

W. EDWARD BALMER SCHOOL

FEASIBILITY STUDY

NORTHBRIDGE, MA

School Building Committee

SEPTEMBER 19, 2017



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



- 
- 1. Review of Forum #3 Comments and Findings**
 - 2. Design Alternatives Review**
 - 3. Conceptual Cost Estimate Update**
 - 4. Evaluation of Design Alternatives**
 - 5. Questions, Comments, Feedback**



FORUM NO. 3 FINDINGS

- Group B (Grade 2-4 Options-510 enrollment) not favored by any breakout group last night
- **Group C (Grade PK-5 Option-1030 enrollment) discussed as best path forward by attendees.**
 - Most financial sense long-term
 - Comparisons made of “Cost to Town” of Group C options to cost of Option A (no MSBA reimbursement, or educational improvements)
 - Wish to explore 5-year total cost of ownership (TCO) of maintaining BES/NES versus TCO of new building



FORUM NO. 3 COMMENTS

TABLE 1

- Options C1 and C2 – too long and disruptive
- C3 and C5 most appealing
- C5 with school up front appealing (not a parking lot)
- C3 and C5: less impact and shorter duration/less impact to students
- C3 and C4 might be too far back for safety
- B series is not economical.



FORUM NO. 3 COMMENTS

TABLE 2

- Security – back of site options are better
- Like separation of upper school/lower school into different wings (C4)
- Some appreciated separation of grade pairings onto different floors
- Traffic Circulation – rear options seem to have better flow
- Some questioned usefulness of N Main connection
- Like exit lined up with Lake Street – 4-way intersection



FORUM NO. 3 COMMENTS

TABLE 2 - Continued

- Need to look at cost of maintenance of BES/NES over longer construction durations versus shorter
- Prefer C Series options unanimously
- Want to look at impact of add/reno versus new (duration)





DESIGN ALTERNATIVES

SPACE PROGRAM UPDATE

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**



A SERIES (RENO ONLY)

- A1**
2 - 4
Balmer ES
- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES
- A2**
PK-1st
NES
- NO EDUCATIONAL IMPROVEMENTS

**NON- MSBA-
Reimbursed
Projects**

B SERIES (GRADE 2-4)

- B1**
RENO/
ADD
Balmer ES
- B2**
NEW/
REAR
- B3**
NEW/
FRONT

**MSBA-
Reimbursed
Projects**

C SERIES (GRADE PK-5)

- C1**
RENO/ADD
DEMO CR
Balmer ES
- C2**
RENO/ADD
KEEP CR
Balmer ES
- C3**
NEW/
REAR
- C4**
NEW/
EAST-REAR
- C5**
NEW/
FRONT

**MSBA-
Reimbursed
Projects**

DESIGN ALTERNATIVES

preliminary design



OPTION A – CODE AND DEFERRED MAINTENANCE UPGRADES

To extend the life of the building, this renovation-only option addresses:

- deferred maintenance
- code deficiencies
- life safety issues
- basic functional deficiencies
- Does not address any educational program issues
- **This work is not MSBA-reimbursable**



OPTION B1

2-4 (510)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP-OFF
7. PLAYGROUND
8. CAR DROP-OFF
9. EXISTING BLDG.
10. ADDITION
11. OUTDOOR LEARNING
12. ONE-WAY EXIT
13. PLAY FIELDS
14. NATURE TRAIL
15. WETLAND



ADD/RENO – ONE STORY ADDITION – 3 YEARS

preliminary design



OPTION B1 – 2-4 RENO/ADD

PRELIMINARY THREE-YEAR PHASING PLAN:

1. Y1 Q2-4: Enabling work; Build new addition – one grade, one story – as swing space.
2. Y2 Q1-2: Move one grade to addition, renovate vacant existing space
3. Y2 Q2-3: Small reno projects on vacations; swing out next block to addition.
4. Y2 Q3-4: Renovate vacant existing space; swing out next block.
5. Y3 Q1-2: Renovate vacant existing core space;
6. Y3 Q2-3: Tie together all remaining spaces; all site work; turn over

preliminary design



2-4 (510)

2-4 (510)

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. GRADE 2 (1 ST.)
6. CORE SPACES
7. GRADE 3-4 (2 ST)
8. DRY SWALE
9. CAR DROP OFF
10. BUS DROP OFF
11. PLAY FIELD
12. PLAYGROUND
13. WETLAND
14. NATURE TRAIL
15. OUTDOOR
LEARNING
16. BIKE-PED PATH



OPTION B3

2-4 (510)

LEGEND

1. PLAY FIELDS
2. BUS ENTRANCE
3. CAR ENTRANCE
4. LEARNING GARDEN
5. PLAYGROUND
6. GRADE 2 (1 ST.)
7. CORE SPACES
8. GRADE 3-4 (2 ST.)
9. CAR DROP OFF
10. BUS DROP OFF
11. RAIN GARDEN
12. NEW VAIL FIELD
13. WETLAND
14. NATURE TRAIL
15. BIKE-PED PATH



NEW CONSTRUCTION – TWO STORIES – TWO YEARS

preliminary design



OPTION C1

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP OFF
7. PLAYGROUND
8. CAR DROP OFF
9. EXISTING BUILDING
10. ADDITIONS
11. OUTDOOR LEARNING
12. ONE-WAY EXIT
13. PLAYFIELDS
14. NATURE TRAIL
15. WETLAND



ADD/ RENO – TWO STORIES – FOUR YEARS

preliminary design



OPTION C1 – PK-5 RENO/ADD

PRELIMINARY PHASING PLAN:

1. Y1 Q2-4, Y2 Q1: Enabling site work; Build new addition for grades 2-5; Includes new mechanical room for all.
2. Y2 Q2-3: Move grades 2-4 to addition, use Grade 5 addition space for specials temporarily; demolish existing 2-story classroom wing
3. Y2 Q4, Y3 Q1-2: Build new addition for grades PK-1 plus new gym addition; small reno/enabling projects over vacations
4. Y3 Q3-4, Y4 Q1: use lower school addition as temp swing space for specials and admin; renovate existing core space
5. Y4 Q2-3: Summer to complete core reno, move PK-1 from NES, and tie together; all remaining site work; turn over.

preliminary design



OPTION C2

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. BUS ENTRANCE
3. CAR ENTRANCE
4. RAIN GARDEN
5. VISITOR PARKING
6. BUS DROP OFF
7. PLAYGROUND
8. CAR DROP OFF
9. EXISTING BLDG.
10. ADDITIONS
11. OUTDOOR LEARNING
12. EXIT (ONE-WAY)
13. PLAY FIELDS
14. NATURE TRAIL
15. WETLAND



ADD/RENO – THREE STORIES – FOUR YEARS

preliminary design



OPTION C3

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. ENTRY/EXIT
3. RAIN GARDEN
4. DRY SWALE
5. PLAY FIELDS
6. NEW SCHOOL
7. CAR DROP OFF
8. PK-K DROP-OFF
9. PLAYGROUND
10. BUS DROP OFF
11. OUTDOOR LEARNING
12. NATURE TRAIL
13. WETLAND
14. BIKE-PED PATH



NEW CONSTRUCTION – THREE STORIES – THREE YEARS

preliminary design

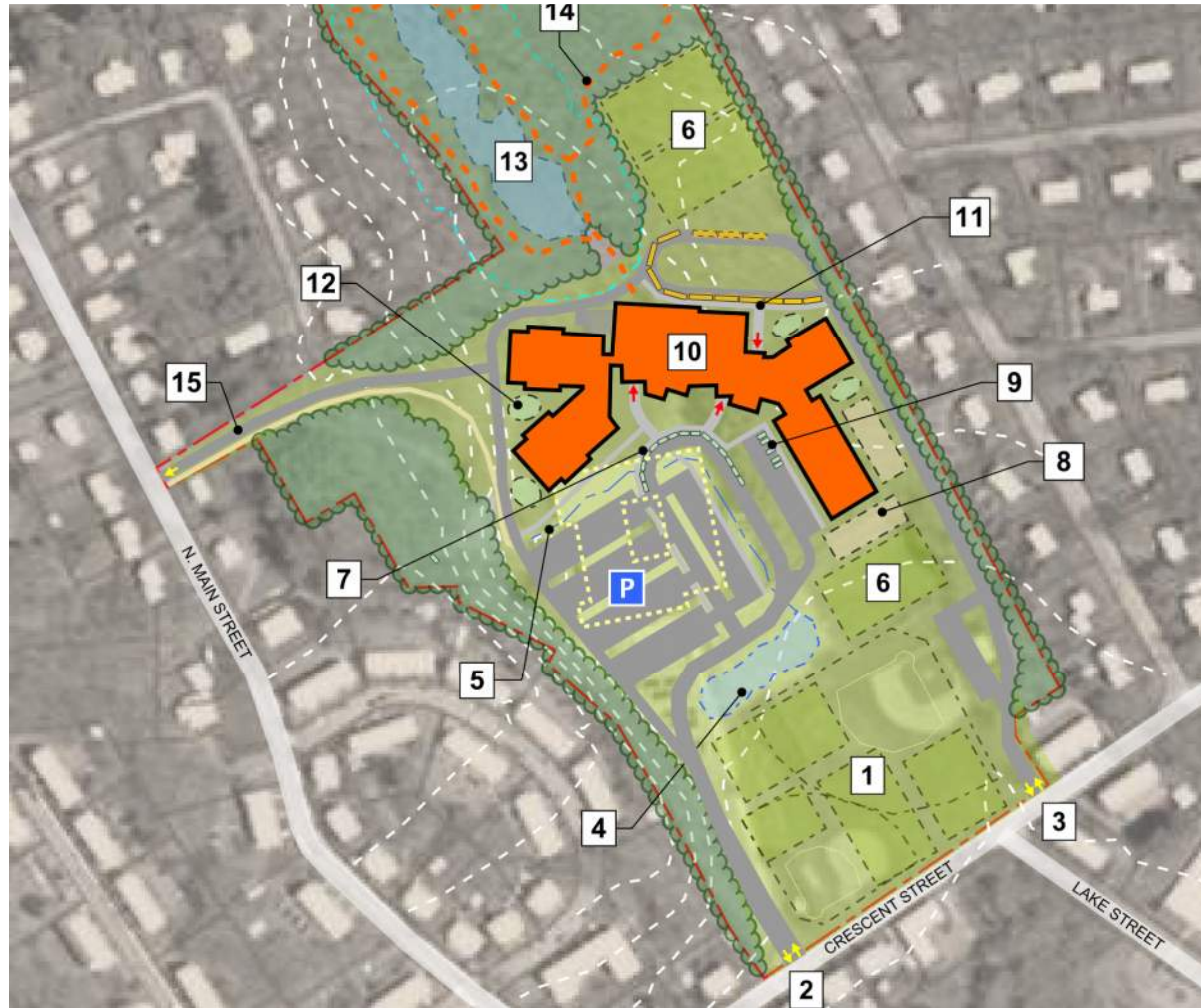


OPTION C4

PK-5 (1030)

LEGEND

1. VAIL FIELD
2. CAR ENTRANCE
3. BUS ENTRANCE
4. RAIN GARDEN
5. DRY SWALE
6. PLAY FIELD
7. CAR DROP OFF
8. PLAYGROUND
9. PK-K DROP OFF
10. NEW BUILDING
11. BUS DROP OFF
12. OUTDOOR LEARNING
13. WETLAND
14. NATURE TRAIL
15. ONE-WAY EXIT



NEW CONSTRUCTION – TWO STORIES – THREE YEARS

preliminary design



OPTION C5

PK-5 (1030)

LEGEND

1. PLAY FIELDS
2. PLAYGROUND
3. OUTDOOR LEARNING
4. UPPER SCHOOL
5. CORE SPACES
6. LOWER SCHOOL
7. BUS DROP OFF
8. CAR DROP OFF
9. RAIN GARDEN
10. NEW VAIL FIELD
11. WETLAND
12. NATURE TRAIL
13. PATHWAY



NEW CONSTRUCTION – THREE STORIES – THREE YEARS

preliminary design

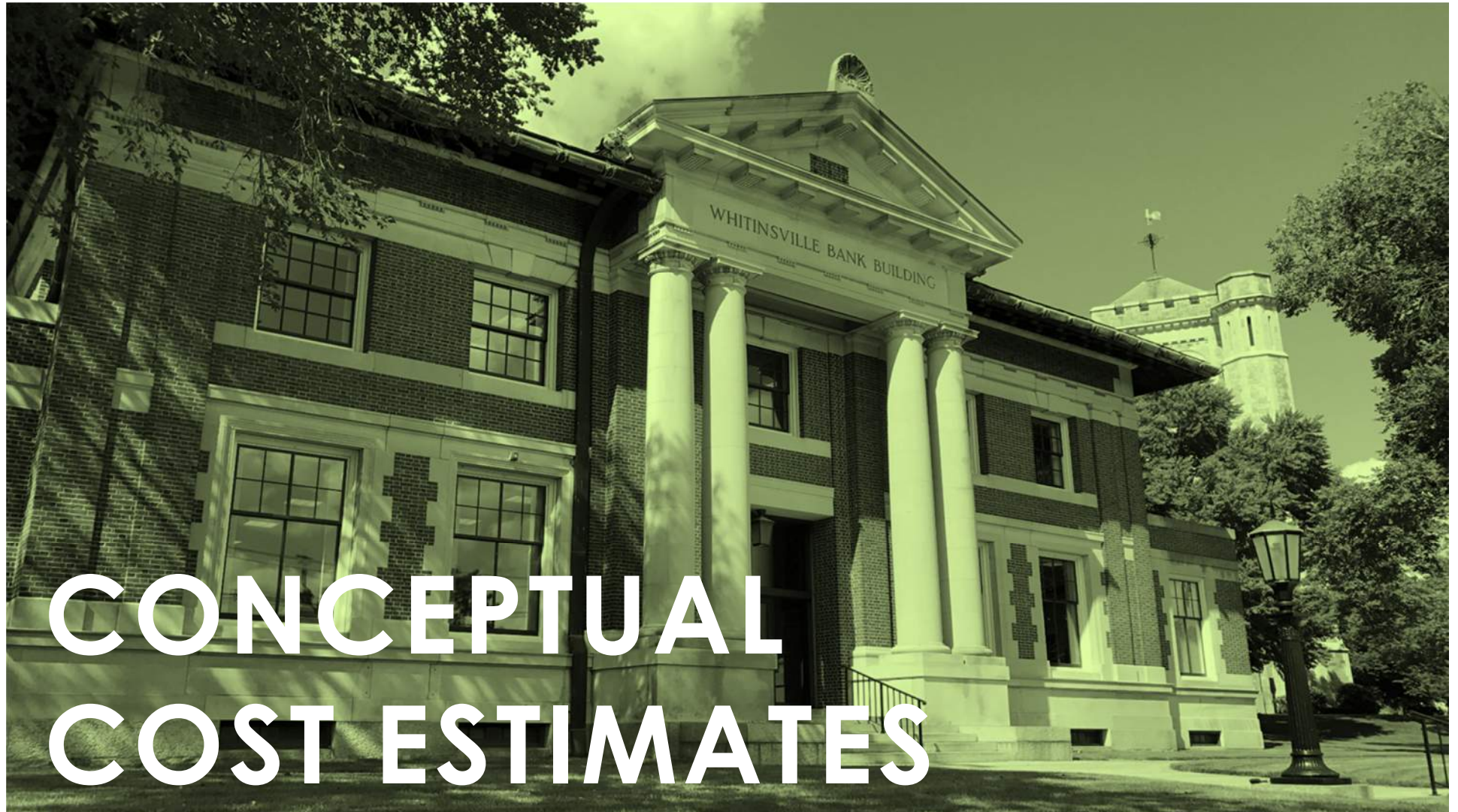




QUESTIONS?



DORE & WHITTIER
ARCHITECTS, INC.



MSBA REIMBURSEMENT PROCESS

- MSBA is the state authority that administers and funds a grant program for Massachusetts school projects.
- MSBA mandates a rigorous, multi-step study and approval process.
- MSBA will reimburse all Eligible Costs, at the mandated District Base Rate (57.11% for Northbridge), plus bonus points.
- Examples of Ineligible Costs include:
 - Site costs over 8%
 - Building costs over \$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 modular used for temporary swing space

preliminary costs



A SERIES (RENO ONLY)

A1 2 - 4 Balmer ES \$32.7M	<ul style="list-style-type: none"> • RENOVATIONS TO EXISTING BUILDINGS • CODE AND DEFERRED MAINTENANCE UPGRADES
A2 PK-1 st NES \$20.3M	<ul style="list-style-type: none"> • NO EDUCATIONAL IMPROVEMENTS

\$ 53.0M total

NON-MSBA-
Reimbursed
Project(s)

B SERIES (GRADE 2-4)

B1 RENO/ ADD \$57.1M	
B2 NEW/ REAR \$61.5M	B3 NEW/ FRONT \$60.6M

MSBA-
Reimbursed
Project

C SERIES (GRADE PK-5)

C1 RENO/ADD DEMO CR \$107.9M	C2 RENO/ADD KEEP CR \$102.4M	
C3 NEW/ REAR \$104.7M	C4 NEW/ EAST-REAR \$113.1M	C5 NEW/ FRONT \$104.1M

MSBA-
Reimbursed
Project

CONCEPTUAL PROJECT COST ESTIMATES

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



A SERIES (RENO ONLY)

A1
2 - 4
Balmer ES
0

- RENOVATIONS TO EXISTING BUILDINGS
- CODE AND DEFERRED MAINTENANCE UPGRADES

A2
PK-1st
NES
0

- NO EDUCATIONAL IMPROVEMENTS

0

**NON-MSBA-
Reimbursed
Project(s)**

B SERIES (GRADE 2-4)

B1
RENO/
ADD
65.13%

B2
NEW/
REAR
61.11%

B3
NEW/
FRONT
61.11%

**MSBA- Reimbursed
Project
(of eligible costs)**

C SERIES (GRADE PK-5)

C1
RENO/ADD
DEMO CR
61.84%

C2
RENO/ADD
KEEP CR
63.19%

C3
NEW/
REAR
61.11%

C4
NEW/
EAST-REAR
61.11%

C5
NEW/
FRONT
61.11%

**MSBA- Reimbursed
Project
(of eligible costs)**

PRELIMINARY REIMBURSEMENT RATES

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





A SERIES (RENO ONLY)

A1 2 - 4 Balmer ES \$32.7M	<ul style="list-style-type: none"> • RENOVATIONS TO EXISTING BUILDINGS • CODE AND DEFERRED MAINTENANCE UPGRADES
A2 PK-1 st NES \$20.3M	<ul style="list-style-type: none"> • NO EDUCATIONAL IMPROVEMENTS

\$ 53.0M total

NON-MSBA-
Reimbursed
Project(s)

B SERIES (GRADE 2-4)

B1 RENO/ ADD \$32.2M	
B2 NEW/ REAR \$37.4M	B3 NEW/ FRONT \$36.7M

MSBA-
Reimbursed
Project

C SERIES (GRADE PK-5)

C1 RENO/ADD DEMO CR \$61.3M	C2 RENO/ADD KEEP CR \$55.6M	
C3 NEW/ REAR \$58.9M	C4 NEW/ EAST-REAR \$66.6M	C5 NEW/ FRONT \$58.3M

MSBA-
Reimbursed
Project

APPROXIMATE COST TO TOWN

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

A SERIES (RENO ONLY)

A1 2 - 4 \$457.77 \$1.61 Balmer	← 20-YR AVERAGE ANNUAL TAX IMPACT, AVERAGE HOME*
A2 PK-1 st \$283.50 \$.998 NES	← AVERAGE ANNUAL TAX INCREASE PER \$1000 VALUATION

B SERIES (GRADE 2-4)

B1 RENO/ADD \$450.11 \$1.59	
B2 NEW/REAR \$523.87 \$1.85	B3 NEW/FRONT \$513.81 \$1.81

C SERIES (GRADE PK-5)

C1 RENO/ADD \$858.20 \$3.02	C2 RENO/ADD \$777.72 \$2.74	
C3 NEW/REAR \$824.36 \$2.90	C4 NEW/EAST \$932.46 \$3.28	C5 NEW/FRONT \$815.86 \$2.87

APPROXIMATE TAX IMPACTS

* AVERAGE HOMESTEAD VALUE = \$284,000, FY 2017 VALUATION

ASSUMPTIONS: BOND RATE 5% TERM 20 YEARS

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





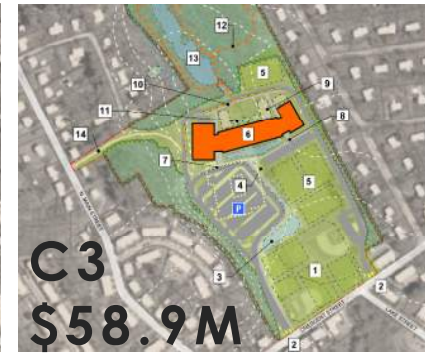
QUESTIONS?



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EVALUATION OF OPTIONS



GROUP A
Balmer + NES
RENO/ DM
ONLY
\$53.0M
total



OPTIONS REVIEW WITH COST TO TOWN

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

options evaluation



KEY ISSUES FOR EVALUATION

- Project Cost
- Provides educational benefits to greatest number of students
 - Add/reno versus new
 - Grades 2-4 versus PK-5
- Educational impacts of project:
 - Phasing
 - Duration
 - Complexity
- Site Planning:
 - Building Location (front, side, back of site)
 - Circulation
 - Parking
 - Site Amenities





QUESTIONS?



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NEXT STEPS

- School Building Committee meetings are every two weeks. Meetings and agendas are posted on the District's website.
- Sept/October 2017 – SBC to select top three options and vote to submit PDP report to MSBA
- October 6, 2017 – Submit Preliminary Design Program (PDP) to MSBA
- October 30, 2017 – Community Forum #4 at NES Cafeteria
- November 27, 2017 – Community Forum #5 at Balmer ES Library
- January 3, 2018 – Submit Preferred Schematic Report (PSR) to MSBA
- 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 Vote



THANK YOU



**DORE & WHITTIER
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