



Town of Concord

Concord Middle School

Middle School Building Committee

VE

15 September 2022





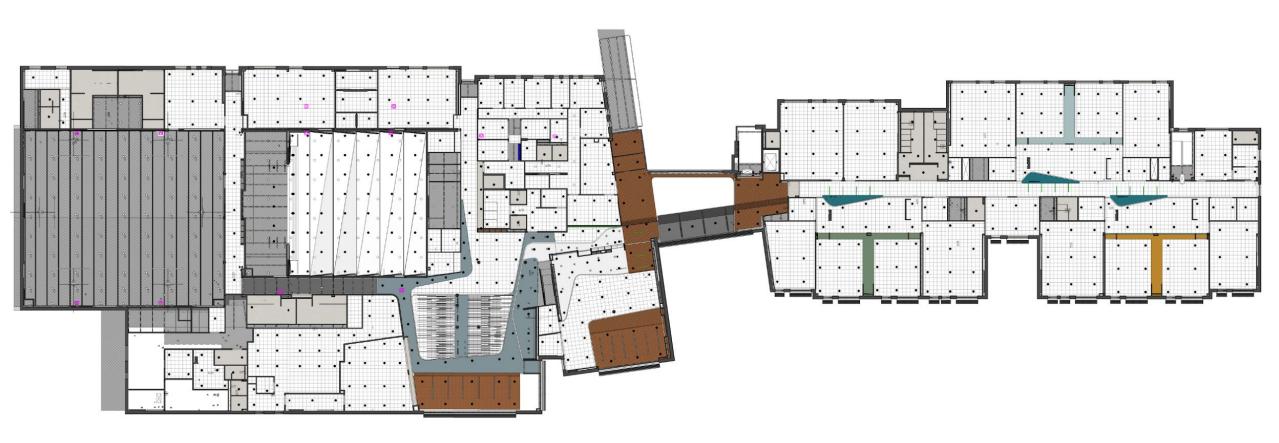
ITEM #19- Reduce advanced lighting controls from 100% addressable lights to 60%

This can be Accepted

We will replace Enhanced lighting <u>controls</u> in accordance with <u>Section C406.4</u> With

Reduced air <u>infiltration</u> in accordance with <u>Section C406.9</u>.

GYPSUM CEILING













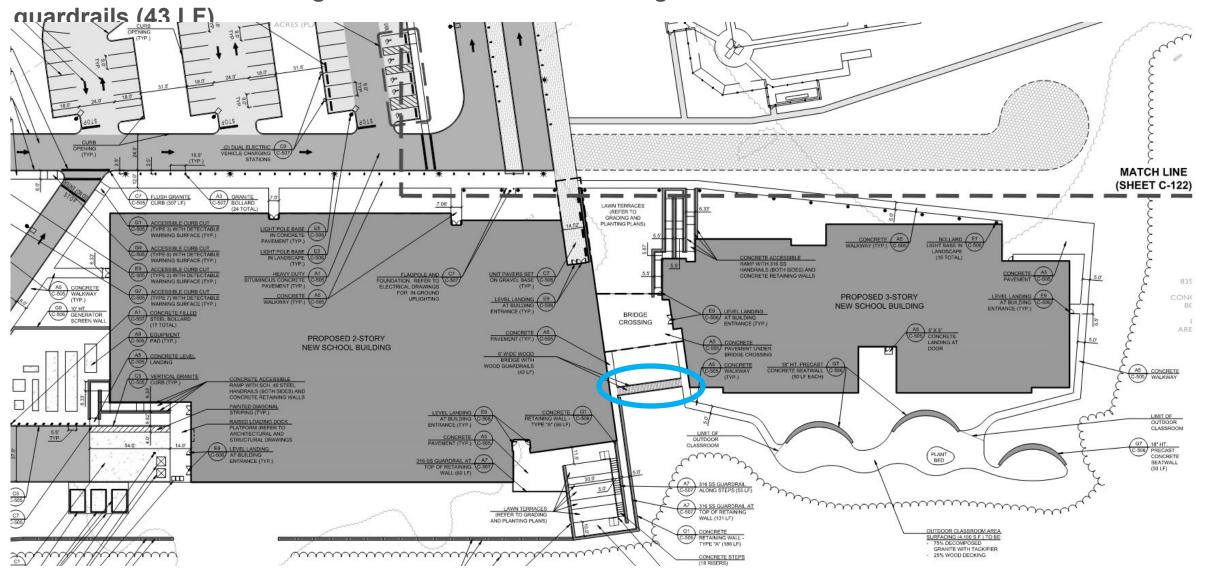
ITEM #29- Change curtainwall and window glazing from triple to double

- •EUI impact: 28.1
- •Estimated annual energy cost increase: Total: \$41,636 [electricity \$20,176 increase + estimated peak charges:\$21,461 increase]
- •Payback analysis: requires increased cost of HVAC equipment (increase loads and sizing) [Note: without HVAC system cost increase, the payback on triple glazing is about 10 yrs. payback will be lower than 10 yrs with HVAC equipment costs increase]
- **HVAC systems sizing and costs impacts**: "Cooling load is about 10% higher and Heating load is 25-30% higher in rooms that have windows.
- Since the equipment was already sized for the cooling load the heating doesn't cause any increase in equipment size (just in energy usage).
- The cooling load increasing 10% will depend on each space if that moves the unit up a size or not, but in general isn't a large impact."
- •Solar PV impact: the Net Zero Readiness will be impacted and the future Solar PV system will require to be larger.
- Peak Usage Increase will have associated GHG emissions increases
- •Double Glazing is compliant under the current Massachusetts energy Stretch Code.
- •Double Glazing does not meet the requirements of the proposed E-Z code, nor the requirements of the upcoming 2023 Massachusetts Stretch Code, namely the Thermal Energy Demand Intensity (TEDI) which impact demand charges.

ITEM #30- Site: At south side of building at Dining Commons terrace: Remove 100 linear feet of retaining wall and guardrail, remove lawn terraces, remove CIP Stairs and concrete walkway. Add 800 SF of concrete pavement to patio and regrade. (BOD C-121)



ITEM #33- Site: Wood Bridge: Remove 6' wide wood bridge with wood



ITEM #33- Exterior Wall Assemblies: Install Metal Composite material wall panels in lieu of phenolic:

available products that may be incorporated into the Work include, but are not limited to, the following: 3A Composites USA, Inc.; Alucobond Plus; Alcoa Inc.; Reynobond FR.; ALOCTEX Inc Alcotex, FR.; Or equal









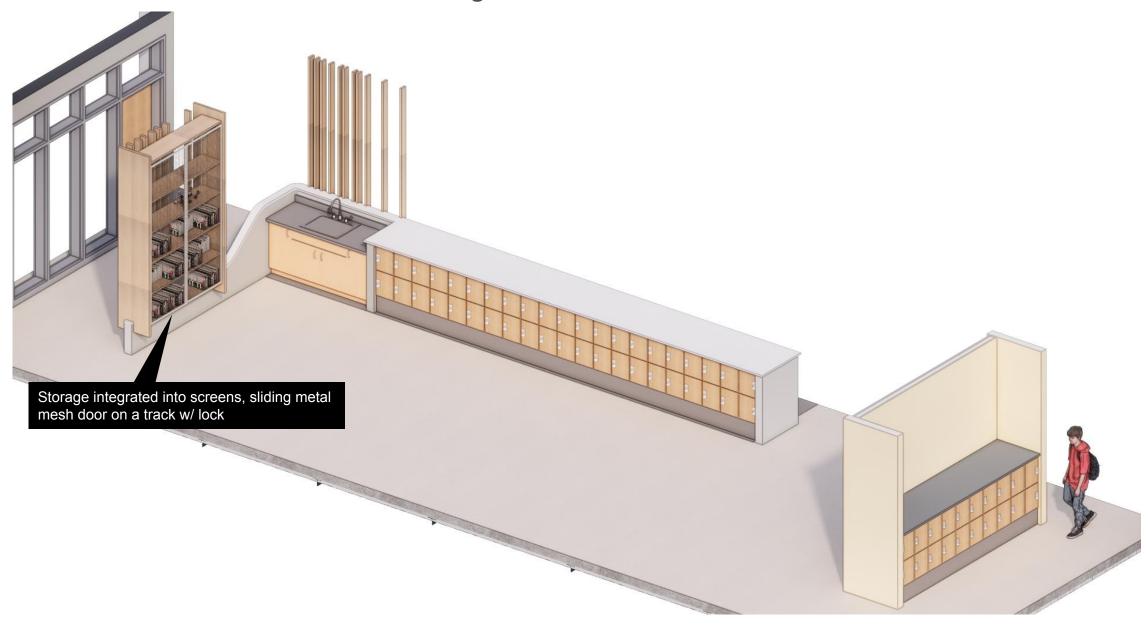


ITEM #52- Eliminate stair access to roof- reduce height of stair tower, add alternating tread stair and

hatch for roof access

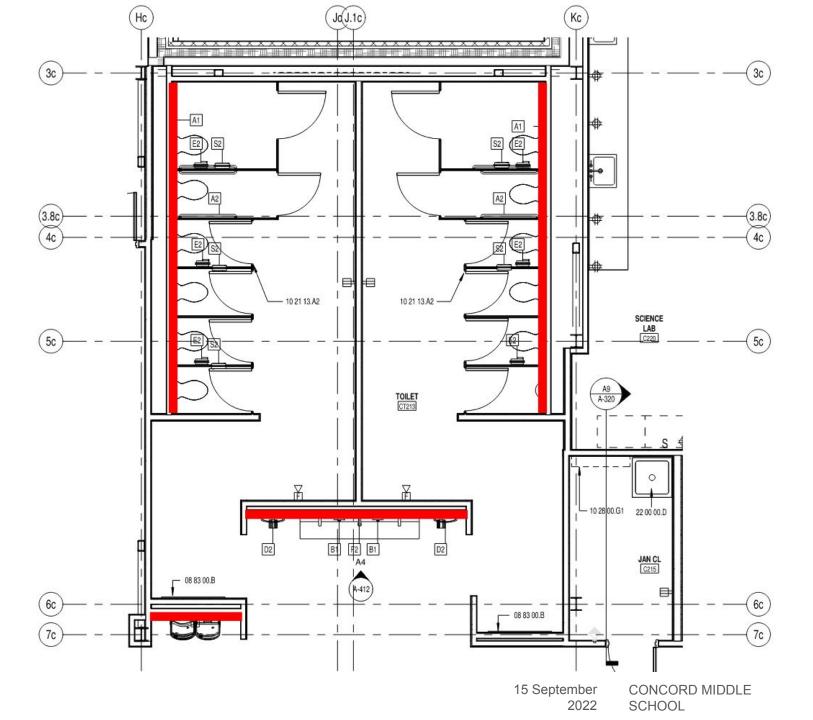


ITEM #56- Remove 8' tall mesh front storage cabinets at Team Commons



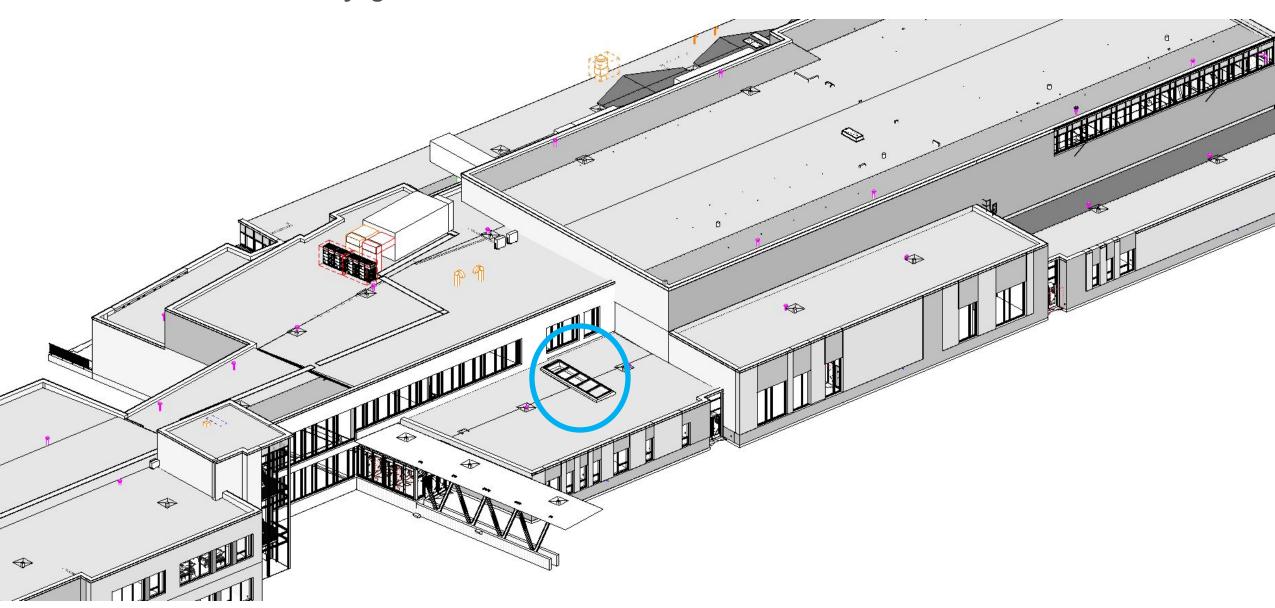
ITEM #57- Reduce ceramic wall tile in toilet rooms to 8' on wet walls only. Epoxy paint on all other walls

WET WALL



EWING SMMA

ITEM #59- Eliminate unit skylights in Administration area



ITEM #63- Reduce height of Gymnasium to minimum clearance allowed by MIAA for basketball - Approx 5'-0" ft



ITEM #66- Reduce Auditorium and Specialty space AV systems by 25%

Auditorium:

- Reduce wireless microphone quantity from 12 to 4
 - Additional wireless microphones can be rented and integrated with the room system when needed.
- Reduce PTZ camera quantity from 3 to 1 (the day/night camera for backstage monitoring remains)
- Remove video recording/streaming
- Change audio mixing console to a more basic model with fewer built-in features and 15 fewer available input channels
- (including basic audio mixing console system above) reduce overall auditorium wired microphone connections from 48 to 16

Gym

Remove video presentation system

Cafeteria

Remove video presentation system

Band/Orchestra (each)

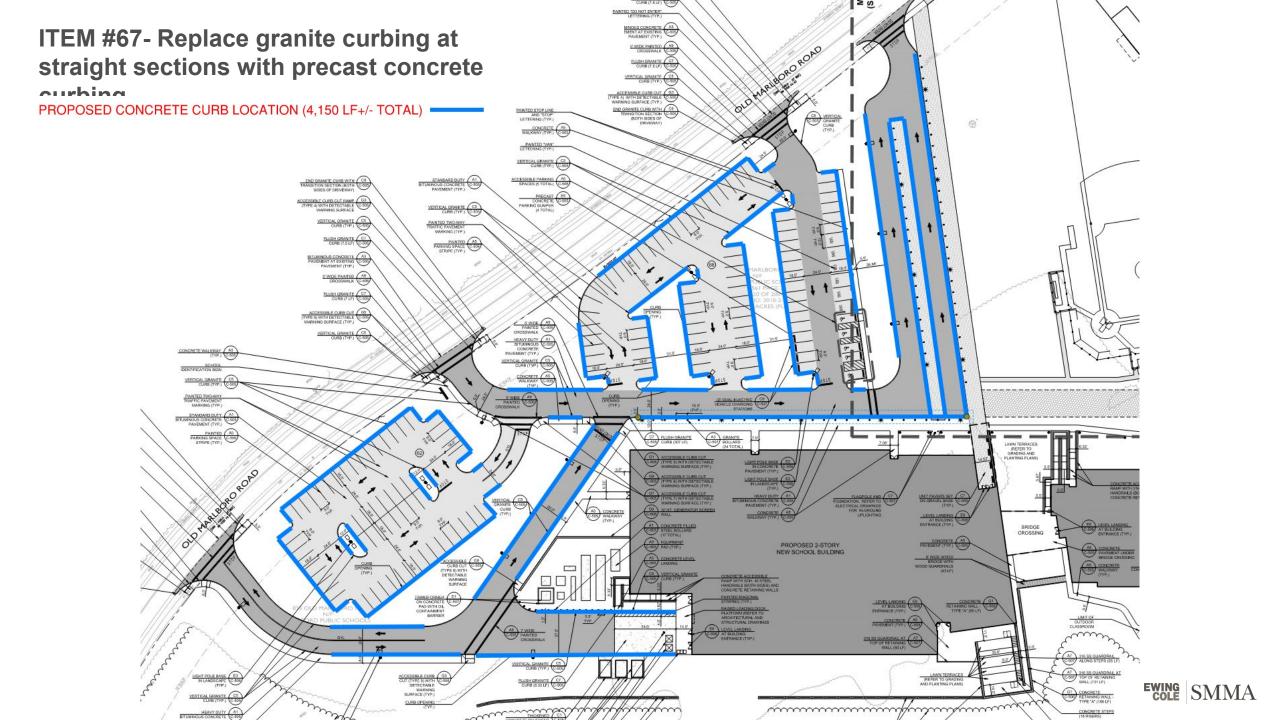
- Reduce PTZ camera quantity from 2 to 1
- Reduce video projection system from brighter projector with a larger screen to typical classroom short throw projector on whiteboard

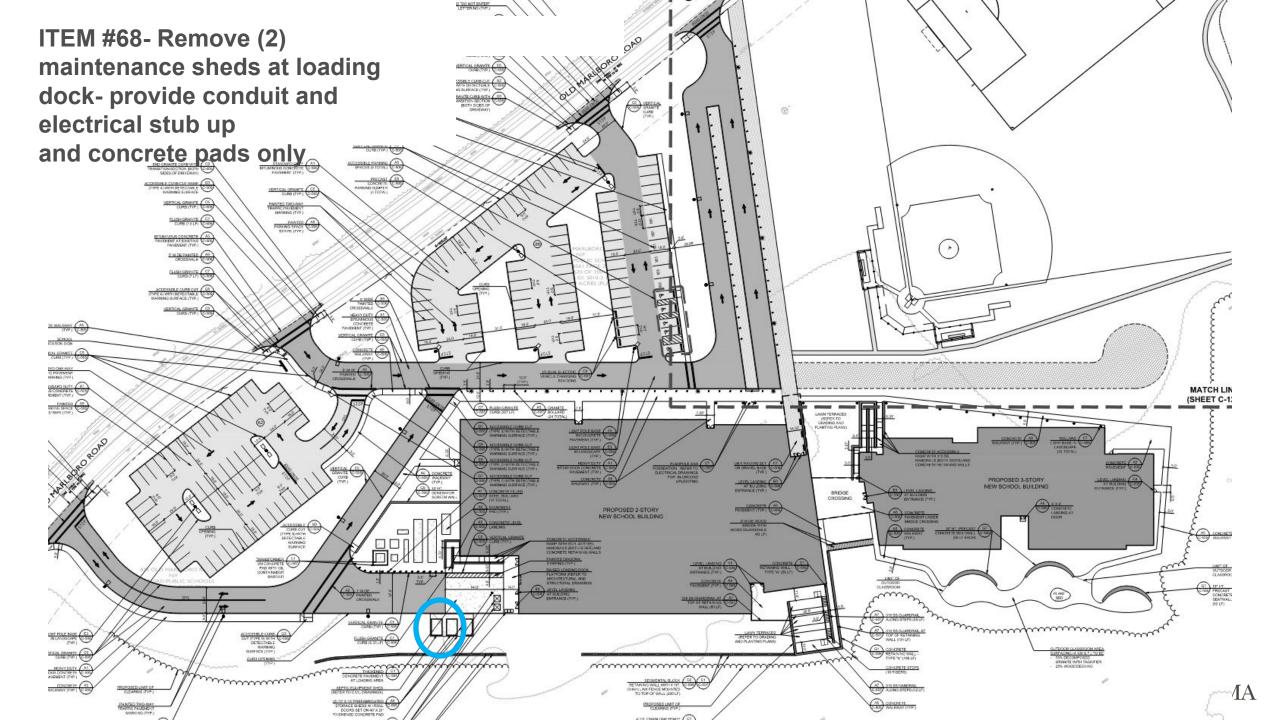
Media Center

Remove audio system (audio from speakers on the projector only)

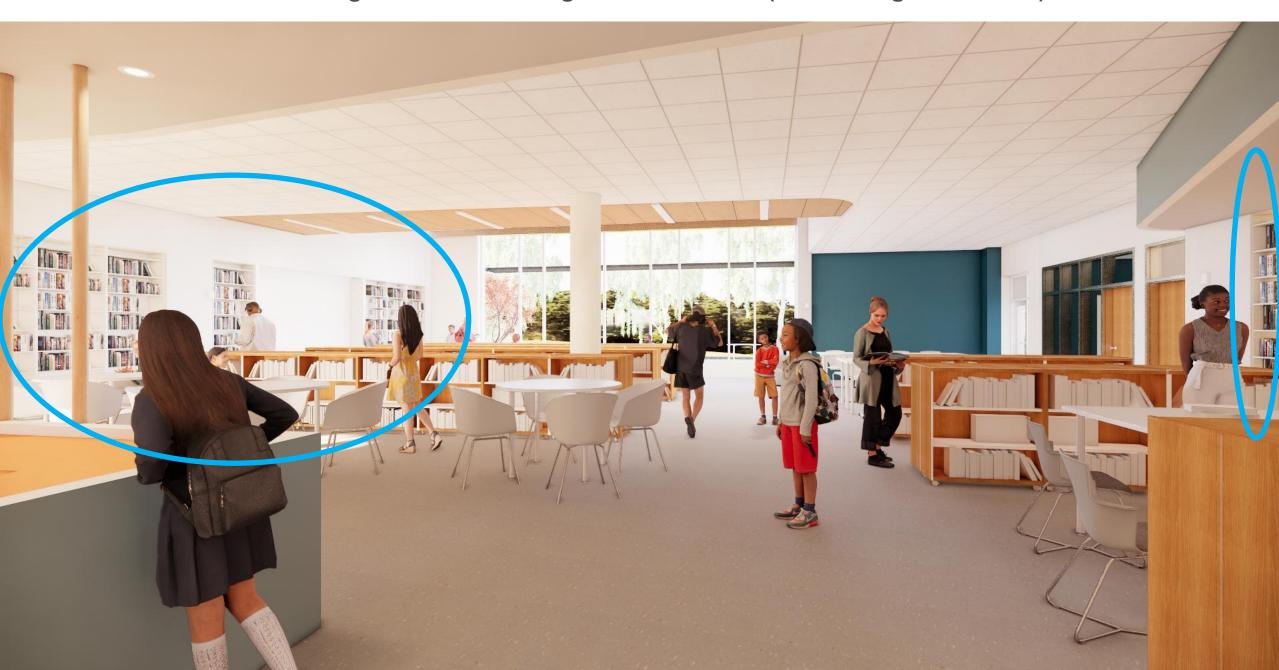
*** These items have not been vetted with CMS yet. These are some suggestions for cutting current AV Scope



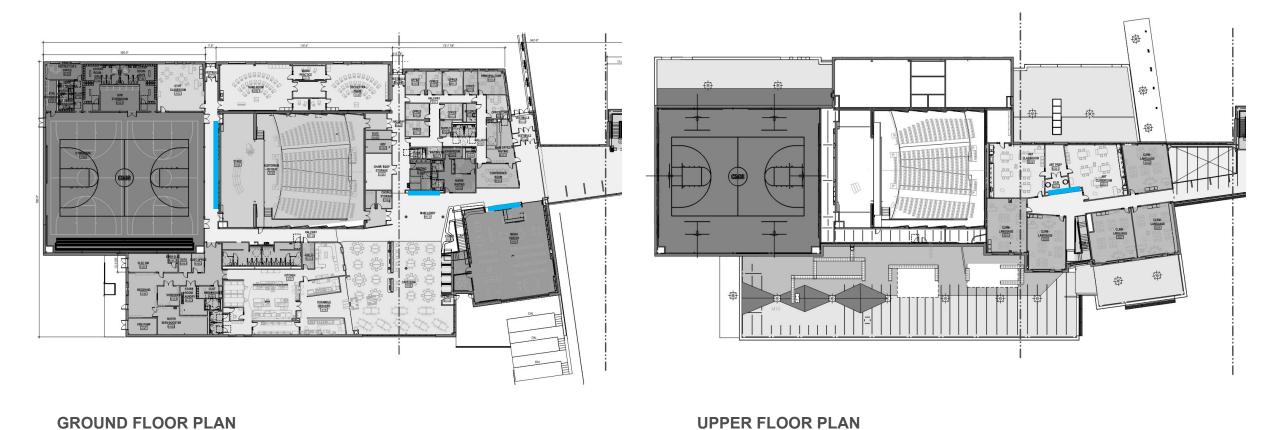




ITEM #69- Eliminate full height built-in shelving at Media Center (all shelving to be FF&E)



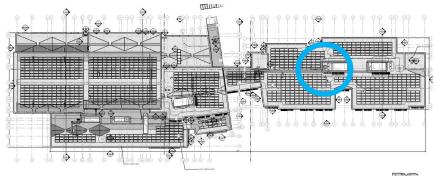
ITEM #72- Millwork display cases (Eliminate or Reduce by 50%)



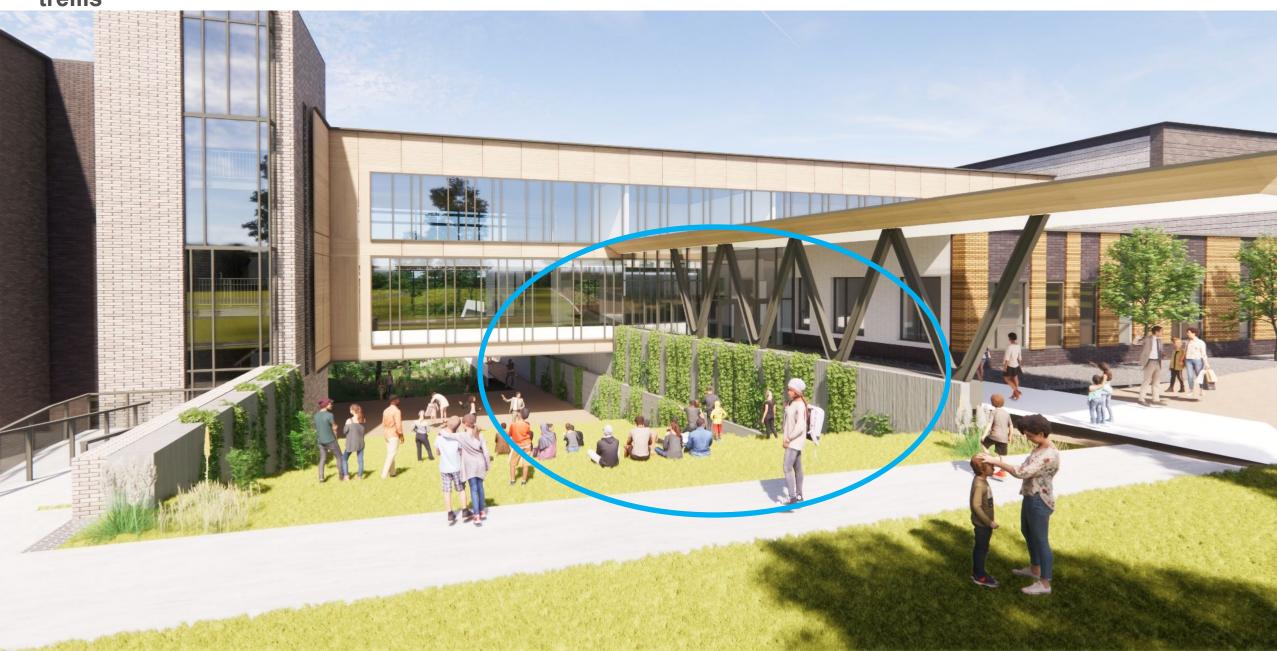
15 September CONCORD MIDDLE SCHOOL SCHOOL SMMA

ITEM #75- Eliminate roof davit and associated structure





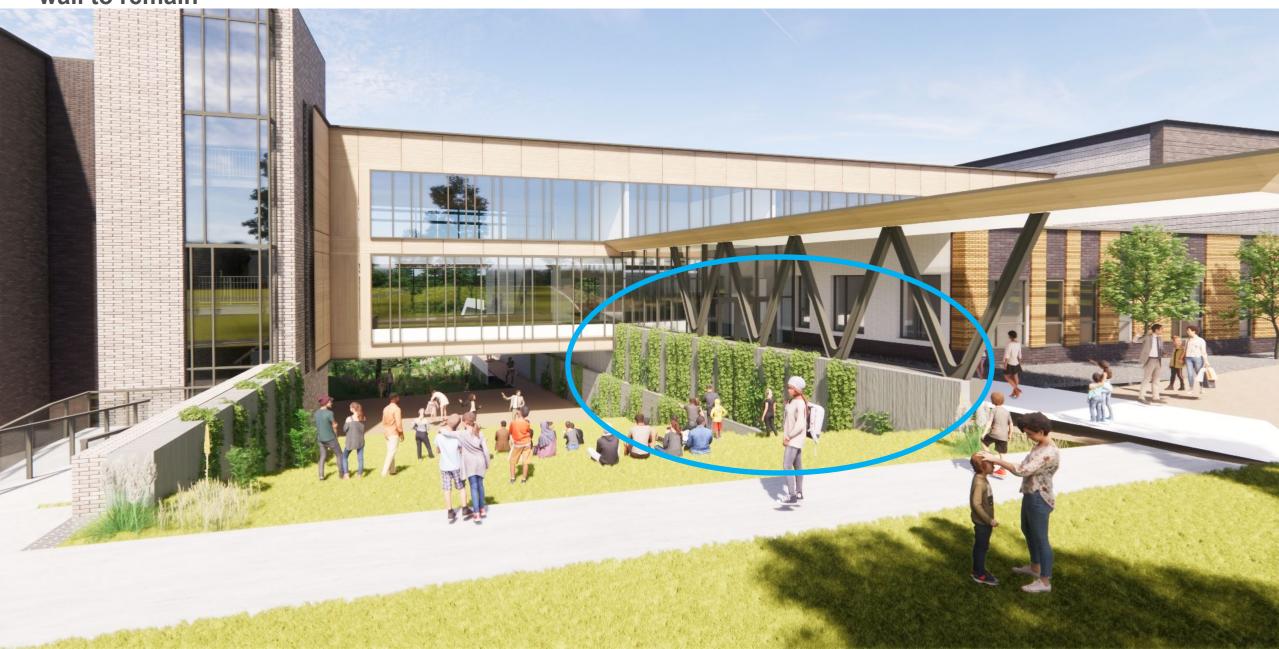
ITEM #76- Eliminate green screen/cable trellis

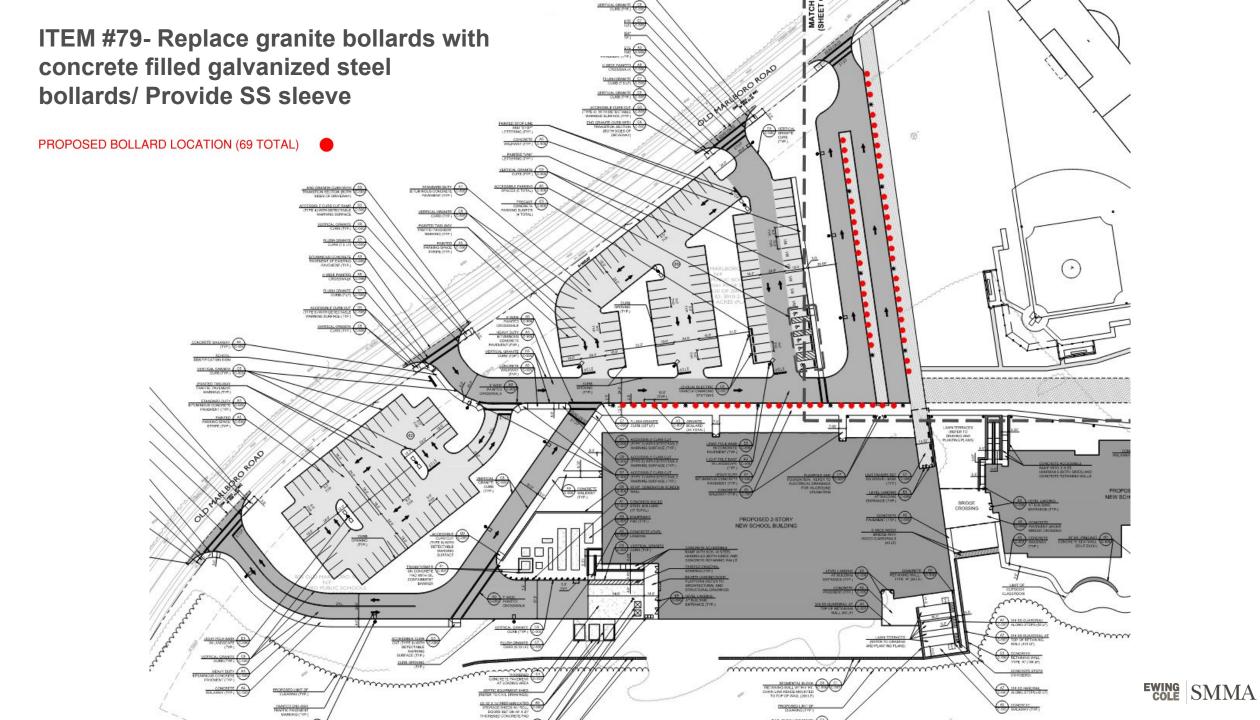


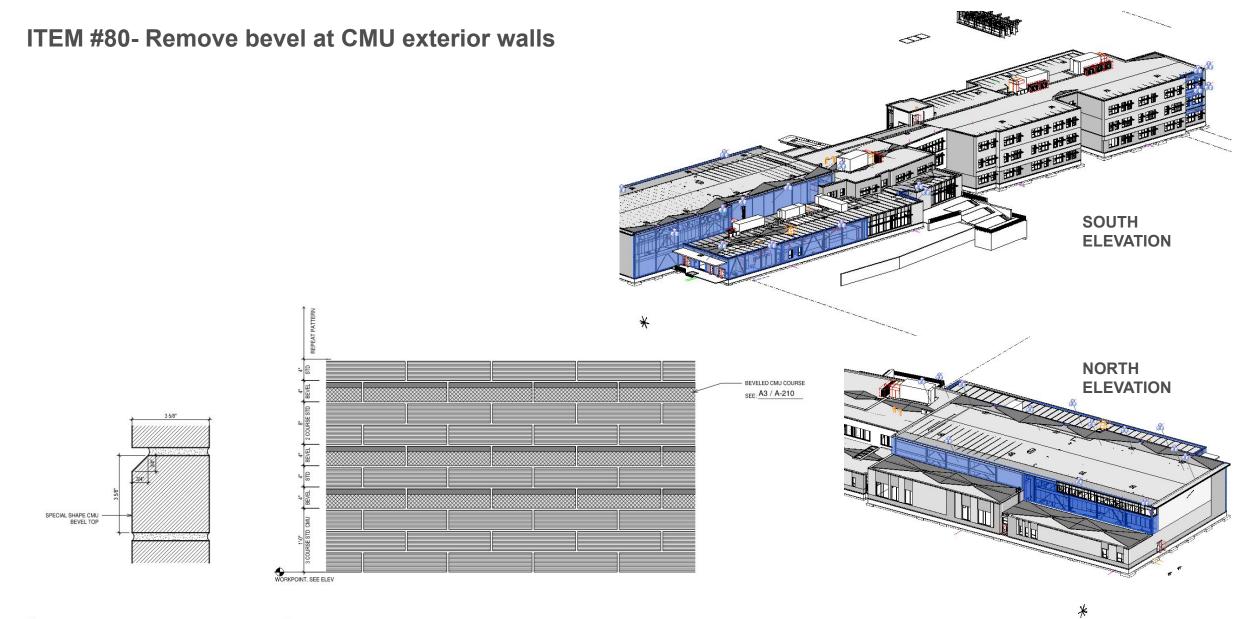
ITEM #77- Simplify main entry canopy design by 50%



ITEM #78- Eliminate entry concrete planter, add metal picket fence rail for fall protection, concrete retaining wall to remain



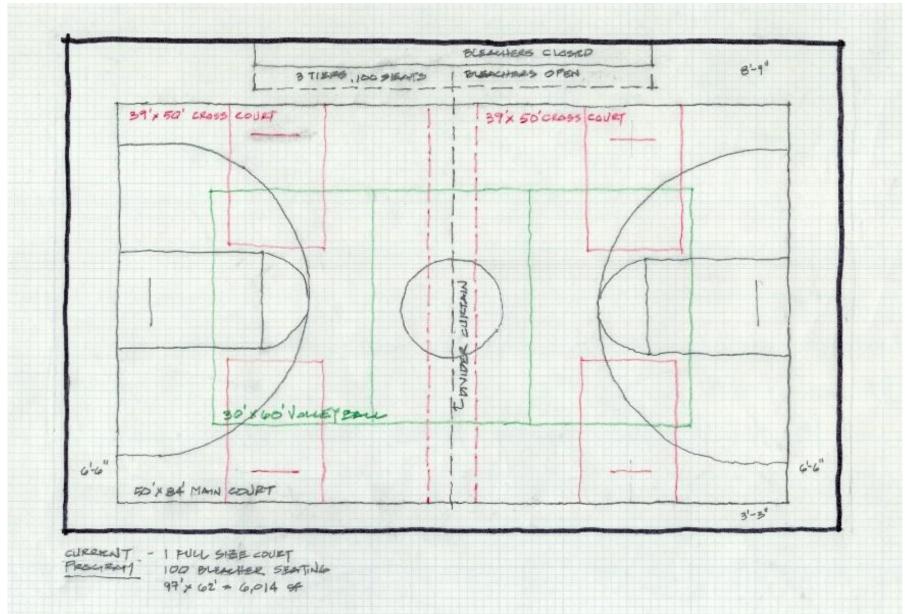






EWA-2 CMU TEXTURE PATTERN
SCALE: 11/2" = 1'-0"

ITEM #81- Reduce size of Gymasium by 3,500 Square Feet to MSBA Standard (6,000 SF Gym with MIAA Cour



Sketch: 6,000 nsf gym

- One MIAA main
- 39'x50' cross courts
- divider curtain
- 100 bleacher seating
- 2 teaching stations

ITEM #82- Reduce size of Auditorium to accommodate 270 person occupancy; reduce by 1/3 from 5040 SF to 3240 SF ...

Auditorium Considerations – 2020 Study

- "Current" (2020) Space Summary: Cafeteria incl. floor seating with stage
- Option 1: Black Box Theater
- Option 2: Auditorium with capacity for 1 grade level, plus staff (270 seats)
- Option 3: Auditorium with capacity for 2 grade levels, plus staff (550 seats)



Questions/Comments?





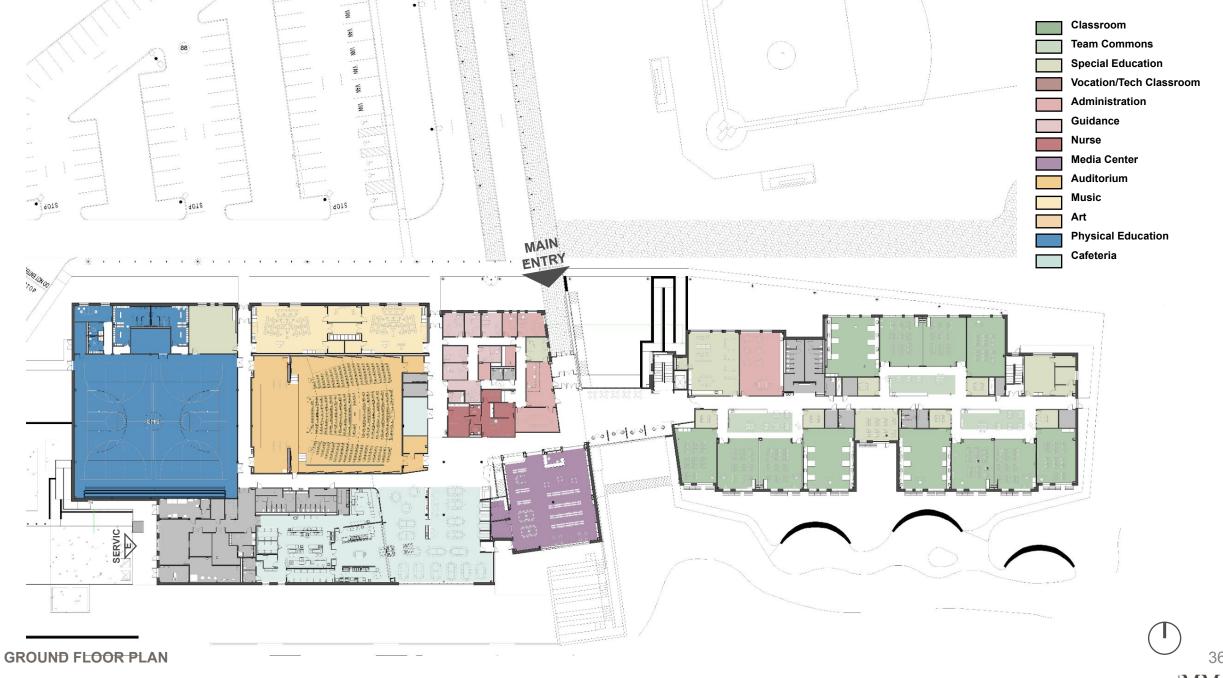


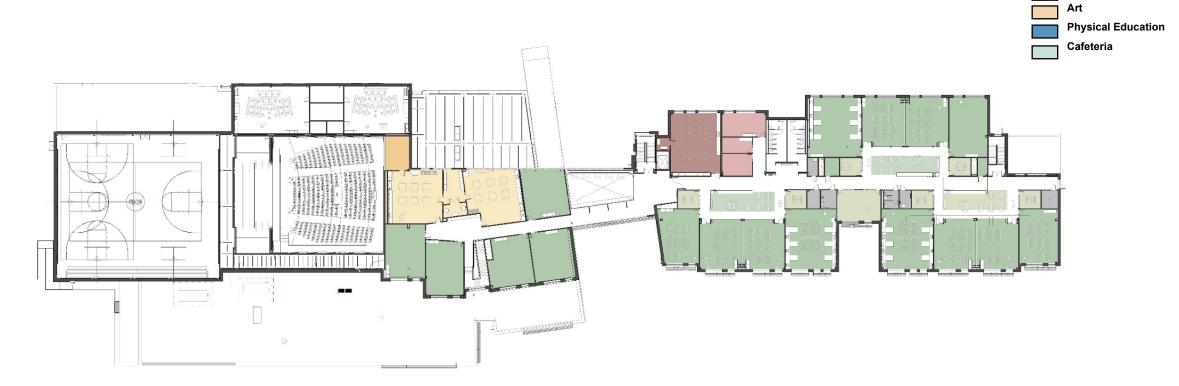
Thank You





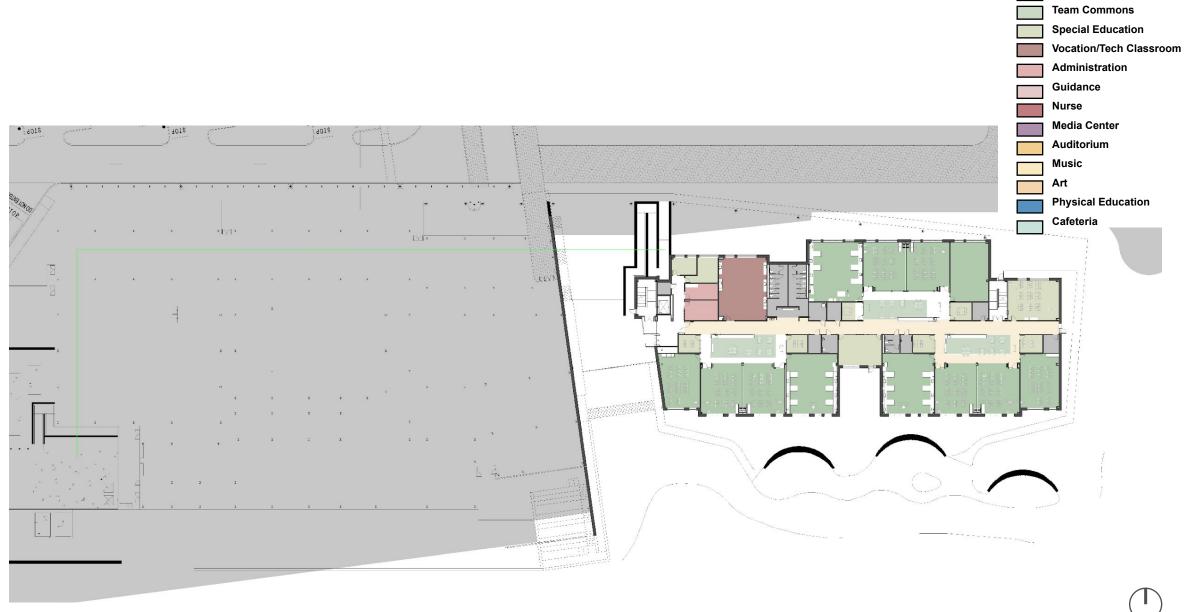






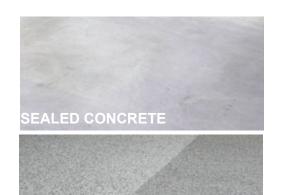
Classroom
Team Commons
Special Education
Vocation/Tech Classroom

Administration
Guidance
Nurse
Media Center
Auditorium
Music

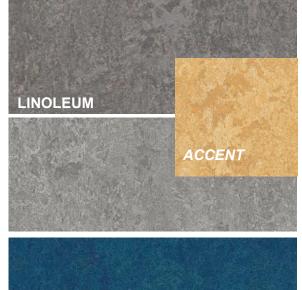


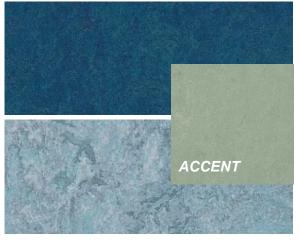
Classroom

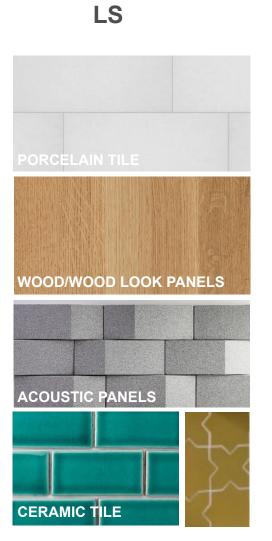
NG

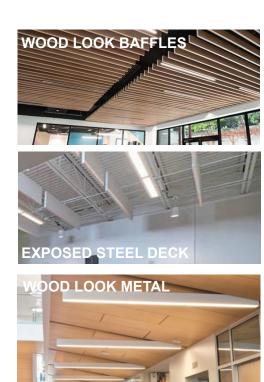














CARPET TILE















