

ELIZABETH G. LYONS ELEMENTARY SCHOOL

RANDOLPH, MA




BUILDING COMMITTEE PRESENTATION



JUNE 23RD, 2021



LYONS ELEMENTARY SCHOOL | GOALS OF THE MEETING

-  walkBoston
- Cost Estimate Update

LYONS ELEMENTARY SCHOOL | WALKBOSTON UPDATE

Philip G. Coburn Elementary Walk Audit
West Springfield, MA

April 25, 2016

Centers for Disease Control and Prevention Division of Community Health/Community Transformation Grant

Mass in Motion, an initiative of the MA Department of Public Health

MAKING MASSACHUSETTS MORE WALKABLE

Old City Hall 145 School Street | Boston, MA 02108 | T: 617.367.9255 | F: 617.367.9285 | info@walkboston.org | www.walkboston.org

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Key Issues and Recommendations

Overall, the pedestrian infrastructure immediately surrounding the Coburn School is safe and in good condition. Children have smooth, wide sidewalks to walk on and crossing guards regulate traffic at arrival and dismissal times. The areas of primary concern are road crossings on the southeast and southwest sides of the school. Below is a summary of the issues observed on the walk audit and preliminary recommendations that address these safety concerns.

1. Road crossings on Elm Street feel dangerous and provide no signal protection for walkers.

Elm Street/Garden Street crossing
Students walking from the west side of Elm Street to the Coburn School use the crosswalk just south of the Elm Street/Garden Street intersection. This intersection was the site of a pedestrian fatality in December 2014. Elm Street was recently converted from a four lane, median-separated road to a two lane, median-separated road with parking lanes on both sides. The crosswalks are well marked. Parking is prohibited within 20' of the crosswalk which improves the visibility of walkers to oncoming traffic. Pedestrian crossing signs are also present.



The crosswalk at Elm Street and Garden Street is a popular crossing point for Coburn students. A crossing guard monitors this area.

Recommendations:

- Install curb bump-outs at the crosswalk locations to reduce the crossing distances for pedestrians and further discourage drivers from parking near the crosswalks.
- Consider installing Rectangular Rapid Flashing Beacons similar to those found at the US Post Office crossing.
- Work with the police department and engineering department to monitor driving speeds and volumes at this crossing. If traffic speeds are an issue, then prioritize this area for traffic enforcement. If traffic volumes are low enough, continue to implement road diet strategies to reduce the width of the travel lanes and roadway.



The crosswalk in front of the US Post Office on Elm Street has a Rectangular Rapid Flash Beacon and curb bump-outs.

Elm Street/Westfield Intersection
The Elm Street/Westfield intersection poses danger to pedestrians, particularly those new to the area who do not understand the phasing of the traffic signal. Most students attending the Coburn School do not use this intersection to reach the school, but they may use it to reach other destinations before or after school. There are no pedestrian signals and it is difficult to anticipate when drivers will be given a green light. The City engineer mentioned that this intersection is under study and traffic counts are in process. This section of Elm Street has two travel lanes and two parking lanes on each side of the median. There is one marked crosswalk on the north side of Elm Street, and one marked crosswalk across Westfield Street.

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Pedestrian safety

Reduce the number of walkers killed / injured statewide.

Walkable communities

Engage & build community through walk audits, workshops, & advocacy training.

Age-friendly walking

Adopt policies and practices that increase safety for children and older adults.

Transit connections

Promote safe walking connections to transit statewide.

Walking policy & design

Influence projects, policy, and legislation on local, state, & national levels.

walkBoston to :

- identify access issues
- make recommendations to improve pedestrian access

LYONS ELEMENTARY SCHOOL | COST ESTIMATE UPDATE

Building Area (GSF)



November, 2020

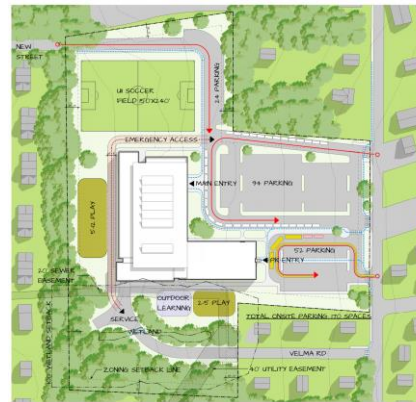
76,700 SF



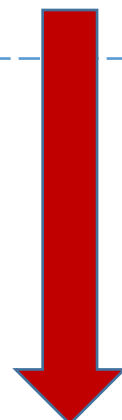
June, 2021

74,720 SF

Asphalt Area (SF)



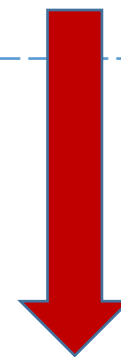
323,244 SF



268,785 SF

Delivery Method

Chapter 149 A
CM @ Risk



Chapter 149
Design, Bid, Build

LYONS ELEMENTARY SCHOOL | COST ESTIMATE UPDATE

AMF: \$47.9M

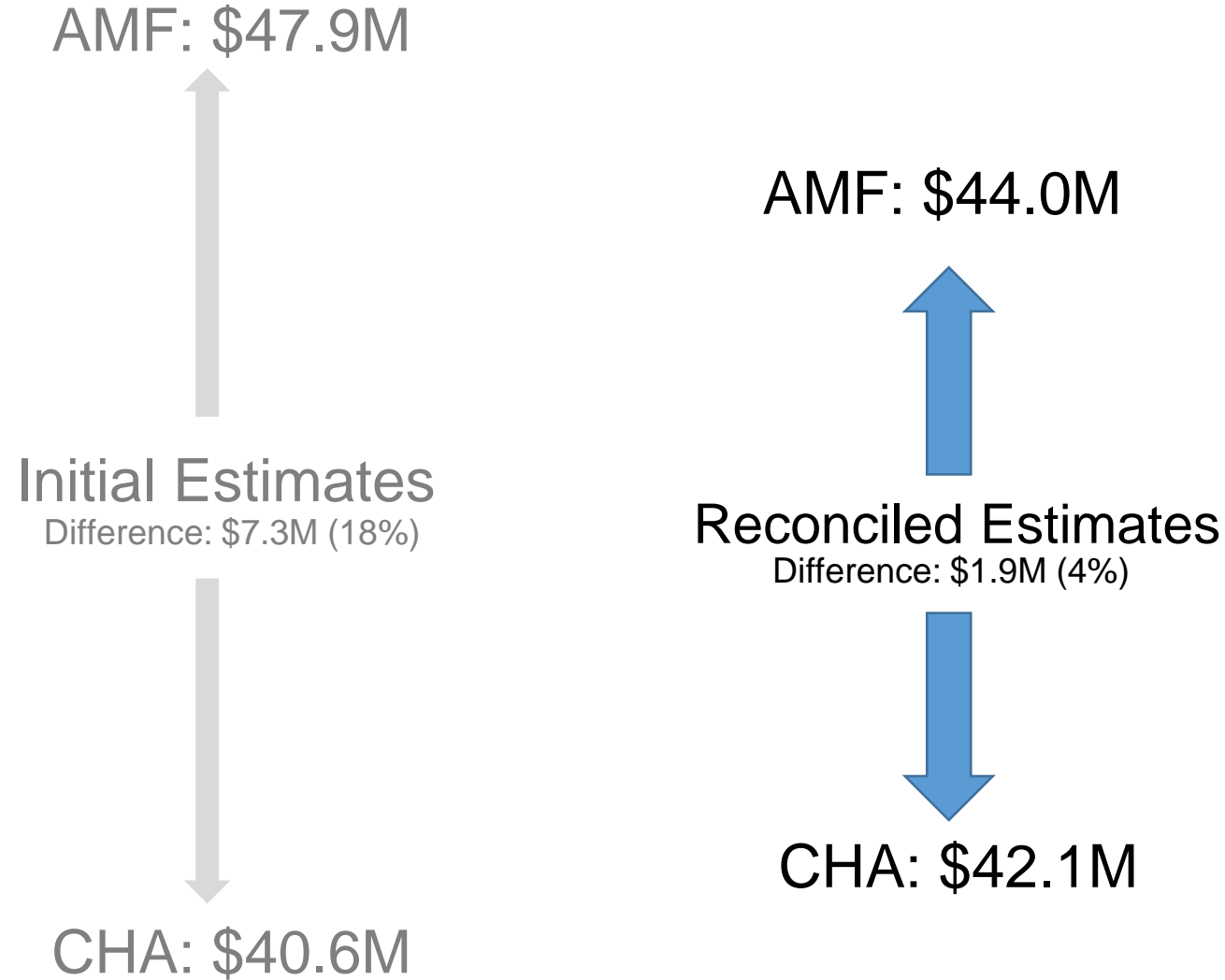


Initial Estimates
Difference: \$7.3M (18%)

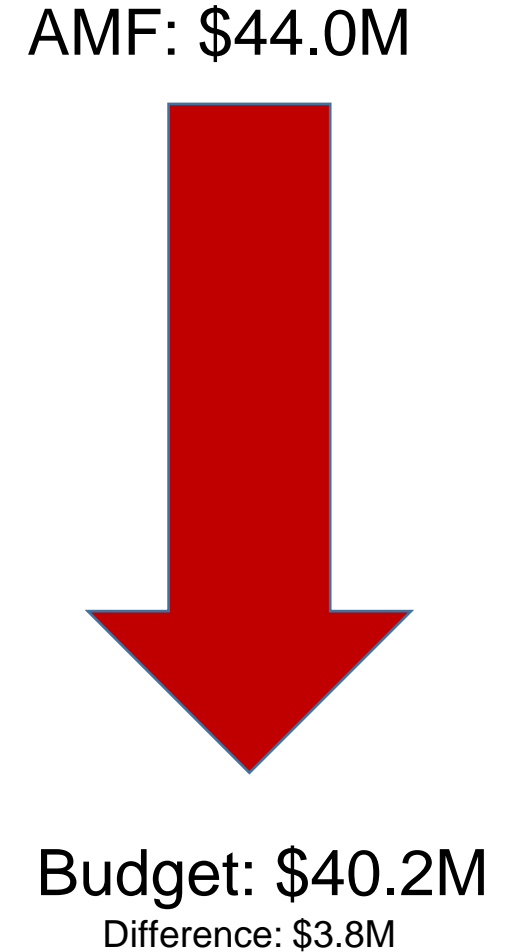
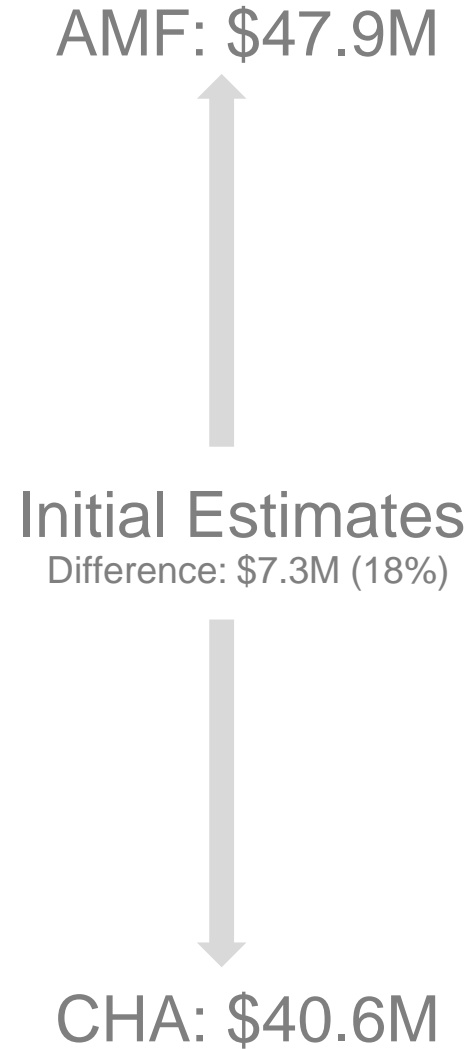


CHA: \$40.6M

LYONS ELEMENTARY SCHOOL | COST ESTIMATE UPDATE



LYONS ELEMENTARY SCHOOL | COST ESTIMATE UPDATE



LYONS ELEMENTARY SCHOOL | **COST REDUCTION – HOLISTIC APPROACH**

| CATEGORY | COST REDUCTION VALUE |
|-----------------|-----------------------------|
| Structure | \$226,609 |
| Shell | \$981,101 |
| Interior | \$1,024,681 |
| Services | \$1,004,428 |
| Sitework | \$803,810 |
| <hr/> | |
| Total | \$4,040,629 |

LYONS ELEMENTARY SCHOOL | COST REDUCTION

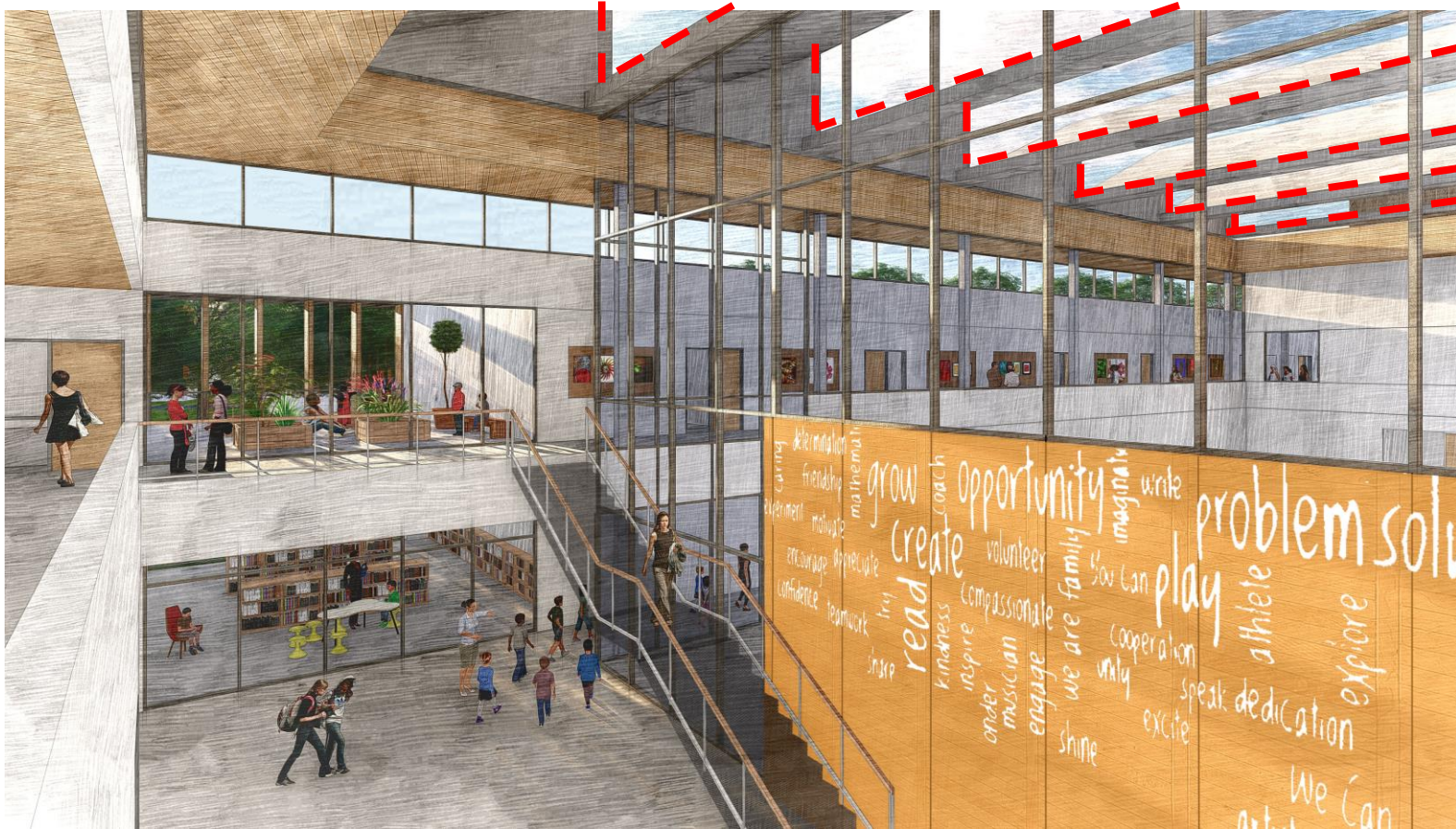
CATEGORY COST REDUCTION VALUE

| | |
|-----------|-------------|
| Structure | \$226,609 |
| Shell | \$981,101 |
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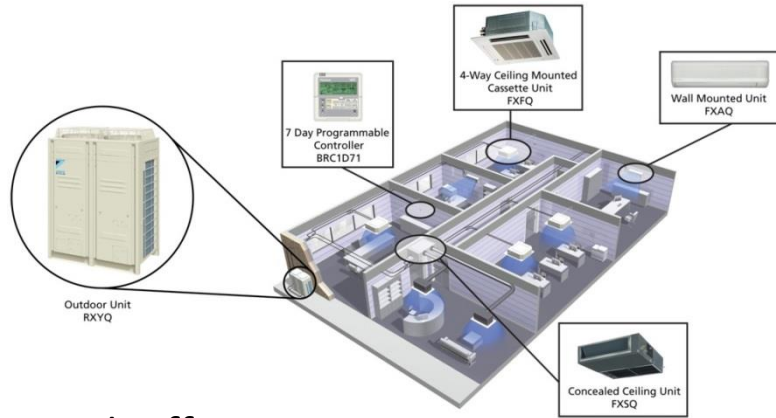
Five Cost Reduction Items

| | |
|--------------|--|
| Shell #9: | Eliminate rooftop clerestory windows. (\$189K) |
| Services #1: | Change hydronic radiant heating panels. (\$911K) |
| Site #1: | Change granite curbs to concrete. (\$126K) |
| Site #2: | Change playground surfacing to engineered wood fiber. (\$181K) |
| Site #3: | Remove Dow/Mitchell Street extensions from the project. Possible Add-Alternate. (\$280K) |

LYONS ELEMENTARY SCHOOL | COST REDUCTION



LYONS ELEMENTARY SCHOOL | COST REDUCTION



High Efficiency
“Variable Refrigerant Flow” (VRF)

Option #1: Change from hydronic to electric radiant heating panels.

Pros:

Lowers first cost.

Decarbonization. Reduced reliance on fossil fuels (natural gas).

Cons:

Electric costs more to operate – higher utility bills.

Option #2: Eliminate radiant heating panels. Use VRF for heat. Upgrade windows.

Pros:

Lowers first cost.

Decarbonization. Reduced reliance on fossil fuels (natural gas).

Envelope efficiency is improved.

Cons:

VRF loses efficiency in low temperatures.

LYONS ELEMENTARY SCHOOL | COST REDUCTION



Granite Curb



Concrete Curb

LYONS ELEMENTARY SCHOOL | COST REDUCTION



Poured in Place Rubber Playground Surfacing



Engineered Wood Fiber Playground Surfacing

LYONS ELEMENTARY SCHOOL | COST REDUCTION

