Manchester Memorial Elementary School
Feasibility Phase

SBC MEETING #7

8/29/2017

TODAY'S AGENDA

Project Update

Educational Programming

Site Understanding

TODAY'S AGENDA

Project Update

Project Schedule/ Work Plan Updated

MSBA's 2018 FAS/ BOD Meeting Dates Posted

PDP Submission – No Change

Submit Nov 9th

PSR Submission – 4 Weeks Earlier

Submit Feb 21st

Schematic Design – 2 Weeks Later

Submit July 11th

Project Schedule/ Work Plan Updated

- *Increases the Time Spent in Schematic Design (6 wks)*

- *No Notable Impact to the Final SD Approval*
  ✓ *1 Week Later*

Project Schedule/ Work Plan Updated

- *Community Meeting #1 - Scheduled:*

✓ *Two Meetings on October 4th: 9am & 7pm*

- *Educational Visioning Session 1 – TBD*

✓ *3 Possible dates in Consideration*

- *FAS Dates Added*

Existing Conditions Assessments

- *Existing Documentation Gathered*
  - ✓ *Existing Drawings*
  - ✓ *2006 Geotech Report*
  - ✓ *2006 Traffic Study*
  - ✓ *200 Safe Routes Report*
  - ✓ *2005 Site Selection Study*
  - ✓ *2017 AHERA Report*
  - ✓ *2013 Habeeb Report*
  - ✓ *…and more*

Existing Conditions Assessments

- *Building and Site Assessments*

✓ *Property Visited by Design Team 8/21 and 8/24*

✓ *Architectural*

✓ *MEP/FP/T*

✓ *Site/ Civil*

✓ *Structural*

✓ *HazMat*

Existing Conditions Assessments

- *Geotechnical Investigation*

✓ *Conservation Agent Reviewed Operations*

✓ *8 Borings Drilled 8/21 – 8/23*

✓ *One Observation Well Installed*

✓ *Initial Findings Falling in Line with Expectations*

✓ *Preliminary Geotech Report Pending*

Educational Planning Leaders Meeting 8/21

- ✓ *David Stephen Outlines Process*
- ✓ *General Discussion About MSBA Requirements*
- ✓ *District Priorities*
- ✓ *Goal Setting*

August 29, 2017






Manchester Essex Regional School District

ENVISIONING THE NEW MANCHESTER MEMORIAL ELEMENTARY SCHOOL

newvistadesign

JCJARCHITECTURE

New Vista Background and Experience

5 years

Architect

- 100+ Schools
- Public Independent Charter
- Publications

15 years

Educator

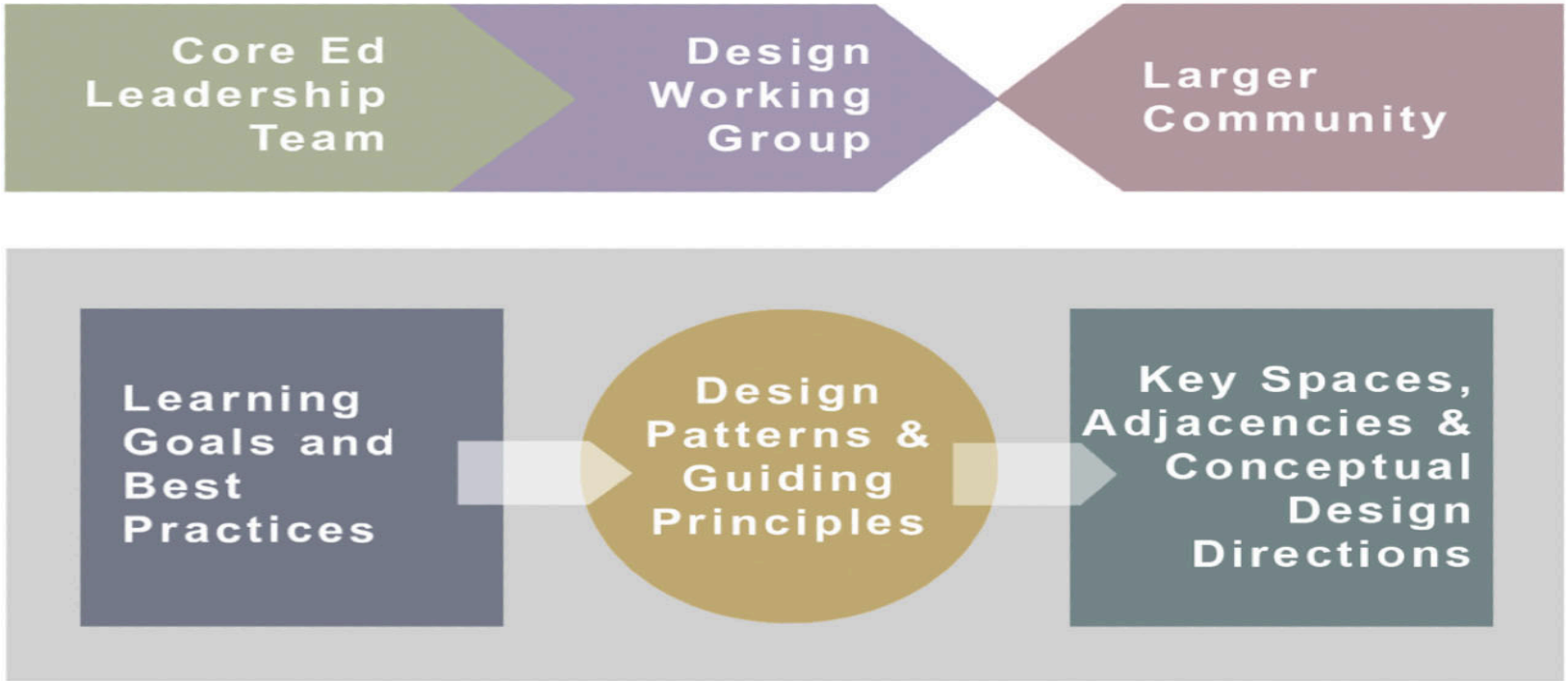
- Teacher
- Researcher
- Curriculum Coordinator
- HGSE – LEFT
- HTHGSE

12 years

School Designer

- 21st Century Schools
- Project-Based Learning
- STEM/STEAM/CTE
- Design Thinking

The Visioning Process



Visioning Options Overview

8.21.17 Meeting with ELT

- 21st Century Learning Goals and Outcomes
- SCOG Analysis
- District/School Deep Dive
- Design Patterns
- Guiding Principles
- Bubble Diagramming

Developing a Narrative

- Shared language about educational and design priorities
- Thorough exploration of design needs and goals
- Understanding of how to best optimize the MSBA template
- Illustrations of key spaces and desired adjacencies
- Language that adds depth to your Ed Plan and helps you to describe and advocate for your design needs

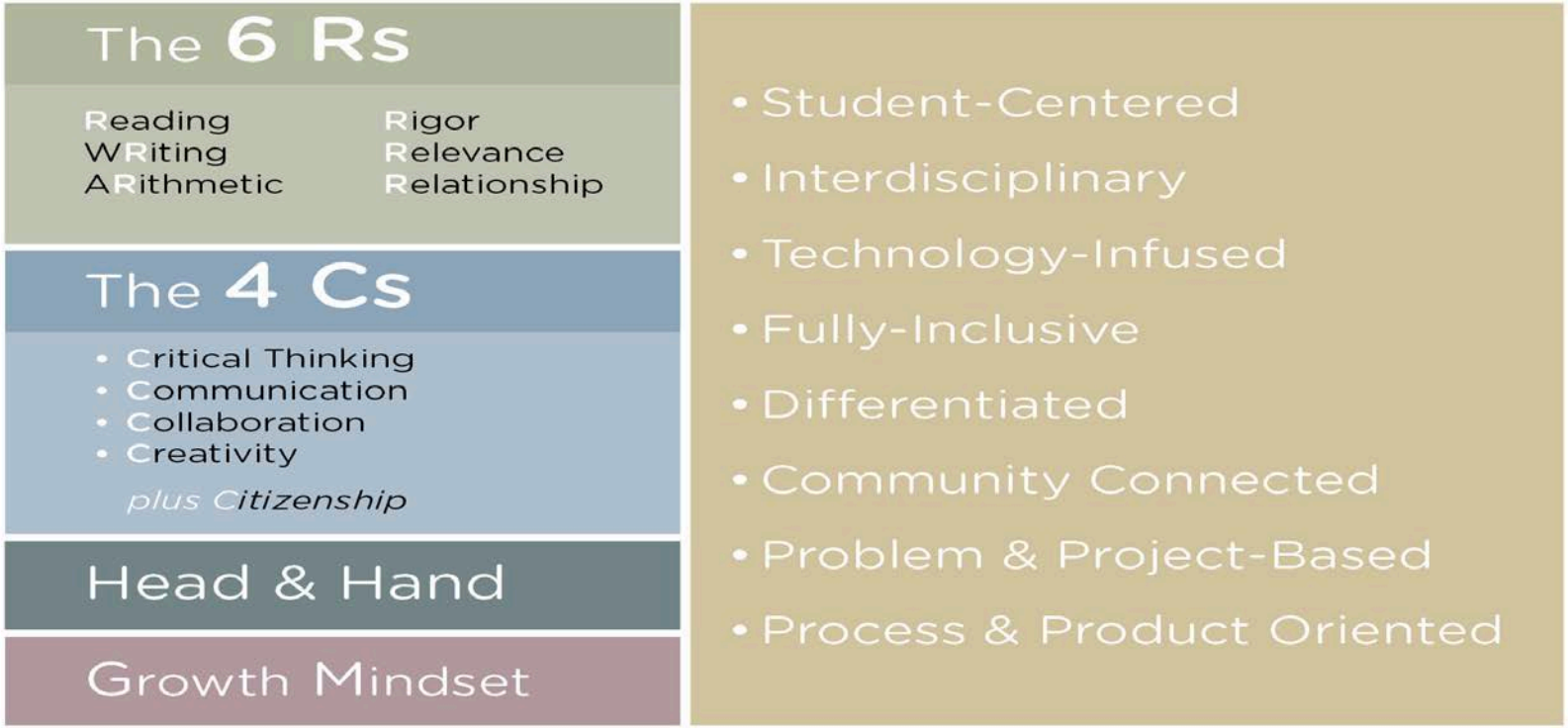
Honoring Core Values

- **Whole Child**
- **Student Achievement**
- **Climate**
  - **Challenging Standards**
  - **Differentiated Instruction**
- **Community Partnerships**
- **Resources**

MERSD

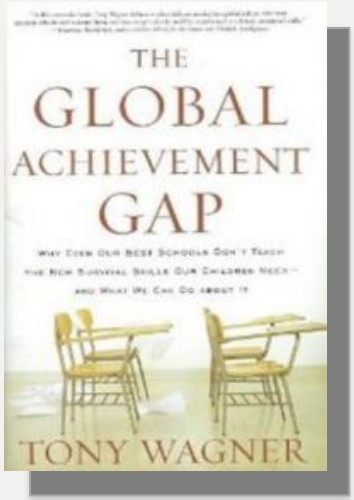
- Elementary Foreign Language
- Integrated Pre-K
- Before and After School Programming
- SWING Program
- Middle School Engineering
- Project Adventure
- FIRST Robotics
- ASR -Authentic Science Research
- Nationally Recognized Debate Team
- Award Winning Drama Program
- Green Team & Green Scholars

21st Century Teaching and Learning



Focus on Doing not Knowing

The world no longer cares about how much you know, the world cares about what you can do with what you know – *Tony Wagner*



- Critical Thinking and Problem Solving
- Communication, oral and written
- Collaboration and Leadership
- Creativity, Curiosity and Imagination
- Accessing and Analyzing Information
- Initiative and Entrepreneurialism
- Agility and Adaptability

Focus on Learning NOT Teaching

- High-performance work environments
- Varied and collaborative
- Lifelong learning

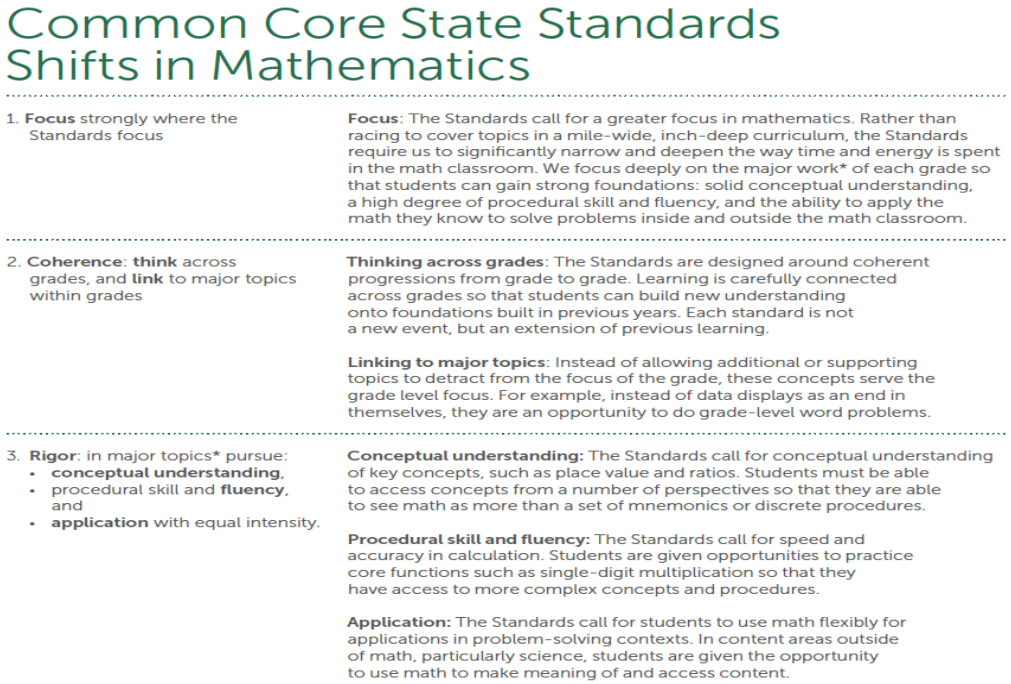
Common Core ELA Shifts

Common Core Shifts for English Language Arts/Literacy

1. Regular practice with **complex text** and its **academic language**	Rather than focusing solely on the skills of reading and writing, the Standards highlight the growing complexity of the texts students must read to be ready for the demands of college and careers. The Standards build a staircase of text complexity so that all students are ready for the demands of college- and career-level reading no later than the end of high school. Closely related to text complexity—and inextricably connected to reading comprehension—is a focus on academic vocabulary: words that appear in a variety of content areas (such as *ignite* and *commit*).
2. Reading, writing and speaking grounded in **evidence from text**, both literary and informational	The Standards place a premium on students writing to sources, i.e., using evidence from texts to present careful analyses, well-defended claims, and clear information. Rather than asking students questions they can answer solely from their prior knowledge or experience, the Standards expect students to answer questions that depend on their having read the text or texts with care. The Standards also require the cultivation of narrative writing throughout the grades, and in later grades a command of sequence and detail will be essential for effective argumentative and informational writing. Likewise, the reading standards focus on students' ability to read carefully and grasp information, arguments, ideas and details based on text evidence. Students should be able to answer a range of *text-dependent* questions, questions in which the answers require inferences based on careful attention to the text.
3. **Building knowledge** through **content-rich nonfiction**	Building knowledge through content rich non-fiction plays an essential role in literacy and in the Standards. In K–5, fulfilling the standards requires a 50–50 balance between informational and literary reading. Informational reading primarily includes content rich non-fiction in history/social studies, science and the arts; the K–5 Standards strongly recommend that students build coherent general knowledge both within each year and across years. In 6–12, ELA classes place much greater attention to a specific category of informational text—literary nonfiction—than has been traditional. In grades 6–12, the Standards for literacy in history/social studies, science and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing.

- Complex Text
- Academic Language
- Evidence from Text
- Building Knowledge
- Content-Rich Nonfiction

Common Core Math Shifts

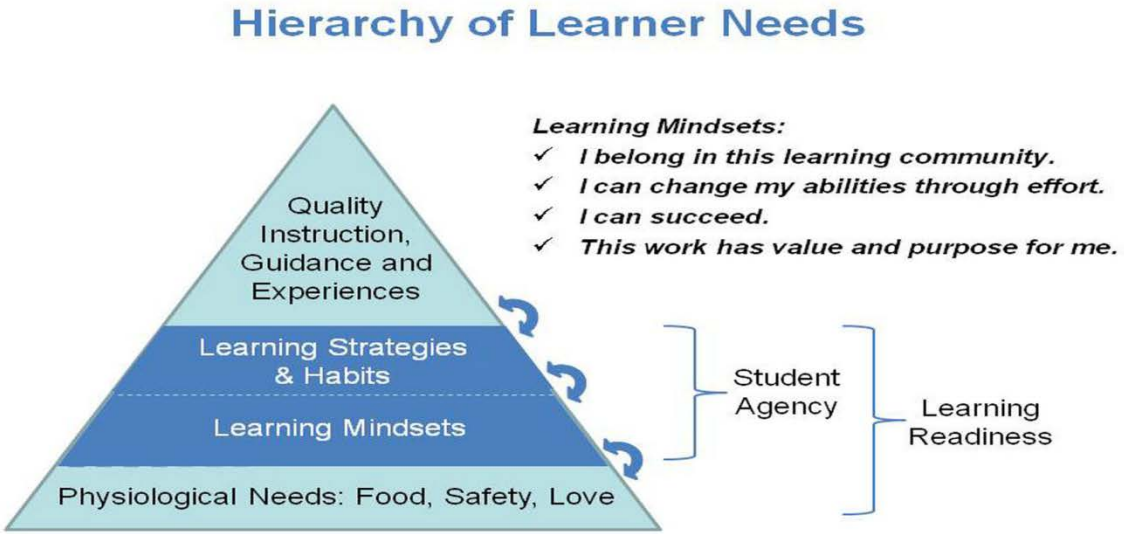


Common Core State Standards Shifts in Mathematics

1. **Focus** strongly where the Standards focus	**Focus**: The Standards call for a greater focus in mathematics. Rather than racing to cover topics in a mile-wide, inch-deep curriculum, the Standards require us to significantly narrow and deepen the way time and energy is spent in the math classroom. We focus deeply on the major work* of each grade so that students can gain strong foundations: solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the math they know to solve problems inside and outside the math classroom.
2. **Coherence**: **think** across grades, and **link** to major topics within grades	**Thinking across grades**: The Standards are designed around coherent progressions from grade to grade. Learning is carefully connected across grades so that students can build new understanding onto foundations built in previous years. Each standard is not a new event, but an extension of previous learning. **Linking to major topics**: Instead of allowing additional or supporting topics to detract from the focus of the grade, these concepts serve the grade level focus. For example, instead of data displays as an end in themselves, they are an opportunity to do grade-level word problems.
3. **Rigor**: in major topics* pursue: • **conceptual understanding**, • procedural skill and **fluency**, and • **application** with equal intensity.	**Conceptual understanding:** The Standards call for conceptual understanding of key concepts, such as place value and ratios. Students must be able to access concepts from a number of perspectives so that they are able to see math as more than a set of mnemonics or discrete procedures. **Procedural skill and fluency:** The Standards call for speed and accuracy in calculation. Students are given opportunities to practice core functions such as single-digit multiplication so that they have access to more complex concepts and procedures. **Application:** The Standards call for students to use math flexibly for applications in problem-solving contexts. In content areas outside of math, particularly science, students are given the opportunity to use math to make meaning of and access content.

- Concepts and Skills
- Problem Solving
- Thinking Across Grades
- Conceptual Understanding
- Fluency
- Application

Academic/Growth Mindset

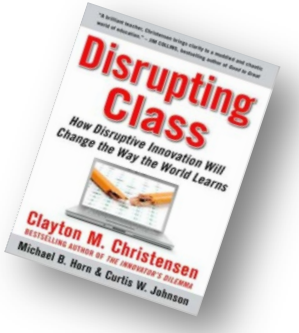


… Integrity, responsibility and

Perseverance…

Blended Learning

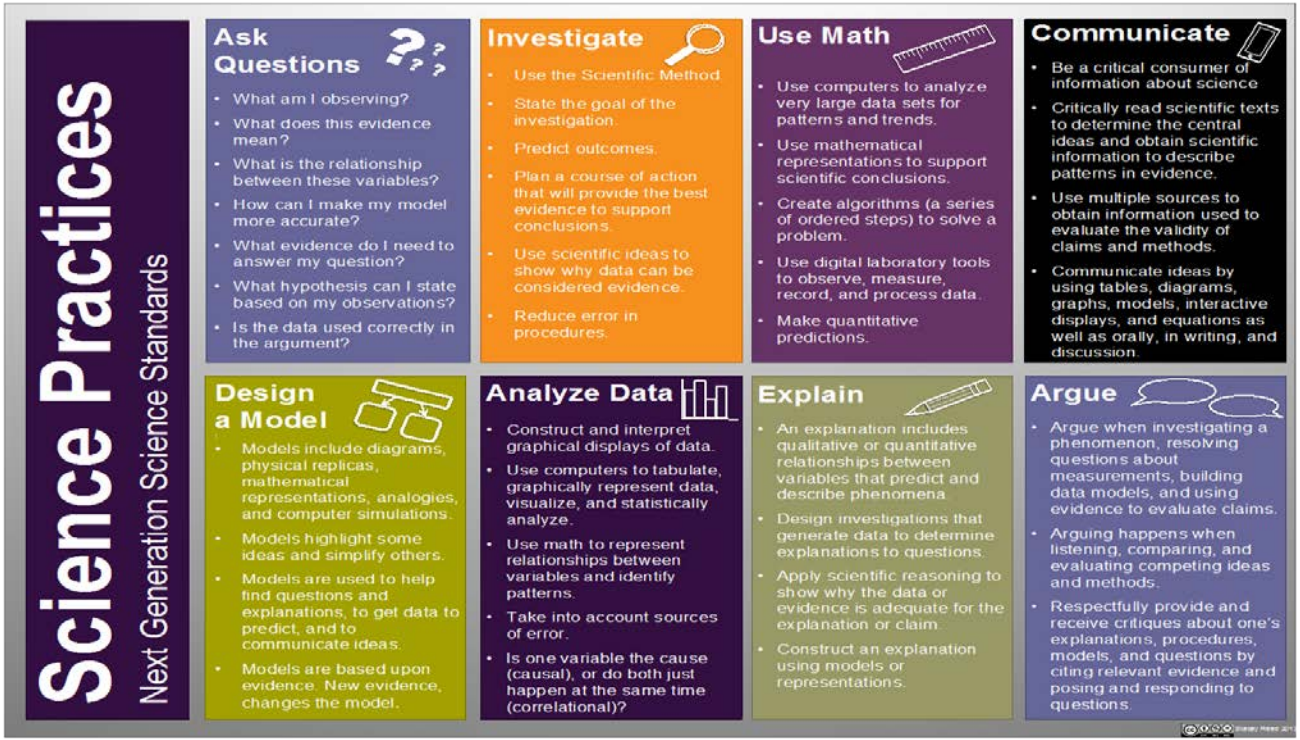
- Seamless Technology Integration
- Online and Virtual Delivery
- Production of Technology and Information



Differentiated Instruction

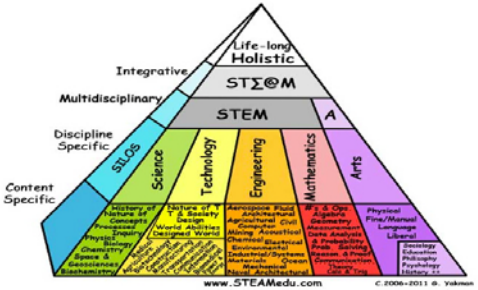
- Full Inclusion
- Personalization
- Self-Paced and Small Group
- Anywhere, anytime learning

Next Gen Science Standards



STEM and STEAM

- STEM as meta-discipline
- Art and Humanities as Glue
- Design Thinking Process



Explorer Elementary PBL Video

Learning Goals for Manchester Memorial Elementary

What school/district materials are important incorporate into our visioning work together?

WhAT 21st Century Skills Are Most Important to Your School and District?

Bloom's Taxonomy

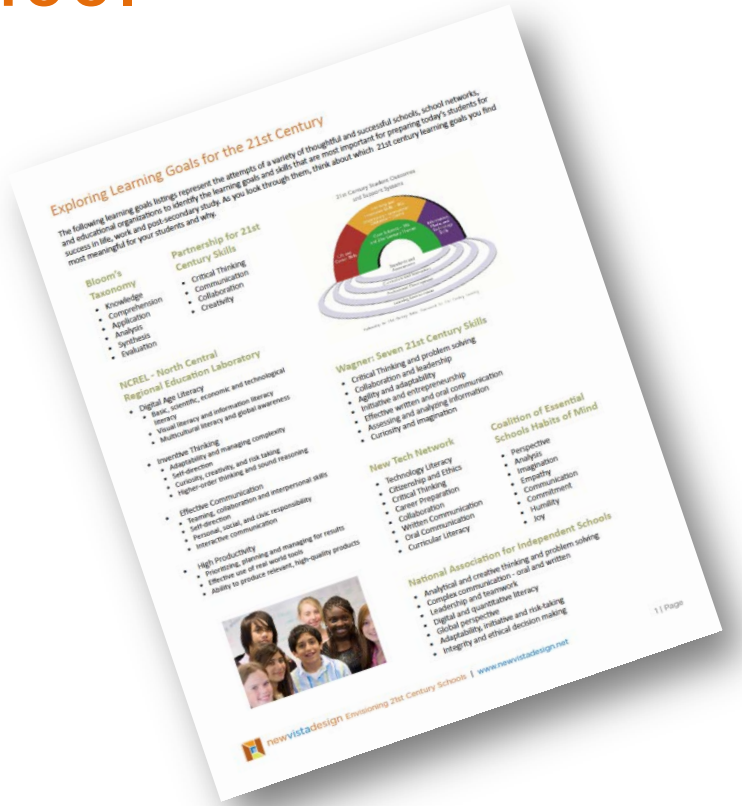
- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Partnership for 21st Century Skills

- Critical Thinking
- Communication
- Collaboration
- Creativity

NCREL - North Central Regional Education Laboratory

- Digital Age Literacy
  - Basic, scientific, economic and technological literacy
  - Visual literacy and information literacy
  - Multicultural literacy and global awareness


Exploring Learning Goals for the 21st Century

The following learning goals listings represent the attempts of a variety of thoughtful and successful schools, school networks, and educational organizations to identify the learning goals and skills that are most important for preparing today's students for success in life, work and post-secondary study. As you look through them, think about which 21st century learning goals you find most meaningful for your students and why.

Bloom's Taxonomy
- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

Partnership for 21st Century Skills
- Critical Thinking
- Communication
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- Creativity

NCREL - North Central Regional Education Laboratory
- Digital Age Literacy
  - Basic, scientific, economic and technological literacy
  - Visual literacy and information literacy
  - Multicultural literacy and global awareness
- Inventive Thinking
  - Adaptability and managing complexity
  - Self-direction
  - Curiosity, creativity, and risk taking
  - Higher-order thinking and sound reasoning
- Effective Communication
  - Teaming, collaboration and interpersonal skills
  - Self-direction
  - Personal, social, and civic responsibility
  - Interactive communication
- High Productivity
  - Prioritizing, planning and managing for results
  - Effective use of real-world tools
  - Ability to produce relevant, high-quality products

Wagner: Seven 21st Century Skills
- Critical Thinking and problem solving
- Collaboration and leadership
- Agility and adaptability
- Initiative and entrepreneurship
- Effective written and oral communication
- Assessing and analyzing information
- Curiosity and imagination

New Tech Network
- Technology Literacy
- Citizenship and Ethics
- Critical Thinking
- Career Preparation
- Collaboration
- Written Communication
- Oral Communication
- Curricular Literacy

Coalition of Essential Schools Habits of Mind
- Perspective
- Analysis
- Imagination
- Empathy
- Communication
- Commitment
- Humility
- Joy

National Association for Independent Schools
- Analytical and creative thinking and problem solving
- Complex communication - oral and written
- Leadership and teamwork
- Digital and quantitative literacy
- Global perspective
- Adaptability, initiative and risk-taking
- Integrity and ethical decision making

SCOG Analysis

What are the district's Strengths, Challenges, Opportunities and Goals as connected to the project?

SCOG Analysis

- *Strengths*
- *Challenges*
- *Opportunities*
- *Goals*

Deep Dive into School Programs and Initiatives

How can we best create an overview of essential programs and initiatives within the school and district ?

Overview of key programs and initiatives

EASTHAMPTON PUBLIC SCHOOLS
A GREAT PLACE TO LEARN AND GROW

Maple Elementary Educational Working Group
Visioning Workshop Two Notes
September 30, 2016

District Leadership: Overview of Key Elements of Culture, Programs and Vision

Maple Elementary:

- Literary "Making Meaning" program
- Being a Writer – curriculum; intentional writing program that works with Making Meaning
- Strong Community
- Committed parents
- Committed staff
- How does community take place? All school meeting once per month; celebrate birthdays; pep rallies; honor 4th graders – lead in song, etc. 4th graders become leaders. o All school meetings are in cafeteria or outside weather permitting
- PBIS Positive behavior intervention support – Program aligned across all 3 elementary schools
- Second step violence prevention program
- 3rd grade bullying prevention program (address age-based need in building); part of second step
- New building would help us do this better:
  - Better space for families
  - Year-round space – currently everything is held in spring and fall because it has to occur outside.
  - Family center is a dream of principal
  - Teacher/ staff development space
  - Collaborative planning space
  - Multi-use space
- Math expression - similar across all three elementary schools
- Full inclusion autism support system. Meets needs of many children
- Similar SPED programs in both buildings
- Summer SPED program
- Behavioral program
- Feeder to Soar program at Maple is prek – 1
- EESP is Maples after school program

Center Pepin Elementary:

- Effort to keep experience as similar to each other as possible
- Grade Level meetings (not all school because of two buildings)
- PBIS – Playground, gym
- Dedicated staff
- Second Step
- Challenging to bring staff together from two buildings
- Pepin tends to host professional development – Challenging to Maple teachers

| 9.30.16 12 | page

newvistadesign Envisioning 21st Century Schools |

studio g architects building sustainable communities

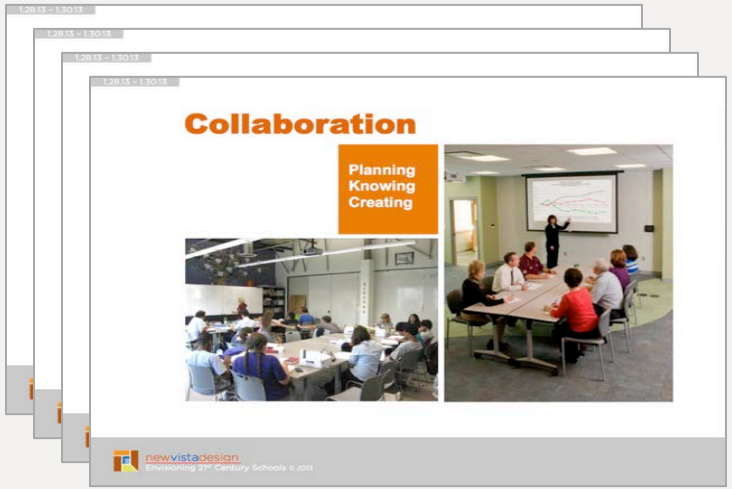
Caolo & Bieniek Associates, Inc. Architecture Planning Interior Design

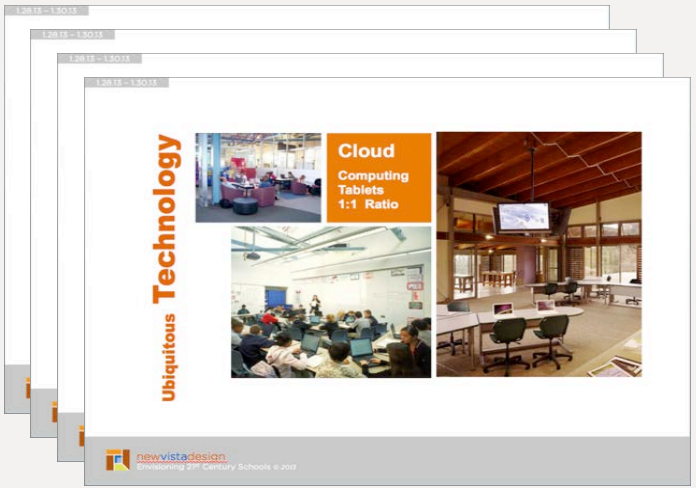
Design Patterns

New School
Design Patterns

In Support 21st Century Teaching and Learning

- Facilitate inquiry-based learning – now and tomorrow
- View school as varied, evolving, and high performance environment
- Provide seamless technology integration





Selected Design Patterns

- Clusters of Learning
- Differentiated Instruction
- Distributed Resources
- Professional Workspaces
- Shared Use
- Flexible Furniture
- Comfort and Play
- Sustainable Design
- Building as Teacher
- Branding and Identity
- Greeting and Gatekeeping
- Safety
- Streetscapes
- Wayfinding
- Flexible Use
- High-Performance
- Ubiquitous Technology
- Varied Spaces
- Collaboration
- Gathering
- Multi-Use Classrooms
- Multi-Purpose Spaces
- Teaming
- Hubs of Activity

- Transparency
- Display and Exhibition
- Aesthetics
- Lifelong Fitness
- Community Connections
- Maker Spaces
- Design Thinking
- Indoor/Outdoor Connections
- Community Access
- Between Spaces
- Breakout Spaces
- Distributed Dining
- Cyber Dining
- Curb Appeal
- Universal Design
- Athletics and Wellness
- Campus Feel
- Inclusion
- Arts Integration
- Movable Walls
- Permeable Walls
- Extended Learning
- Alternative Storage
- Nooks

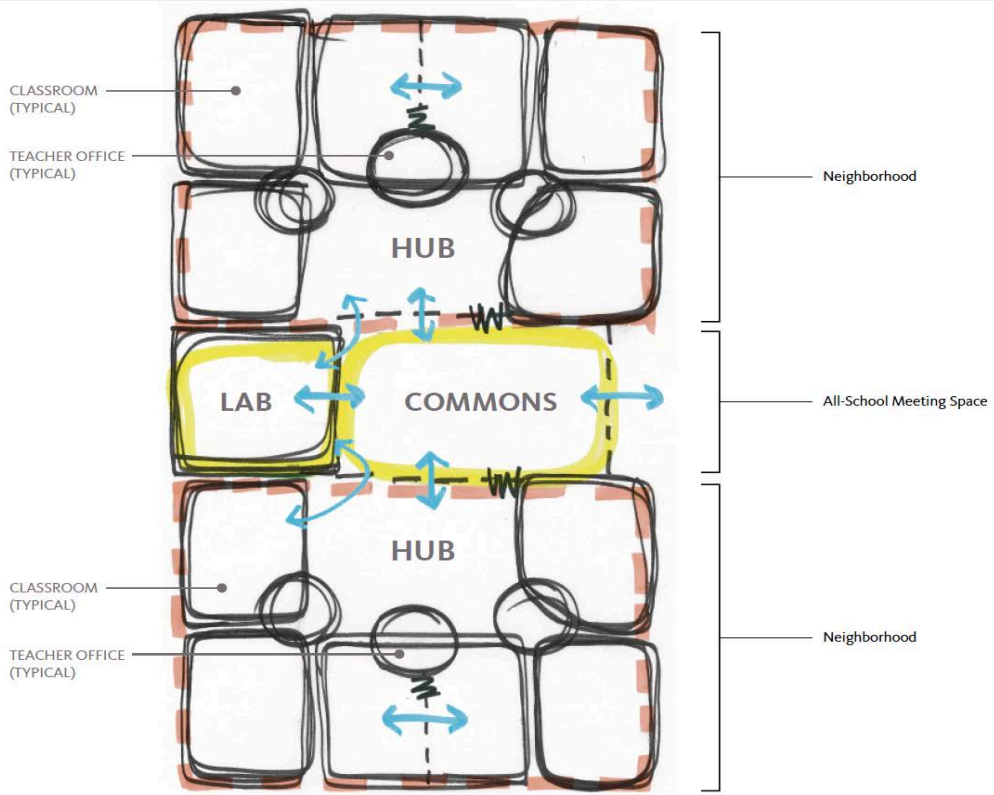
Guiding Principles set design priorities and offer an invaluable framework for making decisions and choices as the design process unfolds…

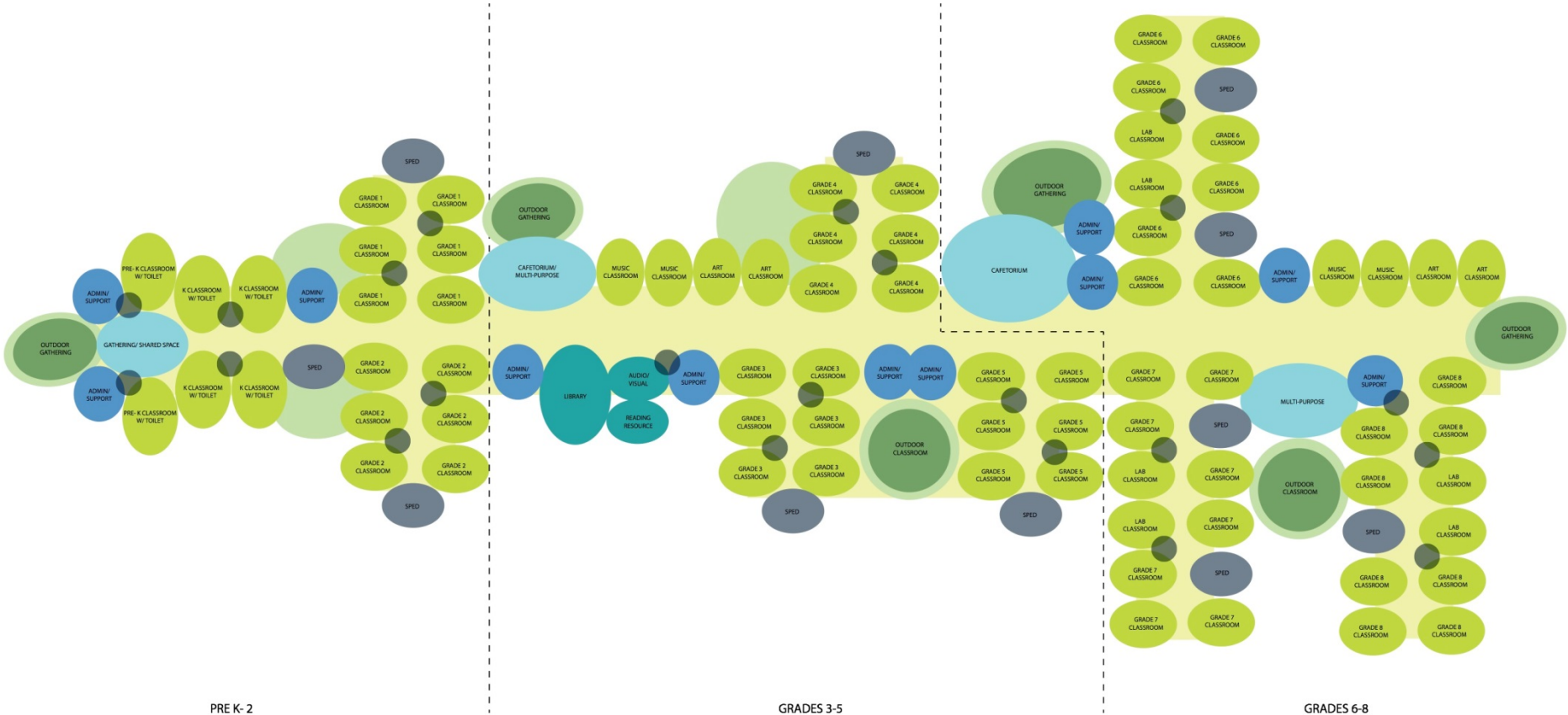
Dr. Martin Luther King Junior School

Dr. Martin Luther King Jr. School and Putnam Avenue Upper School

1. Innovation Agenda
2. Community School
3. Academic Wings/Front Doors
4. Heart of the Building
5. Extended Learning Spaces
6. Outdoor Learning
7. Sustainability

Bubble Diagramming


CLASSROOM
(TYPICAL)
TEACHER OFFICE
(TYPICAL)
HUB
LAB
COMMONS
HUB
CLASSROOM
(TYPICAL)
TEACHER OFFICE
(TYPICAL)
Neighborhood
All-School Meeting Space
Neighborhood


PRE K- 2
GRADES 3-5
GRADES 6-8
EMPHASIZES HORIZONTAL INTEGRATION
OUTDOOR GATHERING
GATHERING/ SHARED SPACE
ADMIN/ SUPPORT
PRE- K CLASSROOM W/ TOILET
K CLASSROOM W/ TOILET
SPED
GRADE 1 CLASSROOM
GRADE 2 CLASSROOM
CAFETORIUM/ MULTI-PURPOSE
MUSIC CLASSROOM
ART CLASSROOM
LIBRARY
AUDIO/ VISUAL
READING RESOURCE
GRADE 3 CLASSROOM
GRADE 4 CLASSROOM
OUTDOOR CLASSROOM
GRADE 5 CLASSROOM
CAFETORIUM
GRADE 6 CLASSROOM
LAB CLASSROOM
GRADE 7 CLASSROOM
MULTI-PURPOSE
GRADE 8 CLASSROOM

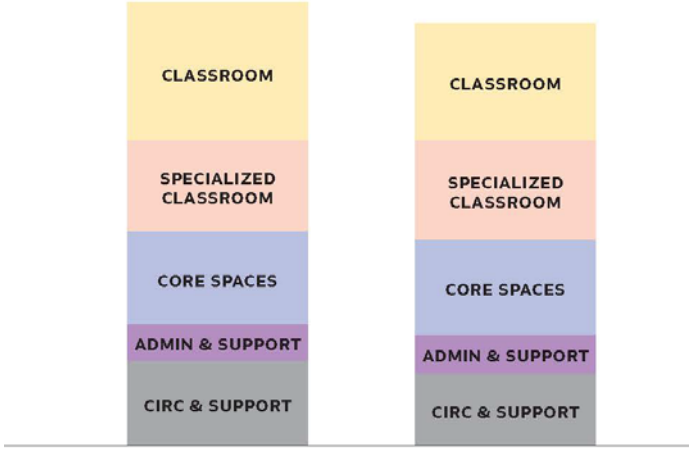
Educational Program Review

The MSBA Space Summary Template

Proposed Space Summary- Manchester Memorial Elementary School

Manchester Memorial Elementary School	Existing Conditions			PROPOSED									MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
				Existing to Remain/Renovated			New			Total						
ROOM TYPE	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	ROOM NFA[1]	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES			**17,517**			**0**			**0**			**0**		**15**	**15,000**	
(List classrooms of different sizes separately)																
Pre-Kindergarten w/ toilet	1,657	1	1,657										1,200		-	1,100 SF min - 1,300 SF max
Kindergarten w/ toilet	930	2	1,860										1,200	3	3,600	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-6	850 & 930	16	14,000										950	12	11,400	900 SF min - 1,000 SF max
SPECIAL EDUCATION			**3,927**			**0**			**0**			**0**			**4,530**	
(List rooms of different sizes separately)																
Self-Contained SPED (SAIL)	932	1	932										950	3	2,850	8% of pop. in self-contained SPED
Self-Contained SPED - toilet		0	0										60	3	180	
Resource Room (OTPT, Tutor, Literacy, Speech)	VARIES	4	2,798										500	2	1,000	1/2 size Genl. Clrm.
Small Group Room / Reading	197	1	197										500	1	500	1/2 size Genl. Clrm.
ART & MUSIC			**2,096**			**0**			**0**			**0**			**2,500**	
Art Classroom - 25 seats	935	1	935										1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln	226	1	226										150	1	150	
Music Classroom / Large Group - 25-50 seats	935	1	935										1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble	0	0	0										75	2	150	
HEALTH & PHYSICAL EDUCATION			**5,598**			**0**			**0**			**0**			**6,300**	
Gymnasium	5,359	1	5,359										6,000	1	6,000	6000 SF Min. Size
Gym Storeroom	180	1	180										150	1	150	
Health Instructor's Office w/ Shower & Toilet	59	1	59										150	1	150	
MEDIA CENTER			**1,020**			**0**			**0**			**0**			**2,178**	

EDUCATIONAL PLANNING



66,573 SF

EXISTING BUILDING
GRADES PRE-K - 5
361 ENROLLMENT
+ 7,641 SF

58,932 SF

MSBA TEMPLATE
GRADES K-5
335 ENROLLMENT

The Space Summary Template

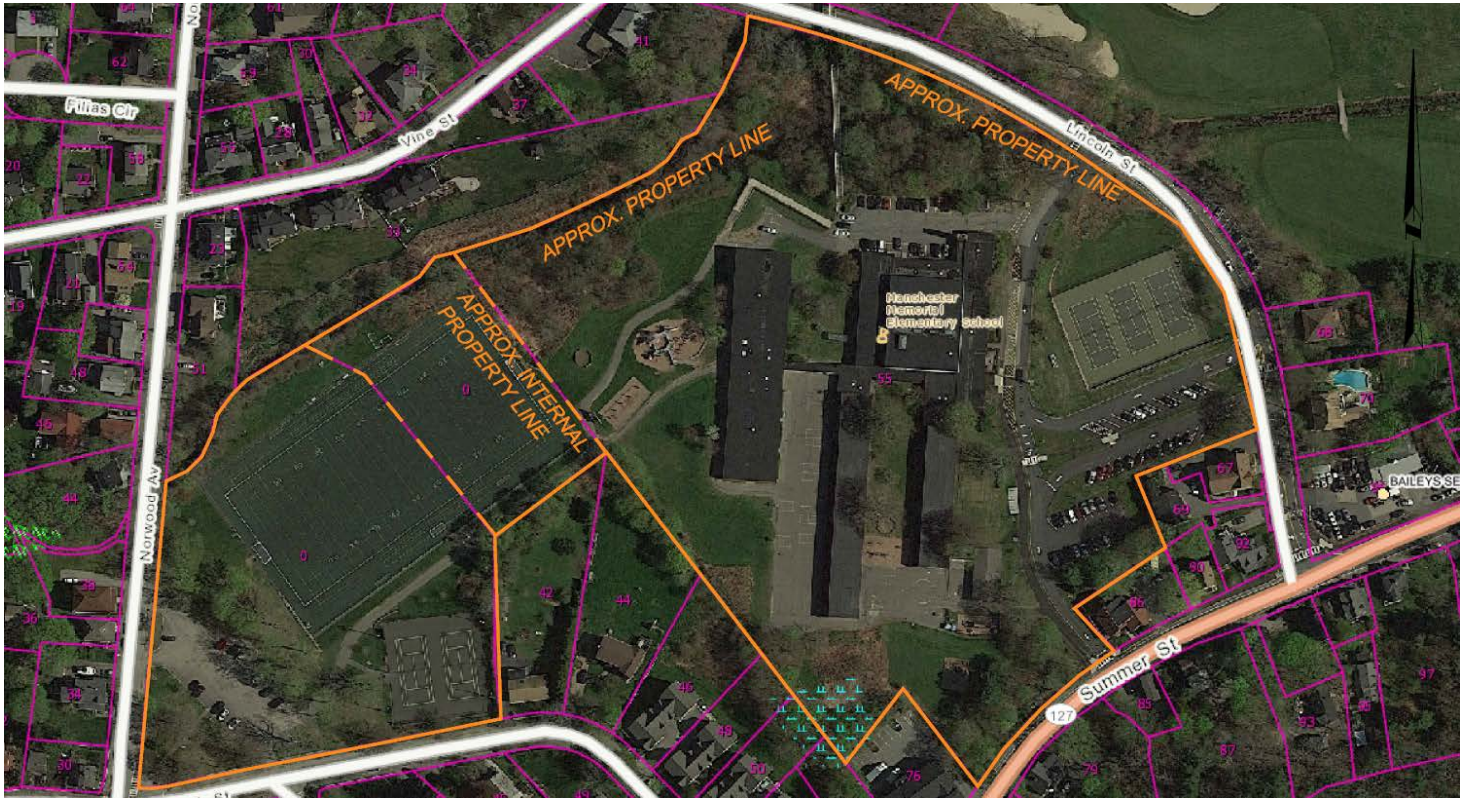
Next Steps:

Educational Plan to Inform Proposed Space Summary
Meetings with the Educators

Site Understanding

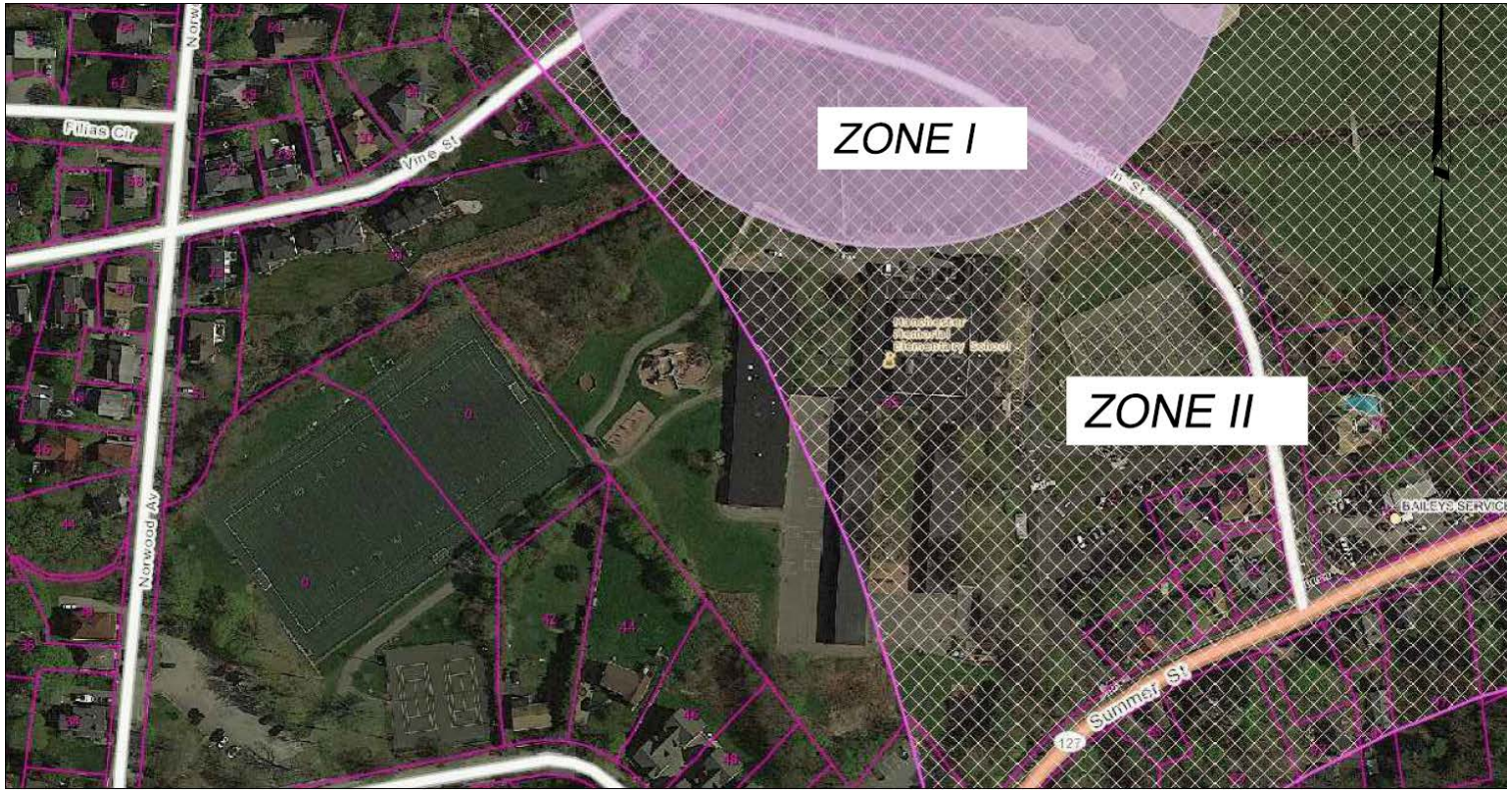
PROJECT UPDATE

PROPERTY LINES



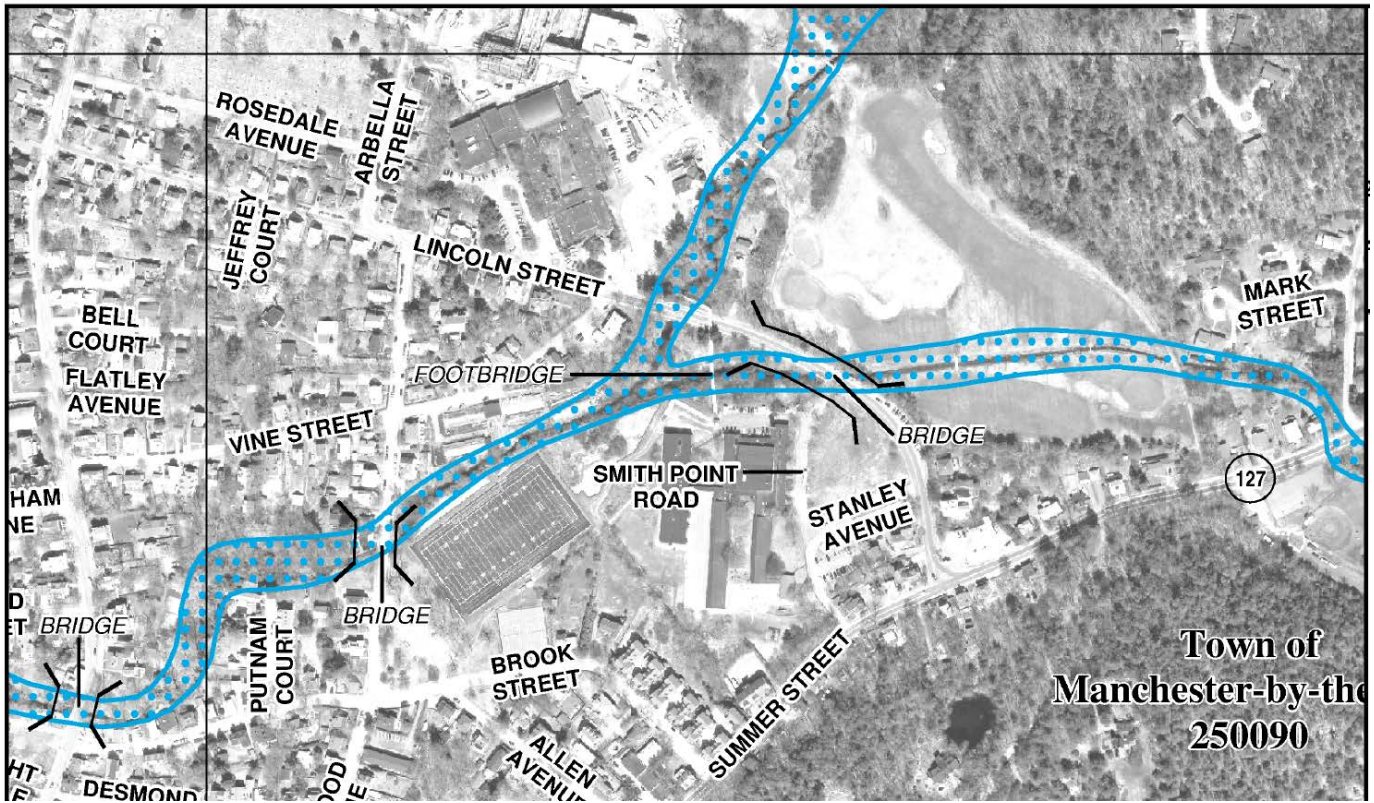
PROJECT UPDATE

ZONE I & II EXTENTS



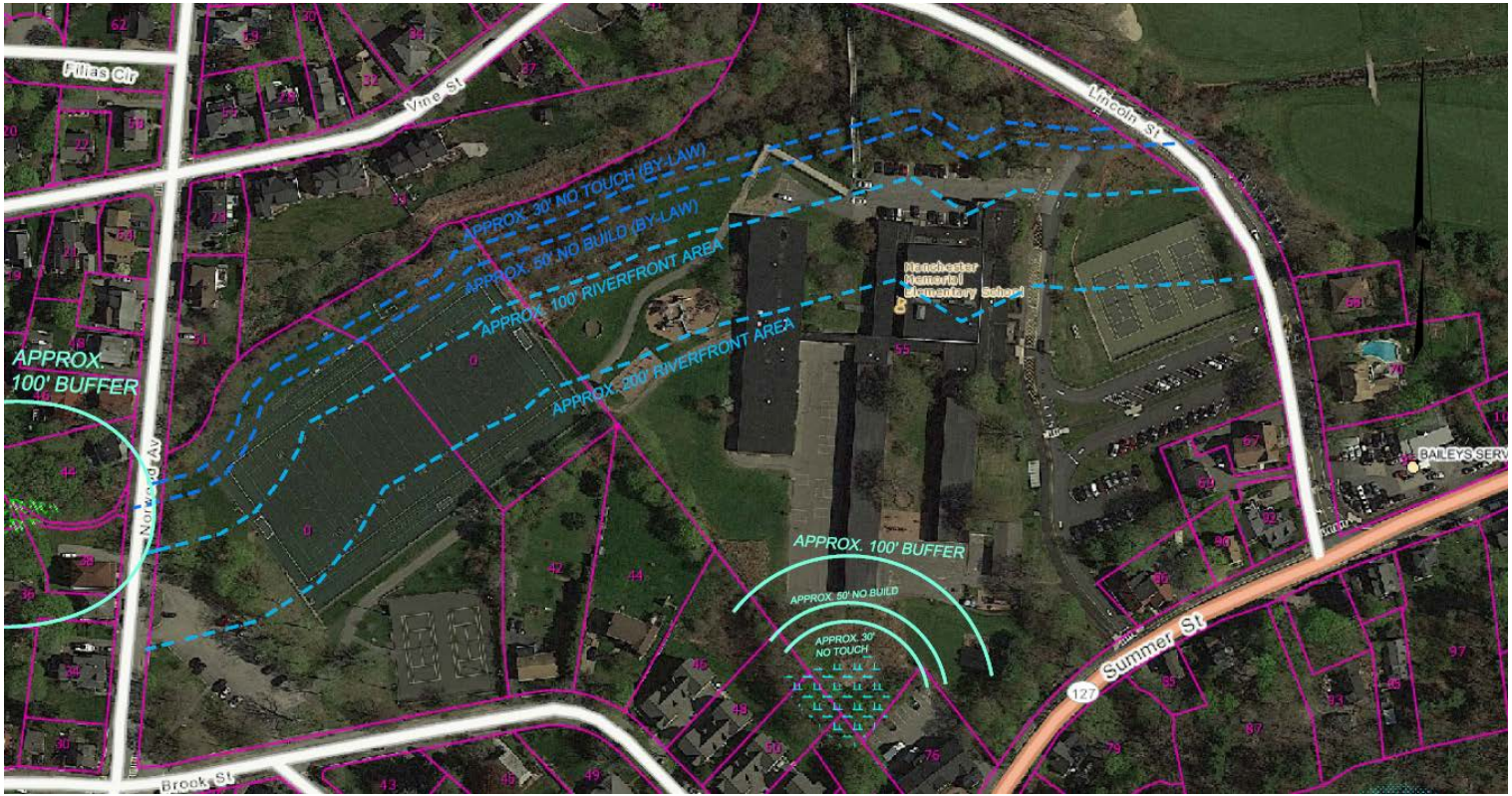
PROJECT UPDATE

FEMA FLOOD MAP



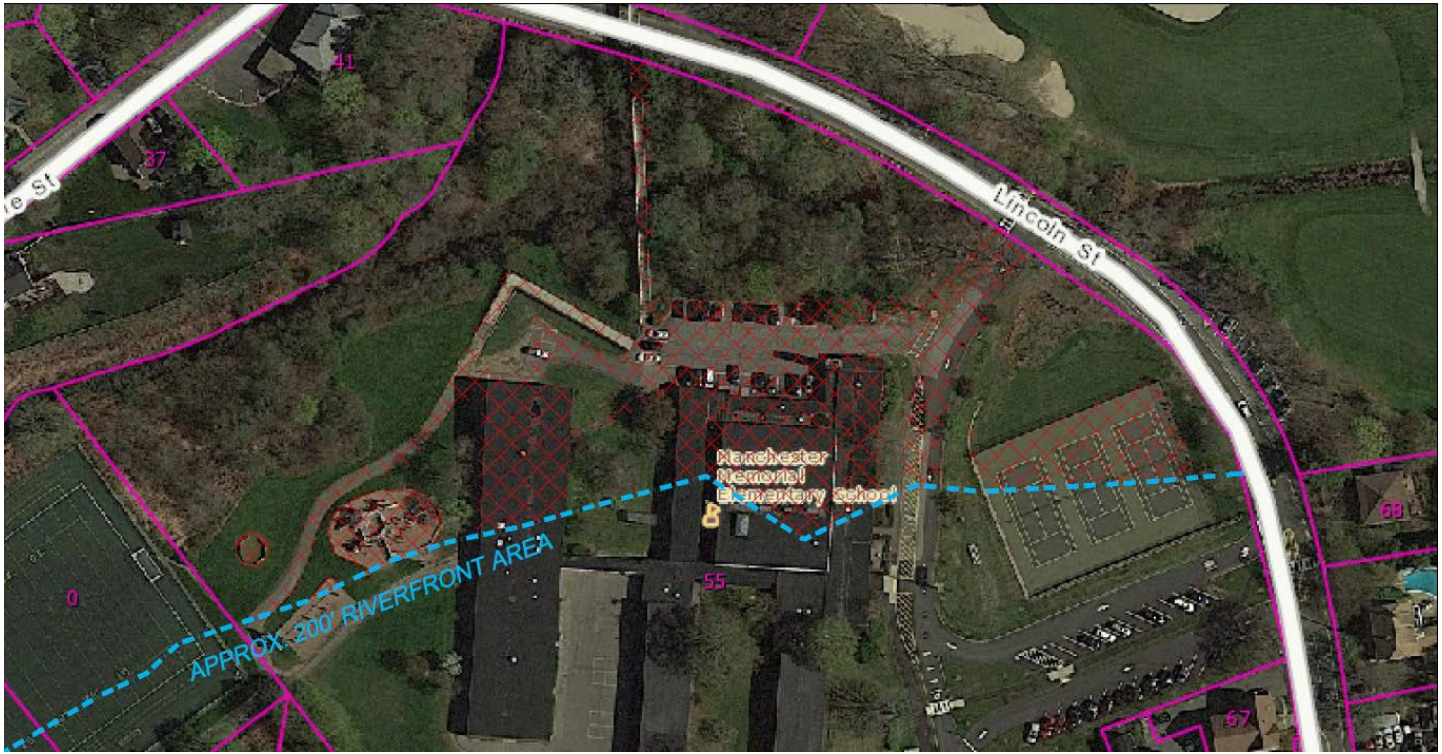
PROJECT UPDATE

RESOURCE AREAS



SITE UNDERSTANDING

DEGRADED AREAS



SITE UNDERSTANDING

ZONING RESTRICTIONS

DISTRICT	MINIMUM LOT AREA (SQ. FT.)	MINIMUM FRONTAGE	MINIMUM LOT WIDTH	MINIMUM FRONT SETBACK	MINIMUM SIDE SETBACK	MINIMUM REAR SETBACK
Single Res. District A	22,500	150 ft.	125 ft.	30 ft.	20 ft.	40 ft
Single Res. District B	15,000	75 ft	60 ft.	20 ft.	15 ft.	20 ft.
Single Res. District C	45,000	150 ft.	125 ft.	30 ft.	20 ft.	40 ft.
Res. District D	6,000	60 ft.	50 ft	10ft.	10 ft.	10 ft.
Single Res. District E	90,000	150 ft.	125 ft.	30 ft.	20 ft.	40 ft.
General District	6,000	60 ft.	50 ft.	5 ft	10 ft.	10 ft.

In the case of a lot abutting on more than one street, the minimum front setback shall be applicable to each street. (See Section 5.3)

PROJECT UPDATE

PROPERTY LINES/ SET BACKS

SITE UNDERSTANDING

HEIGHT REGULATIONS

5.5 Height Regulations

No structure shall be erected or altered so that it exceeds 2-1/2 stories or so that the vertical distance measured from the highest point of the roof to the mean pre-construction grade exceeds thirty-five (35) feet, whichever is the lesser. Chimneys, spires or towers not used for human occupancy may extend ten (10) feet above these height limits. Mean pre-construction grade is defined as a reference plane representing the average elevation of pre-construction ground adjoining the building at all exterior walls. A half story is defined as a story with a sloping roof, the area of which story at a height of four (4) feet above the floor does not exceed two-thirds of the floor area of the story immediately below it." (Amended 2001)

SITE UNDERSTANDING

ZONING RESTRICTIONS

DISTRICT COVERAGE	LOT COVERAGE REQUIREMENTS BY STRUCTURES	MAXIMUM % LOT BY STRUCTURES AND IMPERVIOUS SURFACES
Single Residence District A	15%	30%
Single Residence District B	20%	35%
Single Residence District C	15%	25%
Residence District D	40%	50%
Single Residence District E	15%	25%
General District	40%	70%*

*Except as noted within Section 4.3 of the Zoning By-Law.

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THANK YOU