



WILMINGTON PUBLIC SCHOOLS

Wildwood Early Childhood Center Project

School Building Committee Meeting #28

February 5, 2025



smma **dw**
DORE & WHITTIER



Massachusetts School Building Authority



Agenda

1. Call to Order
2. Approval of Minutes
3. Approval of Invoices
4. Design Update
 - Plans
 - Exterior and Interior
 - Building Systems Update
5. CM at Risk Update
6. Working Group Updates
7. Discussion/Correspondence/New Items
8. Committee Questions
9. Public Comments
10. Next Meeting: Wednesday February 13, 2025 (virtual)
11. Adjourn

Approval of Minutes



SMAA
1000 Massachusetts Ave.
Cambridge, MA 02138

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Minutes

Project Name:	Wilmington Wildwood Early Childhood Center	Project Number:	22127
Prepared by:	School Building Committee	Meeting Date:	1/29/2024
	Sarah A. Tranello	Meeting No:	26
Location:	Hybrid (In Person at North Intermediate School, Cambridge, 320 Salem Street, Wilmington, and Remote Participation via Zoom)		
	Security questions: Wildwood Rating Project website, MC TV and Tri7.net		

Distribution: School Building Committee

Attendees

Wildwood School Building Committee				SMAA OPM	
Diane M. Allen	Remote	Derricka Kestley	Present	Julie Lindell, Director, OPM Services and	Remote
Gregory B. Bensch	Absent	Craig Minor	Present	John Collier, Project Manager	Present
Kate Bisatt	Present	Christine Murray	Present	Sarah Tranello, Assistant Project Manager	Present
Dr. Glenn Brand, Chair	Present	Christy O'Donnell	Present		
Revin A. Cairn	Remote	Christine Prondzyga	Remote		Present
Michael Camoscio	Present	Paul J. McKinnis	Present		
Justin Casco	Present	David A. Papadakis	Present		
Marianne Gallezzi	Remote	Paul Ruggiero	Present		
Nicholas Golden	Present	Stacey Scott	Remote		
Christina Holzman	Present	R. Eric Siegel	Present		
John C. Holloway	Absent	Stephen Turner	Present		
		Vivian Vardanyan, Vice Chair	Remote		

Dore-Whitlery Architects

Lee P. Dore, Principal Designer	Present
Ryan Phily, Project Manager	Present
Byron Traft, Designer	Present

Item No.	Action	Discussion
26.01	Record	Chair, Glenn Brand, called the meeting to order at 7:00 PM. Roll Call of the School Building Committee was performed to account for all of those who are present through remote participation via Zoom. The attendance based on the roll call can be found on page 1 of these minutes. The majority were present in person with a handful of members through remote access on Zoom Webinar. Remote and absent members are noted below.
26.02	Record	Approval of Minutes G. Brand advised that the draft minutes of the January 14, 2025 School Building Committee Meeting were distributed for review and approval. - N. Golden motioned to approve the revised meeting minutes from the January 14, 2025 School Building Committee meeting, with a second motion by M. Camoscio. - Approval of Minutes Roll Call Vote: Affirmatively responded, passed unanimously. K. Bisatt abstained due to absence from meeting.

smaa.com

Approval of Invoices



FOR APPROVAL



SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138

Warrant No. 21 A

Project: Wildwood Early Childhood Center, Wilmington, MA
SMMA Project No. 22127
Date: 2/5/2025
Prepared by: Julie Leduc, Sarah Traniello

Approved On: _____

School Building Committee for the Wilmington Early Childhood Center hereby authorizes the payment for the obligations incurred for the value received in services and for materials shown below:

Vendor	Invoice No.	Invoice Date	Invoice Amount	ProPay Code	Balance After Invoice
SMMA	62667	1/30/2025	\$ 3,750.00	0001-0000	\$ 3,750.00
OPM Basic Services - Schematic Design					
			Total		\$ 3,750.00

Activities for the Month of January 2025

- 1 Weekly Leadership Working Group meetings to review project progress.
- 2 Participated in Meetings with PR Working Group meetings on January 8, 2025, January 15, 2025, January 22, 2025 and January 29, 2025.
- 3 Preparation of the Monthly Reporting to the MSBA.
- 4 Working with Designer and Leadership Working Group to finalize details for the December 3 and December 17 Meeting Agendas and Presentations.
- 5 Participated in Meetings with Sustainability Working Group on January 15, 2025, January 23, 2025 and January 29, 2025.
- 6 Participated in Meetings with Site/Landscape Working Group on January 8, 2025 and January 22, 2025.
- 7 Communications with the Inspector General's Office with questions relating to the Construction Manager at Risk Notice to Proceed for the project and the contents of the Request for Qualifications and Interview Process.
- 8 Prepared and distributed documentation to be used in the Prequalification Review of the individual Construction Management Qualification Packages.
- 9 Conducted Prequalification Reference Checks on all 7 Construction Management Firms and prepared documentation for review and consideration by the Construction Manager at Risk Prequalification and Selection Working Group in the efforts to analyze and formulate a shortlist for the purpose of interviews and requesting proposals be submitted.
- 10 Assembly of the results from members of the Working Group into tabulation documentation for review of anticipated qualifications submissions for review together as CM-R Prequalification / Selection Working Group during review.
- 11 Led the CM-R Procurement Process and conducted CM Prequalification Working Group Meeting to review the 7 submissions from Construction Management Firms.
- 12 Coordination with Construction Manager at Risk Prequalification and Selection Working Group members, Town Procurement Officer for the Distribution of Interview Invitations and Scheduling of Interview Dates with Construction Management Firm Candidates for February 11, 2025 and February 12, 2025.
- 13 Finalizing the Request for Proposals for the Construction Manager at Risk and Preparing for Distribution through review process with Town Council and Town Procurement Officer.
- 14 Coordination with Director of Technology & Digital Learning for Wilmington Public Schools details relating to Construction Management Firm Candidate Interviews on February 11, 2025 and February 12, 2025 to permit WSBC members to be able to be as informed as possible about the contents of the Candidate Interviews as possible to assist in their participation in the final selection process that will be voted on February 13, 2025.



SMMA
1000 Massachusetts Ave.
Cambridge, MA 02138

Warrant No. 21 B

Project: Wildwood Early Childhood Center, Wilmington, MA
SMMA Project No. 22127
Date: 2/5/2025
Prepared by: Julie Leduc, Sarah Traniello

Approved On: _____

School Building Committee for the Wilmington Early Childhood Center hereby authorizes the payment for the obligations incurred for the value received in services and for materials shown below:

Vendor	Invoice No.	Invoice Date	Invoice Amount	ProPay Code	Balance After Invoice
Dore+Whittier Architects	20	1/30/2025	\$ 53,900.00	0002-0000	\$ 184,800.00
Architectural Basic Services - Schematic Design					
Dore+Whittier Architects	20	1/30/2025	AM-3 \$ 5,604.50	0003-0000	\$ 445.50
Site Services - Designer Amendment No. 3					
Site Survey					
			Total		\$ 59,504.50

Activities for the Month of January 2025

- 1 Weekly Leadership Working Group meetings to review progress
- 2 Participate in PR Working Group meetings
- 3 Prepare presentation and participate in School Building Committee Meetings on January 14, 2025 and January 29,
- 4 Report out on investigation reports (Traffic Study, Site Survey, Geotech, Geoenvironmental) of preferred site.
- 5 Floor plan refinement
- 6 Meeting with District Leadership Team on January 17, 2025
- 7 Meetings with User Groups - Follow-up with Technology and Food Services
- 8 Development of Schematic Design drawings and specifications
- 9 Development of Exterior, Interior and Landscape Design

Design Update



Site Plan Update

- 1** ACCESSIBLE PATH
MOTOR CORTEX (PHYSICAL)
CIRCUITOUS CAMPUS PATH
CONNECTING PROGRAMS



- 2A** OPEN PLAY
MOTOR CORTEX (PHYSICAL)



- 2B** ACTIVE PLAY: PLAYGROUND
MOTOR CORTEX (PHYSICAL)



- 3** RAISED GARDEN BEDS
SENSORY CORTEX



Improve buffer/distance
between access road
and property line

Potentially
locate Gr. K-2
playground

- 4** SENSORY GARDEN: EDUCATIONAL
SENSORY CORTEX
STORMWATER MITIGATION
HANDS-ON OBSERVATION



- 5** OUTDOOR CLASSROOM / INTERACTIVE /
PASSIVE / INCLUSIVE
FRONTAL CORTEX

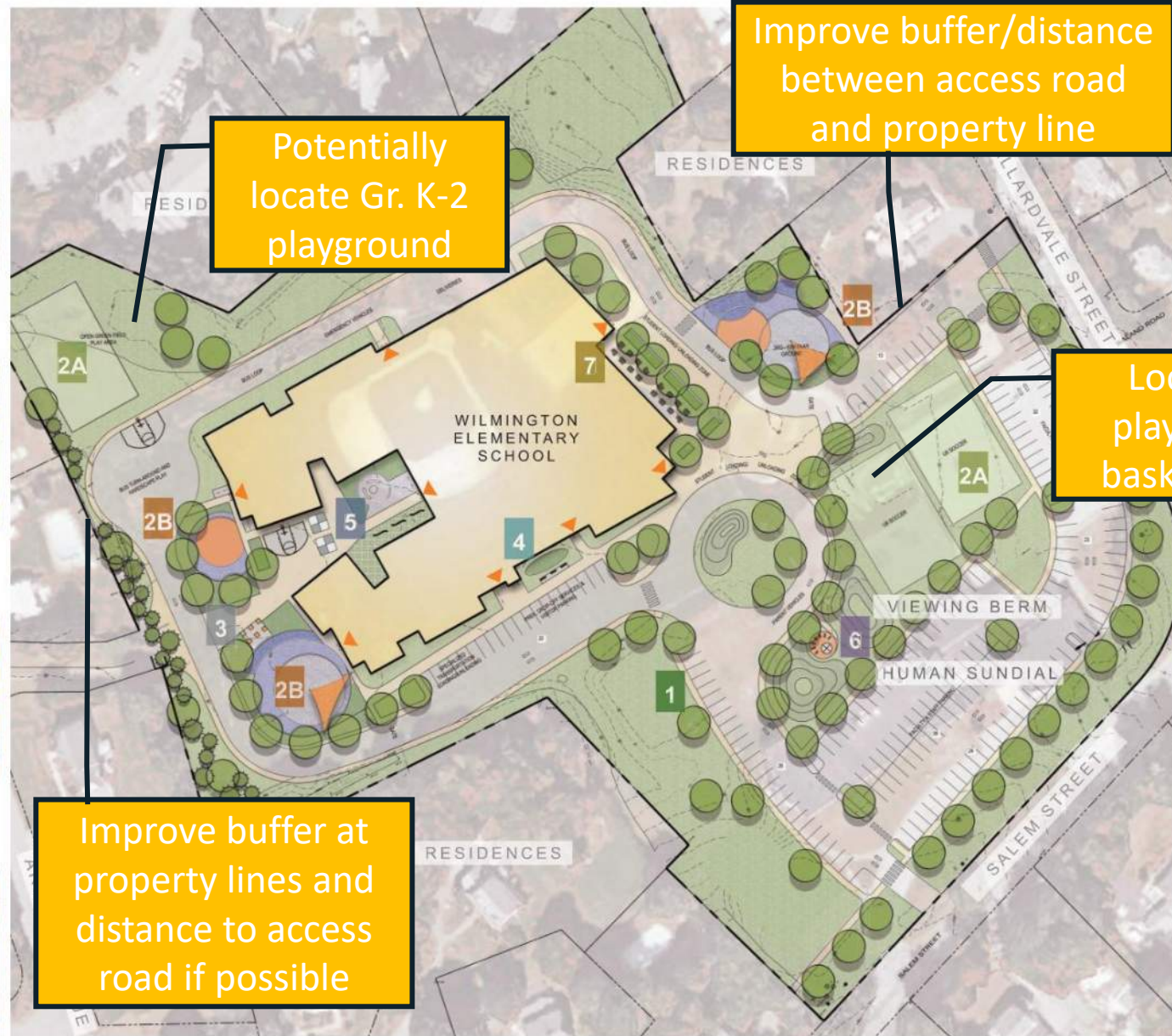


Locate Gr. 3-5
playground and
basketball courts

- 6** OUTDOOR DISCOVERY LAB
SENSORY CORTEX



- 7** DINING & GATHERING
SOCIAL / EMOTIONAL / INTERACTIVE



Improve buffer at
property lines and
distance to access
road if possible



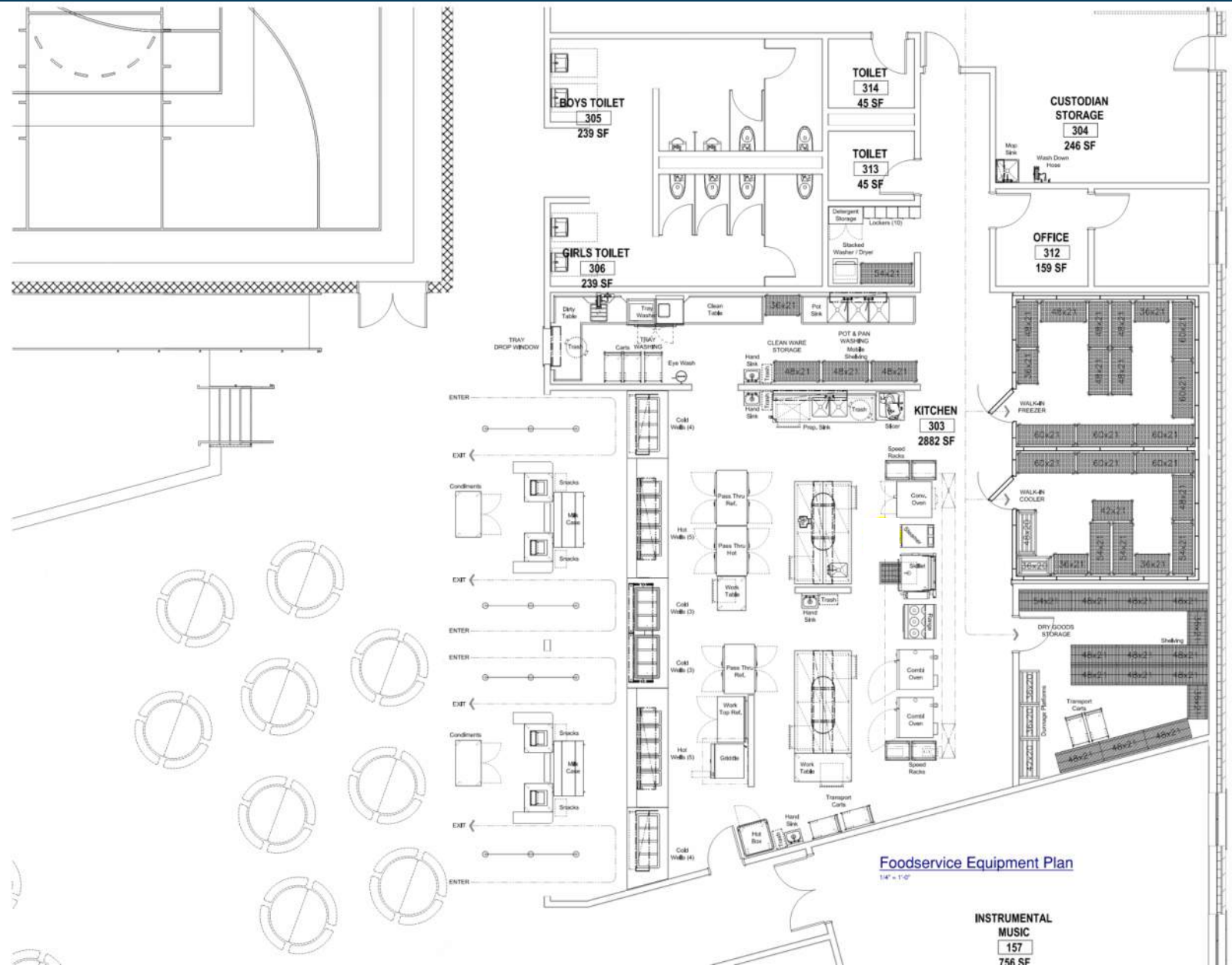
Floor Plan Update

Floor Plan Review: Stage Area



First Floor

Floor Plan Review: Food Service



Foodservice Equipment Plan

1/4" = 1'-0"

INSTRUMENTAL
MUSIC

157

756 SF

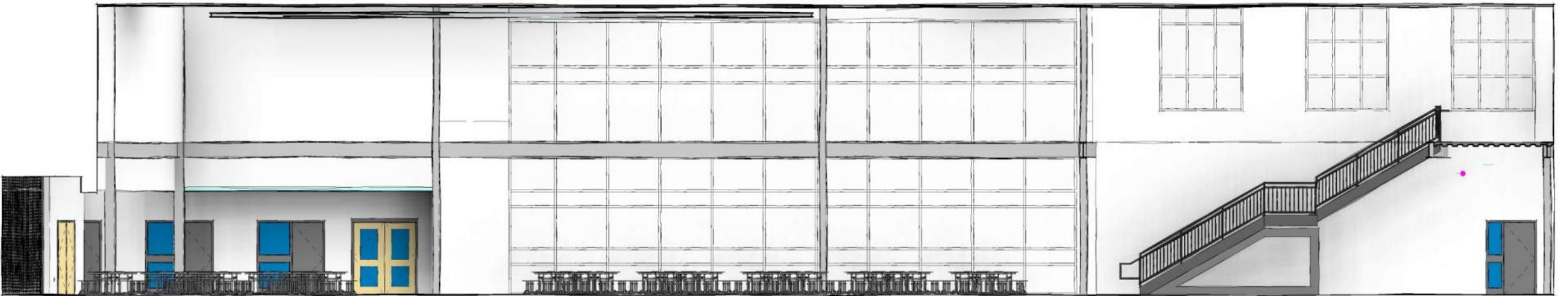


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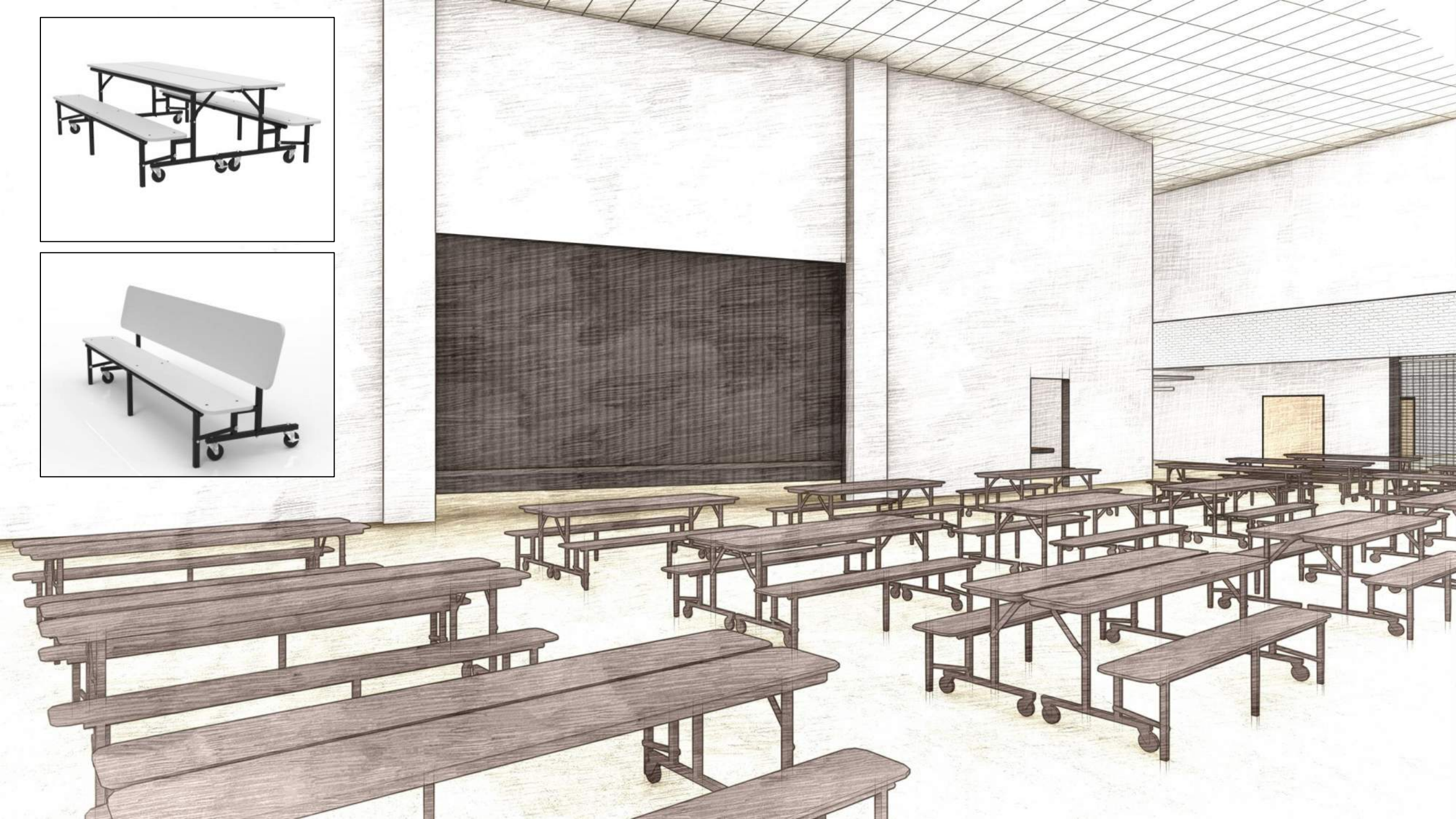
Project Aesthetics Interiors

Cafeteria Study

Stage











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Project Aesthetics Exterior Update

Option 4



Option 4



Southeast Perspective

Option 5



Option 5



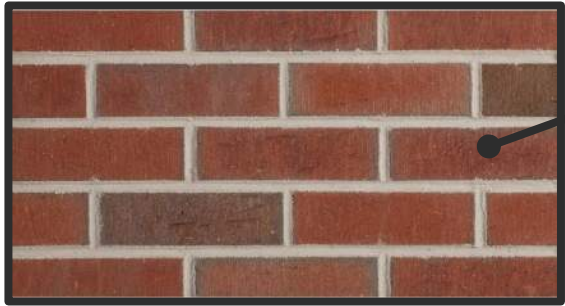
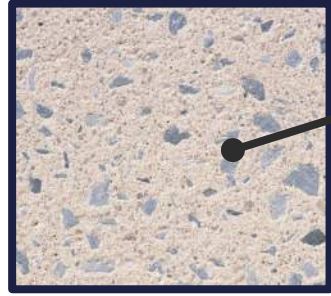
Southeast Perspective

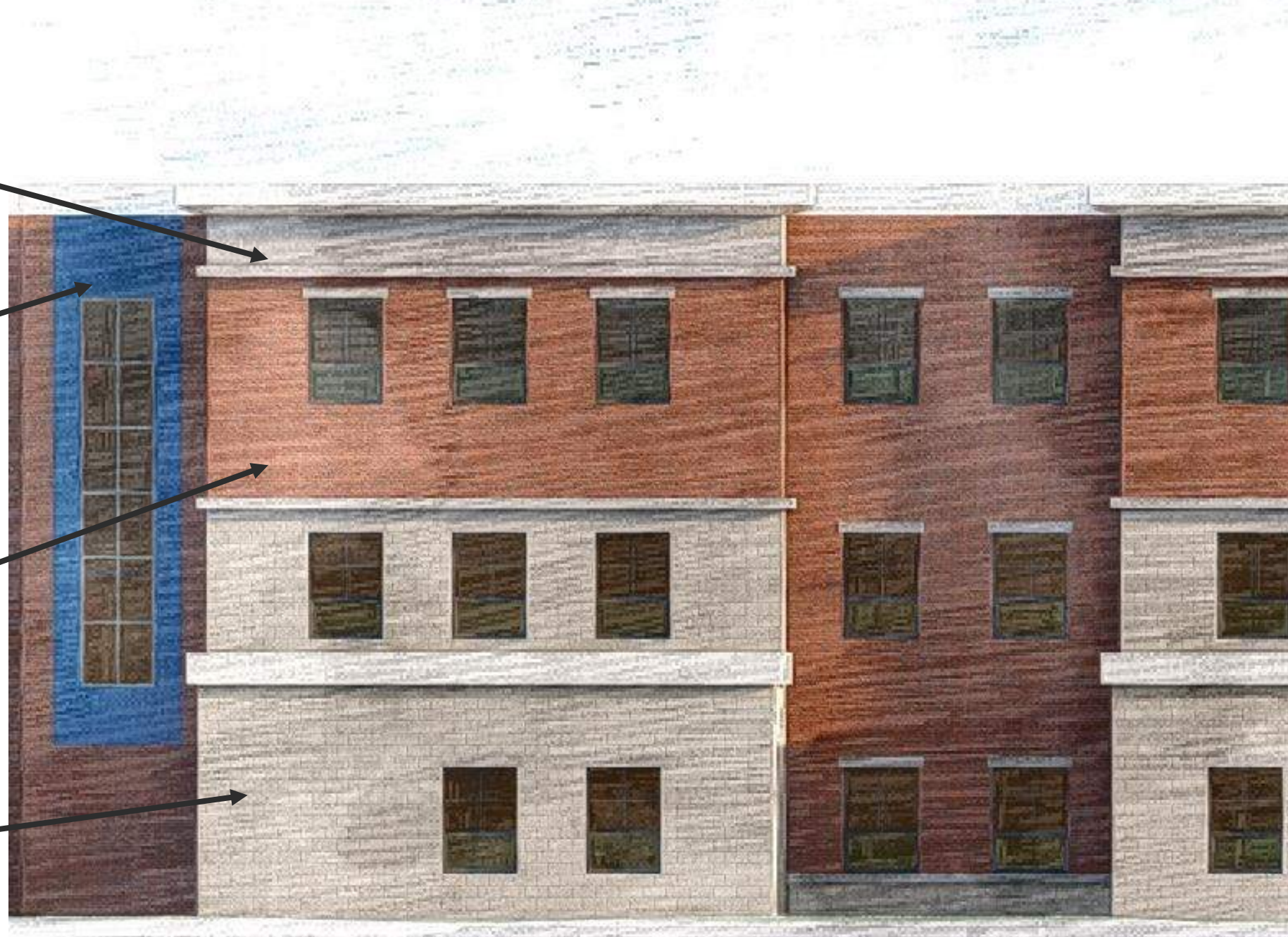
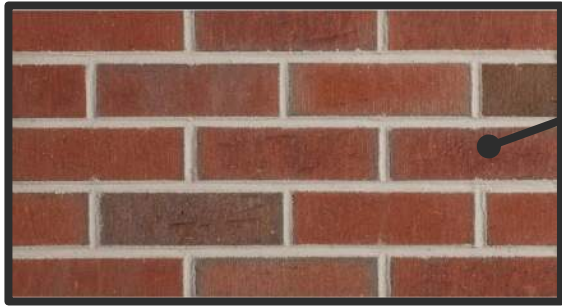
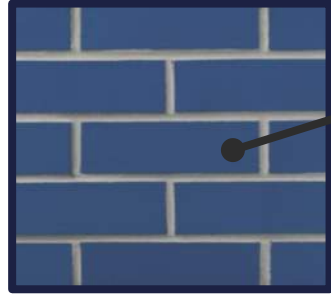
Option 4



Option 5







Building Systems Update

GOAL OF LIFE CYCLE COST ANALYSIS

- The goal of the mechanical lifecycle engineering economic analysis is to assess the performance of **various mechanical system options** in comparison to a baseline mechanical system.
- Each option is compared to the baseline system over a 50-year cycle to determine the most advantageous system considering **utility costs, maintenance costs, replacement costs, and initial construction costs**.
- By comparison of each option to the baseline system, the option with the **greatest total life-cycle savings** is generally recommended.



LCCA HVAC OPTIONS

ALL HVAC OPTIONS ARE BASED ON FOSSIL FUEL FREE, ELECTRIFIED HEATING SYSTEMS THAT WILL BE COMPARED TO A MASSACHUSETTS OPT-IN CODE COMPLAINT BUILDING & HVAC SYSTEM.

ALL OPTIONS SHALL MEET OR EXCEED:

- MSBA Requirement for Additional Reimbursement
- LEED Requirements
- MA Opt-in Stretch Energy Code Requirements

ALL PROPOSED SYSTEMS INCLUDE AIR CONDITIONING.



LCCA HVAC OPTIONS SHORTLIST COMPARISON

BASELINE: Air Source Heat Pump Plant - Mixed-Air Overhead VAV System and High Efficiency Air-Source to Hydronic Heat Pump Chiller/Heating Plant for Chilled/Heating Hot Water (Fossil Fuel Free)

OPTION 1: Air-Source VRF (Variable Refrigerant Flow) and DOAS (Dedicated Outdoor Air Systems w/ Air Source Heat Pump) for Classrooms/Office areas & Air Source Heat Pump Rooftop Units for Gym, & Cafeteria with Supplemental electric heating for entryways, storage, and utility rooms. (Fossil Fuel Free)

OPTION 3: Air Source Heat Pump Plant - VAV Displacement System w/ Passive Radiant Cooling/Heating Panels and High Efficiency Air-Source to Hydronic Heat Pump Chiller/Heating Plant for Chilled/Heating Hot Water (Fossil Fuel Free)



LCCA Summary (without Federal Tax Credits)

Baseline	System	Gross Capital Investment*	Annual Elec. Cons. (kWh)	Annual Electric Cost	Annual Utility \$/s.f.	Annual kBTU/s.f. (EUI)	Annual Maint. Cost	20 Year Equipment Replacement Cost	30 Year Equipment Replacement Cost	40 Year Equipment Replacement Cost	Combined Annual Expense	Combined Expense Savings**	Total Life-Cycle Savings***	Discounted Payback (Years)****
-	1. Mixed-Air Overhead CHW/HHW VAV AHU's w/ ERV & Terminal VAV's w/ Hot Water Re-Heat Coils 2. High-Efficiency ASHP Chiller/Heater Plant	\$15,838,440	1,738,354	\$327,852	\$1.96	35.5	\$77,410	\$1,620,000	\$3,198,500	\$1,620,000	\$405,262	-	-	-
Option	System	Gross Capital Investment*	Annual Elec. Cons. (kWh)	Annual Electric Cost	Annual Utility \$/s.f.	Annual kBTU/s.f. (EUI)	Annual Maint. Cost	20 Year Equipment Replacement Cost	30 Year Equipment Replacement Cost	40 Year Equipment Replacement Cost	Combined Annual Expense	Combined Expense Savings**	Total Life-Cycle Savings***	Discounted Payback (Years)****
1	1. Variable Refrigerant Flow (VRF) Units w/ Air-Source Condensers serving the Classrooms, Administration and Support Areas 2. ASHP DOAS AHU's w/ ERV & Terminal VAV's w/ DCV providing Ventilation to the VRF Units 3. Mixed-Air Overhead AHSP VAV AHU's w/ ERV & DCV serving the Cafe/Stage and Gym areas 4. Supplemental Electric Resistance Heating Units	\$14,007,900	1,443,027	\$291,930	\$1.75	29.5	\$58,460	\$1,943,500	\$1,185,000	\$3,167,000	\$350,390	\$54,872	\$4,025,486	Instant*****
2	1. VRF System w/ Water-Source Heat Pump (WSHP) Heat Recovery Condensing Units 2. WSHP VAV Dedicated Outdoor Air Systems (DOAS) w/ ERV & DCV with Terminal VAV Boxes 3. Supplemental Electric Heating 4. Geothermal Well Field and Distribution Plant	\$19,358,100	1,183,958	\$223,944	\$1.34	24.2	\$62,235	\$0	\$3,945,000	\$0	\$286,179	\$119,083	\$2,446,273	23
3	1. Displacement Ventilation Diffusers w/ Radiant Cooling/Heating Panels 2. CHW/HHW Dedicated Outdoor Air System (DOAS) AHU's ERV & Terminal VAV's w/ DCV 3. High-Efficiency ASHP Chiller/Heater Plant 4. Backup Electric Boiler Plant	\$14,442,360	1,160,735	\$229,174	\$1.37	23.7	\$74,000	\$1,620,000	\$2,289,500	\$1,620,000	\$303,174	\$102,088	\$5,680,330	Instant*****
4	1. Displacement Ventilation Diffusers w/ Radiant Cooling/Heating Panels 2. CHW/HHW DOAS AHU's ERV & Terminal VAV's w/ DCV 3. High-Efficiency Ground Source Heat Pump (GSHP) Chiller/Heater Plant w/ Geothermal Well Field 4. Backup Side-Stream Electric Boiler Plant	\$18,306,360	1,093,195	\$205,748	\$1.23	22.3	\$75,675	\$0	\$3,379,500	\$0	\$281,423	\$123,839	\$4,041,912	21

SYSTEM COMPARISON

Variable Refrigerant Flow Air Source Heat Pumps Option 1



Maintenance zones:
All spaces



Standard Ventilation



Less Outdoor Noise



LEED Points: 11



No additional Initial Cost



Not Manufacturer Agnostic



\$4.0M added life cycle savings



Full Heating + Air Conditioning

Displacement Ventilation Air Source Heat Pumps Option 3



Maintenance zones:
Roof and Mech Space



Improved Ventilation



Less Indoor Noise



LEED Points: 16



+\$435K initial cost



Manufacturer Agnostic



\$5.6M added life cycle savings



Full Heating + Air Conditioning

Construction Manager at Risk



Working Group Updates



Discussion,
Correspondence,
New Items



Committee Questions



Public Comment



**Thank
You**