

# Perkins Eastman | *DPC*

## Lowell High School Visioning Summary

December 1, 2016

During October and November of 2016, the Lowell High School Educational Working Group (EWG), a group of approximately 50 Lowell Area Schools (LAS) administrative leaders, and Lowell High School (LHS) teachers, administrators, students, parents, and community partners, participated in three Educational Visioning Workshops run by New Vista Design and Perkins Eastman. Each workshop was a collaborative session designed to inform the LHS design process. Participants were led through a step-by-step visioning process aimed at capturing their best thinking about LAS's/LHS's current and future educational goals and priorities, and connecting them to best practices and possibilities in innovative school facility design.

On **October 14, 2016**, the Lowell High School EWG participated in the first Educational Visioning Workshop. The four-hour workshop explored the following topics:

- **Priority Goals** for the renovated/new facility
- **21st century teaching and learning practices** that are being influenced by digital technology and our changing economy
- **Strengths, Challenges, Opportunities, and Goals (SCOG Analysis)** associated with Lowell High School's current academic program as well as the vision for its new facility
- **21st Century Learning Goals** that distill the group's best thinking with regard to Lowell High School's current and future educational programming and priorities

On **November 1, 2016**, the Lowell High School EWG participated in the second Educational Visioning Workshop. The four-hour workshop explored the following topics:

- **21st Century Design Patterns 1.0** that innovative schools throughout the country have put into practice in order to make their forward-thinking learning goals come alive on the level of facility design
- **Guiding Principles 1.0** for design of the renovated/new facility

On **November 17, 2016**, the Lowell High School EWG participated in the third Educational Visioning Workshop. The four-hour workshop explored the following topics:

- **Blue Sky Ideas** for the renovated/new facility
- **Key Spaces and Adjacencies** for the renovated/new facility
- **Bubble and Adjacency Diagramming** for the renovated/new facility

The following pages offer a summary of notes taken and information gathered during each workshop. If you would like to add comments or ideas to this evolving narrative please contact Dr. Roxanne Howe at [rhowe@lowell.k12.ma.us](mailto:rhowe@lowell.k12.ma.us).

Agendas for each of the three workshops can be found at the end of this document.



## Facility Design Visioning

### Workshop One Notes

Friday, October 14, 2016

## Essential and Cutting Edge LHS Programs

The following list of essential and cutting edge programs at Lowell High School was brainstormed by the Educational Working Group's (EWG).

#### **An increasing number of co-taught classrooms:**

- General Ed and Special Education Teachers in 7 classrooms
- Share responsibilities
- Gives both sets of students collaborative
- Teamwork experiences

#### **Activities outside the classroom include:**

- Internships
- Field studies
- Authentic contexts

#### **Community involvement – both ways**

- I.e. Jeanne D'Arc Credit Union

#### **New Programs Include:**

- Generation citizen – action citizenship
  - Students interact with local businesses to solve community problems
- Tsongas Industrial History Center talks
  - Living history
- Engineering
  - Project Lead the Way
  - PBL – 21<sup>st</sup> century learning and collaboration

#### **Cultural Diversity**

- ELL and Refugees
  - From competency to absorption to diffusion
  - Insight health clinic +/- 1/3 students
  - Food programs
  - International Institute

#### **Lowell Latin Lyceum**

- A gifted and talented program with fewer than 200 students
- Test-in / application
- Cohort model – for 4 years
- All core subjects for first two years
- In Senior year just English

#### **Freshman Academy**

- Important transition
- 8 core teachers > 200 students
- 3 teams of 8 core teachers

#### **Enrichment Programming**

- Fine and performing arts
- Student activities (clubs and student government)
- Athletic programs

#### **STEM Program**

- Engineering
- Maker Space – opened last year
- 9<sup>th</sup> grade revamp
- NGSS – science
- Clean Energy Pathway
- Offer science in pathways
- 120+ students
- Integral course offerings



## Essential and Cutting Edge LHS Programs (continued)

### **Downtown Lowell Activities**

- The Merrimack River
- Boarding House Park
- City Hall
- Monuments
- Volunteer work at Lowell National Historical Park
- School store (expanded location in downtown)
- Sports activities and clubs
  - Crew
- Important transportation links

### **University Partnerships**

- Dual enrollment partnerships (Junior and Senior year)
  - Middlesex Community College (MCC) partnership
  - University of Mass Lowell (UML) partnership

### **Junior Reserve Officer Training Corp (JROTC)**

- Grades 9-12
- Sense of belonging
- EII / SPED / LYCEUM students
- Leadership, integrity, competitiveness

### **Diversity of Curriculum**

- Variety of programs meet student needs and inspire student interest and engagement
- Advanced Placement courses
- Cultural diversity and awareness – flags / programs
- Need to add more languages
- Assist student in priority setting and time management

### **Vocational Offerings**

- Culinary
- Bank
- TV Communications
- Job prep for special needs students
- Local business
- Aiming to meet the needs of the 10-15% of students who will not go on to college

### **Explore notion of “pathways”**

- Course selection
- Capstone projects
- Intern / extern program

### **College and Career Center**

- Naviance (college & careers)
- Part-time work resource
- Resume building





# Facility Design Visioning Workshop One Notes

Friday, October 14, 2016

## SCOG Analysis

The Educational Working Group (EWG) conducted a “SCOG Analysis” of what it sees as the current strengths, challenges, opportunities and goals with regard to Easthampton Public School’s elementary and middle school academic programs and facilities. The EWG is a group of approximately 35 participants that includes Easthampton Public School’s leadership, as well as school administrators, teachers, students, parents and community partners.

The following is a compilation of participants’ responses and ideas.



### STRENGTHS

- Students
- Staff
- Workforce (administration, custodial, health, faculty)
- Community partnerships
- Location (access, connections, academic/business/comm./transportation)
- Academic arc – physical links
- TLT (that Lowell thing)  
“the school is the city / city is the school”
  - Gateway city
  - Belief in public education
  - Vibrant middle class
- School history
- One school community / 2 day schools connected
- Services
- Multi-cultural (diversity)
- Academic choice
- Student support services
- College and Career Center
- Dual enrollment
- Partnerships
- Sense of belonging
- Curricular evolving
- Working with what we have
- Tutoring (can do work before and after school)
- House model
- Extended day hours
- Extra-curricular hours
- Extra-curricular activities
- Scheduling (student-driven)
- Outside agencies
- Co-taught classes
- Breakfast and lunch (free) mobility
- Parking garage
- ASPEN portal + Naviance
- Student involvement
- Advisory time





## Facility Design Visioning

### Workshop One Notes

Friday, October 14, 2016

## SCOG Analysis (continued)



### CHALLENGES

- Rapidity of technology & cultural change
- Multiple buildings & divides
- Physical conditions ... including technology
- Universal design
- Paring (note pay at garage / backups & limited availability)
- Scale of student / teacher
- Diversity / equity
- Schedule (lunch driven) doesn't max student time or account for passing time
- Scheduling
- Number of students vs. space
- Diversity within staff
- Transitional planning for students
- Equity in technology in school
- Lack of technology at home
- Adapting curriculum as technology changes
- Maintaining healthy lifestyle and balance with academics / activities / work
- Parental pressures
- Parental involvement
- Lack of opportunities for movement
- Cultural competence
- Lack of green space
- Students drug and alcohol involvement
- Getting outside agencies into building
- Parking
- More space for tutoring/time to use classrooms
- Use of advisory
- Communication with students
- Size staffing and maintaining communication
- Alternate scheduling
- Website not as user friendly as could be
- Limited time to address multiple needs
- Lunch time schedule
- Lack of time to collaborate
- Current traditional schedule
- Workable classroom spaces / storage space
- Lack of places to display work
- Consistency in houses (house model)
- Extended day coverage/ supervision/ safety
- Lack of marketing/ telling our story
- Antiquated phone system / interior rooms
- Building navigating
- Relationships with students + teacher
- Differentiation – more student voice & choice





# Facility Design Visioning Workshop One Notes

Friday, October 14, 2016

## SCOG Analysis (continued)



### OPPORTUNITIES

- Blank slate (starting project)
- Students
- Constant renewal (people) & continuity of community
- Constant expansion of partnerships
- Create national model (civic, cultural, engagement, global classroom)
- Head & hand / service learning
- More community partnerships into school
- Ability to gather broad and diverse input on school design
- Community involvement / partnerships
- Cultural competency
- Green space
- New layout could provide increased space for
  - Health and wellness center
  - Parent space
  - 3 lunch model
- Time and space for collaboration
- Create more workable classroom space
- An opportunity to think outside the box
- Increase the reputation of LHS and LHS students
- Marketing
- How we can better expand opportunities with the city businesses
- Differentiation for all students and learning styles
- Self examination
- Go green
- Increase collaborative student working spaces – peer work/tutoring
- Classroom set up (a shared space) will encourage collaboration
- Communication with students
- Alternate scheduling
- Website can be used to communicate out
- Increase opportunities for student engagement in activities (Pep Rally's events)

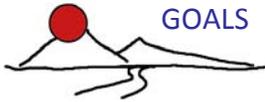




# Facility Design Visioning Workshop One Notes

Friday, October 14, 2016

## SCOG Analysis (continued)



- Equity in supporting whole students
- Minimize educational disruptions
- Flexible / adaptable space
- Transformative renovation (capture great existing space)
- Aesthetic belonging / purpose and functional belonging
- Holistic design
- Visible learning (showcase success and hard work of students)
- Supports experiential learning
- Self directed learning
- Student voice and choice
- Partnerships with community
- Diversity in staff
- Technology equity school / home
- Adapting the curriculum
- Community partnerships/ Family Involvement Center
- Cultural competency
- Green space
- Wellness Center
- Collaboration time
- Workable classroom spaces/storage
- Exhibition spaces
- Extended communal spaces / day
- Positive marketing and visibility
- Way-finding system
- Lunch modification
- Expand co-taught classrooms
- "Go Green"
- Relevance
- Student involvement in policy/planning
- Homework and tutoring during class time
- Common space for students
- Use of advisory
- Communication with advisory/students
- More school spirit/ build morale / positive culture





# Facility Design Visioning Workshop Two Notes

November 1, 2016

## 21<sup>st</sup> Century Learning Goals 2.0

The following set of priority “21<sup>st</sup> Century Learning Goals 2.0” for Lowell High School students was developed based on feedback from the Educational Working Group (EWG). Seven teams of six participants worked to review and edit the Learning Goals 1.0 document that was created during Workshop One, with the resulting reprioritization and grouping of desired Learning Goals.



- **Empathy, Global Perspective and Civic Engagement**

- Cultural Awareness
- Personal, Social and Civic Responsibility
- Awareness of Community and Global Society
- Multi-Cultural Literacy

- **Critical and Inventive Thinking**

- Critical Reasoning and Problem Solving
- Agility, Adaptability and Risk-Taking
- Joy, Curiosity and Imagination
- Motivation and Creativity

- **Communication and Collaboration**

- Oral and Written Communication
- Teamwork and Interpersonal Skills
- Media Literacy and Digital Competence
- Accuracy of Information

- **Real World Interconnectivity**

- Executive and Organizational Skills
- Competency in Core Skills and Content
- Career Preparation and Life Skills
- Vocational Opportunities and Certifications

- **Holistic Awareness**

- Self-Advocacy
- Wellness
- The Natural World





# Facility Design Visioning Workshop Three Notes November 17, 2016

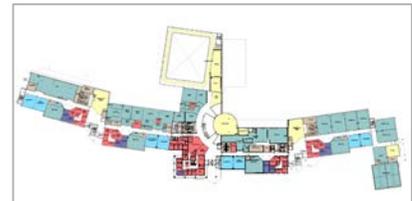
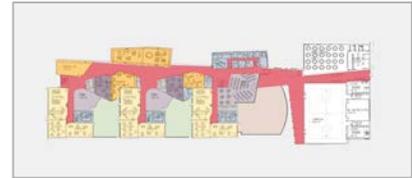
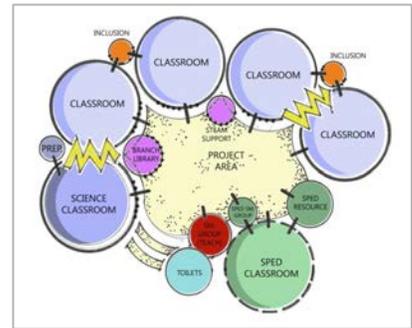
## 21<sup>st</sup> Century Design Patterns 2.0

The following set of priority “21<sup>st</sup> Century Design Patterns 2.0” for the design of the new and/or renovated Lowell High School has been modified from the original list that was developed by the Educational Working Group in Workshop One, based on participants’ comments and suggested changes during Workshop Two.

- **Flexible Everything**
  - Agile and High Performance Classrooms
  - Flexible Furniture
  - Flexible Science Labs and Maker Space
  - Flexible Multi-Purpose Spaces
  - Flexible Performance Spaces
- **Secure and Welcoming Arrival**
- **Community Access**
- **Distributed Dining**
  - Explore as a Possibility
  - Cyber Dining
- **Between Spaces/Commons/Breakout**
- **Civic Presence**
- **Display and Exhibition of Student Work  
(Locker Alternatives)**
- **Clusters of Learning**



- **Special Ed Training Facilities**
- **Athletics**
  - Space for Band and Marching Band
  - Space for ROTC
- **Distributed Resources**
- **Adequate and Flexible Space**
- **Outdoor Space**
- **Teacher Space/Work Stations**
- **Confidential Spaces**
- **Building as Teacher/Sustainability**
- **Enrichment Spaces**
- **Hallway Trafficking**
- **Teacher Teaming**
- **Breaks of Institutional Norms**
  - Soft Seating, Locker Alternatives, Commons Spaces
- **Flexible Storage**
- **Wayfinding**
- **Heart of School**





# Facility Design Visioning Workshop Three Notes

November 17, 2016

## DRAFT Guiding Design Principles 2.0

The following set of priority “Guiding Design Principles 2.0” for the design of the new and/or renovated Lowell High School has been modified from the original list that was developed by the Educational Working Group in Workshop One, based on participants’ comments and suggested changes during Workshop Two.

### A School for Everyone

- A Program and Place for Every Student
- Small School Identity, Big School Pride
- Neighborhoods and Personalization
- Belonging, Identity and Ownership
- Safety and Security
- Ownership and Connection
- Sustainability and Inclusivity
- Centralized Support Services with Personalized House Offices
- Opportunity for ALL Students (Including SPED, ELL)

### Learning by Thinking and Doing

- Real Connections to 21<sup>st</sup> Century Skills
- High Expectations and Personal Responsibility
- Mastery-Based Learning
- Explore, Create, Learn
- Inquiry and Problem-Based
- Real World Connections
- Building as Teacher
- Pathways
- Collaboration
- Clean Energy

### Adaptability and Evolution

- Teaching and Learning
- Curriculum and Scheduling
- Tradition to 21<sup>st</sup> Century and Beyond
- Support of High Quality Programming and Innovation

### Joy, Curiosity and Imagination

- Joyful Environment
- Visible Learning
- Varied Spaces, Including Reflection Spaces
- Empathic Engagement
- Indoor/Outdoor Connections

### Community and Civic Connections

- School as Community Resource
- Community and Civic Connections
- LHS as Part of Fabric of Community
- Incubation Spaces for Local Businesses and Partners
- Community Outreach



# Perkins Eastman | *DPC*

## Lowell High School Programming Summary

December 1, 2016

- Educational Programming is the method by which the existing course offerings, scheduling and room uses are assessed, adjusted for future needs and recalculated to determine the types and number of spaces that are needed. The process occurs in three steps;
  1. **Program Analysis** – we look at the full Master Schedule, uncovering every pupil for every period of a cycle. At the start of the 2016-17 academic year, Lowell had 3125 students scheduled in a 35 period cycle (7 periods/day x 5 days per week), which totals 109,375 pupil-periods. The count of pupil-periods we find must equal the total available to ensure all programs are found and understood. In this case all but .3% of the pupil-periods were identified and well within an acceptable margin of error.
  2. **Program Adjustments** – the adjustments begin with a simple prorated formula to increase all course participation for the design enrollment, in this case 3520 students. During this step we are able to modify (increase or decrease) courses to reflect future changes and can adjust class sizes to match the District's objectives or policies; the number of students programmed into each class determines the number of rooms required for each. No significant changes to courses and class sizes were made.
  3. **Program Requirements** – the final step involves
    - Program requirements are then reconciled into the MSBA Space Summary Template, which is effectively the default size and count of spaces that the State expects to fund. The spaces do not need to align completely and many districts have particular circumstances and needs that do not align. These differences must be justified through programming calculations and/or the Educational Program Narrative (written by the District), not to be confused with programming.
    - After both the Visioning and Programming (and existing conditions assessments) are complete, design studies begin. This is also the point in time when the District will need to refine the MSBA Educational Program Narrative, taking into account the programming calculations, vision/goals and policies/practices of the School.
    - Attached are summary sheet excerpts that provide an overview of Analysis, Adjustments and Requirements. The programming seems to be reasonably in-line with the MSBA guidelines. A few points of interest will be justifying the Pool, Athletic Spaces, Auditorium size, Little Theater & Specialty Programs (Clinic, Bank, Store, Catie's Closet, TRIO, etc).

# **Lowell High School**

**Program Analysis Summary**

**Program Adjustments Summary**

**Program Requirements (Draft)**

# Program Analysis v3

School: Lowell High School Gr 9-12  
 Basis: Existing Enrollment @ 3,125  
 Date: 11/23/2016

**Comparison:**

Subject Area	HAVE acad 2200	TAUNT comp 1963	LOND acad 1710	FITCH comp 1500	WESTB acad 1400	HING acad 1100	DRAC comp 1090	KENN acad 1025	WILM comp 960	<b>Lowell HS exist 3125</b>
English	16.3	14.1	13.6	15.1	15.8	14.3	14.9	14.3	14.4	<b>16.9</b>
[1] Reading	---	---	0.5	0.8	0.2	---	1.9	0.6	1.9	---
Social Studies	15.2	13.9	13.1	11.3	13.5	13.3	13.3	12.0	9.9	<b>13.4</b>
World Languages	12.5	7.6	9.7	7.4	11.2	12.3	9.1	9.0	7.2	<b>8.6</b>
Mathematics	15.0	15.7	12.7	12.4	14.0	14.4	13.8	13.0	11.1	<b>14.0</b>
Science	15.1	13.1	13.9	14.2	14.2	15.4	13.2	14.8	10.2	<b>13.0</b>
[2] Computer Science	---	---	---	0.7	2.6	0.6	2.0	0.6	1.8	---
Business	0.0	9.0	4.8	9.4	2.0	2.1	6.1	5.0	9.4	<b>2.5</b>
[3] Vocational Education	---	---	2.5	---	1.1	0.8	---	5.8	---	---
Technology/Engineering	4.8	4.5	3.6	6.0	4.2	3.6	3.6	---	6.4	<b>0.9</b>
Fam & Cons Sci (Culinary)	1.9	4.5	1.9	2.5	1.0	2.3	1.7	3.5	2.9	<b>0.9</b>
Performing Arts	2.4	2.2	4.0	1.0	6.6	2.6	2.5	2.5	1.6	<b>2.7</b>
[4] Drama/Video	---	---	0.6	0.7	1.4	1.8	1.0	0.5	0.6	---
Visual Arts	3.6	2.0	2.8	3.4	2.6	2.5	2.2	3.5	3.0	<b>2.3</b>
Physical Education	5.7	3.4	4.4	5.7	7.1	3.2	6.0	4.0	8.8	<b>5.5</b>
Health & Nutrition	1.1	1.5	2.5	1.5	1.8	1.2	1.9	2.6	2.4	<b>4.3</b>
[5] SPED/Remedial	0.5	4.1	1.6	1.8	---	3.2	1.8	2.0	1.6	<b>4.8</b>
[6] Miscellaneous	---	2.7	0.3	1.0	0.7	0.0	1.0	1.3	1.0	<b>9.9</b>
Unaccounted (Excess)	---	1.7	---	---	---	---	---	---	---	<b>0.3</b>
Subtotal	94.3	100.0	92.5	94.9	100.0	93.7	96.0	95.0	94.2	<b>100.0</b>
Release			1.3						1.3	---
Study	5.7		6.2	5.1	---	6.3	4.0	5.0	4.5	---
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	<b>100.0</b>

- [1] Where not shown otherwise, Reading courses are included in English.
- [2] Where not shown otherwise, Computer Science courses are included in Mathematics
- [3] Where not shown otherwise, Voc Tech courses are included in Technology Ed.
- [4] **Drama/Video courses are included in Performing Arts**
- [5] **Includes Life Skills programs**
- [6] **Includes Community Service, Internship and Supervised Work Courses**



# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: Freshman ENGLISH

Subject	Course	Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
C/H/HH English	[Reg. CR]	668	24	28.0	5	140.0	
Fresh & Latin Lyceum Sem.	[Reg. CR]	718	24	30.0	5	150.0	
						290.0	8.286
Bal Literacy, Explor in Engl	[Sm Grp]	159	14	11.0	5	55.0	
						55.0	1.571
<b>Total</b>		<b>1545</b>	<b>22</b>	<b>69</b>			<b>9.857</b>

Subject Area: Freshman SOCIAL STUDIES

C/H World History	[Reg. CR]	763	24	32.0	5	160.0	
						160.0	4.571
<b>Total</b>		<b>763</b>	<b>24</b>	<b>32</b>			<b>4.571</b>

Subject Area: Freshman MATHEMATICS

Math Sem, Trans/Topics Alg	[Reg. CR]	86	14	6.0	5	30.0	
C/H Algebra, Geometry	[Reg. CR]	630	24	26.0	5	130.0	
						160.0	4.571
<b>Total</b>		<b>716</b>	<b>22</b>	<b>32</b>			<b>4.571</b>

Subject Area: Freshman SCIENCE

C/H Integrated Science	[Sci Lab]	705	24	29.0	5	145.0	
Explor in Integrated Science	[Sci Lab]	68	14	5.0	5	25.0	
						170.0	4.857
<b>Total</b>		<b>773</b>	<b>23</b>	<b>34</b>			<b>4.857</b>

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: ENGLISH

Subject	Course	Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
C/H/A English Gr 10, 11, 12	[Reg. CR]	2141	24	88.0	5	440.0	
Various C/H Engl Crs Gr 11, 12	[Reg. CR]	394	24	16.5	5	82.5	
						522.5	14.929
Bal Lit, SAT Prp & Eng 0121,2	[Sm. Grp]	77	13	6.0	5	30.0	
						30.0	0.857
<b>Total</b>		<b>2612</b>	<b>24</b>	<b>110.5</b>			<b>15.786</b>
		4157	23	179.5			

Subject Area: SOCIAL STUDIES

C/H/A US Hist Gr 10, 11, 12	[Reg. CR]	1650	24	68.0	5	340.0	
Intro to Econ/US Gov & Politic	[Reg. CR]	85	21	4.0	5	20.0	
C/H/A Soc, Psych, Philosophy	[Reg. CR]	751	24	31.0	5	155.0	
						515.0	14.714
Educ in Am, Topics in US Hist	[Sm. Grp]	12	12	1.0	5	5.0	
Gender & Iden, Digital Journal	[Sm. Grp]	44	15	3.0	5	15.0	
						20.0	0.571
<b>Total</b>		<b>2542</b>	<b>24</b>	<b>107.0</b>			<b>15.286</b>
		3305	24	139.0			

Subject Area: WORLD LANGUAGE

Latin Gr. 9-12	[Reg. CR]	177	25	7.0	5	35.0	
French Gr. 9-12	[Reg. CR]	339	24	14.0	5	70.0	
Spanish Gr. 9-12	[Reg. CR]	1094	24	45.0	5	225.0	
Portuguese Gr. 9-12	[Reg. CR]	94	19	5.0	5	25.0	
Khmer Gr. 9-12	[Reg. CR]	278	23	12.0	5	60.0	
						415.0	11.857
Latin Gr. 9-12	[Sm. Grp]	27	14	2.0	5	10.0	
French Gr. 9-12	[Sm. Grp]	15	15	1.0	5	5.0	
Spanish Gr. 9-12	[Sm. Grp]	43	14	3.0	5	15.0	
Khmer Gr. 9-12	[Sm. Grp]	46	15	3.0	5	15.0	
						45.0	1.286
<b>Total</b>		<b>2113</b>	<b>23</b>	<b>92.0</b>			<b>13.143</b>

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: MATHEMATICS

Subject	Course Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
SAT Prep, C/H Algebra, Geom [Reg. CR]	2503	24	103.0	5	515.0	
Intr Stats, Disc Mth, Fund Calc [Reg. CR]	112	14	8.0	5	40.0	
					555.0	15.857
Sm. Courses/Indep. Study [Comp CR]	96	24	4.0	5	20.0	
					20.0	0.571
Sm. Courses/Indep. Study [Sm. Grp]	24	12	2.0	5	10.0	
					10.0	0.286
<b>Total</b>	<b>2735</b>	<b>23</b>	<b>117.0</b>			<b>16.714</b>
	3451	23	149.0			

Subject Area: SCIENCE

MCAS Bio Prep, Princ of Bio [Sci Lab]	44	15	3.0	5	15.0	
C/H/A Bio, Expl in Bio Gen Bio [Sci Lab]	809	24	34.0	5	170.0	
Anat/Physio/Forens/MicroBio [Sci Lab]	462	24	19.0	5	95.0	
Genetics [Sci Lab]	83	24	3.5	5	17.5	
					297.5	8.500
C/H Chemistry [Sci Lab]	513	24	21.0	5	105.0	
A Chemistry [Sci Lab]	34	17	2.0	5	10.0	
					115.0	3.286
H/A Physics [Sci Lab]	236	24	10.0	5	50.0	
Partnership Experience [Sci Lab]	9	9	1.0	5	5.0	
Geolo/Meteor/Ocean/Astron [Sci Lab]	206	24	8.5	5	42.5	
Clean Energy Career Explor [Sci Lab]	17	17	1.0	5	5.0	
Environmental Studies [Sci Lab]	20	20	1.0	5	5.0	
					107.5	3.071
<b>Total</b>	<b>2433</b>	<b>23</b>	<b>104.0</b>			<b>14.857</b>
	3206	23	138.0			

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: **BUSINESS**

Subject	Course	Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
Google, Acctg, Pers Fin, Law	[Comp CR]	295	24	12.5	5	62.5	
C/H Mktg & Entrepreneur	[Comp CR]	262	24	11.0	5	55.0	
Intro to Financial Services	[Comp CR]	16	2	7.0	5	35.0	
Retail Marketing	[Comp CR]	53	11	5.0	5	25.0	
		1	1	1.0		177.5	5.071
<b>Total</b>		<b>627</b>	<b>17</b>	<b>36.5</b>			<b>5.071</b>

Subject Area: **ENGINEERING**

Intro Engr, Arch Dsgn, Robot	[Engr Lab]	191	24	8.0	5	40.0	
Princ of Eng, Intro to Engr	[Engr Lab]	35	12	3.0	5	15.0	
						55.0	1.571
<b>Total</b>		<b>226</b>	<b>21</b>	<b>11.0</b>			<b>1.571</b>

Subject Area: **FACS/CULINARY**

Melting Pot, Regional Cuisine	[Cul CR]	135	25	5.5	5	27.5	
						27.5	0.786
Culinary Arts Beginner	[Kitch/Restaur]	37	19	2.0	5	10.0	
Culinary Arts Interm/Adv.	[Kitch/Restaur]	10	10	1.0	5	5.0	
						15.0	0.429
<b>Total</b>		<b>182</b>	<b>21</b>	<b>8.5</b>			<b>1.214</b>

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: PERFORMING ARTS

Subject	Course	Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
Band	[Band Rm]	69	69	1.0	5	5.0	
W of Drums, Beg/Adv Guitar	[Band Rm]	41	14	3.0	5	15.0	
						20.0	0.571
Show Choir	[Chor Rm]	70	70	1.0	5	5.0	
Concert Chorus, Intro Thtr Arts	[Chor Rm]	61	20	3.0	5	15.0	
						20.0	0.571
String Ensemble, Begin Piano	[Ens/MIDI]	83	14	6.0	5	30.0	
						30.0	0.857
Dance Modern & Jazz Tech	[Dance]	342	26	13.0	5	65.0	
						65.0	1.857
<b>Total</b>		<b>666</b>	<b>25</b>	<b>27.0</b>			<b>3.857</b>

Subject Area: VISUAL ARTS

Art Exploration	[2D/Studio]	24	12	2.0	5	10.0	
						10.0	0.286
Intro to Art Studio	[3D/2D/Studio]	156	22	7.0	5	35.0	
						35.0	1.000
Digital Photo/Animation	[PC Art Lab]	208	23	9.0	5	45.0	
						45.0	1.286
Intro/Adv Graphic Design	[Graphic Lab]	124	23	5.5	5	27.5	
TV Prod, Adv TV Prod	[Graphic Lab]	51	11	4.5	5	22.5	
						50.0	1.429
<b>Total</b>		<b>563</b>	<b>20</b>	<b>28.0</b>			<b>4.000</b>

Subject Area: PE & HEALTH

Physical Education Gr. 7-8	[Gym]	1359	24	56.0	5	280.0	
						280.0	8.000
Health Ed, Med Term & Body	[Reg. CR]	1039	24	43.0	5	215.0	
Senior Externship	[Sm Grp]	10	20	0.5	5	2.5	
						217.5	6.214
<b>Total</b>		<b>2408</b>	<b>24</b>	<b>99.5</b>			<b>14.214</b>



# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

Subject Area: MISCELLANEOUS

Subject	Course	Enrollments	Class Size Avg.	Number of Sections	Sessions per Cycle	Total Sessions in Cycle	Teaching Stations Needed
ELL Begin Engl Language	[Reg. CR]	315	20	16.0	5	80.0	
ELL Supp Engl Lang Dev	[Reg. CR]	246	19	13.0	5	65.0	
ELL Pronun & Vocab	[Sm Grp]	11	11	1.0	5	5.0	
ELL Reading, Lit of Math	[Sm Grp]	18	9	2.0	5	10.0	
						160.0	4.571
ELL Intro to Math, Alg, Geom	[Reg. CR]	310	22	14.0	5	70.0	
ELL Algebra 2	[Sm Grp]	9	9	1.0	5	5.0	
						75.0	2.143
ELL Intro to S Studies, W. Hist	[Reg. CR]	310	24	13.0	15	195.0	
						195.0	5.571
ELL Integrated Science	[Reg. CR]	91	23	4.0	5	20.0	
ELL Biology	[Reg. CR]	152	25	6.0	5	30.0	
ELL Chemistry	[Reg. CR]	41	21	2.0	5	10.0	
						60.0	1.714
ROTC Aviation History	[Reg. CR]	359	24	15.0	5	75.0	
ROTC Mgmt/Cadet Corps, Flt Cmd	[Sm Grp]	72	4	18.0	5	90.0	
						165.0	4.714
Upward Bound	[Sm Grp Suite]	46	9	5.0	15	75.0	
						75.0	2.143
Modified Day	[No Space Req'd]	17	9	2.0	5	10.0	
						10.0	0.286
Report to Guidance	[No Space Req'd]	104	10	10.0	5	50.0	
						50.0	1.429
<b>Total</b>		<b>2101</b>	<b>17</b>	<b>122.0</b>			<b>22.571</b>

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

## Summary A: Regular Academic Classrooms

Department	Demand at 100% Utilization			Adjusted Total		Provide		
	Regular	Sm. Group	Total		Utilization @ 85%	Regular	Sm. Grp.	Total
Freshman ENGLISH	8.286	1.571	9.857		11.597	10	2	12
	some classes @ 16-18							
Freshman SOCIAL STUDIES	4.571	0.000	4.571		5.378	5	0	5
Freshman MATHEMATICS	4.571	0.000	4.571		5.378	5	0	5
Freshman SCIENCE	----		----		----	See Summary B		
<b>Total Freshman CRs</b>	<b>17.429</b>	<b>1.571</b>	<b>19.000</b>		<b>86%</b>	<b>20</b>	<b>2</b>	<b>22</b>
ENGLISH	14.929	0.857	15.786		18.571	18	1	19
SOCIAL STUDIES	14.714	0.571	15.286		17.983	18	0	18
	some classes @ 16-18							
WORLD LANGUAGE	11.857	1.286	13.143		15.462	16	1	17
MATHEMATICS	16.429	0.286	16.714		19.664	20	0	20
						1 for Comp Science		
SCIENCE	----		----		----	See Summary B		
BUSINESS	----		----		----	See Summary B		
ENGINEERING	----		----		----	See Summary B		
FACS/CULINARY	----		----		----	See Summary B		
PERFORMING ARTS	----		----		----	See Summary B		
VISUAL ARTS	----		----		----	See Summary B		
PE & HEALTH	----		----		----	See Summary B		
PE & HEALTH	6.214	0.000	6.214		7.311	7	0	7
SPECIAL EDUCATION	----		----		----	See Summary B		
MISCELLANEOUS	----		----		----	See Summary B		
<b>Total Gr 10, 11, 12 CRs</b>	<b>64.143</b>	<b>3.000</b>	<b>67.143</b>		<b>83%</b>	<b>79</b>	<b>2</b>	<b>81</b>

\* Misc. classroom to be sub-divided with operable wall for flexibility as 2 small group or full size classroom

# Program Requirements v1 (DRAFT CALCULATIONS)

Perkins Eastman/DPC

School: LOWELL HIGH SCHOOL Gr. 9-12  
 Basis: Proposed @ 3520 Per/Cycle: 35  
 Date: 11/23/2016

## Summary B: Specialized Teaching Stations

Department & Space	Provide	Utilization Rate (%)	Department & Space	Provide	Utilization Rate (%)
<b>SCIENCE</b> [Sci Lab]			<b>SPECIAL EDUCATION</b>		
Freshman (Integrated Sci)	6	81%	<u>Fundamentals Program</u>		
Biology/Physio/Anatomy	12	71%	- Fund Gr 9 [Sm Grp]	2	71%
Chemistry	4	82%	- Fund Gr 10, 11, 12 [Sm Grp]	6	86%
Phys/Foren/Env/Astron	4	77%	- Instructional Supp [Lg CR]	3	67%
	26	76%	<u>Adjustments Program</u>		
Green House	2	n.a.	- Adjust Gr 9 [Reg CR]	2	71%
Maker Space	1	n.a.	- Adjust Gr 10, 11, 12 [Reg CR]	6	81%
			- Storage (Different Instruct)	1	n.a.
<b>BUSINESS</b> [Comp CR]	6	85%	- Social Worker	1	n.a.
School Store	1	n.a.	- Counseling Room (for10)	1	n.a.
Bank	1	n.a.	<u>Life Skills Program</u>		
			- Intensive SPED [CR w/ Tlt]	1	71%
<b>ENGINEERING</b> [Engr Lab]	2	79%	- Sensory Room (w/ intensive)	1	n.a.
			- CSA/Autism [CR w/ Tlt]	4	68%
<b>FACS/CULINARY</b> [CR+Restaur]	2	61%	- Life Skills Labs [CR+Kitch]	4	71%
			- Media & Mail Room	1	n.a.
<b>PERFORMING ARTS</b>			- Laundry/Folding Room	1	n.a.
Band	1	57%	- Hygene (Wash/Chng'g Rm)	1	n.a.
Chorus	1	57%	- Life Skills PE / SPED PE	2	57%
Ensemble/MIDI	1	86%	OT/PT	1	n.a.
Dance	2	93%	Deaf/HI Office (Suite)	1	n.a.
	5	77%	Speech Specialist & Asst	1	n.a.
			Social Worker	2	n.a.
<b>VISUAL ARTS</b>	7				
Art Expl/Studio (2D & 3D)	2	79%	<b>MISCELLANEOUS</b>		
Digital Photo/Animation	2	71%	ELL - English/Reading	5	91%
Graphic Dsgn/TV Prod	2	71%	ELL - Math	3	71%
	6	67%	ELL - Social Studies	7	80%
			ELL - Science	2	86%
<b>PE &amp; HEALTH</b>			ROTC	6	79%
PE Teaching Stations	10	80%		23	91%
Health/Wellness CRs	See Summary A				
			Upward Bound	3	71%
<b>MEDIA CENTER</b>	1	n.a.	Modified Day & Report to Guid	No Space Req'd	
Computer Lab	1	incl. abv.			
Sm Group/Meeting	1	incl. abv.	<b>OTHER UNASSIGNED SPACES</b>		
			Security/SRO offices	2	n.a.
<b>AUDITORIUM</b>			Student Publishing	1	n.a.
Stage	1	n.a.	Student Government	1	n.a.
Control Room	1	n.a.	Teen Center	1	n.a.
Dressing Rooms	1	n.a.	Health Clinic	1	n.a.
			Caties Closet	1	n.a.
			Little Theater	1	n.a.
			TV Studio Suite	1	n.a.

# Perkins Eastman | *DPC*

## Lowell High School User Group Summary

December 1, 2016

- Full Day Sessions on 11/15 & 11/16 with 17 Groups to discuss big picture overview of each program, space requirements, adjacencies, educational aspirations and trends.
- Focus Groups included:
  1. Safety & Security
  2. Health & Bioscience Pathway
  3. Freshman Academy
  4. ELL/Foreign Language
  5. Wellness/Physical Education
  6. ROTC
  7. Student Support Services
  8. Athletics
  9. Custodial
  10. Business/Culinary Pathways
  11. Special Education
  12. Fine Arts
  13. Humanities
  14. STEM
  15. Food Service
  16. Communications Pathway & Library media Center
  17. Outside Programs (Gear-Up, Health Clinic, Catie's Closet, Jeanne D'Arc Credit Union)
- Ongoing interactive process with 3-4 future meetings as design develops.

# Perkins Eastman | *DPC*

## Lowell High School Design Options

December 1, 2016

1. Base Repair - See Attached Scope Summary
2. Full Renovation w/ Small Addition (requires creation of Academic swing space)\*
  - 2A. Renovate available space in nearby building(s) for  $\frac{1}{4}$  population?
  - 2B. Relocate  $\frac{1}{4}$  population into other schools?
  - 2C. Create Temporary/Modular CRs using portion of F. Morissette Blvd?)
  - 2D. Create Temporary/Modular CRs via use of upper Garage Level
  - 2E. Other
3. Renovation w/ Rebuild of FA, Gym and Portion of Lord Building (requires temp PE/Athletics)
  - 3A. Temporary Gymnasium(s) via use of upper Garage Level
  - 3B. PE/Athletic programs off-site for 1yr (use nearby Arena, Gyms, Pools?)
  - 3C. Other?
4. Renovation w/ Rebuild of FA, Gym Building and  $\frac{1}{2}$  Lord Building (requires temp PE/Athletics)  
(See Swing Space Options Above)
5. All New Construction (existing site)  
(See Swing Space Options Above)
6. All New Construction (new site)

# Perkins Eastman | *DPC*

## Lowell High School Base Repair Project Scope

November 21, 2016

1. HC Accessible Ramps
2. Masonry veneer replacement at Field House
3. Replacement of all exterior sealants
4. Replacement of all windows
5. Replacement of all exterior doors
6. Replacements of all roofs (except Coburn Hall)
7. Modification of existing interior walls for accessibility
8. Modifications to existing science rooms for accessibility
9. Replacement of selective doors for accessibility
10. Replacement of all hardware locksets
11. Replacement of selective toilet rooms for accessibility
12. Replacement of shower rooms for accessibility
13. Paint all interior walls
14. Replace all floor finishes
15. Replace all ceilings
16. Renovate all stairs for accessibility
17. Replace and add elevators for accessibility
18. Add HC lifts for accessibility
19. Replace Plumbing system
20. Replace HVAC Systems
21. Replace electrical systems
22. Replace fire protection system
23. Replace casework
24. Hazmat abatement
25. Replace concrete sidewalks and entry
26. Replace granite curbing
27. Replace bituminous paving
28. Replace catch basins
29. Separate sanitary and storm water system for future connection by city
30. Provide some level of storm water infiltration
31. Replace all utilities
32. Provide site lighting

**Base Repair**

		FS Cost Estimate		
Gross Floor Area (sf) =			628,000	
		Element (\$)	\$/sf	
<b>A Substructure</b>		226,905	0.36	
A10 Foundations		226,905	0.36	
Special Foundations		0	0.00	
Slab on Grade		0	0.00	
<b>B Shell</b>		17,602,978	28.03	
B10 Superstructure		2,959,569	4.71	
B20 Exterior Closure		6,055,060	9.64	
B30 Roofing		8,588,349	13.68	
<b>C Interiors</b>		19,923,777	31.73	
C10 Interior Construction		7,401,877	11.79	
C20 Stairs		1,801,578	2.87	
C30 Interior Finishes		10,720,322	17.07	
<b>D Services</b>		67,552,964	107.57	
D10 Conveying Systems		477,962	0.76	
D20 Plumbing		9,897,224	15.76	
D30 HVAC		26,295,941	41.87	
D40 Fire Protection Systems		4,035,314	6.43	
D 50 Electrical Systems		26,846,523	42.75	
<b>E Equipment and Furnishings</b>		6,072,937	9.67	
E10 Equipment		4,298,015	6.84	
E 20 Furnishings		1,774,922	2.83	
<b>F Special Construction and Demolition</b>		8,084,276	12.87	
F20 Selective/Building Demolition		8,084,276	12.87	
F20 Asbestos Abatement (in demo)		0	0.00	
<b>Sub Total Building Cost</b>		<b>119,463,837</b>	<b>190.23</b>	
<b>G Building Sitework</b>		1,759,863	2.80	
G10 Site Preparation		293,707	0.47	
G20 Site Improvements		336,156	0.54	
G30 Site Civil/Mechanical Utilities		457,000	0.73	
G40 Site Electrical Utilities		673,000	1.07	
<b>Sub Total Construction</b>		<b>121,223,700</b>	<b>193.03</b>	
General Conditions		10.50%	12,728,489	20.27
General Requirements		1.00%	1,212,237	1.93
Design / Bidding Contingency		15.00%	20,274,664	32.28
CM Contingency		3.00%	4,663,173	7.43
Escalation (2.4%/yr. til Jun. 2021)		11.72%	18,217,461	29.01
Bonds		1.00%	1,783,197	2.84
GMP Insurance		0.95%	1,694,037	2.70
CM Fee		2.50%	4,341,414	6.91
<b>Estimated Total Construction Cost</b>		<b>186,138,372</b>	<b>296.40</b>	
FF&E			8,448,000	13.45
Soft Cost		20%	37,227,674	
<b>Estimated Total Project Cost</b>		<b>231,814,046</b>	<b>369.13</b>	2,400 per student





## Lowell High School Project Site Selection Analysis

Most Favorable 
 Favorable 
 Less Favorable 
 Unfavorable 
 Y=Yes N=No

Site	Acreage +/-	Usable Acreage +/-	Proximity to Public Transportation	Proximity to Parking and/or Garage	Eminent Domain Required	Utilities Available Y/N	Entirely Within Lowell City Limits	Proximity to Public Services in Miles (50 Arcand Dr.)	Sidewalks	Potential Environmental Issues	Land Use Restrictions	Historical Significance	Wetlands Y/N	Flood Plain	Zoning
<b>Existing HS Location</b> 50 Father Morissette Blvd.	6	6	Central Bus Hub	Ayotte Garage, John St. Garage	N	Y	Y	0	Y	Y	None known	Y	Y	N	Downtown Mixed Use (DMU)
<b>Cawley Stadium</b> 364 Douglas Rd.	45 +/-	31 +/-	Local Bus Routes	On Site	N	Y	Portions at Clark Rd. in Tewksbury	2.6	Rogers St.-Yes, Douglas Rd.-No	Potential Endangered Species	Title Review Req'd	Y	Y	Y	Regional Retail & Single Family (RR & SSF)
<b>Wang MS/LeBlanc Park</b> 475 West Meadow Rd.	56	31	Local Bus Routes	Limited existing	N	Y	Y	2.3	Y	Former Hospital Site	None known	N	Y	Y	Single Family (SSF)
<b>South Common Park</b> 171 South St.	20	2.3	Bus Routes, Train Terminal	Central & Early Garages, On Site	N	Y	Y	0.9	Y	None known	Article 97 Open Spaces	Y (Public Park)	N	N	Traditional Multi-Family (TMF)
<b>Regatta Field</b> 381 Pawtucket Blvd.	23	19	Local Bus Routes	N	Owned by MassDOT	Y	Y	2.4	Y	None known	None known	Y (Public Greenspace)	Y	Y	Single Family (SSF)
<b>Rollie's Farm</b> 1415 Varnum Ave.	11.18	11.18	Local Bus Routes	N	Y	Y	Y	3.8	Y	Potential Endangered Species	Ch. 61A Farmland Restrict.	N	Y	N	Single Family (SSF)
<b>Carlisle St.</b> 0 Carlisle St. Chelmsford	14	10	Local Bus Routes	N	N	Y	Entire lot in Chelmsford	2.5	N	Potential Endangered Species	None known	N	Y	N	Public Educational & Municipal (P)

# Existing High School

## Pros:

- Proximity to Services
- Walking/Bus Proximity
- Existing Parking
- City Owned

## Cons:

- Potential Environmental Issues
- Limited Site Size

1996

Imagery Date: 5/10/2016 42°38'49.81" N 71°18'39.27" W elev 92 ft eye alt 1041 ft

Boundary lines are for presentation purposes.

Maps are unofficial unless stamped/logged/certified by City Assessor.



# Cawley Stadium

Tewksbury

- Pros:
- Usable Acreage (31 acres)
  - City Owned

- Cons:
- Proximity to Services
  - Walking/Bus Route Proximity

Boundary lines are for presentation purposes.  
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# South Common

## Pros:

- Proximity to Services
- Walking/Bus Proximity

## Cons:

- Land Use Restrictions
- Usable Acreage (2.3 acres)

1995

Imagery Date: 5/10/2016 42°38'14.62" N 71°18'44.01" W elev 121 ft eye alt 1538 ft

Boundary lines are for presentation purposes.

Maps are unofficial unless stamped/logged/certified by City Assessor.



# Regatta Field

Wetlands

**Pros:**  
- Usable Acreage (19 acres)

**Cons:**  
- Flood Plain  
- Owned by MA DOT  
- Wetlands Divide Site  
- Proximity to Services

1995

Imagery Date: 5/10/2016 42°38'31.24" N 71°20'58.74" W elev 96 ft eye alt 1953 ft

Boundary lines are for presentation purposes.  
Maps are unofficial unless stamped/logged/certified by City Assessor.

# Rollie's Farm

## Cons:

- Usable Acres (11.18 acres)
- Privately Owned
- Proximity to Services
- Walking/Bus Route Proximity

## Pros:

- Zoning

© 2016 Google

Imagery Date: 5/10/2016 42°39'03.97" N 71°22'31.72" W elev 161 ft eye alt 2041 ft

Boundary lines are for presentation purposes.

Maps are unofficial unless stamped/logged/certified by City Assessor.

# Carlisle Street

Wetlands

Wetlands

## Pros:

- City Owned
- Usable Acreage

## Cons:

- Lot is in Chelmsford
- Proximity to Services
- Walking/Bus Proximity

1995

Imagery Date: 5/10/2016 42°36'46.96" N 71°18'32.46" W elev 128 ft eye alt 1349 ft

Boundary lines are for presentation purposes.

Maps are unofficial unless stamped/logged/certified by City Assessor.

# Perkins Eastman | *DPC*

## Lowell High School

## Neighborhood /Community Meeting Summary

December 1, 2016

- **The focus of each meeting:**
  1. Identify Project team: City Manager's Office, School Building Committee, Lowell High School, Skanska, PE + Consultants
  2. Overview of MSBA & Process/Reimbursement
  3. Feasibility Study: Schedule/Decisions/Deliverables
  4. What we have learned so far: uniqueness of Lowell and history, LHS diverse over 40 countries represented, 1<sup>st</sup> coed high school in the country. ELL Influx, Career Pathways, City / History Ties
  5. Existing Conditions: school has exceeded useful life, systems are not energy efficient and cost money, some code/accessibility non-compliance, do not support 21<sup>st</sup> century education to provide competitive education for students
  6. Looking for community involvement & input
  7. Community Involvement via: additional meetings, website, questions to City Manager
  
- **Meetings:**
  1. 10/17: Centralville Neighborhood Action Group w/ Centralville Community Coalition
  2. 11/7: Pawtucketville Citizens Council w/ East Pawtucketville Citizens Group
  3. 11/9: Belvidere Residents Council w/ Sacred Heart Neighborhood Improvement Group, Riverside Community Council & Back Central Neighborhood Association
  4. 11/14: Highlands Neighborhood Association w/ Lower Highlands Neighborhood Group, Cupples Square Business & Residents Association, Friends of Taylor Park
  5. 11/28: Lowell Downtown Neighborhood Association w/ Jackson Appleton Business Resident Association & Acre Coalition to Improve our Neighborhoods
  6. 12/8: Community Meeting @ LHS Auditorium 6:30.
  
- **The primary questions/discussion(s) focused on:**
  1. Where school will be located?
  2. Is the building going to be flexible/adaptable for the future (50+ years)?
  3. Traffic implications?