METHACTON SCHOOL DISTRICT

HIGH SCHOOL CAMPUS PROJECT

Board Update Presentation

18 JUNE 2024

SCHRADERGROUP

BOARD UPDATE

APRIL   MAY   JUNE

3 — KICK-OFF MTG
15 — PROGRAMMING
17 — VIRTUAL TOURS
1 — TEAM MTG
15 — TEAM MTG
23 — WORCESTER TWP MTG
28 — STAFF MTGS
30 — MERIDIAN HS VISIT
31 — SCASD HS VISIT
4 — SUSTAINABILITY MTG
12 — TEAM MTG
SITE CONSTRAINTS

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PROGRAM

	CAPACITY students	NET SQUARE FEET total	GROSSING factor	GROSS SQUARE FEET total
A. AREA SUMMARY				
1 Target Program Area		214,100 nsf	1.5 *	321,150 gsf
2 Existing Area in Plan				- gsf
Addition Area in Plan				- gsf
Total Area in Plan		- nsf	TBD *	- gsf
Difference		214,100 nsf		321,150 gsf
		District Administrative Offices		11,825
		TOTAL		332,975 gsf

Note that the PDE allowable grossing factor is 1.58 however some of those spaces are provided in Area 7

B. CAPACITY SUMMARY			
1 Goal Student Capacity		1,600 students	
2 Teaching Stations	137	1,878 students	
3 Utilization Factor	85%		
4 Effective Student Capacity		1,596 students	

C. AREA ANALYSIS		
1 Square Feet per student: Planned	201 s.f.	Does not include DAO Area
2 Square Feet per student: Goal	200 s.f.	
2 Square Feet per student: actual	TBD	

D. AREA COMPARISON (Program)		
1 Learning Spaces	93,398	140,097 gsf
2 Admin & Staff	7,318	10,977 gsf
3 Community Spaces	21,170	31,755 gsf
4 Media Center Spaces	8,610	12,915 gsf
5 Fitness & Wellness	55,204	82,806 gsf
6 Performing Arts	20,100	30,150 gsf
7 Facility Support	8,300	12,450 gsf
8 District Admin	7,950	11,825 gsf
TOTAL GSF	222,050 nsf	332,975 gsf

332,975 S.F.

PROGRAM

	CAPACITY students	NET SQUARE FEET total	GROSSING factor	GROSS SQUARE FEET total
A. AREA SUMMARY				
1 Target Program Area		230,220 nsf	1.5 *	345,330 gsf
2 Existing Area in Plan				- gsf
Addition Area in Plan				- gsf
Total Area in Plan		- nsf	TBD *	- gsf
Difference		230,220 nsf		345,330 gsf
			DAO	11,825
			TOTAL	357,155 gsf

Note that the PDE allowable grossing factor is 1.58 however some of those spaces are provided in Area 7

B. CAPACITY SUMMARY			
1 Goal Student Capacity		1,600 students	
2 Teaching Stations	147	2,198 students	
3 Utilization Factor	85%		
4 Effective Student Capacity		1,868 students	

C. AREA ANALYSIS		
1 Square Feet per student: Planned	185 s.f.	Does not include DAO Area
2 Square Feet per student: Goal	200 s.f.	
2 Square Feet per student: actual	TBD	

D. AREA COMPARISON (Program)		
1 Learning Spaces	104,638	156,957 gsf
2 Admin & Staff	7,318	10,977 gsf
3 Community Spaces	21,170	31,755 gsf
4 Media Center Spaces	8,750	13,125 gsf
5 Fitness & Wellness	57,944	86,916 gsf
6 Performing Arts	22,100	33,150 gsf
7 Facility Support	8,300	12,450 gsf
8 District Admin	7,950	11,825
TOTAL GSF	238,170 nsf	357,155 gsf

357,155 S.F.

METHACTON SCHOOL DISTRICT
District Administration Relocation

TOTAL PROGRAM SUMMARY - DRAFT

DRAFT 2024.04.15

		NSF	Grossing Factor		GSF	Total
1.0	EDUCATIONAL SERVICES	3682	40	%	1367	5049
2.0	BUSINESS SERVICES	2828	40	%	989	3817
3.0	COMMON SPACES	1440	21	%	444	1884
	Subtotal	7950	34	%	2800	10750
	Building GSF @ 10%				1075	
	TOTAL MAIN BUILDING	7950			3875	11825

11,825 S.F.

WORCESTER TOWNSHIP MEETING TOPICS

Discussion

- Zoning Relief that may be needed:
    - o Building height – 35 ft & 2.5 stories
    - o Impervious surface – 40%
    - o Parking lot(s) within building setbacks – 250 feet front yard
    - o Building setback – 250 feet
    - o Steep slope disturbance
- Public School is a use permitted by Conditional Use in AGR district
    - o CU may or may not be needed since public school is existing use
- Worcester prefers a linear zoning approval for land development approval rather than concurrent approvals of zoning with LD.
- Parking is seen as challenging on site and off-site parking should be eliminated if possible. Prefer that the project should increase parking on the site. Traffic and speeding are also concerns.
- A bus access on Mill Road was discussed.
- The team is pursuing public sanitary sewer connection with the Grange Ave. Pump Station in Lower Providence as the most likely connection point.
- Stormwater design will be a key element of the site design as there is currently limited stormwater management that will need to be significantly upgraded to meet current regulations. The JV baseball field is being considered for a stormwater basin.
- A sketch plan will be submitted to the Township after School Board concept review and approval in Fall 2024.
- An engineered land development plan can be prepared for submission pending sketch review and zoning proceedings. Would like to target approximately February 2025 for this preliminary LD submission.
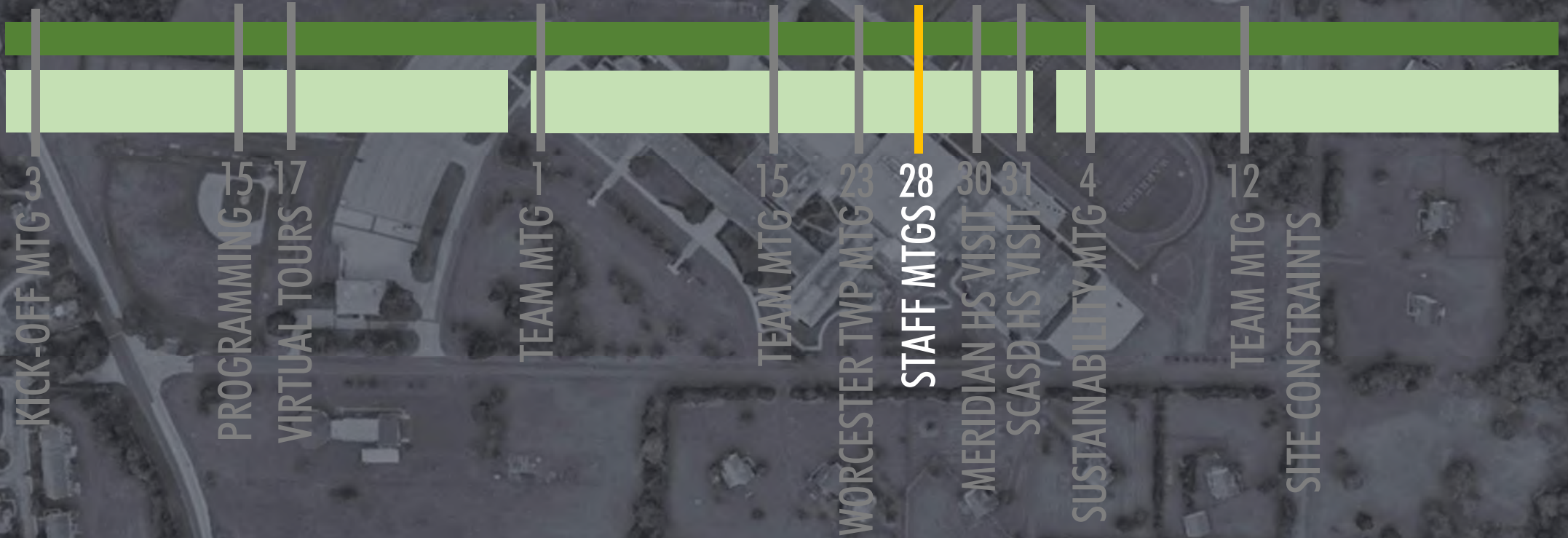
AUDITORIUMS

GYMNASIUMS

NATATORIUMS

FACILITIES TOURED

STATE COLLEGE AREA HIGH SCHOOL
State College, PA
(Toured May 31)

UPPER MERION AREA HIGH SCHOOL
King of Prussia, PA
(Toured by MSD previously)

SPRINGFIELD HIGH SCHOOL
Springfield, PA
(On the tour list but never made it due to time limitations)

AVON GROVE HIGH SCHOOL
West Grove, PA
(Toured by MSD previously)

MERIDIAN HIGH SCHOOL
Falls Church, VA
(Toured May 30)

FACILITY TOURS

SCHRADERGROUP

FACILITY TOURS

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UPPER MERION AREA HIGH SCHOOL
King of Prussia, PA

Architect: SCHRADERGROUP
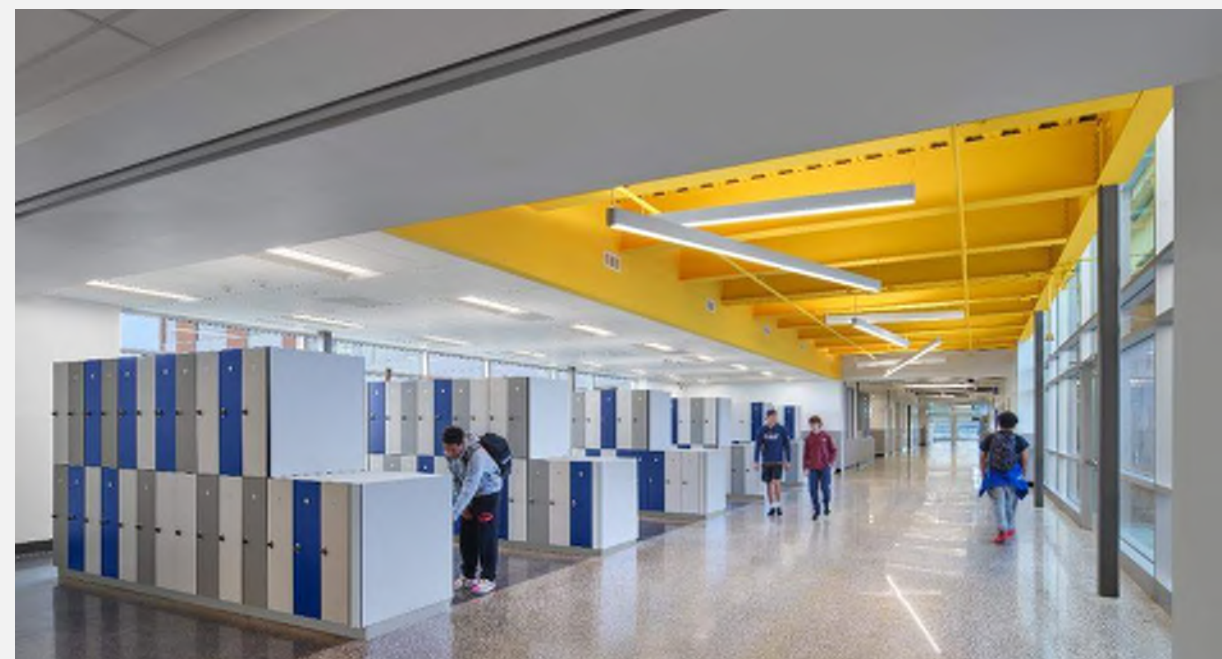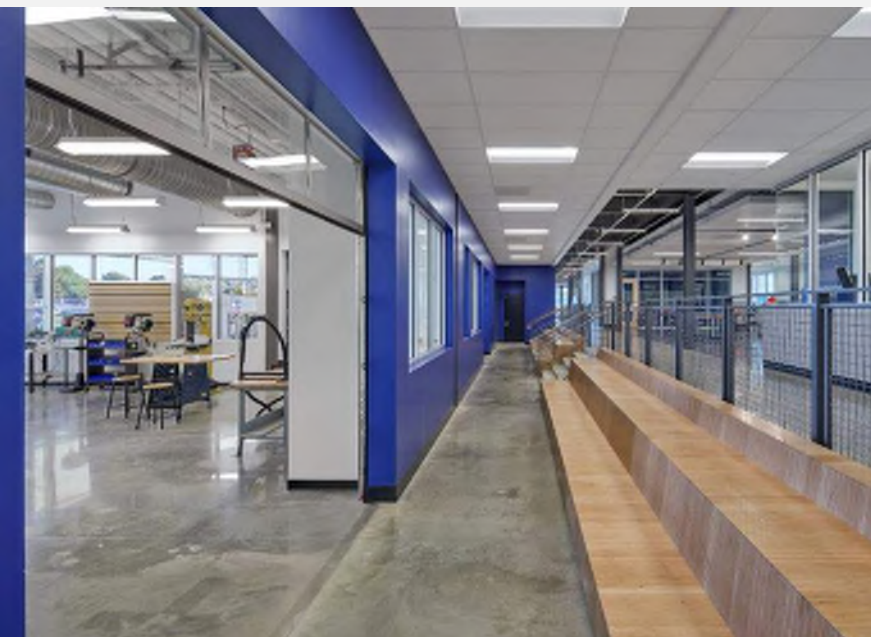
The Viking Grill

Pizza Plus

Special of the Day

INGREDIENTS FOR
EXCELLENCE

HEALTHY MIND
HEALTHY BODY
HEALTHY HABIT

FACILITY TOURS

SCHRADERGROUP

SPRINGFIELD HIGH SCHOOL
Springfield, Delaware County, PA

Architect: SCHRADERGROUP with Perkins & Will

before construction
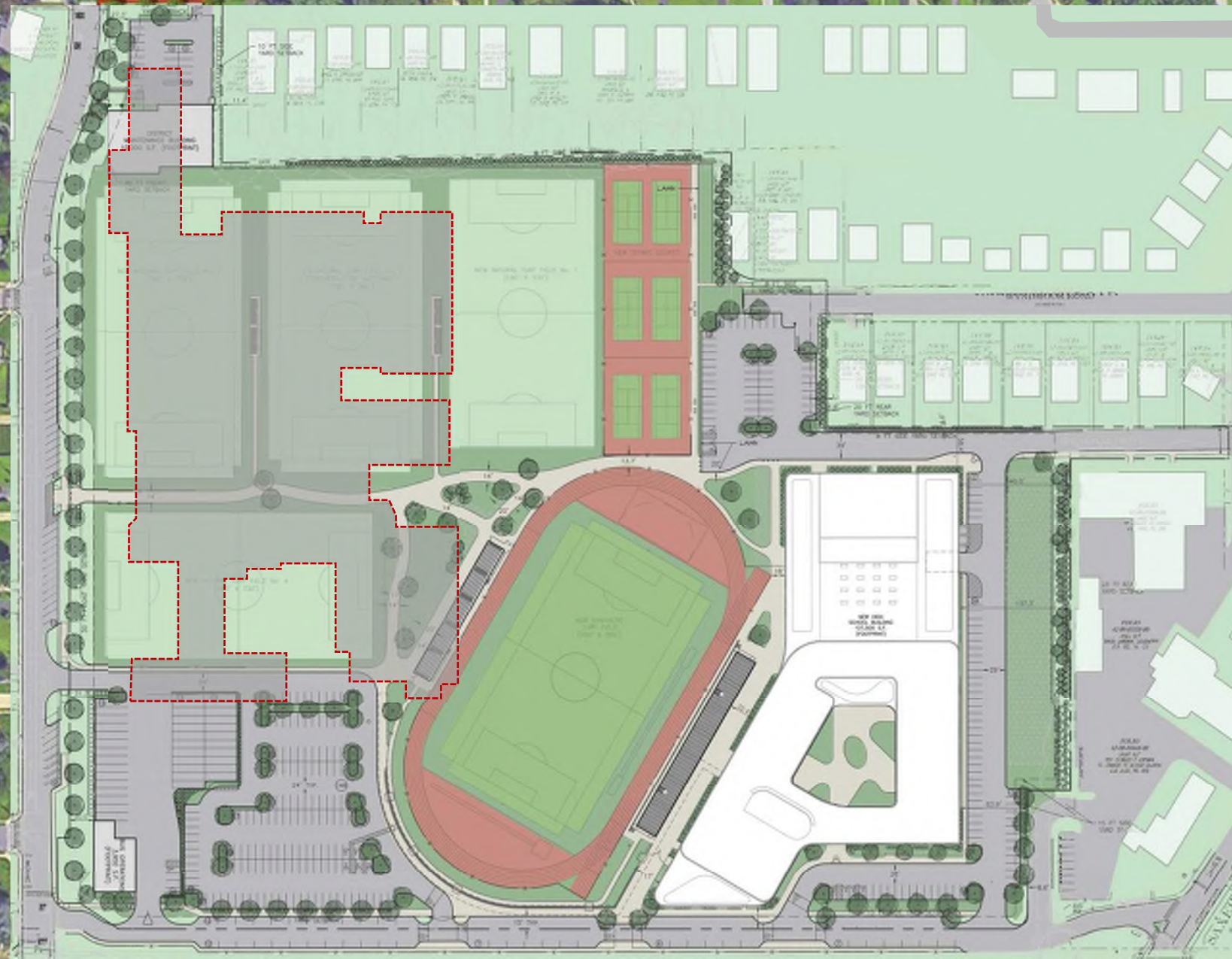
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SPRINGFIELD HIGH SCHOOL

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FACILITY TOURS

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MERIDIAN HIGH SCHOOL
Falls Church, VA

Architect: Stantec
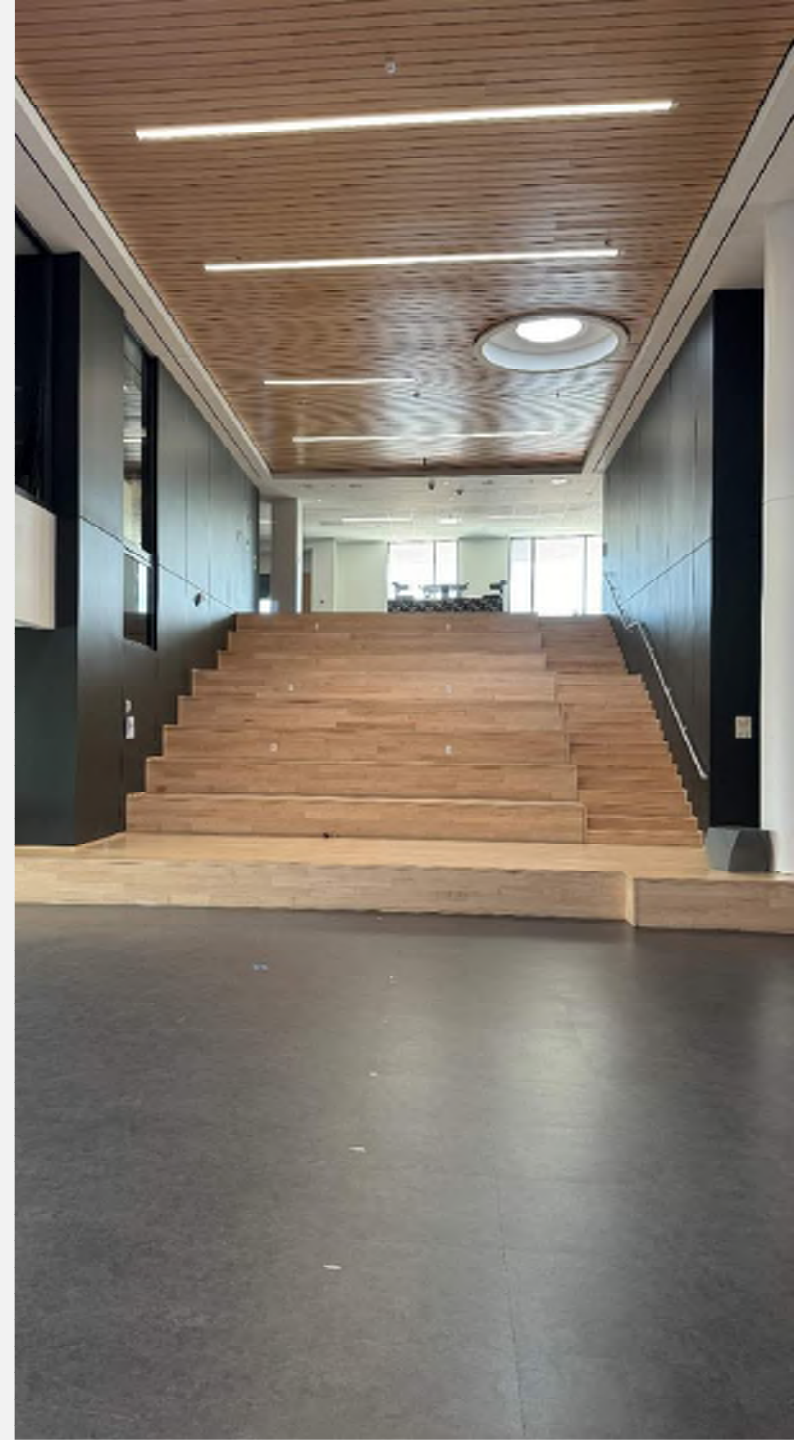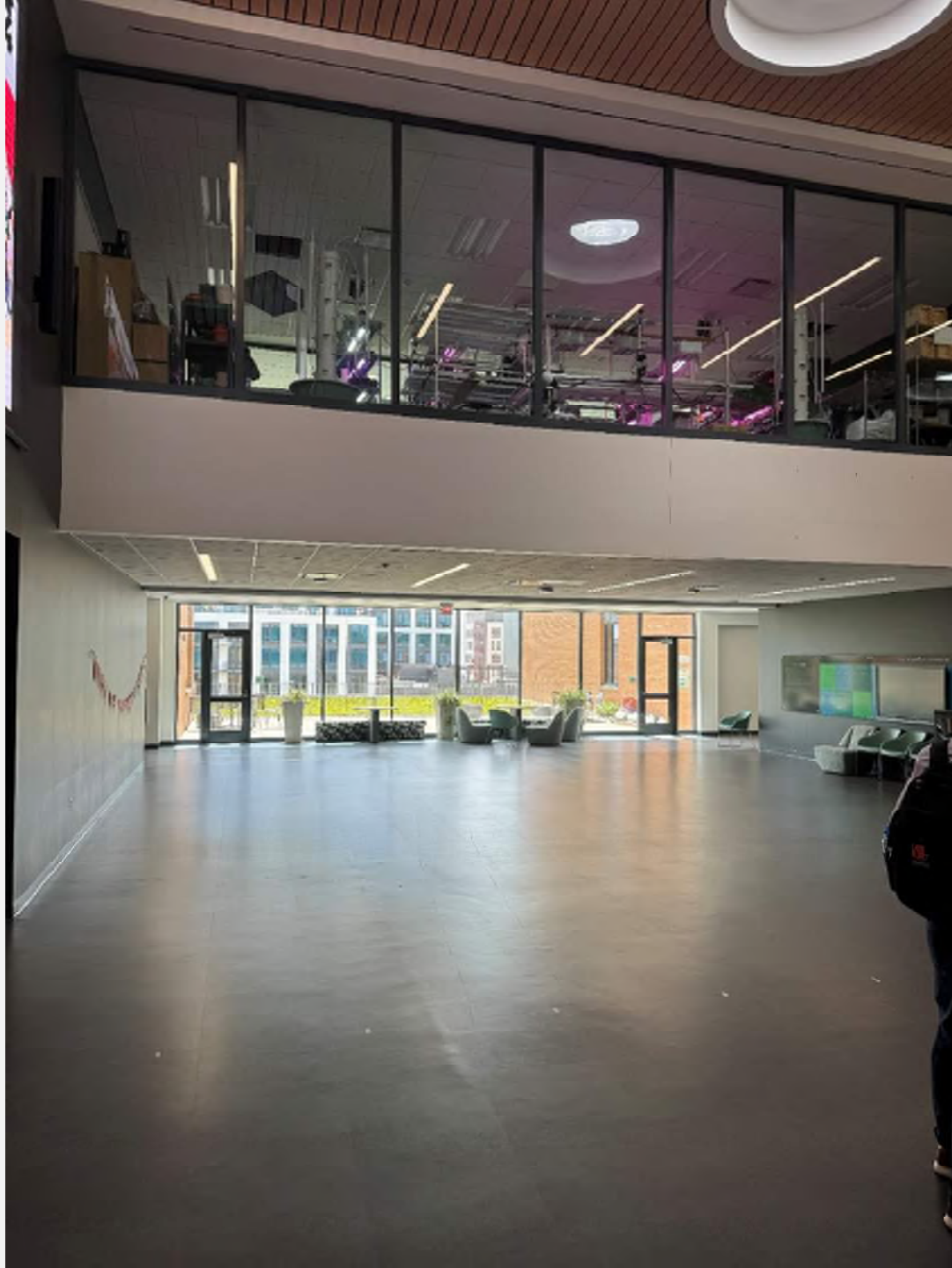
Image courtesy of Stantec website (Joseph Romeo photography)

Image courtesy of Stantec website (Joseph Romeo photography)

MERIDIAN HIGH SCHOOL

Positive Reactions

- Library location/layout
- Toilet room arrangements. Toilet rooms were great- multiple solutions so you can go to whichever place you are comfortable.
- Tiered furniture in classrooms
- Open breakout spaces in classroom pods
- Abundant daylight throughout
- Variety of LGI spaces
- Sensory rooms ("zen room" concept)
- Learning stair design was effective – more centralized so is a gathering point – multi-use space with balcony – all functions off of it.
- Central configuration of academic wings worked well.
- The idea of digital backdrops for stage is a great idea.
- Liked the library with glass breakout areas as well as moveable furniture – the size was good.
- Liked the TV station but would like it directly adjacent to the media center.
- Flexibility of rooms and layout is advantageous.
- Mobile furniture is a positive.
- The idea of non-homerooms is good.
- Discussed the International Baccalaureate program held in the building yesterday.

MERIDIAN HIGH SCHOOL

Concerns

- Mobile storage in classrooms (prefer built in casework, felt "cluttered")
- Avoid splitting departments across floors
- Track in aux gym (keep in main gym)

- Lack of wall protection in corridors

- Meridian had too many windows from a safety standpoint.
- Too many interior windows – concerned about safety – no "hide" areas, yet, good supervision with central glass areas

FACILITY TOURS

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STATE COLLEGE AREA HIGH SCHOOL
State College, PA

Architect: Crabtree, Rorhbaugh & Associates
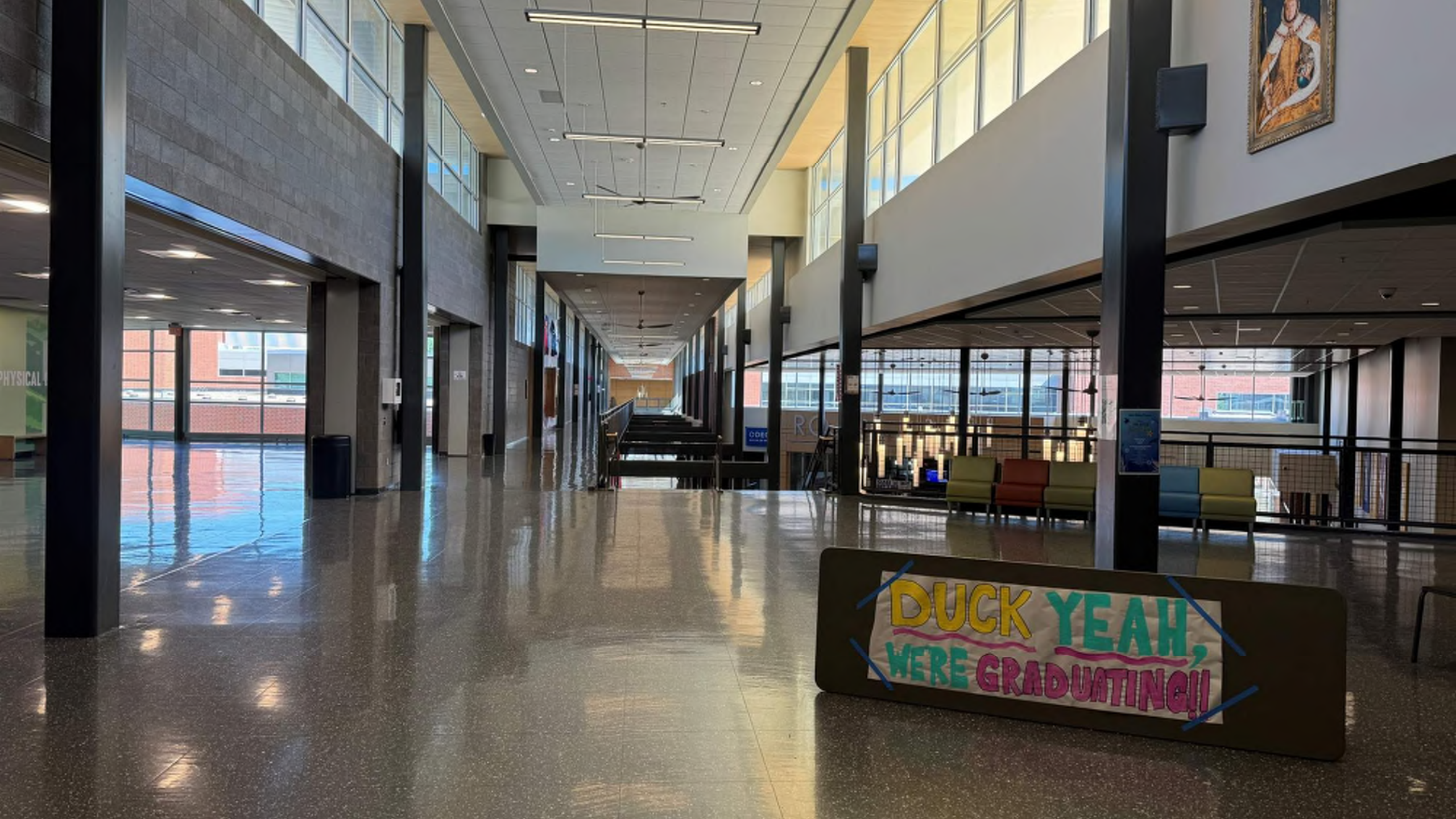
Image courtesy of Crabtree, Rohrbaugh & Associates website

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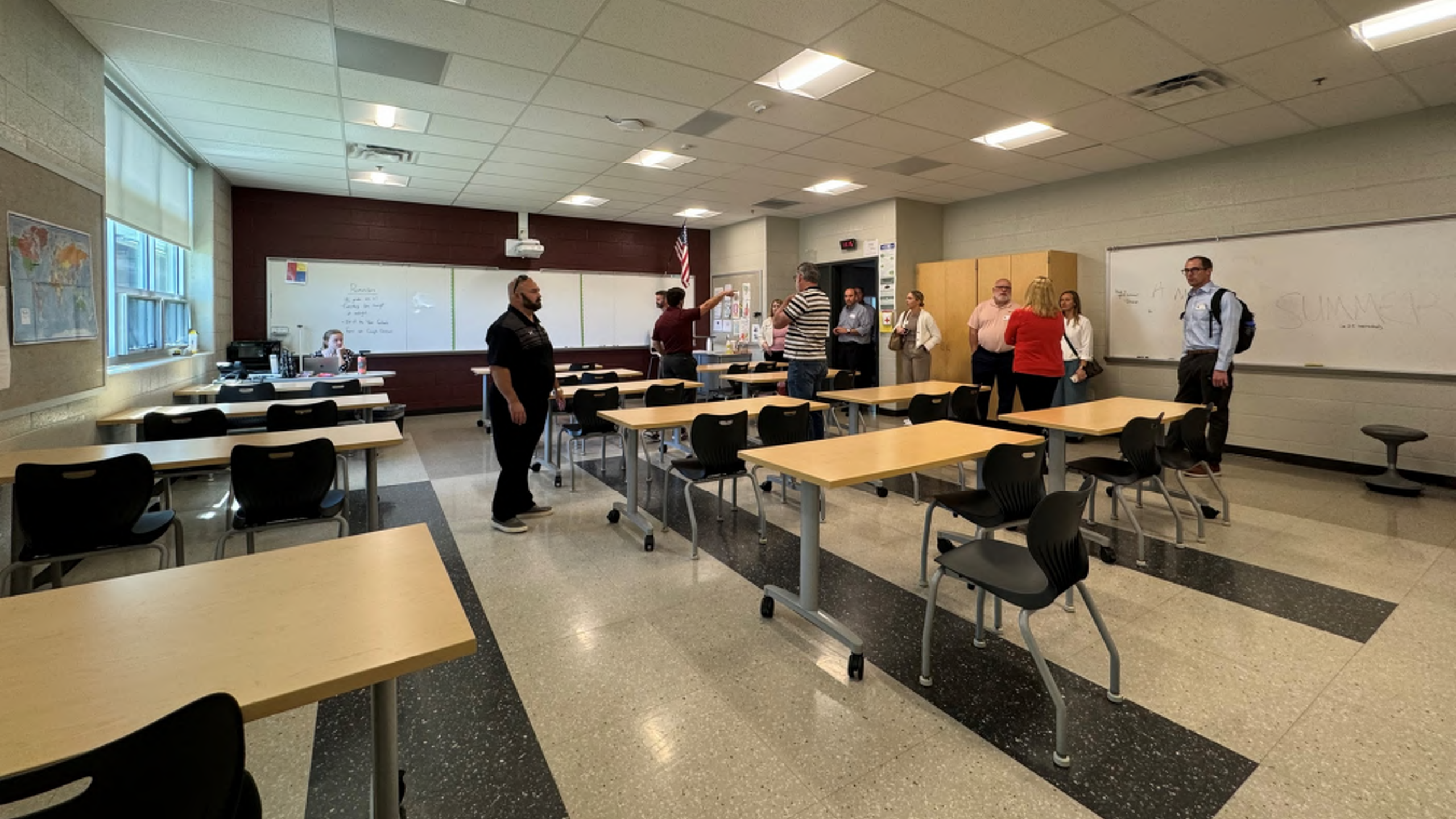
Image courtesy of Crabtree, Rohrbaugh & Associates website

Image courtesy of Crabtree, Rohrbaugh & Associates website

STATE COLLEGE AREA HIGH SCHOOL

Positive Reactions

- Great educational programming and modified block program

- Loved 9th grade academy.

- Outside amphitheater proximate to cafeteria is good – had landscaping to soften it – had lunch areas – these are used. Utilized changes in elevation well –

- Two-sided entry – bus and car are positive.

- Black box functionality can be expanded if you have it for dance class and with pull out tablet seating to be both educational and

- Second level windows with copious daylight are good for safety.

- Shared classrooms and teacher work rooms were good. Teacher work area is better than Meridian

- The furniture configuration is depicted by the educational goals.

- Liked the ground faced block wall from a color and durability standpoint.

- Exposed ceiling areas

- Curriculum based fitness room (not just for sports teams)

- Commons/stair layout. Had some flexibility for presentations/performances without being true learning stairs

- (3) gym spaces (multipurpose gym as wrestling room)

- FCS near cafeteria

- Costume area/changing rooms/scene shop (liked general layout of PA area)

- Counselor suites ("safe spaces" are important)

- Centralized school store

STATE COLLEGE AREA HIGH SCHOOL

Concerns

- Mobile storage in classrooms (prefer built in casework, felt "cluttered")
- Challenging supervision with big solid central block – hard to monitor and supervise.
- LGIs felt dark/secluded
- Auditorium felt steep at second floor

OTHER

General Comments

- Like enclosed courtyards
- Discussed block system vs non block system.
- Still important to have departments near each other.
- Some would like to look further into the 9th grade center concept (Freshman Academy)
- Flexibility in CR layout will allow the district to adapt an educational concept to that facility later.
- Discussed having a serious discussion about the performing arts and arts and what is really required.

FACILITY TOURS

SCHRADERGROUP

AVON GROVE HIGH SCHOOL
Avon Grove, PA

Architect: KCBA

Image courtesy of KCBA website

Image courtesy of KCBA website

Image courtesy of KCBA website

LEED SCORECARD SUMMARY
CCP Career + Technology Center
BD+C New Construction v4
5/15/2024

ReVision

Y	Y?	?	N	TOTAL	110 Pts			
63			47					

Columns: Y / Y? / ? / N | Credit | Pts | D/C | EP | RP

INTEGRATED PROCESS — 1 Pts

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
			1	IPc1: Integrated Process	1	D		

LOCATION AND TRANSPORTATION — 16 Pts (Y 14, N 2)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
			16	LTc1: LEED For Neighborhood Development Location	16	D		
1				LTc2: Sensitive Land Protection	1	D		
2				LTc3: High-Priority Site (v4.1)	2	D	EP	
5				LTc4: Surrounding Density and Diverse Uses (V4.1)	5	D		
4			1	LTc5: Access to Quality Transit	5	D	EP	
1				LTc6: Bicycle Facilities	1	D		
1				LTc7: Reduced Parking Footprint v4.1	1	D	EP	
			1	LTc8: Green Vehicles	1	D		

SUSTAINABLE SITES — 10 Pts (Y 9, N 1)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
Required				SSp1: Construction Activity Pollution Prevention		C		
1				SSc1: Site Assessment	1	D		
2				SSc2: Site Development - Protect or Restore Habitat	2	D	EP	
			1	SSc3: Open Space	1	D		
3				SSc4: Rainwater Management (Vv4.1)	3	D	EP	
2				SSc5: Heat Island Reduction	2	D	EP	
1				SSc9: Light Pollution Reduction	1	D		

WATER EFFICIENCY — 11 Pts (Y 6, N 5)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
Required				WEp1: Outdoor Water Use Reduction		D		
Required				WEp2: Indoor Water Use Reduction		D		
Required				WEp3: Building-Level Water Metering		D		
2				WEc1: Outdoor Water Use Reduction	2	D		
3			3	WEc2: Indoor Water Use Reduction	6	D		
			2	WEc3: Cooling Tower Water Use	2	D		
1				WEc4: Water Metering	1	D		

ENERGY AND ATMOSPHERE — 33 Pts (Y 12, N 21)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
Required				EAp1: Fundamental Commissioning & Verification		C		
Required				EAp2: Minimum Energy Performance		D		
Required				EAp3: Building Level Energy Metering		D		
Required				EAp4: Fundamental Refrigerant Management		D		
			6	EAc1: Enhanced Commissioning	6	D	EP	
12			6	EAc2: Optimize Energy Performance	18	D	EP	
			1	EAc3: Advanced Energy Metering	1	D	EP	
			2	EAc4: Demand Response	2	D		
			3	EAc5: Renewable Energy Production	3	C	EP	
			1	EAc6: Enhanced Refrigerant Management	1	D	EP	
			2	EAc7: Green Power and Carbon Offsets	2	C	EP	

MATERIALS AND RESOURCES — 13 Pts (Y 7, N 6)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
Required				MRp1: Storage and Collection of Recyclables		D		
Required				MRp2: Construction and Demolition Waste Management Planning		C		
			5	MRc1: Building Life-Cycle Impact Reduction	5	D		
2				MRc2: Bldg Product Disclosure & Optimization - EPDs (v4.1)	2	C		
1			1	MRc3: Bldg Product Disclosure & Optimization - Sourcing of Raw Mat. (v4.1)	2	C		RP
2				MRc4: Bldg Product Disclosure & Optimization - Material Ingredients (v4.1)	2	C		RP
2				MRc5: Construction and Demolition Waste Management	2	C		RP

INDOOR ENVIRONMENTAL QUALITY — 16 Pts (Y 6, N 10)

Y	Y?	?	N	Credit	Pts	D/C	EP	RP
Required				EQp1: Minimum Indoor Air Quality Performance		D		
Required				EQp2: Environmental Tobacco Smoke Control		D		
2				EQc1: Enhanced Indoor Air Quality Strategies	2	D		
3				EQc2: Low-Emitting Materials (v4.1)	3	C		
			1	EQc3: Construction Indoor Air Quality Management Plan	1	C		
			2	EQc4: Indoor Air Quality Assessment	2	C		
			1	EQc5: Thermal Comfort	1	C		
1			1	EQc6: Interior Lighting (v4.1)	2	C		
			3	EQc7: Daylight	3	C		
			1	EQc8: Quality Views	1	C		
			1	EQc9: Acoustic Performance	1	C		

INNOVATION IN DESIGN — 6 Pts

Y	Y?	?	N	Credit	Pts	D/C
1				IDc1.1: Innov: Purchasing - Lamps	1	C
			1	IDc1.2: Community Outreach and Involvement	1	C
			1	IDc1.3: EP: Construction and Demolition Waste Management	1	C
1				IDc1.4: EP: Parking reduced by 60%+	1	C
1				IDc1.5: Design for Active Participants	1	C
1				IDc1.6: Pilot: Community Contaminant Prevention	1	C
1				IDc2: LEED Accredited Professional	1	C

REGIONAL PRIORITY — 4 Pts (Y 3, N 1)

Y	Y?	?	N	Credit	Pts	D/C
1				High Priority Site, threshold is 2 points	1	D
1				Access to quality transit, threshold is 3 points	1	D
			1	Building Life Cycle Impact Reduction	1	D
				Indoor water use reduction, threshold is 4 points	1	D
1				Rainwater management, threshold is 2 points	1	D
			1	Cooling tower water use, threshold is 2 points	1	D

COMMUNITY COLLEGE OF PHILADELPHIA
Philadelphia, PA

Career & Advanced Technology Center (CATC)

- Green roof for stormwater solutions
- Minimized parking related to zoning
- Highly energy efficient facility
- High recycled content finishes
- Urban environment

COMMUNITY COLLEGE OF PHILADELPHIA
Philadelphia, PA

Career & Advanced Technology Center (CATC)

- CCP reduced its water consumption by over 37% when compared to a 'typical' building.
- The project's annual water consumption uses ~135,000 gallons less than the average building, of its size and occupancy, per year.
- The project acts as a great neighbor to both the nearby humans and animals alike - meeting the requirements of Light Pollution Reduction by limiting the spread of lighting over the property boundary and up into the sky.
- The project has a total energy cost savings of 30.8% compared to the ASHRAE 90.1-2010 baseline

COMMUNITY COLLEGE OF PHILADELPHIA
Philadelphia, PA

Career & Advanced Technology Center (CATC)

- The total predicted annual energy consumption for the project is 1,020,997 kWh/year of electricity and 3,211 therms/year of natural gas.
- The team did an exemplary job with material selections and purchasing - installing many products that have both Environmental Product Declarations as well as Material Ingredient Reporting.
- High Priority Site
- Reduced Parking Footprint
- LED light fixture selection
- Water Metering
- Building Product Disclosure and Optimization
- Indoor Air Quality Strategies
- Selecting low-emitting materials
- Rainwater Management

TRANSPORTATION CENTER

TURF MULTI-PURPOSE FIELD

SEWER TREATMENT FACILITY

ANVIL DRIVE

KRIEBEL MILL ROAD

GERMANTOWN PIKE

POTENTIAL ACCESS

WARRIORS STADIUM

EXISTING HIGH SCHOOL

MILL ROAD

WARRIORS FIELD

EXISTING DAO

CURRENT ACCESS

CURRENT ACCESS

CURRENT ACCESS

CURRENT ACCESS

KRIEBEL MILL ROAD

NORTH

METHACTON SCHOOL DISTRICT

HIGH SCHOOL CAMPUS PROJECT

SCHRADERGROUP