764.00**	$21,971,645.85
	Project Construction Subtotal	**$114,058,048.01**	**$114,448,497.00**	**$114,253,272.51**
	Design Contingency	**$8,554,354.00**	**$8,583,637.00**	$8,568,995.50
				$0.00
	Construction / CM Contingency	**$2,703,253.00**	**$2,579,669.00**	$2,641,461.00
				$0.00
	Escalation	**$7,169,027.00**	**$5,951,322.00**	$6,560,174.50
				$0.00
	General Conditions & Requirements	**$9,900,000.00**	**$9,794,504.00**	$9,847,252.00
				$0.00
	CM Fee	**$2,757,318.00**	**$2,892,233.00**	$2,824,775.50
				$0.00
	Permit	**$0.00**		$0.00
				$0.00
	Bond & Insurance	**$2,650,248.00**	**$3,033,704.00**	$2,841,976.00
				$0.00
	Total Markups	**$33,734,200.00**	**$32,835,069.00**	$33,284,634.50
	Total:	**$147,792,248.01**	**$147,283,566.00**	$147,537,907.01

Schematic Design Reconciled Estimates

CSI Format

		PCM	PM&C	Reconciled Avg.
Div. 1	General Requirements			
Div. 2	Existing Conditions	$3,776,720.50	$3,730,808.00	$3,753,764.25
Div. 3	Concrete	$4,551,162.36	$4,873,271.00	$4,712,216.68
Div. 4	Masonry	$2,602,294.00	$2,980,357.00	$2,791,325.50
Div. 5	Metals	$8,439,341.81	$8,180,314.00	$8,309,827.91
Div 6	Woods, Plastics and Composites	$751,466.00	$1,027,407.00	$889,436.50
Div. 7	Thermal and Moisture Protection	$9,560,989.50	$9,774,538.00	$9,667,763.75
Div. 8	Openings	$6,390,655.00	$6,570,085.00	$6,480,370.00
Div. 9	Finishes	$13,558,508.81	$12,791,441.00	$13,174,974.91
Div. 10	Specialties	$986,275.00	$1,232,321.00	$1,109,298.00
Div. 11	Equipment	$4,183,900.00	$5,166,790.00	$4,675,345.00
Div. 12	Furnishings	$2,077,657.00	$2,492,400.00	$2,285,028.50
Div. 13	Special Construction	$38,500.00	$188,500.00	$113,500.00
Div. 14	Conveying Systems	$170,000.00	$180,000.00	$175,000.00
Div. 21	Fire Suppression	$1,552,368.00	$1,990,105.00	$1,771,236.50
Div. 22	Plumbing	$4,198,346.00	$4,672,992.00	$4,435,669.00
Div. 23	HVAC	$14,918,909.69	$14,625,252.00	$14,772,080.85
Div. 25	Integrated Automation			$0.00
Div. 26	Electrical	$9,041,019.59	$14,686,183.00	$11,863,601.30
Div. 27	Communications	$1,917,960.00		$958,980.00
Div. 28	Electronic Safety and Security	$1,544,180.00		$772,090.00
Div. 31	Earthwork	$6,356,066.32	$8,409,753.00	$7,382,909.66
Div. 32	Exterior Improvements	$12,353,879.57	$9,251,900.00	$10,802,889.79
Div. 33	Utilities	$5,087,848.86	$1,624,080.00	$3,355,964.43
	Total:	**$114,058,048.01**	**$114,448,497.00**	**$114,253,272.51**

MSBA PROJECT NUMBER: 201900870505

Schematic Design Cost Estimate

East Longmeadow High School

East Longmeadow, MA

PM&C LLC
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Prepared for:

Jones Whitsett Architects/ SMMA

8/4/2023
Reconciled

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East Longmeadow High School
East Longmeadow, MA

04-Aug-23

Schematic Design Cost Estimate

MSBA PROJECT NUMBER: 201900870505

	Construction Start		Gross Floor Area	$/sf	Estimated Construction Cost
NEW SCHOOL					
	Aug-24				
NEW SCHOOL			191,796	$460.27	$88,277,523
CONCESSIONS BUILDING			1,344	$471.28	$633,402
DEMOLITION OF EXISTING SCHOOL			186,980	$9.00	$1,682,820
REMOVE HAZARDOUS MATERIALS ALLOW PER SMITH AND WESSEL					$2,047,988
SITEWORK					$21,806,764
SUB-TOTAL			191,796	$596.72	$114,448,497
DESIGN AND PRICING CONTINGENCY	7.5%				$8,583,637
ESCALATION	5.2%				$5,951,322
SUB-TOTAL			191,796	$672.50	$128,983,456
GENERAL CONDITIONS - PHASE 1		24	Months	$200,000	$4,800,000
GENERAL CONDITIONS - PHASE 2		9	Months	$125,000	$1,125,000
GENERAL REQUIREMENTS	3.0%				$3,869,504
GL INSURANCE	1.50%				$2,081,669
BONDS	0.50%				$704,298
BUILDER'S RISK	0.175%				$247,737
PERMITS					Assume Waived
CM FEE	2.00%				$2,892,233
CM CONTINGENCY	2.00%				$2,579,669
MODULAR CLASSROOMS					By Owner
TOTAL OF ALL CONSTRUCTION			191,796	$767.92	**$147,283,566**

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TOTAL COST ITEM 1 WORK FSB BIDS	**$61,294,042**
TOTAL COST ITEM 2 WORK NON-FSB	**$67,689,414**
TOTAL ALL WORK	**$128,983,456**

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Alternates;			**Estimated Cost**
S1	Lighting for varsity baseball field	Add	**$1,314,720**
S2	Sports field storage building	Add	**$51,216**
S3	Additional athletic field irrigation beyond base project scope	Add	**$513,000**
S4	Provide 650,000sf sod in lieu of seed for athletic fields	Add	**$936,000**
S5	Athletic field safety netting adjacent to abutting residences	Add	**$304,200**
S6	Natural gas line from Maple Street to emergency generator.	Add	**$54,600**
E2	Natural gas-fired emergency generator in lieu of a diesel-fired generator of the same size, 900Kw.	Add	**$276,000**
M1	Mechanical System Option: Ground source heat pumps	Add	**$10,100,578**
M2	Mechanical System Option: Air source heat pump chillers and water source loop	Add	**$2,045,146**
A2	Brick ILO formed metal panel	Savings	**($527,736)**

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This Schematic Design cost estimate was produced from drawings, specifications and other documentation prepared by Jones Whitsett Architects and SMMA and their design team dated July 11th, 2023. Design and engineering changes occurring subsequent to the issue of these documents have not been incorporated in this estimate.

This estimate includes all direct construction costs, construction manager's overhead, fee and design contingency. Cost escalation assumes start dates indicated.

Bidding conditions are expected to be public bidding under Chapter 149a of the Massachusetts General Laws to pre-qualified construction managers, and pre-qualified sub-contractors, open specifications for materials and manufacturers.

The estimate is based on prevailing wage rates for construction in this market and represents a reasonable opinion of cost. It is not a prediction of the successful bid from a contractor as bids will vary due to fluctuating market conditions, errors and omissions, proprietary specifications, lack or surplus of bidders, perception of risk, etc. Consequently the estimate is expected to fall within the range of bids from a number of competitive contractors or subcontractors, however we do not warrant that bids or negotiated prices will not vary from the final construction cost estimate.

ITEMS NOT CONSIDERED IN THIS ESTIMATE

Items not included in this estimate are:

Land acquisition, feasibility, and financing costs
All professional fees and insurance
Site or existing conditions surveys investigations costs, including to determine subsoil conditions
All Furnishings, Fixtures and Equipment
Items identified in the design as Not In Contract (NIC)
Items identified in the design as by others
Owner supplied and/or installed items as indicated in the estimate
Utility company back charges, including work required off-site
Work to City streets and sidewalks, (except as noted in this estimate)
Construction contingency
Contaminated soils removal

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CONSTRUCTION COST SUMMARY IN CSI FORMAT

	NEW SCHOOL		*Concession Building*		*SITE WORK*		*TOTAL PROJECT*	
	Subtotal	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*
DIV. 2 EXISTING CONDITIONS		**$0**		**$0**		**$3,730,808**		**$3,730,808**
024300 Selective Demolition	$0		$0		$0		$0	
024400 Building Demolition	$0		$0		$1,682,820		$1,682,820	
025000 Site Remediation	$0		$0		$0		$0	
028000 Building Abatement	$0		$0		$2,047,988		$2,047,988	
DIV. 3 CONCRETE		**$4,432,497**		**$65,674**		**$375,100**		**$4,873,271**
033000 Cast In Place Concrete	$4,432,497		$65,674		$375,100		$4,873,271	
DIV. 4 MASONRY		**$2,840,541**		**$139,816**		**$0**		**$2,980,357**
040001 Unit Masonry	$2,840,541		$139,816		$0		$2,980,357	
DIV. 5 METALS		**$8,058,875**		**$70,864**		**$50,575**		**$8,180,314**
050001 Miscellaneous & Ornamental Iron	$1,174,113		$3,664		$50,575		$1,228,352	
051200 Structural Steel Framing	$6,884,762		$67,200		$0		$6,951,962	
DIV. 6 WOODS, PLASTICS & COMPOSITES		**$1,020,954**		**$6,453**		**$0**		**$1,027,407**
061000 Rough Carpentry	$265,203		$6,453		$0		$271,656	
062000 Finish Carpentry	$755,751		$0		$0		$755,751	
							$0	
DIV. 7 THERMAL & MOISTURE PROTECTION		**$9,719,657**		**$54,881**		**$0**		**$9,774,538**
070001 Waterproofing, Damproofing & Caulking	$1,158,099		$7,345		$0		$1,165,444	
070002 Roofing and Flashing	$4,498,500		$43,888		$0		$4,542,388	
072100 Insulation	$828,354		$3,648		$0		$832,002	
076400 Metal Wall Panels	$854,745		$0		$0		$854,745	
076800 Phenolic Wall Panels	$1,399,300		$0		$0		$1,399,300	
078100 Applied Fireproofing	$633,863		$0		$0		$633,863	
078400 Firestopping	$266,796		$0		$0		$266,796	
079500 Expansion Joints	$80,000		$0		$0		$80,000	
DIV. 8 DOORS & WINDOWS		**$6,512,785**		**$57,300**		**$0**		**$6,570,085**
080001 Glass and Glazing	$54,000		$0		$0		$54,000	
080002 Metal Framed Windows	$3,273,945		$21,600		$0		$3,295,545	
081110 Doors and Frames	$484,470		$22,200		$0		$506,670	
083100 Access Doors and Panels	$10,000		$0		$0		$10,000	
083323 Overhead Coiling Doors	$33,600		$13,500		$0		$47,100	
083513 Folding Glass Doors	$20,000		$0		$0		$20,000	
084313 Aluminum Framed Storefronts	$68,400		$0		$0		$68,400	
085313 Vinyl Windows	$2,131,570		$0		$0		$2,131,570	
086300 Metal Framed Skylights	$0		$0		$0		$0	
087100 Door Hardware	$371,800		$0		$0		$371,800	
089000 Louvers and Vents	$65,000		$0		$0		$65,000	
DIV. 9 FINISHES		**$12,764,797**		**$26,644**		**$0**		**$12,791,441**
090001 Terrazzo	$0		$0		$0		$0	
090002 Tile	$2,276,699		$0		$0		$2,276,699	
090003 Acoustical Ceilings	$1,187,923		$0		$0		$1,187,923	
090005 Resilient Flooring	$807,343		$0		$0		$807,343	
090007 Painting	$687,039		$7,284		$0		$694,323	
092900 GWB, Lath and Plastering	$6,878,910		$19,360		$0		$6,898,270	
092610 Vapor Mitigation at slabs	$0		$0		$0		$0	
096400 Wood Flooring	$0		$0		$0		$0	
096466 Wood Athletic Flooring	$383,115		$0		$0		$383,115	
096800 Carpet	$188,468		$0		$0		$188,468	
097500 Resinous Flooring	$0		$0		$0		$0	
098120 Sprayed Acoustic Insulation	$50,000		$0		$0		$50,000	
098413 Acoustic Panels	$305,300		$0		$0		$305,300	
DIV 10 SPECIALTIES		**$1,200,441**		**$31,880**		**$0**		**$1,232,321**
101100 Markerboards	$277,824		$0		$0		$277,824	
101200 Display Cases	$47,800		$0		$0		$47,800	
101400 Signage	$218,847		$5,000		$0		$223,847	
102110 Wire Partitions	$0		$0		$0		$0	
102113 Toilet Compartments	$77,750		$0		$0		$77,750	
102123 Cubicle Curtain	$2,000		$0		$0		$2,000	
102228 Folding Partitions	$0		$0		$0		$0	
102600 Wall Protection	$10,000		$0		$0		$10,000	
102813 Toilet Accessories	$95,300		$26,880		$0		$122,180	
104400 Fire Protection Specialties	$26,500		$0		$0		$26,500	
105113 Metal Lockers	$244,020		$0		$0		$244,020	
107113 Exterior Sun Control Devices	$200,400		$0		$0		$200,400	
DIV. 11 EQUIPMENT		**$3,971,440**		**$1,500**		**$1,193,850**		**$5,166,790**
119000 Miscellaneous Equipment	$42,500		$0		$0		$42,500	
113100 Appliances	$60,700		$1,500		$0		$62,200	
114000 Foodservice Equipment	$2,350,000		$0		$0		$2,350,000	
115000 VoTech Equipment	$0		$0		$0		$0	
115213 Projection Screens	$15,000		$0		$0		$15,000	
115313 Laboratory Equipment incl. Fume Hoods	$160,000		$0		$0		$160,000	
116100 Theatre Equipment	$1,144,000		$0		$0		$1,144,000	
116623 Gymnasium Equipment	$156,400		$0		$0		$156,400	
116653 Gymnasium Dividers	$42,840		$0		$0		$42,840	
116800 Play Field Equipment & Structures	$0		$0		$1,193,850		$1,193,850	

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	NEW SCHOOL		*Concession Building*		*SITE WORK*		*TOTAL PROJECT*	
	Subtotal	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*	*Subtotal*	*Total*
DIV. 12 FURNISHINGS		**$2,117,400**		**$15,000**		**$360,000**		**$2,492,400**
122400 Window Shades	$250,000		$0		$0		$250,000	
123000 Casework	$1,318,580		$15,000		$0		$1,333,580	
124813 Entrance Floor Mats and Frames	$98,820		$0		$0		$98,820	
126100 Fixed Audience Seating	$225,000		$0		$0		$225,000	
126613 Telescoping Bleachers	$225,000		$0		$0		$225,000	
129300 Site Furnishings	$0		$0		$360,000		$360,000	
DIV. 13 SPECIAL CONSTRUCTION		**$38,500**		**$0**		**$150,000**		**$188,500**
132000 Greenhouse	$38,500		$0		$0		$38,500	
133000 Pressbox	$0		$0		$150,000		$150,000	
DIV. 14 CONVEYING SYSTEMS		**$180,000**		**$0**		**$0**		**$180,000**
142424 Elevators	$180,000		$0		$0		$180,000	
143424 LULA	$0		$0		$0		$0	
DIV. 21 FIRE SUPPRESSION		**$1,580,490**		**$0**		**$409,615**		**$1,990,105**
210000 Fire Suppression	$1,580,490		$0		$409,615		$1,990,105	
DIV.22 PLUMBING		**$4,603,104**		**$69,888**		**$0**		**$4,672,992**
220000 Plumbing	$4,603,104		$69,888		$0		$4,672,992	
DIV. 23 HVAC		**$14,598,372**		**$26,880**		**$0**		**$14,625,252**
230000 HVAC	$14,598,372		$26,880		$0		$14,625,252	
DIV.26 ELECTRICAL		**$12,885,228**		**$53,760**		**$1,747,195**		**$14,686,183**
260000 Electrical Work	$12,885,228		$53,760		$1,747,195		$14,686,183	
270000 Communications	$0		$0		$0		$0	
280000 Security	$0		$0		$0		$0	
DIV. 31 EARTHWORK		**$1,752,442**		**$12,862**		**$6,644,449**		**$8,409,753**
311000 Site Preparation & Clearing	$0		$0		$1,639,387		$1,639,387	
312000 Earthwork	$1,752,442		$12,862		$5,005,062		$6,770,366	
312500 Erosion Control	$0		$0		$0		$0	
312900 Ground Improvements	$0		$0		$0		$0	
DIV. 32 EXTERIOR IMPROVEMENTS		**$0**		**$0**		**$9,251,900**		**$9,251,900**
320000 Bituminous Paving, Curbing & Edging	$0		$0		$3,266,684		$3,266,684	
321314 Exposed Aggregate Concrete Paving	$0		$0		$1,217,813		$1,217,813	
321724 Signs	$0		$0		$45,000		$45,000	
321816 Playground Protective Surfaces	$0		$0		$130,589		$130,589	
322105 Exterior Decking	$0		$0		$0		$0	
322110 Synthetic Turf Fields	$0		$0		$61,452		$61,452	
323114 Fencing	$0		$0		$444,350		$444,350	
323000 Gabion Walls	$0		$0		$300,500		$300,500	
329800 Irrigation	$0		$0		$71,250		$71,250	
329900 Landscaping	$0		$0		$3,714,262		$3,714,262	
DIV. 33 UTILITIES		**$0**		**$0**		**$1,624,080**		**$1,624,080**
331000 Water Distribution	$0		$0		$34,640		$34,640	
333000 Sanitary Sewerage	$0		$0		$305,055		$305,055	
334000 Storm Drainage Systems	$0		$0		$1,284,385		$1,284,385	
336000 Traffic Mitigation	$0		$0		$0		$0	
SUBTOTAL DIRECT (TRADE) COST		**$88,277,523**		**$633,402**		**$25,537,572**		**$114,448,497**

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GFA 191,796

CONSTRUCTION COST SUMMARY

	BUILDING SYSTEM	NEW SCHOOL SUB-TOTAL	SITEWORK SUB-TOTAL	CONCESSIONS SUB-TOTAL	TOTAL	$/SF	%
A10	**FOUNDATIONS**						
A1010	Standard Foundations	$2,871,250		$58,652			
A1020	Special Foundations	$0		$0			
A1030	Lowest Floor Construction	$2,648,737		$17,868	**$5,596,507**	$29.18	4.9%
B10	**SUPERSTRUCTURE**						
B1010	Upper Floor Construction	$2,767,895		$0			
B1020	Roof Construction	$5,463,255		$67,200	**$8,298,350**	$43.27	7.3%
B20	**EXTERIOR CLOSURE**						
B2010	Exterior Walls	$8,395,908		$80,112			
B2020	Windows/Curtainwall	$5,044,413		$24,320			
B2030	Exterior Doors	$201,504		$23,320	**$13,769,577**	$71.79	12.0%
B30	**ROOFING**						
B3010	Roof Coverings	$4,702,750		$48,144			
B3020	Roof Openings	$91,000		$0	**$4,841,894**	$25.25	4.2%
C10	**INTERIOR CONSTRUCTION**						
C1010	Partitions	$5,816,771		$70,200			
C1020	Interior Doors	$1,233,320		$17,574			
C1030	Specialties/Millwork	$2,131,147		$26,880	**$9,295,892**	$48.47	8.1%
C20	**STAIRCASES**						
C2010	Stair Construction	$327,000		$0			
C2020	Stair Finishes	$142,000		$0	**$469,000**	$2.45	0.4%
C30	**INTERIOR FINISHES**						
C3010	Wall Finishes	$2,086,405		$4,032			
C3020	Floor Finishes	$2,726,880		$7,260			
C3030	Ceiling Finishes	$1,649,879		$20,812	**$6,495,268**	$33.87	5.7%
D10	**CONVEYING SYSTEMS**						
D1010	Elevator	$182,875		$0	**$182,875**	$0.95	0.2%
D20	**PLUMBING**						
D20	Plumbing	$4,603,104		$69,888	**$4,672,992**	$24.36	4.1%
D30	**HVAC**						
D30	HVAC	$14,598,372		$26,880	**$14,625,252**	$76.25	12.8%
D40	**FIRE PROTECTION**						
D40	Fire Protection	$1,580,490		$0	**$1,580,490**	$8.24	1.4%
D50	**ELECTRICAL**						
D5010	Electrical Systems	$12,960,228		$53,760	**$13,013,988**	$67.85	11.4%
E10	**EQUIPMENT**						
E10	Equipment	$4,121,440		$1,500	**$4,122,940**	$21.50	3.6%
E20	**FURNISHINGS**						
E2010	Fixed Furnishings	$1,892,400		$15,000			
E2020	Movable Furnishings	NIC		NIC	**$1,907,400**	$9.94	1.7%
F10	**SPECIAL CONSTRUCTION**						
F10	Special Construction	$38,500		$0	**$38,500**	$0.20	0.0%
F20	**SELECTIVE BUILDING DEMOLITION**						
F2010	Building Elements Demolition	$0	$1,682,820	$0			
F2020	Hazardous Components Abatement	$0	$2,047,988	$0	**$3,730,808**	$19.45	3.3%
G	**SITEWORK**				**$21,806,764**	$113.70	19.1%
G10	Site Prep and Demolition		$4,719,583				
G20	Site Improvements		$12,148,307				
G30	Civil Utilities		$2,584,089				
G40	Electrical Utilities		$2,354,785				
TOTAL DIRECT COST (Trade Costs)		**$88,277,523**	**$25,537,572**	**$633,402**	**$114,448,497**	$596.72	100.0%

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
NEW SCHOOL BACKUP							
	CONCRETE						
	Strip Footings	*237*	*CY*				
	Foundation Walls	*633*	*CY*				
	Spread Footings	*527*	*CY*				
	Piers	*117*	*CY*				
	Grade beams	*73*	*CY*				
	Loading dock, elevator pits, misc.	*13*	*CY*				
	Total Foundation Concrete	*1,600*	*CY*				
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
	Strip footings - perimeter; 30"x12"						
033000	Formwork	**4,876**	sf	16.00	78,016		
033000	Re-bar	**17,180**	lbs.	2.00	34,360		
033000	Concrete material	**237**	cy	160.00	37,920		
033000	Placing concrete	**237**	cy	120.00	28,440		
033000	Typical foundation walls, 20" thick						
033000	Formwork	**19,504**	sf	19.00	370,576		
033000	Re-bar	**47,192**	lbs.	2.00	94,384		
033000	Concrete material	**633**	cy	160.00	101,280		
033000	Placing concrete	**633**	cy	120.00	75,960		
033000	Form shelf	**2,438**	lf	10.00	24,380		
033000	Spread Footings						
033000	Formwork	**8,478**	sf	16.00	135,648		
033000	Re-bar	**37,213**	lbs.	2.00	74,426		
033000	Concrete material	**527**	cy	160.00	84,320		
033000	Placing concrete	**527**	cy	120.00	63,240		
033000	Set anchor bolts grout plates	**263**	ea	250.00	65,750		
033000	GB-1 Grade beams; 30"x18"						
033000	Formwork	**1,500**	sf	19.00	28,500		
033000	Re-bar	**21,471**	lbs.	2.00	42,942		
033000	Concrete material	**73**	cy	160.00	11,680		
033000	Placing concrete	**73**	cy	120.00	8,760		
	Piers						
033000	Piers/Pilasters - allowance	**117**	cy	1,000.00	117,000		
033000	Allowance for kitchen pits	**1**	ls	30,000.00	30,000		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
070001	Damproofing and drainage mat	**9,752**	sf	6.00	58,512		
070001	Waterproofing at elevator pits	**360**	sf	16.00	5,760		
072100	*THERMAL INSULATION*						
072100	4" thick Insulation	**9,752**	sf	5.50	53,636		
312000	*EARTHWORK*						
312000	Strip footings						
312000	Excavation & reuse on site	**4,209**	cy	40.00	168,360		
312000	Spread footings						
312000	Excavation & reuse on site	**1,318**	cy	40.00	52,720		
	Building Earthwork						
312000	Cut - over excavated 2' of fill beneath building	**12,300**	cy	10.00	123,000		
312000	Fill - import structural - 25% swell	**30,000**	cy	48.00	1,440,000		
312000	*SOIL DISPOSAL - conversion factor 1.7 to tons*						
312000	Load excess soils for disposal	**12,300**	cy	2.50	30,750		
312000	Less than RCS-1 - clean non-regulated	**20,910**	tn	23.00	480,930		
312000	Revisions to over-excavation assumptions - VE	**1**	ls	(1,100,000.00)	(1,100,000)		
	Miscellaneous						
334000	Perimeter drain				w/ site drainage		

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GFA 191,796

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
			NEW SCHOOL BACKUP						
51	334000		Underslab drainage	**58,870**	sf		NR		
52	312000		Dewatering for foundation work	**1**	ls	50,000.00	50,000		
53			SUBTOTAL					2,871,250	
54									
55		**A1020**	**SPECIAL FOUNDATIONS**						
56			SUBTOTAL					-	
57									
58		**A1030**	**LOWEST FLOOR CONSTRUCTION**						
59		*033000*	*CONCRETE*						
60	033000		Slab on grade, 5" thick						
61	033000		Vapor barrier, heavy duty	**140,675**	sf	1.50	211,013		
62	033000		Mesh reinforcing 15% lap	**161,776**	lbs	1.85	299,286		
63	033000		Concrete - 5" thick	**2,243**	cy	155.00	347,665		
64	033000		Barrier One Admixture				Assume NR		
65	033000		Placing concrete	**2,243**	cy	90.00	201,870		
66	033000		Premium for sloped slab at Auditorium	**3,500**	sf	15.00	52,500		
67	033000		Finishing and curing concrete	**140,675**	sf	3.50	492,363		
68	033000		Control joints - saw cut	**140,675**	sf	0.10	14,068		
69	033000		Elevator Pits; 12" walls	**1**	ea				
70	033000		Formwork	**480**	sf	22.00	10,560		
71	033000		Re-bar; 120lbs/cy	**1,080**	lbs	2.00	2,160		
72	033000		Concrete material	**9**	cy	155.00	1,395		
73	033000		Placing concrete	**9**	cy	120.00	1,080		
74	033000		12" thick Mat slab	**100**	sf	30.00	3,000		
75	033000		Sump pit premium	**1**	ea	1,500.00	1,500		
76	033000		Loading dock allowance	**1**	ls	30,000.00	30,000		
77	033000		Miscellaneous						
78	033000		Equipment pads	**1**	ls	15,000.00	15,000		
79									
80		*072100*	*THERMAL INSULATION*						
81	33000		4" EPS insulation 6' at perimeter	**14,628**	sf	5.50	80,454		
82	33000		2" EPS insulation underslab	**126,047**	sf	3.00	378,141		
83									
84		*312000*	*EARTHWORK*						
85	312000		Gravel fill, 12"	**5,210**	cy	50.00	260,500		
86	312000		Compact existing sub-grade	**140,675**	sf	0.50	70,338		
87	312000		Underslab E&B for plumbing including radon	**140,675**	sf	1.25	175,844		
88			SUBTOTAL					2,648,737	
89									
90			***TOTAL - FOUNDATIONS***						**$5,519,987**
91									
92									
93		***A20***	***BASEMENT CONSTRUCTION***						
94									
95		**A2010**	**BASEMENT EXCAVATION**						
96			**No Work in this section**						
97			SUBTOTAL					-	
98									
99		**A2020**	**BASEMENT WALLS**						
100			**No Work in this section**						
101			SUBTOTAL					-	
102									
103			***TOTAL - BASEMENT CONSTRUCTION***						
104									
105									
106		***B10***	***SUPERSTRUCTURE***						
107				11	lbs/sf				
108		**B1010**	**FLOOR CONSTRUCTION**	1,061	tns				
109		*033000*	*CONCRETE*						
110	33000		WWF reinforcement	**58,789**	sf	1.80	105,820		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
			NEW SCHOOL BACKUP						
111	33000		Concrete Fill to metal deck; 6-1/4" light weight	**1,093**	cy	190.00	207,670		
112	33000		Place and finish concrete	**51,121**	sf	3.00	153,363		
113	33000		Rebar to decks	**15,336**	lbs	2.00	30,672		
114									
115		*051200*	*STRUCTURAL STEEL FRAMING*						
116	51200		Typical floor framing; 13lbs/sf	**332**	tns	4,800.00	1,593,600		
117	51200		Miscellaneous steel angles, plates, supports				incl		
118	51200		Relieving angles etc. at exterior closure				incl		
119	51200		Premium for AESS steel	**1**	ls	15,000.00	15,000		
120	51200		Shear studs	**10,224**	ea	2.50	25,560		
121	51200		3" Metal galvanized floor deck	**51,121**	sf	7.00	357,847		
122	78400		Expansion joints	**1**	ls	75,000.00	75,000		
123									
124		*078100*	*FIREPROOFING/FIRESTOPPING*						
125	78100		Fire proofing to columns and beams; 2 hr	**51,121**	sf	3.00	153,363		
126	78100		Intumescent paint - allow	**1**	ls	50,000.00	50,000		
127			SUBTOTAL					2,767,895	
128									
129		**B1020**	**ROOF CONSTRUCTION**						
130		*033000*	*CONCRETE*						
131	33000		6" Normal weight concrete deck fill at mechanical equipment	**14,000**	sf	10.00	140,000		
132									
133		*051200*	*STRUCTURAL STEEL FRAMING*						
134	51200		Typical roof framing; 11lbs/sf	**601**	tns	4,800.00	2,884,800		
135	51200		Open web steel joists and accessories at Gym, Auditorium and Cafeteria (6lbs/sf)	**98**	tns	4,800.00	470,400		
136	51200		Glu-lam beams at Café/Lobby/Media center	**4,558**	sf	30.00	136,740		
137	51200		Steel framing at canopies	**17**	tns	5,200.00	88,400		
138	51200		Roof screen support (215 lf)	**13**	tns	5,200.00	67,600		
139	51200		3" galvanized metal roof deck, typical	**129,500**	sf	7.00	906,500		
140	51200		2" galvanized metal roof deck @ concrete fill	**14,000**	sf	6.00	84,000		
141	51200		Premium for acoustic deck	**40,800**	sf	6.00	244,800		
142	51200		1 1/2" Metal deck at canopies	**1,730**	sf	5.50	9,515		
143									
144		*078100*	*FIREPROOFING/FIRESTOPPING*						
145	78100		Fire proofing to columns, beams and deck (excluding deck at gym, auditorium, café, lobby & media)	**143,500**	sf	3.00	430,500		
146			SUBTOTAL					5,463,255	
147									
148			***TOTAL - SUPERSTRUCTURE***						**$8,231,150**
149									
150									
151		***B20***	***EXTERIOR CLOSURE***						
152									
153		**B2010**	**EXTERIOR WALLS**	*93,638*	sf				
154			**Exterior Wall Area - Solid**	*71,942*	sf	excluding glazing			
155									
156	40001	*042000*	*MASONRY*						
157	40001		Exterior mockup - allow	**1**	ls	50,000.00	50,000		
158	40001		Norman brick with contrasting colors	**38,990**	sf	44.00	1,715,560		
159	40001		Granite base	**2,188**	sf	125.00	273,500		
160	40001		Precast bands	**4,120**	lf	75.00	309,000		
161	40001		Precast sills	**1,479**	lf	55.00	81,345		
162	40001		GF CMU	**2,128**	sf	38.00	80,864		
163	40001		Staging to exterior wall	**71,942**	sf	4.00	287,768		
164									
165		*055000*	*MISC. METALS*						
166	101400		Signage - allow	**1**	ls	15,000.00	15,000		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	NEW SCHOOL BACKUP								
167	50001		Misc. metals at masonry/ lintels/flashings etc. (assumes structural angles included in tonnage)	**43,306**	sf	1.50	64,959		
168									
169		*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
170	070001		Air barrier at closure	**71,942**	sf	8.75	629,493		
171	070001		Air barrier/flashing at glazing	**7,223**	lf	6.00	43,338		
172	070001		Air barrier/flashing at soffits	**2,990**	sf	8.75	26,163		
173	070001		Miscellaneous sealants to closure	**93,638**	sf	1.00	93,638		
174									
175		*072100*	*THERMAL INSULATION*						
176	72100		6" Mineral board insulation at stud backup	**71,942**	sf	6.00	431,652		
177	72100		3 1/2" batt insulation in stud closure	**71,942**	sf	4.00	287,768		
178	72100		Insulation at roof overhang fascia and soffits	**2,990**	sf	4.00	11,960		
179	072100		Insulation at glazed openings	**7,223**	lf	6.00	43,338		
180									
181		*076400*	*CLADDING*						
182	76800		Formed metal panel	**19,990**	sf	70.00	1,399,300		
183	76400		Composite metal panel	**4,418**	sf	90.00	397,620		
184	76400		Composite metal panel soffit/ overhangs	**2,420**	sf	90.00	217,800		
185	76400		Wood look soffit, Armstrong Metalworks on or similar	**570**	sf	60.00	34,200		
186	76400		Roof equipment screen; perforated corrugated formed metal panels, 9' high	**1,935**	sf	75.00	145,125		
187									
188		*079513*	*EXPANSION JOINT COVERS*						
189	079500		Expansion joint covers	**1**	ls	30,000.00	30,000		
190									
191		*092900*	*GYPSUM BOARD ASSEMBLIES*						
192	92900		Framing and sheathing at soffits	**2,990**	sf	12.00	35,880		
193	92900		6" metal stud backup	**71,942**	sf	16.00	1,151,072		
194	92900		Gypsum Sheathing	**71,942**	sf	3.50	251,797		
195	92900		5/8" GWB lining to interior face at stud backup	**71,942**	sf	4.00	287,768		
196			SUBTOTAL					8,395,908	
197									
198		**B2020**	**WINDOWS**						
199			**Exterior Wall Area - Glazed**	*21,696*	sf				
200									
201		*061000*	*ROUGH CARPENTRY*						
202	61000		Wood blocking at openings	**7,223**	lf	10.00	72,230		
203									
204		*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
205	70001		Backer rod & double sealant	**7,223**	lf	11.00	79,453		
206									
207		*080001*	*STOREFRONT / CURTAINWALL*						
208	085313		Aluminum windows, triple glazed	**11,522**	sf	185.00	2,131,570		
209	080002		Aluminum curtainwall, triple glazed	**10,174**	sf	240.00	2,441,760		
210	107113		Exterior sun control louvers at CW	**687**	sf	100.00	68,700		
211	107113		Exterior sun control at windows	**878**	lf	150.00	131,700		
212	80001		Premium for school guard glass @ entrances	**720**	sf	75.00	54,000		
213									
214		*089000*	*LOUVERS*						
215	89000		Louvers - allowance per architect	**1**	ls	65,000.00	65,000		
216			SUBTOTAL					5,044,413	
217									
218		**B2030**	**EXTERIOR DOORS**						
219		*061000*	*ROUGH CARPENTRY*						
220	061000		Wood blocking at openings	**107**	lf	11.00	1,177		
221									

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
222		*079200 JOINT SEALANTS*						
223	070001	Backer rod & double sealant	**107**	lf	11.00	1,177		
224								
225		*081110 HOLLOW METAL*						
226	81110	Single leaf door and frame	**1**	ea	1,150.00	1,150		
227	81110	Double leaf door and frame	**3**	pr	2,100.00	6,300		
228								
229		*083000 OVERHEAD DOORS*						
230	83323	Overhead door @ Loading dock	**1**	ea	7,000.00	7,000		
231								
232		*084410 ALUMINUM-FRAMED CURTAINWALL ENTRANCES*						
233	080002	Glazed entrance doors including frame and hardware; single door	**1**	ea	7,500.00	7,500		
234	080002	Glazed entrance doors including frame and hardware; double door	**12**	pr	13,000.00	156,000		
235								
236		*087100 DOOR HARDWARE*						
237	87100	Hardware to exterior door	**7**	ea	1,400.00	9,800		
238	87100	Allowance for automatic door operators	**1**	ea	10,000.00	10,000		
239								
240		*090007 PAINTING*						
241	90007	Paint door and frame	**7**	ea	200.00	1,400		
242		SUBTOTAL					201,504	
243								
244		***TOTAL - EXTERIOR CLOSURE***						**$13,641,825**
245								
246								
247		***B30 ROOFING***						
248								
249		**B3010 ROOF COVERINGS**						
250	070002	*055000 MISCELLANEOUS METALS*						
251	50001	Roof ladders - allow	**1**	ls	20,000.00	20,000		
252								
253		*061000 ROUGH CARPENTRY*						
254	092900	Wood blocking & rough carpentry	**143,500**	sf	1.50	215,250		
255								
256		*070002 ROOFING AND FLASHING*	143,500	total area				
257	070002	ERA-1, 1A; 60mil PVC roof membrane system, 1/2" coverboard, 8.5" polyiso insulation, vapor barrier on substrate board	**128,000**	sf	28.00	3,584,000		
258	070002	ERA-1B; 60mil PVC roof membrane system, 1/2" coverboard, 8.5" polyiso insulation, vapor barrier	**14,000**	sf	25.50	357,000		
259	070002	ERA-2; PVC roof membrane system, 1/2" coverboard on 1/2" plywood	**1,500**	sf	16.00	24,000		
260	070002	Miscellaneous roofing						
261	070002	Parapet coping w/ 10" brake formed metal roof fascia, typical	**4,080**	lf	50.00	204,000		
262	76400	Brake metal fascia @ spine and canopies; 24" high	**800**	lf	75.00	60,000		
263	070002	Miscellaneous flashings, accessories etc.	**143,500**	sf	1.00	143,500		
264	070002	Walkway pads - allow	**5,000**	sf	15.00	75,000		
265	070002	Anti-bird device	**1**	ls	20,000.00	20,000		
266		SUBTOTAL					4,702,750	
267								
268		**B3020 ROOF OPENINGS**						
269		*086300 ROOF OPENINGS*						
270	70002	Skylights; fixed dome, polycarbonate - allow	**6**	ea	3,500.00	21,000		
271	70002	Roof hatch w/ ladder	**2**	ea	5,000.00	10,000		
272	70002	Smoke hatch at Stage	**4**	ea	15,000.00	60,000		
273		SUBTOTAL					91,000	
274								
275		***TOTAL - ROOFING***						**$4,793,750**
276								

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	NEW SCHOOL BACKUP						
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	042000 MASONRY						
40001	M8R1 - 8" CMU, 1 Hr	**1,288**	sf	33.00	42,504		
	055000 MISCELLANEOUS METALS						
050001	Seismic clips	**20**	ea	180.00	3,600		
050001	Misc. metals to CMU	**1,288**	sf	1.00	1,288		
	061000 ROUGH CARPENTRY						
061000	Rough blocking at partitions, interior opes, accessories etc.	**191,796**	gsf	1.00	191,796		
	078100 FIREPROOFING/FIRESTOPPING						
078400	Miscellaneous fire stopping	**191,796**	gsf	1.00	191,796		
	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
070001	Miscellaneous sealants throughout building	**191,796**	gsf	1.15	220,565		
79500	Allowance for expansion joint covers	**1**	ls	50,000.00	50,000		
	080002 GLASS AND GLAZING	per schedule A400 & Cost memo					
080002	Hollow metal interior windows/ borrowed lites w/ 1/4" laminated glass	**2,447**	sf	105.00	256,935		
080002	Control room sliding acoustic window	**2**	ea	2,250.00	4,500		
080002	Interior transaction window, 4' 0" x 4' 0"	**3**	ea	5,000.00	15,000		
080002	Frameless glass; 1/2" laminated in 4" aluminum head and sill; 140LF x 7'-2" high	**1,008**	sf	125.00	126,000		
084313	Aluminum storefront at Gym; assume 8' high	**320**	sf	120.00	38,400		
084313	Aluminum storefront at interior vestibules	**250**	sf	120.00	30,000		
080002	Premium for school guard glass	**250**	sf	75.00	18,750		
080002	Mirrors in Alt P.E.	**192**	sf	50.00	9,600		
	092900 GYPSUM BOARD ASSEMBLIES						
	Interior drywall partitions						
092900	C3A - 3 5/8" metal stud, insulation, 2#5/8" gwb o.s.	**12,893**	sf	16.00	206,288		
092900	C3C - 3 5/8" metal stud, insulation, 5/8" gwb o.s.	**782**	sf	13.00	10,166		
092900	G4E - 6" metal stud, insulation, 5/8" gwb b.s.	**234**	sf	20.00	4,680		
092900	G6 - 6" metal stud, insulation, 5/8" gwb b.s.	**54,759**	sf	20.00	1,095,180		
092900	G6A - 6" metal stud, insulation, 1 layer 5/8" gwb o.s., 2 layers o.s.	**61,335**	sf	23.00	1,410,705		
092900	G6B - 6" metal stud, insulation, 2# 5/8" gwb b.s.	**20,312**	sf	26.00	528,112		
092900	G6D - 6" metal stud, insulation, 1# 5/8" gwb o.s., 2# gwb o.s.	**5,074**	sf	23.00	116,702		
092900	G6E - 6" metal stud, 1 layer 5/8" gwb b.s.	**2,499**	sf	18.00	44,982		
092900	G6F - 6" metal stud, 1 layer 5/8" gwb b.s.	**1,272**	sf	18.00	22,896		
092900	G6R - 6" metal stud, insulation, 5/8" gwb b.s., 1hr rated	**7,435**	sf	21.00	156,135		
092900	G10B - allowance	**2,391**	sf	25.00	59,775		
092900	G12A; 6" metal stud, 2 1/2" metal stud, 2 layers gwb o.s., 1 layer o.s., insulation in both studs	**7,282**	sf	29.00	211,178		
092900	G12B; 6" metal stud, 2 1/2" metal stud, 2 layers gwb b.s., insulation in both studs	**9,244**	sf	32.00	295,808		
092900	G12E; 6" metal stud, 2 1/2" metal stud, 1 layers gwb b.s., insulation in both studs	**107**	sf	26.00	2,782		
092900	G14B; 6" metal stud, 2 1/2" metal stud, 2 layers gwb b.s., insulation in both studs	**6,853**	sf	32.00	219,296		
092900	P8C; Double 3 5/8" metal stud, 1 layer gwb b.s., insulation in each stud	**429**	sf	26.00	11,154		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	NEW SCHOOL BACKUP								
326	092900		P8D; Double 3 5/8" metal stud, 1 layer gwb o.s., 2 layers os, insulation in each stud	**475**	sf	24.00	11,400		
327	092900		P8E; Double 3 5/8" metal stud, 1 layer gwb b.s. in each stud	**261**	sf	26.00	6,786		
328	092900		P11B - allowance	**153**	sf	25.00	3,825		
329	092900		P11E; Double 3 5/8" metal stud, 1 layer gwb b.s. in each stud	**1,104**	sf	29.00	32,016		
330	092900		Allowance for high impact and abuse resistant gwb, level 5 finish at select locations, moisture resistant gwb, reveals/ trim, high STC premium etc.	**194,894**	sf	0.75	146,171		
331									
332		*101500*	*OPERABLE PARTITIONS*						
333	083513		Acrylic folding wall in Alt PE, manual, Lumacore or similar	**16**	lf	1,250.00	20,000		
334			SUBTOTAL					5,816,771	
335									
336		**C1020**	**INTERIOR DOORS**	Per schedule on A-400					
337			*HM Frames*						
338	081110		Hollow metal frame, sgl	**242**	ea	250.00	60,500		
339	081110		Hollow metal frame, double	**55**	ea	300.00	16,500		
340	081110		Premium for transom, single	**59**	ea	180.00	10,620		
341	081110		Premium for transom, double	**10**	ea	270.00	2,700		
342	081110		Premium for sidelight, 18" wide	**87**	ea	300.00	26,100		
343	081110		Premium for sidelight, 26" wide	**59**	ea	350.00	20,650		
344	081110		*Doors*						
345	081110		Flush, single leaf	**185**	ea	400.00	74,000		
346	081110		Flush, double leaf	**16**	pr	800.00	12,800		
347	081110		Single leaf with vent	**29**	ea	450.00	13,050		
348	081110		Single leaf with viewing panel	**28**	ea	450.00	12,600		
349	081110		Double leaf with viewing panel	**4**	pr	900.00	3,600		
350	081110		Double leaf, fully glazed	**35**	pr	1,300.00	45,500		
351	081110		Premium for fire rated ,STC, full seals etc.	**1**	ls	20,000.00	20,000		
352	081110		Install door and hardware	**352**	ea	450.00	158,400		
353	092900		Install door frame	**297**	ea	200.00	59,400		
354									
355		*080002*	*GLASS AND GLAZING*						
356	080002		Glazing to sidelights and transoms	**2,164**	sf	50.00	108,200		
357	080002		Glazing to doors	**1,104**	sf	50.00	55,200		
358									
359		*083110*	*ACCESS DOORS AND FRAMES*						
360	083100		Access doors	**1**	ls	10,000.00	10,000		
361									
362		*084113*	*ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS*						
363	080002		Glazed aluminum entrance door and hardware, single	**2**	ea	6,500.00	13,000		
364	080002		Glazed aluminum entrance door and hardware, double	**1**	pr	13,500.00	13,500		
365	080002		Premium for storefront doors @ primary interior vestibules not allocated as alum on door schedule dwg A400	**12**	ea	4,000.00	48,000		
366									
367		*083400*	*COILING GRILLES*						
368	083323		Overhead coiling doors in Servery	**3**	ea	7,200.00	21,600		
369	083323		Overhead shutter in Culinary classroom	**1**	ea	5,000.00	5,000		
370									
371		*087100*	*HARDWARE*						
372	087100		Door hardware	**1**	ls	352,000.00	352,000		
373									
374		*090007*	*PAINTING*						
375	090007		Finish doors and frames	**352**	ea	200.00	70,400		
376			SUBTOTAL					1,233,320	
377									
378		**C1030**	**SPECIALTIES / MILLWORK**						
379									
380		*055000*	*MISCELLANEOUS METALS*						

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
381	050001	Allowance for catwalk, rails and ladders/stair	**1**	ls	200,000.00	200,000		
382	050001	Unistrut in science classrooms	**6**	ea	5,000.00	30,000		
383	050001	Guardrail at open to below areas	**233**	lf	450.00	104,850		
384	050001	Miscellaneous metals throughout building	**191,796**	gsf	2.25	431,541		
385								
386	*061000*	*ROUGH CARPENTRY*						
387	092900	Backer panels in electrical closets	**1**	ls	10,000.00	10,000		
388								
389	*064020*	*INTERIOR ARCHITECTURAL WOODWORK*						
390	062000	Window sill; solid surface	**1,479**	lf	65.00	96,135		
391	062000	Solid surface sills at upper level open to below	**32**	lf	65.00	2,080		
392	062000	Reception desk, custom wood in Waiting areas (3 loc)	**111**	lf	1,000.00	111,000		
393	062000	Corridor bench	**37**	lf	450.00	16,650		
394	062000	Cubby storage with bench in Alt PE	**15**	lf	750.00	11,250		
395	062000	Booth seating	**40**	lf	500.00	20,000		
396	062000	Media Center						
397	062000	Circulation desk	**30**	lf	1,000.00	30,000		
398	062000	Wood bookcases at perimeter of Media center	**88**	lf	750.00	66,000		
399	062000	Mailboxes	**11**	lf	600.00	6,600		
400	062000	Plastic laminate coat rod and shelf in closets - allowance	**1**	ls	10,000.00	10,000		
401								
402	*070001*	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
403								
404	*101100*	*VISUAL DISPLAY SURFACES*						
405	101100	White board/ Tackboards per schedule A400	**10,576**	sf	24.00	253,824		
406	101100	Tack strip in classrooms; 40 lf per loc	**1,600**	lf	15.00	24,000		
407								
408	*101400*	*DISPLAY CASES*						
409	101200	Display cases	**54**	lf	700.00	37,800		
410	101200	2-D Poster/ Art Display outside Auditorium - allow	**1**	ls	10,000.00	10,000		
411								
412	*101400*	*SIGNAGE*						
413	101400	Room Signs, other signage	**191,796**	gsf	0.75	143,847		
414	101400	Graphics allowance	**1**	ls	60,000.00	60,000		
415								
416	*102110*	*TOILET COMPARTMENTS*						
417	102113	ADA	**14**	ea	1,800.00	25,200		
418	102113	Standard	**19**	ea	1,600.00	30,400		
419	102113	Urinal screen	**7**	ea	650.00	4,550		
420	102113	Shower enclosure	**11**	ea	1,600.00	17,600		
421								
422	*102600*	*CORNER GUARDS*						
423	102600	Allowance for wall protection	**1**	ls	10,000.00	10,000		
424								
425	*102800*	*TOILET ACCESSORIES*						
426	102813	Gang toilet room accessories	**14**	rms	2,500.00	35,000		
427	102813	Locker room toilet accessories	**2**	rms	1,750.00	3,500		
428	102813	Single toilet room	**23**	rms	1,350.00	31,050		
429	102813	Warm air dryer @ closed multi-user toilet rooms	**6**	ea	950.00	5,700		
430	102813	Shower accessories	**11**	loc	750.00	8,250		
431	102813	Shower seat in ADA	**2**	ea	1,000.00	2,000		
432	102813	Janitors closet accessories	**4**	ea	600.00	2,400		
433	102813	Baby changing table - allow	**2**	ea	1,200.00	2,400		
434	102813	Allowance for OFCI accessories in classrooms, science rooms etc.; paper towel dispensers, soap dispensers etc.	**1**	ls	5,000.00	5,000		
435								
436	*102123*	*CUBICLE CURTAINS*						
437	102123	Cubicle curtain track in Medical Suite - allow	**1**	ls	2,000.00	2,000		

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
438								
439		*104313 DEFRIBRILATOR CABINETS*						
440	104400	Defibrillator cabinets - allowance	**1**	ls	1,500.00	1,500		
441								
442		*104400 FIRE PROTECTION SPECIALTIES*						
443	104400	Fire extinguisher cabinets	**1**	ls	25,000.00	25,000		
444								
445		*105000 LOCKERS*	Metal u.n.o.					
446	105113	Student wardrobe lockers, double tier, 15"x15" w/ built-in electronic lock	**200**	opes	250.00	50,000		
447	105113	Student wardrobe lockers in PE, double tier, 18"x15" w/ built-in electronic lock	**228**	opes	300.00	68,400		
448	105113	Staff lockers; double tier, 15"x15" w/ built-in combination locks in Kitchen and Teacher Planning	**54**	opes	280.00	15,120		
449	105113	Athletic lockers, single tier w/ built-in bench in locker room	**150**	ea	500.00	75,000		
450	105113	Athletic lockers, single tier, no bench in Gym corridor	**20**	ea	400.00	8,000		
451	105113	Athletic lockers, double tier, no bench in Gym corridor	**20**	ea	400.00	8,000		
452	105113	Locker room athletic lockers, double tier, metal	**40**	opes	250.00	10,000		
453	105113	Locker bench	**60**	lf	125.00	7,500		
454	105113	ADA bench	**4**	ea	500.00	2,000		
455		SUBTOTAL					2,131,147	
456								
457		***TOTAL - INTERIOR CONSTRUCTION***						**$9,181,238**
458								
459								
460		***C20 STAIRCASES***						
461								
462		**C2010 STAIR CONSTRUCTION**						
463	50001	Academic stairs including rails	**3**	flt	60,000.00	180,000		
464	50001	Core stairs	**1**	flt	60,000.00	60,000		
465	50001	Learning stair adjacent to core stair - framing	**1**	flt	75,000.00	75,000		
466	33000	Concrete fill to stairs	**4**	flt	3,000.00	12,000		
467		SUBTOTAL					327,000	
468								
469		**C2020 STAIR FINISHES**						
470	090005	Rubber tile at stairs landings, treads and landings	**3**	flts	5,000.00	15,000		
471	090002	Precast terrazzo finish at core stair	**1**	flt	15,000.00	15,000		
472	062000	Wood tread/bench and riser @ Learning stair	**1**	flt	100,000.00	100,000		
473	90007	High performance coating to stairs including all railings etc.	**4**	flt	3,000.00	12,000		
474		SUBTOTAL					142,000	
475								
476		***TOTAL - STAIRCASES***						**$469,000**
477								
478								
479		***C30 INTERIOR FINISHES***						
480								
481		**C3010 WALL FINISHES**						
482								
483		*064020 INTERIOR ARCHITECTURAL WOODWORK*						
484	062000	Wood paneling; hardwood veneer; Rulon or similar						
485	062000	Auditorium	**2,000**	sf	55.00	110,000		
486	062000	LGI	**600**	sf	55.00	33,000		
487	062000	Cafeteria	**1,500**	sf	55.00	82,500		
489	062000	FRP panels at kitchen, full height to 11'	**2,948**	sf	14.00	41,272		
490	062000	FRP panels at utility closets, full height 8'	**1,376**	sf	14.00	19,264		
491								
492		*090002 TILE*	*21,689*	*sf*	*total tile*			
493	090002	Porcelain tile, large format						
494	090002	Cafeteria, Arts & PE wing corridors to 42" high	**6,601**	sf	36.00	237,636		
495	090002	Wall tile at classroom entries, full height, 9' high	**3,088**	sf	34.00	104,992		
496	090002	Wall tile in restrooms, full height, 8'-6" high	**12,000**	sf	34.00	408,000		

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
090002		Wall tile wainscot height at academic wing corridors; 42" high	**8,278**	sf	34.00	281,452		
	090007	*PAINTING*						
090007		Paint to interior walls	**471,810**	sf	0.85	401,039		
090007		Epoxy paint premium - allowance	**47,181**	sf	0.50	23,591		
090007		Misc. touch-up painting throughout	**191,796**	gsf	0.20	38,359		
	097200	*WALLCOVERINGS*						
	098413	*SOUND ABSORBING PANELS*						
98413		Acoustical Wood Panels						
98413		Media Center	**1,000**	sf	85.00	85,000		
98413		Cafeteria	**1,000**	sf	85.00	85,000		
98413		Fabric-Faced Acoustical Wood Fiber Wall Panels						
98413		Band	**400**	sf	35.00	14,000		
98413		Chorus	**300**	sf	35.00	10,500		
98413		Auditorium	**2,000**	sf	35.00	70,000		
98413		Acoustical shaped panels, pyramidal, dome or similar				NR		
98413		Tectum wall panels						
098413		Gym	**3,000**	sf	24.00	Eliminated		
098413		Alt PE	**400**	sf	24.00	9,600		
098413		Cafeteria	**1,000**	sf	24.00	24,000		
098413		LGI	**300**	sf	24.00	7,200		
098413		SUBTOTAL					2,086,405	
098413								
	C3020	**FLOOR FINISHES**	*177,471*	*sf*	*total floor finishes*			
	033000	*CONCRETE*						
033000		Moisture protection				assumed not required		
033000		Sealed concrete	**17,430**	sf	2.50	43,575		
090002	*090002*	*TILE*						
090002		Ceramic floor tile - bathrooms, mosaic	**5,333**	sf	38.00	202,654		
090002		Porcelain floor tile - main hall/corridors; 12"x24" with crack isolation membrane	**24,196**	sf	40.00	967,840		
090002		Tile base @ corridor wood veneer wainscot	**2,365**	lf	25.00	59,125		
	090005	*RESILIENT FLOORS*						
090005		Linoleum sheet	**59,129**	sf	7.50	443,468		
090005		Rubber tile flooring in Labs, 3mm	**19,787**	sf	13.50	267,125		
090005		Resilient athletic flooring in Weight room	**1,025**	sf	18.00	18,450		
090005		Resilient base, 4" high	**21,100**	lf	3.00	63,300		
	096400	*WOOD FLOORING*						
096466		Wood athletic flooring	**14,115**	sf	24.00	338,760		
096466		Stage flooring	**1,571**	sf	25.00	39,275		
096466		Vented base	**635**	lf	8.00	5,080		
	097500	*RESINOUS FLOORING*						
033000		Epoxy flooring w/ integral base	**4,080**	sf	22.00	89,760		
	096820	*TILE CARPETING*						
096800		Carpet	**28,995**	sf	6.50	188,468		
		SUBTOTAL					2,726,880	
	C3030	**CEILING FINISHES**	*185,738*	*sf of ceilings*				
	098129	*ACOUSTICAL INSULATION*						
98120		K-13 Insulation in Art,STEM & Video	**5,000**	sf	10.00	50,000		

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	NEW SCHOOL BACKUP						
	090003 *ACOUSTICAL TILE*						
90003	ACT - 2x2, typical	**114,933**	sf	6.50	747,065		
90003	ACT - 2x2 , washable	**13,390**	sf	6.75	90,383		
90003	Sound reflecting panels in Auditorium - assume 20%	**1,149**	sf	75.00	86,175		
90003	Sound reflecting panels in Stage - assume 80%	**1,257**	sf	75.00	94,275		
90003	Allowance for sound diffusing panels in Chorus & Band; Wenger or similar - 20%	**700**	sf	50.00	35,000		
90003	Wood slat ceiling, Rulon or similar	**2,455**	sf	55.00	135,025		
	090007 *PAINTING*						
090007	Paint to GWB ceilings	**4,815**	sf	1.00	4,815		
090007	Paint exposed structure	**45,145**	sf	3.00	135,435		
	092900 *GYPSUM BOARD ASSEMBLIES*						
092900	GWB ceiling, typical	**3,380**	sf	16.00	54,080		
092900	GWB ceiling, 1 hr	**1,435**	sf	18.00	25,830		
092900	Sound barrier ceiling				NR		
092900	GWB soffits, miscellaneous	**191,796**	gsf	1.00	191,796		
	SUBTOTAL					1,649,879	
	TOTAL - INTERIOR FINISHES						**$6,463,164**
	D10 CONVEYING SYSTEMS						
	D1010 ELEVATOR						
	055000 *MISCELLANEOUS METALS*						
050001	Pit ladder	**1**	ea	2,500.00	2,500		
050001	Sill angle	**15**	lf	25.00	375		
	142000 *ELEVATOR*						
142424	Elevator, electric traction; 5000lb, 2 stop	**1**	ea	180,000.00	180,000		
	SUBTOTAL					182,875	
	TOTAL - CONVEYING SYSTEMS						**$182,875**
	D20 PLUMBING						
	D2010 PLUMBING FIXTURES						
	Equipment						
220000	Plumbing equipment (Including radon system)	**191,796**	sf	3.50	671,286		
220000	Fixtures						
220000	Plumbing fixtures	**191,796**	sf	4.00	767,184		
220000	Domestic Piping						
220000	Domestic water, CW & HW	**191,796**	sf	6.00	1,150,776		
220000	Valves & accessories	**191,796**	sf	0.75	143,847		
220000	Piping Insulation	**191,796**	sf	3.15	604,157		
220000	Sanitary waste and venting						
220000	Cast iron pipe with fittings & hangers	**191,796**	sf	5.00	958,980		
220000	Kitchen waste and venting						
220000	Cast iron pipe with fittings & hangers	**191,796**	sf	0.35	67,129		
220000	Stormwater						
220000	Storm Cast iron pipe with fittings & hangers	**191,796**	sf	1.00	191,796		
220000	Stormwater insulation (Horizontal Runs)	**191,796**	sf	0.25	47,949		
220000	SUBTOTAL					4,603,104	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	NEW SCHOOL BACKUP						
	TOTAL - PLUMBING						**$4,603,104**
	D30 HVAC						
230000	**Base Option - Air Source VRF**						
230000	HVAC Equipment	**191,796**	sf	12.00	2,301,552		
230000	Air Handling Unit						
230000	AHU packaged DX heat pump units (gym)	**16,000**	cfm	32.00	512,000		
230000	AHU packaged DX heat pump units (cafeteria)	**7,000**	cfm	32.00	224,000		
230000	AHU packaged DX heat pump units (media center)	**4,000**	cfm	32.00	128,000		
230000	AHU packaged DX heat pump units (large group instruction)	**3,000**	cfm	32.00	96,000		
230000	AHU packaged DX heat pump units (auditorium and stage)	**15,000**	cfm	32.00	480,000		
230000	DOAS packaged DX heat pump units with energy recovery	**17,000**	cfm	32.00	544,000		
230000	DOAS packaged DX heat pump units with energy recovery	**17,000**	cfm	38.00	646,000		
230000	DOAS packaged DX heat pump units with energy recovery	**6,000**	cfm	38.00	228,000		
230000	DOAS packaged DX heat pump units with energy recovery	**6,000**	cfm	38.00	228,000		
230000	Misc. air distribution equipment	**191,796**	sf	1.00	191,796		
230000	Exhaust fan						
230000	Kitchen hood exhaust	**4,000**	cfm	4.00	16,000		
230000	Kitchen hood exhaust	**4,000**	cfm	4.00	16,000		
230000	Kiln exhaust	**500**	cfm	3.00	1,500		
230000	Lab exhaust fan	**3,000**	cfm	6.50	19,500		
230000	Lab exhaust fan	**3,000**	cfm	6.50	19,500		
230000	Sheet metal & Accessories						
230000	Sheet metal & accessories	**191,796**	sf	21.00	4,027,716		
230000	Mech. Piping						
230000	Refrigerant piping	**191,796**	sf	8.00	1,534,368		
230000	Piping insulation	**191,796**	sf	5.25	1,006,929		
230000	Automatic Temperature Controls						
230000	Automatic Temperature Controls Proprietary	**191,796**	sf	8.50	1,630,266		
230000	Balancing						
230000	System testing & balancing	**191,796**	sf	1.25	239,745		
230000	Miscellaneous						
230000	Coring, cutting, sleeves & fire stopping	**1**	ls	7,500.00	7,500		
230000	Vibration isolation and supports	**1**	ls	10,000.00	10,000		
230000	Hydraulic lifts/rigging	**1**	ls	25,000.00	25,000		
230000	Coordination / BIM / ENG Support / As-Builts	**1**	ls	425,000.00	425,000		
230000	Commissioning Support	**1**	ls	40,000.00	40,000		
230000	Fees & permits	**1**	ls	190,000.00	Waived		
	SUBTOTAL					14,598,372	
	TOTAL - HVAC						**$14,598,372**
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION, GENERALLY						
210000	Fire Protection Equipment						
210000	Fire water service entrance	**1**	ea	7,500.00	7,500		
210000	Double check valve assembly incl. BFP	**1**	ea	10,000.00	10,000		
210000	Wet alarm check valve assembly	**1**	ea	5,500.00	5,500		
210000	Dry alarm check valve assembly with compressor	**1**	ls	20,000.00	20,000		
210000	Floor Control Valve assembly	**4**	ea	1,800.00	7,200		
210000	Fire department connection	**1**	ea	1,250.00	1,250		
210000	Electric bell	**1**	ea	600.00	600		
210000	Misc. Fire Protection Equipment	**191,796**	sf	0.25	47,949		
210000	Fire Protection Service						

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
671	210000	Sprinkler heads	**1,977**	ea	125.00	247,125		
672	210000	Main sprinkler piping	**7,900**	lf	57.00	450,300		
673	210000	Branch sprinkler piping	**15,823**	lf	42.00	664,566		
674	210000	Miscellaneous						
675	210000	Coordination & BIM	**1**	ls	85,000.00	85,000		
676	210000	Hydraulic calculations	**1**	ls	3,500.00	3,500		
677	210000	Coring, sleeves & fire stopping	**1**	ls	6,500.00	6,500		
678	210000	Shop drawings	**1**	ls	3,500.00	3,500		
679	210000	Commissioning of system	**1**	ls	20,000.00	20,000		
680	210000	Fees & permits	**1**	ls	20,000.00	Waived		
681		SUBTOTAL					1,580,490	
682								
683		***TOTAL - FIRE PROTECTION***						**$1,580,490**
684								
685								
686		***D50 ELECTRICAL***						
687								
688		**D5010 SERVICE & DISTRIBUTION**						
689		**Gear & Distribution**						
690	260000	Meter socket	**20**	ea	850.00	17,000		
691	260000	4000A 277/480V main switchboard	**1**	ea	170,000.00	170,000		
692	260000	600A 277/480V distribution panelboard	**1**	ea	12,000.00	12,000		
693	260000	400A 277/480V distribution panelboard	**5**	ea	8,500.00	42,500		
694	260000	400A 277/480V double tub panelboard	**1**	ea	14,000.00	14,000		
695	260000	250A 277/480V double tub panelboard	**1**	ea	6,500.00	6,500		
696	260000	100A 277/480V panelboard	**6**	ea	2,000.00	12,000		
697	260000	75KVA dry type transformer k-rated	**6**	ea	12,000.00	72,000		
698	260000	75KVA dry type transformer	**2**	ea	8,200.00	16,400		
699	260000	45KVA dry type transformer	**2**	ea	6,100.00	12,200		
700	260000	250A 120/208V triple tub panelboard	**1**	ea	9,000.00	9,000		
701	260000	250A 120/208V double tub panelboard	**4**	ea	6,500.00	26,000		
702	260000	150A 120/208V panelboard	**2**	ea	2,800.00	5,600		
703	260000	100A 120/208V panelboard	**1**	ea	2,000.00	2,000		
704	260000	Normal power feeders						
705	260000	600A CU feed	**150**	lf	283.00	42,450		
706	260000	400A CU feed	**900**	lf	200.00	180,000		
707	260000	250A CU feed	**300**	lf	105.00	31,500		
708	260000	150A CU feed	**1,260**	lf	58.00	73,080		
709	260000	100A CU feed	**30**	lf	41.00	1,230		
710	260000	90A CU feed	**300**	lf	41.00	12,300		
711	260000	Normal power feeder allowance	**191,796**	sf	0.50	95,898		
712	260000	Grounding & bonding	**1**	ls	80,000.00	80,000		
713	260000	Emergency power						
714	260000	Networked energy metering system	**1**	ls	30,000.00	30,000		
715	260000	900KW diesel fueled generator set in weatherproof enclosure	**1**	ea	400,000.00	400,000		
716	260000	4000A 600V transclosure cabinet	**1**	ea	75,000.00	75,000		
717	260000	1200A 4 pole automatic transfer switch	**1**	ea	90,000.00	90,000		
718	260000	400A 4 pole manual transfer switch for temp generator	**1**	ea	30,000.00	30,000		
719	260000	150A 4 pole automatic transfer switch	**1**	ea	18,000.00	18,000		
720	260000	1200A 277/480V distribution panelboard	**1**	ea	25,000.00	25,000		
721	260000	225A 277/480V panelboard	**5**	ea	4,750.00	23,750		
722	260000	150A 277/480V panelboard	**1**	ea	2,800.00	2,800		
723	260000	100A 277/480V panelboard	**6**	ea	2,000.00	12,000		
724	260000	75KVA dry type transformer k-rated	**4**	ea	12,000.00	48,000		
725	260000	75KVA dry type transformer	**1**	ea	8,200.00	8,200		
726	260000	45KVA dry type transformer k-rated	**3**	ea	9,000.00	27,000		

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
727	260000	225A 120/208V double tub panelboard	**1**	ea	6,000.00	6,000		
728	260000	150A 120/208V double tub panelboard	**4**	ea	5,500.00	22,000		
729	260000	150A 120/208V panelboard	**3**	ea	2,800.00	8,400		
730	260000	Generator power feeders						
731	260000	1200A CU feed	**150**	lf	606.00	90,900		
732	260000	400A CU feed	**75**	lf	200.00	15,000		
733	260000	225A CU feed	**750**	lf	88.00	66,000		
734	260000	150A CU feed	**360**	lf	58.00	20,880		
735	260000	100A CU feed	**900**	lf	41.00	36,900		
736	260000	90A CU feed	**450**	lf	40.00	18,000		
737	260000	Emergency power feeder allowance	**191,796**	sf	0.50	95,898		
738	260000	Aluminum feeders ilo copper VE item 14	**1**	ls	(75,000.00)	(75,000)		
739	260000	Photovoltaic System						
740	260000	PV system; 450 kW	**1**	ls	1,150,000	1,150,000		
741	260000	1000A 277/480 PV system switchboard exterior including associated feeders. **Sheet ES102 indicates utility provided PV-switchboard. Sheet EP 601 does not indicate this being provided by utility. For budget purposes the estimate includes this item**	**1**	ls	125,000	125,000		
742	260000	PV array battery storage, allow	**1**	ea	700,000.00	700,000		
743	260000	Equipment Wiring						
744	260000	Equipment wiring	**191,796**	sf	3.50	671,286		
745		SUBTOTAL					4,674,672	
746								
747		**D5020 LIGHTING & POWER**						
748	260000	Lighting Fixtures						
749	260000	Lighting fixtures	**191,796**	sf	8.50	1,630,266		
750	260000	Lighting controls						
751	260000	Digital Addressable Lighting control system	**191,796**	sf	2.50	479,490		
752	260000	Branch Devices						
753	260000	Branch devices	**191,796**	sf	0.75	143,847		
754	260000	Lighting and branch circuitry						
755	260000	Lighting circuitry	**191,796**	sf	4.00	767,184		
756	260000	Branch circuitry	**191,796**	sf	4.00	767,184		
757		SUBTOTAL					3,787,971	
758								
759		**D5030 COMMUNICATION & SECURITY SYSTEMS**						
760	260000	Telecommunications						
761	260000	Telecommunications devices and cabling	**191,796**	sf	3.50	671,286		
762	260000	Telecommunications rough-in	**191,796**	sf	1.50	287,694		
763	260000	Digital Signage System						
764	260000	Digital Signage System (rough in only)	**191,796**	sf	0.20	38,359		
765	260000	Public Address/Clock System						
766	260000	PA/master clock	**191,796**	sf	2.25	431,541		
767	260000	Audio Visual						
768	260000	Building audiovisual - rough-in & power only	**191,796**	sf	1.50	287,694		
769	260000	Auditorium Performance System						
770	260000	Auditorium audio/visual system rough-in and power	**1**	ls	125,000.00	125,000		
771	260000	Auditorium lighting, allowance provided	**1**	ls	141,000.00	w/ equipment		
772	260000	Auditorium dimming controls allowance provided	**1**	ls	141,000.00	141,000		
773	260000	Auditorium lighting and dimming rough-in and power	**1**	ls	75,000.00	75,000		
774	260000	Auditorium audio/visual system			Allowance carried in Equipment			
775	116100	TV Studio Lighting - allowance per JWA	**1**	ls	75,000.00	75,000		
776	260000	Specialty Communication Systems						
777	260000	Fire alarm						
778	260000	Addressable fire alarm system	**191,796**	sf	3.50	671,286		
779	260000	Bi-Directional Amplification						

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
			NEW SCHOOL BACKUP						
780	260000		Bi-directional amplification system	**191,796**	sf	1.00	191,796		
781	260000		Area of Refuge						
782	260000		Two-Way call box system	**191,796**	sf	0.75	143,847		
783	260000		Cell Repeater System						
784	260000		Cell repeater system	**191,796**	sf		NR		
785	260000		Security System						
786	260000		CCTV	**191,796**	sf	2.00	383,592		
787	260000		Intrusion detection	**191,796**	sf	1.00	191,796		
788	260000		Access control	**191,796**	sf	1.50	287,694		
789			SUBTOTAL					4,002,585	
790									
791		**D5040**	**OTHER ELECTRICAL SYSTEMS**						
792	260000		Lightning protection	**1**	ls	80,000.00	80,000		
793	260000		Temp power, lights & fire alarm	**1**	ls	125,000.00	125,000		
794	260000		Identification, Firestopping, Seismic	**1**	ls	15,000.00	15,000		
795	260000		Coordination/Power Studies	**1**	ls	25,000.00	25,000		
796	260000		Coordination/BIM/Management	**1**	ls	250,000.00	250,000		
797	260000		Fees & Permits	**1**	ls	166,000.00	Waived		
798	260000		SUBTOTAL					495,000	
799									
800			***TOTAL - ELECTRICAL***						**$12,960,228**
801									
802									
803		***E10***	***EQUIPMENT***						
804									
805		**E10**	**EQUIPMENT, GENERALLY**						
806									
807		*119000*	*MISCELLANEOUS EQUIPMENT*						
808	119000		Loading dock leveler and bumpers	**1**	ls	20,000.00	20,000		
809	119000		Kiln				F,F&E		
810	119000		Whirlpool	**1**	ea	12,500.00	12,500		
811	119000		Patient lift in Medic Fragile	**1**	ea	10,000.00	10,000		
812									
813		*113100*	*APPLIANCES*						
814	113100		Allowance for appliances	**1**	ls	60,700.00	60,700		
815	113100		Dishwasher (1 per science prep)	**4**	ea	included in allowance			
816	113100		Dishwasher (Culinary classroom)	**3**	ea	included in allowance			
817	113100		Refrigerator (Kitchen @ Admin, Teacher Planning, Medic, & Life Skills)	**8**	ea	included in allowance			
818	113100		U/C Fridge in Science Prep	**4**	ea	included in allowance			
819	113100		Freezer in Science Prep	**4**	ea	included in allowance			
820	113100		Microwave	**8**	ea	included in allowance			
821	113100		Ice making machines (Athletic Trainer's Office & Science Prep rooms)	**5**	ea	included in allowance			
822	113100		Stacked washer & dryer, light commercial	**6**	ea	included in allowance			
823									
824		*114000*	*FOOD SERVICE EQUIPMENT*						
825	114000		Food Service equipment budget per J.M. Schiavone	**1**	ls	1,550,000.00	1,550,000		
826	114000		Culinary Arts Classroom equipment budget per J.M. Schiavone	**1**	ls	800,000.00	800,000		
827									
828		*115213*	*PROJECTION SCREENS*						
829	115213		Motorized projection screens - 2#	**1**	ls	15,000.00	15,000		
830									
831		*115300*	*LABORATORY EQUIPMENT*						
832	115313		Allowance for science room equipment	**1**	ls	160,000.00	160,000		
833	115313		Fume hood, double sided, 6' wide, glazed in Chemistry	**2**	ea	included in allowance			
834	115313		Fume hood, accessible, 4' wide in Science Prep	**4**	ea	included in allowance			
835	115313		Bio-safety cabinet	**8**	ea	included in allowance			
836	115300		Chemical storage cabinets	**4**	ea	included in allowance			

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
			NEW SCHOOL BACKUP						
837	115300		Germicidal goggle cabinet	**8**	ea	included in allowance			
838	115300		Wall mounted fire blanket cabinet	**8**	ea	included in allowance			
839	115300		Wall mounted First Aid kit	**8**	ea	included in allowance			
840	115300		Pegboards - allow	**40**	ea	included in allowance			
841									
842		*116000*	*AUDITORIUM EQUIPMENT*						
843	116100		Adjustable acoustic	**1**	ls	99,000.00	99,000		
844	116100		Theater rigging	**1**	ls	55,500.00	55,500		
845	116100		Stage Curtains	**1**	ls	23,500.00	23,500		
846	116100		Auditorium Lighting fixtures	**1**	ls	141,000.00	141,000		
847	116100		Auditorium Lighting Controls	**1**	ls	141,000.00	See electrical		
848			AV Equipment						
849	116100		Auditorium	**1**	ls	200,000.00	200,000		
850	116100		Gymnasium	**1**	ls	150,000.00	150,000		
851	116100		Cafeteria	**1**	ls	150,000.00	150,000		
852	116100		LGI	**1**	ls	50,000.00	50,000		
853	116100		Band	**1**	ls	50,000.00	50,000		
854	116100		Chorus	**1**	ls	50,000.00	50,000		
855	116100		Media Center	**1**	ls	50,000.00	50,000		
856	116100		TV Studio	**1**	ls	50,000.00	50,000		
857									
861		*116600*	*ATHLETIC + OTHER EQUIPMENT*						
862	116623		Basketball backstops	**6**	ea	10,000.00	60,000		
863	116623		Scoreboards	**2**	ea	20,000.00	40,000		
864	116623		Shot timer	**1**	ea	5,000.00	5,000		
865	116623		Gym wall pads	**1,440**	sf	15.00	21,600		
866	116623		Volleyball equipment	**1**	ls	5,000.00	5,000		
867	116653		Divider curtain	**1**	ea	42,840.00	42,840		
868	116623		Suspended batting cage and mat hoist (2#)	**1**	ls	20,000.00	20,000		
869	116623		Ballet bar	**24**	lf	200.00	4,800		
870	126613		Retractable bleachers in gym - allow 900 seats	**1**	ls	225,000.00	225,000		
871			SUBTOTAL					4,121,440	
872									
873			***TOTAL - EQUIPMENT***						**$4,121,440**
874									
875									
876			***E20 FURNISHINGS***						
877									
878		**E2010**	**FIXED FURNISHINGS**						
879		*123553*	*CASEWORK*	**Plam cabinets u.n.o.**					
880	123553		*Classrooms including Business, Video, Health & ASD classroom*	*33*	*rms*				
881	123553		Tall cabinets/Wardrobe, 36" wide	**99**	ea	2,000.00	198,000		
882	123553		*Pre-K Classrooms*	*1*	*rms*				
883	123553		Base cabinet w/ plam counter	**14**	lf	400.00	5,600		
884	123553		Upper cabinet	**8**	lf	280.00	2,240		
885	123553		Tall cabinets/Wardrobe	**4**	ea	2,000.00	8,000		
886	123553		*Art Classroom*	**2**	ea				
887	123553		Base cabinet w/ plam counter	**84**	lf	420.00	35,280		
888	123553		Upper cabinet	**24**	lf	280.00	6,720		
889	123553		Tall cabinets/Wardrobe	**6**	ea	1,600.00	9,600		
890	123553		*Admin*						
891	123553		Base cabinet w/ plam counter (at mailboxes)	**12**	lf	400.00	4,800		
892	123553		*Kitchen*	*4*	*rms*				

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		NEW SCHOOL BACKUP						
893	123553	Base cabinet w/ plam counter	**9**	lf	420.00	3,780		
894	123553	Upper cabinet	**9**	lf	280.00	2,520		
942	123553	*OT/PT*				No scope		
892	123553	*Exam rooms*						
893	123553	Base cabinet w/ plam counter	**4**	lf	400.00	1,600		
894	123553	Upper cabinet	**4**	lf	280.00	1,120		
895	123553	*Life Skills*	*2*	*rms*				
896	123553	Base cabinet w/ plam counter	**8**	lf	400.00	3,200		
897	123553	Upper cabinet	**8**	lf	280.00	2,240		
898	123553	Plam counter	**4**	lf	150.00	600		
899	123553	Tall cabinets/Wardrobe	**4**	ea	1,600.00	6,400		
900	123553	*Medical Fragile*	*1*	*rms*				
901	123553	Base cabinet w/ plam counter	**14**	lf	400.00	5,600		
902	123553	Upper cabinet	**14**	lf	280.00	3,920		
903	123553	Plam counter	**4**	lf	150.00	600		
904	123553	Tall cabinets/Wardrobe	**3**	ea	1,600.00	4,800		
905	123553	*Trainer*						
906	123553	Base cabinet w/ plam counter	**8**	lf	400.00	3,200		
907	123553	Upper cabinet	**8**	lf	280.00	2,240		
908	123553	*PE Instructor*	*1*	*rms*				
909	123553	Plam counter on supports	**20**	lf	150.00	3,000		
910	123553	*Resource*	*3*	*rms*				
911	123553	Tall cabinets/Wardrobe	**7**	ea	2,000.00	14,000		
912	123553	*Science classrooms*	*8*	*rms*				
913	123553	Fixed demonstration bench on casters, 6' long	**16**	ea	2,500.00	40,000		
914	123553	Wood base cabinet w/ epoxy counter	**608**	lf	525.00	319,200		
915	123553	Wood upper cabinet	**288**	lf	325.00	93,600		
916	123553	Tall cabinets/Wardrobe, 36" wide	**8**	ea	1,600.00	12,800		
917	123553	Student tables on casters	**96**	ea	2,500.00	240,000		
918	123553	*Science Prep*	*4*	*rms*				
919	123553	Wood base cabinet w/ epoxy counter	**104**	lf	525.00	54,600		
920	123553	Wood upper cabinet	**104**	lf	325.00	33,800		
921	123553	*Teacher Planning*	*4*	*rms*				
922	123553	Base cabinet w/ plam counter	**38**	lf	400.00	15,200		
923	123553	Upper cabinet	**38**	lf	280.00	10,640		
924	123553	Tall cabinets/Wardrobe	**7**	ea	1,600.00	11,200		
925	123553	*Culinary Arts Classroom*						
926	123553	Base cabinet w/ solid surface counter	**81**	lf	550.00	44,550		
927	123553	Upper cabinet	**36**	lf	280.00	10,080		
928	123553	Demonstration station	**1**	ea	10,500.00	10,500		
929	123553	Solid surface service counter	**11**	lf	450.00	4,950		
930	123553	*WR*	*2*	*rms*				
931	123553	Base cabinet w/ plam counter	**6**	lf	400.00	2,400		
932	123553	Upper cabinet	**6**	lf	280.00	1,680		
933	123553	Tall cabinets/Wardrobe	**4**	ea	1,600.00	6,400		
934	123553	*Graphics with Darkroom*						
935	123553	Base cabinet w/ plam counter	**34**	lf	400.00	13,600		
936	123553	Upper cabinet	**34**	lf	280.00	9,520		
937	123553	Tall cabinets/Wardrobe, 36" wide	**4**	ea	1,600.00	6,400		
938	123553	*Upper level Main Hallway*						
939	123553	Solid surface counter on supports	**30**	lf	350.00	10,500		
940	123553	*ELL*	*1*	*rms*				
941	123553	Tall cabinets/Wardrobe	**2**	ea	2,000.00	4,000		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
			NEW SCHOOL BACKUP						
942	123553		*Tech Supt*						
943	123553		Plam counter on supports	**30**	lf	150.00	4,500		
944	123553		Tall cabinets/Wardrobe	**2**	ea	1,600.00	3,200		
945	123553		*ELL*	*1*	*rms*				
946	123553		Tall cabinets/Wardrobe	**2**	ea	2,000.00	4,000		
947	123553		*STEM*	*1*	*rms*				
948	123553		Tall cabinets/Wardrobe	**6**	ea	2,000.00	12,000		
949	123553		*Chemistry Storage*						
950	123553		Wood base cabinet w/ epoxy counter	**12**	lf	525.00	6,300		
951	123553		Wood upper cabinet	**12**	lf	325.00	3,900		
952									
953		*122100*	*WINDOW TREATMENT*						
954	122400		Roller shades at exterior glazing including room darkening shades in LGI and Science rooms	**1**	ls	150,000.00	150,000		
955	122400		Premium for motorized roller shades at Gym, Auditorium and Cafeteria - allow	**3,000**	sf	25.00	75,000		
956	122400		Window treatments at interior glazing - allowance	**1**	ls	25,000.00	25,000		
957									
858		*126000*	*SEATING*						
859	126100		Auditorium fixed seating per JWA cost memo	**1**	ls	225,000.00	225,000		
860									
958		*124810*	*ENTRANCE FLOOR MAT AND FRAMES*						
959	124813		WOM	**890**	sf	18.00	16,020		
960	124813		Aluminum entrance grille	**920**	sf	90.00	82,800		
961			SUBTOTAL					1,892,400	
962									
963		**E2020**	**MOVABLE FURNISHINGS**						
964			All movable furnishings to be provided and installed by owner						
965			SUBTOTAL					NIC	
966									
967			***TOTAL - FURNISHINGS***						**$1,892,400**
968									
969									
970		***F10***	***SPECIAL CONSTRUCTION***						
971									
972		**F10**	**SPECIAL CONSTRUCTION**						
973	132000		Greenhouse; 220SF	**1**	ls	38,500.00	38,500		
974			SUBTOTAL					38,500	
975									
976			***TOTAL - SPECIAL CONSTRUCTION***						**$38,500**
977									
978									
979		***F20***	***SELECTIVE BUILDING DEMOLITION***						
980									
981		**F2010**	**BUILDING ELEMENTS DEMOLITION**						
982			No items in this section						
983			SUBTOTAL						
984									
985		**F2020**	**HAZARDOUS COMPONENTS ABATEMENT**						
986	02121		See main summary for HazMat allowance				See Summary		
987			SUBTOTAL						
988									
			TOTAL - SELECTIVE BUILDING DEMOLITION						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK						
	G SITEWORK						
	G10 SITE PREPARATION & DEMOLITION						
	311000 SITE PREPARATION & DEMOLITION						
	311000 GENERAL CONDITIONS						
311000	6' high site construction fence - assume LOW				w/phasing		
311000	6' high site construction fence double gate	**3**	loc	5,000.00	15,000		
311000	Site construction entrance and removal/restoration	**3**	loc	12,000.00	36,000		
311000	Mobilizations	**1**	ls	50,000.00	50,000		
311000	Temporary signs	**1**	ls	10,000.00	10,000		
311000	Layout/As-builts/Survey	**1**	ls	15,000.00	15,000		
311000	Construction offices area prep - allowance	**1**	ls	10,000.00	10,000		
311000	Temporary signs	**1**	ls	20,000.00	w_GRs		
311000	Wheel wash rack	**1**	ls	20,000.00	20,000		
311000	Concrete pump staging areas	**2**	loc	10,000.00	20,000		
311000	Snow removal - allowance	**1**	ls		w_GRs		
311000	Winter conditions - allowance	**1**	ls		w_GRs		
311000	Police details	**1**	ls		w_GRs		
311000	Site security	**1**	ls		w_GRs		
311000	Job site construction trailer	**1**	ls		w_GRs		
311000	Temp utilities for job trailer	**1**	ls		w_GRs		
	311000 PHASING						
311000	Temporary paving; 2" thick	*12,000*	*sf*				
311000	Cut and prep	**89**	cy	15.00	1,335		
311000	gravel base; 6" thick	**222**	cy	48.00	10,656		
311000	Binder pavement	**12,000**	sf	2.00	24,000		
311000	geotextile	**12,000**	sf	0.55	6,600		
311000	R&D	**12,000**	sf	1.00	12,000		
	Phase 1A						
311000	6' high site construction fence	**2,400**	lf	20.00	48,000		
312000	Compost sock with silt fence	**1,500**	lf	12.00	18,000		
	Phase 1B						
311000	6' high site construction fence	**4,000**	lf	20.00	80,000		
312000	Compost sock with silt fence	**1,500**	lf	12.00	18,000		
312000	Compost sock	**2,000**	lf	8.00	16,000		
	Phase 1C						
311000	6' high site construction fence	**2,400**	lf	20.00	48,000		
312000	Compost sock with silt fence	**1,500**	lf	12.00	18,000		
312000	Compost sock	**1,000**	lf	8.00	8,000		
	Phase 2A						
311000	6' high site construction fence	**5,200**	lf	20.00	104,000		
312000	Compost sock with silt fence	**1,100**	lf	12.00	13,200		
312000	Compost sock	**2,800**	lf	8.00	22,400		
	311000 SITE SALVAGE ITEMS						
311000	Remove and stockpile existing wood guardrail	**400**	lf	15.00	6,000		
311000	Remove and stockpile existing athletic equipment	**2**	ea	500.00	1,000		
311000	Remove and stockpile existing barrels	**6**	ea	125.00	750		
311000	Remove and stockpile existing batting cages	**1**	ea	5,000.00	5,000		
311000	Remove and stockpile existing benches	**3**	ea	375.00	1,125		
311000	Remove and stockpile existing birdbath	**1**	ea	225.00	225		
311000	Remove and stockpile existing bleachers - allowance	**1**	ls	10,000.00	10,000		
311000	Remove and stockpile existing dedication pavers	**1,173**	sf	5.00	5,865		
311000	Remove and stockpile existing garden structures	**3**	ea	325.00	975		
311000	Remove and stockpile existing granite plaques	**2**	ea	525.00	1,050		
311000	Remove and stockpile existing picnic tables	**8**	ea	125.00	1,000		
311000	Remove and stockpile existing planters	**9**	ea	500.00	4,500		
311000	Remove and stockpile existing throwing wall and synthetic surface	**1**	ls	7,500.00	7,500		
311000	Remove and stockpile existing sign	**1**	ea	500.00	500		
311000	Remove and stockpile existing soccer flags	**2**	sts	50.00	100		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
61	311000		Remove and stockpile existing soccer goals	**7**	ea	750.00	5,250		
62	311000		Remove and stockpile existing storage cabinets	**1**	ea	125.00	125		
63	311000		Remove and stockpile existing storage containers	**3**	ea	1,250.00	3,750		
64	311000		Remove and stockpile existing tennis court lights and fixtures	**6**	ea	1,250.00	7,500		
65		*311000*	*SITE DEMOLITION AND RELOCATIONS*						
66	311000		Demolish curbing	**6,093**	lf	6.00	36,558		
67	311000		Pulverize existing paving	**33,545**	sy	8.00	268,360		
68	311000		Stockpile material for use at building	**5,591**	cy	2.50	13,978		
69	311000		Demolish existing concrete walk	**6,078**	sf	1.50	9,117		
70	311000		Demolish existing synthetic surfacing	**1,125**	sf	1.50	1,688		
71	311000		Demolish existing tennis nets and posts	**6**	loc	150.00	900		
72	311000		Demolish existing fencing	**5,141**	lf	5.00	25,705		
73	311000		Demolish existing fence gates	**1**	ea	250.00	250		
74	311000		Demolish scoreboard	**1**	ea	1,250.00	1,250		
75	311000		Demolish pressbox structure	**1**	ea	5,000.00	5,000		
76	311000		Demolish small outbuilding	**7**	ea	2,500.00	17,500		
77	311000		Demolish existing goalpost	**2**	ea	1,250.00	2,500		
78	311000		Blackout existing crosswalk	**1**	ea	500.00	500		
79	311000		Miscellaneous site demolition; lightpoles/signs/small items/small trees	**1**	ls	50,000.00	50,000		
80		*311000*	*UTILITY DEMOLITION*						
81	311000		Demolish existing hydrant	**1**	ea	1,000.00	1,000		
82	311000		Demolish existing utility lines	**9,306**	lf	25.00	232,650		
83	311000		Demolish existing utility structures	**47**	ea	500.00	23,500		
84	311000		Demolish existing asbestos lines	**271**	lf	25.00	6,775		
85	311000		Cut/cap utility lines	**2**	ea	10,000.00	20,000		
86		*311000*	*UTILITY DEMOLITION - TEMPORARY*						
87	311000		8" CLDI	**200**	lf	25.00	5,000		
88	311000		6" CLDI	**400**	lf	25.00	10,000		
89	311000		Fire hydrant	**2**	ea	1,200.00	2,400		
90	311000		Gate valve	**3**	ea	500.00	1,500		
91	311000		8" PVC	**150**	lf	25.00	3,750		
92	311000		SMH - 0-5' deep	**2**	ea	850.00	1,700		
93	311000		24" CPE	**600**	lf	25.00	15,000		
94	311000		12" CPE	**200**	lf	25.00	5,000		
95	311000		DMH - 0-5' doghouse	**3**	ea	1,250.00	3,750		
96	311000		CB - 5' Dia.	**3**	ea	850.00	2,550		
97		*311000*	*ROADWAY WORK*						
98	311000		Sawcut	**419**	lf	8.25	3,457		
99		*311000*	*VEGETATION & TOPSOIL MANAGEMENT*						
100	311000		Clear existing vegetation/invasive species	**1**	acre	5,000.00	5,000		
101	311000		Clear existing infields	**25,897**	sf	0.55	14,243		
102	311000		Strip + stockpile topsoil (swell 25%)	**24,000**	cy	11.50	276,000		
103	312000		Topsoil VE item #30 Athletic fields	**7,944**	cy	(11.50)	(91,356)		
104		*312000*	*EROSION & SEDIMENT CONTROL*						
105	312000		Silt Fence; installation and removal - stockpile areas	**1**	ls	5,000.00	5,000		
106	312000		Silt Sacks; installation and removal	**41**	ea	250.00	10,250		
107	312000		Temporary sedimentation basins	**14,642**	sf	3.00	43,926		
108	312000		Temporary outlet device at sediment basins	**2**	ea	3,000.00	6,000		
109	312000		Street sweeping & dust control allowance	**1**	ls	40,000.00	40,000		
110	312000		Erosion Control monitoring & maintenance	**1**	ls	25,000.00	25,000		
111			SUBTOTAL					1,791,807	
112									
113		*312000*	*SITE EARTHWORK*						
114	312000		Site cut to design subgrade - phase 1	*26,400*	*cy*				
115	312000		Cut	**26,400**	cy	8.00	211,200		
116	312000		Store cut onsite	**8,000**	cy	3.50	28,000		
117	312000		Site cut processing	*8,000*	*cy*				
118	312000		Screen cut soils	**8,000**	cy	5.00	40,000		
119	312000		Site fill to design subgrade - phase 1	*8,000*	*cy*				
120	312000		Fill - from cut	**8,000**	cy	10.00	80,000		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
121		*312000*	*SOIL DISPOSAL - conversion factor 1.7 to tons*						
122	312000		Load excess soils for disposal	**18,400**	cy	2.50	46,000		
123	312000		Less than RCS-1 - clean non-regulated	**31,280**	tn	23.00	719,440		
124									
125	312000		Site cut to design subgrade - phase 2	*39,600*	*cy*				
126	312000		Cut	**39,600**	cy	8.00	316,800		
127	312000		Store cut onsite	**4,000**	cy	3.50	14,000		
128	312000		Site cut processing	*4,000*	*cy*				
129	312000		Screen cut soils	**4,000**	cy	5.00	20,000		
130	312000		Site fill to design subgrade - phase 2	*4,000*	*cy*				
131	312000		Fill - from cut	**4,000**	cy	10.00	40,000		
132	312000		Cut/Fill savings @ VE item #30 Athletic fields	**1**	ls	(812,624.00)	(812,624)		
133		*312000*	*SOIL DISPOSAL - conversion factor 1.7 to tons*						
134	312000		Load excess soils for disposal	**35,600**	cy	2.50	89,000		
135	312000		Less than RCS-1 - clean non-regulated	**60,520**	tn	23.00	1,391,960		
136									
137		*312000*	*SUPPORT OF EXCAVATION*						
138			SOE allowance excavation		lf		Assume NR		
139									
140		*312000*	*ESTABLISHING GRADE*						
141	312000		Sub grade establishment	**1,840,000**	sf	0.10	184,000		
142	312000		Fine grading throughout the site	**1,840,000**	sf	0.25	460,000		
143									
144		*312000*	*HAZARDOUS MATERIALS*						
145	312000		UST removal allowance	**1**	ls	100,000.00	100,000		
146			SUBTOTAL					2,927,776	
147									
148		**G20**	**SITE IMPROVEMENTS**						
149									
150		*320000*	***ROADWAYS AND PARKING LOTS***						
151			Asphalt Paving; standard duty	*153,918*	*sf*				
152	312000		gravel base; 12" thick	**5,701**	cy	50.00	285,050		
153	320000		asphalt top; 1.5" thick	**1,471**	tns	190.00	279,490		
154	320000		asphalt binder; 2.5" thick	**2,449**	tns	175.00	428,575		
155			Asphalt Paving; heavy duty	*99,362*	*sf*				
156	312000		gravel base; 18" thick	**5,520**	cy	50.00	276,000		
157	320000		asphalt top; 1.5" thick	**950**	tns	190.00	180,500		
158	320000		asphalt binder; 3" thick	**1,900**	tns	175.00	332,500		
159			Porous pavement	*10,200*	*sf*				
160	320000		Porous asphalt paving; 4" thick	**255**	tns	300.00	76,500		
161	312000		Choker course; 2" thick	**63**	cy	55.00	3,465		
162	312000		gravel base; 6" thick	**189**	cy	50.00	9,450		
163	312000		3/4" crushed stone; 12" thick	**378**	cy	52.00	19,656		
164			Vehicular Concrete	*2,167*	*sf*				
165	312000		gravel base; 18" thick	**120**	cy	50.00	6,000		
166	320000		Broom finish concrete paving; 8" thick	**2,167**	sf	22.00	47,674		
167		*320000*	*CURBING*						
168	320000		Vertical granite curb	**14,428**	lf	48.00	692,544		
169	320000		ADA Curb cuts	**18**	ea	850.00	15,300		
170	320000		Wheel stops	**28**	ea	250.00	7,000		
171		*320000*	*ROAD MARKINGS AND SIGNS*						
172	320000		Parking spot	**445**	ea	85.00	37,825		
173	320000		Parking spot ADA	**18**	ea	250.00	4,500		
174	321724		Sign allowance	**1**	ls	20,000.00	20,000		
175	320000		Crosswalk hatching	**11**	loc	2,500.00	27,500		
176			Roadway markings						
177	320000		Diagonal pavement striping	**1,285**	sf	5.00	6,425		
178	320000		Pavement Markings - Turn arrows	**4**	ea	500.00	2,000		
179	320000		Pavement Markings - Straight Arrows	**45**	ea	400.00	18,000		
180	320000		Pavement Markings - "ONLY/BUS/BIKE" Text	**19**	ea	125.00	2,375		
181	320000		Pavement Markings - "DO NOT ENTER" Text	**1**	ea	250.00	250		
182	320000		Pavement Markings - SWL/SYL	**854**	lf	3.25	2,776		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
183	320000		Pavement Markings - DYL	**928**	lf	4.25	3,944		
184	320000		Pavement Markings - Stop Lines	**246**	lf	5.00	1,230		
185			Traffic control						
186	320000		Rapid flashing crossing beacon	**4**	ea	25,000.00	100,000		
187	320000		SUBTOTAL					2,886,529	
188									
189		***320000***	***PEDESTRIAN PAVING***						
190			Concrete sidewalks	*72,638*	*sf*				
191	312000		gravel base; 12" thick	**2,690**	cy	50.00	134,500		
192	321314		Broom finish concrete paving; 5" thick	**72,638**	sf	13.00	944,294		
193	320000		Premium for 30" crushed stone at landings within 6' and in plazas within 20' of the building	**1**	ls	25,000.00	25,000		
194	321314		Premium for integral colored sidewalks	**14,253**	sf	3.00	42,759		
195	320000		Install salvaged pavers	**596**	sf	40.00	23,840		
196	320000		Stabilized stone dust pathway ilo concrete sidewalk (VE#41)	**1**	ls	(120,000.00)	(120,000)		
197			Concrete pads	*9,230*	*sf*				
198	320000		gravel base; 18" thick	**513**	cy	50.00	25,650		
199	321314		Broom finish concrete paving; 8" thick	**9,230**	sf	22.00	203,060		
200	320000		Oil containment area allowance	**1**	ea	7,500.00	7,500		
201			Bituminous concrete walkways	*7,167*	*sf*				
202	312000		gravel base; 8" thick	**178**	cy	50.00	8,900		
203	320000		asphalt top; 1.5" thick	**69**	tns	200.00	13,800		
204	320000		asphalt binder; 1.5" thick	**69**	tns	180.00	12,420		
205			Bio-retention bridge crossing	*482*	*sf*				
206	320000		Bridge allowance	**1**	ls	100,000.00	100,000		
207	312000		Railings	**112**	lf		incl. above		
208			Permeable concrete pavers	*10,622*	*sf*				
209	320000		Concrete unit pavers	**10,622**	sf	32.00	339,904		
210	312000		Stone open graded base; 4" thick	**134**	cy	60.00	8,040		
211	312000		Stone subbase; 6" thick	**197**	cy	58.00	11,426		
212	312000		Bedding stone; 2" thick	**66**	cy	65.00	4,290		
213	320000		Geotextiles	**10,622**	sf	0.55	5,842		
214			Stabilized stone dust pathway	*13,566*	*sf*				
215	312000		Gravel base; 8" thick	**337**	cy	50.00	16,850		
216	320000		Stone dust 3" thick	**254**	tns	250.00	63,500		
217	320000		Edging	**3,482**	lf	18.00	62,676		
218	320000		Geotextiles	**13,566**	sf	0.55	7,461		
219			Mow strip	*3,202*	*sf*				
220	312000		Crushed stone; 6" thick	**59**	cy	50.00	2,950		
221	320000		Stone dust 3" thick	**60**	tns	125.00	7,500		
222	320000		Edging	**530**	lf	18.00	9,540		
223	320000		Geotextiles	**9,606**	sf	0.55	5,283		
224		*320000*	*STAIRS AND RAMPS*						
225	321314		Ramp premium	**1,385**	sf	20.00	27,700		
226	050001		Ramp handrails - stainless steel	**119**	lf	425.00	50,575		
227			SUBTOTAL					2,045,260	
228									
229		**323000**	***SITE IMPROVEMENTS***						
230		*320000*	*SITE FURNISHINGS*						
231	129300		Bollards - ADA parking and EV stations	**20**	ea	900.00	18,000		
232	129300		Bollards - stainless steel sleeve	**106**	ea	750.00	79,500		
233	129300		Bollards - metal	**106**	ea	600.00	63,600		
234	129300		Bollards - foundation	**106**	ea	400.00	42,400		
235	260000		Option 2 Bollards VE item 14	**1**	ls	(86,625.00)	(86,625)		
236	129300		Flagpole - 30' Ht.	**1**	ea	7,000.00	7,000		
237	129300		Flagpole foundation	**1**	ea	4,500.00	4,500		
238	129300		Table and chairs	**10**	ea	4,500.00	45,000		
239	321724		School sign	**1**	ea	25,000.00	25,000		
240	129300		Install spartan elements	**4**	ea	2,500.00	10,000		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
241	129300		Shade element	**2**	ea	25,000.00	50,000		
242	129300		Allowance for misc. site furnishings	**1**	ls	40,000.00	40,000		
243		*320000*	*PLAY AREAS*						
244			Playground - pour-in-place safety surfacing	1,061	*sf*				
245	312000		gravel base; 8" thick	**26**	cy	50.00	1,300		
246	321816		Pour-in-place safety surface	**1,061**	sf	36.00	38,196		
247	321816		Geotextiles	**1,061**	sf	0.55	584		
248	321816		Edging w_spread	**133**	lf	90.00	11,970		
249	323114		Decorative metal fencing	**130**	lf	125.00	16,250		
250	116800		Allowance for play structures	**1**	ls	50,000.00	50,000		
251		*320000*	*SYNTHETIC TURF AREA*						
252			Turf area	3,231	*sf*				
253	312000		Cut and prep	**120**	cy	35.00	4,200		
254	312000		gravel base; 8" thick	**80**	cy	50.00	4,000		
255	322110		Synthetic turf	**3,231**	sf	12.00	38,772		
256	322110		Synthetic turf anchor - practice wall	**221**	lf	80.00	17,680		
257	322110		Install salvaged practice walls	**1**	ls	5,000.00	5,000		
258		*320000*	*SPORTS COURTS*						
259			Pavement areas	*52,528*	*sf*				
260	312000		gravel base; 8" thick	**1,303**	cy	50.00	65,150		
261	320000		asphalt top; 2" thick	**658**	tns	200.00	131,600		
262	320000		asphalt binder; 2" thick	**658**	tns	180.00	118,440		
263	116800		Tennis court nets	**6**	set	3,000.00	18,000		
264	321816		Tennis court color coating	**38,545**	sf	1.20	46,254		
265	321816		Basketball court color coating	**13,983**	sf	0.90	12,585		
266	321816		Pickleball overlay striping and nets	**6**	ea	3,500.00	21,000		
267	116800		Basketball hoops	**4**	ea	6,700.00	26,800		
268		*320000*	*ATHLETIC EQUIPMENT*						
269			Softball						
270	116800		Softball mound - assume clay bricks or mound clay	**2**	loc	2,000.00	4,000		
271	116800		Softball bases	**2**	set	2,500.00	5,000		
272	116800		Softball batters boxes	**4**	loc	3,500.00	14,000		
273	116800		Softball foul poles	**4**	ea	3,600.00	14,400		
274	116800		Softball backstop	**2**	ea	55,000.00	110,000		
275	116800		Softball dugouts - concrete pads				incl. above		
276	116800		Softball dugout and team bench set	**4**	ea	50,000.00	200,000		
277	116800		Softball batting cages	**1**	loc	16,500.00	16,500		
278	116800		Softball side and outfield fencing	**858**	lf	75.00	64,350		
279	116800		Softball fence gates	**4**	ea	2,500.00	10,000		
280			Baseball						
281	116800		Baseball mound- assume clay bricks or mound clay	**2**	loc	3,500.00	7,000		
282	116800		Baseball bases	**2**	set	2,500.00	5,000		
283	116800		Baseball batters boxes	**4**	loc	3,500.00	14,000		
284	116800		Baseball foul poles	**4**	ea	3,600.00	14,400		
285	116800		Baseball backstop	**2**	ea	75,000.00	150,000		
286	116800		Baseball dugout and team bench set	**4**	ea	50,000.00	200,000		
287	116800		Baseball dugouts - concrete pads				incl. above		
288	116800		Baseball batting cages	**1**	loc	18,000.00	18,000		
289	116800		Baseball side and outfield fencing	**1,232**	lf	75.00	92,400		
290	116800		Baseball fence gates	**4**	ea	2,500.00	10,000		
291			Football						
292	116800		Football goalposts	**2**	ea	15,000.00	30,000		
293		*320000*	*BLEACHERS AND SCOREBOARDS*						
294	116800		Electronic scoreboard	**2**	ea	60,000.00	120,000		
295	133000		Elevated press box and ramp	**1**	loc	150,000.00	150,000		
296		*320000*	*FENCING*						
297	323114		4' Ht - Chain link fence	**110**	lf	65.00	7,150		
298	323114		6' Ht - Chain link fence	**582**	lf	75.00	43,650		
299	323114		6' Ht - Wood privacy				eliminated VE item #3		
300	323114		8' Ht - Chain link fence	**416**	lf	90.00	37,440		

PM&C

East Longmeadow High School 04-Aug-23

East Longmeadow, MA

Schematic Design Cost Estimate

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
301	323114		10' Ht - Chain link fence	**1,516**	lf	125.00	189,500		
302	323114		6' Ht - Chain link single gate	**8**	ea	1,200.00	9,600		
303	323114		8' Ht - Chain link single gate	**2**	ea	1,400.00	2,800		
304	323114		10' Ht - Chain link single gate	**6**	ea	1,700.00	10,200		
305	323114		8' Ht - Chain link double gate	**2**	ea	3,500.00	7,000		
306	323114		10' Ht - Chain link double gate	**3**	ea	4,000.00	12,000		
307	323114		Double swing gate - double leaf	**1**	ea	6,500.00	6,500		
308	323114		Single lift power gate	**1**	ea	35,000.00	35,000		
309	323114		Wood guardrail	**152**	lf	65.00	9,880		
310	323114		Ball control netting - 10' Ht.	**302**	lf	190.00	57,380		
311	323000		Granite block freestanding seat walls	**601**	lf	500.00	300,500		
312	260000		Precast block @ rear side of school seatwalls VE item 12	**1**	ls	(50,000.00)	(50,000)		
313	040001		Placehold for wall at utility area				NR		
314			SUBTOTAL					2,853,806	
315									
316		*323000*	*SITE WALLS*						
317		*329900*	*LAWN AND SEED*						
318	312000		Screen topsoil	**24,000**	cy	7.50	180,000		
319	312000		Export tailings from screening process - assume clean rock	**7,200**	cy	8.50	61,200		
320	312000		Amend/Place	**16,800**	cy	20.00	336,000		
321	329900		Topsoil - swell 25% (delta - 33,000 cy required)	**20,250**	cy	65.00	1,316,250		
322	329900		Reduce depth of topsoil at athletic fields from 12" to 8" (VE item#30)	**7,944**	cy	(92.50)	(734,820)		
323	329900		Soil and mulch at planting areas; 12" thick	**1,051**	cy	65.00	68,315		
324	329900		Power rake and hydroseed disturbed areas	**380,000**	sf	0.35	133,000		
325	329900		Bioswale/Raingarden seed mix	**18,830**	sf	0.55	10,357		
326	329900		Boulders	**80**	ea	500.00	40,000		
327	329900		Reinforced turf	*6,462*	*sf*				
328	329900		gravel base; 6" thick	**120**	cy	50.00	6,000		
329	329900		Turf reinforcement system	**6,462**	sf	10.00	64,620		
330	329900		Loam and seeding	**6,462**	sf	2.00	12,924		
331	329900		Geotextiles	**6,462**	sf	0.55	3,554		
332		*320000*	*ATHLETIC LANDSCAPING*						
333	329900		Field maintenance - 1 year	**650,000**	sf	0.15	97,500		
334	329800		Hand water fields not irrigated	**285,000**	sf	0.25	71,250		
335			Softball and Baseball Infield Mix	*71,284*	*sf*				
336	329900		Infield mix	**2,788**	tn	225.00	627,300		
337	329900		Sand gravel fill; 8" thick	**1,742**	cy	50.00	87,100		
338	329900		Geotextiles	**142,568**	sf	0.55	78,412		
339			Natural grass fields	*650,000*	*sf*				
340	329900		Lawn seeding	**650,000**	sf	0.55	357,500		
341	320000		Geotextiles	**650,000**	sf	0.55	eliminated		
342	329900		Sand gravel fill; 12" thick	**24,074**	cy	50.00	eliminated		
343	329900		Irrigation	**435,000**	sf	1.75	761,250		
344		*329900*	*TREES*						
345	329900		Deciduous trees - 2-2.5" cal.	**60**	ea	2,000.00	120,000		
346	329900		Deciduous trees - 2.5-3" cal.	**63**	ea	2,500.00	157,500		
347	329900		Deciduous trees - 3"-3.5" cal.	**155**	ea	3,500.00	542,500		
348	329900		Multi-stem tree - 10-12' Ht.	**55**	ea	2,200.00	121,000		
349	329900		Evergreen trees - 8-10' Ht.	**88**	ea	1,200.00	105,600		
350	329900		VE item #7 Reduce caliper of trees	**1**	ls	(200,000.00)	(200,000)		
351	329900		VE item #8 Reduce plantings budget by 10%	**1**	ls	(80,000.00)	(80,000)		
352		329900	*UNDERSTORY PLANTING*						
353	329900		Groundcovers - #3 container	**9,000**	ea	35.00	315,000		
354	329900		Target adjustment	**1**	ls	(361,600.00)	(361,600)		
355		329900	*MAINTENANCE*						
356	329900		1-yr plant maintenance	**1**	ls	25,000.00	25,000		
357	329900		1-yr lawn maintenance	**1**	ls	25,000.00	25,000		
358	329900		Watering to grow-in	**1**	ls	15,000.00	15,000		

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	SITEWORK								
359			SUBTOTAL					4,362,712	
360									
361		**G30**	**CIVIL MECHANICAL UTILITIES**						
362		*210000*	*FIRE PROTECTION*						
363	210000		8" CLDI	**2,821**	lf	90.00	253,890		
364	210000		6" CLDI	**259**	lf	75.00	19,425		
365	210000		Fire department connection	**1**	ea	2,500.00	2,500		
366	210000		Gate valve	**16**	ea	1,200.00	19,200		
367	210000		Water valve - per memo for water cannons	**2**	ea	3,000.00	6,000		
368	210000		Fire hydrant	**5**	ea	6,500.00	32,500		
369	210000		Thrust blocks	**23**	ea	500.00	11,500		
370		*331000*	*WATER UTILITIES*						
371	331000		4" CLDI	**180**	lf	56.00	10,080		
372	331000		2" Type K	**264**	lf	40.00	10,560		
373	331000		2" Type K - per memo for water cannons	**100**	lf	40.00	4,000		
374		*331000*	*CONNECTIONS*						
375	331000		Cap for future connections	**2**	ea	2,500.00	5,000		
376	331000		Connect to existing water meter pit	**1**	ea	5,000.00	5,000		
377	331000		Connect to existing for water canons	**2**	ea	1,200.00	incl. above		
378		*312000*	*EXCAVATION & BACKFILL*	*4,224*	*lf*				
379	312000		DI gravity piping excavation	**4,013**	cy	15.00	60,195		
380	312000		Trench bedding	**845**	cy	50.00	42,250		
381	312000		Backfill w/cut soils	**3,168**	cy	20.00	63,360		
382	312000		Pressure test & chlorinate	**4,224**	lf	5.00	21,120		
383		*331000*	*TEMPORARY UTILITIES*						
384	210000		8" CLDI	**200**	lf	90.00	18,000		
385	210000		6" CLDI	**400**	lf	75.00	30,000		
386	210000		Fire hydrant	**2**	ea	6,500.00	13,000		
387	210000		Gate valve	**3**	ea	1,200.00	3,600		
388			SUBTOTAL					631,180	
389									
390		333000	SANITARY SEWER						
391	333000		Sewer force main - 3"	**1,203**	lf	30.00	36,090		
392	333000		8" PVC	**1,684**	lf	45.00	75,780		
393	333000		6" PVC	**21**	lf	35.00	735		
394	333000		6" DI	**30**	lf	45.00	1,350		
395	333000		4" PVC	**180**	lf	25.00	4,500		
396	333000		4" DI	**50**	lf	40.00	2,000		
397	333000		Vent piping - size unknown	**58**	lf	25.00	1,450		
398	333000		SMH - 0-5' deep	**16**	ea	4,800.00	76,800		
399	333000		Cap for future connections	**1**	ea	2,500.00	2,500		
400	333000		Grease trap - 5,000 gal.	**1**	ea		w/ plumbing		
401	333000		Pump chamber; 12,000 gal	**1**	ea	15,000.00	15,000		
402	333000		Pump system	**1**	ls	50,000.00	50,000		
403	333000		6'x6' valve vault	**1**	ls	12,500.00	12,500		
404	333000		Access hatches for pump system/valve vault	**2**	ea	2,500.00	5,000		
405		*333000*	*CONNECTIONS*						
406	333000		Connect to existing structure (inside site)	**1**	ea	5,000.00	5,000		
407		*312000*	*EXCAVATION & BACKFILL - force main*	*1,203*	*lf*				
408	312000		Force main piping excavation- assume shallow	**421**	cy	15.00	6,315		
409	312000		Trench bedding	**241**	cy	50.00	12,050		
410	312000		Backfill w/cut soils	**180**	cy	20.00	3,600		
411		*312000*	*EXCAVATION & BACKFILL - Gravity*	*2,173*	*lf*				
412	312000		PVC gravity piping excavation	**2,173**	cy	15.00	32,595		
413	312000		Trench bedding	**435**	cy	50.00	21,750		
414	312000		Backfill w/cut soils	**1,738**	cy	20.00	34,760		
415	312000		Pressure testing	**3,376**	lf	4.00	13,504		
416	312000		Video Inspection	**1**	ls	10,000.00	10,000		
417	312000		Grease trap; 5,000 gal. (e/b only) incl. shoring	**1**	ea	10,000.00	10,000		
418	312000		Pump chamber; 12,000 gal (e/b only) incl. shoring	**1**	ea	12,000.00	12,000		

CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK								
	331000	*TEMPORARY UTILITIES*						
333000		8" PVC	**150**	lf	45.00	6,750		
333000		SMH - 0-5' deep	**2**	ea	4,800.00	9,600		
		SUBTOTAL					461,629	
	334000	STORM DRAINAGE						
334000		Drainage pipe - no size given - assume 12" CPE	**6,291**	lf	75.00	471,825		
334000		4' Dia. DMH - 0-5' deep	**30**	ea	4,800.00	144,000		
334000		DMH - 0-5' doghouse	**1**	ea	8,000.00	8,000		
334000		AD	**10**	ea	2,500.00	25,000		
334000		CO	**5**	ea	1,200.00	6,000		
334000		OCS	**1**	ea	8,000.00	8,000		
334000		WQU -4'	**3**	ea	10,000.00	30,000		
334000		WQU -5'	**3**	ea	18,000.00	54,000		
334000		WQI - 450 Gallon	**4**	ea	18,000.00	72,000		
334000		OWS - 1500 Gallon	**1**	ea	25,000.00	25,000		
334000		CB - 5' Dia.	**31**	ea	4,200.00	130,200		
334000		Trench drains	**30**	lf	180.00	5,400		
334000		Underdrain	**716**	lf	25.00	17,900		
334000		Foundation drain	**2,404**	lf	25.00	60,100		
334000		Roof drain connections	**4**	ea	500.00	2,000		
	334000	*CONNECTIONS*						
334000		Connect to existing endwall structure	**1**	ea	5,000.00	5,000		
	331000	*TEMPORARY UTILITIES*						
334000		24" CPE	**600**	lf	100.00	60,000		
334000		12" CPE	**200**	lf	75.00	15,000		
334000		DMH - 0-5' doghouse	**3**	ea	8,000.00	24,000		
334000		CB - 5' Dia.	**3**	ea	4,800.00	14,400		
	334000	*SURFACE DRAINAGE SYSTEMS*						
		Bio retention/Rain Garden	*18,830*	sf				
312000		shape basins	**18,830**	sf	2.50	47,075		
320000		mulch	**174**	cy	50.00	8,700		
320000		24" Planting soil mix	**1,395**	cy	80.00	111,600		
320000		8" Double washed pea stone	**467**	cy	60.00	28,020		
320000		4" Sand	**230**	cy	50.00	11,500		
	334000	*SUBSURFACE DRAINAGE SYSTEMS*						
		Infiltration System	*2,220*	*sf*				
334000		30" Premolded chambers	**2,220**	sf	48.00	106,560		
		SUBTOTAL					1,491,280	
	220001	NATURAL GAS				See Alternate		
		SUBTOTAL					0	
	G40	**ELECTRICAL UTILITIES**						
		Site Civil for Electrical						
		Concrete:						
033000		Primary Duct bank AA 2-4"C	**1,000**	lf	120.00	120,000		
033000		Secondary Duct bank CC 10-4"C	**220**	lf	160.00	35,200		
033000		Generator duct bank DD: 3-4"C & 5-2"C	**300**	lf	160.00	48,000		
033000		Communications duct bank, 4-4" BB	**715**	lf	160.00	114,400		
033000		Transformer pad	**4**	ea	2,500.00	10,000		
033000		Generator pad	**1**	ea	2,500.00	2,500		
033000		Pole base	**90**	ea	500.00	45,000		
		Excavation & Backfill:						
312000		Primary Duct bank AA 2-4"C	**1,000**	lf	30.00	30,000		
312000		Secondary Duct bank CC 10-4"C	**220**	lf	28.00	6,160		
312000		Generator duct bank DD: 3-4"C & 5-2"C	**300**	lf	22.00	6,600		
312000		Communications duct bank, 4-4" BB	**715**	lf	22.00	15,730		
260000		100A feed to Press box from Main elec room	**700**	lf	20.00	14,000		
312000		Direct buried circuitry: Lighting, security, Scoreboard, EV etc	**7,475**	lf	5.00	37,375		

	CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
		SITEWORK						
479	312000	*Note: assumes site lighting & security run parallel, single trench needed*						
480		SUBTOTAL					484,965	
481								
482		Electrical						
483	260000	Demolition	**1**	ls	20,000.00	20,000		
484	260000	Utility company back charges				NIC		
485	260000	Pole riser	**1**	ea	1,500.00	1,500		
486	260000	Power manhole	**4**	ea	12,000.00	48,000		
487	260000	Primary Duct bank AA 2-4"C	**1,000**	lf	60.00	60,000		
488	260000	Pad mount transformer				By Utility		
489	260000	Secondary Duct bank CC 10-4"C with 4000A feeder	**220**	lf	1,300.00	286,000		
490	260000	Generator						
491	260000	Generator pad grounding	**1**	ls	500.00	500		
492	260000	Generator duct bank DD: 3-4"C & 5-2"C 600A, 100A, control wiring	**300**	lf	650.00	195,000		
493	260000	Electrical to pump chamber	**1**	ls	10,000.00	10,000		
494	260000	Gate Power						
495	260000	Gate power connection	**1**	ea	500.00	500		
496	260000	Gate power circuitry	**100**	lf	10.00	1,000		
497	260000	EV Stations						
498	260000	Future EV charging station power and communication conduit, wire and handhole individual home run	**25**	ea	10,000.00	250,000		
499	260000	EV Stations, dual	**5**	ea	15,000.00	75,000		
500	260000	EV feeder, allow 40A	**1,400**	lf	20.00	28,000		
501	260000	Communications						
502	260000	Pole riser	**1**	ea	1,500.00	1,500		
503	260000	New handhole	**4**	ea	2,500.00	10,000		
504	260000	Communications duct bank, 4-4" BB	**715**	lf	120.00	85,800		
505	260000	Install temporary communications utilities including 1,400 lf overhead 12 stand SM fiber, six utility poles and terminations.	**1**	ls	50,000.00	50,000		
506	260000	Site Security						
507	260000	Pole mounted camera WP	**9**	ea	1,500.00	13,500		
508	260000	Pole mounted multi lens camera WP	**10**	ea	1,700.00	17,000		
509	260000	CO mounted multi lens camera WP	**9**	ea	1,700.00	15,300		
510	260000	Security camera circuitry, allow	**6,000**	lf	10.00	60,000		
511	260000	Sports Field						
512	260000	400A power to Athletic Field, 200LF (per EE)	**1**	ls	35,000.00	35,000		
513	260000	Electrical 100A connection to PreFab press box	**1**	ls	500.00	500		
514	260000	100A feed and communications conduit to Press box from Main elec room	**700**	lf	80.00	56,000		
515	260000	Power handhole 12x18"	**5**	ea	1,500.00	7,500		
516	260000	1.5KVA transformer at light pole	**4**	ea	1,500.00	6,000		
517	260000	Sound system	**1**	ls	85,000.00	85,000		
518	260000	Intercept and extend scoreboard feeder	**1**	ls	5,000.00	5,000		
519	260000	SUBTOTAL					1,423,600	
520	260000							
521	260000	**<u>Site Lighting</u>**						
522	260000	Site lighting fixture Type AA1	**28**	ea	2,500.00	70,000		
523	260000	Site lighting fixture Type AA2	**23**	ea	3,200.00	73,600		
524	260000	Site lighting fixture Type AA3	**1**	ea	3,200.00	3,200		
525	260000	Site lighting fixture Type BB	**27**	ea	2,000.00	54,000		
526	260000	Site lighting fixture Type CC	**3**	ea	1,000.00	3,000		
527	260000	Site lighting fixture Type DD				eliminated VE item #1		
528	260000	Site lighting circuitry:						
529	260000	Circuitry	**7,475**	lf	20.00	149,500		
530	260000	Pole/Bollard grounding	**90**	ea	150.00	13,500		
531	260000	Sports Field Lighting						
532	260000	Site lighting fixture Type XRE relocated tennis court lights	**8**	ea	5,000.00	40,000		
533	260000	Tennis/basketball court lighting circuitry	**814**	lf	30.00	24,420		
534	260000	Tennis court lighting control cabinet	**1**	ls	5,000.00	5,000		
535	260000	Stadium lighting control cabinet	**1**	ls	10,000.00	10,000		

PM&C

East Longmeadow High School 04-Aug-23

East Longmeadow, MA

Schematic Design Cost Estimate

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
SITEWORK							
536	SUBTOTAL					446,220	
537							
538	**TOTAL - SITE DEVELOPMENT**						***$21,806,764***

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Bristol Plymouth Regional Technical High School 11-May-23
Taunton, MA

90% Construction Documents Estimate GFA 1,344

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	CONCESSIONS BUILDING						
	GROSS FLOOR AREA CALCULATION						
	Concessions			1,344			
	TOTAL GROSS FLOOR AREA (GFA)				**1,344** ***sf***		
	A10 FOUNDATIONS						
	A1010 STANDARD FOUNDATIONS						
033000	Strip Footing @ foundation walls						
033000	Formwork	**304**	sf	15.00	4,560		
033000	Re-bar	**1,520**	lbs.	2.00	3,040		
033000	Concrete material	**12**	cy	150.00	1,800		
033000	Placing concrete	**12**	cy	120.00	1,440		
033000	Foundation wall						
033000	Formwork	**1,064**	sf	20.00	21,280		
033000	Re-bar	**2,660**	lbs.	2.00	5,320		
033000	Concrete material	**29**	cy	150.00	4,350		
033000	Placing concrete	**29**	cy	120.00	3,480		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
070001	Damp proofing foundation wall and footing	**532**	sf	3.00	1,596		
072100	*THERMAL INSULATION*						
072100	Insulation	**532**	sf	3.00	1,596		
312000	*EARTHWORK*						
	Continuous footings						
312000	Excavation	**169**	cy	16.00	2,704		
312000	Remove off site	**169**	cy	14.00	2,366		
312000	Backfill with imported material	**128**	cy	40.00	5,120		
	SUBTOTAL					58,652	
	A1020 SPECIAL FOUNDATIONS						
	SUBTOTAL					-	
	A1030 LOWEST FLOOR CONSTRUCTION						
	New Slab on grade, 5" thick						
33000	Vapor barrier	**1,344**	sf	1.25	1,680		
33000	WWF Rebar	**1,546**	sf	1.80	2,783		
33000	Concrete - 5" thick	**21**	cy	150.00	3,150		
33000	Placing concrete	**21**	cy	65.00	1,365		
33000	Finishing and curing concrete	**1,344**	sf	3.00	4,032		
33000	Control joints - saw cut	**1,344**	sf	0.10	134		
072100	*THERMAL INSULATION*						
72100	2" Rigid insulation at slab perimeter, 6'	**912**	sf	2.25	2,052		
312000	*EARTHWORK*						
312000	Compact existing sub-grade	**1,344**	sf	0.50	672		
312000	Gravel fill	**50**	cy	40.00	2,000		
	SUBTOTAL					17,868	
	TOTAL - FOUNDATIONS						**$76,520**
	A20 BASEMENT CONSTRUCTION						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
CONCESSIONS BUILDING							
	A2010 BASEMENT EXCAVATION						
	No Work in this section						
	SUBTOTAL					-	
	A2020 BASEMENT WALLS						
	No Work in this section						
	SUBTOTAL					-	
	TOTAL - BASEMENT CONSTRUCTION						**$0**
	B10 SUPERSTRUCTURE						
	B1010 FLOOR CONSTRUCTION						
	SUBTOTAL					-	
	B1020 ROOF CONSTRUCTION						
51200	Steel roof framing	**1,344**	sf	50.00	67,200		
	SUBTOTAL					67,200	
	TOTAL - SUPERSTRUCTURE						**$67,200**
	B20 EXTERIOR CLOSURE						
	B2010 EXTERIOR WALLS						
	Exterior Wall Area; Solid	*1,832*	sf				
042000	*MASONRY*						
040001	8" GF CMU	**1,832**	sf	38.00	69,616		
055000	*MISC. METALS*						
050001	Miscellaneous metals to exterior masonry; lintels, angles etc.	**1,832**	sf	2.00	3,664		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
070001	Air barrier				NR		
070001	Miscellaneous sealants to closure	**1,832**	sf	1.00	1,832		
072100	*THERMAL INSULATION*						
072100	Insulation				NR		
101400	*SIGNAGE*						
101400	Allowance for signage	**1**	ls	5,000.00	5,000		
	SUBTOTAL					80,112	
	B2020 WINDOWS						
061000	*ROUGH CARPENTRY*						
061000	Wood blocking at openings	**136**	lf	11.00	1,496		
070001	*WATERPROOFING, DAMPPROOFING AND CAULKING*						
070001	Backer rod & double sealant	**136**	lf	9.00	1,224		
080001	*METAL WINDOWS + CURTAINWALL*						
080002	Windows; 4'x6'	**4**	ea	3,600.00	14,400		
080002	Windows; 4'x3'	**4**	ea	1,800.00	7,200		
	SUBTOTAL					24,320	

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
CONCESSIONS BUILDING							
	B2030 EXTERIOR DOORS						
	061000 ROUGH CARPENTRY						
061000	Wood blocking at openings	**131**	lf	11.00	1,441		
	079200 JOINT SEALANTS						
070001	Backer rod & double sealant	**131**	lf	9.00	1,179		
	081110 HOLLOW METAL						
081110	Allowance						
081110	Double leaf	**2**	pr	3,400.00	6,800		
	083513 OVERHEAD DOORS						
083323	Overhead door @ storage	**1**	ea	7,500.00	7,500		
083323	Overhead shutters @ Concession	**1**	ea	6,000.00	6,000		
	090007 PAINTING						
090007	Finish doors and frames	**2**	ea	200.00	400		
	SUBTOTAL					23,320	
	TOTAL - EXTERIOR CLOSURE						**$127,752**
	B30 ROOFING						
	B3010 ROOF COVERINGS						
	061000 ROUGH CARPENTRY						
061000	Wood blocking at roof edge	**152**	lf	20.00	3,040		
	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						
070001	AVB at roof perimeter	**152**	lf	8.00	1,216		
	070002 ROOFING AND FLASHING						
070002	Membrane roof system	**1,344**	sf	27.00	36,288		
070002	Roof edge	**152**	lf	50.00	7,600		
	SUBTOTAL					48,144	
	B3020 ROOF OPENINGS						
	SUBTOTAL					-	
	TOTAL - ROOFING						**$48,144**
	C10 INTERIOR CONSTRUCTION						
	C1010 PARTITIONS						
	042000 MASONRY						
040001	Allowance for interior partitions; 4" CMU	**2,340**	sf	30.00	70,200		
	SUBTOTAL					70,200	
	C1020 INTERIOR DOORS	**Allowance**					
	061000 ROUGH CARPENTRY						
061000	Wood blocking at openings	**119**	lf	4.00	476		
	070001 WATERPROOFING, DAMPPROOFING AND CAULKING						

	CSI CODE		DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
	CONCESSIONS BUILDING								
176	070001		Backer rod & double sealant	**119**	lf	2.50	298		
177									
178		*081110*	*HOLLOW METAL DOOR FRAMES*						
179	081110		Wood door, hollow metal frame and hardware						
180	081110		Single	**7**	ea	2,200.00	15,400		
181									
182		*090007*	*PAINTING*						
183	090007		Finish doors and frames	**7**	ea	200.00	1,400		
184			SUBTOTAL					17,574	
185									
186		**C1030**	**SPECIALTIES / MILLWORK - ALLOW**						
187	102813		Toilet partitions, accessories, signage, misc. metals etc.	**1,344**	gsf	20.00	26,880		
188			SUBTOTAL					26,880	
189									
190			***TOTAL - INTERIOR CONSTRUCTION***						**$114,654**
191									
192									
193		***C20***	***STAIRCASES***						
194									
195		**C2010**	**STAIR CONSTRUCTION**						
196			No work in this section						
197			SUBTOTAL					-	
198									
199		**C2020**	**STAIR FINISHES**						
200			No work in this section						
201			SUBTOTAL					-	
202									
203			***TOTAL - STAIRCASES***						**$0**
204									
205									
206		***C30***	***INTERIOR FINISHES***						
207									
208									
209		**C3010**	**WALL FINISHES**						
210									
211		*090007*	*PAINTING*						
212	090007		Paint to CMU walls	**1,344**	gsf	3.00	4,032		
213			SUBTOTAL					4,032	
214									
215		**C3020**	**FLOOR FINISHES**						
216									
217		*033000*	*CONCRETE*						
218	033000		Stained concrete	**1,210**	sf	6.00	7,260		
219			SUBTOTAL					7,260	
220									
221		**C3030**	**CEILING FINISHES**						
222									
223		*092900*	*GYPSUM BOARD ASSEMBLIES*						
224	092900		GWB ceiling	**1,210**	sf	16.00	19,360		
225									
226		*090007*	*PAINTING*						
227	090007		Paint to GWB	**1,210**	sf	1.20	1,452		
228			SUBTOTAL					20,812	
229									
230			***TOTAL - INTERIOR FINISHES***						**$32,104**
231									
232									
233		***D10***	***CONVEYING SYSTEMS***						
234									
235		**D1010**	**ELEVATOR**						
236			No work in this section						

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
CONCESSIONS BUILDING							
	SUBTOTAL					-	
	TOTAL - CONVEYING SYSTEMS						**$0**
	D20 PLUMBING						
	D20 PLUMBING, GENERALLY						
220000	Allowance for plumbing per dwg layout on A103	**1,344**	gsf	52.00	69,888		
	SUBTOTAL					69,888	
	TOTAL - PLUMBING						**$69,888**
	D30 HVAC						
	D30 HVAC, GENERALLY						
230000	Allowance for HVAC per layout per dwg A103	**1,344**	gsf	20.00	26,880		
	SUBTOTAL					26,880	
	TOTAL - HVAC						**$26,880**
	D40 FIRE PROTECTION						
	D40 FIRE PROTECTION, GENERALLY						
	No work in this section						
	SUBTOTAL					-	
	TOTAL - FIRE PROTECTION						**$0**
	D50 ELECTRICAL						
	D5010 ELECTRICAL SYSTEMS						
260000	Allowance for electrical per dwg layout on A103	**1,344**	gsf	40.00	53,760		
	SUBTOTAL					53,760	
	TOTAL - ELECTRICAL						**$53,760**
	E10 EQUIPMENT						
	E10 EQUIPMENT, GENERALLY						
116600	*EQUIPMENT*						
113100	Ice machine	**1**	ea	1,500.00	1,500		
	SUBTOTAL					1,500	
	TOTAL - EQUIPMENT						**$1,500**
	E20 FURNISHINGS						
	E2010 FIXED FURNISHINGS						
123553	Casework/ counters in Ticket/Concessions - allowance	**1**	ls	15,000.00	15,000		
	SUBTOTAL					15,000	
	E2020 MOVABLE FURNISHINGS						
	All movable furnishings to be provided and installed by owner						
	SUBTOTAL					NIC	
	TOTAL - FURNISHINGS						**$15,000**

PM&C

Bristol Plymouth Regional Technical High School 11-May-23
Taunton, MA

90% Construction Documents Estimate GFA 1,344

CSI CODE	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
CONCESSIONS BUILDING							
	F10 SPECIAL CONSTRUCTION						
F10	**SPECIAL CONSTRUCTION**						
	No work in this section						
	SUBTOTAL					$0	
	TOTAL - SPECIAL CONSTRUCTION						**$0**
	F20 SELECTIVE BUILDING DEMOLITION						
F2010	**BUILDING ELEMENTS DEMOLITION**						
	See main summary for demolition of existing buildings						
	SUBTOTAL					$0	
F2020	**HAZARDOUS COMPONENTS ABATEMENT**						
	See main summary for HazMat allowance				See Summary		
	SUBTOTAL					$0	
	TOTAL - SELECTIVE BUILDING DEMOLITION						**$0**
	SUBTOTAL						**$ 633,402**

PM&C

East Longmeadow High School
East Longmeadow, MA

04-Aug-23

Schematic Design Cost Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
S1	**Lighting for varsity baseball field**						
	Site Civil for Electrical						
	Concrete:						
	Baseball/softball lighting primary service	**300**	lf	120.00	36,000		
	Baseball/softball lighting secondary service	**110**	lf	160.00	17,600		
	Transformer pad	**1**	ea	2,500.00	2,500		
	Pole base	**12**	ea	5,000.00	Inc with fixtures below		
	Excavation & Backfill:						
	Primary Duct bank AA 2-4"C	**300**	lf	30.00	9,000		
	Secondary Duct bank CC 6-4"C	**110**	lf	28.00	3,080		
	Electrical:						
	Riser for baseball/softball fields	**1**	ea	1,500.00	1,500		
	Controls cabinet for baseball/softball fields	**1**	ea	25,000.00	25,000		
	Baseball/softball lighting primary service	**300**	lf	50.00	15,000		
	Baseball/softball lighting secondary service	**110**	lf	150.00	16,500		
	Site lighting fixture Type EE	**12**	ea	75,000.00	900,000		
	Baseball field lighting circuitry	**1,423**	lf	40.00	56,920		
	Scoreboard feed and connection	**1**	ea	5,000.00	5,000		
	Pitching machine wp receptacle	**3**	ea	2,500.00	7,500		
	SUBTOTAL					1,095,600	
	Add Markups & Contingencies	20%				219,120	
	TOTAL						**$1,314,720**
S2	**Sports field storage building**						
	10'x30' Exterior roll-up relocatable mobile storage unit - allow	**300**	sf	100.00	30,000		
	Concrete floor slab	**384**	sf	20.00	7,680		
	Electrical to storage building	**1**	ls	5,000.00	5,000		
	SUBTOTAL					42,680	
	Add Markups & Contingencies	20%				8,536	
	TOTAL						**$51,216**
S3	**Additional athletic field irrigation beyond base project scope**						
	Add						
	Hand water fields not irrigated	**(285,000)**	sf	0.25	(71,250)		
	Deduct						
	Irrigation at practice fields	**285,000**	sf	1.75	498,750		
	SUBTOTAL					427,500	
	Add Markups & Contingencies	20%				85,500	
	TOTAL						**$513,000**

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
S4	**Provide 650,000sf sod in lieu of seed for athletic fields**						
	Natural grass fields	*650,000*	*sf*				
	Athletic Sod	**650,000**	sf	1.20	780,000		
	SUBTOTAL					780,000	
	Add Markups & Contingencies	20%				156,000	
	TOTAL						**$936,000**
S5	**Athletic field safety netting adjacent to abutting residences**						
	Ball control netting - 30' Ht.	**780**	lf	325.00	253,500		
	SUBTOTAL					253,500	
	Add Markups & Contingencies	20%				50,700	
	TOTAL						**$304,200**
S6	**Natural gas line from Maple Street to emergency generator.**						
	Piping excavation/backfill (inside site)	**1,200**	lf	35.00	42,000		
	Permit and connection	**1**	ls	3,500.00	3,500		
	SUBTOTAL					45,500	
	Add Markups & Contingencies	20%				9,100	
	TOTAL						**$54,600**
E2	**Natural gas-fired emergency generator in lieu of a diesel-fired generator of the same size, 900Kw.**						
	900KW diesel fueled generator set in weatherproof enclosure	**(1)**	ea	400,000.00	(400,000)		
	900KW gas fired generator set in weatherproof enclosure	**1**	ea	630,000.00	630,000		
	SUBTOTAL					230,000	
	Add Markups & Contingencies	20%				46,000	
	TOTAL						**$276,000**
M1	**Mechanical System Option: Ground source heat pumps**						
	Option M1 - Ground Source Heat Pumps						
	Base option air source VRF	**1**	ls	(14,598,372)	(14,598,372)		
	Ground source heat pumps including closed loop geothermal 130 wells at 500' with electric boiler back-up	**191,796**	sf	120.00	23,015,520		
	SUBTOTAL					8,417,148	
	Add Markups & Contingencies	20%				1,683,430	
	TOTAL						**$10,100,578**

PM&C

East Longmeadow High School 04-Aug-23
East Longmeadow, MA

Schematic Design Cost Estimate

	DESCRIPTION	QTY	UNIT	UNIT COST	EST'D COST	SUB TOTAL	TOTAL COST
M2	**Mechanical System Option: Air source heat pump chillers and water source loop**						
	Option M2 - Air to Water Heat Pump and Water Source Loop with electric boiler back-up						
	Base option air source VRF	**1**	ls	(14,598,372)	(14,598,372)		
	Air to water heat pump system with HW boiler	**191,796**	sf	85.00	16,302,660		
	SUBTOTAL					1,704,288	
	Add Markups & Contingencies	20%				340,858	
	TOTAL						**$2,045,146**
A2	**Brick ILO formed metal panel**	19,990	sf	(22.00)	(439,780)		
	SUBTOTAL					(439,780)	
	Add Markups & Contingencies	20%				(87,956)	
	TOTAL						**($527,736)**

EAST LONGMEADOW HIGH SCHOOL — SD ESTIMATE

MSBA PROJECT # 201900870505

PCM COMPANY
Accuracy You Can Build On

PROJ. NO:	27-148
REVISION:	RECON 4
EST DATE:	8/14/2023
GROSS SF:	***191,796***

DESCRIPTION	UNIT COST	TOTAL COST
DIVISION 02 - EXISTING CONDITIONS	$ 19.69	$ 3,776,720.50
DIVISION 03 - CONCRETE	$ 23.73	$ 4,551,162.36
DIVISION 04 - MASONRY	$ 13.57	$ 2,602,294.00
DIVISION 05 - STEEL	$ 44.00	$ 8,439,341.81
DIVISION 06 - CARPENTRY	$ 3.92	$ 751,466.00
DIVISION 07 - THERMAL & MOISTURE CONTROL	$ 49.85	$ 9,560,989.50
DIVISION 08 - OPENINGS	$ 33.32	$ 6,390,655.00
DIVISION 09 - FINISHES	$ 70.69	$ 13,558,508.81
DIVISION 10 - SPECIALTIES	$ 5.14	$ 986,275.00
DIVISION 11 - EQUIPMENT	$ 21.81	$ 4,183,900.00
DIVISION 12 - FURNISHINGS	$ 10.83	$ 2,077,657.00
DIVISION 13 - SPECIAL CONSTRUCTION	$ 0.20	$ 38,500.00
DIVISION 14 - CONVEYING EQUIPMENT	$ 0.89	$ 170,000.00
DIVISION 21 - FIRE SUPPRESSION	$ 8.09	$ 1,552,368.00
DIVISION 22 - PLUMBING	$ 21.89	$ 4,198,346.00
DIVISION 23 - HVAC	$ 77.79	$ 14,918,909.69
DIVISION 26 - ELECTRICAL	$ 47.14	$ 9,041,019.59
DIVISION 27 - COMMUNICATIONS	$ 10.00	$ 1,917,960.00
DIVISION 28 - ELECTRONIC SAFETY & SECURITY	$ 8.05	$ 1,544,180.00
DIVISION 31 - EARTHWORK	$ 33.14	$ 6,356,066.32
DIVISION 32 - EXTERIOR IMPROVEMENTS	$ 64.41	$ 12,353,879.57
DIVISION 33 - UTILITIES	$ 26.53	$ 5,087,848.86
CONSTRUCTION SUBTOTAL	**$ 594.68**	**$ 114,058,048**
DESIGN / ESTIMATE CONTINGENCY -- 7.5%	7.5%	$ 8,554,354
GENERAL CONDITIONS / REQUIREMENTS (MOS)	33	$ 9,900,000
CONSTRUCTION SUBTOTAL	**$ 690.90**	**$ 132,512,402**
BOND AND INSURANCE -- 2%	2%	$ 2,650,248
CONSTRUCTION SUBTOTAL	**$ 704.72**	**$ 135,162,650**
CM CONTINGENCY -- 2%	2%	$ 2,703,253
CONSTRUCTION SUBTOTAL	**$ 718.82**	**$ 137,865,903**
CONTRACTOR FEE -- 2%	2%	$ 2,757,318
CONSTRUCTION SUBTOTAL	**$ 733.19**	**$ 140,623,221**
ESCALATION - ASSUME AUGUST 2024 START	5.2%	$ 7,169,027
CONSTRUCTION GRAND TOTAL	**$ 770.57**	**$ 147,792,248**

ALTERNATE S1 - ADD LIGHTING TO BASEBALL & SOFTBALL VARSITY FIELDS	$ 6.42	**$ 1,232,259**
ALTERNATE S2 - ADD SPORTS FIELD STORAGE BUILDING	$ 0.21	**$ 40,828**
ALTERNATE S3 - ADD IRRIGATION AT JV BASEBALL, SOFTBALL AND PRACTICE FIELDS	$ 2.67	**$ 513,051**
ALTERNATE S4 - SOD ILO SEED AT ATHLETIC FIELDS	$ 5.29	**$ 1,014,102**
ALTERNATE S5 - ADD SAFETY NETTING 30' HIGH	$ 1.22	**$ 234,023**
ALTERNATE S6 - ADD NATURAL GAS LINE TO EMERGENCY GENERATOR	$ 0.74	**$ 142,316**
ALTERNATE E2 - NATRUAL GAS-FIRED GENERATOR ILO DIESEL-FIRED	$ 1.19	**$ 227,802**
ALTERNATE M1 - GROUND SOURCE HEAT PUMPS	$ 49.59	**$ 9,510,316**
ALTERNATE M2 - AIR SOURCE HEAT PUMP CHILLERS & WATER SOURCE LOOP	$ 12.39	**$ 2,375,602**

EAST LONGMEADOW HIGH SCHOOL — SD ESTIMATE

MSBA PROJECT # 201900870505

PCM COMPANY
Accuracy You Can Build On

PROJ. NO:	27-148
REVISION:	RECON 4
EST DATE:	8/14/2023
GROSS SF:	***191,796***

DESCRIPTION	UNIT COST	TOTAL COST
A10 - FOUNDATIONS	$ 30.19	$ 5,789,966.17
A20 - BASEMENT CONSTRUCTION	$ -	$ -
B10 - SUPERSTRUCTURE	$ 45.14	$ 8,658,373.81
B20 - ENCLOSURE	$ 70.07	$ 13,439,082.25
B30 - ROOFING	$ 25.25	$ 4,842,884.00
C10 - INTERIOR CONSTRUCTION	$ 48.85	$ 9,370,117.25
C20 - STAIRS	$ 2.29	$ 438,785.00
C30 - INTERIOR FINISHES	$ 31.09	$ 5,962,751.06
D10 - CONVEYING	$ 0.89	$ 170,000.00
D20 - PLUMBING	$ 21.89	$ 4,198,346.00
D30 - HVAC	$ 77.79	$ 14,918,909.69
D40 - FIRE PROTECTION	$ 8.09	$ 1,552,368.00
D50 - ELECTRICAL	$ 65.19	$ 12,503,159.59
E10 - EQUIPMENT	$ 21.81	$ 4,183,900.00
E20 - FURNISHINGS	$ 10.83	$ 2,077,657.00
F10 - SPECIAL CONSTRUCTION	$ 0.20	$ 38,500.00
F20 - SELECTIVE BUILDING DEMOLITION	$ 19.69	$ 3,776,720.50
G10 - SITE PREPARATIONS	$ 24.76	$ 4,749,725.00
G20 - SITE IMPROVEMENTS	$ 64.41	$ 12,353,879.57
G30 - SITE CIVIL / MECHANICAL UTILITIES	$ 14.13	$ 2,710,506.02
G40 - SITE ELECTRICAL UTILITIES	$ 12.11	$ 2,322,417.10
CONSTRUCTION SUBTOTAL	**$ 594.68**	**$ 114,058,048**
DESIGN / ESTIMATE CONTINGENCY -- 7.5%	7.5%	$ 8,554,354
GENERAL CONDITIONS / REQUIREMENTS (MOS)	33	$ 9,900,000
CONSTRUCTION SUBTOTAL	**$ 690.90**	**$ 132,512,402**
BOND AND INSURANCE -- 2%	2%	$ 2,650,248
CONSTRUCTION SUBTOTAL	**$ 704.72**	**$ 135,162,650**
CM CONTINGENCY -- 2%	2%	$ 2,703,253
CONSTRUCTION SUBTOTAL	**$ 718.82**	**$ 137,865,903**
CONTRACTOR FEE -- 2%	2%	$ 2,757,318
CONSTRUCTION SUBTOTAL	**$ 733.19**	**$ 140,623,221**
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CONSTRUCTION GRAND TOTAL	**$ 770.57**	**$ 147,792,248**

ALTERNATE S1 - ADD LIGHTING TO BASEBALL & SOFTBALL VARSITY FIELDS	$ 6.42	**$ 1,232,259**
ALTERNATE S2 - ADD SPORTS FIELD STORAGE BUILDING	$ 0.21	**$ 40,828**
ALTERNATE S3 - ADD IRRIGATION AT JV BASEBALL, SOFTBALL AND PRACTICE FIELDS	$ 2.67	**$ 513,051**
ALTERNATE S4 - SOD ILO SEED AT ATHLETIC FIELDS	$ 5.29	**$ 1,014,102**
ALTERNATE S5 - ADD SAFETY NETTING 30' HIGH	$ 1.22	**$ 234,023**
ALTERNATE S6 - ADD NATURAL GAS LINE TO EMERGENCY GENERATOR	$ 0.74	**$ 142,316**
ALTERNATE E2 - NATRUAL GAS-FIRED GENERATOR ILO DIESEL-FIRED	$ 1.19	**$ 227,802**
ALTERNATE M1 - GROUND SOURCE HEAT PUMPS	$ 49.59	**$ 9,510,316**
ALTERNATE M2 - AIR SOURCE HEAT PUMP CHILLERS & WATER SOURCE LOOP	$ 12.39	**$ 2,375,602**

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

PCM COMPANY

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
A - SUBSTRUCTURE				
A10 - FOUNDATIONS				
A1010 - STANDARD FOUNDATIONS				
EARTHWORK				
TRENCH FOOTINGS	$ 40.00	CY	1078	$ 43,133.33
BACKFILL AND COMPACT	$ 40.00	CY	1078	$ 43,133.33
PVC - 4" FOUNDATION DRAIN	$ 12.50	LF	2482	$ 31,025.00
STONE BED	$ 65.00	CY	368	$ 23,900.74
MASS EXCAVATION				
CUT	$ 15.00	CY	13000	$ 195,000.00
FILL, *PLACE AND COMPACT*	$ 18.00	CY	30000	$ 540,000.00
IMPORT FILL	$ 40.00	CY	30000	$ 1,200,000.00
HAUL AND DISPOSE	$ 35.00	CY	13000	$ 455,000.00
REVISIONS FOR OVEREXCAVATION ASSUMPTIONS	$ 1,100,000.00	LS	-1	$ (1,100,000.00)
RIGID INSULATION AT FOUNDATION	$ 3.50	SF	11166	$ 39,079.25
SPREAD FOOTINGS (F4, F5, F6, F7)				
FORM & POUR	$ 870.00	EA	263	$ 228,810.00
FORMWORK MATERIAL	$ 6.00	SF	8478	$ 50,868.00
REBAR	$ 4,200.00	TN	19.36	$ 81,317.30
CONCRETE	$ 155.00	CY	502	$ 77,810.00
FOOTINGS, CONTINUOUS (WF1 2'6"X1')				
FORM & POUR	$ 55.00	LF	2482	$ 136,510.00
FORMWORK MATERIAL	$ 6.00	SF	4962	$ 29,772.00
REBAR	$ 4,200.00	TN	7.15	$ 30,016.02
CONCRETE	$ 155.00	CY	230	$ 35,650.00
FOUNDATION WALLS - ASSUME 4'6" HIGH, 20" THICK				
FORM & POUR	$ 135.00	LF	2482	$ 335,070.00
FORMWORK MATERIAL	$ 6.00	SF	22331	$ 133,986.00
REBAR	$ 4,200.00	TN	32.62	$ 136,995.38

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
CONCRETE	$ 155.00	CY	690	$ 106,950.00
GRADE BEAMS (GB1)				
FORM & POUR	$ 205.00	LF	530	$ 108,650.00
FORMWORK MATERIAL	$ 6.00	SF	1590	$ 9,540.00
REBAR	$ 4,200.00	TN	11.89	$ 49,930.07
CONCRETE	$ 155.00	CY	74	$ 11,470.00
PIERS (P1, P2)	$ 850.00	EA	92	$ 78,200.00
THERMAL MOISTURE PROTECTION				
FOUNDATION WATERPROOFING AT NEW FOUNDATION WALL	$ 7.50	SF	11166	$ 83,741.25
A1010 - STANDARD FOUNDATIONS				**$ 3,195,557.67**
A1030 - SLAB ON GRADE				
EARTHWORK				
STONE UNDER SLAB	$ 65.00	CY	3540	$ 230,074.65
RIGID INSULATION AT SLAB ON GRADE				
4" @ 6' PERIMETER	$ 3.50	SF	14892	$ 52,122.00
2" @ REST OF UNDER SLAB	$ 2.25	SF	127749	$ 287,435.25
ELEVATOR PIT	$ 12,000.00	EA	1	$ 12,000.00
SLAB ON GRADE - 5"	$ 11.25	SF	142641	$ 1,604,711.25
ADD FOR SLOPED/STEPPED SLAB AT AUDITORIUM	$ 25.00	SF	5300	$ 132,500.00
STOOPS AND PADS	$ 5,000.00	LOC	15	$ 75,000.00
THERMAL MOISTURE PROTECTION				
WATERPROOFING; AT ELEVATOR PIT	$ 8,000.00	EA	1	$ 8,000.00
VAPOR BARRIER AT SLAB ON GRADE	$ 1.35	SF	142641	$ 192,565.35

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
A1030 - SLAB ON GRADE				**$ 2,594,408.50**
A10 - FOUNDATIONS				**$ 5,789,966.17**
A20 - BASEMENT CONSTRUCTION				
A20 - BASEMENT CONSTRUCTION				**$ -**
B - SHELL				
B10 - SUPERSTRUCTURE				
B1010 - FLOOR CONSTRUCTION				
SLAB ON DECK - LWT 3.5"	$ 7.25	SF	52384	$ 379,784.00
METAL DECK				
METAL FLOOR DECK - 18GA 3"	$ 8.50	SF	52384	$ 445,264.00
STRUCTURAL STEEL				
FIRST FLOOR - 13 LBS/SF	52,384.00	SF	680992	LBS
HSS AT SCREEN			27654	LBS
TOTAL LBS		LBS	708646	
TOTAL TONS	$ 5,500.00	TN	354.3	$ 1,948,775.81
SPRAY ON FIREPROOFING	$ 2.50	SF	52384	$ 130,960.00
COLUMNS, GIRDERS & BEAMS - NOT DECK				
B1010 - FLOOR CONSTRUCTION				**$ 2,904,783.81**
B1020 - ROOF CONSTRUCTION				
METAL DECK				
METAL DECK - 3" AT DOUBLE HEIGHT SPACE	$ 8.50	SF	4586	$ 38,981.00
ROOF DECK - 3" (ACOUSITC)	$ 8.50	SF	135427	$ 1,151,129.50
SLAB ON ROOF - 3.5"	$ 7.25	SF	14058	$ 101,920.50
STRUCTURAL STEEL				
CANOPY - 12 LBS/SF	1,409.00	SF	16908	LBS

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
ROOF - 11 LBS/SF	111,334.00	SF	1224674	LBS
OPEN WEB JOISTS (GYM, AUD, CAFE) - 6 LBS/SF	24,093.00	SF	144558	LBS
STEEL FRAMING AT GLULAM ROOF - 3 LBS/SF	4,522.00	SF	13566	LBS
TOTAL LBS		LBS	1399706	
TOTAL TONS	$ 5,500.00	TN	699.9	$ 3,849,191.50
GLULAM BEAMS (CAFE)	$ 200.00	LF	445	$ 89,000.00
ROOF BLOCKING	$ 18.00	LF	5500	$ 99,000.00
ADD FOR ROOF OVERHANG	$ 65.00	SF	1320	$ 85,800.00
SPRAY ON FIREPROOFING	$ 2.50	SF	135427	$ 338,567.50
B1020 - ROOF CONSTRUCTION				**$ 5,753,590.00**
B10 - SUPERSTRUCTURE				**$ 8,658,373.81**
B20 - ENCLOSURE				
B2010 - EXTERIOR WALLS				
MASONRY FAÇADE				
BRICK VENEER	$ 45.00	SF	38990	$ 1,754,550.00
GRANITE VENEER	$ 110.00	SF	4165	$ 458,150.00
GLAZED BLOCK	$ 32.00	SF	2128	$ 68,096.00
CAST STONE				
SILLS	$ 75.00	LF	1831	$ 137,325.00
BAND	$ 55.00	LF	2671	$ 146,905.00
THERMAL MOISTURE PROTECTION				
AIR & MOISTURE BARRIER SYSTEM	$ 9.00	SF	91387	$ 822,483.00
MECHANICAL ENCLOSURE / ROOFTOP SCREEN	$ 75.00	SF	2000	$ 150,000.00
INSULATION				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
RIGID MINERAL WOOL INSULATION - 6"	$ 8.25	SF	91387	$ 753,942.75
EXTERIOR PANELS				
FORMED METAL PANEL	$ 70.00	SF	19990	$ 1,399,300.00
COMPOSITE METAL PANEL	$ 90.00	SF	4418	$ 397,620.00
EXTERIOR SOFFIT - COMPOSITE METAL PANELS	$ 90.00	SF	1,483	$ 133,470.00
EXTERIOR SOFFIT - WOOD LOOK METAL	$ 80.00	SF	606	$ 48,480.00
JOINT SEALANTS & CAULKING	$ 1.00	SF	191,796	$ 191,796.00
EXTERIOR WALL				
EXTERIOR WALL - 8" MS, SHEATHING, ROCK WOOL	$ 19.25	SF	91,387	$ 1,759,199.75
GWB AT EXTERIOR WALLS	$ 5.25	SF	91,387	$ 479,781.75
B2010 - EXTERIOR WALLS				**$ 8,701,099.25**
B2020 - EXTERIOR WINDOWS				
EXTERIOR ALUMINUM WINDOWS - TRIPLE GLAZED	$ 145.00	SF	11522	$ 1,670,690.00
SUNSHADE - 25% OF WINDOWS				
AT CURTAIN WALL	$ 150.00	SF	687	$ 103,050.00
AT NON CURTAIN WALL	$ 225.00	LF	878	$ 197,550.00
CURTAINWALL SYSTEM - TRIPLE GLAZED	$ 240.00	SF	10174	$ 2,441,760.00
LOUVERS	$ 250.00	SF	200	$ 50,000.00
JOINT SEALANTS & CAULKING	$ 0.50	SF	191796	$ 95,898.00
B2020 - EXTERIOR WINDOWS				**$ 4,558,948.00**
B2030 - EXTERIOR DOORS				
ALUMINUM & GLASS DOORS				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
EXTERIOR				
ALUMINUM, SINGLE	$ 6,000.00	EA	2	$ 12,000.00
ALUMINUM, DOUBLE	$ 8,500.00	EA	12	$ 102,000.00
HARDWARE	$ 1,500.00	LEAF	26	$ 39,000.00
HM / WOOD DOORS / FRAMES				
HOLLOW METAL FRAMES				
SINGLE HM	$ 475.00	EA	1	$ 475.00
DOUBLE HM	$ 575.00	EA	3	$ 1,725.00
EXTERIOR STEEL DOORS	$ 550.00	EA	7	$ 3,850.00
HARDWARE MATERIAL				
EXTERIOR HARDWARE SETS	$ 900.00	EA	7	$ 6,300.00
DOORS / FRAMING / HARDWARE LABOR				
INSTALL DOORS	$ 270.00	EA	7	$ 1,890.00
INSTALL SINGLE FRAMES	$ 270.00	EA	1	$ 270.00
INSTALL DOUBLE FRAMES	$ 405.00	EA	3	$ 1,215.00
HARDWARE INSTALLATION	$ 405.00	EA	7	$ 2,835.00
OVERHEAD DOORS AT LODAING DOCK	$ 7,475.00	EA	1	$ 7,475.00
B2030 - EXTERIOR DOORS				**$ 179,035.00**
B20 - ENCLOSURE				**$13,439,082.25**
B30 - ROOFING				
B3010 - ROOF COVERINGS				
ROOFING				
PVC MEMBRANE ROOF W/ INSULATION - 1&1A	$ 28.00	SF	128,694	$ 3,603,432.00
PVC MEMBRANE ROOF W/ INSULATION - 1B	$ 29.00	SF	14,058	$ 407,682.00
PVC MEMBRANE ROOF W/ INSULATION - 2	$ 29.00	SF	1,312	$ 38,048.00
ROOF SPECIALTIES	$ 50,000.00	LS	1	$ 50,000.00
GUTTER	$ 22.00	LF	87	$ 1,914.00
LEADER	$ 22.00	LF	48	$ 1,056.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
ROOF HATCH	$ 3,500.00	EA	1	$ 3,500.00
ROOF DRAIN: SUPPLY, SET, FLASH	$ 450.00	EA	45	$ 20,250.00
FASCIA / COPING	$ 28.00	LF	4,651	$ 130,228.00
PERIMETER CONDITION	$ 75.00	LF	4,651	$ 348,825.00
SKYLIGHTS	$ 5,000.00	EA	6	$ 30,000.00
PREFABRICATED CANOPIES	$ 5,000.00	EA	7	$ 35,000.00
JOINT SEALANTS & CAULKING	$ 0.25	SF	191796	$ 47,949.00
EXPANSION JOINT ASSEMBLY ALLOWANCE	$ 500.00	LF	250	$ 125,000.00
B3010 - ROOF COVERINGS				**$ 4,842,884.00**
B30 - ROOFING				**$ 4,842,884.00**

C - INTERIORS				
C10 - INTERIOR CONSTRUCTION				
C1010 - PARTITIONS				
INTERIOR CMU PARTITIONS				
8" - RATED M8R (ELEVATOR SHAFT)	$ 28.00	SF	1,331	$ 37,268.00
BLOCKING				
INTERIOR	$ 10.00	LF	5,000	$ 50,000.00
INTERIOR STOREFRONT				
INTERIOR ALUMINUM STOREFRONT	$ 115.00	SF	1,389	$ 159,735.00
WITH SCHOOLGUARD GLASS				
TRANSACTION WINDOWS	$ 5,000.00	EA	4	$ 20,000.00
GLAZING				
CLASSROOM GLAZED WALL AREA - 16 SF / EA	$ 95.00	SF	896	$ 85,120.00
SIDELIGHTS	$ 850.00	EA	50	$ 42,500.00
GLAZING ALLOWANCE	$ 150,000.00	ALLW	1	$ 150,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
INTERIOR PARTITIONS (EXCLUDING GWB)				
C3A - 1MS 4" - 2GYP - 1SB - ONE SIDED	$ 10.00	SF	19,632	$ 196,320.00
C3C - 1MS 4" - 1CB - 1SB - ONE SIDED	$ 10.00	SF	1,426	$ 14,260.00
G4E - 1MS 4" - 2GYP - 1SB	$ 10.00	SF	339	$ 3,390.00
G6 - 1MS 6" - 2GYP - 1SB	$ 12.00	SF	52,281	$ 627,372.00
G6R - 1MS 6" - 2GYP 'X' - 1SB	$ 12.00	SF	6,844	$ 82,128.00
G6A - 1MS 6" - 3GYP - 1SB	$ 12.00	SF	62,494	$ 749,928.00
G6B - 1MS 6" - 4GYP - 1SB	$ 12.00	SF	17,570	$ 210,840.00
G6D - 1MS 6" - 2GYP - 1CB	$ 12.00	SF	4,335	$ 52,020.00
G6E - 1MS 6" - 1GYP - 1CB	$ 12.00	SF	2,354	$ 28,248.00
G6F - 1MS 6" - 2CB	$ 12.00	SF	1,254	$ 15,048.00
G10B - 2MS 4" - 4GYP - 2SB	$ 20.00	SF	4,983	$ 99,660.00
G12A - 1MS 6" - 1MS 2.5" - 3GYP - 2SB	$ 17.00	SF	7,714	$ 131,138.00
G12B - 1MS 6" - 1MS 2.5" - 4GYP -2SB	$ 17.00	SF	11,562	$ 196,554.00
G14B - 1MS 6" - 1MS 4" - 4GYP -2SB	$ 22.00	SF	6,458	$ 142,076.00
P8C - 2MS 4" - 1GYP - 1CB - 2SB	$ 20.00	SF	135	$ 2,700.00
P8D - 2MS 4" - 2GYP - 1CB - 2SB	$ 20.00	SF	874	$ 17,480.00
P11E - 2MS 4" - 2CB - 2SB	$ 20.00	SF	1,469	$ 29,380.00
INTERIOR GWB AT PARTITIONS				
GWB AT INTERIOR WALLS	$ 4.25	SF	544,341	$ 2,313,449.25
ADD FOR IMPACT RESISTANT GWB	$ 350,000.00	ALLW	1	$ 350,000.00
JOINT SEALANTS & CAULKING	$ 0.75	SF	191,796	$ 143,847.00
C1010 - PARTITIONS				**$ 5,950,461.25**
C1020 - INTERIOR DOORS				
INTERIOR STOREFRONT				
INTERIOR ALUMINUM DOORS				
SINGLE	$ 4,000.00	EA	2	$ 8,000.00
DOUBLE	$ 6,000.00	EA	7	$ 42,000.00
ADD FOR HARDWARE	$ 1,500.00	LEAF	16	$ 24,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
FRAMELESS GLASS DOOR				
DOUBLE	$ 15,000.00	EA	9	$ 135,000.00
ADD FOR HARDWARE	$ 1,500.00	LEAF	18	$ 27,000.00
GLAZING				
DOOR LITES	$ 225.00	EA	193	$ 43,425.00
HM / WOOD DOORS / FRAMES				
HOLLOW METAL FRAMES				
SINGLE HM	$ 475.00	EA	242	$ 114,950.00
DOUBLE HM	$ 575.00	EA	55	$ 31,625.00
INTERIOR WOOD DOORS	$ 575.00	EA	352	$ 202,400.00
HARDWARE MATERIAL				
INTERIOR HARDWARE SETS	$ 800.00	EA	352	$ 281,600.00
DOORS / FRAMING / HARDWARE LABOR				
INSTALL DOORS	$ 270.00	EA	352	$ 95,040.00
INSTALL SINGLE FRAMES	$ 270.00	EA	242	$ 65,340.00
INSTALL DOUBLE FRAMES	$ 405.00	EA	55	$ 22,275.00
HARDWARE INSTALLATION	$ 405.00	EA	352	$ 142,560.00
COILING DOORS	$ 6,500.00	EA	4	$ 26,000.00
C1020 - INTERIOR DOORS				**$ 1,261,215.00**
C1030 - SPECIALTIES				
MISCELLANEOUS METALS ALLOWANCE	$ 500,000.00	ALLW	1	$ 500,000.00
STAGE FRAMING	$ 65.00	SF	1,630	$ 105,950.00
MISC AND ORNAMENTAL				
HANDRAIL AT AUDITORIUM	$ 220.00	LF	218	$ 47,960.00
GUARD AT 2ND FLOOR OPENINGS	$ 350.00	LF	247	$ 86,450.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
UNISTRUTS AT LAB	$ 35.00	LF	694	$ 24,290.00
INTERIOR FINISH CARPENTRY ALLOWANCE	$ 1.00	SF	191,796	$ 191,796.00
VISUAL DISPLAY BOARDS ALLOWANCE	$ 275,000.00	ALLW	1	$ 275,000.00
PLASTIC TOILET PARTITION				
TOILET/SHOWER PARITION	$ 1,350.00	EA	41	$ 55,350.00
URINAL SCREEN	$ 650.00	EA	10	$ 6,500.00
LOCKERS (15" WIDE)	$ 525.00	EA	229	$ 120,225.00
ATHLETIC LOCKERS (24" WIDE)	$ 650.00	EA	40	$ 26,000.00
ATHLETIC LOCKER w/ BENCHES	$ 750.00	EA	154	$ 115,500.00
TOILET AND BATH ACCESSORIES				
SINGLE USER BATHROOMS	$ 1,500.00	LOC	23	$ 34,500.00
MULTI-USER BATHROOMS	$ 5,000.00	LOC	14	$ 70,000.00
PROJECTOR MOUNTS	$ 400.00	EA	2	$ 800.00
PROJECTION SCREENS				
LARGE	$ 5,000.00	EA	2	$ 10,000.00
SIGNAGE				
INTERIOR ALLOWANCE	$ 65,000.00	ALLW	1	$ 65,000.00
EXTERIOR ALLOWANCE	$ 50,000.00	ALLW	1	$ 50,000.00
GRAPHICS ALLOWANCE	$ 60,000.00	ALLW	1	$ 60,000.00
DISPLAY CASES	$ 400.00	LF	57	$ 22,800.00
POSTER/ART DISPLAY	$ 300.00	LF	112	$ 33,600.00
WOOD BENCHES	$ 125.00	LF	38	$ 4,750.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
LOCKER ROOM BENCHES	$ 100.00	LF	60	$ 6,000.00
LOCKER ROOM BENCHES - ADA	$ 125.00	LF	14	$ 1,750.00
MAIL BOX UNIT	$ 6,000.00	EA	1	$ 6,000.00
WALL PROTECTION				
CORNER GUARDS	$ 150.00	EA	150	$ 22,500.00
CABINETRY				
CUSTOM RECEPTIONS DESK	$ 500.00	LF	131	$ 65,500.00
SOLID SURFACE SILL	$ 85.00	LF	32	$ 2,720.00
MEDIA CENTER CIRCULATION DESKS	$ 800.00	LF	39	$ 31,200.00
MEDIA CENTER BOOKCASES - SINGLE SIDE	$ 300.00	LF	89	$ 26,700.00
MEDIA CENTER BOOKCASES - DOUBLE SIDE	$ 450.00	LF	168	$ 75,600.00
CIRCULATION MIXED DISPLAY	$ 200.00	LF	40	$ 8,000.00
CUBBY STORAGE w/ BENCHES	$ 1,500.00	EA	4	$ 6,000.00
C1030 - SPECIALTIES				**$ 2,158,441.00**
C10 - INTERIOR CONSTRUCTION				**$ 9,370,117.25**
C20 - STAIRS				
C2010 - STAIR CONSTRUCTION				
CONCRETE				
PAN FILLED TREADS / LANDINGS	$ 6,500.00	FLT	5	$ 32,500.00
METAL STAIRS				
WING STAIRS	$ 45,000.00	FLT	3	$ 135,000.00
EGRESS STAIRS	$ 45,000.00	FLT	1	$ 45,000.00
MAIN ENTRANCE STAIRS / SEATING	$ 75,000.00	FLT	1	$ 75,000.00
COMPLETE ASSEMBLY INCLUDING RAILS AND LANDINGS				
ROOF LADDER	$ 3,000.00	EA	1	$ 3,000.00
ELEVATOR PIT LADDER	$ 3,500.00	EA	1	$ 3,500.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
FINISHES				
MONUMENTAL SEATING STAIR FLOORING	$ 100,000.00	FLT	1	$ 100,000.00
TERRAZZO STAIR FLOORING	$ 65.00	SF	689	$ 44,785.00
C2010 - STAIR CONSTRUCTION				**$ 438,785.00**
C20 - STAIRS				**$ 438,785.00**
C30 - INTERIOR FINISHES				
C3010 - WALL FINISHES				
PAINT				
WALLS	$ 1.00	SF	314,260	$ 314,260.00
DOOR FRAMES	$ 100.00	EA	301	$ 30,100.00
METAL DOORS	$ 150.00	EA	7	$ 1,050.00
RAILS	$ 10.00	LF	465	$ 4,650.00
ACOUSTIC WALL TREATMENT				
ACOUSTIC PANELS AT BAND, CHORUS, AUD	$ 25.00	SF	2,700	$ 67,500.00
WOOD ACOUSTIC PANELS - MEDIA CENTER, CAFÉ	$ 85.00	SF	2,000	$ 170,000.00
WOOD VENEER PANELS - AUD, LGI, CAFÉ	$ 55.00	SF	4,100	$ 225,500.00
COLORED ACOUSTIC PANELS - CIRCULATION	*$ 25.00*	*SF*		*$ -*
TECTUM WALL PANELS - ALT PE, CAFÉ, LGI	$ 22.00	SF	1,700	$ 37,400.00
FRP AT KITCHEN & JANITOR'S CLOSETS	$ 12.00	SF	4,375	$ 52,500.00
TILE				
CERAMIC WALL TILE AT BATHROOMS	$ 28.00	SF	12,000	$ 336,000.00
PORCELAIN WALL TILE - CORRIDORS	$ 28.00	SF	9,648	$ 270,144.00
GLAZED THIN BRICK AT CORRIDORS	$ 32.00	SF	3,088	$ 98,816.00
CERAMIC TILE BASE	$ 28.00	LF	2,012	$ 56,325.92
BASE, PORCELAIN TILE	$ 32.00	LF	3,321	$ 106,272.00
C3010 - WALL FINISHES				**$ 1,770,517.92**
C3020 - FLOOR FINISHES				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
MOISTURE MITIGATION MEASURES	*$ 2.00*	*SF*		*$ -*
TILE				
CERAMIC FLOOR TILE	$ 28.00	SF	5,602	$ 156,856.00
FLOORS, PORCELAIN TILE	$ 32.00	SF	23,913	$ 765,216.00
EPOXY RESINOUS FLOOR	$ 12.00	SF	4,169	$ 50,028.00
ADD FOR INTEGRAL BASE	$ 12.00	LF	305	$ 3,660.00
SEALED CONCRETE	$ 3.50	SF	18,050	$ 63,175.00
WOOD FLOOR AT STAGE	$ 18.00	SF	1,630	$ 29,340.00
GYM FLOOR				
WOOD	$ 15.00	SF	14,265	$ 213,975.00
CARPET AND RESILIENT				
CARPET TILE	$ 6.25	SF	32,273	$ 201,706.25
LINOLEUM	$ 10.00	SF	61,125	$ 611,250.00
RUBBER BASE	$ 4.50	LF	18,382	$ 82,720.89
VENTED RUBBER BASE - GYM/AUDITORIUM	$ 6.00	LF	1,297	$ 7,782.00
RUBBER FLOORING - LABS	$ 15.00	SF	23,157	$ 347,355.00
ADD FOR BASE	$ 15.00	LF	2,768	$ 41,520.00
C3020 - FLOOR FINISHES				**$ 2,574,584.14**
C3030 - CEILING FINISHES				
K-13 INSULATION AT ART, STEM & VIDEO	$ 10.00	SF	5000	$ 50,000.00
GYP SOFFITS AND CEILINGS				
GWB CEILINGS	$ 12.00	SF	4,161	$ 49,936.80
GWB CEILINGS - RATED	$ 15.00	SF	1,584	$ 23,760.00
GWB CEILINGS & SOFFITS ALLOWANCE	$ 100,000.00	ALLW	1	$ 100,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
ACOUSTIC CEILING				
ACT	$ 6.50	SF	125,486	$ 815,659.00
ACT - WASHABLE	$ 8.50	SF	13,279	$ 112,871.50
INTERIOR SLATTED WOOD	$ 55.00	SF	2,620	$ 144,100.00
PAINT				
CEILINGS AND SOFFITS	$ 3.50	SF	5,745	$ 20,108.90
EXPOSED CEILNGS / STRUCTURE	$ 4.00	SF	54,810	$ 219,240.00
SOUND DIFFUSING PANELS	$ 28.00	SF	2,928	$ 81,972.80
C3030 - CEILING FINISHES				**$ 1,617,649.00**
C30 - INTERIOR FINISHES				**$ 5,962,751.06**

D - SERVICES				
D10 - CONVEYING				
D1010 - ELEVATORS & LIFTS				
ELEVATOR				
2 STOP	$ 170,000.00	EA	1	$ 170,000.00
D1010 - ELEVATORS & LIFTS				**$ 170,000.00**
D10 - CONVEYING				**$ 170,000.00**
D20 - PLUMBING				
D2010 - PLUMBING FIXTURES				
FIXTURES, *INCLUDES ROUGH-IN*				
WATER CLOSET	$ 2,000.00	EA	57	$ 114,000.00
LAVATORY	$ 2,000.00	EA	29	$ 58,000.00
URINAL	$ 2,200.00	EA	15	$ 33,000.00
SINKS	$ 2,000.00	EA	25	$ 50,000.00
LAB PREP FLOOR SINK	$ 2,200.00	EA	4	$ 8,800.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
CAN WASH ROOM SINK	$ 2,800.00	EA	1	$ 2,800.00
MAIN KITCHEN SINKS	$ 2,800.00	EA	4	$ 11,200.00
LAB / ART SINKS	$ 2,800.00	EA	55	$ 154,000.00
SHOWER	$ 5,000.00	EA	11	$ 55,000.00
ELECTRIC WATER COOLER	$ 3,250.00	EA	6	$ 19,500.00
ELECTRIC WATER COOLER LO-HI	$ 3,250.00	EA	3	$ 9,750.00
EMERGENCY SHOWER / EYEWASH	$ 6,000.00	EA	8	$ 48,000.00
EMERGENCY EYEWASH AT EXAM ROOMS	$ 3,500.00	EA	4	$ 14,000.00
MOP SINK	$ 1,800.00	EA	4	$ 7,200.00
TROUGH SINK - 4 FAUCET	$ 8,250.00	EA	6	$ 49,500.00
TROUGH SINK - 3 FAUCET	$ 6,400.00	EA	1	$ 6,400.00
TROUGH SINK - 2 FAUCET	$ 5,000.00	EA	1	$ 5,000.00
HOSE BIBS - INTERIOR	$ 1,300.00	EA	41	$ 53,300.00
HOSE BIBS - EXTERIOR	$ 1,500.00	EA	16	$ 24,000.00
D2010 - PLUMBING FIXTURES				**$ 723,450.00**
D2020 - DOMESTIC WATER DISTRIBUTION				
DOMESTIC WATER PIPING				
PER FIXTURE	$ 4,500.00	EA	291	$ 1,309,500.00
KITCHEN REQUIREMENTS	$ 30,000.00	ALLW	1	$ 30,000.00
EQUIPMENT				
CIRCULATION PUMPS	$ 3,800.00	EA	2	$ 7,600.00
ELECTRIC WATER HEATERS	$ 125,000.00	EA	2	$ 250,000.00
MASTER MIXING VALVE	$ 12,000.00	EA	1	$ 12,000.00
D2020 - DOMESTIC WATER DISTRIBUTION				**$ 1,609,100.00**
D2030 - SANITARY WASTE				
SANITARY & VENT PIPING				
PER FIXTURE	$ 4,000.00	EA	234	$ 936,000.00
KITCHEN REQUIREMENTS	$ 25,000.00	ALLW	1	$ 25,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
EQUIPMENT				
ELEVATOR SUMP PUMP, INCL DISCHARGE	$ 3,500.00	EA	1	$ 3,500.00
GREASE TRAP	$ 12,000.00	EA	1	$ 12,000.00
LABORATORY WASTE SYSTEM	$ 150,000.00	LS	1	$ 150,000.00
FLOOR DRAINS	$ 4,500.00	EA	55	$ 247,500.00
D2030 - SANITARY WASTE				**$ 1,374,000.00**
D2040 - RAIN WATER DRAINAGE				
ROOF DRAINS	$ 6,000.00	EA	50	$ 300,000.00
D2040 - RAIN WATER DRAINAGE				**$ 300,000.00**
D2090 - OTHER PLUMBING SYSTEMS				
LABORATORY GAS PIPING	$ 3,500.00	LOC		$ -
PASSIVE RADON SYSTEM	$ 1.00	SF	191,796	$ 191,796.00
D2090 - OTHER PLUMBING SYSTEMS				**$ 191,796.00**
D20 - PLUMBING				**$ 4,198,346.00**
D30 - HVAC				
D3010 - ENERGY SUPPLY				
GAS PIPING ALLOWANCE		SF	191,796	$ -
D3010 - ENERGY SUPPLY				$ -
D3030 - COOLING GENERATING SYSTEMS				
EQUIPMENT				
ACCU'S SERVING FCU'S, CASSETTES, DOAS, AHU'S	$ 6.50	SF	191,796	$ 1,246,674.00
D3030 - COOLING GENERATING SYSTEMS				**$ 1,246,674.00**
D3040 - DISTRIBUTION SYSTEMS				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
AIR DISTRIBUTION				
DUCTWORK - ASSUME 1 LBS/SF	$ 18.00	LBS	191796	$ 3,452,328.00
INSULATION	$ 5.25	SF	143847	$ 755,196.75
DIFFUSERS / REGISTERS; *INCL DAMPERS / FLEX*	$ 260.00	EA	1534	$ 398,840.00
STAINLESS STEEL DUCTWORK FOR KITCHEN EXHAUST	$ 75,000.00	ALLW	1	$ 75,000.00
REFRIGERANT PIPING & INSULATION	$ 4.00	SF	191796	$ 767,184.00
EQUIPMENT				
ROOF TOP AIR HANDLING UNITS - SINGLE ZONE, VAV, DX HEAT PUMP COIL				
16,000 CFM	$ 400,000.00	EA	1	$ 400,000.00
7,000 CFM	$ 196,000.00	EA	1	$ 196,000.00
4,000 CFM	$ 112,000.00	EA	1	$ 112,000.00
3,000 CFM	$ 90,000.00	EA	1	$ 90,000.00
15,000 CFM - DISPLACEMENT VENTILATION	$ 420,000.00	EA	1	$ 420,000.00
DOAS UNITS - 17,000 CFM	$ 510,000.00	EA	2	$ 1,020,000.00
DOAS UNITS - 6,000 CFM	$ 192,000.00	EA	2	$ 384,000.00
KITCHEN EXHAUST HOODS - 4,000 CFM	$ 24,000.00	EA	2	$ 48,000.00
KILN EXHAUST HOOD - 500 CFM	$ 5,500.00	EA	1	$ 5,500.00
LAB EXHAUST FANS - 3,000 CFM	$ 22,000.00	EA	2	$ 44,000.00
RIGGING	$ 250,000.00	LS	1	$ 250,000.00
D3040 - DISTRIBUTION SYSTEMS				**$ 8,418,048.75**
D3050 - TERMINAL & PACKAGE UNITS				
EQUIPMENT				
VAV BOXES - ASSUME 1 EA / 500 SF	$ 2,200.00	EA	384	$ 844,800.00
UNIT HEATERS	$ 4,200.00	EA	17	$ 71,400.00
FAN COIL UNITS / CASSETTES - ASSUME 1 EA / 400 SF	$ 3,400.00	EA	479	$ 1,628,600.00
SPLIT UNITS AT IT/ELECTRICAL CLOSETS	$ 5,500.00	EA	10	$ 55,000.00
AIR CURTAIN AT LOADING DOCK	$ 6,500.00	EA	1	$ 6,500.00
D3050 - TERMINAL & PACKAGE UNITS				**$ 2,606,300.00**

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

			GROSS SF	191,796
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
D3060 - CONTROLS & INSTUMENTATION				
CONTROLS			15.00%	$ 1,840,653.41
D3060 - CONTROLS & INSTUMENTATION				**$ 1,840,653.41**
D3070 - SYSTEMS TESTING & BALANCING				
TEST AND BALANCE			2.00%	$ 282,233.52
COMMISIONING	$ 250,000.00	LS	1	$ 250,000.00
D3070 - SYSTEMS TESTING & BALANCING				**$ 532,233.52**
D3090 - OTHER HVAC SYSTEMS & EQUIPMENT				
COORDINATION	$ 125,000.00	LS	1	$ 125,000.00
MANAGEMENT	$ 150,000.00	LS	1	$ 150,000.00
D3090 - OTHER HVAC SYSTEMS & EQUIPMENT				**$ 275,000.00**
D30 - HVAC				**$14,918,909.69**
D40 - FIRE PROTECTION				
D4040 - SPRINKLERS				
NEW WET SPRINKLER SYSTEM	$ 8.00	SF	191796	$ 1,534,368.00
INCLUDING MAINS, BRANCH PIPING AND HEADS				
D4040 - SPRINKLERS				**$ 1,534,368.00**
D4050 - FIRE PROTECTION SPECIALTIES				
FIRE EXTINGUISHER & CABINET	$ 600.00	EA	30	$ 18,000.00
D4050 - FIRE PROTECTION SPECIALTIES				**$ 18,000.00**
D40 - FIRE PROTECTION				**$ 1,552,368.00**
D50 - ELECTRICAL				
D5010 - ELECTRICAL SERVICE & DISTIBUTION				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

			GROSS SF	***191,796***	
DESCRIPTION		UNIT COST	UNIT	QUANTITY	TOTAL
POWER AND DISTRIBUTION					
SWITCH GEAR - 4000 AMP		$ 285,000.00	EA	1	$ 285,000.00
PANELBOARDS					
1200 AMP		$ 15,000.00	EA	1	$ 15,000.00
600 AMP		$ 8,000.00	EA	1	$ 8,000.00
400 AMP		$ 6,500.00	EA	6	$ 39,000.00
250 AMP		$ 5,500.00	EA	7	$ 38,500.00
225 AMP		$ 5,250.00	EA	5	$ 26,250.00
150 AMP		$ 4,800.00	EA	10	$ 48,000.00
100 AMP		$ 4,000.00	EA	13	$ 52,000.00
ELEVATOR, LIGHTING CABINETS		$ 3,500.00	EA	3	$ 10,500.00
TRANSFORMERS					
75 kVA		$ 19,850.00	EA	10	$ 198,500.00
45 kVA		$ 14,500.00	EA	8	$ 116,000.00
ADD'L PANELS & TRANSFORMER NOT INDICATED		$ 75,000.00	ALLW	1	$ 75,000.00
BRANCH FEEDERS AND SUBFEEDERS					
KT4 / T4 INCOMING	*3#4, #8, 1-1/4" C*	$ 35.05	LF	160	$ 5,608.00
KT5 / T5 INCOMING	*3#1/0, #6, 1-1/2" C*	$ 48.85	LF	200	$ 9,770.00
T4 OUTGOING	*4#1/0, #6, 2" C*	$ 63.35	LF	140	$ 8,869.00
KT4 OUTGOING	*5#1/0, #6, 2" C*	$ 68.75	LF	20	$ 1,375.00
T5 OUTGOING	*4#250KCMIL, #2, 3" C*	$ 106.45	LF	60	$ 6,387.00
KT5 OUTGOING	*5#250KCMIL, #2, 3" C*	$ 117.40	LF	140	$ 16,436.00
1200Y	*NOT SIZED*	$ 450.00	LF	60	$ 27,000.00
600Y	*2 SETS 4#350KCMIL, #1, 3" C*	$ 245.80	LF	20	$ 4,916.00
400Y	*4#600KCMIL, #3, 4" C*	$ 197.80	LF	1545	$ 305,601.00
250Y	*4#250KCMIL, #4, 3" C*	$ 105.25	LF	760	$ 79,990.00
200Y	*4#3/0, #6, 2" C*	$ 73.85	LF	1695	$ 125,175.75
150Y	*4#1/0, #6, 2" C*	$ 63.40	LF	130	$ 8,242.00
100Y	*4#2, #8, 1-1/4" C*	$ 43.40	LF	530	$ 23,002.00
60Y	*4#6, #10, 1-1/4" C*	$ 35.80	LF	830	$ 29,714.00
150D	*3#1/0, #6, 1-1/2" C*	$ 48.90	LF	480	$ 23,472.00
ADD'L BRANCH FEEDERS & SUBFEEDERS ALLOWANCE		$ 50,000.00	ALLW	1	$ 50,000.00
ALUMINUM FEEDERS ILO COPPER		$ 75,000.00	LS	-1	$ (75,000.00)

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
D5010 - ELECTRICAL SERVICE & DISTIBUTION				**$ 1,562,307.75**
D5020 - LIGHTING & BRANCH WIRING				
LIGHT FIXTURES				
LIGHT FIXTURES - ASSUME 1 EA / 50 SF	$ 250.00	EA	3836	$ 959,000.00
LABOR TO INSTALL FIXTURES (ALLOW 1.5HRS/EA)	$ 217.50	EA	3836	$ 834,330.00
STAGE LIGHTING SYSTEM	$ 125,000.00	LS	1	$ 125,000.00
LIGHTING CONTROL SYSTEM	$ 3.50	SF	191796	$ 671,286.00
THEATER LIGHTING CONTROLS	$ 141,000.00	LS	1	$ 141,000.00
POWER & LIGHTING DEVICES	$ 5.50	SF	191796	$ 1,054,878.00
WIRE & CONDUIT, *FOR LIGHTS*				
CONDUIT - ALLOW 3/4" EMT	$ 13.98	LF	46032	$ 643,527.36
#12	$ 78.00	CLF	1380.96	$ 107,714.88
HVAC LINE VOLTAGE	$ 500,000.00	LS	1	$ 500,000.00
MISC POWER: *INCLUDING CONDUIT, WIRE & JUNCTION BOX FOR COMPLETE INSTALLATION*				
ELEVATOR / SUMP PUMP	$ 3,000.00	EA	1	$ 3,000.00
GYM EQUIPMENT	$ 5,000.00	LS	1	$ 5,000.00
LAB EQUIPMENT	$ 3,500.00	LOC	8	$ 28,000.00
KITCHEN	$ 35,000.00	LS	1	$ 35,000.00
EV CHARGING STATION - DUAL HEAD	$ 12,500.00	EA	5	$ 62,500.00
D5020 - LIGHTING & BRANCH WIRING				**$ 5,170,236.24**
D5030 - COMMUNICATIONS & SECURITY				
FIRE ALARM				
NEW FIRE ALARM SYSTEM	$ 4.25	SF	191796	$ 815,133.00
AREA OF REFUGE SYSTEM	$ 0.75	SF	191796	$ 143,847.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
SECURITY & ACCESS CONTROL				
CARD ACCESS - INCL WIRE/CONDUIT	$ 2,200.00	EA	46	$ 101,200.00
ACCESS CONTROL HDWR, SOFTWARE, PRINTER	$ 75,000.00	EA	1	$ 75,000.00
CAMERA, INTERIOR	$ 1,800.00	EA	80	$ 144,000.00
CAMERA, EXTERIOR	$ 2,300.00	EA	50	$ 115,000.00
FRONT END MONITORING	$ 150,000.00	LS	1	$ 150,000.00
TELE/DATA	$ 5.50	SF	191796	$ 1,054,878.00
AUDIO / VISUAL ALLOWANCE	$ 4.50	SF	191796	$ 863,082.00
D5030 - COMMUNICATIONS & SECURITY				**$ 3,462,140.00**
D5090 - OTHER ELECTRICAL SERVICES				
GENERATOR & TRANSFER SWITCHES - 900 KW	$ 510,000.00	LS	1	$ 510,000.00
GROUNDING SYSTEMS	$ 0.35	SF	191796	$ 67,128.60
LIGHTNING PROTECTION	$ 0.75	SF	191796	$ 143,847.00
PV REQUIREMENTS				
PV PANELS ALLOWANCE	$ 31.75	SF	50000	$ 1,587,500.00
PV SYSTEM BATTERY STORAGE	$ 150,000.00	EA	1	$ 150,000.00
PV EXTERIOR SWITCH BOARD - 1000 AMP	$ 25,000.00	EA	1	$ 25,000.00
PV INVERTERS - 33.3 KW	$ 5,490.00	EA	15	$ 82,350.00
TRANSCLOSURE CABINET - 4000 AMP	$ 85,000.00	EA	1	$ 85,000.00
D5090 - OTHER ELECTRICAL SERVICES				**$ 2,308,475.60**
D50 - ELECTRICAL				**$ 12,503,160**

E - EQUIPMENT & FURNISHINGS				
E10 - EQUIPMENT				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
E1020 - INSTITUTIONAL EQUIPMENT				
LABORATORY EQUIPMENT	$ 20,000.00	LOC	8	$ 160,000.00
THEATER & STAGE				
ADJUSTABLE ACOUSTIC	$ 99,000.00	LS	1	$ 99,000.00
THEATER RIGGING	$ 55,500.00	LS	1	$ 55,500.00
STAGE CURTAINS	$ 23,500.00	LS	1	$ 23,500.00
LIGHTING FIXTURES	$ 141,000.00	LS	1	$ 141,000.00
VALUES IDENTIFIED BY NEXTSTAGE DESIGN				
AV ALLOWANCES				
GYM	$ 150,000.00	LS	1	$ 150,000.00
AUDITORIUM	$ 200,000.00	LS	1	$ 200,000.00
CAFETERIA	$ 150,000.00	LS	1	$ 150,000.00
LGI	$ 50,000.00	LS	1	$ 50,000.00
BAND	$ 50,000.00	LS	1	$ 50,000.00
CHORUS	$ 50,000.00	LS	1	$ 50,000.00
MEDIA CENTER	$ 50,000.00	LS	1	$ 50,000.00
TV STUDIO	$ 50,000.00	LS	1	$ 50,000.00
TV STUDIO LIGHTING ALLOWANCE	$ 75,000.00	LS	1	$ 75,000.00
E1020 - INSTITUTIONAL EQUIPMENT				**$ 1,304,000.00**
E1090 - OTHER EQUIPMENT				
KITCHEN EQUIPMENT	$ 1,550,000.00	LS	1	$ 1,550,000.00
VALUE IDENTIFIED BY J.M. SCHIAVONE				
WALK IN REFRIGERATOR - INCLUDED IN ABOVE VALUE				
WALK IN FREEZER - INCLUDED IN ABOVE VALUE				
CULINARY ARTS CLASSROOM EQUIPMENT	$ 800,000.00	LS	1	$ 800,000.00
VALUE IDENTIFIED BY J.M. SCHIAVONE				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

			GROSS SF	***191,796***
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
FUME HOOD	$ 5,000.00	EA	6	$ 30,000.00
GYM EQUPMENT				
BASKETBALL BACKSTOP	$ 7,000.00	EA	6	$ 42,000.00
SCOREBOARD	$ 6,500.00	EA	2	$ 13,000.00
VOLLEYBALL SLEEVE SET	$ 1,000.00	EA	2	$ 2,000.00
WALL PADS	$ 20.00	SF	1,910	$ 38,200.00
GYM DIVIDER CURTAIN	$ 1,200.00	LF	86	$ 103,200.00
BLEACHERS, TELESCOPING - 8 TIER	$ 1,500.00	LF	201	$ 301,500.00
E1090 - OTHER EQUIPMENT				**$ 2,879,900.00**
E10 - EQUIPMENT				**$ 4,183,900.00**
E20 - FURNISHINGS				
E2010 - FIXED FURNISHINGS				
CABINETRY				
WALL CABINETS	$ 335.00	LF	165	$ 55,275.00
BASE CABINETS	$ 355.00	LF	268	$ 95,140.00
TALL STORAGE 1.5X2.5X7	$ 1,800.00	EA	120	$ 216,000.00
PLAM COUNTERTOP	$ 150.00	LF	396	$ 59,400.00
KITCHEN DEMONSTRATION STATION	$ 800.00	LF	14	$ 11,200.00
WARDROBE 3X7X2	$ 2,200.00	EA	47	$ 103,400.00
TALL STORAGE 3X7X2	$ 2,200.00	EA	103	$ 226,600.00
SCIENCE CASEWORK				
LAB - WARDROBE 3X7x2	$ 2,200.00	EA	8	$ 17,600.00
LAB - WALL CABINET	$ 450.00	LF	445	$ 200,250.00
LAB - BASE CABINET	$ 500.00	LF	728	$ 364,000.00
LAB - TALL STORAGE 2X3X7	$ 2,200.00	LF	14	$ 30,800.00
LAB - COUNTERTOP EPOXY	$ 350.00	LF	39	$ 13,650.00
LAB - WALL MOUNT OPEN SHELVES 5-3X5X1-3	$ 200.00	LF	16	$ 3,200.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
ART CASEWORK				
WARDROBE 3X7x2	$ 2,200.00	EA	2	$ 4,400.00
WALL CABINET	$ 450.00	LF	25	$ 11,250.00
BASE CABINET	$ 500.00	LF	87	$ 43,500.00
COUNTERTOP EPOXY	$ 350.00	LF	87	$ 30,450.00
TALL STORAGE 2X3X7	$ 2,200.00	LF	4	$ 8,800.00
STORAGE WALL SHELVING	$ 200.00	LF	32	$ 6,400.00
WINDOW TREATMENT				
BLINDS / SHADES	$ 12.00	SF	21696	$ 260,352.00
FLOOR MAT / WALK OFF MAT	$ 35.00	SF	994	$ 34,790.00
WALK-OFF GRILLE	$ 40.00	SF	1,053	$ 42,120.00
ADD FOR BASE	$ 40.00	SF	352	$ 14,080.00
AUDITORIUM SEATING	$ 432.69	EA	520	$ 225,000.00
VALUE IDENTIFIED BY NEXTSTAGE DESIGN				
E2010 - FIXED FURNISHINGS				**$ 2,077,657.00**
E20 - FURNISHINGS				**$ 2,077,657.00**

F - SPECIAL CONSTRUCTION & DEMOLITION				
F10 - SPECIAL CONSTRUCTION				
F1010 - SPECIAL STRUCTURES				
GREENHOUSE WALLS / ROOF	$ 175.00	SF	220	$ 38,500.00
F1010 - SPECIAL STRUCTURES				**$ 38,500.00**
F10 - SPECIAL CONSTRUCTION				**$ 38,500.00**
F20 - SELECTIVE BUILDING DEMOLITION				
F2010 - BUILDING ELEMENTS DEMOLITION				
BUILDING DEMOLITION				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
DEMO EXISTING HIGH SCHOOL	$ 6.00	SF	186890	$ 1,121,340.00
REMOVE FOUNDATIONS/SOG	$ 3.25	SF	186890	$ 607,392.50
F2010 - BUILDING ELEMENTS DEMOLITION				**$ 1,728,732.50**
F2020 - HAZARDOUS COMPONENTS ABATEMENT				
HAZARDOUS MATERIAL ABATEMENT ALLOWANCE	$ 2,047,988.00	ALLW	1	$ 2,047,988.00
F2020 - HAZARDOUS COMPONENTS ABATEMENT				**$ 2,047,988.00**
F20 - SELECTIVE BUILDING DEMOLITION				**$ 3,776,720.50**
G - BUILDING SITEWORK				
G10 - SITE PREPARATIONS				
G1020 - SITE DEMOLITION & RELOCATIONS				
SITE DEMOLITION				
ASPHALT PAVING - PULVERIZE & REUSE	$ 1.75	SF	280,936	$ 491,638.00
PIPE INCL TRENCH AND BACKFILL	$ 15.00	LF	10,048	$ 150,720.00
BITUMINOUS SIDEWALK	$ 2.00	SF	21,033	$ 42,066.00
CONCRETE SIDEWALK	$ 3.50	SF	8,404	$ 29,414.00
SAWCUT:				
ASPHALT	$ 8.00	LF	477	$ 3,816.00
CONCRETE	$ 10.00	LF	80	$ 800.00
REMOVE CONCRETE PAD	$ 300.00	EA	1	$ 300.00
REMOVE SCRUB VEGETATION	$ 0.50	SF	71,620	$ 35,810.00
REMOVE CABLE RAILING	$ 7.00	LF	1,638	$ 11,466.00
WOOD GUARD RAIL	$ 9.00	LF	228	$ 2,052.00
REMOVE PRESS BOX	$ 1,200.00	EA	1	$ 1,200.00
REMOVE TIMBER CURB	$ 3.00	LF	149	$ 447.00
FENCE/RAIL	$ 8.00	LF	3,677	$ 29,416.00
REMOVE TENNIS NET AND POSTS	$ 300.00	EA	6	$ 1,800.00
UTILITY STRUCTURES	$ 700.00	EA	51	$ 35,700.00
UTILITY KIOSK	$ 1,000.00	EA	1	$ 1,000.00
REMOVE SKINNED INFIELD	$ 0.35	SF	26,094	$ 9,132.90

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
REMOVE SYNTHETIC SURFACING	$ 1.00	SF	1,861	$ 1,861.00
POLE LIGHT w/ BASE	$ 600.00	EA	28	$ 16,800.00
POLE LIGHT BASE	$ 250.00	EA	8	$ 2,000.00
OVERHEAD POWER POST w/ BASE	$ 600.00	EA	4	$ 2,400.00
OVERHEAD POWER LINE	$ 12.40	LF	1,149	$ 14,247.60
REMOVE SUB-METERED UTILITY SERVICS	$ 3,720.00	EA	2	$ 7,440.00
REMOVE UTILITY TRANSFORMER	$ 3,720.00	EA	1	$ 3,720.00
REMOVE SWITCHBOARD	$ 7,440.00	EA	1	$ 7,440.00
REMOVE DISTRIBUTION PANEL	$ 1,860.00	EA	1	$ 1,860.00
REMOVE AND RE-INSTALL WOOD GUARDRAIL	$ 22.50	LF	384	$ 8,640.00
SALVAGE PAVERS	$ 18.50	SF	1,159	$ 21,441.50
SALVAGE GRANITE PLAQUES	$ 1,080.00	EA	3	$ 3,240.00
SALVAGE GRANITE BENCHES	$ 1,620.00	EA	10	$ 16,200.00
SALVAGE BIRD BATH	$ 1,080.00	EA	1	$ 1,080.00
SALVAGE PLANTERS	$ 270.00	EA	9	$ 2,430.00
SALVAGE GARDEN SCULPTURES	$ 1,080.00	EA	3	$ 3,240.00
SALVAGE TABLE	$ 270.00	EA	1	$ 270.00
SALVAGE STOREGE CABINET	$ 270.00	EA	2	$ 540.00
SALVAGE TWO-ROW PORTABLE BLEACHERS	$ 67.50	EA	40	$ 2,700.00
SALVAGE BENCHES	$ 270.00	EA	12	$ 3,240.00
SALVAGE PICNIC TABLES	$ 135.00	EA	3	$ 405.00
SALVAGE 3-ROW BLEACHERS	$ 2,160.00	EA	1	$ 2,160.00
SALVAGE TENNIS COURT LIGHT	$ 405.00	EA	8	$ 3,240.00
SALVAGE SIGNS	$ 75.00	EA	2	$ 150.00
SALVAGE BARREL	$ 25.00	EA	12	$ 300.00
SALVAGE SOCCER GOAL	$ 135.00	EA	7	$ 945.00
SALVAGE SOCCER FLAG	$ 40.00	EA	8	$ 320.00
SALVAGE STORAGE CONTAINER	$ 270.00	EA	3	$ 810.00
SALVAGE BATTING PRACTICE CAGE	$ 810.00	EA	2	$ 1,620.00
SALVAGE PRECAST THROWING WALL	$ 75.00	LF	40	$ 3,000.00
SALVAGE SYNTHETIC SURFACING	$ 3.00	SF	2,711	$ 8,133.00
SALVAGE ATHLETIC EQUIPMENT	$ 540.00	EA	2	$ 1,080.00
SALVAGE FOOTBAL GOAL POST	$ 1,620.00	EA	2	$ 3,240.00
SALVAGE SCOREBOARD AND POST	$ 3,240.00	EA	1	$ 3,240.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
G1020 - SITE DEMOLITION & RELOCATIONS				**$ 996,211.00**
G1030 - SITE EARTHWORK				
EROSION AND SEDIMENT CONTROL				
CONSTRUCTION ENTRANCE W/ FILTER FABRIC	$ 3.00	SF	3,038	$ 9,114.00
SILT FENCE	$ 11.25	LF	5600	$ 63,000.00
SILT SOCK	$ 8.00	LF	5800	$ 46,400.00
ADDITIONAL EROSION CONTROL MEASURES	$ 35,000.00	LS	1	$ 35,000.00
TEMPORARY FENCE	$ 22.00	LF	14,000	$ 308,000.00
EARTHWORK				
STRIP TOPSOIL	$ 15.00	CY	24000	$ 360,000.00
MASS EXCAVATION				
CUT	$ 15.00	CY	67000	$ 1,005,000.00
FILL, *PLACE AND COMPACT*	$ 18.00	CY	9500	$ 171,000.00
HAUL AND DISPOSE	$ 35.00	CY	43600	$ 1,526,000.00
CUT/FILL/HAUL VE AT FIELDS	$ 20.00	CY	-30000	$ (600,000.00)
GRADING	$ 0.40	SF	1700000	$ 680,000.00
G1030 - SITE EARTHWORK				**$ 3,603,514.00**
G1040 - HAZARDOUS WASTE REMEDIATION				
EXCAVATE CONTAMINATED MATERIALS				*EXCLUDED*
HAUL & DISPOSE OF CONTAMINATED MATERIALS				*EXCLUDED*
REMOVE UNDERGROUND STORAGE TANKS	$ 150,000.00	LS	1	$ 150,000.00
G1040 - HAZARDOUS WASTE REMEDIATION				**$ 150,000.00**
G10 - SITE PREPARATIONS				**$ 4,749,725.00**
G20 - SITE IMPROVEMENTS				
G2010 - ROADWAYS				
SITE CONCRETE				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
GRANITE CURB - VERTICAL	$ 45.00	LF	5,929	$ 266,805.00
THICKENED CONCRETE PAD AT LOADING DOCK	$ 22.00	SF	2,228	$ 49,016.00
PAVEMENT				
VEHICLE DRIVE - STRIPING	$ 75.00	SY	11,382	$ 853,650.00
ROADWAY PATCH AT UTILITY TIE-INS	$ 150.00	SY	300	$ 45,000.00
POROUS PAVEMENT	$ 10.93	SF	10,037	$ 109,704.41
STREET IMPROVEMENTS				
FLASHING BEACONS	$ 9,500.00	EA	4	$ 38,000.00
ACCESSIBLE & PEDESTRIAN STREET CROSSINGS	$ 7,500.00	LOC	5	$ 37,500.00
G2010 - ROADWAYS				**$ 1,399,675.41**
G2020 - PARKING LOTS				
SITE CONCRETE				
GRANITE CURB - VERTICAL	$ 45.00	LF	7,291	$ 328,095.00
PAVEMENT				
PARKING AREA PAVING - STRIPING	$ 60.00	SY	17,153	$ 1,029,180.00
CONCRETE WHEEL STOP	$ 350.00	EA	28	$ 9,800.00
TEMP PAVING				
TEMP PAVING	$ 38.00	SY	1,333	$ 50,666.67
REMOVE TEMP PAVING	$ 1.35	SF	12,000	$ 16,200.00
G2020 - PARKING LOTS				**$ 1,357,275.00**
G2030 - PEDESTRIAN PAVING				
PAVEMENT				
BITUMINOUS WALKS	$ 52.00	SY	2,002	$ 104,092.44
CONCRETE				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
GRANITE CURB - FLUSH	$ 42.00	LF	1,124	$ 47,208.00
ACCESS GRANITE CURB	$ 42.00	LF	70	$ 2,940.00
SIDEWALK	$ 8.00	SF	65,266	$ 522,128.00
ADD FOR DETECTABLE SURFACE	$ 250.00	EA	26	$ 6,500.00
CONCRETE PADS	$ 22.00	SF	1,341	$ 29,502.00
ADD FOR PERIMETER HAUNCH	$ 50.00	LF	444	$ 22,200.00
UNIT PAVERS	$ 28.00	SF	617	$ 17,276.00
SIDEWALK - INTEGRALLY COLORED	$ 13.50	SF	15,060	$ 203,310.00
INSTALL SALVAGED "SPARTAN WALKWAY" ELEMENTS	$ 405.00	EA	5	$ 2,025.00
CONCRETE EDGER 12X12	$ 35.00	LF	98	$ 3,430.00
PERMEABLE PAVERS	$ 40.00	SF	10,792	$ 431,680.00
G2030 - PEDESTRIAN PAVING				**$ 1,392,291.44**
G2040 - SITE DEVELOPMENT				
RETAINING WALLS				
GRANITE SEAT WALL	$ 1,200.00	LF	426	$ 511,200.00
PRECAST SEAT WALL AT REAR OF BUILDING	$ 500.00	LF	83	$ 41,500.00
CONCRETE				
CHARGING STATION FOUNDATION	$ 1,500.00	EA	5	$ 7,500.00
FLAG POLE AND FOUNDATION	$ 600.00	EA	4	$ 2,400.00
OIL CONTAINMENT AT TRANSFORMER PAD	$ 2,000.00	EA	1	$ 2,000.00
CRUSHED STONE SURFACING AT EQUIPMENT PADS	$ 4.85	SF	4,356	$ 21,126.60
ADD FOR STEEL EDGE RESTRAINT	$ 25.00	LF	265	$ 6,625.00
BOLLARD, SUPPLY - TYPE A W/ GALV STEEL BOLLARD - 48" HIGH	$ 800.00	EA	11	$ 8,800.00
BOLLARD, SUPPLY - TYPE B W/ GALV STEEL BOLLARD - 36" HIGH	$ 650.00	EA	95	$ 61,750.00
BOLLARD FOOTING / INSTALL	$ 450.00	EA	106	$ 47,700.00
SIGNAGE				
DIRECTIONAL / PARKING SIGNAGE	$ 250.00	EA	100	$ 25,000.00
MONUMENT SIGN	$ 75,000.00	EA	0	$ -

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
MONUMENT SIGN				
FOOTINGS, CONTINUOUS - 5'X1'				
FORM & POUR	$ 75.00	LF	18	$ 1,350.00
FORMWORK MATERIAL	$ 6.00	SF	35	$ 210.00
REBAR	$ 4,200.00	TN	0.16	$ 682.50
CONCRETE	$ 155.00	CY	4	$ 620.00
FOUNDATION WALLS - 7' HIGH, 24" THICK				
FORM & POUR	$ 240.00	LF	16	$ 3,840.00
FORMWORK MATERIAL	$ 6.00	SF	224	$ 1,344.00
REBAR	$ 4,200.00	TN	0.25	$ 1,060.50
CONCRETE	$ 155.00	CY	8	$ 1,240.00
BRICK VENEER	$ 40.00	SF	139	$ 5,560.00
3" PRECAST CONCRETE WALL CAP	$ 400.00	LF	17	$ 6,800.00
LETTERING - 1" STAINLESS STEEL H=9"	$ 550.00	EA	48	$ 26,400.00
LETTERING - 1" STAINLESS STEEL H=5"	$ 450.00	EA	28	$ 12,600.00
FIELDS / COURTS				
BITUMINOUS CONCRETE PAVING W/ STRIPING AT	$ 8.00	SF	51,176	$ 409,408.00
TENNIS COURTS				
TENNIS COURT NET	$ 1,500.00	SET	6	$ 9,000.00
NATURAL TURF FIELDS - FOOTBALL, SOCCER, BB OUTFIELD	$ 1.60	SF	650000	$ 1,040,000.00
BASEBALL				
BACKSTOP	$ 200.00	LF	340	$ 68,000.00
BENCHES AT DUGOUT	$ 250.00	LF	125	$ 31,250.00
CONCRETE PAD AT DUGOUT & BLEACHERS	$ 25.00	SF	7,066	$ 176,650.00
DUGOUT	$ 25.00	SF	2,134	$ 53,350.00
OUTFIELD FENCE	$ 65.00	LF	1,736	$ 112,840.00
BATTING CAGE NETTING 12'	$ 85.00	LF	378	$ 32,130.00
BATTING CAGE ARTIFICIAL TURF	$ 18.00	SF	3,761	$ 67,698.00
INSTALL SALVAGED ARTIFICIAL TURF	$ 4.50	SF	2,771	$ 12,469.50
INSTALL SALVAGED PRACTICE WALL	$ 75.00	LF	41	$ 3,075.00
SCOREBOARDS	$ 35,000.00	EA	2	$ 70,000.00
FOUL POLE 20'	$ 2,500.00	EA	7	$ 17,500.00
SKINNED AND GRASS INFIELD	$ 5.50	SF	52,744	$ 290,092.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
SKINNED PERIMETER WARNING TRACK	$ 5.50	SF	17,385	$ 95,617.50
PRESS BOX	$ 400.00	SF	387	$ 154,800.00
BASKETBALL HOOPS	$ 4,000.00	EA	4	$ 16,000.00
GOAL POSTS AT FOOTBALL FIELD	$ 15,000.00	EA	2	$ 30,000.00
SOCCER COURT SAFETY NET - H=10'	$ 35.00	LF	301	$ 10,535.00
FENCES AND GATES				
CHAIN LINK FENCE				
4'H	$ 65.00	LF	109	$ 7,085.00
6'H	$ 80.00	LF	626	$ 50,080.00
8'H	$ 95.00	LF	424	$ 40,280.00
10'H	$ 110.00	LF	1,586	$ 174,460.00
MAN GATE	$ 600.00	EA	26	$ 15,600.00
DOUBLE GATE	$ 1,600.00	EA	5	$ 8,000.00
WOOD FENCE - 6' HIGH	*$ 150.00*	*LF*		$ -
DECORATIVE METAL FENCE	$ 500.00	LF	98	$ 49,000.00
MAN GATE	$ 1,500.00	EA	1	$ 1,500.00
WOOD GUARD RAIL	$ 55.00	LF	155	$ 8,525.00
WOOD SWING GATE 12" WIDE - DOUBLE	$ 500.00	EA	1	$ 500.00
ACCESSIBLE RAMPS				
RAMP AT PRESS BOX	$ 55.00	SF	1,182	$ 65,010.00
ADD FOR GUARD RAIL	$ 250.00	LF	428	$ 107,000.00
SITE FURNISHINGS				
SITE FURNITURE SET	$ 5,000.00	EA	10	$ 50,000.00
BENCHES	$ 2,500.00	EA	14	$ 35,000.00
BIKE RACKS	$ 550.00	EA	25	$ 13,750.00
TRASH RECEPTACLES	$ 1,200.00	EA	10	$ 12,000.00
SHADE CANOPY AT OUTDOOR DINING / CLASSROOM	$ 35,000.00	EA	3	$ 105,000.00
PLAY AREAS				
RUBBER SURFACING	$ 35.00	SF	1,000	$ 35,000.00
PLAY STRUCTURES	$ 60,000.00	ALLW	1	$ 60,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
CONCESSIONS				
CONCRETE				
FOOTINGS, CONTINUOUS AT CONCESSIONS - ASSUME 2'X1'				
FORM & POUR	$ 55.00	LF	150	$ 8,250.00
FORMWORK MATERIAL	$ 6.00	SF	300	$ 1,800.00
REBAR - ASSUME 90 LBS/CY	$ 4,200.00	TN	1	$ 3,024.00
CONCRETE	$ 155.00	CY	16	$ 2,480.00
FOUNDATION WALLS AT CONCESSIONS STAND - ASSUME 4'6" HIGH, 8" THICK				
FORM & POUR	$ 135.00	LF	150	$ 20,250.00
FORMWORK MATERIAL	$ 6.00	SF	1,343	$ 8,058.00
REBAR - ASSUME 125 LBS/CY	$ 4,200.00	TN	1.06	$ 4,462.50
CONCRETE	$ 155.00	CY	17	$ 2,635.00
RIGID INSULATION	$ 4.00	SF	896	$ 3,584.00
SLAB ON GRADE - 5" - AT CONCESSIONS	$ 11.25	SF	1,369	$ 15,401.25
MASONRY				
8" CMU AT CONCESSIONS - ASSUME 12' HIGH	$ 32.00	SF	1,796	$ 57,472.00
4" CMU AT CONCESSIONS - ASSUME 12' HIGH	$ 28.00	SF	2,277	$ 63,756.00
STEEL				
ROOF DECK - AT CONCESSIONS	$ 6.75	SF	1,609	$ 10,860.75
JOISTS, COLUMNS, BEAMS AT CONCESSIONS - 8LBS/SF	$ 5,500.00	TN	6	$ 35,381.50
THERMAL & MOISTURE PROTECTION				
BITUMINOUS DAMPPROOFING	$ 5.50	SF	672	$ 3,693.25
STANDING SEAM METAL ROOF AT CONCESSIONS	$ 40.00	SF	1,609	$ 64,360.00
GUTTER	$ 35.00	LF	63	$ 2,205.00
DOWNSPOUTS	$ 35.00	SF	28	$ 980.00
EXTERIOR SOFFIT	$ 35.00	SF	240	$ 8,400.00
OPENINGS				
EXTERIOR DOUBLE HM DOORS	$ 4,825.00	EA	2	$ 9,650.00
INTERIOR SINGLE WOOD DOORS	$ 2,795.00	EA	8	$ 22,360.00
EXTERIOR ROLL-UP DOOR/WINDOW - 5'	$ 2,500.00	EA	1	$ 2,500.00
EXTERIOR ROLL-UP DOOR/WINDOW - 9'	$ 6,000.00	EA	1	$ 6,000.00
FINISHES				
FLOOR FINISH -STAINED CONCRETE	$ 5.50	SF	1,214	$ 6,677.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
RUBBER BASE	$ 4.50	LF	438	$ 1,971.00
PAINT WALLS	$ 1.50	SF	5,262	$ 7,893.00
PAINT STRUCTURE	$ 3.00	SF	1,347	$ 4,041.00
SPECIALTIES				
TOILET PARTITIONS	$ 1,350.00	EA	6	$ 8,100.00
SINGLE TOILET ACCESSORIES	$ 850.00	EA	2	$ 1,700.00
GANG TOILET ACCESSORIES	$ 1,500.00	EA	2	$ 3,000.00
CASEWORK				
STORAGE SHELVES	$ 60.00	LF	13	$ 780.00
BASE CABINET	$ 355.00	LF	7	$ 2,485.00
COUNTERTOP	$ 275.00	LF	20	$ 5,500.00
WARMING KITCHEN EQUIPMENT ALLOWANCE	$ 30,000.00	LS	1	$ 30,000.00
PLUMBING				
FIXTURES AT CONCESSIONS	$ 2,000.00	EA	16	$ 32,000.00
CONCESSIONS WARMING KITCHEN REQUIREMENTS	$ 7,500.00	ALLW	1	$ 7,500.00
SANITARY CONCESSIONS PER FIXTURE	$ 1,800.00	EA	16	$ 28,800.00
WATER CONCESSIONS PER FIXTURE	$ 2,000.00	EA	16	$ 32,000.00
HVAC				
EXHAUST REQUIREMENTS AT CONCESSIONS	$ 10,000.00	LS	1	$ 10,000.00
SPLIT UNITS AT CONCESSIONS	$ 5,500.00	EA	2	$ 11,000.00
ELECTRICAL				
LIGHTING & POWER REQUIREMENTS AT CONCESSIONS	$ 45.00	SF	1,200	$ 54,000.00
FIRE ALARM AT CONCESSIONS	$ 4.25	SF	1,200	$ 5,100.00
EARTHWORK				
STONE UNDER SLAB AT CONCESSIONS	$ 65.00	CY	33	$ 2,157.04
POWER TO CONCESSIONS STAND	$ 125.00	LF	90	$ 11,250.00
PRIMARY TO TRANSFORMER	$ 75.00	LF	400	$ 30,000.00
TOTAL CONCESSIONS COST	***$ 653,517.29***			
BRIDGE				
CONCRETE				
FOOTINGS				
FORM & POUR	$ 55.00	EA	12	$ 660.00
FORMWORK MATERIAL	$ 6.00	SF	189	$ 1,134.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
REBAR - ASSUME 90 LBS/CY	$ 4,200.00	TN	0.09	$ 378.00
CONCRETE	$ 155.00	CY	2	$ 310.00
ABUTEMENT WALLS				
FORM & POUR	$ 135.00	LF	32	$ 4,320.00
FORMWORK MATERIAL	$ 6.00	SF	374	$ 2,244.00
REBAR - ASSUME 125 LBS/CY	$ 4,200.00	TN	0.88	$ 3,675.00
CONCRETE	$ 155.00	CY	14	$ 2,170.00
FRAMING				
CEDAR FRAMING w/ DECK BOARDS & RAILING	$ 150.00	SF	478	$ 71,700.00
LOADING DOCK				
CONCRETE				
RAISED LOADING DOCK PLATFORM	$ 25.00	SF	678	$ 16,950.00
CONCRETE RAMP AT LOADING DOCK	$ 35.00	SF	395	$ 13,825.00
FOOTINGS				
FORM & POUR	$ 55.00	EA	100	$ 5,500.00
FORMWORK MATERIAL	$ 6.00	SF	199	$ 1,194.00
REBAR - ASSUME 90 LBS/CY	$ 4,200.00	TN	0.81	$ 3,402.00
CONCRETE	$ 155.00	CY	18	$ 2,790.00
RETAINING WALLS				
FORM & POUR	$ 135.00	LF	97	$ 13,095.00
FORMWORK MATERIAL	$ 6.00	SF	1,304	$ 7,824.00
REBAR - ASSUME 125 LBS/CY	$ 4,200.00	TN	1.56	$ 6,562.50
CONCRETE	$ 155.00	CY	25	$ 3,875.00
RAILING				
STEEL GUARDRAIL AT LOADING DOCK	$ 300.00	LF	24	$ 7,200.00
CONCRETE RAMP STEEL HANDRAIL	$ 250.00	LF	123	$ 30,750.00
LOADING DOCK EQUIPMENT	$ 15,000.00	LS	1	$ 15,000.00
LIFT ARM				
CONCRETE				
FOOTINGS				
FORM & POUR	*$ 55.00*	*EA*		*$ -*
FORMWORK MATERIAL	*$ 6.00*	*SF*		*$ -*

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
REBAR - ASSUME 90 LBS/CY	*$ 4,200.00*	*TN*		*$ -*
CONCRETE	*$ 155.00*	*CY*		*$ -*
PEDESTAL				
FORM & POUR	*$ 135.00*	*LF*		*$ -*
FORMWORK MATERIAL	*$ 6.00*	*SF*		*$ -*
REBAR - ASSUME 125 LBS/CY	*$ 4,200.00*	*TN*		*$ -*
CONCRETE	*$ 155.00*	*CY*		*$ -*
EQUIPMENT				
22' ELECTRONIC LIFT ARM	*$ 15,000.00*	*EA*		*$ -*
G2040 - SITE DEVELOPMENT				**$ 4,989,030.89**
G2050 - LANDSCAPING				
LANDSCAPING				
SPREAD/IMPORT TOPSOIL	$ 50.00	CY	28055	$ 1,402,750.00
TREES				
LARGE TREE	$ 1,200.00	EA	155	$ 186,000.00
MEDIUM TREE	$ 800.00	EA	115	$ 92,000.00
SMALL FLOWERING TREE	$ 650.00	EA	60	$ 39,000.00
EVERGREEN TREE	$ 550.00	EA	88	$ 48,400.00
TARGET LANDSCAPING	$ 250,000.00	ALLW	1	$ 250,000.00
PLANTINGS	$ 40.00	EA	8100	$ 324,000.00
SEEDING / FERTILZING	$ 3.75	SY	42222	$ 158,333.33
SYNTHETIC LAWN	$ 18.00	SF	497	$ 8,946.00
REINFORCED TURF SURFACING	$ 3.25	SF	6,670	$ 21,677.50
REDSTONE BOULDERS	$ 400.00	EA	80	$ 32,000.00
IRRIGATION SYSTEM FOR FIELDS				
VARSITY FIELDS	$ 1.50	SF	435000	$ 652,500.00
G2050 - LANDSCAPING				**$ 3,215,606.83**
G20 - SITE IMPROVEMENTS				**$12,353,879.57**
G30 - SITE CIVIL / MECHANICAL UTILITIES				
G3010 - WATER SUPPLY				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
WATER DISTRIBUTION				
DUCTILE IRON, MECH JOINT				
2"	$ 77.60	LF	368	$ 28,554.96
4"	$ 81.80	LF	176	$ 14,395.92
6"	$ 100.91	LF	177	$ 17,860.19
8"	$ 122.50	LF	2,911	$ 356,597.50
TRENCH AND BACKFILL	$ 45.00	LF	3,632	$ 163,440.00
STONE BED	$ 65.00	CY	538	$ 34,974.81
GATE VALVE AND BOX	$ 2,000.00	EA	12	$ 24,000.00
WET TAP	$ 7,000.00	EA	1	$ 7,000.00
FIRE HYDRANT - ALLOWANCE	$ 3,800.00	EA	5	$ 19,000.00
TEMP WATER DISTRIBUTION				
DUCTILE IRON, MECH JOINT				
6"	$ 100.91	LF	400	$ 40,362.00
8"	$ 122.50	LF	200	$ 24,500.00
TRENCH AND BACKFILL	$ 45.00	LF	600	$ 27,000.00
STONE BED	$ 65.00	CY	89	$ 5,777.78
GATE VALVE AND BOX	$ 2,000.00	EA	3	$ 6,000.00
FIRE HYDRANT	$ 3,800.00	EA	2	$ 7,600.00
REMOVE TEMP PIPING & FIRE HYDRANTS	$ 55.00	LF	600	$ 33,000.00
G3010 - WATER SUPPLY				**$ 810,063.16**
G3020 - SANITARY SEWER				
SANITARY SEWER				
PIPING; PVC; SDR 35				
3" FORCE MAIN	$ 22.40	LF	1,213	$ 27,171.20
4"	$ 24.25	LF	421	$ 10,209.25
6"	$ 28.00	LF	862	$ 24,136.00
8"	$ 30.80	LF	851	$ 26,210.80
TRENCH AND BACKFILL (UP TO 4' DEEP)	$ 45.00	LF	3,347	$ 150,615.00
STONE BED	$ 65.00	CY	496	$ 32,230.37

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
MANHOLES	$ 4,000.00	EA	15	$ 60,000.00
CONNECT TO EXISTING PIPE / STRUCTURE	$ 1,200.00	EA	1	$ 1,200.00
GREASE TRAP 5000 GAL.	$ 10,500.00	EA	1	$ 10,500.00
PUMP CHAMBER w/ VALVE PIT	$ 20,000.00	EA	1	$ 20,000.00
TEMP SANITARY SEWER				
PIPING; PVC; SDR 35				
8"	$ 30.80	LF	150	$ 4,620.00
TRENCH AND BACKFILL (UP TO 4' DEEP)	$ 45.00	LF	150	$ 6,750.00
STONE BED	$ 1,000.00	CY	22	$ 22,222.22
MANHOLES	$ 4,000.00	EA	2	$ 8,000.00
CONNECT TO EXISTING PIPE / STRUCTURE	$ 1,200.00	EA	1	$ 1,200.00
REMOVE TEMP PIPING & MANHOLES	$ 55.00	LF	150	$ 8,250.00
G3020 - SANITARY SEWER				**$ 413,314.84**
G3030 - STORM SEWER				
STORM SYSTEM				
HDPE				
12" - ROOF DRAIN	$ 43.00	LF	6,764	$ 290,852.00
TRENCH AND BACKFILL	$ 45.00	LF	6,764	$ 304,380.00
STONE BED	$ 65.00	CY	1,002	$ 65,134.81
CONNECT TO EXISTING PIPE / STRUCTURE	$ 1,000.00	EA	2	$ 2,000.00
WATER QUALITY UNITS	$ 3,500.00	EA	7	$ 24,500.00
CATCH BASINS / MANHOLES	$ 4,000.00	EA	55	$ 220,000.00
AREA DRAINS	$ 3,000.00	EA	8	$ 24,000.00
PLANTER DRAIN	$ 850.00	EA	4	$ 3,400.00
PAVERS AREA UNDERDRAIN 6"	$ 16.50	EA	527	$ 8,695.50
FOUNDATION DRAIN 6"	$ 16.50	LF	2,402	$ 39,633.00
CLEANOUT	$ 300.00	EA	5	$ 1,500.00
OUTLET CONTROL STRUCTURE	$ 6,500.00	EA	3	$ 19,500.00
TRENCH DRAIN	$ 250.00	LF	31	$ 7,750.00
OIL WATER SEPARATOR - 1500 GAL.	$ 24,500.00	EA	1	$ 24,500.00
WATER QUALITY INLET - 450 GALLON	$ 6,500.00	EA	5	$ 32,500.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
BIORETENTION AREAS	$ 8.00	SF	18,918	$ 151,344.00
SUBSURFACE FILTER SYSTEMS	$ 45.00	SF	2,283	$ 102,735.00
TEMP STORM SYSTEM				
CPE				
12"	$ 40.00	LF	200	$ 8,000.00
24"	$ 75.00	LF	600	$ 45,000.00
TRENCH AND BACKFILL	$ 45.00	LF	800	$ 36,000.00
STONE BED	$ 65.00	CY	119	$ 7,703.70
CATCH BASINS / MANHOLES	$ 4,000.00	EA	6	$ 24,000.00
REMOVE TEMP PIPING & MANHOLES	$ 55.00	LF	800	$ 44,000.00
G3030 - STORM SEWER				**$ 1,487,128.02**
G30 - SITE CIVIL / MECHANICAL UTILITIES				**$ 2,710,506.02**
G40 - SITE ELECTRICAL UTILITIES				
G4010 - ELECTRICAL DISTRIBUTION				
ELECTICAL SERVICE				
PRIMARY POWER (CONDUIT ONLY) - (2) 4" CONDUIT	$ 61.10	LF	1,461	$ 89,267.10
SECONDARY POWER (CONDUIT & WIRE) - 8 SETS OF	$ 1,060.00	LF	20	$ 21,200.00
4#600MCM, 4" CONDUIT				
SECONDARY POWER (CONDUIT & WIRE) - 10 SETS OF	$ 1,325.00	LF	270	$ 357,750.00
4#600MCM, 4" CONDUIT				
FEEDERS BETWEEN TRANSCLOSURE CAB & GEN/PV	$ 150.00	LF	150	$ 22,500.00
TRANSFORMER - EXCLUDED, ASSUMED BY OTHERS				
TRENCH AND BACKFILL	$ 30.00	LF	1,901	$ 57,030.00
DUCTBANK CONCRETE FILL	$ 300.00	CY	158	$ 47,525.00
MANHOLE	$ 12,000.00	EA	4	$ 48,000.00
HAND HOLE	$ 1,800.00	EA	20	$ 36,000.00
WF RECEPTACLE	$ 2,500.00	EA	15	$ 37,500.00
UPGRADE SERVICE TO CONCESSION, BASKETBALL, TENNIS COURTS				
PRIMARY POWER (CONDUIT ONLY)	$ 61.10	LF	1,200	$ 73,320.00
SECONDARY POWER (CONDUIT & WIRE)	$ 600.00	LF	400	$ 240,000.00
TRENCH AND BACKFILL	$ 30.00	LF	1,600	$ 48,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
DUCTBANK CONCRETE FILL	$ 300.00	CY	133	$ 40,000.00
G4010 - ELECTRICAL DISTRIBUTION				**$ 679,272.10**
G4020 - SITE LIGHTING				
SITE LIGHTING				
WIRE & CONDUIT	$ 35.00	LF	9725	$ 340,375.00
TRENCH & BACKFILL	$ 25.00	LF	9725	$ 243,125.00
POLE & FIXTURE				
POLE LIGHTS - AA1	$ 3,500.00	EA	29	$ 101,500.00
POLE LIGHTS - AA2	$ 4,500.00	EA	23	$ 103,500.00
POLE LIGHT - BB	$ 2,000.00	EA	27	$ 54,000.00
POLE LIGHT - CC	$ 1,800.00	EA	3	$ 5,400.00
POLE LIGHT - DD (BASKETBALL COURT)	*$ 29,640.00*	*EA*		*$ -*
POLE LIGHT- XRE - INSTALLATION	$ 1,080.00	EA	8	$ 8,640.00
ADD FOR CONCRETE BASE	$ 600.00	EA	90	$ 54,000.00
G4020 - SITE LIGHTING				**$ 910,540.00**
G4030 - SITE COMMUNICATION & SECURITY				
COMMUNICATION DISTRIBUTION				
CONDUIT - (4) 4" CONDUITS	$ 135.00	LF	1,423	$ 192,105.00
TRENCH AND BACKFILL	$ 30.00	LF	1,423	$ 42,690.00
OH COMMUNICATION WIRING	$ 135.00	LF	126	$ 17,010.00
UTILITY POLES	$ 2,000.00	EA	2	$ 4,000.00
HAND HOLE	$ 1,200.00	EA	1	$ 1,200.00
G4030 - SITE COMMUNICATION & SECURITY				**$ 257,005.00**
G4090 - OTHER SITE ELECTRICAL UTILITIES				
EMERGENCY GENERATOR DISTRIBUTION				
1200Y - NOT SIZED	$ 300.00	LF	225	$ 67,500.00
400Y - 4#600KCMIL, #3, 4" C	$ 135.50	LF	450	$ 60,975.00
TRENCH AND BACKFILL	$ 30.00	LF	675	$ 20,250.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
DUCTBANK CONCRETE FILL	$ 300.00	CY	56	$ 16,875.00
EV CHARGING STATIONS				
EV STATIONS	$ 12,000.00	EA	5	$ 60,000.00
CONDUIT FOR FUTURE EV STATIONS	$ 10,000.00	EA	25	$ 250,000.00
G4090 - OTHER SITE ELECTRICAL UTILITIES				**$ 475,600.00**
G40 - SITE ELECTRICAL UTILITIES				**$ 2,322,417.10**
ALTERNATE S1 - ADD LIGHTING TO BASEBALL & SOFTBALL VARSITY FIELDS				
SITE LIGHTING				
WIRE & CONDUIT	$ 35.00	LF	2,113	$ 73,955.00
TRENCH & BACKFILL	$ 25.00	LF	2,113	$ 52,825.00
POLE & FIXTURE				
POLE LIGHT - EE (BASEBALL FIELD)	$ 60,000.00	EA	12	$ 720,000.00
ADD FOR CONCRETE BASE	$ 15,000.00	EA	12	$ 180,000.00
ALTERNATE S1 - ADD LIGHTING TO BASEBALL & SOFTBALL VARSITY FIELDS				**$ 1,026,780.00**
ALTERNATE S2 - ADD SPORTS FIELD STORAGE BUILDING				
PORTABLE STORAGE BUILDING AT SPORTS FIELD - 10'X30'	$ 1.00	LS	22,500	$ 22,500.00
ADD FOR SLAB ON GRADE & PREP	$ 30.00	SF	384	$ 11,520.00
ALTERNATE S2 - ADD SPORTS FIELD STORAGE BUILDING				**$ 34,020.00**
ALTERNATE S3 - ADD IRRIGATION AT JV BASEBALL, SOFTBALL AND PRACTICE FIELDS				
IRRIGATION SYSTEM FOR FIELDS				
JV BASEBALL, JV SOFTBALL, PRACTICE FIELDS	$ 1.50	SF	285,000	$ 427,500.00
ALTERNATE S3 - ADD IRRIGATION AT JV BASEBALL, SOFTBALL AND PRACTICE FIELDS				**$ 427,500.00**
ALTERNATE S4 - SOD ILO SEED AT ATHLETIC FIELDS				
DEDUCT				

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
NATURAL TURF FIELDS - FOOTBALL, SOCCER, BB OUTFIELD	$ 4.00	SF	(650,000)	$ (2,600,000.00)
ADD				
SOD	$ 5.30	SF	650,000	$ 3,445,000.00
ALTERNATE S4 - SOD ILO SEED AT ATHLETIC FIELDS				**$ 845,000.00**
ALTERNATE S5 - ADD SAFETY NETTING 30' HIGH				
ADD SAFETY NETTING - 30' HIGH	$ 250.00	LF	780	$ 195,000.00
ALTERNATE S5 - ADD SAFETY NETTING 30' HIGH				**$ 195,000.00**
ALTERNATE S6 - ADD NATURAL GAS LINE TO EMERGENCY GENERATOR				
GAS SERVICE				
POLYETHELENE				
4"	$ 48.50	LF	1,200	$ 58,200.00
TRENCH AND BACKFILL	$ 45.00	LF	1,200	$ 54,000.00
STONE BED	$ 65.00	CY	100	$ 6,500.00
ALTERNATE S6 - ADD NATURAL GAS LINE TO EMERGENCY GENERATOR				**$ 118,700.00**
ALTERNATE E2 - NATRUAL GAS-FIRED GENERATOR ILO DIESEL-FIRED				
DEDUCT GENERATOR & TRANSFER SWTICHES - 900 KW	$ 510,000.00	LS	(1)	$ (510,000.00)
ADD GAS-FIRED GENERATOR & TRANSFER SWITCHES	$ 700,000.00	LS	1	$ 700,000.00
ALTERNATE E2 - NATRUAL GAS-FIRED GENERATOR ILO DIESEL-FIRED				**$ 190,000.00**
ALTERNATE M1 - GROUND SOURCE HEAT PUMPS				
GEOTHERMAL WELLS				
WELLS & PIPING LOOP - 500 LF/EA	$ 32,500.00	EA	130	$ 4,225,000.00
ASSOCIATED SITEWORK	$ 2,000,000.00	LS	1	$ 2,000,000.00
GEOTHERMAL EQUIPMENT				
WATER TO WATER HEAT PUMPS - 20HP	$ 38,000.00	EA	3	$ 114,000.00

EAST LONGMEADOW HIGH SCHOOL **MSBA PROJECT # 201900870505**

SD ESTIMATE

		GROSS SF	***191,796***	
DESCRIPTION	UNIT COST	UNIT	QUANTITY	TOTAL
WATER TO WATER HEAT PUMPS - 15HP	$ 32,000.00	EA	3	$ 96,000.00
PLATE & FRAME HEAT EXCHANGERS	$ 225,000.00	EA	2	$ 450,000.00
BOILER				
ELECTRIC BOILER - 250 KW	$ 70,000.00	EA	2	$ 140,000.00
INLINE PUMPS - 2HP	$ 5,500.00	EA	2	$ 11,000.00
HYDRONIC PIPING VS REFERIGERANT PIPING	$ 7.50	SF	191,796	$ 1,438,470.00
ELECTRICAL				
INCREASE SERVICE	$ 250,000.00	ALLW	1	$ 250,000.00
HVAC SAVINGS	$ 800,000.00	ALLW	(1)	$ (800,000.00)
ALTERNATE M1 - GROUND SOURCE HEAT PUMPS				**$ 7,924,470.00**
ALTERNATE M2 - AIR SOURCE HEAT PUMP CHILLERS & WATER SOURCE LOOP				
EQUIPMENT				
AIR TO WATER HEAT PUMPS - 15 HP, 100 TON	$ 215,000.00	EA	3	$ 645,000.00
PLATE & FRAME HEAT EXCHANGERS	$ 225,000.00	EA	2	$ 450,000.00
BUFFER TANK - 1000 GALLON	$ 15,000.00	EA	1	$ 15,000.00
MISC ASSOCIATED EQUIPMENT	$ 150,000.00	LS	1	$ 150,000.00
ELECTRIC BOILER - 250 KW	$ 35,000.00	EA	2	$ 70,000.00
INLINE PUMPS - 2HP	$ 5,500.00	EA	2	$ 11,000.00
HYDRONIC PIPING VS REFERIGERANT PIPING	$ 7.50	SF	191,796	$ 1,438,470.00
HVAC SAVINGS	$ 800,000.00	ALLW	(1)	$ (800,000.00)
ALTERNATE M2 - AIR SOURCE HEAT PUMP CHILLERS & WATER SOURCE LOOP				**$ 1,979,470.00**

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Project Team and Local Officials List

East Longmeadow High School
180 Maple St.
East Longmeadow, MA 01028

ELHS School Building Committee	**Stephen Chrusciel**, School Building Committee Chair **Gordon Smith**, Superintendent of Schools **Pamela Blair**, Assistant Superintendent for Business **Frank Paige**, ELHS Principal **Heather Brown**, ELPS Director of Curriculum **Kathleen Hill**, Town Council Member **Tom Christensen,** Town Manager **Kimberly Collins,** Director of Municipal Finance at Town of East Longmeadow **Elizabeth Marsian-Boucher**, School Committee Member **Greg Thompson**, School Committee Member **Bruce Fenney**, Superintendent of East Longmeadow DPW **Daniela LaBarre**, School Psychologist and Faculty member **Ryan Quimby**, Town IT Director
East Longmeadow Public School Department 180 Maple St East Longmeadow, MA 01028 Phone: (413) 525-5450	**Gordon Smith**, Superintendent **Pamela Blair**, Assistant Superintendent for Business
East Longmeadow High School 180 Maple St East Longmeadow, MA 01028 Phone: (413) 525-5460	**Frank Paige,** Principal
East Longmeadow School Committee 180 Maple St East Longmeadow, MA 01028 Phone: (413)525-5450	**Greg Thompson**, Chair **Antonella Raschilla Manzi,** Vice Chair **Elizabeth Marsian-Boucher**, Committee Member **Sarah Truoiolo,** Committee Member **Aimee Dalenta,** Committee Member
East Longmeadow Public Schools Information Technology 180 Maple St. East Longmeadow, MA 01028 Phone: (413) 525-5400 ext. 1900	**Ryan Quimby**, IT Director
East Longmeadow Town Council 60 Center Square East Longmeadow, MA 01028 Phone: (413) 525-5400 ext. 1001	**Ralph E. Page,** Council President **Marilyn M. Richards,** Council Vice President **Matthew Boucher,** Council Member **Anna T. Jones,** Council Member **Michael J. Kane,** Council Member **Kathleen G. Hill,** Council Member **Connor James O'Shea,** Council Member
East Longmeadow Building Management Division 60 Center Square, 2nd Floor East Longmeadow, MA 01028 Phone: (413) 525-5400 ext. 1200	**Bruce Fenney**, DPW Superintendent **Rob Roy,** Building Facilities Manager
East Longmeadow Building Department 60 Center Sq. East Longmeadow, MA 01028 Phone: (413) 525-5400 ext. 1150	**David Gardner,** Building Commissioner/ Zoning Enforcement Officer

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East Longmeadow Fire Department 150 Somers Rd. East Longmeadow, MA 01028 Phone: (413) 525-5430	**Paul J. Morrissette**, Fire Chief
East Longmeadow Health Department 60 Center Sq. East Longmeadow, MA 01028 Phone: 413-525-5400 x 1106	**Tammy Spencer,** Director of Public Health **Alix Roncarati,** Health Inspector **Renée Suckau,** Administrative Assistant
East Longmeadow Police Department 160 Somers Road East Longmeadow, MA 01028 Phone: (413) 525-5440	**Mark Williams,** Chief of Police
East Longmeadow Department of Public Works 60 Center Square, 2nd Floor East Longmeadow, MA 01028 Phone: (413) 525-5400 ext. 1200	**Bruce Fenney,** Department Head **Philip Abair,** Board Chair **Thomas O'Brien,** Board Member **Michael Lynch,** Board Member
Massachusetts School Building Authority 40 Broad St., Suite 500 Boston, MA 02108 Phone: (617) 720-4466	**Veatriki Dagkalakou,** Project Manager FS/SD **Nina Pappacostas**, Project Director
Skanska Building USA (OPM) 1350 Main St., Suite 1209 Springfield, MA 01103 Phone: (617) 275 6422	**Dale Caldwell,** Project Executive **John Benzinger,** Project Director **Ben Murphy**, Project Manager **Victoria Clifford,** Communications Director **Richard L'Heureux,** Field Representatives
Jones Whitsett Architects 308 Main St. Suite 3A Greenfield, MA 01301 Phone: (413) 773-5551	**Kristian Whitsett,** Principal-in-Charge **Dorrie Brooks**, Project Architect - Plans, Interiors, programming **Jillian DeCoursey,** Architect **Aviva Galaski,** Architect **Molly Clark,** Design Associate
Symmes Maini & McKee Associates 1000 Massachusetts Ave Cambridge, MA 02138 Phone: (617) 547-5400	**Lorraine Finnegan,** Principal **Helen Fantini,** Project Manager **Philip J. Poinelli,** Educational Programming **Brian Black,** Design Architect **Mariana Hernandez,** Project Architect - Envelope **Chris Racine,** Civil Engineer **Erik Vangsness,** Landscape Architect **Andrew Oldeman,** Mechanical Engineer **Stella Drizin,** Electrical Engineer **Patrick Weygint,** Communications Engineer **Paul Elliott,** Plumbing/Fire Protection Engineer
Richmond So Engineers (RSE) 85 Main St Watertown, MA 02472 Phone: (617) 926-9300	**Jennifer McClain,** Principal **Sofya Auren,** Structural Engineer **Georgi Chaykov,** Structural Engineer **Eugene Slavsky**, Structural Engineer
New Vista Design - Educational Visioning 32 Sheridan Street, #3 Boston, MA 02130 Phone: 617.733.0847	**David Stephen,** Architect & Educational Planner
Smith & Wessel - Hazardous Materials 188 Greenville St Spencer, MA 01562	**Glenn Nelson,** Operations Manager **Ted Sherry,** Consultant

Phone: (978) 346-4800	
O'Reilly Talbot & Okun Associates - Geotechnical/Geoenvironmental Engineering 293 Bridge Street, Suite 500 Springfield, MA 01103 Phone: (413) 788-6222	**Ashley Sullivan,** President **Mike Talbot**, Principal **Mark O'Malley**, Consultant
PM&C - Cost Estimating 20 Downer Ave, Suite 5 Hingham, MA 02043 Phone: 781-740-8007	**Peter Bradley,** Cost Estimator
Schiavone Designs - Food Service 112 Saddle Rock Road Holbrook, NY 11741 Phone: 631-403-4268	**Joanne Schiavone,** Kitchen/Food Service Consultant
Acentech, Inc. - Acuostics 33 Moulton St Cambridge, MA 02138 Phone: 617-499-8005	**Jonah Sacks,** Acoustical Consultant
Next Stage Design - Theater 900 Chapel St New Haven, CT, 06510 Phone: (203) 936-6565	**Gene Leitermann,** Theatrical Consultant
Hastings Consulting - Code 142 Hanlon Rd Holliston, MA 017446 Phone: 508.397.8417	**Kevin Hastings,** Code Consultant
IHCD - Accessibility 200 Portland St, 1st Floor, Boston, MA 02114 Phone: (617) 695-1225	**Valerie Fletcher,** Accessibility Consultant
Tighe & Bond - Traffic 1 University Ave #100 Westwood, MA 02090 Phone: (413) 562-1600	**Daniel Murphy,** Traffic Consultant
Stefura Associates, Inc. - Furniture 7 North Washington St, 7th Floor Boston, MA 02114 Phone: 617-723-5164	**Lianne Vivilecchia,** Furniture, Fixtures and Equipment
Heritage - Survey 241 Colleg Highway Southampton, MA 01073 Phone: (413) 527-3600	**Bruce Coombs,** Surveyor
Good Harbor Techmark, LLC - Security 17 Accord Park Drive, Suite 201 Norwell, MA 02061 Phone: 781-871-6555	**Matt Allain,** Security Consultant **Cody Lattin,** Security Consultant

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Communications Plan

Town of East Longmeadow
East Longmeadow High School Project
East Longmeadow, Massachusetts
February 14, 2023

Summary

The purpose of this document is to outline the proper communication procedures between all parties involved with the East Longmeadow High School Project.

Key Personnel

Name	*Title*	*Affiliation*	*Email*
District			
Gordon Smith	Superintendent	ELPS	gordon.smith@eastlongmeadowma.gov
Steve Chrusciel	Chairman	ELHS SBC	schrusciel@chruscielgroup.com
Massachusetts School Building Authority			
Veatriki Dagkalakou	Project Manager	MSBA	Veatriki.Dagkalakou@MassSchoolBuildings.org
Nina Pappacostas	Project Coordinator	MSBA	nina.pappacostas@massschoolbuildings.org
Design Team			
Kristian Whitsett	Principle in Charge	Jones Whitsett Architects	kw@joneswhitsett.com
Dorrie Brooks-Kahn	Principle	Jones Whitsett Architects	db@joneswhitsett.com
Helen Fantini	Project Manager	SMMA	hfantini@smma.com

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Owner's Project Manager

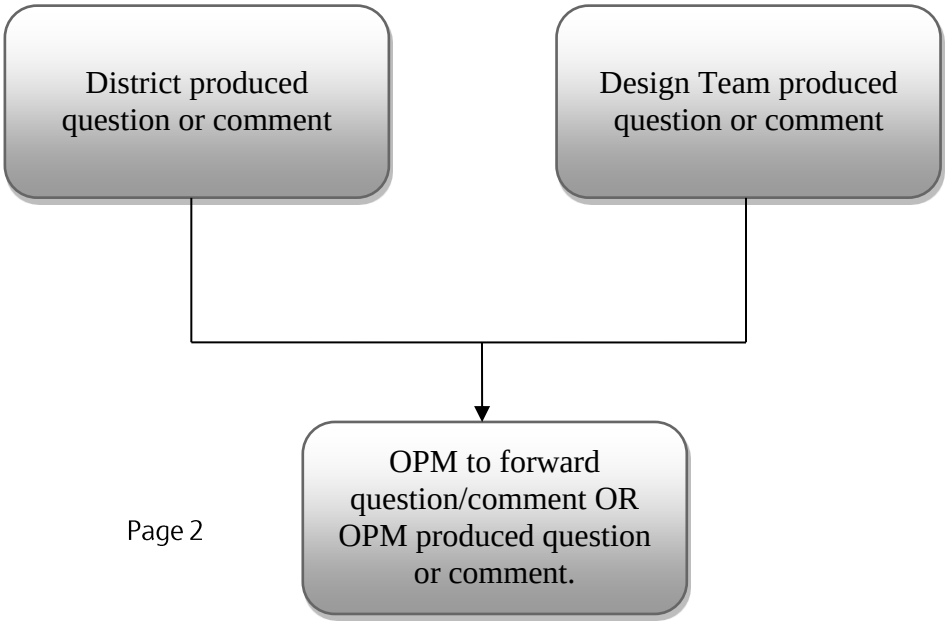
John Benzinger	Project Director	Skanska	john.benzinger@skanska.com
Dale Caldwell	Project Executive	Skanska	dale.caldwell@skanska.com
Ben Murphy	Project Manager	Skanska	ben.murphy@skanska.com
Victoria Clifford	Assistant Project Manager	Skanska	Victoria.clifford@skanska.com

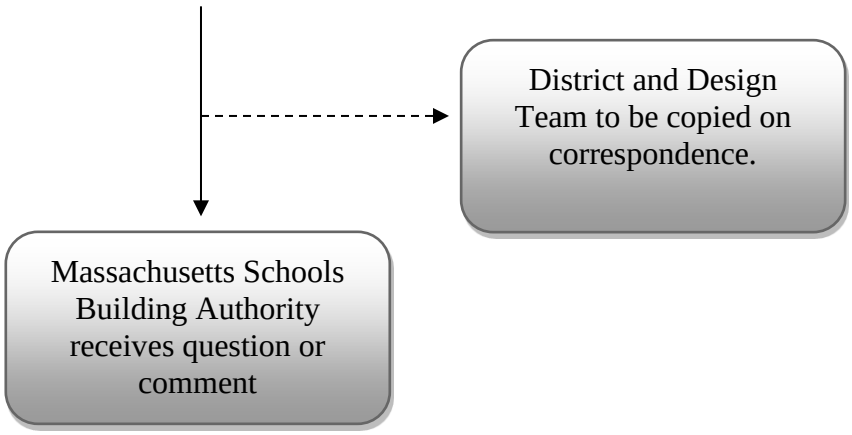
Communication Strategy

The following diagrams represent the flow of communication between the personnel identified through the Schematic Design Phase. This document will be updated when the Project Team expands to include a general contractor/ construction manager and subcontractors during the construction phase.

Communication to the Massachusetts School Building Authority

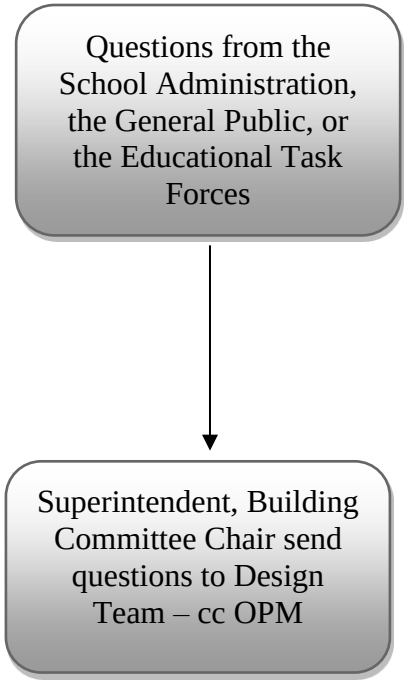
The Owner's Project Manager (OPM) is responsible for being the conduit to the Massachusetts School Building Authority (MSBA). Any questions or comments directed to the MSBA should be issued through the OPM. In the event that the OPM Team is aware of the discussion point, the District and the Design Team can communicate directly with the MSBA while copying the OPM on the correspondence.





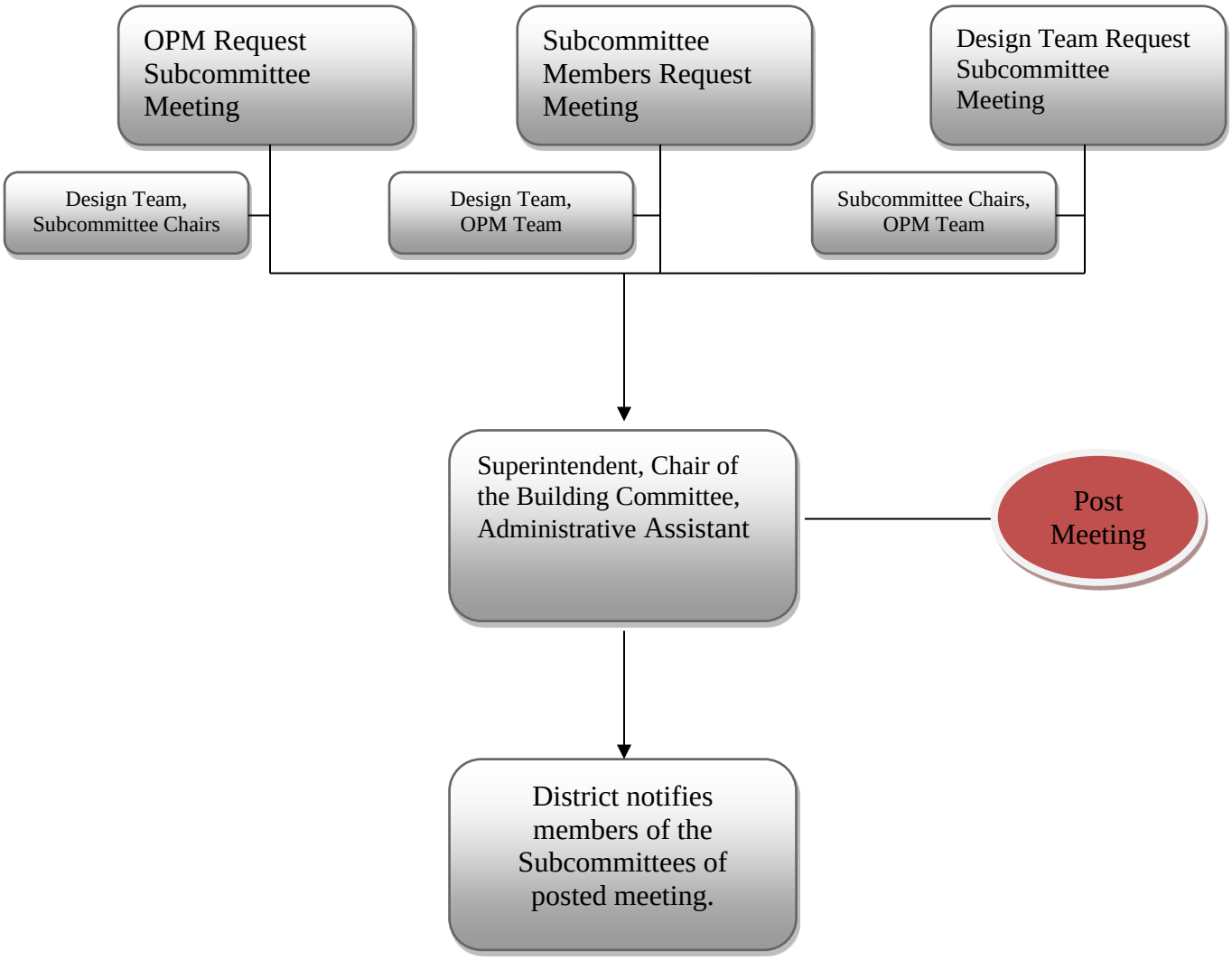
Communication to the Design Team

All design related questions from the School Administration, Educational Task Forces, and the General Public should be filtered through the Superintendent and the School Building Committee Chair. These questions should then be directed to the Design Team while notifying the Owner's Project Manager. All responses should filter back through the District the same way before being distributed to the appropriate parties.



Scheduling Subcommittee Meetings

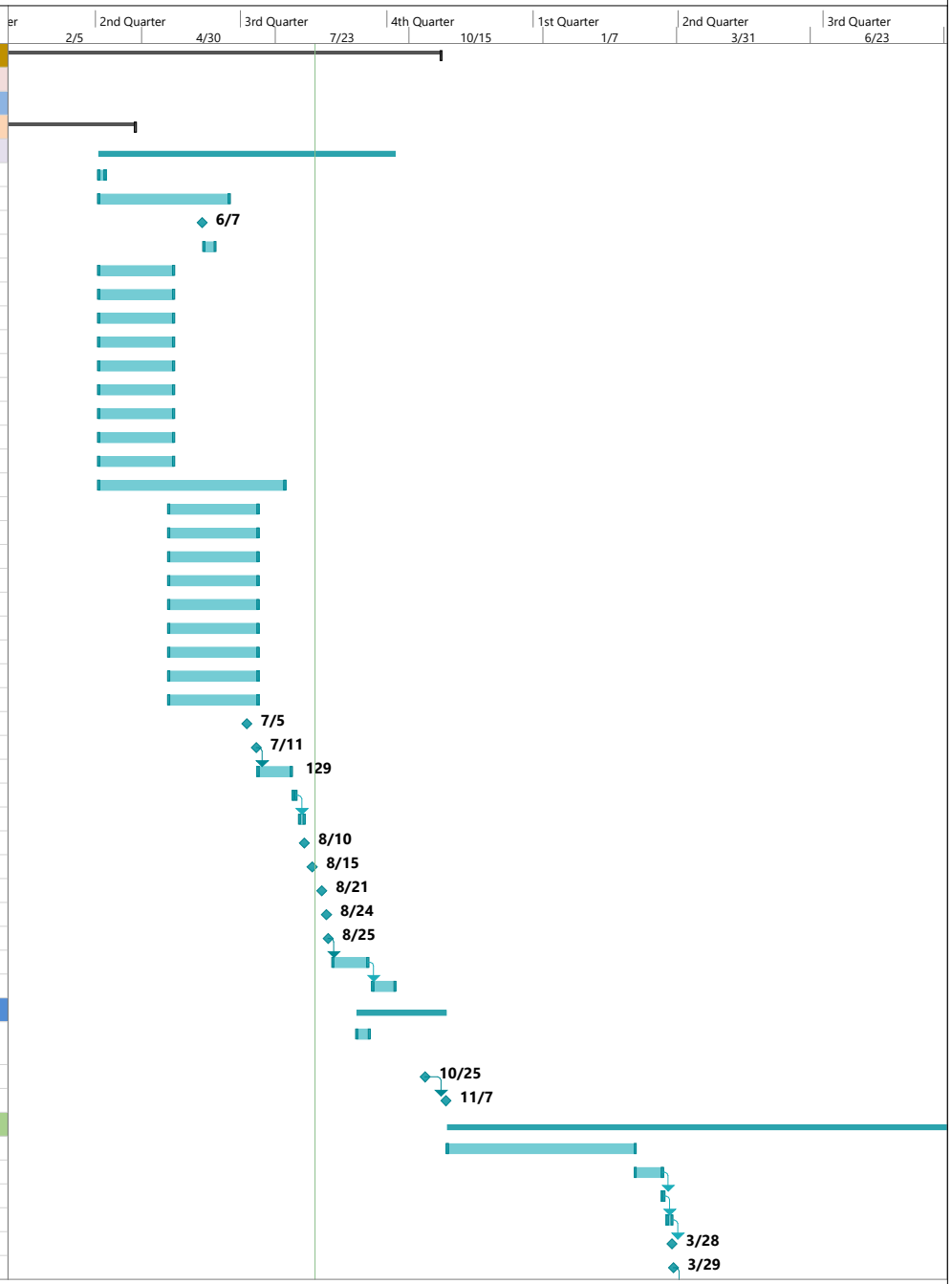
Subcommittee Meetings should be scheduled by the Subcommittee Chair at the end of the each meeting. The time and location decided upon should be sent to the members of the district identified in the Key Personnel Table. These meetings should be posted on the Town of East Longmeadow website. In the event that another meeting needs to be scheduled, the procedure outlined below should be followed.



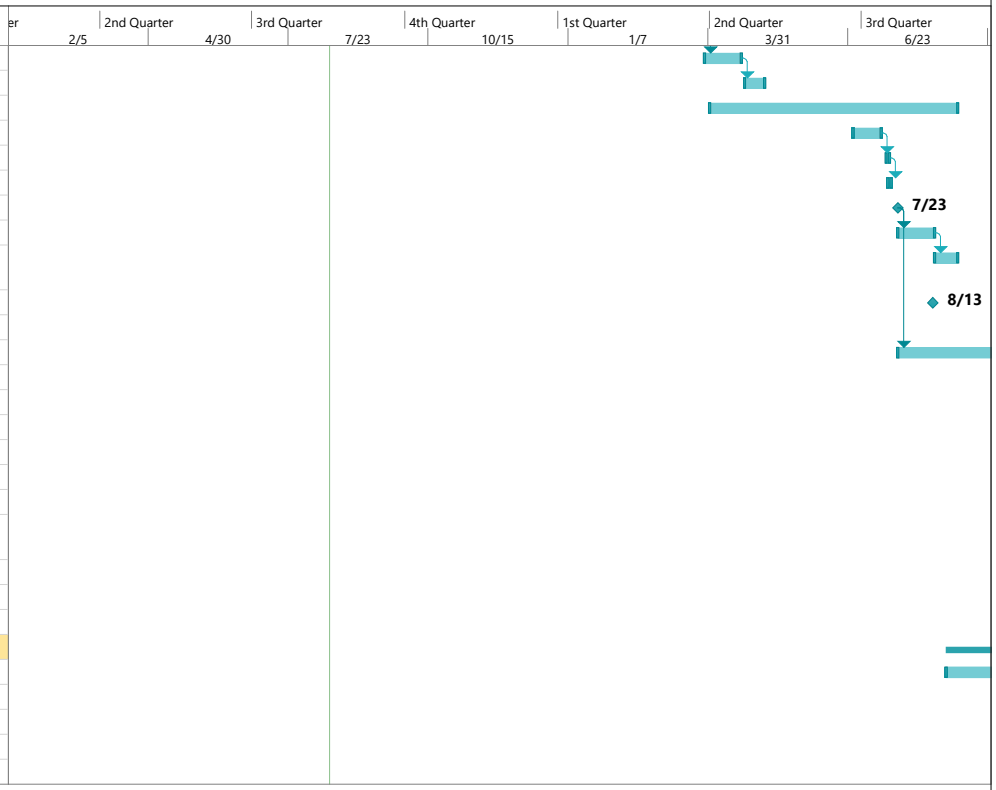
East Longmeadow High School
Designer Work Plan

Thu 8/17/23

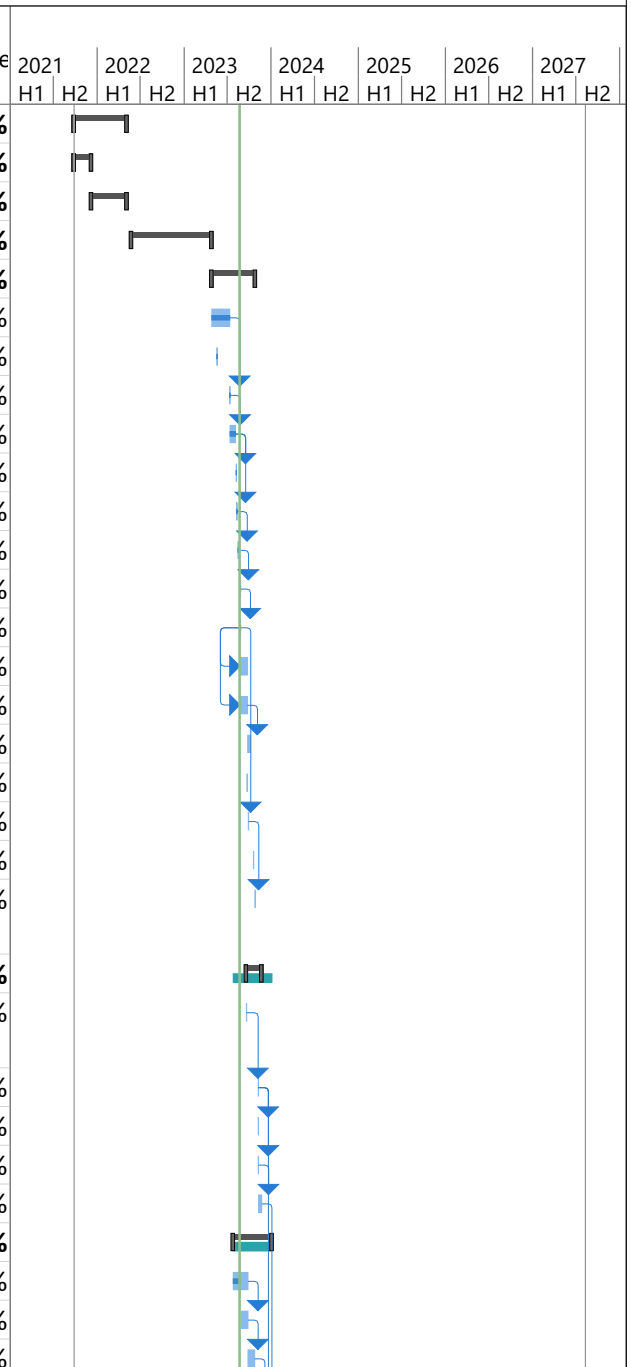
ID	Task Name	Duration	Start	Finish
1	**Community Meetings**	**363 days**	**Wed 6/15/22**	**Fri 11/3/23**
7	**Project Start-up**	**39 days**	**Mon 4/18/22**	**Thu 6/9/22**
13	**MODULE 3 - Preliminary Design Program**	**105 days**	**Wed 5/18/22**	**Tue 10/11/22**
49	**MODULE 3 - PREFERRED SCHEMATIC REPORT**	**171 days**	**Tue 8/30/22**	**Wed 4/26/23**
77	**MODULE 4 - Schematic Design**			
78	Schematic Design Kick-Off Meeting (week of)	4 days	Mon 4/3/23	Thu 4/6/23
79	Focus Group Meetings	60 days	Mon 4/3/23	Fri 6/23/23
80	Green Building Charrette (TBD)	0 days	Wed 6/7/23	Wed 6/7/23
81	Update LEED Scorecard	5 days	Thu 6/8/23	Wed 6/14/23
82	Refine Educational Programming with Departments	35 days	Mon 4/3/23	Fri 5/19/23
83	Develop Safety and Security Meeting Parameters	35 days	Mon 4/3/23	Fri 5/19/23
84	Update Space Summary	35 days	Mon 4/3/23	Fri 5/19/23
85	Define Building Design Characteristics	35 days	Mon 4/3/23	Fri 5/19/23
86	Develop Room Data Sheets	35 days	Mon 4/3/23	Fri 5/19/23
87	Update Site Development Requirements	35 days	Mon 4/3/23	Fri 5/19/23
88	Define Instructional Technology Requirements	35 days	Mon 4/3/23	Fri 5/19/23
89	Develop Site Plan	35 days	Mon 4/3/23	Fri 5/19/23
90	Develop Floor Plans	35 days	Mon 4/3/23	Fri 5/19/23
91	Develop Building Exterior Imagery	85 days	Mon 4/3/23	Fri 7/28/23
92	Develop Building Sections	40 days	Wed 5/17/23	Tue 7/11/23
93	Develop Typical Interior Elevations	40 days	Wed 5/17/23	Tue 7/11/23
94	Develop Preliminary Energy Model	40 days	Wed 5/17/23	Tue 7/11/23
95	Perform Life Cycle Cost Analysis on Major MEP Equipment	40 days	Wed 5/17/23	Tue 7/11/23
96	Update Building Systems Narratives	40 days	Wed 5/17/23	Tue 7/11/23
97	Update Code Analysis & Accessibilty Narrative	40 days	Wed 5/17/23	Tue 7/11/23
98	Develop Uniformat Specification	40 days	Wed 5/17/23	Tue 7/11/23
99	Develop Exterior Presentation Building Imagery	40 days	Wed 5/17/23	Tue 7/11/23
100	Develop FF&E and Instructional Tech Estimates	40 days	Wed 5/17/23	Tue 7/11/23
101	Consultant info to JWA	0 days	Wed 7/5/23	Wed 7/5/23
102	Submit SD Package to Cost Estimators	0 days	Tue 7/11/23	Tue 7/11/23
103	Develop Cost Estimate	15 days	Wed 7/12/23	Tue 8/1/23
104	Reconcile Cost Estimates	2 days	Thu 8/3/23	Fri 8/4/23
105	Finalize Cost Estimates (with VE)	3 days	Mon 8/7/23	Wed 8/9/23
106	SBC Votes to Submit SD Notification to MSBA	0 days	Thu 8/10/23	Thu 8/10/23
107	OPM Submits Schematic Design Notification to MSBA	0 days	Tue 8/15/23	Tue 8/15/23
108	Consultant info to JWA	0 days	Mon 8/21/23	Mon 8/21/23
109	SBC Votes to Submit SD to MSBA	0 days	Thu 8/24/23	Thu 8/24/23
110	Submit Schematic Design Binder& DESE Plan to MSBA	0 days	Fri 8/25/23	Fri 8/25/23
111	MSBA Review Timeframe	16 days	Mon 8/28/23	Mon 9/18/23
112	Respond to MSBA Staff Comments	10 days	Fri 9/22/23	Thu 10/5/23
113	**MODULE 5 - Project Scope and Budget Agreement**			
114	Town Council Vote to approve project & ballot language (min 5 wks pre-vote) Sept 12 and Sept 19 Council Meetings	6 days	Tue 9/12/23	Tue 9/19/23
115	Obtain MSBA Board Scope and Budget Approval	0 days	Wed 10/25/23	Wed 10/25/23
116	Local Funding Authorization	0 days	Tue 11/7/23	Tue 11/7/23
117	**MODULE 6 - Detailed Design**			
118	Design Development (Estimate Set)	84 days	Wed 11/8/23	Mon 3/4/24
119	Design Development Cost Estimate	13 days	Tue 3/5/24	Thu 3/21/24
120	Design Development Cost Estimate Reconciliation	1 day	Fri 3/22/24	Fri 3/22/24
121	Design Development Value Engineering	3 days	Mon 3/25/24	Wed 3/27/24
122	PBC Vote to submit DD Report to MSBA	0 days	Thu 3/28/24	Thu 3/28/24
123	Design Development to MSBA	0 days	Fri 3/29/24	Fri 3/29/24



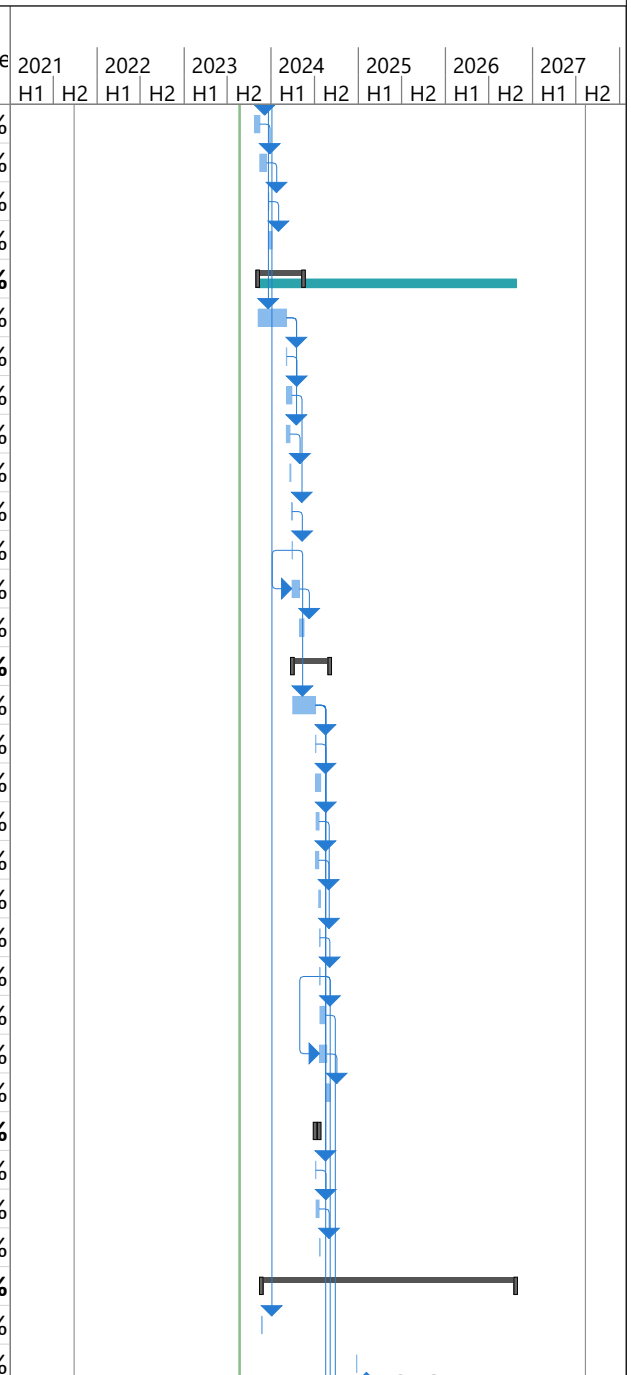
ID	Task Name	Duration	Start	Finish
124	MSBA Design Development Review Period	16 days	Fri 3/29/24	Fri 4/19/24
125	Design Team Reponse to MSBA Comments	10 days	Mon 4/22/24	Fri 5/3/24
126	**60% Construction Documents**	107 days	Mon 4/1/24	Tue 8/27/24
127	60% Construction Documents Cost Estimate	13 days	Wed 6/26/24	Fri 7/12/24
128	60% Construction Documents Cost Estimate Reconciliation	2 days	Tue 7/16/24	Wed 7/17/24
129	60% Value Engineering	2 days	Wed 7/17/24	Thu 7/18/24
130	60% Construction Documents to MSBA	0 days	Tue 7/23/24	Tue 7/23/24
131	MSBA 60% Construction Documents Review Period	16 days	Tue 7/23/24	Tue 8/13/24
132	District 60% Construction Documents Review Response and Drawing Revisions	10 days	Wed 8/14/24	Tue 8/27/24
133	Issue Early Package #1: Site	0 days	Tue 8/13/24	Tue 8/13/24
134	**90% Construction Documents**			
135	90% Construction Documents Development	52 days	Tue 7/23/24	Wed 10/2/24
136	90% CD Estimate	12 days	Wed 10/2/24	Thu 10/17/24
137	90% CDs Estimate Reconciliation	3 days	Fri 10/18/24	Tue 10/22/24
138	90% Value Engineering	2 days	Tue 10/22/24	Wed 10/23/24
139	90% Construction Documents to MSBA	0 days	Fri 10/25/24	Fri 10/25/24
140	Early Package #2: Concrete, Steel, Elevator	1 day	Mon 10/28/24	Mon 10/28/24
141	MSBA 90% Construction Documents Review Period	16 days	Fri 10/25/24	Fri 11/15/24
142	District 90% Construction Documents Review Response and Drawing Revisions	10 days	Mon 11/18/24	Fri 11/29/24
143	**100% Construction Documents**	26 days	Fri 10/25/24	Fri 11/29/24
144	100% Construction Documents to Bid	15 days	Mon 12/2/24	Fri 12/20/24
145	100% Construction Documents to MSBA	0 days	Mon 12/2/24	Mon 12/2/24
146	**MODULE 7 - Construction**			
147	Phase 1	500 days	Wed 8/21/24	Tue 7/21/26
148	Substantial Completion Phase 1	0 days	Wed 7/22/26	Wed 7/22/26
149	Phase 2	190 days	Wed 7/22/26	Tue 4/13/27
150	Substantial Completion Phase 2	0 days	Wed 4/14/27	Wed 4/14/27
151	Final Completion	60 days	Wed 4/14/27	Tue 7/6/27



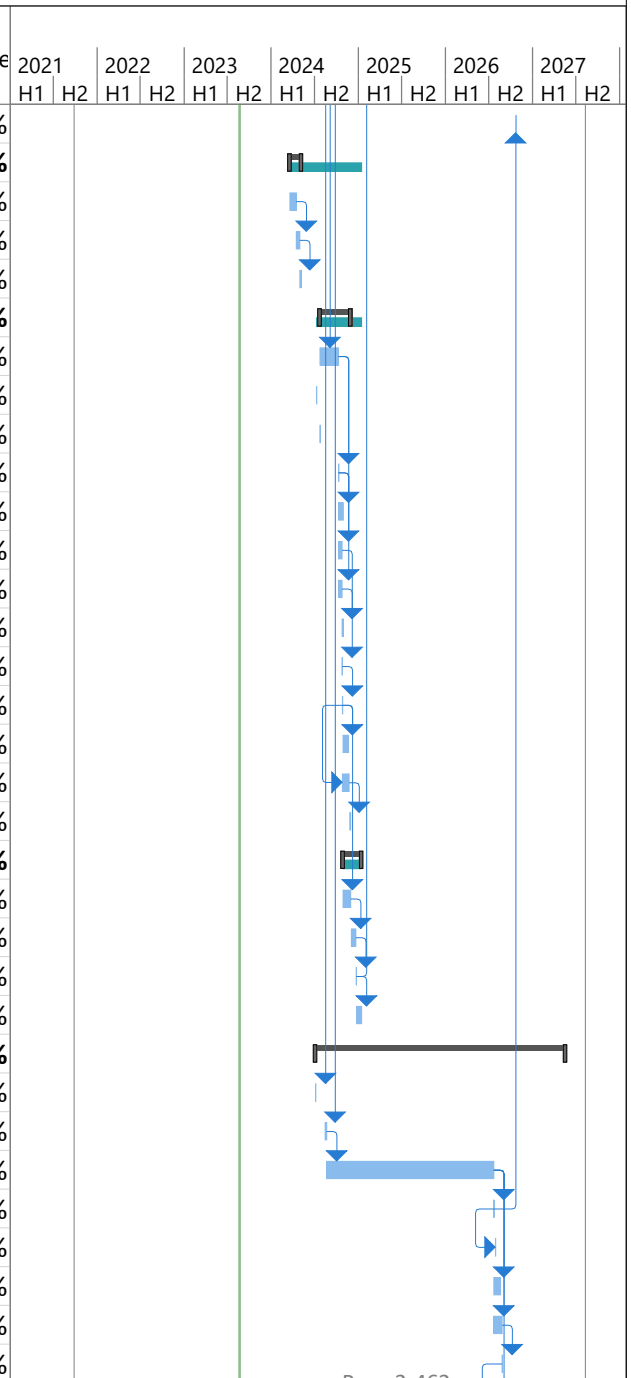
ID	Task Name	Duration	Start	Finish	% Comple
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**100%**
69	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**58%**
70	SD Submittal Development	53 days	Thu 4/27/23	Mon 7/10/23	100%
71	Community Forum #5	1 day	Thu 5/18/23	Thu 5/18/23	100%
72	SD Pricing Set to Estimators	1 day	Tue 7/11/23	Tue 7/11/23	100%
73	Cost Estimate & Reconciliation	18 days	Wed 7/12/23	Fri 8/4/23	100%
74	VE Subcommittee Meeting	1 day	Mon 8/7/23	Mon 8/7/23	100%
75	SBC Vote to Submit SD Notification to MSBA	1 day	Thu 8/10/23	Thu 8/10/23	100%
76	OPM Submits SD Notification to MSBA	1 day	Tue 8/15/23	Tue 8/15/23	100%
77	SBC Vote to approve SD Submittal	1 day	Thu 8/24/23	Thu 8/24/23	100%
78	SD Submittal to MSBA	1 day	Fri 8/25/23	Fri 8/25/23	100%
79	DESE Special Education Review/Approval	21 days	Fri 8/25/23	Fri 9/22/23	0%
80	MSBA SD Review	21 days	Fri 8/25/23	Fri 9/22/23	0%
81	Address SD Comments	10 days	Mon 9/25/23	Fri 10/6/23	0%
82	Community Forum #6	1 day	Thu 9/21/23	Thu 9/21/23	0%
83	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%
84	Community Forum #7	1 day	Thu 10/19/23	Thu 10/19/23	0%
85	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
86	**Module 5: Funding the Project**	**47 days**	**Tue 9/19/23**	**Wed 11/22/23**	**15%**
87	Town Council Vote to Approve Budget & Ballot Question Language	1 day	Tue 9/19/23	Tue 9/19/23	0%
88	District Vote to Appropriate Full Project Cost	1 day	Tue 11/7/23	Tue 11/7/23	0%
89	Certificate of Vote Sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
90	PSBA sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
91	PSBA Executed	10 days	Thu 11/9/23	Wed 11/22/23	0%
92	**CM @ Risk Procurement Process**	**116 days**	**Wed 7/26/23**	**Wed 1/3/24**	**17%**
93	OIG CMR Application	44 days	Wed 7/26/23	Mon 9/25/23	50%
94	Draft CM @ Risk RFQ	20 days	Tue 8/29/23	Mon 9/25/23	0%
95	Issue Ch. 149A CM @ Risk RFQ	20 days	Tue 9/26/23	Mon 10/23/23	0%



ID	Task Name	Duration	Start	Finish	% Comple
96	Review and Qualify CM Firms	15 days	Tue 10/24/23	Mon 11/13/23	0%
97	Issue C. 149A CM @ Risk RFP	20 days	Tue 11/14/23	Mon 12/11/23	0%
98	CM Interviews	1 day	Wed 12/20/23	Wed 12/20/23	0%
99	Selection and Negotiation	10 days	Thu 12/21/23	Wed 1/3/24	0%
100	**Module 6: Detailed Design**	**137 days**	**Wed 11/8/23**	**Thu 5/16/24**	**0%**
101	100% DD Development	84 days	Wed 11/8/23	Mon 3/4/24	0%
102	Issue DD Documents to Estimators	1 day	Tue 3/5/24	Tue 3/5/24	0%
103	Cost Estimate/Reconciliation/VE if Required	16 days	Wed 3/6/24	Wed 3/27/24	0%
104	Cx Agent Comments on 100% DD	10 days	Tue 3/5/24	Mon 3/18/24	0%
105	Team Responds to Cx Agent's Comments	4 days	Tue 3/19/24	Fri 3/22/24	0%
106	SBC Approval of 100% DD Submission to MSBA	1 day	Thu 3/28/24	Thu 3/28/24	0%
107	100% DD Submission to the MSBA	1 day	Fri 3/29/24	Fri 3/29/24	0%
108	MSBA DD Review	21 days	Fri 3/29/24	Fri 4/26/24	0%
109	Address DD Review Comments	14 days	Mon 4/29/24	Thu 5/16/24	0%
110	**60% Construction Documents**	**112 days**	**Mon 4/1/24**	**Tue 9/3/24**	**0%**
111	60% CD Development	69 days	Mon 4/1/24	Thu 7/4/24	0%
112	60% CDs to Estimators	1 day	Fri 7/5/24	Fri 7/5/24	0%
113	Site Building Permit Issued	15 days	Fri 7/5/24	Thu 7/25/24	0%
114	Cost estimate/Reconciliation/VE if Required	10 days	Mon 7/8/24	Fri 7/19/24	0%
115	Cx Agent's Comments on 60% CD	10 days	Fri 7/5/24	Thu 7/18/24	0%
116	Teams Respond to Cx Agent's Comments	4 days	Fri 7/19/24	Wed 7/24/24	0%
117	SBC Approval of 60% CD Submission to MSBA	1 day	Mon 7/22/24	Mon 7/22/24	0%
118	60% CD Submission to MSBA	1 day	Tue 7/23/24	Tue 7/23/24	0%
119	Bid Early Package #1 (Site)	15 days	Wed 7/24/24	Tue 8/13/24	0%
120	MSBA 60% CD Review	21 days	Tue 7/23/24	Tue 8/20/24	0%
121	Address 60% Review Comments	10 days	Wed 8/21/24	Tue 9/3/24	0%
122	**Structural Peer Review**	**12 days**	**Fri 7/5/24**	**Mon 7/22/24**	**0%**
123	Issue 60% Structural CDs to Peer Reviewer	1 day	Fri 7/5/24	Fri 7/5/24	0%
124	Structural Steel Peer Review on 60% CDs	10 days	Mon 7/8/24	Fri 7/19/24	0%
125	Review/Incorporate Peer Reviewer's Comm	1 day	Mon 7/22/24	Mon 7/22/24	0%
126	**Sustainable Design Milestones**	**762 days**	**Thu 11/23/23**	**Fri 10/23/26**	**0%**
127	LEED Project Registration	1 day	Thu 11/23/23	Thu 11/23/23	0%
128	LEED Design Submission	1 day	Tue 12/24/24	Tue 12/24/24	0%



ID	Task Name	Duration	Start	Finish	% Comple
129	Final Review Submission (3 months after SC)	1 day	Fri 10/23/26	Fri 10/23/26	0%
130	**Filed Sub Bid Process**	**35 days**	**Tue 3/19/24**	**Mon 5/6/24**	**0%**
131	Issue RFQ for Filed Sub Bids	20 days	Tue 3/19/24	Mon 4/15/24	0%
132	Prequailify Filed Subs	10 days	Tue 4/16/24	Mon 4/29/24	0%
133	Notify Preqaulified Bidders	5 days	Tue 4/30/24	Mon 5/6/24	0%
134	**90% Construction Documents**	**93 days**	**Wed 7/24/24**	**Fri 11/29/24**	**0%**
135	90% CD Development	55 days	Wed 7/24/24	Tue 10/8/24	0%
136	NOI to Con. Comm. and DEP	1 day	Tue 7/9/24	Tue 7/9/24	0%
137	NPDES Approval by EPA	1 day	Wed 7/24/24	Wed 7/24/24	0%
138	90% CDs to Estimators	1 day	Wed 10/9/24	Wed 10/9/24	0%
139	Full Building Permit Issued	15 days	Wed 10/9/24	Tue 10/29/24	0%
140	Cost Estimate/Reconciliation/VE if Requi	10 days	Thu 10/10/24	Wed 10/23/24	0%
141	Cx Agent Comments on 90% CDs	10 days	Thu 10/10/24	Wed 10/23/24	0%
142	Team Responds to Cx Agent's Comments	4 days	Thu 10/24/24	Tue 10/29/24	0%
143	SBC Approval of 90% CD Submission to M	1 day	Thu 10/24/24	Thu 10/24/24	0%
144	90% CD Submission to MSBA	1 day	Fri 10/25/24	Fri 10/25/24	0%
145	Bid Early Package #2 (Concrete & Steel)	16 days	Mon 10/28/24	Mon 11/18/24	0%
146	MSBA 90% CD Review Comments	21 days	Fri 10/25/24	Fri 11/22/24	0%
147	Address 90% Review Comments	5 days	Mon 11/25/24	Fri 11/29/24	0%
148	**100% Construction Documents**	**56 days**	**Mon 10/28/24**	**Mon 1/13/25**	**0%**
149	100% CD/ Bid Packages Development	25 days	Mon 10/28/24	Fri 11/29/24	0%
150	Bid 100% CDs	15 days	Mon 12/2/24	Fri 12/20/24	0%
151	Bids Due	1 day	Mon 12/23/24	Mon 12/23/24	0%
152	Finalize GMP	15 days	Tue 12/24/24	Mon 1/13/25	0%
153	**Module 7: Construction**	**748 days**	**Fri 7/5/24**	**Tue 5/18/27**	**0%**
154	NTP for Construction	1 day	Fri 7/5/24	Fri 7/5/24	0%
155	Mobilization (Early Package #1)	5 days	Wed 8/14/24	Tue 8/20/24	0%
156	Phase 1- Site & Building	500 days	Wed 8/21/24	Tue 7/21/26	0%
157	Substantial Completion (Phase 1)	1 day	Wed 7/22/26	Wed 7/22/26	0%
158	Certificate of Occupancy	1 day	Wed 7/29/26	Wed 7/29/26	0%
159	FF&E Installation	20 days	Wed 7/22/26	Tue 8/18/26	0%
160	Complete Punch List (Phase 1)	25 days	Wed 7/22/26	Tue 8/25/26	0%
161	Occupancy/Move In	1 day	Wed 8/26/26	Wed 8/26/26	0%



ID	Task Name	Duration	Start	Finish	% Comple
162	Phase 2- Demolition, Landscape, & Hardscape	190 days	Wed 7/22/26	Tue 4/13/27	0%
163	Complete Punch List (Phase 2)	25 days	Wed 4/14/27	Tue 5/18/27	0%
164	Substantial Completion (Phase 2)	1 day	Wed 4/14/27	Wed 4/14/27	0%
165	*Occupancy/Move In*	1 day	Wed 8/26/26	Wed 8/26/26	0%
166	**Module 8: Completing the Project**	**60 days**	**Wed 5/19/27**	**Tue 8/10/27**	0%

EAST LONGMEADOW PUBLIC SCHOOLS
180 Maple Street
East Longmeadow, MA. 01028-2788
Achievement *Accountability*

Gordon Smith
Superintendent of Schools

Pamela Blair
Asst. Supt. for Business

August 10th, 2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Mrs. Pichetti:

At its meeting on Thursday, August 10th, 2023, the East Longmeadow High School Building Committee voted the following:

Frank Paige made the following motion: The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget of $177.5M for the East Longmeadow High School Project and approves the submission to the MSBA for its consideration. Elizabeth (Beth) Marsian-Boucher seconded the Motion.

10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.
0 opposed.
0 abstained.
3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.
The motion passed unanimously.

Respectfully submitted by:

Gordon C. Smith

Gordon Smith
Superintendent of Schools
East Longmeadow Public Schools
(413) 525-5450

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

EAST LONGMEADOW PUBLIC SCHOOLS
180 Maple Street
East Longmeadow, MA. 01028-2788
Achievement Accountability

Gordon Smith
Superintendent of Schools

Pamela Blair
Asst. Supt. for Business

August 24th, 2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Mrs. Pichetti:

At its meeting on Thursday, August 24th, 2023, the East Longmeadow High School Building Committee voted the following:

The East Longmeadow High School Building Committee votes to approve the Schematic Design (SD) Submission and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district. Elizabeth Marsian-Boucher made the motion. Kathleen Hill seconded the motion.

12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen, Kimberly Collins.
0 opposed.
0 abstained.
1 absent. Ryan Quimby
The motion passed unanimously.

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

Respectfully submitted by:

Gordon C. Smith

Gordon Smith
Superintendent of Schools
East Longmeadow Public Schools
(413) 525-5450

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
8/10/23 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair (virtual)
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business, absent
Frank Paige, ELHS Principal, absent
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member, absent
Elizabeth (Beth) Marsian-Boucher, Community Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager, absent
Kimberly Collins, Director of Municipal Finance

Other Attendees:
Skanska USA Building, Inc.: John Benzinger, Victoria Clifford (virtual)
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Kristian Whitsett

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 3:03 PM.
- Steve asked for a motion to approve the 7/20/2023 ELHSBC Meeting Minutes.
- **Ryan Quimby made the motion. Elizabeth (Beth) Marsian-Boucher seconded the motion.**
    - **7 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Kimberly Collins.**
    - **0 opposed.**
    - **3 abstained, Bruce Fenney, Daniela LaBarre, Frank Paige.**
    - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed.**

Public Participants

No public Participants

Design Updates

- Life Cycle Cost Analysis:
    - Andy Oldeman, JWA, gave an overview of the Life Cycle Cost Analysis

- MSBA requires us to study 3 mechanical systems and compare them to the code baseline. Four systems were studied in the presented in the life cycle cost analysis.
- Includes installation costs and estimates for operating energy costs.
- Mechanical equipment would need to be replaced after 50 years.
- Group discussed the Mass Save incentive plan.
- The design team recommended the VRF system.
- Bruce Fenney asked if we've built in the incentive plan savings in the SD total project budget?
- Beth asked if the WRF chillers use freon and if that will change in the next 5 to 10 years?
    - Andy responded yes, and it is very possible the systems will change in 5 to 10 years as most do.
- Dorrie Brooks suggested hiring a Photovoltaics Design Consultant in the DD phase
- Greg requested we highlight the Photovoltaics in the exterior design. from the front exterior view
    - Beth disagreed and suggested we conceal and Photovoltaics as much as possible.
    - Bruce added that this is an all electric building, so we should highlight that with the Photovoltaics.
    - The Design Team responded that they will look into developing this in the DD Phase.

Value Engineering

- Design team presented Recommended Scope Reductions/Value Engineering (VE) items recommended by the Value Engineering Subcommittee:

Recommended Scope Reductions

Item	Item Description
1B	Eliminate Basketball Court Lighting (and new controls cabinet)
3	Eliminate 6' wood fencing along property line, 504lf
4	Eliminate 6' chain link on southern perimeter, 455lf
5	Eliminate 4' Chain link fence on property line, 743lf
6	Eliminate Lft Arm Barrier Gate at Emergency Access Path
7	Reduce Caliper of Tree Site
8	Reduce Quantity of Plant Materials by 10%
10	PreK Playground EQ Allowance of 60K ilo of outlined scope
12	Granite Block Seatwalls to Precast at rear side of school only
14	Aluminum feeders ilo copper
15	Reduce AV Allowance for Auditorium to $200,000 from $450,000
16	Formed Metal ilo Porcelain Clad Rainscreen
19	Reduce design and quantity of bollards (based on memo Opt. 2)
23	Wall tile ilo veneer wood wainscot in academic wing
24	Eliminate acoustic treatment to Gym Walls
25	Steel ilo glulam beams
26	~~Gyp Ceiling ilo wood slatted ceiling, 2455sf~~
30	Athletic fields - eliminate 12" gravel base, geo-textile fabric, reduce topsoil from 12" to 8" including associated cut/fill adjustments
36	Correct estimated toilet ceramic wall area to 12,000sf from 14,994sf
40	Adjust the triple pane glazing at curtain wall price to $240/SF and window to $185.
41	Replace 13,566 sf stabilized stone dust pathway with bituminous concrete walkway (including bituminous. Reduce width to 6 ft.
42	Reduce gravel below footing to 6" thick section of imported ¾" crushed stone. Provide 8" thick section of imported base course sand & gravel below the building slab. Soil/fill below the top layer of topsoil can remain in place. Assume that 80% of this 2' average depth of fill can remain in place.
	Estimated value of deductions before markup **$6.9M**
	Estimated value of deductions after markup **$8.5M**

- The following items were discussed:

- Gordon clarified that the Preschool program at the High School is a class for child development and not the Preschool program that is housed at Meadowbrook.
- Beth asked if aluminum feeders were safe,
- John Benzinger, Skanska, responded that the aluminum feeders for commercial work are safe. John noted that aluminum feeders in residential work are different.
- Bruce added that the Town makes their own millings.
- To be discussed with the Design Team in the DD Phase.
- Beth asked how much square feet was included in the outdoor athletics storage.
- Bruce Fenney confirmed that a diesel generator would be the preference for the town.

- **Gordon Smith made the following motion: Motion to accept the recommended scope reductions by the value engineering subcommittee with 1 amendment to the current list, #25, #26, and recognizing the new cost savings from earthwork, relative to the ability to retain existing soils on site. The motion was seconded by Greg Thompson.**
  - **7 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Kimberly Collins, Bruce Fenney, Daniela LaBarre, Frank Paige.**
  - **0 opposed.**
  - **0 abstained.**
  - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed.**

Total Project Budget Update

- The Project Team presented the Schematic Design Total Project::

Construction Budget (PSR Estimate: to be adjusted per reconciled SD estimate)	**$ 147.8 M**
Soft Costs (OPM & A/E Administration, FF&E, Misc. Project Costs)	**$ 25.78 M**
Contingencies (Owner's & Construction)	**$ 4.1 M**
Estimated Total Project Budget	**$ 177.8 M**
Estimated Max. Total Facilities Grant	**$ 62.2 M**
Anticipated District Share	**$ 115.5 M**

Figures above developed prior to final soils VE addition and Committee VE approval and estimate revision. Figures do not represent final MSBA scope and budget agreement.

- The Team reported that the SD budget has gone up to $177.8M since the PSR budget, but from work with the SBC and Design Team, and realizing additional incentive points

- with Town Share has gone down to $115.5M.
- John Benzinger, Skanska, noted that the cost will come down another $300k with the scope reduction revisions.
- The Project Team reviewed the estimating and value engineering process.
- Greg asked why the Soft Costs have gone up since the PSR estimate
    - The Design Team noted that there are additional soft costs included pertaining to achieving the sustainability goals and PV design consultant.
- Gordon asked if the MSBA will revisit the district reimbursement rate?
    - Skanska to review with the MSBA.
- Dorrie noted that there are additional costs included to cover the construction manager at risk delivery method which was not included in the PSR estimate.
- **Frank Paige made the following motion: The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget of $177.5M for the East Longmeadow High School Project and approves the submission to the MSBA for its consideration. Elizabeth (Beth) Marsian-Boucher seconded the Motion.**
    - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.**
    - **0 opposed.**
    - **0 abstained.**
    - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed unanimously.**

Proprietary Items

- The Design Team gave an update that the District requested changes to the previously voted Proprietary Items:
    - #2, #4, #6 to change to AXIS.
- **Greg Thompson made the following motion: Motion to approve the following proprietary items:**

Item #1: StruxureWare - for BMS

Item #2: AXIS- for door access system

Item #3: Schlage - for door hardware

Item #4: AXIS - for security cameras

Item #5: Atlas - for clocks and paging

Item #6: AXIS - video surveillance system

- **Ryan Quimby seconded the motion.**

- **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.**
- **0 opposed.**
- **0 abstained.**
- **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**

- **The motion passed unanimously.**

Upcoming Milestones

- 8/8: Town Council meeting update
- 8/15: Skanska to submit the budget statement
- 8/15: Submission to MSBA for early deliverables
- 8/24: SBC to approve the SD Submission
- 8/25: Full SD Package Submission to the MSBA
- 9/12: Town council meeting with Kim on bond process
- 9/19: Town Council Ballot Language Vote
- 10/25: MSBA Project Scope and Budget Agreement
- 11/7: Debt exclusion vote
- Gordon asked what the turnaround time is for approving the ballot vote language?
    - Skanska to confirm with the Town Council and the MSBA.
- Pool Process:
    - Documented to be estimated next week.
    - Will have budget numbers by 9/6.
    - John asked if we need to hit town council meetings for the pool.
    - WIll need to have a budget set by the 9/12 town council meeting.
    - Week of the 6th - pool meet to review budget and VE (plan for the 7th).
        - Skanska/PD&C to confirm with estimators

Communications

- Victoria Clifford, Skanska, gave an update that the National Night Out booth was successful.
- Beth volunteered to lead the effort for SBC outreach at upcoming School Open Houses.
- Meadowbrook booth outside
- The committee discussed presenting boards at the entrances and providing the informational monthly pamphlets and QR code to the building project website, and advertise the time/date/place of upcoming community forums.
- Skanska to set up boards at East Longmeadow Library.
- Daniella suggested providing information on the project at St Michaels CCD program.

New Business

- John Benzinger noted that Longmeadow has issued an RFP for a new elementary school.

Motion to adjourn by Ryan Quimby. Seconded by Frank Paige.

Meeting adjourned at 4:55 PM.

Gordon C. Smith
8/25/23

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
8/24/23 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Elizabeth (Beth) Marsian-Boucher, Community Member
Bruce Fenney, Superintendent of East Longmeadow DPW, virtual
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance, virtual
Ryan Quimby, ELPS IT Director, absent

Other Attendees:
Skanska USA Building, Inc.: John Benzinger, Ben Murphy
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Kristian Whitsett
Public: Marilyn Richards

Welcome & Approval of Meeting Minutes

- Steve Chrusciel began the meeting at 3:02 PM.
- Steve asked for a motion to approve the 8/10/23 ELHSBC Meeting Minutes.
- **Greg Thompson made the motion to approve the 8/10/23 SBC minutes with the amendment that Beth Marsian-Boucher be listed as Community Member. Beth Marsian-Boucher seconded the motion.**
    - **8 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Kimberly Collins**
    - **0 opposed,**
    - **3 abstained, Kathleen Hill, Pamela Blair, Tom Christensen**
    - **2 absent, Ryan Quimby, Dr. Daniela LaBarre (joined meeting after this vote was taken)**
- **The motion passed.**

Public Participation

- No public Participants

Skanska Update – Schedule & Process

- John Benzinger, Skanska, gave a schedule/process update:
    - Schematic Design Package will be submitted to MSBA on 8/25/23.

- MSBA will review and respond to the SD submission by the end of September.
- MSBA approval of the Project Scope and Budget will occur at the 10/25/23 Board of Directors meeting.
- The Town has been working with its legal counsel and the MSBA to finalize the Project vote language.
- Skanska has been in contact with the OIG and expects NTP approval for CM @ Risk services within the next few weeks.

Design Update – Summary of Schematic Design Submission

- Kristian Whitsett, JWA, provided an overview of the Schematic Design Submission:
  - Kristian reviewed the estimated costs at Preferred Schematic:
    - Total estimated construction cost at PSR was $147.5M.
    - Approx. total Project cost at PSR was $177M
    - Approx. MSBA reimbursement at PSR was $55M – $57M
    - Anticipated District share at PSR was $120M - $122M
  - Kristian reviewed the estimated costs for Schematic Design:
    - PM&C (Designer's estimator) estimated construction costs at $147,283,566.
    - PCM (OPM's estimator) estimated construction costs at $147,792,248.
    - The project team averaged the two estimates to achieve a fully reconciled estimate of construction costs at $147,537,907.
  - Kristian provided an overview of the SD Total Project Budget:
    - Construction Budget is $147,537,907.
    - Soft costs are $25,782,738
    - Contingencies are $4,140,000
    - Estimated Total Project Budget is $177,460,645
    - Approx. MSBA reimbursement is $63,145,648
    - Anticipated District share is $114,314,997
  - Kristian reviewed the Add Alternates that have been identified but are not included in the estimated construction cost:
    - Lighting for varsity baseball and softball fields: add $1,273,490.
    - Sports field storage building: add $46,022
    - Additional athletic field irrigation beyond base scope: add $513,026
    - Provide sod ILO seed for athletic fields: add $975,051
    - Athletic field netting adjacent to neighboring property: add $269,112
    - Ground source heat pump ILO air source heat pump: add $9,805,447
  - Kristian shared recent exterior and interior renderings produced by SMMA.

- **Steve Chrusciel asked for a motion to approve the Schematic Design (SD) Submission and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district. Beth Marsian-Boucher made the motion. Kathleen Hill seconded the motion.**

- **12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Tom Christensen, Kimberly Collins, Dr. Daniela LaBarre**
- **0 opposed,**
- **0 abstained,**
- **1 absent, Ryan Quimby,**
- **The motion passed unanimously.**

New Business

- Upcoming Milestones:
  - 9/12/23 – Town Council reviews bond structure w/ Kim Collins
  - 9/15/23 – Town Council votes on bond commitment and votes on ballot language
  - 10/25/23 – MSBA approves scope & budget
  - 11/7/23 – Special election for Debt Exclusion vote.
- Next SBC meeting scheduled for 9/14/23 at 3PM.
- The SBC tentatively scheduled a meeting for 10/19/23 at 3PM.
- The SBC will look to designate a CM selection subcommittee at its next meeting.
- Frank Paige recommended starting Community Forum tours at 5:30 PM rather than 5 PM.
- The SBC identified volunteers for the upcoming open house events.

Approval of Meeting Minutes

- **At 3:42 PM, Frank Paige motioned that the SBC take a 15 minute recess, Beth Marsian-Boucher seconded the motion.**
  - **12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Tom Christensen, Kimberly Collins, Dr. Daniela LaBarre**
  - **0 opposed,**
  - **0 abstained,**
  - **1 absent, Ryan Quimby,**
  - **The motion passed.**
- During the recess, Skanska USA Building completed the 8/24/23 SBC meeting minutes. The 8/24/23 SBC minutes were printed and distributed to the SBC members for their review.
- The SBC resumed the meeting at 4:17 PM.
- **Tom Christensen made a motion to approve the 8/24/23 SBC minutes up to the point of recess. Greg Thompson seconded the motion.**
  - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen.**
  - **0 opposed,**
  - **0 abstained,**
  - **3 absent, Ryan Quimby, Bruce Fenney, Kimberly Collins**
  - **The motion passed unanimously.**

Adjournment

- **Motion to adjourn made by Greg Thompson. Seconded by Tom Christensen.**
  - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen.**
  - **0 opposed,**
  - **0 abstained,**
  - **3 absent, Ryan Quimby, Bruce Fenney, Kimberly Collins**
  - **The motion passed unanimously.**

- Meeting adjourned at 4:18 PM.

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

Gordon C. Smith
8/25/23

EAST LONGMEADOW PUBLIC SCHOOLS
180 Maple Street
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Achievement *Accountability*

Gordon Smith
Superintendent of Schools

Pamela Blair
Asst. Supt. for Business

August 31, 2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Ms. Pichetti:

The East Longmeadow High School Building Committee ("SBC") has completed its review of the Feasibility Study Schematic Design Report for the East Longmeadow High School project (the "Project"), and on Thursday, August 24, 2023, the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study Schematic Design related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on June 23, 2021, the SBC has held 23 meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

1. **School Building Committee Meeting, December 15th, 2021, 3:30 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Introduction of the Skanska USA Building, Owner's Project Management (OPM) Team
     - Update on OPM Panel
     - OPM Team presented an outline of next steps for the Designer Selection Process.
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

2. **School Building Committee Meeting, January 5th, 2022, 3:30 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Approval of the 12/15/22 Meeting Minutes. Minutes were approved.
     - Forming of a Designer Selection sub-group:
       - Members selected: Stephen Chrusciel, Gordon Smith, Joe Dunn, and Elizabeth Marsian-Boucher.
     - Schedule Overview
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

3. **School Building Committee Meeting, March 16th, 2022, 3:30 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Approval of the 1/5/22 Meeting Minutes. Minutes were approved.
     - Update on the Designer Selection process
     - Schedule Overview
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

4. **School Building Committee Meeting, May 25th, 2022, 3:45 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Approval of the 3/16/22 Meeting Minutes. Minutes were approved.
     - Process Update and Schedule Overview
     - MSBA Kick-Off Meeting Update
     - Introduction of the JWA & SMMA Design Team
     - JWA & SMMA Interview Presentation Recap
     - Review of MSBA Module 3 & 4
     - Goals of the Preliminary Design Program (PDP) Phase
     - Review of the Visioning Process Schedule
     - Communications Update:
       - Building Project Website Update
       - Project Email Update
       - Upcoming Community Forums/Outreach Update
     - Vote to add Ryan Quimby, Town IT Director, as a School Building Committee member. The vote passed.
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

5. **School Building Committee Meeting, June 27th, 2022, 1:30 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Approval of the 5/25/22 Meeting Minutes. Minutes were approved.
     - Process Update and Schedule Overview
     - Update on Educational Programming and Visioning Process
     - Existing Conditions report Review
     - Preliminary Space Summary & Plan Analysis Review
     - Design Options Development Review
     - Communications Update:
       - 6/15/22 Community Forum Recap
       - Community Outreach Update
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

6. **School Building Committee Meeting, July 18th, 2022, 2:30 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Process Update and Schedule Overview
     - Update on Educational Programming and Visioning Process
     - Space Summary Review
     - Design Options Development and Review Criteria Review
     - School Tours
     - Student Engagement
     - Communications Update:
       - Community Outreach Update
       - 8/2/22 National Night Out Booth Update
   - Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

7. **School Building Committee Meeting, August 25th, 2022, 2:00 PM (Meeting #1), East Longmeadow School Committee Conference Room & Zoom Meeting:**
   - Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
   - Items discussed:
     - Approval of the 6/27/22 and 7/18/22 Meeting Minutes. Both Minutes were approved.
     - Process Update and Schedule Overview
       - Project team proposed delaying Preferred Schematic Report (PSR) 1 month, and shortening Schematic Design (SD) submission, to gain community support on a preferred design

concept. The School Building Committee agreed with the schedule update.
  - MSBA Pool Ruling Update
  - North Middlesex Tour Recap
  - Community Survey Results Review
  - Cost Update and Design Options Review
    - The Committee voted to move forward options 1, 2B, 3B, and 5 to the Preferred Schematic Report (PSR) Phase. The vote passed.
  - Review of the Preliminary Design Program (PDP)
    - The Committee voted to authorize Skanska USA Building to submit the Preliminary Design Program (PDP) on the District's behalf. The vote passed. The corresponding certified vote letter and notarized meeting minutes are included in this package.
  - Communications Update:
    - Community Outreach Update
    - 8/2/22 National Night Out Recap
- Approved meeting minutes and materials posted on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

8. School Building Committee Meeting, August 25th, 2022, 4:00 PM (Meeting #2), East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 8/25/2022 (Meeting #1) Meeting Minutes. The Minutes were approved.
- Draft meeting minutes are included in this package. These minutes will be on the September meeting agenda for approval.

9. School Building Committee Meeting, September 15th, 2022, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 8/25/2022 (Meeting #2) Meeting Minutes. The Minutes were approved.
  - Process Update and Schedule Overview
  - PSR Phase Overview
  - Design Update
  - Cost Update
    - Preliminary tax impact study presented my Steve Lonergan, Former Town Accountant and Town Finance Director
  - Preview September Community Forum Content

- Community Outreach Update
- Budget Revision Request #1 Review and Approval. The BRR #1 was approved.
- Formal acknowledgment of SBC Meeting 8/19/21, 9/8/21 and 9/27/21.
  - The committee approved the actions taken by the ELHSBC on 9/27/21 to advertise a Request for Services for an Owner's Project Manager and move forward with the Owner's Project Manager procurement process.

10. School Building Committee Meeting, September 29th, 2022, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 9/15/22 Meeting Minutes. The Minutes were approved.
  - The Committee approved new SBC Member, Tom Christensen, Deputy Town Manager
  - Process Update and Schedule Overview
  - September Community Forum Recap
  - Design Update
  - MSBA PDP Review Comments Update
  - Community Outreach Update

11. School Building Committee Meeting, October 27th, 2022, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 9/29/22 Meeting Minutes. The Minutes were approved.
  - Process Update and Schedule Overview
  - MSBA PDP Review Comments Update
  - Design Updates
  - Community Outreach Update

12. School Building Committee Meeting, December 1st, 2022, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 10/27/22 Meeting Minutes. The Minutes were approved.
  - Process Update and Schedule Overview

- Construction Management Delivery Methods Presentation
- Community Feedback Review from the November Public Forum
- Design Updates

13. School Building Committee Meeting, January 5th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 12/1/22 Meeting Minutes. The Minutes were approved.
  - Process Update and Schedule Overview
  - Construction Management Delivery Methods discussion
  - Feedback from Student Focus Groups
  - Design Updates
  - SBC voted to approve LEED as the preferred rating system for the project. The motion was approved.

14. School Building Committee Meeting, February 2nd, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 1/5/23 Meeting Minutes. The Minutes were approved.
  - Process Update and Schedule Overview
  - Cost Estimate Review
  - Options Evaluation Matrix Review
  - Approval of Option 3C to be moved forward to Schematic Design Phase, with inclusion of Photovoltaics. The motion was approved.
  - PSR Submission Review and Approval. The Committee approved the submission.
  - Agenda for the 2/9 SBC Meeting
  - Timing for local approvals

15. School Building Committee Meeting, February 9th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- A DRAFT version of the 2/9/23 Meeting Minutes are included in this package.
- Items discussed:
  - Approval of the 2/9/23 Meeting Minutes. The Minutes were approved.
  - Planning upcoming community forums
  - The Committee approved new SBC Member, Kim Collins

16. School Building Committee Meeting, March 9th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
    - Approval of the 2/9/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Recommendation for Construction Delivery Method
        - The SBC voted to move forward with the Construction Manager at Risk method.
    - Process Update and Schedule Overview
    - Review of MSBA PSR Review Comments
    - Planning of the 3/16 Community Forum

17. School Building Committee Meeting, April 6th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
    - Approval of the 3/9/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Process Update and Schedule Overview
    - Review of the separate pool project process
    - Design Update
    - Planning of the 3/16 Community Forum

18. School Building Committee Meeting, May 11th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
    - Approval of the 4/6/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Process Update and Schedule Overview
    - Design Update
        - Programming
        - Building & Site
        - Review of upcoming milestones
    - Communications
        - Updated projected tax impact
        - 3/16 Community Forum Recap
        - 5/18 Community Forum and 6/7 Sustainability Charette Planning

19. School Building Committee Meeting, June 15th, 2023, 4:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter

- Items discussed:
    - Approval of the 5/11/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Process Update and Schedule Overview
    - Design Update
        - Sustainability Charrette Recap
        - MEP/FR Update
        - Site Plan Update
        - Floor Plan Update and Programming
        - Interior Finishes Update
    - Communications
        - 5/18 Community Forum Recap
        - Monthly Pamphlet Review

20. School Building Committee Meeting, June 29th, 2023, 3:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
    - Approval of the 6/15/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Process Update and Schedule Overview
    - Design Update
        - Exterior Massing and Materials
        - Proprietary Items
    - Communications
        - Summer Communications Strategies

21. School Building Committee Meeting, July 20th, 2023, 3:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
    - Approval of the 6/29/23 Meeting Minutes. The Minutes were approved.
    - Public Participation
    - Process Update and Schedule Overview
    - Design Update
        - FF&E Technology Budgets
        - MSBA Green Schools Program
        - Updated Space Summary Review
        - Confirmation of Proprietary Items – items were voted on and approved.
        - SD Value Engineering Process
    - Communications

- Summer Communications Strategies

22. School Building Committee Meeting, August 10th, 2023, 3:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 7/20/23 Meeting Minutes. The Minutes were approved.
  - Public Participation
  - Process Update and Schedule Overview
  - Design Update
    - Proprietary Items – a revised list was voted on and approved.
    - Value Engineering Review – the SBC voted on the recommended path to arrive at a total project budget of $177.5M,
    - SD Submission Total Project Budget Review – the SBC voted to set the total project budget to $ $177.5M.
  - Communications
    - Recap of National Night Out
    - Summer Communications Strategies

23. School Building Committee Meeting, August 24th, 2023, 3:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:

- Meeting details and agenda were posted publicly on the Town Agenda Center: https://www.eastlongmeadowma.gov/AgendaCenter
- Items discussed:
  - Approval of the 8/10/23 Meeting Minutes. The Minutes were approved.
  - Public Participation
  - Process Update and Schedule Overview
  - Review and Approval of the SD Submission – the SBC voted and authorized Skanska to submit the SD Submission on the District's behalf.
  - Brief recess to finalize the 8/24/23 Meeting Minutes.
  - Approval of the 8/24/23 Meeting Minutes. The Minutes were approved.

In addition to the SBC meetings listed above, the District held 4 public meetings, which were posted in compliance with the state Open Meeting Law, at which the Project was discussed. This meeting included:

1. Educational Vision Community Forum, June 15th, 2022, 6:00 PM, East Longmeadow HS Auditorium & Zoom Meeting:

- Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
- Items Discussed:
    - Meeting details were and agenda were also sent out via the School District's email list-serve.
    - The East Longmeadow High School Building Committee hosted a community forum
    - rum to discuss the Educational Vision for the High School.
    - David Stephen, New Vista Design, gave an overview of 21st century teaching and learning themes.
    - Gordon Smith, School Superintendent, and Steve Chrusciel, School Building Committee Chair, introduced the project team, gave an overview of the MSBA process, project schedule, and the current needs of East Longmeadow HS.

2. **ELHS Building Project Community Forum, September 21st, 2022, 6:00 PM, East Longmeadow HS Auditorium & Zoom Meeting:**
    - Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
    - Items Discussed:
        - MSBA Process overview
        - Visioning and Educational Priorities
        - Existing Conditions
        - Review of Options
        - Q&A and Input Gathering
        - Next Steps

3. **ELHS Building Project School Council Update, October 6th, 2022, 6:00 PM, East Longmeadow School Committee Conference Room & Zoom Meeting:**
    - Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
    - Items Discussed:
        - Introductions
        - Schedule Overview
        - Visioning and Educational Priorities
        - Existing Conditions
        - Review of Options
        - Next Steps

4. **ELHS Building Project Community Forum, November 16th, 2022, 6:00 PM, East Longmeadow HS Cafeteria/High School Tours:**

- Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
- Items Discussed:
  - MSBA Process Overview
  - Existing Conditions
  - Visioning and Educational Priorities
  - Review of Options
  - Q&A and Input Gathering
  - Next Steps

5. **ELHS Building Project Community Forum, March 16th, 2023, 6:00 PM, East Longmeadow HS Cafeteria/High School Tours:**
   - Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
   - Items Discussed:
     - MSBA Process Overview
     - Existing Conditions
     - Visioning and Educational Priorities
     - Schematic Design Update
     - Q&A and Input Gathering
     - Next Steps

6. **ELHS Building Project Community Forum, May 18th, 2023, 6:00 PM, East Longmeadow HS Cafeteria/High School Tour:**
   - Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
   - Items Discussed:
     - MSBA Process Overview
     - Schedule Overview
     - Visioning and Educational Priorities
     - Existing Conditions
     - Schematic Design Update
     - Cost Update
     - Estimated Tax Impact
     - Review of Options
     - Q&A and Input Gathering
     - Next Steps

7. **ELHS Building Project Sustainability Charrette, June 7th, 2023, 2:30 PM, East Longmeadow HS Library:**
   Meeting details and agenda were posted publicly on the East Longmeadow HS Building Project Website: https://www.eastlongmeadowma.gov/elhsbuildingproject
   - Meeting Format:

- Interactive workshop held for students, teachers, community members, and technical experts to brainstorm sustainable design goals and objectives for the HS project.

The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at https://www.eastlongmeadowma.gov/AgendaCenter.

To the best of my knowledge and belief, each of the meetings listed above complied with the requirements of the Open Meeting Law, M.G.L. c. 30A, §§ 18-25 and 940 CMR 29 *et seq*.

If you have any questions or require any additional information, please contact Gordon Smith, Superintendent of Schools, East Longmeadow Public Schools, (413) 525-5450, gordon.smith@eastlongmeadowma.gov.

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By:

Tom Christensen

Title: Chief Executive Officer (Town Manager)

Date: 8/24/23

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Gordon C. Smith

Gordon Smith

Title: Superintendent of Schools

Date: 8/24/23

By signing this Local Action and Approval Certification, I hereby certify that, to the best of my knowledge and belief, the information supplied by the District in this Certification is true, complete, and accurate.

By: Greg Thompson

Gregory Thompson

Title: Chair of the School Committee

Date: 8/24/23

EAST LONGMEADOW PUBLIC SCHOOLS
180 Maple Street
East Longmeadow, MA. 01028-2788
Achievement Accountability

Gordon Smith
Superintendent of Schools

Pamela Blair
Asst. Supt. for Business

August 10th, 2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Mrs. Pichetti:

At its meeting on Thursday, August 10th, 2023, the East Longmeadow High School Building Committee voted the following:

Frank Paige made the following motion: The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget of $177.5M for the East Longmeadow High School Project and approves the submission to the MSBA for its consideration. Elizabeth (Beth) Marsian-Boucher seconded the Motion.

10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.
0 opposed.
0 abstained.
3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.
The motion passed unanimously.

Respectfully submitted by:

Gordon C. Smith

Gordon Smith
Superintendent of Schools
East Longmeadow Public Schools
(413) 525-5450

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

EAST LONGMEADOW PUBLIC SCHOOLS
180 Maple Street
East Longmeadow, MA. 01028-2788
Achievement Accountability

Gordon Smith
Superintendent of Schools

Pamela Blair
Asst. Supt. for Business

August 24th, 2023

Ms. Mary Pichetti
Director of Capital Planning
40 Broad Street
Boston, Massachusetts 02109

Dear Mrs. Pichetti:

At its meeting on Thursday, August 24th, 2023, the East Longmeadow High School Building Committee voted the following:

The East Longmeadow High School Building Committee votes to approve the Schematic Design (SD) Submission and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district. Elizabeth Marsian-Boucher made the motion. Kathleen Hill seconded the motion.

12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen, Kimberly Collins.
0 opposed.
0 abstained.
1 absent. Ryan Quimby
The motion passed unanimously.

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

Respectfully submitted by:

Gordon C. Smith

Gordon Smith
Superintendent of Schools
East Longmeadow Public Schools
(413) 525-5450

Massachusetts School Building Authority

Next Steps to Finalize Submission of your FY 2019 Statement of Interest

Thank you for submitting your FY 2019 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete**. The District is required to mail all required supporting documentation, which is described below.

VOTES: Each SOI must be submitted with the proper vote documentation. This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the District has submitted a record of the vote in the format required by the MSBA.

- **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
  - For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.
- **Municipal Body Vote:** SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.
  - Regional School Districts do not need to submit a vote of the municipal body.
  - For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3: If a District selects Priority #1 and/or Priority #3, the District is required to submit additional documentation with its SOI.

- If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The District also must submit photographs of the problematic building area or system to the MSBA.
- If a District selects Priority #3, Prevention of a loss of accreditation, the SOI will not be considered complete unless and until a summary of the accreditation report focused on the deficiency as stated in this SOI is provided.

ADDITIONAL INFORMATION: In addition to the information required above, the District may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process please contact the MSBA at 617-720-4466 or SOI@massschoolbuildings.org.

Massachusetts School Building Authority

School District East Longmeadow

District Contact Gordon C Smith TEL: (413) 525-5450

Name of School East Longmeadow High

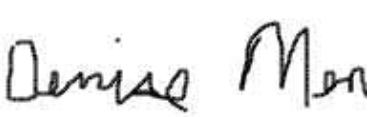
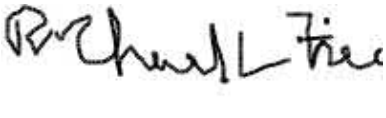
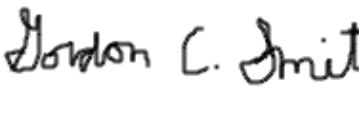
Submission Date 4/9/2019

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- After the district completes and submits this SOI electronically, the district must mail hard copies of the required documentation described under the "Vote" tab, on or before the deadline.
- The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- Prior to the submission of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation in a format acceptable to the MSBA. If Priority 1 is selected, your SOI will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system. If Priority 3 is selected, your SOI will not be considered complete unless and until you provide a summary of the accreditation report focused on the deficiency as stated in this SOI.

LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR
(E.g., Mayor, Town Manager, Board of Selectmen)

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Denise Menard	Richard L. Freccero	Gordon C. Smith
Town Manager		
		
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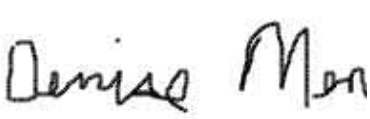
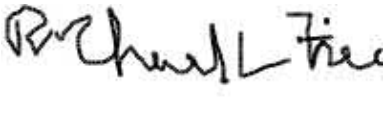
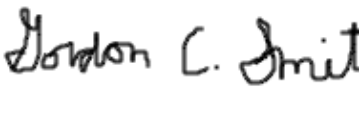
Date	Date	Date
4/8/2019 5:21:13 PM	4/8/2019 8:20:24 PM	4/8/2019 5:18:28 PM

* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

Chief Executive Officer *	**School Committee Chair**	**Superintendent of Schools**
Denise Menard	Richard L. Freccero	Gordon C. Smith
Town Manager		
		
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June 23, 2021

Ms. Mary E. McNally, Town Manager
Town of East Longmeadow
60 Center Square
East Longmeadow, MA 01028

Re: Town of East Longmeadow, East Longmeadow High School

Dear Ms. McNally:

I am pleased to report that the Board of the Massachusetts School Building Authority (the "MSBA") has voted to invite the Town of East Longmeadow (the "Town") to partner with the MSBA in conducting a Feasibility Study for the East Longmeadow High School. The Board's vote follows the Town's timely completion of all of the requirements of the MSBA's Eligibility Period.

I do want to emphasize that this invitation to partner on a Feasibility Study is ***not*** approval of a project but is strictly an invitation to the Town to work with the MSBA to explore potential solutions to the problems that have been identified. Moving forward in the MSBA's process requires collaboration with the MSBA, and communities that "get ahead" of the MSBA without MSBA approval will not be eligible for grant funding. To qualify for any funding from the MSBA, local communities must follow the MSBA's statute, regulations, and policies which require MSBA collaboration and approval at each step of the process.

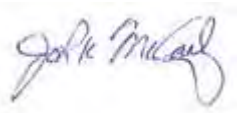
During the Feasibility Study phase, the Town and the MSBA will partner pursuant to the terms of the Feasibility Study Agreement to find the most fiscally responsible and educationally appropriate solution to the problems identified at the East Longmeadow High School. The Feasibility Study, which will be conducted pursuant to the MSBA's regulations and policies, requires the Town to work with the MSBA on the procurement of an Owner's Project Manager and Designer, which will help bring the Town's Feasibility Study to fruition.

We will be contacting you soon to discuss these next steps in more detail. In the meantime, however, I wanted to share with you the Board's decision and provide a brief overview of what this means for the Town of East Longmeadow.

I look forward to continuing to work with you as part of the MSBA's grant program. As always, feel free to contact me or my staff at (617) 720-4466 should you have any questions.

40 Broad Street, Suite 500 ● Boston, MA 02109 ● Phone: 617-720-4466 ● www.MassSchoolBuildings.org

Sincerely,



John K. McCarthy
Executive Director

Cc: Legislative Delegation
Michael J. Kane, President, East Longmeadow Town Council
Gregory Thompson, Chair, East Longmeadow School Committee
Gordon Smith, Superintendent, East Longmeadow Public Schools
Pamela Blair, Assistant Superintendent for Business, East Longmeadow Public Schools
File: 10.2 Letters (Region 1)

40 Broad Street, Suite 500 ● Boston, MA 02109 ● Phone: 617-720-4466 ● www.MassSchoolBuildings.org

May 27, 2021

Ms. Mary E. McNally, Town Manager
Town of East Longmeadow
60 Center Square
East Longmeadow, MA 01028

Re: Town of East Longmeadow, East Longmeadow High School

Dear Ms. McNally:

I would like to thank you and representatives of the Town of East Longmeadow (the "District") again for continuing to work with the Massachusetts School Building Authority (the "MSBA") towards the most educationally appropriate and cost-effective solution for the East Longmeadow High School project (the "Proposed Project"). A detailed explanation of the MSBA's base enrollment projection and adjustment for the District has been provided through previous correspondence dated May 12, 2021. This letter is a follow up to the email from Superintendent Gordon Smith dated May 18, 2021 regarding the impact of increasing enrollments in East Longmeadow's lower grades and an increase in recent local housing sales.

During a call on May 24, 2021, the MSBA was able to clarify how enrollment trends in lower grades are incorporated in the grade 9-12 enrollment projection, and the District provided additional information regarding steadily increasing housing sales since 2016, including data from 2020 and the beginning of 2021. Subsequently, the MSBA referred to historic sale data from The Warren Group to confirm that these recent years constitute an increasing trend in housing turnover.

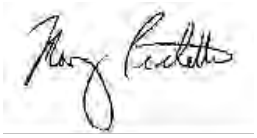
Based on the discussions between the District and the MSBA, and the recent sales information provided by the District, the MSBA enrollment model has been adjusted to use the five-year 75th percentile cohort survival rate for 2022 rather than the five-year average, or 50th percentile, cohort survival rate which is utilized throughout the base enrollment forecast. This adjustment added 10 students for grades 9-12 to the projected average for the District's proposed grade configuration as compared to the base enrollment projection.

As a result of the analysis on the base enrollment forecast, the historical enrollment trends of the District, the adjustments described in the May 12, 2021, enrollment letter and above, the MSBA recommends a design enrollment of 800 students for the East Longmeadow High School project.

The MSBA believes that this design enrollment recommendation will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification no later than June 11, 2021, to confirm agreement on this design enrollment.

The MSBA looks forward to working with the District on the remaining actions necessary to conclude Eligibility Period. If you have any questions regarding this matter, please do not hesitate to contact me or Emma Parish (Emma.Parish@massschoolbuildings.org) at 617-720-4466.

Sincerely,



Mary Pichetti
Director of Capital Planning

Cc: Legislative Delegation
Michael J. Kane, President, East Longmeadow Town Council
Gregory Thompson, Chair, East Longmeadow School Committee
Gordon Smith, Superintendent, East Longmeadow Public Schools
Pamela Blair, Assistant Superintendent for Business, East Longmeadow Public Schools
File: 10.2 Letters (Region 1)

MASSACHUSETTS SCHOOL BUILDING AUTHORITY

TOWN OF EAST LONGMEADOW
EAST LONGMEADOW HIGH SCHOOL
DESIGN ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the proposed project at the East Longmeadow High School, the Town of East Longmeadow hereby acknowledges and agrees that the design of the proposed project at the East Longmeadow High School shall be based on an enrollment of no more than 800 students in grades 9-12. The Town of East Longmeadow further acknowledges and agrees that, pursuant to 963 CMR 2.00 *et seq.*, the MSBA shall determine the square feet per student space allowance and total square footage for a high school serving 800 students. The Town of East Longmeadow acknowledges and agrees that it has no right or entitlement to any particular design enrollment, square feet per student space allowance, or total square footage and that it has no right or entitlement to a design enrollment any greater than 800 students for the East Longmeadow High School, and further acknowledges and agrees that it shall not bring any claim or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the design enrollment at the East Longmeadow High School that it has acknowledged and agreed to herein. The Town of East Longmeadow further acknowledges and agrees that, among other things, the design enrollment, square feet per student space allowance, and total square footage of the East Longmeadow High School shall be subject to the approval of the MSBA's Board and that the final approval of a proposed project at the East Longmeadow High School shall be within the sole discretion of the MSBA's Board.

The undersigned, for themselves and the Town of East Longmeadow, hereby certify that they have read and understand the contents of this Design Enrollment Certification and that each of the above statements is true, complete and accurate. The undersigned also hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of East Longmeadow and to bind the Town of East Longmeadow to its terms.

Chief Executive Officer

6/1/2021
Date

Duly Authorized Representative of School Committee

6/2/21
Date

Gordon C. Smith
Superintendent of Schools

6/1/21
Date

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Date: December 15, 2021 *3:30PM*

AGENDA ITEM	TIME	NOTES
1) Welcome and Introductions	10 Minutes	❖ Welcome the Skanska Team ❖ Introduce School Building Committee Members ❖ Introduce Skanska Team Members
2) Update OPM Panel	10 minutes	
3) Outline of Next Steps for the Selection of a Designer	20 - 30 Minutes	
4) Questions	10 Minutes	

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
December 15, 2021 – 3:30PM
Meeting Minutes

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Joe Dunn, Town DPW Facilities Manager
Frank Paige, ELHS Principal
Heather Brown, ELPS Director of Curriculum
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant (joined at 4:05 PM)
Mary McNally, Town Manager (joined at 4:05 PM)
Elizabeth Marsian-Boucher, School Committee Member
Antonella Raschilla, School Committee Member (absent)
Bruce Fenney, Superintendent of East Longmeadow DPW (absent)
Daniela LaBarre, School Psychologist and Faculty member (absent)

Other Attendees:
Ben Murphy, Dale Caldwell, John Benzinger, Victoria Clifford - Skanska USA Building, Inc.

Meeting called to order 3:34 PM

Introductions

- The ELHS Building Committee welcomed the Owner's Project Management team from Skanska USA Building, Inc.
- The School Building Committee members introduced themselves.
- The Skanska team introduced themselves.

Update OPM Panel

- Gordon Smith gave an update to the committee that the leadership group met with the MSBA OPM Panel on 12/6 as the final formality to hire Skanska as the OPM. The meeting included introductions, an overview of Skanska, the next steps for designer selection, and Q&A.
- Any questions on the OPM selection process or process with the MSBA?
- There were no further questions from the School Building Committee.

Outline of Next Steps for the Selection of a Designer

- Skanska reviewed the Designer Selection process. Ben Murphy, Skanska, shared a "Designer Selection Timeline - Draft Schedule." Skanska explained that the next steps are to:
    - School Building Committee to select a Designer Applicant Review Subcommittee (DARS) to review and evaluate the designer.

        - Submit the Designer RFP to the MSBA to review, and the MSBA has ten days to review and provide comments.
        - Skanska is currently targeting 1/13/22 to submit the Designer RFS Advertisement to the central registrar and two other public listings per public bidding laws
        - 1/19/22 tentative date made available to bidders and public
        - 1/26/22 tentative date for the designer site visit
        - 4/5/21 targeted MSBA Designer Selection Panel (DSP) Meeting
- Pamela Blair confirmed that the School Department attorney has OK'd the Designer RFS draft and will send it to the Skanska team.
- Skanska asked that if designers and engineers contact the District to solicit information regarding the Designer RFP, for the District to direct inquiries to the Skanska team.
- Pamela Blair asked if the site visit is mandatory for the bidding designers and engineers
    - Skanska answered, no, but they will most likely attend for face-time with the District and learn about the existing building conditions.
- Pamela Blair asked who from the District should attend
    - Skanska answered that School leadership and reps from facilities most commonly attend.
- Pamela Blair asked if Districts have done site visits at bidding architect's projects.
    - Skanska answered that they haven't seen it done before, but if the District wanted to, they would recommend tours are requested thru peers.
- The committee asked how many members should be selected for the Designer Applicant Review Subcommittee?
    - Skanska recommended 4 - 6 members.
- Skanska explained that they would perform an evaluation of designers and ask the DARS Committee to perform an evaluation. Skanska and DARS will meet and compare notes. MSBA asks us not to rank the firms formally, but we will evaluate the firms based on our criteria matrix.
- Pamela Blair asked what the process would be for submitting copies of the designer applications to the MSBA.
    - The District Business office will receive the proposals, Skanska will distribute copies to the DARS group, and the Skanska team will mail ten hard copies of each proposal to the MSBA.
- Gordon Smith noted that selecting a Designer Application Review Selection will be on the January SBC agenda.
- Dale Caldwell noted that the April DSP Meetings would most likely be conducted virtually.
- There were no further questions on the Designer Selection process.

New Business

- The subcommittee discussed scheduling the next SBC Meeting on 1/5/21 at 3:30 PM. confirmed

Meeting adjourned at 4:15 PM.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: ELHS School Building Committee Link
Date: January 5, 2022 *3:30PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome and Approval of Minutes from the 12-15-21 meeting**	10 Minutes	
2) **Selection of the Designer Applications Review Subcommittee (DARS)**	20 minutes	
3) **Questions on Next Steps**	10 Minutes	**Tentative Schedule:** • School Building Committee to select a Designer Applicant Review Subcommittee (DARS) to review and evaluate the designer. • Submit the Designer RFP to the MSBA to review, and the MSBA has ten days to review and provide comments. • Skanska is currently targeting 1/13/22 to submit the Designer RFS Advertisement to the central registrar and two other public listings per public bidding laws • 1/19/22 tentative date made available to bidders and public • 1/26/22 tentative date for the designer site visit • 4/5/21 targeted MSBA Designer Selection Panel (DSP) Meeting

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
January 5, 2021 – 3:30PM
Meeting Minutes

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Joe Dunn, Town DPW Facilities Manager
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum (absent)
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant
Mary McNally, Town Manager
Elizabeth Marsian-Boucher, School Committee Member
Antonella Raschilla, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Daniela LaBarre, School Psychologist and Faculty member

Other Attendees:
Dale Caldwell, John Benzinger, Ben Murphy, Victoria Clifford - Skanska USA Building, Inc.

Meeting called to order 3:32 PM

Approval of Minutes from the 12/15/21 SBC Meeting

- Gordon Smith moved to approve the 12/15/21 ELHS SBC Meeting Minutes. Stephen Lonergan seconded the motion.
    - Gordon Smith called a roll call vote:
        - Antonella Raschilla – abstain
        - Daniela LaBarre – abstain
        - Mary McNally – abstain
        - Stephen Lonergan – abstain
        - Stephen Chrusciel – yes
        - Gordon Smith – yes
        - Pamela Blair – yes
        - Frank Paige - yes
        - Joe Dunn – yes
        - Kathleen Hill – yes
        - Elizabeth Marsian-Boucher – yes
        - Bruce Fenney – no response due to audio issues
- The motioned passed.

Selection of the Designer Applications Review Subcommittee (DARS)

- Ben Murphy, Skanska, reviewed purpose of the subcommittee
- Ben Murphy confirmed the RFS was under review by the MSBA. MSBA is expected to provide their comments by the end of the week.
- It was asked if DARS would be asked to rank the applicants.
    - Dale Caldwell, Skanska, answered that DARS would come to a consensus on the top firms, and if there is one firm that the District favors, the District can specify at the Designer Selection Panel.
- Gordon Smith asked the ELHS SBC for volunteers to be on DARS. The following members volunteered:
    - Beth Marsian-Boucher
    - Stephen Chrusciel
    - Gordon Smith
    - Joe Dunn
- Gordon Smith moved to approve the four members as the Designer Applications Review Subcommittee (DARS). Beth Marsian-Boucher seconded the motion. Gordon called a roll call vote:
    - Antonella Raschilla – yes
    - Daniela LaBarre – yes
    - Mary McNally – yes
    - Stephen Lonergan – yes
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige - yes
    - Joe Dunn – yes
    - Kathleen Hill – yes
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
- The motion passed unanimously.

Questions on Next Steps

- Gordon Smith asked Skanska what the first 90 days look like after hiring an A&E firm.
    - Dale Caldwell, Skanska, explained that there would be a team kick-off meeting, the designer would begin studying the school's existing conditions, they would prompt the District for a HS Educational Plan, they would assist with community outreach, and they would begin considering options for new construction, renovation, and addition renovation.
- Stephen Chrusciel asked Skanska what the pros and cons would be of speeding up the feasibility study process.
    - Dale Caldwell answered that it would, in turn, move up the construction start date, which would be a financial benefit due to construction escalation.

New Business

- Skanska requested that DARS meet the first week of March to evaluate applications and that the next ELHS SBC Meeting be scheduled for the second week of March to line up with the DARS report on application reviews.
- Gordon Smith tentatively scheduled the next ELHS SBC Meeting for 3/9/22 at 3:30 PM. Gordon Smith to follow up with a calendar invitation.

Kathleen Hill moved to adjourn. Steve Chrusciel. Gordon Smith called a roll vote:

- Antonella Raschilla – yes
- Daniela LaBarre – yes
- Mary McNally – yes
- Stephen Lonergan – yes
- Stephen Chrusciel – yes
- Gordon Smith – yes
- Pamela Blair – yes
- Joe Dunn – yes
- Kathleen Hill – yes
- Elizabeth Marsian-Boucher – yes
- Bruce Fenney – yes

The motion passed unanimously.
Meeting adjourned at 4:15 PM.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: Zoom Meeting Link
Date: March 16, 2022 *3:30PM*

AGENDA ITEM	TIME	NOTES
1) Welcome and Approval of Minutes from the 1-5-22 meeting	10 Minutes	
2) Update on the Designer Selection Process	25 minutes	• **Skanska Team to provide update and overview of MSBA Designer Selection Panel Meeting to take place on March 22, 2022**
3) Questions on Next Steps	10 Minutes	
4) Adjourn		

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
March 16th, 2022 – 3:30PM
Meeting Minutes

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Joe Dunn, Town DPW Facilities Manager
Frank Paige, ELHS Principal (absent)
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Beth Bower - School Building Committee Member
Stephen Lonergan, Town Accountant
Mary McNally, Town Manager (absent)
Elizabeth Marsian-Boucher, School Committee Member
Antonella Raschilla, School Committee Member (absent)
Bruce Fenney, Superintendent of East Longmeadow DPW (absent)
Daniela LaBarre, School Psychologist and Faculty member
Greg Thompson, sitting in for Antonella Raschilla

Other Attendees:
John Benzinger, Ben Murphy, Victoria Clifford - Skanska USA Building, Inc.

Meeting called to order 3:30 PM

Approval of Meeting Minutes

- Gordon Smith asked for a motion on the 1/5/22 SBC Meeting Minutes.
- Elizabeth Marsian-Boucher moved to approve the 1/5/22 ELHS SBC Meeting Minutes. Stephen Lonergan seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Joe Dunn - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Beth Bower - yes
        - Steve Lonergan
        - Elizabeth Marsian-Boucher - yes
        - Daniela LaBarre – abstain
    - The motion passed.

Selection of the Designer Application Review Subcommittee (DARS)

- Ben Murph, Skanska, gave an overview of the designed selection schedule and process.
- Ben reported that 8 proposals were received and that the DARS subcommittee reviewed all and deemed all as qualified bidders. The firm that the DARS subcommittee found to be most advantageous for this project was JWA/SMMA.
- Three representatives from the East Longmeadow SBC will meet with the MSBA Designer Selection Committee on April 5th, to select a firm for the project.
    - East Longmeadow will have 3 votes
    - MSBA will have 13 votes
- Steve Chrusciel asked if we should expect pushback from the MSBA if District uses their opening to express which firm they favor.
    - Skanska responded that we wouldn't expect pushback if there is a firm that is noted as the preferred firm by the District.
- Gordon Smith asked for Skanska's assistance in crafting the opening statement.
    - Skanska agreed.
- Skanska explained once the designer is selected, the process will pick up quite a bit, and regular monthly SBC meetings will be scheduled starting May 2022..
- A committee member asked how many projects Skanska has done where the MSBA did not select the District's preferred design firms.
    - Skanska responded that they had seen it once in West Springfield. There are lots of factors that come into play. The biggest factor is the firm's capacity to take on the job.

Questions on Next Steps

- No further questions.

Kathleen Hill moved to adjourn. Steve Chrusciel seconded the motion. Gordon Smith called a roll vote:

- Gordon Smith called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Joe Dunn - yes
    - Heather Brown - yes
    - Kathleen Hill - yes
    - Beth Bower - yes
    - Steve Lonergan
    - Elizabeth Marsian-Boucher - yes
    - Daniela LaBarre – abstain
- The motion passed.

Meeting adjourned at 4:20 PM.
Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska

ELHS SCHOOL BUILDING COMMITTEE MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: Zoom Meeting Link
Date: May 25, 2022 *3:45PM*

AGENDA ITEM	TIME	NOTES
1) Welcome/ Introductions & Approval of Minutes	5 Minutes	❖ **Welcome the JWA/SMMA Team** ❖ **Introduce School Building Committee Members** ❖ **Approval of 3/16/2022 Minutes**
2) Skanska Update	10 minutes	❖ **Process Update** ❖ **MSBA Kick-Off Meeting Update** ❖ **Project Schedule Overview**
3) JWA/SMMA Update	35 Minutes	❖ **JWA/SMMA Interview Presentation** ❖ **Review of MSBA Module 3 & 4** ❖ **Goals of PSR Phase** ❖ **Review of Visioning Process Schedule**
4) Communications Update	5 Minutes	❖ **Building Project Website Status** ❖ **Project Email Status** ❖ **Upcoming Community Forums/Outreach**
5) New Business	5 Minutes	❖ **ELHS SBC Membership – Ryan Quimby**
6) Questions/Public Participation	10 Minutes	
7) Adjourn		

Please click the link below to join the webinar:
https://us02web.zoom.us/j/85927899766?pwd=eHV6TTRXL0tva0MzYVM1UU95YjVmZz09
Passcode: 373269
Or One tap mobile :
US: +16465588656,,85927899766# or +13017158592,,85927899766#

Or Telephone:
Dial(for higher quality, dial a number based on your current location):
US: +1 646 558 8656 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900 9128 or +1 253 215 8782 or +1 346 248 7799
Webinar ID: 859 2789 9766
International numbers available: https://us02web.zoom.us/u/kbNrOIxgN

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
May 25th, 2022 – 2:30 PM
Meeting Minutes

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Joe Dunn, Town DPW Facilities Manager
Frank Paige, ELHS Principal (absent)
Heather Brown, ELHS Director of Curriculum (joined at 3:55 PM)
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director (joined at 3:48 PM)
Mary McNally, Town Manager (attended through Zoom in the audience)
Elizabeth Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member (absent)
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director (absent)

Other Attendees:
Ben Murphy, John Benzinger, Victoria Clifford (joined at 3:47 PM), Skanska USA Building, Inc.
Kristian Whitsett (left at 5:00 PM), Dorrie Brooks, Jillian DeCoursey, JWA
Helen Fantini, SMMA

Meeting called to order 3:45 PM

Approval of Meeting Minutes

- Gordon Smith asked for a motion on the 3/16/22 SBC Meeting Minutes.
- Stephen Chrusciel moved to approve the 1/5/22 ELHS SBC Meeting Minutes. Elizabeth Marsian-Boucher seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair- yes
        - Joe Dunn - yes
        - Kathleen Hill - yes
        - Elizabeth Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Greg Thompson - yes
    - The motion passed.

Skanska Update

- Ben Murph, Skanska, gave an update on the MSBA process
    - Project Team:
        - MSBA – Funding partner

- Skanska – OPM and Liaison between district and MSBA
- Design Team – Architect and Engineers
- School Building Committee – Representation of the community who will make all critical decisions for the project

- Ben reviewed the current project schedule:

Eligibility – Module 1	
ELHS Statement of Interest Accepted	April 2019
MSBA Accepted ELHS into the Feasibility Program	December 2019
Forming the Project Team – Module 2	
OPM Hired (Skanska USA Building, Inc.)	December 2021
Design Team Hired (JWA/SMMA)	May 2022
Feasibility Phase – Module 3	**May 2022 – March 2023**
Preferred Design Program (PDP) Report due to MSBA	August 2022
Preferred Schematic Report (PSR) due to MSBA	January 2023
MSBA PSR Approval Meeting	March 2023
Schematic Design Phase – Module 4	**March 2023 – October 2023**
Schematic Design (SD) Report due to MSBA	August 2023
MSBA Project Scope Budget Approval Meeting	October 2023
Funding the Project (Town-wide vote) – Module 5	**October/November 2023 (TBD)**
Detailed Design – Module 6	**November 2023 – November 2024**
Construction – Module 7	**July 2024 – May 2027 (2.8 years)**

JWA/SMMA Update

- JWA/SMMA recapped their interview presentation:
  - Introduced core team and engineering team
  - Project experience
  - Shared values
  - Preliminary space summary
    - District asked if the cost per square foot reimbursement rate would be increased by the MSBA
    - JWA/SMMA and Skanska reported the MSBA recently updated their cost by square foot reimbursement rate but noted that the MSBA is open with the fact that it's not on par with current construction costs.
    - Project scope and budget pricing will be set fall of 2023. This is a contract that will lock in the reimbursement rate for the full project.
  - Design goals
  - Preliminary design concepts:
    - JWA/SMMA noted that these concepts were purely conceptual and created before being hired without any input from the District.
      - SBC addressed the community desire to add additional sports fields and a new pool.
      - SBC member pointed out that losing the new tennis courts could be an issue for the community as it was a recent project.
      - Pamala Blair asked that the design team look into parking that made sense for access to the athletic fields.

        - JWA/SMMA introduced the concept of using the cafeteria as circulation and multiple-use space to maximize reimbursement.
            - Gordon brought up that the school has increased COVID-19 cleaning operations and asked if that can be considered in the design concepts.
        - SBC reported that the School staff has requested covered outdoor teaching spaces.
        - Bruce Feeney reported that the Town is in the process of approving a park or basketball court and that there is time to collaborate before design decisions are made.
- SBC asked if including the central offices in the project would be explored.
    - JWA/SMMA answered yes. The existing conditions report will evaluate the cost of keeping or removing offices from the project.
- Question conditions of the plumbing system.
    - JWA/SMMA answered yes. It will be a part of the existing conditions report.
- A SBC member suggested adding bathroom facilities and a concessions building for the athletic fields.
    - JWA/SMMA noted that it would not be reimbursed by MSBA, but they will look at including it in the project.
- A SBC member asked how we would prepare for flexibility in the school after the project is complete.
    - JWA/SMMA answered that the school would be designed to accommodate projected enrollment, and there will be studies to support how the school can handle future growth as part of the MSBA process Review of MSBA Process.
- JWA/SMMA gave an overview of MSBA Modules 3 & 4
    - Preliminary Design Program (PDP) Goals:
        - Develop educational program (District)
        - Develop space summary program (design team)
        - Evaluate existing conditions (design team)
        - Determine site development requirements (civil)
        - Develop preliminary alternatives (design team)
        - Develop district evaluation priorities (SBC & project team)
    - JWA/SMMA presented a PDP preferred options evaluation sample
- Review of Visioning Process
    - Three 90-minute sessions with 30-50 participants (virtual)
        - Chosen representatives from stakeholder groups
        - 6/13/22, 6-7:30 PM
        - 6/22/22, 6-8 PM
        - 6/29/22, 6-8 PM
        - Gordon asked for SBC member volunteers.
- Community Forum (virtual & in-person)
    - 6/15/22 6-8 PM
- Faculty Review
    - Voluntary
    - In-Person
    - August or September
- In-Person Programming Meetings
    - By department
    - Happening this week
    - In-Person with JWA/SMMA

Communications Update

- Victoria Clifford, Skanska, gave an update on the Building Project Website, https://www.eastlongmeadowma.gov/School-Building-Project.
- Victoria reported that members of the project team and SBC met to review the goals and logistics for a building project website.
- Ryan Quimby, Town IT Director, has volunteered to assist the SBC build and manage a website.
    - Website Goals:
        - Explain the process and report the project schedule
        - Meet the team
        - Advertise community forums, tours, and other events
        - Hub for:
            - Project documentation
            - Project news/updates
- Reaching Stakeholders:
    - The District identified the following channels for reaching community stakeholders:
        - LCAT, Blackboard Connect, Student Portals, Town Site.
        - Social Media – District, Town Departments, Shared Use Orgs, to share project news.
    - Victoria reported that the District has set up a project email, ELHSBuildingProject@eastlongmeadowma.gov, that will be accessible for all community members to send in questions and comments throughout the building project process. Skanska will manage to respond to emails and report to the SBC.

New Business

- Gordon Smith announced that Ryan Quimby, Town IT Director, has expressed interest in joining the School Building Committee.
- Stephen Chrusciel asked for a motion to add Ryan Quimby as a voting member of the East Longmeadow High School Building Committee.
- Elizabeth Marsian-Boucher made the motion. Pamela Blair seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair- yes
        - Joe Dunn - yes
        - Kathleen Hill - yes
        - Elizabeth Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Greg Thompson – yes
        - Steve Lonergan – yes
    - The motion passed.
- Next SBC Meeting:
    - 6/27 at 1:30 PM. Gordon to follow up with an invite.

Motion to adjourn by Stephen Lonergan, and Bruce Fenney seconded the motion.

- Stephen Chrusciel - yes
- Gordon Smith - yes
- Pamela Blair- yes
- Joe Dunn - yes
- Kathleen Hill - yes
- Elizabeth Marsian-Boucher - yes
- Bruce Fenney - yes
- Greg Thompson – yes
- Steve Lonergan – yes
-

The motion passed.

Meeting adjourned at 5:00 PM.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: Zoom Link
Date: June 27, 2022 *1:30 – 2:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Minutes	5 Minutes	❖ Welcome ❖ Approval of 5/25/2022 Minutes
2) Skanska Update	5 minutes	❖ Process Update ❖ Project Schedule Overview
3) JWA/SMMA Update	40 Minutes	❖ Update on Educational Programming and Visioning Process ❖ Existing Conditions Report ❖ Preliminary Space Summary & Plan Analysis ❖ Options Development
4) Communications Update	5 Minutes	❖ Community Forum Recap ❖ Community Outreach Update
5) New Business		
6) Questions/Public Participation		
7) Adjourn		

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
June 27th, 2022 – 1:30 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Joe Dunn, Town DPW Facilities Manager
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum (absent)
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager
Elizabeth Marsian-Boucher, School Committee Member (absent)
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett, Dorrie Brooks, Jillian DeCoursey, Brian Black, Helen Fantini, Erik Vangsness, Samantha Farrell

Gordon Began the meeting at 1:33 PM.

Meeting Minute Approval

- Steve Stephen Chrusciel asked for a motion to approve the 5/25 ELHSBC Meeting Minutes.
  - Kathleen Hill made the motion. Pamela Blair seconded the motion.
  - Gordon Smith called a roll call:
    - Pamela Blair – yes
    - Steve Chrusciel – yes
    - Joe Dunn – yes
    - Bruce Fenney – yes
    - Kathleen Hill – yes
    - Dr. Daniela LaBarre – yes
    - Stephen Lonergan – yes
    - Mary McNally – yes
    - Frank Paige – abstain
    - Ryan Quimby– abstain
    - Gordon Smith – yes
- The motion passed.

Skanska Update

- Ben Murphy, Skanska, gave an update on the schedule milestones to date.
    - Ben reported that the team met with the MSBA for a project kick-off meeting on 5/25.
    - Ben reported that a small Senior Leadership Team (SLT) meets every two weeks to stay on target for the PDP report due on 8/30. The SLT group includes Gordon Smith, Steve Chrusciel, Pamela Blair, Ryan Quimby, Heather Brown, Skanska, SMMA, and JWA.
    - Ben noted that SBC meetings should be scheduled for July and August to stay on target for the review and approval of the PDP submission.

JWA/SMMA Design Update

- Eric Vangness, Landscape Architect with SMMA and East Longmeadow HS alumni, provided an overview of initial findings from the Site Existing Conditions Survey:
    - The site is located less than one mile west of the town center.
    - Existing site access from Maple Street (primary) and Norden Street (secondary).
    - The design team noted there might be an opportunity to access thru Chestnut Street to alleviate some traffic.
    - The design team noted that a traffic engineer will be brought on later in the process to do a complete traffic study and will make recommendations based on counts.
    - The site abuts residential neighborhoods, industrial properties, and the Redstone Rail Trail.
    - Currently, there is no town-owned land available for connection south to Chestnut Street.
    - The existing public sidewalk along the north side of maple street
    - 61.4 acres
    - Athletic fields and courts are extensive and are in good overall condition.
    - Tennis courts need to be resurfaced in the next 2-3 years.
    - Press Box/concessions are not ADA accessible.
    - Lack of separation between school bus traffic and passenger vehicle traffic.
    - Recommended separating staff and student parking.
    - General safety concerns and lack of efficiency with overall vehicular circulation.
    - Lacking dedicated pedestrian routes and areas in the main parking lot and between the building and stadium.
    - Loading dock/service area cannot accommodate large vehicles.
    - The site majorly drains towards the Southeast corner.
    - Reviewed draining issues inside the school with the facilities group.
    - Wooded wetlands to keep in mind for setbacks and drainage issues
        - A committee member asked what the wetland setbacks were.
            - Eric answered that state guidelines are 100 ft buffer zone from wetlands.
- Kristian Whitsett, JWA, provided an overview of initial findings from the Structural Existing Conditions Survey:
    - The gym is in good shape structurally.
    - The flat roof structure consists of open web steel join.

    - The elevated floor structure consists of open web steel joists, steel griders and concrete floor slab on deck.
    - The original gym roof consists of steel bents supporting steel beams purlins and metal roof deck.
    - Gym addition and industrial arts addition roofs are structured with steel space trusses and metal roof deck.
    - Swimming pool roof consists of long span open web joists and metal roof deck.
    - Façade stucco shows cracking/delamination.
- Kristian Whitsett provided an overview of initial findings from the Architectural Existing Conditions:
    - Circulation is convoluted.
    - Finishes are robust – though colors are, of course dated and fixed
    - Spaces are being well utilized by staff.
    - Furnishings are dated and do not reinforce collaborative learning.
    - Natural light and ventilation issues.
    - Exterior sheet cladding is in very poor condition.
    - Lack of ADA compliance.
    - Bathrooms that cannot be monitored are abandoned.
    - Water infiltration in pool basement.
    - Poor architectural conditions as expected for a building of this age.
    - Significant quantities of hazmat material.
    - No student work is displayed in hallways or shared spaces.
    - The school demonstrates a strong sense of pride and a vibrant athletic/sport and wellness focus.
    - There are spaces where student-centered/UDL learning is on display.
    - Roof in poor shape, history of leaks.
    - Major public spaces lack updated technology and finishes.
- Helen Fantini, SMMA, provided an overview of initial findings from the MEP Existing Conditions:
    - The electrical generator and panels are in good condition but at the end of their life expectancy.
    - No emergency generator on site.
    - Electrical receptacles are at the end of their lives.
    - The kitchen and bathroom outlets are not up to code.
    - Question from a committee member: Is there redundancy if a boiler fails?
    - Bruce Fenney answered that some redundancy was built into the current boiler system.
    - The facility is not currently equipped with fire protection systems.
    - Storm piping is out of date, and no secondary overflow drainage.
    - Domestic hot water piping is outdated.
        - Question from a committee member: is the report on the plumbing system only based on what we can see?
            - Helen answered, yes, there could be further issues we don't know of. If the SBC selects addition/renovation, more investigative work will be ordered.2
    - Natural gas entrances and distributions are in fair condition.

- Compressed air system approaching life span.
    - Bruce Fenney provided an update to the committee:
        - UST's replaced in 2011/2012.
        - Underground storage tanks were also replaced, along with piping.

Review of Visioning Process

- Dorrie Brooks, JWA, gave an update to the SBC on the Visioning Process:
    - June 12th and June 22nd visioning workshops are complete.
    - Purpose of the workshops are to gain feedback that will inform the educational plan to be authored by the school district.
    - Dorrie shared key takeaways for educational, architectural, and community goals.
    - June 15th Visioning Community Forum was a hybrid event, with 45 attendees in-person and about 45 attendees virtual.
- Programming:
    - The existing school is 185,614 gsf total.
    - Spaces undersized by 5% or more from MSBA size expectations.
    - Dorrie shared a comparison of the existing school vs. the recommended class sizes for an 800-student high school. The key take away from the existing space was:
        - MSBA would have fewer classrooms than the current building, but they would be larger. The concept is to share classrooms.
        - No planning rooms.
        - No breakout rooms.
        - Undersized labs and STEM spaces.
        - Undersized gym.
        - Undersized media center.
        - Oversized auditorium.
        - Oversized art rooms.
        - Even on admin/slightly under on medical.
        - Abundant storage.
        - Oversized spaces may not be reimbursed by MSBA but can be funded by the community.
        - Spaces are negotiated with the MSBA.
        - Special Education spaces will be included in future reports.
        - Anticipate exceeding MSBA in core academic, physical education, and special education to meet ELHS programming needs.
        - Assume additional non-reimbursed shared community space.
        - Recommends matching MSBA in space guidelines to make the project more affordable construction costs.
        - Design team proposed to expect a building that is 200,000 gsf.
    - Comments and Questions:
        - A committee member expressed that cutting art and physical education square footage would pose an issue for programming.
        - A committee member asked if there are more reimbursement opportunities for renovation vs. new construction.

        - The design team answered that renovation gains additional reimbursement in the overall project. However, the MSBA will not participate in renovating spaces above their guidelines.
    - Committee members expressed that downsizing the auditorium may not go over well with the community.
    - A committee member expressed that bringing Elcat into the building could be a programmatic opportunity for the school district.

Preliminary Development Studies

- Site Considerations:
    - Spatial restrictions.
    - Proximity to neighbors.
    - Poor visibility from Maple Street.
    - Conflicts the with existing facility (building and track and field).
- The design team presented proposed building options for discussion:
    - Code upgrade
        - Maintains current entry.
        - Remediates hazmat.
        - Brings building up to code.
        - Undersized labs and classrooms.
        - Accessibility upgrades.
        - Circulation reconfiguration.
        - Utility upgrades.
    - Addition/Renovation
        - Maintains current entry location.
        - Requires swing space for construction.
        - Accessibility upgrades.
        - Circulation reconfiguration.
        - Utility upgrades.
        - Open space reconfiguration.
        - Outdoor classroom opportunities.
    - New Construction (Center of Site – Option A)
        - “Embracing the green”
        - Suboptimal solar orientation.
        - Building between playing fields.
        - Large green to West.
        - Bike/ped connections to neighborhood.
        - Building adjacent to placing field.
        - Western exposure for entry.
        - Opportunity for North/South vehicle axis.
    - New Construction (Center of Site – Option B)
        - “Central green”
        - Some overlap on existing footprint.
        - Fronts towards Maple.

        - Good solar orientation.
        - Building surrounded by playing fields.
        - Provides expansive green at front entry.
        - Eliminated Norden connection.
        - Maintains current parking strategy.
        - Improves pedestrian access.
    - New Construction (South End of Site – Option A)
        - "Big bow little bow"
        - Dramatic arrival.
        - Good solar orientation.
        - Building behind playing fields.
        - Separation between building and football field/track.
        - Large green to the North.
        - Spreads parking.
        - Uses Norden for emergency access and loading.
    - New Construction (South End of Site – Option B)
        - Building on North/South axis.
        - Suboptimal orientation.
        - Organized around chestnut connection.
        - Roads and building bifurcate site.
        - Greater impact on athletic program.
        - Spreads parking.
- Input from committee members:
    - Separating student and staff parking is preferred by School District.
    - Bruce Fenney comments that we should shy away from using Chestnut as access due to complaints from neighbors.
    - Bruce Fenney noted that including durable sidewalks on the perimeter of the site would be a bonus for the facilities department.
    - Committee member suggested maintaining current athletic spaces for community use.
- The design team noted that the educational plan that will be submitted with the PDP would help the SBC make informed decisions that align with the educational goals.

Communication Update

- Victoria Clifford, Skanska, noted that the Community Visioning Forum took place on July 15th, as Dorrie Brooks noted earlier in the meeting.
    - Recording of the Forum is available on the "Project News" section of the building website.
- Victoria asked for any input from committee members on outreach for the forum.
- Skanska to share with the committee questions that were asked by community members at the forum.
- Project website is live and accessible from the School and Town website landing pages.
- "Frequently Asked Questions" to be added to the project website.

New Business

- Steve Chrusciel asked for any new business.
- No new business from the committee.

Upcoming Meetings

- The design team requested to meet the week of July 18th.
    - Meeting scheduled for July 18th at 2:30 PM.
- Skanska requested the August meeting be scheduled for week of August 22nd to approve the PDP submission.
    - Meeting scheduled for August 22nd at 2:00 PM.

Motion to adjourn by Ryan Quimby. Seconded by Bruce Fenney.
Motion unanimously approved.

Meeting adjourned at 3:42.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: ELHS SBC Meeting
Date: July 18, 2022 *2:30 – 3:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Minutes	5 Minutes	❖ Welcome ❖ Approval of 6/27/2022 Minutes
2) Skanska Update	5 minutes	❖ General Project Update ❖ Schedule Update
3) JWA/SMMA Update	40 Minutes	❖ Update on Educational Programming and Visioning Process ❖ Space Summary Review ❖ Options Development & Review Criteria ❖ School Tours ❖ Student Engagement
4) Communications Update	10 Minutes	❖ Community Outreach Update ❖ National Night Out Event
5) New Business		❖ August SBC Meeting Date Change to 8/24 or 8/25
6) Questions/Public Participation		
7) Adjourn		

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
July 18th, 2022 – 2:30 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business (absent)
Joe Dunn, Town DPW Facilities Manager (absent)
Frank Paige, ELHS Principal (absent)
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member (absent)
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager (absent)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW (absent)
Dr. Daniela LaBarre, School Psychologist and Faculty Member (absent)
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett, Dorrie Brooks, Jillian DeCoursey, Brian Black, Helen Fantini, Erik Vangsness, Phil Peneli

Gordon began the meeting at 2:37 PM.

Skanska Update

- Ben Murphy, Skanska, gave an update on the schedule milestones to date.
    - PDP due to MSBA on August 30th
    - Held three educational visioning sessions
    - Review of space summary with school district
    - Drafting of educational plan
    - Existing conditions survey
    - Cost estimate upcoming
    - At the upcoming August SBC meeting, the SBC will be asked to approve the PDP submission.

JWA/SMMA Update

- Visioning Workshop Results:
    - Documentation shared with SBC. The team encouraged SBC to review the documentation to get caught up with the feedback received and the design intent moving forward.

    - Feedback was heavy on the community use side as not many teachers were able to attend.
    - Feedback from teachers was captured by department interviews conducted by the design team.
- Proposed Program Spaces:
    - The design team gave an overview of proposed educational spaces, an early study of eligible and ineligible square footage for MSBA reimbursement, and an early study of estimated construction cost by cost per square foot.
    - Greg Thompson asked if all rooms with have windows.
        - Not necessarily, as some small spaces may be in between rooms or hallways. The intent is for all staffed rooms to have windows.
    - The design team reviewed square foot overages in the athletics and arts categories.
    - Beth Boucher expressed wanting to prioritize a larger auditorium for large educational gatherings and community gatherings.
    - The design team explained that some ineligible square footage could be deemed as reimbursable by the MSBA if it is clearly part of the educational program.
    - Gordon mentioned DESE's involvement in recent years and their push for social and emotional education and school resource officer.
    - The design team reviewed ineligible spaces that they propose to delete from the program. This included the greenhouses, willie ross program, LGI & Black Box in lieu of oversized auditorium, ELCAT studio, and overlap locker rooms.
    - The design team noted that the cafeteria or gym could be used as overflow area or an alternate large gathering space.
    - Group discussed that a black box is not as advantageous for the District as a traditional stage because other schools use the HS stage.
    - Greg voiced to not delete locker room space due to the volume of athletics.
- MSBA Reimbursement:
    - The project team explained that the MSBA Reimbursement Rate will be locked in just prior to going to the Town for the project approval vote.
    - Beth Boucher expressed needing to communicate to the community how much it would cost to bring the building up to code without any help from the MSBA.
    - John Benzinger added that if the vote did not pass and the District wanted to reenroll with the MSBA for another try, they'd be put at the bottom of the barrel for acceptance to the Feasibility Program and have to fund another Feasibility Study.
    - Skanska explained each design option would have a detailed cost analysis to help the SBC make the best decision on which option to pursue and present to the community for approval.
    - The project team explained that site costs are capped at 8%
    - Swing space not reimbursable
    - The design team went over additional reimbursement opportunities.
- PDP Options Criteria:
    - The design team presented PDP review criteria which included sample scoring performed by design team (subjective).
    - The design team asked for input on weighting priorities and scoring.

- PDP Options:
    - The design team reviewed the following PDP design options:
        - Add/Reno
            - Tried to save as much of the building as possible
            - It would be quite difficult to get classrooms at intended sizes and preferred adjacencies per the educational plan
            - Includes a pool
            - A committee member asked if this would include site drainage.
                - Yes, and traffic mitigation improvements.
        - New Construction Center A – "Reverse L"
            - Centers building on site
            - Build new around existing school footprint
            - The design team noted circulation could be changed with input from the SBC
                - Committee members discussed that mini-bus traffic might be possible thru Norden, but SBC mentioned large busses and student traffic wouldn't be supported by neighbors.
        - New Construction Center B – "Tripod"
            - Footprint may be more costly (more square footage)
        - New Construction South A – "Corner Pods"
        - New Construction South B – "Flying J"
            - Beth responded to keeping green space as a buffer for neighbors.
                - Erik cautioned putting sports fields with ball hazards close to neighbors.
            - Gordon recommended bringing in the Rec Department for their input.
                - Greg cautioned adding any rec non-reimbursable square footage.
        - Alt New Construction South C – "Corner Pods/Separate Pool"
            - Pool, district office, and IT in a satellite building
                - Committee members raised concerns about wayfinding and student's accessing the pool for PE classes.
    - The design team presented vehicle circulation routes.
        - The committee confirmed using the west side of the site for busses, student and parent drop-off would be OK.
        - The committee voiced a desire for adding another traffic light and three-lane exit.
        - Committee confirmed that service deliveries currently using Norden works well.
            - Greg voiced that large delivery trucks should not exit with the bus traffic and not be directed to drive around the school during classes.
- Reactions to PDP Review Criteria:
    - The design team asked SBC to email input to Gordon
    - The design team asked to narrow down similar options:
        - Reverse L vs. Tripod
            - Ryan preferred Tripod due to outdoor classroom opportunities

        - The committee agreed
    - Corner Pods vs. Flying J
        - The committee preferred flying J
    - Separated Pool
        - The committee decided to forego
- Student Engagement:
    - Phil Peneli proposed including students in the design process. Potentially as SBC members.
    - Phil also recommended having students participate in a survey.
    - Gordon asked the design team to provide a draft survey
- School Tours:
    - Phil recommended the SBC tour other schools in the Commonwealth
    - Helen recommended touring North Middlesex. Proposed setting a date in August.
    - The project team is to follow up with committee to coordinate.

Communications Update

- Community Outreach:
    - Planning to host a booth at National Night Out, 8/2
        - Skanska reported that the building project plans to have a booth at National Night Out. The project team will provide a handout with FAQ information, ways to get involved, and a date for a fall community forum.
        - The design team added they will provide a community survey as well to collect input and will be working on a logo for the building project.
        - The project team invited SBC members to attend and assist with answering questions from the community.
    - Fall Community Forum
        - Skanska asked the committee to set a date.
        - Beth suggested having SBC reps at School open houses.
        - Project team asked for open house schedules
            - Mapleshade – Sept 7th
            - Birchland Park – Sept 14th
            - High School – Sept 22nd
            - Meadowbrook – Sept 28th/27th
        - Potential forum location: Senior Center
        - Potential dates: 9/15 or 9/21, 6 PM
            - Gordon to confirm with Senior Center

New Business

- Design team asked for the August SBC Meeting to be rescheduled for the 25th to allow time to incorporate estimates in the PDP.
- SBC Meeting rescheduled for Thursday 25th, 2 PM

Questions/Public Participation

- None

Motion to adjourn by Ryan Quimby. Seconded by Bruce Fenney.
Motion unanimously approved.

Meeting adjourned at 3:42.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: Zoom Meeting Link
Date: August 25, 2022 *2:00 PM – 3:45 PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome & Approval of Meeting Minutes**	*5 Minutes	❖ **Welcome** ❖ **Approval of 6/27/2022 Minutes** ❖ **Approval of 7/18/2022 Minutes**
2) **Public Participation**	*15 Minutes	
3) **Skanska Update**	*10 minutes	❖ **Process Update** ❖ **Schedule Update** ❖ **MSBA Pool Ruling Update**
4) **JWA/SMMA Update**	*60 Minutes	❖ **North Middlesex Tour** ❖ **Community Survey Results** ❖ **Cost Update** ❖ **Review of Preliminary Design Program (PDP) Assets/TOC**
5) **Preliminary Design Program (PDP) Required Votes**	*10 Minutes	❖ **Vote to move design options forward to PSR phase** ❖ **Vote to submit Preliminary Design Program (PDP) Report**
6) **Communications Update**	*5 Minutes	❖ **Community Outreach Update** ❖ **National Night Out Recap**
7) **New Business**		
8) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
August 25th, 2022 – 2:00 PM
(Meeting #1)

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member (absent)
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager (absent)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW (joined at 2:14 PM)
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett, Dorrie Brooks, Jillian DeCoursey, Brian Black, Helen Fantini, Phil Poinelli, Samantha Farrell, Molly Clark

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 2:03 PM.
- Stephen Chrusciel asked for a motion to approve the 7/18/22 ELHSBC Meeting Minutes.
  - Beth Marsian-Boucher made the motion. Ryan Quimby seconded the motion.
  - Gordon Smith called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - yes
    - Heather Brown - yes
    - Kathleen Hill - absent
    - Stephen Lonergan - yes
    - Mary McNally - absent
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - absent
    - Dr. Daniela LaBarre - abstain
    - Greg Thompson - yes
    - Ryan Quimby - yes
  - The motion passed.
- Stephen Chrusciel asked for a motion to approve the 6/27/22 ELHSBC Meeting Minutes.
  - Ryan Quimby made the motion. Beth Marsian-Boucher seconded the motion.

- Gordon Smith called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - yes
    - Heather Brown - abstain
    - Kathleen Hill - absent
    - Stephen Lonergan - yes
    - Mary McNally - absent
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - absent
    - Dr. Daniela LaBarre - yes
    - Greg Thompson - yes
    - Ryan Quimby - yes
- The motion passed.

Public Participation

- Steve Chrusciel opened the meeting for public comment.
- Andrea Schmidt, 66 Norden Street:
    - Andrea asked if the committee members received a copy of the petition from the Norden/Maple Community Members regarding their objection for using the Norden/Maple neighborhood as access for the new school project.
        - The SBC confirmed they received the petition.
    - Andrea reported that on the walk over for this meeting, three cars were speeding on Nordon Street on the way to the School. Andrea expressed concern with including access to Nordon Street in the new project.
        - Beth Marsian-Boucher, added that 30 to 40 neighborhood residents attended the recent School Committee meeting and expressed the same concern.
    - Brittany Sasidharan, 26 Marshall Street:
    - Brittany reported to the committee that her 10 year old child was almost hit by a car getting on to a school bus last year. Brittany expressed that the students and parents should feel safe walking in the neighborhood. Brittany expressed concern with including site access through Marshal St./Nordin St.
- John Benzinger, Skanska, suggested adding speed bumps or other speed mitigation measures.
    - Gordon Smith noted he plans to meet with the Town Police to discuss.
- Louis Calabrese,198 Maple Street:
    - Louis told the Committee that when the current school was built, the school district promised the Maple Street residents that access through the neighborhood would be for deliveries only. Would advocate that Marshall St./Norden St entrance be used for emergencies and deliveries only.

Bruce Fenney joined the meeting at 2:14 PM.

Skanska Update

- Process Update
    - Ben Murphy, Skanska, updated the committee that today, the main objective will be to review the components of the Preliminary Design Program (PDP) submission and authorize the OPM to submit the PDP package to the MSBA.
- Schedule Update
    - Ben Murphy, Skanska, gave an update on the project schedule
    - PDP is due on 8/30, once received, the MSBA will review and submit comments for the project team and committee to respond to.
    - After 8/30, the project team will move directly into the Prefered Schematic Report (PSR) phase of Module 3. PSR is currently targeted to be submitted to the MSBA in January 2023.
    - Assuming that the SBC chooses a new construction option, construction is tentatively scheduled to begin June 2024 with a 60% Construction Documents Early Bid Package for Sitework. Currently assuming 2.5 years for construction in total, with the new ELHS building complete by the summer of 2026.
    - Skanska notified the SBC of a recently proposed schedule change. Members of the project team suggested increasing the PSR phase by 1 month and reducing the Schematic Design phase by 1 month. By lengthening the PSR duration, it will allow for the SBC and the community to build better consensus on the preferred option.
        - Steve Chrusciel asked if the MSBA Board of Directors (BOD) meeting schedule is reflected in this schedule. Ben Murphy responded that MSBA issued their 2023 BOD meeting schedule today and that the schedule would be revised to accurately reflect the known BOD meeting dates.
        - Pam Blair asked what the process is for changing the schedule and is one month enough time to add for building community consensus which she finds to be a very important aspect.
            - Dorrie Brooks added that this schedule change doesn't require MSBA approval.
        - Beth voiced that the committee should look at construction delivery methodologies and asked that it be a topic for future SBC meeting agenda(s).
            - Skanska recommended giving a presentation on the delivery methods at one of the next SBC meetings.
- MSBA Pool Ruling Update
    - Ben Murphy, Skanska pushed for this discussion to take place during the design team's update because the slide containing MSBA's policy falls within.

JWA/SMMA Update

- North Middlesex Tour
    - Dorrie and Helen recapped the SBC tour at North Middlesex.

- Beth Marsian-Boucher, added that she liked how compact the footprint was and was impressed with the art facilities.
- Gordon Smith added that he liked the classroom pods and how they support student collaboration.
- Frank Paige expressed it was eye opening to see a building that could be a possibility for our school.
- Gordon Smith asked if the design team received any feedback from the North Middlesex staff or committee members.
    - Dorrie Brooks answered that a facilities staff member who joined the tour expressed the importance of not cutting too much out of the project.
- Beth Marsian-Boucher, added that the large group instruction rooms were a great use of space and the school finishes have held up very well and school has been open for 6/7 years.
    - Dorrie mentioned that the materials used in this school is what the team has included generally in our current cost estimate.

- Community Survey Results
    - Dorrie Brooks presented survey results from the survey originally intended for National Night Out, but due to low response rate, it was later posted to the Building Committee Project Website. 172 responses have been collected to date.
    - Dorrie Brooks gave an overview of the results:
        - Community desire to include a pool
        - Discomfort in supporting all-gender bathrooms
        - Concerns with traffic
        - Mixed results on current safety
    - Dorrie Brooks reported that a student survey has been provided to the HS staff and will work with Frank Paige for that to be circulated to students when they return.
- MSBA Pool Policy
    - Dorrie Brooks presented the current position of the MSBA on supporting a project with a pool. Dorrie reported that the MSBA's policy states that new construction options cannot include a new pool in the scope of work or associated budget for any project seeking MSBA grant money. If the preferred option is new construction, and the District still wishes to include a new pool; the procurement, design and construction of the new pool must be separate from the MSBA project. Should the preferred option be to renovate the building, the MSBA may consider it acceptable to incorporate scope associated with renovating the existing pool as part of the MSBA project. Dorrie added that a new pool could be in a separate building or if the current pool is renovated, any construction supporting the pool renovation would be ineligible for reimbursement.
    - Steve Lonergan asked how the MSBA would cut off funding if the pool is connected to the new school?
        - Dorrie added that there is a gray zone which is why the MSBA pushes for the pool to be in a separate building.

        - Pamela Blair added that a pool building would most likely need to be a separate warrant on the vote.
    - Andrea Schmidt, public participant, asked what happens to the swim teams if the pool does not get approved and why the state does not see the pool as an important part of physical education.
        - Gordon and Steve answered that the MSBA is firm in their policy, the District does see the pool as an important part of the educational program, which is why they are continuing to consider including it in the project.
- Eligible Options
    - Option 1 - Code Upgrade
        - MSBA would support a code upgrade but reimbursement is based on space guidelines, and reimbursement wouldn't be as advantageous as an add/reno or new build.
        - Visually the building would not look new, this would be purely a code upgrade.
        - Would lose classroom space because would need to build new walls inward to fit new utilities.
        - Frank Paige asked if modular classrooms are included in the cost estimate?
            - Yes, they are included in the full project cost, modular classrooms (swing-space) are 100% not reimbursed by the MSBA.
        - Beth Marsian-Boucher asked if this $113M code upgrade would be the amount the community would need to spend on the building regardless if we get the MSBA's support.
            - Dorrie Brooks answered that at the end of the PSR phase, the School Building Committee will need to decide on one option to develop in Schematic Design and the Schematic Design is the project that the MSBA will have the opportunity to partner with the District in funding.
        - Greg Thompson suggested that the project team should coordinate with MSBA to find out an estimated effective reimbursement rate for Option 1.
            - Kristian Whitsett explained that it is very difficult to derive effective reimbursement rates due to the complicated formulas and project cost caps in MSBA's budget formulation.
    - Option 2 - Renovation/Addition
        - 2B: Renovation/Addition with renovated pool
            - Pool is deemed ineligible by MSBA
        - 2C: Renovation/Addition with new community building (not priced)
            - Proposed by District as an alternate for discussion
        - Greg Thompson asked if it is possible to include a code repair with a separate community building.
        - Heather Brown added that it is important to remember that this project is to improve education for our current and future students.

        - Gordon Smith noted that the current prediction for MSBA reimbursement is 30%.
        - Steve Lonergan added that that is the prediction now, the MSBA's reimbursement commitment is not finalized.
        - Bruce Fenney moved to move forward option 2B, 3B and 5 to the PSR phase.
            - The committee asked if Bruce could withdraw his motion until the end of the presentation.
            - Bruce Fenney withdrew his motion so the committee could continue with the design team's presentation.
    - Option 3 - New
        - 3A - new construction central to site with new pool
        - 4A - new construction central to site with new pool (independent project)
        - 4B - new construction future south within site with new pool (independent project)
    - Option 5 - Split building (pool, locker rooms, concessions, district offices, ELCAT and IT in separate building from the school)
- Cost Update
    - The design team presented a cost overview of all options presented
    - Beth Marsian-Boucher asked why the options with separate buildings are more costly.
        - The design team answered that separate buildings require their own mechanic systems.
    - Kristian Whitsett added that the design team has fears around the base upgrade because of the low floor to ceiling ratio.
    - Andrea Schmidt, 66 Norden Street:
        - If we do the base-upgrade only it won't fix the educational issues in the building. Ultimately this is a 70 year old building and these need to be addressed anyway.
        - Andrea asked why Norden is being considered for access.
            - Dorrie Brooks answered that the design team has met to review traffic with Police and Fire and the group felt that an alternate route should be included for emergency access and school staff has expressed a desire to spread traffic flow. The design team added these options are not final and will be looking into alternate options.
    - Steve Chrusciel asked if there were any other concerns from the SBC before moving forward?
        - Beth Marsian-Boucher voiced concern of moving a project forward that does not include a pool.
        - Bruce Fenney added that we will need to consider adding bathrooms for the field per code.

Preliminary Design Program (PDP) Required Votes

- Steve Chrusciel asked if anyone would like to make a motion.
- Bruce Fenney moved to select options 2B 3B and 5 to move forward to the PSR Phase. Ryan Quimby seconded the motion.
    - Discussion:
        - Greg Thompson and Steve Lonergan supported including option 1.
        - Steve Chrusciel asked if Bruce would like to modify or withdraw his motion.
- Bruce Fenney modified his motion to include 1, 2B, 3B and 5. Ryan Quimby seconded the motion.
- Steve Chrusciel called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - yes
    - Heather Brown - yes
    - Kathleen Hill - absent
    - Stephen Lonergan - yes
    - Mary McNally - absent
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - yes
    - Dr. Daniela LaBarre - yes
    - Greg Thompson - yes
    - Ryan Quimby - yes
- The motion passed unanimously.

- Vote to submit Preliminary Design Program (PDP) Report:
    - Steve Chrusciel asked for a motion on the following vote:
    - The East Longmeadow High School Building Committee votes to approve the Preliminary Design Program (PDP) and authorized Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the District.
    - Motion by Pamela Blair, seconded by Ryan Quimby.
    - Steve Chrusciel called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - absent
        - Stephen Lonergan - yes
        - Mary McNally - absent
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes

    - Greg Thompson - yes
    - Ryan Quimby - yes
- The motion passed unanimously.

Communications Update

- Community Outreach Update
    - Community Forum #2 scheduled for September 21st at the Senior Center.
    - The SBC asked that tonight's presentation be added to the project website.

New Business

- No new business

Motion to adjourn by Beth Marsian-Boucher. Seconded by Pamela Blair.

Steve Chrusciel called a roll call vote:

- Stephen Chrusciel - yes
- Gordon Smith - yes
- Pamela Blair - yes
- Frank Paige - yes
- Heather Brown - yes
- Kathleen Hill - absent
- Stephen Lonergan - yes
- Mary McNally - absent
- Elizabeth (Beth) Marsian-Boucher - yes
- Bruce Fenney - yes
- Dr. Daniela LaBarre - yes
- Greg Thompson - yes
- Ryan Quimby - yes

Motion approved unanimously.

The Commonwealth of Massachusetts
this 30 day of August, 2022
me, the undersigned notary public, Gordon Smith
onally appeared, proved to me through
factory evidence of identification, which were
Personally known, to be the person who signed the
eding or attached document in my presence and who swore or
ffirmed to me that the contents of the document are truthful and
curate to the best of his/her knowledge and belief.
Deborah M. House
Deborah M. House, Notary Public
My Commission Expires June 23, 2028

Meeting adjourned at 4:19 PM.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska.

Deborah M. House
Notary Public
COMMONWEALTH OF MASSACHUSETTS
My Commission Expires
June 23, 2028

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
Zoom Meeting Link: Zoom Meeting Link
Date: August 25, 2022 *4:00PM – 4:15PM*

AGENDA ITEM	TIME	NOTES
1) **Overview of Final Responsibility of ELHS SBC for the Submission of the Preliminary Design Program Report**	*5 Minutes	
2) **Approval of Minutes from 8/25/22 meeting at 3:00PM**	*5 Minutes	❖ **Approval of minutes from the preceding meeting**
3) **Public Comment**	*5 minutes	
4) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
August 25th, 2022 – 4:00 PM
(Meeting #2)

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member (absent)
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager (absent)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett

Stephen Chrusciel began the meeting at 4:41 PM.

Approval of Meeting Minutes

- The Committee noted one error on the 8/25/22 ELHSBC Meeting Minutes (Meeting #1) to be amended:
    - removing Joe Dunn from the list of attendees as he is no longer a Town Employee.
- Stephen Chrusciel asked for a motion to approve the 8/25/22 ELHSBC Meeting Minutes (Meeting #1).
- Greg Thompson moved to approve the Meeting Minutes as amended. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - absent
        - Stephen Lonergan - yes
        - Mary McNally - absent
        - Elizabeth (Beth) Marsian-Boucher - yes

        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
- The motion passed unanimously.

Motion to adjourn by Ryan Quimby. Seconded by Beth Marsian-Boucher.

- Gordon Smith called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - yes
    - Heather Brown - yes
    - Kathleen Hill - absent
    - Stephen Lonergan - yes
    - Mary McNally - absent
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - yes
    - Dr. Daniela LaBarre - yes
    - Greg Thompson - yes

Meeting adjourned at 4:44 PM.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING ELPS Central Office 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom Meeting Link
Date: September 15, 2022 *4:00 PM –5:30PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome & Approval of Meeting Minutes**	*5 Minutes	❖ **Welcome** ❖ **Approval of 8/5/22 (Meeting #2) Minutes**
2) **Skanska Update**	*10 minutes	❖ **Process Update** ❖ **Schedule Update**
3) **JWA/SMMA Update**	*30 Minutes	❖ **Goals of PSR Phase** ❖ **Detailed Review of 4 Selected Options** ❖ **Preview Community Forum Content**
4) **Communications Update**	*15 Minutes	❖ **Preview Community Forum Content** ❖ **Future Community Forum Schedule** ❖ **Community Outreach Update**
5) **Public Participation**	*10 Minutes	
6) **MSBA Budget Revision Request Approval**	*5 Minutes	❖ **Feasibility Study Budget Redistribution**
7) **Acknowledgment of SBC Meeting 8/19/21, 9/8/21, 9/27/21**	*10 Minutes	
8) **SBC Approval of OPM Request for Service Issuance**	*5 Minutes	
9) **New Business**	*5 Minutes	
10) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
September 15, 2022 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Victoria Clifford, Craig Spice
Design Team (JWA/SMMA): Kristian Whitsett, Jillian DeCoursey, Samantha Farrell

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 4:04 PM.
- Stephen Chrusciel asked for a motion to approve the 8/25/2022 (Meeting #2) ELHSBC Meeting Minutes.
    - Pam Blair made the motion. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - abstain
        - Stephen Lonergan - yes
        - Mary McNally - absent at time of motion
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
    - The motion passed.

Skanska Update

- Ben Murphy gave a schedule update and overview of Preferred Schematic Report (PSR) milestone dates.

- Ben reported that due to feedback at the last SBC meeting, the PSR deadline has been pushed back from February 2023 to April 2023 to allow for more time for community input.
- Looking at October 2023 for approval of the Schematic Design (SD), which will be the project that moves forward for a Town Vote in November 2023.
- July 2024 tentative construction start date, assuming early bid packages.
- Greg Thompson asked if there would be enough time to adjust the Town Vote materials if the MSBA does not approve the SD package in October.
- Skanska answered that the Project Team will complete and submit the SD package in August, the MSBA will begin review of the package right away and will flag any items that may need to be revised or revisited well before the October Board Date.
- Kathleen Hill noted that the vote date for the Town in 2023 will be on November 7th.

JWA/SMMA Update

- Kristian Whitsett noted that one of the goals for today would be to eliminate one of the two add/reno schemes to streamline what is presented at the 9/21 community forum.
- JWA/SMMA reviewed the PSR deliverables.
- JWA/SMMA gave an overview of the differences between code upgrade, add/reno, and new construction.
- JWA/SMMA gave an overview of square feet included in each design option.
- Design Updates
    - The design team presented updated design options.
    - The design team presented updated site design for each option.
    - The design team presented cost models for each option.
    - Beth Marsian-Boucher asked if there will be future opportunities to discuss layout of the floorplans. Would like to see the Auditorium closer to the main entrance.
        - The design team answered yes.
    - Greg Thompson asked why we aren't looking at saving the cafeteria and gym in the add/reno scheme.
        - The design team answered that both are undersized, and the surrounding locker area needs to be redone, so might not be cost effective to save those spaces.
        - Bruce Fenney added that that wing of the existing building has foundation issues.
    - Steve Chrusciel asked if Skanska has followed up with the OIG's office for clarification on the pool project procurement process and whether the pool project needs to be a separate warrant article.
        - Skanska reported they will be setting up a call next week.

The design team presented HVAC challenges with the add/reno and code upgrade options. Greg Thompson asked if the Town pursued a project outside of the MSBA project, would they need to adhere to this code?

- The design team answered that code requirements would be based on the assessed value of the existing building.

Cost Update

- Steve Lonergan presented a rough draft calculation for tax impact based on early assumptions using information that is available at this time.
- Beth Marsian-Boucher asked the project team if they foresee construction costs to be lowered within the next few months.
    - Kristian Whitsett answered that the last noticeable drop in construction costs was in 2008 during a recession.
- Pam Blair asked the project team if they foresee MSBA updating their reimbursement for cost per square foot within the next few months.
    - The team answered, no. They update every two years and just recently made an update.
- Bruce Fenney voiced that he would support the project including everything we need as a separate project might not have the likelihood to be pursued later and it may cost more.
- The Committee discussed their responsibility to effectively communicate the project cost and tax impact with the community.

Communications Update

- Project team presented a draft community forum slide deck
    - Committee asked to include locker room photos in the existing conditions section
- The Committee asked if they should knock down to 1 add/reno for the purpose of the community presentation on Sept. 21st?
    - Greg suggested 2c, 3c, 5b be presented during the community presentation.
    - Design team to revise the presentation accordingly.
- Design team asked if we should include the tax impact information?
    - Mary and Steve L. advised not printing the numbers because it is still in draft form. But be prepared to answer the question if it is asked.
- Design team proposed simplifying the cost table to show the cost range.
    - The Committee agreed.

Kristian left the meeting at 6:15 PM.

- SBC looking to present Project information at PTO meetings.
- Beth suggested perhaps presenting Project information to audiences at the annual elementary school holiday plays that are typically held in December.
- Victoria Clifford suggested setting a date for a 3rd community forum in November before the Thanksgiving holiday.
    - Committee scheduled Community Forum #3 to be held on November 16th at 6 PM at the high school. Exact meeting location TBD.

MSBA Budget Revision Request Approval

- Ben Murphy explained that Budget Revision Request #1 is necessary to reallocate approved project funds within MSBA's ProPay Feasibility Study budget to match agreed upon contract values.
- Greg Thompson made a motion to approve Budget Revision Request #1. Ryan Quimby seconded the motion.
- Gordon Smith called a roll call vote:

- Stephen Chrusciel - yes
- Gordon Smith - yes
- Pamela Blair - yes
- Frank Paige - yes
- Heather Brown - yes
- Kathleen Hill - yes
- Stephen Lonergan - yes
- Mary McNally - yes
- Elizabeth (Beth) Marsian-Boucher - yes
- Bruce Fenney - yes
- Dr. Daniela LaBarre - yes
- Greg Thompson - yes
- Ryan Quimby - yes

Mary McNally left the meeting at 6:20 PM.

Public Participation

- **No public participation**

Acknowledgment of SBC Meeting 8/19/21, 9/8/21, and 9/27/21

- Gordon asked the SBC for a formal acknowledgement of the 8/19/21, 9/8/21, and 9/27/21 meetings which were not publicly posted, and meeting minutes were not taken.
- Gordon let the group know that meetings prior to 9/27/21 were informational only. At the 9/27/21 meeting, the SBC voted to approve the OPM Request for Services. That vote was captured and included in a letter to the MSBA.
- Beth Marsian-Boucher made a motion to approve the actions taken by the ELHSBC on 9/27/21 to advertise a Request for Services for an Owner's Project Manager and move forward with the Owner's Project Manager procurement process. Kathy Hill seconded the motion.
- Gordon Smith called a roll call vote:

    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - yes
    - Heather Brown - yes
    - Kathleen Hill - yes
    - Stephen Lonergan - yes
    - Mary McNally - absent
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - yes
    - Dr. Daniela LaBarre - yes
    - Greg Thompson - abstain
    - Ryan Quimby – abstain

New Business

- Skanska suggested SBC meet bi-weekly moving forward thru the PSR phase.
- Thursday works best for the Committee.
- Next meeting 9/29 at 2PM.

Adjournment

- Motion to adjourn made by Steve Lonergan. Seconded by Ryan Quimby.
- Steve Chrusciel called a roll call vote:
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige – yes
    - Heather Browne – yes
    - Kathleen Hill – yes
    - Stephen Lonergan – yes
    - Mary McNally – absent
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
    - Dr. Daniela LaBarre – yes
    - Greg Thompson – yes
    - Ryan Quimby – yes

- Motion approved unanimously.
- Meeting adjourned at 6:36 PM.

Meeting minutes respectfully submitted by Victoria Clifford, Skanska.

ELHS SCHOOL BUILDING COMMITTEE MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom Link
Date: September 29, 2022 *4:00 PM – 5:30PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 9/15/22 Minutes**
2) Welcome to Tom Christensen as a new member of the ELHS SBC	*5 Minutes	❖ **Tom currently is the Deputy Town Manager, and he formerly was the Deputy Superintendent of the Department of Public Works**
3) Public Participation	*10 Minutes	
4) Skanska Update	*10 minutes	❖ **Schedule Update**
5) JWA/SMMA Update	*35 Minutes	❖ **Community Forum #2 Recap** ❖ **Focus Group Formation** (Building Systems & Sustainability, Site) ❖ **Pool Project** ❖ **MSBA PDP Review Comments** ❖ **Design Updates**
6) Communications Update	*10 Minutes	❖ **Community Outreach Update**
7) New Business		
8) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
September 29, 2022 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Craig Spice
Design Team (JWA/SMMA): Kristian Whitsett, Dorrie Brooks, Helen Fantini, Jillian DeCoursey, Samantha Farrell

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 4:02 PM.
- Gordon Smith asked for a motion to approve the 9/15/2022 ELHSBC Meeting Minutes.
    - Beth Marsian-Boucher made the motion. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – absent at time of motion
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Stephen Lonergan - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - abstain
    - The motion passed.

Welcome to Tom Christensen as a new member of the ELHS SBC

- Gordon Smith welcomed Tom Christensen, Deputy Town Manager to the School Building Committee.

- Gordon Smith asked for a motion to approve Mr. Christensen's appointment to the School Building Committee.
    - Steve Lonergan made the motion. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – absent at time of motion
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Stephen Lonergan - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - abstain
    - The motion passed.

Public Participation

- There were no members of the public present at the meeting.

Skanska Update

- Schedule Update:
    - Ben Murphy gave a schedule update and overview of Preferred Schematic Report (PSR) milestone dates.
    - Ben reported that the Project Team is still awaiting MSBA's review comments on the PDP submission that was made on August 30th, 2022. Once the team receives the comments, they will formulate responses and send them back to MSBA.
    - Ben made note of the Community Forum #2 event which took place on September 21st, 2022. It was a successful event in which the Project Team was able to provide important Project updates and receive useful feedback from community members who attended and participated.
    - The design team held a charrette at the high school on September 25th, 2022. During the charrette, design team members were able to walk the site, observe arrival/dismissal tendencies and progress the different project schemes with firsthand information.
    - Community Forum #3 has been scheduled for November 16th, 2022, at the high school.
    - Cost estimating of the different project options will begin in early January 2023. Reconciled estimates are expected to be complete by January 25th, 2023.
    - SBC approval of the PSR submission is tentatively scheduled for February 8th, 2023.
    - The Facilities Assessment Subcommittee (FAS) meeting will take place on March 29th, 2023. Ben noted that the FAS meeting is an informal meeting between MSBA, the district and the Project Team in which the PSR will be reviewed, and thoughts will be shared amongst attendees.
    - Formal PSR approval will take place on April 26th, 2023, at the MSBA's Board of Directors meeting.

JWA/SMMA Update

- Community Forum #2 Recap:
    - Jill DeCoursey recapped the 9/21 community forum presentation and community feedback.
    - Interactive feedback showed a strong preference for a new construction option from the community.
    - Option 5b (New Construction w/ Separate Community Bldg.) garnered the most support from the community.
    - Gordon Smith noted that there was a good mix of forum attendees/participants including teachers, parents, town department members, neighbors and others.
    - Beth Marsian-Boucher said that it's helpful to see the overwhelming support for the new construction option and it helps give the SBC direction.
    - Project team members volunteered to give presentations to the various Parent-Teacher Organizations. Gordon Smith will provide the upcoming PTO dates to the design team, OPM and SBC.
    - The project team will present to School Counsel on October 6th at 6 PM.
- Focus Group Formation:
    - Helen Fantini informed the SBC that the design team is looking to assemble three working groups to focus on: Building systems/sustainability, Site, and Educational Programming
    - The design team will work with the Town to identify volunteers for each group. Helen is aiming to have finalized rosters for each group by the end of next week.
- Design Updates:
    - Helen informed the SBC of the design charrette that took place at the high school on Sept. 28th. This event allowed the design team to walk the site and discuss and develop plans as a group. The charrette focused on:
        - Review of Community Forum #2 feedback
        - Additional Site Development
        - Circulation and Ed. Program Layout
        - Exploration of existing District Offices Building aka: the Annex Building.
    - Kristian Whitsett reviewed the prospects of keeping the Annex Building as a community building.
        - Pros:
            - Potential reduction of cost by removing district offices, IT, ELCAT scope from the main building.
        - Cons:
            - Resizing/replacement of mechanical systems.
            - Requires new electrical service.
            - New entries, parking, site access.
            - Possible need to keep Norden St. access.
            - Loss of a softball field/usable athletic field space.
            - Oversized for current needs
            - Keeps unattractive building in prominent location.
            - Blocks view into the site
        - The SBC expressed interest in learning the financial and programmatic differences in renovating the Annex building vs. keeping it in the main building.

        - The design team will work with the various disciplines to establish scope associated with retaining the Annex building. Once scope is defined, a high-level estimate will be developed for comparative purposes.
    - Kristian reviewed the design team's current goals:
        - Further development of Option 3C
        - Further development of community program location/phasing options
        - Aiming to review more detailed floor plans and specific room adjacencies
        - Initiating traffic study and site survey
        - Prep for first Sustainability charrette
    - Beth Marsian-Boucher suggested that the design team consider including an exterior overhang or covered space that could be used for shelter from rain or as an outdoor classroom.
- MSBA PDP Review Comments
    - The project team will respond to MSBA's PDP review comments once they are received.
    - The project team will summarize MSBA's PDP review comments and the associated responses to be shared at the next SBC meeting.

Communications Update

- Community Forum #3 will be held in the cafeteria at East Longmeadow High School on November 16th at 6 PM.
    - SBC members will lead tours through the high school for attendees who are interested.

New Business

- The next SBC meeting has been scheduled for October 27th at 4 PM.

Adjournment

- Motion to adjourn made by Beth Marsian-Boucher. Seconded by Ryan Quimby.
- Gordon Smith called a roll call vote:
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige – yes
    - Heather Browne – yes
    - Kathleen Hill – yes
    - Stephen Lonergan – yes
    - Mary McNally – yes
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
    - Dr. Daniela LaBarre – yes
    - Greg Thompson – yes
    - Ryan Quimby – yes
    - Tom Christensen – yes
- Motion approved unanimously.
- Meeting adjourned at 5:23 PM.

Meeting minutes respectfully submitted by Ben Murphy, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom Meeting Link
Date: October 27, 2022 *4:00 PM –5:30PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 9/29/22 Minutes**
2) Public Participation		
3) Skanska Update	*10 minutes	❖ **Schedule/MSBA Process Update**
4) JWA/SMMA Update	*35 Minutes	❖ **MSBA PDP Review/Response** ❖ **Focus Groups Update** ❖ **Pool Project** ❖ **Design Updates** o **Annex Evaluation** o **New Construction Plan Concepts**
5) Communications Update	*10 Minutes	❖ **Feedback on Presentation to ELHS School Council** ❖ **Community Forum #3 Update**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
October 27, 2022 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Craig Spice, John Benzinger
Design Team (JWA/SMMA): Kristian Whitsett, Dorrie Brooks, Helen Fantini, Jillian DeCoursey, Samantha Farrell, Aviva Galaski

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 4:05 PM.
- Gordon Smith asked for a motion to approve the 9/29/2022 ELHSBC Meeting Minutes.
    - Stephen Chrusciel made the motion. Beth Marsian-Boucher seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Stephen Lonergan - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - yes
    - The motion passed.

Public Participation

- There were no members of the public present at the meeting.

Skanska Update

- Schedule Update:
    - Ben Murphy gave a schedule update and overview of Preferred Schematic Report (PSR) milestone dates.
    - Ben reported that the Project Team is still awaiting MSBA's review comments on the PDP submission that was made on August 30th, 2022. Once the team receives the comments, they will formulate responses and send them back to MSBA.
    - Community Forum #3 has been scheduled for November 16th, 2022, at the high school.
    - Cost estimating of the different project options will begin in early January 2023. Reconciled estimates are expected to be complete by January 25th, 2023.
    - SBC approval of the PSR submission is tentatively scheduled for February 8th, 2023.
    - PSR (Preferred Schematic Report) submittal to MSBA is scheduled for February 14, 2023.
    - Address MSBA PSR comments March 15, 2023 – March 28, 2023.
    - The Facilities Assessment Subcommittee (FAS) meeting will take place on March 29th, 2023. Ben noted that the FAS meeting is an informal meeting between MSBA, the district and the Project Team in which the PSR will be reviewed, and thoughts will be shared amongst attendees.
    - Formal PSR approval will take place on April 26th, 2023, at the MSBA's Board of Directors meeting.

JWA/SMMA Update

- PDP – Update on MSBA Comments. Dorrie Brooks provided updates on MSBA PDP comments:
    - District's target budget
        - Response about process decisions and current status.
    - Ed Plan Clarifications
        - Schedule, Guidance, faculty size, professional development and UDL priorities.
    - Clarification of Educational Program
        - Music, PE Program Needs, Health Classes, Business Classes, ELCAT/Video Production Studio, Willie Ross.
    - Space Summary justifications
        - Science, Business, Greenhouse, Health, ELL, LGI, PE, Dining, Medical, Guidance Conf Rms., District Offices, IT & ELCAT.
    - Site diagram requested
        - Access issues, Circulation Information.
    - Reiteration of Pool Policy
        - All work relating to the pool - beyond the PSR submission - must be carried as a separate contract.

- System & Sustainability Focus Group Results:
    - Helen Fantini provided updates on System & Sustainability Focus Group results.
    - Energy Efficiency
        - Helen provided updates regarding Energy Use Index (EUI).
        - Green Community versus Stretch Code was discussed. It was clarified that East Longmeadow is already a Stretch Code Community and that this is the bare minimum required for Energy Code compliance. Green

Community has increased goals and requirements above and beyond the Stretch Code.
    - Upcoming Code Changes
    - Green Building Rating System
    - Intro to Mechanical Systems
    - MSBA Sustainability Requirements

- Site Design Focus Group Results:
    - Samantha Farrell provided updates on Site Design Focus Group results.
    - Topics of discussion included existing conditions, structure, and goals.
    - Outcomes of the focus group included:
        - Gathering Community
        - Warm Welcome Green
        - Social Safety
        - Circulation Clarity
    - Goals of the Site Design Focus Group were identified as follows:
        - Flexible, multi-purpose, communal
        - Welcoming and inclusive
        - Active recreation integration
        - Health and wellbeing
        - Connecting to nature

- Educational Programming Focus Group Update:
    - Educational Programming Focus Group is scheduled to meet on November 2, 2022.

- Design Updates:
    - Samantha Farrell reviewed the Site Plan.
        - Sam reviewed the Site Plan rough sketch:
            - Vehicular Systems
                - Busses & cars
            - Pedestrian Zones
                - Seating Zones
    - Samantha Farrell reviewed the Site Plan.
        - Sam reviewed Site Plan Development.
            - District Office at west side of building.
                - Can easily be removed from design at a later date without impacting the larger plan.
            - Pool to northwest corner of building.
                - Can easily be removed from design at a later date without impacting the larger plan.
            - Front door centrally located on north side.
            - Athletic fields to south and west of the building.
            - A separate building with concessions and bathrooms was discussed.
            - CPC funding of basketball court was discussed.
        - Sam reviewed another slide titled Site Plan Development which showed the footprint of the existing school building in relation to the proposed new building. There was some overlap of the two footprints.
            - John Benzinger voiced a concern over constructability of a new building while maintaining the current school operations.

        - Dorrie agreed with these concerns and stated that the new building will likely need to be situated more to the SE to avoid conflicts with the existing building.
    - Sam reviewed Site Plan Development - Circulation.
        - Main drop off loop, preserve trees.
        - Parking to NE.
        - Service Route on west side.
        - Emergency Route west and south.
    - Sam reviewed Site Plan Development – Green & Views.
        - Viewing of school from main road and entrance discussed.
        - Viewing of fields from main entrance and from inside the building discussed.
    - Sam reviewed Site Plan Development – Gathering Spaces.
        - Community gathering.
        - Larger groups can be accommodated as well as smaller groups.
    - Sam reviewed Site Plan Development – Social/Educational Spaces.
        - Social/Educational Spaces discussed.
    - Sam reviewed Site Plan Development – No District Offices.
        - No District Offices discussed.
            - It was noted that many schools include District Offices in their plan.
- Greg Thompson voiced a concern over parking proximity and pedestrian access to the athletic fields specifically in regard to older citizens.
    - Sam stated that pedestrian systems will be in place to access the fields.

- Dorrie Brooks provided a Design Update regarding the Organizing Concept as follows:
    - (1) Physical Education Block.
    - (1) Arts Block.
    - (2) Educational Blocks.
    - Create a Center Point that welcomes and celebrates students.
    - Auditorium accessible to community.
    - Useful and enjoyable outdoor spaces.
    - Classrooms with north south orientation and relating to open space/woods.
    - Gym relating to field and pool.
- Dorrie further discussed Exploratory Spaces in relation to the larger blocks:
    - Locate exploratory learning spaces near to the central axis to create a more active, student-centered school with diverse learning opportunities.
    - Early Ed Lab
    - Media Studio
    - Engineering/Robotics Studio
    - Large Group Instructional Space
    - Fitness Studio
    - Graphics Studio
    - Culinary Studio
- Dorrie Brooks provided a Design Update regarding Concept Development as follows:
    - One versus two circulation spines discussed in terms of Singular Circulation and Dual Circulation.
- Dorrie Brooks provided a Design Update regarding Plan Development as follows:

        - Dorrie stated that this is still in the conceptual stage.
        - Building with two floors including Auditorium, Gym, and Cafeteria on Floor 1 and Media Center on Floor 2.
        - District Office located at west side of building.
            - Can easily be removed from design at a later date without impacting the larger plan.
        - Pool located at northwest corner of building.
            - Can easily be removed from design at a later date without impacting the larger plan.
- Dorrie Brooks provided a Design Update regarding Academic “House” Explorations as follows:
    - Bring Flex Space into the plan.
    - Options A-D discussed.
    - Option D appears most advantageous.
- Samantha Farrell reviewed Design Update – Site Plan Development with Annex as follows:
    - Leaves connection to Norden St. in place.
- Kristian Whitsett reviewed Design Update – Annex Evaluation as follows:
    - Kristian explained that the Concept Estimate was developed in a “perfect world” scenario where all existing conditions are able to be maintained without major renovation or replacement. These conditions included:
        - Abatement
        - Architectural
        - Mechanical
        - Plumbing
        - Fire Protection
        - Electrical/Fire Alarm/Data
        - Site
    - Concept Estimate:
        - Utilize the existing Annex:
          Total $4,818,751 = $268/SF
          GSF: 18,000
        - New Construction:
          Total $6,370,000 = $650/SF
          GSF: 9,800
        - Delta: +/- $1,550,000
    - The group discussed Pro’s and Con’s of existing versus new. The group is leaning towards a new 2-story addition as part of the school.
        - Pro’s:
            - Potentially saves $1.5 million.
            - Leaves additional space that could be used for other District / Town needs.
            - Postpones long term location of these spaces to another day, buying time for Town offices project.
        - Con’s:
            - Leaves the existing Annex "as is" with few exterior updates.
            - Poor first impression upon entering the site.
            - Awkward location restricts site design and field layout.
            - Cost savings could decline considerably based on the state of the existing mechanical distribution system

and the condition of the pipes – and other utilities - under the slab.
        - Difficulties with existing ELCAT and District Office space to remain.
        - Reduced connection between the High School and ELCAT and IT presents challenges
        - Outstanding deferred maintenance issues for the Annex remain on the books.
    - Dorrie recommended revisiting the parking count.

Communications Update

- Community Forum #3 will be held in the cafeteria at East Longmeadow High School on November 16th at 6 PM.
    - SBC members will lead tours through the high school for attendees who are interested.

New Business

- The next SBC meeting has been scheduled for December 1st at 4 PM.

Adjournment

- Motion to adjourn made by Dr. Daniela LaBarre. Seconded by Tom Christensen.
- Gordon Smith called a roll call vote:
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige – yes
    - Heather Browne – yes
    - Kathleen Hill – yes
    - Stephen Lonergan – yes
    - Mary McNally – yes
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
    - Dr. Daniela LaBarre – yes
    - Greg Thompson – yes
    - Ryan Quimby – yes
    - Tom Christensen – yes
- Motion approved unanimously.
- Meeting adjourned at 5:52 PM.

Meeting minutes respectfully submitted by Craig D. Spice, Skanska.

ELHS SCHOOL BUILDING COMMITTEE MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING
180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom Meeting Link - ELHS SBC
Date: December 1st, 2022 *4:00 PM –5:30PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome & Approval of Meeting Minutes**	*5 Minutes	❖ **Welcome** ❖ **Approval of 10/27/22 Minutes**
2) **Public Participation**	*10 Minutes	
3) **Skanska Update**	*35 minutes	❖ **Ch. 149 (Design-Bid-Build) vs. Ch. 149A (CM @ Risk) Presentation**
4) **JWA/SMMA Update**	*30 Minutes	❖ **Design Updates**
5) **Communications Update**	*10 Minutes	❖ **Community Forum #3 Review**
6) **New Business**		
7) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
December 01, 2022 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director
Mary McNally, Town Manager
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Craig Spice, John Benzinger
Design Team (JWA/SMMA): Dorrie Brooks, Helen Fantini, Samantha Farrell Folger, Brian Black, Erik Vangsness

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 4:05 PM.
- Gordon Smith asked for a motion to approve the 10/27/2022 ELHSBC Meeting Minutes.
    - Beth Marsian-Boucher made the motion. Greg Thompson seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown – absent at time of vote
        - Kathleen Hill - yes
        - Stephen Lonergan - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - yes
    - The motion passed.

Public Participation

- Member of the public asked what the Town feels they can afford for this project.

Skanska Update

- Schedule Update:
    - Ben Murphy gave a schedule update and overview of Preferred Schematic Report (PSR) milestone dates.
    - Ben stated that documents will be provided to the estimators in the next few weeks.
        - Each Design Option will be estimated on a SF basis.
    - PSR (Preferred Schematic Report) submittal to MSBA is scheduled for February 14, 2023.
    - Formal PSR approval will take place on April 26th, 2023, at the MSBA's Board of Directors meeting.

Skanska DBB vs CM@R Presentation

- John Benzinger gave a presentation addressing Massachusetts Construction Reform Chapter 193 of the Acts of 2004 and touched on the following items:

    - Enacted July 19, 2004
    - Most comprehensive construction reform since 1981
    - Higher thresholds for general and filed sub-bidders
    - DCAM Certification requirements for filed sub-bidders
    - Prequalification requirements for bidders and sub-bidders
    - OPM requirements
    - MBE/WBE requirements
    - New Statute: Chapter 149A to permit the use of the Construction Management at Risk alternative delivery method

- John Benzinger discussed Construction Delivery Methods and the key differences between Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

    - Design-Bid-Build (DBB) Traditional approach
        - Chapter 149: You are purchasing a building in accordance with plans and specifications.

    - Construction Management at Risk (CM@R) Qualifications based selection
        - Chapter 149A: You are hiring a professional service firm which manages the construction of buildings.

    The construction delivery method is the choice of the Owner.

- John Benzinger discussed General Project Risks Regardless of Delivery Used:

    - Unforeseen building or site conditions
        - John stated that his experience reflects that +/-30% of risk is in the ground (excavation)
    - Incomplete design documents
    - Unqualified sub-contractors, poor performance
    - Sub-contractor or trade contractor failures
    - Future construction cost escalation
    - Working on and around occupied facilities
    - Complex site logistics
    - Adversarial team environment
    - Potential bid protests

- Bid coverage
    - Minimum (3) bids per trade

- John Benzinger discussed Cost Implications between Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

    - Design-Bid-Build (DBB)
        - Aside from the 18 Filed Sub-Trades, the DBB cost of the work is highly competitive and will likely yield a lower cost up front than CM@R however, greater incentive to seek change orders for under bidding
        - Direct subs are the Contractor's choice
        - The Contractor's contingency is NOT transparent
        - *Note: The Contractor's objective is to maximize their profit margin*

    - Construction Management at Risk (CM@R)
        - The Owner and project team interacts with the CM to establish the GMP
        - Direct subs may be selected to bid
        - Fee is fixed, GC/GR's are negotiable
        - Open book accounting
        - Any unused funds in project requirements, allowances, scope and CM contingency is returned to the owner
        - Includes contingency within the GMP to cover work reasonably non-inferable from the design documents
        - The CM contingency is transparent

- John Benzinger discussed the differences between Contract Types used for Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

    - Design-Bid-Build (DBB) Lump Sum:
        - Based on cost of the work, general conditions and desired profit of GC
        - Price fixed at lump sum bid amount with additions for change orders
        - Price based on "plans and specs", or exactly what is indicated on contract documents. GCs look at documents as "black and white"
        - Savings on actual costs below the bid "lump sum" amount become contractor profit
        - No opportunity or incentive for negotiation

    - Construction Management at Risk (CM@R) Guaranteed Maximum Price (GMP):
        - Based on bids for work packages, general conditions, contingency and set fee
        - Essentially a "cost-plus" contract with guaranteed maximum
        - Final price is based on actual bids received, amount of contingency used, and agreed upon general conditions/fee
        - Any savings on actual costs revert to the owner
        - All items of GMP are negotiable with the exception of the CM fee and Filed Sub-Trades Contractor Bids
        - Can include allowances for work that is unclear or undefined to minimize the risk of financial surprises

    Q: *Elizabeth (Beth) Marsian-Boucher asked when the GMP is determined.*

A: *John Benzinger responded that once the documents are 100% complete and all scopes are bid.*

- John Benzinger discussed the differences between Quality Control as applied to Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

  - Design-Bid-Build (DBB):
    - Lump Sum process promotes cost cutting to increase profit
    - With General Contracting, heavy owner involvement is required to ensure no “cutting corners” on quality
    - GC bids are based on “plans and specs” with no opportunity for scope clarification

  - Construction Management at Risk (CM@R):
    - CM Selection process is based on qualifications, experience, proposed team and success on past projects
    - CM early involvement in project leads to greater understanding of complex logistics and design details
    - CM’s involvement in the review of constructability during design phase utilizes builder’s knowledge of means and methods and subcontractor abilities to ensure a design that will result in a “buildable” high quality product

- John Benzinger discussed the differences between Subcontractors as applied to Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

  - Design-Bid-Build (DBB):
    - With GC process, Filed Sub-Bidders do not know who GC is at time of bidding
    - No ability to vet and select subcontractors

  - Construction Management at Risk (CM@R):
    - CM leads subcontractor bidding and manages bid process
    - CM involvement in prequalification of Trade Contractors
    - Allows owner “screening” of subs through review of bid lists and qualifications
    - Significant bid coverage for all trades due to CM relationships in marketplace
    - Ability for CM to create specific scopes of work for subcontractors as basis for bidding
    - Early involvement and knowledge of project helps CM mitigate gaps in purchased scope
    - Ability to perform “scope debriefs” to ensure bidder understanding of documents and expectations

- John Benzinger discussed Schedule Considerations as applied to Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

  - Design-Bid-Build (DBB):

  - Construction Management at Risk (CM@R):

        - If CM@R option is chosen, John Benzinger recommended sign-on of contractor at 30% design and development and release of early bid packages for site, concrete, and steel.

- John Benzinger provided a Comparison Summary between Design-Bid-Build (DBB) and Construction Management at Risk (CM@R):

    - Design-Bid-Build (DBB):
        - BEST SUITED FOR: Less complicated smaller scale projects that are not schedule sensitive and not subject to change.

    - Construction Management at Risk (CM@R):
        - BEST SUITED FOR: Projects that are time sensitive, challenging to define or subject to potential changes; projects requiring high construction oversight due to site logistics and phases as well as multiple stakeholders.

- John Benzinger discussed the Steps in the CM Procurement Process:

    - 1 - Establish Prequalification Committee (OPM, Designer, at least two public representatives)
    - 2 - Prepare and Advertise Request for Qualifications (RFQ)
    - 3 - Evaluate Responses and Prequalify at least Three (3) Construction Managers
    - 4 - Establish a Selection Committee (can be same as Prequalification Committee)
    - 5 - Prepare Request for Proposals (RFP) and Distribute to Prequalified Firms
    - 6 - Receive, Evaluate and Rank Proposals (interviews are permitted if conducted with all proposers)
    - 7 - Negotiate Non-fee Terms with Selected Proposer and Award Contract

- John Benzinger provided a Summary discussing some opportunities that CM at Risk creates.

    - It is theorized that CM@R can be up to 5% higher than DBB at the upfront number (original bid) but that the end number of a CM@R project is lower than the DBB amount. This is partially the result of the “nature of the beast” in DBB whereby the winning contractor is essentially forced to pursue as many add change orders as possible in order to make up what was “left on the table” during the competitive bidding process whereby the lowest qualified and responsible bidder wins.

JWA/SMMA Update

- Dorrie Brooks provided an update on the Community Forum Feedback. Community Forum #3 was held in the cafeteria at East Longmeadow High School on November 16th at 6 PM.
    - Tours of the School were conducted which included an explanation of Add/Reno & Base Repair and provided the ability to see the school's condition.

- Dorrie Brooks provided an update on the Educational Programming Subcommittee.
    - Reviewed visioning priorities in relation to ELHS educator's experience

        - SEL throughout building
        - Flex in classrooms/Flexible ways for students to learn out of classroom
        - Excited about Breakout Rms
        - Excited about collaborative Large Group Areas
        - Interest in cross curricular project-based learning
        - Like generous hallways to support more active learning
        - Interest in interdisciplinary organization of halls but a desire to remain in a classroom consistently
        - Eager to see classrooms that are well-equipped
        - Interested in sharing access to flexible studios
        - Need personal space for classroom aides/paras
    - Student Experience
        - Need for more social space
        - Need for charging stations
        - Need for lockers to support athletes
        - Need dedicated storage for extracurricular club

- Samantha Farrell provided an update on Site Design - Fields/Recreation Meeting:
    - Keep (6) tennis courts and line them for pickleball.
    - Keep space near building for (3) future pickleball courts.
    - Irrigation is a priority, with varsity at the top.
    - Priority to bring (2) softball fields to the site if possible.
    - Final design based on survey information and continued coordination with AD and Rec Dir.

- Samantha Farrell provided a Design Update on Site Plan:
    - Building location has been shifted east approximately 40'-0".
    - Overall parking has been increases to a capacity of 450.
    - Further development of outdoor spaces and programs.

    Q: *Elizabeth (Beth) Marsian-Boucher asked if outdoor shade structure is part of the plan.*
    A: *Samantha Farrell and Dorrie Brooks responded that the design team will consider how this can best be included in the project design.*

- Samantha Farrell provided a Design Update on Vehicle Circulation:
    - Sam discussed further development and layout of vehicle circulation to the front, side, and rear of the building.

- Samantha Farrell provided a Design Update on Pedestrian Circulation:
    - Sam discussed further development of a path to connect the south of the site.
    - Sam discussed the intent to keep the pedestrian and vehicle routes separated.

- Brian Black provided an update on the Building Form:
    - Brian explained that the front east single-story portion of the building is the Health/Wellness wing with the Gym space rising behind.
    - The front west single story portion is the Admin wing with 2-story District Office (DO).
    - Academic wings spread out at the rear of the building east and west.
    - Mechanical screens to shield rooftop units are represented in the rendering.
    - Sheltered student drop-off included at front east portion of building.

- Sam discussed further development and layout of vehicle circulation to the front, side, and rear of the building.

Frank Paige raised the importance of parent drop-off loop over bus drop-off route.

- Dorrie Brooks provided a Floor plan Update:
  - Pupil Services, District Offices, IT & ELCAT included with internal stair and elevator. This wing has a separate entrance.
  - (2) Elevators included in this project: (1) at District Offices and (1) at Academic Wings for students.
  - Academic Wings each have (2) Labs.
  - District Office accounts for approximately 7,000 GSF of office space.
  - Further revisions of plan to capture all miscellaneous offices, utility spaces and circulation needs.
  - Beginning to establish a structural layout.
  - Beginning to layout mechanical and electrical space needs.
  - Exploring massing, daylighting and elevations.
  - Beginning energy modelling to compare wall types and system.

- Dorrie Brooks provided a PSR Estimate Look Ahead:
  - Revised Cost Estimates based on Narratives and Floor Plans:
    - Base Code Upgrade
    - Add/Reno not including Pool
    - New Construction not including Pool
  - Option of Separate Community Building to be Excluded.
  - Add/Reno & New Options will include:
    - Press box
    - Concessions Building
    - District Offices/IT/ELCAT
    - Field Upgrades
    - Site Improvements
    - Utility Connections sized to support school & pool
  - Alternate cost info will be gathered for:
    - Additional Recreational Lighting & Infrastructure
    - Roof PV Array
  - Pool is separate price and project.
  - MEP Systems – To Be Discussed Next Week
  - Cost Estimates Re-schedule for Return to SBC by January 19

- Dorrie Brooks provided updates on Site Investigation:
  - Survey – Incomplete
  - Wetlands
    - Flagged and Looking Good. No surprises
  - Traffic - Preliminary review complete
    - Approves eliminating Norden connection
    - Minor improvements at Maple Street recommended
    - Generally happy about the internal circulation concepts
    - Not recommending adding signal or turning lanes at Maple
  - Geotech
    - Six wells completed
    - Groundwater at 10' depth

        - Dense Till to 20-25 ft
        - Good soils for compaction
        - Site Class D - Not a concern for liquification

    Q: *Greg Thompson asked if pedestrian access to the rail trail in relation to the wetlands is possible.*
    A: *Dorrie Brooks responded yes. Sam explained that elevation challenges requiring switchback ramps for access will require Con Com input. Dorrie recommended allocating dollars towards this scope.*

- Dorrie Brooks provided updates regarding Upcoming Milestones:
    - Student Engagement Day – TUESDAY, DEC. 13
        - Design Team will visit four classes to discuss student experiences and how the design can be improved by student insight.
        - Design Team will encourage students to play a role on SBC and in planning transitions to a new school.
    - Subcommittee Meetings
        - Educational Planning – DEC. 15 (contact Dorrie)
        - Sustainability - DEC. 8 (contact Jill)
    - Next SBC Meeting -
        - HVAC Systems
    - Cost Estimate Set to Estimators – DEC. 21, 2022
        - Gives SBC more time with the revised costs
        - Allows for a meeting with Town Leadership on implications for borrowing/debt exclusion
        - Allows time for set up of pool project
    - Cost Estimate Reconciliation – JAN. 19, 2022
    - PROPOSED SBC/ Town Council Project Info Meeting – END OF JANUARY
    - SBC Meeting – FEB. 8 or 9
        - Approval of PSR Submittal

New Business
- The next SBC meeting has been scheduled for Thursday January 5, 2023 at 4 PM.
- Town Council Project Info Meeting scheduled for January 24, 2023.

Adjournment
- Motion to adjourn made by Bruce Fenney. Seconded by Tom Christensen.
- Gordon Smith called a roll call vote:
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige – gone
    - Heather Browne – absent at time of vote
    - Kathleen Hill – yes
    - Stephen Lonergan – yes
    - Mary McNally – yes
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
    - Dr. Daniela LaBarre – gone
    - Greg Thompson – yes
    - Ryan Quimby – yes

    - Tom Christensen – gone
- Motion approved unanimously.
- Meeting adjourned at 6:27 PM.

Meeting minutes respectfully submitted by Craig D. Spice, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Meeting Zoom Link
Date: January 5th, 2023 *4:00 PM – 6:10PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome & Approval of Meeting Minutes**	*5 Minutes	❖ **Welcome** ❖ **Approval of 12/1/22 Minutes**
2) **Public Participation**		
3) **Skanska Update**	*10 minutes	❖ **OPM Updates**
4) **Guest Presentation on Project Bonding**	*1 hour	❖ **Eric Mason, Chief Financial Officer of the City of Quincy, MA**
5) **JWA/SMMA Update**	*45 minutes	❖ **Design Updates**
6) **Vote on Project Sustainability Certification**	*10 minutes	❖ **Building Systems and Sustainability Subcommittee: Recommendation for LEED Certification Process**
7) **New Business**		
8) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
January 05, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal - online
Heather Brown, ELHS Director of Curriculum - NP
Kathleen Hill, Town Council Member
Stephen Lonergan, Town Accountant and Town Finance Director - NP
Mary McNally, Town Manager - online
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Craig Spice
Design Team (JWA/SMMA): Dorrie Brooks, Helen Fantini

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 4:01 PM.
- Stephen Chrusciel asked for a motion to approve the 12/01/2022 ELHSBC Meeting Minutes.
    - Beth Marsian-Boucher made the motion. Greg Thompson seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - NP
        - Heather Brown – absent at time of vote
        - Kathleen Hill - yes
        - Stephen Lonergan - NP
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - yes
    - The motion passed.

Public Participation

- No questions posed.

Skanska Update

- Schedule Update:
    - Ben Murphy gave a schedule update and overview of Preferred Schematic Report (PSR) milestone dates.
    - Ben stated that we are in the estimating phase for which we will receive estimates for the (3) design options. Two separate estimates are expected January 17, 2023 and reconciliation January 20, 2023.
        - Each Design Option will be estimated on a SF basis.
    - PSR (Preferred Schematic Report) submittal to MSBA is scheduled for February 14, 2023.
    - Formal PSR approval will take place on April 26th, 2023, at the MSBA's Board of Directors meeting.
    - Ben demonstrated that the CM@Risk and DBB schedules are the same up through Schematic Design Phase.
    - Ben further discussed the CM@R approach versus the DBB approach in respect to construction schedule impacts. CM@R allows for earlier construction start and finish.
        - Occupancy/move-in for CM@R is projected to be August 24, 2026.
        - Occupancy/move-in for DBB approach is projected to be March 26, 2027.
    - If CM@R is chosen by the town, an application must be submitted to the Massachusetts Office of the Inspector General (OIG).

    Q: *Greg Thompson asked when the project scope can be adjusted to save money.*
    A: *Helen Fantini responded that this can be accomplished in the SD (Schematic Design) phase.*

JWA Update

- Dorrie Brooks discussed Student Engagement Focus Group. Key takeaways included:

    - Seating outside with shade
    - Very strong interest in cafeteria having multiple types of seating areas
    - Students liked space/designs that felt clean, modern, and open
    - Natural light and comfortable spaces/seating were popular
    - Many students would use lockers if they were big enough
    - A lot of students want spaces that help them feel more independent/adult

- Dorrie Brooks discussed PSR Design Options:

    - Option 1 –Base Code Repair: 186,890 GSF
    - Option 2C – Add/Reno: 199,719 GSF
    - Option 3C – New Construction: 198,380 GSF New Construction
        194,580 gsf - deducts IT & ELCAT
        187,910 gsf – deducts District Offices
    - Drawings and Narratives submitted to two estimators – Skanska and PM&C Estimates due Jan. 17
    - Reconciliation process Jan. 20
    - MSBA Reimbursement Rate Basis has been raised
        1. Was 56.48% of $360/sf

2. Is now 56.48% of $393/sf plus incentive points

- Dorrie Brooks discussed Deduct Alternates:
  - 198,380 gsf - Option 3C New Construction
  - 194,580 gsf - Alt. 3 Deducts IT & ELCAT
  - 187,910 gsf – Alt. 4 Deducts District Offices

- Dorrie Brooks stated that March 29, 2023 is an ideal deadline for the Town to decide what is in or out of the project – see deduct alternates above.

- Dorrie Brooks stated that the most important decision for the Town is choosing which of the (3) options is the desired option.

- A discussion regarding Town acquisition of a separate property which would house IT, ELCAT, and DO thus allowing removal of these departments from the project.

- Dorrie Brooks discussed the Sustainability & Systems Focus Group:
  - Reviewed Sustainability Requirements
    - LEED or CHPS requirements
  - Brainstormed Sustainability Priorities
    - East Longmeadow Priorities
  - Reviewed of MEP System Options
  - Proposed use of LEED Certification System

- Helen Fantini discussed Sustainable Design Opportunities Focus Group:
  - Building that supports health and wellness
    - Clean air, daylighting, natural light, reduced glare, access
  - Building as a tool for learning:
    - Student gardens, green educational curriculum, outdoor classrooms, access to energy data & monitoring for STEM
  - Building for climate resilience
    - Outstanding Energy Performance
    - Reduced operational costs, improved enclosure, all-electric heat pumps (geothermal or ASHP/VRF), Solar PV readiness.
    - Regenerative site, stormwater retention, systems redundancy, community resource

- Dorrie Brooks discussed an Overview of Advantages and Disadvantages between the following systems:
  - Conventional System (Cost Estimate Add/Deduct Alt. 2):
    - Good Efficiency

        - Fossil Fuel Source
        - Centralized, Inflexible
        - Heating and cooling distributed via hydronics
        - Redundancy
        - Well-known to facility personnel
        - May not meet code
        - **Requires infrastructure ready for future all-electric systems**

    - Ground Source Heat Pump/VRF (Cost Estimate Add Alt. 1):
        - High Efficiency
        - All-Electric
        - Decentralized and flexible
        - Heating and cooling distributed via refrigerant
        - No redundancy
        - Meets Electrification Requirements
        - Requires auxiliary boiler/chiller in case of diminished well performance
        - **High Installation cost for geothermal wells**

    - Air Source Heat Pump/VRF:
        - **Considered Basis of Design for this project**
        - High Efficiency
        - All-Electric
        - Decentralized and flexible
        - Heating and cooling distributed via refrigerant
        - No redundancy
        - Meets Electrification Requirements
        - Meets new code
        - **Best Overall Life Cycle Cost**

- Helen Fantini discussed Rating System Recommendations:

    - NE-CHPS vs LEED

- Vote on Sustainability Certification Method:

    - Greg Thompson made the motion to accept LEED as the preferred rating system for this project. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel – yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown – absent at time of vote
        - Kathleen Hill - yes
        - Stephen Lonergan - NP
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes

        - Tom Christensen - yes
    - The motion passed.

New Business

- Dorrie Brooks asked what the community's appetite for solar is and suggested it be considered due to the large amount of electrically powered mechanical equipment. The school is already being designed as "solar ready" as part of the current code requirements.
- Dorrie Brooks stated Ed Plan needs to be revisited with Gordon and Frank.
- The next SBC meeting has been scheduled for Thursday February 2, 2023 at 4 PM.

Adjournment

- Motion to adjourn made by Elizabeth Marsian-Boucher. Seconded by Ryan Quimby.
- Gordon Smith called a roll call vote:
    - Stephen Chrusciel – yes
    - Gordon Smith – yes
    - Pamela Blair – yes
    - Frank Paige – yes
    - Heather Browne – absent at time of vote
    - Kathleen Hill – yes
    - Stephen Lonergan – NP
    - Mary McNally – yes
    - Elizabeth Marsian-Boucher – yes
    - Bruce Fenney – yes
    - Dr. Daniela LaBarre – yes
    - Greg Thompson – yes
    - Ryan Quimby – yes
    - Tom Christensen – gone
- Motion approved unanimously.
- Meeting adjourned at 6:02 PM.

Meeting minutes respectfully submitted by Craig D. Spice, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Zoom Link
Date: February 2, 2023 *4:00 PM – 5:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ Welcome ❖ Approval of 1/5/23 Minutes
2) Public Participation		
3) Skanska Update	*5 minutes	❖ Schedule & Process Update
4) JWA/SMMA Update	*50 Minutes	❖ PSR Cost Estimating Update ❖ PSR Options Matrix ❖ Summary of the Preferred Schematic Report (PSR) Submission
5) Vote on Option to Develop in Schematic Design	*5 minutes	❖ *Draft Vote Language:* Motion to develop Option 3C in the Schematic Design Phase.
6) Vote to approve the Preferred Schematic Report	*5 minutes	❖ *Draft Vote Language*: Motion to approve the Preferred Schematic Report (PSR) and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district.
7) New Business		
8) Adjourn		

*All times are estimates for the completion of the specific agenda item.

Town Clerk Received January 31, 2023, 1:33 PM
Town Clerk Posted January 31, 2023, 1:35 PM

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
February 2, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal (arrived at 4:02 PM)
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Mary McNally, Town Manager (left at 4:10 PM)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Victoria Clifford, John Benzinger
Design Team (JWA/SMMA): Kristian Whitsett, Helen Fantini, Dorrie Brooks

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 4:02 PM.
- **Stephen asked for a motion to approve the 1/5/2023 ELHSBC Meeting Minutes.**
  - **Elizabeth (Beth) Marsian-Boucher made the motion. Ryan Quimby seconded the motion.**
  - **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - (absent at time of motion, arrived 4:02 PM)**
    - **Heather Brown - abstain**
    - **Kathleen Hill - yes**
    - **Mary McNally - yes**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - yes**
  - **The motion passed.**
- Mary McNally introduced Kim Collins, the new Finance Director for the Town of East Longmeadow.
- Greg Thompson noted that the School Committee plans to vote Kim Collins in as a member of the School Building Committee.
- Mary McNally asked that Tom Christensen be a proxy for her vote on the preferred option after she leaves the meeting.
  - The committee later decided that this would potentially violate open meeting law, so the committee decided to mark her as absent for upcoming motions.
- Mary McNally and Kim Collins left the meeting at 4:10 PM.

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

Skanska Update

- Ben Murphy, Skanska, gave a schedule update:
    - The design team and OPM team and estimators met last week to reconcile the PSR estimates.
    - Goal for today is to bring forward to SD and for approval to submit the PSR on 2/14/23. As a clarification, we are not approving the budget at this point.
    - April 26th - Board Meeting for PSR Approval.
    - Schematic Design package is due to the MSBA on 8/31/23.
    - 10/25/23 is the scheduled Project Scope and Budget meeting with the MSBA to approve the SD package and project budget.
        - After the Project Scope and Budget is approved, the Town will have 60 days to receive local approvals for funding.
            - Kathleen Hill confirmed that the debt exclusion vote will be on election day, 11/7/23.
            - Town Council Vote is needed prior to the local debt exclusion.
            - Ballots need to be printed 5 weeks before 11/7/23.
            - Skanska to follow up if the Town Council can approve the project budget prior to the MSBA Project Scope and Budget approval.
    - Skanska showing Design Bid Build delivery method tentatively until SBC decides on construction delivery method.
        - Steve Chrusciel suggested showing the delivery method with the more aggressive schedule for the submittal until the SBC votes on the preferred method. Tom Christensen agreed.
            - Skanska to revise schedule for the PSR submission to CM at Risk method.
            - Skanska will target the March SBC meeting to present on the two methods and ask for a vote.

Design Update - Cost Estimate/PSR Options Matrix

- PSR Cost Estimate:
    - The design team and Skanska had their two separate estimators, PM&C and PCM, provide an estimate on the current designs and then met to reconcile to an average for all options.
        - The design team clarified that material escalation is included and has gone up since the last round of estimates.
    - Option 1:
        - Not showing a reimbursement percentage for the base upgrade.
    - Option 2C:
        - Add/Renovation
        - Cost impact from needing to build-out for insulation required in renovations.
        - $3M included for swing space modulars.
    - Option 3C:
        - New Construction
        - Two estimates are closer together, partly because the most time was spent on reconciling this option.
        - Includes District Offices, ELCAT and IT.

        - Includes concessions, basketball courts, tennis courts, updated recreation fields, full irrigation and full site lighting.
        - VRF HVAC included per facilities request.
        - Alternate pricing included for Solar PV for 37% of roof area, Geothermal and Nat Gas Fired HVAC.
            - The Design team added that Solar PV would offset plug loads and HVAC usage. Minimizes but does not eliminate fossil fuel usage.
        - This option does not require swing space modulars but there is phased construction required to remove a small area of the existing school for site enabling.
    - The design team shared cost comparison for option 1, 2C and 3c, construction costs, total project costs, and town share.
        - Greg Thompson asked what the cost would be to get up to code if the project fails.
            - The design team answered that option 1 would be the cost if it was all done in one project. Most districts would end up breaking down the upgrades into multiple projects which could end up costing more or potentially not end up happening.
    - Beth Marsian-Boucher asked if pool costs were included in these estimates.
        - The design team clarified that pool costs are not included in these estimates. The pool is a separate project outside of the MSBA scope that can happen in parallel with the project but will require two separate votes from the community and would be contracted and permitted separately.
    - Greg Thompson asked if the pool locker room can be included in the main project to lower the cost of the pool project to make the pool project as small as possible.
        - The design team responded that they can look into it for functionality but it would definitely be non-reimbursable by the MSBA.
    - Greg Thompson asked what the cost per square foot was.
        - Option 3C: $758
        - Option 2C: $711
    - Skanska added that there has been no value engineering to date and that this is a baseline estimate.
    - The design team noted that there is a standard soft cost percentage included on all options.
- Evaluation Matrix:
    - Design team reviewed plus deltas of each option and asked if the SBC would like to revisit the criteria or scoring weight.
        - Kathleen Hill confirmed that she is comfortable with the criteria and weighting and feels that this generally captures the community's concerns.
    - Option 3C scored the highest.

Gordon Smith asked for a motion to develop Option 3C in the Schematic Design Phase. Elizabeth (Beth) Marsian-Boucher made the motion. Kathleen Hill seconded the motion.

- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**

        - **Pamela Blair - yes**
        - **Frank Paige - yes**
        - **Heather Brown - yes**
        - **Kathleen Hill - yes**
        - **Mary McNally - (absent)**
        - **Elizabeth (Beth) Marsian-Boucher - yes**
        - **Bruce Fenney - yes**
        - **Dr. Daniela LaBarre - yes**
        - **Greg Thompson - yes**
        - **Ryan Quimby - yes**
        - **Tom Christensen - yes**
    - **The motion passed unanimously.**

Design Team Update - PSR Submission

- The PSR draft went out to the committee prior to today's meeting to be reviewed.
- The Design team gave an overview of the PSR submittal highlights.
- Greg Thompson asked if Photovoltaics could be included in option 3C estimate for the submission.
    - The design confirmed that it could but would ask the SBC to vote it in.
- Bruce Fenney asked if the committee would want to cut out irrigation and do it as a separate project.
    - Skanska suggested leaving it in and we can value engineer the budget in Schematic Design.

Tom Christensen moved to add Photovoltaics to Option 3C. Ryan Quimby seconded the motion.

- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - yes**
    - **Heather Brown - yes**
    - **Kathleen Hill - yes**
    - **Mary McNally - (absent)**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - yes**
- **The motion passed unanimously.**

Steve Chrusciel asked for a motion to approve the Preferred Schematic Report (PSR) and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district. Kathleen Hill made the motion. Ryan Quimby seconded the motion.

- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - yes**
    - **Heather Brown - yes**

    - **Kathleen Hill - yes**
    - **Mary McNally - (absent)**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - yes**
- **The motion passed unanimously.**

New Business

- Next SBC Meeting 2/9/23 to approve these meeting minutes for inclusion in the PSR Submission.
- 2/9/22 meeting we will also decide our next Public Forum date.
    - Frank Paige suggested mid-March.
- Local events where the SBC could publicize upcoming Public Forums:
    - Daniela LaBarre noted there is a school book fair in April.
        - Beth Marsian-Boucher noted there is a Town wide book fair being planned and that she would follow up with the date.
        - Daniela also noted that St. Michaels has CCD on Thursday nights, which draws a big crowd of elementary and middle school students and parents.

Public Participation

- Mr. Page, a member of Town Council, asked if the SBC could give a timeframe for when the Town Council needs to vote to approve the project to include it on a debt exclusion vote. Mr. Page asked that the SBC also look at timing for publicity of the project prior to the debt exclusion vote.
    - The Design team and Skanska noted the following key dates:
        - 10/25/23 MSBA approval of Project Scope and Budget (formalizes the total project budget).
        - Two weeks prior - OPM notifies the MSBA of the final budget number
        - Pencils are down for design late July for SD estimating ahead of the final 8/31/23 SD submission.
        - Skanska to follow up on timeline for Town Council approval and Ballot language approval.
    - The Design Team suggested having a meeting with the Town Council before the start of summer to review the project and vote process.

Motion to Adjourn by Beth Marsian-Boucher. Ryan Quimby seconded.

- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - yes**
    - **Heather Brown - yes**
    - **Kathleen Hill - yes**
    - **Mary McNally - (absent)**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - yes**

- **The motion passed unanimously.**

Adjourned at 5:23 PM.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom ELHS SBC Meeting Link
Date: February 9, 2023 *4:00 PM – 4:45 PM*

AGENDA ITEM	TIME	NOTES
1) **Welcome & Approval of Meeting Minutes**	*5 Minutes	❖ **Welcome** ❖ **Approval of 2/2/2023 Minutes**
2) **Public Participation**		
3) **Communications Update**	*20 Minutes	❖ **Public Forum Planning**
4) **New Business**	*5 Minutes	
5) **Adjourn**		

*All times are estimates for the completion of the specific agenda item.

Town Clerk Received February 7, 2023, 1:30 pm
Town Clerk Posted February 7, 2023, 1:40 pm

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
February 9, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member (joined at 4:10 PM)
Mary McNally, Town Manager (joined at 4:10 PM)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Victoria Clifford
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 4:00 PM.
- **Stephen asked for a motion to approve the 2/2/2023 ELHSBC Meeting Minutes.**
    - **Ryan Quimby moved to approve the minutes with one amendment: the spelling of Mr. Page's last name. Elizabeth (Beth) Marsian-Boucher seconded the motion.**
    - **Gordon Smith called a roll call vote:**
        - **Stephen Chrusciel - yes**
        - **Gordon Smith - yes**
        - **Pamela Blair - yes**
        - **Frank Paige - yes**
        - **Heather Brown - yes**
        - **Kathleen Hill – absent at time of motion**
        - **Mary McNally - absent at time of motion**
        - **Elizabeth (Beth) Marsian-Boucher - yes**
        - **Bruce Fenney - yes**
        - **Dr. Daniela LaBarre - yes**
        - **Greg Thompson - yes**
        - **Ryan Quimby - yes**
        - **Tom Christensen - yes**
    - **The motion passed.**

Mary McNally and Kathleen Hill joined virtually at 4:10 PM.

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Communications Update

- Skanska gave an update that members of the Project Team and SBC Senior Leadership Met with a representative from the Office of Campaign and Political Finance (OCPF) to review rules and regulations for campaigning public projects.
    - Gordon Smith noted that any flyers going out to publicize community forums can only include time, date, and place and that the public offices cannot use robo calls or other publicly funded equipment or materials to publicize community forums.
- The Committee discussed scheduling the next community forum.
    - Steve Chrusciel asked the Project Team if it would make sense to schedule the forum after PSR feedback is received from the MSBA.
        - The design team answered that the MSBA's PSR comments most likely won't impact any of the forum presentation materials.
    - Gordon Smith asked Mary McNally if scheduling the forum towards the end of March would give Kim Collins enough time to finalize a tax impact study that could be included in the presentation.
        - Mary McNally answered that it did seem feasible but noted that the budget is due to Town Council on April 1st, so she wouldn't recommend pushing it out much further.
    - Greg Thompson recommended hosting at least one more forum at the Senior Center.
    - The Committee decided on March 16th, 6 PM, at the HS Cafeteria.
    - The Committee decided to schedule the next forum at the March 2nd SBC Meeting.
- Daniela LaBarre asked if SBC members could verbally inform community members about the forum at upcoming community events.
- Gordon confirmed that all members of the Committee can and that we will have a flyer for the forum by our March 2nd meeting.
- Greg Thompson asked if SBC members could recruit community members to start a campaign group.
- Gordon confirmed that SBC members and public appointees could, but it can't be thru a public email account or using any public resources.
    - Skanska added that if there are any questions from committee members or school/district staff, please send them to the Skanska team to review with OCPF and Ethics Commission.
- The Committee discussed the upcoming PTO meeting schedule and noted that members of the SBC should attend and discuss the project with PTO members
    - Skanska volunteered to put together a schedule of upcoming PTO's, Town Committee, and Town Commission meetings, where SBC members can volunteer to speak at. Victoria Clifford asked that SBC members email her with any meetings that they would like added to the schedule.

New Business

- **Tom Christensen made a motion to vote to add Kim Collins, East Longmeadow Financial Director, as a member of the School Building Committee. Ryan Quimby seconded the motion.**
    - **Gordon Smith called a roll call vote:**
        - **Stephen Chrusciel - yes**
        - **Gordon Smith - yes**
        - **Pamela Blair - yes**
        - **Frank Paige - yes**
        - **Heather Brown - yes**
        - **Kathleen Hill – yes**
        - **Mary McNally - yes**
        - **Elizabeth (Beth) Marsian-Boucher - yes**
        - **Bruce Fenney - yes**
        - **Dr. Daniela LaBarre - yes**

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        - **Greg Thompson - yes**
        - **Ryan Quimby - yes**
        - **Tom Christensen - yes**
    - **The motion passed unanimously.**

- **Motion to Adjourn by Ryan Quimby. Bruce Fenney seconded.**
    - **Gordon Smith called a roll call vote:**
        - **Stephen Chrusciel - yes**
        - **Gordon Smith - yes**
        - **Pamela Blair - yes**
        - **Frank Paige - yes**
        - **Heather Brown - yes**
        - **Kathleen Hill - yes**
        - **Mary McNally - yes**
        - **Elizabeth (Beth) Marsian-Boucher - yes**
        - **Bruce Fenney - yes**
        - **Dr. Daniela LaBarre - yes**
        - **Greg Thompson - yes**
        - **Ryan Quimby - yes**
        - **Tom Christensen - yes**
    - **The motion passed unanimously.**

Adjourned at 4:35 PM.

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ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 MAPLE STREET EAST LONGMEADOW, MA 01028
Zoom Meeting Link: ELHS SBC Zoom Link
Date: March 9, 2023 *4:00 PM – 5:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 minutes	❖ **Welcome** ❖ **Approval of 2/9/23 Minutes**
2) Public Participation		
3) Recommendation for Construction Delivery Method	*45 minutes	❖ **Skanska Presentation**
4) MSBA Coordination	*20 minutes	❖ **PSR Review Comments** ❖ **FAS Meeting (3/15/23)**
5) Public Outreach	*20 minutes	❖ **Community Forum #4 (3/16/23)**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
March 9, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Mary McNally, Town Manager (virtually)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance (virtually)

Other Attendees:
Skanska USA Building, Inc.: John Benzinger, Dale Caldwell, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett, Helen Fantini, Jillian DeCoursey

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 4:02 PM.
- Stephen asked for a motion to approve the 2/9/2023 ELHSBC Meeting Minutes.
    - Mary McNally made the motion. Ryan Quimby seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - yes
        - Greg Thompson - yes
        - Ryan Quimby - yes
        - Tom Christensen - yes
        - Kimberly Collins - yes
    - The motion passed.

Public Participants

- Stephen Chrusciel asked for any comments from community members in the gallery.
    - There were no comments.

Skanska Update - Recommendation for Construction Delivery Methods

- Skanska gave a presentation on construction delivery methods for the project; CM at Risk (CMR), or, Design-Bid-Build (DBB).
- Skanska reported that there is a schedule advantage for going with CM at Risk of about 6 months.
- Cost Considerations:
    - John Benzinger noted that he felt the CM at Risk approach would give East Longmeadow more cost security as the CM relationship is a partnership. John added that with the DBB approach, we lose the value of having the CM on during pre-construction and partnering on value engineering and early bid packages.
    - Skanska research shows there will be less coverage in Western Mass with DBB than CMR for our schedule.
    - John explained that with the CMR procurement process, East Longmeadow can choose the firm based on qualifications and price. The selection process for the DBB approach is based on price only.
    - Steve Chrusciel asked John to explain the procurement process for CMR.
        - John gave a high level overview:
            - The SBC will form a CM Selection Subcommittee
            - RFQ is advertised publicly
            - CM Selection Subcommittee will qualify the bidding firms
            - RFP is distributed to qualified bidders only
            - CM Selection Subcommittee evaluates firms based on qualifications and can elect to interview shortlisted firms
            - CM Selection Subcommittee awards firm based on qualifications and cost proposal
            - The Owner then can enter contract negotiation with the selected firm. The fee is fixed but all other general requirements are negotiable, and project team members can be handpicked by the Owner.
    - Steve asked what the range is for CM general conditions fees.
        - Skansa answered, about 7% - 8%.
    - Greg Thompson asked if a CMR would work within our budget.
        - Skanska answered, yes. The CMR would work within the proposed budget and make recommendations for value engineering if the program exceeds the budget.
    - Gordon Smith asked if the MSBA has a say in the procurement process.
        - Skanska answered, no, the MSBA is not involved in the selection process.
    - Tom Christensen asked if Trade Bidders are selected at the same time as a CMR.

        - Skanska answered, no. Trade Bidders are selected after bid packages are finalized after the CM is brought on board.
    - Steve Chrusciel asked for an explanation of filed sub-bidder vs non-filed sub-bidder.
        - Skanska explained that filed subs-bidders are procured thru a public process where bidders are qualified and then selected based on lowest bid. Non-filed sub-bidders submit bids to the CM directly, and the CM can negotiate price. With the CMR approach, accounting is still an open book for non-filed sub-bids.
    - Pamela Blair asked how the CMR fee is structured.
        - Skanska explained that the CM is first contracted for Pre-Construction and then when bids are in, we enter a Guaranteed Maximum Price (GMP) Agreement, which once formalized, becomes the GMP Amendment to the hen will come to a GMP amendment.
    - Steve Chrusciel asked if the same team is carried thru all phases.
        - Skanska answered that we can make it a contractual obligation for the team to stay consistent throughout the project.
- Beth Marsian-Boucher voiced concern with cost control of early bid packages with the CMR approach.
- Dale Caldwell, Skanska, added that the Skanska team has done both CMR and DBB. However, they feel there is an advantage to CMR for the ability to release early bid packages.
- John Benzinger, Skanska, added that with CMR, we can guarantee to use the same firm for the HS project and the separate pool project.
- A committee member asked how warranties work.
    - Skanska answered that the roof is warranties by the manufacturer. Most items will have a year warranty. We can elect to buy longer warranties.
- Danielle LaBarre asked delivery method comes with the least risk for the taxpayers.
    - John answered, in his opinion, CMR. Allowances and holds can be included to cover unforeseens.
- Steve Chrusciel asked what the MSBA Change Order reimbursement process is.
    - The Design Team answered that MSBA Change Order funding participation is capped.
- Greg Thompson asked the Design Team what their average change order percentage is.
    - The Design Team answered, mostly about 1%, some projects up closer to 3%.
- Bruce Feeney advocated for CMR due to partnership benefits.
- Kathy Hill advocated for CMR due to schedule benefits.
- **Pamela Blair made a motion to select the Construction Manager at Risk delivery method for the ELHS Project. Ryan Quimby seconded the motion.**
    - **Gordon Smith called a roll call vote:**
        - **Stephen Chrusciel - yes**
        - **Gordon Smith - yes**

        - **Pamela Blair - yes**
        - **Frank Paige - yes**
        - **Heather Brown - yes**
        - **Kathleen Hill - yes**
        - **Mary McNally - yes**
        - **Elizabeth (Beth) Marsian-Boucher - yes**
        - **Bruce Fenney - yes**
        - **Dr. Daniela LaBarre - yes**
        - **Greg Thompson - yes**
        - **Ryan Quimby - yes**
        - **Tom Christensen - yes**
        - **Kimberly Collins - yes**
    - **The motion passed.**
- John Benzinger noted that Skanska will begin the procurement process by sending the Office of the Inspector General CMR Application. We should plan to have the CMR procured by the start of Design Development.
- Beth Marsian-Boucher asked if we can procure the CM prior to Town approval of the project.
    - John answered, yes, but they are not allowed to begin services until after vote approval.
    - Victoria Clifford, Skanska, added that at the next SBC meeting, the SBC can select members for a CM selection subcommittee.

MSBA Coordination

- MSBA PSR Review Comments
    - Kristian Whitsett, JWA, gave an overview of the MSBA PSR review comments received on 3/6/23. Comments were minimal, Kristian noted the following comments:
        - Hydrant flow test recommended during Schematic Design (SD)
        - Building Management system during SD
        - Proprietary items
        - Roof access for rooftop unit maintenance
        - Security
        - Circulation diagrams
        - District share costs will be calculated at the end of SD
- Space Summary Review
    - Kristian Whitsett, JWA, reported that the Design Team has a good indication of what is accepted and will not be accepted by MSBA space guidelines.
    - Kristian gave an overview of the current space summary.
        - Central Admin, IT, ELCAT included in the other ineligible category.
            - Helen Fantini asked for formal direction from the SBC to include these programs in the project.

- The SBC discussed if there would be opportunities for the Town to house these programs at any other Town properties.
- Greg Thompson voiced his support for housing the programs in the High School due to benefits for adjacencies.
- **Greg Thompson made a motion to include Central Admin, IT and ELCATin the HS project. Daniella LaBarre seconded the motion.**
- **Discussion:**
    - **Mary McNally added that she wants to support the SBC but would want to define the cost before supporting this motion.**
- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - yes**
    - **Heather Brown - yes**
    - **Kathleen Hill - abstain**
    - **Mary McNally - no**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - no**
    - **Kimberly Collins - abstain**
- **The motion passed.**
    -

Frank Paige left at 5:18 PM.

John Benzinger left at 5:22 PM.

Mary McCnally left at 5:23 PM.

FAS Presentation Overview

- Kristian Whitsett, JWA, gave an overview of the MSBA FAS Presentation.
- Kristian reported that we expect to receive questions on the following:
    - Special Education
    - Outdoor Learning
    - Circulation
    - Accessibility
- Kristian noted that these presentation materials will be adopted for the upcoming Community Forum presentation.
    - Greg Thompson asked that we include code upgrade cost for the community forum

Community Outreach

- Victoria Clifford, Skanska, noted that we are prepping for the Community Forum on 3/16. Flyer will be posted on the website within the next few days.
- Topics to be presented include:
    - Process update
    - Schedule update
    - Design update
    - Why new?
    - Cost
    - Cost of a no vote
    - Schedule of future community forums
- The committee discussed a date for the next community forum:
    - The committee decided on May 18th 6 PM, at the Senior Center
- The committee discussed coordinating tax impact figures for the May community forum.

New Business

- Next SBC Meeting
    - April 6th, 4 PM.
- Greg Thompson asked how we can best move the pool project forward
    - Skanska recommended forming a separate building committee

Motion to Adjourn by Pamela Blair. Ryan Quimby seconded.

- **Gordon Smith called a roll call vote:**
    - **Stephen Chrusciel - yes**
    - **Gordon Smith - yes**
    - **Pamela Blair - yes**
    - **Frank Paige - absent**
    - **Heather Brown - yes**
    - **Kathleen Hill - yes**
    - **Mary McNally - absent**
    - **Elizabeth (Beth) Marsian-Boucher - yes**
    - **Bruce Fenney - yes**
    - **Dr. Daniela LaBarre - yes**
    - **Greg Thompson - yes**
    - **Ryan Quimby - yes**
    - **Tom Christensen - yes**
    - **Kimberly Collins - absent**
- **The motion passed unanimously.**

Adjourned at 5:51 PM.

Meeting Minutes respectfully submitted by, Victoria Clifford, Skanska.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Zoom Link
Date: April 6th, 2023 *4:00 PM –5:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 3/9/23 Minutes**
2) Public Participation		
3) Skanska Update	*20 minutes	❖ **Schedule & Process Update** ❖ **Pool Project Planning**
4) JWA/SMMA Update	*30 Minutes	❖ **Design Update**
5) Communications Update	*20 minutes	❖ **Community Forum #5 Planning**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
April 6, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Mary McNally, Town Manager (virtually)
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW (virtually)
Dr. Daniela LaBarre, School Psychologist and Faculty Member, absent
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director, absent
Tom Christensen, Deputy Town Manager, absent
Kimberly Collins, Director of Municipal Finance, absent

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Dale Caldwell, Victoria Clifford (virtually)
Design Team (JWA/SMMA): Kristian Whitsett, Helen Fantini, Dorrie Brooks, Brian Black (virtually), Jillian DeCoursey (virtually)

Welcome & Approval of Meeting Minutes

- Stephen Chrusciel began the meeting at 4:02 PM.
- Stephen asked for a motion to approve the 3/9/2023 ELHSBC Meeting Minutes.
    - Beth Marsian-Boucher made the motion. Pamela Blair seconded the motion.
    - Discussion: Bruce Fenney, page 5, change yes to abstain. Mary McNally, last page, change last vote to absent.
    - Beth moved to approve the minutes as amended. Pamela Blair seconded the motion.
    - Gordon Smith called a roll call vote:
        - Stephen Chrusciel - yes
        - Gordon Smith - yes
        - Pamela Blair - yes
        - Frank Paige - yes
        - Heather Brown - yes
        - Kathleen Hill - yes
        - Mary McNally - yes
        - Elizabeth (Beth) Marsian-Boucher - yes
        - Bruce Fenney - yes
        - Dr. Daniela LaBarre - absent
        - Greg Thompson - yes

        - Ryan Quimby - absent
        - Tom Christensen - absent
        - Kimberly Collins - absent
    - The motion passed.

Public Participants

- No participation

Skanska Update

- Skanska gave a high-level overview of the process and schedule.
- Ben Murphy asked what the timing is to receive project approval from the Town Council.
    - Kathy Hill noted that ballot question vote language needs to be approved by Town Council five (5) weeks prior to the town-wide vote. The Town Council meets the second Tuesday of the Month.
- Update on CM Procurement Process
    - Skanska reported that they are developing the application to the Office of the Inspector General to utilize CM @ Risk Services and plan to submit it at the end of the month. The goal is to bring a CM on board in January 2024. The CM's first deliverable will be to estimate the 100% Detailed Design (DD) drawing set.
    - Greg Thompson asked how long the interview process is for CM selection.
        - Ben answered, about one week if it is divided up over weekdays or all interviews could be scheduled on a Saturday and all interviews could take place on the same day.
        - CM Selection Subcommittee to be formed at a future meeting.
    - Greg asked if all qualified CM firms needed to be interviewed.
        - Ben answered, all qualified CM firms will be issued an RFP, each qualified firm that submits a proposal must be interviewed.
- Pool Update
    - Design contract to be executed in April.
    - Design Process will be April thru August. At the end of August, the project will be professionally estimated and the budget will be set prior to the November vote.
    - Greg Thompson asked if bidding CM firms can be interviewed for both projects.
        - Skanska answered, yes.
    - Greg asked if the pool committee should expect any costs other than design services.
        - Skanska answered, no.
    - Greg asked who needs to give jurisdiction for the pool committee to form.
        - Gordon Smith suggested confirming that information with the Town Council.
    - Committee discussed potential candidates for Pool Committee Membership.
        - Greg Thompson, School Committee Member
        - Steve Chrusciel, School Building Committee Member
        - Gordon Smith, School Superintendent

        - Kevin Magee, Athletic Director
        - Donna Prather, Recreation Director
        - Bruce Fenney, Town Facilities
        - Town Council Member
        - Parent/Community Member
    - Mary McNally asked if the Pool Design Services proposal had been provided to the Town yet.
        - Steve answered, no, it is still being vetted by leadership of SBC.
    - Ben suggested that the Pool Committee meet directly before/after the monthly SBC Meetings moving forward.
- The committee discussed scheduling the next SBC meeting:
    - 5/11 4 PM for SBC
    - 5/11 3 PM for Pool Committee

Design Update

- The Design Team presented the Schematic Design (SD) Work Plan
- Helen noted that identifying the FF&E budget will be an important component of Schematic Design.
    - Beth Marsian-Boucher voiced concern for furniture durability and asked the Design Team to think about the lifespan of furniture before it's selected.
    - Gordon asked if there was a program through the MSBA to combine FF&E orders with other projects to increase buying.
        - Dale answered, yes. Skanska can assist with it. Schedules would need to align but there could be big cost savings.
- Dorrie reviewed the SD design goals:
    - Simplify circulation
    - Adjacencies
    - Cafeteria access
    - Outdoor connections
- Brian Black gave an overview of design adjacencies and exterior massing concepts.
- Dorrie expressed that these are very much in draft form and that the Design Team was looking for feedback on programmed space adjacencies.
- Greg Thompson asked if bathrooms and locker rooms can be accessible to the separate pool project and for community use during sporting events.
- Beth positively responded to guidance offices in upper classroom wings
    - Frank Paige responded that guidance most regularly meets with parents. Would prefer to have an entrance for visiting parents closer to the front of the building.
    - The design team discussed locations for conference rooms for visiting parents.
- Dorrie reviewed upcoming programming meetings and programming efforts:
    - Community Sustainability Charrette - June
    - Material Conceptual Study - April
    - Exterior Elevations & Massing - May
    - Enlarged Floor Plans, Labs, Classrooms, Corridors - Ongoing
    - Security Charette - June

- IT Goals and Budget - July
- Site Plans & Schematic Plans - Ongoing
- Phasing - Ongoing

Communications Update

- Ben Murphy recapped the 3/16 Community Forum
    - Lots of great feedback from community members
    - Tour of HS for community members was impactful
    - Yes! ELHS Campaign group formed
    - Next forum main focus will be financial impact for the community
- Victoria Clifford presented the monthly project update pamphlet to be posted on the project website. This will include updates from the monthly SBC meetings and include relevant project information.

Tax Impact Draft

- The project team presented a draft estimated tax impact summary. Ben explained this study was put together by Kim Collins using the Project's Preferred Schematic Design pricing set. Ben let the committee know that this study is very much in draft stage and will be further refined.
    - Greg Thompson reminded the committee that this tax impact does not include impact of the separate pool project. Greg asked if pool cost can be included for future community presentations.

Frank Paige left the meeting.

- Ben answered that we will not have the pool project cost until later in the summer. Pool costs can be added as a separate budget item.
- Beth asked if the MSBA has given us indication of reimbursement rate
    - Dorrie answered that we have an idea, but it is not guaranteed until the Project Scope and Budget Agreement is executed.
- The committee discussed how to most transparently present budget and impact details with the community.
- The committee discussed ballot vote language.
    - Public Participant, Mr. Page, Town Council Member, added that the pool could be added to the ballot as a non-binding question.

New Business

- Public Participant, Mr. Page, Town Council Member raised concern with snow removal and maintenance of landscaping and snow removal in current site plan drawing.

    - Dorrie responded that the trees drawn currently don't show an accurate tree count. Dorrie also noted that it will be refined further with input from the facilities team.
- Mary McNally asked if pickleball courts can be considered.
    - The design team responded that pickleball courts are not in the current budget.
    - Mary recommended that if we consider pickleball, make it separate from the tennis courts.

Motion to adjourn by Beth Marsian-Boucher. Seconded by Pamela Blair.

- Gordon Smith called a roll call vote:
    - Stephen Chrusciel - yes
    - Gordon Smith - yes
    - Pamela Blair - yes
    - Frank Paige - absent
    - Heather Brown - yes
    - Kathleen Hill - yes
    - Mary McNally - yes
    - Elizabeth (Beth) Marsian-Boucher - yes
    - Bruce Fenney - yes
    - Dr. Daniela LaBarre - absent
    - Greg Thompson - yes
    - Ryan Quimby - absent
    - Tom Christensen - absent
    - Kimberly Collins - absent
- The motion passed.

Meeting adjourned at 6:00 PM.

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Zoom Link
Date: May 11, 2023 *4:00 PM – 5:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 4/6/23 Minutes**
2) Public Participation		
3) Skanska Update	*10 minutes	❖ **Schedule & Process Update**
4) JWA/SMMA Update	*40 Minutes	❖ **Update on Schematic Design Programming** ❖ **Design Update (Building & Site)** ❖ **Review of Upcoming Milestones**
5) Communications Update	*30 minutes	❖ **Updated Projected Tax Impact** ❖ **Community Forum #5 Planning**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
May 11, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member, absent
Mary McNally, Town Manager virtual
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW, absent
Dr. Daniela LaBarre, School Psychologist and Faculty Member, absent
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director,
Tom Christensen, Deputy Town Manager,
Kimberly Collins, Director of Municipal Finance, virtual (joined at 5:00 PM)

Other Attendees:
Kevin Magee, East Longmeadow Athletics Director
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Dale Caldwell, Victoria Clifford
Design Team (JWA/SMMA): Kristian Whitsett, Helen Fantini, Dorrie Brooks, Eric Erik Vangsness, Jillian DeCoursey (virtual)

Welcome & Approval of Meeting Minutes

- Stephen (Steve) Chrusciel began the meeting at 4:05 PM.
- Steve asked for a motion to approve the 4/62023 ELHSBC Meeting Minutes.
- Greg Thompson made the motion. Kathleen Hill seconded the motion.
- Steve called the vote. The following members voted in the affirmative:
    - Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Mary McNally, Elizabeth (Beth) Marsian-Boucher, Greg Thompson.
    - The following members abstained from the vote: Ryan Quimby, Tom Christensen.
    - The following members were absent: Bruce Fenney, Dr. Daniela LaBarre, Kimberly Collins.
- The motion passed.

Public Participants

- No comments

Skanska Update

- Ben Murphy, Skanska, gave a high-level overview of the process and schedule.
- Ben reported that on April 26th the MSBA formally approved the PSR Submission and formally moved the project into Schematic Design, Module 4. We are on target to submit the SD submission.
- Ben reported that Skanska will submit an CM at Risk OIG Application at the end of the month with the hopes to have a CM on board by the end of January.
- Steve asked if the design team felt comfortable SD drawings deadline to estimators.
    - The design team confirmed that they were comfortable with the deadline.
- Gordon asked if the new building move in date would be more than one day move.
    - Ben answered, yes. It will be a highly coordinated effort with the construction team, movers, furniture vendors and school staff. The school staff move will take place over multiple days.

Design Update

- The design team has met with the following departments for programming:
    - Special Ed, Admin, Guidance, Sciences, General Ed, Media Center, Arts.
- The following departmental programming meetings are to be scheduled:
    - Medical, Business, Health, Tech, Custodial, Kitchen, IT, and a separate security meeting.
- Dorrie reported takeaways from completed programming meetings with school staff.
- Dorrie recommended that school faculty perform professional development in line with the construction process to help staff prepare for the new building.
- The design team asked for feedback on if a general use auditorium would be preferred over a more extensive drama auditorium. After talking with program leaders, the design team reported that a general use auditorium is more geared towards AV/Audio tech than drama. Seeing there is no current drama program, fly-loft may not be necessary.
    - The SBC agreed that a general use auditorium without a fly-loft would be preferred.
- Dorrie reported that teachers have stressed the importance of stress of social emotional learning and the importance of including air conditioning.
    - Greg asked if we are planning to condition the whole building.
        - Yes, it is typical for new HS buildings. Can be a VE option.
- Dorrie presented updated floor plans. The following updates were included:
    - Simplify second floor
    - Elimination of extra elevator stairs
    - Move of LGI
    - Stronger arts block
    - Two part cafe
    - Guidance at first floor
    - Medical and life skills
- Frank brought up concern with the cafeteria's proximity to classrooms. Concerned with noise, distractions for classrooms, and flow.
    - Dorrie noted that there is no classroom with a view of the cafe or doors that connect. The design team can look into double walls for sound isolation.

- Frank asked if the balcony on the second floor looking down at the cafe could be removed.
    - Design team to look at closing balcony with glazing
- John, Skanska, asked for clarification on gymnasium entrances
    - The design team pointed out 2 entrance points, one for the school and one more public facing entrance for events.
- Kevin Magee, East Longmeadow Athletic Director, added that having the ability to close off the gymnasium area from the rest of school after hours is helpful for security.
- The design team asked Kevin if the Alt PE classroom would be used after hours.
    - Kevin answered, yes.
- Beth asked what the space requirement is for the Pre-K
    - Dorrie answered that it is a 1,000 sq ft room now, because the pre-k is non-reimbursable, we are not tied to a requirement.
- Beth asked if the design team could look into configuring the Pre-K so that in the future a room can be separated in half with a shared bathroom.
    - Design team to look into it.
- Eric reviewed site plan circulation updates
    - Beth noted that field parking near the neighborhood is problematic.
- Eric reviewed athletic field design updates
    - Kevin Magee requested that varsity sports have their own fenced in fields.
        - After discussing field layout, Kevin noted that they would be okay with one less practice field to accommodate dedicated varsity baseball and softball fields (fenced).
    - Remove parking on the West side confirmed by SBC. The 20 spots being removed were in addition to 450 spots intended for the project.
    - Basketball courts might need lighting
    - Pickleball planned on top of tennis courts
    - Foul lines are 70 feet from site property, Eric to confirm. Baseball configuration takes into account balls into abutter properties.
- Eric brought up that there may need to be a few accessible spaces in the west side -
    - The committee settled on removing parking near the neighborhood, but including approx. 10l handicap only parking spots with space for a turnaround.
        - Gordon and Frank discussed reviewing the updated site plans with the abutters.

Kim joined at 5:00 PM.

Eric left at 5:09 PM.

- Team Design Explorations
    - Overall massing study
    - Height over auditorium will come down, no fly loft
    - Materials not applied yet
    - Roof screen- looking at refining amount
    - John asked if the auditorium is pitched?

        - The design team answered that in this rendering it is, but that will be revised now that the fly loft is being removed.
    - Beth raised concern that window size shown on schematic 3D design are too small
        - Design team noted that has been a challenge that they have been working through due to the admin offices at the front ground level.
- Entry Studies
    - Shows a canopy option
    - Greg asked if we can explore brownstones to note East Longmeadow's stone quarry history.
        - The design team agreed that would be great material to study.
- Materials
    - Masonry cost now lower than metal panels.
    - Beth and Greg noted their desire to highlight the red or brown stone with another neutral material.
    - Committee responded positively to the durability of brick.
- The design team reviewed upcoming design milestones:
    - The design team reviewed planned content to include for the upcoming 5/18 Community Forum.
        - The Committee discussed moving the tour from the Senior Center to the HS to include a HS tour. The Committee agreed to move the tour.
            - Skanska to post flyer on the project website tomorrow.
    - The design team reported on plans for the 6/7 Eco-Charrette
        - To include students, staff, and community members
        - The committee discussed ideas to get more students to participate

Summary of Estimated Construction Costs

- Kristian presented the summary of estimated construction costs which include current PSR estimates for the HS project, and a rough estimate of the pool cost.
- Kristian reported that the included figures for MSBA reimbursement is a rough estimate range that won't be known until the end of Schematic Design.
- Kristian added that the summary of estimated tax impacts based on average single family home, was provided by Kim Collins, and is a early study based on the PSR estimates and estimated MSBA reimbursement,
    - $1.2k average annual tax impact
    - Based on a 30 year loan
- Ryan Quimby noted that IT built a calculator that the SBC can post to the project website if desired.
    - The Design team recommended waiting until SD costs are finalized before implementing that tool.
- Kim noted that there were two options for presentation:
- Average tax rate impact amount or give average assessed value (not market value).
- Gordon asked who would speak to the tax impact slide at the community forum?
    - Tom volunteered to speak to the tax impact slide.

- Gordon added that at the forum, he will speak to recent maintenance projects at the High School.
- For the Community Forum, The SBC requested that the following slides be added:
    - Benchmark projects - with escalation
    - Updated floor and site plans
    - Capital Planning/Maintenance to date
    - Cost of no vote
    - Pool Building Committee update

Helen, Kim and Mary left the meeting at 6 PM.

Communications Update

- Victoria, Skanska, reported that there is a new Project Update Pamphlet on the project website. Tomorrow the 5/18 community forum pamphlet will be posted and we will post for the Eco-Charrette as well.
- Skanska to organize a prep meeting for the 5/18 forum.

New Business

- Next meeting, 6/15 4 PM

Motion to adjourn by Greg Thompson. Seconded by Ryan Quimby.

- Steve called the vote. The following members voted in the affirmative:
    - Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Tom Christensen.
    - The following members were absent: Bruce Fenney, Dr. Daniela LaBarre, Kimberly Collin, Mary McNally.
- The motion passed.

Meeting adjourned at 6:05 PM

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS School Building Committee
Date: June 15th, 2023 *4:00 PM –5:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 5/11/23 Minutes**
2) Public Participation		
3) Skanska Update	*10 minutes	❖ **Schedule & Process Update**
4) JWA/SMMA Update	*65 Minutes	❖ **6/7 Sustainability Charrette Recap** ❖ **MEP/FP Update** ❖ **Site Plan Update** ❖ **Floor Plan Update and Programming Takeaways** ❖ **Overview of Proposed Interior Finish Selections**
5) Communications Update	*10 minutes	❖ **Community Forum #5 Recap** ❖ **Updated Project Pamphlet**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
June 15, 2023 – 4:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member, absent
Mary McNally, Town Manager, absent
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance, virtual

Other Attendees:
Kevin Magee, East Longmeadow Athletics Director
Skanska USA Building, Inc.: Ben Murphy, John Benzinger, Dale Caldwell, Victoria Clifford
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Eric Erik Vangsness, Jillian DeCoursey, Paul Elliot, Stella Drizin, and Andy Oldeman.

Welcome & Approval of Meeting Minutes

- Stephen (Steve) Chrusciel began the meeting at 4:07 PM.
- Steve asked for a motion to approve the 5/11/2023 ELHSBC Meeting Minutes. Frank Paige made the motion. Beth Marsian-Boucher seconded the motion.
- The following members voted in the affirmative:
    - Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Tom Christensen, Kimberly Collins.
    - The following members abstained:
        - Bruce Fenney, Dr. Daniela LaBarre.
    - The following members were absent:
        - Kathleen Hill, Mary McNally.
- The motion passed.

Public Participants

- No comments

Skanska Update

- Ben Murphy, Skanska, gave a high-level overview of the process and schedule.
- Ben reported that on April 26th the MSBA formally approved the PSR Submission and formally moved the project into Schematic Design, Module 4. Ben reported that we are on target to submit the SD submission.
- Mid-August, SBC will meet to approve the SD package. August 31st is the deadline to submit SD package to the MSBA,
- Steve asked for an update on the OIG application.
    - Ben reported that the OIG application is currently under review with the Town.
- Dorrie requested we set a date for the August SBC meeting to approve the SD package.
    - The committee scheduled the meeting for August 15th, 3PM, East Longmeadow Council-Aging

Design Update

- Helen gave a recap of the 6/7 Eco-Charrette:
    - Participants advocated for the following:
        - EV charging stations
        - Outdoor classroom spaces
        - Use of site's wooded back
        - Support from solar pv, system
        - 100% eclectic cooling and heating
        - Ventilation and filtered air
        - Interior plants
        - Desire to use the building as a teacher for sustainability
    - Design team and staff pushed to have student participation, but unfortunately, no students participated.
        - The committee discussed ways to get more student involvement
            - Next activity with student involvement to be scheduled during school hours
- MEP Systems (SMMA Team)
    - Helen introduced SMMA MEP Engineers, Paul Elliot, Stella Drizin, and Andy Oldeman.
    - Heating/Cooling Systems:
        - 3 possible mechanical systems:
            - Air source variable refrigerant flow (VRF) Heat Pumps + DOAS
            - Two
            - Three
        - Air source variable refrigerant flow (VRF) Heat Pumps + DOAS:
            - Roof top units
        - Geothermal Systems: Ground Source Heat Pumps + DOAS
            - Geothermal system would be within property buffers, away from new building footprint - still working on number of pumps and location.
        - Air Source Chiller + Heat Pump + DOAS

    - Beth asked with the VRF system, what would happen if an outdoor unit went down?
        - Andy answered, the most likely failure would be a compressor failure. In that event, you would have difficulty maintaining target temperature. Recommends purchasing a back-up unit to have on hand.
    - Beth asked if you are contractually obligated to use a specific contractor for repairs?
        - Andy answered, yes. Most systems today have that requirement.
- Electrical
    - Overview of electrical systems included:
        - LED interior and exterior for energy efficiency
        - Wireless networked lighting system
        - Lights all on occupancy sensors per code
        - Plug load control system for energy savings (50%-70%)
        - Energy metering system to collect data for tie-in to building management system
        - Demand response Sequence of Operations
        - EV Charging Stations
        - Photovoltaics
    - Stella reported that an Electical Work Order is already initiated for the project
    - Planning for diesel generator
- Ryan Quimby asked if the utility company will have the ability to shut down cooling if we have a high load.
    - Stella answered, yes, via remote access.
- Bruce asked what size generator we are pricing and if it is possible to change to natural gas.
    - Stella answered that gas is not considered a reliable power source. Local jurisdiction would need to give approval to use gas. Cost of gas generator is higher than a diesel generator. But in general, yes, we can do gas, but need local approval and building inspector approval.
- Beth, how much energy does plug load turn off save?
    - Stella answered that it is not quantified right now, but it saves alot of energy. It will be included in the energy model.
- Ryan asked if the building management system could select which plugs go off?
    - Stella answered no, it would need to be hardwired.
- There was a general concern from the committee on the percentage of plugs that would need to be on auto shut down.
    - Dorrie noted that we can look into the LEED scorecard to identify if the plug load needs to be pursued.
- Plumping and Fire
    - Overview of plumbing/fire system:

            - Bathroom systems can be prefabricated and brought to site, cost savings.
            - Drinking fountains with touchless fill
            - Toilet flushing options:
                - Dual
                - Sensor
                - Hardwired
            - Mop sink
                - Soap mixing
                - Backflow preventer (if soap mixing is included)
            - All electric for water heaters
            - Grease interceptors
            - Water outlets
            - Trap primers
        - Pamela asked which systems are battery powered
            - Toilet auto-flushing. Those batteries typically have a 5 - 10 year lifespan.
        - Pamela asked if custodial areas have eye wash stations?
            - No, but the design team will look into including.
        - Beth asked that we not include troft sinks for sanitary concerns.
    - Dorrie noted that proprietary items will need to be reviewed by the SBC and Town and voted on
        - Gordon asked that the design team recirculates the list and vote at next meeting
    - Gordon asked how a HVAC system will handel cooling one section and heating another
        - Dorrie noted that at a different project it has been successful
    - There will be temperature control in a room defined by range

Stephen Chrusciel left the meeting.

Beth Marsian-Boucher left the meeting.

- The design team reviewed site plan updates:
    - New pool orientation
    - Revised field layouts
    - Handicap and emergency only parking near athletic fields
        - Gordon noted he spoke to a neighbor on accessible parking near Nordon neighborhood - will continue to reach out.
        - Site focus group this morning and fire chief responded positively
- The design team reviewed updated floor plans:
    - Gymnasium wing updates
    - Forum stair moved
    - Auditorium updates
    - Updated entry and media center

Communications Update

- Victoria, Skanska, reported that there is a new Project Update Pamphlet on the project website with updated FAQ's and links to the May community forum video. Victoria asked for input for future communications.
    - Gordon asked that we include more visual design updates in the next pamphlet
        - The design team noted that the renderings won't be polished until the end of the summer - but we can include draft renderings
        - By National Night Out, we will have much more polished imagery.
- The committee discussed filming a forum or publishing a podcast over the summer to keep the community informed on progress and answer more questions around cost and tax impact.
- Ben noted that he is drafting responses to inquiries received via the project emails
- The committee discussed other FAQ's
    - Greg asked that we include a detailed summary of what is included in our analysis of a "cost of no", base repair only
    - What's coming off the long-term debt?
        - Gordon and Bruce noted that capital bonding is constantly evolving.
- Greg asked that we target the senior community to get the word out on the project.
- Daniella noted that there is a community parade that we should consider outreach for

Helen Fantini left the meeting.

New Business

- Next meeting, 6/29, 3 PM, School Committee Room

Motion to adjourn by Greg Thompson. Seconded by Ryan Quimby.

- Steve called the vote. The following members voted in the affirmative:
    - Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Greg Thompson.Ryan Quimby, Tom Christensen.
    - The following members were absent: Bruce Fenney, Dr. Daniela LaBarre, Kimberly Collin, Mary McNally.
- The motion passed.
- The following members voted in the affirmative:
        - Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Greg Thompson, Ryan Quimby, Tom Christensen, Kimberly Collins.
    - The following members abstained:
        - Bruce Fenney, Dr. Daniela LaBarre.
    - The following members were absent:
        - Kathleen Hill, Mary McNally, Elizabeth (Beth) Marsian-Boucher, Stephen Chrusciel

Meeting adjourned at 6:05 PM

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Mtg Zoom Link
Date: June 29th, 2023 *3:00 PM–4:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ Welcome ❖ Approval of 6/15/23 Minutes
2) Public Participation		
3) Skanska Update	*5 minutes	❖ Schedule & Process Update
4) JWA/SMMA Update	*60 Minutes	❖ Exterior Building Massing & Materials ❖ Proprietary Items
5) New Business		❖ Summer Communication Strategies
6) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
6/29/23, 2023 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal, absent
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Mary McNally, Town Manager, absent
Elizabeth (Beth) Marsian-Boucher, School Committee Member, absent
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member, absent
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance

Other Attendees:
Don Maki, ELCAT Director
Skanska USA Building, Inc.: John Benzinger, Victoria Clifford
Design Team (JWA/SMMA):Helen Fantini, Brian Black, Jillian DeCoursey

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 3:02 PM.
- Steve asked for a motion to approve the 6/15/2023 ELHSBC Meeting Minutes.
- Ryan Quimby made the motion. Bruce Fenney seconded the motion.
- Gordon called the vote. The following members voted in the affirmative:
    - Gordon Smith, Bruce Fenney, Tom Christensen, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Pamela Blair, Stephen Chrusciel
    - The following members abstained from the vote: Kathleen Hill.
    - The following members were absent: Steve, Mary McNally, Kimberly Collins, Frank Paige, Elizabeth (Beth) Marsian-Boucher, Daniela LaBarre
    - The motion passed.

Public Participants

- No comments

Skanska Update

- John Benzinger, Skanska, gave a high-level overview of the process and schedule.

- MSBA requested a meeting with the project team to review the schedule and SD submittal. Skanska to cover and report back to the SBC.
- Gordon asked that the language for the November 7th vote be revised to “debt exclusion” and not for “town to appropriate the costs”. The Town Council will vote to appropriate the actual project budget value.
    - Skanska to update the schedule and design team to update the schedule graphic.
    - The committee discussed process for finalizing the vote language.
- John Benzinger, Skanska, added that there was a request from a resident to review the project budget. John asked that a SBC member be present for that conversation.
    - Gordon/Steve to coordinate.
- Tom Christensen asked when the next community forum is scheduled for.
    - Skanska responded that based on feedback from the SBC, there will be no summer forum, but we will have a booth at National Night Out, and host a services of forums in early fall.
- John reviewed the timeline for estimates.
- Greg Thompson asked if lights were included on the fields.
    - Helen responded, the lights are not included, only electrical infrastructure for them to be added at a later date.

Design Update

- Proprietary Items:
    - The Design Team reviewed a draft list of proprietary items to be included in the project, which the SBC will be asked to vote on.
        - Item #1: StruxureWare - for BMS
        - Item #2: Infinias - for door access system
        - Item #3: Schlage - for door hardware
        - Item #4: AXIS - for security cameras
        - Item #5: Cisco - for Network equipment
        - Item #6: Meraki - for Wireless equipment
        - Item #7: Cisco IP - for phones
        - Item #8: Atlas - for clocks and paging
    - Bruce and Ryan asked that #1 thru #8 are approved today and #2 be left off until the preferred vendor can be confirmed.
    - Gordon asked if we can change after it’s voted.
        - Helen answered, yes. But, there will be a premium if one vendor is requested, versus having an open bid.
    - **Greg Thompson made a motion to approve the proprietary items as listed, #1 thru #8, excluding #2. Ryan Quimby seconded the motion.**
        - **Item #1: StruxureWare - for BMS**
        - **Item #2: Infinias - for door access system (excluded)**
        - **Item #3: Schlage - for door hardware**
        - **Item #4: AXIS - for security cameras**
        - **Item #5: Cisco - for Network equipment**

        - **Item #6: Meraki - for Wireless equipment**
        - **Item #7: Cisco IP - for phones**
        - **Item #8: Atlas - for clocks and paging**
    - **Gordon called the vote.**
        - **The following members voted in the affirmative: Gordon Smith, Bruce Fenney, Tom Christensen, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Pamela Blair**
        - **The following members abstained from the vote: Kathleen Hill, Steve Chrusciel.**
        - **The following members were absent: Mary McNally, Kimberly Collins, Frank Paige, Elizabeth (Beth) Marsian-Boucher, Daniela LaBarre**
    - **The motion passed.**
- Exterior:
    - Brian Black, reviewed exterior design goals, building materials and renderings
    - Pamela asked if we will get to choose from highly durable materials.
        - Yes, all are materials will be high durability and have been used in schools.
    - Envelope parameters:
        - Brian explained that the envelope will be expensive, but will result in lower energy costs and more efficient building.
    - Brian explained the inspiration for the facade design - Quarry, in reference to the town's mine history.
    - Materials
        - Greg asked what the cost difference would be between metal and brick
            - Potentially around $.5 million.
        - Design team recommended including more detail in the facade with the option to VE down.
        - Bruce mentioned we may want to include some local masonry, but would be small scale, as an homage.
        - Design team looking into a similar color brownstone.
    - Massing:
        - The design team presented two options for the Spine Massing:
            - Option 1: Monolith
            - Option 2: The Wedge
        - Greg and Ryan voiced favor to the wedge (option 2)
        - Gordon voiced preference for the wedge (option 2) but felt that the entrance looked dated.
    - Color palette:
        - Option A: Warm Red Tones
        - Option B: Warm Neutral (most contemporary)
    - Masonry pattern:
        - Option A:Horizontal
        - Option B: Vertical

- The committee voice preference for Color Option: A, due to ease of maintenance
- Gordon asked that the sunshade be not reachable from ground level.
- Pamela asked how long do sun shades protrude?
    - About 2 feet.
- Are sunshades required?
    - Yes, LEED requirement. And reduces glare.
- Do the sunshades collect rain/snow?
    - No, they are sloped
- Committee preferred Masonry Option 2: Vertical.
- The committee reviewed physical material samples brought by the Design Team.

Communications

- The committee discussed topics to clarify for the community:
- Cost of a base repair:
    - We have a preliminary cost based on the PDP study
    - HVAC upgrades alone would shrink classrooms and all spaces
    - More lead time
    - Can only build during summer months or school breaks
- Don Maki, ELCAT Director, recommended making highlight on ELCAT video to cover:
    - What is on the ballot?
    - Why new construction?
- Don to create these videos on behalf of ELCAT to help educate the community on the process in an objective manner.
- Don to make recommendations on how information is presented on the current project website.
- Tom suggested putting together a summary of estimated costs for base repair project and a timeline.

New Business

- Skanska reported that after discussing with the Town, it was decided that the CM at Risk OIG Application two projects will be broken out into two separate applications for the HS and Pool Project.
- Meeting Schedule:
    - Next SBC Meeting - 7/20, 3PM
    - Next Pool BC - 7/6 (TBD) - post by tomorrow - send to Gordon and Pam. Skanska to confirm times.

Motion to adjourn by RyanQuimby. Seconded by Ryan Greg Thompson.

- **Gordon called the vote. The following members voted in the affirmative:**
    - **The following members voted in the affirmative: Gordon Smith, Bruce Fenney, Tom Christensen, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Pamela Blair**

    - **The following members abstained from the vote: Kathleen Hill, Steve Chrusciel.**
    - **The following members were absent: Mary McNally, Kimberly Collins, Frank Paige, Elizabeth (Beth) Marsian-Boucher, Daniela LaBarre**
- **The motion passed.**

Meeting adjourned at 5:26 PM

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: ELHS SBC Mtg. Link
Date: July 20th, 2023 *3:00 PM – 4:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 6/29/23 Minutes**
2) Public Participation		
3) Skanska Update	*5 minutes	❖ **Schedule & Process Update**
4) JWA/SMMA Update	*60 Minutes	❖ **FF&E & Technology Budgets** ❖ **MSBA Green Schools Program Change** ❖ **Updated Space Summary Review** ❖ **Confirmation of Proprietary Items** ❖ **SD Value Engineering Coordination** ❖ **Meeting Date Changes**
5) Communications Update	*10 Minutes	❖ **Summer Communications Strategies**
6) New Business		
7) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
7/20/23 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair (virtual)
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business, absent
Frank Paige, ELHS Principal, absent
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Elizabeth (Beth) Marsian-Boucher, School Committee Member
Bruce Fenney, Superintendent of East Longmeadow DPW, absent
Dr. Daniela LaBarre, School Psychologist and Faculty Member, absent
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance, absent

Other Attendees:
Skanska USA Building, Inc.: Ben Murphy, Victoria Clifford (virtual)
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Kristian Whittsett

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 3:03 PM.
- Steve asked for a motion to approve the 6/29/2023 ELHSBC Meeting Minutes.
- **Ryan Quimby made the motion. Kathleen Hill seconded the motion.**
- **Gordon called the vote. The following members voted in the affirmative:**
    - **Gordon Smith, Bruce Fenney, Tom Christensen, Greg Thompson, Stephen Chrusciel, Kathleen Hill, Ryan Quimby.**
    - **The following members abstained from the vote: Heather Brown, Elizabeth (Beth) Marsian-Boucher,**
    - **The following members were absent: Kimberly Collins, Frank Paige, Elizabeth Daniela LaBarre, Pamela Blair, Bruce Fenney**
- **The motion passed.**

Public Participants

- Mr. Seleti, 385 Chestnut Street:
    - Is there a detailed cost list for Option 3C?
        - Estimates from the PSR phase for Option 3C are included on the project website. We will have the Schematic Design phase estimate complete at the end of the month.

- Is the Pool $15M estimate still accurate?
    - That was the initial estimation done by the project team based on cost per square foot and escalation from the West Springfield pool project. There has not been a professional Pool estimate to date. There will be a professional estimate done for the Pool Schematic Design at the end of the month.
- Minutes from the Pool Project are not on Town Site.
    - Gordon confirmed that they were posted earlier today.
- What is the cost for IT, District Offices, ELCAT? Are they reimbursable?
    - They will not be reimbursed by MSBA. The offices are currently not priced separately because they are in the HS building, not a separate building.The Design Team recommended reviewing the Space Summary from the PSR report to see all non-reimbursable spaces.
- When will the Schematic Estimate be available?
    - Early August.
- What is the annual usage for the proposed solar array?
    - After we have the Schematic Design (SD) estimate, we will perform a life cycle cost analysis that will have those details included.
- What will be the operating costs of the new building?
    - All three systems are being modeled, we will have a study available with the SD package.
- At the May Community Forum, there was a slide on on-going capital investments. Are those projects already funded capital investments or are those wannabes?
    - Meadowbrook received a MSBA grant money to repair the roof, windows, and doors. Others were funded through the Town capital planning process.
- High School repairs to date, have they been funded or are they in process?
    - All funded by the Town. Switchgear is funded and is being replaced this summer.

- Ross Lavigne, East Longmeadow Resident:
    - Why we haven’t fixed the roof in the HS?
        - Gordon responded that there have been multiple repairs to the roof.
    - Does it leak?
        - Yes, it still leaks. We are repairing on an ongoing basis.
    - Is the roof fine as it stands with repairs?
        - As of now, there are no current leaks. The full roof replacement has been on the capital plan during Gordon’s tenure. We are patching the roof as leaks come up, but a new roof is needed for the long term.
    - Why hasn't a new roof been approved by capital planning?
        - Gordon explained that the projects are selected by funds available and urgency of the issues.
        - Tom responded that a full roof replacement would be about 10 to 15 years of capital outlay. We outlay $1.5M per year for capital planning projects.

- Ross asked why we can afford a new school building but not a roof.
    - Tom responded that with the new school we are receiving funding from the MSBA.
    - Ben, Skanska, added that we are estimating to receive $54M from the MSBA.
    - Ross made the point that inflation outways the amount the amount we will receive from the MSBA.
    - Beth explained that the timing of the project is unfortunate with construction costs, but that this is our opportunity to receive the funding from MSBA. Beth explained that the roof is not the only issue with the school and that the new building will fix spacial and accessibility deficiencies in the existing building. Beth went on to explain that a number of repairs will trigger code requirements that would lead to equal or more costly than the new school and take longer to complete.
- Ross explained that he does not agree that the current building will not last another 60 years with proper maintenance. Ross asked if the base repair and code upgrade option are the same study?
    - The project team confirmed that the terms “base repair” and “code upgrade” are interchangeable.
- Ross asked how the estimates were derived. Ross asked how the students will receive a better education due to a new building.
    - Beth explained her thought process on why she changed her mind on base repair vs. new construction. Beth proposed Ross send an email to the project team for specific questions on cost to be answered.
    - Dorrie and Heather explained how the classrooms will become smaller in the code upgrade option and the classroom experience would in turn be negatively impacted by the loss of space.
    - Gordon added the electrical system is at capacity. We can only currently accommodate a certain number of air conditioners, and legally, the school has to provide an air conditioned environment for individual student health plans, which is a current challenge for administration.
    - Gordon pointed out that the MEASC accreditation is at risk with the current existing building.
- Ross expressed his feelings that the existing school is fine as it is and his concern with the tax increase.
- Ross agreed to send another email to Gordon with further questions to be answered by the project team.

Skanska Update

- Schedule update
    - 8/1: Cost Estimates due
    - 8/4: Estimate reconciliation complete

        - 8/8: Project Team to present project with Town Council
        - 8/10: SBC to approve the SD budget
        - 8/15: Skanska to submit the budget statement
        - 8/15: Submission to MSBA for early deliverables
        - 8/24: SBC to approve the SD Submission
        - 8/35: Full SD Package Submission to the MSBA
        - 9/19: Town Council Ballot Language Vote
- Tom Christensen recommended a 10-minute meeting slot Meeting with the Town Council.
- Beth recommended sending future Community Forum invitations thru Town distributions as well as the School distribution.
- Gordon to send calendar invites for 8/10 and 8/24 SBC Meetings to assure quorums
- Budget Update
    - Ben gave an overview of the 3011 total project budget format
    - At the 8/10 meeting, the budget will be updated with SD estimates

Design Update

- Recent meetings
    - Design team gave an update on recent meetings needed for input on the SD submission:
        - FF&E
        - Security
        - IT
        - Mass Save Incentive
- Proprietary Items
    - Design team recommended revoting proprietary items based on recommendations from the Security and IT meetings.
    - To be added to the 8/10 agenda.
- Proposed FF&E / IT Budget
    - Design team presented proposed budgets
    - FFE:
        - $2,400 per student / 800 students
        - Total - $1.92M
        - Local Share: $1,200 per student, $960,000 total
    - IT:
        - $1,500-$1,800 per student / 800 students
        - Total - $1.2M - $1.4M
        - Local Share: $300-$600 per student, $240,00-$480,000 total
    - Ryan requested detailed information on what's included in the IT budget
    - Beth request to be involved in FF&E selection and voiced her desire for durable selections
- MSBA Green School Incentive Policy Impact

- The Design Team gave an update on MSBA's updated incentive plan for green schools.
- With the current plan for an all electric, LEED silver building, the combined incentive is approximately a 3% reimbursement, $3.7M.
- Beth asked for more information on what the cost is to achieve the green requirements.
    - Design team responded that we will have that study within the next few weeks.
- Beth asked if a geothermal system would deliver cooler air and safe money on operating costs of air conditioning.
    - The team and committee discussed alternate options that will be reviewed in the estimation process and life-cycle report.
- MASS Save Program
    - Dorrie gave an update on the MASS Save Program that we could receive incentive funding from if we hit the agreed EUI target.
    - Pathway 1 Option
        - Net-0 school, EUI 25
        - $1,035,415 total incentive (assuming VRF)
    - Pathway 2 Option
        - Net-0 school, EUI 29-36
        - $601,210 total incentive (assuming VRF)
    - Dorrie asked the SBC to make a decision on the EUI and Mass Save Path goal prior to SD submission.
- List of Cost Items Being Tracked for Information
    - Dorrie presented a list of items that will be estimated as breakout costs for the SBC's consideration
    - Helen noted that we are pricing the natural gas generator, but the recommendation is electric.

Communications

- Victoria, Skanska, gave an update that the website has been updated with FAQ's and that Don Maki is working on a reorganization of materials on the ELHS project website.
    - Gordon noted that we are including recent inquiries that have been received thru the project email and from public participation at SBC meetings.
- Victoria noted that the July Monthly Pamphlet is posted to the website and will be used as a handout at National Night Out.
- Victoria asked the committee to select dates for a September and October Community Forums.
- Beth voiced concern that the general community is not aware of the project. Beth recommended and volunteered to attend open houses to provide information on the project.
- Heather recommended the project leverage facebook and other social media platforms to get project news out.

    - Victoria responded that it may be late in the game to create a project Facebook page but that we can leverage the Town facebook page and request informational content be posted. Victoria also noted that the campaign group has a facebook presence and will also have a booth at National Night Out.
- Open House Events:
    - 9/6 - Mapleshare
    - 9/13 - Birchland Park MS
    - 9/14 - Mountain View ES
    - 9/27 - ELHS
    - 10/4 & 10/5 - Meadowbrook
- The SBC Selected the following dates for Community Forums:
    - 9/21, 5PM Tour, 6PM Forum - Cafeteria
    - 10/19, 5PM Tour, 6PM Forum - Cafeteria

New Business

- **Motion to adjourn by Ryan Quimby. Seconded by Greg Thompson.**
- **Gordon called the vote. The following members voted in the affirmative:**
    - **Gordon Smith, Bruce Fenney, Tom Christensen, Greg Thompson, Stephen Chrusciel, Kathleen Hill, Ryan Quimby. Heather Brown, Elizabeth (Beth) Marsian-Boucher.**
    - **The following members were absent: Kimberly Collins, Frank Paige, Elizabeth Daniela LaBarre, Pamela Blair, Bruce Fenney**
- **The motion passed.**

Meeting adjourned at 5:06 PM

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom Link for ELHS Bldg. Comm. Mtg.
Date: August 10th, 2023 *3:00 PM – 4:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 7/20/23 Minutes**
2) Public Participation		
3) Motions/Approvals	*30 minutes	❖ **Updated *Proprietary Items* List:** ○ ***Item #1: StruxureWare - for BMS*** ○ ***Item #2: 3xLOGIC - for door access system*** ○ ***Item #3: Schlage - for door hardware*** ○ ***Item #4: AXIS - for security cameras*** ○ ***Item #5: Atlas - for clocks and paging*** ○ ***Item #6: ExacqVision- video surveillance system*** ❖ **Schematic Design Submission - Total Project Budget Review/Approval** ***"The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget for the East Longmeadow High School Project and approves the submittal to MSBA for consideration."***
4) New Business		

5) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
8/10/23 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair (virtual)
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business, absent
Frank Paige, ELHS Principal, absent
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member, absent
Elizabeth (Beth) Marsian-Boucher, Community Member
Bruce Fenney, Superintendent of East Longmeadow DPW
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Ryan Quimby, Town IT Director
Tom Christensen, Deputy Town Manager, absent
Kimberly Collins, Director of Municipal Finance

Other Attendees:
Skanska USA Building, Inc.: John Benzinger, Victoria Clifford (virtual)
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Kristian Whitsett

Welcome & Approval of Meeting Minutes

- Gordon Smith began the meeting at 3:03 PM.
- Steve asked for a motion to approve the 7/20/2023 ELHSBC Meeting Minutes.
- **Ryan Quimby made the motion. Elizabeth (Beth) Marsian-Boucher seconded the motion.**
    - **7 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Kimberly Collins.**
    - **0 opposed.**
    - **3 abstained, Bruce Fenney, Daniela LaBarre, Frank Paige.**
    - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed.**

Public Participants

No public Participants

Design Updates

- Life Cycle Cost Analysis:
    - Andy Oldeman, JWA, gave an overview of the Life Cycle Cost Analysis

- MSBA requires us to study 3 mechanical systems and compare them to the code baseline. Four systems were studied in the presented in the life cycle cost analysis.
- Includes installation costs and estimates for operating energy costs.
- Mechanical equipment would need to be replaced after 50 years.
- Group discussed the Mass Save incentive plan.
- The design team recommended the VRF system.
- Bruce Fenney asked if we've built in the incentive plan savings in the SD total project budget?
- Beth asked if the WRF chillers use freon and if that will change in the next 5 to 10 years?
    - Andy responded yes, and it is very possible the systems will change in 5 to 10 years as most do.
- Dorrie Brooks suggested hiring a Photovoltaics Design Consultant in the DD phase
- Greg requested we highlight the Photovoltaics in the exterior design. from the front exterior view
    - Beth disagreed and suggested we conceal and Photovoltaics as much as possible.
    - Bruce added that this is an all electric building, so we should highlight that with the Photovoltaics.
    - The Design Team responded that they will look into developing this in the DD Phase.

Value Engineering

- Design team presented Recommended Scope Reductions/Value Engineering (VE) items recommended by the Value Engineering Subcommittee:

Recommended Scope Reductions

Item	Item Description
1B	Eliminate Basketball Court Lighting (and new controls cabinet)
3	Eliminate 6' wood fencing along property line, 504lf
4	Eliminate 6' chain link on southern perimeter, 455lf
5	Eliminate 4' Chain link fence on property line, 743lf
6	Eliminate Lft Arm Barrier Gate at Emergency Access Path
7	Reduce Caliper of Tree Site
8	Reduce Quantity of Plant Materials by 10%
10	PreK Playground EQ Allowance of 60K ilo of outlined scope
12	Granite Block Seatwalls to Precast at rear side of school only
14	Aluminum feeders ilo copper
15	Reduce AV Allowance for Auditorium to $200,000 from $450,000
16	Formed Metal ilo Porcelain Clad Rainscreen
19	Reduce design and quantity of bollards (based on memo Opt. 2)
23	Wall tile ilo veneer wood wainscot in academic wing
24	Eliminate acoustic treatment to Gym Walls
25	Steel ilo glulam beams
26	~~Gyp Ceiling ilo wood slatted ceiling, 2455sf~~
30	Athletic fields - eliminate 12" gravel base, geo-textile fabric, reduce topsoil from 12" to 8" including associated cut/fill adjustments
36	Correct estimated toilet ceramic wall area to 12,000sf from 14,994sf
40	Adjust the triple pane glazing at curtain wall price to $240/SF and window to $185.
41	Replace 13,566 sf stabilized stone dust pathway with bituminous concrete walkway (including bituminous. Reduce width to 6 ft.
42	Reduce gravel below footing to 6" thick section of imported ¾" crushed stone. Provide 8" thick section of imported base course sand & gravel below the building slab. Soil/fill below the top layer of topsoil can remain in place. Assume that 80% of this 2' average depth of fill can remain in place.
	Estimated value of deductions before markup **$6.9M**
	Estimated value of deductions after markup **$8.5M**

- The following items were discussed:

- Gordon clarified that the Preschool program at the High School is a class for child development and not the Preschool program that is housed at Meadowbrook.
- Beth asked if aluminum feeders were safe,
- John Benzinger, Skanska, responded that the aluminum feeders for commercial work are safe. John noted that aluminum feeders in residential work are different.
- Bruce added that the Town makes their own millings.
- To be discussed with the Design Team in the DD Phase.
- Beth asked how much square feet was included in the outdoor athletics storage.
- Bruce Fenney confirmed that a diesel generator would be the preference for the town.

- **Gordon Smith made the following motion: Motion to accept the recommended scope reductions by the value engineering subcommittee with 1 amendment to the current list, #25, #26, and recognizing the new cost savings from earthwork, relative to the ability to retain existing soils on site. The motion was seconded by Greg Thompson.**
  - **7 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Greg Thompson, Ryan Quimby, Kimberly Collins, Bruce Fenney, Daniela LaBarre, Frank Paige.**
  - **0 opposed.**
  - **0 abstained.**
  - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed.**

Total Project Budget Update

- The Project Team presented the Schematic Design Total Project::

Construction Budget (PSR Estimate: to be adjusted per reconciled SD estimate)	**$ 147.8 M**
Soft Costs (OPM & A/E Administration, FF&E, Misc. Project Costs)	**$ 25.78 M**
Contingencies (Owner's & Construction)	**$ 4.1 M**
Estimated Total Project Budget	**$ 177.8 M**
Estimated Max. Total Facilities Grant	**$ 62.2 M**
Anticipated District Share	**$ 115.5 M**

Figures above developed prior to final soils VE addition and Committee VE approval and estimate revision. Figures do not represent final MSBA scope and budget agreement.

- The Team reported that the SD budget has gone up to $177.8M since the PSR budget, but from work with the SBC and Design Team, and realizing additional incentive points

- with Town Share has gone down to $115.5M.
- John Benzinger, Skanska, noted that the cost will come down another $300k with the scope reduction revisions.
- The Project Team reviewed the estimating and value engineering process.
- Greg asked why the Soft Costs have gone up since the PSR estimate
    - The Design Team noted that there are additional soft costs included pertaining to achieving the sustainability goals and PV design consultant.
- Gordon asked if the MSBA will revisit the district reimbursement rate?
    - Skanska to review with the MSBA.
- Dorrie noted that there are additional costs included to cover the construction manager at risk delivery method which was not included in the PSR estimate.
- **Frank Paige made the following motion: The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget of $177.5M for the East Longmeadow High School Project and approves the submission to the MSBA for its consideration. Elizabeth (Beth) Marsian-Boucher seconded the Motion.**
    - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.**
    - **0 opposed.**
    - **0 abstained.**
    - **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**
- **The motion passed unanimously.**

Proprietary Items

- The Design Team gave an update that the District requested changes to the previously voted Proprietary Items:
    - #2, #4, #6 to change to AXIS.
- **Greg Thompson made the following motion: Motion to approve the following proprietary items:**

Item #1: StruxureWare - for BMS

Item #2: AXIS- for door access system

Item #3: Schlage - for door hardware

Item #4: AXIS - for security cameras

Item #5: Atlas - for clocks and paging

Item #6: AXIS - video surveillance system

- **Ryan Quimby seconded the motion.**

- **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Dr. Daniela LaBarre, Greg Thompson, Ryan Quimby, Kimberly Collins.**
- **0 opposed.**
- **0 abstained.**
- **3 absent, Pamela Blair, Kathleen Hill, Tom Christensen.**

- **The motion passed unanimously.**

Upcoming Milestones

- 8/8: Town Council meeting update
- 8/15: Skanska to submit the budget statement
- 8/15: Submission to MSBA for early deliverables
- 8/24: SBC to approve the SD Submission
- 8/25: Full SD Package Submission to the MSBA
- 9/12: Town council meeting with Kim on bond process
- 9/19: Town Council Ballot Language Vote
- 10/25: MSBA Project Scope and Budget Agreement
- 11/7: Debt exclusion vote
- Gordon asked what the turnaround time is for approving the ballot vote language?
    - Skanska to confirm with the Town Council and the MSBA.
- Pool Process:
    - Documented to be estimated next week.
    - Will have budget numbers by 9/6.
    - John asked if we need to hit town council meetings for the pool.
    - WIll need to have a budget set by the 9/12 town council meeting.
    - Week of the 6th - pool meet to review budget and VE (plan for the 7th).
        - Skanska/PD&C to confirm with estimators

Communications

- Victoria Clifford, Skanska, gave an update that the National Night Out booth was successful.
- Beth volunteered to lead the effort for SBC outreach at upcoming School Open Houses.
- Meadowbrook booth outside
- The committee discussed presenting boards at the entrances and providing the informational monthly pamphlets and QR code to the building project website, and advertise the time/date/place of upcoming community forums.
- Skanska to set up boards at East Longmeadow Library.
- Daniella suggested providing information on the project at St Michaels CCD program.

New Business

- John Benzinger noted that Longmeadow has issued an RFP for a new elementary school.

Motion to adjourn by Ryan Quimby. Seconded by Frank Paige.

Meeting adjourned at 4:55 PM.

Gordon C. Smith
8/25/23

Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

ELHS SCHOOL BUILDING COMMITTEE
MEETING
SCHOOL COMMITTEE CONFERENCE ROOM AND ZOOM MEETING 180 Maple Street East Longmeadow, MA 01028
Zoom Meeting Link: Zoom ELHS SBC Link
Date: August 24th, 2023 *3:00 PM – 4:30 PM*

AGENDA ITEM	TIME	NOTES
1) Welcome & Approval of Meeting Minutes	*5 Minutes	❖ **Welcome** ❖ **Approval of 8/10/23 Minutes**
2) Public Participation		
3) Skanska Update	*5 Minutes	❖ **Schedule & Process Update**
4) JWA/SMMA Update	*45 Minutes	❖ **Summary of the Schematic Design (SD) Submission**
5) Motions/Approvals	*10 minutes	❖ **Draft Vote Language: *Motion to approve the Schematic Design package and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district.***
6) New Business		
7) SBC Mtg. Recess	*15 Minutes	❖ **Recess to Print and Organize Minutes**
8) Approval of Meeting Minutes	*5 Minutes	❖ **Approval of 8/24/23 Minutes**
9) Adjourn		

*All times are estimates for the completion of the specific agenda item.

ELHS School Building Committee
School Committee Conference Room and Zoom Meeting
8/24/23 – 3:00 PM

Attendees:
Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELHS Director of Curriculum
Kathleen Hill, Town Council Member
Elizabeth (Beth) Marsian-Boucher, Community Member
Bruce Fenney, Superintendent of East Longmeadow DPW, virtual
Dr. Daniela LaBarre, School Psychologist and Faculty Member
Greg Thompson, School Committee Member
Tom Christensen, Deputy Town Manager
Kimberly Collins, Director of Municipal Finance, virtual
Ryan Quimby, ELPS IT Director, absent

Other Attendees:
Skanska USA Building, Inc.: John Benzinger, Ben Murphy
Design Team (JWA/SMMA): Helen Fantini, Dorrie Brooks, Kristian Whitsett
Public: Marilyn Richards

Welcome & Approval of Meeting Minutes

- Steve Chrusciel began the meeting at 3:02 PM.
- Steve asked for a motion to approve the 8/10/23 ELHSBC Meeting Minutes.
- **Greg Thompson made the motion to approve the 8/10/23 SBC minutes with the amendment that Beth Marsian-Boucher be listed as Community Member. Beth Marsian-Boucher seconded the motion.**
    - **8 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Frank Paige, Heather Brown, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Kimberly Collins**
    - **0 opposed,**
    - **3 abstained, Kathleen Hill, Pamela Blair, Tom Christensen**
    - **2 absent, Ryan Quimby, Dr. Daniela LaBarre (joined meeting after this vote was taken)**
- **The motion passed.**

Public Participation

- No public Participants

Skanska Update – Schedule & Process

- John Benzinger, Skanska, gave a schedule/process update:
    - Schematic Design Package will be submitted to MSBA on 8/25/23.

- MSBA will review and respond to the SD submission by the end of September.
- MSBA approval of the Project Scope and Budget will occur at the 10/25/23 Board of Directors meeting.
- The Town has been working with its legal counsel and the MSBA to finalize the Project vote language.
- Skanska has been in contact with the OIG and expects NTP approval for CM @ Risk services within the next few weeks.

Design Update – Summary of Schematic Design Submission

- Kristian Whitsett, JWA, provided an overview of the Schematic Design Submission:
  - Kristian reviewed the estimated costs at Preferred Schematic:
    - Total estimated construction cost at PSR was $147.5M.
    - Approx. total Project cost at PSR was $177M
    - Approx. MSBA reimbursement at PSR was $55M – $57M
    - Anticipated District share at PSR was $120M - $122M
  - Kristian reviewed the estimated costs for Schematic Design:
    - PM&C (Designer's estimator) estimated construction costs at $147,283,566.
    - PCM (OPM's estimator) estimated construction costs at $147,792,248.
    - The project team averaged the two estimates to achieve a fully reconciled estimate of construction costs at $147,537,907.
  - Kristian provided an overview of the SD Total Project Budget:
    - Construction Budget is $147,537,907.
    - Soft costs are $25,782,738
    - Contingencies are $4,140,000
    - Estimated Total Project Budget is $177,460,645
    - Approx. MSBA reimbursement is $63,145,648
    - Anticipated District share is $114,314,997
  - Kristian reviewed the Add Alternates that have been identified but are not included in the estimated construction cost:
    - Lighting for varsity baseball and softball fields: add $1,273,490.
    - Sports field storage building: add $46,022
    - Additional athletic field irrigation beyond base scope: add $513,026
    - Provide sod ILO seed for athletic fields: add $975,051
    - Athletic field netting adjacent to neighboring property: add $269,112
    - Ground source heat pump ILO air source heat pump: add $9,805,447
  - Kristian shared recent exterior and interior renderings produced by SMMA.

- **Steve Chrusciel asked for a motion to approve the Schematic Design (SD) Submission and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district. Beth Marsian-Boucher made the motion. Kathleen Hill seconded the motion.**

- **12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Tom Christensen, Kimberly Collins, Dr. Daniela LaBarre**
- **0 opposed,**
- **0 abstained,**
- **1 absent, Ryan Quimby,**
- **The motion passed unanimously.**

New Business

- Upcoming Milestones:
  - 9/12/23 – Town Council reviews bond structure w/ Kim Collins
  - 9/15/23 – Town Council votes on bond commitment and votes on ballot language
  - 10/25/23 – MSBA approves scope & budget
  - 11/7/23 – Special election for Debt Exclusion vote.
- Next SBC meeting scheduled for 9/14/23 at 3PM.
- The SBC tentatively scheduled a meeting for 10/19/23 at 3PM.
- The SBC will look to designate a CM selection subcommittee at its next meeting.
- Frank Paige recommended starting Community Forum tours at 5:30 PM rather than 5 PM.
- The SBC identified volunteers for the upcoming open house events.

Approval of Meeting Minutes

- **At 3:42 PM, Frank Paige motioned that the SBC take a 15 minute recess, Beth Marsian-Boucher seconded the motion.**
  - **12 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Bruce Fenney, Greg Thompson, Tom Christensen, Kimberly Collins, Dr. Daniela LaBarre**
  - **0 opposed,**
  - **0 abstained,**
  - **1 absent, Ryan Quimby,**
  - **The motion passed.**
- During the recess, Skanska USA Building completed the 8/24/23 SBC meeting minutes. The 8/24/23 SBC minutes were printed and distributed to the SBC members for their review.
- The SBC resumed the meeting at 4:17 PM.
- **Tom Christensen made a motion to approve the 8/24/23 SBC minutes up to the point of recess. Greg Thompson seconded the motion.**
  - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen.**
  - **0 opposed,**
  - **0 abstained,**
  - **3 absent, Ryan Quimby, Bruce Fenney, Kimberly Collins**
  - **The motion passed unanimously.**

Adjournment

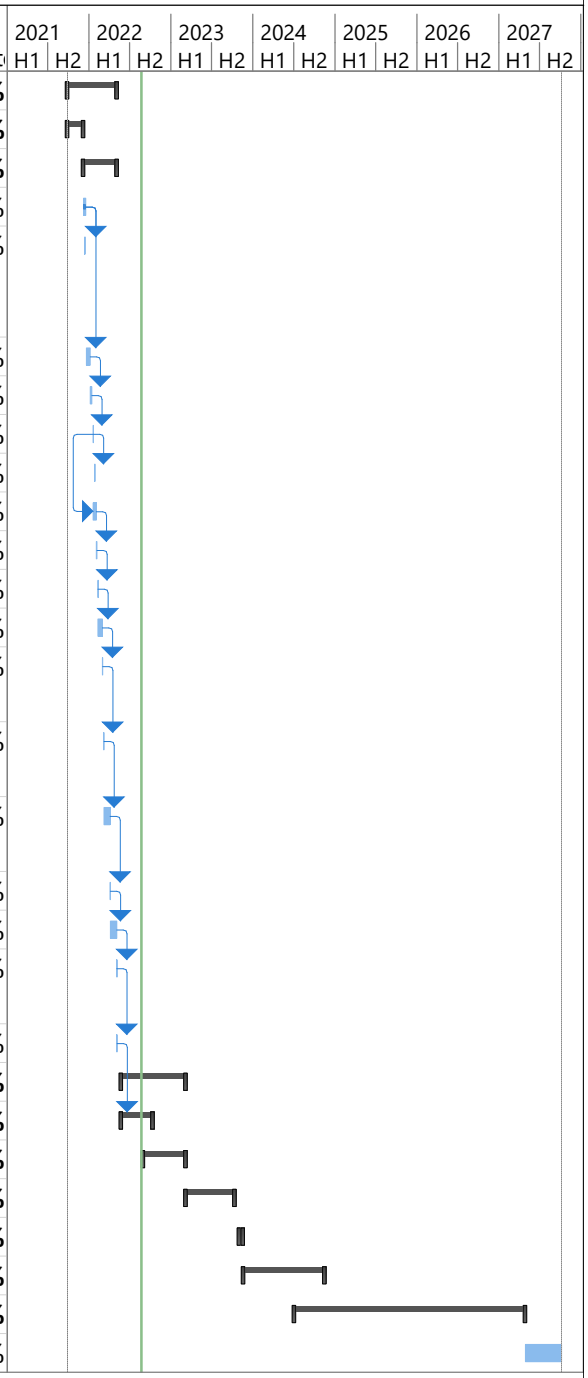
- **Motion to adjourn made by Greg Thompson. Seconded by Tom Christensen.**
  - **10 voted in the affirmative, Stephen Chrusciel, Gordon Smith, Pamela Blair, Frank Paige, Heather Brown, Kathleen Hill, Elizabeth (Beth) Marsian-Boucher, Dr. Daniela LaBarre, Greg Thompson, Tom Christensen.**
  - **0 opposed,**
  - **0 abstained,**
  - **3 absent, Ryan Quimby, Bruce Fenney, Kimberly Collins**
  - **The motion passed unanimously.**

- Meeting adjourned at 4:18 PM.

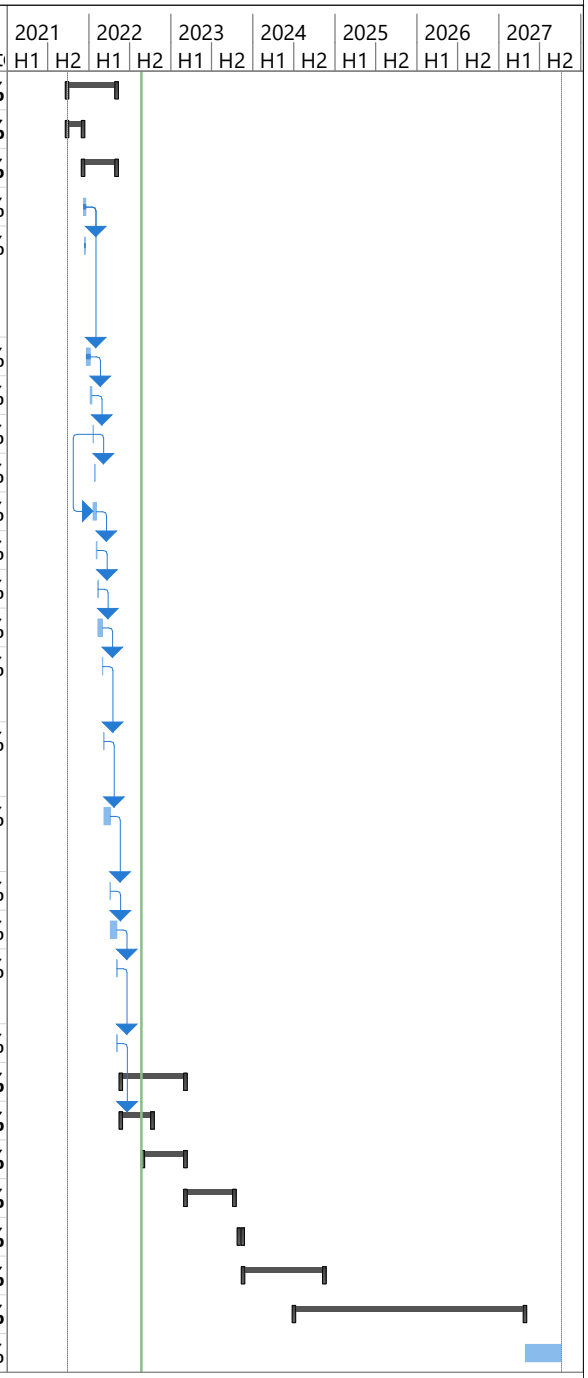
Samantha M. Velazquez
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
8/17/2029

Gordon C. Smith
8/25/23

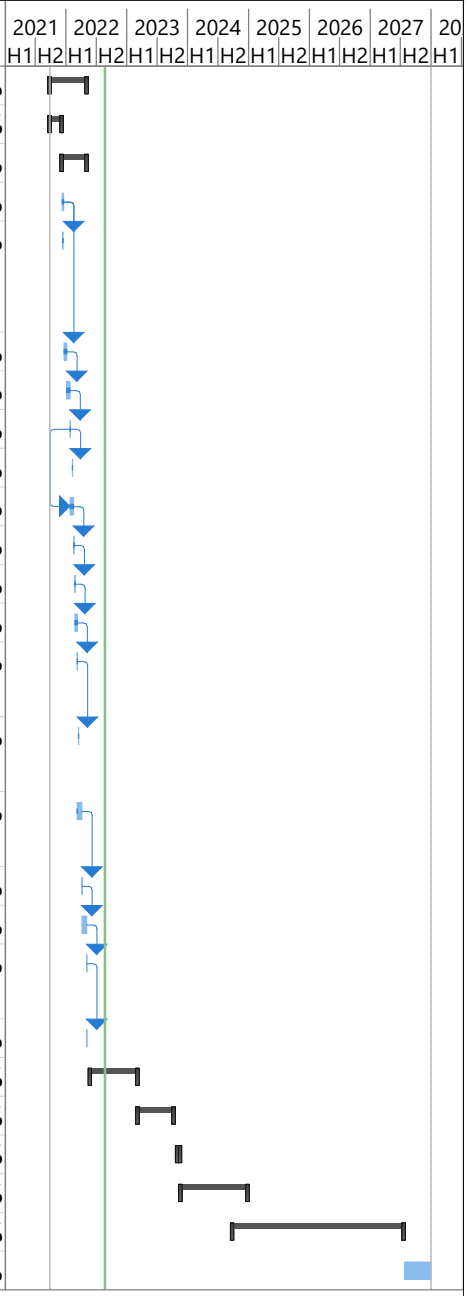
ID	Task Name	Duration	Start	Finish	% Complet
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**27%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**6%**
12	Develop Designer RFS	8 days	Wed 12/8/21	Fri 12/17/21	75%
13	SBC Meeting- Review DSP Process and form Designer Application Review Subcommittee (DARS)	1 day	Mon 12/13/21	Mon 12/13/21	0%
14	Submit Redline Draft to MSBA for Review	13 days	Mon 12/20/21	Wed 1/5/22	0%
15	RFS Ad to Central Register, Newspaper, etc.	6 days	Thu 1/6/22	Thu 1/13/22	0%
16	RFS Ad Appears	1 day	Wed 1/19/22	Wed 1/19/22	0%
17	Informational Meeting & Site Visit	1 day	Wed 1/26/22	Wed 1/26/22	0%
18	Period for Questions from Respondents	10 days	Wed 1/19/22	Tue 2/1/22	0%
19	District Response to Questions	3 days	Wed 2/2/22	Fri 2/4/22	0%
20	RFS Responses Due	1 day	Wed 2/9/22	Wed 2/9/22	0%
21	OPM & DARS Review RFS Responses	14 days	Thu 2/10/22	Tue 3/1/22	0%
22	DARS Team Meeting- Discuss Applications and Create Summary	1 day	Wed 3/2/22	Wed 3/2/22	0%
23	SBC Meeting- Review Designer Application Review Status	1 day	Mon 3/7/22	Mon 3/7/22	0%
24	Designer Applications to MSBA-4 weeks for MSBA Review	20 days	Tue 3/8/22	Mon 4/4/22	0%
25	DSP Meeting Date	1 day	Tue 4/5/22	Tue 4/5/22	0%
26	Designer Fee & Contract Negotiations	20 days	Wed 4/6/22	Tue 5/3/22	0%
27	District Approval of Designer Fee Proposal and Contract	1 day	Wed 5/4/22	Wed 5/4/22	0%
28	Designer Contract Executed	1 day	Thu 5/5/22	Thu 5/5/22	0%
29	**Module 3: Feasibility Study**	**206 days**	**Wed 5/25/22**	**Wed 3/8/23**	**0%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**0%**
51	**Module 3.2 Preferred Schematic Report**	**136 days**	**Wed 8/31/22**	**Wed 3/8/23**	**0%**
61	**Module 4: Schematic Design**	**155 days**	**Thu 3/9/23**	**Wed 10/11/23**	**0%**
73	**Module 5: Funding the Project**	**12 days**	**Thu 11/2/23**	**Fri 11/17/23**	**0%**
78	**Module 6: Detailed Design**	**260 days**	**Mon 11/20/23**	**Fri 11/15/24**	**0%**
113	**Module 7: Construction**	**736 days**	**Wed 7/3/24**	**Wed 4/28/27**	**0%**
120	**Module 8: Completing the Project**	**115 days**	**Thu 4/29/27**	**Wed 10/6/27**	0%



ID	Task Name	Duration	Start	Finish	% Complet
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**39%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**21%**
12	Develop Designer RFS	8 days	Wed 12/8/21	Fri 12/17/21	100%
13	SBC Meeting- Review DSP Process and form Designer Application Review Subcommittee (DARS)	1 day	Mon 12/13/21	Mon 12/13/21	100%
14	Submit Redline Draft to MSBA for Review	13 days	Mon 12/20/21	Wed 1/5/22	100%
15	RFS Ad to Central Register, Newspaper, etc.	6 days	Thu 1/6/22	Thu 1/13/22	0%
16	RFS Ad Appears	1 day	Wed 1/19/22	Wed 1/19/22	0%
17	Informational Meeting & Site Visit	1 day	Wed 1/26/22	Wed 1/26/22	0%
18	Period for Questions from Respondents	10 days	Wed 1/19/22	Tue 2/1/22	0%
19	District Response to Questions	3 days	Wed 2/2/22	Fri 2/4/22	0%
20	RFS Responses Due	1 day	Wed 2/9/22	Wed 2/9/22	0%
21	OPM & DARS Review RFS Responses	14 days	Thu 2/10/22	Tue 3/1/22	0%
22	DARS Team Meeting- Discuss Applications and Create Summary	1 day	Wed 3/2/22	Wed 3/2/22	0%
23	SBC Meeting- Review Designer Application Review Status	1 day	Mon 3/7/22	Mon 3/7/22	0%
24	Designer Applications to MSBA-4 weeks for MSBA Review	20 days	Tue 3/8/22	Mon 4/4/22	0%
25	DSP Meeting Date	1 day	Tue 4/5/22	Tue 4/5/22	0%
26	Designer Fee & Contract Negotiations	20 days	Wed 4/6/22	Tue 5/3/22	0%
27	District Approval of Designer Fee Proposal and Contract	1 day	Wed 5/4/22	Wed 5/4/22	0%
28	Designer Contract Executed	1 day	Thu 5/5/22	Thu 5/5/22	0%
29	**Module 3: Feasibility Study**	**206 days**	**Wed 5/25/22**	**Wed 3/8/23**	**0%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**0%**
51	**Module 3.2 Preferred Schematic Report**	**136 days**	**Wed 8/31/22**	**Wed 3/8/23**	**0%**
61	**Module 4: Schematic Design**	**155 days**	**Thu 3/9/23**	**Wed 10/11/23**	**0%**
73	**Module 5: Funding the Project**	**12 days**	**Thu 11/2/23**	**Fri 11/17/23**	**0%**
78	**Module 6: Detailed Design**	**260 days**	**Mon 11/20/23**	**Fri 11/15/24**	**0%**
113	**Module 7: Construction**	**736 days**	**Wed 7/3/24**	**Wed 4/28/27**	**0%**
120	**Module 8: Completing the Project**	**115 days**	**Thu 4/29/27**	**Wed 10/6/27**	0%



ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**160 days**	**Mon 9/27/21**	**Fri 5/6/22**	**70%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**108 days**	**Wed 12/8/21**	**Fri 5/6/22**	**63%**
12	Develop Designer RFS	8 days	Wed 12/8/21	Fri 12/17/21	100%
13	SBC Meeting- Review DSP Process and form Designer Application Review Subcommittee (DARS)	1 day	Mon 12/13/21	Mon 12/13/21	100%
14	Submit Redline Draft to MSBA for Review	13 days	Mon 12/20/21	Wed 1/5/22	100%
15	RFS Ad to Central Register, Newspaper, etc.	14 days	Thu 1/6/22	Tue 1/25/22	100%
16	RFS Ad Appears	1 day	Wed 1/26/22	Wed 1/26/22	100%
17	Informational Meeting & Site Visit	1 day	Tue 2/8/22	Tue 2/8/22	100%
18	Period for Questions from Respondents	15 days	Wed 1/26/22	Tue 2/15/22	100%
19	District Response to Questions	3 days	Wed 2/16/22	Fri 2/18/22	100%
20	RFS Responses Due	1 day	Wed 2/23/22	Wed 2/23/22	100%
21	OPM & DARS Review RFS Responses	10 days	Wed 2/23/22	Tue 3/8/22	100%
22	DARS Team Meeting- Discuss Applications and Create Summary	1 day	Wed 3/9/22	Wed 3/9/22	100%
23	SBC Meeting- Review Designer Application Review Status	1 day	Wed 3/16/22	Wed 3/16/22	100%
24	Designer Applications to MSBA-4 weeks for MSBA Review	20 days	Wed 3/9/22	Tue 4/5/22	5%
25	DSP Meeting Date	1 day	Wed 4/6/22	Wed 4/6/22	0%
26	Designer Fee & Contract Negotiations	20 days	Thu 4/7/22	Wed 5/4/22	0%
27	District Approval of Designer Fee Proposal and Contract	1 day	Thu 5/5/22	Thu 5/5/22	0%
28	Designer Contract Executed	1 day	Fri 5/6/22	Fri 5/6/22	0%
29	**Module 3: Feasibility Study**	**205 days**	**Thu 5/26/22**	**Wed 3/8/23**	**0%**
60	**Module 4: Schematic Design**	**155 days**	**Thu 3/9/23**	**Wed 10/11/23**	**0%**
73	**Module 5: Funding the Project**	**12 days**	**Thu 11/2/23**	**Fri 11/17/23**	**0%**
78	**Module 6: Detailed Design**	**290 days**	**Mon 11/20/23**	**Fri 12/27/24**	**0%**
132	**Module 7: Construction**	**736 days**	**Fri 9/27/24**	**Fri 7/23/27**	**0%**
142	**Module 8: Completing the Project**	**115 days**	**Mon 7/26/27**	**Fri 12/31/27**	0%



East Longmeadow High School

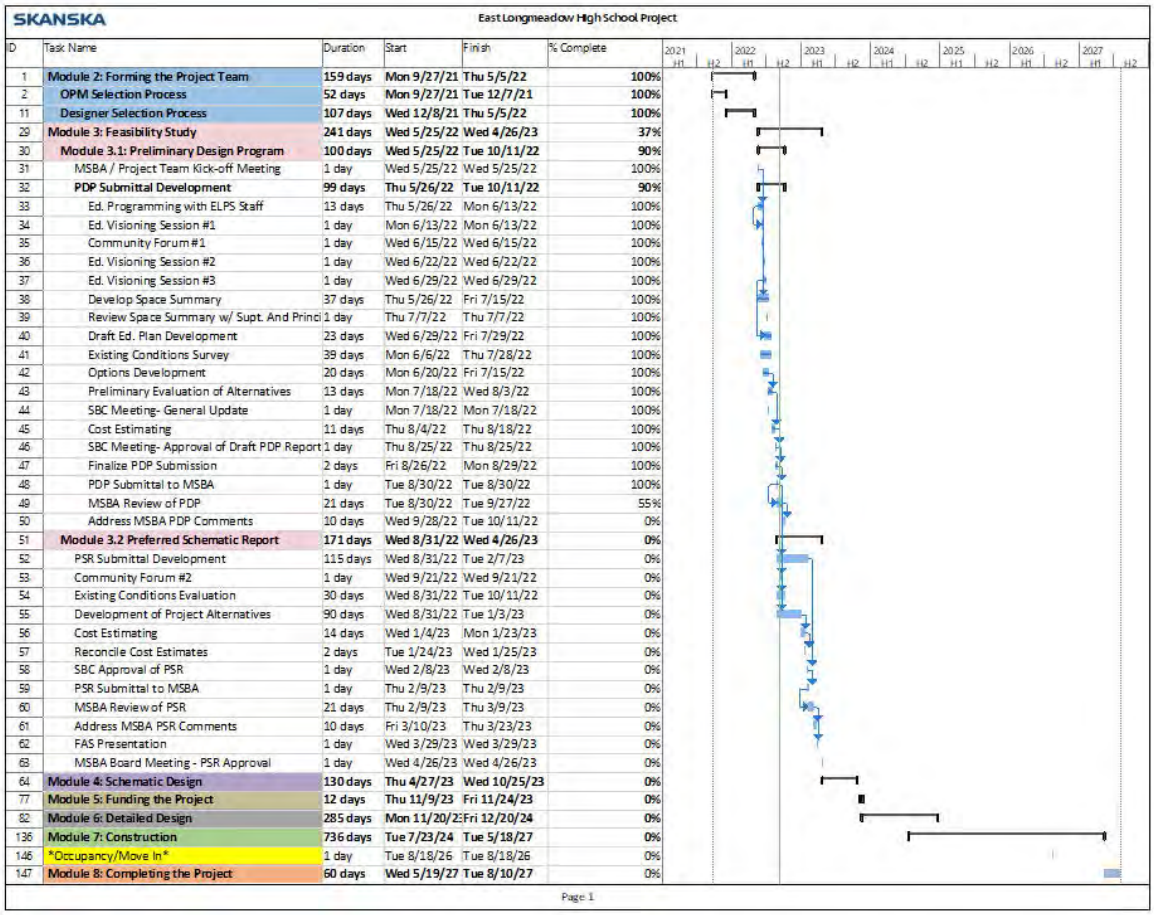
JONES WHITSETT ARCHITECTS

in association with SMMA

SBC Meeting - September 15, 2022

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) **SKANSKA Update**
4) JWA Update
   - Goals of PSR Phase
   - Detailed Review of 4 Selected Options
   - Preview Community Forum Content
5) Communications Update
6) MSBA Budget Revision Request Approval
7) Acknowledgement of SBC Meeting 8/19/21, 9/8/21, 9/27/21
8) SBC Approval of OPM Request for Service Issuance
9) New Business
10) Adjourn



ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**37%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**90%**
31	MSBA / Project Team Kick-off Meeting	1 day	Wed 5/25/22	Wed 5/25/22	100%
32	**PDP Submittal Development**	**99 days**	**Thu 5/26/22**	**Tue 10/11/22**	**90%**
33	Ed. Programming with ELPS Staff	13 days	Thu 5/26/22	Mon 6/13/22	100%
34	Ed. Visioning Session #1	1 day	Mon 6/13/22	Mon 6/13/22	100%
35	Community Forum #1	1 day	Wed 6/15/22	Wed 6/15/22	100%
36	Ed. Visioning Session #2	1 day	Wed 6/22/22	Wed 6/22/22	100%
37	Ed. Visioning Session #3	1 day	Wed 6/29/22	Wed 6/29/22	100%
38	Develop Space Summary	37 days	Thu 5/26/22	Fri 7/15/22	100%
39	Review Space Summary w/ Supt. And Princi	1 day	Thu 7/7/22	Thu 7/7/22	100%
40	Draft Ed. Plan Development	23 days	Wed 6/29/22	Fri 7/29/22	100%
41	Existing Conditions Survey	39 days	Mon 6/6/22	Thu 7/28/22	100%
42	Options Development	20 days	Mon 6/20/22	Fri 7/15/22	100%
43	Preliminary Evaluation of Alternatives	13 days	Mon 7/18/22	Wed 8/3/22	100%
44	SBC Meeting- General Update	1 day	Mon 7/18/22	Mon 7/18/22	100%
45	Cost Estimating	11 days	Thu 8/4/22	Thu 8/18/22	100%
46	SBC Meeting- Approval of Draft PDP Report	1 day	Thu 8/25/22	Thu 8/25/22	100%
47	Finalize PDP Submission	2 days	Fri 8/26/22	Mon 8/29/22	100%
48	PDP Submittal to MSBA	1 day	Tue 8/30/22	Tue 8/30/22	100%
49	MSBA Review of PDP	21 days	Tue 8/30/22	Tue 9/27/22	55%
50	Address MSBA PDP Comments	10 days	Wed 9/28/22	Tue 10/11/22	0%
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**0%**
52	PSR Submittal Development	115 days	Wed 8/31/22	Tue 2/7/23	0%
53	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	0%
54	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 10/11/22	0%
55	Development of Project Alternatives	90 days	Wed 8/31/22	Tue 1/3/23	0%
56	Cost Estimating	14 days	Wed 1/4/23	Mon 1/23/23	0%
57	Reconcile Cost Estimates	2 days	Tue 1/24/23	Wed 1/25/23	0%
58	SBC Approval of PSR	1 day	Wed 2/8/23	Wed 2/8/23	0%
59	PSR Submittal to MSBA	1 day	Thu 2/9/23	Thu 2/9/23	0%
60	MSBA Review of PSR	21 days	Thu 2/9/23	Thu 3/9/23	0%
61	Address MSBA PSR Comments	10 days	Fri 3/10/23	Thu 3/23/23	0%
62	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
63	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
64	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
77	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
82	**Module 6: Detailed Design**	**285 days**	**Mon 11/20/2**	**Fri 12/20/24**	**0%**
136	**Module 7: Construction**	**736 days**	**Tue 7/23/24**	**Tue 5/18/27**	**0%**
146	*Occupancy/Move In*	1 day	Tue 8/18/26	Tue 8/18/26	0%
147	**Module 8: Completing the Project**	**60 days**	**Wed 5/19/27**	**Tue 8/10/27**	**0%**

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) **JWA Update**
   - Goals of PSR Phase
   - Detailed Review of 4 Selected Options
   - Preview Community Forum Content
5) Communications Update
6) MSBA Budget Revision Request Approval
7) Acknowledgement of SBC Meeting 8/19/21, 9/8/21, 9/27/21
8) SBC Approval of OPM Request for Service Issuance
9) New Business
10) Adjourn

Preferred Schematic Report (PSR)

"The purpose of the PSR is to…substantiate and document the District's selection and recommendation of a preferred solution."

Illustrate how the preferred solution meets the District's educational program

- **Updated Educational Program**
- Updated Space Summary
- Updated total project budget and cost estimate
- Narratives on all systems
- Building Plans and Site Plans
- Updated schedule
- **"Budget Statement" needed from District**

Previous SBC Meeting

8/24/2022 JWA SMMA

ELHS OPTIONS MATRIX INFO FOR ESTIMATING		RENO POOL	WO NEW POOL	WO POOL	
OPTION	1	2B	3B	4B	5
SITE	Existing HS	Existing HS	Existing HS	Existing HS	Existing HS
CATEGORY	CODE UPGRADE RENOVATION	RENOVATION & ADDITION	NEW CENTRAL	NEW SOUTH	NEW SPLIT BUILDING
DEMOLITION SF	0	48,730	186,890	186,890	186,890
RENOVATION SF	186,890	138,160	0	0	0
NEW HS SF	0	77,480	194,397	194,397	183,897
NON High School SF	NA	-	15,000	15,000	34,020
TOTAL SF	**186,890**	**215,640**	**209,397**	**209,397**	**217,917**
CONSTRUCTION COST	**$91.8**	**$136.4**	**$138.8**	**$140.5**	**$150.5**
Cost per SF	**$491**	**$633**	**$663**	**$671**	**$690**
Project Cost Multiplier	1.2	1.2	1.2	1.2	1.2
Modulars (In Project Budget)	**3M**	**2.5M**	NA	NA	NA
Pool Stand Alone Bldg	NA	NA	**$10,125,000**	**$10,125,000**	NA
Project Cost	**$113M**	**$166M**	**$176.7M**	**178.7M**	**$180.5M**

4 Options Selected to Carry into PSR

8/24/2022

JWA SMMA

ELHS OPTIONS MATRIX INFO FOR ESTIMATING		RENO POOL	WO NEW POOL	WO POOL	
OPTION	1	2B	3B	4B	5
SITE	Existing HS	Existing HS	Existing HS	Existing HS	Existing HS
CATEGORY	CODE UPGRADE RENOVATION	RENOVATION & ADDITION	NEW CENTRAL	NEW SOUTH	NEW SPLIT BUILDING
DEMOLITION SF	0	48,730	186,890	186,890	186,890
RENOVATION SF	186,890	138,160	0	0	0
NEW HS SF	0	77,480	194,397	194,397	183,897
NON High School SF	NA	-	15,000	15,000	34,020
TOTAL SF	186,890	215,640	209,397	209,397	217,917
CONSTRUCTION COST	$91.8	$136.4	$138.8	$140.5	$150.5
Cost per SF	$491	$633	$663	$671	$690
Project Cost Multiplier	1.2	1.2	1.2	1.2	1.2
Modulars (In Project Budget)	3M	2.5M	NA	NA	NA
Pool Stand Alone Bldg	NA	NA	$10,125,000	$10,125,000	NA
Project Cost	$113M	$166M	$176.7M	178.7M	$180.5M

Evaluation Matrix

EAST LONGMEADOW HIGH SCHOOL CRITERIA OF EVALUATION	Weighting	1 - Base Repair / Code Upgrade		2B - Add/Reno HS - Reno Pool		3B - New HS - Central Location - Pool Separate		[illegible]		5 - New HS - New Community Bldg	
8/23/2022											
Scores: 0 = does not meet 1 = slightly meets 2 = definitely meets criteria		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Meets Educational Space Needs	5	0	0	2	10	2	10	2	10	2	10
Meets Education Vision	5	0	0	1	5	2	10	2	10	2	10
Meets Community Recreational Goals	5	0	0	1	5	2	10	2	10	2	10
Highest MSBA Reimbursement Potential	4	1	4	2	8	1	4	1	4	1	4
Does not require modular rentals during construction	4	0	0	0	0	2	8	2	8	2	8
Meets varied parking needs	3	0	0	1	3	2	6	2	6	2	6
Meets District Office and Town IT/ELCAT Needs	3	1	3	2	6	2	6	2	6	2	6
Allows for greater choice in mechanical systems	2	0	0	0	0	2	4	2	4	2	4
Provides Energy Efficient Building Envelope	2	1	2	1	2	2	4	2	4	2	4
Provides for Flexibility & Expansion Potential	2	0	0	1	2	2	4	2	4	2	4
Maintains current number of fields	2	2	4	2	4	2	4	2	4	2	4
Reduces queueing on Maple Street	1	0	0	1	1	2	2	2	2	2	2
TOTAL SCORE			13		46		72		72		72
APPROX PROJECT COSTS (with modulars and separate pool included)			~ 113 Million		~ 166 Million		~ 176.7 Million		~ 178.7 Million		~ 181 Million

Quick Review of Possible Approaches

Code Upgrade

- No change to interior finishes / plan
- No change to educational pattern
- No changes to site
- Bringing school up to code only
  - Accessibility
  - Fire protection
  - Energy code
  - Hazmat abatement
  - Updated systems

Add/Reno

- Re-arrange interior spaces and move interior walls
- Larger classrooms in classroom wings
- No changes to floor diaphragm (there will be extremely low ceilings)
- Saves larger Auditorium
- New Gym, Cafeteria, Entry
- Upgraded site

New Construction

- Most flexibility for interior layout
- Smaller auditorium than existing
- Higher floor-to-floor heights – with better control of building systems, acoustics, etc.
- Upgraded site

Updates Since Our Last Meeting

Size of addition reduced:

- 16,000 sq ft for Add/Reno Options
  - Minor cuts throughout (see below)
  - Tighter grossing factor on the renovation portion
- 2,640 sq ft for New Options
  - Eliminate Greenhouses (600)
  - Reduce Life Skills 18-22 to 850sf (350)
  - Reduce SPED Conf Rm to 350 (100)
  - Reduce Willie Ross Support to 200sf (200)
  - Reduce Athletic Director Office to 150 (100)
  - Eliminate Staff Lunchroom (Redeploy the Teacher Workroom to Planning Rooms and provide kitchenettes) (450)
  - Eliminate extra med toilet (60)
  - Reduce Academic Conf Rm to 400 (50)
  - Keep SPED Conf Rm but eliminate Guidance Conf Rm (300)

Scope removed:

- Fitness Course $ 94,500
- 200 Seat Guest Bleachers $ 54,000
- Artificial Turf Field $ 1,974,213
- Misc Small Site Deductions ~$ 100,000

Updated Floor Plans and Site Plans

Add/ Reno Implications explored with Engineers

"New" Updates

5B:

- All new construction
- Pool, District Admin & IT/ELCAT as a separate "Community Building"

8/24/2022

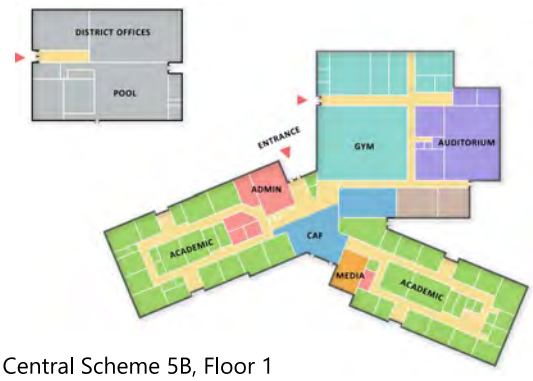
ELHS OPTIONS MATRIX INFO FOR ESTIMATING	
OPTION	5
SITE	Existing HS
CATEGORY	NEW SPLIT BUILDING
DEMOLITION SF	186,890
RENOVATION SF	0
NEW HS SF	183,897
NON High School SF	34,020
TOTAL SF	217,917
CONSTRUCTION COST	$150.5
Cost per SF	$690
Project Cost Multiplier	1.2
Modulars (In Project Budget)	NA
Pool Stand Alone Bldg	NA
Project Cost	$180.5M

9/13/2022

ELHS OPTIONS MATRIX INFO FOR ESTIMATING	NEW/COMMUNITY
OPTION	5B
SITE	Existing HS
CATEGORY	NEW SPLIT BUILDING
DEMOLITION SF	186,890
RENOVATION SF	0
NEW HS SF	180,657
NON High School SF	0
TOTAL SF	180,657
TOTAL CONSTRUCTION COST	$126,795,922
Cost per SF	$701.86
Project Cost Multiplier	1.2
Project Cost	$152,155,106
Estimated Reimbursement Rate	Est. 30%
Estimated Grant	$45,646,531.9
Estimated Local Share	$106,508,574
Modulars (In Project Budget)	NA
Stand Alone Bldg (either pool or community)	$23,120,332
Estimated Local Share TOTAL	$129,628,907

5B – New School + Community Building

- Separate Community building
- 2 separate drop-off loops, one at front and one at side
- Buffered parking at front with pedestrian spine
- Removes Norden St. Emergency access
- Gains space for softball field



Central Scheme 5B, Floor 1

Central Scheme 5B, Floor 2

5B – New School + Community Building

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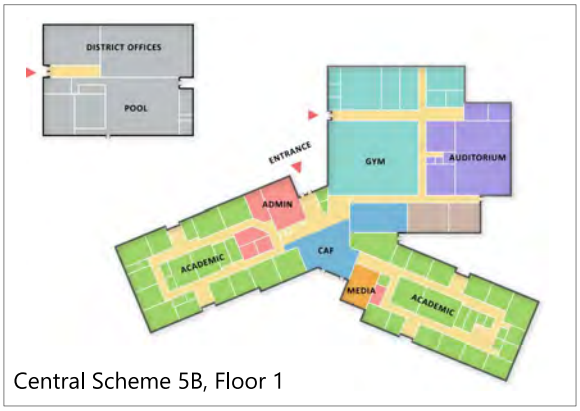
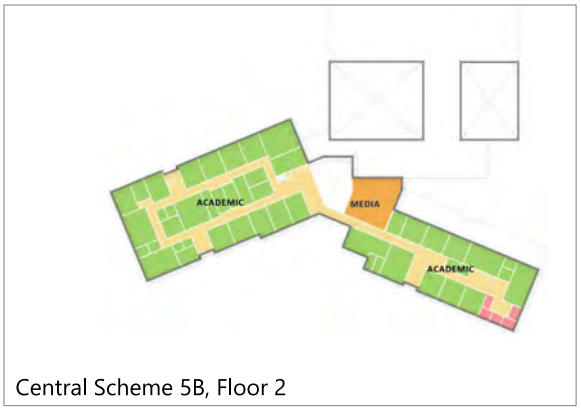


Central Scheme 5B, Floor 1



Central Scheme 5B, Floor 2

"New" Updates

3C:

- All new construction
- 6 lane pool is a separate project – but is basically "connected" to the building
- District Administration & IT/ELCAT is included as part of the school

8/24/2022

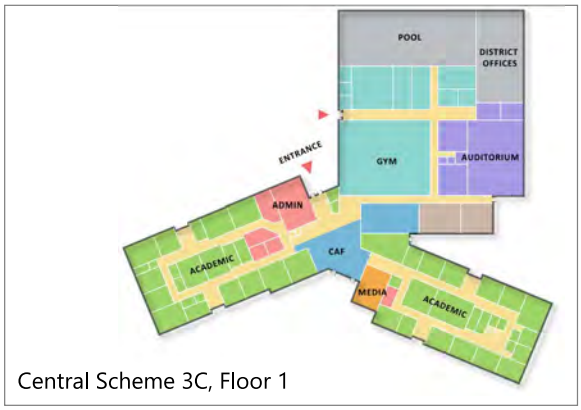
ELHS OPTIONS MATRIX INFO FOR ESTIMATING	WO NEW POOL
OPTION	3B
SITE	Existing HS
CATEGORY	NEW CENTRAL
DEMOLITION SF	186,890
RENOVATION SF	0
NEW HS SF	194,397
NON High School SF	15,000
TOTAL SF	209,397
CONSTRUCTION COST	$138.8
Cost per SF	~~$663~~ $714
Project Cost Multiplier	1.2
Modulars (In Project Budget)	NA
Pool Stand Alone Bldg	$10,125,000
Project Cost	$176.7M

9/13/2022 JWA

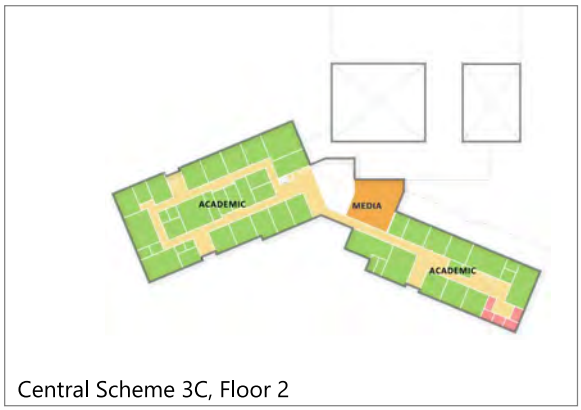
ELHS OPTIONS MATRIX INFO FOR ESTIMATING	NEW/POOL
OPTION	3C
SITE	Existing HS
CATEGORY	NEW CENTRAL
DEMOLITION SF	186,890
RENOVATION SF	0
NEW HS SF	191,157
NON High School SF	0
TOTAL SF	191,157
TOTAL CONSTRUCTION COST	$134,165,452
Cost per SF	$701.86
Project Cost Multiplier	1.2
Project Cost	$160,998,542
Estimated Reimbursement Rate	Est. 30%
Estimated Grant	$48,299,562.7
Estimated Local Share	$112,698,980
Modulars (In Project Budget)	NA
Stand Alone Bldg (either pool or community)	$10,125,000
Estimated Local Share TOTAL	$122,823,980

3C – New School

- Community program incorporated into High School
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden St. Emergency access



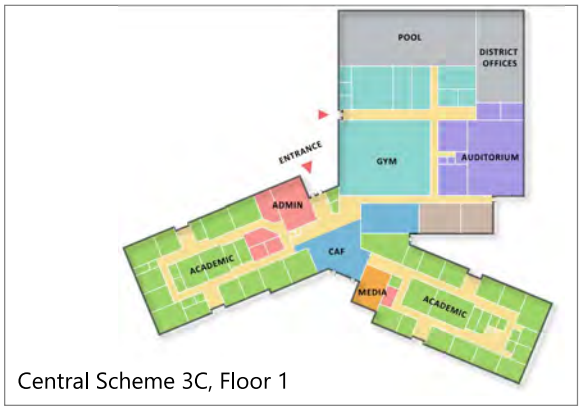
Central Scheme 3C, Floor 1



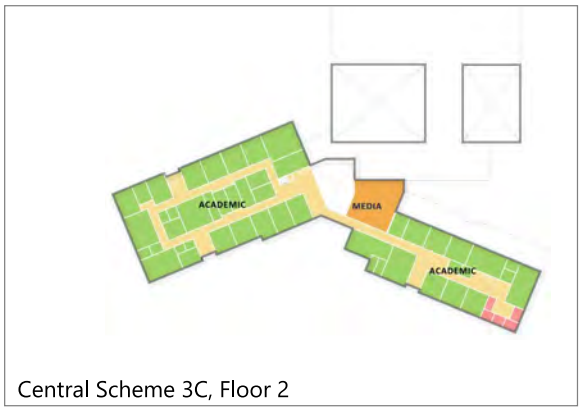
Central Scheme 3C, Floor 2

3C – New School

- Community program incorporated into High School
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden St. Emergency access



Central Scheme 3C, Floor 1



Central Scheme 3C, Floor 2

"Add/Reno" Updates

2C:

- Complete Renovation and Addition
- 6 lane pool is a separate project – but is basically "connected" to the building
- District Administration & IT/ELCAT is included as part of the school

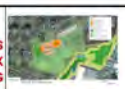
2D:

- Complete Renovation and Addition
- Pool, District Admin & IT/ELCAT as a separate "Community Building"

8/24/2022

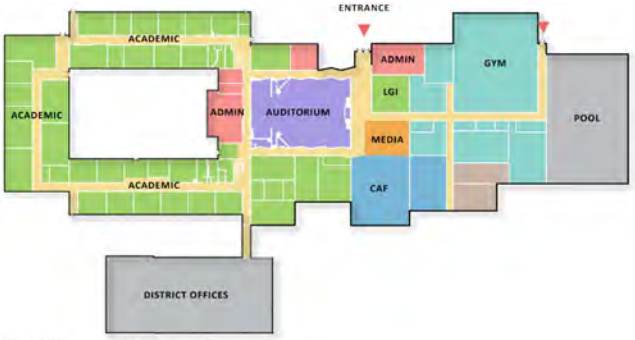
ELHS OPTIONS MATRIX INFO FOR ESTIMATING	RENO POOL
OPTION	2B
SITE	Existing HS
CATEGORY	RENOVATION & ADDITION
DEMOLITION SF	48,730
RENOVATION SF	138,160
NEW HS SF	77,480
NON High School SF	-
TOTAL SF	215,640
CONSTRUCTION COST	$136.4
Cost per SF	$633
Project Cost Multiplier	1.2
Modulars (In Project Budget)	2.5M
Pool Stand Alone Bldg	NA
Project Cost	$166M

9/13/2022

ELHS OPTIONS MATRIX INFO FOR ESTIMATING	 NEW/POOL	NEW /POOL
OPTION	2C	2D
SITE	Existing HS	Existing HS
CATEGORY	RENOVATION & ADDITION	RENOVATION & ADDITION
DEMOLITION SF	48,730	67,678
RENOVATION SF	113,356	99,425
NEW HS SF	86,093	86,093
NON High School SF	-	-
TOTAL SF	199,449	185,518
TOTAL CONSTRUCTION COST	$123,911,680	$115,256,768
Cost per SF	$621.27	$621.27
Project Cost Multiplier	1.2	1.2
Project Cost	$148,694,016	$138,308,121
Estimated Reimbursement Rate	Est. 30%	Est. 30%
Estimated Grant	$44,608,204.9	$41,492,436.4
Estimated Local Share	$104,085,811	$96,815,685
Modulars (In Project Budget)	$2,500,000	$2,500,000
Stand Alone Bldg (either pool or community)	$10,125,000	$23,120,332
Estimated Local Share TOTAL	$116,710,811	$122,436,017

Add Reno 2C

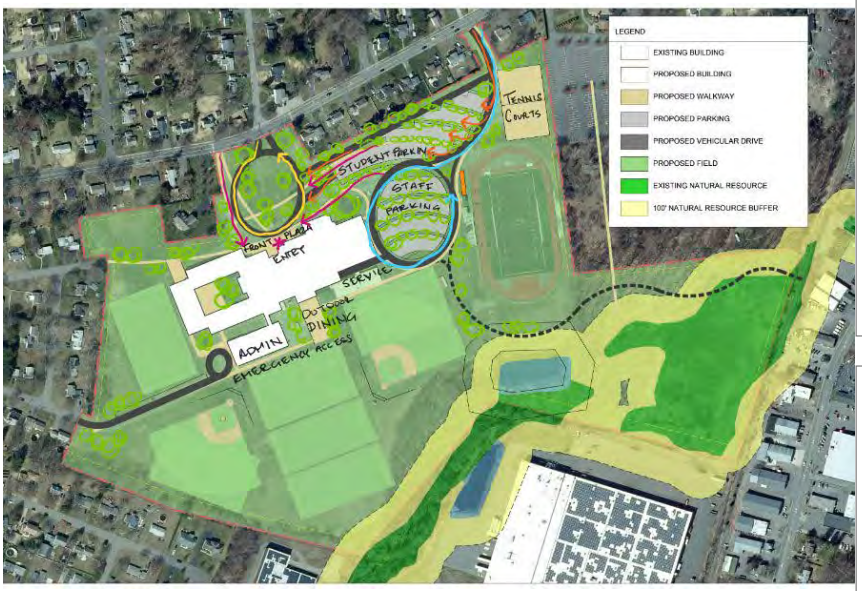
- Community program incorporated into High School
- 2 separate drop-off loops, at front and side
- Brings parking closer to building and relocates tennis courts
- Maintains Norden St. Admin and Emergency access

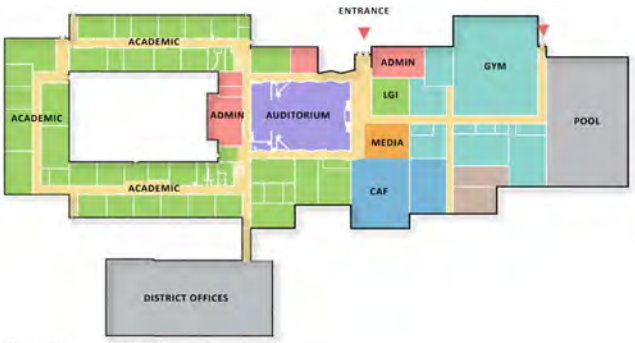


Add Reno 2C, Floor 1

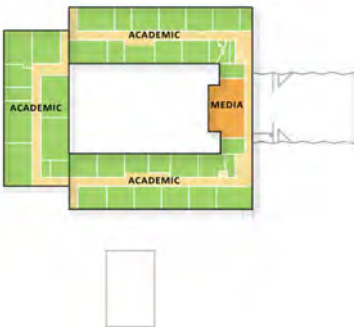
Add Reno 2C, Floor 2

Add Reno 2C





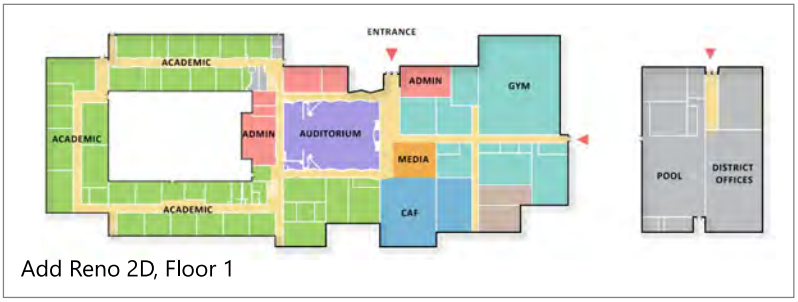
Add Reno 2C, Floor 1



Add Reno 2C, Floor 2

- Community program incorporated into High School
- 2 separate drop-off loops, at front and side
- Brings parking closer to building and relocates tennis courts
- Maintains Norden St. Admin and Emergency access

Add Reno 2D

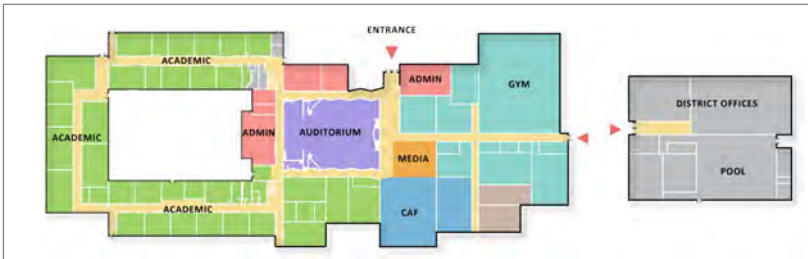


Add Reno 2D, Floor 1

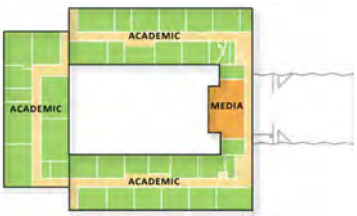
Add Reno 2D, Floor 2

- Separate Community building
- 2 separate drop-off loops, at front and side
- Brings parking closer to building and relocates tennis courts to rear
- Maintains Norden St. Emergency access via 12' path

Add Reno 2D



Add Reno 2D, Floor 1



Add Reno 2D, Floor 2

- Separate Community building
- 2 separate drop-off loops, at front and side
- Brings parking closer to building and relocates tennis courts to rear
- Maintains Norden St. Emergency access via 12' path

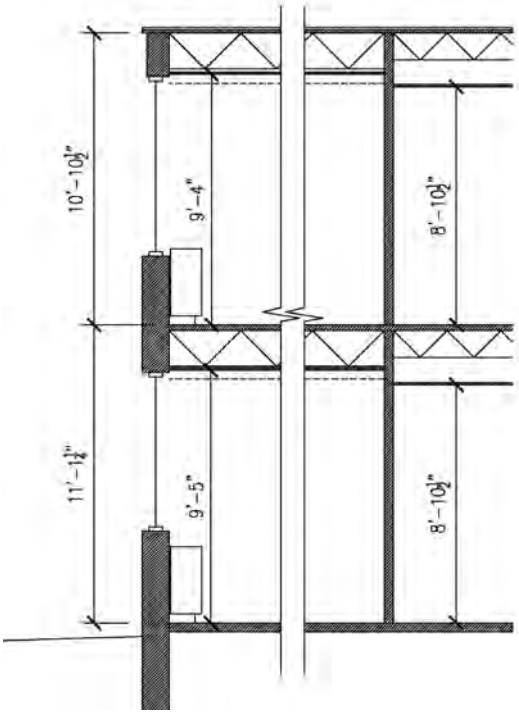
Side-by-Side Comparison

- $16.5M cost spread in local share

ELHS OPTIONS MATRIX INFO FOR ESTIMATING	RENO POOL	NEW/POOL	NEW /POOL	NEW/POOL	NEW/COMMUNITY
OPTION	1	2C	2D	3C	5B
SITE	Existing HS	Existing HS	Existing HS	Existing HS	Existing HS
CATEGORY	CODE UPGRADE RENOVATION	RENOVATION & ADDITION	RENOVATION & ADDITION	NEW CENTRAL	NEW SPLIT BUILDING
DEMOLITION SF	0	48,730	67,678	186,890	186,890
RENOVATION SF	186,890	113,356	99,425	0	0
NEW HS SF	0	86,093	86,093	191,157	180,657
NON High School SF	NA	-	-	0	0
TOTAL SF	186,890	199,449	185,518	191,157	180,657
TOTAL CONSTRUCTION COST	$91,779,810	$123,911,680	$115,256,768	$134,165,452	$126,795,922
Cost per SF	$491.09	$621.27	$621.27	$701.86	$701.86
Project Cost Multiplier	1.2	1.2	1.2	1.2	1.2
Project Cost	$110,135,772	$148,694,016	$138,308,121	$160,998,542	$152,155,106
Estimated Reimbursement Rate	Unknown	Est. 30%	Est. 30%	Est. 30%	Est. 30%
Estimated Grant	$33,040,731.6	$44,608,204.9	$41,492,436.4	$48,299,562.7	$45,646,531.9
Estimated Local Share	$77,095,040	$104,085,811	$96,815,685	$112,698,980	$106,508,574
Modulars (In Project Budget)	$3,000,000	$2,500,000	$2,500,000	NA	NA
Stand Alone Bldg (either pool or community)	-	$10,125,000	$23,120,332	$10,125,000	$23,120,332
Estimated Local Share TOTAL	$113,135,772	$116,710,811	$122,436,017	$122,823,980	$129,628,907

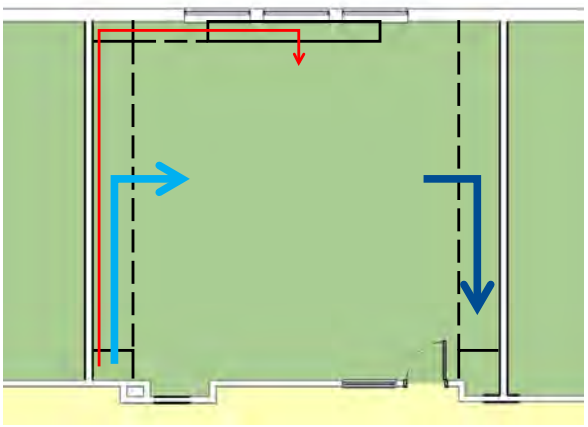
Add/Reno – Code Upgrade
Ceiling Height Implications

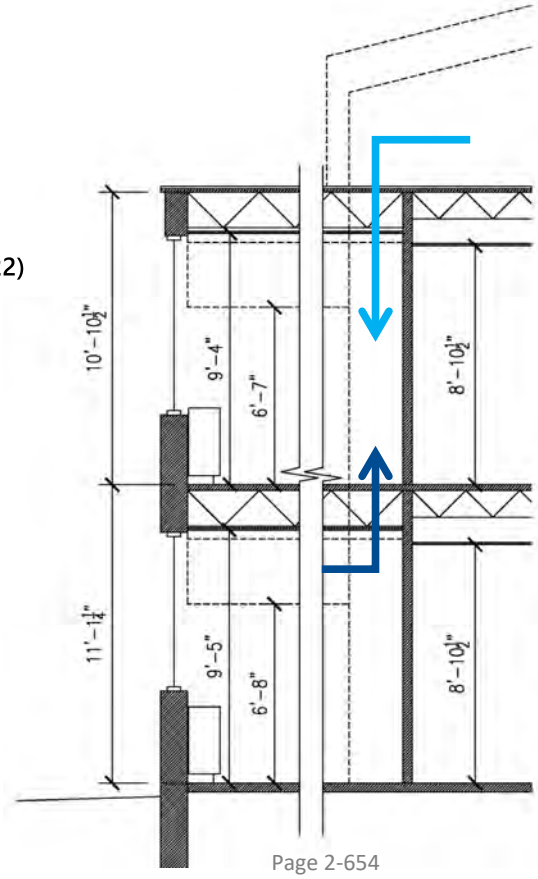
- Current ceiling is at 9′-4″ and 9′-5″
- Floor to floor is 11′-1 ¼″. Typically would be ~14′ in new construction
- Ceilings would have to be lowered at least 4″ for new ceiling systems
- New fire protection would likely run below the new ceiling
- Light fixtures would likely be recessed – and not pendant
- HVAC is difficult
  - Likely need a separate heating / cooling element at the window
  - Separate system for ventilation – will need to come from above the hallway (doghouse) – and then multiple shafts coming down.



Add/Reno – Code Upgrade
HVAC Implications

- Linear, insulated “dog-house” running above hallway – with multiple shafts coming down
- Two vertical shafts in each corner of each classroom (supply and return) (44x22)
- Soffits on each side of the classroom (44x33)
- ~9′ long, 1′ deep, 2′-6″ floor mounted Fan Coil Unit needed at window – and chase to contain piping to that unit.
- VAV boxes will be located in the soffits – not ideal acoustically
- Significant structural implications to the above requirements





5B – New School + Community Building

2C– Add Reno

3C – New School

2D– Add Reno + Community Building

Community Forum

AGENDA:

- Welcome (SBC)
- Introduction to process/timeline (Skanska)
- Visioning Process (SBC)
- Educational Goals & Priorities (SBC)
- Existing Conditions Evaluation (Design Team)
- Review of Options (Design Team)
- Q&A
- Comment Gathering Activity
- Review of Comments/Discussion
- Next Steps (Skanska/SBC)

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) JWA Update
   - Goals of PSR Phase
   - Detailed Review of 4 Selected Options
   - Preview Community Forum Content
5) Communications Update
6) MSBA Budget Revision Request Approval
7) Acknowledgement of SBC Meeting 8/19/21, 9/8/21, 9/27/21
8) SBC Approval of OPM Request for Service Issuance
9) New Business
10) Adjourn

Upcoming Community Meeting
Sept. 21, 6pm, Senior Center

JWA | SMMA

Next Meeting Time?

JWA | SMMA

END

JWA | SMMA

Evolution of New Schemes

1 Base Repair	→	**1** Base Repair
2B Add Reno + renovate existing 4 lane pool	→	**2C** Add Reno + New Pool **2D** Add Reno + New Community Bldg
3B New School + New Pool (separate project)	→	**3C** New School + New Pool
5 New School + New Community Bldg (separate project)	→	**5B** New School + New Community Bldg

(design refinements & reduced costs throughout the above)

New Construction Options

3C New Construction with New Pool

Community program incorporated into High School

5B New Construction with Community Building

Separate Community building

New Construction Options

3C New Construction with New Pool

- Community program incorporated into High School
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden St. Emergency access

Hi Sam – We are in a zoom meeting – just sent an email – if you want to join us. Discussing PPT...

New Construction Options

3C New Construction with New Pool

- Community program incorporated into High School
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden St. Emergency access

New Construction Options

5B New w/ Community Building

- Separate Community building
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New Construction Options

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- Gains space for softball field

Add Reno Options

2C Add/Reno with New Pool

- Keeps community program at High School
- Keeps Annex building
- Creates double loop traffic pattern

2D Add/Reno with Community Building

- Shared pool, district offices, concessions building
- Eliminates Annex building

East Longmeadow High School

JWA
JONES WHITSETT
ARCHITECTS

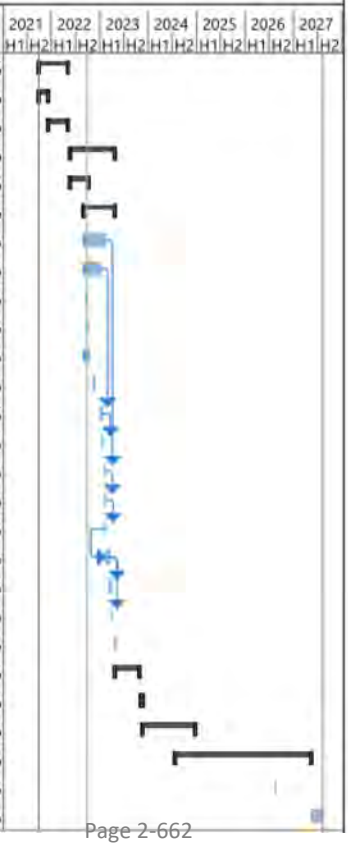
in association with
SMMA

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) **SKANSKA Update**
4) JWA Update
   - Community Forum Recap
   - Focus Groups
   - Design Update
5) Communications Update
6) New Business
7) Adjourn

SKANSKA — East Longmeadow High School Project

ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**51%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**95%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**21%**
52	PSR Submittal Development	115 days	Wed 8/31/22	Tue 2/7/23	15%
53	Development of Project Alternatives	90 days	Wed 8/31/22	Tue 1/3/23	25%
54	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	100%
55	Design Team Charrette	1 day	Wed 9/28/22	Wed 9/28/22	100%
56	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 10/11/22	70%
57	Community Forum #3	1 day	Wed 11/16/22	Wed 11/16/22	0%
58	Cost Estimating	14 days	Wed 1/4/23	Mon 1/23/23	0%
59	Reconcile Cost Estimates	2 days	Tue 1/24/23	Wed 1/25/23	0%
60	SBC Approval of PSR	1 day	Wed 2/8/23	Wed 2/8/23	0%
61	Finalize PSR	3 days	Thu 2/9/23	Mon 2/13/23	0%
62	PSR Submittal to MSBA	1 day	Tue 2/14/23	Tue 2/14/23	0%
63	MSBA Review of PSR	21 days	Tue 2/14/23	Tue 3/14/23	0%
64	Address MSBA PSR Comments	10 days	Wed 3/15/23	Tue 3/28/23	0%
65	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
66	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
67	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
85	**Module 6: Detailed Design**	**285 days**	**Mon 11/20/23**	**Fri 12/20/24**	**0%**
139	**Module 7: Construction**	**736 days**	**Tue 7/23/24**	**Tue 5/18/27**	**0%**
149	*Occupancy/Move In*	1 day	Tue 8/18/26	Tue 8/18/26	0%
150	**Module 8: Completing the Project**	**60 days**	**Wed 5/19/27**	**Tue 8/10/27**	**0%**



AGENDA

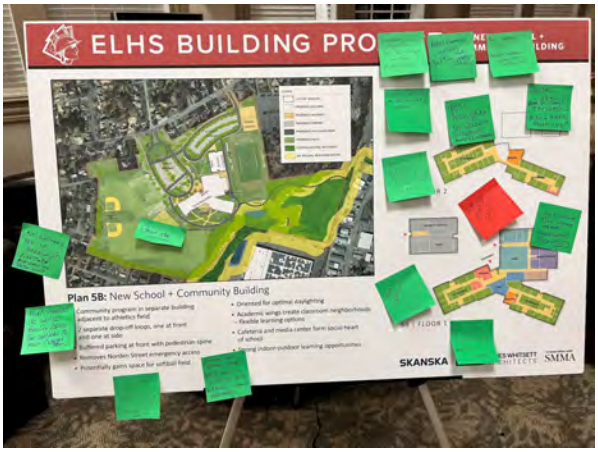
1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) **JWA Update**
   - Community Forum Recap
   - Focus Groups
   - Design Update
5) Communications Update
6) New Business
7) Adjourn

Community Forum Feedback

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
PROJECT COST $170-175M	PROJECT COST $168-173M	PROJECT COST $160-165M	PROJECT COST $110-115M
ESTIMATED GRANT $45M	ESTIMATED GRANT $48M	ESTIMATED GRANT $45M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

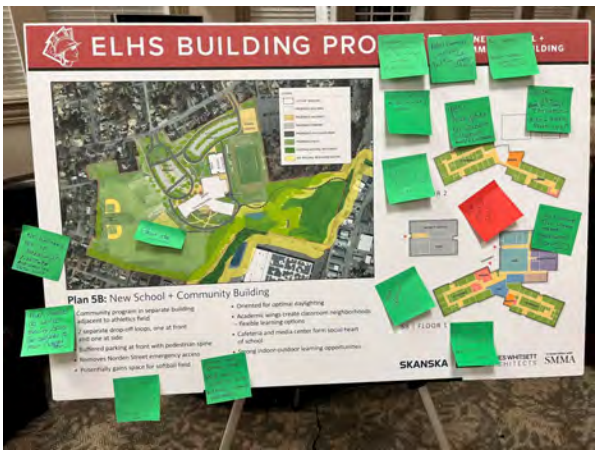
Community Forum Feedback

- Base Repair & Add-Reno
  - Does not meet modern education needs
  - Band-Aid, money pit, waste of money in long term, not cost effective
  - Does not help our property values
  - Our kids need better
- New Construction
  - Safer for all who enter
  - Best flow – traffic, pedestrian, athletics
  - Love the bike path connection
  - Yeah softball!
  - No student disruption during construction
  - Best option for current and future generations, room to grow
  - Natural light, openness, quiet spaces
  - Mixed opinions on attached vs. separate pool/community building
  - Town should see options without pool



Community Forum Feedback

- Committee Follow Up
- Planning for Next Forum
  - Goals
  - Advertising
  - Location



Focus Group Formation

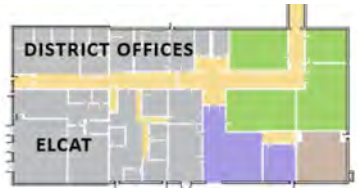
- Ideally 4-6 members, including 1-2 SBC members
- Would spend more time than SBC reviewing Design Team proposal and responding to Design Team information requests

Systems & Sustainability	Site & Recreation	Educational Programming
Stephen Chrusciel? **Bruce Fenney?** Bailey Mitchell?	**Bruce Fenney** Athletic Director? Public Safety Rep?	**Frank Paige** --Faculty --Students

Design Updates

- 9/28 observations and design team charrette on site
- Review of Community Meeting feedback
- Additional development of site circulation and educational program layout
- Exploration of existing District Offices Bldg (aka "the Annex") for retention

Design Updates



Keeping the Annex as Community Building/No Pool

Opportunities:

- Potential reduction of MSBA project cost total by removing the district offices, ELCAT and IT scope from within the main building.
- May provide addition square footage for town use in the Annex

Challenges:

- Requires severing and resizing/replacing mechanical system
- Requires new electric service or feed from new school
- New entries, parking, site access
- Possible need to keep Norden St
- Loss of useful athletic field space
- Oversized for current needs
- Keeps unattractive building in prominent location, blocks view into site

- Questions for SBC:
  - Should this scenario be explored further?
  - Should it be assumed that the Project would address utility issues and the Town would address any renovation as a distinct project?
  - Or should the full scope of abatement and renovation of the Annex be included within the Project?

Design Team Goals

- Further development of Option 3C.
- Further development of community program location/phasing options.
- Aiming to review more detailed floor plans and specific room adjacencies in next meeting.
- Faculty Meeting on Oct. 4 to review progress and recruit for Ed Planning Subcommittee.
- Initiating traffic study and site survey.
- Prep for first sustainability charette.

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) JWA Update
   - Community Forum Recap
   - Focus Groups
   - Design Update
5) **Communications Update**
6) **New Business**
7) Adjourn

Next Meeting Time?

END

JWA | SMMA

Side-by-Side Comparison

OPTION 5B New School + Community Building	**OPTION 3C** New School	**OPTION 2C** Add/Reno	**OPTION 1** Base Repair
PROJECT COST $170-175M	PROJECT COST $168-173M	PROJECT COST $160-165M	PROJECT COST $110-115M
ESTIMATED GRANT $45M	ESTIMATED GRANT $48M	ESTIMATED GRANT $45M	ESTIMATED GRANT Unknown
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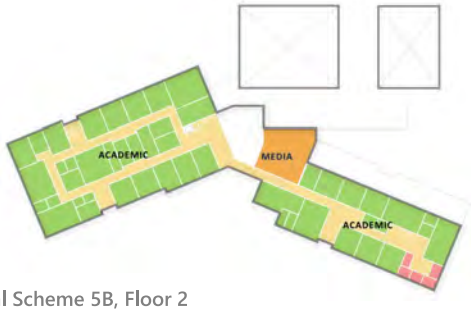
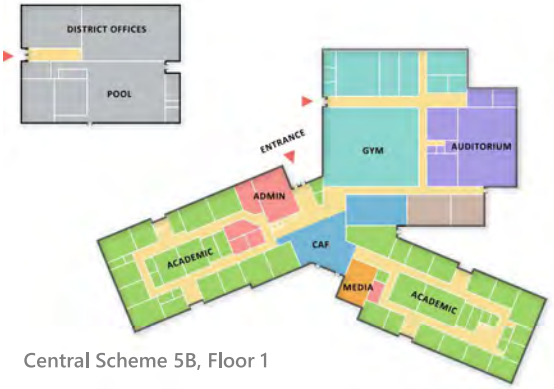
5B – New School + Community Building

- Community program in separate building adjacent to athletics field
- 2 separate drop-off loops, one at front & one at side
- Buffered parking at front with pedestrian spine
- Removes Norden Street emergency access
- Potentially gains space for softball field
- Oriented for optimal daylighting
- Academic wings create classroom neighborhoods – flexible learning options
- Cafeteria & media center form social heart of school
- Strong indoor-outdoor learning opportunities



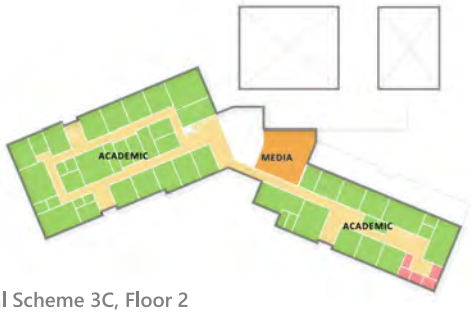
Central Scheme 5B, Floor 2



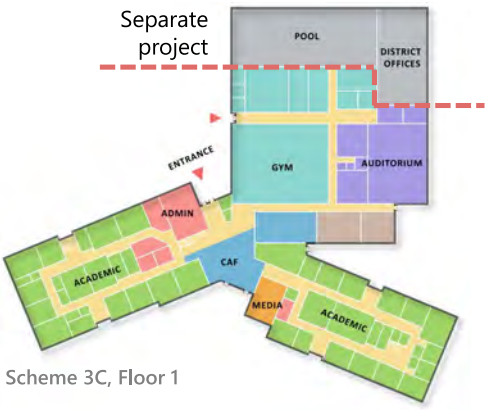
Central Scheme 5B, Floor 1

3C – New School

- Community program integrated with high school
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden Street emergency access
- Oriented for optimal daylighting
- Academic wings create classroom neighborhoods – flexible learning options
- Cafeteria & media center form social heart of school
- Strong indoor-outdoor learning opportunities



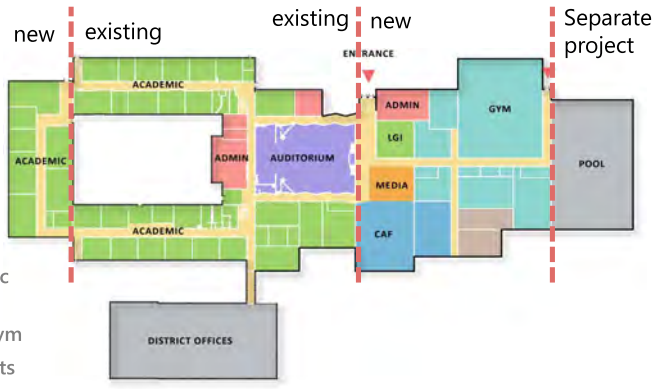
Central Scheme 3C, Floor 2



Central Scheme 3C, Floor 1

Add Reno 2C

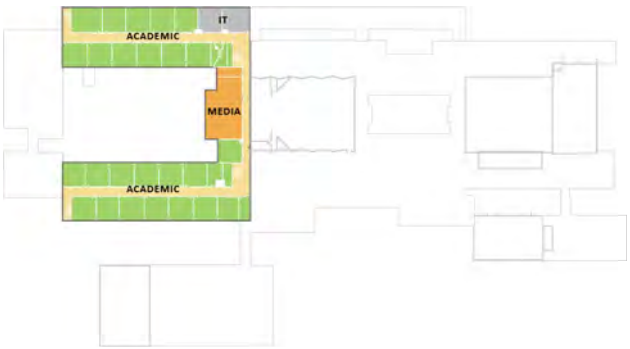
Add Reno 2C, Floor 2



Add Reno 2C, Floor 1

- Community program stays in current District Office building
- 2 separate drop-off loops, at front & side
- Brings parking closer to building & relocates tennis courts
- Maintains Norden Street admin & emergency access
- Roughly 60% renovation – including academic wings & auditorium
- New 2-story STEAM wing, Cafeteria, Entry, Gym
- Limited by existing low floor-to-ceiling heights

1– Base Repair

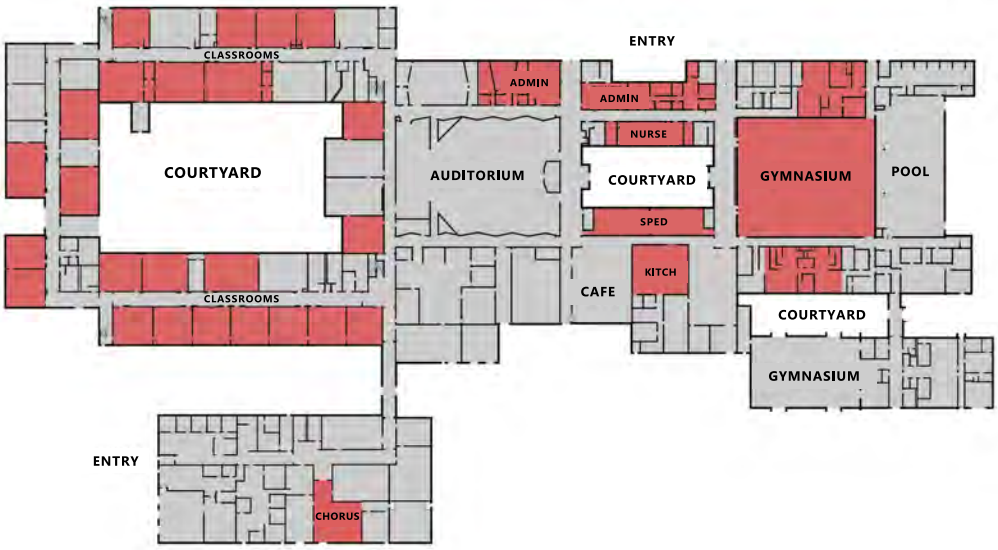


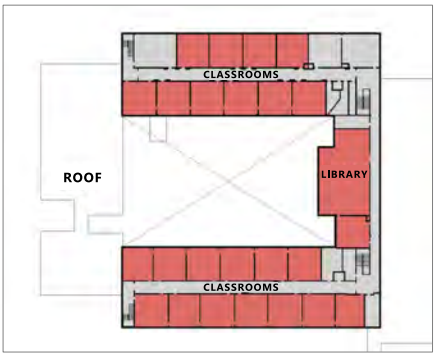
Base Repair 1, Floor 2

Base Repair 1, Floor 1

- No changes to interior walls or finishes – floor plan remains as is
- Upgrades would address: life safety, hazmat, accessibility, energy code, building systems
- Site remains as is

Existing Building
Conditions Summary





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Spaces undersized by 5% or more from MSBA guidelines

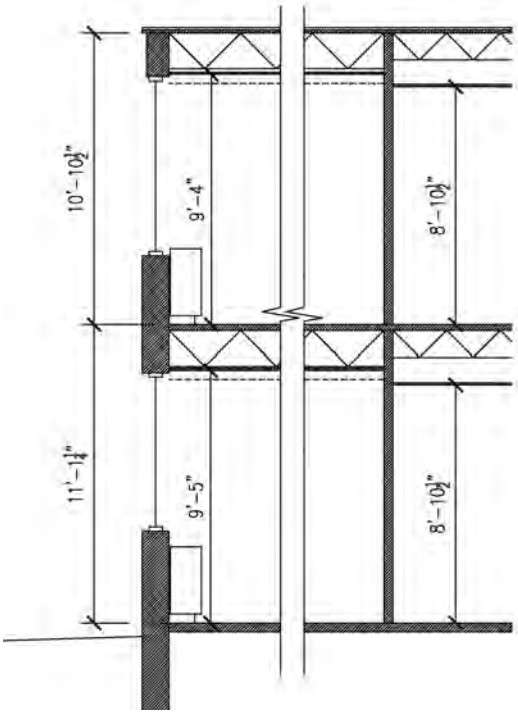
Side-by-Side Comparison

- $16.5M cost spread in local share

ELHS OPTIONS MATRIX INFO FOR ESTIMATING	RENO POOL	NEW/POOL	NEW /POOL	NEW/POOL	NEW/COMMUNITY
OPTION	1	2C	2D	3C	5B
SITE	Existing HS	Existing HS	Existing HS	Existing HS	Existing HS
CATEGORY	CODE UPGRADE RENOVATION	RENOVATION & ADDITION	RENOVATION & ADDITION	NEW CENTRAL	NEW SPLIT BUILDING
DEMOLITION SF	0	48,730	67,678	186,890	186,890
RENOVATION SF	186,890	113,356	99,425	0	0
NEW HS SF	0	86,093	86,093	191,157	180,657
NON High School SF	NA	-	-	0	0
TOTAL SF	186,890	199,449	185,518	191,157	180,657
TOTAL CONSTRUCTION COST	$91,779,810	$123,911,680	$115,256,768	$134,165,452	$126,795,922
Cost per SF	$491.09	$621.27	$621.27	$701.86	$701.86
Project Cost Multiplier	1.2	1.2	1.2	1.2	1.2
Project Cost	$110,135,772	$148,694,016	$138,308,121	$160,998,542	$152,155,106
Estimated Reimbursement Rate	Unknown	Est. 30%	Est. 30%	Est. 30%	Est. 30%
Estimated Grant	$33,040,731.6	$44,608,204.9	$41,492,436.4	$48,299,562.7	$45,646,531.9
Estimated Local Share	$77,095,040	$104,085,811	$96,815,685	$112,698,980	$106,508,574
Modulars (In Project Budget)	$3,000,000	$2,500,000	$2,500,000	NA	NA
Stand Alone Bldg (either pool or community)	-	$10,125,000	$23,120,332	$10,125,000	$23,120,332
Estimated Local Share TOTAL	$113,135,772	$116,710,811	$122,436,017	$122,823,980	$129,628,907

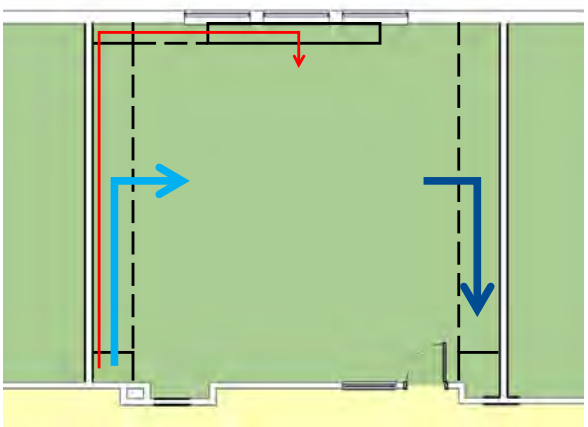
Add/Reno – Code Upgrade
Ceiling Height Implications

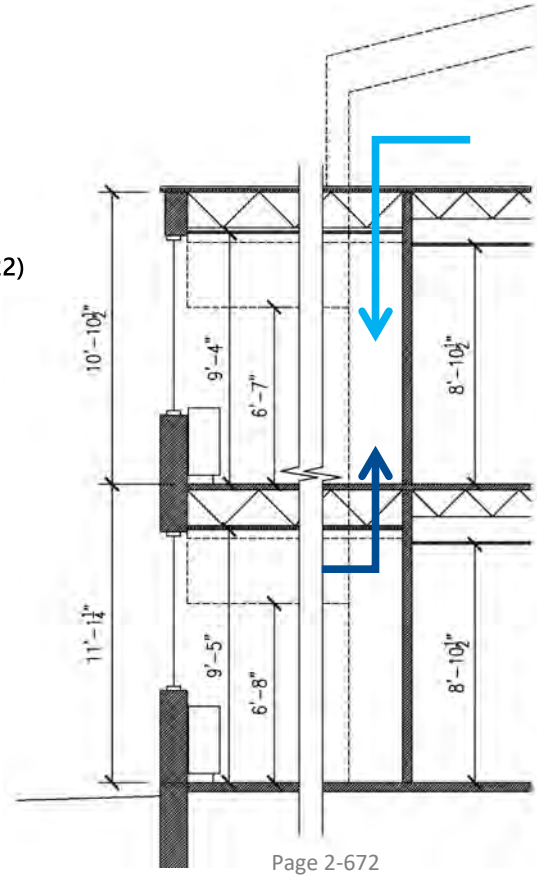
- Current ceiling is at 9′-4″ and 9′-5″
- Floor to floor is 11′-1 ¼″. Typically would be ~14′ in new construction
- Ceilings would have to be lowered at least 4″ for new ceiling systems
- New fire protection would likely run below the new ceiling
- Light fixtures would likely be recessed – and not pendant
- HVAC is difficult
    - Likely need a separate heating / cooling element at the window
    - Separate system for ventilation – will need to come from above the hallway (doghouse) – and then multiple shafts coming down.



Add/Reno – Code Upgrade
HVAC Implications

- Linear, insulated “dog-house” running above hallway – with multiple shafts coming down
- Two vertical shafts in each corner of each classroom (supply and return) (44x22)
- Soffits on each side of the classroom (44x33)
- ~9′ long, 1′ deep, 2′-6″ floor mounted Fan Coil Unit needed at window – and chase to contain piping to that unit.
- VAV boxes will be located in the soffits – not ideal acoustically
- Significant structural implications to the above requirements





SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Community Forum
September 21, 2022

Topics of Discussion

- Introduction
- MSBA Process Overview
- Visioning & Priorities
- Existing Conditions
- Review of Options
- Q&A, Gathering Input
- Next Steps

Introductions & Project Team

ELHS School Building Committee

Stephen Chrusciel, School Building Committee Chair

Gordon Smith, Superintendent of Schools

Pamela Blair, Assistant Superintendent for Business

Frank Paige, ELHS Principal

Heather Brown, ELPS Director of Curriculum

Kathleen Hill, Town Council Member

Stephen Lonergan, Town Accountant and Town Finance Director

Mary McNally, Town Manager

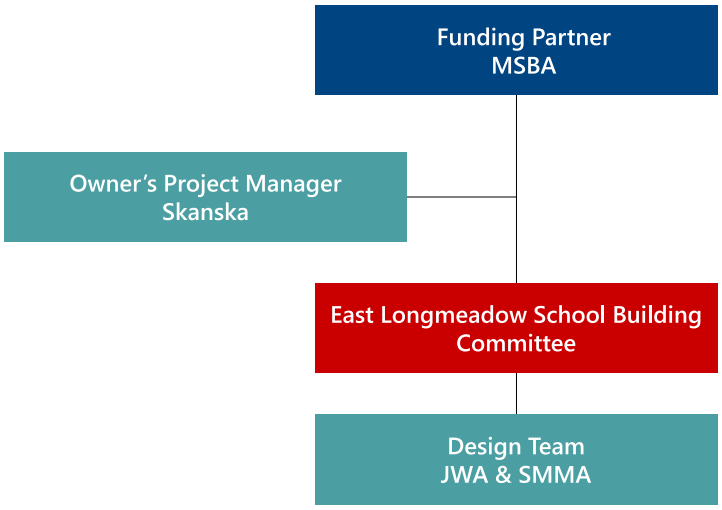
Elizabeth Marsian-Boucher, School Committee Member

Greg Thompson, School Committee Member

Bruce Fenney, Superintendent of East Longmeadow DPW

Daniela LaBarre, School Psychologist and Faculty member

Ryan Quimby, Town IT Director



MSBA Partnership

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

The Massachusetts School Building Authority ("MSBA") is a quasi-independent government authority created to reform the process of funding capital improvement projects in the Commonwealth's public schools. The MSBA strives to work with local communities to create affordable, sustainable, and energy efficient schools across Massachusetts.

The East Longmeadow Public School District
has an opportunity to receive a

Grant Reimbursement from the MSBA
to pay costs associated with a new school facility project.

MSBA Grant Program

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

Where does the grant money come from?

MSBA grant money comes from
Taxes paid by East Longmeadow residents
and taxpayers throughout the Commonwealth.

1 penny of the state's 6.25% sales tax

Your state tax dollars have already been used in hundreds of school districts for their new schools. East Longmeadow has now been given an opportunity to accept state grant money for investment in the town's current and future needs!

MSBA Process
Feasibility Study (Module 3)

Module 3A
Preliminary Design Program (PDP)

Module 3B
Preferred Schematic Report (PSR)

PDP Development
May – August 2022
- Existing Conditions Assessment
- Educational Visioning
- Site Options Evaluation
- Development of Preliminary Options

PSR Development
August 2022– February 2023
- Development of Options
- Develop Preliminary Budget
- Evaluate & Select Preferred Option

MSBA Review
February – March 2023
- MSBA Facilities Assessment Sub-Committee

MODULE 3A | MODULE 3B

Submit PDP to MSBA
August 2022

Submit PSR to MSBA
February 2023

MSBA Approval to Proceed to Schematic Design (SD)
April 2023

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

MSBA Process
Schematic Design (Module 4) & Funding (Module 5)

Module 4
Schematic Design (SD)

SD Development
April – August 2023
- Development of a Single Option
- Establish Budget
- Educational Space Planning
- Selection of Building Systems

MSBA Review
August – October 2023
- MSBA Review
- Project Scope & Budget

Town Vote / Seek Project Funding
November 2023 (TBD)

MOD 4 – Schematic Design | MOD 5 - Funding

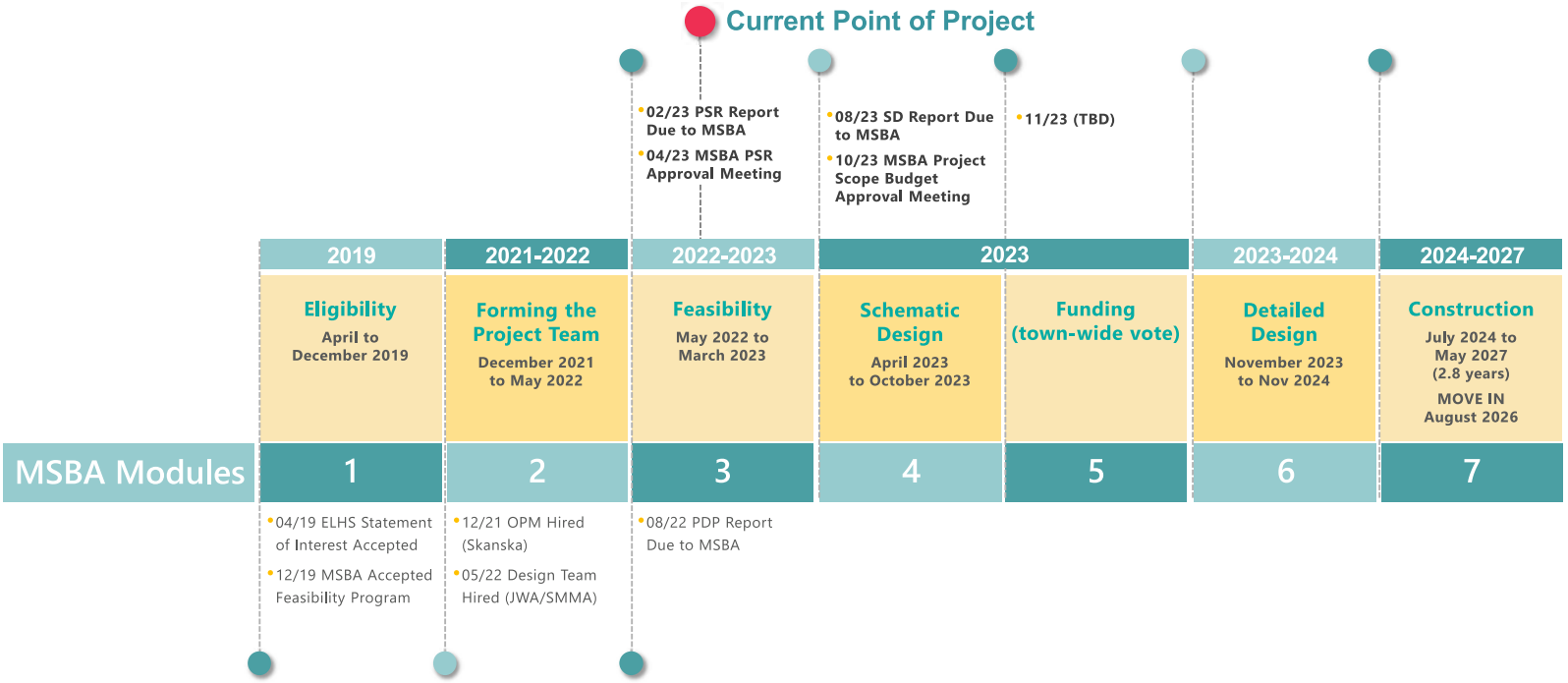
Submit SD to MSBA
August 2023

MSBA Board Approval
October 2023

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

Overall Schedule



SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

Work to Date

East Longmeadow Public Schools

- Funded Feasibility Study & Schematic Design
- Formed School Building Committee
- Hired Project Manager (Skanska)
- Hired of Architect (JWA and SMMA)
- Drafted Educational Plan

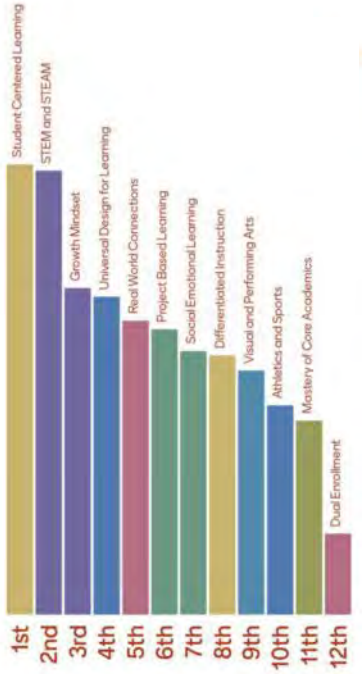
Design Team

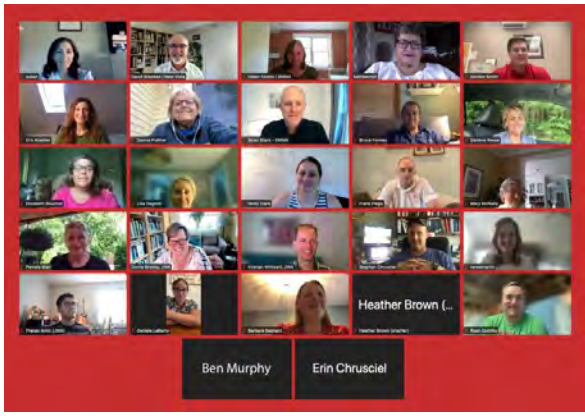
- Conducted Visioning Process
- Developed Summary of Spaces
- Assessed Existing Conditions:
  - Site
  - Architecture
  - Engineering Disciplines
  - Accessibility
  - Hazardous Materials
- Developed Preliminary Schemes
- Estimated Preliminary Schemes

Visioning Process

What 3 words best describe **the culture** of teaching and learning at ELHS?

Which **educational focus** areas are most important to you?





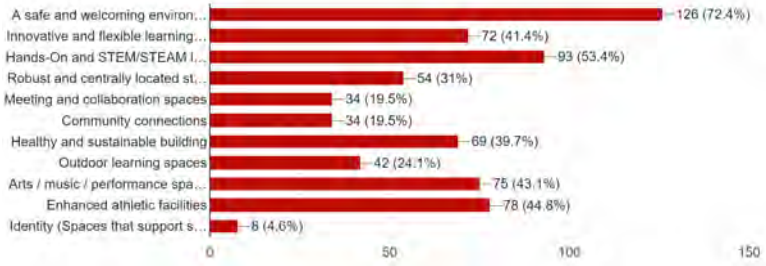
Visioning Process

Top 10 Design Patterns

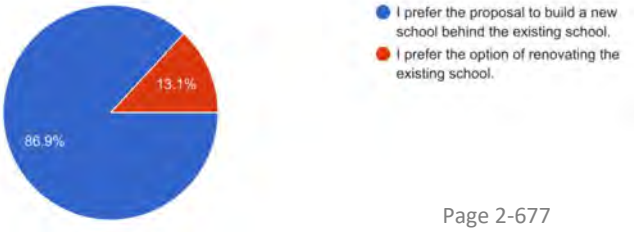
1. Breakout and Quiet Spaces (25 votes)
2. Dining as Social Commons (23 votes)
3. Media Center as Learning Commons (23 votes)
4. STEM/STEAM Adjacencies (23 votes)
5. STEM/STEAM & Makerspaces (22 votes)
6. Display and Exhibition (22 votes)
7. Wayfinding and Streetscapes (21 votes)
8. Clusters of Learning (21 votes)
9. Flexible Modular Furniture (21 votes)
10. Agile Classrooms (20 votes)

How often do you access the **community recreation** of the school?

Architectural Focus Areas – What do you see as a priority?



Do you have a preference between building a **new school or renovating**?

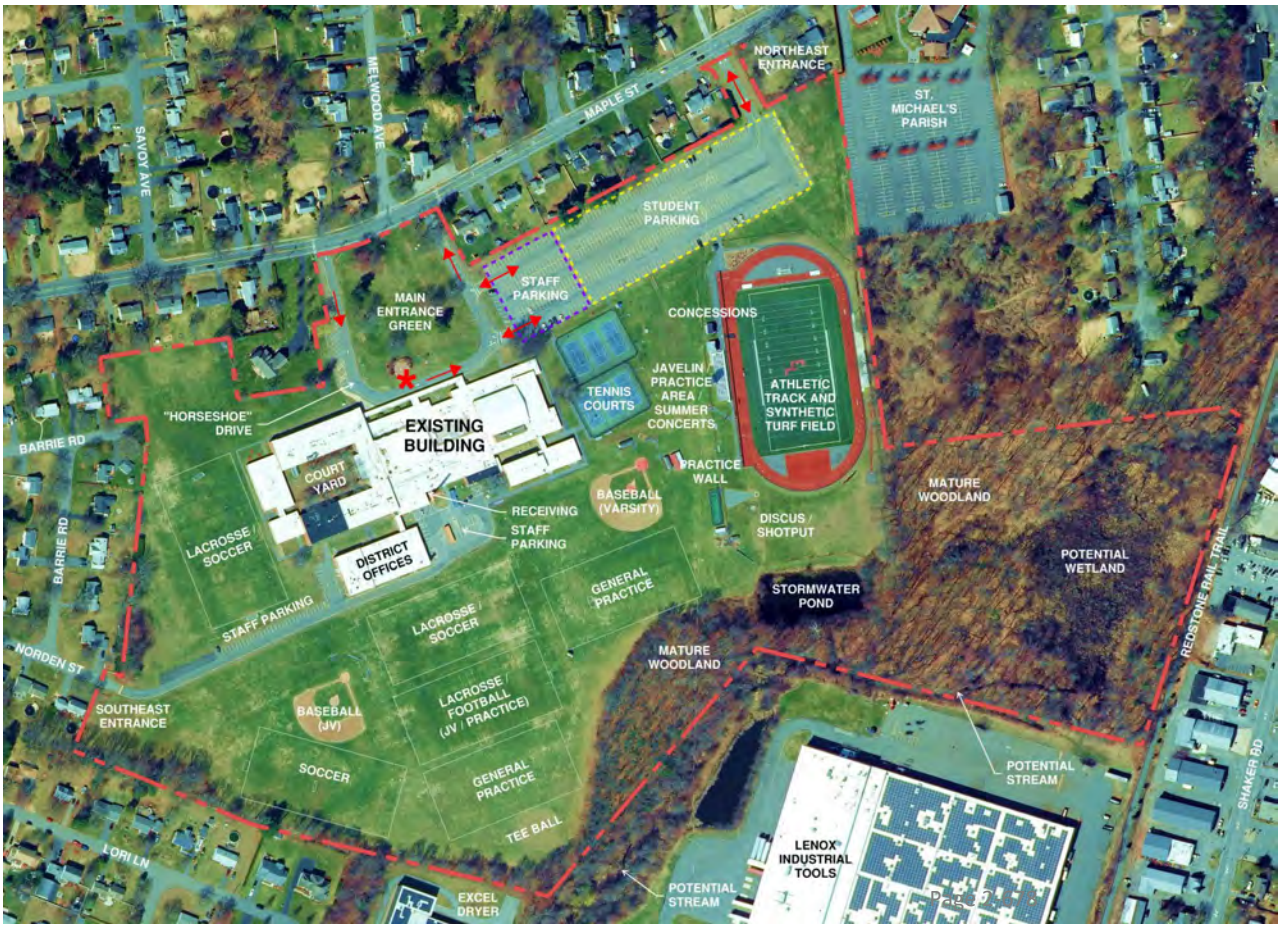


Educational Goals and Priorities

Educate students today for the challenges of tomorrow

- Focus on the whole child supporting children as they grow academically, socially, and emotionally
- Develop collaborative leadership
- Create learning experiences and learning environments that are rooted in Universal Design for Learning and Culturally Responsive Teaching
- Support students to develop the knowledge, the skills (academic, social, and emotional), and the mindset to become resilient and culturally-proficient citizens

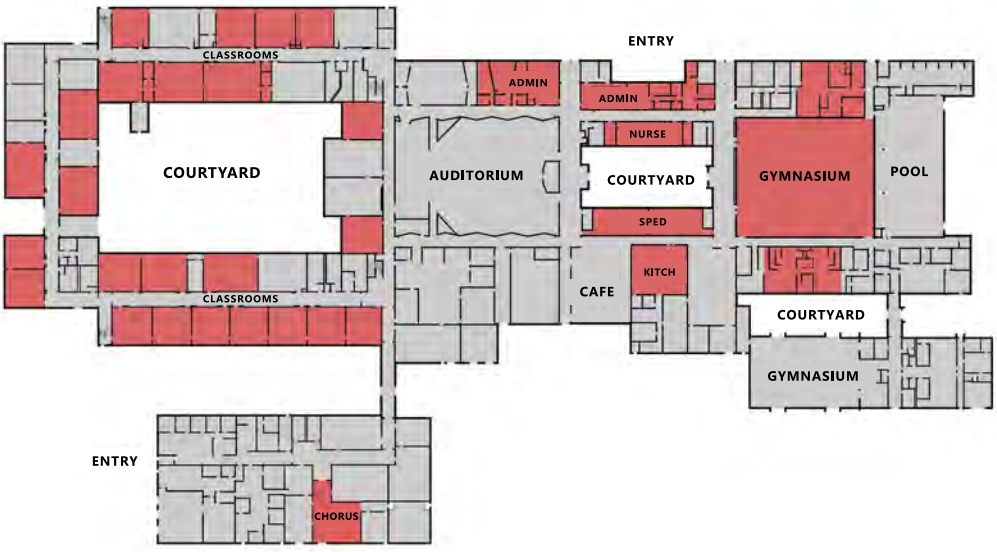
Existing Site

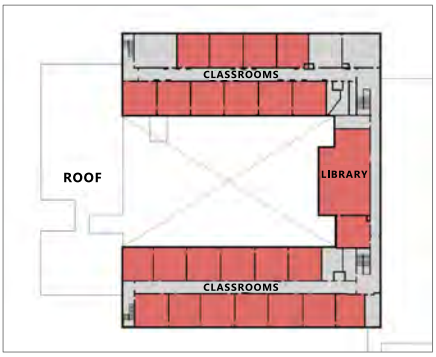


Existing Site
Conditions Summary

- 61.40 Acres (1 Parcel)
- More than Adequate Parking
- Athletic Fields and Courts are Extensive and in Good Overall Condition
- Lack of Separation Between School Bus and Passenger Vehicle Traffic; General Safety Concerns with Overall Vehicular Circulation
- Many Accessible Routes are Non-Compliant Due to Surface Conditions, Configuration, or Slope
- Lacks Dedicated Pedestrian Routes in Parking Lot and Between Building and Stadium
- Lacks Dedicated Exterior Common Space for Large Group Gathering or Dining
- Loading | Service Area Cannot Accommodate Large Vehicles

Existing Building
Conditions Summary





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Spaces undersized by 5% or more from MSBA guidelines

Existing Building
Conditions Summary

- Convoluted circulation – a result from the different eras of construction.
- Finishes are robust –though colors are dated and fixed.
- Significant quantities of hazmat material.
- Roof is in poor shape – and is flashed incorrectly at adjacent walls. History of leaks.
- Lack of MAAB / ADA compliance in numerous locations
- Science facilities are outdated, undersized and lack necessary infrastructure
- Mechanical, Electrical & Plumbing systems have all exceeded their life expectancy
- Typical lack of insulation and moisture control at the exterior envelope

Preliminary Options
Reviewed by the School Building Committee

1

2A

2B

2C

2D

3A

3B

3C

4A

4B

5A

5B

Preliminary Options

Reviewed by the School Building Committee

1

2A

3A

4A

5A

2B

3B

4B

5B

2C

3C

2D

Quick Review of Possible Approaches

Code Upgrade

- No change to interior finishes / plan
- No change to educational pattern
- Minimal changes to site
- Bringing school up to code only
  - Accessibility
  - Fire protection
  - Energy code
  - Hazmat abatement
  - Updated systems

Add/Reno

- Re-arrange interior spaces and move interior walls
- Larger classrooms in classroom wings
- No changes to floor diaphragm (there will be extremely low ceilings)
- Saves larger Auditorium
- New Gym, Cafeteria, Entry
- Upgraded site

New Construction

- Most flexibility for interior layout
- Smaller auditorium than existing
- Higher floor-to-floor heights – with better control of building systems, acoustics, etc.
- Fully upgraded site

5B – New School + Community Building

- Community program in separate building adjacent to athletics field
- 2 separate drop-off loops, one at front & one at side
- Buffered parking at front with pedestrian spine
- Removes Norden Street emergency access
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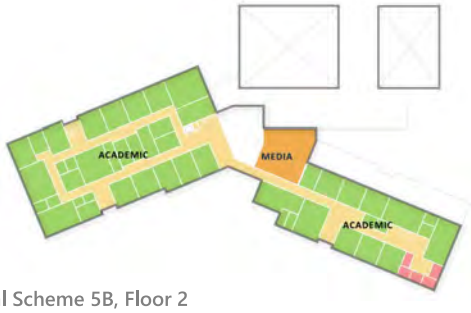
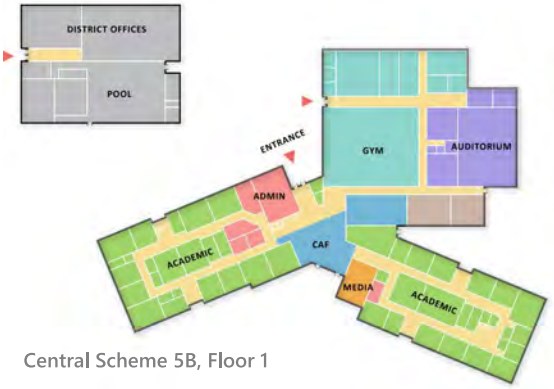


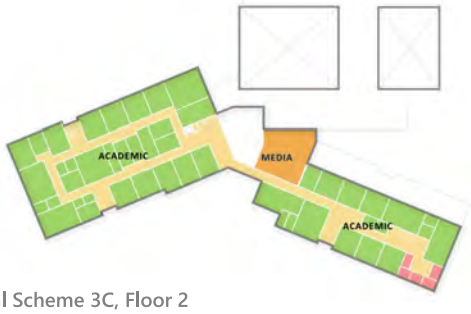
Central Scheme 5B, Floor 2



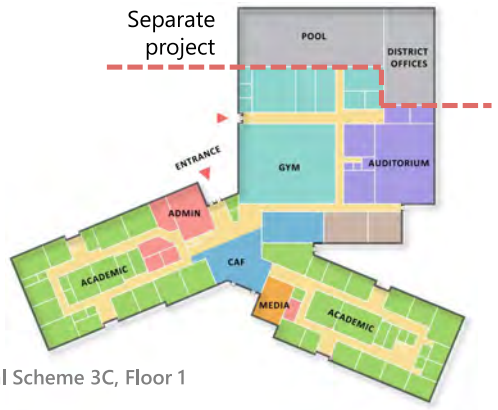
Central Scheme 5B, Floor 1

3C – New School

- Community program integrated with high school
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
- Maintains Norden Street emergency access
- Oriented for optimal daylighting
- Academic wings create classroom neighborhoods – flexible learning options
- Cafeteria & media center form social heart of school
- Strong indoor-outdoor learning opportunities



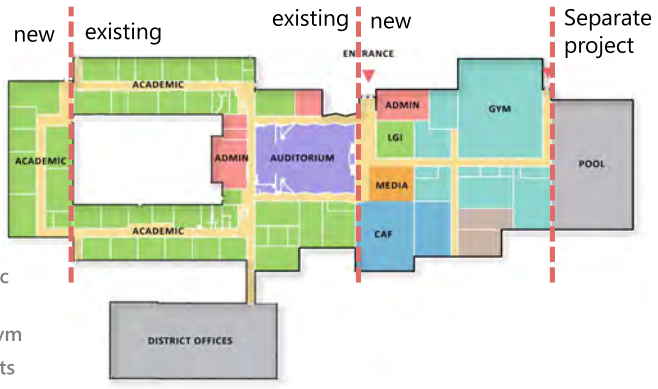
Central Scheme 3C, Floor 2



Central Scheme 3C, Floor 1

Add Reno 2C

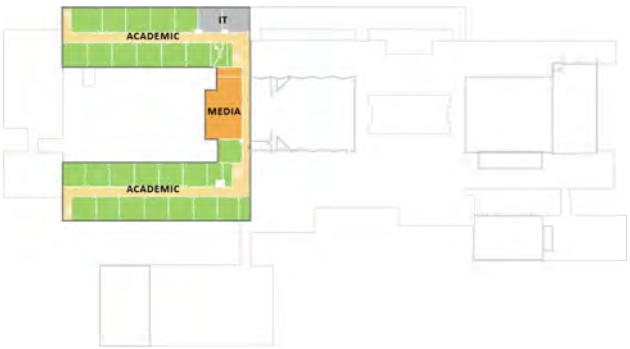
Add Reno 2C, Floor 2



Add Reno 2C, Floor 1

- Community program stays in current District Office building
- 2 separate drop-off loops, at front & side
- Brings parking closer to building & relocates tennis courts
- Maintains Norden Street admin & emergency access
- Roughly 60% renovation – including academic wings & auditorium
- New 2-story STEAM wing, Cafeteria, Entry, Gym
- Limited by existing low floor-to-ceiling heights

1– Base Repair



Base Repair 1, Floor 2

Base Repair 1, Floor 1

- No changes to interior walls or finishes – floor plan remains as is
- Upgrades would address: life safety, hazmat, accessibility, energy code, building systems
- Site remains as is

Side-by-Side Comparison

OPTION 5B New School + Community Building	**OPTION 3C** New School	**OPTION 2C** Add/Reno	**OPTION 1** Base Repair
PROJECT COST $170-175M	PROJECT COST $168-173M	PROJECT COST $160-165M	PROJECT COST $110-115M
ESTIMATED GRANT $45M	ESTIMATED GRANT $48M	ESTIMATED GRANT $45M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

Q&A and Stretch Break!

Please visit the boards around the room.

Red post-its

- **concerns** with the plan / approach / option / specific room / etc. – that you do not like

Green post-its

- **advantages** of the plan / approach / option / specific room / etc. – that you like

Boards:

- Pics of Existing Facility
- 1 – Code Upgrade Site Plan / Floor Plan
- 2C – Add/Reno Site Plan / Floor Plan
- 3C – New School Site Plan / Floor Plan
- 5B – New School Site Plan / Floor Plan
- Pics of New Schools

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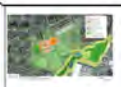
25

Side-by-Side Comparison

ELHS OPTIONS MATRIX INFO FOR ESTIMATING	RENO POOL	 NEW/POOL	NEW/POOL	NEW/COMMUNITY
OPTION	1	2C	3C	5B
SITE	Existing HS	Existing HS	Existing HS	Existing HS
CATEGORY	CODE UPGRADE RENOVATION	RENOVATION & ADDITION	NEW CENTRAL	NEW SPLIT BUILDING
DEMOLITION SF	0	48,730	186,890	186,890
RENOVATION SF	186,890	113,356	0	0
NEW HS SF	0	86,093	191,157	180,657
NON High School SF	NA	-	0	0
TOTAL SF	186,890	199,449	191,157	180,657
TOTAL CONSTRUCTION COST	$91,779,810	$123,911,680	$134,165,452	$126,795,922
Cost per SF	$491.09	$621.27	$701.86	$701.86
Project Cost Multiplier	1.2	1.2	1.2	1.2
Project Cost	$110,135,772	$148,694,016	$160,998,542	$152,155,106
Estimated Reimbursement Rate	Unknown	Est. 30%	Est. 30%	Est. 30%
Estimated Grant	Unknown	$44,608,204.9	$48,299,562.7	$45,646,531.9
Estimated Local Share	$77,095,040	$104,085,811	$112,698,980	$106,508,574
Modulars (In Project Budget)	$3,000,000	$2,500,000	NA	NA
Stand Alone Bldg (either pool or community)	-	$10,125,000	$10,125,000	$23,120,332
Estimated Local Share TOTAL	$113,135,772	$116,710,811	$122,823,980	$129,628,907

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

School Council
October 6, 2022

Topics of Discussion

- Introduction
- Schedule Overview
- Visioning & Priorities
- Existing Conditions
- Where we are now
- Next Steps

Introductions & Project Team

ELHS School Building Committee

Stephen Chrusciel, School Building Committee Chair

Gordon Smith, Superintendent of Schools

Pamela Blair, Assistant Superintendent for Business

Frank Paige, ELHS Principal

Heather Brown, ELPS Director of Curriculum

Kathleen Hill, Town Council Member

Stephen Lonergan, Town Accountant and Town Finance Director

Mary McNally, Town Manager

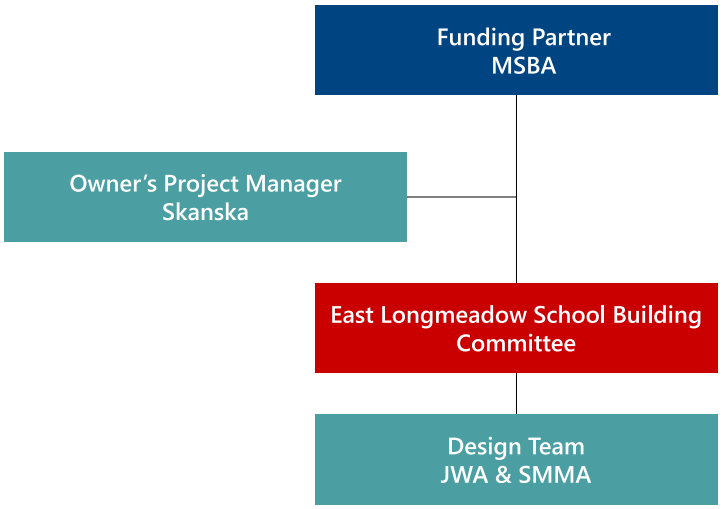
Elizabeth Marsian-Boucher, School Committee Member

Greg Thompson, School Committee Member

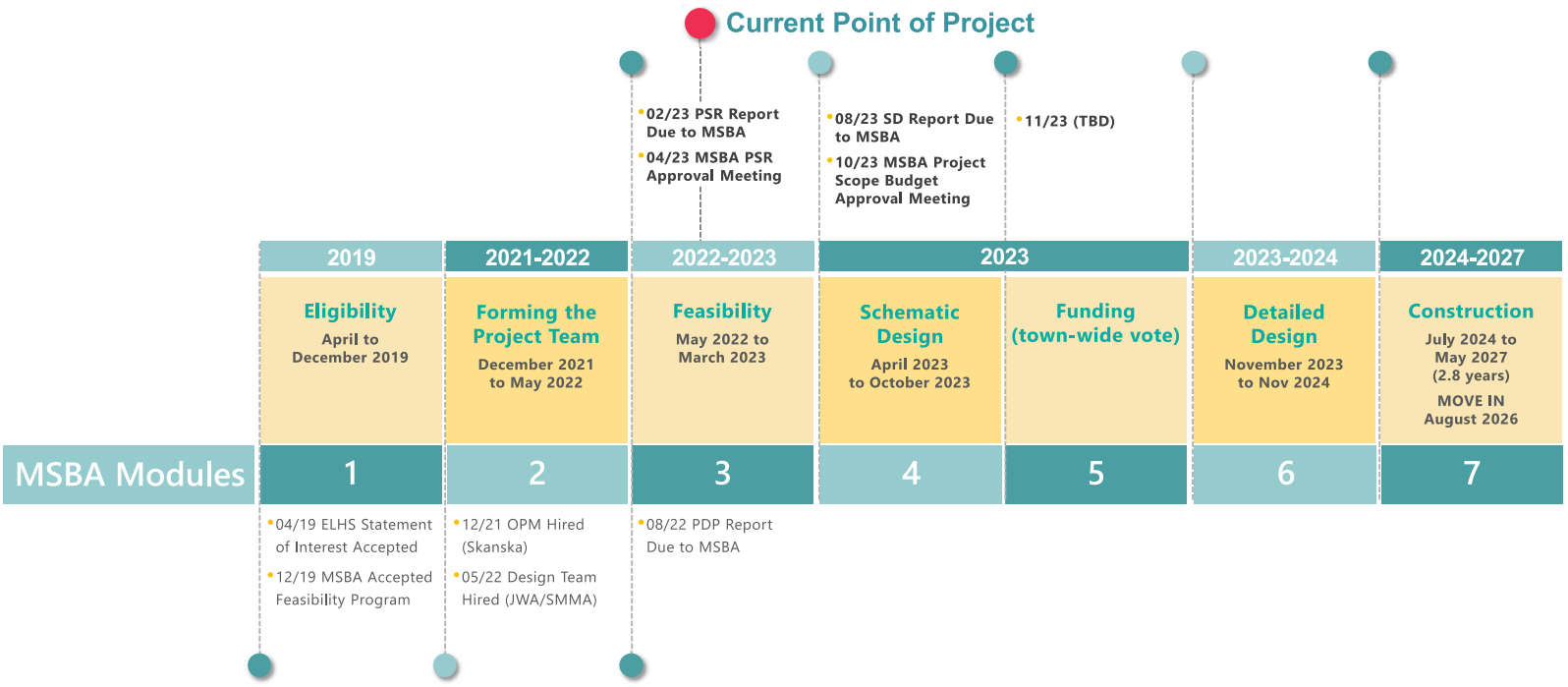
Bruce Fenney, Superintendent of East Longmeadow DPW

Daniela LaBarre, School Psychologist and Faculty member

Ryan Quimby, Town IT Director



Overall Schedule

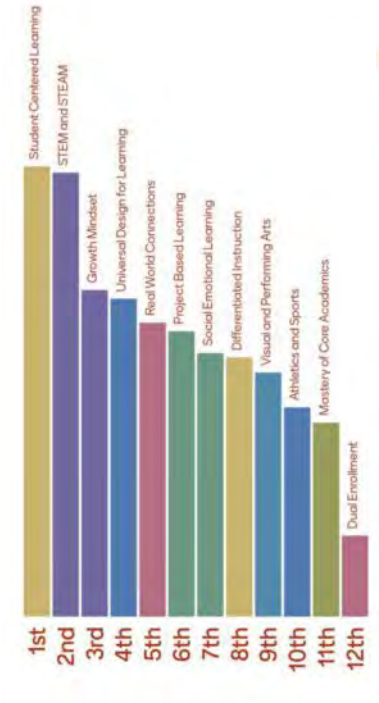


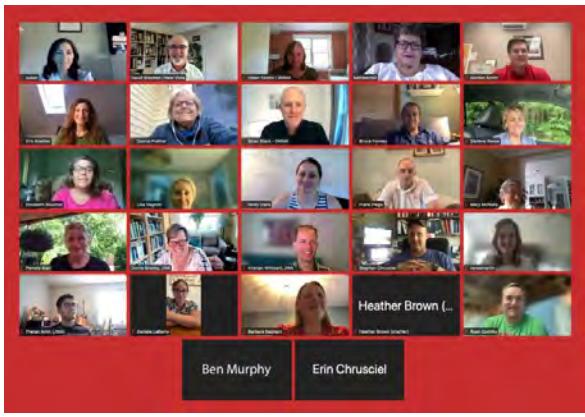
*Schedule is subject to change

Visioning Process

What 3 words best describe **the culture** of teaching and learning at ELHS?

Which **educational focus** areas are most important to you?



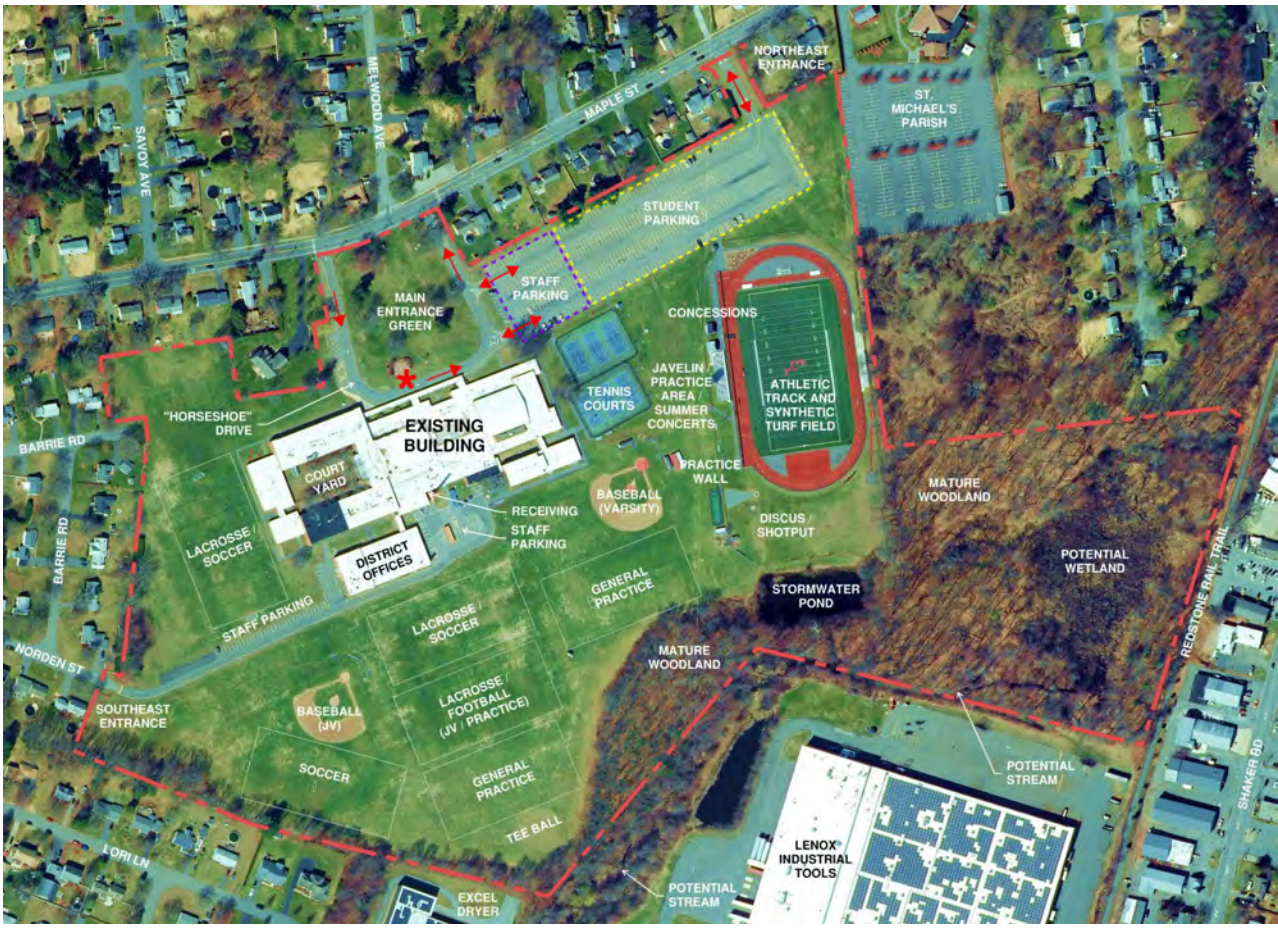


Educational Goals and Priorities

Educate students today for the challenges of tomorrow

- Focus on the whole child supporting children as they grow academically, socially, and emotionally
- Develop collaborative leadership
- Create learning experiences and learning environments that are rooted in Universal Design for Learning and Culturally Responsive Teaching
- Support students to develop the knowledge, the skills (academic, social, and emotional), and the mindset to become resilient and culturally-proficient citizens

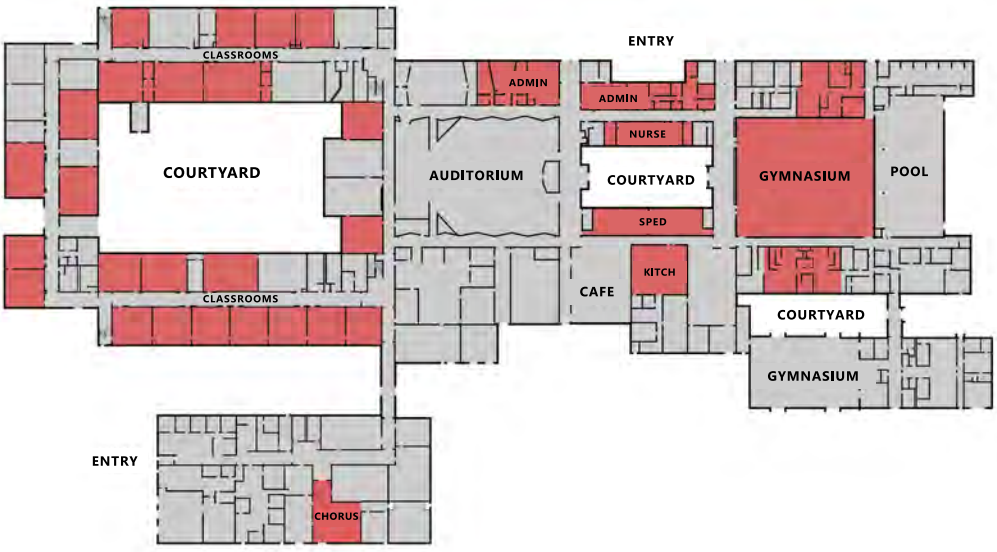
Existing Site

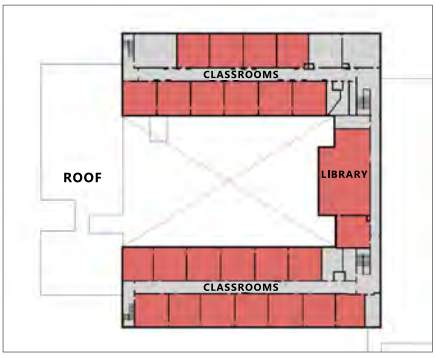


Existing Site
Conditions Summary

- 61.40 Acres (1 Parcel)
- More than Adequate Parking
- Athletic Fields and Courts are Extensive and in Good Overall Condition
- Lack of Separation Between School Bus and Passenger Vehicle Traffic; General Safety Concerns with Overall Vehicular Circulation
- Many Accessible Routes are Non-Compliant Due to Surface Conditions, Configuration, or Slope
- Lacks Dedicated Pedestrian Routes in Parking Lot and Between Building and Stadium
- Lacks Dedicated Exterior Common Space for Large Group Gathering or Dining
- Loading | Service Area Cannot Accommodate Large Vehicles

Existing Building
Conditions Summary





185,614gsf

Spaces undersized by 5% or more from MSBA guidelines

Existing Building
Conditions Summary

- Convoluted circulation – a result from the different eras of construction.
- Finishes are robust –though colors are dated and fixed.
- Significant quantities of hazmat material.
- Roof is in poor shape – and is flashed incorrectly at adjacent walls. History of leaks.
- Lack of MAAB / ADA compliance in numerous locations
- Science facilities are outdated, undersized and lack necessary infrastructure
- Mechanical, Electrical & Plumbing systems have all exceeded their life expectancy
- Typical lack of insulation and moisture control at the exterior envelope

Preliminary Options Exploring site, phasing & cost implications

Reviewed by the School Building Committee

1

2A

2B

2C

2D

3A

3B

3C

4A

4B

5A

5B

Preliminary Options

Reviewed by the School Building Committee

1

2A

2B

2C

2D

3A

3B

3C

4A

4B

5A

5B

Quick Review of Possible Approaches

Code Upgrade

- No change to interior finishes / plan
- No change to educational pattern
- Minimal changes to site
- Bringing school up to code only
  - Accessibility
  - Fire protection
  - Energy code
  - Hazmat abatement
  - Updated systems

Add/Reno

- Re-arrange interior spaces and move interior walls
- Larger classrooms in classroom wings
- No changes to floor diaphragm (would result in very low ceilings)
- Saves larger Auditorium
- New Gym, Cafeteria, Entry
- Upgraded site

New Construction

- Most flexibility for interior layout
- Smaller auditorium than existing
- Higher floor-to-floor heights – with better control of building systems, acoustics, etc.
- Fully upgraded site

Side-by-Side Comparison

OPTION 5B New School + Community Building	**OPTION 3C** New School	**OPTION 2C** Add/Reno	**OPTION 1** Base Repair
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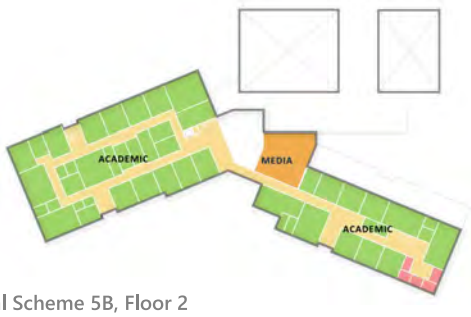
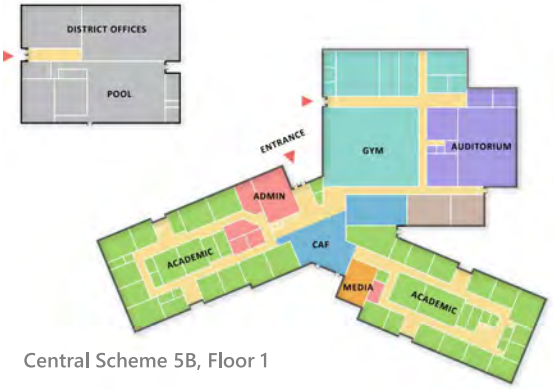
5B – New School + Community Building

- Community program in separate building adjacent to athletics field
- 2 separate drop-off loops, one at front & one at side
- Buffered parking at front with pedestrian spine
- Removes Norden Street emergency access
- Potentially gains space for softball field
- Oriented for optimal daylighting
- Academic wings create classroom neighborhoods – flexible learning options
- Cafeteria & media center form social heart of school
- Strong indoor-outdoor learning opportunities



Central Scheme 5B, Floor 2



Central Scheme 5B, Floor 1

3C – New School- All In

- Community program integrated with high school
- 2 separate drop-off loops at front
- Green entry sequence with pedestrian spine
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- Academic wings create classroom neighborhoods – flexible learning options
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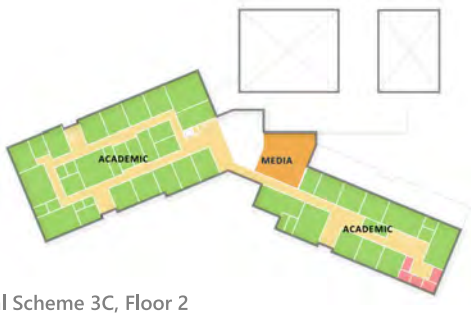
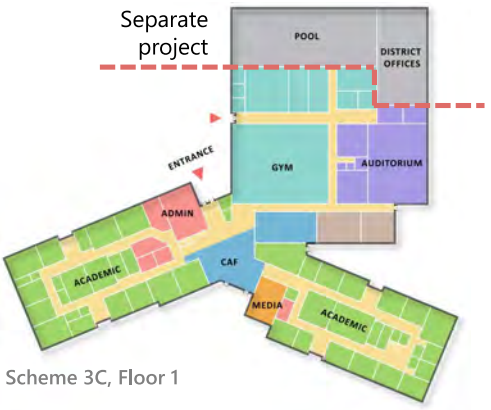
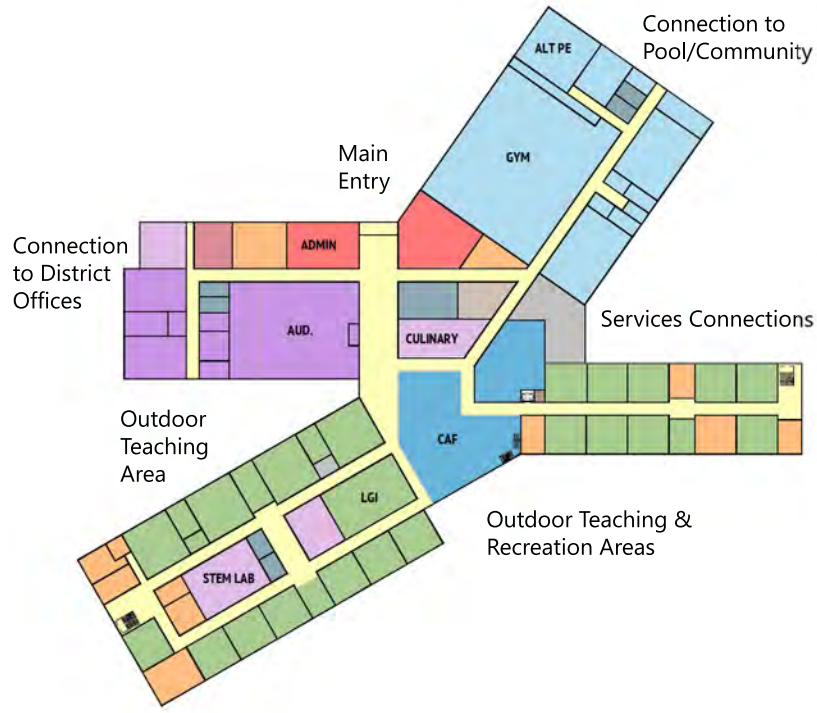


Central Scheme 3C, Floor 2



Central Scheme 3C, Floor 1

Current Rough Floor Plan Concept



Level 1

Level 2

Educational Advantages

Improved setting for teaching, learning and community connections

- Organized to create more inclusive and student-centered school culture
- Opportunity to provide better sized teaching spaces.
- Provides more varied space types. *We can introduce collaboration and support spaces throughout.*
- Update all teaching technology, furniture and finishes.
- Fully new infrastructure
- Code compliant, energy efficient construction.
- Better security and better spaces for community use.

How can I continue to learn more about the ELHS building project?

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SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

MSBA Process
Feasibility Study (Module 3)

Module 3A
Preliminary Design Program (PDP)

Module 3B
Preferred Schematic Report (PSR)

PDP Development
May – August 2022
- Existing Conditions Assessment
- Educational Visioning
- Site Options Evaluation
- Development of Preliminary Options

PSR Development
August 2022– February 2023
- Development of Options
- Develop Preliminary Budget
- Evaluate & Select Preferred Option

MSBA Review
February – March 2023
- MSBA Facilities Assessment Sub-Committee

MODULE 3A | MODULE 3B

Submit PDP to MSBA
August 2022

Submit PSR to MSBA
February 2023

MSBA Approval to Proceed to Schematic Design (SD)
April 2023

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

MSBA Process
Schematic Design (Module 4) & Funding (Module 5)

Module 4
Schematic Design (SD)

SD Development
April – August 2023
- Development of a Single Option
- Establish Budget
- Educational Space Planning
- Selection of Building Systems

MSBA Review
August – October 2023
- MSBA Review
- Project Scope & Budget

Town Vote / Seek Project Funding
November 2023 (TBD)

MOD 4 – Schematic Design | MOD 5 - Funding

Submit SD to MSBA
August 2023

MSBA Board Approval
October 2023

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

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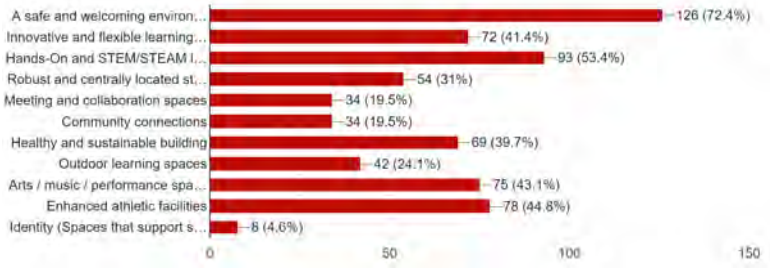
Visioning Process

Top 10 Design Patterns

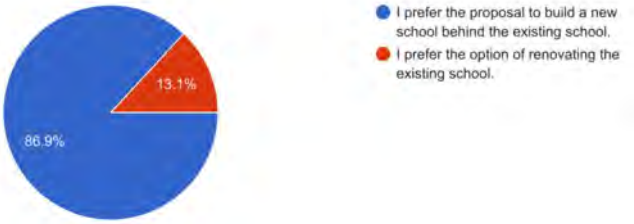
1. Breakout and Quiet Spaces (25 votes)
2. Dining as Social Commons (23 votes)
3. Media Center as Learning Commons (23 votes)
4. STEM/STEAM Adjacencies (23 votes)
5. STEM/STEAM & Makerspaces (22 votes)
6. Display and Exhibition (22 votes)
7. Wayfinding and Streetscapes (21 votes)
8. Clusters of Learning (21 votes)
9. Flexible Modular Furniture (21 votes)
10. Agile Classrooms (20 votes)

How often do you access the **community recreation** of the school?

Architectural Focus Areas – What do you see as a priority?



Do you have a preference between building a **new school or renovating**?



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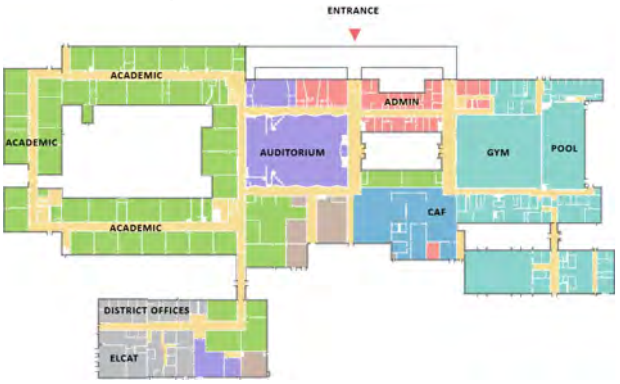
Base Repair 1, Floor 2



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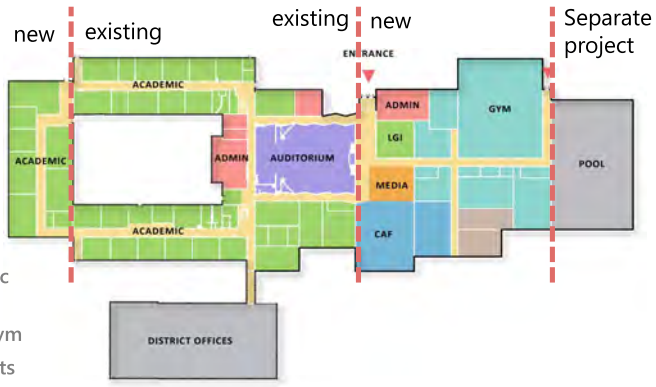
Add Reno 2C

Add Reno 2C, Floor 2



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East Longmeadow High School

JONES WHITSETT ARCHITECTS

in association with SMMA

SBC Meeting - October 27, 2022

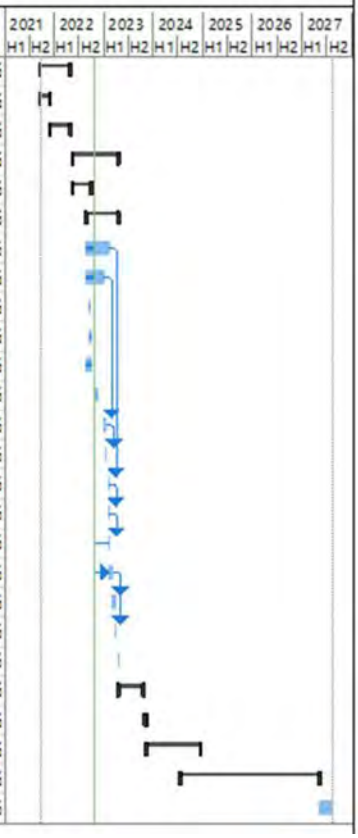
AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) **SKANSKA Update**
4) JWA Update
   - MSBA PDP Review / Response
   - Focus Groups Update
   - Design Update
     - New Construction Option - Plan Concepts
     - Annex Evaluation
5) Communications Update
6) New Business
7) Adjourn

SKANSKA

East Longmeadow High School Project

ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**63%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**37%**
52	PSR Submittal Development	115 days	Wed 8/31/22	Tue 2/7/23	35%
53	Development of Project Alternatives	90 days	Wed 8/31/22	Tue 1/3/23	40%
54	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	100%
55	Design Team Charrette	1 day	Wed 9/28/22	Wed 9/28/22	100%
56	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 10/11/22	100%
57	Community Forum #3	1 day	Wed 11/16/22	Wed 11/16/22	0%
58	Cost Estimating	14 days	Wed 1/4/23	Mon 1/23/23	0%
59	Reconcile Cost Estimates	2 days	Tue 1/24/23	Wed 1/25/23	0%
60	SBC Approval of PSR	1 day	Wed 2/8/23	Wed 2/8/23	0%
61	Finalize PSR	3 days	Thu 2/9/23	Mon 2/13/23	0%
62	PSR Submittal to MSBA	1 day	Tue 2/14/23	Tue 2/14/23	0%
63	MSBA Review of PSR	21 days	Tue 2/14/23	Tue 3/14/23	0%
64	Address MSBA PSR Comments	10 days	Wed 3/15/23	Tue 3/28/23	0%
65	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
66	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
67	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
85	**Module 6: Detailed Design**	**285 days**	**Mon 11/20/23**	**Fri 12/20/24**	**0%**
139	**Module 7: Construction**	**736 days**	**Tue 7/23/24**	**Tue 5/18/27**	**0%**
149	**Module 8: Completing the Project**	**60 days**	**Wed 5/19/27**	**Tue 8/10/27**	**0%**



AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) **JWA Update**
   - MSBA PDP Review / Response
   - Focus Groups Update
   - Design Update
     - New Construction Option - Plan Concepts
     - Annex Evaluation
5) Communications Update
6) New Business
7) Adjourn

Preliminary Design Program - Update on MSBA Comments

- District's target budget
  - Response about process decisions and current status
- Ed Plan Clarifications
  - Schedule, Guidance, faculty size, professional development and UDL priorities
- Clarification of Educational Program
  - Music, PE Program Needs, Health Classes, Business Classes, ELCAT/Video Production Studio, Willie Ross
- Space Summary justifications
  - Science, Business, Greenhouse, Health, ELL, LGI, PE, Dining, Medical, Guidance Conf Rms., District Offices, IT & ELCAT
- Site diagram requested
  - Access issues, Circulation Information
- Reiteration of Pool Policy
  - All work relating to the pool - beyond the PSR submission - must be carried as a separate contract

Focus Group Reports

- Site & Sustainability have met
- Ed Planning is schedule for 11/2

Systems & Sustainability

Stephen Chrusciel
Bruce Fenney?
Jodi Culbertson
Kerry Shorrock
Matt Martin
Dawn Quercia
Nicki MacGillivray
Peter van Buren

Site Design

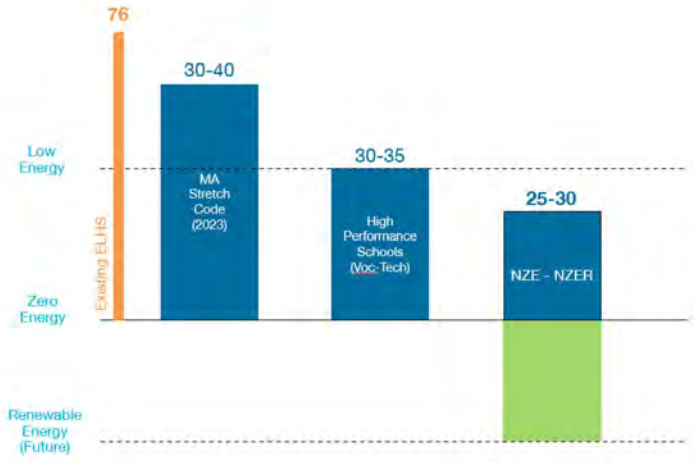
Allen Klinger
Amy Amore
Bruce Fenney
Carolyn Ferros
Donna Prather
Greg Thompson
Kerry Skillen
Kevin Magee
Marc Maccarini
Mark Williams
Michael Minahan
Michael Morrisino
Paul Morrissette
Tom Christensen

Educational Programming

Frank Paige
Heather Brown
Beth Marsian-Boucher
Juanita Poole
Carol Forward
Aneesa Tirsch
Nicolette Mushenko
Sarah Truoiolo

Systems & Sustainability

- Energy Efficiency
- Upcoming Code Changes
- MSBA Sustainability Requirements
- Green Building Rating Systems
- Introduction to Mechanical Systems



Rooftop PV Panels

Rainwater Harvesting System

Outdoor Learning/ Classroom

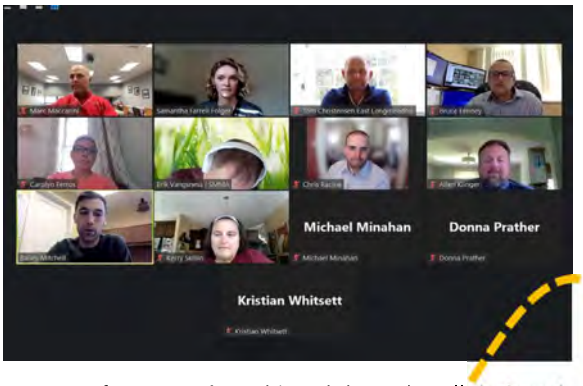
Abundant Daylight

Material Re-use

Environmental Literacy

Site Design

PEOPLE



"Sense of **community** achieved through well designed **gathering** places" – Bailey Mitchell

"I lived close to SIUE in Southern Illinois and the use of **green space** was amazing. I would love to see lots of greenery and for the school to have a **warm** and **welcoming** feel." – Carolyn Ferros

"Campus feel, instead of school feel, where there are **spaces to socialize**" – Marc Maccarini

"**Clear enter/exit directions**. How do I enter the pool/gym, where is Varsity baseball etc." – Donna Prather

PROMPT

Imagine you're a student, staff or visitor at ELHS, how would you like to feel when entering the site?

GOALS

1. *Flexible, multi-purpose, communal*
2. *Welcoming and inclusive*
3. *Active recreation integration*
4. *Health and wellbeing*
5. *Connecting to nature*

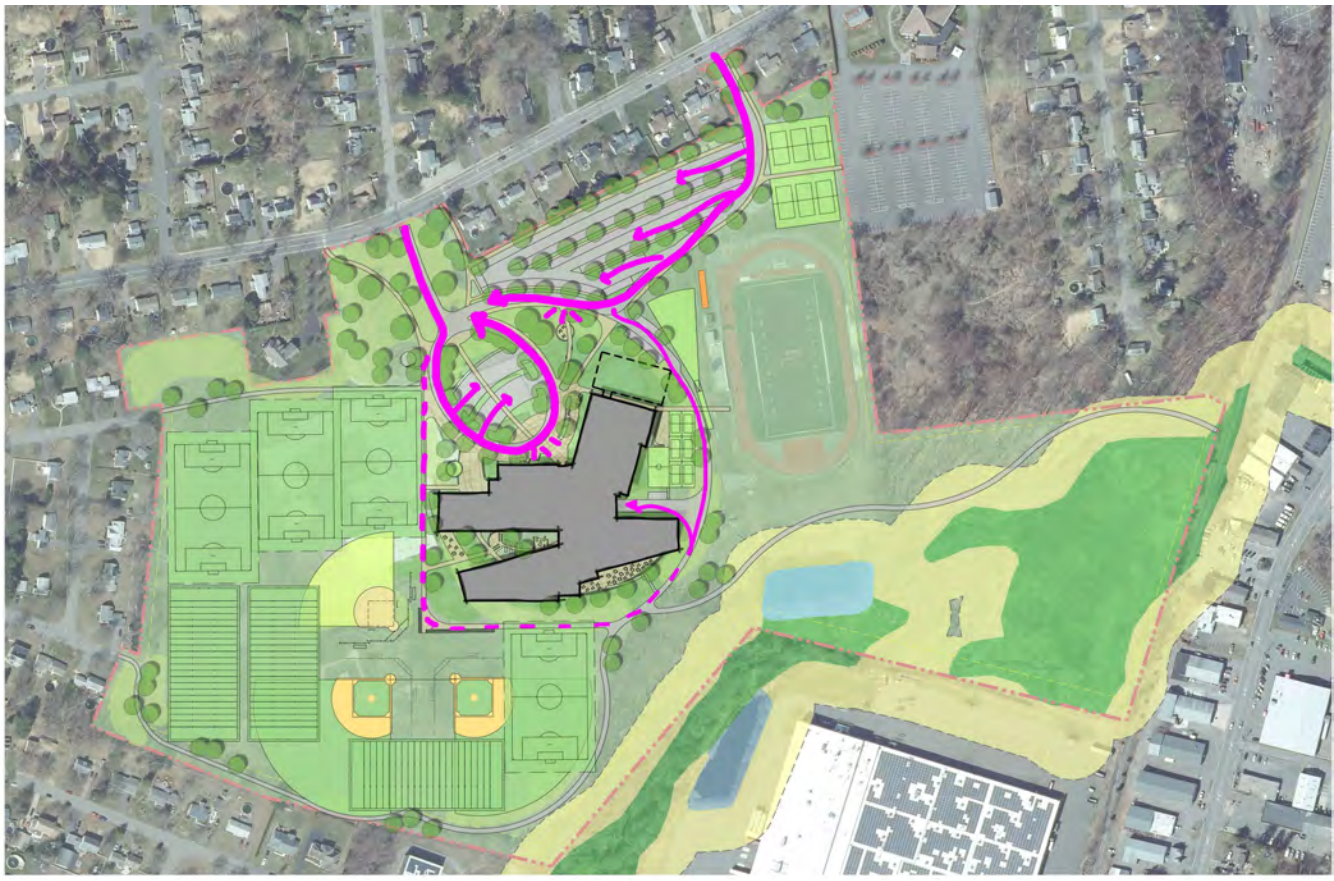
Design Update - Site Plan

Design Update – Site Plan Development

Design Update – Site Plan Development

Design Update – Site Plan Development

Circulation



Design Update – Site Plan Development

Green and Views

Design Update – Site Plan Development

Gathering Spaces

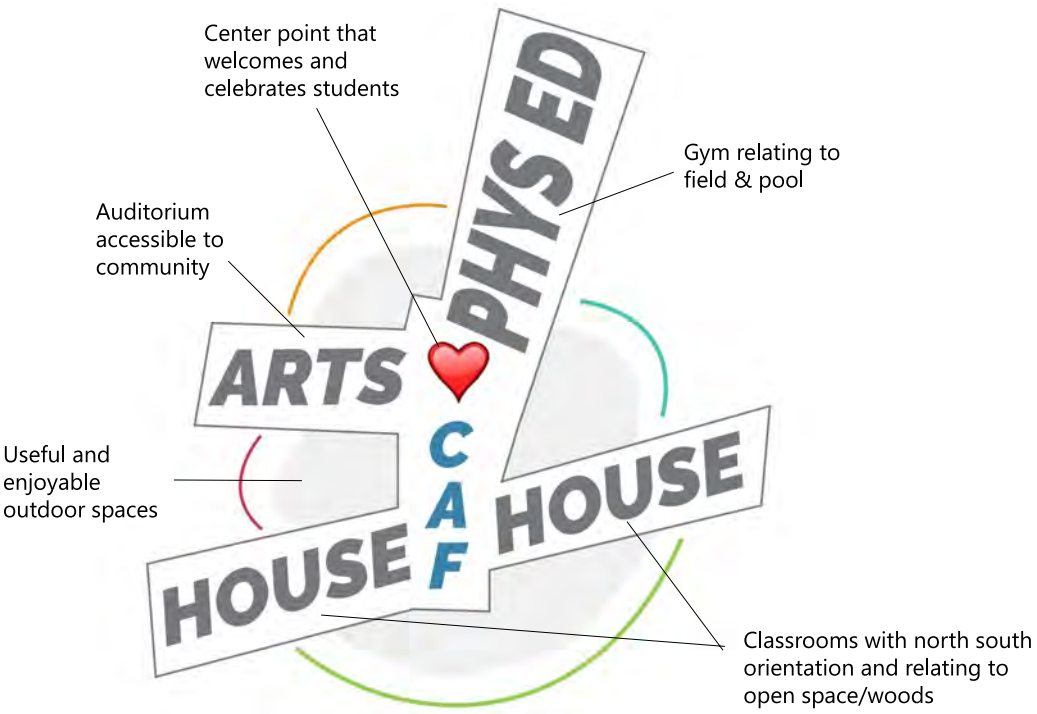
Design Update – Site Plan Development

Social/ Educational Spaces

Design Update – Site Plan Development No District Office

Design Update

ORGANIZING CONCEPT

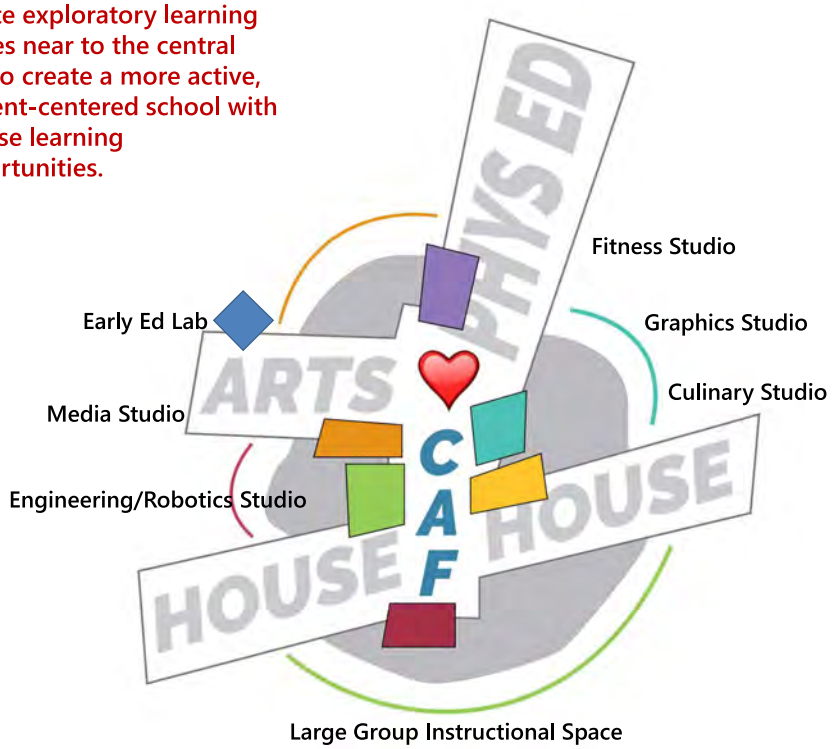


JWA JONES WHITSETT ARCHITECTS | SMMA

Design Update

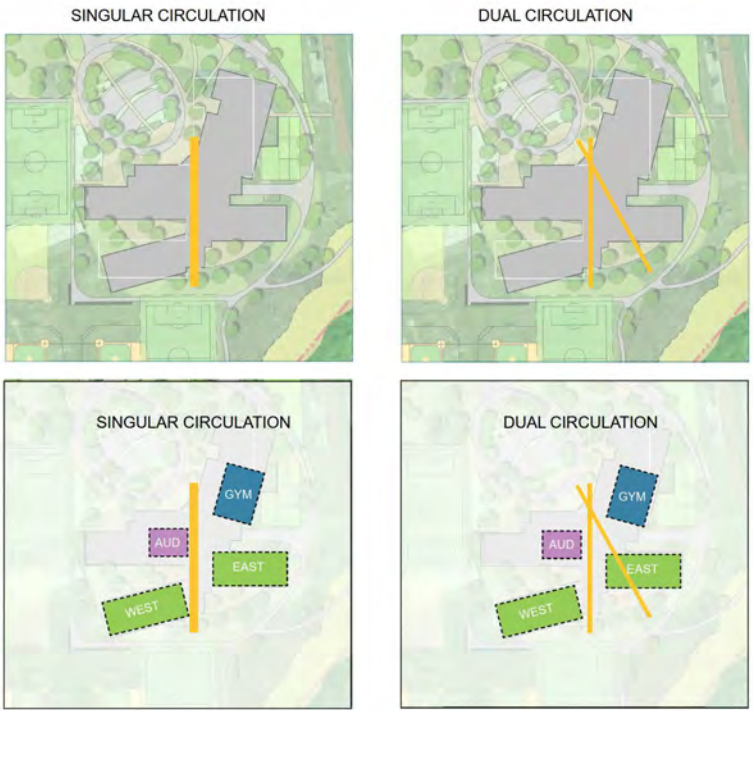
ORGANIZING CONCEPT

Locate exploratory learning spaces near to the central axis to create a more active, student-centered school with diverse learning opportunities.

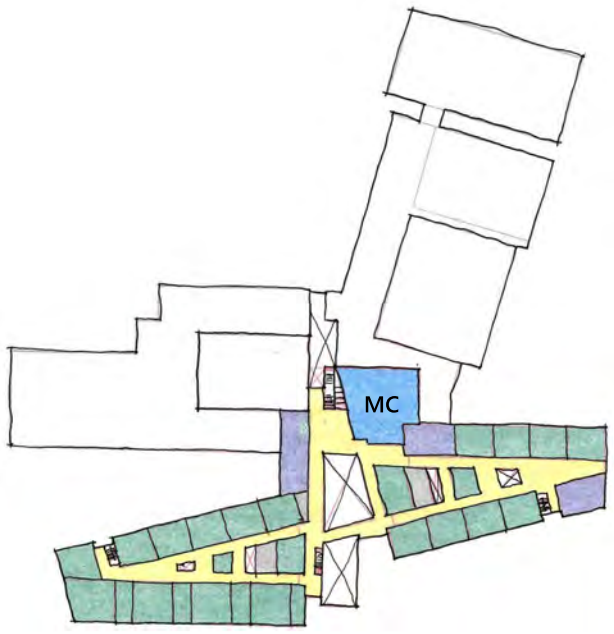


JWA JONES WHITSETT ARCHITECTS | SMMA

Design Update – Concept Development



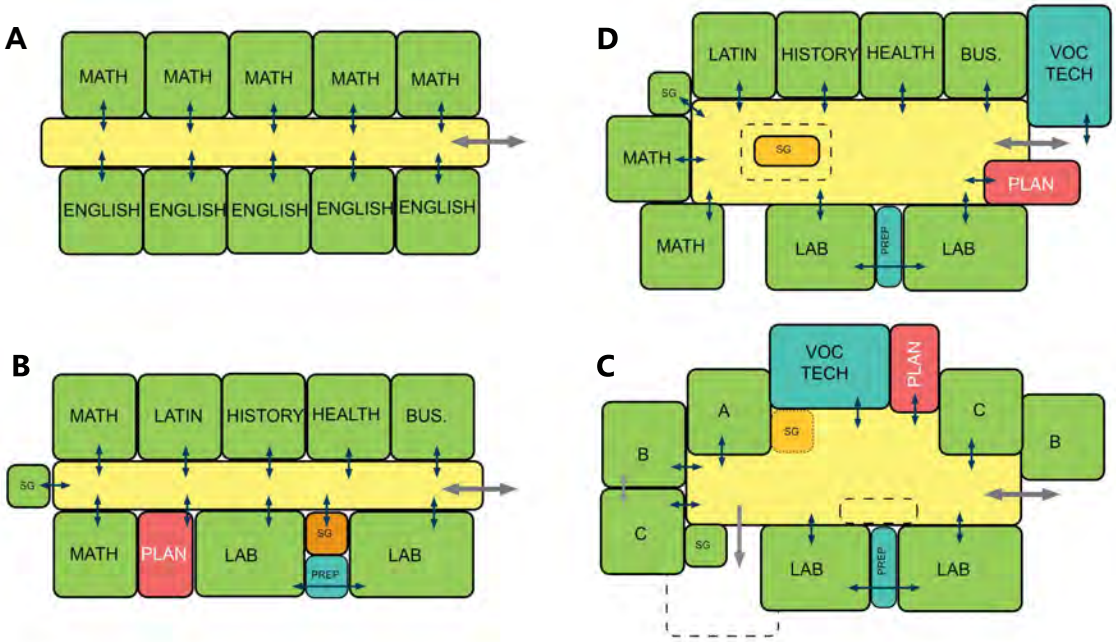
Design Update – Plan Development



First Floor

Second Floor

Design Update –Academic "House" Explorations



Design Update – Site Plan Development with Annex

Design Update
Annex Evaluation

PCM COMPANY

EAST LONGMEADOW HIGH SCHOOL - ANNEX RENOVATION

SKANSKA
CONCEPT ESTIMATE
10/20/2022

THE ATTACHED COST ESTIMATE IS BASED ON THE FOLLOWING DOCUMENTS:

Drawings Dated		Number of Sheets
8/30/2022	ELHS Annex Sketches	3
10/11/2022	ELHS Annex Reno Narrative	4

ASSUMPTIONS AND EXCLUSIONS:

1 Escalation is included at 20% assuming a Summer 2026 start.
2 Hazardous material remediation is included at areas indicated in narrative.
3 Sitework quantities are per narrative.
4 Contaminated soils handling, removal and disposal is excluded.
5 Minor floor preparation and moisture mitigation are included.
6 Loose furniture is excluded.

PCM reserve the right to revise and/or amend this estimate accordingly should any new or additional information be made available to us.

Project estimate prepared by:

Amanda Keene, Estimator
Preferred Construction Management Co., Inc.
amanda@pcmcompany.com
(t) 973.853.6060; (c) 978.335.6447

EAST LONGMEADOW HIGH SCHOOL - ANNEX RENOVATION — CONCEPT ESTIMATE

PCM COMPANY

NEW sf
RENOVATED 18000 sf

PROJ. NO: 27-118
REVISION: 1
EST DATE: 10/20/2022
GROSS SF: 18000

DESCRIPTION	QUANTITY	UNIT	UNIT COST	TOTAL COST
DIVISION 2 - DEMOLITION	18,000	SF	$ 22.11	$ 398,050.50
DIVISION 2 - SITE WORK	18,000	SF	$ 14.64	$ 263,593.15
DIVISION 3 - BUILDING CONCRETE	18,000	SF	$ -	$ -
DIVISION 4 - MASONRY	18,000	SF	$ 2.21	$ 39,800.00
DIVISION 5 - STEEL	18,000	SF	$ -	$ -
DIVISION 6 - CARPENTRY	18,000	SF	$ 1.46	$ 26,260.00
DIVISION 7 - THERMAL MOISTURE PROTECTION	18,000	SF	$ 22.70	$ 408,560.00
DIVISION 8 - OPENINGS	18,000	SF	$ 2.45	$ 44,125.00
DIVISION 9 - FINISHES	18,000	SF	$ 28.35	$ 510,228.00
DIVISION 10 - SPECIALTIES	18,000	SF	$ 1.11	$ 20,045.00
DIVISION 11 - EQUIPMENT	18,000	SF	$ -	$ -
DIVISION 12 - FURNISHINGS	18,000	SF	$ -	$ -
DIVISION 12 - CASEWORK AND MILLWORK	18,000	SF	$ -	$ -
DIVISION 13 - SPECIAL CONSTRUCTION	18,000	SF	$ -	$ -
DIVISION 14 - CONVEYING	18,000	SF	$ -	$ -
DIVISION 21 - SPRINKLER	18,000	SF	$ 8.00	$ 144,000.00
DIVISION 22 - PLUMBING	18,000	SF	$ 3.19	$ 57,500.00
DIVISION 23 - HVAC	18,000	SF	$ 20.91	$ 376,400.00
DIVISION 26 - ELECTRICAL	18,000	SF	$ 45.22	$ 813,890.94
CONSTRUCTION SUBTOTAL	**18,000**	**SF**	**$ 172.36**	**$ 3,102,453**
GENERAL CONDITIONS	12.00	%		$ 372,294
CONSTRUCTION SUBTOTAL	**18,000**	**SF**	**$ 193.04**	**$ 3,474,747**
DESIGN / ESTIMATE CONTINGENCY	10.00	%		$ 347,475
CONSTRUCTION SUBTOTAL	**18,000**	**SF**	**$ 212.35**	**$ 3,822,222**
OVERHEAD AND PROFIT	3.00	%		$ 114,667
CONSTRUCTION SUBTOTAL	**18,000**	**SF**	**$ 218.72**	**$ 3,936,888**
BOND AND INSURANCE	2.00	%		$ 78,738
CONSTRUCTION SUBTOTAL	**18,000**	**SF**	**$ 223.09**	**$ 4,015,626**
ESCALATION - ASSUMES SUMMER 2026 START	20.00	%		$ 803,125
CONSTRUCTION GRAND TOTAL	**18,000**	**SF**	$ 267.71	**$ 4,818,751**

Annex Evaluation

Abatement:
- Floor, Roof, Upper fiber cement cladding
- NOT: windows, foundation walls, exterior masonry

Architectural:
- Demolish ceiling, lighting, fixtures, electrical, floor finishes
- New walls for the I/T program, new roof membrane
- New ceilings & paint
- NOT: windows, exterior walls,
- No change to District offices or ELCAT
- Assumptions: We will not touch exterior walls – and therefore do not need to bring them up to energy code. No floors need to be demolished and excavated to access utilities under the floor.

Mechanical:
- Demo underground oil tank, old boilers, pneumatic controls
- New: gas fired hot water boiler, new connections to existing distribution systems
- New A/C to IT rooms
- **Assumptions:** that the existing distribution system is in good order and will work with an updated boiler. More testing needs to be done.

Plumbing:
- New 2.5" domestic water service
- New domestic hot water
- New gas service
- **Assumptions:** that existing fixtures can remain. Assume that all underground piping is in good shape. More testing needs to be done. This could drive up costs considerably.

Fire Protection:
- New 6" Fire Service
- New sprinklers throughout

Electrical / Fire Alarm / Data:
- Demo existing 6 panelboards, receptacles, light fixtures, etc.
- New service to the Annex Building
- New system throughout.
- New lighting

Site:
- Additional walkway
- New utilties to the building

Update on Annex Cost

Utilizing Existing Annex	
Construction Subtotal	$ 3,102,453
After General Conditions, Contingency, Overhead, Etc.	$ 4,015,626
After Escalation	$ 4,818,751
Gross square footage	18,000
$ / SF	$ 268
TOTAL	$ 4,818,751

New Construction	
ELCAT / IT	3,000
District	4,000
Net Square Feet	7,000
Grossing Factor	1.4
Gross square footage	9,800
$ / SF	$ 650
	$ 6,370,000

DELTA	$ ~ 1,550,000

Annex Evaluation

Pro's

- Potentially saves $1.5 million
- Leaves additional space that could be used for other District / Town needs
- Postpones long term location of these spaces to another day, buying time for Town offices project.

Con's

- Leaves the existing Annex "as is" with few exterior updates.
- Poor first impression upon entering the site
- Awkward location restricts site design and field layout
- Cost savings could decline considerably based on the state of the existing mechanical distribution system and the condition of the pipes – and other utilities - under the slab.
- Difficulties with existing ELCAT and District Office space to remain
- Reduced connection between the High School and ELCAT and IT presents challenges
- Outstanding deferred maintenance issues for the Annex remain on the books.

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Next Meeting Time?

JWA | SMMA

END

JWA | SMMA

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Community Forum
November 16, 2022

Topics of Discussion

- Introduction
- Schedule Overview
- Visioning & Priorities
- Existing Conditions
- Narrowing Towards a Preferred Schematic
- Next Steps

Introductions & Project Team

ELHS School Building Committee

Stephen Chrusciel, School Building Committee Chair

Gordon Smith, Superintendent of Schools

Pamela Blair, Assistant Superintendent for Business

Frank Paige, ELHS Principal

Heather Brown, ELPS Director of Curriculum

Kathleen Hill, Town Council Member

Stephen Lonergan, Town Accountant & Town Finance Director

Mary McNally, Town Manager

Elizabeth Marsian-Boucher, School Committee Member

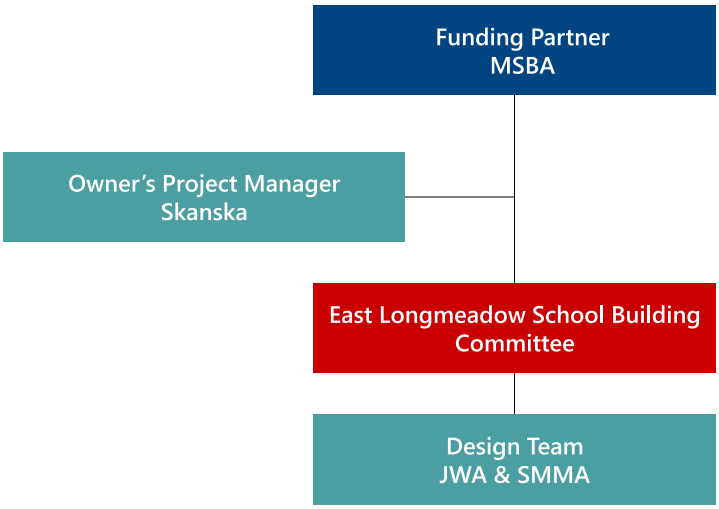
Greg Thompson, School Committee Member

Tom Christensen, Deputy Town Manager

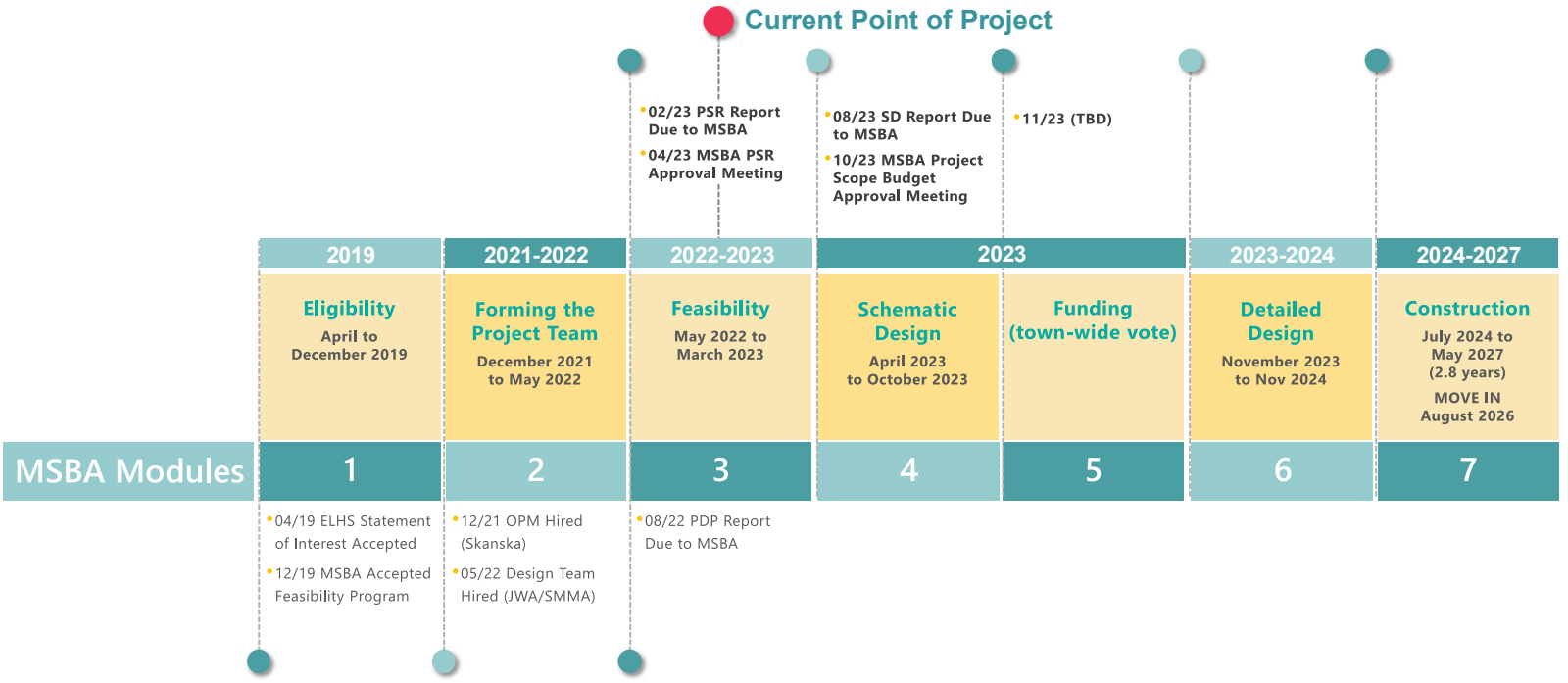
Bruce Fenney, Superintendent of East Longmeadow DPW

Daniela LaBarre, School Psychologist and Faculty member

Ryan Quimby, Town IT Director



Overall Schedule

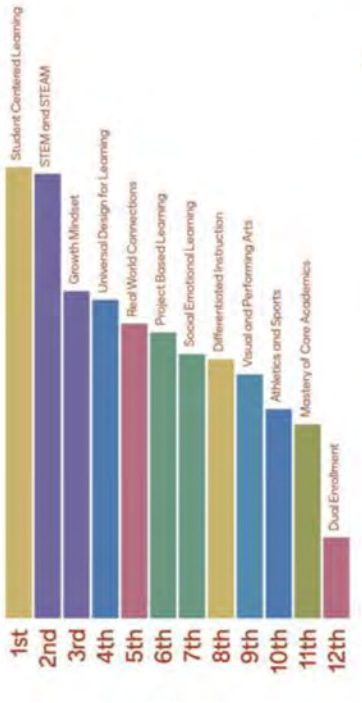


*Schedule is subject to change

Visioning Process

What 3 words best describe **the culture** of teaching and learning at ELHS?

Which **educational focus** areas are most important to you?



Educational Goals and Priorities

Educate students today for the challenges of tomorrow

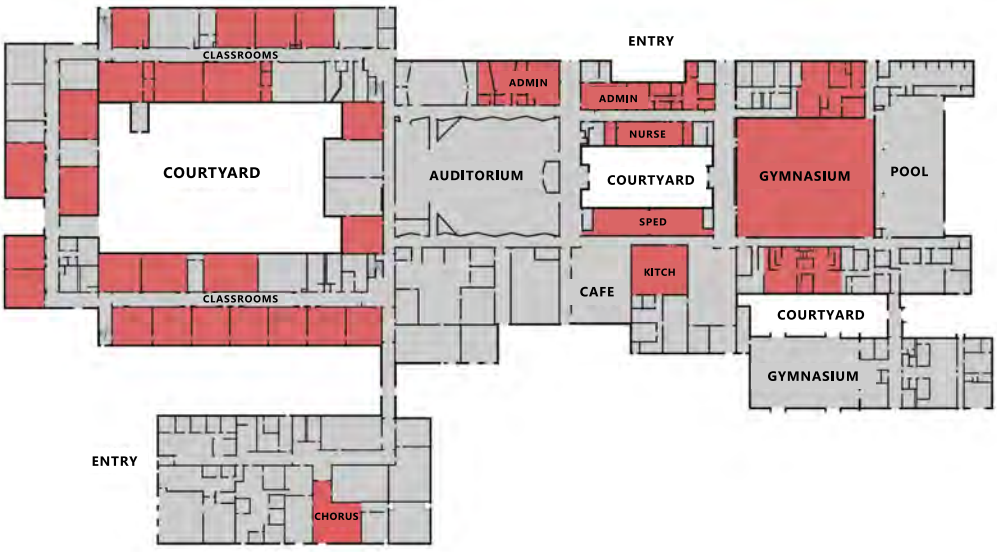
- Focus on the whole child supporting children as they grow academically, socially, and emotionally
- Develop collaborative leadership
- Create learning experiences and learning environments that are rooted in Universal Design for Learning and Culturally Responsive Teaching
- Support students to develop the knowledge, the skills (academic, social, and emotional), and the mindset to become resilient and culturally-proficient citizens

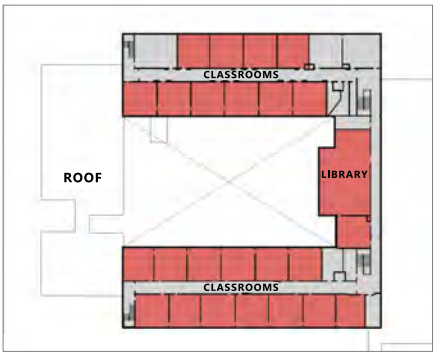
Existing Site

Existing Site
Conditions Summary

- 61.40 Acres (1 Parcel)
- More than Adequate Parking
- Athletic Fields and Courts are Extensive and in Good Overall Condition
- Lack of Separation Between School Bus and Passenger Vehicle Traffic; General Safety Concerns with Overall Vehicular Circulation
- Many Accessible Routes are Non-Compliant Due to Surface Conditions, Configuration, or Slope
- Lacks Dedicated Pedestrian Routes in Parking Lot and Between Building and Stadium
- Lacks Dedicated Exterior Common Space for Large Group Gathering or Dining
- Loading | Service Area Cannot Accommodate Large Vehicles

Existing Building
Undersized Spaces





185,614gsf

Spaces undersized by 5% or more from MSBA guidelines

Existing Building
Conditions Summary

- Convoluted circulation – a result from the different eras of construction.
- Finishes are robust –though colors are dated and fixed.
- Significant quantities of hazmat material.
- Roof is in poor shape – and is flashed incorrectly at adjacent walls. Ongoing roof leaks are a hazard to occupants.
- Lack of MAAB / ADA compliance in numerous locations
- Education spaces do not support today's educational needs.
- Mechanical, Electrical & Plumbing systems have all exceeded their life expectancy
- Typical lack of insulation and moisture control at the exterior envelope

Preliminary Options Exploring site, phasing & cost implications

Reviewed by the School Building Committee

1

2A

2B

2C

2D

3A

3B

3C

4A

4B

5A

5B

Preliminary Options

Reviewed by the School Building Committee

1

2A

2B

2C

2D

3A

3B

3C

4A

4B

5A

5B

Side-by-Side Comparison

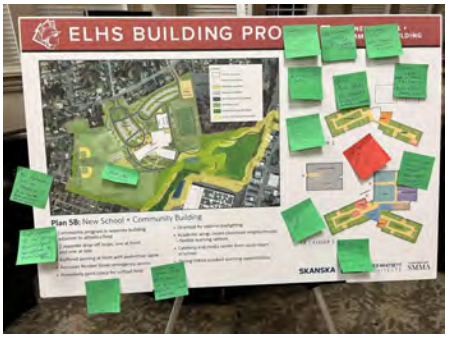
OPTION 5B New School + Community Building	**OPTION 3C** New School	**OPTION 2C** Add/Reno	**OPTION 1** Base Repair
PROJECT COST $170-175M	PROJECT COST $168-173M	PROJECT COST $160-165M	PROJECT COST $110-115M
ESTIMATED GRANT $45M	ESTIMATED GRANT $48M	ESTIMATED GRANT $45M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

Side-by-Side Comparison

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
PROJECT COST $170-175M	PROJECT COST $168-173M	PROJECT COST $160-165M	PROJECT COST $110-115M
ESTIMATED GRANT $45M	ESTIMATED GRANT $48M	ESTIMATED GRANT $45M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

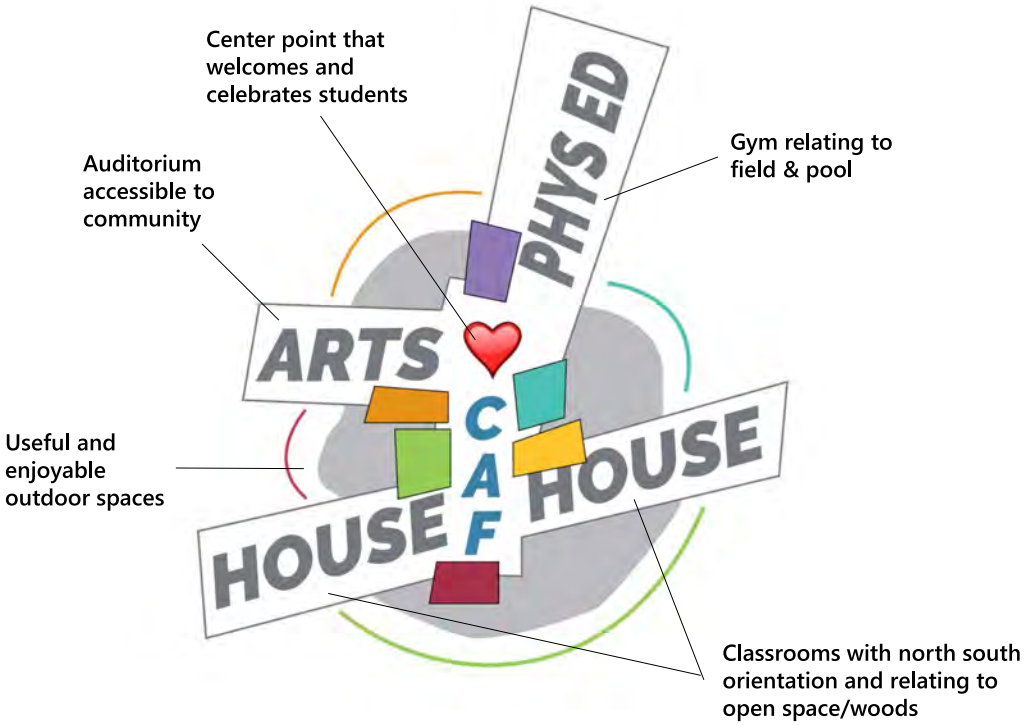
Gathering input from previous Community Meetings & SBC Meetings…

- Base Repair is expensive, will result in a smaller grant from the MSBA, and does not meet any of the District goals
- Numerous challenges with an Add/Reno approach
  - Difficult to bring existing building up to code (accessibility, sprinklers, new energy code, etc.)
  - Extremely low floor-to-floor heights
  - Introducing adequate ventilation is almost impossible and would lead to extremely low ceilings throughout
- Keeping costs as low as possible, while still planning for the future
- Maximize the MSBA Grant whenever possible
- Strong community preference for New – leading to deeper exploration
- Still in the midst of the process – working towards a "Preferred Schematic"



Design Update

ORGANIZING CONCEPT



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Design Update – Plan Development

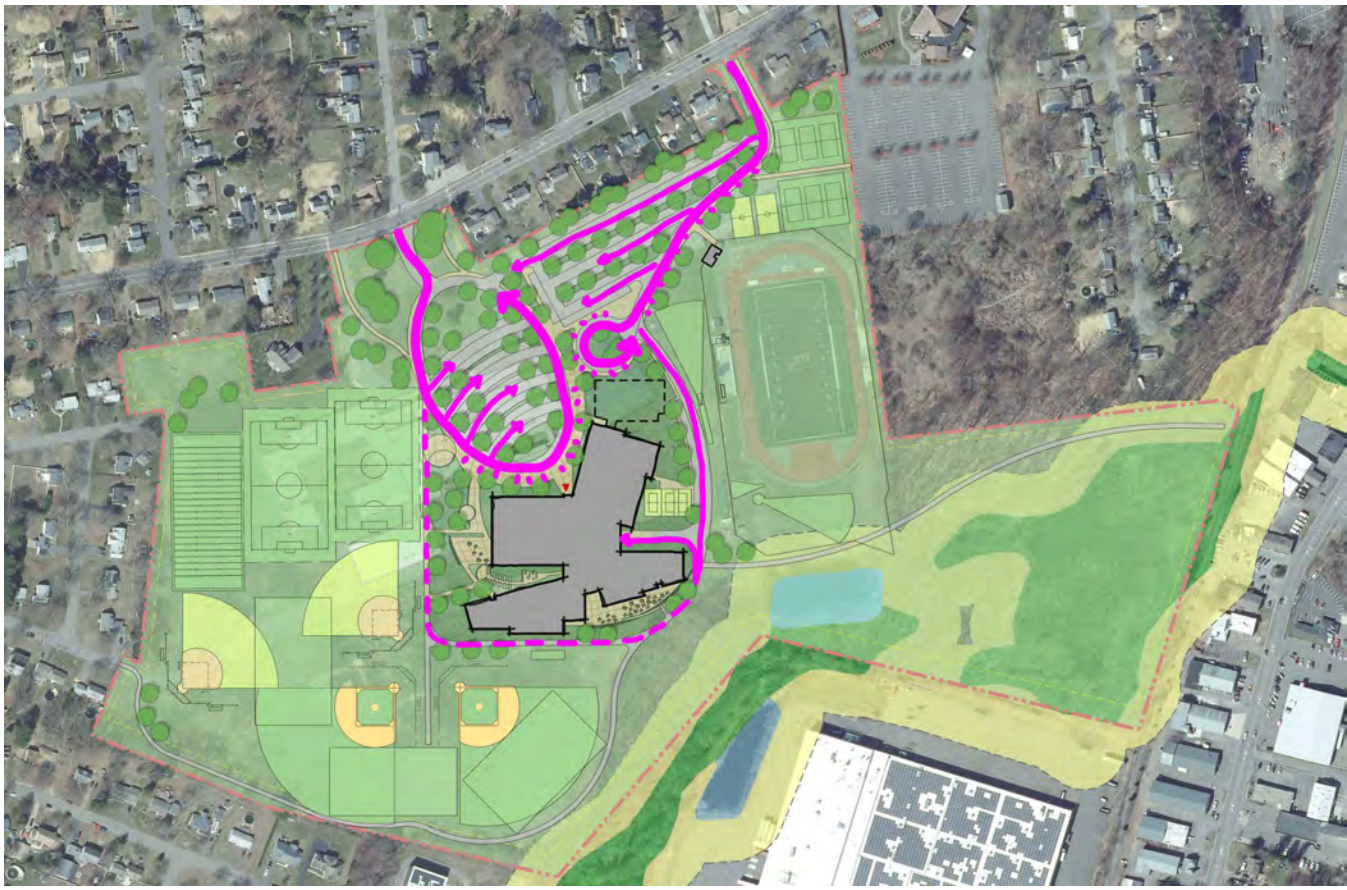
FIRST FLOOR

SECOND FLOOR

Design Update –

Site Plan

Design Update – Vehicle Circulation

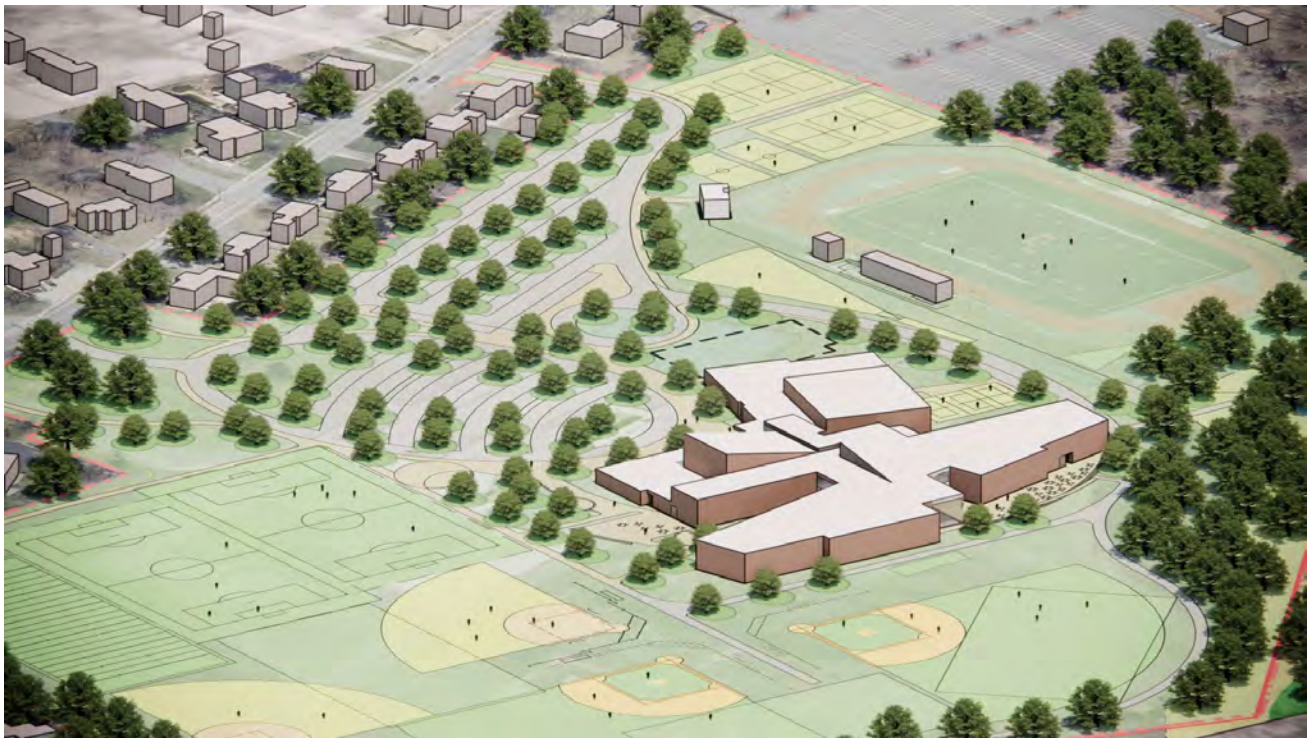


Design Update – Pedestrian Circulation

Building Form

conceptual render from north

Building Form



conceptual render from southwest

Sustainability & Systems: Opportunities

Building that supports health and wellness

- Clean air, daylighting, natural light, reduced glare, access to nature, thermal comfort, acoustics, healthy materials

Building as a tool for learning

- Measured energy data, post-occupancy systems monitoring, student gardens, green educational curriculum, outdoor classrooms

Outstanding energy performance

- Solar PV, Heat pumps (geothermal, VRF), net-zero ready design, reduced operational costs

Building for resilience

- High performing envelope, regenerative site, stormwater retention, systems redundancy, rain-water harvesting, community resource

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

Improved Security

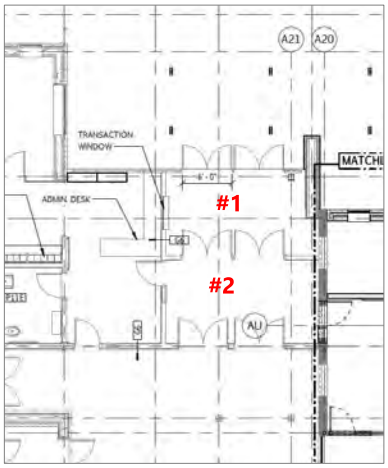
The new building will improve security

Starting with the big picture:

- Crime Through Environmental Design (CPTED)
- Engagement with key stakeholders throughout design process
- Clear site lines – inside and out
- Easily monitored spaces
- Easy emergency access
- Controlled public access

To the details:

- Controlled entry with abuse resistant glass
- Comprehensive security system
- Door contacts tied to centralized system
- Functioning, easy to use door hardware



Educational Advantages

Improved setting for teaching, learning and community connections

- Organized to create more inclusive and student-centered school culture
- Opportunity to provide better sized teaching spaces.
- Provides more varied space types and outdoor learning spaces.
- Introduction of collaboration and support spaces throughout.
- Update all teaching technology, furniture and finishes.
- Fully new infrastructure.
- Reinvestment in enrichment programs including art, drama, music, PE and hands-on learning spaces

What excites you about the plans so far?

What concerns you about the plans so far?

YOUR TURN!

How can I continue to learn more about the ELHS building project?

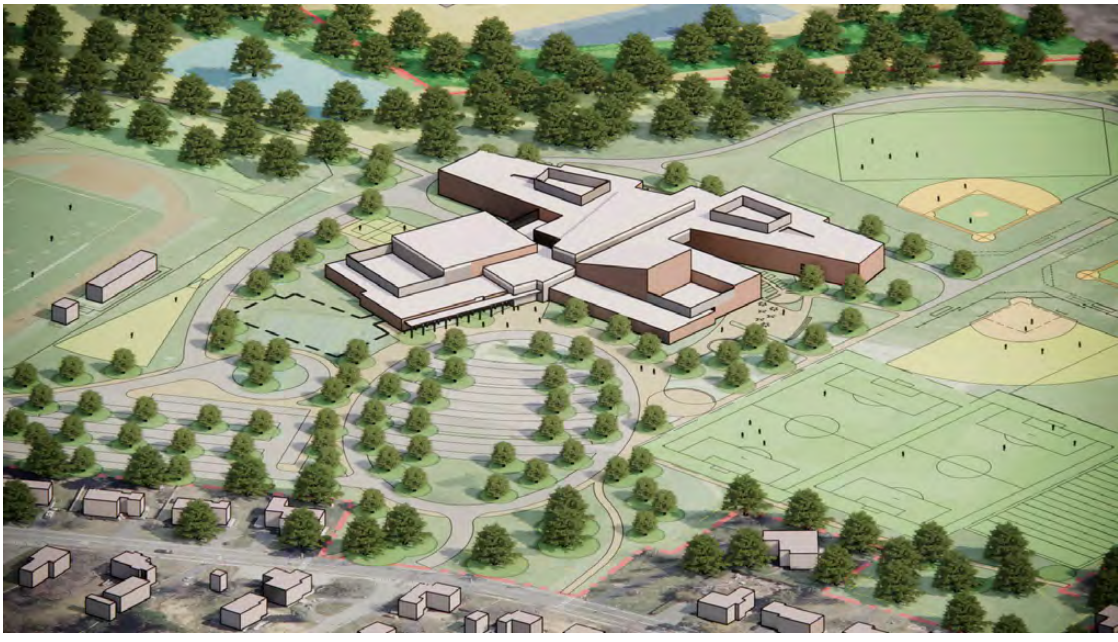
- To learn more about the ELHS building project please visit www.eastlongmeadowma.gov/ELHSBuildingProject
- Attend and participate in monthly School Building Committee Meetings. Calendar of meetings are posted on the project website.
- Please visit the ELHS building project website to stay updated on future Community Forums and Building Tours.
- If you have questions about the project or the Feasibility Phase, please email your questions to elhsbuildingproject@eastlongmeadowma.gov

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow High School

JWA JONES WHITSETT ARCHITECTS

in association with SMMA



AGENDA

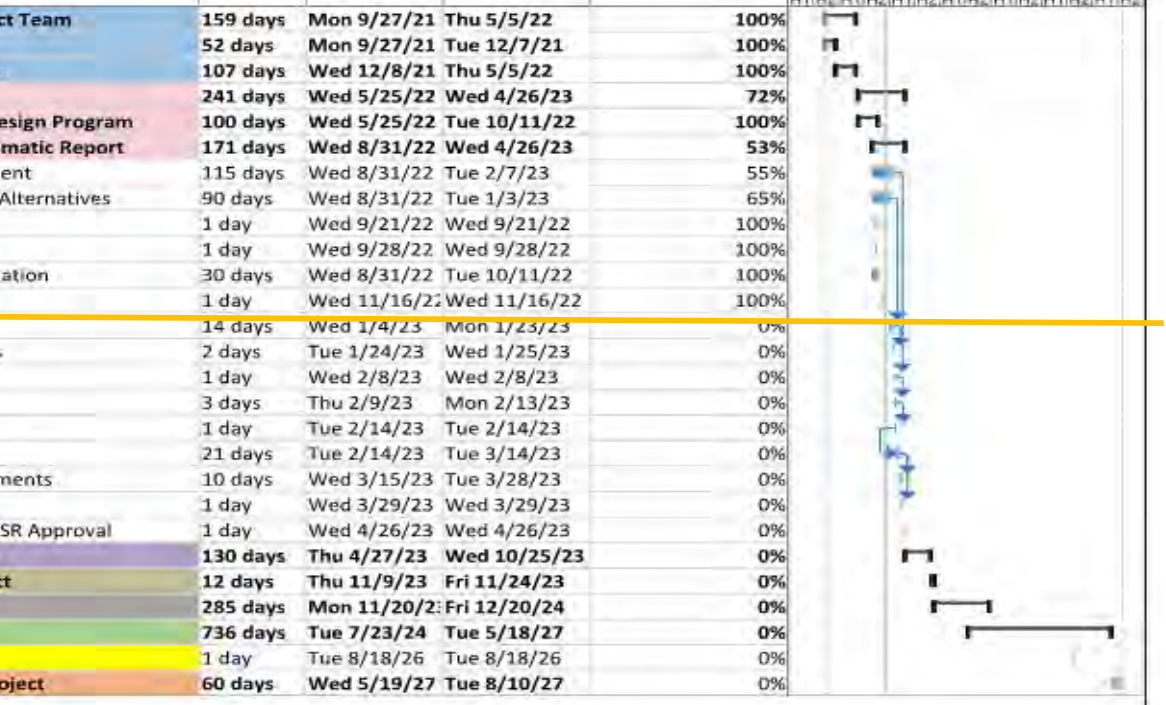
1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
   - DBB v CMR
4) JWA Update
5) New Business
6) Adjourn

JWA | SMMA

SKANSKA

East Longmeadow High School Project

ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**72%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**53%**
52	PSR Submittal Development	115 days	Wed 8/31/22	Tue 2/7/23	55%
53	Development of Project Alternatives	90 days	Wed 8/31/22	Tue 1/3/23	65%
54	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	100%
55	Design Team Charrette	1 day	Wed 9/28/22	Wed 9/28/22	100%
56	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 10/11/22	100%
57	Community Forum #3	1 day	Wed 11/16/22	Wed 11/16/22	100%
58	Cost Estimating	14 days	Wed 1/4/23	Mon 1/23/23	0%
59	Reconcile Cost Estimates	2 days	Tue 1/24/23	Wed 1/25/23	0%
60	SBC Approval of PSR	1 day	Wed 2/8/23	Wed 2/8/23	0%
61	Finalize PSR	3 days	Thu 2/9/23	Mon 2/13/23	0%
62	PSR Submittal to MSBA	1 day	Tue 2/14/23	Tue 2/14/23	0%
63	MSBA Review of PSR	21 days	Tue 2/14/23	Tue 3/14/23	0%
64	Address MSBA PSR Comments	10 days	Wed 3/15/23	Tue 3/28/23	0%
65	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
66	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
67	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
85	**Module 6: Detailed Design**	**285 days**	**Mon 11/20/23**	**Fri 12/20/24**	**0%**
139	**Module 7: Construction**	**736 days**	**Tue 7/23/24**	**Tue 5/18/27**	**0%**
149	*Occupancy/Move In*	1 day	Tue 8/18/26	Tue 8/18/26	0%
150	**Module 8: Completing the Project**	**60 days**	**Wed 5/19/27**	**Tue 8/10/27**	**0%**



SKANSKA

East Longmeadow High School

2022

Massachusetts Construction Reform

Chapter 193 of the Acts of 2004

"An Act Further Regulating Public Construction in the Commonwealth"

- Enacted July 19, 2004
- Most comprehensive construction reform since 1981
- Higher thresholds for general and filed sub-bidders
- DCAM Certification requirements for filed sub-bidders
- Prequalification requirements for bidders and sub-bidders
- OPM requirements
- MBE/WBE requirements
- New Statute: Chapter 149A to permit the use of the Construction Management at Risk alternative delivery method

Construction Delivery Methods

Key Differences

Design-Bid-Build (DBB)

Chapter 149

You are purchasing a building in accordance with plans and specifications

Construction Management at Risk (CM@R)

Chapter 149A

You are hiring a professional service firm which manages the construction of buildings

General Project Risks Regardless of Delivery Used

- Unforeseen building or site conditions
- Incomplete design documents
- Unqualified sub-contractors, poor performance
- Sub-contractor or trade contractor failures
- Future construction cost escalation
- Working on and around occupied facilities
- Complex site logistics
- Adversarial team environment
- Potential bid protests
- Bid coverage

Cost Implications

Design-Bid-Build

- Aside from the 18 Filed Sub-Trades, the DBB cost of the work is highly competitive and will likely yield a lower cost up front than CM@R however, greater incentive to seek change orders for under bidding
- Direct subs are the Contractor's choice
- The Contractor's contingency is NOT transparent
- *Note: The Contractor's objective is to maximize their profit margin*

CM@R

- The Owner and project team interacts with the CM to establish the GMP
- Direct subs may be selected to bid
- Fee is fixed, GC/GR's are negotiable
- Open book accounting
- Any unused funds in project requirements, allowances, scope and CM contingency is returned to the owner
- Includes contingency within the GMP to cover work reasonably non-inferable from the design documents
- The CM contingency is transparent

Contract Type

Design-Bid-Build

Lump Sum

- Based on cost of the work, general conditions and desired profit of GC
- Price fixed at lump sum bid amount with additions for change orders
- Price based on "plans and specs", or exactly what is indicated on contract documents. GCs look at documents as "black and white"
- Savings on actual costs below the bid "lump sum" amount become contractor profit
- No opportunity or incentive for negotiation

CM@R

Guaranteed Maximum Price (GMP)

- Based on bids for work packages, general conditions, contingency and set fee
- Essentially a "cost-plus" contract with guaranteed maximum
- Final price is based on actual bids received, amount of contingency used, and agreed upon general conditions/fee
- Any savings on actual costs revert to the owner
- All items of GMP are negotiable with the exception of the CM fee and Filed Sub-Trades Contractor Bids
- Can include allowances for work that is unclear or undefined to minimize the risk of financial surprises

Quality Control

Design-Bid-Build

- Lump Sum process promotes cost cutting to increase profit
- With General Contracting, heavy owner involvement is required to ensure no “cutting corners” on quality
- GC bids are based on “plans and specs” with no opportunity for scope clarification

CM@R

- CM Selection process is based on qualifications, experience, proposed team and success on past projects
- CM early involvement in project leads to greater understanding of complex logistics and design details
- CM’s involvement in the review of constructability during design phase utilizes builder’s knowledge of means and methods and subcontractor abilities to ensure a design that will result in a “buildable” high quality product

Subcontractors

Design-Bid-Build

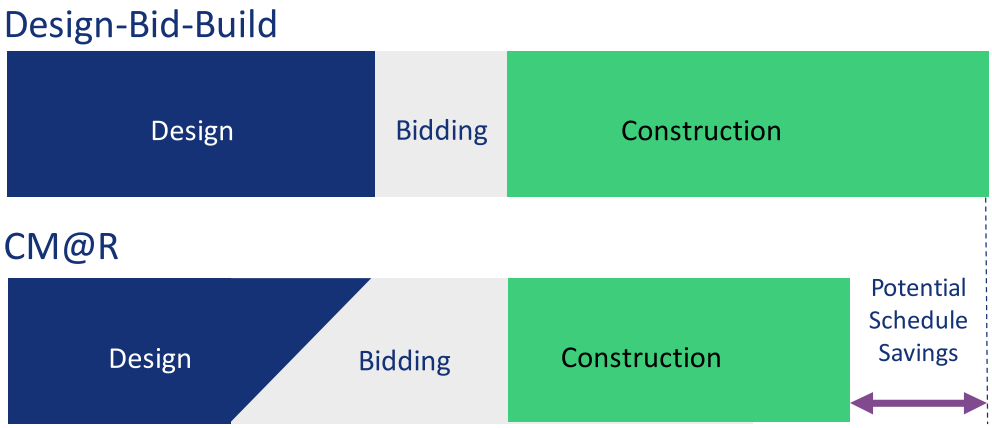
- With GC process, Filed Sub-Bidders do not know who GC is at time of bidding
- No ability to vet and select subcontractors

CM@R

- CM leads subcontractor bidding and manages bid process
- CM involvement in prequalification of Trade Contractors
- Allows owner “screening” of subs through review of bid lists and qualifications
- Significant bid coverage for all trades due to CM relationships in marketplace
- Ability for CM to create specific scopes of work for subcontractors as basis for bidding
- Early involvement and knowledge of project helps CM mitigate gaps in purchased scope
- Ability to perform “scope debriefs” to ensure bidder understanding of documents and expectations

Schedule Considerations

- Builder's viewpoint on "how to build" for planning and logistics integration into design
- Opportunity for fast-tracking and prepurchase of equipment
- CM Design-phase input allows for facilitation of biddable fast-track package documents



Comparison Summary

Design-Bid-Build (DBB)

- Fully defined project scope complete set of design documents is finished before the builder becomes involved
- Once plans are completed, bids are solicited from General Contractors (GC) and Filed Sub-bidders and select lowest responsible and eligible GG
- Alternates must be taken in order
- Early bid packages not available as an option
- Linear process means longer schedule duration than other methods
- Contract is based on a "Lump Sum" amount Perceived as getting "best price" by awarding to lowest responsible bidder.
- "Hard" price not established until bids are received; may require redesign and rebid if bids exceed budget.
- Simple accounting – any savings stays with GC
- Prone to changes and claims which may increase final project cost
- Bonding Capacity – Joint Ventures (?)
- **BEST SUITED FOR:** Less complicated smaller scale projects that are not schedule sensitive and not subject to change.

Comparison Summary

Construction Management at Risk (CM@R)

- CM Hired early and provides design phase and preconstruction services
- Interview and Select Contractor (Construction Manager)
  - Selection based on qualifications, experience & proposed team rather than lowest price/bid
  - Filed Sub-Trades Still Competitively Bid
  - Becomes Member of Project Team During Design
  - General Constructability Reviews
  - Construction Cost Estimates
  - Construction Phasing
- Early Bid Packages
  - Start Construction Earlier = Building Completed Earlier
  - CM has ability to "drive" the entire process
- Premium Cost of Involving During Design Phase (Preconstruction Fee)
- Open Book Accounting
  - Ability to Work With Contractor During "Buy-out"
  - Ability to Cost Control During Bidding Phase
  - Contract is based on "Guaranteed Maximum Price" (GMP), savings stays with owner
- **BEST SUITED FOR:** Projects that are time sensitive, challenging to define or subject to potential changes; projects requiring high construction oversight due to site logistics and phases as well as multiple stakeholders.

The CM Advantage

Cost Factors

Fee set at time of contract. No motivation for CM to "inflate" costs because savings revert back to owner

vs.

GC motivated to find "holes" in documents to reduce bid amount and make up with later change orders

- CM involvement in preconstruction to assist design team in maintaining budget and optimizing value/constructability
- Continuous budget feedback and control, open book accounting and purchasing
- Ability to obtain GMP earlier in process than traditional bid
- More ability to handle change in design and scope, minimizes changes and claims once in construction

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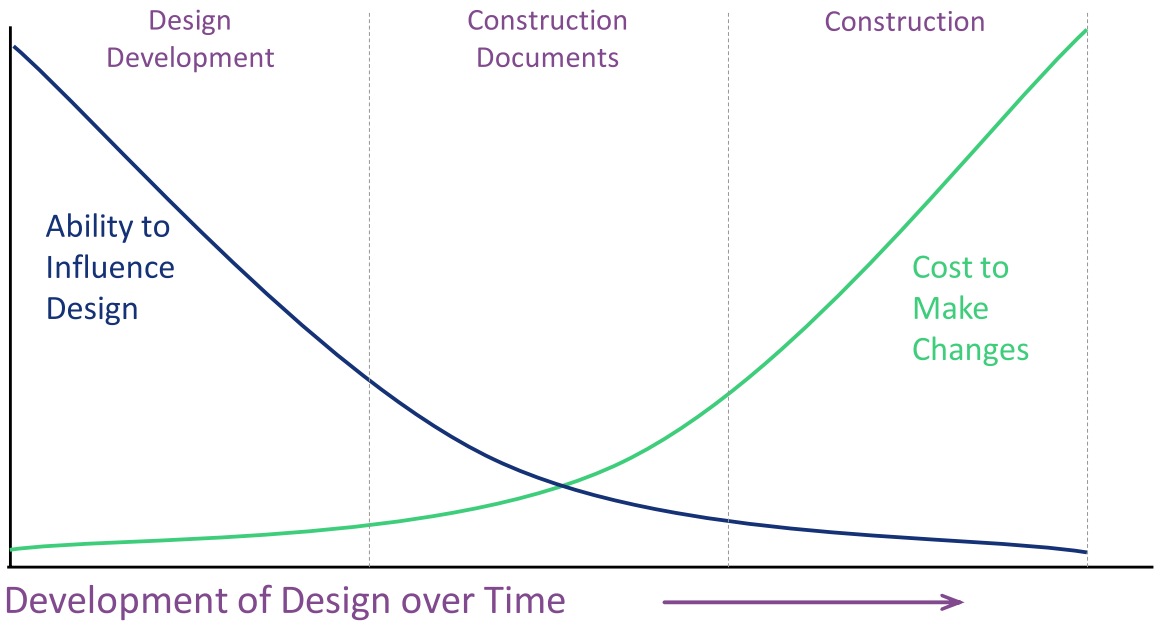
Cost and Ability to Influence Design



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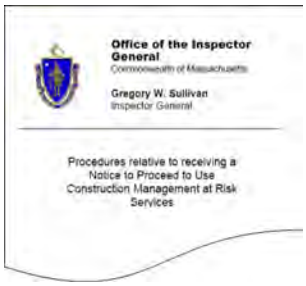
Planning Steps for CM@R Application Process

- Prepare Feasibility Study including Proposed Budget
- Establish proposed schedule
- Plan CM@R "oversight" organization (how will contract, change orders, GMP be handled)
- Create CM@R plan and procedures on how project will be managed
- Establish reporting and record-keeping systems
- Establish project organization chart and roles/responsibilities
- Obtain authorization from "governing body"
- Submit project specific Application to Proceed to Inspector General



Steps in CM Procurement Process

1 **Establish Prequalification Committee** *(OPM, Designer, at least two public representatives)*

2 **Prepare and Advertise Request for Qualifications (RFQ)**

3 **Evaluate Responses and Prequalify at least Three (3) Construction Managers**

4 **Establish a Selection Committee** *(can be same as Prequalification Committee)*

5 **Prepare Request for Proposals (RFP) and Distribute to Prequalified Firms**

6 **Receive, Evaluate and Rank Proposals** *(interviews are permitted if conducted with all proposers)*

7 Negotiate Non-fee Terms with Selected Proposer and Award Contract

Summary

CM at Risk Creates the Opportunity to:

- Hire a sophisticated, experienced team member based on qualifications
- Save time on the schedule through fast tracking and prepurchase
- Design a "buildable" building with a great deal of thought about value, quality, durability and user benefits
- Manage the budget process and see all costs via open book accounting
- Have a greater opportunity to select and prequalify subcontractors for the project resulting in significant quality improvement
- Reduce changes and claims through preconstruction involvement, design-to-budget, and effective purchasing and scope delineation
- Engage in a positive and collaborative design and construction process
- Gain an advocate looking out for your interests

	CM@R	DBB
Cost Control	✓	
Faster Process	✓	
Competitive Bidding	✓	✓
Less Contract Management		✓
Quality Control	✓	
Less Owner Risk	✓	
Contractor Input During Design	✓	

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
   - DBB v CMR
4) **JWA Update**
   - **Community Forum Input**
   - **Subcommittee Updates**
   - **Site Plan**
   - **District Offices/IT/ELCAT Revision**
   - **Floor Plans**
   - **Other/PDP Estimate/Look Ahead**
5) New Business
6) Adjourn

Community Forum Feedback

- Tour of School
  - Explanation of Add/Reno & Base Repair
  - Ability to see the school's condition
- Feedback on Presentation
  - Desire for more site lighting to enable longer community use of fields
  - Concern about parking access to fields
  - Interest in how project may benefit educational experience
  - Appreciation for the concessions bldg
  - Appreciation from neighbors on the revised circulation plan
  - Overall—strong support for the project
  - Desire to see tax impact information soon

Educational Programming Subcommittee Update

Watched inspirational video about Grant High Renovation, Portland, Oregon

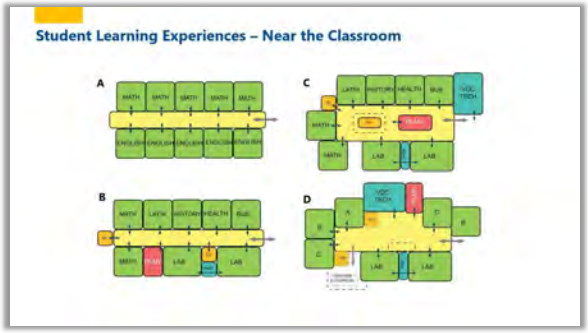
Reviewed Conceptual Organizational Diagrams of Academic Wings

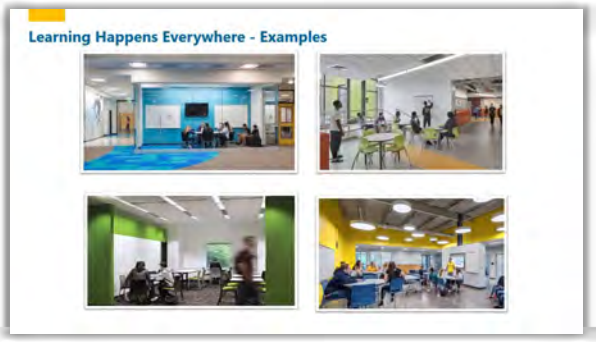
Reviewed visioning priorities in relation to ELHS educator's experience

- SEL throughout bldg
- Flex in classrooms/Flexible ways for students to learn out of classroom
- Excited about Breakout Rms
- Excited about collaborative Lrg Group Areas
- Interest in cross curricular project-based learning
- Like generous hallways to support more active learning
- Interest in interdisciplinary organization of halls but a desire to remain in a classroom consistently
- Eager to see classrooms that are well-equipped
- Interested in sharing access to flexible studios
- Need personal space for classroom aides/paras

Student Experience

- Need for more social space
- Need for charging stations
- Need for lockers to support athletes
- Need dedicated storage for extracurricular clubs





Site Design – Fields/Recreation Meeting

PEOPLE

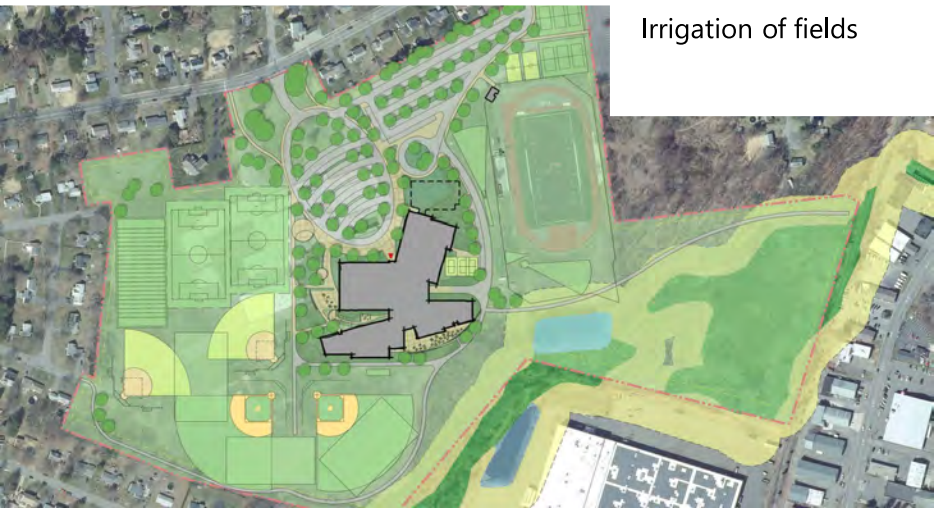
Kevin Magee – Athletic Director
Donna Prather – Recreation Director
Kristian Whitsett – JWA
Jillian DeCoursey – JWA
Chris Racine – SMMA
Samantha Farrell Folger – SMMA

DISCUSSION

Field program; type, quantity, orientation and location

Track and Field program and supporting sports programs (batting cages, sport courts, etc.)

Irrigation of fields



GOALS

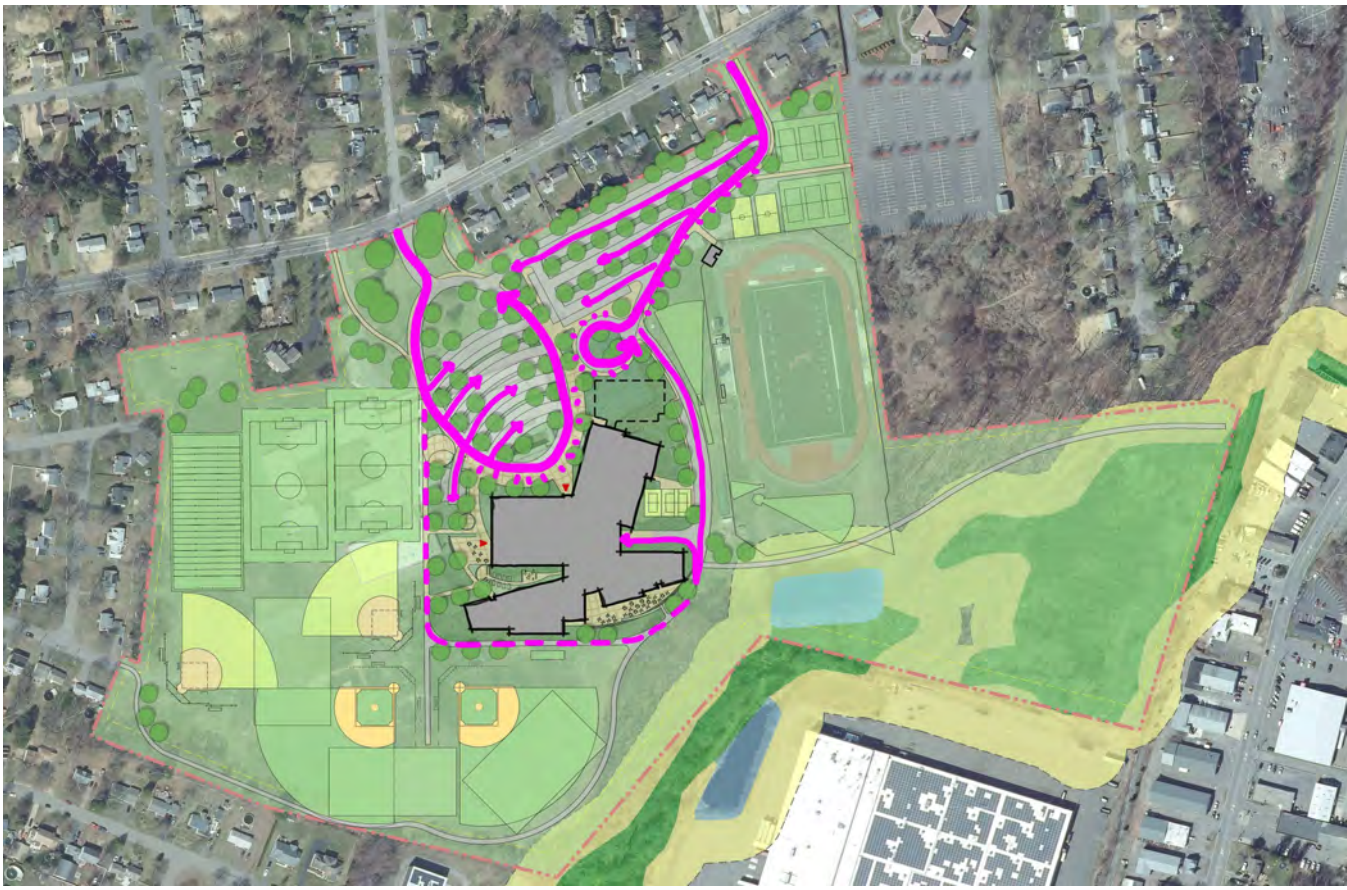
Existing	Proposed
Soccer F/S – 2	Soccer F/S - 2
Football F/S – 1	Football F/S - 1
Flex Field - 3	Flex Field – 0-3
Baseball – 2	Baseball - 2
Softball - 0	Softball - 2
Total - 8	Total – 7-10

- Meet proposed fields listed above
- Priority to bring 2 softball fields to site if possible
- Irrigation also a priority, with varsity fields at the top
- Final design based on survey information and continued coordination with AD and Rec Dir

Design Update –

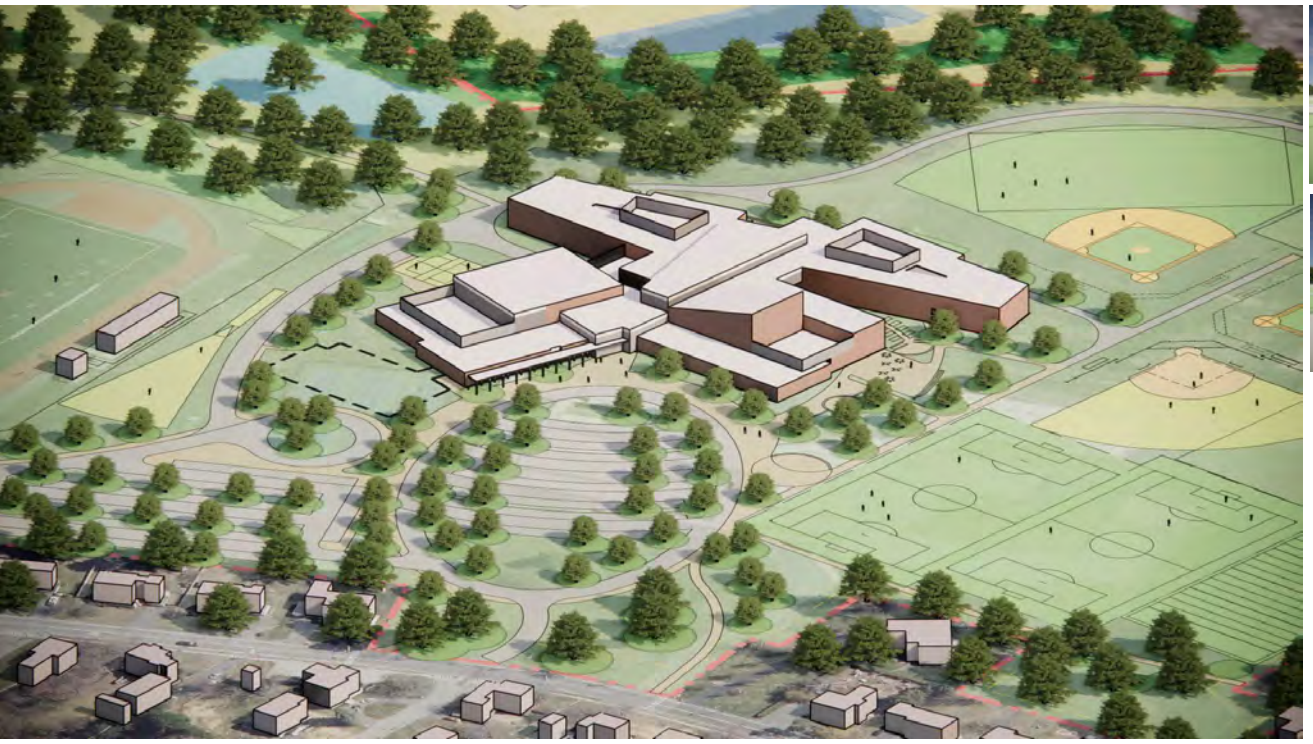
Site Plan

Design Update – Vehicle Circulation



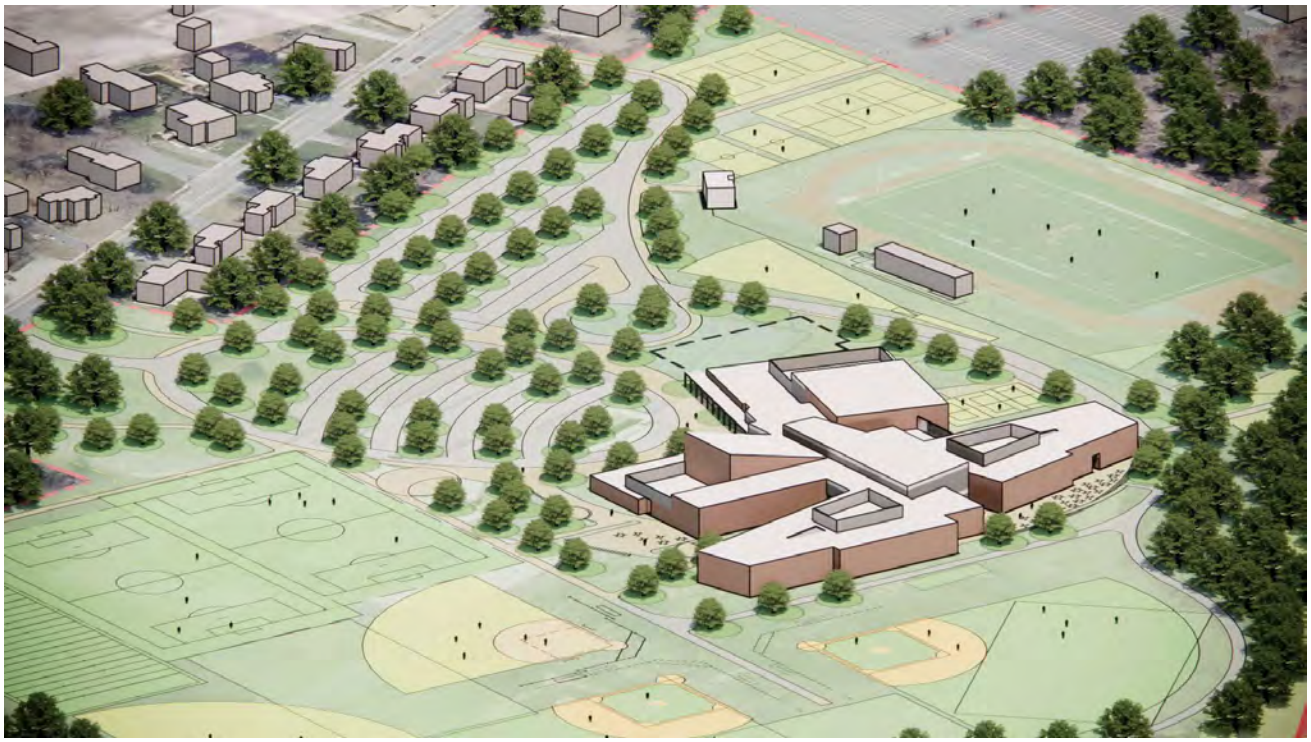
Design Update – Pedestrian Circulation

Building Form



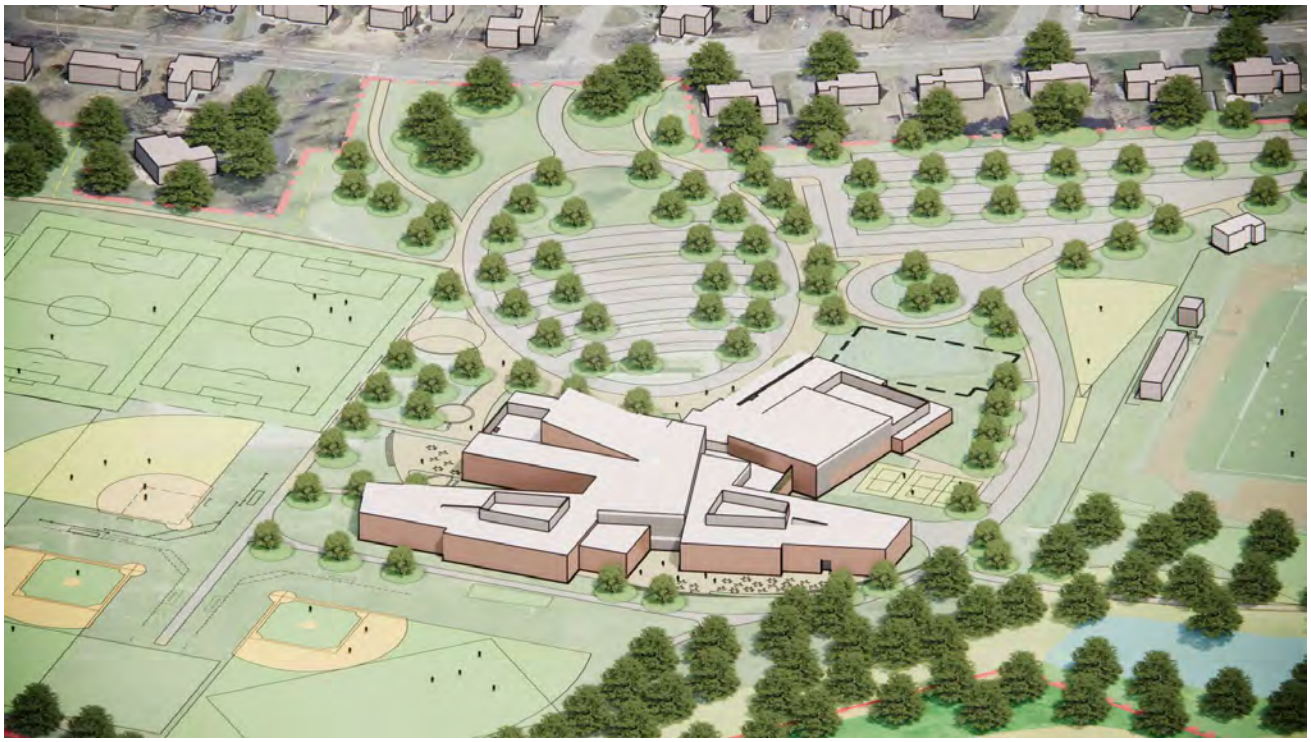
conceptual render from north

Building Form



conceptual render from southwest

Building Form



conceptual render from south

Building Form

conceptual render from northeast

Floor Plan Update

Floor Plan Update – District Offices, etc.

Floor Plan Update

- Further revisions of plan to capture all miscellaneous offices, utility spaces and circulation needs.
- Beginning to establish a structural layout
- Beginning to layout mechanical and electrical space needs.
- Exploring massing, daylighting and elevations.
- Beginning energy modelling to compare wall types and systems

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FIRST FLOOR

198,335 gsf

Floor Plan Update

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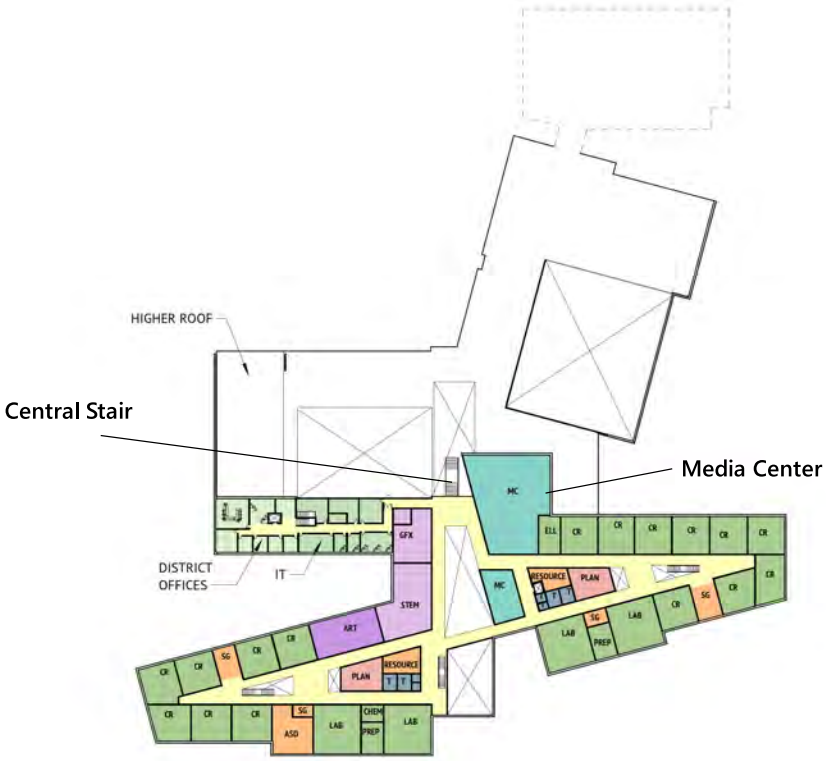

SECOND FLOOR 198,335 gsf

PSR Estimate Look Ahead

Revised Cost Estimates based on Narratives and Floor Plans:

- Base Code Upgrade
- Add/Reno not including Pool
- New Construction not including Pool

Option of Separate Community Building to be Excluded

Add/Reno & New Options will include:

- Pressbox
- Concessions Building
- District Offices/IT/ELCAT
- Field Upgrades
- Site Improvements
- Utility Connections sized to support school & pool

Alternate cost info will be gathered for:

- Additional Recreational Lighting & Infrastructure
- Roof PV Array

MEP Systems – To Be Discussed Next Week

Cost Estimates Re-schedule for Return to SBC by January 19

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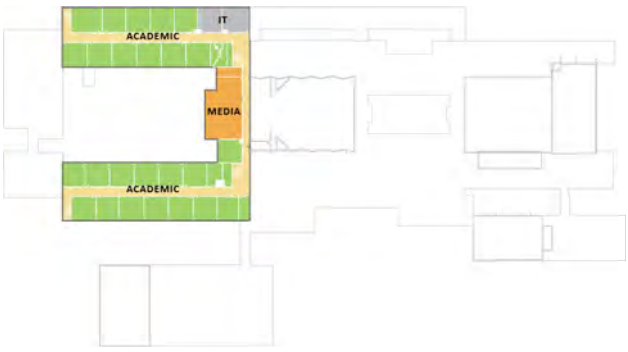
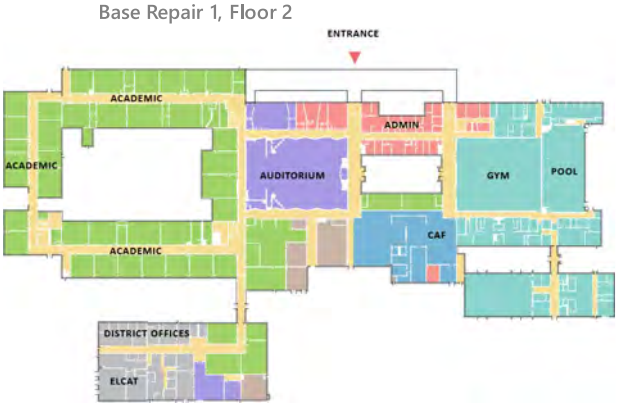
1– Base Repair

186,890 gsf existing

- No changes to interior walls or finishes – floor plan remains as is
- Upgrades would address: life safety, hazmat, accessibility, energy code, building systems
- Upgrades would constrain educational space and not meet educational goals
- Site remains unimproved
- Reduced classroom ceiling heights
- Undersized spaces would not be eligible for MSBA Reimbursement
- Community meetings have not supported this option



Base Repair 1, Floor 2

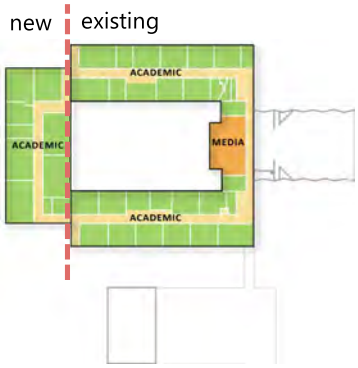


Base Repair 1, Floor 1

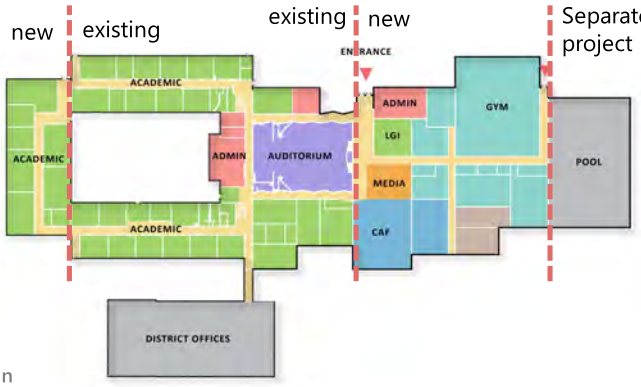
Add Reno 2C

113,282 gsf renovation
86,438 gsf new

- Roughly 60% renovation – including academic wings & auditorium
- New 2-story STEAM wing, Cafeteria, Entry, Gym
- Limited by existing low floor-to-ceiling heights
- Community program stays in current District Office building
- 2 separate drop-off loops, at front & side
- Improves fields
- Reduces classroom ceiling height
- Poorer building performance than New Option
- Community has opposed this approach in public meetings thus far



Add Reno 2C, Floor 2

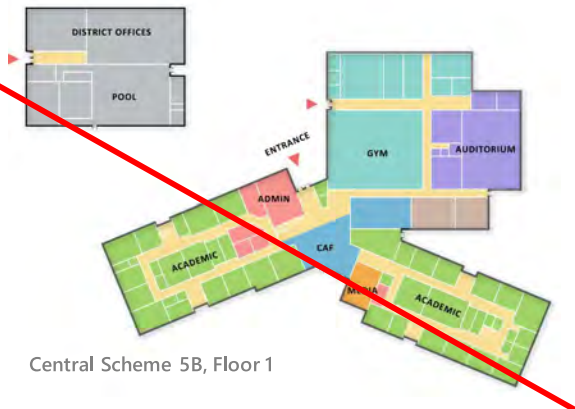


Add Reno 2C, Floor 1

5B – New School + Community Building

- Community program in separate building adjacent to athletics field
- 2 separate drop-off loops, one at front & one at side
- Buffered parking at front with pedestrian spine
- Removes Norden Street emergency access
- Potentially gains space for softball field
- Oriented for optimal daylighting
- Academic wings create classroom neighborhoods – flexible learning options
- Cafeteria & media center form social heart of school
- Strong indoor-outdoor learning opportunities

Central Scheme 5B, Floor 2



Central Scheme 5B, Floor 1

Investigation Update

Survey – *Incomplete*

Wetlands

- Flagged and Looking Good. No surprises

Traffic - Preliminary review complete

- Approves eliminating Norden connection
- Minor improvements at Maple Street recommended
- Generally happy about the internal circulation concepts
- Not recommending adding signal or turning lanes at Maple

Geotech

- Six wells completed
- Groundwater at 10' depth
- Dense Till to 20-25 ft
- Good soils for compaction
- Site Class D- Not a concern for liquification

JWA JONES WHITSETT ARCHITECTS SMMA

Upcoming Milestones

Student Engagement Day – TUESDAY, DEC. 13

- Design Team will visit four classes to discuss student experiences and how the design can be improved by student insight.
- Design Team will encourage students to play a role on SBC and in planning transitions to a new school.

Subcommittee Meetings

- Educational Planning – DEC. 15 (contact Dorrie)
- Sustainability - DEC. 8 (contact Jill)

Next SBC Meeting - ?

- HVAC Systems

Cost Estimate Set to Estimators – DEC. 21, 2022

- Gives SBC more time with the revised costs
- Allows for a meeting with Town Leadership on implications for borrowing/debt exclusion
- Allows time for set up of pool project

Cost Estimate Reconciliation – JAN. 19, 2022

PROPOSED SBC/ Town Council Project Info Meeting – END OF JANUARY

SBC Meeting – FEB. 8 or 9?

- Approval of PSR Submittal

JWA JONES WHITSETT ARCHITECTS SMMA

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
4) JWA Update
5) Communications Update
6) New Business
7) Adjourn

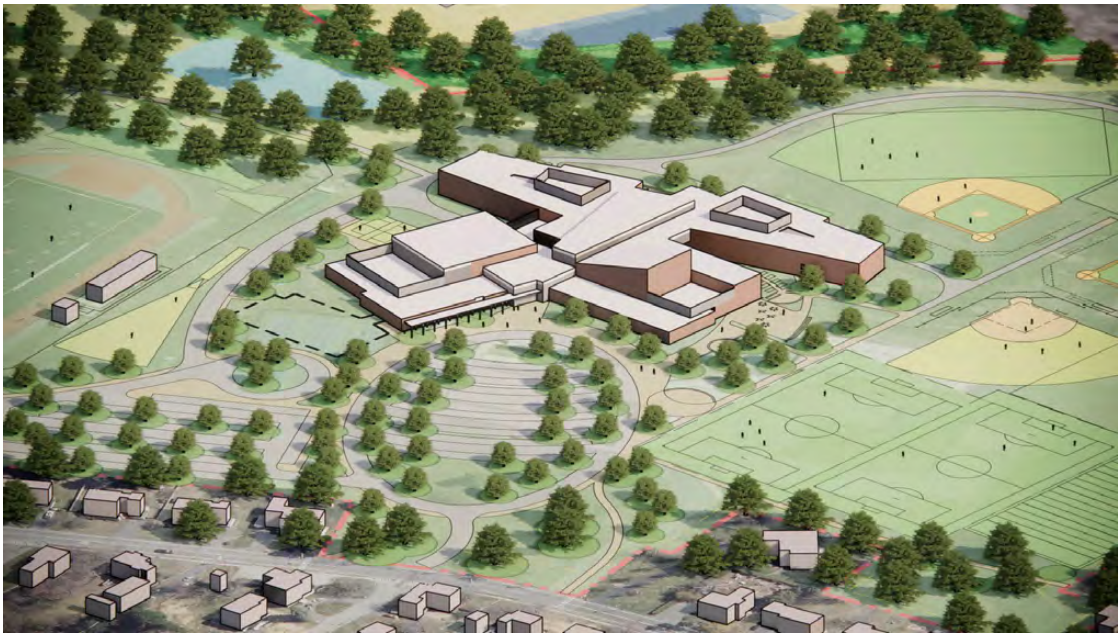
END

JWA | SMMA

East Longmeadow High School

JONES WHITSETT ARCHITECTS

in association with SMMA



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1) Welcome and Approval of Minutes
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   - Erik Mason, CFO, City of Quincy, Ma.
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6) Vote on Sustainability Certification Method
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SKANSKA — East Longmeadow High School Project — Ch. 149A (CMR) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Comple
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**85%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**74%**
52	PSR Submittal Development	111 days	Wed 8/31/22	Wed 2/1/23	83%
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67	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
85	**Module 6: Detailed Design**	**265 days**	**Mon 11/27/23**	**Fri 11/29/24**	**0%**
139	**Module 7: Construction**	**734 days**	**Tue 7/23/24**	**Fri 5/14/27**	**0%**
150	*Occupancy/Move In*	1 day	Mon 8/24/26	Mon 8/24/26	0%
151	**Module 8: Completing the Project**	**60 days**	**Mon 5/17/27**	**Fri 8/6/27**	**0%**

SKANSKA | East Longmeadow High School Project | Ch. 149 (D-B-B) Construction Delivery Method

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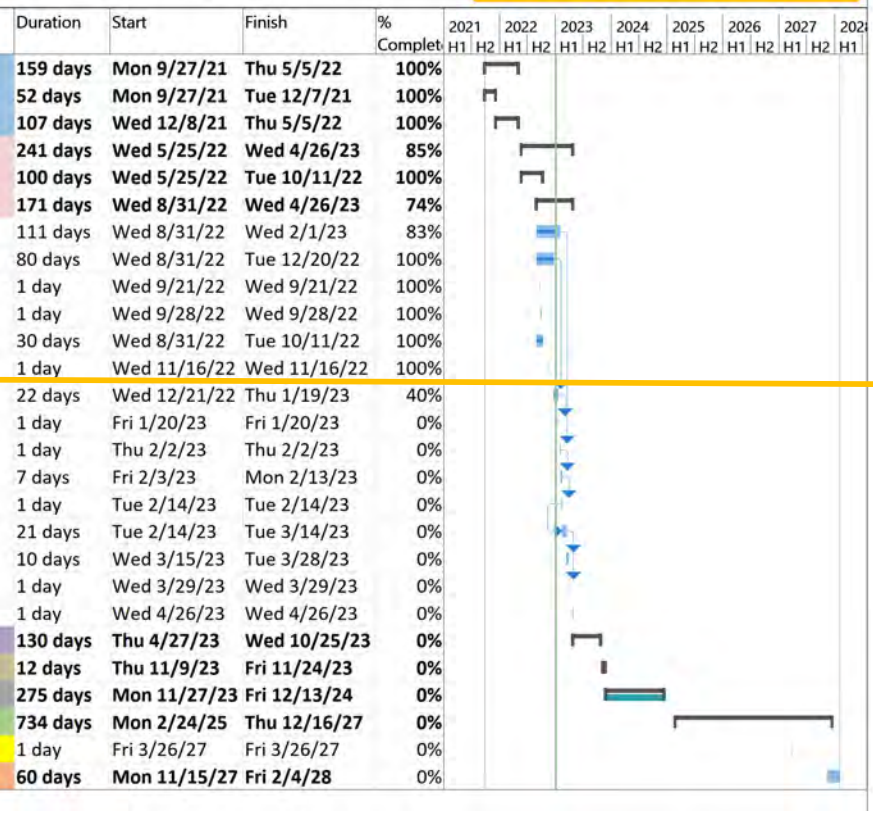
130	**Module 7: Construction**	**734 days**	**Mon 2/24/25**	**Thu 12/16/27**	**0%**
141	*Occupancy/Move In*	1 day	Fri 3/26/27	Fri 3/26/27	0%
142	**Module 8: Completing the Project**	**60 days**	**Mon 11/15/27**	**Fri 2/4/28**	**0%**



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6) Vote on Sustainability Certification Method
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   - Erik Mason, CFO, City of Quincy, Ma.
5) JWA Update
   - **Student Engagement Update**
   - **Cost Estimate Process Update**
   - **Mechanical Systems**
   - **Sustainability Certification**
6) Vote on Sustainability Certification Method
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Student Engagement

KEY TAKEAWAYS:

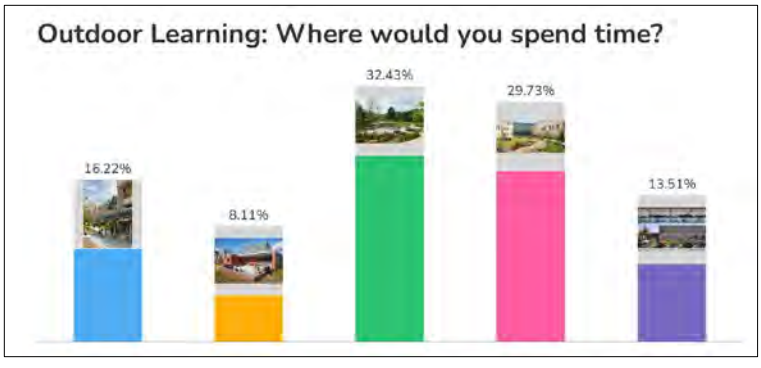
Very strong interest in cafeteria having multiple types of seating areas

Students liked space/designs that felt clean, modern, and open

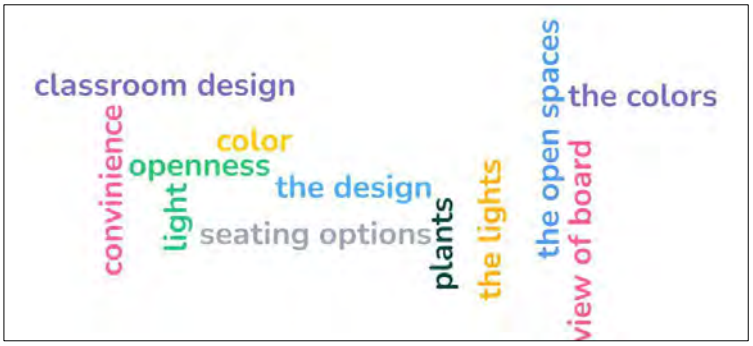
Natural light and comfortable spaces/seating were popular

Many students would use lockers *if* they were big enough

A lot of students want spaces that help them feel more independent/adult



What characteristics drew you to your selections?



PSR Design Options

- Drawings and Narratives submitted to two estimators – Skanska and PM&C
- Estimates due Jan. 17
- Reconciliation process Jan. 20
- MSBA Reimbursement Rate Basis has been raised
    1. Was 56.48% of $360/sf
    2. Is now 56.48% of $393/sf plus incentive points

Option 1 – Base Code Repair	Option 2C – Add/Reno	Option 3C – New Construction
186,890 gsf	199,719 gsf	198,380 gsf New Construction 194,580 gsf - deducts IT & ELCAT 187,910 gsf – deducts District Offices

PSR Design Options

Option 1 – Base Code Repair

Option 2C – Add/Reno

Option 3C – New Construction

JWA JONES WHITSETT ARCHITECTS | SMMA

Level 2

Level 1

199,719 gsf - Option 2C Add/Reno

Deduct Alternates

Option 1 – Base Code Repair

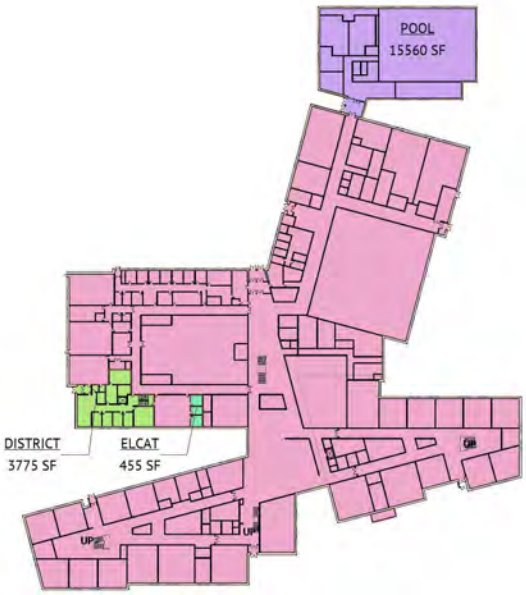
Option 2C – Add/Reno

Option 3C-3 – New Construction

198,380 gsf - Option 3C New Construction

194,580 gsf - Alt. 3 Deducts IT & ELCAT

187,910 gsf – Alt. 4 Deducts District Offices



Level 1

Level 2

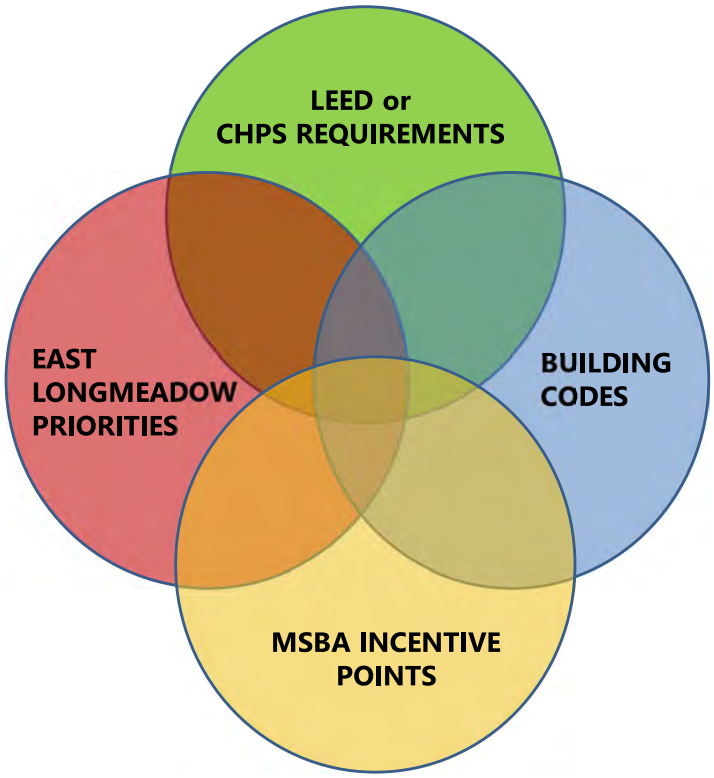
Sustainability & Systems Focus Group

Reviewed Sustainability Requirements

Brainstormed Sustainability Priorities

Reviewed of MEP System Options

Proposed use of LEED Certification System



Sustainable Design Opportunities

Building that supports health and wellness

- Clean air, daylighting, natural light, reduced glare, access to nature, thermal comfort, acoustics, healthy materials

Building as a tool for learning

- student gardens, green educational curriculum, outdoor classrooms, access to energy data & monitoring for STEM.

Building for climate resilience

- **Outstanding Energy Performance**
- Reduced operational costs, improved enclosure, all-electric heat pumps (geothermal or ASHP/VRF), Solar PV readiness.
- Regenerative site, stormwater retention, systems redundancy, community resource

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

"High efficiency systems. Low maintenance costs, long life of equipment being specified."

"More natural light and less noise from mechanicals"

"Low utility costs, ROI, and ease of maintenance.

"Energy management system is critical to maintaining a facility of this size as well.

What are your sustainability priorities for the new high school? What excites you?

" ... a building that is ready for the future and sets a good example for what we should be doing to make our world a better place for future generations."

"Energy efficiency, specifically with an ROI attached to it"

"Rain gardens, pollinator habitats, stormwater storage for irrigation."

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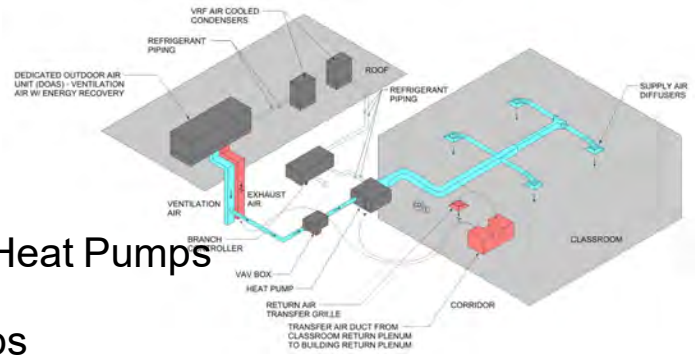
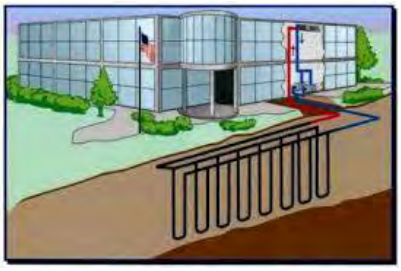
All-Electric HVAC Systems



- Air Source Variable Refrigerant Flow (VRF) Heat Pumps
- Geothermal Ground Source VRF Heat Pumps



Conventional HVAC System

- Fossil Fuel Source – Gas Fired Boiler, Air Cooled Chiller, 4-pipe Fan Coil Units (FCU)

Overview of Advantages & Disadvantages

COST ESTIMATE ADD/DEDUCT ALT. 2		COST ESTIMATE ADD ALT. 1
Conventional System	**Air Source Heat Pump/VRF**	**Ground Source Heat Pump/VRF**
Good Efficiency	High Efficiency	High Efficiency
Fossil Fuel Source	All-Electric	All-Electric
Centralized, Inflexible	Decentralized and flexible	Decentralized and flexible
Heating and cooling distributed via hydronics	Heating and cooling distributed via refrigerant	Heating and cooling distributed via refrigerant
Redundancy	No redundancy	No redundancy
Well-known to facility personnel	Meets Electrification Requirements	Meets Electrification Requirements
May not meet code	Meets new code	Requires auxilliary boiler/chiller in case of diminished well performance
Requires infrastructure ready for future all-electric systems	**Best Overall Life Cycle Cost***	High Installation cost for geothermal wells

Rating System Recommendation

	NE-CHPS	LEED
Total Pre-Requisites	28	14
Total Credits	250	110
Certification Level	**110 CHPS Verified**	**40 Certified****
Owner related Documentation	13 Pre-req 15+ credits	4 Pre-req 2 credit (Silver)
Registration and Documentation Process	National CHPS	USGBC/GBCI

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

LEED Scorecard

Y	?	N			
			Credit	Integrative Process	1

0	0	0	**Location and Transportation**		**16**
			Credit	LEED for Neighborhood Development Location	16
			Credit	Sensitive Land Protection	1
			Credit	High Priority Site	2
			Credit	Surrounding Density and Diverse Uses	5
			Credit	Access to Quality Transit	5
			Credit	Bicycle Facilities	1
			Credit	Reduced Parking Footprint	1
			Credit	Green Vehicles	1

0	0	0	**Sustainable Sites**		**10**
Y			Prereq	Construction Activity Pollution Prevention	Required
			Credit	Site Assessment	1
			Credit	Site Development - Protect or Restore Habitat	2
			Credit	Open Space	1
			Credit	Rainwater Management	3
			Credit	Heat Island Reduction	2
			Credit	Light Pollution Reduction	1

0	0	0	**Water Efficiency**		**11**
Y			Prereq	Outdoor Water Use Reduction	Required
Y			Prereq	Indoor Water Use Reduction	Required
Y			Prereq	Building-Level Water Metering	Required
			Credit	Outdoor Water Use Reduction	2
			Credit	Indoor Water Use Reduction	6
			Credit	Cooling Tower Water Use	2
			Credit	Water Metering	1

0	0	0	**Energy and Atmosphere**		**33**
Y			Prereq	Fundamental Commissioning and Verification	Required
Y			Prereq	Minimum Energy Performance	Required
Y			Prereq	Building-Level Energy Metering	Required
Y			Prereq	Fundamental Refrigerant Management	Required
			Credit	Enhanced Commissioning	6
			Credit	Optimize Energy Performance	18
			Credit	Advanced Energy Metering	1
			Credit	Demand Response	2
			Credit	Renewable Energy Production	3
			Credit	Enhanced Refrigerant Management	1
			Credit	Green Power and Carbon Offsets	2

0	0	0	**Materials and Resources**		**13**
Y			Prereq	Storage and Collection of Recyclables	Required
Y			Prereq	Construction and Demolition Waste Management Planning	Required
			Credit	Building Life-Cycle Impact Reduction	5
			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations	2
			Credit	Building Product Disclosure and Optimization - Sourcing of Raw Materials	2
			Credit	Building Product Disclosure and Optimization - Material Ingredients	2
			Credit	Construction and Demolition Waste Management	2

0	0	0	**Indoor Environmental Quality**		**16**
Y			Prereq	Minimum Indoor Air Quality Performance	Required
Y			Prereq	Environmental Tobacco Smoke Control	Required
			Credit	Enhanced Indoor Air Quality Strategies	2
			Credit	Low-Emitting Materials	3
			Credit	Construction Indoor Air Quality Management Plan	1
			Credit	Indoor Air Quality Assessment	2
			Credit	Thermal Comfort	1
			Credit	Interior Lighting	2
			Credit	Daylight	3
			Credit	Quality Views	1
			Credit	Acoustic Performance	1

0	0	0	**Innovation**		**6**
			Credit	Innovation	5
			Credit	LEED Accredited Professional	1

0	0	0	**Regional Priority**		**4**
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1
			Credit	Regional Priority: Specific Credit	1

0	0	0	**TOTALS**	Possible Points:	**110**

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

LEED "Certified" is the minimum required by MSBA and is readily achievable with 40-49 points. Most projects aim for "Silver" at 50 points

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LOOK AHEAD

Jan. 20 – Cost Estimate Reconciliation

Feb. 8 – Next SBC Meeting & Vote to Approve Preferred Schematic Design

Feb. 14 – Submission to MSBA

??? - Follow up presentation with Town Council regarding tax implications

March 29 – Facilities Assessment Subcommittee Meeting (MSBA)

April 26 – MSBA Approval of SD Phase

END

JWA | SMMA

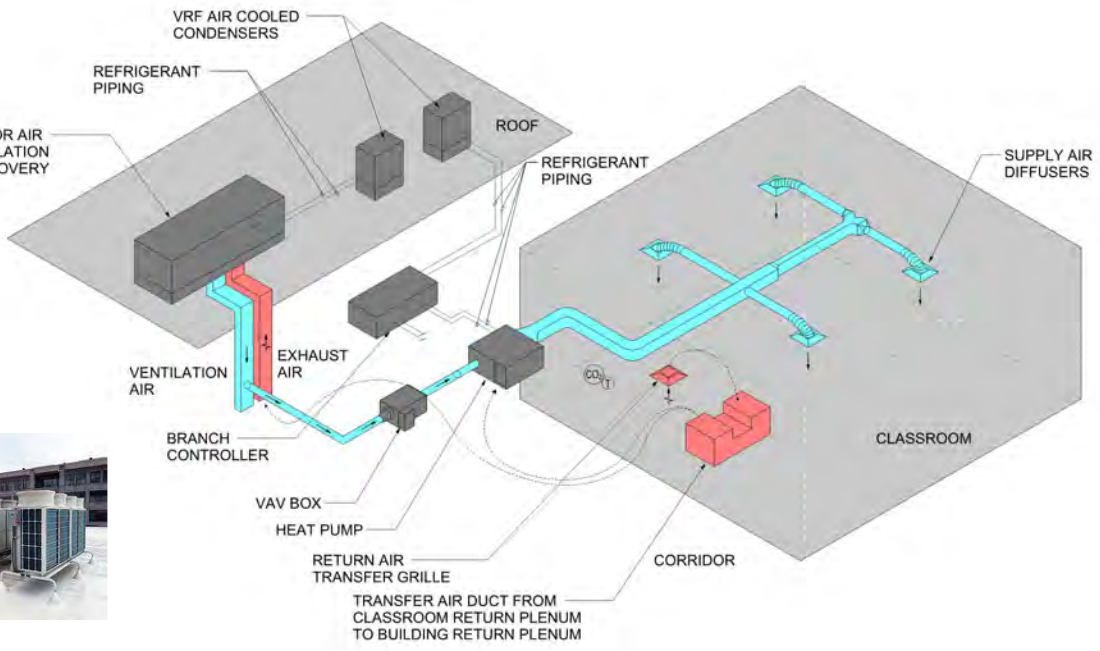
Air Source VRF Heat Pump System (ASHP)

VAV terminal

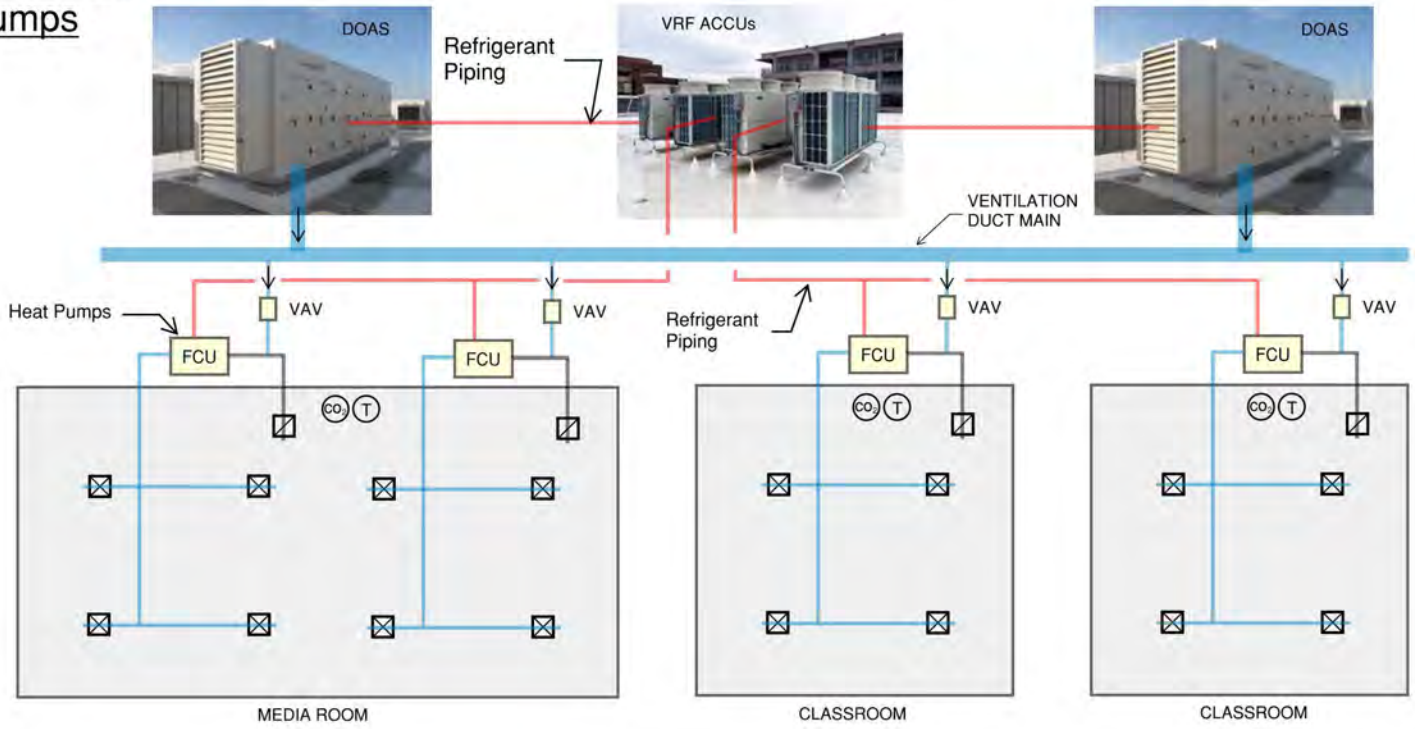
Ducted Heat Pump

Ceiling Cassette

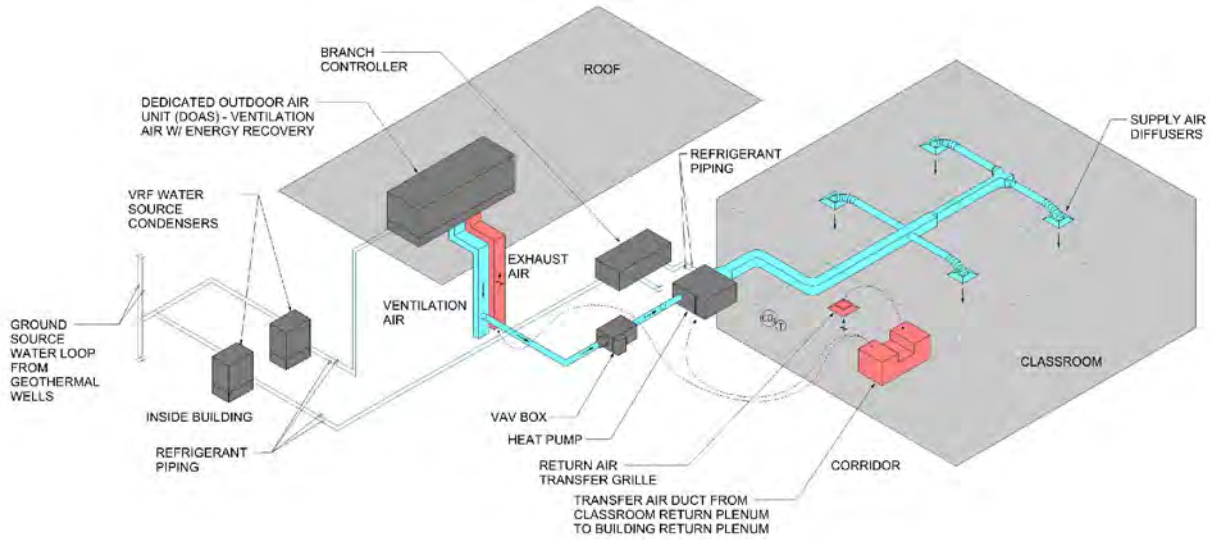
VRF Air Condensers



Air Source VRF Heat Pumps



Ground Source Geothermal VRF Heat Pump System (GSHP)



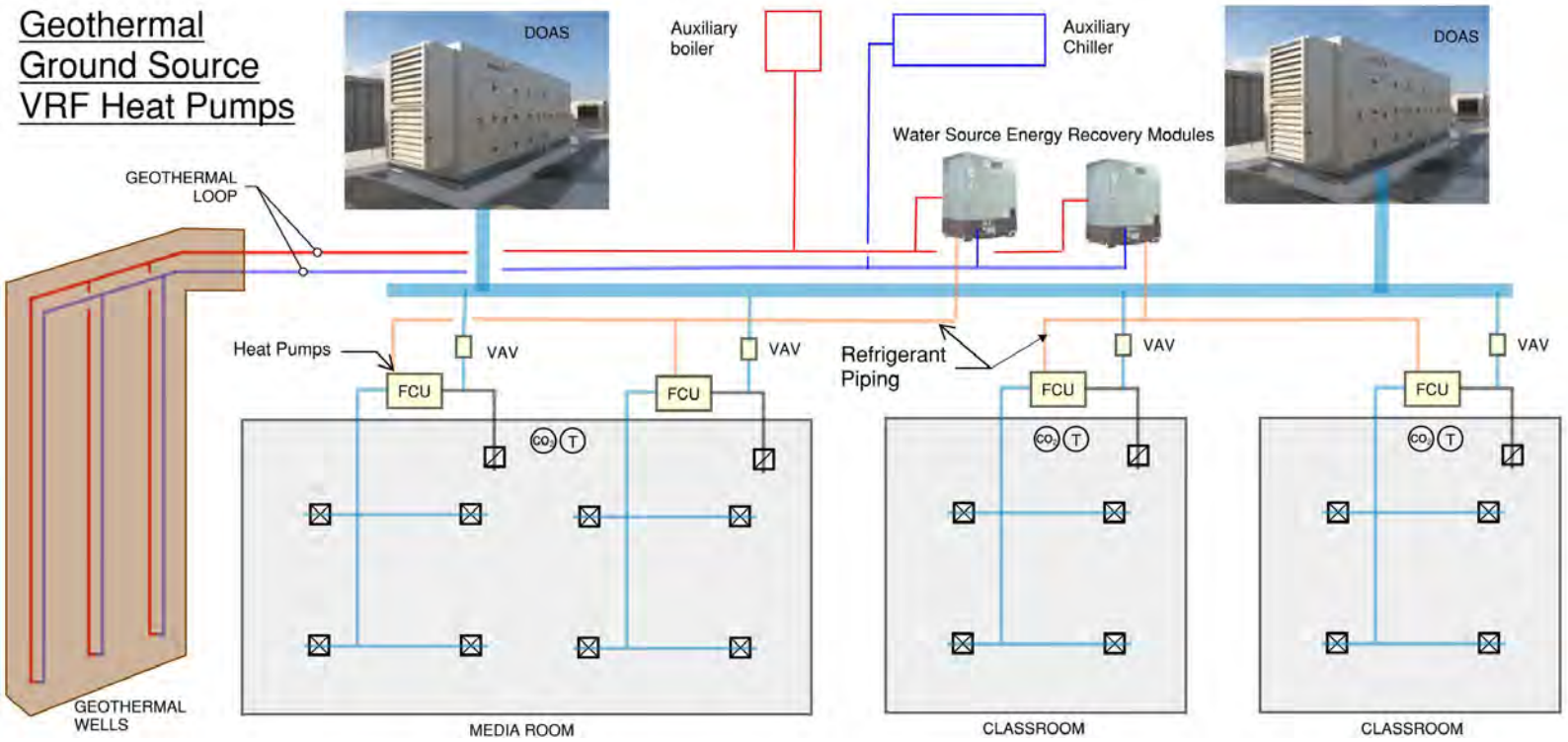
Water Source Energy recovery module

VAV terminal

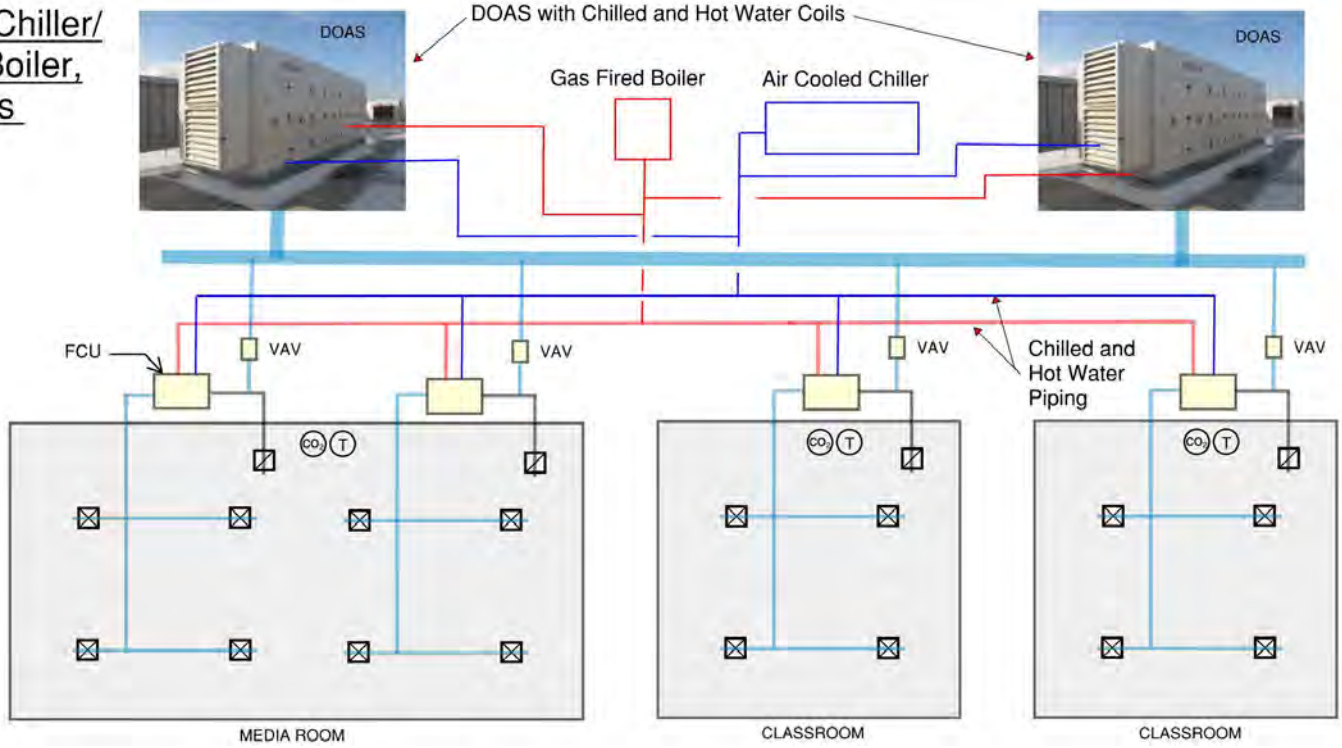
Ducted Heat Pump

Ceiling Cassette

Geothermal Ground Source VRF Heat Pumps



Air Cooled Chiller/ Gas Fired Boiler, 4-pipe FCUs



East Longmeadow High School

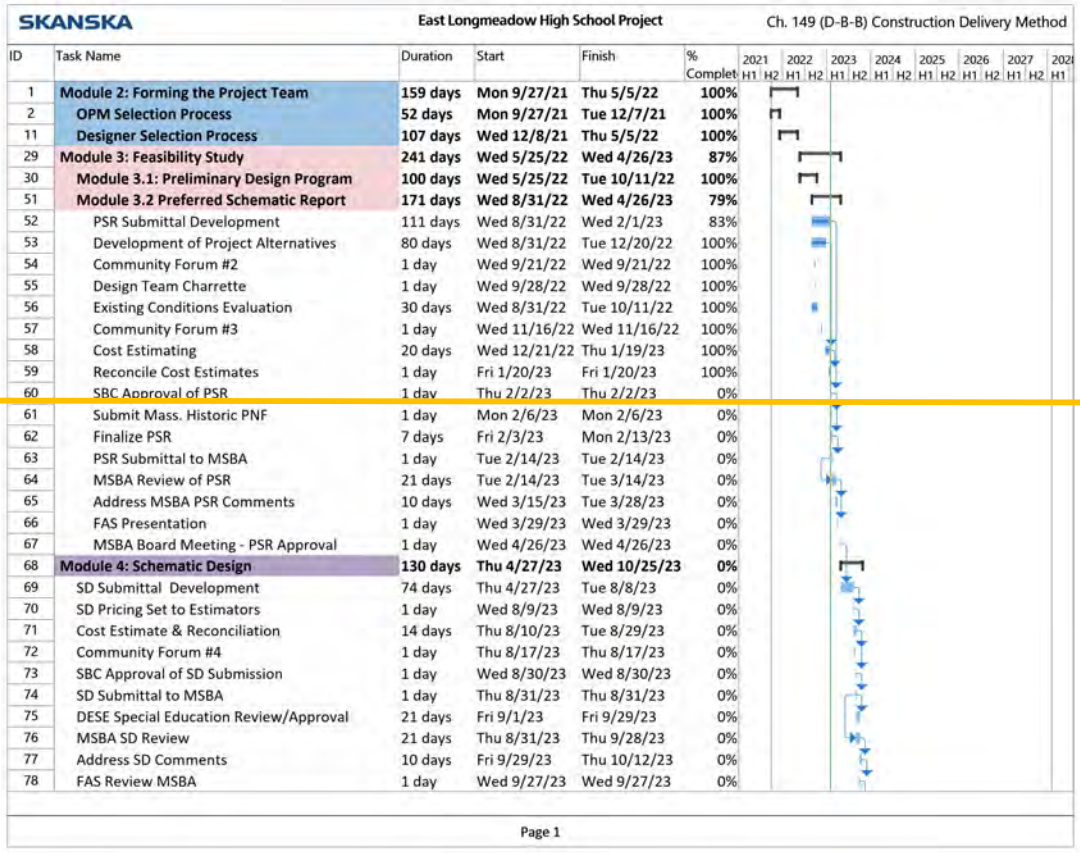
JONES WHITSETT ARCHITECTS

in association with SMMA

SBC Meeting –February 2, 2023

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
   - Review of Schedule
4) JWA Update
   - Review of PSR Reconciled Cost Estimate
   - Summary of Preferred Schematic Report Submission
   - Review of PSR Options/Matrix
5) Vote on Option to Develop Schematic Design
6) Vote to Approve Preferred Schematic Report
7) New Business
8) Adjourn



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72	Community Forum #4	1 day	Thu 8/17/23	Thu 8/17/23	0%
73	SBC Approval of SD Submission	1 day	Wed 8/30/23	Wed 8/30/23	0%
74	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
75	DESE Special Education Review/Approval	21 days	Fri 9/1/23	Fri 9/29/23	0%
76	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
77	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
78	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%

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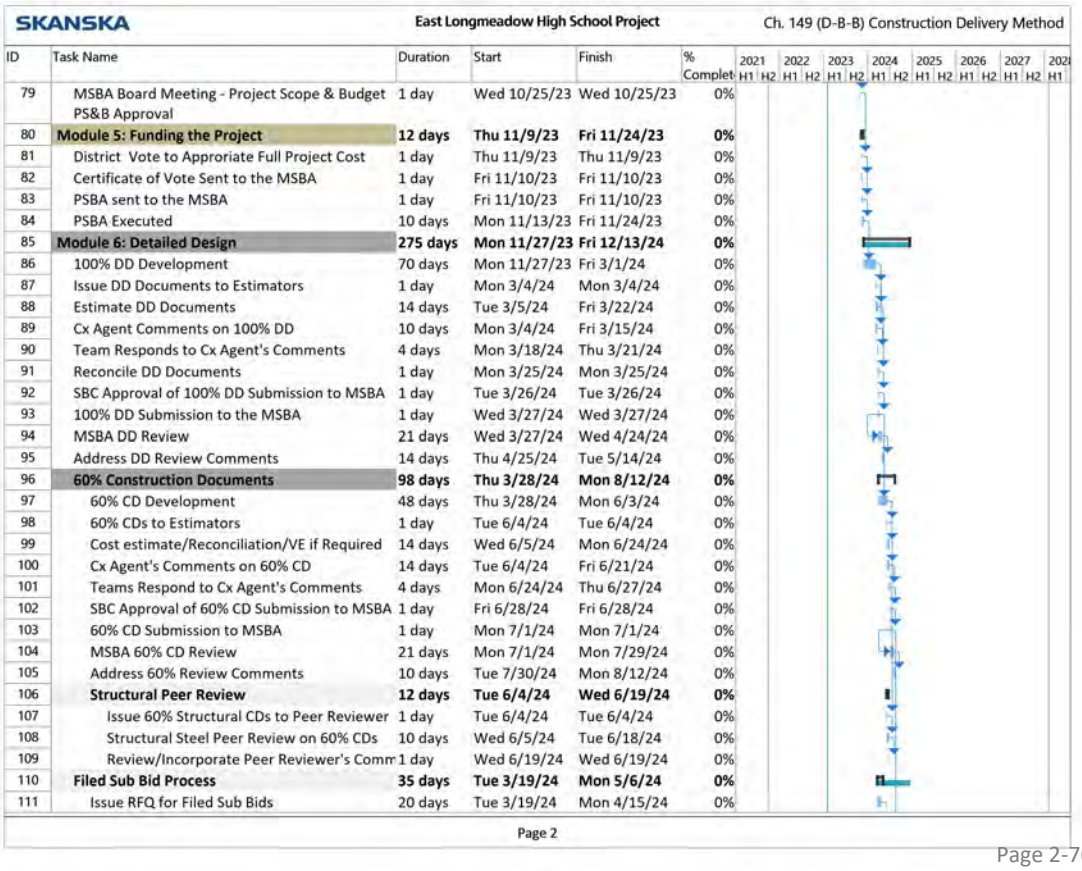

SKANSKA | East Longmeadow High School Project | Ch. 149 (D-B-B) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Complete
79	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
81	District Vote to Approriate Full Project Cost	1 day	Thu 11/9/23	Thu 11/9/23	0%
82	Certificate of Vote Sent to the MSBA	1 day	Fri 11/10/23	Fri 11/10/23	0%
83	PSBA sent to the MSBA	1 day	Fri 11/10/23	Fri 11/10/23	0%
84	PSBA Executed	10 days	Mon 11/13/23	Fri 11/24/23	0%
85	**Module 6: Detailed Design**	**275 days**	**Mon 11/27/23**	**Fri 12/13/24**	**0%**
86	100% DD Development	70 days	Mon 11/27/23	Fri 3/1/24	0%
87	Issue DD Documents to Estimators	1 day	Mon 3/4/24	Mon 3/4/24	0%
88	Estimate DD Documents	14 days	Tue 3/5/24	Fri 3/22/24	0%
89	Cx Agent Comments on 100% DD	10 days	Mon 3/4/24	Fri 3/15/24	0%
90	Team Responds to Cx Agent's Comments	4 days	Mon 3/18/24	Thu 3/21/24	0%
91	Reconcile DD Documents	1 day	Mon 3/25/24	Mon 3/25/24	0%
92	SBC Approval of 100% DD Submission to MSBA	1 day	Tue 3/26/24	Tue 3/26/24	0%
93	100% DD Submission to the MSBA	1 day	Wed 3/27/24	Wed 3/27/24	0%
94	MSBA DD Review	21 days	Wed 3/27/24	Wed 4/24/24	0%
95	Address DD Review Comments	14 days	Thu 4/25/24	Tue 5/14/24	0%
96	**60% Construction Documents**	**98 days**	**Thu 3/28/24**	**Mon 8/12/24**	**0%**
97	60% CD Development	48 days	Thu 3/28/24	Mon 6/3/24	0%
98	60% CDs to Estimators	1 day	Tue 6/4/24	Tue 6/4/24	0%
99	Cost estimate/Reconciliation/VE if Required	14 days	Wed 6/5/24	Mon 6/24/24	0%
100	Cx Agent's Comments on 60% CD	14 days	Tue 6/4/24	Fri 6/21/24	0%
101	Teams Respond to Cx Agent's Comments	4 days	Mon 6/24/24	Thu 6/27/24	0%
102	SBC Approval of 60% CD Submission to MSBA	1 day	Fri 6/28/24	Fri 6/28/24	0%
103	60% CD Submission to MSBA	1 day	Mon 7/1/24	Mon 7/1/24	0%
104	MSBA 60% CD Review	21 days	Mon 7/1/24	Mon 7/29/24	0%
105	Address 60% Review Comments	10 days	Tue 7/30/24	Mon 8/12/24	0%
106	**Structural Peer Review**	**12 days**	**Tue 6/4/24**	**Wed 6/19/24**	**0%**
107	Issue 60% Structural CDs to Peer Reviewer	1 day	Tue 6/4/24	Tue 6/4/24	0%
108	Structural Steel Peer Review on 60% CDs	10 days	Wed 6/5/24	Tue 6/18/24	0%
109	Review/Incorporate Peer Reviewer's Comm	1 day	Wed 6/19/24	Wed 6/19/24	0%
110	**Filed Sub Bid Process**	**35 days**	**Tue 3/19/24**	**Mon 5/6/24**	**0%**
111	Issue RFQ for Filed Sub Bids	20 days	Tue 3/19/24	Mon 4/15/24	0%

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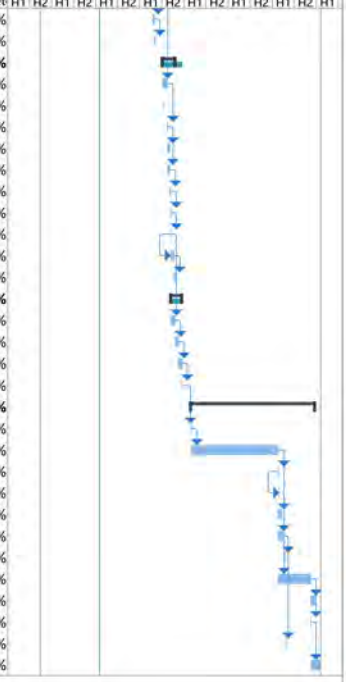
SKANSKA | East Longmeadow High School Project | Ch. 149 (D-B-B) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Complet
112	Prequailify Filed Subs	10 days	Tue 4/16/24	Mon 4/29/24	0%
113	Notify Preqaulified Bidders	5 days	Tue 4/30/24	Mon 5/6/24	0%
114	**90% Construction Documents**	**76 days**	**Thu 7/4/24**	**Thu 10/17/24**	**0%**
115	90% CD Development	30 days	Thu 7/4/24	Wed 8/14/24	0%
116	NOI to Con Comm and DEP	1 day	Tue 7/9/24	Tue 7/9/24	0%
117	90% CDs to Estimators	1 day	Thu 8/15/24	Thu 8/15/24	0%
118	Cost Estimate/Reconciliation/VE if Required	14 days	Fri 8/16/24	Wed 9/4/24	0%
119	Cx Agent Comments on 90% CDs	14 days	Fri 8/16/24	Wed 9/4/24	0%
120	Team Responds to Cx Agent's Comments	4 days	Thu 9/5/24	Tue 9/10/24	0%
121	SBC Approval of 90% CD Submission to MSE	1 day	Wed 9/11/24	Wed 9/11/24	0%
122	90% CD Submission to MSBA	1 day	Thu 9/12/24	Thu 9/12/24	0%
123	MSBA 90% CD Review Comments	21 days	Thu 9/12/24	Thu 10/10/24	0%
124	Address 90% Review Comments	5 days	Fri 10/11/24	Thu 10/17/24	0%
125	**100% Construction Documents**	**66 days**	**Fri 9/13/24**	**Fri 12/13/24**	**0%**
126	100% CD/ Bid Packages Development	25 days	Fri 9/13/24	Thu 10/17/24	0%
127	Filed Sub Trade Bid Period	20 days	Fri 10/18/24	Thu 11/14/24	0%
128	General Contractor Bid Period	20 days	Fri 11/15/24	Thu 12/12/24	0%
129	Bids Due	1 day	Fri 12/13/24	Fri 12/13/24	0%
130	**Module 7: Construction**	**734 days**	**Mon 2/24/25**	**Thu 12/16/27**	**0%**
131	Mobilization	5 days	Mon 2/24/25	Fri 2/28/25	0%
132	Phase 1- Site & Building	514 days	Mon 3/3/25	Thu 2/18/27	0%
133	Substantial Completion (Phase 1)	1 day	Fri 2/19/27	Fri 2/19/27	0%
134	Certificate of Occupancy	1 day	Fri 2/26/27	Fri 2/26/27	0%
135	FF&E Installation	20 days	Fri 2/19/27	Thu 3/18/27	0%
136	Complete Punch List	25 days	Fri 2/19/27	Thu 3/25/27	0%
137	Occupancy/Move In	1 day	Mon 4/19/27	Mon 4/19/27	0%
138	Phase 2- Demolition, Landscape & Hardscape	190 days	Fri 2/19/27	Thu 11/11/27	0%
139	Complete Punch List	25 days	Fri 11/12/27	Thu 12/16/27	0%
140	Substantial Completion (Phase 2)	1 day	Fri 11/12/27	Fri 11/12/27	0%
141	*Occupancy/Move In*	1 day	Mon 4/19/27	Mon 4/19/27	0%
142	**Module 8: Completing the Project**	**60 days**	**Mon 11/15/27**	**Fri 2/4/28**	0%



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SKANSKA | East Longmeadow High School Project | Ch. 149A (CMR) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Comple
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**87%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**78%**
52	PSR Submittal Development	111 days	Wed 8/31/22	Wed 2/1/23	83%
53	Development of Project Alternatives	80 days	Wed 8/31/22	Tue 12/20/22	100%
54	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	100%
55	Design Team Charrette	1 day	Wed 9/28/22	Wed 9/28/22	100%
56	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 10/11/22	100%
57	Community Forum #3	1 day	Wed 11/16/22	Wed 11/16/22	100%
58	Cost Estimating	20 days	Wed 12/21/22	Thu 1/19/23	100%
59	Reconcile Cost Estimates	1 day	Fri 1/20/23	Fri 1/20/23	100%
60	SBC Approval of PSR	1 day	Thu 2/2/23	Thu 2/2/23	0%
61	Submit Mass. Historic PNF	1 day	Mon 2/6/23	Mon 2/6/23	0%
62	Finalize PSR	7 days	Fri 2/3/23	Mon 2/13/23	0%
63	PSR Submittal to MSBA	1 day	Tue 2/14/23	Tue 2/14/23	0%
64	MSBA Review of PSR	21 days	Tue 2/14/23	Tue 3/14/23	0%
65	Address MSBA PSR Comments	10 days	Wed 3/15/23	Tue 3/28/23	0%
66	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
67	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
68	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
69	SD Submittal Development	74 days	Thu 4/27/23	Tue 8/8/23	0%
70	SD Pricing Set to Estimators	1 day	Wed 8/9/23	Wed 8/9/23	0%
71	Cost Estimate & Reconciliation	14 days	Thu 8/10/23	Tue 8/29/23	0%
72	Community Forum #4	1 day	Thu 8/17/23	Thu 8/17/23	0%
73	SBC Approval of SD Submission	1 day	Wed 8/30/23	Wed 8/30/23	0%
74	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
75	DESE Special Education Review/Approval	21 days	Fri 9/1/23	Fri 9/29/23	0%
76	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
77	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
78	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%

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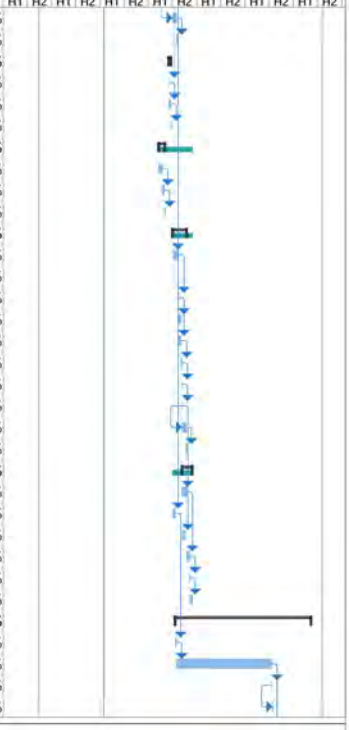
ID	Task Name	Duration	Start	Finish	% Comple
79	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
81	District Vote to Approriate Full Project Cost	1 day	Thu 11/9/23	Thu 11/9/23	0%
82	Certificate of Vote Sent to the MSBA	1 day	Fri 11/10/23	Fri 11/10/23	0%
83	PSBA sent to the MSBA	1 day	Fri 11/10/23	Fri 11/10/23	0%
84	PSBA Executed	10 days	Mon 11/13/23	Fri 11/24/23	0%
85	**Module 6: Detailed Design**	**265 days**	**Mon 11/27/23**	**Fri 11/29/24**	**0%**
86	100% DD Development	70 days	Mon 11/27/23	Fri 3/1/24	0%
87	Issue DD Documents to Estimators	1 day	Mon 3/4/24	Mon 3/4/24	0%
88	Estimate DD Documents	14 days	Tue 3/5/24	Fri 3/22/24	0%
89	Cx Agent Comments on 100% DD	10 days	Mon 3/4/24	Fri 3/15/24	0%
90	Team Responds to Cx Agent's Comments	4 days	Mon 3/18/24	Thu 3/21/24	0%
91	Reconcile DD Documents	1 day	Mon 3/25/24	Mon 3/25/24	0%
92	SBC Approval of 100% DD Submission to MSBA	1 day	Tue 3/26/24	Tue 3/26/24	0%
93	100% DD Submission to the MSBA	1 day	Wed 3/27/24	Wed 3/27/24	0%
94	MSBA DD Review	21 days	Wed 3/27/24	Wed 4/24/24	0%
95	Address DD Review Comments	14 days	Thu 4/25/24	Tue 5/14/24	0%
96	**CM @ Risk Procurement Process**	**90 days**	**Mon 11/27/23**	**Fri 3/29/24**	**0%**
97	Submit Application to OIG	30 days	Mon 11/27/23	Fri 1/5/24	0%
98	Issue Ch. 149A CM @ Risk RFQ	20 days	Mon 1/8/24	Fri 2/2/24	0%
99	Review and Qualify CM Firms	10 days	Mon 2/5/24	Fri 2/16/24	0%
100	Issue C. 149A CM @ Risk RFP	20 days	Mon 2/19/24	Fri 3/15/24	0%
101	CM Interviews	5 days	Mon 3/18/24	Fri 3/22/24	0%
102	Selection and Negotiation	5 days	Mon 3/25/24	Fri 3/29/24	0%
103	**60% Construction Documents**	**98 days**	**Thu 3/28/24**	**Mon 8/12/24**	**0%**
104	60% CD Development	48 days	Thu 3/28/24	Mon 6/3/24	0%
105	60% CDs to Estimators	1 day	Tue 6/4/24	Tue 6/4/24	0%
106	Cost estimate/Reconciliation/VE if Required	14 days	Wed 6/5/24	Mon 6/24/24	0%
107	Cx Agent's Comments on 60% CD	14 days	Tue 6/4/24	Fri 6/21/24	0%
108	Teams Respond to Cx Agent's Comments	4 days	Mon 6/24/24	Thu 6/27/24	0%
109	SBC Approval of 60% CD Submission to MSBA	1 day	Fri 6/28/24	Fri 6/28/24	0%
110	60% CD Submission to MSBA	1 day	Mon 7/1/24	Mon 7/1/24	0%

ID	Task Name	Duration	Start	Finish	% Comple
111	MSBA 60% CD Review	21 days	Mon 7/1/24	Mon 7/29/24	0%
112	Address 60% Review Comments	10 days	Tue 7/30/24	Mon 8/12/24	0%
113	**Structural Peer Review**	**12 days**	**Tue 6/4/24**	**Wed 6/19/24**	**0%**
114	Issue 60% Structural CDs to Peer Reviewer	1 day	Tue 6/4/24	Tue 6/4/24	0%
115	Structural Steel Peer Review on 60% CDs	10 days	Wed 6/5/24	Tue 6/18/24	0%
116	Review/Incorporate Peer Reviewer's Comm	1 day	Wed 6/19/24	Wed 6/19/24	0%
117	**Filed Sub Bid Process**	**35 days**	**Tue 3/19/24**	**Mon 5/6/24**	**0%**
118	Issue RFQ for Filed Sub Bids	20 days	Tue 3/19/24	Mon 4/15/24	0%
119	Prequailify Filed Subs	10 days	Tue 4/16/24	Mon 4/29/24	0%
120	Notify Preqaulified Bidders	5 days	Tue 4/30/24	Mon 5/6/24	0%
121	**90% Construction Documents**	**76 days**	**Thu 7/4/24**	**Thu 10/17/24**	**0%**
122	90% CD Development	30 days	Thu 7/4/24	Wed 8/14/24	0%
123	NOI to Con Comm and DEP	1 day	Tue 7/9/24	Tue 7/9/24	0%
124	90% CDs to Estimators	1 day	Thu 8/15/24	Thu 8/15/24	0%
125	Cost Estimate/Reconciliation/VE if Required	14 days	Fri 8/16/24	Wed 9/4/24	0%
126	Cx Agent Comments on 90% CDs	14 days	Fri 8/16/24	Wed 9/4/24	0%
127	Team Responds to Cx Agent's Comments	4 days	Thu 9/5/24	Tue 9/10/24	0%
128	SBC Approval of 90% CD Submission to MSE	1 day	Wed 9/11/24	Wed 9/11/24	0%
129	90% CD Submission to MSBA	1 day	Thu 9/12/24	Thu 9/12/24	0%
130	MSBA 90% CD Review Comments	21 days	Thu 9/12/24	Thu 10/10/24	0%
131	Address 90% Review Comments	5 days	Fri 10/11/24	Thu 10/17/24	0%
132	**100% Construction Documents**	**56 days**	**Fri 9/13/24**	**Fri 11/29/24**	**0%**
133	100% CD/ Bid Packages Development	25 days	Fri 9/13/24	Thu 10/17/24	0%
134	Bid Early Package #1 (Sitework)	15 days	Tue 7/2/24	Mon 7/22/24	0%
135	Bid Early Package #2 (Concrete, Steel)	15 days	Fri 9/13/24	Thu 10/3/24	0%
136	Bid 100% CDs	15 days	Fri 10/18/24	Thu 11/7/24	0%
137	Bids Due	1 day	Fri 11/8/24	Fri 11/8/24	0%
138	Finalize GMP	15 days	Mon 11/11/24	Fri 11/29/24	0%
139	**Module 7: Construction**	**734 days**	**Tue 7/23/24**	**Fri 5/14/27**	**0%**
140	Mobilization (Early Package #1)	5 days	Tue 7/23/24	Mon 7/29/24	0%
141	Phase 1- Site & Building	514 days	Tue 7/30/24	Fri 7/17/26	0%
142	Substantial Completion (Phase 1)	1 day	Mon 7/20/26	Mon 7/20/26	0%
143	Certificate of Occupancy	1 day	Mon 7/27/26	Mon 7/27/26	0%



AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
   - Review of Schedule
4) JWA Update
   - Review of PSR Reconciled Cost Estimate
   - Summary of Preferred Schematic Report Submission
   - Review of PSR Options/Matrix
5) Vote on Option to Develop Schematic Design
6) Vote to Approve Preferred Schematic Report
7) New Business
8) Adjourn

Reconciled PSR Cost Estimate

East Longmeadow High School PSR Estimate Comparison
Option 1 Code Upgrade/Repair

		PCM	PM&C	Delta	Average
A10	Foundation	$ 668,625	$ 692,100	$ (23,475.00)	$ 680,362.50
A20	Basements	$ -			
B10	Superstructure	$ 1,205,646	$ 1,285,900	$ (80,253.75)	$ 1,245,773.13
B20	Exterior Closure	$ 8,169,579	$ 9,722,206	$ (1,552,627.25)	$ 8,945,892.38
B30	Roofing	$ 6,083,928	$ 5,566,000	$ 517,927.50	$ 5,824,963.75
C10	Interior Construction	$ 5,670,654	$ 7,493,534	$ (1,822,880.25)	$ 6,582,093.88
C20	Stairs		$ 96,346	$ (96,346.00)	$ 96,346.00
C30	Interior Finishes	$ 3,882,425	$ 4,058,692	$ (176,267.50)	$ 3,970,558.25
D10	Conveying		$ 95,000	$ (95,000.00)	$ 95,000.00
D20	Plumbing	$ 3,630,500	$ 4,419,949	$ (789,449.00)	$ 4,025,224.50
D30	HVAC	$ 15,484,116	$ 15,184,813	$ 299,302.78	$ 15,334,464.39
D40	Fire Protection	$ 1,326,230	$ 1,448,398	$ (122,168.00)	$ 1,387,314.00
D50	Electrical	$ 6,732,122	$ 6,379,760	$ 352,862.44	$ 6,555,691.22
E10	Equipment	$ 2,632,500	$ 2,285,020	$ 347,480.00	$ 2,458,760.00
E20	Furnishings	$ 578,590	$ 2,064,900	$ (1,486,310.00)	$ 1,321,745.00
F10	Special Construction	$ -	$ 500,000	$ (500,000.00)	$ 250,000.00
F20	Selective Construction	$ 4,180,482	$ 5,033,958	$ (853,476.25)	$ 4,607,219.88
	Total Building Cost	**$ 60,245,396**	**$ 66,326,076**	$ (6,080,680.28)	$ 63,285,735.86
G10	Site Preparation	$ 383,222	$ 135,000	$ 248,222.00	$ 259,111.00
G20	Site Improvements	$ 1,624,483	$ 791,500	$ 832,983.40	$ 1,207,991.70
G30	Site Mechanical utilities	$ 215,802	$ 157,675	$ 58,126.85	$ 186,738.43
G40	Site Electrical Utilities	$ 3,600	$ 411,000	$ (407,400.00)	$ 207,300.00
	Total Site Cost	**$ 2,227,107**	**$ 1,495,175**	$ 731,932.25	$ 1,861,141.13
	Project Construction Subtotal	$ 62,472,503	$ 67,821,251	$ (5,348,748.03)	$ 65,146,876.99
	Design Contingency	$ 6,247,250	$ 8,138,550	$ (1,891,300.00)	$ 7,192,900.00
	Escalation	$ 10,696,755	$ 7,799,444	$ 2,897,311.00	$ 9,248,099.50
	General Conditions & Requirements	$ 9,600,000	$ 8,435,878	$ 1,164,122.00	$ 9,017,939.00
	CM Fee	$ 2,396,584	$ 2,878,369	$ (481,785.00)	$ 2,637,476.50
	Phasing and Logistics	$ -	$ 2,034,638	$ (2,034,638.00)	$ 1,017,319.00
	Bond & Insurance	$ 1,566,395	$ 1,715,877	$ (149,482.00)	$ 1,641,136.00
				$ -	
	Total Markups	$ 30,506,984	$ 31,002,756	$ (495,772.00)	$ 30,754,870.00
	Grand Total	**$ 92,979,487**	**$ 98,824,007**	$ (5,844,520.03)	**$ 95,901,746.99**
	Cost/SF:	$ 498	$ 529		$ 513

JWA JONES WHITSETT ARCHITECTS | SMMA

SKANSKA

Option 1 – Code Upgrade

- This option has not changed since PDP.
- This reflects the cost of improving the school to meet current energy, building and accessibility codes but with no overall educational improvements or program changes.
- This assumes that the estimated cost would be paid by the District, either in a single project or over the course of many maintenance projects and code upgrades.

What changed between PDP & PSR?

Reconciled PSR Cost Estimate

East Longmeadow High School PSR Estimate Comparison
Option 2C Addition/Renovation

		PCM	PM&C	Delta	Average
A10	Foundation	$ 3,868,667	$ 4,916,472	$ (1,047,804.89)	$ 4,392,569.56
A20	Basements	$ -	-		
B10	Superstructure	$ 5,466,564	$ 6,550,847	$ (1,084,283.25)	$ 6,008,705.38
B20	Exterior Closure	$ 10,515,625	$ 11,133,517	$ (617,892.00)	$ 10,824,571.00
B30	Roofing	$ 6,996,885	$ 5,399,292	$ 1,597,593.00	$ 6,198,088.50
C10	Interior Construction	$ 9,185,174	$ 9,260,147	$ (74,973.25)	$ 9,222,660.38
C20	Stairs	$ -	$ 118,862	$ (118,862.00)	$ 59,431.00
C30	Interior Finishes	$ 5,732,174	$ 5,900,082	$ (167,907.62)	$ 5,816,128.19
D10	Conveying	$ -	$ 205,000	$ (205,000.00)	$ 102,500.00
D20	Plumbing	$ 3,636,160	$ 4,667,193	$ (1,031,033.00)	$ 4,151,676.50
D30	HVAC	$ 15,819,345	$ 16,119,203	$ (299,857.75)	$ 15,969,274.13
D40	Fire Protection	$ 1,416,040	$ 1,547,831	$ (131,791.00)	$ 1,481,935.50
D50	Electrical	$ 11,397,022	$ 13,095,082	$ (1,698,060.04)	$ 12,246,051.98
E10	Equipment	$ 3,092,400	$ 3,418,100	$ (325,700.00)	$ 3,255,250.00
E20	Furnishings	$ 544,825	$ 2,155,980	$ (1,611,155.00)	$ 1,350,402.50
F10	Special Construction	$ -	$ -	$ -	$ -
F20	Selective Construction	$ 4,171,917	$ 4,749,631	$ (577,714.25)	$ 4,460,773.88
	Total Building Cost	**$ 81,842,798**	**$ 89,237,239**	$ (7,394,441.05)	$ 85,540,018.48
G10	Site Preparation	$ 2,333,995	$ 2,067,563	$ 266,432.00	$ 2,200,779.00
G20	Site Improvements	$ 10,126,750	$ 12,056,532	$ (1,929,782.26)	$ 11,091,640.87
G30	Site Mechanical utilities	$ 1,969,850	$ 1,572,610	$ 397,240.10	$ 1,771,230.05
G40	Site Electrical Utilities	$ 2,016,200	$ 916,720	$ 1,099,480.00	$ 1,466,460.00
	Total Site Cost	**$ 16,446,795**	**$ 16,613,425**	$ (166,630.16)	$ 16,530,109.92
	Project Construction Subtotal	**$ 98,289,593**	**$ 105,850,664**	**$ (7,561,071.21)**	$ 102,070,128.40
	Design Contingency	**$ 9,828,959**	**$ 12,702,080**	$ (2,873,121.00)	$ 11,265,519.50
	Escalation	**$ 15,483,650**	**$ 12,172,826**	$ 3,310,824.00	$ 13,828,238.00
	General Conditions & Requirements	**$ 5,250,000**	**$ 8,558,022**	$ (3,308,022.00)	$ 6,904,011.00
	CM Fee	**$ 3,469,078**	**$ 4,354,114**	$ (885,036.00)	$ 3,911,596.00
	Phasing & Logistics	**$ -**	**$ 3,175,520**	$ (3,175,520.00)	$ 1,587,760.00
	Bond & Insurance	**$ 2,267,371**	**$ 2,678,021**	$ (410,650.00)	$ 2,472,696.00
				$ -	
	Total Markups	**$ 36,299,058**	**$ 43,640,583**	**$ (7,341,525.00)**	$ 39,969,820.50
	Grand Total	**$ 134,588,651**	**$ 149,491,247**	$ (14,902,596.21)	**$ 142,039,948.90**
	Cost/SF	$ 674	$ 749		711

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Option 2C- Addition/Renovation

- This option shows reduced overall square footage through further design efforts.
- This cost reflects slightly higher material costs due to continuing inflation.
- The revised design assumptions reflect the more stringent requirements of the newly released energy code.
- This option still presents a compromise of the Ed Plan goals and Rec Goals.
- The cost does not include the cost of modular classroom rentals for the period of construction.

What changed between PDP & PSR?

Reconciled PSR Cost Estimate

East Longmeadow High School PSR Estimate Comparison
Option 3C New Construction

		PCM	PM&C	Delta	Average
A10	Foundation	$ 5,437,030	$ 5,556,193	$ (119,163.27)	$ 5,496,611.37
A20	Basements	$ -	$ -		
B10	Superstructure	$ 9,161,580	$ 8,955,875	$ 205,705.00	$ 9,058,727.50
B20	Exterior Closure	$ 11,435,515	$ 10,876,382	$ 559,133.00	$ 11,155,948.50
B30	Roofing	$ 6,198,945	$ 4,516,016	$ 1,682,929.00	$ 5,357,480.50
C10	Interior Construction	$ 11,492,870	$ 9,575,018	$ 1,917,852.00	$ 10,533,944.00
C20	Stairs	$ 214,500	$ 450,024	$ (235,524.00)	$ 332,262.00
C30	Interior Finishes	$ 5,569,781	$ 5,961,147	$ (391,365.75)	$ 5,765,464.13
D10	Conveying	$ 240,000	$ 164,500	$ 75,500.00	$ 202,250.00
D20	Plumbing	$ 3,537,690	$ 4,219,160	$ (681,469.64)	$ 3,878,425.18
D30	HVAC	$ 15,338,059	$ 15,342,400	$ (4,341.05)	$ 15,340,229.48
D40	Fire Protection	$ 1,360,460	$ 1,486,295	$ (125,835.00)	$ 1,423,377.50
D50	Electrical	$ 11,068,405	$ 12,465,700	$ (1,397,294.76)	$ 11,767,052.62
E10	Equipment	$ 3,102,800	$ 3,348,100	$ (245,300.00)	$ 3,225,450.00
E20	Furnishings	$ 487,175	$ 2,067,800	$ (1,580,625.00)	$ 1,277,487.50
F10	Special Construction	$ -	$ 50,000	$ (50,000.00)	$ 25,000.00
F20	Selective Construction	$ 3,799,721	$ 3,566,108	$ 233,612.50	$ 3,682,914.25
	Total Building Cost	**$ 88,444,531**	**$ 88,600,718**	$ (156,186.97)	$ 88,522,624.52
G10	Site Preparation	$ 2,395,995	$ 2,353,418	$ 42,577.00	$ 2,374,706.50
G20	Site Improvements	$ 10,215,071	$ 12,215,302	$ (2,000,230.68)	$ 11,215,186.66
G30	Site Mechanical utilities	$ 2,231,978	$ 2,002,060	$ 229,917.61	$ 2,117,018.81
G40	Site Electrical Utilities	$ 2,171,800	$ 1,049,440	$ 1,122,360.00	$ 1,610,620.00
	Total Site Cost	**$ 17,014,844**	**$ 17,620,220**	$ (605,376.07)	$ 17,317,531.97
	Project Construction Subtotal	**$ 105,459,375**	**$ 106,220,938**	**$ (761,563.04)**	$ 105,840,156.48
	Design Contingency	**$ 10,545,937**	**$ 12,746,513**	$ (2,200,575.70)	$ 11,646,225.15
	Escalation	**$ 16,745,188**	**$ 12,215,408**	$ 4,529,780.00	$ 14,480,298.00
	General Conditions & Requirements	**$ 6,600,000**	**$ 7,243,657**	$ (643,656.70)	$ 6,921,828.65
	CM Fee	**$ 3,751,723**	**$ 4,231,505**	$ (479,782.00)	$ 3,991,614.00
	Bond & Insurance	**$ 2,452,106**	**$ 2,623,657**	$ (171,551.00)	$ 2,537,881.50
	Total Markups	**$ 40,094,955**	**$ 39,060,740**	**$ 1,034,214.60**	$ 39,577,847.30
	Grand Total	**$ 145,554,330**	**$ 145,281,678**	**$ 272,651.56**	**$ 145,418,003.78**
	Cost/SF:	$ 759	$ 758		$ 758

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Option 3C- New

- This option is smaller by 2,617sf since the last submittal.
- This option still includes square footage for District Offices, ELCAT and IT.
- This option includes concessions, press box, basketball & tennis courts, updated rec fields, irrigation and full site lighting in the site costs.
- This option assumes Air-Sourced Heat Pump/VRF HVAC.
- Alternate pricing is provided for Solar PV, Geothermal and Nat Gas Fired HVAC.
- No modular rentals would be required. Students would remain in the existing school during construction.
- Assumes early demo of small gym & weight room

What changed between PDP & PSR?

Reconciled PSR Cost Estimate

	Total Gross Sq Ft	Estimated Construction Costs	***Est. Total Project Costs	**Approx. Local Share
1. Code Upgrade / Repair	186,890	$ 95,901,746	$114,800,000	114,800,000
2C. Add/Reno PSR*	199,720	$142,039,948	$173,030,000	116,968,280
3C. New Construction PSR*	191,780	$ 145,418,003	$174,074,554	117,612,680

*The District acknowledges that options containing a new pool are ineligible for participation in the MSBA Grant Program.

**Local share is assumed to be 67.6% of total cost.
***Assumes a project cost multiplier of 1.19706.
Option 2C includes 3M for Modular CRs

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Evaluation Matrix

EAST LONGMEADOW HIGH SCHOOL CRITERIA OF EVALUATION	Weighting	1 - Base Repair / Code Upgrade		2C - Add/Reno HS - Reno Pool		3C - New HS - Central Location - Pool Separate	
2/2/2023							
Scores: 0 = does not meet 1 = slightly meets 2 = definitely meets criteria		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Meets Educational Space Needs	5	0	0	2	10	2	10
Meets Education Vision	5	0	0	1	5	2	10
Meets Community Recreational Goals	5	0	0	1	5	2	10
Highest MSBA Reimbursement Potential	4	1	4	2	8	1	4
Does not require modular rentals during construction	4	0	0	0	0	2	8
Meets desired Parking Needs	3	0	0	1	3	2	6
Meets District Office and Town IT/ELCAT Needs	3	1	3	2	6	2	6
Allows for greater choice in mechanical systems	2	0	0	0	0	2	4
Provides Energy Efficient Building Envelope	2	1	2	1	2	2	4
Provides for Flexibility & Expansion Potential	2	0	0	1	2	2	4
Meets District field requests	2	1	2	1	2	2	4
Reduces queueing on Maple Street	1	0	0	1	1	2	2
TOTAL SCORE			11		44		72
APPROX PROJECT COSTS			~ 114.8Million		~173.0 Million		~174 Million
APPROX LOCAL SHARE			~114.8 Million		~116.9 Million		~117.6 Million

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) SKANSKA Update
   - Review of Schedule
4) JWA Update
   - Review of PSR Reconciled Cost Estimate
   - Summary of Preferred Schematic Report Submission
   - Review of PSR Options/Matrix
5) Vote on Option to Develop Schematic Design
6) Vote to Approve Preferred Schematic Report
7) New Business
8) Adjourn

Preferred Schematic Report – Table of Contents

Introduction
- Overview of Process & Changes Since PDP
- Updated Project Directory
- MSBA Preliminary Design Program Review - and District Response

Evaluation of Existing Conditions
- Narrative
- Traffic Report
- Geotechnical Report
- Wetlands Survey
- Site Survey

Final Evaluation of Alternatives
- Narrative Outline of Architectural Systems
- Outline of Site Parameters
- Outline of Structural Systems
- Outline of HVAC Systems
- Outline of Plumbing & Fire Protection Systems
- Outline of Electrical Systems
- Outline of Security Systems
- Outline of Food Service Systems
- MSBA Summary of Preliminary Design Pricing Spreadsheet
- Designer Cost Estimate for PSR (PM&C) OPM Cost Estimate for PSR (PCM)
- Estimate Comparison
- Initial Draft Total Project Budget

Preferred Solution
- General Information
- Educational Program
- Educational Program
- Preferred Solution Space Summary
- Space Summary Narrative Sustainability Documents
- Budget Overview Narrative & Approval Process
- Budget Statement – Expenditures
- Budget Statement – Revenue Updated Project Schedules
- Communications Plan - OPM
- Work Plan – Design Team
- Project Schedule - DBB
- Project Schedule – CM at Risk

Local Action and Approval Certification
- Local Action and Approval Certified Letter

Appendix Architectural & Site Drawings
- Base Repair / Code Upgrade
- Add/Reno – Option 2C
- All New – Options 3C Massing Images (Options 2C and 3C)
- Preliminary Phasing Plan
- SBC Minutes
- SBC Presentations
- Student Engagement Takeaways

AGENDA

1) Welcome and Approval of Minutes
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3) SKANSKA Update
   - Review of Schedule
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   - Summary of Preferred Schematic Report Submission
   - Review of PSR Options/Matrix
5) Vote on Option to Develop Schematic Design
6) Vote to Approve Preferred Schematic Report
7) New Business
8) Adjourn

LOOK AHEAD

Feb. 7 – School Committee Town Council Meeting

Feb. 9 – Next SBC Meeting & Vote to Approve Preferred Schematic Design

Feb. 14 – Submission to MSBA

??? - Next Public Meeting

March 29 – Facilities Assessment Subcommittee Meeting (MSBA)

April 26 – MSBA Approval of SD Phase

JWA JONES WHITSETT ARCHITECTS | SMMA

END

JWA | SMMA

GENERAL NOTES:

STRUCTURAL:
- PAINT STEEL BAR JOISTS, WHICH ARE SLIGHTLY RUSTED.
- REPAIR / RESURFACING AND REPAINTING OF METAL DECKING ARE RECOMMENDED.
- COLUMNS AND PORTIONS OF THE STEEL BAR JOISTS ARE RUSTED WITH PAINT FAILING AND FLAKING-OFF. LOCAL REPAIR WORK TO SAND, PROTECT AND REPAINT IS RECOMMENDED.

EXTERIOR WALLS:
- REPAIR / REPOINT CRACKS IN CMU WALLS PRESENT THROUGHOUT BUILDING.
- REPAINT / REPOINT CRACKS IN EXTERIOR BRICK WALLS. ASSUME 10% MASONRY REPLACEMENT; 25% REPOINTING
- THE EIFS PANELS OVER THE WINDOW SYSTEMS ARE IN POOR CONDITION AND SHOULD BE FULLY REMOVED. RESTORE ORIGINAL WINDOW OPENINGS AT ALL CLASSROOM LOCATIONS.
- ALL EXISTING WINDOWS TO BE REPLACED WITH NEW ENERGY EFFICIENT INSULATED WINDOWS.
- ALL STOREFRONTS TO BE REPLACED WITH NEW ENERGY EFFICIENT STOREFRONTS.
- ALL EXISTING EXTERIOR DOORS TO BE REPLACED WITH NEW.

INTERIOR:
- REPLACE ALL DOOR LOCKSETS WITH NEW.

ELECTRICAL:
- POWER UPGRADES IN THE TELECOMMUNICATIONS EQUIPMENT SPACES WILL BE REQUIRED TO SUPPORT FUTURE NETWORK ELECTRONIC EQUIPMENT UPGRADES.
- CARD READERS AT DOORS THAT ARE USED AFTER HOURS, EXPANDING THE CCTV SYSTEM COVERAGE AND UPGRADING THE INTRUSION DETECTION SYSTEM TO INCLUDE MOTION DETECTION IN SPACES WHERE THERE WINDOWS ON THE BUILDING EXTERIOR AND DOOR POSITION SWITCHES ON ALL EXTERIOR DOORS.
- REPLACE ALL EXISTING LIGHTS WITH NEW LAY-IN LED LIGHTS. LIGHTING CONTROLS IN CLASSROOMS TO BE UPGRADED TO PROVIDE MORE CONTROL OPTIONS.
- PANELS, FEEDERS AND BRANCH WRING CIRCUITS THAT ARE OLDER THAN THIRTY YEARS SHALL BE REPLACED.
- 120/208V ELECTRICAL SWITCHBOARD INSTALLATION DOES NOT MEET CURRENT ELECTRICAL CODE AND SHOULD EB REPLACED.
- RECEPTACLE QUANTITIES IN CLASSROOMS ARE NOT SUFFICIENT TO MEET CURRENT PROGRAM. PROVIDE ADDITIONAL RECEPTACLES AND UPGRADE ALL EXISTING.
- INCLUDE INSTALLATION OF NEW GAS GENERATOR FOR EMERGENCY BACKUP POWER FOR EGRESS INDICATOR, LIFE SAFETY AND KITCHEN REFRIGERATION.
- INSTALL NEW SECURITY CAMERA SYSTEMS PER CURRENT STANDARDS AT EXTERIOR AND INTERIOR LOCATIONS.

PLUMBING:
- REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.
- FIRE SUPPRESSION SHOULD BE ADDED THROUGHOUT THE FACILITY TO ACCOMMODATE CURRENT CODE REQUIREMENTS.

HAZMAT:
- PRIOR TO ANY RENOVATIONS OR DEMOLITION AT THE SCHOOL BUILDING ASBESTOS CONTAINING MATERIALS, AND ASBESTOS SUSPECT MATERIALS FOUND PRESENT THROUGHOUT WILL REQUIRE PROPER ABATEMENT AND HANDLING AND DISPOSAL OF UNIVERSAL WASTES.

KITCHEN SCOPE:
- REPLACE QUARRY TILE WITH NEW
- NEW SERVERY BETWEEN KITCHEN AND CAFETERIA SPACE
- PROVIDE NEW WALKIN FREEZER
- REPLACE FLOOR DRAINS
- REPLACE SINKS WITH NEW STAINLESS STEEL COMMERCIAL SINKS
- REPLACE COMMERCIAL HOODS, AND ASSOCIATE EXHAUST FANS, PROVIDE NEW HOOD WITH ANSUL FIRE EXTINGUISHER SYSTEM
- REPAIR / PATCH SGFT WALLS TO REMAIN
- PROVIDE NEW MOISTURE RESISTANT ACT CEILINGS AND LED LAY-IN LIGHTING THROUOUT.

AUDITORIUM SCOPE:
- REPLACE HVAC UNITS AT AUDITORIUM WITH NEW, PROVIDE NEW AIRCONDITIONING UNITS AND VETILATORS WITH ADEQUATE CAPACITY FOR THE UPGRADED SPACE
- REMOVE SEATS & REPLACE WITH NEW SEATS
- PROVIDE NEW ADA COMPLIANT HANDRAILS
- PROVIDE NEW 5/8" GWB CEILING ENTIRE AUDITORIUM HOUSE. PROVIDE NEW ACOUSTIC PANELING ON WALLS
- REPAINT EXISTING TO REMAIN CATWALKS ABOVE AUDITORIUM
- REMOVE VCT AT EXISTING ORCHESTRA PIT & AISLES
- PROVIDE NEW CARPET TILE THROUGHOUT.
- PROVIDE NEW LED LIGHTING AND SOUND SYSTEM THROUGHOUT.

STAGE SCOPE:
- REPLACE WD FLOOR ON SLEEPERS
- REPLACE ALL RIGGING
- REPLACE ALL STAGE LIGHTING
- REPLACE FIRE CURTAIN WITH NEW RATED FIRE CURTAIN
- PROVIDE CATWALK & ACCESS LADDER ABOVE STAGE WITH METAL GUARDRAILS TO 42" A.F.F. CATWALK
- PAINT ALL EXPOSED STRUCTURE ABOVE
- PAINT ALL CMU WALLS

REMOVE ALL ASBESTOS CONTAINING CLADDING AND REPLACE WITH NEW RESINOUS PANELS, ROUGHLY 4 FT HIGH AT PERIMETER

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

79' - 0"

DEMOLISH ABANDONED INCINERATOR AND SMOKE STACK IN ITS ENTIRETY WITH APPROPRIATE HAZMAT REMEDIATION/REMOVAL IF REQUIRED.

REPLACE WALK-IN FREEZER AND ASSOCIATED EQUIPMENT AND PIPING IN ITS ENTIRETY.

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

REPLACE GARAGE DOOR SYSTEM

TERRAZZO FLOOR TO REMAIN

REPLACE GARAGE DOOR SYSTEM

POOL SCOPE:
PROVIDE NEW DEHUMIDIFICATION SYSTEM
- REPAIR MOISTURE DAMAGE TO WALLS/ CEILING.
- REPAINT EXPOSED STEEL JOISTS
- PROVIDE NEW BLEACHERS
- PROVIDE NEW LED LIGHTING
- REPAIR DAMAGED TILES ON WALLS AND FLOORS.

GYM SCOPE:
- REFINISH EXISTING HARDWOOD FLOORS
- REPAINT GAME LINES
- MODIFY EXISTING BLEACHERS TO INCLUDE (4) HANDICAP ACCESSIBLE SEATING SPACES PER SET OF BLEACHERS, TYP.

REPLACE ALL EXISTING HARDSCAPE WITH NEW

87' - 2"

45' - 0"

98' - 0"

99' - 7"

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

ASSUME RECONFIGURATION OF VESTIBULE AND OFFICE TO MEET CURRENT SCHOOL SAFETY STANDARDS.

ASSUME SCHOOL GUARD GLASS AT MAIN ENTRY.

SAND, REPAINT AND REPAIR ALL CANOPY METAL ADDRESS HEAVING AND DAMAGED WALKWAYS WITH NEW, ADA COMPLIANT CONCRETE WALKWAYS

REPLACE ALL EXISTING DAMAGED ASPHALT WALKS WITH ADA COMPLIANT CONCRETE SIDEWALKS

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

LOCKER/ TOILET/ SHOWER SCOPE:
- REPAIR ALL EXISTING CT WALLS & CT BASE TO MATCH EXISTING.
- PROVIDE NEW MOISTURE RESISTANT GWB CEILINGS THOROUGHOUT
- REMOVE ALL CT FLOORING AND REPLACE WITH NEW CT AND MARBLE THRESHOLDS TRANSITIONS AT CORRIDOR.
- REMOVE ALL EXISTING TOILET FIXTURE AND TOILET PARTITIONS AND REPLACE WITH NEW
- REMOVE ALL EXISTING SHOWER STALLS AND ALL FLOOR DRAINS AND REPLACE WITH NEW
- REMOVE ALL EXISTING ATHLETIC LOCKERS AND REMOVE EXISTING WOOD BENCHES AND REPLACE WITH NEW ADA ACCESSIBLE BENCHES AND NEW 18 X 18 LOCKERS
- REMOVE ALL EXISTING WOOD DOORS AND REPLACE WITH NEW
- PROVIDE NEW LED LIGHTING THOUGHT
- MAXIMUM GYM CAPACITY POSTED TO MINIMIZE REQUIRED PLUMBING FIXTURE COUNTS.

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

ASSUME REPLACEMENT OF EXISTING STOREFRONTS. AT THIS LOCATION REPLACE WITH SCHOOL GUARD GLASS SYSTEM.

TYPICAL CLASSROOM SCOPE:
- REMOVE METAL CASEWORK AT EXTERIOR WALL. PATCH CMU WALL
- PAINT WALLS
- REPLACE PROJECTOR SCREEN, ADD CEILING MOUNTED PROJECTOR
- REPLACE VAT/VCT FLOORS WITH NEW VCT
- REPLACE 2X2 ACT CEILINGS. PROVIDE NEW LAY-IN LED LIGHTING
- REPLACE MILLWORK WITH NEW ADA ACCESSIBLE PLAM MILLWORK.
- REMOVE ALL UNIT VENTILATORS IN CLASSROOMS, PROVIDE NEW HVAC UNITS THROUGHOUT.
- UPGRADE POWER RECEPTACLES AND PROVIDE ADDITIONAL TO ACCOMMODATE LEARNING NEEDS
- PROVIDE UPGRADED LIGHTING CONTROLS

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

TYPICAL CORRIDOR SCOPE:
- PAINT PLASTER ABOVE LOCKER BAYS, TYP.
- REPLACE 12 X 12 SINGLE TIER LOCKERS ON METAL BASE, WITH NEW 2-TIER LOCKERS.
- PROVIDE NEW 2X2 ACT CEILING
- PROVIDE NEW LAY-IN LED LIGHTS
- REMOVE EXISTING VCT FLOORING, PROVIDE NEW

REPLACE GARAGE DOOR SYSTEM

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

94' - 0"

51' - 0"

115' - 4"

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Greenfield, MA 01301
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F. 413.773.5551
office@joneswhitsett.com

CONSULTANTS:

LEVEL 1 - FULL RENO

East Longmeadow Highschool

PROJ. NUMBER:	2206
DATE:	
SCALE:	3/64" = 1'-0"
DRAWN BY:	NNM
REVISIONS:	

A115

GENERAL NOTES:

STRUCTURAL:
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TYPICAL ROOF SCOPE:
- REPLACE EXISTING EPDM ROOF WITH NEW PVC ROOF WITH 30 YEAR WARRANTY
- PROVIDE NEW 8" RIGID INSULATION
- EXISTING TO REMAIN METAL ROOF DECK
- REMOVE ALL ROOF DRAINS, ROOF EDGES, PERIMETER FLASHING, COUNTERFLASHING, SCUPPERS, & DOWNSPOUTS AND PROVIDE NEW
- REMOVE AND PROVIDE NEW ALL ROOFTOP VENTS AND STACKS
- REPLACE ALL SKYLIGHTS WITH NEW
- PROVIDE NEW 2' X 4' SKYLIGHTS THROUGHOUT

TYPICAL CLASSROOM SCOPE:
- REMOVE METAL CASEWORK AT EXTERIOR WALL. PATCH CMU WALL
- PAINT WALLS
- REPLACE PROJECTOR SCREEN, ADD CEILING MOUNTED PROJECTOR
- REPLACE VAT/VCT FLOORS WITH NEW VCT
- REPLACE 2X2 ACT CEILINGS, PROVIDE NEW LAY-IN LED LIGHTING
- REPLACE MILLWORK WITH NEW ADA ACCESSIBLE PLAM MILLWORK.
- REMOVE ALL UNIT VENTILATORS IN CLASSROOMS, PROVIDE NEW HVAC UNITS THROUGHOUT.
- UPGRADE POWER RECEPTACLES AND PROVIDE ADDITIONAL TO ACCOMMODATE LEARNING NEEDS
- PROVIDE UPGRADED LIGHTING CONTROLS

DEMOLISH ABANDONED INCINERATOR AND SMOKE STACK IN ITS ENTIRETY WITH APPROPRIATE HAZMAT REMEDIATION/REMOVAL IF REQUIRED.

REPLACE ALL EXISTING HARDSCAPE WITH NEW

TYPICAL CORRIDOR SCOPE:
- PAINT PLASTER ABOVE LOCKER BAYS, TYP.
- REPLACE 12 X 12 SINGLE TIER LOCKERS ON METAL BASE, WITH NEW 2-TIER LOCKERS.
- PROVIDE NEW 2X2 ACT CEILING
- PROVIDE NEW LAY-IN LED LIGHTS
- REMOVE EXISTING VCT FLOORING, PROVIDE NEW

REPLACE PLUMBING SYSTEMS, FIXTURES, EQUIPMENT AND PIPING IN THEIR ENTIRETY.

SAND, REPAINT AND REPAIR ALL CANOPY METAL ADDRESS HEAVING AND DAMAGED WALKWAYS WITH NEW, ADA COMPLIANT CONCRETE WALKWAYS

REPLACE ALL EXISTING DAMAGED ASPHALT WALKS WITH ADA COMPLIANT CONCRETE SIDEWALKS

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CONSULTANTS:

LEVEL 2 - FULL RENO

East Longmeadow Highschool

PROJ. NUMBER:	2206
DATE:	
SCALE:	3/64" = 1'-0"
DRAWN BY:	NNM
REVISIONS:	

A117

PROVIDE NEW METAL FASCIA AT ALL ROOF EDGES (TYP)

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REPAVE ALL ROADS AND WALKING PATHS THROUGHOUT ENTIRE SITE AND RESTRIPE FOR WAYFINDING AND PARKING.

PROVIDE NEW GUTTERS AND DOWNSPOUTS THOUGHOUT.

PROVIDE NEW METAL FASCIA AT ALL ROOF EDGES (TYP)

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REMOVE EXTERIOR GRILLS AT UNIT HEATERS AND INFILL OPENINGS, BRICK TO MATCH EXISTING.

REPLACE ALL METAL FASCIA WITH NEW AT ALL ROOFS

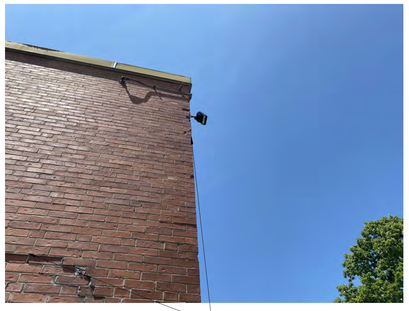
REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REPLACE ALL MEMBRANE ROOFS AND INSULATION WITH NEW

REPLACE ALL STOREFRONT ENTRIES WITH NEW INSULATED ALUMINUM STOREFRONTS AND DOORS.

PPROVIDE NEW LANDSCAPING AND IMPROVED GRADING IN ALL COURTYARDS. PROVIDE NEW OUTDOOR SEATING AND SHADING STRUCTURES.

ALL EXTERIOR EXTERIOR ASBESTOS PANELS TO BE REMOVED AND REPLACED WITH INSULATED METAL PANEL CLADDING AND FASCIA



EXTERIOR BRICK VENEER IS MOSTLY IN GOOD CONDITION WITH FEW AREAS OF CRACKING AND SPALLING IN NEED TO RESTORATION AND REPOINTING.

SAND, REPAINT AND REPAIR ALL CANOPY METAL
ADDRESS HEAVING AND DAMAGED WALKWAYS WITH NEW, ADA COMPLIANT CONCRETE WALKWAY

REPLACE STOREFRONT ENTRY AND FACADE WITH NEW INSULATED ALUMINUM SYSRTEM

RE-GRADE AND REPAVE ALL WALKWAYS THROUGHOUT SITE

REMOVE EXISTING EIFS SYSTEM AND WINDOW SYSTEM AND REPLACE WITH NEW IN ORIGINAL WINDOW LOCATIONS

REMOVE EXTERIOR GRILLS AT UNIT HEATERS AND INFILL OPENINGS, BRICK TO MATCH EXISTING.

RE-GRADE AND REPAVE ALL WALKWAYS THROUGHOUT SITE

REPLACE STOREFRONT ENTRY AND FACADE WITH NEW INSULATED ALUMINUM SYSRTEM

REMOVE EXTERIOR GRILLS AT UNIT HEATERS AND INFILL OPENINGS. BRICK TO MATCH EXISTING.

DEMOLISH ABONDONED INSINERATOR AND SMOKE STACK IN ITS ENTIRETY WITH APPROPRIATE HAZMAT REMEDIATION/REMOVAL IF REQUIRED.

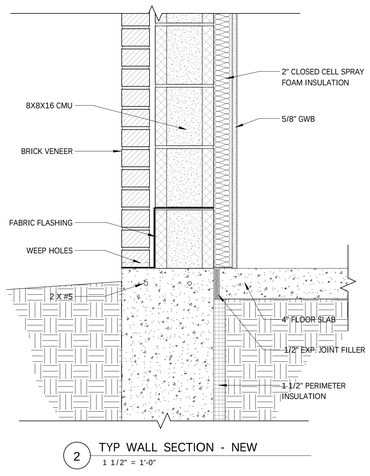
REPLACE ALL OVERHEAD DOORS WITH NEW INSULATED METAL OVERHEAD DOORS AT LOADING AREAS.

ALL EXTERIOR ASBESTOS PANELS TO BE REMOVED AND REPLACED WITH INSULATED METAL PANEL CLADDING AND FASCIA

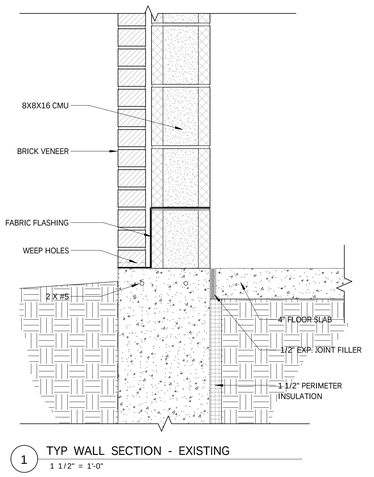
REPLACE ALL OVERHEAD DOORS WITH NEW INSULATED METAL OVERHEAD DOORS AT LOADING AREAS.

PROVIDE NEW OR UPGRADE BLEACHERS ACCROSS FROM PRESSBOX TO BE ADA ACCESSIBLE

REPLACE PRESSBOX WITH NEW ACCESSIBLE ONE WITH RAMP



2 TYP WALL SECTION - NEW
1 1/2" = 1'-0"



1 TYP WALL SECTION - EXISTING
1 1/2" = 1'-0"

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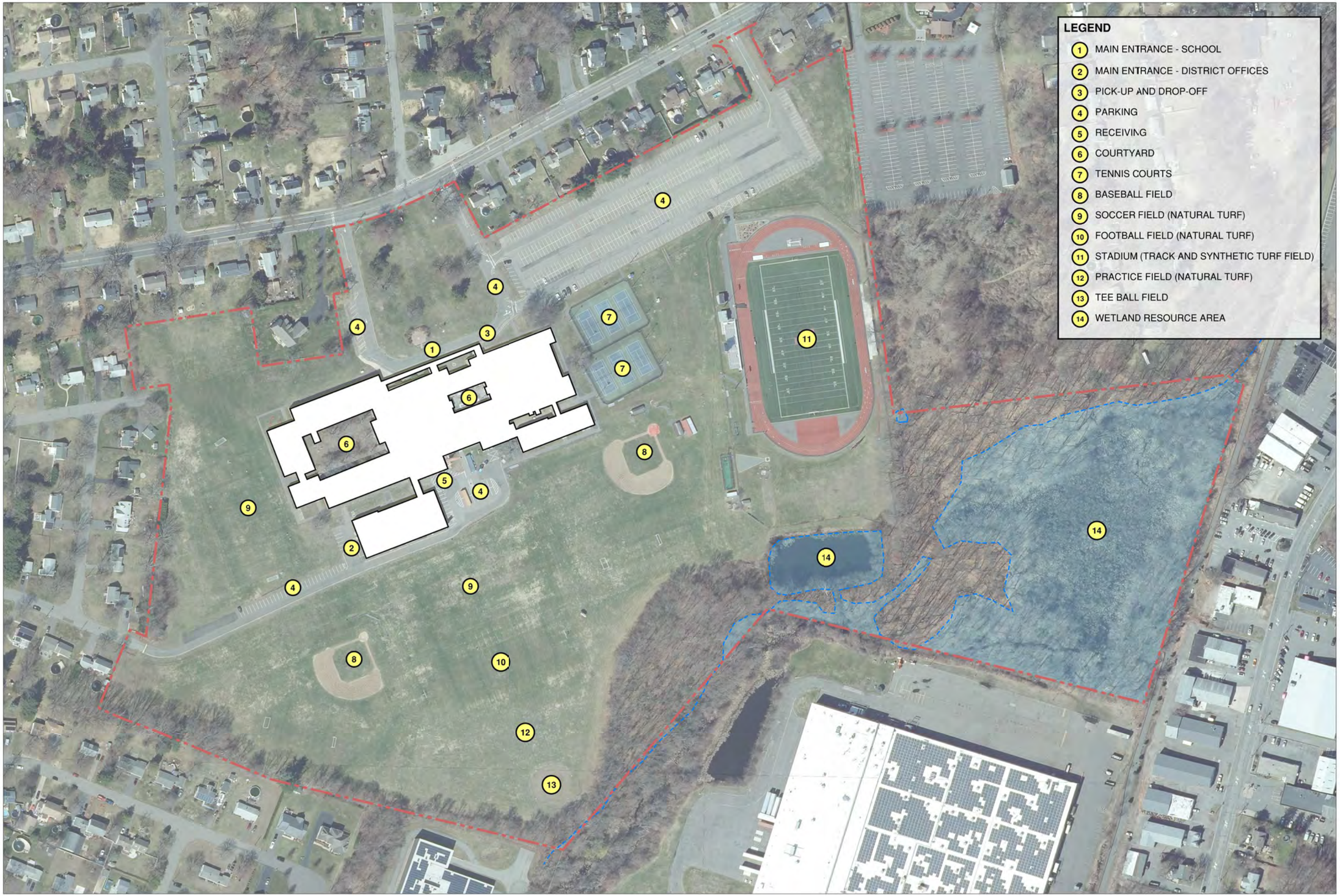
CONSULTANTS:

EXTERIOR IMPROVEMENTS

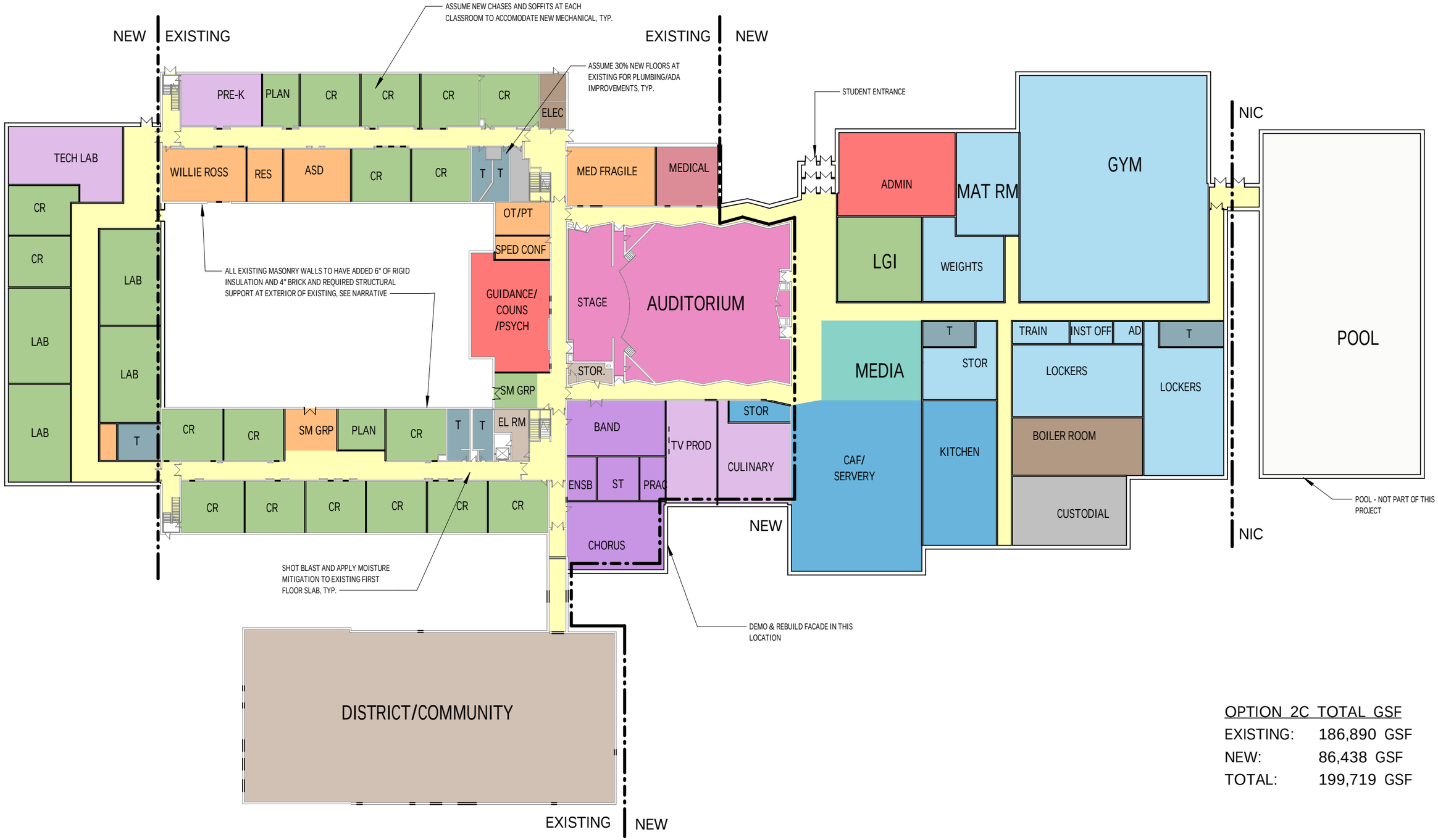
East Longmeadow Highschool

PROJ. NUMBER:	2206
DATE:	
SCALE:	1 1/2" = 1'-0"
DRAWN BY:	NNM
REVISIONS:	

A118



OPTION 1 - BASE REPAIR / CODE UPGRADE



OPTION 2C TOTAL GSF

EXISTING:	186,890 GSF
NEW:	86,438 GSF
TOTAL:	199,719 GSF

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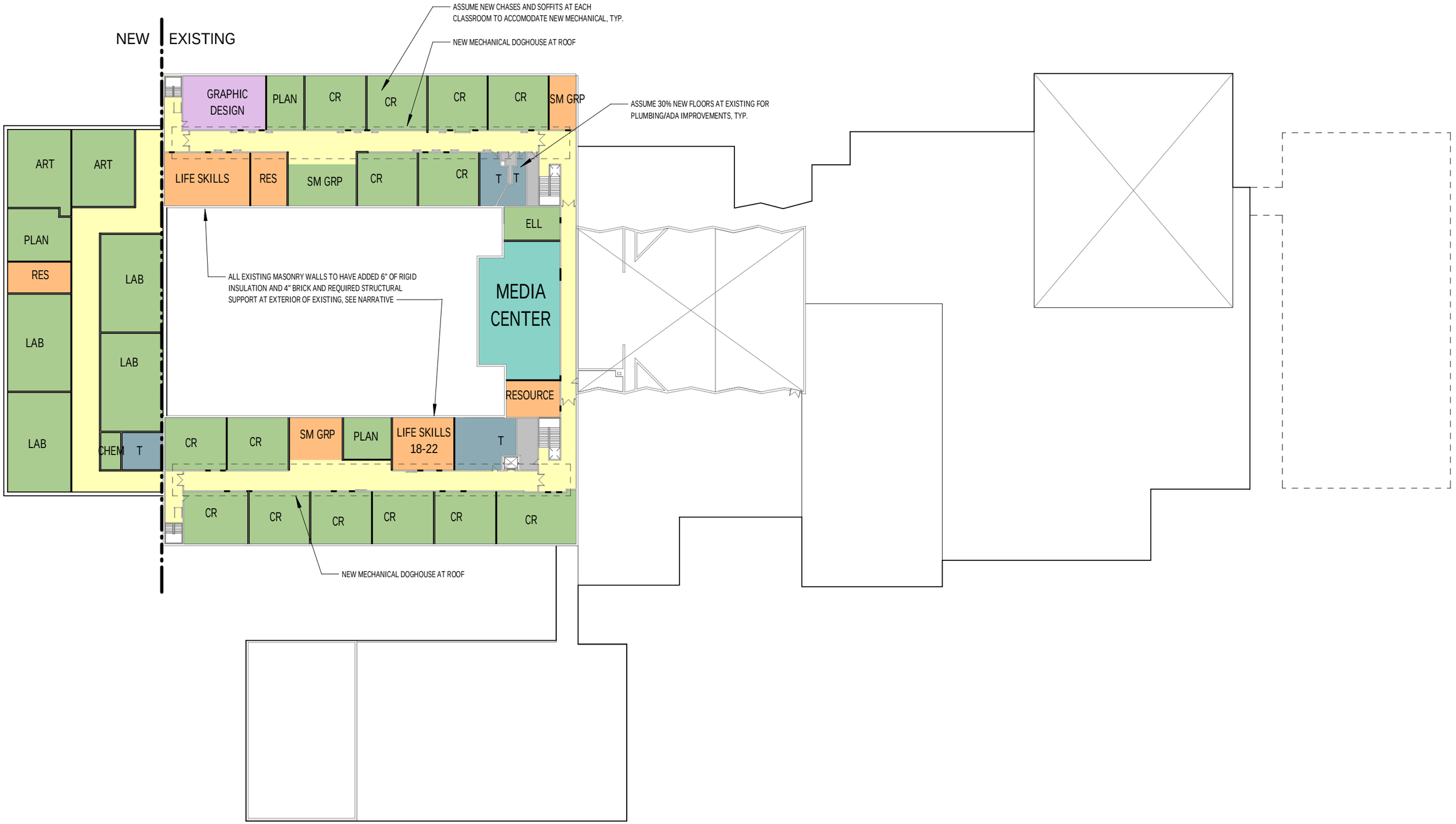
ADD/RENO OPTION 2C - LEVEL 1

PROJECT:
DATE: 07/06/22

SCALE: 1" = 50'-0"
0 2' 4' 8'

PN

A2C-1



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ADD/RENO OPTION 2C - LEVEL 2

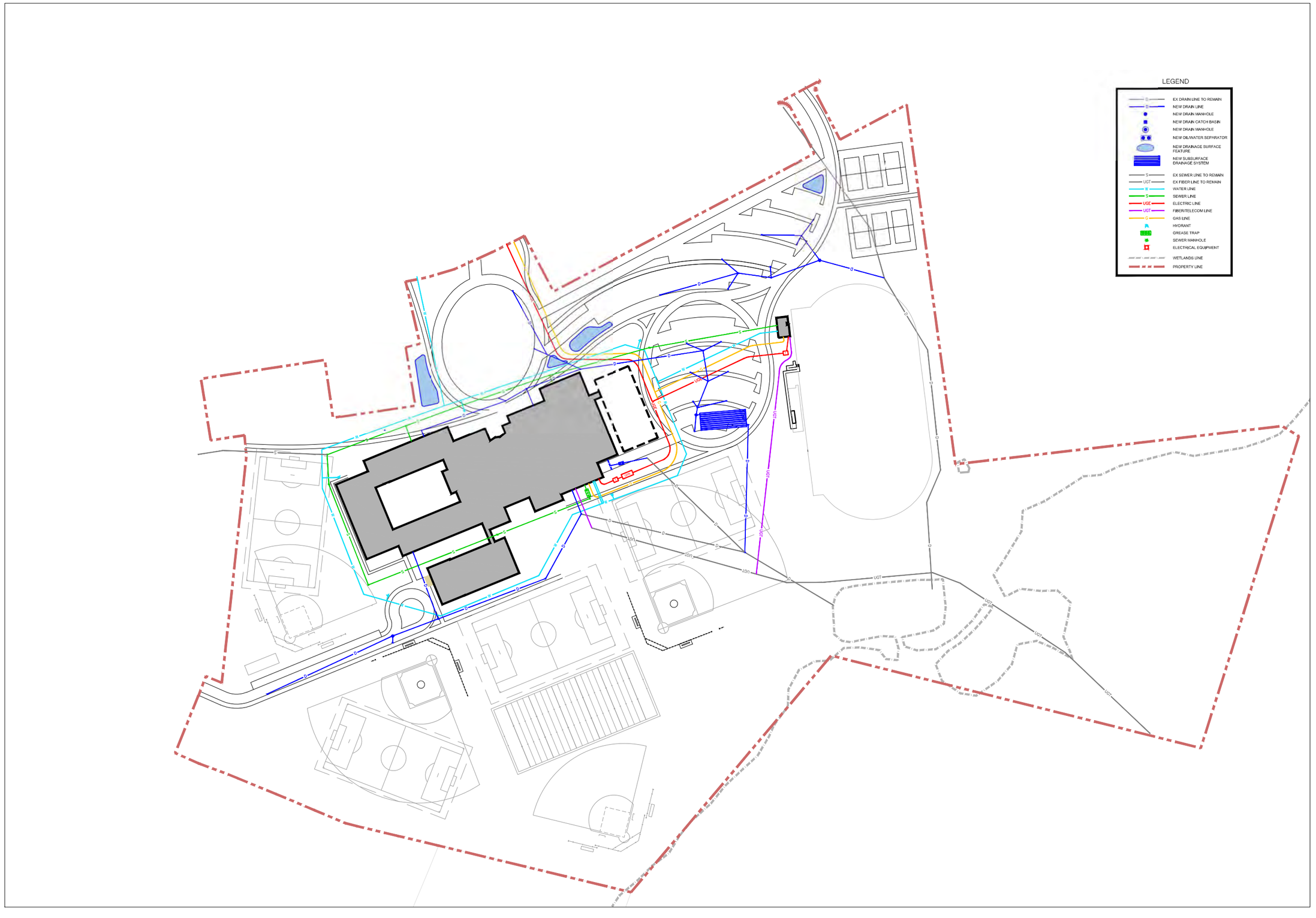
PROJECT:
DATE: 07/06/22

SCALE: 1" = 50'-0"
0 2' 4' 8'

PN

A2C-2

OPTION 2C - ADDITION/RENOVATION



OPTION 2C - ADDITION/RENOVATION
DRAINAGE & UTILITIES PLAN

ALTERNATE 1: ADD GEOTHERMAL GROUND SOURCE HEAT PUMPS IN PLACE OF AIR SOURCE HEAT PUMPS

ALTERNATE 2: REPLACE HEAT PUMP VRF SYSTEM WITH GAS FIRED BOILERS / AIR COOLED CHILLERS, 4-PIPE FCUs

ALTERNATE 3: DEDUCT 3,800 SF FOR REMOVING IT AND ELCAT FROM SCOPE

ALTERNATE 4: DEDUCT 10,470 SF FOR REMOVING IT, ELCAT, AND DISTRICT FROM SCOPE

NOTE: POOL IS NOT PART OF THIS PROJECT.

OPTION 3C TOTAL GSF

TOTAL: 191,780 GSF

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CONSULTANTS:

NEW CONSTRCUTION - OPTION 3C - LEVEL 1

EAST LONGMEADOW HIGH SCHOOL

180 MAPLE STREET, EAST LONGMEADOW, MA 01028

PROJECT:	2206
DATE:	12/20/22
DRAWN BY:	Author

SCALE:	1" = 50'-0"

A3C-1

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CONSULTANTS:

NEW CONSTRUCTION - OPTION 3C - LEVEL 2

EAST LONGMEADOW HIGH SCHOOL

180 MAPLE STREET, EAST LONGMEADOW, MA 01028

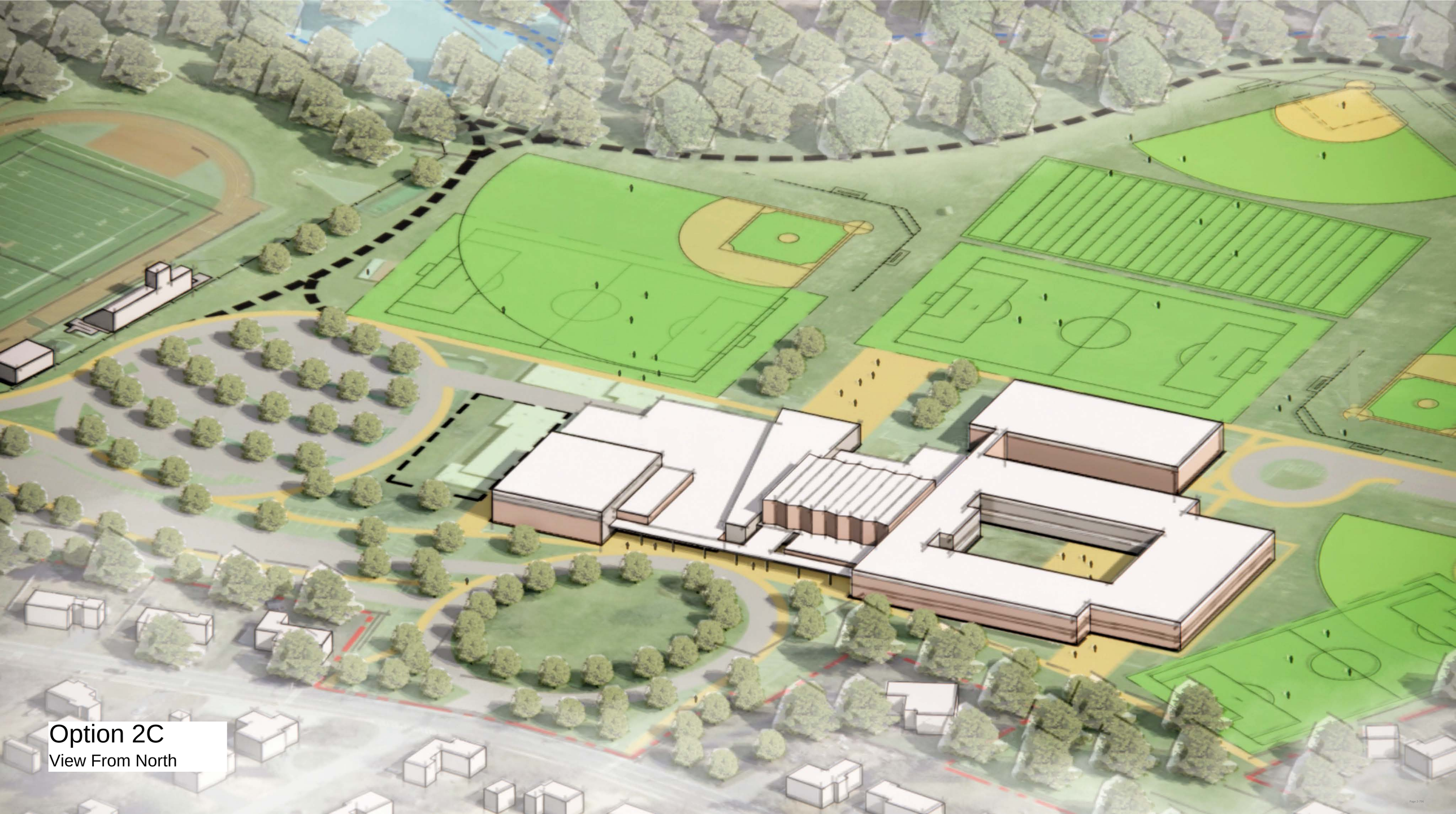
PROJECT:	2206
DATE:	12/20/22
DRAWN BY:	Author

SCALE:	1" = 50'-0"

A3C-2

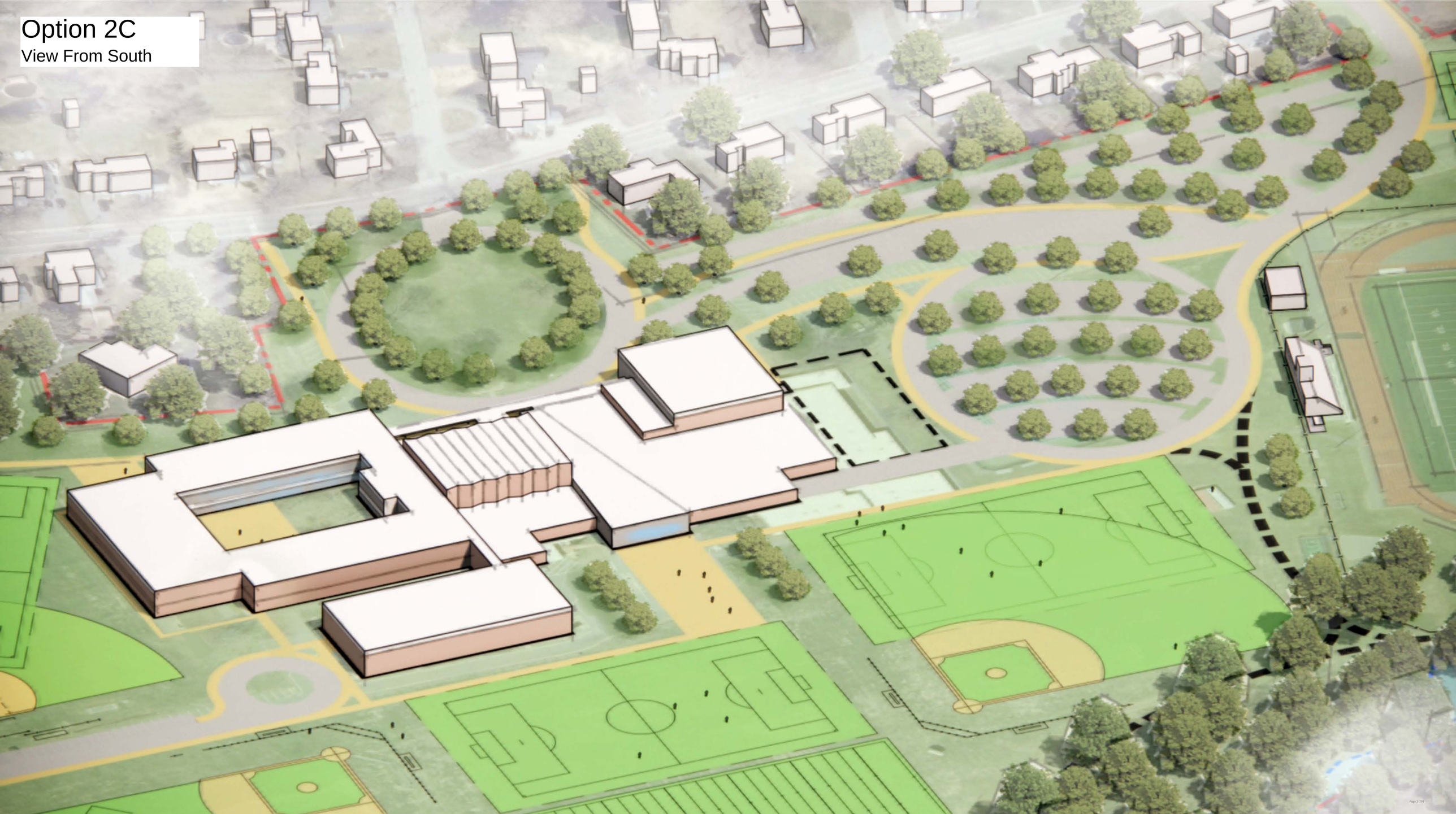
OPTION 3C - ALL NEW CONSTRUCTION
DRAINAGE & UTILITIES PLAN

OPTION 3C - ALL NEW CONSTRUCTION


Option 2C
View From North

Option 2C

View From South

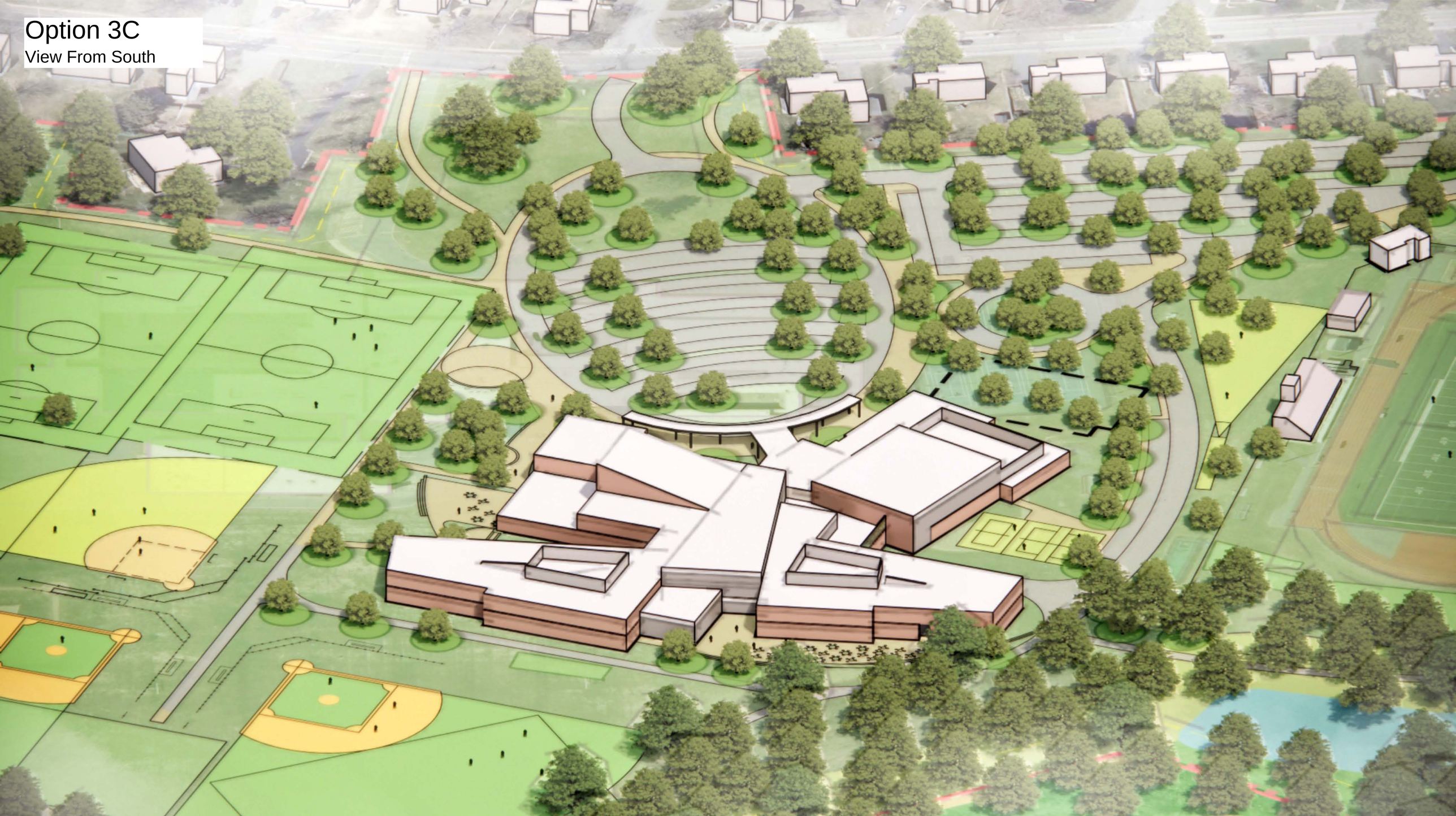


Option 3C

View From North

Option 3C

View From South



PHASE 1A
4/25 - 6/25

MOVE SMALL BUSES / VANS TO FRONT FOR DROP-OFF & PICK-UP

CONTRACTOR ACCESS POINT

SHARED SCHOOL STAFF / CONTRACTOR DRIVE

RECONFIGURE AREA TO ALLOW DUMPSTER SERVICE TO REMAIN

FOUNDATION EXCAVATION, BLDG CONSTRUCTION

FENCE (TYP.)

SOIL STOCKPILING, LAYDOWN/STAGING AREA, & CONTRACTOR PARKING

CONSIDER INSTALLING TEMP. BASEBALL FIELD

ADDITIONAL NOTES:

WILL LOSE SMALL AMOUNT OF PARKING

WILL LOSE ABOUT 3 RECTILINEAR FIELDS

WILL REQUIRE TEMP. BASEBALL FIELD IF THEY NEED TWO (ONE DISPLACED BY BLDG)

PHASING DIAGRAMS
OPTION 3C - NEW CONSTRUCTION

Note that these Phasing Diagrams assume a DBB approach. The SBC is expecting to vote on DBB vs CM@Risk project delivery approach - during the Schematic Design phase.

PHASE 1B
6/25 - 8/25
(SUMMER VACATION)

CONTRACTOR ACCESS POINT DURING SUMMER

INSTALL UTILITIES, BINDER COURSE FOR ACCESS DRIVES AND PARKING

RECONFIGURED ACCESS/PARKING

RELOCATE TENNIS COURTs

COULD INSTALL 1 BASKETBALL COURT HERE (BY OTHERS)

REMOVE AUX GYM

ONGOING BUILDING & PERIMETER UTILITIES WORK

FENCE (TYP.)

SOIL STOCKPILING, LAYDOWN, & STAGING AREA

PHASING DIAGRAMS
OPTION 3C - NEW CONSTRUCTION

PHASE 1C
9/25 - 3/27

TEMP PARKING

CONSIDER SEEKING USE OF ST. MICHAELS PARKING LOT FOR TEMP USE, OR ADD TEMP PARKING ADJACENT TO NEW ACCESS DRIVE

COMPLETE BUILDING CONSTRUCTION IN THIS PHASE

INSTALL LOADING DOCK DRIVE

FENCE (TYP.)

COMPLETE PERIMETER SITE WORK AROUND BUILDING

CONTRACTOR ACCESS POINT

SHARED SCHOOL STAFF / CONTRACTOR DRIVE

SOIL STOCKPILING, LAYDOWN/STAGING AREA, & CONTRACTOR PARKING

ADDITIONAL NOTES:

WILL HAVE LESS TOTAL PARKING UNTIL NEW FRONT LOOP IS CONSTRUCTED IN PHASE 2 (SEE TEMP. OPTIONS)

PHASING DIAGRAMS
OPTION 3C - NEW CONSTRUCTION

PHASE 2A
4/27 - 2/28

WORK ON FRONT ACCESS LOOP, PARKING AND FRONT PLAZAS/WALKWAYS

PRIMARY CONTRACTOR ACCESS POINT

FINISH DEMO OF BULDING

FENCE (TYP.)

CONTINUED USE OF ST. MICHAELS FOR TEMP. PARKING IF FEASIBLE (OR CONSTRUCT TEMP. PARKING ON-SITE)

NEW SCHOOL IN USE

DEMO NORDEN ST. CONNECTION

GRADE, PREP, AND SEED FIELDS PRIOR TO NOVEMBER 2027;

ADDITIONAL NOTES:

BEGINNING POINT FOR LOSS OF ALL ATHLETIC FIELDS, EXCEPT TRACK & FIELD

PHASING DIAGRAMS
OPTION 3C - NEW CONSTRUCTION

PHASE 2B
3/28 - 9/28

FINISH REMAINING TREE/SHRUB PLANTINGS

FINAL PAVING AND STRIPING OF ACCESS DRIVES AND PARKING LOTS

CONTINUE MAINTENANCE PERIOD OF NEW FIELDS

CONSTRUCT FINAL MISC. SIDEWALKS/PLAZA AROUND FRONT OF BUILDING

PHASING DIAGRAMS
OPTION 3C - NEW CONSTRUCTION

Student Engagement – Major Takeaways

Re: Student Engagement Day
Project: East Longmeadow High School
Date/Time: 12/13/2022, 8:30 -12:30 PM

Attendees:

TOWN/DISTRICT	OPM/DESIGN TEAM
8:30 AM – Discrete (C-Grid) Math	Aviva Galaski, JWA
9:20 AM - Environmental Science	Jill DeCoursey, JWA
10:20 AM - Accounting	
11:50 AM - ELL	

Aviva Galaski and Jill DeCoursey from Jones Whitsett Architects visited four classes at East Longmeadow High School on the morning of December 13, 2022. They provided an interactive presentation using Aha Slides and gathered input from students on their thoughts about the new high school building. A full copy of the student's input using Aha Slides is attached to this document. The following is a summary of major takeaways based on conversations with the students.

Exterior spaces:

- All outdoor space is good outdoor space.
- Strong need for canopies out front – they would make them bigger and connected to the building. They also would like seating underneath. Interest in covered area to wait for the bus and pick-up.
- Interest in outdoor seating – but would prefer chairs and tables or possibly stone benches, etc. – would not sit on grass.
- Do not feel that the current parking works. Would like to see better parking and pedestrian delineation. Clear separation of buses, cars, pedestrians. Would like bike parking.

Corridors:

- Would like an open welcoming entrance.
- There was interest in clearer signage, room numbering, clearer wayfinding.
- Current corridors are too narrow and crowded. They would like more space as well as places to step aside and pause from the rush.
- Many students would use a locker if they were centrally located (they had time to get to it) and if it was big enough to hold their stuff. There is also significant need for sports equipment storage. Currently sports storage is not even between genders.

Aesthetics/Character:

- Students don't like ACT ceilings, mostly because they are broken or falling down, but also due to aesthetics (a sense that it gets dirty).
- Students liked the idea of more character in common areas (idea of themed houses, for example). But would like there to be an overall organizing aesthetic to the building.
- They like collegiate feeling spaces. Would like it to feel sophisticated.

- Some interest in incorporating school spirit into the design.
- They would like places for student art to be displayed.
- Overall strong interest in having plenty of natural light.

Cafeteria:

- Interest in having different spaces in the cafeteria – a quieter zone and a larger more active zone.
- Some reservations about the cafeteria being in center of building – would like more separation between the cafeteria and academic areas.
- Would like a servery more like a mall food court. Also like the idea of having a coffee shop in the school.

Library/Commons:

- Definite interest in monumental stairs.
- Birchland Park Middle School – has a great library. Lots of kids feel let down by the library when they arrive after being at Birchland Park.
- Small group rooms in library would be useful.
- Many students want both quiet study spaces and spaces they can informally collaborate in groups.
- Like the idea of clubs not meeting in classrooms. Would like to see more options for meetings and club storage.

Mental wellbeing:

- Interest in quiet spaces to study or decompress.
- Interest in more private spaces in general.
- Need more privacy in Guidance.
- More comfortable spaces.

Mechanical/Back-of-house:

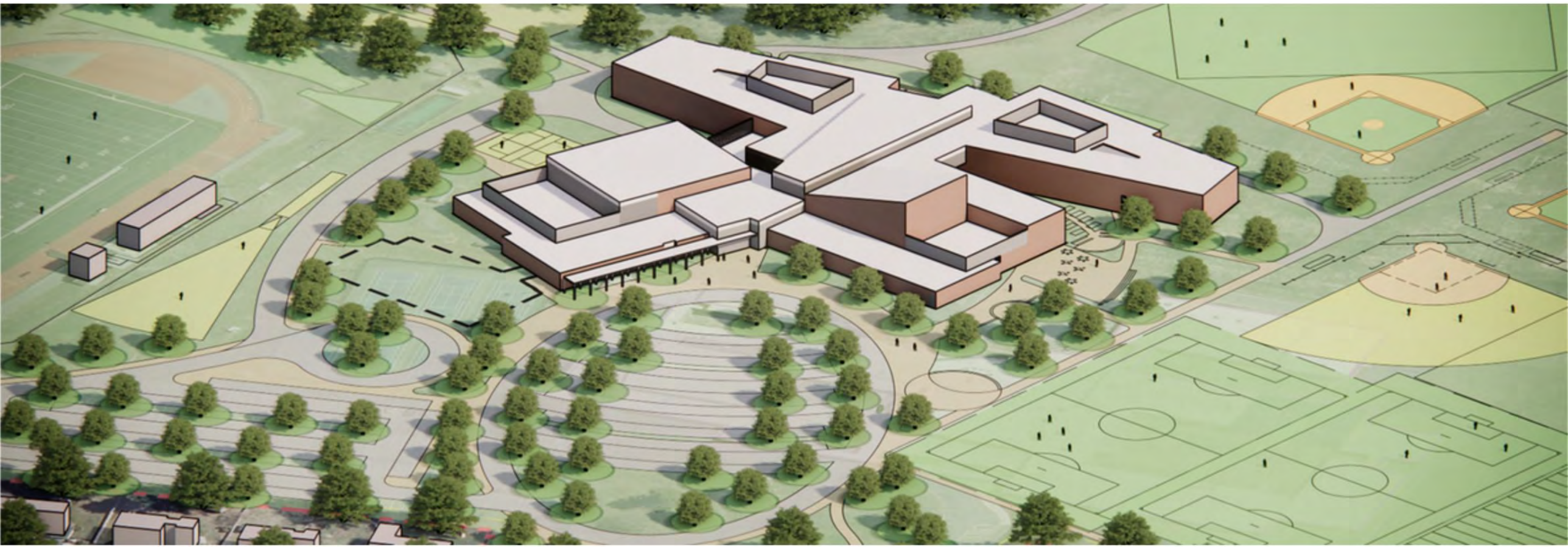
- Bathrooms now are too small, would like more stalls, full length mirrors, individual sinks
- Currently mechanical noise can be disruptive.
- Mechanical/thermal control is uneven. Spaces are uncomfortable. Interest in air conditioning.

Classroom:

- Current triangle desks are too small, students need space for a book, laptop, and notebook to all fit.
- Preference for individual or group tables (not 2-student desks).
- Need places to plug-in and charge – everywhere.
- Not sold on idea of interdisciplinary arrangement of classrooms.
- Happy to move around throughout the day.
- Would like operable windows in classrooms.

Distributed to: *Design Team*

ELHS Building Project



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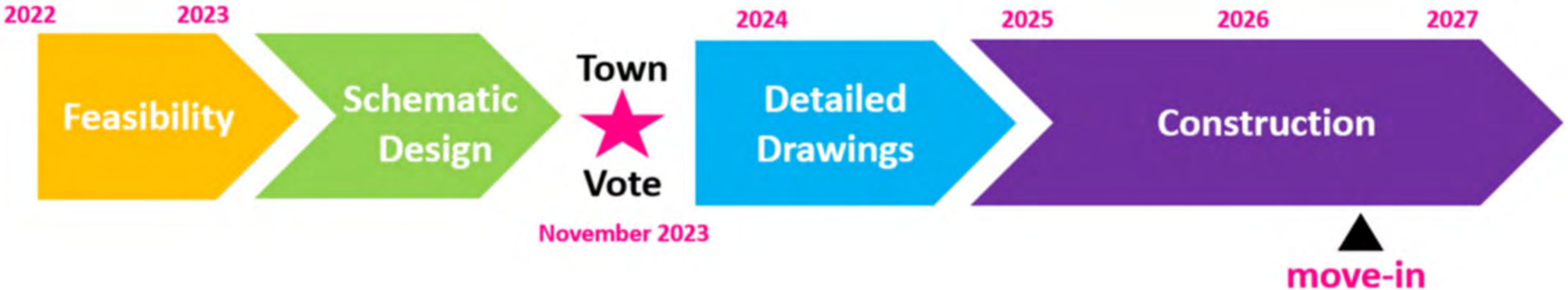
Building Project Timeline



AhaSlides

25 60 2 15 9

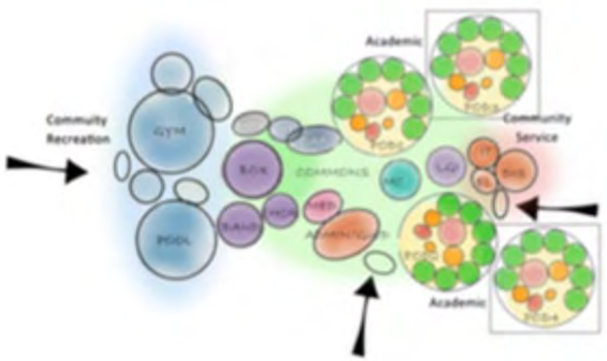
Where are we now?

AhaSlides

25 60 2 15 9

Where are we now?

Feasibility → Schematic Design → Town ★ Vote → Detailed Drawings → Construction



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AhaSlides

Scan this QR code to join →

25 60 2 15 9

The new school should be student-centered and support learning for all students. How can a building do that?

25 60 2 15 9

RESPONSES: DISCRETE MATH

AhaSlides

What do you like and what don't you like about the current high school?

I hate the library at the highschool. I used to get a lot of work done due to the library at the Middle School. Coming here and seeing the small area with barely any books was underwhelming. Please add a better school library.

I don't really have any problems with the building.

I don't like how everything's further away from eachother and how the lockers are small and i don't like the court yard because it's small and the heaters and air conditioners sometimes don't work and some classrooms are a little small

bigger bathrooms

BETTER A/C

i dont like how hot it is in the summer

The downer classrooms aren't great

It'd be nice if the school still have some older styles in design like still having a older look

This one time when it was down pouring water was dripping from the ceiling and my cane slipped in a puddle and I fell, I like the principal though

very square/blocky, uncomforting

more natural lighting

The elevator is terrifying. Could we potentially have that fixed up and not as wonky? It's scary

I didn't like when the school flooded and we had to go outside in the pouring rain

i like that im almost done and i like leaving and going to cosmetology school, i dont like coming in early

better seating for lunch/more spread out

What I don't like about the school are the pipe leak and how some of the ac don't work and I have to freeze myself sometimes

I don't like that there always bucks in the hall way

I like that I'm almost going to be done with this year and what I don't like is the broken sink in the girls bathroom

i don't like how some of the ceiling is literally rotting

I like the courtyards and It would be cool to have an outdoor classroom. I think there should still be an small and big cafeteria. The library also needs more books with newer books and nicer design and the rooms that are down the slope smell dusty

wider stairs

Pros: The staff, the courtyards, the green house
Cons: The desks, dripping ceilings, lingering asbestos, the chorus room and back hall in general feels very out of place, very cramped lockers, electrical issues

25 60 2 15 9 22

RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

What do you like and what don't you like about the current high school?

how it’s falling apart

That I know my way around

Leaking ceiling

I don’t like the ceiling

This school is really old, they need to add more stalls in the bathroom

The terrible administration and the leaky ceilings, courtyard is mediocre at best and is honestly a sad excuse for an outdoor space with the benches having chipped paint it almost feels like im gonna get lead poisoning out there. i like nothing

The ceiling leaks when it rains

The bathroom sinks explode

Brady Robertson

The way the school and classes are too it’s always crowded so a bigger school and halls in general would be nice

there are water leaks i dont relly like anything

the falling ceiling tiles

layout = good
quality = bad

Nah who ruined the 420

I don’t really like anything about this school I find it cool how we. Can leave for lunch though and the work. Study is cool

I like the history the building shows but what I don’t like is the size of the classrooms and bathrooms

Cafe is too small

i like the way the auditorium is setup it just needs updates. i also like having courtyards but bigger and modernized ones with more seating would be cool. we need bigger cafeteria with different types of seating options. i don’t like the split cafeteria

There is a hole in the wall of one of the girls bathroom

Some bathrooms break more than they should

How I can get to classes without getting lost

i like the people in it

The high school is very humid and overly hot during the summer and early fall. There aren’t a lot of classrooms with working air conditioning or pipes. There’s a lot of leaky ceiling tiles

Don't like the bathrooms or the hallways. 2 people can hold up the entire hallway

There’s not lots of room in the cafeterias, and the science rooms are small

I don’t like the asbestos all over the building, leaking roofs, always either too hot or too cold

Terrified of the Elevator

I like the design of the building, when you first come here it’s hard to find things but I’d like the halls to be less weirdly numbered, the bathrooms are in weird places and it’s super inconvenient. I don’t like how the tiles leak, recently one got so wet it fell and nearly missed a kids head. There is mold in the school as well. Air conditioning would be Amazing for the summer

172 853 261 165 3.8k 31

RESPONSES: ACCOUNTING

AhaSlides

What do you like and what don't you like about the current high school?

Leaky Roof, bad weight room, awful food, easy to navigate, outdated

Not too big, I know where mostly everything is and learned where they were in a short amount of time. I don't like how many aspects such as the roof are run-down/old.

I like the auditorium. The spaciousness and the v shape design looks good.

I like this school because it has been here for a while and I just like the brick and everythig because my parents went here, etc. I feel like this school gives and oldish vibe too. What I don´t like is the leaky ceilings, old equipment in the weight room, pool room, locker room, dusty and musty at times. How the only part of the school that gets AC is the nurses and the main office but everyone else has to suffer with the heat in the summer.

Dislike: stained ceiling from leaky roof.
Like: Outside garden area with tables

Cafeteria needs to be bigger, not a lot of room when everyone eats there

It needs bigger hallways

The walls and ceilings have stains and have dirty. The pool is very dirty but I think if we got another one it would be nice to have but only if it was taken care of and cleaned.

I don't like the lack of structure and stability of the building and its rooms

The roof leaks when it rains. I don't know why there are two cafeterias. The weight room is terrible. The locker rooms are not good, at all. The temperature in the school is never comfortable.

Many parts of the building aren't structurally sound.

The pool room needs better ventilation, Every time I enter the pool room I would be overwhelmed with the chlorine.

I like the layout of this school.
I like the two different courtyards and picnic tables outside.

The doorways need to be bigger. There is not enough room near the doorways and they are so close to the stairs that there's traffic.

The colors are not appealing.

Lockers may not be necessary unless used for sports.

I don't like the lack of stability in the ceilings, the small classrooms, the locker room, the weight room, and the unpredictable temperatures in the classrooms.
I like the courtyard and the auditorium

I liked the idea of the double-sided cafe.

The locker rooms are bad, there is no privacy

I like the simple layout, courtyards. I don't like how small the pool is, the divider in the gy, smaller classrooms, more school color themed decor, leaky roof, locker rooms are small, showers don't work, more storage more accessible outlets for computers.

We should have bigger bathrooms, maybe a few minutes extra of passing time.

I like how the school is easy to navigate because it is a simple shape. I don't like how during the summer some classes don't have air conditioning because it gets hot especially upstairs.

better bathrooms, lockers are obsolete now don't need, new weight room, better room for our athletic trainer

I like our turf, tennis courts, and fields. I do not like the actually building itself. I think the building is very boring. The style of the school is very old and dirty looking. Their are many leaks from the ceiling which is not safe or sanitary. I don´t like that we don´t get air condition in the summer because it gets very hot and sticky. The lockers are way to tiny and have no room for my backpack. I think sports lockers would be nice. The food is not good.

1.3k 119 142 62 225 21

RESPONSES: ELL

AhaSlides

What do you like and what don't you like about the current high school?

Cafeteria needs more options for places for students to eat

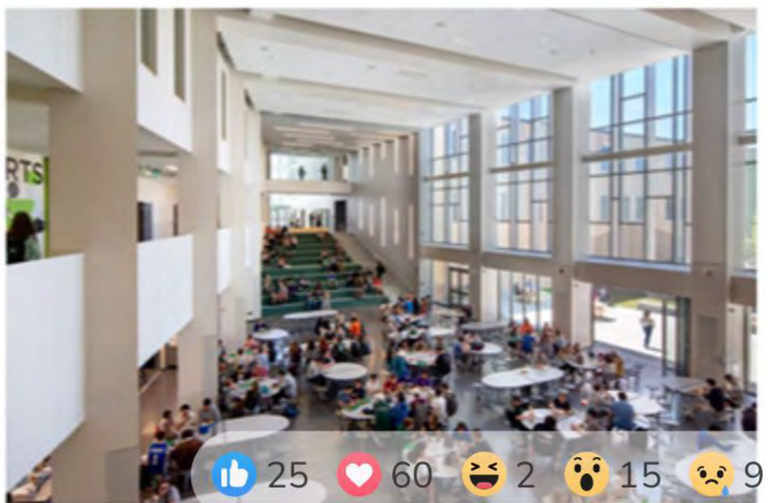
I don’t like the colors

I don't like the heating system and colors

I like the Cafeteria. I don’t like The Nursery School section (known as PK)

6 2 1 3 5 4

Commons: Where would you eat/socialize?



RESPONSES: DISCRETE MATH

AhaSlides

Commons: Where would you eat/socialize?

25 60 2 15 9 11

RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

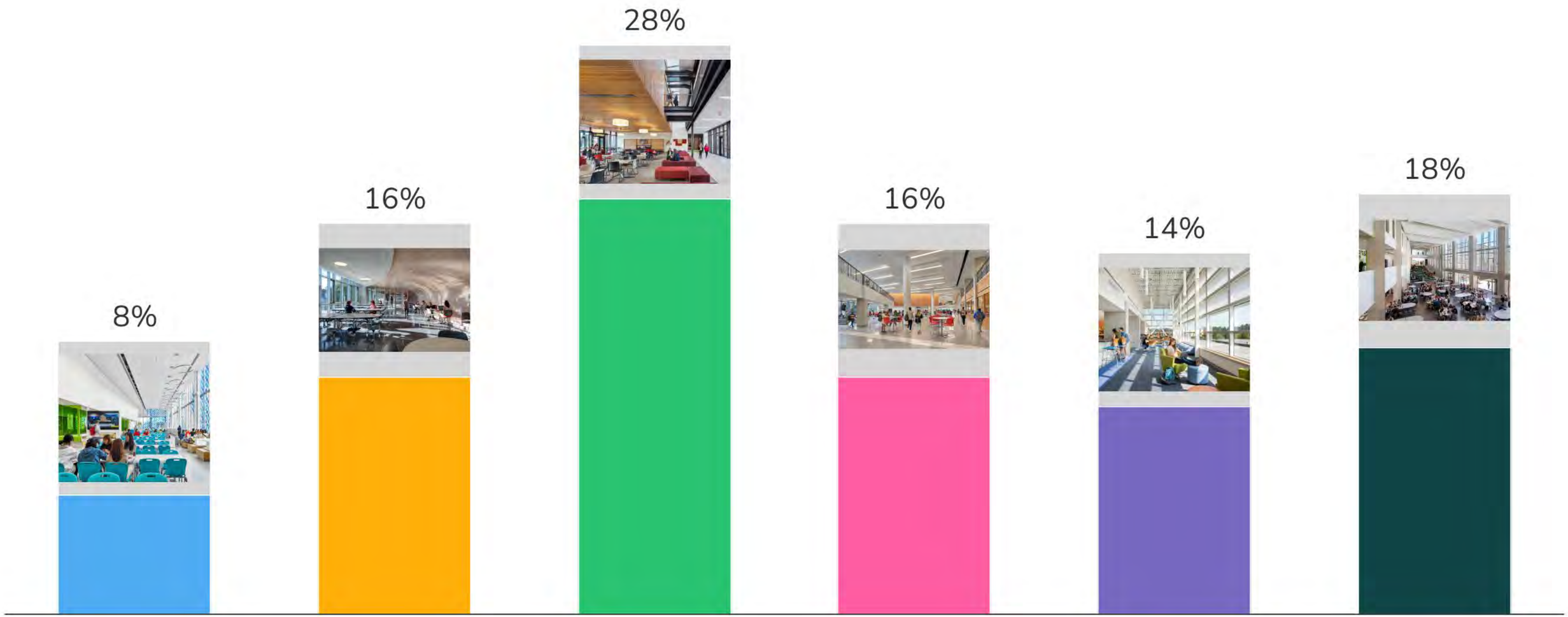
Commons: Where would you eat/socialize?

172 853 261 165 3.8k 19

RESPONSES: ACCOUNTING

AhaSlides

Commons: Where would you eat/socialize?



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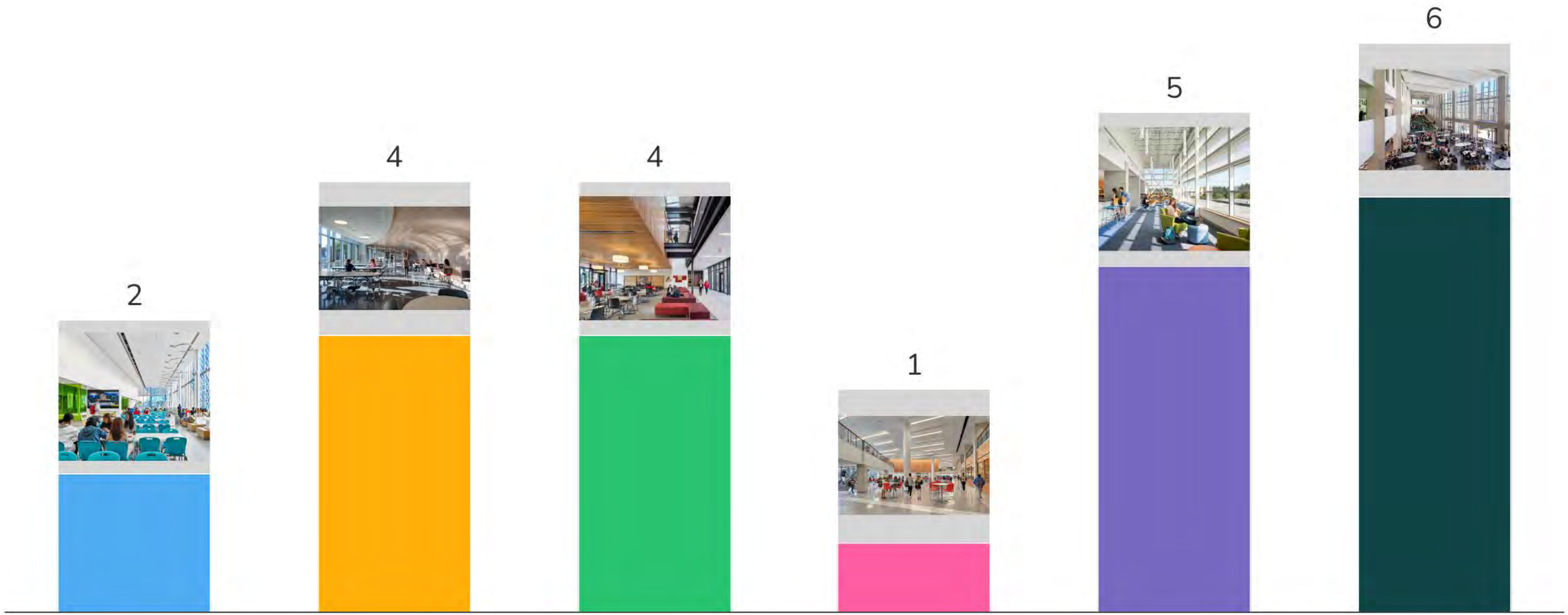
RESPONSES: ELL

AhaSlides

Commons: Where would you eat/socialize?



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AhaSlides

Active Hallways: Which spaces would you use?

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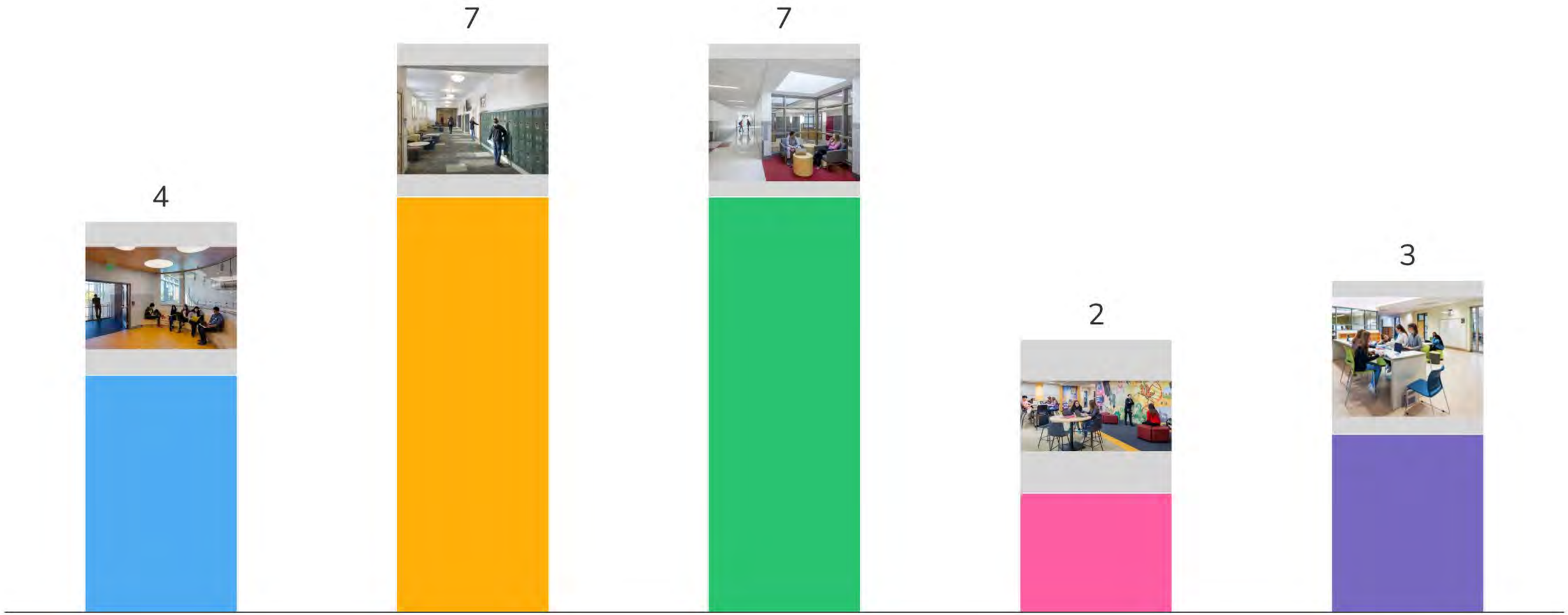
RESPONSES: DISCRETE MATH

AhaSlides

Active Hallways: Which spaces would you use?



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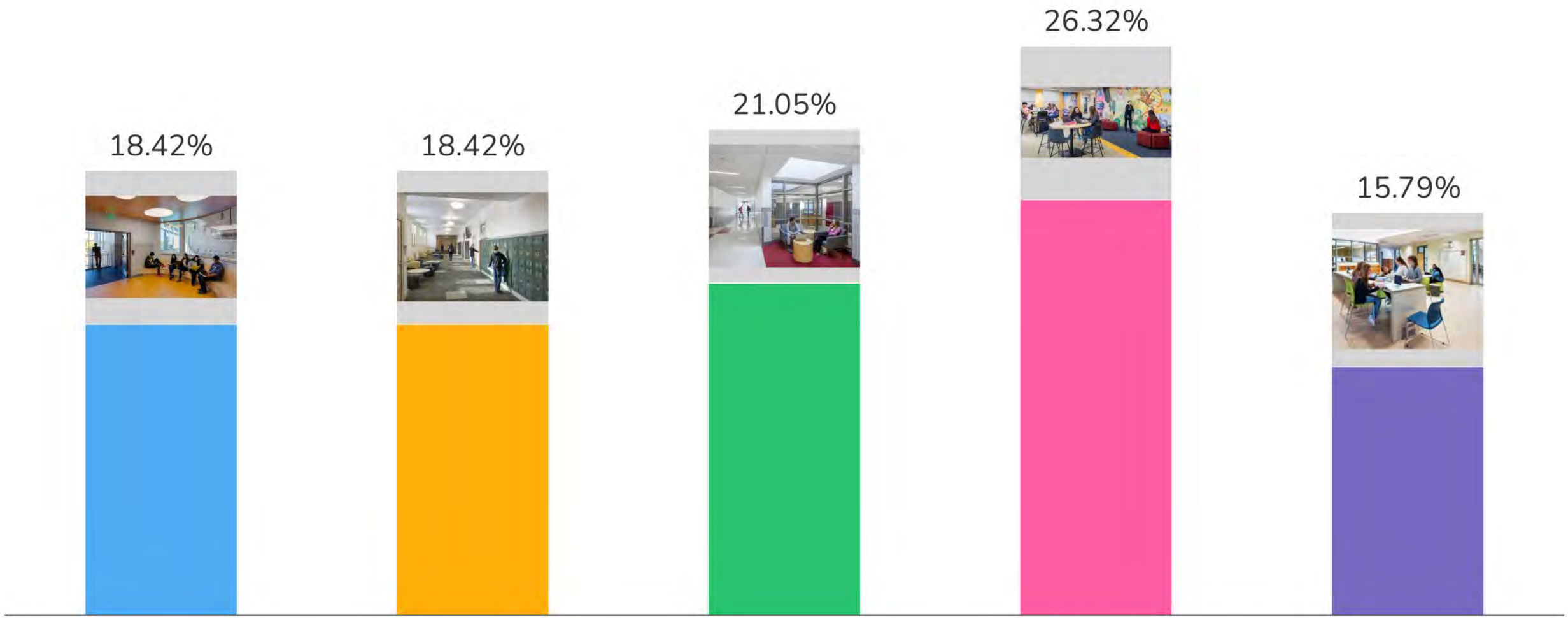
RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

Active Hallways: Which spaces would you use?



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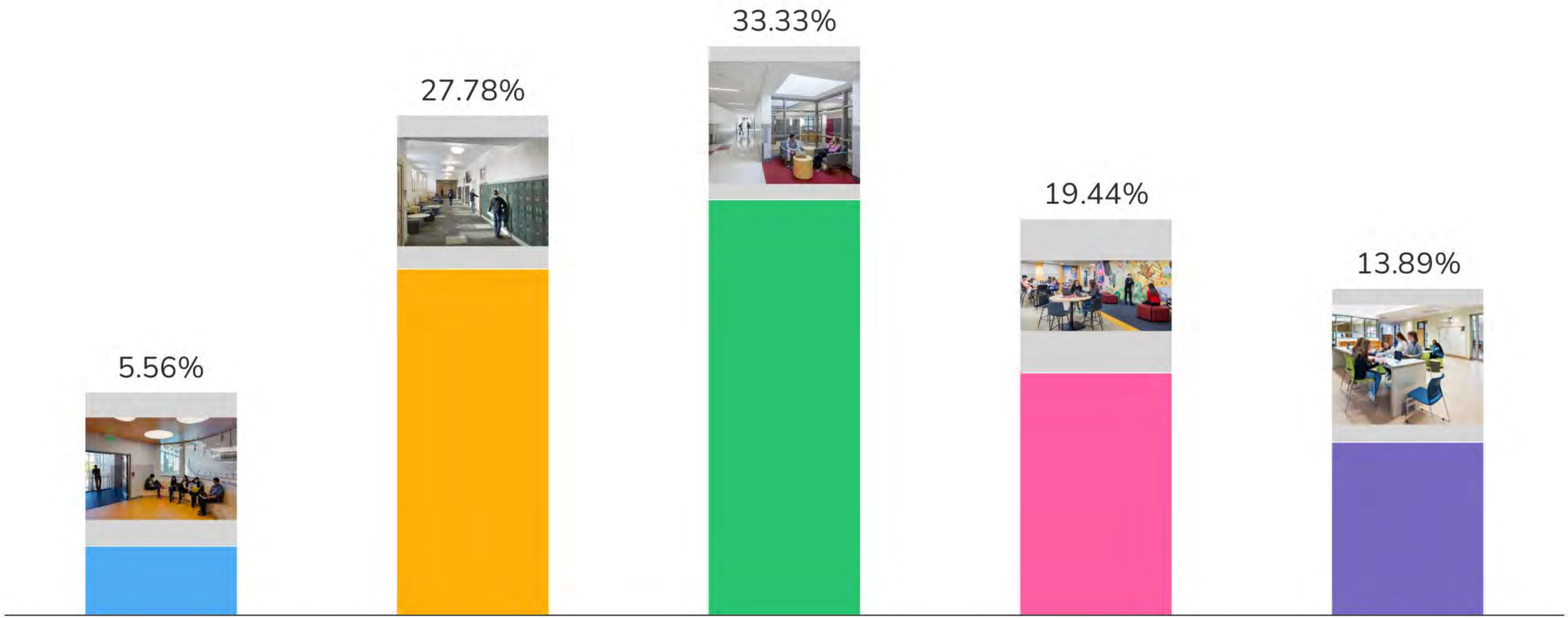
RESPONSES: ACCOUNTING

AhaSlides

Active Hallways: Which spaces would you use?



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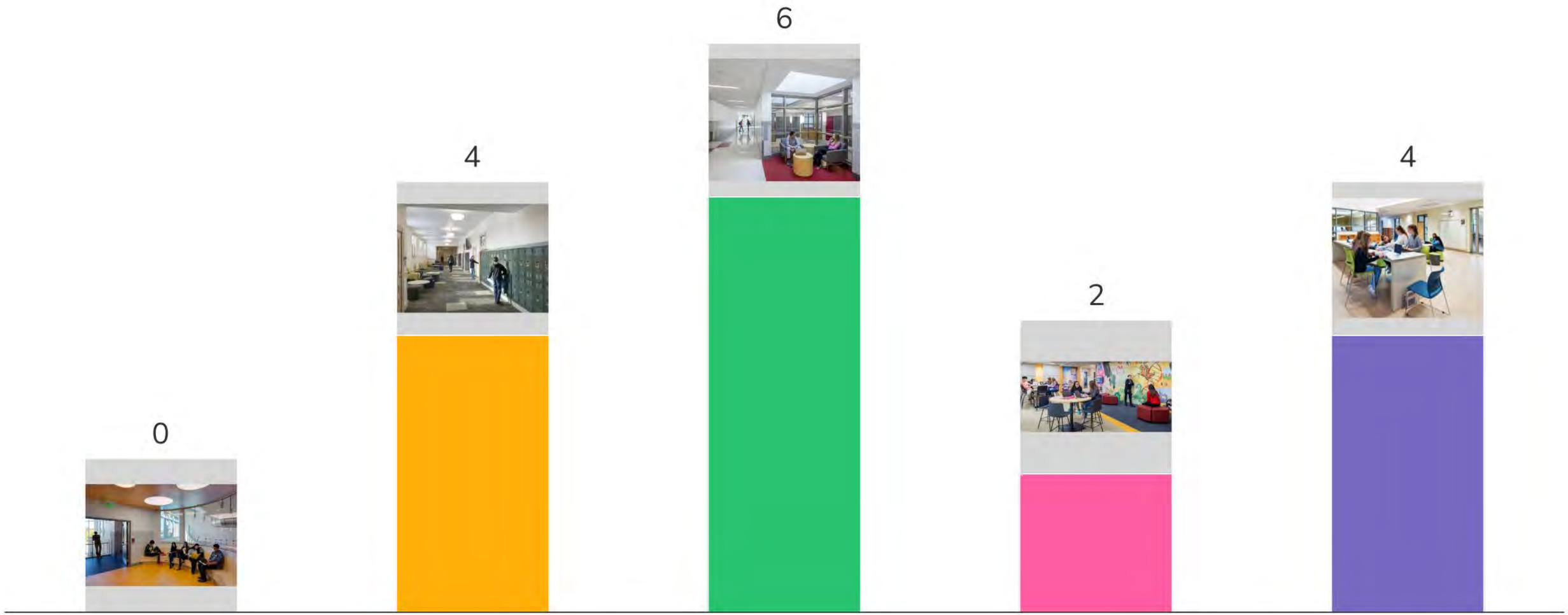
RESPONSES: ELL

AhaSlides

Active Hallways: Which spaces would you use?



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AhaSlides

Outdoor Learning: Where would you spend time?

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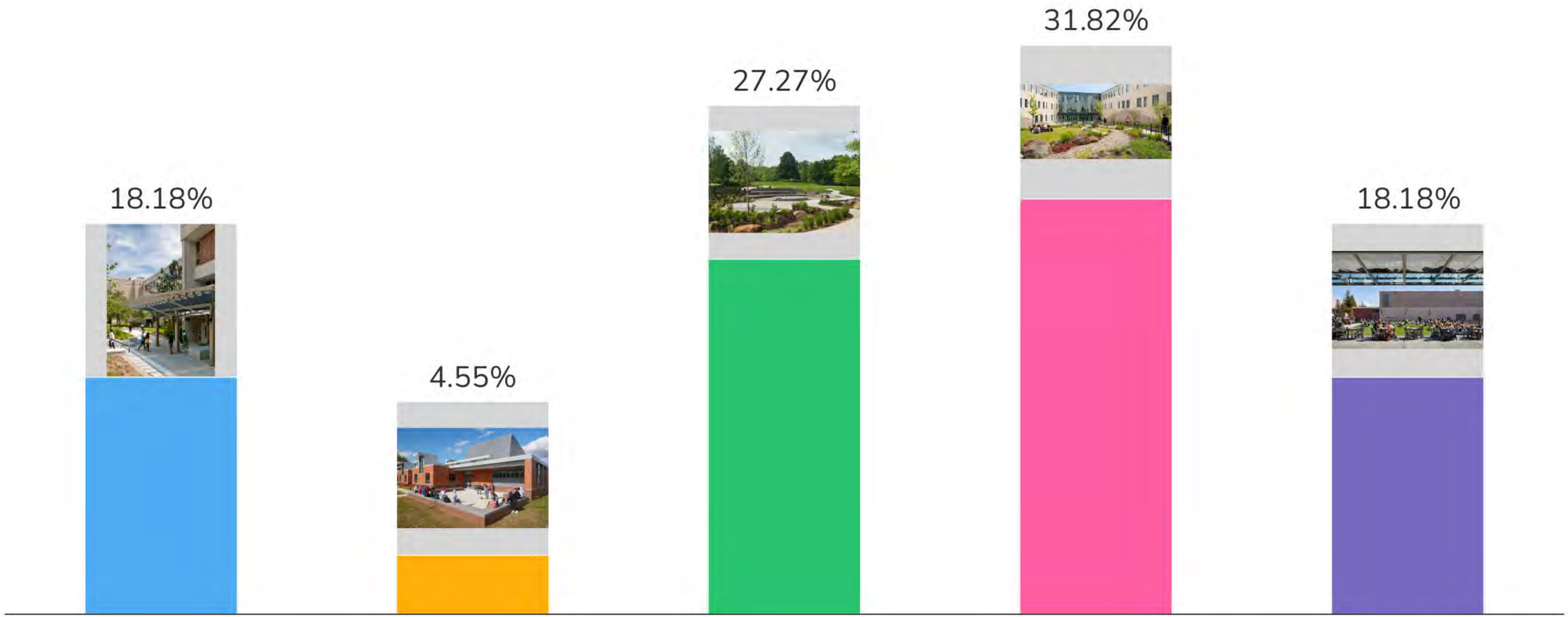
RESPONSES: DISCRETE MATH

AhaSlides

Outdoor Learning: Where would you spend time?



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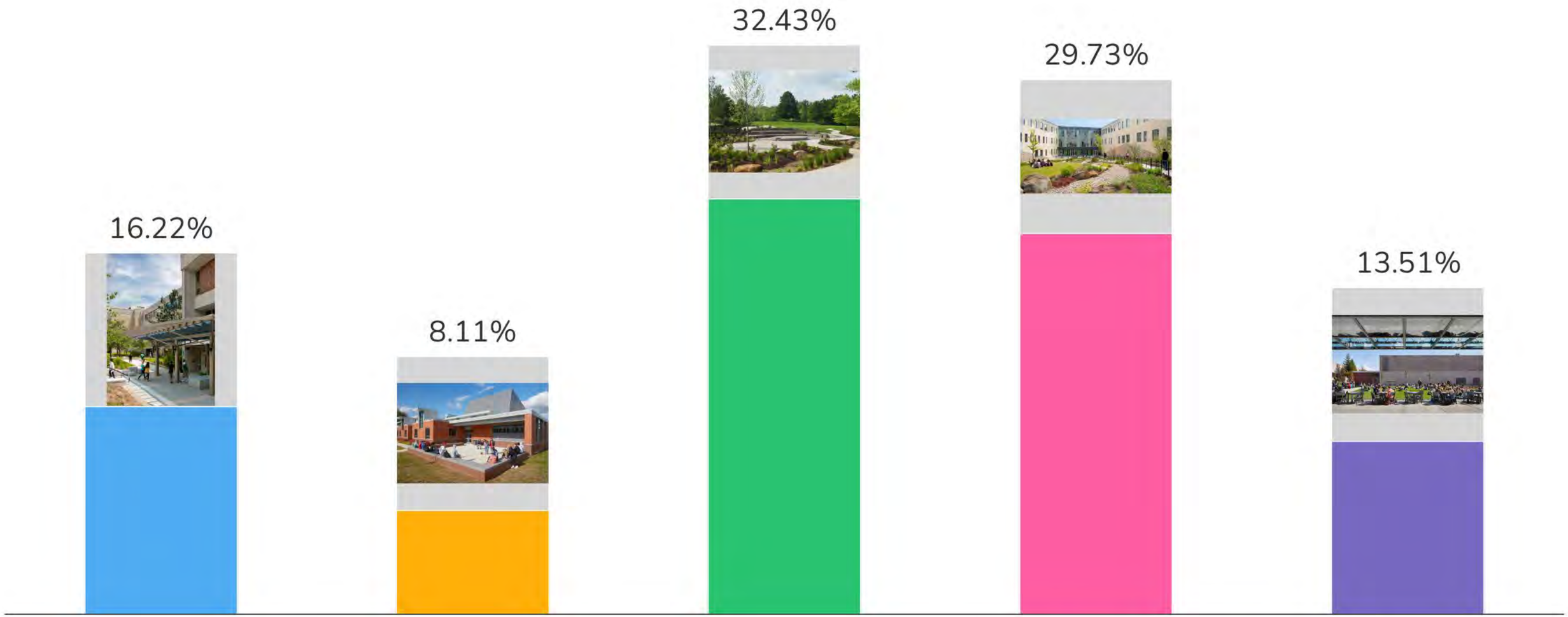
RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

Outdoor Learning: Where would you spend time?



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RESPONSES: ACCOUNTING

AhaSlides

Outdoor Learning: Where would you spend time?

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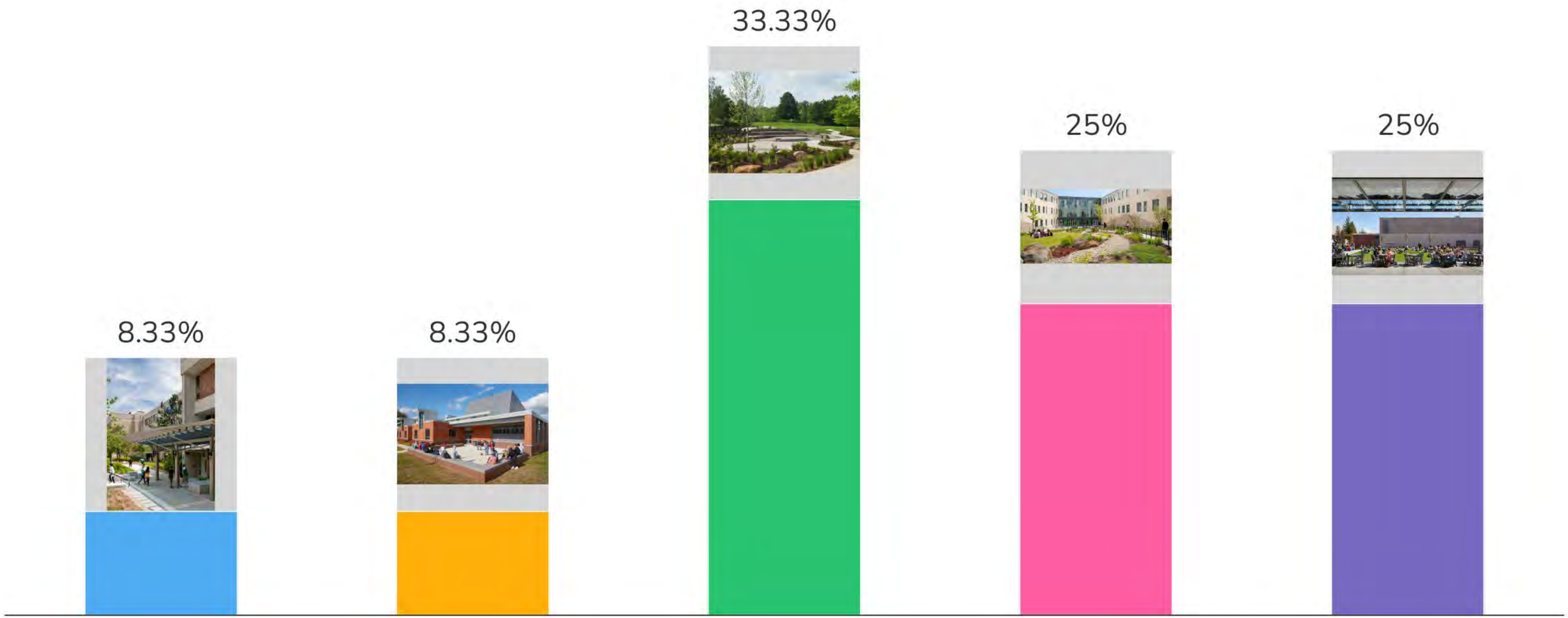
RESPONSES: ELL

AhaSlides

Outdoor Learning: Where would you spend time?



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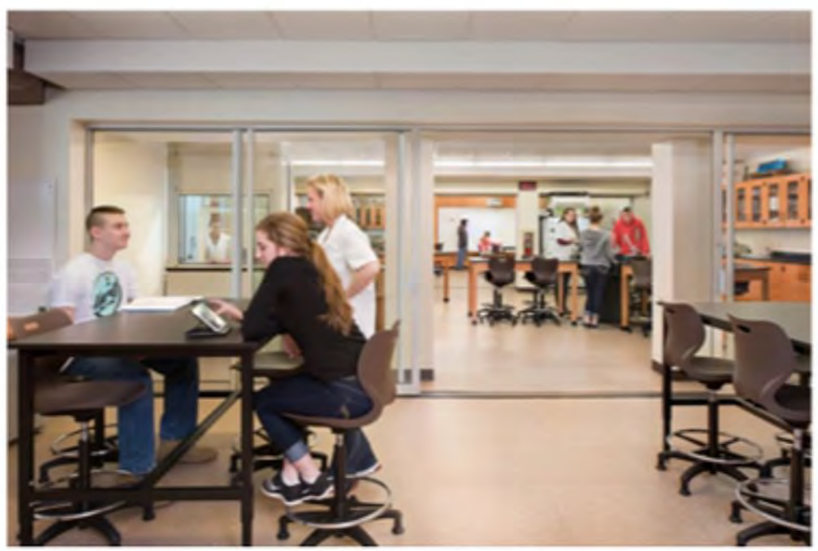
AhaSlides

Classrooms: Where would you learn best?



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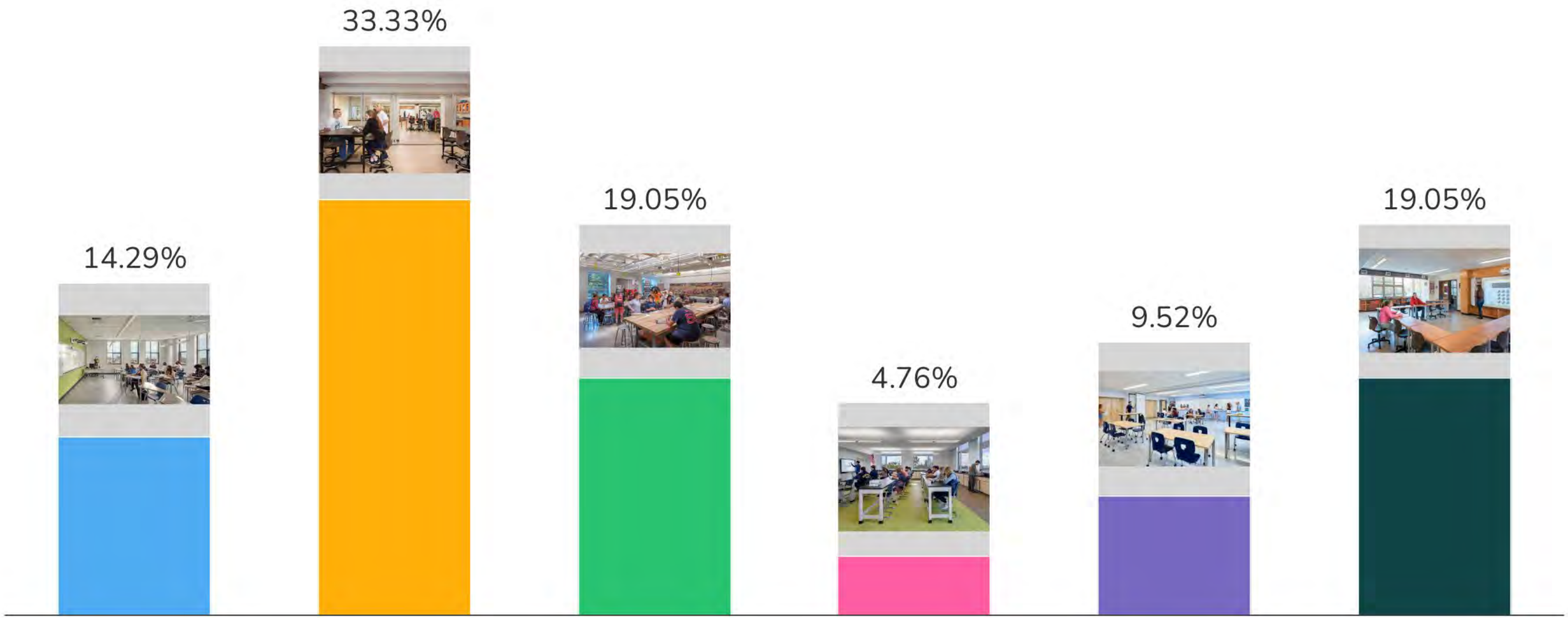
RESPONSES: DISCRETE MATH

AhaSlides

Classrooms: Where would you learn best?



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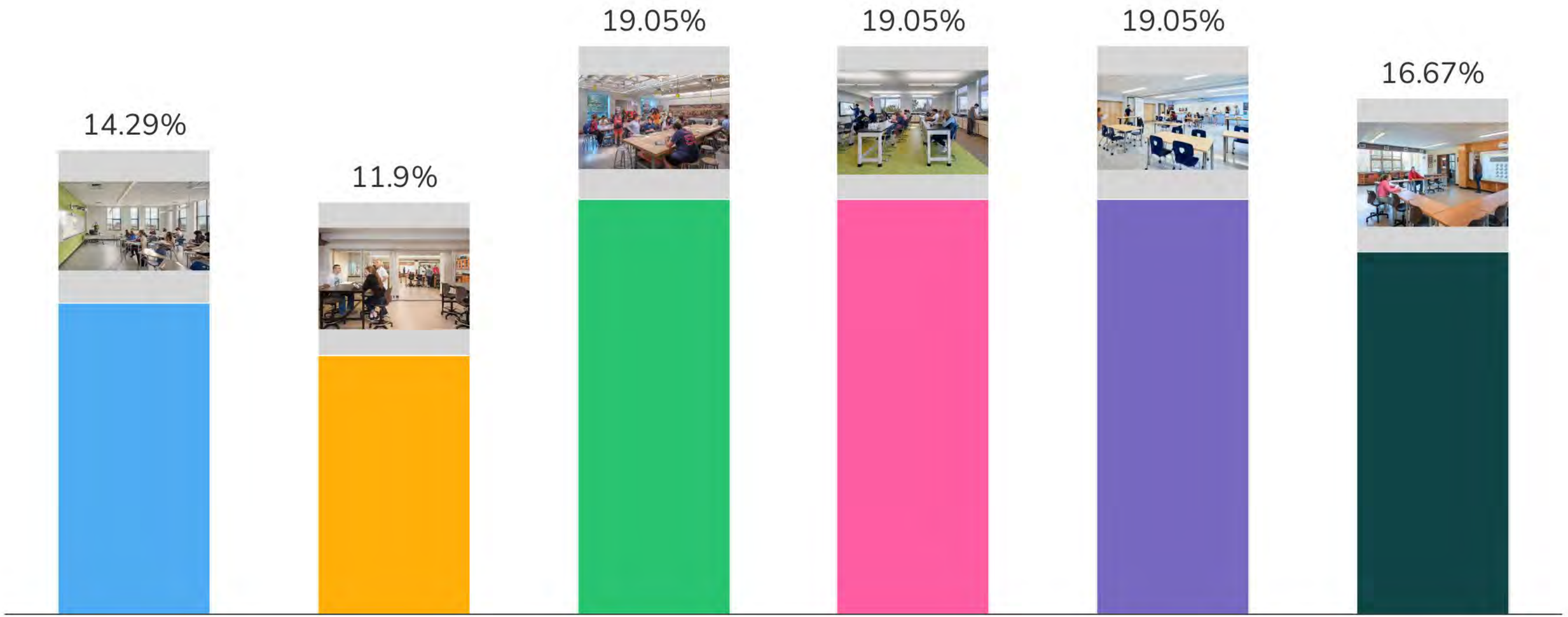
RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

Classrooms: Where would you learn best?



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RESPONSES: ACCOUNTING

AhaSlides

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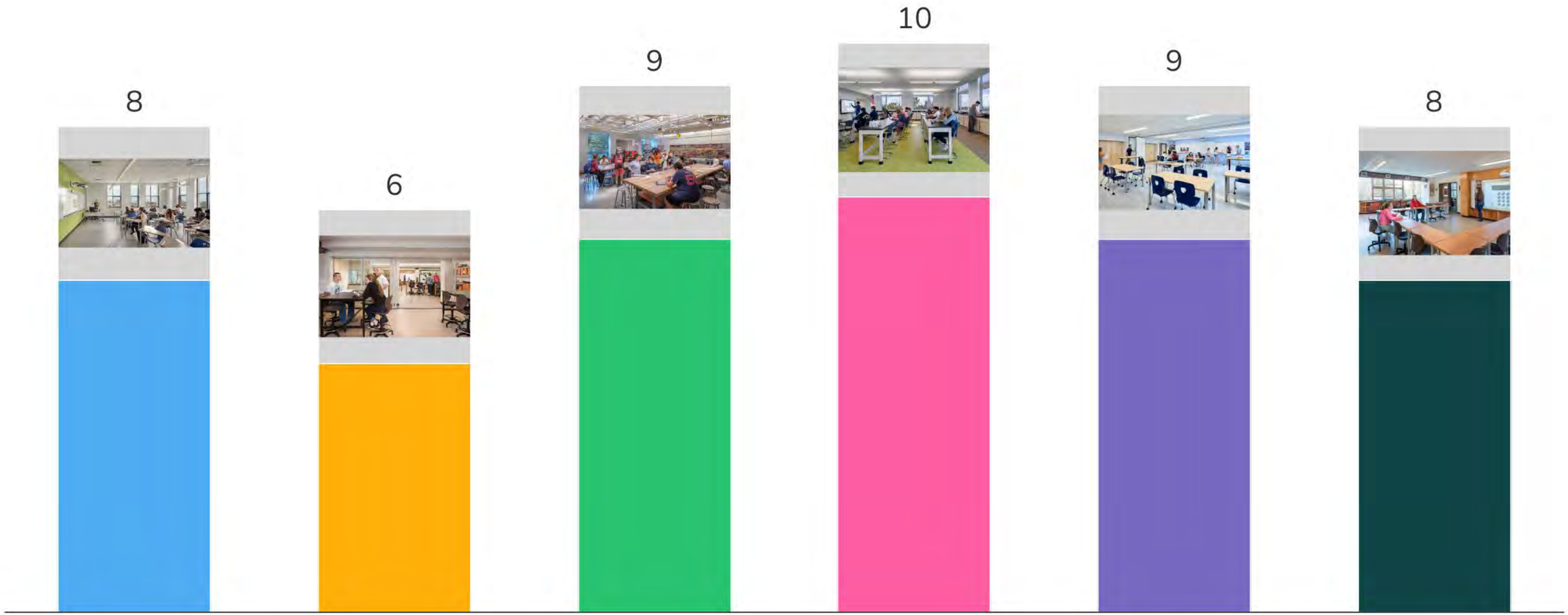

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RESPONSES: ELL

AhaSlides

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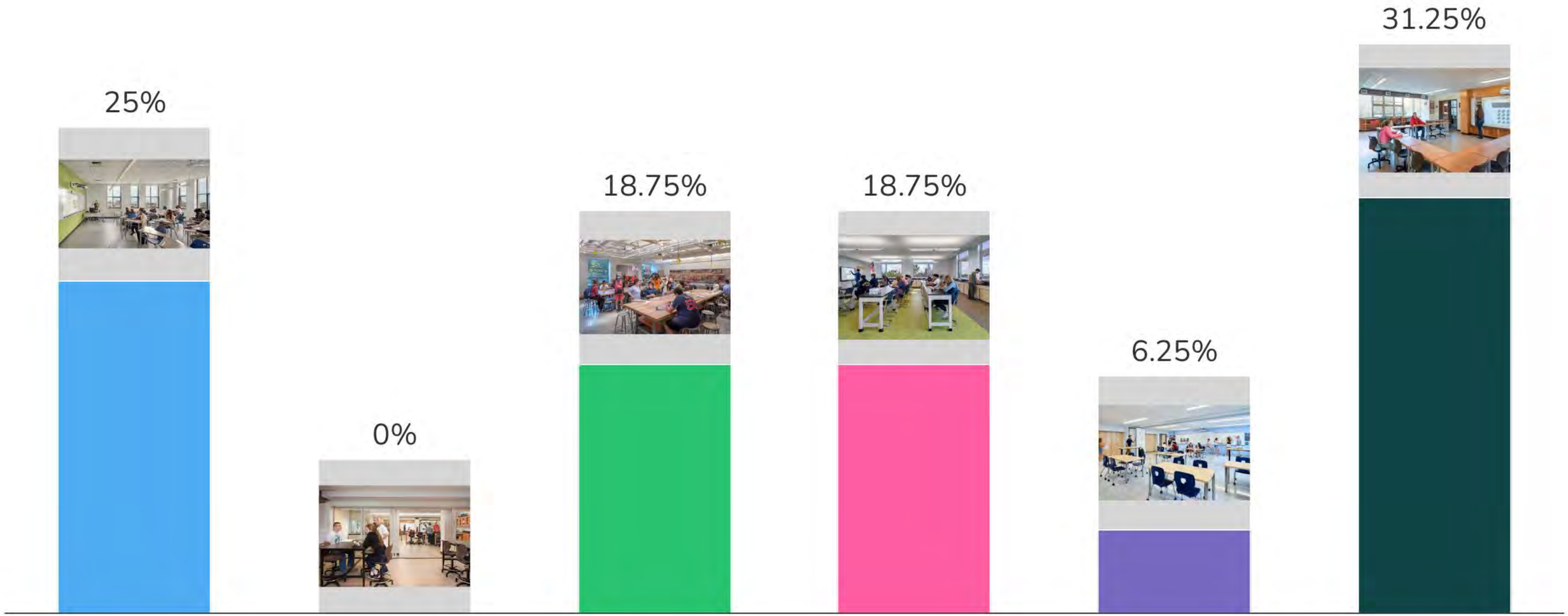

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RESPONSES: DISCRETE MATH

AhaSlides

What characteristics drew you to your selections?

25 60 2 15 9 49

RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

What characteristics drew you to your selections?

172 853 261 165 3.8k 76

RESPONSES: ACCOUNTING

AhaSlides

What characteristics drew you to your selections?

1.3k 119 142 62 225 50

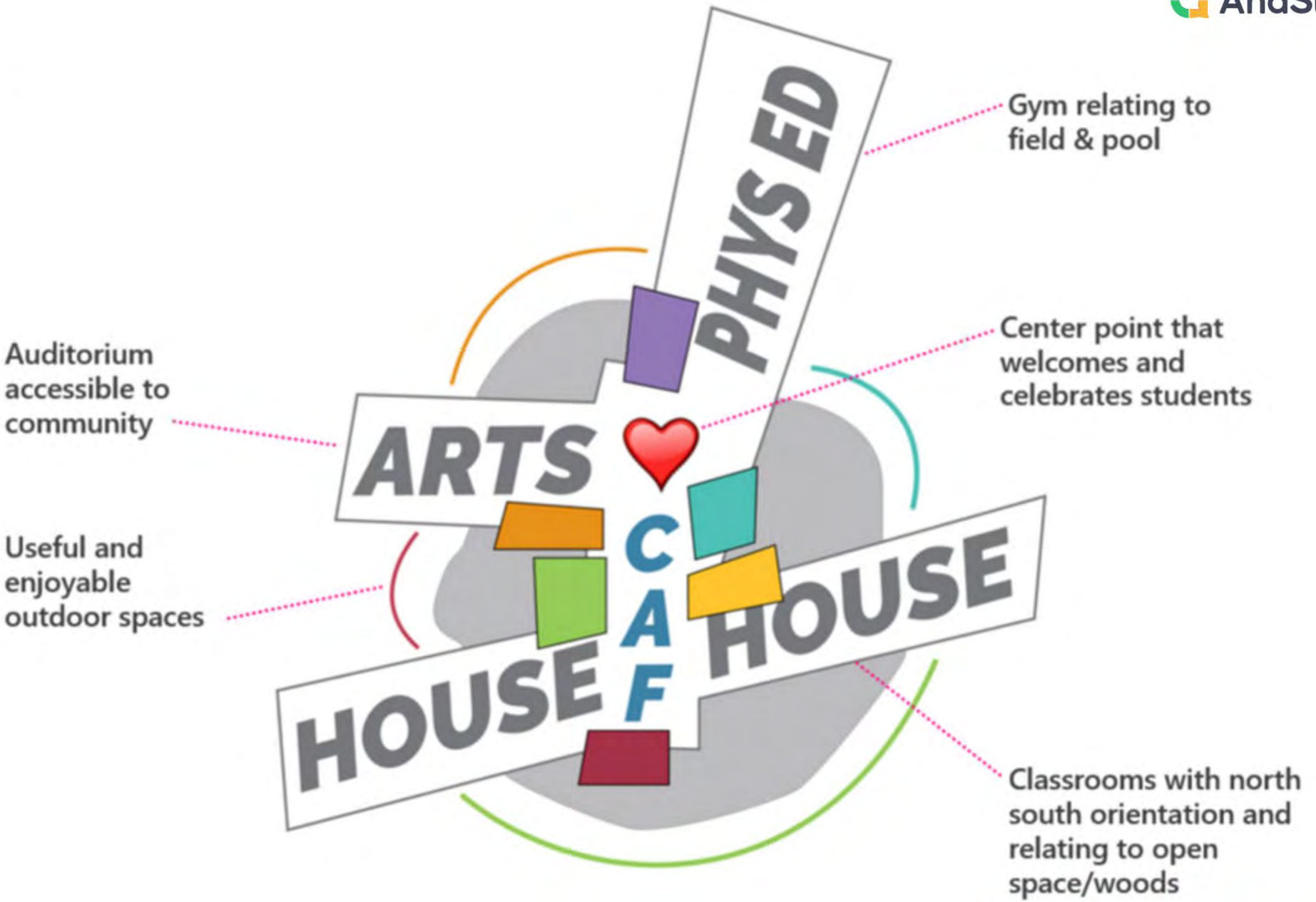
RESPONSES: ELL

AhaSlides

What characteristics drew you to your selections?

6 2 1 3 5 12

Organizing Concept



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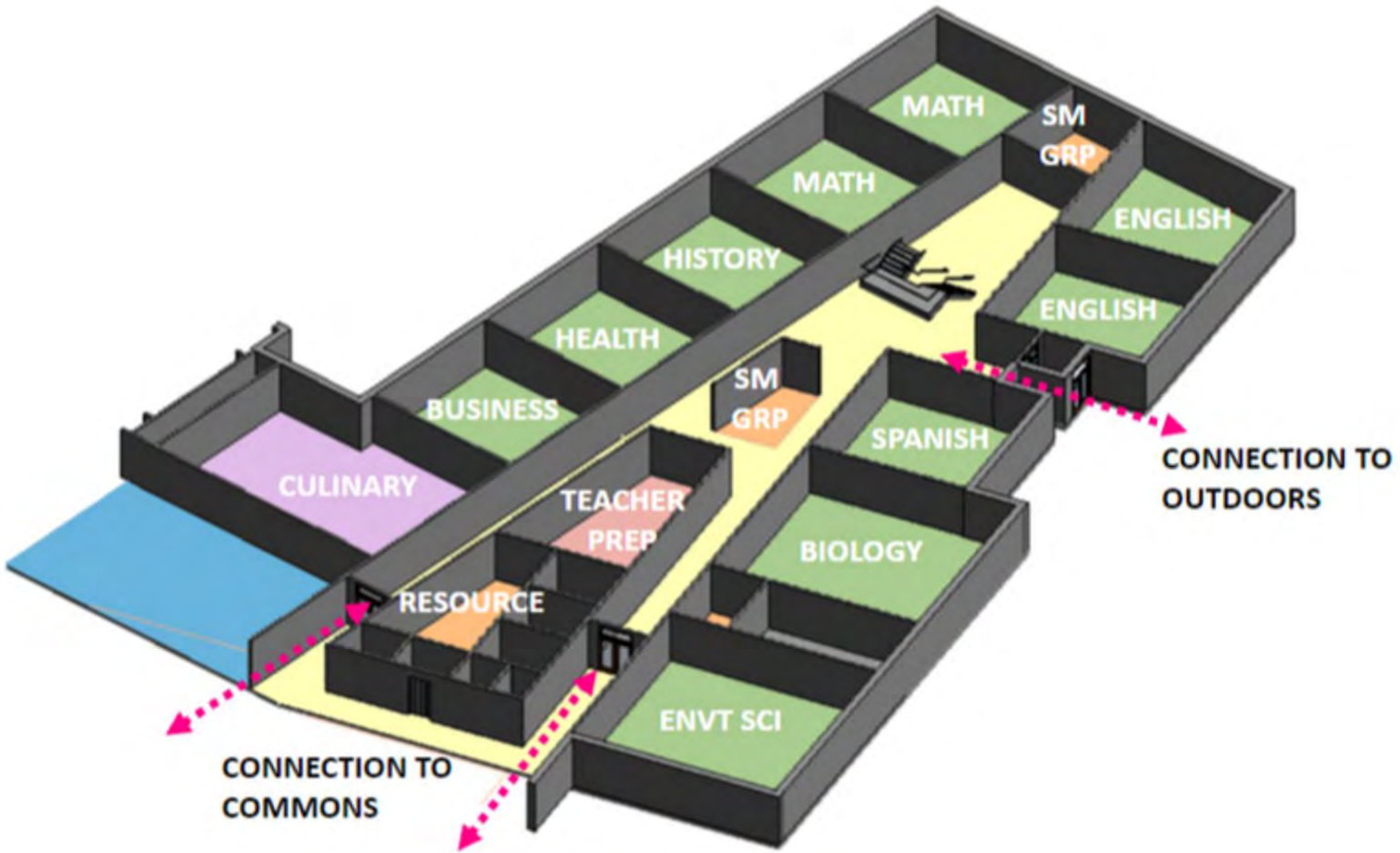
Current Proposal

- What works?
- What doesn't?
- What would make it better?

25 60 2 15 9

What does an academic house look like?



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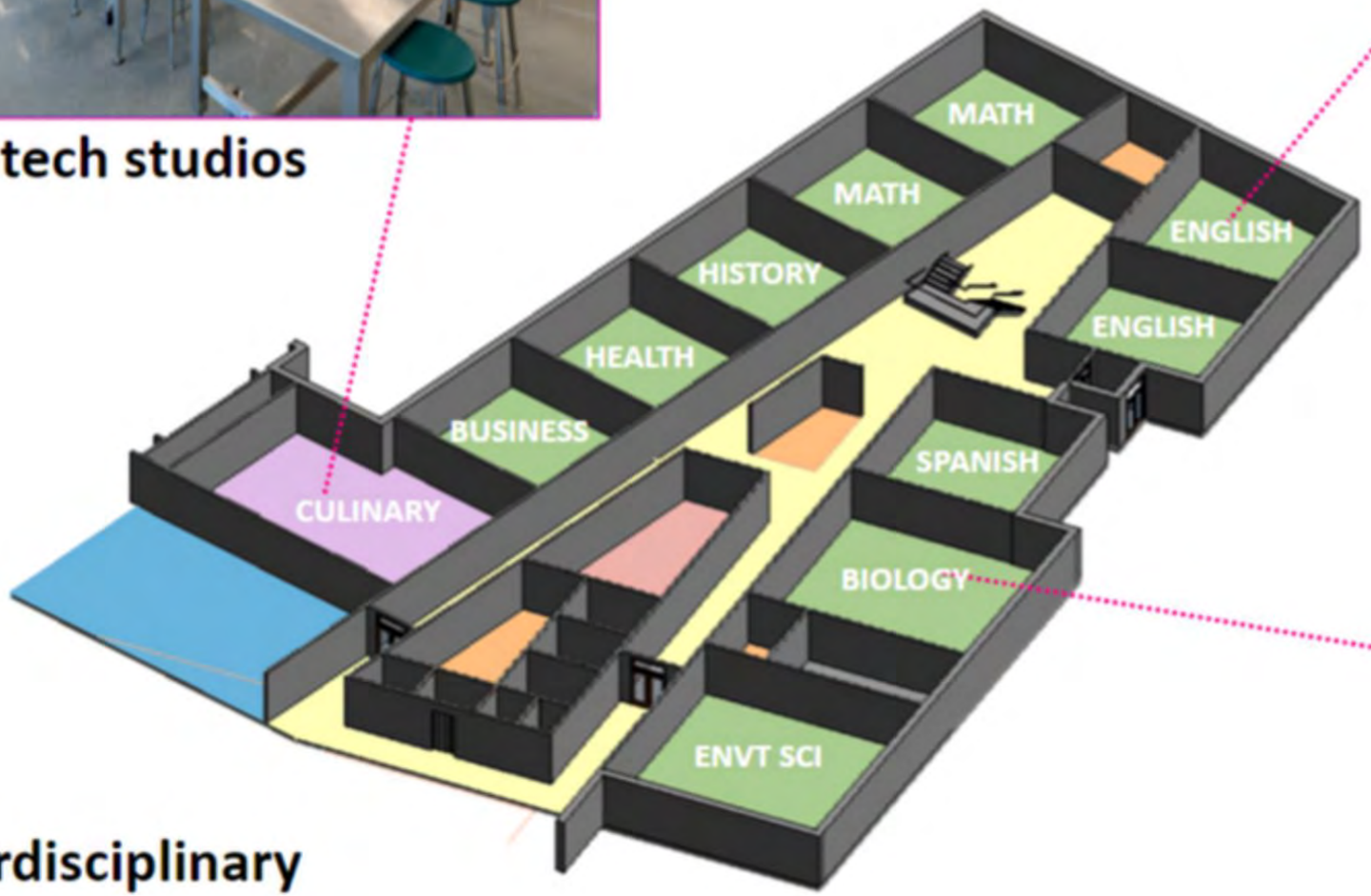
Voc tech studios

General classrooms

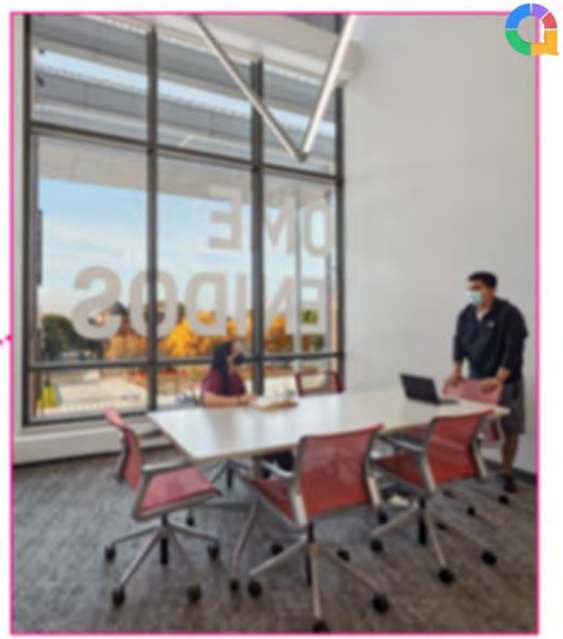


Interdisciplinary classrooms

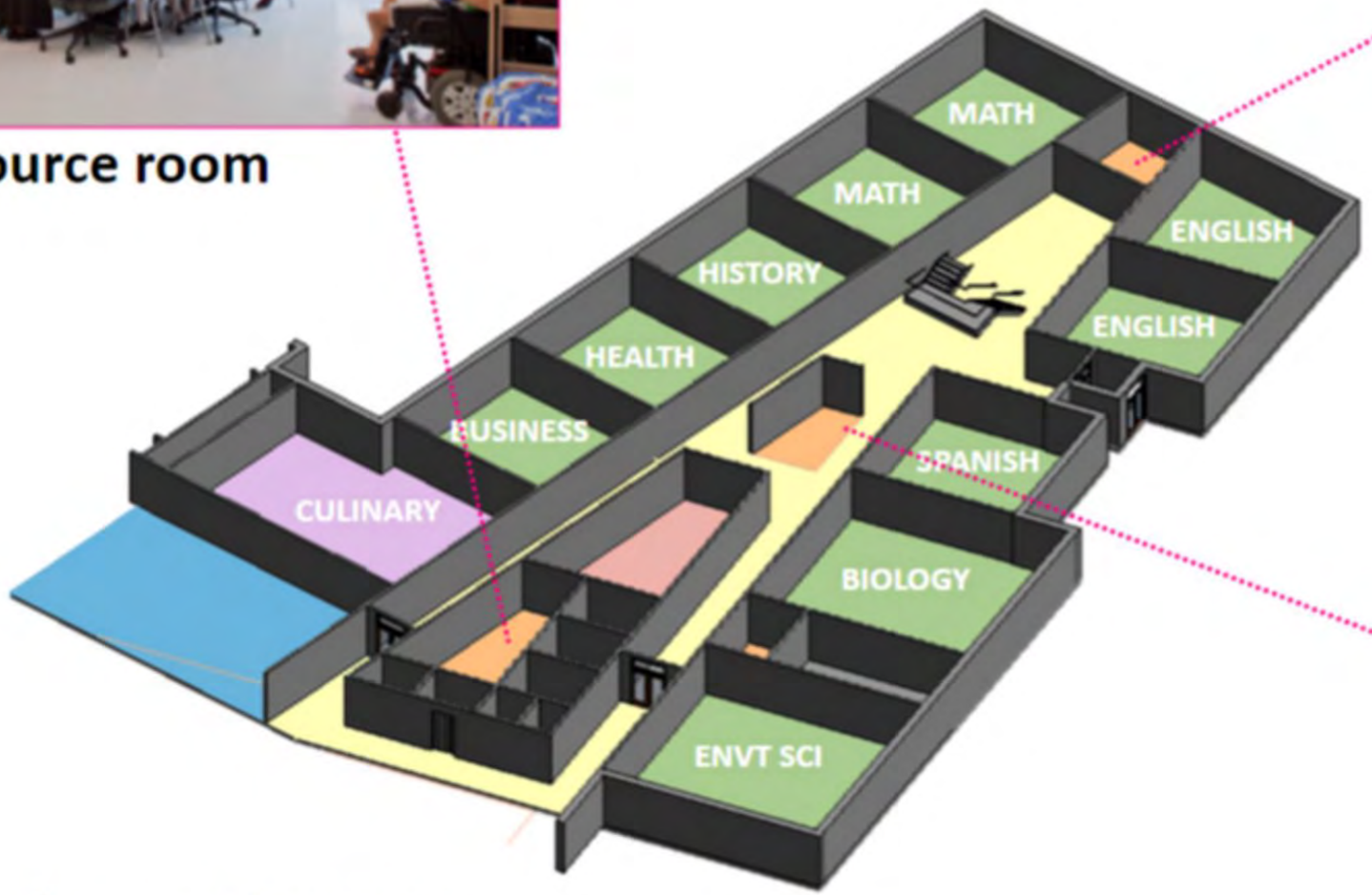
25 60 2 15 9

Science labs

Resource room



Small group



Varied support spaces

Flexible work area

AhaSlides
25 60 2 15 9
Page 2-850

RESPONSES: DISCRETE MATH

AhaSlides

What's working? What's not? What would make it better?

looks good

Looks pretty sick

Its looks great

Maybe add Tinted windows because the sunlight blinds me sometimes

the school should have more space

Would there be a roof we could go on? I know some schools have that.

i feel like all the teachers should have their own rooms because every year teachers here now switch rooms and it gets confusing sometimes

I like it, I like all of it don't change anything

Honestly the new school looks cramped. Would their be two floors?

I like all the big open rooms instead of a bunch of square rooms

the smaller the school the harder it is to focus on individual subjects because it feels like everythings getting crammed

Library! We need a library like the one at the middle school. The more welcoming it looks the more students will go to it. Please update the book selection as well

It'd be helpful to have more clear signs.. like the ones at the doctors office where it's like # - subject?

The classrooms look good and I like the resource rooms

i feel like there should be more space between tables in the cafeteria so people don't have to worry about people that are annoying or mean or places where people with social anxiety can go to have some peace

I'd be more comfortable away from the woods. More plants and natural flowers rather than being right in the woods.

Can we get the spinny office chairs??

Very rad 😎

A new auditorium, caf, and more walking space and places where people can have solitude to focus and take a breather

25 60 2 15 9 19

RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

What's working? What's not? What would make it better?

The bathroom

The sinks sometimes explode

The lack of privacy the doors being open

Bathroom is to small

nothing is working

keep all the bathrooms open and too small

bigger bathrooms, nicer stalls, stalls that can be easily locked, full length mirrors, working sinks, more sinks, sinks that turn off after 10 seconds, more conveniently spaces bathrooms. Better rooming numbers, ****** lockers, more passing time, better skylights maybe in the center of the school(a big dome shaped one)

I believe having more breakout rooms is very beneficial along with more space in general

i'm not sure if i like the idea of having random classes in a hall. i like how our school has the classes organized into a hall

172 853 261 165 3.8k 9

RESPONSES: ACCOUNTING

AhaSlides

What's working? What's not? What would make it better?

Dpeneding how big the hallways will be, I feel like there may or may not should be the rooms in the middle of the hallways. I like that idea though of different subjects next to each other. But another thing is teachers share a lot of supplies.

I don´t think we need subjects to be combined together, I think each subject should be their own thing and work of their own stuff.

I would rather the classrooms be organized by subject, like a math hall, science hall, etc rather than groups of different classes in one hallway.

The group spaces are a good idea, I would like more opportunities to socialize as well as to focus on my schoolwork. I also like the adjustments to the cafe, as I am not a big fan of our current one.

More color coordinated, black white red grey

Air fresheners in the bathrooms, more bathroom stalls. A place to put my backpack, not on the hooks they don´t hold the backpacks well. Hand dryers.

I hate how some classes are in the completely opposite area of the school. Such as I would have a Math class at one side but then I would have independent study which is downstairs on the other side.

The small group spaces are a good idea. I don't really like the interdisciplinary group idea to be honest, I'd prefer themed hallways because it makes it easier to navigate, however there aren't many interdisciplinary groups that I've been exposed to so I don't know

We should take bathroom ideas from Longmeadow high school, Modern clean looking

No paintings on the bathroom stalls and maybe add some more bathrooms to the hallways. Make sure all bathrooms are unlocked for students.

No random colors in the hallways or classrooms. No random ceiling colors or panels. Everything should match and be the same color within certain areas.

The bathrooms need work.
I'm still trying to wrap my head around the interdisciplinary rooms. I think it's easier to find classes if they're all in the same hallway.

I think a lot of these ideas are good. I like the openness and the idea of having a area to just do work and hangout. I like the idea of how the cafeteria will be set up.

Taking outdoor sports and making them accessible to work on indoors (lacrosse, soccer, field hockey, tennis)and indoor sports in general (indoor track, basketball court etc.) should be prioritize. Somewhat like the rooms they have right next to the basketball court at WNEU

Teacher planning, would be better as a resource space for teachers with printers and copiers, for me when I was a freshmen having the hallways organized by subject is easier.

Something that isn't working is the amount of bathrooms available. Bigger and more bathrooms available.

Air fresheners in the bathroom with more stalls, good sink handles, hand dryers

openness is a plus

1.3k 119 142 62 225 18

RESPONSES: ELL

AhaSlides

What's working? What's not? What would make it better?

something that definitely isnt working is the parking space

Flexible rooms are great. Our stairs sometimes get clogged. How can we prevent that in the new building

The Nursery School is one small class that neither the big kids and the small kids like.

6 2 1 3 5 3

RESPONSES: DISCRETE MATH

AhaSlides

What excites you most about a new high school building?

more spaces that are comfortable and quiet and also just a school that isn't rotting in numerous places and more space in hallways is awesome

Quieter places so Students get less overstimulated

probably less loud stuff for people with sensitive hearing

the new school itself is exciting, even though i won't be here next year i feel like the new school will help other generations feel more comfortable about coming to school and not so anxious

Teachers lounge except its for students?

Better classrooms and hallways.

Looks a lot more sensory friendly!!

A place to actually decompress

just an idea, but we should put a dunkin' donuts in the school

25 60 2 15 9 9

RESPONSES: ENVIRONMENTAL SCIENCE

AhaSlides

What excites you most about a new high school building?

- new opportunities
- Different learning environments and people will feel more welcome and comfortable coming as they are
- New open space for students and more cleanliness
- lunch room being big
- the lunch room
- seperated areas/breakout rooms
- New building new beginnings
- more space and smaller independent spaces and the lunchroom and just updates that need to be done
- having space to be more independent
- Different work places
- It will be bigger and hopefully more exiting
- skylights

172 853 261 165 3.8k 12

RESPONSES: ACCOUNTING

AhaSlides

What excites you most about a new high school building?

New weight room

That it´l be just new and just how it will be set up and that it´ll be bigger. Maybe the new designs and set ups.

That things won't be old and falling apart. But also new outdoor spaces and school spirit would make the school a lot more refreshing

Outdoor spaces!

No more leaks and ceiling tiles falling.

New auditorium and stage.

what its going to look like

The Bigger hallways

not looking embarrassed compared to longmeadow

All the ideas excite me. I am excited to see what it will look like. I think it will make the town look newer and prettier when people drive by. It excites me for the new students that will come into the new school.

Just having modern renovations to make it fit better with our present day needs. I also like the possibility of more open learning spaces, and more outdoor learning possibilities. Also, just having more open hallways and classrooms to make things feel more comfortable and less structured.

Athletics and natural lighting, clean and modern, FUCTIONABLE.

the future generation and how they are going to use this new school

Cleanliness, modern designs, more opportunities to socialize with friends and study/do schoolwork

better lunch rooms/classrooms

New and improved technology, better spaces for learning

1.3k 119 142 62 225 14

RESPONSES: ELL

AhaSlides

What excites you most about a new high school building?

not being in it

New facilities, cool design

6 2 1 3 5 2

How to get involved?

- **Stay up to date on info here:** https://www.eastlongmeadowma.gov/elhsbuildingproject
- **Volunteer to be on the School Building Committee**
- **Attend community meetings – share your perspective**
- **Help educate the community about student priorities before the ballot measure next November**
- **Stay tuned for additional engagement opportunities**

Send more feedback to: Jill at jd@joneswhitsett.com & Aviva at ag@joneswhitsett.com

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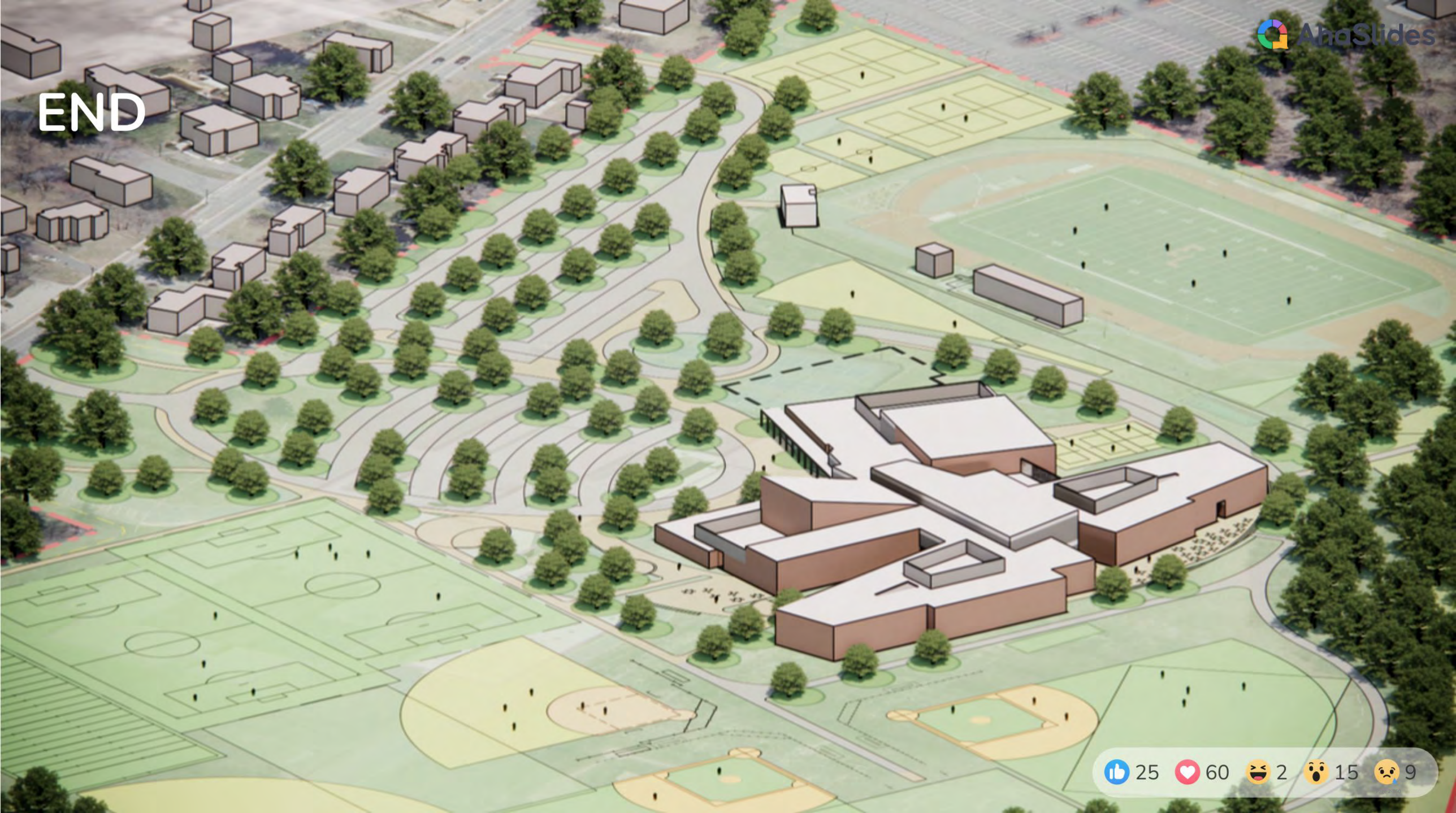
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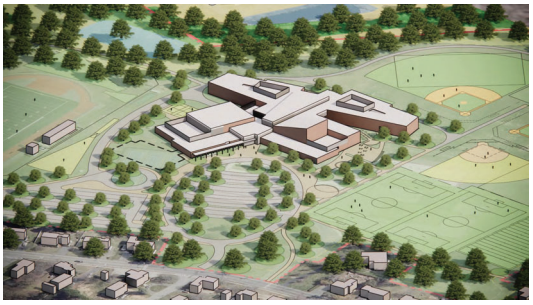
East Longmeadow High School

JONES WHITSETT ARCHITECTS

in association with SMMA



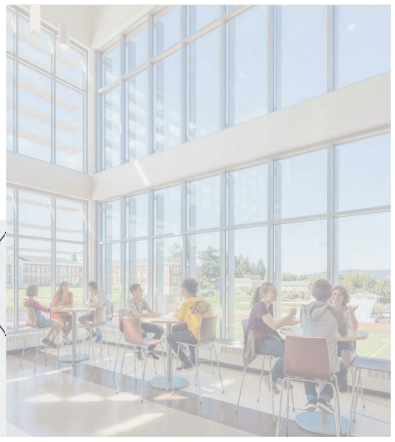
SBC Meeting –March 9, 2023

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Recommendation for Construction Delivery Method
4) MSBA Coordination
5) Public Outreach
6) New Business
7) Adjourn

SKANSKA — East Longmeadow High School Project — Ch. 149A (CMR) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**85%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 11/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**74%**
52	PSR Submittal Development	111 days	Wed 8/31/22	Wed 1/1/23	83%
53	Development of Project Alterratives	80 days	Wed 8/31/22	Tue 12/20/22	100%
54	Community Forum #2	1 day	Wed 9/21/22	Wed 9/21/22	100%
55	Design Team Charrette	1 day	Wed 9/28/22	Wed 9/28/22	100%
56	Existing Conditions Evaluation	30 days	Wed 8/31/22	Tue 11/11/22	100%
57	Community Forum #3	1 day	Wed 11/16/22	Wed 11/16/22	100%
58	Cost Estimating	20 days	Wed 12/21/22	Thu 1/19/23	40%
59	Reconcile Cost Estimates	1 day	Fri 1/20/23	Fri 1/20/23	0%
60	SBC Approval of PSR	1 day	Thu 2/2/23	Thu 2/2/23	0%
61	Finalize PSR	7 days	Fri 2/3/23	Mon 2/13/23	0%
62	PSR Submittal to MSBA	1 day	Tue 2/14/23	Tue 2/14/23	0%
63	MSBA Review of PSR	21 days	Tue 2/14/23	Tue 3/14/23	0%
64	Address MSBA PSR Comments	10 days	Wed 3/15/23	Tue 3/28/23	0%
65	FAS Presentation	1 day	Wed 3/29/23	Wed 3/29/23	0%
66	MSBA Board Meeting - PSR Approval	1 day	Wed 4/26/23	Wed 4/26/23	0%
67	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**0%**
80	**Module 5: Funding the Project**	**12 days**	**Thu 11/9/23**	**Fri 11/24/23**	**0%**
85	**Module 6: Detailed Design**	**265 days**	**Mon 11/27/23**	**Fri 11/29/24**	**0%**
139	**Module 7: Construction**	**734 days**	**Tue 7/23/24**	**Fri 5/14/27**	**0%**
150	*Occupancy/Move In*	1 day	Mon 8/24/26	Mon 8/24/26	0%
151	**Module 8: Completing the Project**	**60 days**	**Mon 5/17/27**	**Fri 8/6/27**	0%



SKANSKA

East Longmeadow High School Building Committee

March 9, 2023

Cost Considerations

Design-Bid-Build (Ch. 149)

- Aside from the 18 Filed Sub-Trades, the DBB cost of the work is highly competitive and will likely yield a lower cost up front than CM@R
- Directsubs are the Contractor's choice
- The Contractor's contingency is NOT transparent
- GC motivated to find "holes" in documents to reduce bid amount and make up with later change orders
- Early bid packages not available as an option
- "Hard" price not established until bids are received; may require redesign and rebid if bids exceed budget
- Skanska's research of current regional market information indicates that there will be less GC coverage at bid time (Expecting 3-4)

CM@R (Ch. 149A)

- More expensive up front because of Preconstruction Services, GMP fee and GMP contingency
- Allowances and holds can be built into GMP for undefined/unknown scope. Helps protect Owner from risk. Any unspent money in GMP contract is returned to the Owner at the end of the project
- Use of early packages (Site, Concrete, Steel) can reduce escalation on those elements if they are purchased early
- Better cost security with ability to value engineer the project using CM's input
- Includes GMP contingency to cover work reasonably non-inferable from the design documents
- Open book accounting. The GMP contingency is transparent
- Fee set at time of contract. No motivation for CM to "inflate" costs because savings revert back to Owner
- Skanska's research of current regional market information indicates that there will be more CM@R coverage at bid time (Expecting 6-8)

3

Quality Control

Design-Bid-Build

- Lump Sum process promotes cost cutting to increase profit
- With General Contracting, heavy owner involvement is required to ensure no "cutting corners" on quality
- GC bids are based on "plans and specs" with no opportunity for scope clarification

CM@R

- CM Selection process is based on qualifications, experience, proposed team and success on past projects
- CM early involvement in project leads to greater understanding of complex logistics and design details
- CM's involvement in the review of constructability during design phase utilizes builder's knowledge of means and methods and subcontractor abilities to ensure a design that will result in a "buildable" high quality product

4

Conflicts & Disputes

Design-Bid-Build

- Disadvantage when unexpected problems arise during construction. The problem of resolving differences can slow down construction and expend time, energy and money of the Owner who must assume the role of mediator between the Architect and the General Contractor. Higher potential for adversarial discussions/ relationships.

CM@R

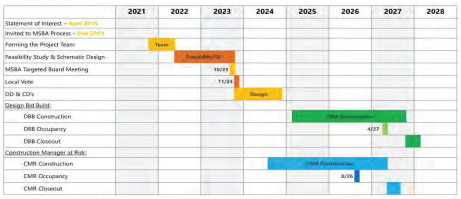
- Any conflicts will still require the time and attention of the Owner. These problems can be mitigated/solved by choosing a CM based on their qualifications and not just the most competitive bid number. Choosing an experienced and professional CM team can help create a civil environment for resolving disputes.

5

CM@R Schedule Benefits

- CM's viewpoint on "how to build" for planning and logistics integrated into design
- CM@R presents opportunity for fast-tracking and prepurchase of equipment to minimize risk of procurement delays
- CM Design-phase input allows for facilitation of biddable fast-track package documents

Timeline



CM at Risk Creates the Opportunity to:

- Hire a sophisticated, experienced team member based on qualifications
- Save time on the schedule through fast tracking and prepurchase
- Design a "buildable" building with a great deal of thought about value, quality, durability and user benefits
- Manage the budget process and see all costs via open book accounting
- Have a greater opportunity to select and prequalify subcontractors for the project resulting in significant quality improvement
- Reduce changes and claims through preconstruction involvement, design-to-budget, and effective purchasing and scope delineation
- Engage in a positive and collaborative design and construction process
- Gain an advocate looking out for your interests

	CM@R	DBB
Cost Control	✓	
Faster Process	✓	
Competitive Bidding	✓	✓
Less Contract Management		✓
Quality Control	✓	
Less Owner Risk	✓	
Contractor Input During Design	✓	

Thank you

SKANSKA

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Recommendation for Construction Delivery Method
4) **MSBA Coordination**
5) Public Outreach
6) New Business
7) Adjourn

Preferred Schematic Report - Review Comments

- MSBA comments received on March 6th
- Response due March 20th

Notable Items:

- Hydrant flow test recommended during Schematic Design
- Design Team to coordinate with District on:
  - Building Management System
  - Proprietary Items
  - Roof Access
  - Security
- Request for circulation diagrams (interior and exterior)
- District share of costs will be calculated at the end of Schematic Design

Space Summary Review:

- 25 General Classrooms accepted
- 8 Science Classrooms accepted
- 8 Prep Rooms accepted
- Green House is ineligible
- 4 Business Classrooms accepted
- 2 Health Classrooms accepted
- 1 ELL Classroom accepted
- 1 Large Group Instruction accepted
- Small overage on Physical Education is ineligible
- Small overage on Dining is ineligible
- Small overage on Admin is ineligible

Space Summary Review

Room Type	Existing Conditions	Proposed Sq Ft	MSBA Guidelines
Core Academic Spaces	40,735	45,870	38,330
Special Education	8,875	10,190	9,060
Art & Music	8,425	6,625	6,625
Vocations & Technology	5,460	7,200	7,200
Health & Physical Education	22,030	21,730	20,680
Media Center	3,140	4,900	4,900
Auditorium / Drama	9,285	8,183	8,183
Dining & Food Service	8,235	8,850	7,500
Medical	765	910	910
Administration & Guidance	4,275	4,570	3,795
Custodial & Maintenance	2,605	2,225	2,225
Other	19,725	6,600	0
Total Building Net Floor Area	133,555	127,853	109,408
Total Building Gross Floor Area	186,890	**191,780**	164,112

Schematic Design: April - October

Department of Elementary and Secondary Education Submittal

- Cover Letter
- Special Education Delivery Methodology
- Signed Educational Space Summary
- DESE Floor Plans
- Special Education Adjacency Table

Schematic Design Binder

- Introduction
- Educational Space Summary
- Traffic, Environmental , Geotechnical Updates
- Code Analysis And List Of Permitting Requirements
- Utility Analysis
- Massing Study
- Building System Descriptions
  - Sustainable Design Elements
  - Building Structure
  - Plumbing & HVAC
  - Fire Protection
  - Verify Adequate Water Capacity For New System
  - Confirm If A Fire Pump Will Be Required
  - Electrical
  - Information Technology
- Sustainable Building Design
- Room Data Sheets
- Proposed Construction Methodology
- District's Anticipated Reimbursement Rate With Incentive Points
- Total Project Budget & Cost Estimate Comparison
- Updated Project Work Plan
- Local Actions & Approvals

Schematic Design: April - October

Schematic Design Project Manual
- Outline specifications in Uniformat
- Proprietary Items

Schematic Design Drawings
- Existing Site Plan
- Site Development Plan
- Schematic Building Floor Plans
- Interior Elevations of typical:
  - General Classroom
  - Science Classroom / Lab
- Schematic exterior building elevations

Additional Items
- Preliminary Furniture Budget
- Preliminary Technology Budget
- Life Cycle Cost Analysis

Facilities Assessment Subcommittee (FAS) Presentation

March 15, 2023

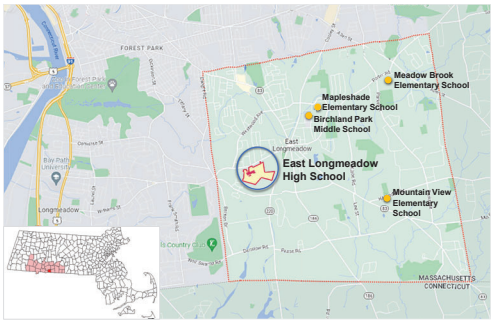
JWA | SMMA

East Longmeadow High School

JWA JONES WHITSETT ARCHITECTS

in association with SMMA

March 15, 2023
FAS Presentation



Introductions

Gordon Smith, *Superintendent of Schools,* East Longmeadow Public Schools
Frank Paige, *Principal,* East Longmeadow High School
Stephen Chrusciel, *SBC Chair*
Greg Thompson, *School Committee Chair*
Mary McNally, *Town Manager*
Tom Christensen, *Deputy Town Manager*

John Benzinger, Skanska, *Owners Project Manager*
Ben Murphy, Skanska, *Owner's Project Manager*
Kristian Whitsett, JWA, *Principal-in-Charge*
Dorrie Brooks, JWA, *Project Architect*
Helen Fantini, SMMA, *Project Manager*
Brian Black, SMMA, *Design Architect*

Vision

A proud community high school extending academic achievement to all learners through a commitment to universal design for learning,...

...A sustainable, community centered school,....

...In the heart of East Longmeadow's primary recreational campus.

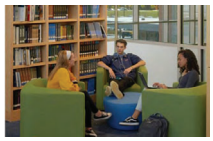
Educational Goals & Priorities

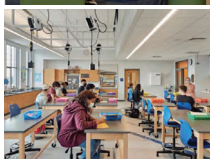
Build on work that has already begun – Support the Whole Child

- Commitment to SEL – SEL and academic instruction fully integrated into daily activity
- Commitment to Universal Design for Learning
- Commitment to Elective Choice
- New schedule change
- Full Inclusion SPED Programs
- Broad internship, CET and college prep options
- Increased Project Based Learning (PLW)
- COVID driven emphasis on Outdoor Learning

Allow for changes

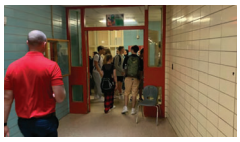
- Encourage more student independence as learners with informal spaces and a modern media center
- Renew arts, drama and music with new facilities
- Allow Digital Video Production to grow from ELCAT internship program
- Create teacher planning rooms
- Support more universal fitness with updated PE spaces
- Welcome community into the school while protecting student learning areas





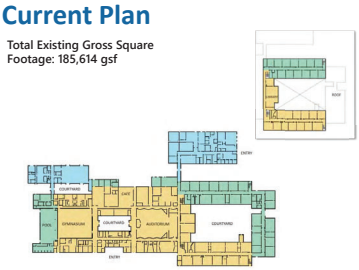
Existing Building Deficits

- Plan produces "siloed teaching"
- Lack of faculty or student collaboration space
- Lack of emphasis on diverse student achievement due to inferior arts, science, elective and exploratory spaces
- Undersized general classrooms
- Undersized and under equipped science labs and STEM spaces
- Lack of interdisciplinary opportunities
- Undersized gym



Current Plan

Total Existing Gross Square Footage: 185,614 gsf



1973
1964
1959

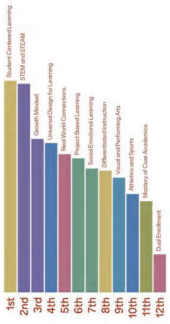
Three distinct eras of construction over 60 years.

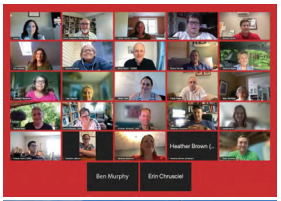
Spaces undersized by 5% or more from MSBA size expectations

Visioning & Engagement Process

What 3 words best describe ***the culture*** *of teaching and learning at ELHS?*

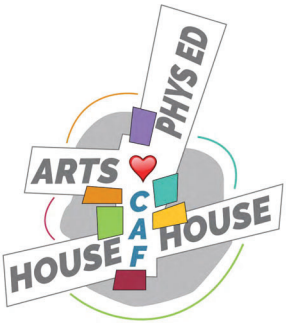
Which educational focus *areas are most important to you?*





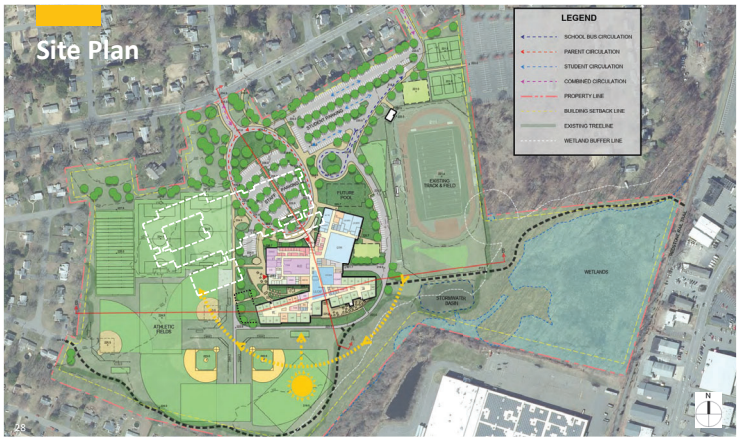
Internal Plan & Diagram

- Welcome to the heart of the school
- Community connected
- A central commons
- Balanced academic "houses"
- Vertical connections & outdoor connections
- Resourced "studios" near to public spaces
- Student centered spaces and character

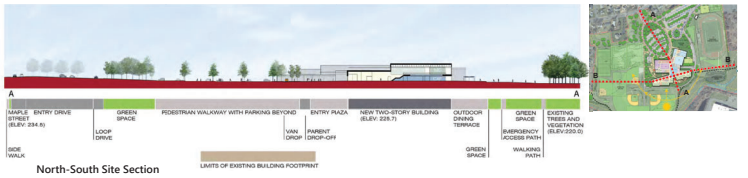


Floor Plans

Site Plan



Site Sections



North-South Site Section

East-West Site Section

Sustainability & Exterior Spaces

- Targeting LEED certification with MSBA green incentive points
- Stretch code community
- Baseline all-electric HVAC system
- Strong SBC interest in PV array
- High performance exterior envelope
- Orientation to optimize daylighting
- Connected campus with expanded outdoor educational options

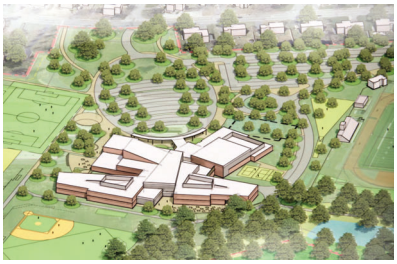
Preliminary Pricing

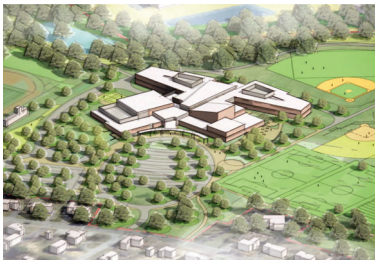
	Total Proposed Gross Square Footage	Square Footage of Renovated Space & Cost Per Squre Foot	Square Footage of New Construction & Cost Per Square Foot	Cost of Site Work, Bldg Demo, Haz Mat, Etc.	Estimated Total Construction & Cost Per Square Foot	Estimated Total Project Cost
Option 1 Code Upgrade	186,890 sf	186,890 sf	0 sf	$6,718,361	$ 95,901,747	$114,800,000
		$ 477.20 /sf	$0.00 /sf		$ 513.15 /sf	
Check	186,890 sf				$ 95,901,747	
					$ 513.15 /sf	
	0 sf				$0.00	
					$0.00	
Option 2C Add./Reno.	199,720 sf	113,282 sf	86,438 sf	$20,990,884	$ 144,167,334	$173,030,000
		$ 574.13 /sf	$672.59 /sf		$ 721.85 /sf	
Check	199,720 sf				$ 144,167,334	
					$ 721.85 /sf	
	0 sf				($0.00)	
					$0.00	
Option 3C New	191,780 sf	0 sf	191,780 sf	$21,025,446	$ 147,519,519	$176,559,772
		0.00 /sf	$659.58 /sf		$ 769.21 /sf	
Check	191,780 sf				$ 147,519,519	
					$ 769.21 /sf	
	0 sf				$0.00	
					($0.00)	

Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
Invited to MSBA Process – Dec 2019								
Forming the Project Team		Team						
Feasibility Study & Schematic Design								
MSBA Targeted Board Meeting			10/23					
Local Vote			11/23					
DD & CD's				Design				
Design Bid Build:								
DBB Construction								
DBB Occupancy						4/27		
DBB Closeout								
Construction Manager at Risk:								
CMR Construction								
CMR Occupancy						8/26		
CMR Closeout								

Massing





Thank You!

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AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Recommendation for Construction Delivery Method
4) MSBA Coordination
5) **Public Outreach**
   - **Community Forum #4 (3/16/23) – High School Cafeteria**
6) New Business
7) Adjourn

Thank You

JWA | SMMA

SKANSKA | JWA JONES WHITSETT ARCHITECTS | In association with SMMA

East Longmeadow HS Building Project

Community Forum
March 16, 2022

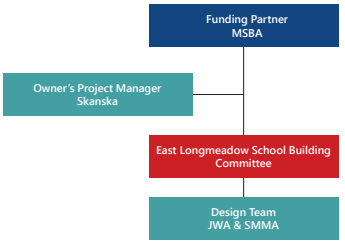
Topics of Discussion

- Introduction
- Schedule Overview
- Visioning & Priorities
- Existing Conditions
- Schematic Design
- Next Steps

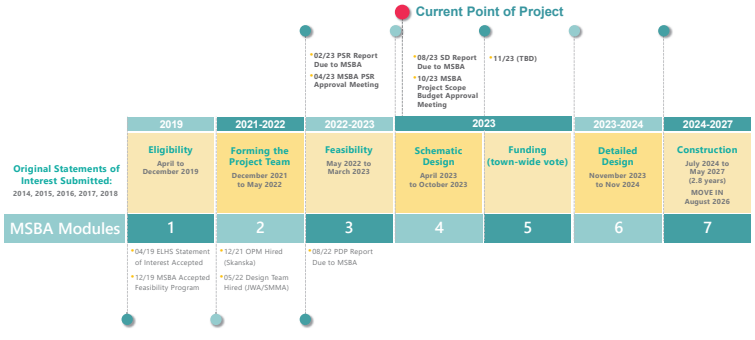
Introductions & Project Team

ELHS School Building Committee

Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELPS Director of Curriculum
Kathleen Hill, Town Council Member
Kimberly Collins, Director of Municipal Finance
Mary McNally, Town Manager
Elizabeth Marsian-Boucher, School Committee Member
Greg Thompson, School Committee Member
Tom Christensen, Deputy Town Manager
Bruce Fenney, Superintendent of East Longmeadow DPW
Daniela LaBarre, School Psychologist and Faculty member
Ryan Quimby, Town IT Director



Overall Schedule

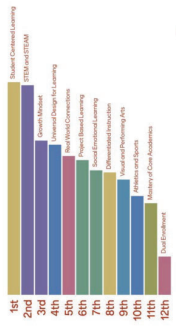


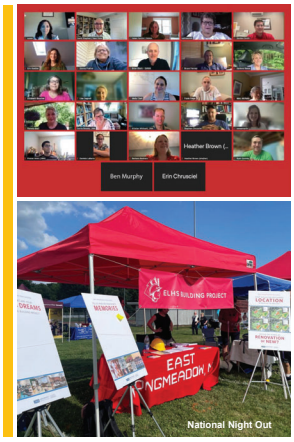
*Schedule is subject to change

Visioning Process

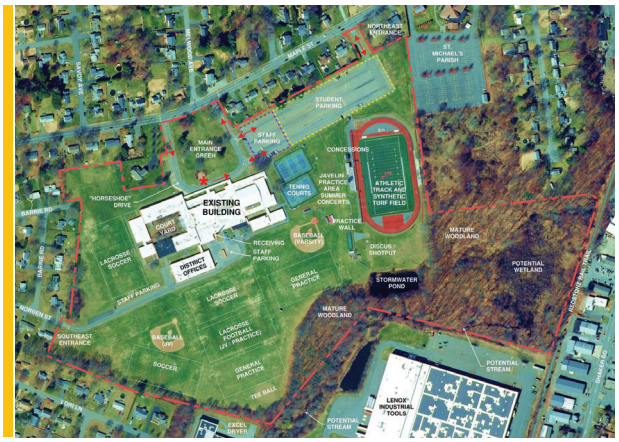
What 3 words best describe **the culture** of teaching and learning at ELHS?

Which **educational focus** areas are most important to you?





Existing Site

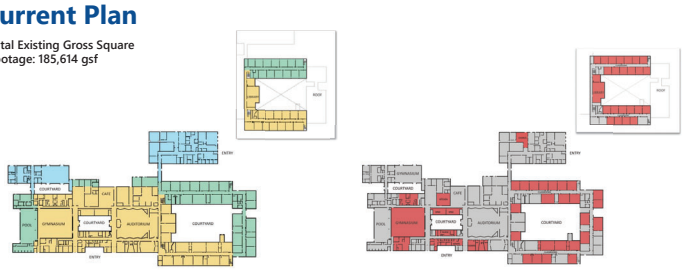


Existing Site
Conditions Summary

- 61.40 Acres (1 Parcel)
- More than Adequate Parking
- Athletic Fields and Courts are Extensive and in Good Overall Condition
- Lack of Separation Between School Bus and Passenger Vehicle Traffic; General Safety Concerns with Overall Vehicular Circulation
- Many Accessible Routes are Non-Compliant Due to Surface Conditions, Configuration, or Slope
- Lacks Dedicated Pedestrian Routes in Parking Lot and Between Building and Stadium
- Lacks Dedicated Exterior Common Space for Large Group Gathering or Dining
- Loading | Service Area Cannot Accommodate Large Vehicles

Current Plan

Total Existing Gross Square Footage: 185,614 gsf



1973
1964
1959

Three distinct eras of construction over 60 years.

Spaces undersized by 5% or more from MSBA size expectations

Existing Building
Conditions Summary

- Convoluted circulation – a result from the different eras of construction.
- Finishes are robust –though colors are dated and fixed.
- Significant quantities of hazmat material.
- Roof is in poor shape – and is flashed incorrectly at adjacent walls. Ongoing roof leaks are a safety concern to occupants.
- Lack of MAAB / ADA compliance in numerous locations
- Education spaces do not support today's educational needs.
- Mechanical, Electrical & Plumbing systems have all exceeded their life expectancy
- Typical lack of insulation and moisture control at the exterior envelope

Side-by-Side Comparison

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
PROJECT COST $180-185M	PROJECT COST $175-180M	PROJECT COST $170-175M	PROJECT COST $115-120M
ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

Side-by-Side Comparison

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
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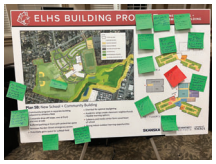
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

Gathering input from previous Community Meetings & SBC Meetings…

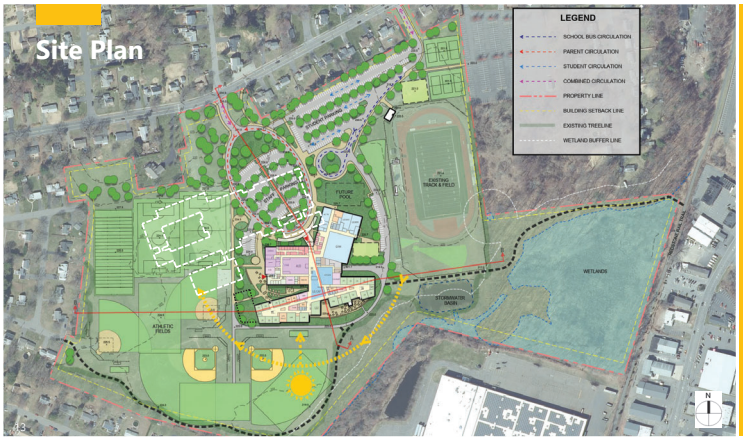
- Base Repair is expensive, will result in a smaller grant from the MSBA, and does not meet any of the District goals
- Numerous challenges with an Add/Reno approach
  - Difficult to bring existing building up to code (accessibility, sprinklers, new energy code, etc.)
  - Extremely low floor-to-floor heights
  - Introducing adequate ventilation is almost impossible and would lead to extremely low ceilings throughout
- Keeping costs as low as possible, while still planning for the future
- Maximize the MSBA Grant whenever possible
- Strong community preference for New – leading to deeper exploration



Cost of Doing Nothing

- Risk NEASC accreditation
- Piecemeal capital expenditures
  - Roof repairs / replacement
  - Failing systems require replacement (Electrical, Mechanical & Plumbing)
  - Costs will continue to escalate
  - Code upgrades will be triggered (accessibility, fire protection)
- Whole-scale accessibility expenses
- Risk not obtaining MSBA approval to re-enter the program for years
  - MSBA typically receives 50 - 75 Statement of Interests (SOI's) per year
  - 10 were invited into the Core Program in 2022
- If there is a "next process" - the MSBA will not participate in the reimbursement of Feasibility and Schematic Design costs
- No improvements to delivery of education
- Possible reduction in enrollment
- Possible reduction in property values
- Possible reduction in State education funding

Site Plan



Design Update – Plan Development

FIRST FLOOR

SECOND FLOOR

Space Summary Review

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Sustainability & Exterior Spaces

- Targeting LEED certification with MSBA green incentive points
- Stretch code community
- Baseline all-electric HVAC system
- Strong SBC interest in PV array
- High performance exterior envelope
- Orientation to optimize daylighting
- Connected campus with expanded outdoor educational options

Improved Security

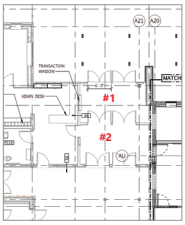
The new building will improve security

Starting with the big picture:

- Crime Through Environmental Design (CPTED)
- Engagement with key stakeholders throughout design process
- Clear site lines – inside and out
- Easily monitored spaces
- Easy emergency access
- Controlled public access

To the details:

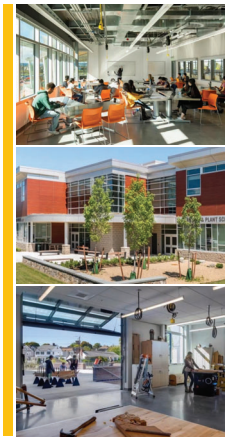
- Controlled entry with abuse resistant glass
- Comprehensive security system
- Door contacts tied to centralized system
- Functioning, easy to use door hardware



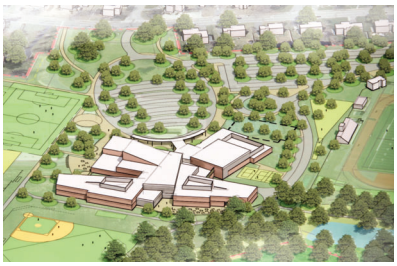
Educational Advantages

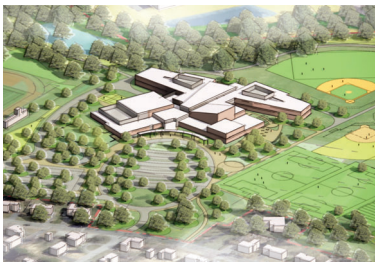
Improved setting for teaching, learning and community connections

- Organized to create more inclusive and student-centered school culture
- Opportunity to provide better sized teaching spaces.
- Provides more varied space types and outdoor learning spaces.
- Introduction of collaboration and support spaces throughout.
- Update all teaching technology, furniture and finishes.
- Fully new infrastructure.
- Reinvestment in enrichment programs including art, drama, music, PE and hands-on learning spaces



Preliminary Massing





Schematic Design: April - October

Comprehensive Cost Estimate

- From two independent cost estimators
- To be uses as the foundation for the Project Scope & Budget Agreement

Department of Elementary & Secondary Education Submittal

Schematic Design Binder

- Educational Space Summary
- Code Analysis & Permitting Requirements
- Building System Descriptions
- Room Data Sheets
- Proposed Construction Methodology
- Total Project Budget & Cost Estimate Comparison

Schematic Design Project Manual

- Outline specifications in Uniformat
- Proprietary items

Schematic Design Drawings

Additional Items

- Preliminary Furniture Budget
- Preliminary Technology Budget
- Life Cycle Cost Analysis

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
Invited to MSBA Process – Dec 2019								
Forming the Project Team	Team							
Feasibility Study & Schematic Design		Feasibility/SD						
MSBA Targeted Board Meeting			10/23					
Local Vote			11/23					
Design Development & Const Doc's				Design				
Construction Manager at Risk:								
Construction					CMR Construction			
Occupancy						8/26		
Closeout								

How can I continue to learn more about the ELHS building project?

- Attend the next Community Forum: May 18
- To learn more about the ELHS building project please visit www.eastlongmeadowma.gov/ELHSBuildingProject
- Attend and participate in monthly School Building Committee Meetings. Calendar of meetings are posted on the project website.
- Please visit the ELHS building project website to stay updated on future Community Forums and Building Tours.
- If you have questions about the project or the Feasibility Phase, please email your questions to elhsbuildingproject@eastlongmeadowma.gov

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

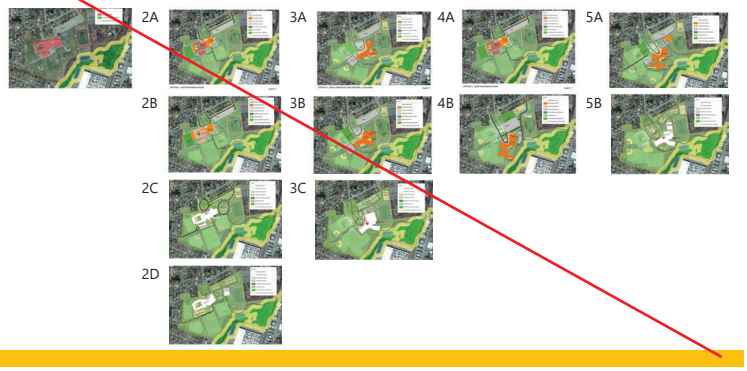
Educational Goals and Priorities

Educate students today for the challenges of tomorrow

- Focus on the whole child supporting children as they grow academically, socially, and emotionally
- Develop collaborative leadership
- Create learning experiences and learning environments that are rooted in Universal Design for Learning and Culturally Responsive Teaching
- Support students to develop the knowledge, the skills (academic, social, and emotional), and the mindset to become resilient and culturally-proficient citizens

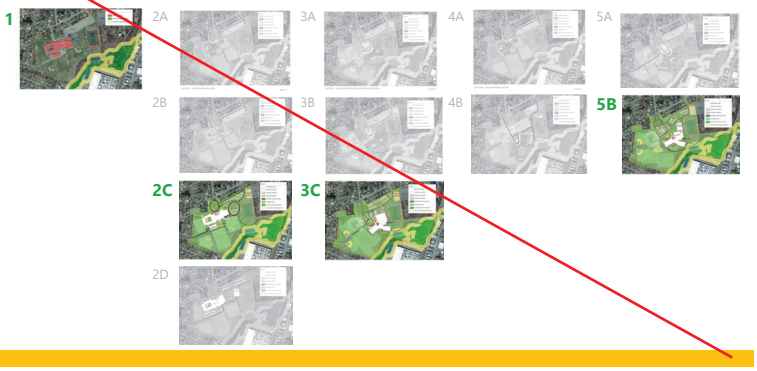
Preliminary Options Exploring site, phasing & cost implications

Reviewed by the School Building Committee



Preliminary Options

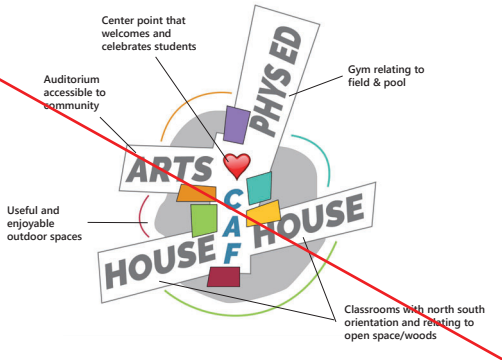
Reviewed by the School Building Committee



Design Update

JWA JONES WHITSETT ARCHITECTS | SMMA

ORGANIZING CONCEPT



East Longmeadow High School

JONES WHITSETT ARCHITECTS

in association with SMMA

SBC Meeting – April 6, 2023

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) Communications Update
6) New Business
7) Adjourn

Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
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Forming the Project Team		Team						
Feasibility Study & Schematic Design			Feasibility/SD					
MSBA Targeted Board Meeting			10/23					
Local Vote			11/7					
Design Development & Const Doc's				Design				
Construction Manager at Risk:								
Construction					CMR Construction			
Occupancy						8/26		
Closeout								

SKANSKA — East Longmeadow High School Project — Ch. 149A (CMR) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Complete
1	Module 2: Forming the Project Team	159 days	Mon 9/27/21	Thu 5/5/22	100%
2	OPM Selection Process	52 days	Mon 9/27/21	Tue 12/7/21	100%
11	Designer Selection Process	107 days	Wed 12/8/21	Thu 5/5/22	100%
29	Module 3: Feasibility Study	241 days	Wed 5/25/22	Wed 4/26/23	99%
30	Module 3.1: Preliminary Design Program	100 days	Wed 5/25/22	Tue 10/11/22	100%
51	Module 3.2 Preferred Schematic Report	171 days	Wed 8/31/22	Wed 4/26/23	99%
69	Module 4: Schematic Design	130 days	Thu 4/27/23	Wed 10/25/23	0%
70	SD Submittal Development	53 days	Thu 4/27/23	Mon 7/10/23	0%
71	Community Forum #5	1 day	Thu 5/18/23	Thu 5/18/23	0%
72	SD Pricing Set to Estimators	1 day	Tue 7/11/23	Tue 7/11/23	0%
73	Cost Estimate & Reconciliation	24 days	Wed 7/12/23	Mon 8/14/23	0%
74	SBC Vote to Submit SD Notification to MSBA	1 day	Tue 8/15/23	Tue 8/15/23	0%
75	OPM Submits SD Notification to MSBA	1 day	Wed 8/16/23	Wed 8/16/23	0%
76	SBC Vote to Approve SD Submission to MSBA	1 day	Thu 8/24/23	Thu 8/24/23	0%
77	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
78	DESE Special Education Review/Approval	21 days	Thu 8/31/23	Thu 9/28/23	0%
79	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
80	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
81	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%
82	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
83	Module 5: Funding the Project	199 days	Thu 4/27/23	Tue 1/30/24	0%
84	Town Council Vote to Approve Budget & Ballot Question Language	1 day	Tue 9/26/23	Tue 9/26/23	0%
85	District Vote to Appropriate Full Project Cost	1 day	Tue 11/7/23	Tue 11/7/23	0%
86	Certificate of Vote Sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
87	PSBA sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
88	PSBA Executed	10 days	Thu 11/9/23	Wed 11/22/23	0%
89	CM @ Risk Procurement Process	199 days	Thu 4/27/23	Tue 1/30/24	0%
90	Submit Application to OIG	30 days	Thu 4/27/23	Wed 6/7/23	0%
91	Issue Ch. 149A CM @ Risk RFQ	20 days	Wed 11/8/23	Tue 12/5/23	0%
92	Review and Qualify CM Firms	10 days	Wed 12/6/23	Tue 12/19/23	0%
93	Issue C. 149A CM @ Risk RFP	20 days	Wed 12/20/23	Tue 1/16/24	0%
94	CM Interviews	5 days	Wed 1/17/24	Tue 1/23/24	0%
95	Selection and Negotiation	5 days	Wed 1/24/24	Tue 1/30/24	0%
96	Module 6: Design Development	137 days	Wed 11/8/23	Thu 5/16/24	0%
142	Module 7: Construction	720 days	Wed 8/14/24	Tue 5/18/27	0%
153	*Occupancy/Move In*	1 day	Wed 8/26/26	Wed 8/26/26	0%
154	Module 8: Completing the Project	60 days	Wed 5/19/27	Tue 8/10/27	0%

Page 1

AGENDA

1) Welcome and Approval of Minutes
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4) **JWA/SMMA Design Update**
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JWA | SMMA

Schematic Design Workplan

77	**MODULE 4 - Schematic Design**			
78	Schematic Design Kick-Off Meeting (week of)	4 days	Mon 4/3/23	Thu 4/6/23
79	Focus Group Meetings	60 days	Mon 4/3/23	Fri 6/23/23
80	Green Building Charrette (TBD)	10 days	Mon 4/10/23	Fri 4/21/23
81	Update LEED Scorecard	5 days	Fri 4/21/23	Thu 4/27/23
82	Refine Educational Programming with Departments	35 days	Mon 4/3/23	Fri 5/19/23
83	Develop Safety and Security Meeting Parameters	35 days	Mon 4/3/23	Fri 5/19/23
84	Update Space Summary	35 days	Mon 4/3/23	Fri 5/19/23
85	Define Building Design Characteristics	35 days	Mon 4/3/23	Fri 5/19/23
86	Develop Room Data Sheets	35 days	Mon 4/3/23	Fri 5/19/23
87	Update Site Development Requirements	35 days	Mon 4/3/23	Fri 5/19/23
88	Define Instructional Technology Requirements	35 days	Mon 4/3/23	Fri 5/19/23
89	Develop Site Plan	35 days	Mon 4/3/23	Fri 5/19/23
90	Develop Floor Plans	35 days	Mon 4/3/23	Fri 5/19/23
91	Develop Building Exterior Imagery	35 days	Mon 4/3/23	Fri 5/19/23
92	Develop Building Sections	35 days	Wed 5/17/23	Tue 7/4/23
93	Develop Typical Interior Elevations	35 days	Wed 5/17/23	Tue 7/4/23
94	Develop Preliminary Energy Model	35 days	Wed 5/17/23	Tue 7/4/23
95	Perform Life Cycle Cost Analysis on Major MEP Equipment	35 days	Wed 5/17/23	Tue 7/4/23
96	Update Building Systems Narratives	35 days	Wed 5/17/23	Tue 7/4/23
97	Update Code Analysis & Accessibilty Narrative	35 days	Wed 5/17/23	Tue 7/4/23
98	Develop Uniformat Specification	35 days	Wed 5/17/23	Tue 7/4/23
99	Develop Exterior Presentation Building Imagery	35 days	Wed 5/17/23	Tue 7/4/23
100	Develop FF&E and Instructional Tech Estimates	35 days	Wed 5/17/23	Tue 7/4/23
101	Submit SD Package to Cost Estimators	0 days	Tue 7/11/23	Tue 7/11/23

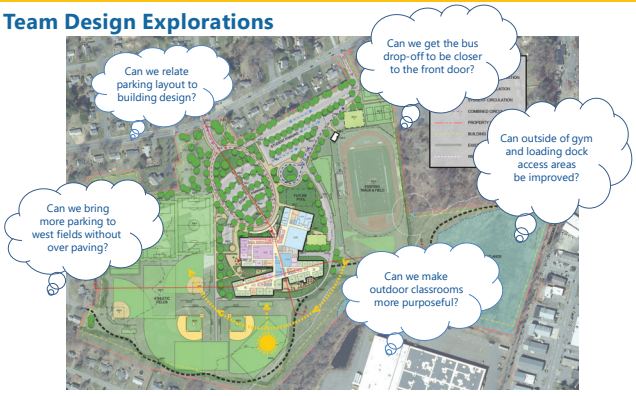
SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

6

Team Design Explorations

7

Team Design Explorations



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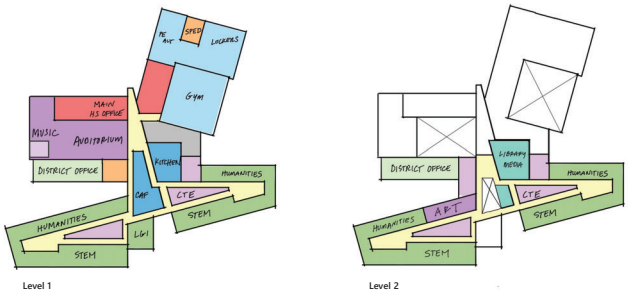
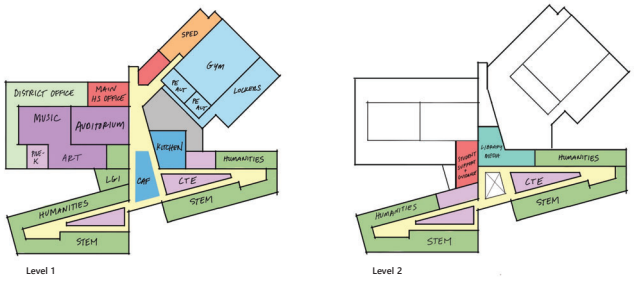
Team Design Explorations



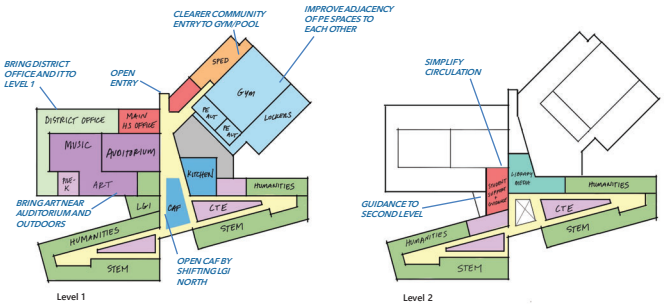
Preferred Schematic Program Arrangement

Team Design Explorations



Revised Program Arrangement

Team Design Explorations



Proposed Program Arrangement

Schematic Design Data Gathering

ELHS Programming Meetings by Dept. - April/May

Community Project Review Forum - May

Community Sustainability Charrette - June

Material Conceptual Study - April

Exterior Elevations & Massing - May

Enlarged Floor Plans - Ongoing

Labs, Typical Room Plans & Typical Corridor & Elevations - Ongoing

Energy Model and Life Cycle Analysis - July

ELHS Security Charette - June

Instructional Technology Goals & Budget - July

Schematic Site Plans & Landscape Plans - Ongoing

Schematic MEP and Structural Plans - Ongoing

Revised Phasing Plan & Construction Schedule - July

Furniture & Equipment Goals & Budget - July

Construction Cost Estimates (2) - July

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

Team Design Explorations

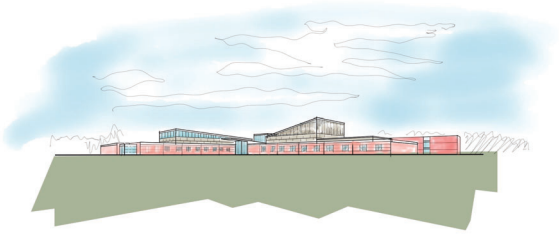
CLEARER ENTRY

CLEARER HIERARCHY OF SPACES

MORE DEFINED GYM & AUDITORIUM VOLUMES

MORE VISIBLE ACCESS TO GYM FOR COMMUNITY

GLIMPSE OF CLASSROOM BAR & MEDIA CENTER BEYOND FRONT PROGRAM



Massing Study

Schematic Design: Programming Meetings at ELHS

#1
- Science
- General Academic
- SPED Programs

#2
- STEM Lab/Gfx/Video/Art
- Food Science/Early Education

#3
- Band, Chorus & Auditorium (Drama)
- Media Center

#4
- Physical Education & Athletics

#5
- Administration/Kitchen/Guidance/Medical
- Custodial

#6
- District Offices/IT/Pupil Services

#7
- Design Advisory Meeting Summary
- Education Technology
- LGI and common spaces

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) **Communications Update**
   - **Community Forum #4 recap**
   - **Community Forum #5 Planning – Focusing on Estimated Tax Impact**
6) New Business
7) Adjourn

SBC Meeting – April 6, 2023

JWA | SMMA

Communications Update

- 3/16 Community Forum Recap
- YES! ELHS – Campaign Group formed
- Monthly Project Update Pamphlet (Issue No. 1) posted to Project Website
- Next SBC Meeting – Discuss 5/18 Community Forum

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

Summary of Estimated Construction Costs
(Pre-Schematic Design)

	School Project	Pool Project*	Combined
Building Costs – Estimated Trade Costs	~$ 90,000,000	~$ XX,000,000	~$ YYY,000,000
Sitework – Estimated Trade Costs	~$ 17,500,000	~$ X,000,000	~$ YY,000,000
Design Contingency & Escalation	~$ 25,000,000	~$ X,000,000	~$ YY,000,000
General Conditions & Overhead	~$ 15,000,000	~$ X,X00,000	~$ YY,Y00,000
Total Estimated Construction Cost	**~ $ 147,500,000**	**~$ XX,X00,000**	**~$ YYY,Y00,000**
Other Project Costs (Fees, Contingencies, Etc.)	~$ 26,500,000	~$ X,000,000	~$ YY,000,000
Approximate Project Costs	**~$ 174 million**	**~$ XX million**	**~$ YYY million**
Approximate MSBA Reimbursement	$55 – 57 million	--	$55 – 57 million
Approximate Town Costs	**$118 – 120 million**	**$ XX – XX million**	**$ YYY – YYY million**

* Note that the Pool Project has not yet been professionally estimated – as it is not part of the MSBA process.

Summary of Estimated Tax Impacts
(Pre-Schematic Design)

	School Project	Pool Project	Combined
Town Share of Total Project Costs	$118 – 120 million	$ XX – XX million	YYY – YYY million
Estimated Tax rate Impact Per $1,000	~$3.15 - $3.25 / year	~$X.XX - $X.XX / year	~$Y.YY - $Y.YY / year
Estimated Tax Impact on Average Single Family Home	~$1,000 - $1,150 / year	~$XXX - $XXX / year	~$Y,YYY - $Y,YYY / year

2023 Total Assessed Valuation for East Longmeadow	$ 2,452,452,700
2023 Average Single Family Home Value	$ 339,811
2023 Average Single Family Tax Bill	$ 6,524

- Over a 30 year loan – tax impact will fluctuate over time – having a slightly smaller impact for the first few years
- Interest rates are estimated
- Tax rate impact assumes no growth in assessed value over the life of the bonds
- Tax rate impact assumes the average home value will remain constant over the live of the bonds
- Bonds issued on a level debt service basis

Notes Regarding Estimated Tax Impacts
(Pre-Schematic Design)

- Estimated Project Cost figures are not finalized until the end of Schematic Design.
- Pool construction costs have not been estimated because design has not begun.
- The District would not be able to move forward with the Pool Project if the School Vote failed because of site logistics. (While they are two separate projects, they are dependent on the same proposed site and utility plans.)
- Tax assessment numbers are revised up to the time of the Debt Exclusion Vote.
- East Longmeadow has a Senior Citizen property tax relief program.

AGENDA

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SBC Meeting – April 6, 2023

JWA | SMMA

Thank You

JWA SMMA

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

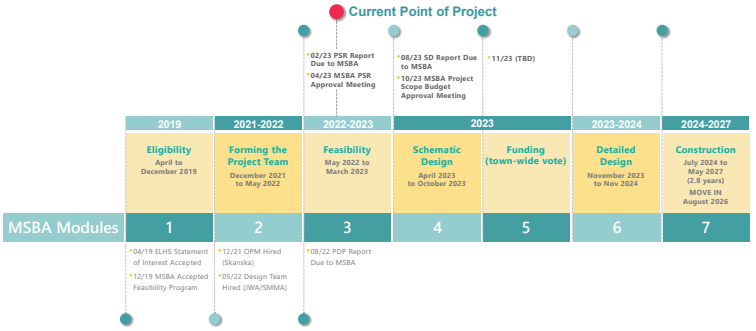
East Longmeadow HS Building Project

SD Programming

Topics of Discussion

- Overview of Process
- Proposed Floor Plans
- Room Design Features
- Questions for Participants
- Schedule Review

Overall Schedule



SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

MSBA Process
Schematic Design (Module 4) & Funding (Module 5)

Module 4
Schematic Design (SD)

SD Development
April – August 2023
- Development of a Single Option
- Establish Budget
- Educational Space Planning
- Selection of Building Systems

MSBA Review
August – October 2023
- MSBA Review
- Project Scope & Budget

Town Vote / Seek Project Funding
November 2023 (TBD)

MOD 4 – Schematic Design | MOD 5 - Funding

VOTE

Submit SD to MSBA
August 2023

MSBA Board Approval
October 2023

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

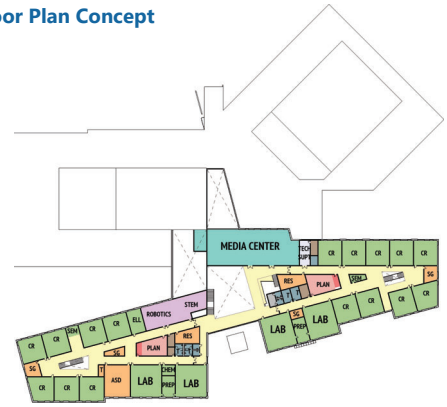
*Schedule is subject to change

Proposed Site Plan

Current Floor Plan Concept

Level 1

Current Floor Plan Concept



Level 2

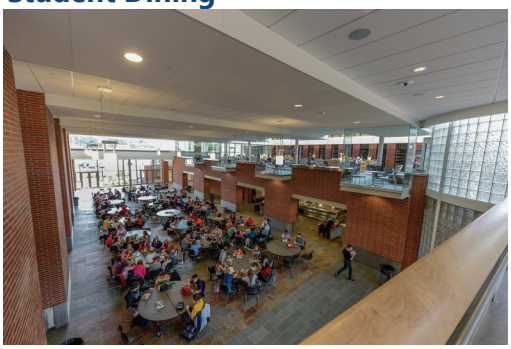
Custodial/Kitchen/Dining

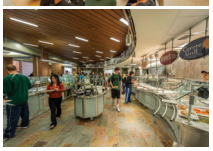
DINING & FOOD SERVICE			8,850
Cafeteria / Student Lounge / Break-out	4,000	1	4,000
Chair / Table Storage	350	1	350
Scramble Serving Area	1,200	1	1,200
Kitchen	3,300	1	3,300

CUSTODIAL & MAINTENANCE			2,225
Custodian's Office	150	1	150
Custodian's Workshop	250	1	250
Custodian's Storage	375	1	375
Recycling Room / Trash	400	1	400
Receiving and General Supply	350	1	350
Storeroom	500	1	500
Network / Telecom Room	200	1	200
Outside Eq Storage			

Student Dining

Student Dining





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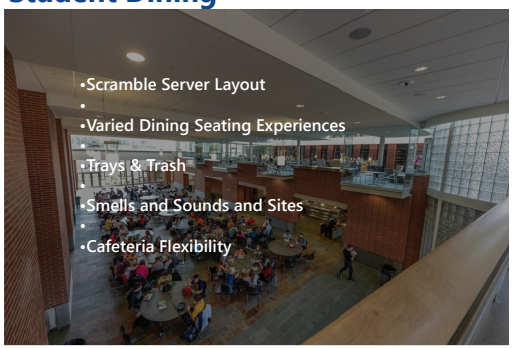
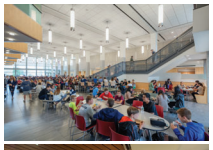
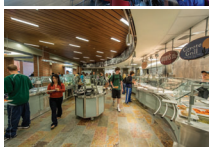
Student Dining







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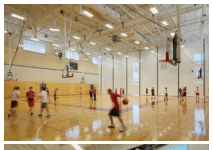
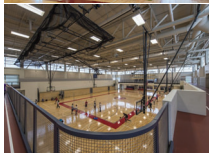
Physical Education

HEALTH & PHYSICAL EDUCATION			21,730
Gymnasium	12,000	1	12,000
PE Alternatives	3,000	1	3,000
Gym Storeroom	300	1	300
Locker Rooms - Boys / Girls w/ Toilets	4,480	1	4,480
Phys. Ed. Storage	500	1	500
Athletic Director's Office	150	1	150
Health Instructor's Office w/ Shower & Toilet	250	2	500
Shower			
Trainers Room	300	1	300
Athletic Storage	500	1	500

Gym





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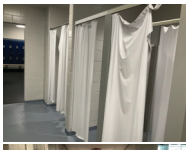
Gymnasium

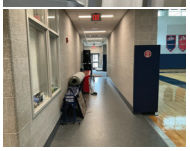
13

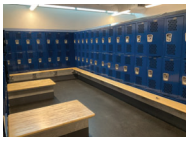
Alternative PE

14

Locker Room







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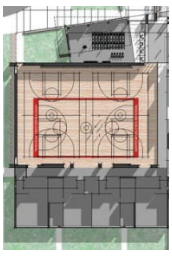
Offices



16

Conf Rm

17

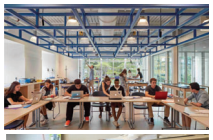
Voc Tech Spaces & Business & Health

VOCATIONS & TECHNOLOGY			7,200
Technology/Engineering Rooms			0
Technology/Engineering CR / Lab (with Robotics)	2,000	1	2,000
Graphic Design Lab (with Darkroom)	1,200	1	1,200
Culinary Arts Lab	1,600	1	1,600
PK-Child Care Lab	1,200	1	1,200
TV Production	1,200	1	1,200

Business Classrooms	850	4	3,400
Health Classroom	850	2	1,700

Business/Health

Engineering

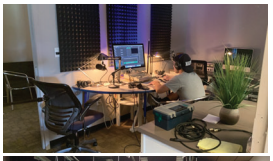


Robotics

21

21

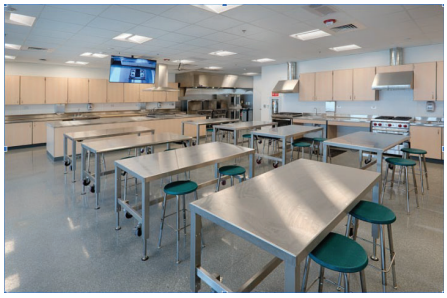
Video



Existing ELCAT

22

Culinary



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Classroom Components

Interchangeable Classrooms – ELA, SS, Math, WL, Health

24

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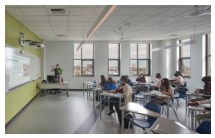
Classroom Components

Interchangeable Classrooms – ELA, SS, Math, WL, Health

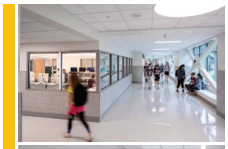
- Furniture – flexible, lightweight, ergonomic
- Markerboards – large on 3 or 4 walls, magnetic
- Tackboard – small
- Technology – to be discussed – touch screen monitors or other
- Storage – 3 tall storage units
- Temperature control, AC, dimmable LED lighting



Classroom Components

Interchangeable Classrooms – ELA, SS, Math, WL, Health - Teachers

Circulation



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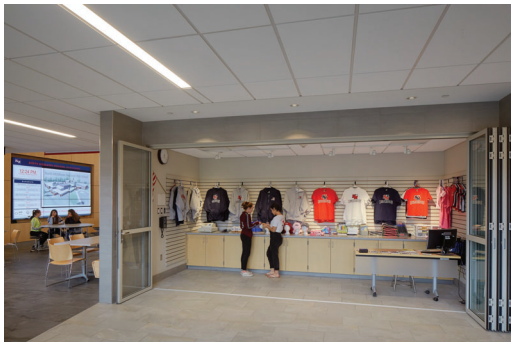
School Store



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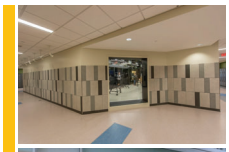
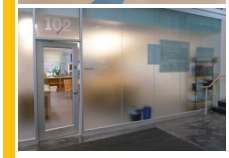
Transparency





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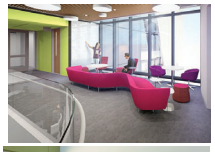
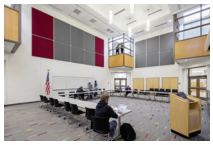
Library / Media Center

32



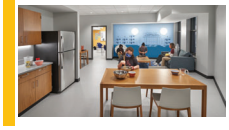
Admin/Guidance/Medical Suites

Large Group



Informal Gathering

Teacher Planning



Music

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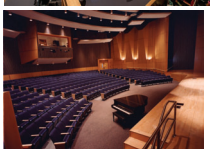
Auditorium



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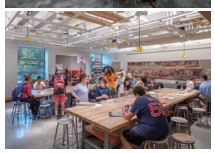
Art



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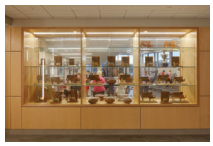
Student Display

- Views into interesting student spaces
- Enliven corridors



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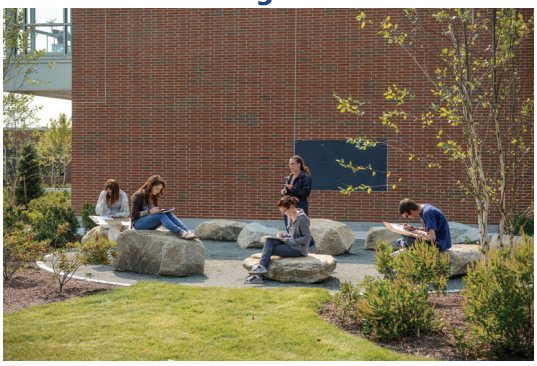
Outdoor Learning



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Health Office

42

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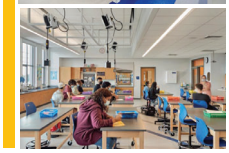
Special Education – Life Skills

Special Education – Medically Fragile

Special Education -

Science Lab Components

- Follows MSBA Guidelines
- Functions in traditional lab, collaboration or lecture modes
- Tabletops with locking casters, stools with backs (no casters)
- Utilities along perimeter + power drops in physics, others?
- Suspended grillage
- Fume hoods – double sided from prep room
- Emergency shower, eye wash, goggle sanitizer,



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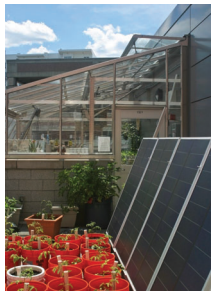
Science Labs



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Science Labs

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Science Lab Components

Spaces

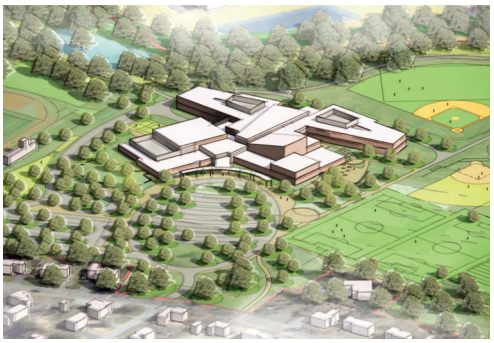
SPECIAL EDUCATION			8,875			0			10,190
(List classrooms of different sizes separately)									
SPED SC	varies	4	2,910			0	0		0
S C Toilet, Shower (in above)	95	1	95			0	0		0
Resource Room, Incl C Grid	varies	2	1,645			0500	4		2,000
Small Group Room		0				0188	8		1,500
S C Medically Fragile	805	1	805			01,200	1		1,200
SC Toilet, shower						120	1		120
Self Contained Life Skills	785	1	785			1,200	1		1,200
SC Toilet						60	1		60
Self Contained Life Skills 18 - 22		0				850	1		850
SC Toilet						60	1		60
ASD Classroom / di-escalation	845	1	845			1,000	1		1,000
OT / PT (shared with ASD in Existing)		0				500	1		500
Willie Ross Deaf Program	varies	2	1,530			500	2		1,000
Willie Ross Deaf Program Support		0				100	2		200
SPED Conference Room		0				350	1		350
Speech Pathologist	150	1	150			150	1		150
Testing	110	1	110						

Special Education

East Longmeadow High School

JWA JONES WHITSETT ARCHITECTS

in association with SMMA



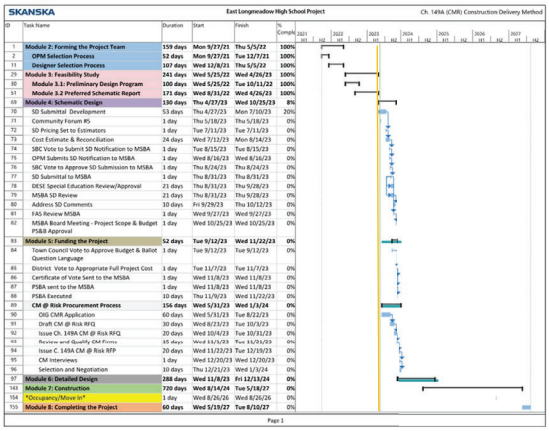
SBC Meeting – May 11, 2023

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) Communications Update
6) New Business
7) Adjourn

Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
Invited to MSBA Process – Dec 2019								
Forming the Project Team		Team						
Feasibility Study & Schematic Design			Feasibility/SD					
MSBA Targeted Board Meeting			10/25					
Local Vote			11/7					
Design Development & Const Doc's				Design				
Construction Manager at Risk:								
Construction					CMR Construction			
Occupancy						8/26		
Closeout								



AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) **JWA/SMMA Design Update**
   - **Update on SD Programming Efforts**
   - **Design Update: Site & Building**
   - **Review of Upcoming Design Milestones**
5) Communications Update
6) New Business
7) Adjourn

Schematic Design: Programming Meetings at ELHS

complete
- Special Education
- Admin, Guidance, Medical
- Sciences
- General Ed, Media Center
- Arts

- **Business, Health, FSC, Technology**
- **Custodial, Kitchen, Physical Education**
- **District Offices, IT Department**

Schematic Design: Programming Meetings at ELHS

Some Key Takeaways

- Science, Art and Technology teachers are to produce equipment lists of desired technology and technology to be salvaged and relocated
- District encouraged to plan for professional development to run parallel with construction documents phase of work to prepare teachers for new school
- Auditorium review suggests that the school does not need a fly space and should prioritize musical performance/multipurpose and AV/IT Infrastructure
- Teachers continue to stress importance of SEL space and distribution of SEL space around the school
- Toilet Rooms continue to be a focus of concern for staff
- The Team gathered useful clarifications on SPED CR needs and adjacencies.
- Teachers continue to stress the importance of air conditioning/humidity control and storage

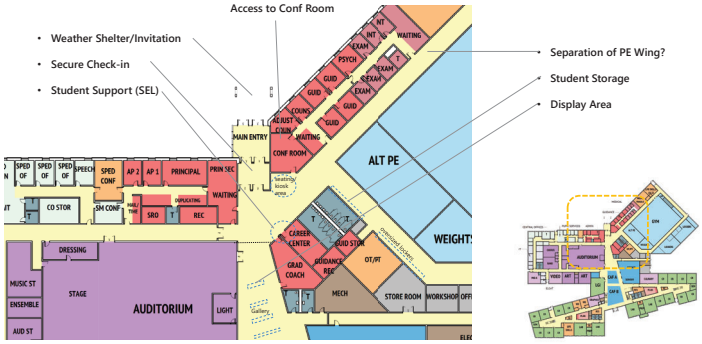
Updated Floor Plans

- Simplification of second floor
- Elimination of extra elevator stairs in Admin
- Move of LGI
- Stronger Arts Block
- Two Part Cafeteria
- Guidance at First Floor
- Med Fragile/Life Skills 18-22

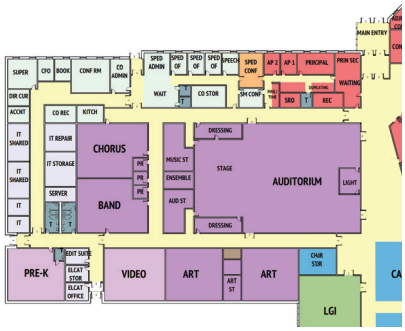
Level 1

Level 2

Admin & Guidance

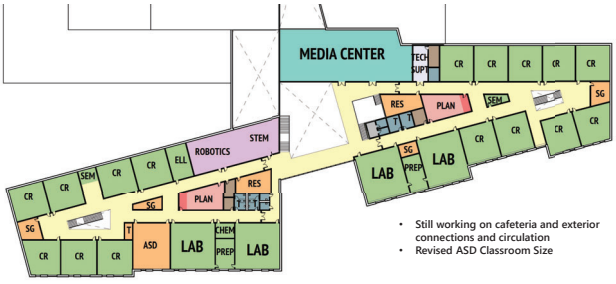


Updated Arts Wing & District Offices



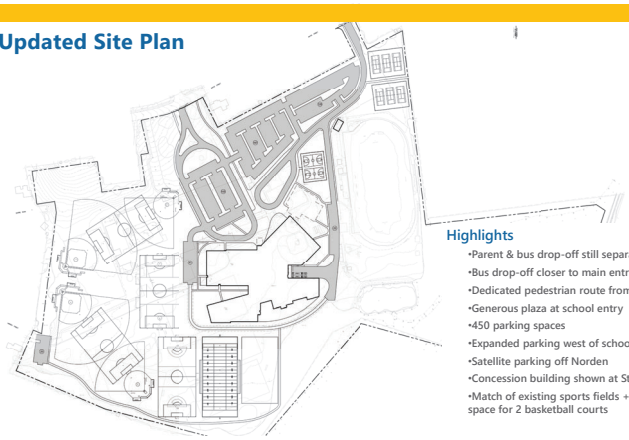
- Band – Chorus – Auditorium Cluster
- Art to Auditorium and Outdoors
- Art and Video Adjacency
- Pre-K Entry
- Pupil Services/Admin Share
- District Offices Conf Rm

General Ed & Media Center



- Still working on cafeteria and exterior connections and circulation
- Revised ASD Classroom Size

Updated Site Plan



Highlights

- Parent & bus drop-off still separate
- Bus drop-off closer to main entry
- Dedicated pedestrian route from Maple St
- Generous plaza at school entry
- 450 parking spaces
- Expanded parking west of school
- Satellite parking off Norden
- Concession building shown at Stadium
- Match of existing sports fields + 2 softball fields, space for 2 basketball courts

Team Design Explorations – 4/6/2023

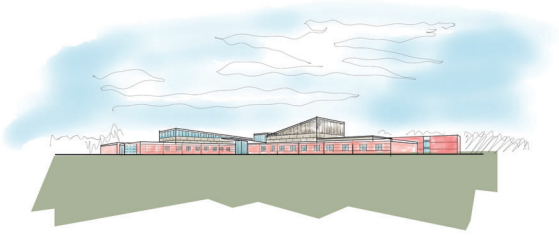
CLEARER ENTRY

CLEARER HIERARCHY OF SPACES

MORE DEFINED GYM & AUDITORIUM VOLUMES

MORE VISIBLE ACCESS TO GYM FOR COMMUNITY

GLIMPSE OF CLASSROOM BAR & MEDIA CENTER BEYOND FRONT PROGRAM



Massing Study

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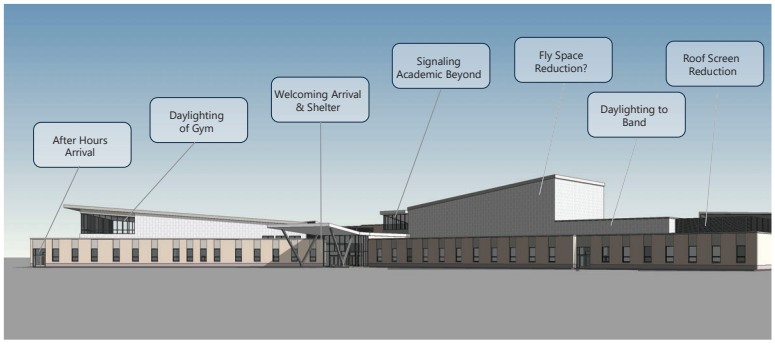
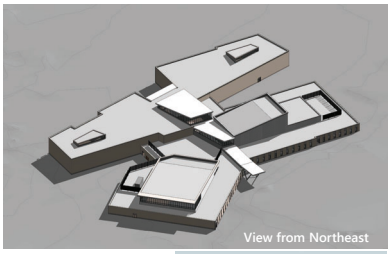
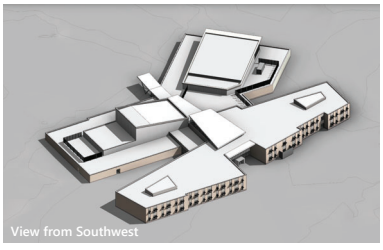
Overall Building Massing Update



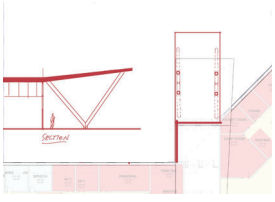
Overall Building Massing Update

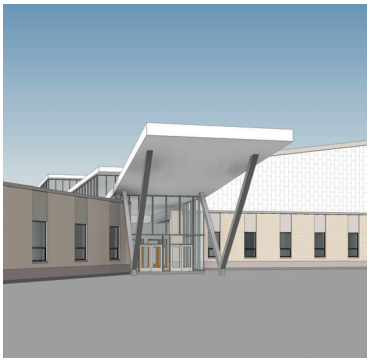


Section Concept at Central Spine



Entry Studies



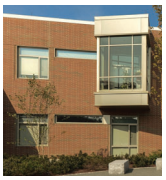


Initial Thoughts on Materiality

East Longmeadow Quarry, 1901

Initial Thoughts on Materiality

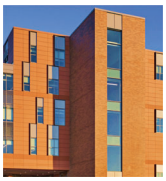
The Design Team is exploring a brick masonry exterior cladding because of its lower cost, ease of maintenance and high durability.



Overall coloration of brick materials can range from red to brown, orange, buff, or gray.

Many people associate red brick with schools and red brick does relate to the traditional East Longmeadow stone.

However a different color or mix of colors could signal ELHS looking to the future.



Mixture of masonry and a lighter weight rain screen can help break up the massing and can reduce weight load in some locations.

Upcoming Design Milestones

ELHS Programming Meetings by Dept. -
Business/Health/FSC/Tech - **5/17**
Custodial/Kitchen/Phys Ed – **5/18**
District Offices & IT – **5/24**

Community Project Review Forum – 5/18

Community Sustainability Charrette – 6/7

Material Conceptual Study - Ongoing

Exterior Elevations & Massing - Ongoing

Enlarged Floor Plans - Ongoing

Labs, Typical Room Plans & Typical Corridor & Elevations - Ongoing

Energy Model and Life Cycle Analysis - July

ELHS Security Charette - June

Instructional Technology Goals & Budget - July

Schematic Site Plans & Landscape Plans - Ongoing

Schematic MEP and Structural Plans - Ongoing

Revised Phasing Plan & Construction Schedule - July

Furniture & Equipment Goals & Budget - July

Construction Cost Estimates (2) - 7/11

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

Outreach for Sustainability Charrette

JWA JONES WHITSETT ARCHITECTS | SMMA

A communications push is needed to make the sustainability charrette more inclusive, interactive and effective

- Participants – hoping for a mix of ages
- Format - presentation + breakout into smaller groups
- Goal of getting the community excited about a high-performance school building and resilient site design
- Relate project to East Longmeadow Resilient Master Plan & Green Communities commitments

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) **Communications Update**
   - **Updated Projected Tax Impact**
   - **Community Forum #5 Planning**
6) New Business
7) Adjourn

SBC Meeting – May 11, 2023

JWA | SMMA

Summary of Estimated Construction Costs
(Pre-Schematic Design)

Project Cost is an estimate based on per SF numbers of a similar scale pool. The Pool Building Committee will deliver specific numbers at end of Schematic Design and before the vote.

	School Project	Pool Project*	Combined
Building Costs – Estimated Trade Costs	~$ 90,000,000	~$ XX,000,000	~$ YYY,000,000
Sitework – Estimated Trade Costs	~$ 17,500,000	~$ X,000,000	~$ YY,000,000
Design Contingency & Escalation	~$ 25,000,000	~$ X,000,000	~$ YY,000,000
General Conditions & Overhead	~$ 15,000,000	~$ X,000,000	~$ YY,000,000
Total Estimated Construction Cost	**~ $ 147,500,000**	**~$ XX,X00,000**	**~$ YYY,Y00,000**
Other Project Costs (Fees, Contingencies, Etc.)	~$ 26,500,000	~$ X,000,000	~$ YY,000,000
Approximate Project Costs	**~$ 176.5 million**	**~$ 15 million**	**~$ 191.5million**
Approximate MSBA Reimbursement	$55 – 57 million	N/A	$55 – 57 million
Approximate Town Costs	**$118 – 120 million**	**$ 14-16 million**	**$ 134 – 136 million**

* Note that the Pool Project has not yet been professionally estimated – as it is not part of the MSBA process.
Pool Project Costs calculated from West Springfield High School pool costs – and applying industry escalation and inflation rates since 2011.

Summary of Estimated Tax Impacts
(Pre-Schematic Design)

	School Project	Pool Project	Combined
Town Share of Total Project Costs	$118 – 120 million	$ 14-16 million	134-136 million
Estimated Tax rate Impact Per $1,000	~$2.92-$3.19 / year	~$.40 / year	~$3.32 - $3.59 / year
Estimated Tax Impact on Average Single Family Home	~$990 - $1,085 / year	~$135 / year	~$1,125 - $1,220 / year

2023 Total Assessed Valuation for East Longmeadow	$ 2,452,452,700
2023 Average Single Family Home Value	$ 339,811
2023 Average Single Family Tax Bill Currently	$6,524/yr
2023 Average Single Family Tax Bill Impact	$ 1,219.92 / year

- Over a 30 year loan – tax impact will fluctuate over time – having a slightly smaller impact for the first few years
- Interest rates are estimated
- Tax rate impact assumes no growth in assessed value over the life of the bonds
- Tax rate impact assumes the average home value will remain constant over the life of the bonds
- Bonds issued on a level debt service basis

Communications Update

Agenda for Community Forum

- Project Schedule Update
- Project Site Plan Update
- Project Floor Plan Update
- Pool Floor Preliminary Plan
- Tax Impact Review
- Gathering Feedback Productively (Small Group? Boards? Direct Q&A)

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Notes Regarding Estimated Tax Impacts
(Pre-Schematic Design)

- Estimated Project Cost figures are not finalized until the end of Schematic Design.
- Pool construction costs have not been estimated because design has just begun.
- The District would not be able to move forward with the Pool Project if the School Vote failed because of site logistics. (While they are two separate projects, they are dependent on the same proposed site and utility plans.)
- Tax assessment numbers are revised up to the time of the Debt Exclusion Vote.
- East Longmeadow has a Senior Citizen property tax relief program.

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) Communications Update
6) New Business
7) Adjourn

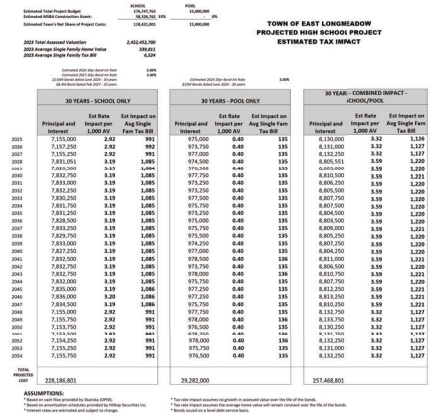
SBC Meeting – May 11, 2023

JWA | SMMA

Thank You

JWA | SMMA

Estimated Tax Impacts
(Pre-Schematic Design)



TOWN OF EAST LONGMEADOW
PROJECTED HIGH SCHOOL PROJECT
ESTIMATED TAX IMPACT

	30 YEARS - SCHOOL ONLY			30 YEARS - POOL ONLY			30 YEAR - COMBINED IMPACT - SCHOOL/POOL		
	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill
2025	7,155,000	2.92	991	975,000	0.40	135	8,130,000	3.32	1,126
2026	7,157,250	2.92	992	973,750	0.40	135	8,131,000	3.32	1,127
2027	7,155,250	2.92	991	977,000	0.40	135	8,132,250	3.32	1,127
2028	7,831,051	3.19	1,085	974,500	0.40	135	8,805,551	3.59	1,220
2029	7,830,500	3.19	1,085	976,500	0.40	135	8,807,000	3.59	1,220
2030	7,832,750	3.19	1,085	977,750	0.40	135	8,810,500	3.59	1,221
2031	7,833,000	3.19	1,085	973,250	0.40	135	8,806,250	3.59	1,220
2032	7,832,250	3.19	1,085	973,250	0.40	135	8,805,500	3.59	1,220
2033	7,830,250	3.19	1,085	977,500	0.40	135	8,807,750	3.59	1,220
2034	7,831,750	3.19	1,085	975,750	0.40	135	8,807,500	3.59	1,220
2035	7,831,250	3.19	1,085	973,250	0.40	135	8,804,500	3.59	1,220
2036	7,828,500	3.19	1,085	975,000	0.40	135	8,803,500	3.59	1,220
2037	7,833,250	3.19	1,085	975,750	0.40	135	8,809,000	3.59	1,221
2038	7,829,750	3.19	1,085	975,500	0.40	135	8,805,250	3.59	1,220
2039	7,833,000	3.19	1,085	974,250	0.40	135	8,807,250	3.59	1,220
2040	7,827,250	3.19	1,085	977,000	0.40	135	8,804,250	3.59	1,220
2041	7,832,500	3.19	1,085	978,500	0.40	136	8,811,000	3.59	1,221
2042	7,832,750	3.19	1,085	973,750	0.40	135	8,806,500	3.59	1,220
2043	7,832,750	3.19	1,085	978,000	0.40	136	8,810,750	3.59	1,221
2044	7,832,000	3.19	1,085	975,750	0.40	135	8,807,750	3.59	1,220
2045	7,835,000	3.19	1,086	977,250	0.40	135	8,812,250	3.59	1,221
2046	7,836,000	3.20	1,086	977,250	0.40	135	8,813,250	3.59	1,221
2047	7,834,500	3.19	1,086	975,750	0.40	135	8,810,250	3.59	1,221
2048	7,155,000	2.92	991	977,750	0.40	135	8,132,750	3.32	1,127
2049	7,155,750	2.92	991	978,000	0.40	136	8,133,750	3.32	1,127
2050	7,153,750	2.92	991	976,500	0.40	135	8,130,250	3.32	1,127
2051	7,155,000	2.92	991	978,250	0.40	136	8,133,250	3.32	1,127
2052	7,154,250	2.92	991	978,000	0.40	136	8,132,250	3.32	1,127
2053	7,155,250	2.92	991	975,750	0.40	135	8,131,000	3.32	1,127
2054	7,155,750	2.92	991	976,500	0.40	135	8,132,250	3.32	1,127
TOTAL PROJECTED COST	228,186,801			29,282,000			257,468,801		

ASSUMPTIONS:
* Based on cash flow provided by Skanska (DPW).
* Based on amortization schedules provided by Hilltop Securities Inc.
* Interest rates are estimated and subject to change.

* Tax rate impact assumes no growth in assessed value over the life of the bonds.
* Tax rate impact assumes the average home value will remain constant over the life of the bonds.
* Bonds issued on a level debt service basis.

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East Longmeadow HS Building Project

Community Forum
May 18, 2023

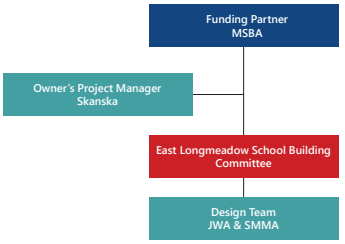
Topics of Discussion

- Introduction
- Schedule Overview
- Visioning & Priorities
- Existing Conditions
- Schematic Design
- Estimated Tax Impact
- Next Steps

Introductions & Project Team

ELHS School Building Committee

Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Paige, ELHS Principal
Heather Brown, ELPS Director of Curriculum
Kathleen Hill, Town Council Member
Kimberly Collins, Director of Municipal Finance
Mary McNally, Town Manager
Elizabeth Marsian-Boucher, School Committee Member
Greg Thompson, School Committee Member
Tom Christensen, Deputy Town Manager
Bruce Fenney, Superintendent of East Longmeadow DPW
Daniela LaBarre, School Psychologist and Faculty member
Ryan Quimby, Town IT Director



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Overall Schedule

Current Point of Project

	2019	2021-2022	2022-2023	2023		2023-2024	2024-2027
	Eligibility April to December 2019	**Forming the Project Team** December 2021 to May 2022	**Feasibility** May 2022 to March 2023	**Schematic Design** April 2023 to October 2023	**Funding (town-wide vote)**	**Detailed Design** Nov 2023 to Nov 2024	**Construction** July 2024 to May 2027 (2.8 years) MOVE IN August 2026
Original Statements of Interest Submitted: 2014, 2015, 2016, 2017, 2018							
MSBA Modules	1	2	3	4	5	6	7
	• 04/19 ELHS Statement of Interest Accepted • 12/19 MSBA Accepted Feasibility Program	• 12/21 OPM Hired (Skanska) • 05/22 Design Team Hired (JWA/SMMA)	• 02/23 Preferred Schematic Report sent to MSBA • 04/23 MSBA approved Preferred Schematic – can proceed into Schematic Design	• **08/31/23 Schematic Design submission Due** • **10/25/23 MSBA "Project Scope & Budget Approval"**	• **Sept - Town Council to vote on Ballot Question Language** • **11/07/23 Town vote to appropriate full project cost**		

*Schedule is subject to change

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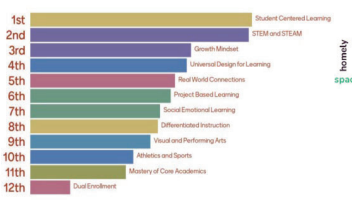
Visioning Process

- Virtual Community Visioning Sessions
- Student Visioning Days at High School & Middle School
- Community Survey
- National Night Out

National Night Out

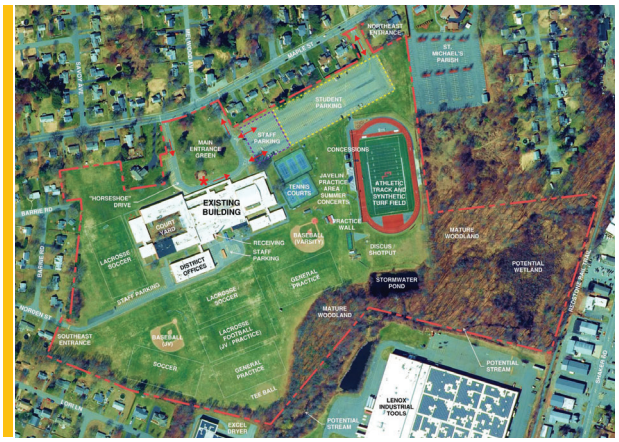
Birchland Park Student Engagement

Which **educational focus** areas are most important to you?



What are **characteristics** of spaces you like?

Existing Site

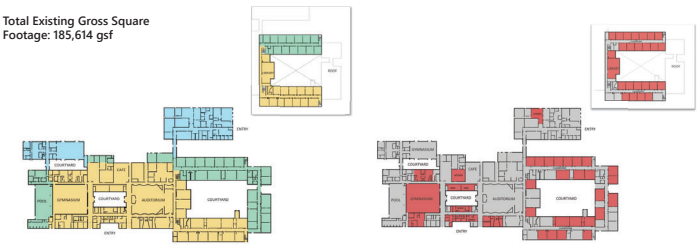


Existing Site
Conditions Summary

- 61.40 Acres (1 Parcel)
- More than Adequate Parking
- Athletic Fields are Extensive and in Good Overall Condition
- General Safety Concerns with Overall Vehicular Circulation
- Lack of Separation Between School Bus and Passenger Vehicle Traffic
- Many Accessible Routes are Non-Compliant Due to Surface Conditions, Configuration, or Slope
- Lacks Dedicated Pedestrian Routes in Parking Lot and Between Building and Stadium
- Lacks Dedicated Exterior Common Space for Large Group Gathering or Dining
- Loading | Service Area Cannot Accommodate Large Vehicles

Current Plan

Total Existing Gross Square Footage: 185,614 gsf



1973
1964
1959

Three distinct eras of construction over 60 years.

Spaces undersized by 5% or more from MSBA size expectations

Existing Building
Conditions Summary

- Convoluted circulation – a result from the different eras of construction.
- Finishes are robust –though colors are dated and fixed.
- Significant quantities of hazmat material.
- Roof is in poor shape – and is flashed incorrectly at adjacent walls. Ongoing roof leaks are a safety concern to occupants.
- Lack of MAAB / ADA compliance in numerous locations
- Education spaces do not support today's educational needs.
- Mechanical, Electrical & Plumbing systems have all exceeded their life expectancy
- Typical lack of insulation and moisture control at the exterior envelope

Ongoing District Investments

Meadow Brook:

- New Roof – MSBA Accelerated Repair Program
- New Windows & Doors – MSBA Accelerated Repair Program
- Replaced four aging modular classrooms

Mapleshade:

- Replacement of heating system steam pipes
- Exterior door replacement is in final phase
- Parking lot and playground update scheduled for this summer

Mountain View:

- New Gym floor
- Replacement of two aging modular classrooms starting this summer

BPMS:

- Library / Media Center and Computer Room carpet replacement

ELHS:

- Electrical switchgear replacement
- Roof repair on one section (different roof membrane than the rest)
- Gym window replacements
- Lighting upgrades
- Boiler replacement

But some items do not lend themselves to repair:

- Accessibility upgrades (interior and exterior)
- Addition of sprinklers
- Replacing Mechanical, Electrical and Plumbing systems that are antiquated (parts are difficult to source – or no longer made)
- Abatement of hazardous materials
- Adding insulation throughout
- Improving access to daylight and fresh air
- Major changes to vehicular circulation routes
- Lack of a Loading / Service Area
- Major changes to classrooms sizes
- Major changes to interior organization and circulation

Side-by-Side Comparison

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
PROJECT COST $180-185M	PROJECT COST $175-180M	PROJECT COST $170-175M	PROJECT COST $115-120M
ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL $90-120M

Cost of Doing Nothing

- No facility improvements to the delivery of education
- Piecemeal capital expenditures (with debt exclusion votes)
  - Roof repairs / replacement
  - Failing systems require replacement (Electrical, Mechanical & Plumbing)
  - Costs will continue to escalate
  - Code upgrades will be triggered (accessibility, fire protection)
  - Projects would have to be done in July & August
- Whole-scale accessibility expenses
- Risk not obtaining MSBA approval to re-enter the program for years
  - MSBA typically receives 50 - 75 Statement of Interests (SOI's) per year
  - 10 were invited into the Core Program in 2022
  - ELHS waited 6 years to be accepted into program in 2019
- If there is a "next process" - the MSBA will not participate in the reimbursement of Feasibility and Schematic Design costs ($1.26M for current project)
- No improvements to community resources (no new athletic fields, no new concessions and restroom facility, no upgraded auditorium, etc.)
- Potential reduction in property values
- Possible reduction in enrollment
- Risk NEASC accreditation

Gathering input from previous Community Meetings & SBC Meetings…

- Base Repair is expensive, will result in a smaller grant from the MSBA, and does not meet any of the District goals
- Numerous challenges with an Add/Reno approach
  - Difficult to bring existing building up to code (accessibility, sprinklers, new energy code, etc.)
  - Extremely low floor-to-floor heights
  - Introducing adequate ventilation is almost impossible and would lead to extremely low ceilings throughout
- Keeping costs as low as possible, while still planning for the future
- Maximize the MSBA Grant whenever possible
- Strong community preference for New – leading to deeper exploration

Side-by-Side Comparison

OPTION 5B New School + Community Building	OPTION 3C New School	OPTION 2C Add/Reno	OPTION 1 Base Repair
PROJECT COST $180-185M	PROJECT COST $175-180M	PROJECT COST $170-175M	PROJECT COST $115-120M
ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT ~$55M	ESTIMATED GRANT Unknown
ESTIMATED LOCAL SHARE TOTAL $125-130M	ESTIMATED LOCAL SHARE TOTAL $120-125M	ESTIMATED LOCAL SHARE TOTAL $115-120M	ESTIMATED LOCAL SHARE TOTAL Unknown

Updated Site Plan

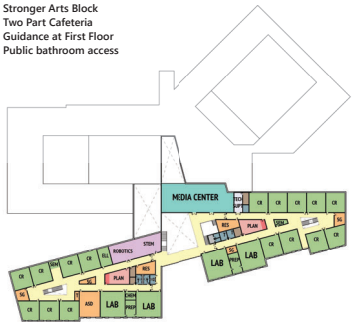
Site Amenities Included in Project

- New athletic field & court program
  - (1) varsity baseball with lights, dugouts, fencing and irrigation
  - (1) varsity softball with lights, dugouts, fencing and irrigation
  - (1) JV baseball, (1) JV Softball, (3) Multisport Fields (w/ irrigation) & (1) practice field
  - (6) tennis courts with lights & pickleball striping
  - (2) basketball courts with lights
- New ticketing and concessions building with restrooms
- New press box with accessible ramp
- Separated staff/student parking and parent/school bus drop off areas
- (2) outdoor classrooms and (1) outdoor dining terrace
- Playground for early education
- New loading dock – isolated from pick-up and drop-off
- Major accessibility and pedestrian safety improvements
- Space for summer concerts

Updated Floor Plans

- Simplification of second floor
- Elimination of extra elevator/stairs in Admin
- Move of LGI
- Stronger Arts Block
- Two Part Cafeteria
- Guidance at First Floor
- Public bathroom access

Level 1



Level 2

Space Summary Review

Room Type	Existing Conditions	Proposed Sq Ft
Core Academic Spaces	40,735	45,870
Special Education	8,875	10,190
Art & Music	8,425	6,625
Hands On Studios (i.e., culinary arts)	5,460	7,200
Health & Physical Education	22,030	21,730
Media Center	3,140	4,900
Auditorium / Drama	9,285	8,183
Dining & Food Service	8,235	8,850
Medical	765	910
Administration & Guidance	4,275	4,570
Custodial & Maintenance	2,605	2,225
Other	19,725	6,600
Total Building Net Floor Area	133,555	127,853
Total Building Gross Floor Area	186,890	**191,780**

Educational Advantages

Improved setting for teaching, learning and community connections

- Organized to create more inclusive and student-centered school culture
- Opportunity to provide better sized teaching spaces.
- Provides more varied space types and outdoor learning spaces.
- Introduction of collaboration and support spaces throughout.
- Update all teaching technology, furniture and finishes.
- Fully new infrastructure.
- Reinvestment in enrichment programs including art, drama, music, PE and hands-on learning spaces

Sustainability & Exterior Spaces

- Targeting LEED certification with MSBA green incentive points
- Stretch code community
- Baseline all-electric HVAC system
- 460 kw PV is included in the project at this time
- High performance exterior envelope
- Orientation to optimize daylighting
- Connected campus with expanded outdoor educational options
- June 7 Eco Charrette

Improved Security

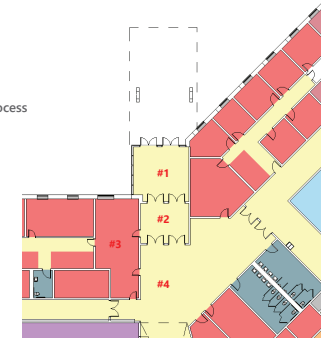
The new building will improve security

Starting with the big picture:

- Crime Prevention Through Environmental Design (CPTED)
- Engagement with key stakeholders throughout design process
- Clear site lines – inside and out
- Easily monitored spaces
- Easy emergency access
- Controlled public access
- Controlled community & after-hours access

To the details:

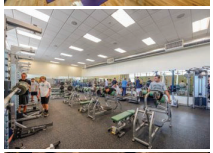
- Controlled entry with abuse resistant glass
- Comprehensive security system
- Door contacts tied to centralized system
- Functioning, easy to use door hardware



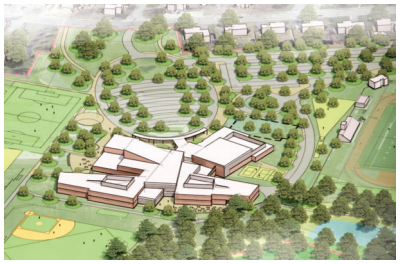
Community Advantages

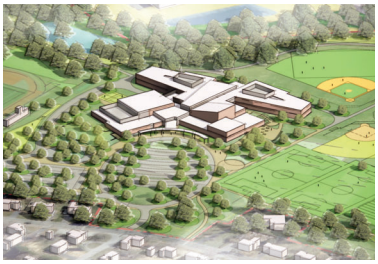
Improved community spaces and community recreation

- Updated and larger Gym. Two full-size courts with roll-down divider curtain. Clear and secure community entrance.
- School designed to successfully integrate with separate pool project – allowing for expanded student use and community use
- Alternative PE space
- Updated Auditorium
- New press box, concessions, and restrooms near primary field
- New tennis courts (with pickleball striping), basketball courts, (2) baseball fields, (2) softball fields, and substantial practice fields
- Easy access to District Administration, Town IT, ELCAT



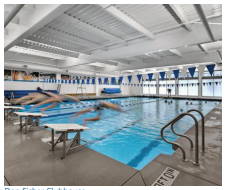
Preliminary Massing



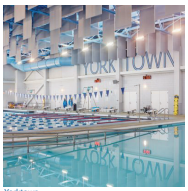


Pool Project Update

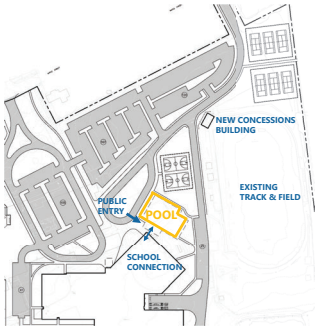
- Pool Building Committee formed
- Preliminary explorations of siting and connections to school building
- Pool design to run parallel to school project moving forward (as a fully separate project)
- Committee is interested in expanding community use



Don Fisher Clubhouse



Yorktown



Summary of Estimated Construction Costs

(Pre-Schematic Design. To be updated at end of Schematic Design.)

	School Project	Pool Project*	Combined
Building Costs – Estimated Trade Costs	~$ 90,000,000	~$ XX,000,000	~$ YYY,000,000
Sitework – Estimated Trade Costs	~$ 17,500,000	~$ X,000,000	~$ YY,000,000
Design Contingency & Escalation	~$ 25,000,000	~$ X,000,000	~$ YY,000,000
General Conditions & Overhead	~$ 15,000,000	~$ X,000,000	~$ YY,000,000
Total Estimated Construction Cost	**~ $ 147,500,000**	**~$ XX,X00,000**	**~$ YYY,Y00,000**
Other Project Costs (Fees, Contingencies, Etc.)	~$ 29,500,000	~$ X,000,000	~$ YY,000,000
Approximate Project Costs	**~$ 177 million**	**~$ 15 million**	**~$ 192 million**
Approximate MSBA Reimbursement	$55 – 57 million	N/A	$55 – 57 million
Approximate Town Costs	**$120 – 122 million**	**$ 14-16 million**	**$ 134 – 138 million**

* Note that the Pool Project has not yet been professionally estimated – as it is not part of the MSBA process.
Pool Project Costs calculated from West Springfield High School pool costs – and applying industry escalation and inflation rates since 2011.

Summary of Estimated Tax Impacts

(Pre-Schematic Design. To be updated at end of Schematic Design.)

	School Project	Pool Project	Combined
Town Share of Total Project Costs	$ 120 – 122 million	$ 14-16 million	**$ 134-138 million**
Estimated Tax rate Impact Per $1,000 Assessed Value	~$2.90-$3.20 / year	~$.40 / year	**~$3.30 - $3.60 / year per $1,000**
OR – Put another way…			
Estimated Tax Impact on "Average Single-Family Home" (Assessed Value)	~$990 - $1,085 / year	~$135 / year	**~$1,125 - $1,220 / year**

2023 Average Assessed Single Family Home Value	$ 339,811
2023 Average Single Family Tax Bill	$ 6,524 / year

- Over a 30-year loan – tax impact will fluctuate over time – having a slightly smaller impact for the first few years
- Interest rates are estimated (at 5%)
- Tax rate impact assumes no increase in assessed value over the life of the bonds
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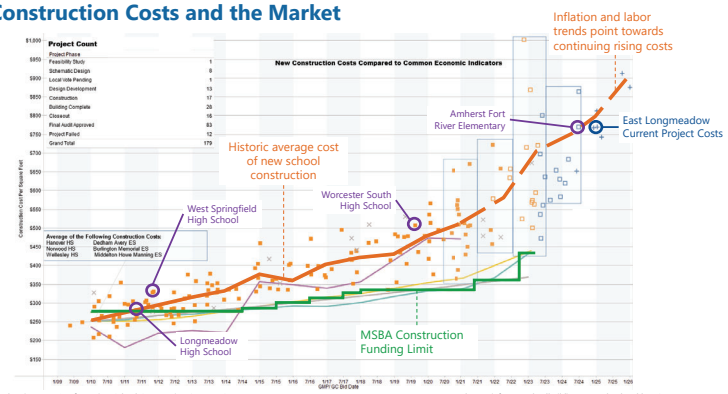
- Bonds issued on a level debt service basis

Construction Costs and the Market



Capital Planning Data & Information: School Construction Costs – MSBA *https://info.massschoolbuildings.org/TabPub/TableauCostData.aspx*

Schematic Design Deliverables

(April – October)

Comprehensive Cost Estimate
- From two independent cost estimators
- To be uses as the foundation for the Project Scope & Budget Agreement

Department of Elementary & Secondary Education Submittal

Schematic Design Binder
- Code Analysis & Permitting Requirements
- Building System Descriptions
- Room Data Sheets
- Proposed Construction Methodology
- Total Project Budget & Cost Estimate Comparison

Schematic Design Project Manual
- Outline specifications in Uniformat
- Proprietary items

Schematic Design Drawings

Additional Items
- Preliminary Furniture Budget
- Preliminary Technology Budget
- Life Cycle Cost Analysis

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Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
Invited to MSBA Process – Dec 2019								
Forming the Project Team	Team							
Feasibility Study & Schematic Design		Feasibility/SD						
MSBA Targeted Board Meeting			10/25					
Local Vote			11/7					
Design Development & Const Doc's				Design				
Construction Manager at Risk:								
Construction					CMR Construction			
Occupancy						Aug of 2026		
Closeout								

28

How can I continue to learn more about the ELHS building project?

- Attend our upcoming Community Sustainability Charrette: June 7th, ELHS Library
- To learn more about the ELHS building project and to stay updated on future meetings and community forums, please visit: www.eastlongmeadowma.gov/ELHSBuildingProject
- Attend and participate in monthly School Building Committee Meetings.
- If you have questions about the project, please email elhsbuildingproject@eastlongmeadowma.gov

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Community Forum
May 18, 2023

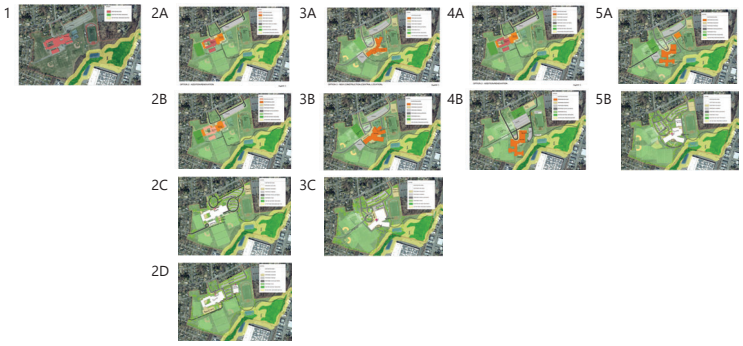
Thank you!

Educational Goals and Priorities

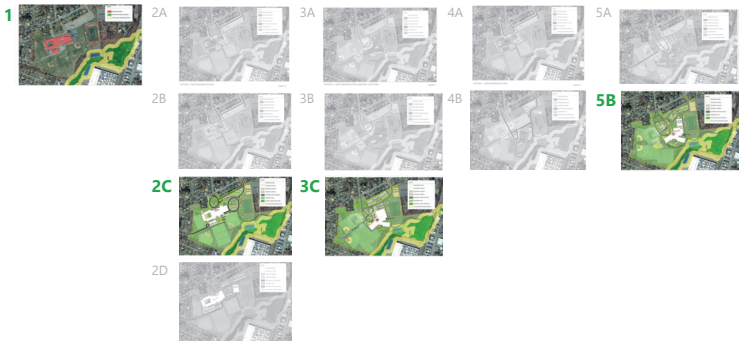
Educate students today for the challenges of tomorrow

- Focus on the whole child supporting children as they grow academically, socially, and emotionally
- Develop collaborative leadership
- Create learning experiences and learning environments that are rooted in Universal Design for Learning and Culturally Responsive Teaching
- Support students to develop the knowledge, the skills (academic, social, and emotional), and the mindset to become resilient and culturally-proficient citizens

Preliminary Options Exploring site, phasing & cost implications
Reviewed by the School Building Committee



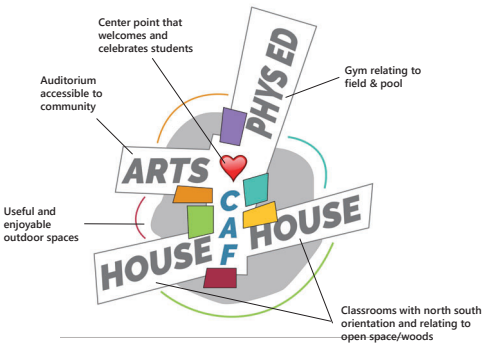
Preliminary Options
Reviewed by the School Building Committee



Design Update

JWA JONES WHITSETT ARCHITECTS | SMMA

ORGANIZING CONCEPT



Estimated Tax Impacts
(Pre-Schematic Design)

TOWN OF EAST LONGMEADOW
PROJECTED HIGH SCHOOL PROJECT
ESTIMATED TAX IMPACT

	SCHOOL	POOL
Estimated Total Project Budget	176,747,762	15,000,000
Estimated MSBA Construction Grant:	58,316,762 33%	0%
Estimated Town's Net Share of Project Costs:	118,431,001	15,000,000
2023 Total Assessed Valuation	2,432,452,700	
2023 Average Single Family Home Value	330,812	
2023 Average Single Family Tax Bill	6.224	

Estimated 2024 30yr Bond Int Rate 6.00%
Estimated 2027 30yr Bond Int Rate 5.00%
$118M Bonds dated June 2024 - 30 years
$15.0M Bonds dated Feb 2027 - 20 years

Estimated 2024 30yr Bond Int Rate 6.00%
$15M Bonds dated June 2024 - 30 years

	30 YEARS - SCHOOL ONLY			30 YEARS - POOL ONLY			30 YEAR - COMBINED IMPACT - (SCHOOL/POOL		
	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill	Principal and Interest	Est Rate Impact per 1,000 AV	Est Impact on Avg Single Fam Tax Bill
2025	7,155,000	2.92	991	975,000	0.40	135	8,130,000	3.32	1,126
2026	7,157,250	2.92	992	973,750	0.40	135	8,131,000	3.32	1,127
2027	7,155,250	2.92	991	977,000	0.40	135	8,132,250	3.32	1,127
2028	7,831,051	3.19	1,085	974,500	0.40	135	8,805,551	3.59	1,220
2029	7,466,500	3.42	1,159	970,500	0.40	135	8,805,000	3.59	1,220
2030	7,832,750	3.19	1,085	977,750	0.40	135	8,810,500	3.59	1,221
2031	7,833,000	3.19	1,085	973,250	0.40	135	8,806,250	3.59	1,220
2032	7,832,250	3.19	1,085	973,250	0.40	135	8,805,500	3.59	1,220
2033	7,830,250	3.19	1,085	977,500	0.40	135	8,807,750	3.59	1,220
2034	7,831,750	3.19	1,085	975,750	0.40	135	8,807,500	3.59	1,220
2035	7,831,250	3.19	1,085	973,250	0.40	135	8,804,500	3.59	1,220
2036	7,828,500	3.19	1,085	975,000	0.40	135	8,803,500	3.59	1,220
2037	7,833,250	3.19	1,085	975,750	0.40	135	8,809,000	3.59	1,221
2038	7,829,750	3.19	1,085	975,500	0.40	135	8,805,250	3.59	1,220
2039	7,833,000	3.19	1,085	974,250	0.40	135	8,807,250	3.59	1,220
2040	7,827,250	3.19	1,085	977,000	0.40	135	8,804,250	3.59	1,220
2041	7,832,500	3.19	1,085	978,500	0.40	136	8,811,000	3.59	1,221
2042	7,832,750	3.19	1,085	973,750	0.40	135	8,806,500	3.59	1,220
2043	7,832,750	3.19	1,085	978,000	0.40	136	8,810,750	3.59	1,221
2044	7,832,000	3.19	1,085	975,750	0.40	135	8,807,750	3.59	1,220
2045	7,835,000	3.19	1,086	977,250	0.40	135	8,812,250	3.59	1,221
2046	7,836,000	3.20	1,086	977,250	0.40	135	8,813,250	3.59	1,221
2047	7,834,500	3.19	1,086	975,750	0.40	135	8,810,250	3.59	1,221
2048	7,155,000	2.92	991	977,750	0.40	135	8,132,750	3.32	1,127
2049	7,155,750	2.92	991	978,000	0.40	136	8,133,750	3.32	1,127
2050	7,153,750	2.92	991	976,500	0.40	135	8,130,250	3.32	1,127
2051	7,153,500	2.92	991	978,250	0.40	136	8,131,750	3.32	1,127
2052	7,154,250	2.92	991	978,000	0.40	136	8,132,250	3.32	1,127
2053	7,155,250	2.92	991	975,750	0.40	135	8,131,000	3.32	1,127
2054	7,155,750	2.92	991	976,500	0.40	135	8,132,250	3.32	1,127
TOTAL PROJECTED COST	228,186,801			29,282,000			257,468,801		

ASSUMPTIONS:
* Based on cash flow provided by Standish (DPW).
* Based on amortization schedules provided by Hilltop Securities Inc.
* Interest rates are estimated and subject to change.
* Tax rate impact assumes no growth in assessed value over the life of the bonds.
* Tax rate impact assumes the average home value will remain constant over the life of the bonds.
* Bonds issued on a level debt service basis.

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East Longmeadow HS Building Project

Schematic Design

Topics of Discussion

- Sustainability Charrette
- Overview of MEP
- Update on MEP/FP Systems
- Site Plan Update
- Floor Plan Updates
- Overview of Proposed Interior Finishes

1

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) Communications Update
6) New Business
7) Adjourn

SBC Meeting – June 15, 2023

JWA | SMMA

Timeline

	2021	2022	2023	2024	2025	2026	2027	2028
Statement of Interest – April 2019								
Invited to MSBA Process – Dec 2019								
Forming the Project Team		Team						
Feasibility Study & Schematic Design			Feasibility/SD					
MSBA Targeted Board Meeting			10/25					
Local Vote			11/7					
Design Development & Const Doc's				Design				
Construction Manager at Risk:								
Construction					CMR Construction			
Occupancy						8/26		
Closeout								

3

SKANSKA — East Longmeadow High School Project — Ch. 149A (CMR) Construction Delivery Method

ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	**159 days**	**Mon 9/27/21**	**Thu 5/5/22**	**100%**
2	**OPM Selection Process**	**52 days**	**Mon 9/27/21**	**Tue 12/7/21**	**100%**
11	**Designer Selection Process**	**107 days**	**Wed 12/8/21**	**Thu 5/5/22**	**100%**
29	**Module 3: Feasibility Study**	**241 days**	**Wed 5/25/22**	**Wed 4/26/23**	**100%**
30	**Module 3.1: Preliminary Design Program**	**100 days**	**Wed 5/25/22**	**Tue 10/11/22**	**100%**
51	**Module 3.2 Preferred Schematic Report**	**171 days**	**Wed 8/31/22**	**Wed 4/26/23**	**100%**
69	**Module 4: Schematic Design**	**130 days**	**Thu 4/27/23**	**Wed 10/25/23**	**20%**
70	SD Submittal Development	53 days	Thu 4/27/23	Mon 7/10/23	50%
71	Community Forum #5	1 day	Thu 5/18/23	Thu 5/18/23	100%
72	SD Pricing Set to Estimators	1 day	Tue 7/11/23	Tue 7/11/23	0%
73	Cost Estimate & Reconciliation	24 days	Wed 7/12/23	Mon 8/14/23	0%
74	SBC Vote to Submit SD Notification to MSBA	1 day	Tue 8/15/23	Tue 8/15/23	0%
75	OPM Submits SD Notification to MSBA	1 day	Wed 8/16/23	Wed 8/16/23	0%
76	SBC Vote to Approve SD Submission to MSBA	1 day	Thu 8/24/23	Thu 8/24/23	0%
77	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
78	DESE Special Education Review/Approval	21 days	Thu 8/31/23	Thu 9/28/23	0%
79	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
80	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
81	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%
82	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
83	**Module 5: Funding the Project**	**52 days**	**Tue 9/12/23**	**Wed 11/22/23**	**5%**
84	Town Council Vote to Approve Budget & Ballot Question Language	1 day	Tue 9/12/23	Tue 9/12/23	0%
85	District Vote to Appropriate Full Project Cost	1 day	Tue 11/7/23	Tue 11/7/23	0%
86	Certificate of Vote Sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
87	PSBA sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
88	PSBA Executed	10 days	Thu 11/9/23	Wed 11/22/23	0%
89	**CM @ Risk Procurement Process**	**156 days**	**Wed 5/31/23**	**Wed 1/3/24**	**6%**
90	OIG CMR Application	60 days	Wed 5/31/23	Tue 8/22/23	15%
91	Draft CM @ Risk RFQ	30 days	Wed 8/23/23	Tue 10/3/23	0%
92	Issue Ch. 149A CM @ Risk RFQ	20 days	Wed 10/4/23	Tue 10/31/23	0%
93	Review and Qualify CM Firms	15 days	Wed 11/1/23	Tue 11/21/23	0%

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MSBA Process
Schematic Design (Module 4) & Funding (Module 5)

Module 4
Schematic Design (SD)

Key Deadlines:
July 11- SD Cost Estimate Set to Estimators
August 14 - SD Reconciliation
August 15 – SBC Vote for Approval
August 31 – SBC Submittal to MSBA

SD Development
April – August 2023
- Development of a Single Option
- Establish Budget
- Educational Space Planning
- Selection of Building Systems

MSBA Review
August – October 2023
- MSBA Review
- Project Scope & Budget

Town Vote / Seek Project Funding
November 2023 (TBD)

MOD 4 – Schematic Design | MOD 5 - Funding

VOTE

Submit SD to MSBA
August 2023

MSBA Board Approval
October 2023

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*Schedule is subject to change

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Eco-Charrette

- To familiarize and educate stakeholders on:
  - General sustainable design principles,
  - MSBA/State sustainable design requirements
  - LEED for Schools certification process
- Identify current and potential sustainable design opportunities
- Develop sustainable design goals that specifically align with the School District and the Town's goals and mission

Eco-Charrette: Highlights

- Sustainable Site / Transportation /Water Efficiency
  - EV Charging Stations required for LEED and Code Readiness
  - Outdoor Classrooms Opportunities
  - Use of the site's wooded (back of site)
- Energy Efficiency / Climate Resiliency
  - Warming and cooling center opportunities
  - Support from the Solar PV system, energy storage.
  - Code requires all-electric heating and 00% cooling.
  - Ventilation 100% filtered outside air and Operable Windows
- Sustainable Materials and Indoor Environmental Quality
  - Views and connection to the outdoors: glazing and operable windows (ventilation)
  - Biophilia: plants (as possible), use of wood and natural materials without compromising performance and durability.
  - Embodied carbon reduction aspirations (incl. wood)

The Third Teacher
Building as Teacher

- Environmental Awareness
- Participatory
  - Recycling
  - Gardens
  - Connect to nature
- Measurable/Quantifiable
- Make Visible (expose what is hidden)
- Connect to consumption
- Habit forming

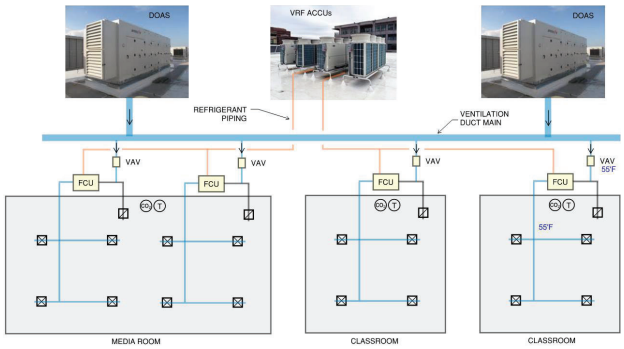
MEP Systems Update

JWA SMMA

HVAC Systems

- HVAC System Options - All-Electric
  - Air Source Variable Refrigerant Flow (VRF) Heat Pumps + DOAS
  - Geothermal System: Ground Source Heat Pumps + DOAS
  - Air Source HRC for Water Source Heat Pumps + DOAS

Air Source VRF Heat Pumps + DOAS

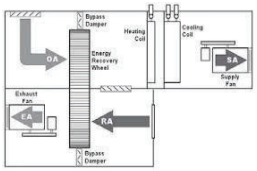


Direct Outdoor Air System (DOAS)

- Provides ventilation air
- Heat pump provides heating & cooling
- Energy recovery wheel
- MERV 8 & MERV 13+ Filtration
- Efficient motors and fans
- Variable volume using VAV boxes

DOAS Unit & Schematic

VAV Box

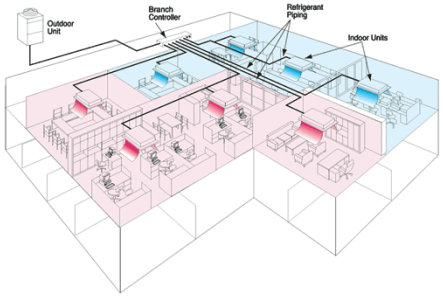


Air Source VRF Heat Pump System

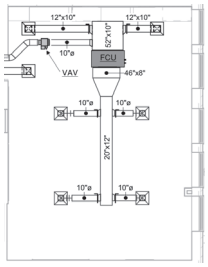
VRF Heat Pumps

Ducted Heat Pump

Ceiling Cassette Heat Pump



Air Source VRF Heat Pump System



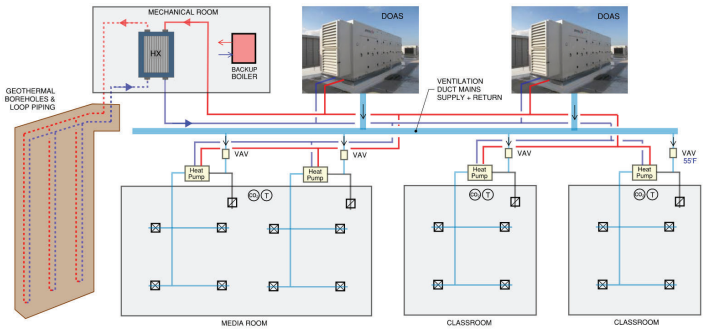
Typical Classroom

Ducted Heat Pumps

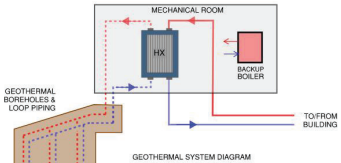
VAV Terminal

Air Cooled Condensing Units

Geothermal System: Ground Source Heat Pumps + DOAS



Geothermal System

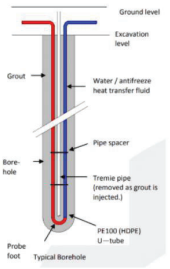


GEOTHERMAL SYSTEM DIAGRAM

DRILL RIG

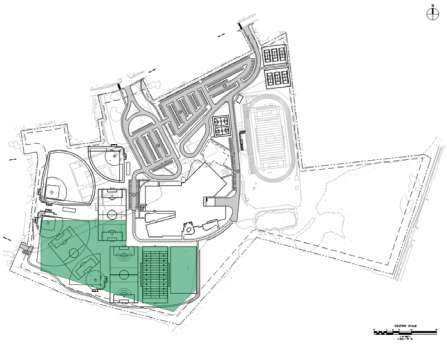
BOREHOLE VERTICAL PIPING

BOREHOLE WITH HORIZONTAL PIPING

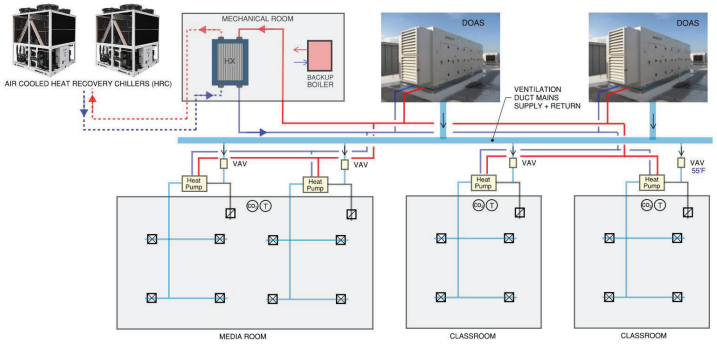


TYPICAL BOREHOLE DIAGRAM

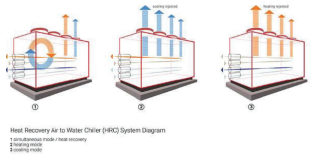
Geothermal System



Air Source Chiller + Heat Pumps + DOAS



Air Source Chiller + Heat Pumps



Air Source Heat Recovery Chiller (HRC)

Water Source or Geothermal Heat Pump

HVAC Systems – Pros & Cons

System Option	Description	Pros	Cons
Air Source VRF + DOAS current basis of design	Air-cooled VRF System Roof-mounted ACCUs VRF fan coil units with ducted distribution Roof Mounted DOAS units VAV boxes for ventilation control	Efficient and flexible system type Can support simultaneous heating and cooling of zones Cost effective option Controls for some manufacturers are BACnet compatible	Can involve extensive refrigerant piping VRF manufacturers have different system approaches Useful life of compressors is more limited Winter time defrost cycle System reliability not consistent
Geothermal: Ground Source Heat Pumps + DOAS	Geothermal Bore Hole Field Mechanical Room Equipment: Boiler, Heat Exchanger Pumped ground source loop to heat pumps Roof Mounted DOAS units VAV boxes for ventilation control	Excellent energy efficiency Use of ground water more resilient than air cooled Many manufacturers of heat pumps - cost competitive Supports simultaneous heating and cooling of zones	Some risk with geothermal bore holes Backup boiler is recommended as insurance Higher first cost relies on incentives to be competitive Requires sufficient area for boreholes
Air Source HRC for Water Source Heat Pumps + DOAS	Air source, modular HW/CHW generators Will support water source heat pump loop Backup boiler recommended, possible backup drycooler Roof Mounted DOAS units VAV boxes for ventilation control	Supports simultaneous heating and cooling of zones Energy efficient option	Requires backup boiler and drycooler for reliability Air source heat recovery chillers can have reliability issues Controls for system are more complex

Electrical Systems Highlights

- LED Interior and Exterior Lighting - extreme energy efficiency and highest lumens per dollar**
- Wireless Networked Lighting Control System, required per IECC (Energy Code) and ASHRAE 90.1
- Occupancy/vacancy sensors, daylight sensors, time-scheduled controls, 0-10 dimming**
- Plug Load Control System, turning on/off individual receptacles based on room vacancy and/or time schedule**
- Energy Metering and Monitoring System – Collecting and recording kWh Consumption, kW Demand, and other Electrical Data**
- Demand Response SOO (Sequence of Operations) – Protocol incorporated into BMS (DDC) to facilitate the electrical load reduction during DR event**
- Integration of Control and Monitoring Systems with Building Management System (DDC)
- EV (Electric Vehicle) Charging Stations**
- PV (Photovoltaic) Rooftop System**

**Required to meet MA Energy [Stretch] Code and/or LEED required

Service & Distribution

- New Electrical Service
  - Pad-mounted Transformer
  - Switchboard
  - Distribution Panels
  - Lighting & Small Power Panels
  - Stepdown Transformers
  - Photovoltaic Rooftop
  - EV Charging Stations

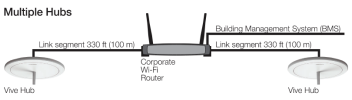
Pad-Mounted Generator

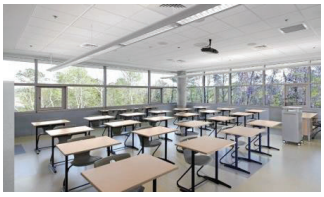
- Emergency (Life Safety):
  - Emergency egress lighting and exit signs (interior and exterior)
  - Fire pump and jockey pump
  - Fire alarm system
- Optional Standby:
  - Heating System equipment, pumps, and controls
  - Cooling System equipment for MDF/IDF rooms
  - Refrigeration equipment
  - Elevator
  - Sewage ejection, sump pumps, heat trace
  - Water service booster

- Optional Standby:
  - Limited lighting and small power in Administration and Nurse/medical areas
  - Public address and Telephone systems
  - Security System equipment
  - Building DDC (BMS) system control panels

Lighting & Controls

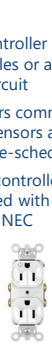
- High Efficiency Interior and Exterior LED Lighting
- Wireless Networked Lighting Control System
- Daylight Harvesting
- Occupancy Sensors
- Timeclock

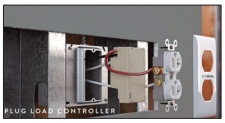


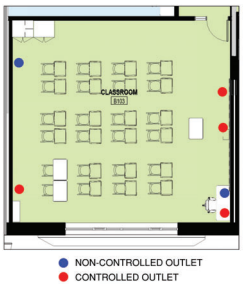


Plug Load Controls

- One Plug Load Controller controls (turns "on/off") individual receptacles or a group of devices wired to one common circuit
- Plug Lod Controllers communicate wirelessly with room occupancy sensors and/or automatic programmable time-scheduled control system
- All "automatically controlled" receptacles shall be permanently marked with standard "power" symbol defined by NEC

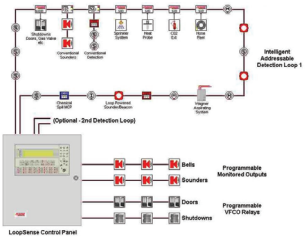






Fire Alarm System

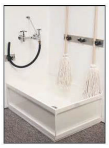
- Fully Addressable System with voice evacuation
- Speaker/Strobes
- Pull Stations
- Smoke Detectors
- Heat Detectors
- Tamper and Flow Switches



Plumbing and Fire Protection Systems

Plumbing Fixtures

- Drinking fountain with touchless bottle filler
- Toilet Flush options
  - Dual Flush
  - Sensor (battery operated)
  - Hard wired
- Mop sink
  - Soap mixing
  - Backflow preventer



Domestic Hot Water

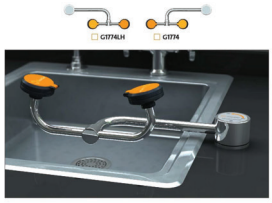
- Water Heaters
  - Electric water heaters to be incorporated in an all-electric building
  - To meet electrification/sustainability goals
- Domestic Hot Water System
  - Centralized system with recirculated hot water
  - Store at 140 degrees. Distribute at 125 with thermostatic mixing valves
  - Domestic Circulating pumps

Equipment

- Grease interceptors
  - Interior
  - Exterior
- Water outlets
  - Exterior freeze proof wall hydrants
  - Interior Hose bibbs
- Trap primers
  - Floor drains
- Mop sinks
  - Soap/chem mixer requires backflow preventer

Emergency Equipment

Barrier Free Units



Eye Wash

Recessed Lab Units

Fire Suppression System

- The building will be protected with an automatic sprinkler system in accordance with the state building code and NFPA 13.
- Preliminary calculations show that a fire pump is not required. To be confirmed during detailed design.
- Concealed sprinklers in ceilings
- Upright sprinklers in areas open to the structure
- Ansul systems within kitchen exhaust hoods (By KEC)

Site & Architecture Update

JWA SMMA

Site Plan Update

- Revised Pool Footprint
- Revised ADA Parking off Norwood

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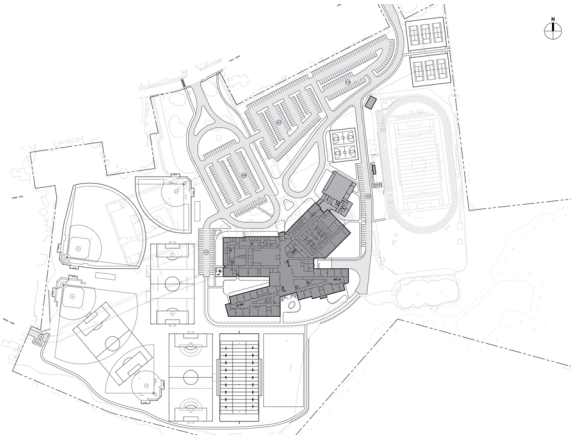


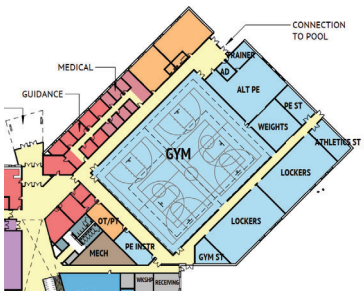
Floor Plan Update/ Programming Take-Aways

- Relocated learning stair
- Shifted gym towards core
- Reconfigured Auditorium/Music
- Relocated Culinary Arts
- Updated loading dock/back of house

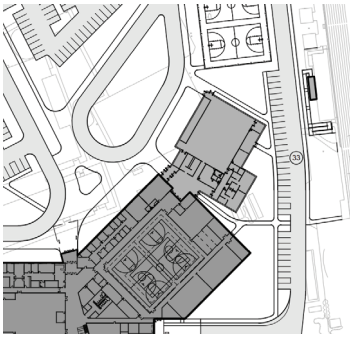
Level 1

Level 2

Updated Gym Wing



- Gym shifts towards core
- Visibility between Alt PE/Weights/Gym
- Improved community entrance, pool connection



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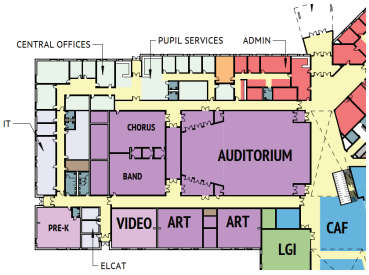
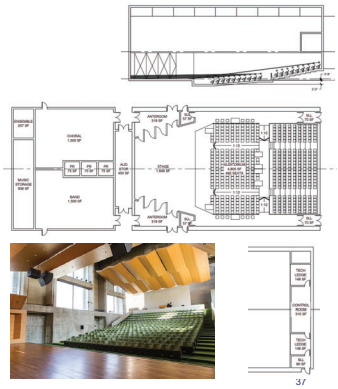
Updated Arts Wing





- Considering idea of "concert hall" approach to auditorium
- Second floor access to auditorium controls
- Added small group space for arts wing
- Considering upper windows in hall

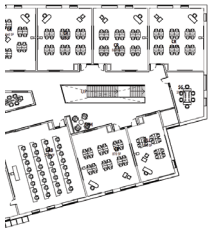
Entry & Media Center

Cafeteria

Academic Wings

- Culinary Arts moves to core – opportunity to interface with cafeteria
- Plan revised to allow supervision of student restroom from teacher planning
- Improved connections to outdoors
- Sound attenuation strategies implemented between classroom wings and cafeteria
- Tech support moves to outside media center

Academic Wings



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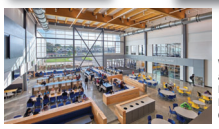
Overview of Finish Approach

Public / High Traffic / Low Maintenance

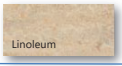
Terrazzo

Porcelain Ceramic Tile

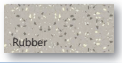


Wood Accents above Durable Tile Flooring with Painted Steel Columns

Academic / Warmth / Low Maintenance



Linoleum



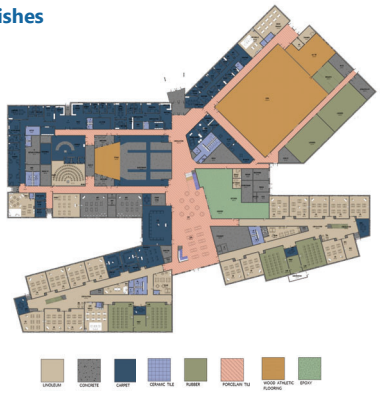
Rubber

Office/Quiet

Carpet in Media & Office & Small Group

Overview of Proposed Interior Finishes

- Floor Finishes
  - Porcelain Ceramic Tile – Primary Public Circulation
  - Protected Linoleum – Academic Wing Circulation & Classrooms
  - Ceramic Tile – Toilet Rooms
  - Rubber – Stairwells, Science Labs, STEM Lab, Locker Rooms, Weight Rm
  - Wood Floor – Stage, Gymnasium, Alt PE
  - Carpet- Offices, LGI, Media Center, Willie Ross, Small Group, SEL CR, Auditorium
  - Polished/Sealed Concrete – Art, Culinary, Custodial
  - Epoxy Resin – Kitchen
  - Thin Set Terrazzo – Main Stairs



Overview of Proposed Interior Finishes

- Wall Finishes
  - PCT Wainscott – Art/PE/Café Areas
  - Wood Panel – Auditorium, LGI, Media
  - Wood Wainscott – Academic Wings
  - Ceramic Tile – Restrooms, Classroom Entries
  - Abuse Resistant Gypsum Wall Board – Offices, Classrooms
- Ceilings
  - Acoustic Tile – Most spaces
  - Washable Acoustic Tile – Kitchen, Toilets
  - Accent Wood Ceiling – Cafeteria (low ceiling area), Auditorium
  - Glulam Beams - Spine

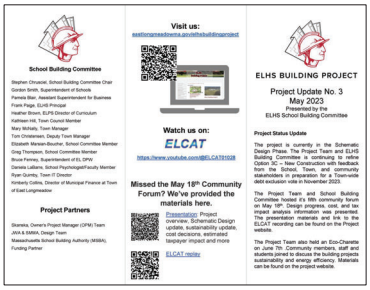
Reduced Cost Options of Proposed Interior Finishes

- Floor Finishes
  - Replace Terrazzo with Rubber
  - Replace PCT and Linoleum with VCT or LVT
  - Replace Stage Wood with MDF
  - Replace Alt PE Wood with Rubber
- Wall Finishes
  - Replace PCT with ceramic tile
  - Reduce wood panels
  - Reduce acoustic panels
- Ceilings
  - Eliminate wood-like ceiling
  - Eliminate Glu-lam

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) **Communications Update**
6) New Business
7) Adjourn

Communications Update



School Building Committee

Stephen Chrusciel, School Building Committee Chair
Gordon Smith, Superintendent of Schools
Pamela Blair, Assistant Superintendent for Business
Frank Page, ELHS Principal
Heather Brown, ELPS Director of Curriculum
Kathleen Hill, Town Council Member
Mary McNally, Town Manager
Tom Christensen, Deputy Town Manager
Elizabeth Marsain-Bouchet, School Committee Member
Greg Thompson, School Committee Member
Bruce Ferriera, Superintendent of EL DPW
Daniela LaBaria, School Psychologist/Faculty Member
Ryan Quimby, Town IT Director
Kimberly Collins, Director of Municipal Finance at Town of East Longmeadow

Project Partners

Skanska, Owner's Project Manager (OPM) Team
JWA & SMMA, Design Team
Massachusetts School Building Authority (MSBA), Funding Partner

Visit us:

eastlongmeadowma.gov/elhsbuildingproject

Watch us on:

ELCAT

https://www.youtube.com/@ELCAT91028

Missed the May 18th Community Forum? We've provided the materials here.

Presentation: Project overview, Schematic Design update, sustainability update, cost decisions, estimated taxpayer impact and more

ELCAT replay

ELHS BUILDING PROJECT

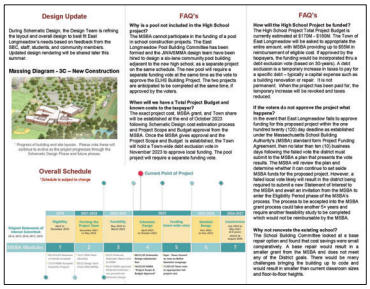
Project Update No. 3
May 2023
Presented by the
ELHS School Building Committee

Project Status Update

The project is currently in the Schematic Design Phase. The Project Team and ELHS Building Committee is continuing to refine Option 3C – New Construction with feedback from the School, Town, and community stakeholders in preparation for a Town-wide debt exclusion vote in November 2023.

The Project Team and School Building Committee hosted it's fifth community forum on May 18th. Design progress, cost, and tax impact analysis information was presented. The presentation materials and link to the ELCAT recording can be found on the Project website.

The Project Team also held an Eco-Charette on June 7th. Community members, staff and students joined to discuss the building projects sustainability and energy efficiency. Materials can be found on the project website.



Design Update

During Schematic Design, the Design Team is refining the layout and overall design to best fit East Longmeadow's needs based on feedback from the SBC, staff, students, and community members. Updated design rendering will be shared later this summer.

Massing Diagram - 3C – New Construction

Overall Schedule

*Schedule is subject to change

Current Point of Project

FAQ's

Why is a pool not included in the High School project?

The MSBA cannot participate in the funding of a pool in the proposed replacement school. The East Longmeadow Pool Building Committee has been formed and the JWA/SMMA design team have been tasked with developing a conceptual design for a pool adjacent to the new high school, as a separate project on the same schools. The new pool will require a separate funding vote at the same time as the vote to approve the ELHS Building Project. The two projects are anticipated to be completed at the same time, if approved by the voters.

When will we have a Total Project Budget and known costs to the taxpayers?

Upon approval of the project grant, and Town share will be established at the end of October 2023 following Schematic Design cost estimation process and Project Scope and Budget approval from the MSBA. Once the MSBA gives approval and the Town share is known, the Select Board and the Town will hold a Town-wide debt exclusion vote in November 2023 to approve local funding. The pool project will require a separate funding vote.

FAQ's

How will the High School Project be funded?

The High School is estimated at $110M - $120M. The currently estimated split is $70M - $100M. The Town of East Longmeadow will be required to appropriate the entire amount, with MSBA providing up to 60M in reimbursement of eligible cost. If approved by the voters, the Town will bond the project through a Town-wide debt exclusion vote (based on 30 years). A debt exclusion is a temporary increase in taxes to pay for a specific debt – typically a capital expense such as a building renovation or repair. It is not permanent. When the project has been paid for, the temporary increase will be revoked and taxes reduced.

If the voters do not approve the project what is the next step?

In the event that East Longmeadow fails to approve funding for this proposed project within the one hundred twenty (120) day deadline as established under the Massachusetts School Building Authority's Project Funding Agreement, the Funding Agreement, then no later than two (10) business days following the failed vote the district must submit to the MSBA a plan that presents the vote results. The MSBA will review the plan and determine whether to rescind the Preferred MSBA funds for this proposed project. However, a failed local vote likely will result in the district being required to submit a new Statement of Interest to the MSBA and await an invitation from the MSBA to enter the Core Program and restart the entire process. The process to be accepted into the MSBA grant process could take another 5+ years and require another feasibility study to be completed which would not be reimbursable by the MSBA.

Why not renovate the existing school?

The School Building Committee looked at a base repair option and found that cost savings were small comparatively. A base repair would result in a building that is not able to meet the educational any of the District goals. There would be many challenges bringing the building up to code and would result in smaller than current classroom sizes and floor-to-floor heights.

SKANSKA | JWA JONES WHITSETT ARCHITECTS | In association with SMMA

East Longmeadow HS Building Project

Schematic Design

Topics of Discussion

- Project Schedule
- Proprietary Items
- Update on Exterior Architectural Design

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) JWA/SMMA Design Update
5) Communications Update
6) New Business
7) Adjourn

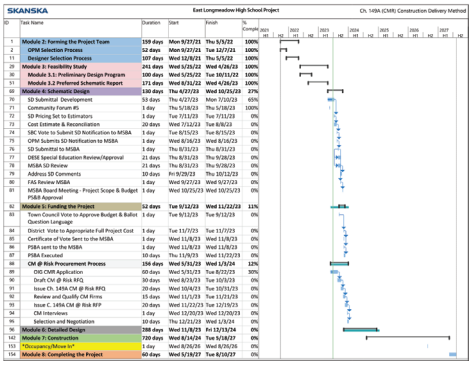
SBC Meeting – June 29, 2023

JWA | SMMA

Schedule

JWA | SMMA

Schedule



ID	Task Name	Duration	Start	Finish	% Complete
1	Module 2: Forming the Project Team	159 days	Mon 9/27/21	Thu 5/5/22	100%
2	OPM Selection Process	52 days	Mon 9/27/21	Tue 12/7/21	100%
11	Designer Selection Process	107 days	Wed 12/8/21	Thu 5/5/22	100%
28	Module 3: Feasibility Study	241 days	Wed 5/25/22	Wed 4/26/23	100%
35	Module 3.1: Preliminary Design Program	100 days	Wed 5/25/22	Tue 10/11/22	100%
51	Module 3.2 Preferred Schematic Report	171 days	Wed 8/31/22	Wed 4/26/23	100%
69	Module 4: Schematic Design	130 days	Thu 4/27/23	Wed 10/25/23	27%
70	SD Submittal Development	53 days	Thu 4/27/23	Mon 7/10/23	65%
71	Community Forum #5	1 day	Thu 5/18/23	Thu 5/18/23	100%
72	SD Pricing Set to Estimators	1 day	Tue 7/11/23	Tue 7/11/23	0%
73	Cost Estimate & Reconciliation	20 days	Wed 7/12/23	Tue 8/8/23	0%
74	SBC Vote to Submit SD Notification to MSBA	1 day	Tue 8/15/23	Tue 8/15/23	0%
75	OPM Submits SD Notification to MSBA	1 day	Wed 8/16/23	Wed 8/16/23	0%
76	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
77	DESE Special Education Review/Approval	21 days	Thu 8/31/23	Thu 9/28/23	0%
78	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
79	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
80	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%
81	MSBA Board Meeting - Project Scope & Budget PS&B Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
82	Module 5: Funding the Project	52 days	Tue 9/12/23	Wed 11/22/23	11%
83	Town Council Vote to Approve Budget & Ballot Question Language	1 day	Tue 9/12/23	Tue 9/12/23	0%
84	District Vote to Appropriate Full Project Cost	1 day	Tue 11/7/23	Tue 11/7/23	0%
85	Certificate of Vote Sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
86	PSBA sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
87	PSBA Executed	10 days	Thu 11/9/23	Wed 11/22/23	0%
88	CM @ Risk Procurement Process	156 days	Wed 5/31/23	Wed 1/3/24	12%
89	CM3 CMR Application	60 days	Wed 5/31/23	Tue 8/22/23	50%
90	Draft CM @ Risk RFQ	30 days	Wed 8/23/23	Tue 10/3/23	0%
91	Issue Ch. 149A CM @ Risk RFQ	20 days	Wed 10/4/23	Tue 10/31/23	0%
92	Review and Qualify CM Firms	15 days	Wed 11/1/23	Tue 11/21/23	0%
93	Issue C. 149A CM @ Risk RFP	20 days	Wed 11/22/23	Tue 12/19/23	0%
94	CM Interviews	1 day	Wed 12/20/23	Wed 12/20/23	0%
95	Selection and Negotiation	10 days	Thu 12/21/23	Wed 1/3/24	0%
96	Module 6: Detailed Design	288 days	Wed 11/8/23	Fri 12/13/24	0%
142	Module 7: Construction	720 days	Wed 8/14/24	Tue 9/18/27	0%
153	*Occupancy/Move In*	1 day	Wed 8/26/26	Wed 8/26/26	0%
154	Module 8: Completing the Project	40 days	Wed 5/18/27	Tue 9/10/27	0%

Proprietary Items

JWA | SMMA

Proposed Proprietary Items List

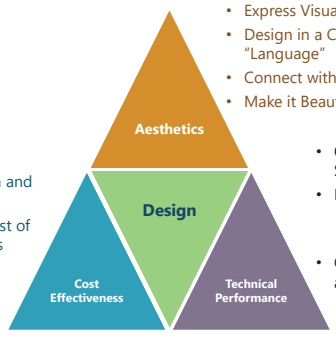
1) StruxureWare - for BMS
2) Infinias - for Door access system
3) Schlage - for door hardware
4) AXIS - for security cameras
5) Cisco - for Network equipment
6) Meraki - for Wireless equipment
7) Cisco IP - for phones
8) Atlas – for clocks and paging

Exterior Architecture Update

JWA | SMMA

Exterior Design Goals

- Express Visually the Educational Aspirations
- Design in a Contemporary but Timeless "Language"
- Connect with the Architectural Context
- Make it Beautiful, Make it Fun!



- Design for Repetition and Ease of Construction
- Prioritize Material Cost of More Visible Features
- Make it Simple

- Optimize Daylighting and Solar Shading
- Maintain High Energy Efficiency
  - Tight Envelope
  - Continuous Insulation
- Consider Maintenance, Weathering and Durability

Visioning Goals – Architectural Design

- A pillar of community activity, inviting gatherings of all sorts
- Addresses the look and feel of East Longmeadow
- Provides ample natural lighting
- Beautiful, welcoming and comfortable
- Easy access to outdoor learning environments
- Secure and sustainable structure
- A 21st Century building - Modern, but not trendy
- Weather-appropriate outdoor spaces
- Building that inspires teachers and students

Energy-Efficient Envelope Parameters

- ❑ R-52 Roof insulation (~10")
- ❑ R-34 wall insulation (~6" outside of AVB)
- ❑ Triple Glazing
  - U-0.23 assembly
  - IGU 0.14 U-value winter
- ❑ R-20 foundation wall, R-20 for 6' perimeter slab on grade and R-10 central slab on grade areas.

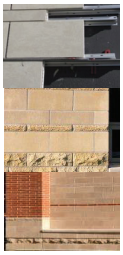
Exterior Enclosure Materials

Opaque Walls	Brick Masonry, Stone Base, Stone or Precast Concrete Trim	• Target 75% of Wall Enclosure • High Insulation Value
Rainscreen Feature Walls	Ceramic Tile or Pre-finished Metal	
Windows	Triple Insulated-Glazed, Aluminum Frame	• Target 25% of Wall Enclosure • Utilizes Low-emissivity glass
Curtain Walls and Storefront	Triple Insulated-Glazed, Aluminum Frame	
Spandrel, Fascia & Canopy	Pre-finished Metal	
Soffit	Pre-finished Metal, Phenolic or DEFS (stucco)	
Roof Screens	Pre-finished Metal	
Roofing	PVC Membrane	

Exterior Enclosure Materials

CMU/Brick/Stone

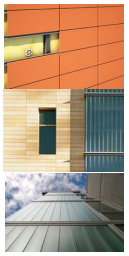
Thin Mfd. Stone



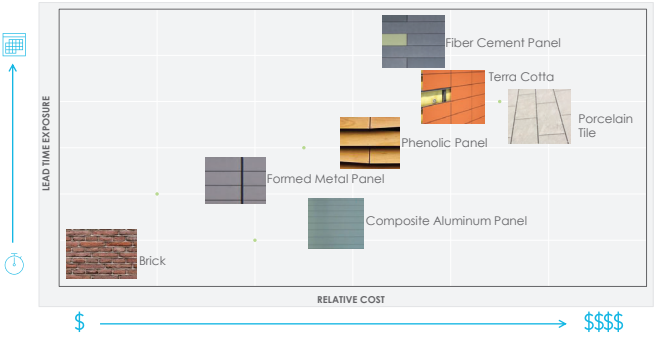
Metal Panel
Metal Tiles

Porcelain Panel
Phenolic Panel

Terracotta
Channel Glass

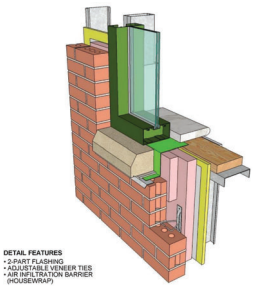


Exterior Wall Cladding Materials: Market Outlook

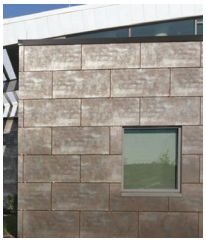


Building Materials Across the District's Schools

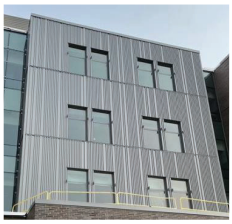
Brick Masonry Veneer



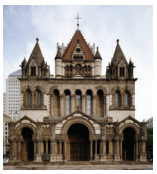
Porcelain Tile Rainscreen Cladding Panels



Formed Metal Wall Panels



Initial Thoughts on Materiality



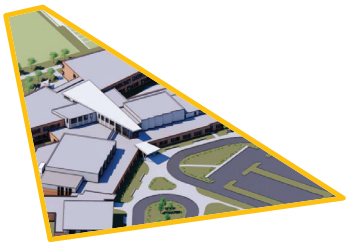
Sandstone Quarries in East Longmeadow: Potential Spatial and Material Influences

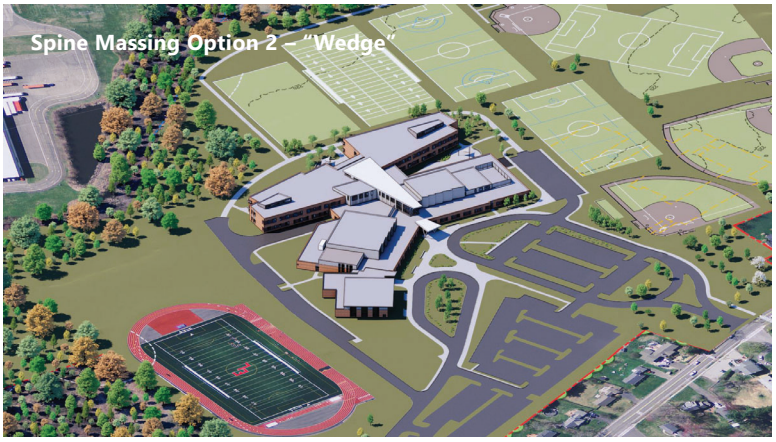
Pine Quarry - Then

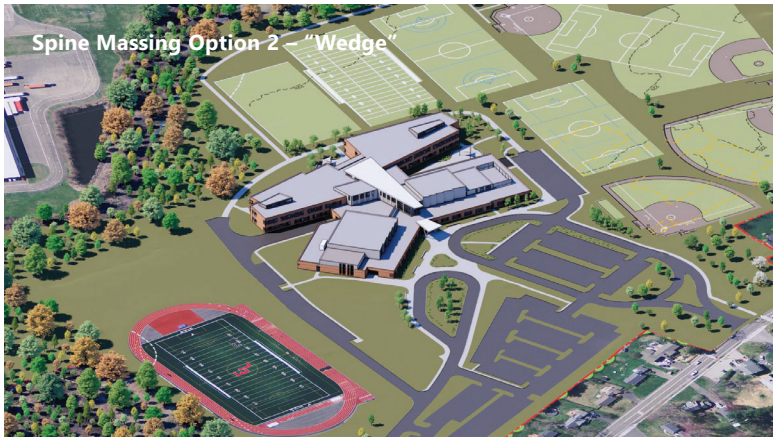
Pine Quarry - Now

Spine Massing Option 1 – "Monolith"

Spine Massing Option 2 – "Wedge"







Overall North Elevation

"Monolith" Massing Option

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Overall North Elevation

"Wedge" Massing Option

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North Elevation Option 1 – "Monolith"

North Elevation Option 2 – "Wedge"

Porcelain Tile Rainscreen Cladding
- Grey Stone Look

Stone or Precast Accents
- Historic Sandstone tie-in

Primary Brick
- Light Color

Accent Brick
- Dark Color
- May be Textured
- May be Ironspot

Stone Base
- Granite for Durability

North Elevation Option 1 – "Monolith"

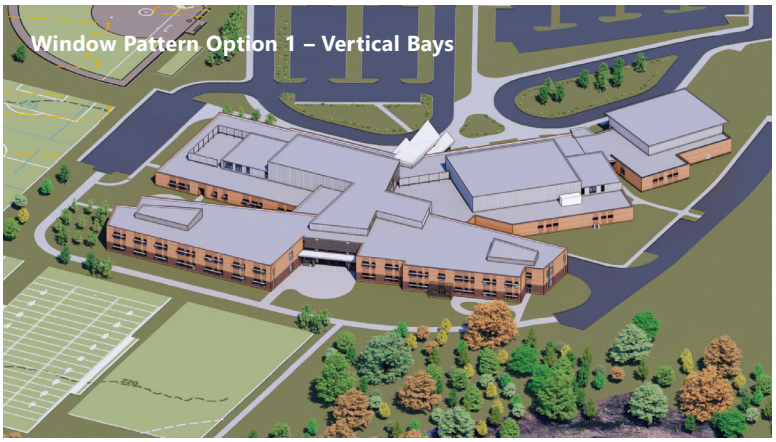
Pre-finished Aluminum
- Window Frames
- Roof Edge Trim
- Sunshades

Stone or Precast Accents
- Historic Sandstone tie-in

Primary Brick
- Light Color

Accent Brick
- Dark Color
- May be Textured
- May be Ironspot

Stone Base
- Granite for Durability



Overall South Elevation – Horizontal Bands

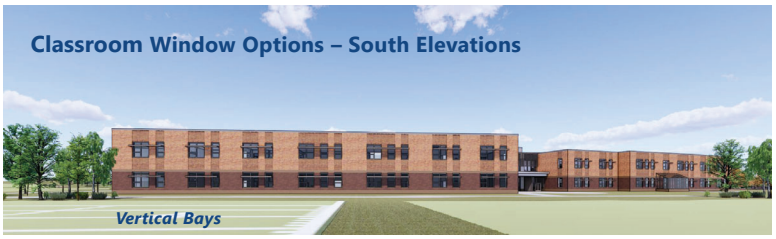
Partial Plan at Classroom Wing

35

Overall South Elevation – Vertical Bays

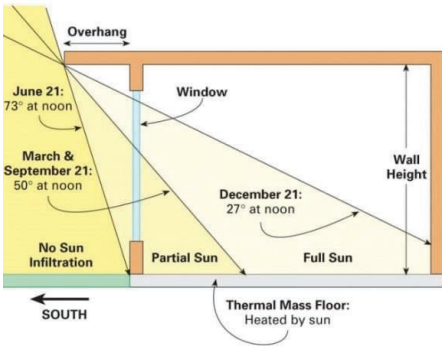
Partial Plan at Classroom Wing

36



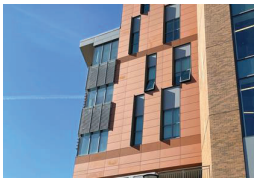
Daylighting Optimization

Roof Overhangs and Projections

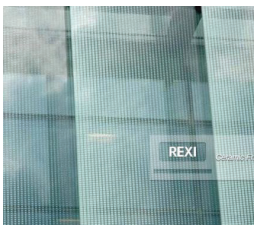


Daylighting Optimization

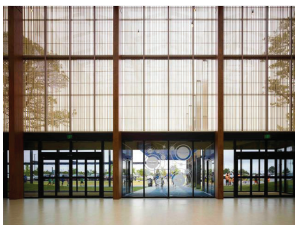
External Shading Devices

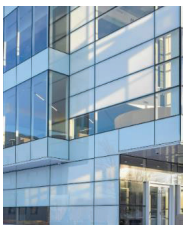


Alternatives to Screening: Integral Solar Control Glass Options



Ceramic Fritted Glass

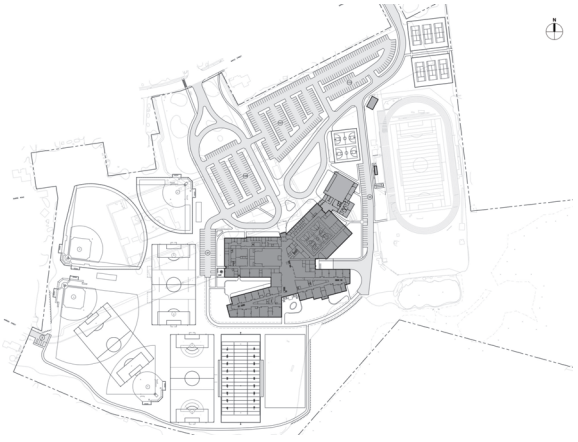

Integral Wood Screen


Light Diffusing Glass

Thank you!

JWA | SMMA

Site Plan



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SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Schematic Design

Topics of Discussion

- Space Summary Update
- Furniture, Equipment & Technology Budget
- Propriety Items
- MSBA Green Incentives
- Mass Save Incentives
- VE Coordination
- Summer/Fall Meetings

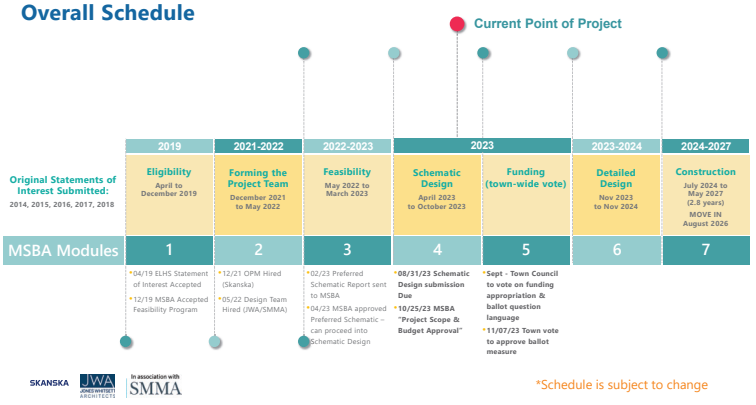
AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Schedule Update
4) JWA/SMMA/SKANSKA - Overview of Scope & Budget Agreement
5) Communications Update
6) New Business
7) Adjourn

Schedule Update

JWA | SMMA

Overall Schedule



SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

*Schedule is subject to change

August Schedule

08/01/23	Cost Estimates Due
08/04/23	Estimate Reconciliation Complete
08/08/23	**Proposed presentation to Town Council**
08/08/23	Life Cycle Cost Analysis (LCCA) complete (with cost data)
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08/25/23	Team submits full SD Report to MSBA
09/19/23	**Town Council Ballot Language Vote**

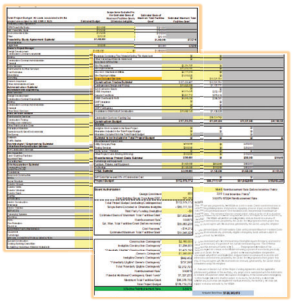
Schematic Design Scope & Budget

JWA | SMMA

Scope & Budget Agreement

Total Project Budget Overview

Construction Budget (PSR Estimate: to be adjusted per reconciled SD estimate)	**$147.5 M**
Soft Costs (OPM & A/E Administration, FF&E, Misc. Project Costs)	**$25.1 M**
Contingencies (Owner's & Construction)	**$4.1 M**
Estimated Total Project Budget	**$176.7 M**
Estimated Max. Total Facilities Grant	**$56.4 M**
Anticipated District Share	**$120.3 M**



Current Floor Plans by Program

FIRST FLOOR

SECOND FLOOR

Space Summary

Proposed Space Summary - High Schools					
	PROPOSED				
	Total		Difference to MSBA Guidelines		
	# OF RMS	area totals	ROOM NFA1	# OF RMS	area totals
CORE ACADEMIC SPACES		45,770			7,440
SPECIAL EDUCATION		11,575			2,875
ART & MUSIC		6,625			0
VOCATIONS & TECHNOLOGY		7,200			0
HEALTH & PHYSICAL EDUCATION		21,895			1,215
MEDIA CENTER		4,900			0
AUDITORIUM / DRAMA		8,183			0
DINING & FOOD SERVICE		8,690			1,190
MEDICAL		910			0
ADMINISTRATION & GUIDANCE		4,575			780
CUSTODIAL & MAINTENANCE		2,225			0
OTHER		6,290			6,290
		128,838			19,790
					10,315
					9,475
NON-PROGRAMMED SPACES	% of GFA	62,958			
		191,796			
		1.49			

Gross Square Footage at PSR= 191,780

Gross Square Footage at SD = 191,796

Recent Meetings

- June 23 -ELHS Admin & District & Design Team and School Security Consultant to review Security System priorities
- June 29 - JWA/SMMA IT Consultant met with ELHS Administration and ELPS IT to discuss Instructional Technology approach at new school.
- July 6 - SLT Met with Stefura Interiors, JWA and SMMA to review furniture goals and procurement process.
- July 10 - OPM, Designer, MSBA – Meeting to review MSBA request for Early Submittal of Schematic Design Documents & Impact of New MSBA Green Schools Incentive Policy
- July 13 - JWA, SMMA, Skanska, SLT Reps with Mass Save Incentives to review Mass Save Incentive options for ELHS Building Project

Spaces Reviewed for Furniture & Equipment

FURNITURE

- ACADEMIC (CLASSROOMS)
- SPECIAL EDUCATION
- TEACHER PLANNING ROOMS
- ART
- MUSIC / DRAMA
- SCIENCE
- GYM / PE
- ADMINISTRATIVE OFFICES / CONFERENCE ROOMS
- DISTRICT OFFICES
- NURSE
- CAFETERIA
- MEDIA CENTER

EQUIPMENT

- ACADEMIC (CLASSROOMS)
- SPECIAL EDUCATION
- ART
- MUSIC / DRAMA
- SCIENCE
- GYM / PE
- NURSE
- KITCHEN SMALLWARES
- MEDIA CENTER
- CULINARY
- ENGINEERING
- PRE-K
- GRAPHICS
- TV PRODUCTION / MEDIA
- CUSTODIAL AND GROUNDS

Instructional Technology

Base Building (Hard Cost)

Included in Construction Cost

Network Cabling/Racks/Patch Panels

Intercom and Clock System (Proprietary Atlas)

Digital Signage System (Software and Displays)

AV Systems for Large Spaces (Auditorium/Other)

Classroom Sound Systems (Audio Reinforcement)

Emergency 2-Way Radio System (BDA)

Area of Refuge 2-Way Voice Comm at Elevators

Tech Equipment (Soft Cost)

Included in FFE Contracts/Purchased Off State Contract

Cisco Network Switches

Meraki Wireless Access System

Cisco IP Telephone System

Misc. Classroom Equipment (Scanners/Doc Cams)

Printers (Desktop and 3-D)

Specialty PCs (POS/Custodial/Media Center)

High School TV Studio Equipment

Proposed Proprietary Items List

1. StruxureWare - for BMS
2. 3xLogic - for access control system
3. Schlage - for door hardware
4. AXIS - for security cameras
5. Atlas – for clocks and paging?
6. Exacq Vision – for video surveillance system?
7. Cisco - for Network equipment(does not need to be voted on if it is part of FF&E)
8. Meraki - for Wireless equipment (does not need to be voted on if it is part of FF&E)
9. Cisco IP - for phones (does not need to be voted on if it is part of FF&E)

Proposed Budgets

Proposed FFE Budget

$2,400/student
800 students
$1,920,000

MSBA Share
$1,200 per student
$960,000

Local Share
$1,200 per student
$960,000

Proposed IT Budget

$1,500-1,800/student
800 students
$1,200,000-1,400,000

MSBA Share
$1,200 per student
$960,000

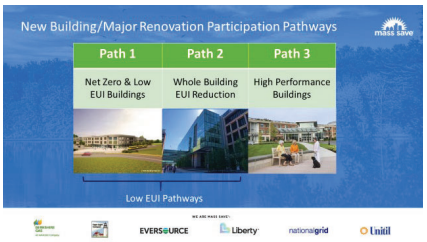
Local Share
$300-600 per student
$240,000-480,000

Updated MSBA Green Schools Incentive Policy Impact

	PREVIOUS		STRETCH	NEW		
	Certified	*Incentivized*	*Required*	*Certified*	*Incentivized*	*Extra*
LEED	Certified "Optimized Energy Performance"	LEED Silver "Optimized Energy Performance"		LEED Silver requiring specific IEQ credits	LEED Silver requiring specific IEQ credits	LEED Silver enhanced IEQ credits
Materials/IEQ	3 of 7 Credits	3 of 7 Credits		3 of 7 Pts Credits	3 out of 7 Credits	5 out of 7 Credits
Energy	10% > Base Code	20% > Base Code	TEDI Pathway 2021 IECC	= New Stretch Code	= New Specialized Code	
Code Basis	>IECC2018	>IECC2018	>2021 IECC	>2021 IECC	>2021 IECC	-
Reimbursement	Zero	2%		Zero	3%	1%
Value to ELHS	$0	$1,880,309		$0	$2,820,464	$940,155
Difference	-	-		$0	+$940,155	+$940,155

Combined Incentive $3,760,619

Mass Save Incentive Program



- State incentives to commercial buildings.
- Is based on Energy Use Intensity metrics.
- Supports an additional consultant to review, assigned by Mass Save. Cost of consultant is paid from in the incentive.
- Incentive is paid to the District after construction and inspection.

Mass Save Incentive Program

Path 1 Incentives

K-12 Schools	Site EUI Range	Incentives				
		Payable at end of Construction		Payable at end of 1 yr. post occupancy		
		Construction Incentive $/sf	Heat Pump Adder*	Post Occ. Inc. $/sf	Adder for getting under ZNE EUI target	Certification Incentive
Tier 2 (high schools only)	26-29	$1.50	Air source heat pumps: $800/ton Variable refrigerant flow (VRF): $1,200/ton Ground source heat pumps: $4,500/ton	$1.50	Not applicable	$3,000
Tier 1 - Net zero level (all schools)	25 or less	$2.00			$0.05/EUI point reduction/sf	

RECOMMENDED

$1,035,415 Total Incentive

$385,963 Tier 1
$289,452 Post Occ
$360,000 ASHP

Value to
ELHS Building Project
at end of project

Mass Save Incentive Program

Path 2 Incentives

Path 2: EUI Reduction Incentive Tiers					
% Reduction Required to Participate					
	Incentive Rate	Heat Pump Adder*	All sectors other than office/labs	Office	Lab/office
Tier 4	$0.35/sf	Air Source Heat Pump: $800/ton Variable Refrigerant Flow: $1200/ton Ground Source Heat Pump: $4,500/ton	10%-15%	5%-10%	15%-20%
Tier 3	$0.50/sf		15%-20%	10%-15%	20%-25%
Tier 2	$0.75/sf		20%-25%	15%-20%	25-30%
Tier 1	$1.25/sf		25% and above	20% and above	30% and above

$601,210 Total Incentive

$241,210 Tier 1
$360,000 ASHP

Value to
ELHS Building Project
at end of project

List of Cost Items Being Tracked for Information

1. Back of house curbs to bituminous
2. Remove Basketball Court from Project- *Move to CPA for future project*
3. Eliminate Basketball Lighting & Tennis Lighting
4. Eliminate JV dugouts, pads, benches as part of project (Revisit at end of project)
5. Eliminate/Reduce Irrigation System (Revisit at end of project)
6. Porcelain Cladding versus Metal Panel Rainscreen
7. Natural Gas versus Diesel Generator

Communications Update

JWA | SMMA

Communications Update

- Newsletter /Handouts
- National Night Out
- Upcoming Community Forum Dates
- Updates to FAQ & Website Re-organization

August Schedule

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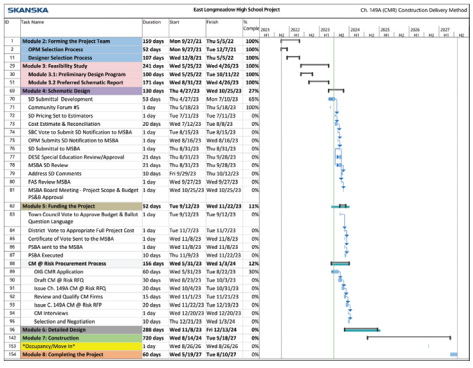
Schedule



ID	Task Name	Duration	Start	Finish	% Complete
1	**Module 2: Forming the Project Team**	110 days	Mon 9/27/21	Thu 5/5/22	100%
2	**OPM Selection Process**	53 days	Mon 9/27/21	Tue 12/7/21	100%
11	**Designer Selection Process**	107 days	Wed 12/8/21	Thu 5/5/22	100%
29	**Module 3: Feasibility Study**	241 days	Wed 5/25/22	Wed 4/26/23	100%
30	**Module 3.1: Preliminary Design Program**	190 days	Wed 5/25/22	Tue 10/11/22	100%
51	**Module 3.2 Preferred Schematic Report**	171 days	Wed 8/31/22	Wed 4/26/23	100%
69	**Module 4: Schematic Design**	130 days	Thu 4/27/23	Wed 10/25/23	27%
70	SD Submittal Development	53 days	Thu 4/27/23	Mon 7/10/23	65%
71	Community Forum #5	1 day	Thu 5/18/23	Thu 5/18/23	100%
72	SD Pricing Set to Estimators	1 day	Tue 7/11/23	Tue 7/11/23	0%
73	Cost Estimate & Reconciliation	20 days	Wed 7/12/23	Tue 8/8/23	0%
74	SBC Vote to Submit SD Notification to MSBA	1 day	Tue 8/15/23	Tue 8/15/23	0%
75	OPM Submits SD Notification to MSBA	1 day	Wed 8/16/23	Wed 8/16/23	0%
76	SD Submittal to MSBA	1 day	Thu 8/31/23	Thu 8/31/23	0%
77	DESE Special Education Review/Approval	21 days	Thu 8/31/23	Thu 9/28/23	0%
78	MSBA SD Review	21 days	Thu 8/31/23	Thu 9/28/23	0%
79	Address SD Comments	10 days	Fri 9/29/23	Thu 10/12/23	0%
80	FAS Review MSBA	1 day	Wed 9/27/23	Wed 9/27/23	0%
81	MSBA Board Meeting - Project Scope & Budget PS&A Approval	1 day	Wed 10/25/23	Wed 10/25/23	0%
82	**Module 5: Funding the Project**	52 days	Tue 9/12/23	Wed 11/22/23	11%
83	Town Council Vote to Approve Budget & Ballot Question Language	1 day	Tue 9/12/23	Tue 9/12/23	0%
84	District Vote to Appropriate Full Project Cost	1 day	Tue 11/7/23	Tue 11/7/23	0%
85	Certificate of Vote Sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
86	PSBA sent to the MSBA	1 day	Wed 11/8/23	Wed 11/8/23	0%
87	PSBA Executed	10 days	Thu 11/9/23	Wed 11/22/23	0%
88	**CM @ Risk Procurement Process**	156 days	Wed 5/31/23	Wed 1/3/24	12%
89	CM: CMR Application	60 days	Wed 5/31/23	Tue 8/22/23	30%
90	Draft CM @ Risk RFQ	30 days	Wed 8/23/23	Tue 10/3/23	0%
91	Issue Ch. 149A CM @ Risk RFQ	20 days	Wed 10/4/23	Tue 10/31/23	0%
92	Review and Qualify CM Firms	15 days	Wed 11/1/23	Tue 11/21/23	0%
93	Issue C. 149A CM @ Risk RFP	20 days	Wed 11/22/23	Tue 12/19/23	0%
94	CM Interviews	1 day	Wed 12/20/23	Wed 12/20/23	0%
95	Selection and Negotiation	10 days	Thu 12/21/23	Wed 1/3/24	0%
96	**Module 6: Detailed Design**	288 days	Wed 11/8/23	Fri 12/13/24	0%
142	**Module 7: Construction**	720 days	Wed 8/14/24	Tue 5/18/27	0%
153	*Occupancy/Move in*	1 day	Wed 8/26/26	Wed 8/26/26	0%
154	**Module 8: Completing the Project**	40 days	Wed 5/19/27	Tue 8/10/27	0%

New Business

JWA | SMMA

Thank you!

JWA | SMMA

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Schematic Design

Topics of Discussion

- Live Cycle Analysis Report
- SD Cost Estimate Review
- Project Budget Vote
- Proprietary Items Vote
- Schedule Review
- Communications Update

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Design Update
4) Motions/Approvals
   - Vote on Project Budget
   - Vote on Proprietary Items
5) New Business
6) Adjourn

Public Participation

JWA SMMA

Design Update

JWA | SMMA

Life Cycle Cost Analysis of HVAC Options

Life Cycle Cost Analysis (50 yrs) - HVAC Systems & Building Enclosure

IN PROGRESS		System Costs as Present Value					Predicted EUI	Predicted GHG emissions Reduction (%)
		Installation	Replacement	Maintenance	Energy	50-Year Life	kBtu/SF/yr	
Code baseline	ALL ELECTRIC PACKAGED DX DOAS + DX HEAT PUMP HEATING/COOLING	$12,638,806	$4,720,206	$643,244	$15,007,059	**$33,009,000**	**48.1**	
Base System - VRF	VRF HEAT PUMPS HEATING & COOLING + DOAS	$14,600,000	$11,913,214	$656,109	$8,299,159	**$35,468,000**	**26.6**	**44.7%**
Option M1	GEOTHERMAL HEAT PUMPS HEATING & COOLING + DOAS	$24,700,000	$7,768,648	$546,757	$7,473,898	**$40,489,000**	**24.0**	**50.2%**
Option M2	HEAT RECOVERY CHILLER + WSHP HEATING & COOLING + DOAS	$16,645,000	$13,037,429	$868,380	$9,746,442	**$40,297,000**	**31.3**	**35.1%**

Initial Project Cost & Payback Analysis

Initial Project Cost & Payback Analysis

IN PROGRESS		Installation Costs	Incremental costs		Predicted Annual Savings	Payback	Predicted EUI	Predicted GHG emissions Reduction (%)
		$	$	%	$	(Years)	kBtu/SF/yr	
Code baseline	ALL ELECTRIC PACKAGED DX DOAS + DX HEAT PUMP HEATING/COOLING	$12,638,806					**48.1**	
Base System - VRF	VRF HEAT PUMPS HEATING & COOLING + DOAS	$14,600,000	$1,961,194	1.4%	$260,706	7.5	**26.6**	**44.7%**
Option M1	GEOTHERMAL HEAT PUMPS HEATING & COOLING + DOAS	$24,700,000	$12,061,194	8.8%	$292,780	41.2	**24.0**	**45.1%**
Option M2	HEAT RECOVERY CHILLER + WSHP HEATING & COOLING + DOAS	$16,645,000	$4,006,194	2.9%	$204,456	19.6	**31.3**	**35.1%**

Energy Cost Neutrality and Solar PV Benefits

	Annual Energy Costs (estimate)**	Comments
	($)	
New ELHS**		
New Facility	$322,551	*Full AC, 21st century technology/equipment, improved ventilation and thermal comfort*
Solar Photovoltaic (PV)	$(99,000)	*Not including peak charges savings*
Estimated Total Annual With PV	**$223,551**	
Existing ELHS**		
	$318,704	*Limited AC and technology/equipment*

***Notes:*
1.New ELHS annual energy costs based on ASHP system and total annual usage of 26.6 kBtu/SF/yr.
2.Using 2023 utility costs: $0.22/kWh and $1.35/Therms
3.Solar PV array savings based on 450,000 kWh harvesting annually. Pending final design, system may harvest more kWh and yield more savings

Energy Consumption & Costs (Backup)

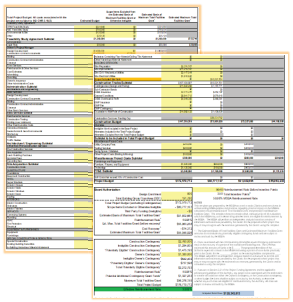
Energy Consumption & Costs

New School HVAC System Options		Predicted Total Annual Energy Use			Present Value	Predicted Utility Costs	GHG Emissions Reduction
		Electricity (kWh)*	Natural Gas (therm)	Annual Energy Costs ($) (Predicted)	(50 yrs.)	($/SF)	(%)
Code baseline	ALL ELECTRIC PACKAGED DX DOAS + DX HEAT PUMP HEATING/COOLING	2,706,528	0	$583,257	$15,007,059	$3.04	
Base System - VRF	VRF HEAT PUMPS HEATING & COOLING + DOAS	1,496,756	0	$322,551	$8,299,159	$1.68	44.7%
Option M1	GEOTHERMAL HEAT PUMPS HEATING & COOLING + DOAS	1,347,920	0	$290,477	$7,473,898	$1.51	50.2%
Option M2	HEAT RECOVERY CHILLER + WSHP HEATING & COOLING + DOAS	1,757,774	0	$378,800	$9,746,442	$1.98	35.1%

Project Cost at Schematic Design

Previous Total Project Budget Overview

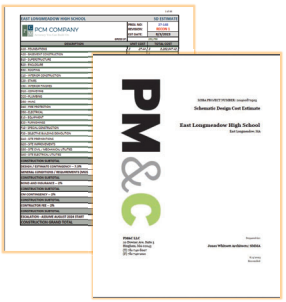
Construction Budget (PSR Estimate: to be adjusted per reconciled SD estimate)	**$147.5 M**
Soft Costs (OPM & A/E Administration, FF&E, Misc. Project Costs)	**$25.1 M**
Contingencies (Owner's & Construction)	**$4.1 M**
Estimated Total Project Budget	**$176.7 M**
Estimated Max. Total Facilities Grant	**$56.4 M**
Anticipated District Share	**$120.3 M**



SD Estimates

Previous Total Project Budget Overview

Est Construction Costs (PSR Estimate: to be	**$147.5 M**
Designer's Estimator (PM&C)	$155,688,338
Owner's Estimator (PCM)	$154,746,343
Average of estimates	$155,217,341
Value Engineering Goal	$7-8M



Recommended Scope Reductions

Item	Item Description
1B	Eliminate Basketball Court Lighting (and new controls cabinet)
3	Eliminate 6' wood fencing along property line, 504lf
4	Eliminate 6' chain link on southern perimeter, 455lf
5	Eliminate 4' Chain link fence on property line, 743lf
6	Eliminate Lft Arm Barrier Gate at Emergency Access Path
7	Reduce Caliper of Tree Site
8	Reduce Quantity of Plant Materials by 10%
10	PreK Playground EQ Allowance of 60K ilo of outlined scope
12	Granite Block Seatwalls to Precast at rear side of school only
14	Aluminum feeders ilo copper
15	Reduce AV Allowance for Auditorium to $200,000 from $450,000
16	Formed Metal ilo Porcelain Clad Rainscreen
19	Reduce design and quantity of bollards (based on memo Opt. 2)
23	Wall tile ilo veneer wood wainscot in academic wing
24	Eliminate acoustic treatment to Gym Walls

~~25~~	~~Steel ilo glulam beams~~
~~26~~	~~Gyp Ceiling ilo wood slatted ceiling, 2455sf~~
30	Athletic fields - eliminate 12" gravel base, geo-textile fabric, reduce topsoil from 12" to 8" including associated cut/fill adjustments
36	Correct estimated toilet ceramic wall area to 12,000sf from 14,994sf
40	Adjust the triple pane glazing at curtain wall price to $240/SF and window to $185.
41	Replace 13,566 sf stabilized stone dust pathway with bituminous concrete walkway (including bituminous. Reduce width to 6 ft.
42	Reduce gravel below footing to 6" thick section of imported ¾" crushed stone. Provide 8" thick section of imported base course sand & gravel below the building slab. Soil/fill below the top layer of topsoil can remain in place. Assume that 80% of this 2' average depth of fill can remain in place.

Estimated value of deductions before markup $6.9M
Estimated value of deductions after markup $8.5M

Revised, 8/10/2023 to reflect addition of item 42 and committee decision to remove items 25 & 26

Identified Add Alternates Not Included in Construction Cost

Item	Item Description	Value
S1	Add Lighting for Varsity Baseball Field	$ 1,314,720
S2	Add Sports Field Storage Building	$ 51,216
S3	Additional Athletic Field Irrigation Beyond Base Scope	$ 513,000
S4	Provide 650,000sf sod ilo seed for athletic fields	$ 936,000
S5	Athletic Field Netting adjacent to neighboring property	$ 304,200
S6	Nat Gas line to EM generator	$ 54,600
E2	Nat Gas Gen ilo Diesel-fired Gen	$ 276,000
M1	Ground Source Heat Pump ilo Air Source Heat Pump	$10,100,578
M2	Air Source Heat Pump Chillers and Water Source Loop	$ 2,045,146
	Subtotal	$ 15,595,460
	Potential Markup	$ 3,431,001
	Potential Addition to Construction Cost	$ 19,026,461

Rejected Value Engineering Proposals

Item Description	SD Value
Eliminate Basketball Court from project - move to Town	$185,885
Eliminate relocation of Tennis lighting (relocated from current location)	$70,000
Make irrigation systems a Scope Hold- Remove from Budget	$427,500
Eliminate Pressbox and Ramp System	$150,000
AC Reduction at Gymnasium - (see Revised Memo)	$130,000
Remove integral colored concrete hardscape in outdoor learning areas	$42,759
Eliminate Greenhouse	$140,000
Reduce curtain wall by 10%	$1,017,400
Eliminate learning stair	$175,000
Eliminate K13 ceiling, revert to ACT, 5000sf	$17,500
Eliminate PV Panels	$1,975,000
Reduce above further by 3900 sf by tiling wet wall only in individual toilets	$132,600
Replace 6,450sf of linoleum with VCT	$19,350
Cut Concession Building Scope	$633,402
Brick lio Formed Metal Panel	$1,247,376

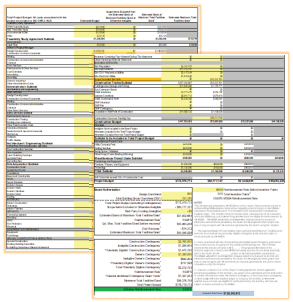
Revised, 8/10/2023.

Project Cost at Schematic Design

Total Project Budget Overview

Construction Budget (PSR Estimate: to be adjusted per reconciled SD estimate)	**$ 147.8 M**
Soft Costs (OPM & A/E Administration, FF&E, Misc. Project Costs)	**$ 25.78 M**
Contingencies (Owner's & Construction)	**$ 4.1 M**
Estimated Total Project Budget	**$ 177.8 M**
Estimated Max. Total Facilities Grant	**$ 62.2 M**
Anticipated District Share	**$ 115.5 M**

Figures above developed prior to final soils VE addition and Committee VE approval and estimate revision. Figures do not represent final MSBA scope and budget agreement.



Motion

The East Longmeadow School Building Committee completed its review of the Schematic Design Total Project Budget for the East Longmeadow High School Project and approves the submittal to MSBA for consideration with a total project budget of $177.5M.

Seconded _____

Discussion _____

Vote

JWA JONES WHITSETT ARCHITECTS | SMMA

Revised, 8/10/2023 based on SBC Motion

Motion

Motion to approve the following proprietary items specification in the project manual:

Item #1: StruxureWare - for BMS

Item #2: AXIS- for door access system

Item #3: Schlage - for door hardware

Item #4: AXIS - for security cameras

Item #5: Atlas - for clocks and paging

Item #6: AXIS - video surveillance system

Seconded _____

Discussion _____

Vote

JWA JONES WHITSETT ARCHITECTS | SMMA

Revised, 8/10/2023 based on SBC Motion

Upcoming Milestones

08/11/23	Consultant info to JWA for Early Submittal
08/15/23	Skanska submits Budget Statement
08/15/23	Skanska/JWA submits early deliverables (see Early Submittal Template)
08/21/23	All remaining deliverables due to JWA
08/24/23	**SBC Votes to submit SD Report** (To Be Confirmed)
08/25/23	Team submits full SD Report to MSBA
09/12/23	**Town Council reviews bond structure with Kim Collins**
09/19/23	**Town Council votes on bond commitment and votes on ballot language**
10/25/23	**MSBA Approves Scope and Budget**
11/7/23	**East Longmeadow Special Election for Debt Exclusion**

Communications Update

JWA | SMMA

Communications Update

National Night Out

Upcoming Open Houses:
- Mapleshade ES – September 6th
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- East Longmeadow HS – September 27th
- Meadow Brook ES – October 4th & 5th
- ***Volunteers to represent the SBC?***

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- October 19th, 5PM HS Tour, 6PM Forum in HS Cafeteria

Other Updates:
- Website updates in progress
- FAQ's updated
- August Monthly Pamphlet forthcoming
- SLT discussing key community groups to present to

New Business

JWA | SMMA

Thank you!

JWA SMMA

SKANSKA JWA JONES WHITSETT ARCHITECTS In association with SMMA

East Longmeadow HS Building Project

Schematic Design

SBC Meeting – August 24, 2023

AGENDA

1) Welcome and Approval of Minutes
2) Public Participation
3) Skanska Update
4) Design Update
5) Motions/Approvals
   - Vote on Schematic Design Submission
6) New Business
7) Adjourn

SBC Meeting – Aug. 24, 2023 JWA SMMA

Public Participation

JWA SMMA

Design Update

JWA SMMA

Schematic Design Binder

JWA JONES WHITSETT ARCHITECTS
In association with
SMMA

August 15th Submission
Green highlights: Part of Aug 15th submission
Complete Package scheduled for Aug 25th

East Longmeadow High School – Schematic Design
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Project Cost at Preferred Schematic

Summary of Estimated Construction Costs
(Pre-Schematic Design. To be updated at end of Schematic Design.)

	School Project	Pool Project*	Combined
Building Costs – Estimated Trade Costs	~$ 90,000,000	~$ XX,000,000	~$ YYY,000,000
Sitework – Estimated Trade Costs	~$ 17,500,000	~$ X,000,000	~$ YY,000,000
Design Contingency & Escalation	~$ 25,000,000	~$ X,000,000	~$ YY,000,000
General Conditions & Overhead	~$ 15,000,000	~$ X,000,000	~$ YY,000,000
Total Estimated Construction Cost	**~ $ 147,500,000**	**~$ XX,X00,000**	**~$ YYY,Y00,000**
Other Project Costs (Fees, Contingencies, Etc.)	~$ 29,500,000	~$ X,000,000	~$ YY,000,000
Approximate Project Costs	**~$ 177 million**	**~$ 15 million**	**~$ 192 million**
Approximate MSBA Reimbursement	$55 – 57 million	N/A	$55 – 57 million
Approximate Town Costs	**$120 – 122 million**	**$ 14-16 million**	**$ 134 – 138 million**

* Note that the Pool Project has not yet been professionally estimated – as it is not part of the MSBA process.
Pool Project Costs calculated from West Springfield High School pool costs – and applying industry escalation and inflation rates since 2011.

SD Estimates

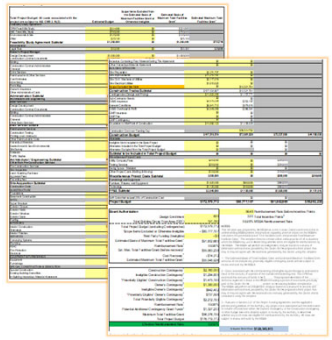
Estimated Construction Costs
Pre & Post Value Engineering

Designer's Estimator (PM&C)	*$155,688,338 (old)* $147,283,566
Owner's Estimator (PCM)	*$154,746,343 (old)* $147,792,248
Average of estimates	*$155,217,341 (old)* $147,537,907

Project Cost at Schematic Design

Total Project Budget Overview
(small changes still possible with MSBA review)

Construction Budget	**$ 147,537,907**
Soft Costs (OPM & A/E & CM Admin, FF&E, Misc. Project Costs)	**$ 25,782,738**
Contingencies (Owner's & Construction)	**$ 4,140,000**
Estimated Total Project Budget	**$ 177,460,645**
Estimated MSBA Max. Total Facilities Grant	**$ 63,145,648**
Anticipated District Share	**$ 114,314,997**



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S1	Add Lighting for Varsity Baseball Field	$ 1,273,490
S2	Add Sports Field Storage Building	$ 46,022
S3	Additional Athletic Field Irrigation Beyond Base Scope	$ 513,026
S4	Provide 650,000sf sod ilo seed for athletic fields	$ 975,051
S5	Athletic Field Netting adjacent to neighboring property	$ 269,112
M1	Ground Source Heat Pump ilo Air Source Heat Pump	$ 9,805,447

Motion

Motion to approve the Schematic Design package and authorize Skanska USA Building as Owner Project Manager to submit to the Massachusetts School Building Authority on behalf of the district.

Seconded _____

Discussion _____

Vote

JWA JONES WHITSETT ARCHITECTS SMMA

Upcoming Milestones

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JWA | SMMA

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New Business

JWA | SMMA

Thank you!

JWA | SMMA