

# W. EDWARD BALMER SCHOOL

NORTHBRIDGE, MA  
SCHEMATIC DESIGN

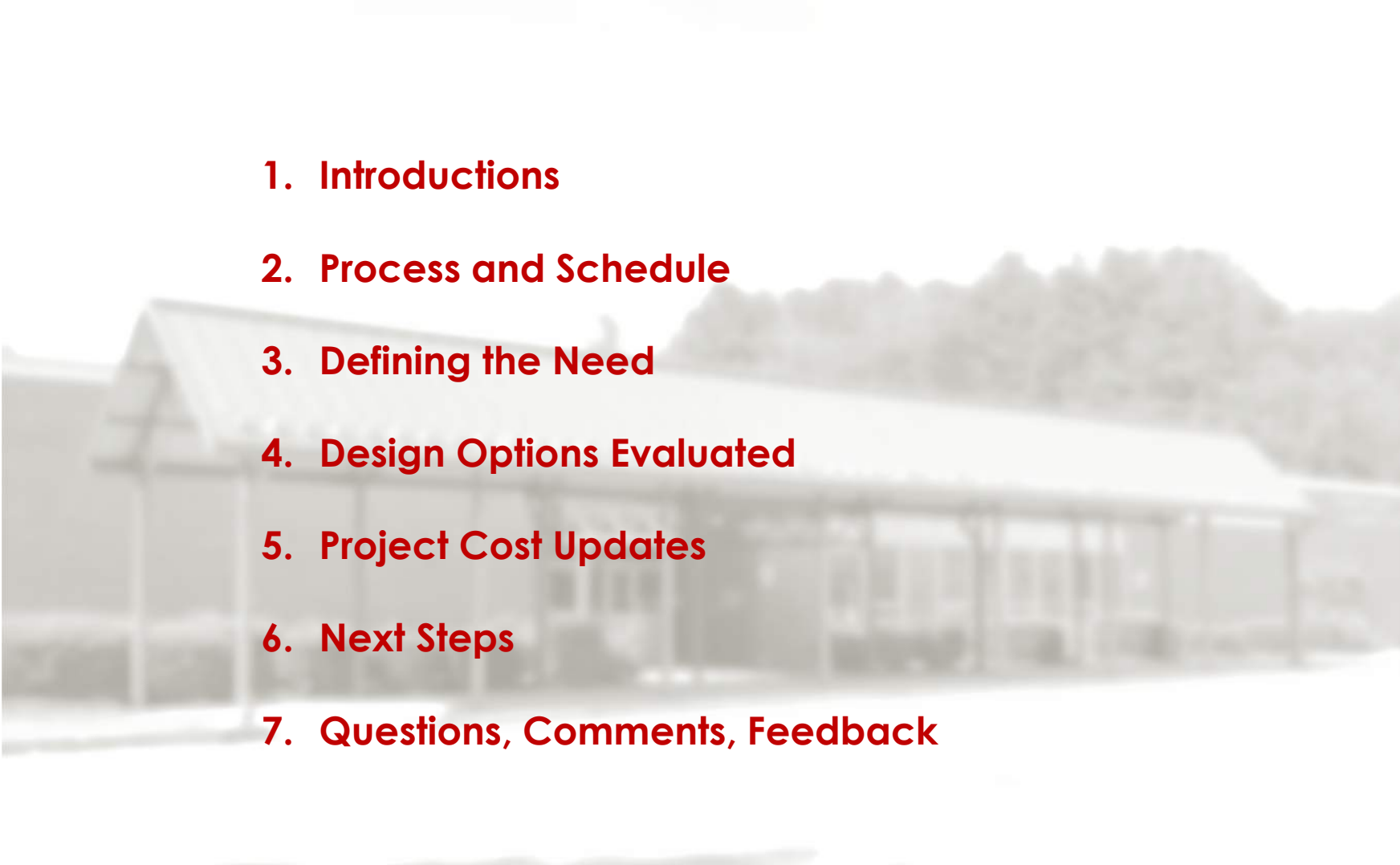
COMMUNITY FORUM #6

MARCH 12, 2018



Massachusetts School Building Authority  
*Funding Affordable, Sustainable, and Efficient Schools in Partnership with Local Communities*



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- 1. Introductions**
  - 2. Process and Schedule**
  - 3. Defining the Need**
  - 4. Design Options Evaluated**
  - 5. Project Cost Updates**
  - 6. Next Steps**
  - 7. Questions, Comments, Feedback**





## **SCHOOL BUILDING COMMITTEE:**

Joseph Strazzulla	Chair, School Building Committee
James Marzec	Member, Board of Selectmen
Michael LeBrasseur	Chair, School Committee
Adam Gaudette	Town Manager
Steven Gogolinski	Member, Finance Committee
Dr. Catherine Stickney	Superintendent of Schools
Melissa Walker	School Business Manager
Steve Von Bargen	Director of Facilities & Operations
Karlene Ross	Principal, Balmer Elementary School
Jill Healy	Principal, Northbridge Elementary School
Kathleen Perry	Director of Pupil Personnel Services
Paul Bedigian	Building, Planning, Construction Comm.
Jeffrey Tubbs	Community Member
Peter L'Hommedieu	Community Member
Jeff Lundquist	Community Member
Andrew Chagnon	Community Member
Spencer Pollock	Parent Representative

study team



**OWNER'S PROJECT MANAGER (OPM)**

Symmes Maini & McKee Associates

**DESIGNER (Architect) and its team of CONSULTANTS**

Dore & Whittier Architects

**PUBLIC SCHOOL CONSTRUCTION PARTNER**

Massachusetts School Building Authority (MSBA)

study team



## PROJECT NEED:

The W. Edward Balmer Elementary School is an aged facility requiring significant upkeep, expenditures which will not result in long-term educational benefits.

Northbridge residents voted to approve this Feasibility Study and seek a grant from the MSBA to address these conditions at its May 3, 2016 Special Town Meeting.

study purpose





## **MASSACHUSETTS SCHOOL BUILDING AUTHORITY (MSBA) PROCESS:**

Partners with the District to support the design and construction of public school facilities that are:

- Educationally Appropriate
- Flexible
- Sustainable
- Cost-Effective

**MSBA will fund 59.21% plus incentives of eligible project costs for an approved project if accepted by the voters of Northbridge.**



# FEASIBILITY STUDY PHASE SCOPE:

- Two grade configurations/enrollments/school sizes:
  - Grades 2-4 (510 students)
  - Grades PK-5 (1030 students)
- Educational Program Requirements
- Space Program
- Location/site
- Conceptual design alternatives:
  - Renovation of existing (bring up to code)
  - Renovation/addition (like-new interiors)
  - New Construction
- Conceptual Cost Estimates
- Select Preferred Alternative

**Devise several alternatives**



**Narrow from several to few**



**Narrow from few to one**

study process



## Massachusetts School Building Authority

Deborah B. Goldberg  
*Chairman, State Treasurer*

James A. MacDonald  
*Chief Executive Officer*

John K. McCarthy  
*Executive Director / Deputy CEO*

February 14, 2018

Mr. Charles Ampagoomian, Jr., Chair  
Northbridge Board of Selectmen  
Northbridge Town Hall  
7 Main Street  
Whitinsville, MA 01588

Mr. James R. Marzec, Member  
Northbridge Board of Selectmen  
Northbridge Town Hall  
7 Main Street  
Whitinsville, MA 01588

Re: Town of Northbridge, W. Edward Balmer Elementary School

Dear Mr. Ampagoomian and Mr. Marzec:

I am pleased to report that the Board (the “Board”) of the Massachusetts School Building Authority (the “MSBA”) has voted to approve the Town of Northbridge (the “Town”), as part of its invitation for Feasibility Study, to proceed into schematic to replace the existing W. Edward Balmer and the Northbridge Elementary Schools, with a new facility that serves grades PK-5 on the existing site of the W. Edward Balmer Elementary School (the “proposed project”).

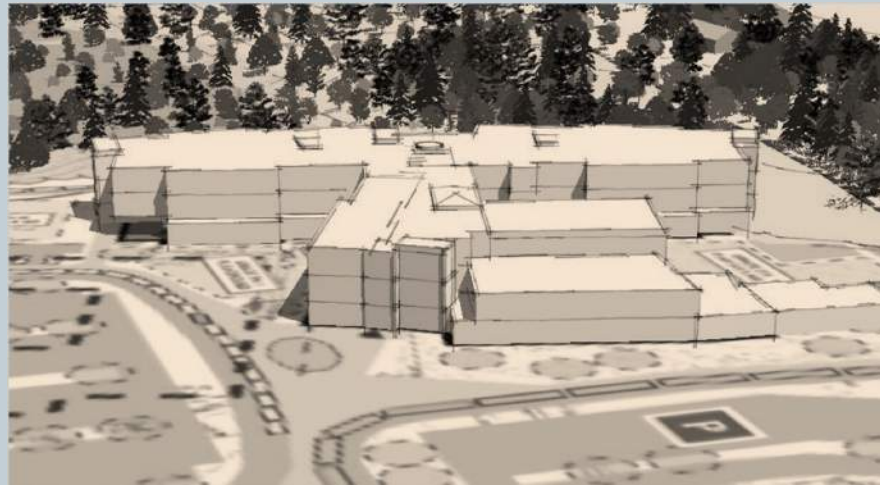
# MSBA Board Vote, February 14, 2018 Approval to proceed to Schematic Design Phase

study process



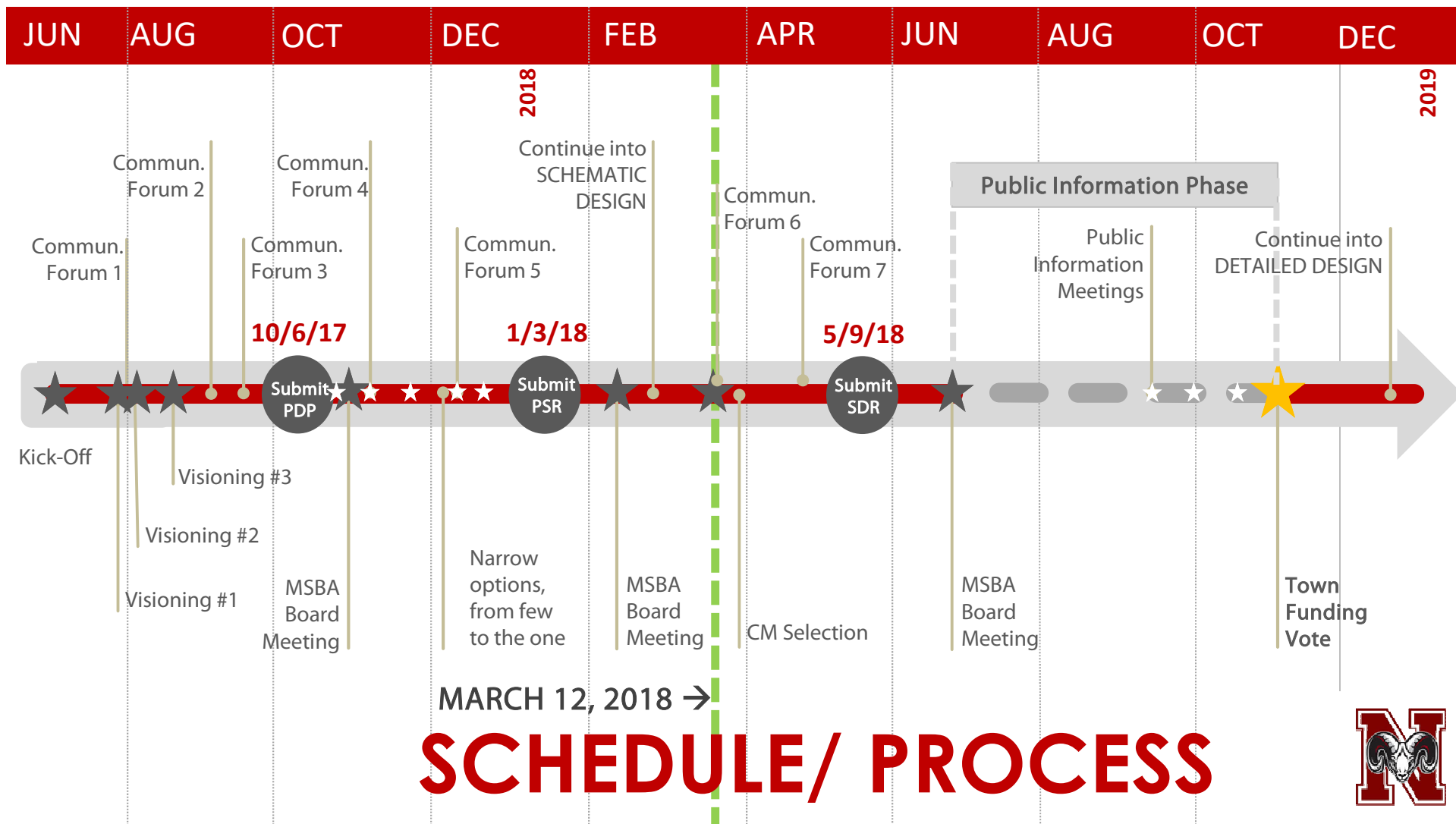
# SCHEMATIC DESIGN PHASE SCOPE:

- Preferred Alternative selected
- Develop design of this alternative:
  - Site/Civil/ Landscape
  - Architectural/ Code
  - Structural
  - Mechanical/Electrical
  - Plumbing/Fire Protection
  - Technology
  - Food Service
  - Safety and Security Planning
- Conceptual Cost Estimates
- Evaluate Budget
- Prepare for Project Funding Votes



study process







# COMMUNITY OUTREACH

## Public Meetings, Town Board Updates, and Community Forums

- 20 School Building Committee meetings
- 6 Community Forums
- Town Board Presentations/Meetings
  - Finance Committee
  - School Committee
  - Safety Committee
  - Recreation Committee
  - Council on Aging
  - Board of Selectmen

## Community-Wide Surveys

- 2 web-based surveys with broad community participation

## Televised School Building Committee Meetings and Community Forums

- Transparent process keeps the community informed

## Project Website and Email

Project Website: <https://www.nps.org/sbc>  
Project Email: [SBC@nps.org](mailto:SBC@nps.org)





QUESTIONS?



DORE & WHITTIER  
ARCHITECTS, INC.



**DEFINING THE NEED**



## DEFINING THE NEED

- Need a long-term solution to resolve deteriorating school buildings
- Provide educational spaces to meet MSBA standards
- Update the school to meet Educational Visioning Session goals
- Provide 21<sup>st</sup> century educational spaces
- Provide schools that are safe, code-compliant, and places Northbridge can be proud of



# BALMER: EXISTING PHYSICAL LIMITATIONS

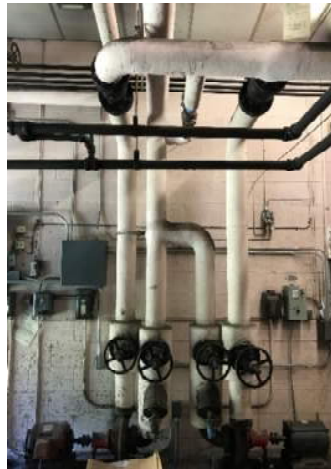
**Built 1968**

## Building Issues:

- Windows/ Curtain Wall
- Exterior Walls/ Thermal Insulation
- Roof patched and leaky
- Ceilings/ Interior Walls
- Cracks/ Interiors worn

## MEP FP Issues:

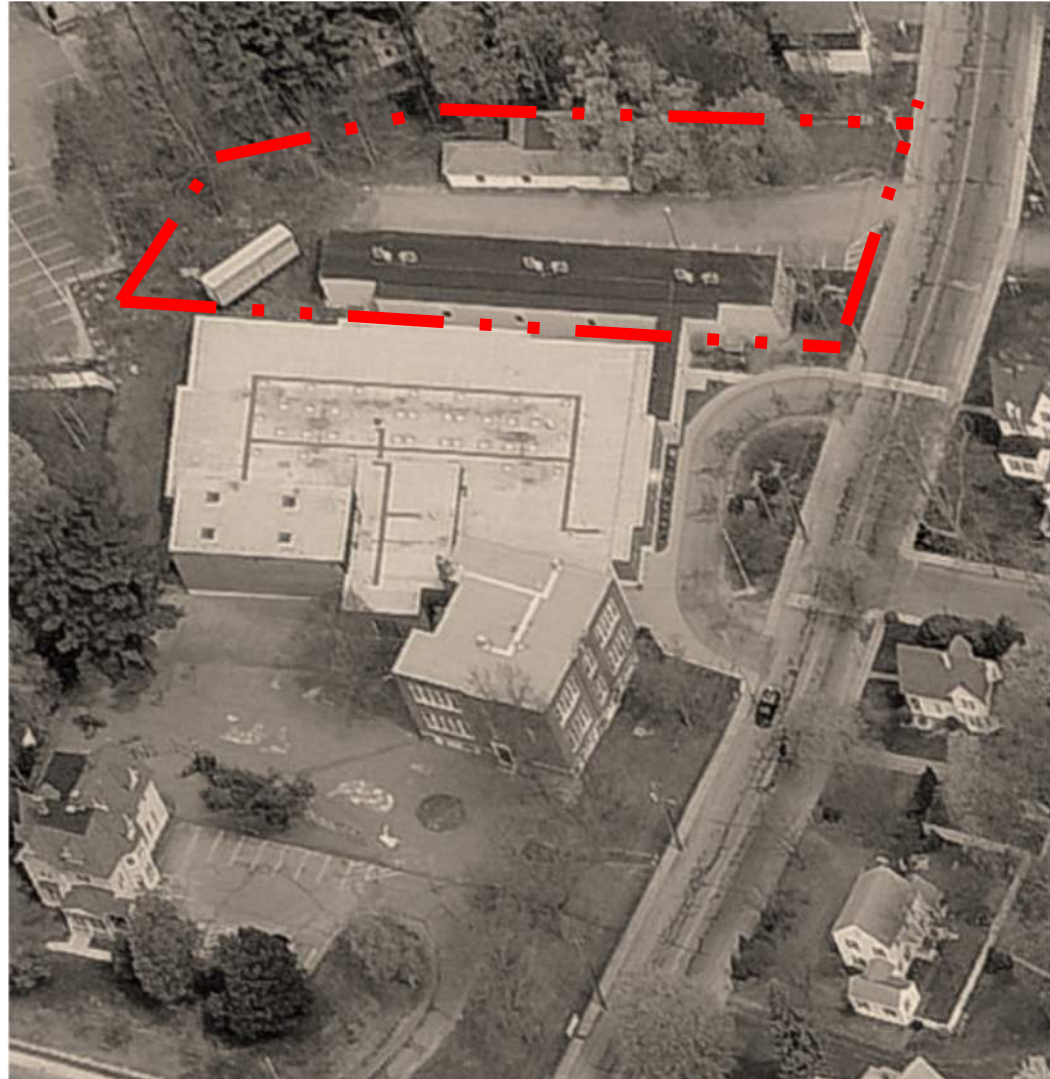
- **Original Mechanical/ Electrical/ Plumbing systems beyond expected lifespan**
- Low Efficiency
- No Sprinkler System
- Technology exposed to room



facilities assessment



**N.E.S.  
Modulars  
on  
leased  
land  
\$27K per year**



**facilities assessment**





# N.E.S. : EXISTING PHYSICAL LIMITATIONS

**Built 1952/ 1983/ Modulares 2000**

## Architectural Issues

- Windows Drafty / Roof Leaky
- Exterior Walls/ Insulation
- Interiors Worn

## MEP FP Issues:

- **Original Mechanical/ Electrical/ Plumbing systems beyond expected lifespan**
- Low Efficiency
- No Sprinkler System
- Technology exposed



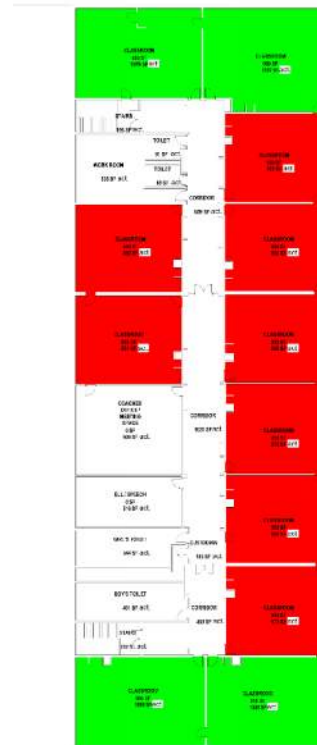
facilities assessment



## space assessment



## FIRST FLOOR PLAN



## SECOND FLOOR PLAN

## MSBA SPACE NEEDS SUMMARY

- Between 90% & 110% MSBA Guideline
- Less Than 90% MSBA Guideline
- More Than 110% MSBA Guideline



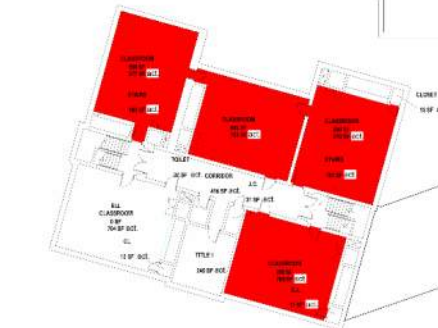
# space assessment



## FIRST FLOOR PLAN



### THIRD FLOOR PLAN



## SECOND FLOOR PLAN

## MSBA SPACE NEEDS SUMMARY

- Between 90% & 110% MSBA Guideline
- Less Than 90% MSBA Guideline
- More Than 110% MSBA Guideline



# EXISTING EDUCATIONAL LIMITATIONS

## Grade 2-4 Option (510 enrollment):

- Existing (Balmer): 71,871 GSF
- Proposed (meets MSBA standard): 89,463 GSF
- **Existing Balmer School is 19.7% undersized**

## Grade PK-5 Option (1030 enrollment):

- Existing (Balmer + NES) 128,431 GSF
- Proposed (meets MSBA standard): 172,845 GSF
- **Existing Balmer + NES space is 25.7% undersized**







QUESTIONS?







# DESIGN OPTIONS EVALUATED



**B2 \$40.5M**



**C2 \$60.0M**



**C3.1A \$59.9M**



**C3.1B \$55.1M**

**GROUP A**

Balmer + NES  
CODE/  
DM ONLY

**\$53.0M**

total



**C3.2 \$58.5M**



**C3.3 \$62.5M**



**C5 \$55.7M**

# OPTIONS REVIEW WITH COST TO TOWN

Estimated costs are preliminary and subject to change as the project is refined.

options evaluated

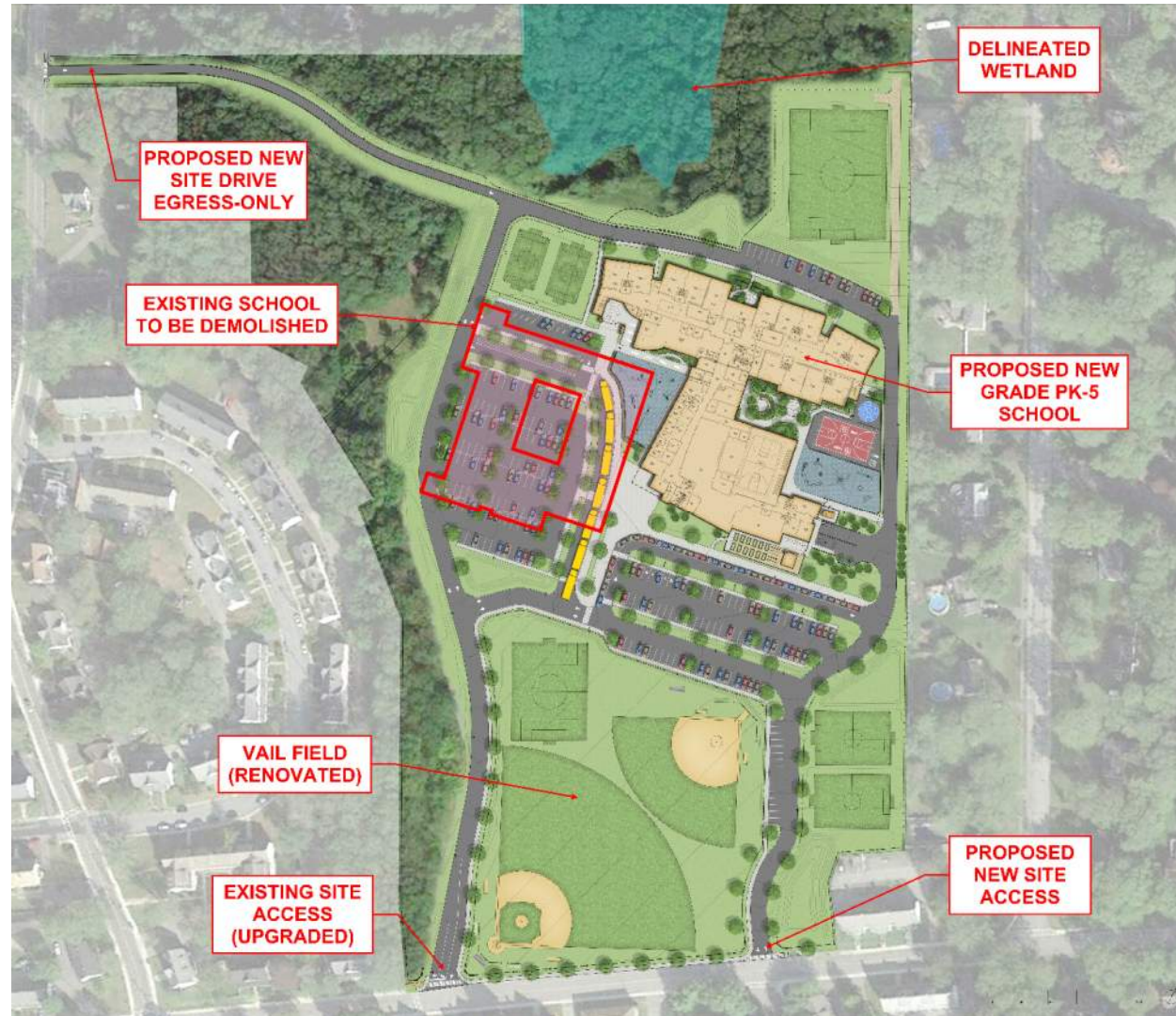


**THE DESIGN**

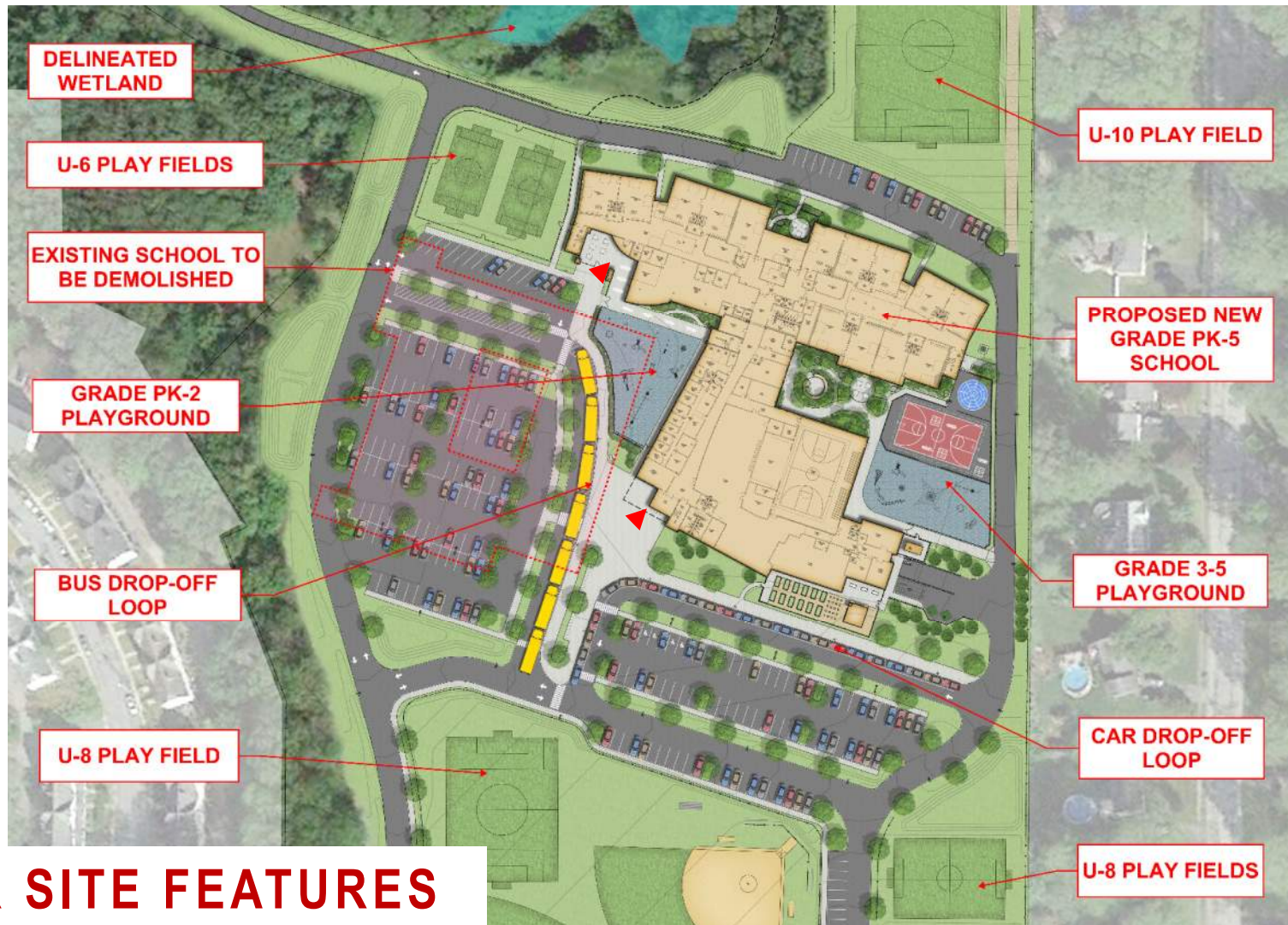
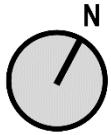




## MAJOR SITE FEATURES





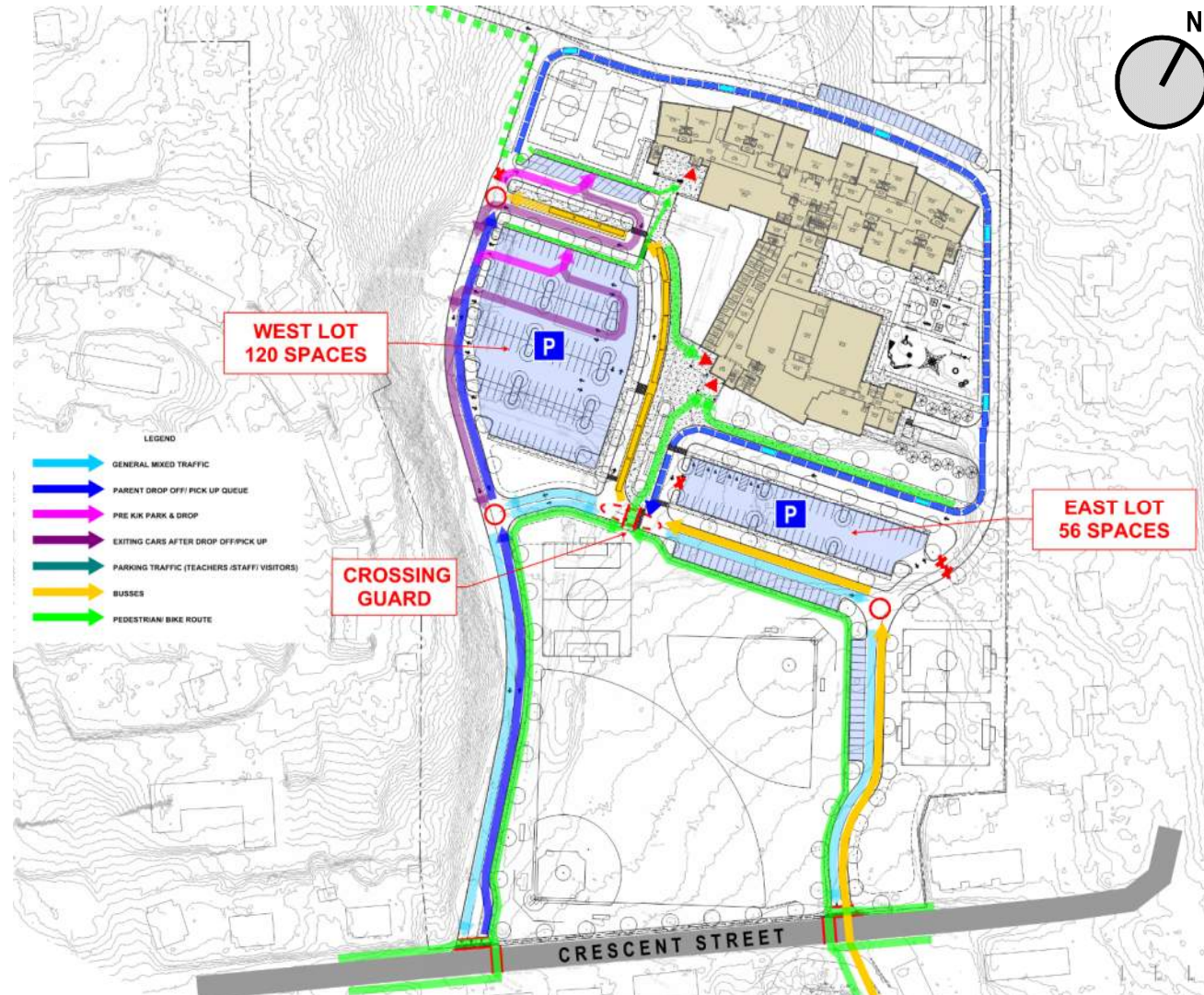


## MAJOR SITE FEATURES



# SITE CIRCULATION

- Bus and Car circulation separated
- Bike/Ped minimal crossing points
- Access to parking and drives at all times
- 254 parking spaces
- 78 queue spaces
- 32 PK-K drop spaces
- 10 Bus spaces



**SITE CIRCULATION**





VIEW FROM SOUTHWEST SITE ENTRANCE



AERIAL VIEW FROM SOUTHWEST



AERIAL VIEW FROM SOUTHEAST





ENTRY VIEW FROM SOUTH



VIEW FROM WEST PARKING LOT

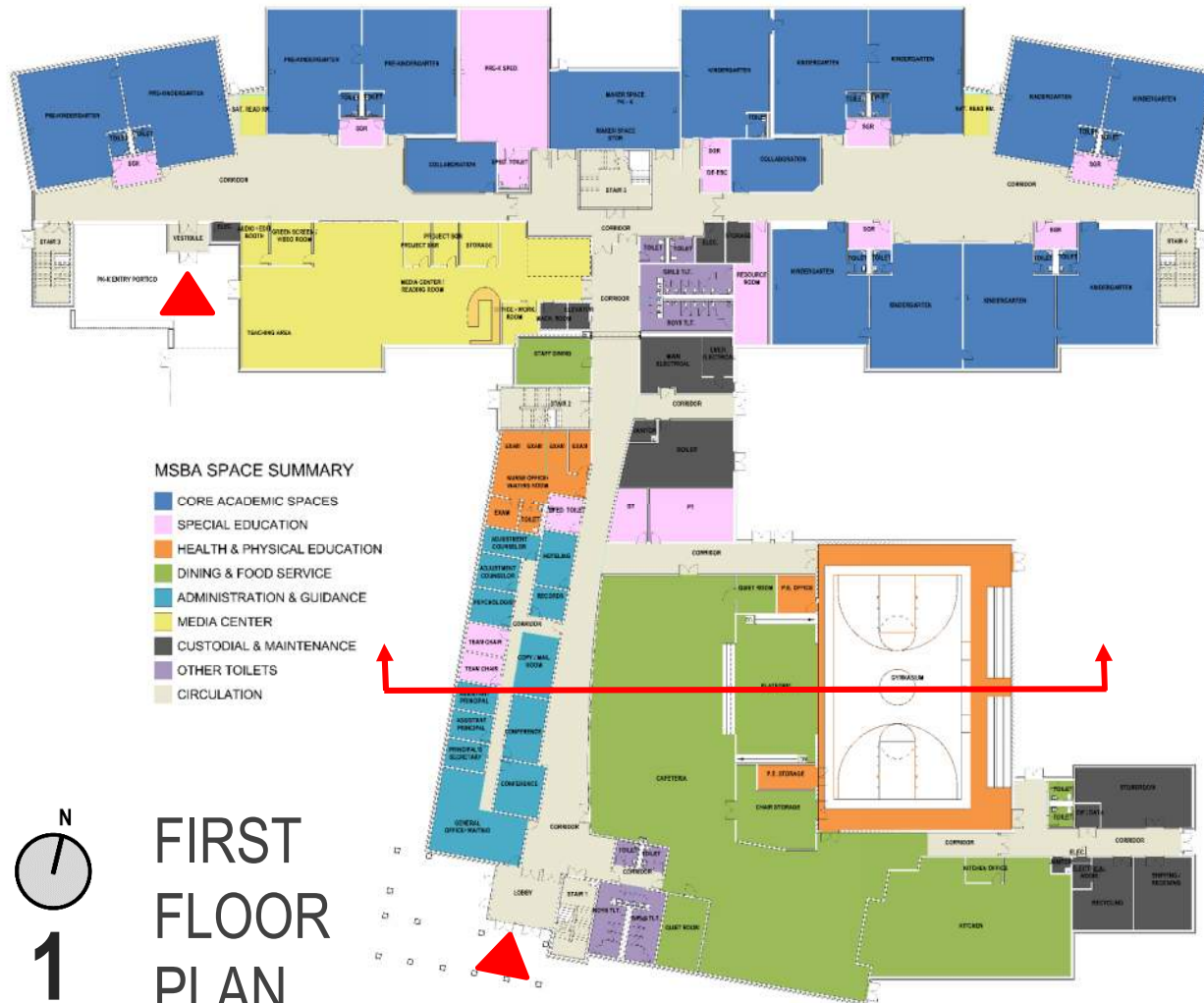




EARLY EDUCATION ENTRY

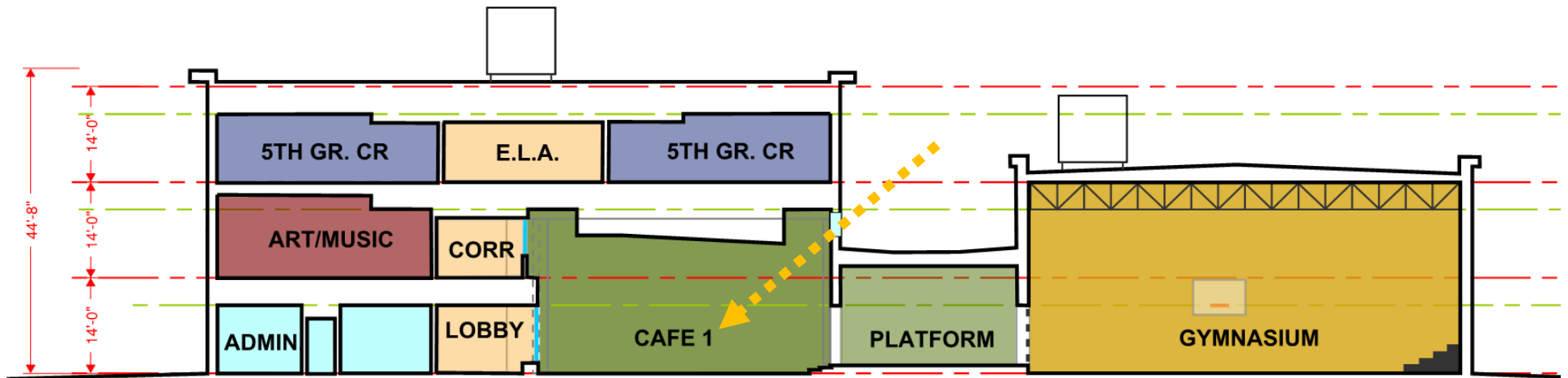


REAR AERIAL VIEW FROM NORTHEAST



- Classroom pairs split to let in light; creates reading nook
- Cafeteria separated into two areas
- Stage between Café 1 and Gym
- Café 1 is a two-story space
- Boiler and Electrical in center of building

- Floors related through vertical spaces
- Dual utility of platform – Café/Gym
- Natural light & views into Café



BUILDING SECTION E-W THRU “PUBLIC” WING







## THIRD FLOOR PLAN

- Further simplified geometry
- Main “open” stair at crossing with skylight above
- Light well provides connection from stair hall to library
- “Well” stair central to principals’ offices

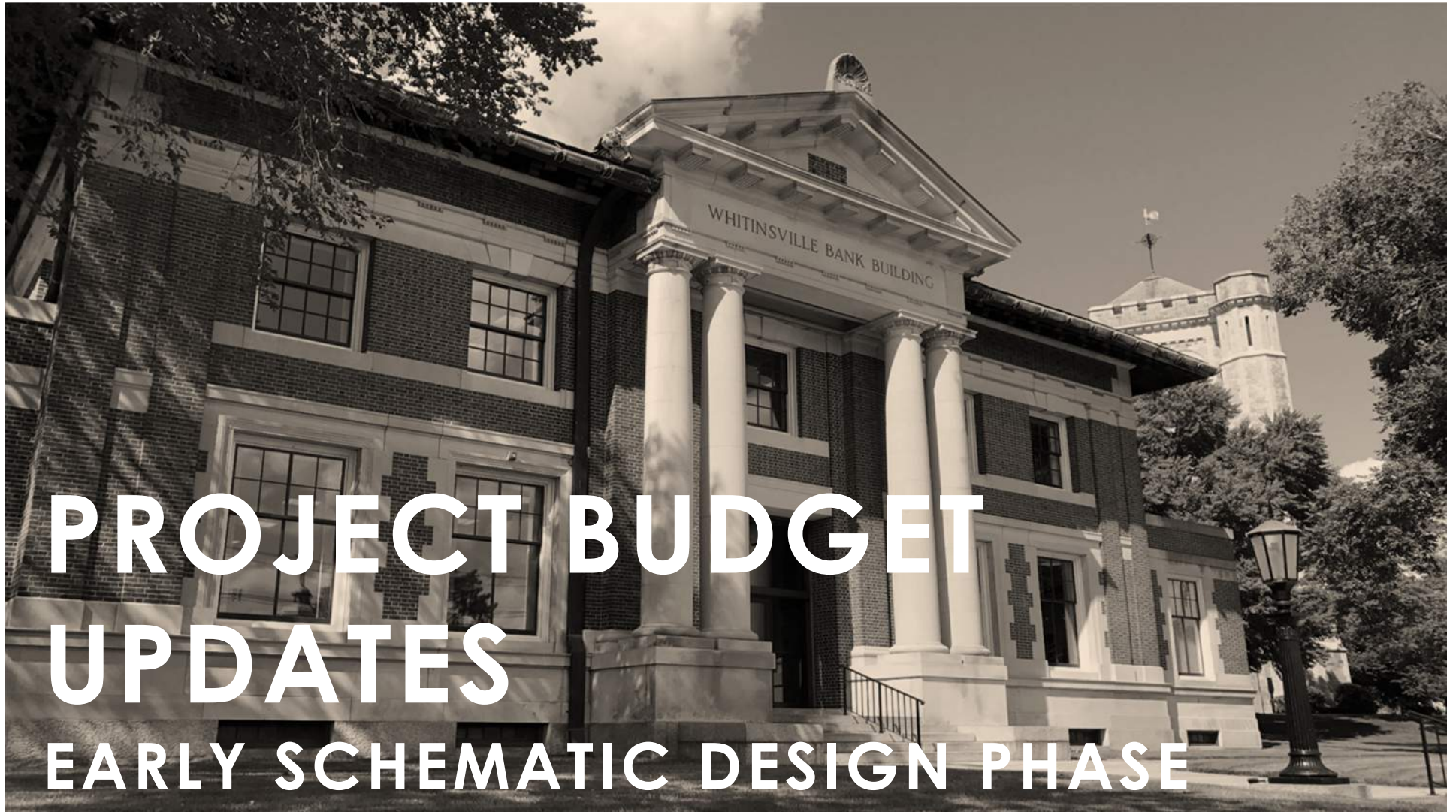


# QUESTIONS?



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ARCHITECTS, INC.





# PROJECT BUDGET UPDATES

EARLY SCHEMATIC DESIGN PHASE



# MSBA REIMBURSEMENT PROCESS

- MSBA will reimburse all Eligible Costs, at the District Base Rate (**59.21%** for Northbridge, up from 57.11%), plus bonus points.
- Examples of Ineligible Costs include:
  - Site costs over 8%
  - Building costs over **\$333/SF** (up from \$326/SF)
  - Asbestos flooring abatement
  - FF&E/ Technology costs over \$2,400 per student
  - Legal Fees, Moving Expenses, Construction contingencies over 1% for new construction or 2% for renovations.
  - Classroom modulares used for temporary swing space



# ESTIMATED PROJECT REIMBURSEMENT RATE FOR ELIGIBLE COSTS

Base Reimbursement Rate	<b>59.21%</b>
Maintenance	<b>1.57%</b>
CM @ Risk	<b>1.00%</b>
Renovation	<b>0%</b>
Green Schools	<b>2.00%</b>
<hr/>	
<b>*Total Reimbursement Rate</b>	<b>63.78%</b>

\*Reimbursement on Eligible Costs

Early SD budget



## PROJECT COST – EARLY SCHEMATIC PHASE

Construction Cost	<b>\$81.4M</b>
Fees & Expenses	<b>\$14.5M</b>
FF&E	<b>\$3.5M</b>
Contingencies	<b>\$5.7M</b>
<hr/>	
<b>Project Cost</b>	<b>\$105.1M</b>

Early SD budget



## ESTIMATED PROJECT COST AND MSBA REIMBURSEMENT (EARLY SCHEMATIC PHASE)

Project Cost	<b>\$105.1M</b>
Approximate MSBA Grant	<b>\$49.9M</b>
<hr/>	
Approximate Project Cost to Northbridge	<b>\$55.2M</b>

Early SD budget





## TAX IMPACT (EARLY SCHEMATIC PHASE)

Project Cost to Northbridge	<b>\$55.2M</b>
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Annual Tax increase on Average Home	<b>\$602.92</b>
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Based on <b>30</b> year term at 5% interest rate	( <b>\$2.00 per \$1000 of valuation</b> )
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Annual Tax increase on Average Home	<b>\$777.01</b>
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Based on <b>20</b> year term at 5% interest rate	( <b>\$2.58 per \$1000 of valuation</b> )
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Average assessed home value is \$301,000

Early SD budget



# SCHEMATIC DESIGN COST ESTIMATE SCHEDULE

**3/20/18: Project pricing drawings and specs going to Estimator and Construction Manager**

**4/12/18: Cost estimate reconciliation**

**4/17/18: Committee review and discuss**

**4/23/18: Schematic Design Budget shared in Public Forum #7**

SD budget



# **DETAILED DESIGN AND CONSTRUCTION SCHEDULE**

**December 2018: Commence Detailed Design**

**Summer 2019: Commence Site Preparation Work**

**August 2021: Open New Balmer School**

**December 2021: Complete Demolition and Sitework**

**SD budget**





QUESTIONS?





## **NEXT STEPS**

- **March 14, 2018 – Construction Manager (CM) Interviews**
- **March 20, 2018 - School Building Committee Meeting – CM Hired**
- **April 23, 2018 – Community Forum #7**
- **May 9, 2018 - Submit Schematic Design (SD) documents to MSBA**
- **June 27, 2018 – MSBA board meeting to approve project to bring to voters**
- **Fall 2018 – Town Funding Vote**

# COMMUNITY RESOURCES

Project Website:

<https://www.nps.org/sbc>

Project Email:

[SBC@nps.org](mailto:SBC@nps.org)





THANK YOU



DORE & WHITTIER  
ARCHITECTS, INC.