



MIDDLE SCHOOL STUDY UPDATE

March 11, 2025



Chris Linkey, AIA
Partner-in-Charge



Andy Blaydon, AIA
Senior Project Architect



Your Team

rlps
ARCHITECTS



70+ years

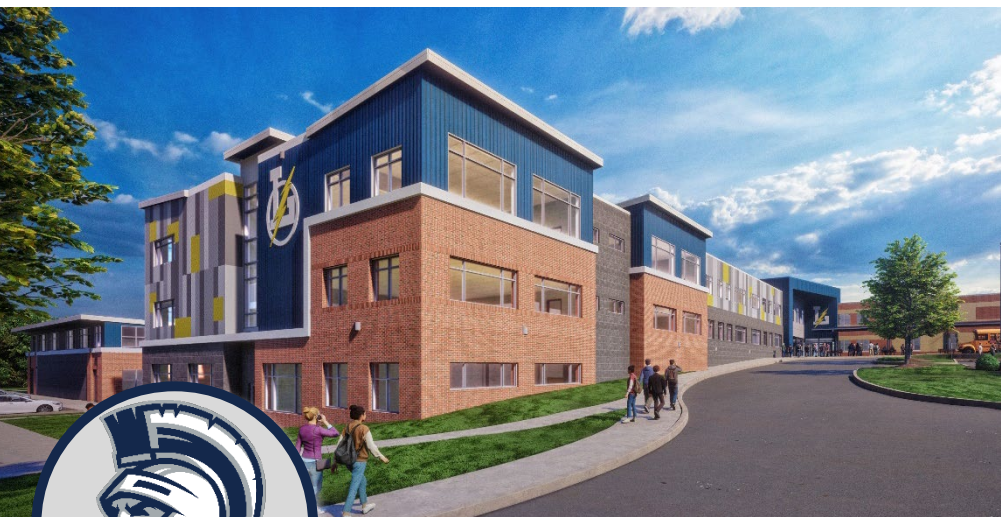
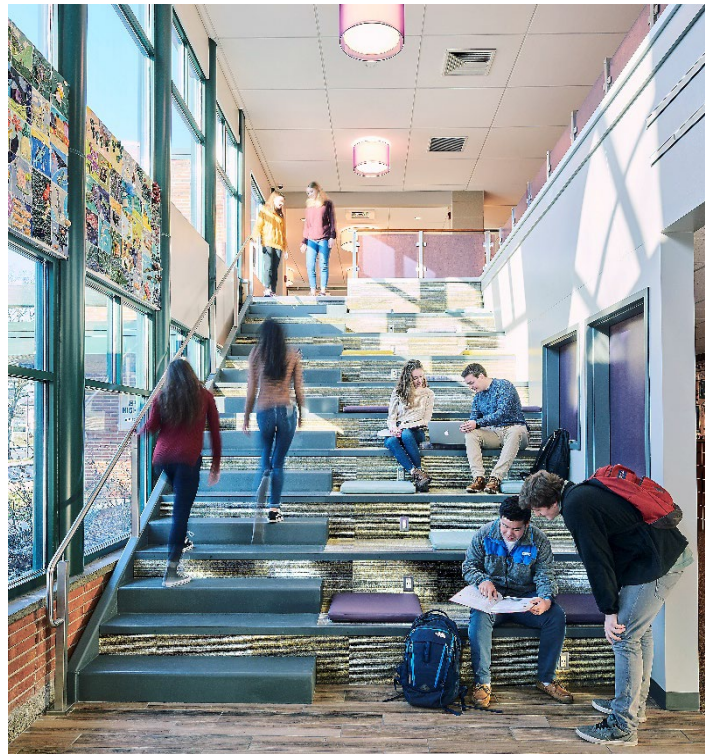
- Lancaster / Pittsburgh

400+ academic projects

- 40+ Schools & Districts

85+ person team

- 26 Architects
- 15 Interior Designers
- 1 Accredited Learning Professional
- 17 LEED & Well Building Accredited Professionals
- IT Specialist
- Building Code Specialist
- QA/QC Team
- PA-Certified Educator



Your Team





CAMS North



CAMS South



Agenda

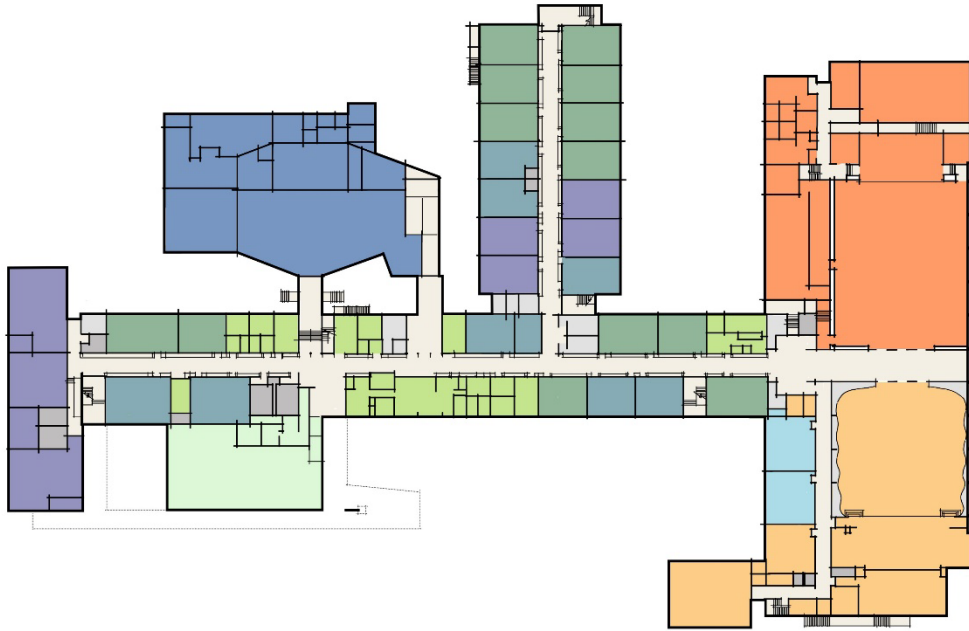
- I. Introduce RLPS**
- II. Outline Goals of Study**
- III. Evaluation of Existing Buildings**
- IV. Program Development**
- V. Option Development**
- VI. Cost Estimates**
- VII. Evaluation of Options**
- VIII. Next Steps**

Middle School Study Goals

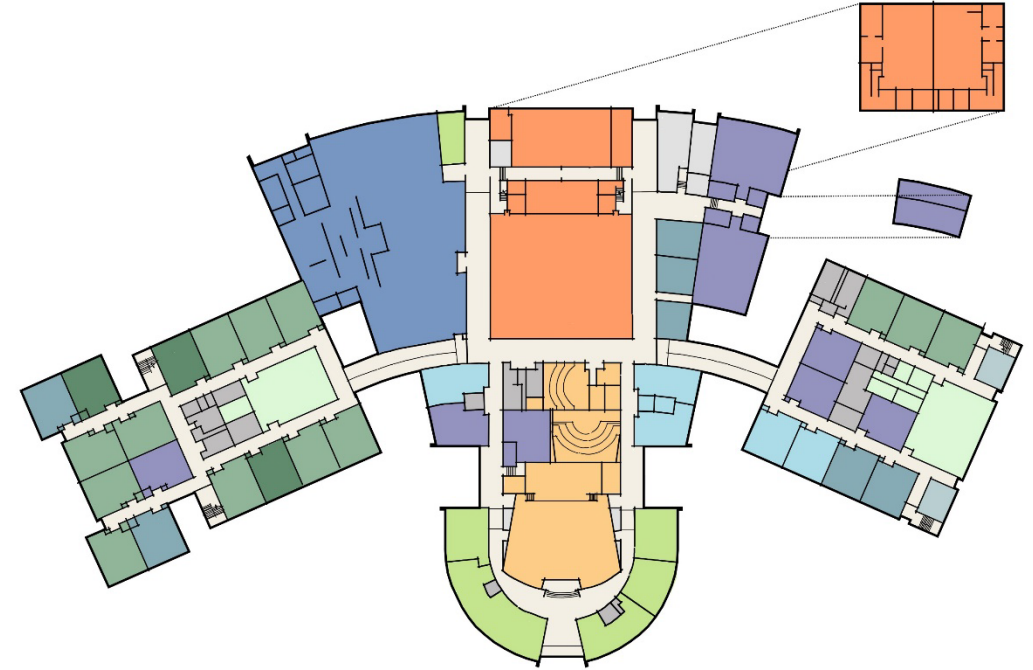
- **Location, Location, Location for 7-8 Grades**
- **Test CAMS North, CAMS South, & New MS Concepts**
- **1,400 to 1,700 Students**
- **Develop & Define 7-8 Grade Educational Program**
 - **Include Flexible, Future-ready Spaces**
 - **Meet Special Education Needs for *Present & Future***
- **Cost Effective Solution for District Master Plan**
- **Provide Supplemental High School Spaces**
 - **Auditorium**
 - **Athletics (Gym & Fields)**



CAMS North



CAMS South



- ✓ General building data
- ✓ Overall building condition
- ✓ Building systems condition
- ✓ Existing space use
- ✓ Academic program & function



Evaluation of Existing Buildings

General Building Data

Site: 25.13 acres
Total Building Area: 178,070 SF
Program Area: 115,599 SF
Construction & Project Dates:

1952	Original Construction
1992	Addition (Classrooms)
2012	Renovation
2017	Addition (Cafeteria)
2018	Roof Re-coating
2022	Exterior Façade & Windows

METRICS

165

TOTAL SF PER
STUDENT

107

PROGRAM SF PER
STUDENT

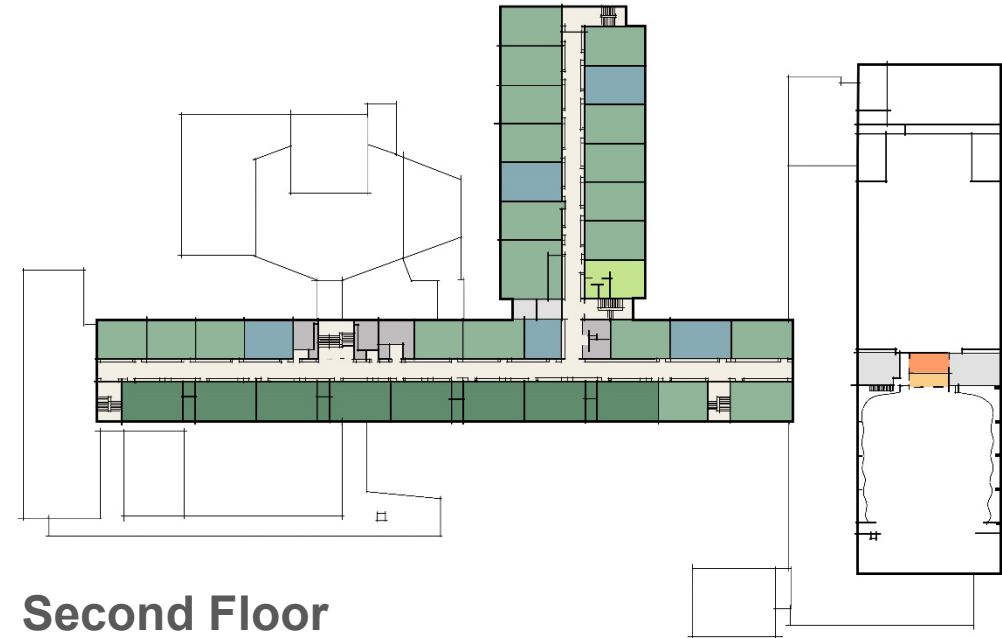
1.54

CURRENT GROSSING FACTOR
(PROGRAM AREA / TOTAL AREA)

- Administration
- Classrooms
- Special Education
- Media Center
- Visual Arts
- Performing Arts
- Athletics
- Kitchen
- Support Areas
- Utility
- Circulation



First Floor



Second Floor

CAMS North



CAMS North

Facility Condition:

- Site asphalt paving and concrete sidewalks need improvement
- Existing track surface needs to be replaced
- **History of additions without comprehensive renovations**
- Finishes & interiors in need of upgrade and replacement
- **Existing gym & auditorium need Full renovations**
- HVAC & Plumbing systems need replacement, upgrades
- Electrical & Low Voltage systems in need of upgrade
- **Most building bathrooms need full renovations**

Building Program & Capacity:

- Most classrooms need upgrading & renovations
- Insufficient space in building for District Special Education needs
- Few small group instruction or flexible instruction areas
- **Current science labs are under-sized and need renovation**
- Existing Office and Counseling areas need improvement
- **Locker rooms are not fully accessible & need improvement**
- Visual and Performing arts classrooms need renovation

Rating Scale:
0.0 = Consider Demolition
1.0 = Weigh Heavy Renovations vs Discontinued Use or Demolition
2.0 = Heavy Renovations or Alterations needed
3.0 = Light Renovations or Capital Projects needed
4.0 = Brand New or Like-New Facility

2.64

- 4-point scale
- Removes Emotion & Bias
- Building, Space & System Evaluation
- Averaged into Categories
- Overall Building Rating reflects Building Condition

BUILDING & PROPERTY			3.07
1	SURROUNDING CONTEXT & SITE	3.36	
2	PHYSICAL FEATURES & APPEARANCE	3.07	
3	MASSING & ORGANIZATION	3.00	
4	WAYFINDING, COMFORT & SAFETY	2.85	
SITE CONDITIONS			2.93
1	GENERAL CONDITIONS	3.17	
2	CIRCULATION	3.25	
3	PAVEMENT (ASPHALT & CONCRETE)	2.63	
4	PLAY AREAS	N/A	
5	ATHLETIC FIELDS & AMENITIES	2.67	
GENERAL EDUCATION & BUILDING			2.48
1	LEARNING ENVIRONMENTS - CORE	2.17	
3	PERFORMING ARTS	2.43	
4	TECHNOLOGY/ STEM/ ART	2.22	
5	ATHLETICS	2.08	
6	COMMONS SPACES	2.96	
7	ADMINISTRATIVE	2.86	
8	SUPPORT SPACES	2.61	
BUILDING CONDITIONS			2.85
1	BUILDING ENVELOPE	3.15	
2	BUILDING INTERIOR	3.08	
3	INTERIOR FINISHES	2.27	
4	SUPPORT SPACES - GENERAL	2.88	
SYSTEMS CONDITIONS			1.86
1	MECHANICAL SYSTEMS	2.00	
2	PLUMBING SYSTEMS	2.30	
3	ELECTRICAL SYSTEMS	1.65	
4	FIRE PROTECTION SYSTEMS	N/A	
5	LOW VOLTAGE SYSTEMS	1.50	
OVERALL BUILDING RATING (Average of 5 categories)			2.64



CAMS North

General Building Data

Site:	39.40 acres
Total Building Area:	175,055 SF
Program Area:	115,163 SF
Construction & Project Dates:	
1972	Original Construction
2001	HVAC
2010	HVAC
2018	Roof Re-coating & Windows

METRICS

154

TOTAL SF PER STUDENT

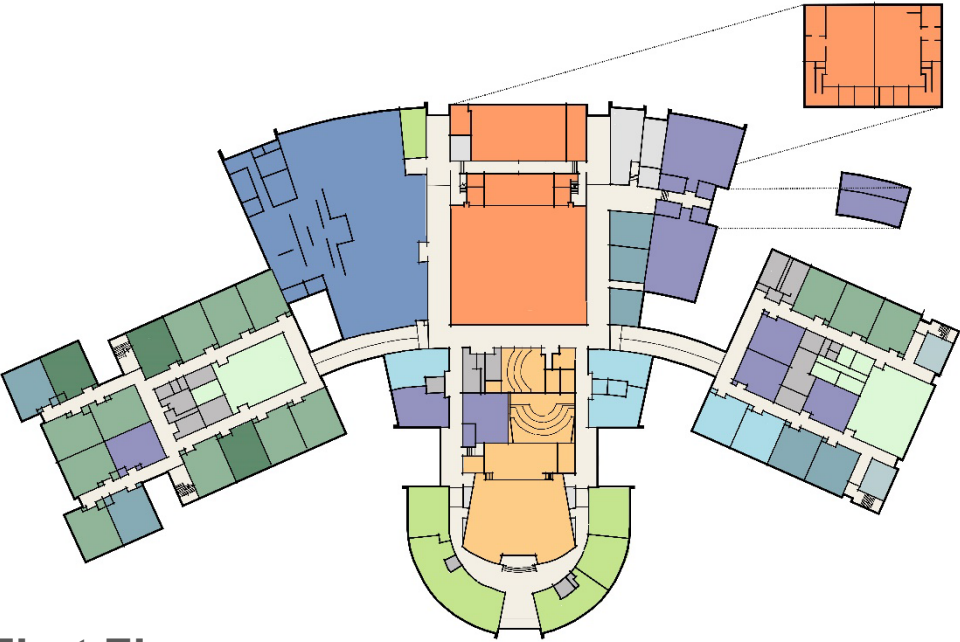
101

PROGRAM SF PER STUDENT

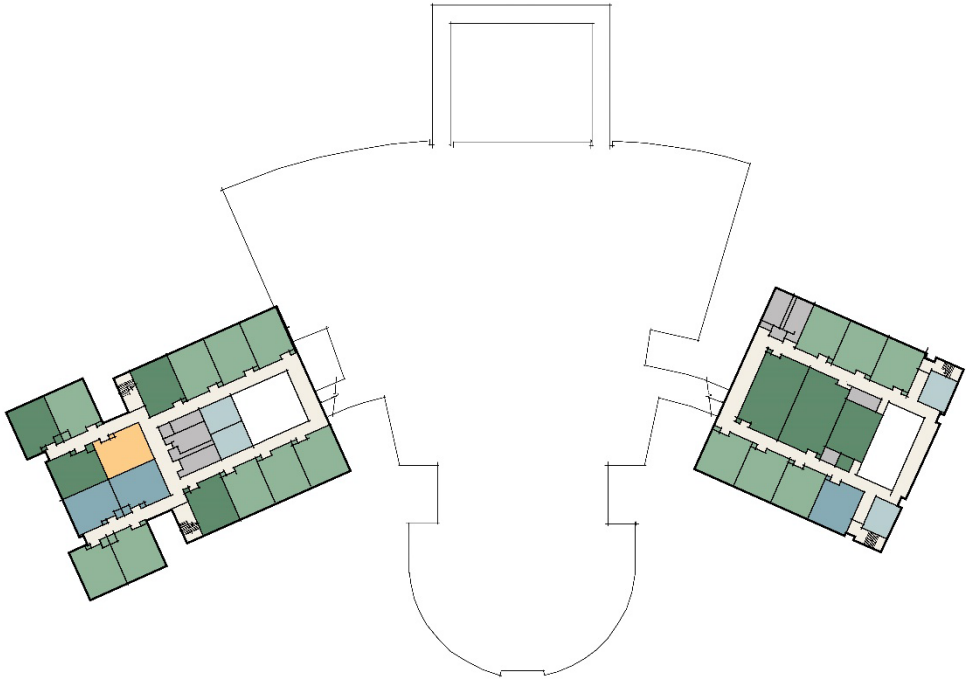
1.52

CURRENT GROSSING FACTOR
(PROGRAM AREA / TOTAL AREA)

- Administration
- Classrooms
- Special Education
- Media Center
- Visual Arts
- Performing Arts
- Athletics
- Kitchen
- Support Areas
- Utility
- Circulation



First Floor



Second Floor



CAMS South

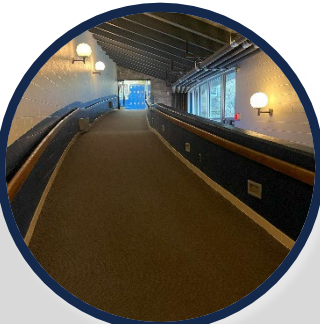


Facility Condition:

- Site asphalt paving and concrete sidewalks need improvement
- Existing grass sports fields show wear from use
- **No significant renovations since 1972**
- Finishes & interiors in need of upgrade and replacement
- **All mechanical, electrical, & plumbing systems are at end of life and in need of replacement**

Building Program & Capacity:

- Most classrooms need upgrading & renovations
- **Existing gym & auditorium are both undersized**
- Insufficient space in building for District Special Education needs
- Few small group instruction or flexible instruction areas
- **Classroom wing ramps are not ADA-compliant**
- Existing office and counseling areas are remote from students
- **Locker Rooms are not fully accessible & need improvement**
- Visual and Performing Arts classrooms need renovation

A circular inset image showing a hallway with blue carpeting and white walls. A person is walking in the distance.

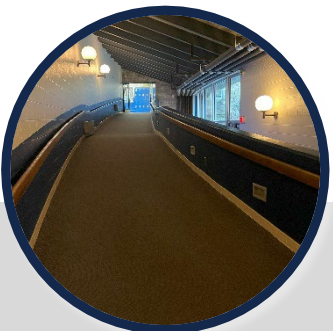
CAMS South

Rating Scale:
0.0 = Consider Demolition
1.0 = Weigh Heavy Renovations vs Discontinued Use or Demolition
2.0 = Heavy Renovations or Alterations needed
3.0 = Light Renovations or Capital Projects needed
4.0 = Brand New or Like-New Facility

2.25

- 4-point scale
- Removes Emotion & Bias
- Building, Space & System Evaluation
- Averaged into Categories
- Overall Building Rating reflects Building Condition

BUILDING & PROPERTY			2.66
1	SURROUNDING CONTEXT & SITE	2.91	
2	PHYSICAL FEATURES & APPEARANCE	2.71	
3	MASSING & ORGANIZATION	2.53	
4	WAYFINDING, COMFORT & SAFETY	2.50	
SITE CONDITIONS			2.38
1	GENERAL CONDITIONS	2.67	
2	CIRCULATION	2.38	
3	PAVEMENT (ASPHALT & CONCRETE)	2.13	
4	PLAY AREAS	N/A	
5	ATHLETIC FIELDS & AMENITIES	2.33	
GENERAL EDUCATION & BUILDING			2.14
1	LEARNING ENVIRONMENTS - CORE	2.17	
3	PERFORMING ARTS	2.09	
4	TECHNOLOGY/ STEM/ ART	2.32	
5	ATHLETICS	1.92	
6	COMMONS SPACES	2.26	
7	ADMINISTRATIVE	2.56	
8	SUPPORT SPACES	1.69	
BUILDING CONDITIONS			2.50
1	BUILDING ENVELOPE	3.00	
2	BUILDING INTERIOR	2.45	
3	INTERIOR FINISHES	2.15	
4	SUPPORT SPACES - GENERAL	2.40	
SYSTEMS CONDITIONS			1.59
1	MECHANICAL SYSTEMS	1.33	
2	PLUMBING SYSTEMS	2.00	
3	ELECTRICAL SYSTEMS	1.35	
4	FIRE PROTECTION SYSTEMS	N/A	
5	LOW VOLTAGE SYSTEMS	1.67	
OVERALL BUILDING RATING (Average of 5 categories)			2.25



CAMS South

CLASSROOMS						
FIRST FLOOR	QTY	AREA	TOTAL	MIN	MAX	COMMENTS
MATH	4	830	3320	100	120	E-107, E-113, E-114, E-115
ELA (ENGLISH LANGUAGE ARTS)	3	830	2490	75	90	E-106, E-108, E-116
SOCIAL STUDIES						
SOCIAL STUDIES						
WORLD LANGUAGE/ AGRICULTURE CONNECTIONS CLASS						
SECOND FLOOR						
MATH						
MATH						
MATH						
ELA						
ELA						
ELA						
SOCIAL STUDIES						
SOCIAL STUDIES						
SOCIAL STUDIES						
SCIENCE LAB						
PROJECT ROOM						
SCIENCE LAB						
PROJECT ROOM						
STORAGE ROOM						
Scheduled Area Total						
Classroom Capacity						

LEARNING SUPPORT/ SPECIAL EDUCATION						
FIRST FLOOR						
LIFE SKILLS CLASSROOM						
ALTERNATIVE INSTRUCTION (ISS)						
GIFTED EDUCATION						
LEARNING SUPPORT						
EMOTIONAL SUPPORT CLASSROOM						
WORK ROOM						
ESL (ENGLISH LANGUAGE LEARNERS)						
SECOND FLOOR						
LEARNING SUPPORT						
LEARNING SUPPORT S.G.I.						
ESL (ENGLISH LANGUAGE LEARNERS)						
Scheduled Area Total						

PERFORMING ARTS						
CORE AREA	QTY	AREA	TOTAL	MIN	MAX	COMMENTS
AUDITORIUM	1	3905	3905			
STAGE	1	1285	1285			
STORAGE	1	235	235			
MUSIC / CHORAL CLASSROOM	1	914	914	25	30	
OFFICE	1	150	150			
STORAGE	1	80	80			
BAND ROOM	1	1500	1500	25	30	
INSTRUMENT STORAGE	1	150	150			
PRACTICE ROOM	1	200	200			
STORAGE ROOM	1	145	145			
Scheduled Area Total			8568			
Classroom Capacity				50	60	
ATHLETICS/ PHYSICAL EDUCATION						
CORE AREA	QTY	AREA	TOTAL	MIN	MAX	COMMENTS
GYMNASIUM	1	7920	7920	66	66	
STORAGE ROOM	1	140	140			
STORAGE ROOM	1	130	130			
REMEDIAL GYM	1	1035	1035			NO ACCESSIBILITY
AUXILIARY GYM	1	2530	2530	33	33	NO ACCESSIBILITY
STORAGE ROOM	1	260	260			NO ACCESSIBILITY
STORAGE ROOM	1	115	115			NO ACCESSIBILITY
STORAGE ROOM	1	95	95			NO ACCESSIBILITY
STORAGE ROOM (OUTDOOR STORAGE?)	1	500	500			
GIRLS LOCKER ROOM	1	2630	2630			NO ACCESSIBILITY
OFFICE	1	125	125			
STORAGE/UTILITY	1	355	355			
JC CLOSET	1	25	25			
BOYS LOCKER ROOM	1	2500	2500			NO ACCESSIBILITY
OFFICE	1	120	120			
STORAGE/UTILITY	1	375	375			
JC CLOSET	1	25	25			
HEALTH CLASSROOM (B WING)	1	900	900	25	30	B-46
Scheduled Area Total			19780			
Classroom Capacity				124	129	
CAFETERIA/ DINING						
CORE AREA	QTY	AREA	TOTAL			COMMENTS
CAFETERIA SEATING	1	3750	3750			
CAFETERIA SEATING	1	2875	2875			
FOOD COURT / SERVING AREA	1	3683	3683			
KITCHEN, STORAGE, SUPPORT SPACES	1	5000	5000			
Scheduled Area Total			15308			

Verify what you HAVE

- ✓ Existing space use within building
- ✓ Classrooms specific for Grade 7-8 instruction
- ✓ Identify current Grade 7-8 organization
- ✓ Identify Special Education organization
- ✓ Review Visual & Performing Arts, Athletics, Technology Education, Science & S.T.E.A.M.
- ✓ Reviewing Metrics:
 - Students per classroom
 - Average classroom size
 - Program area per student
 - Total square foot per student



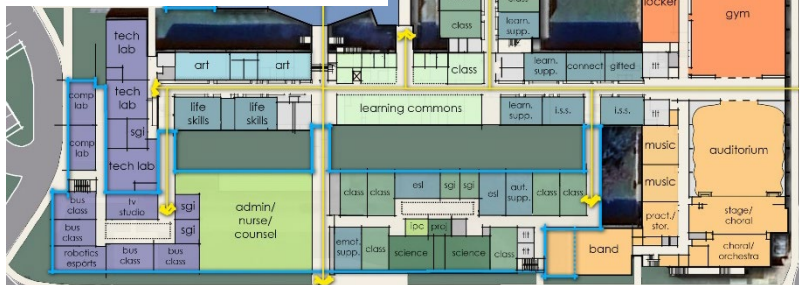
Develop what you NEED

- Are any existing spaces under-utilized?
- Any classrooms that you don't have but need?
- How will a new 7-8 Building be organized?
- What is CASD's min. & max. students per classroom?
- What does future-ready Special Education look like?
- What spaces do Technology & S.T.E.A.M. require?
- How will P.E. class use locker rooms in the future?
- Which shared spaces supplement High School program?
- And many more....



CLASSROOMS										
7TH GRADE	EXISTING					NEW				
	QTY	AREA	TOTAL	MIN	MAX	QTY	AREA	TOTAL	MIN	MAX
NEED 18 CLASSROOMS (6 MATH, 6 SOCIAL STUDIES, 6 ELA)										
CLASSROOMS	11	830	9130	275	330			0	0	0
CLASSROOMS	1	1080	1080	25	30			0	0	0
CLASSROOMS	3	870	2610	75	90			0	0	0
CLASSROOMS	1	850	850	25	30			0	0	0
CLASSROOMS	1	690	690	25	30			0	0	0
CLASSROOMS	1	885	885	25	30			0	0	0
SCIENCE LAB	6	1100	6600	150	180			0	0	0
PROJECT ROOM / STORAGE	2	250	750					0	0	0
STORAGE	3	185	555					0	0	0
WORLD LANGUAGE CLASSROOM	2	850	1700	50	60			0	0	0
	0	0	0	0	0			0	0	0
8TH GRADE										
NEED 18 CLASSROOMS (6 MATH, 6 SOCIAL STUDIES, 6 ELA)										
CLASSROOMS			0	0	0	18	850	15300	450	540
SCIENCE LAB			0	0	0	6	1125	6750	150	180
PROJECT ROOM			0			3	250	750		
STORAGE			0			3	250	750		
WORLD LANGUAGE CLASSROOM			0	0	0	2	850	1700	50	60
			0	0	0	0	0	0	0	0
Scheduled Area Total	#REF!		24850			#REF!		25250		
Classroom Capacity				650	780				650	780

LEARNING SUPPORT/ SPECIAL EDUCATION										
7TH GRADE	EXISTING					NEW				
	QTY	AREA	TOTAL	MIN	MAX	QTY	AREA	TOTAL	MIN	MAX
LEARNING SUPPORT	1	830	830					0		
LEARNING SUPPORT	1	880	880					0		
LEARNING SUPPORT	1	870	870					0		
LEARNING SUPPORT	1	700	700					0		
LEARNING SUPPORT S.G.I.	2	365	730					0		
ESL (ENGLISH LANGUAGE LEARNERS)	2	675	1350					0		
ESL (ENGLISH LANGUAGE LEARNERS)	1	830	830					0		
8TH GRADE										
LEARNING SUPPORT	1	850	850					0		
LEARNING SUPPORT	1	700	700					0		
LEARNING SUPPORT			0			2	850	1700		
LEARNING SUPPORT S.G.I.			0			2	275	550		
ESL (ENGLISH LANGUAGE LEARNERS)			0			3	850	2550		
GENERAL S.E.										
LIFE SKILLS CLASSROOM	2	1100	2200					0		
KITCHENETTE	1	250	250					0		
TOILET ROOM	1	30	70					0		
AUTISTIC SUPPORT CLASSROOM	2	840	1680					0		
AUTISTIC SUPPORT CLASSROOM	1	718	718					0		
AUTISTIC SUPPORT CLASSROOM			0			3	850	2550		
EMOTIONAL SUPPORT CLASSROOM	1	830	830					0		
EMOTIONAL SUPPORT CLASSROOM			0			1	850	850		
GIFTED EDUCATION CLASSROOM	1	860	860					0		
CONNECTIONS CLASSROOM	1	680	680					0		
ALTERNATIVE INSTRUCTION (ISS)	1	870	870					0		
ALTERNATIVE INSTRUCTION (ISS)	1	680	680					0		
			0					0		
Scheduled Area Total			16578					8200		



Validate the CONCEPTS

- ✓ Ideal 'NEW' 7-8 Middle School Program
- ✓ Back-fill each Additions/Renovations concept
- ✓ Check the metrics:
 - Concept classroom size
 - Program area per Student
 - Total square foot per student
 - Grossing factors (program/total area)
- ✓ Verify each concept is the size that it needs to be



Program Development

CAMS North



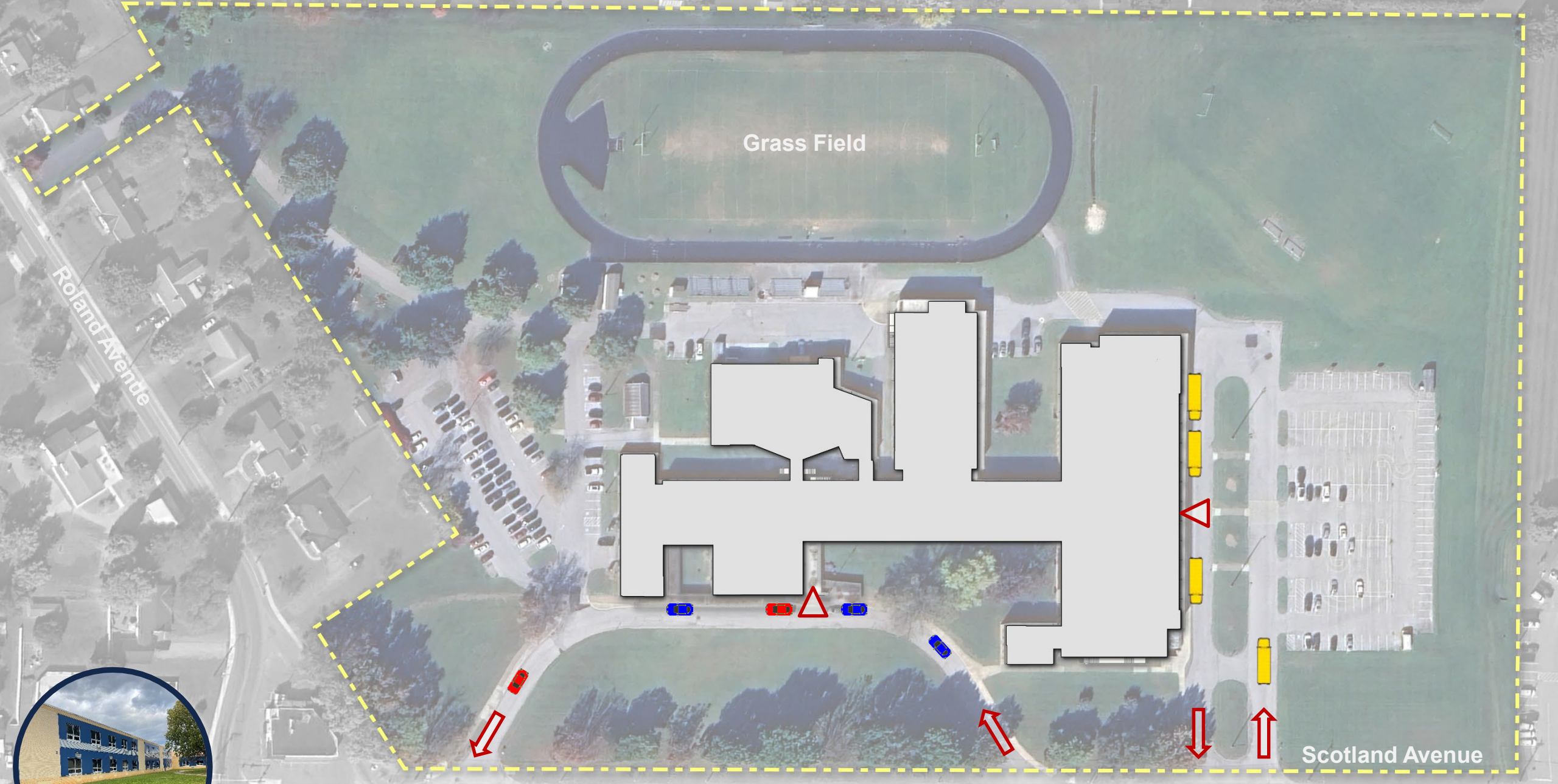
CAMS South



7- 8 New Middle School



Option Development



Grass Field

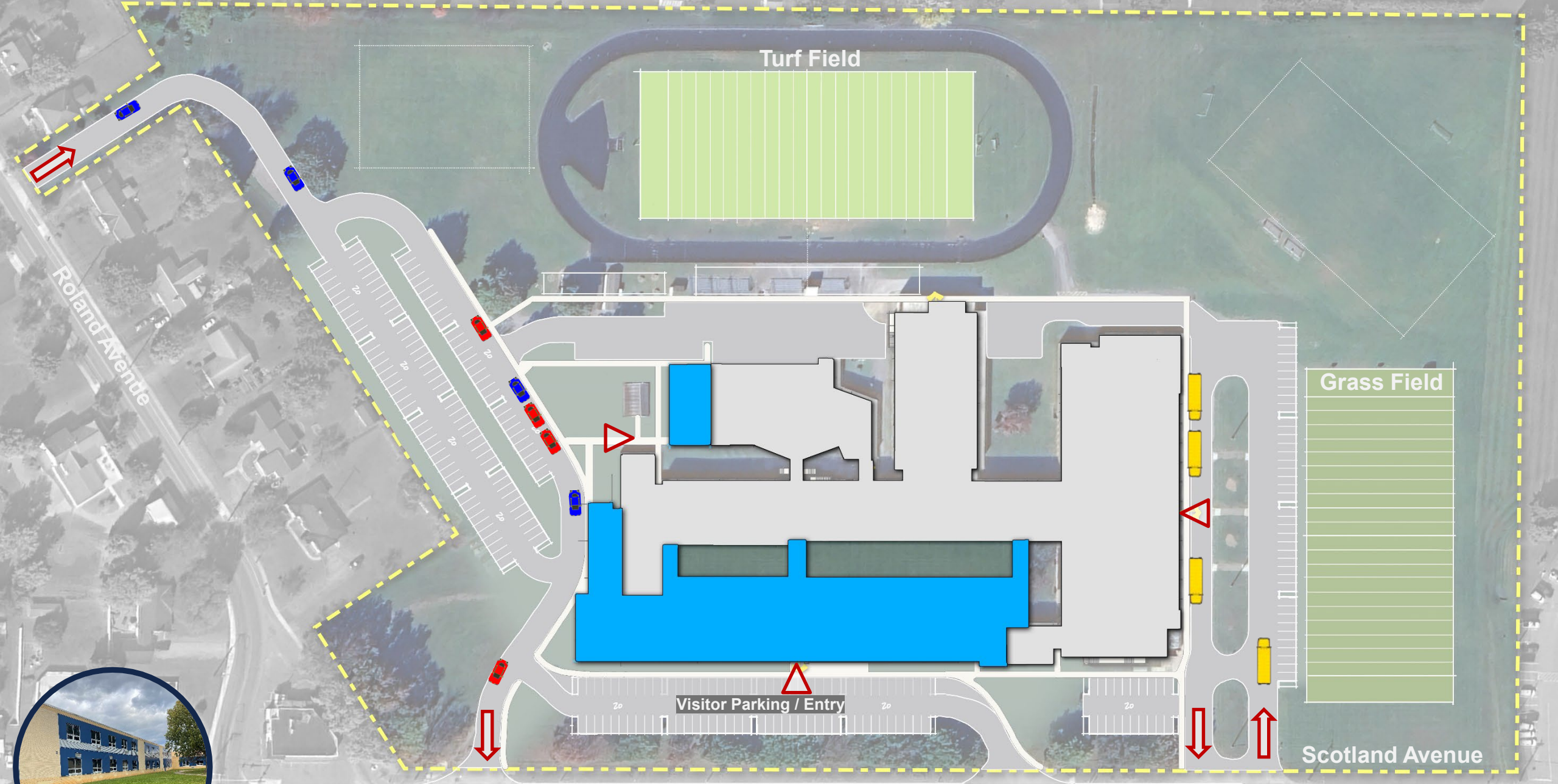
Roland Avenue

Scotland Avenue



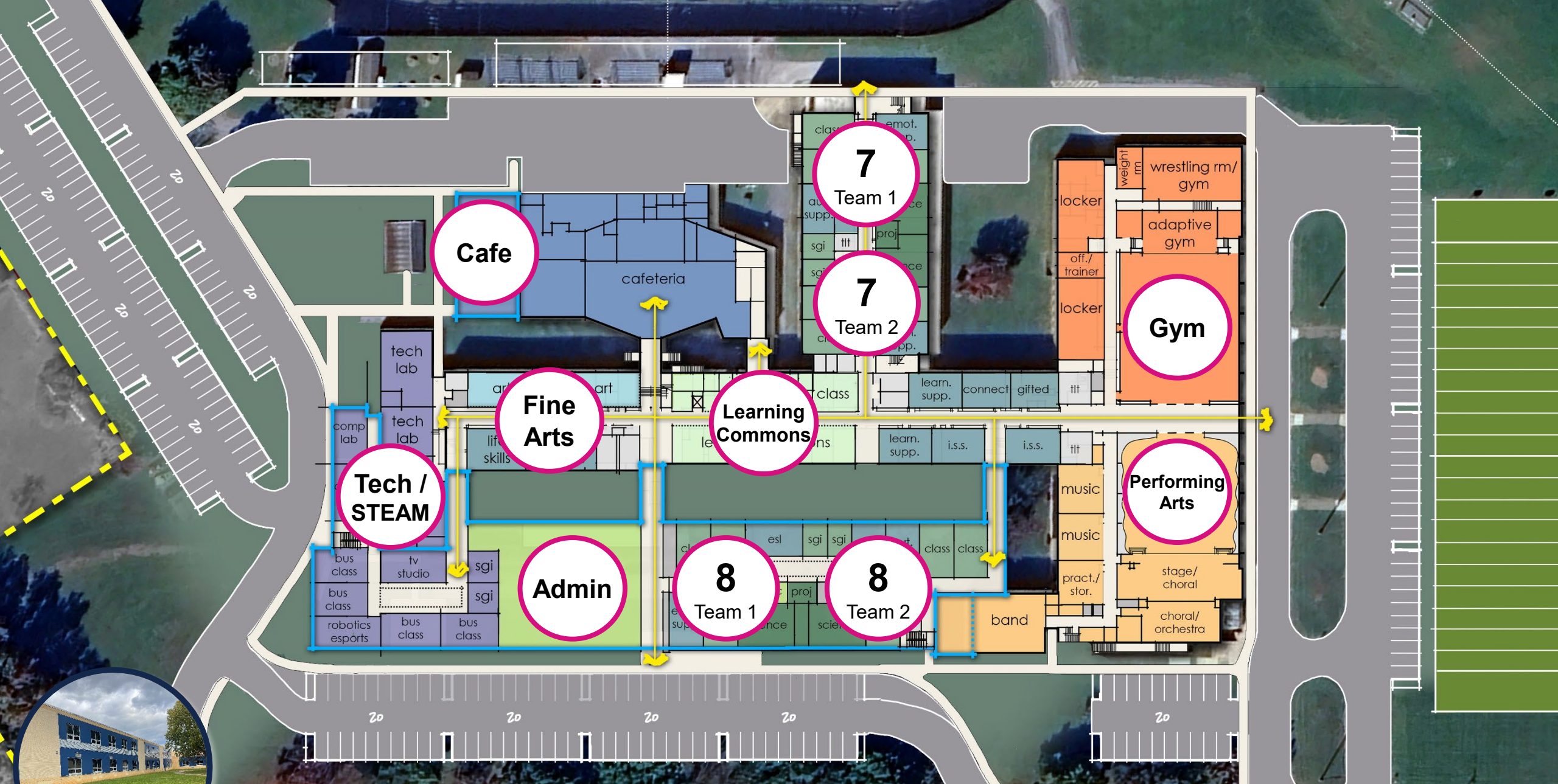
CAMS North

Existing Site Plan



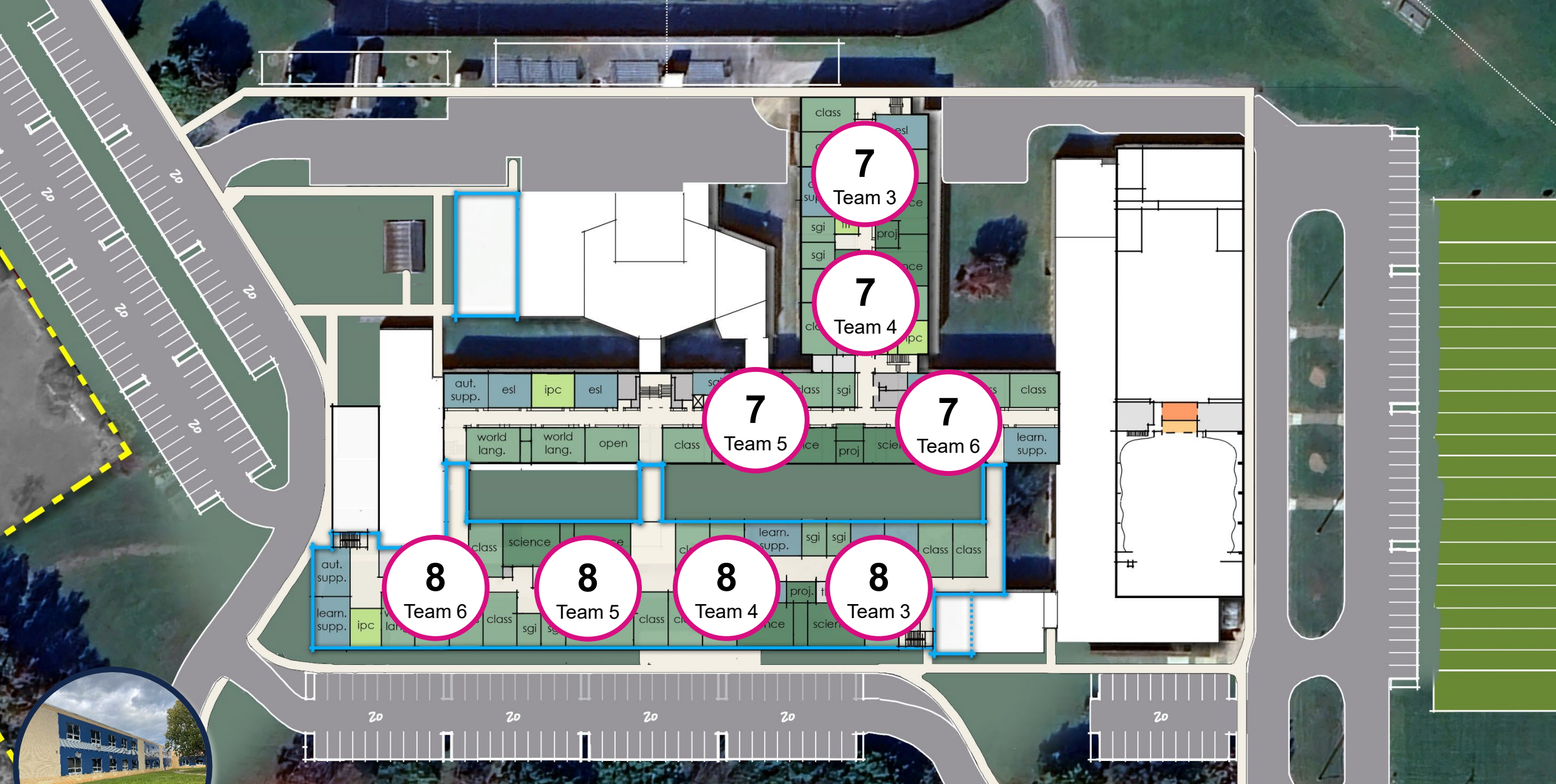
CAMS North

Proposed Site Plan



CAMS North

Proposed First Floor



CAMS North

Proposed Second Floor



CAMS North

Proposed

Concept Estimate

LOW

HIGH

Estimated Construction Cost
(includes 7% design contingency)

\$63,518,000 ↔ \$71,350,000



Construction Cost Inflation
(4% per year through 2027)

\$ 5,183,000 ↔ \$ 5,822,000



Estimated Soft Costs
(16% to 18%)

\$10,992,000 ↔ \$13,891,000

Total Estimated Project Cost

\$79,693,000 ↔ \$91,064,000



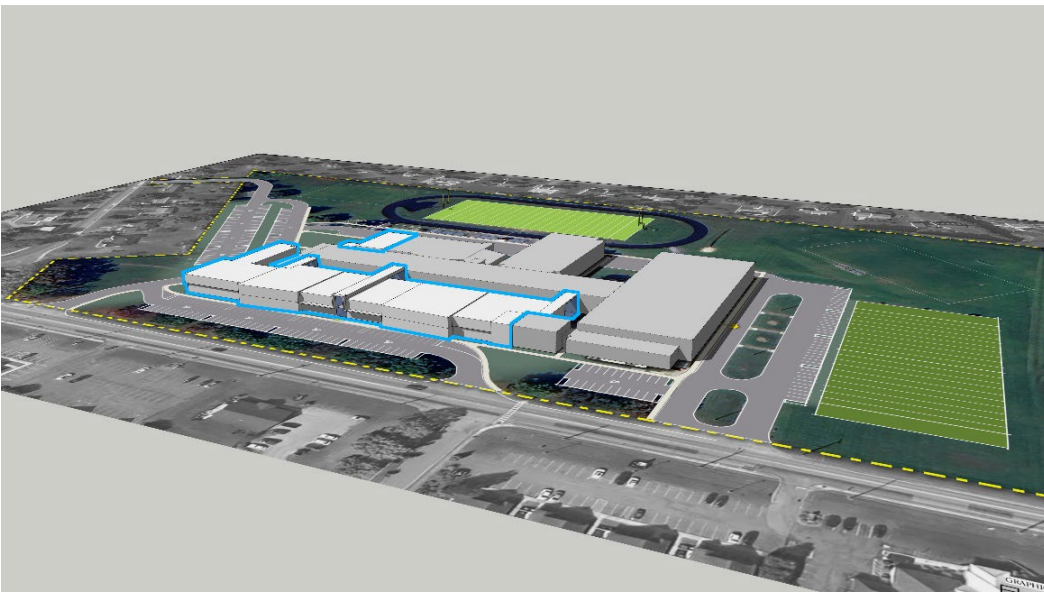
CAMS North

Benefits

- Recent investment in exterior
 - 2018 Roof Coating
 - 2022 New Façade / Windows
- 2017 investment in cafeteria
- Pipe tunnels = pathways for new MEP systems
- Phasing not dependent on other projects
- Auditorium & Gym are the right size

Challenges

- 25 Acre Site (PDE Metric [35 + 1 acre per FTE] = 49 Acres)
- Some smaller existing classrooms < 800 sf
- 3.5 miles from High School



$$\begin{array}{ccccc} 172,692 & + & 87,218 & = & 259,910 \\ \text{RENOVATION} & & \text{ADDITION} & & \text{TOTAL SQUARE FEET} \end{array}$$

METRICS

165,660

PROGRAM
SQUARE FEET

180

TOTAL SF
PER STUDENT

115

PROGRAM SF
PER STUDENT

1.57

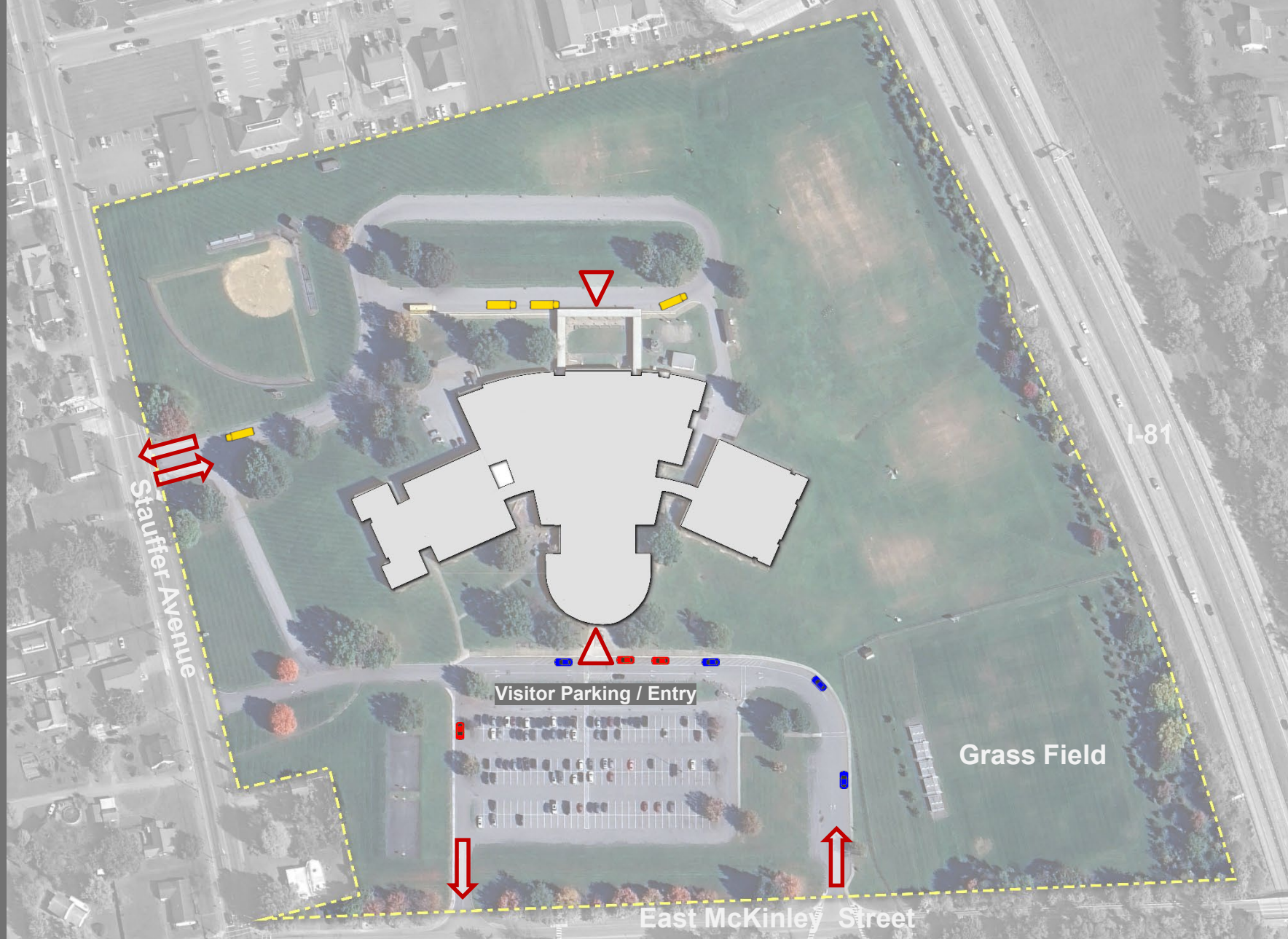
GROSSING
FACTOR

CAMS North





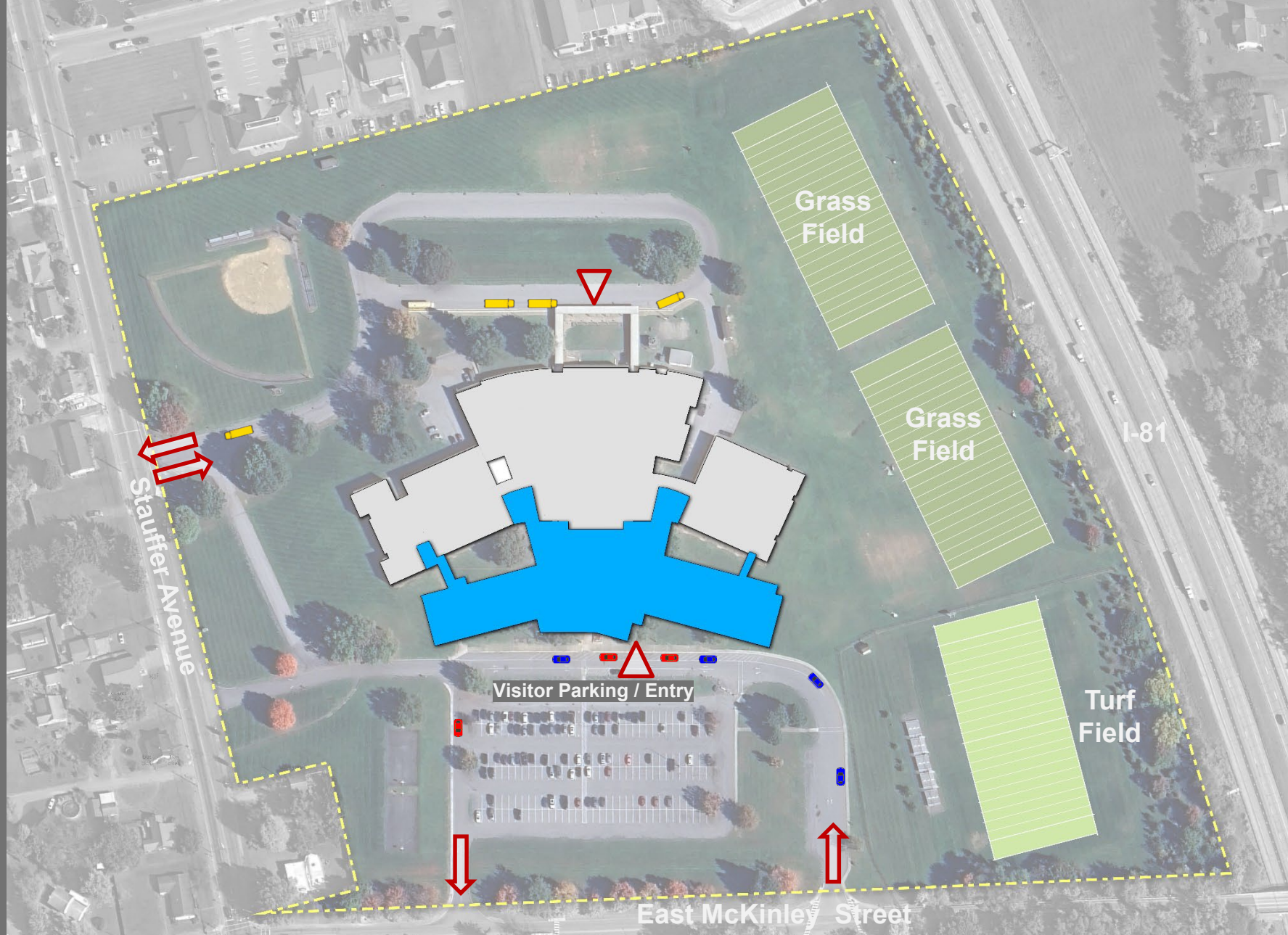
CAMS South



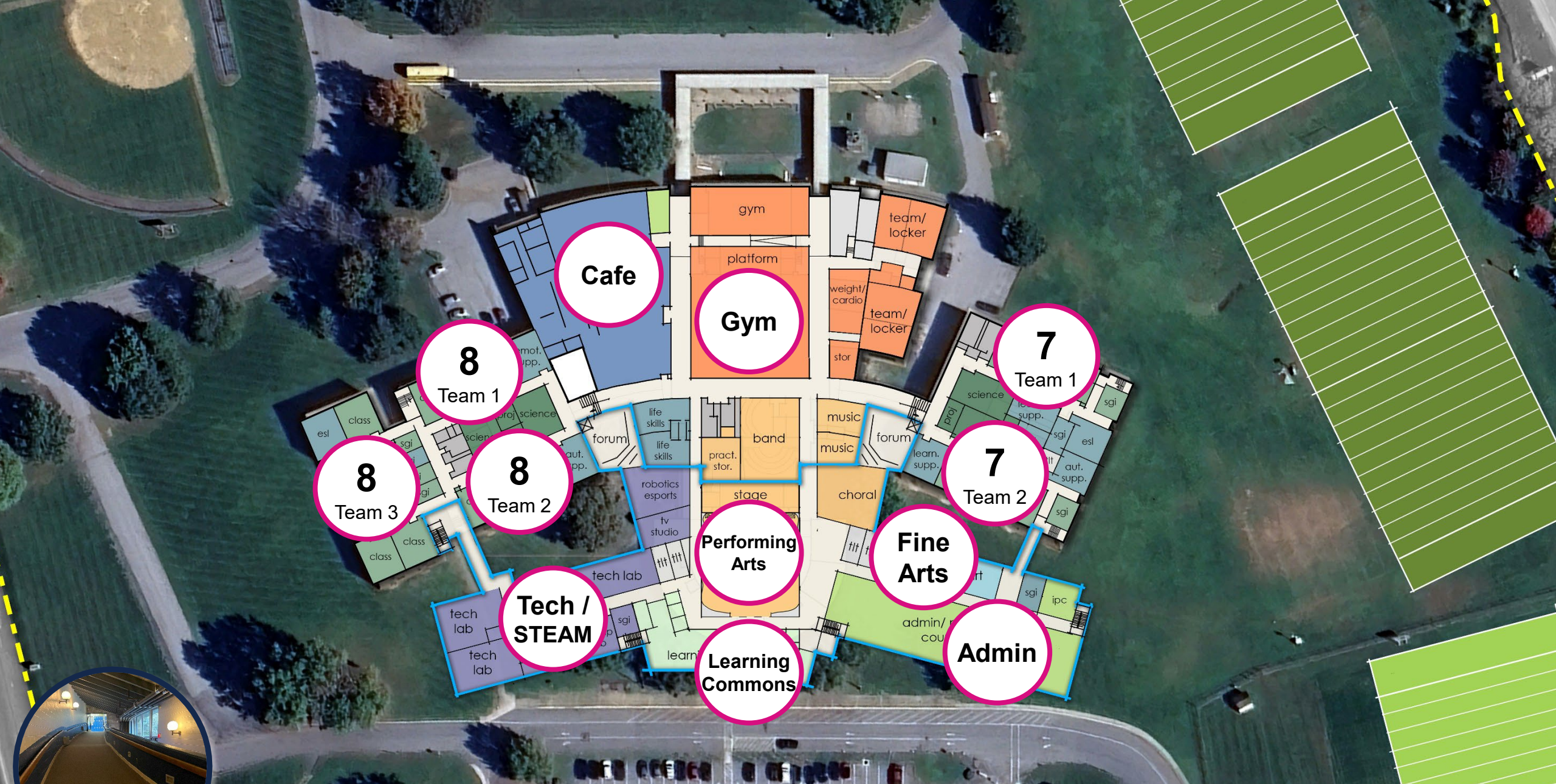
Existing Site Plan



CAMS South

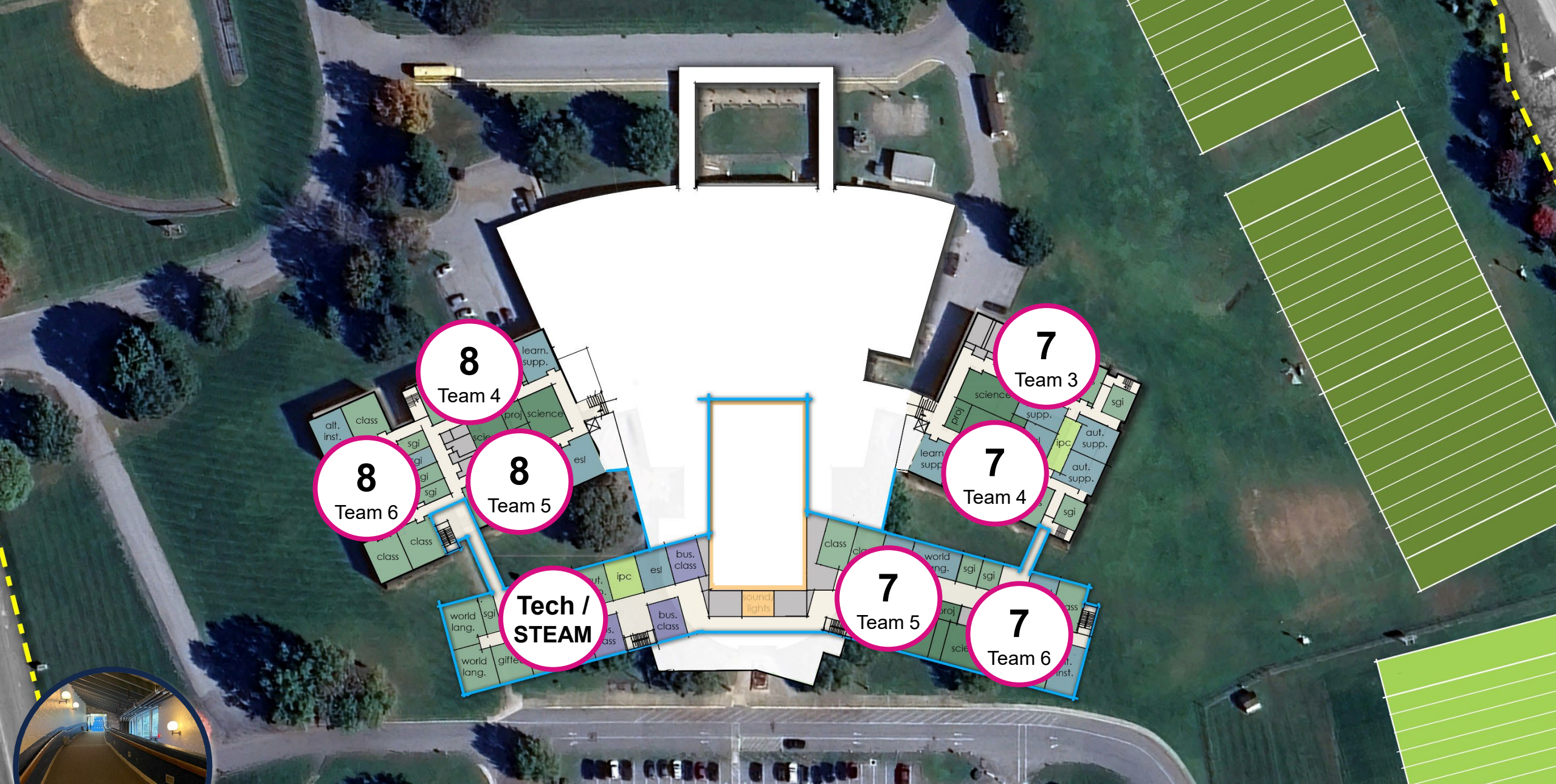


Proposed Site Plan



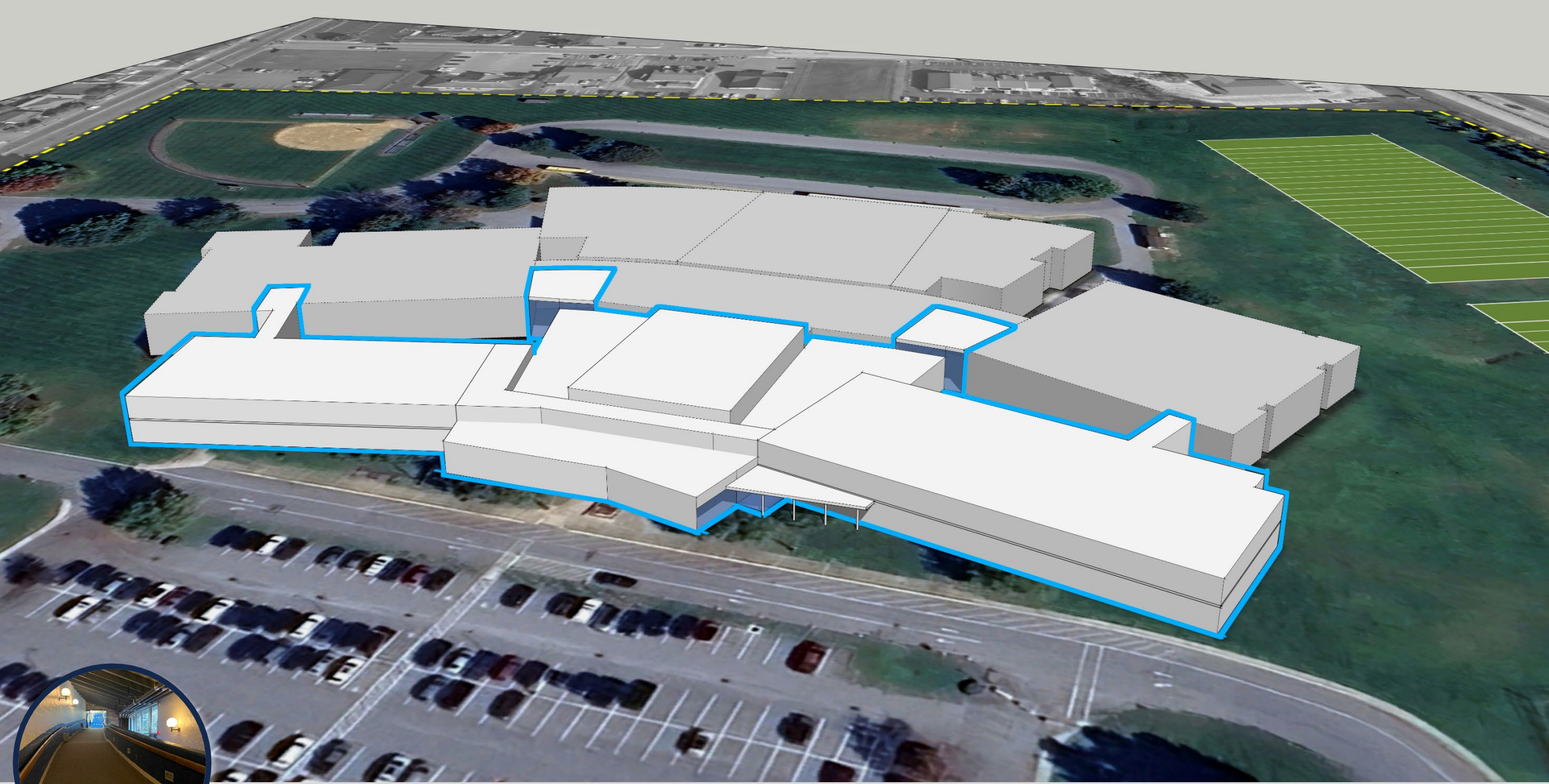
CAMS South

Proposed First Floor



CAMS South

Proposed Second Floor



CAMS South

Proposed

Concept Estimate

LOW

HIGH

Estimated Construction Cost
(includes 7% design contingency)

\$69,411,000 ↔ \$77,557,000



Construction Cost Inflation
(4% per year through 2027)

\$ 5,664,000 ↔ \$ 6,328,000

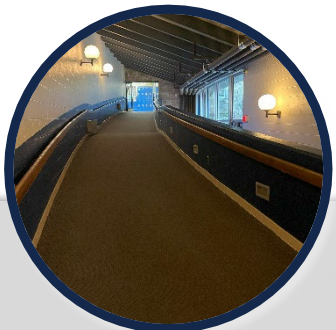


Estimated Soft Costs
(16% to 18%)

\$12,012,000 ↔ \$15,100,000

Total Estimated Project Cost

\$87,087,000 ↔ \$98,985,000



CAMS South



Benefits

- Recent investment in exterior
 - 2018 Roof Coating & Windows
- Less than 1 mile from High School
- 39.4 Acre Site (PDE Metric $[35 + 1 \text{ acre per FTE}] = 49 \text{ Acres}$)
- Existing classroom size > 850 sf

$$\begin{array}{ccccc}
 158,055 & + & 103,350 & = & 261,405 \\
 \text{RENOVATION} & & \text{ADDITION} & & \text{TOTAL SQUARE FEET}
 \end{array}$$

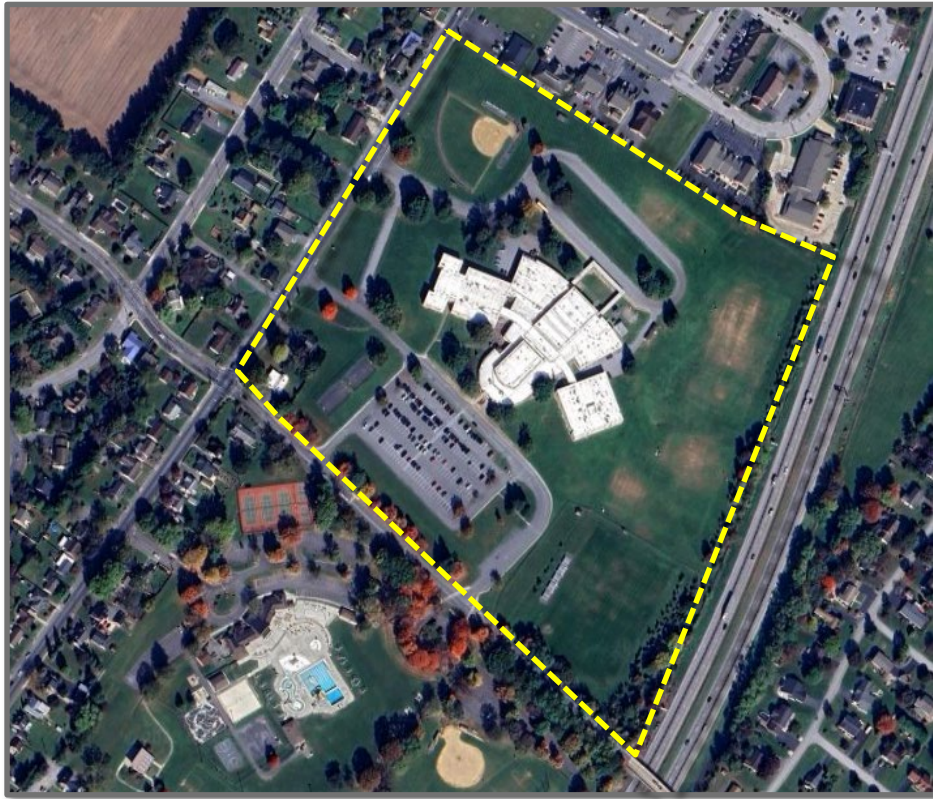
METRICS	171,178	182	119	1.53
	PROGRAM SQUARE FEET	TOTAL SF PER STUDENT	PROGRAM SF PER STUDENT	GROSSING FACTOR

Challenges

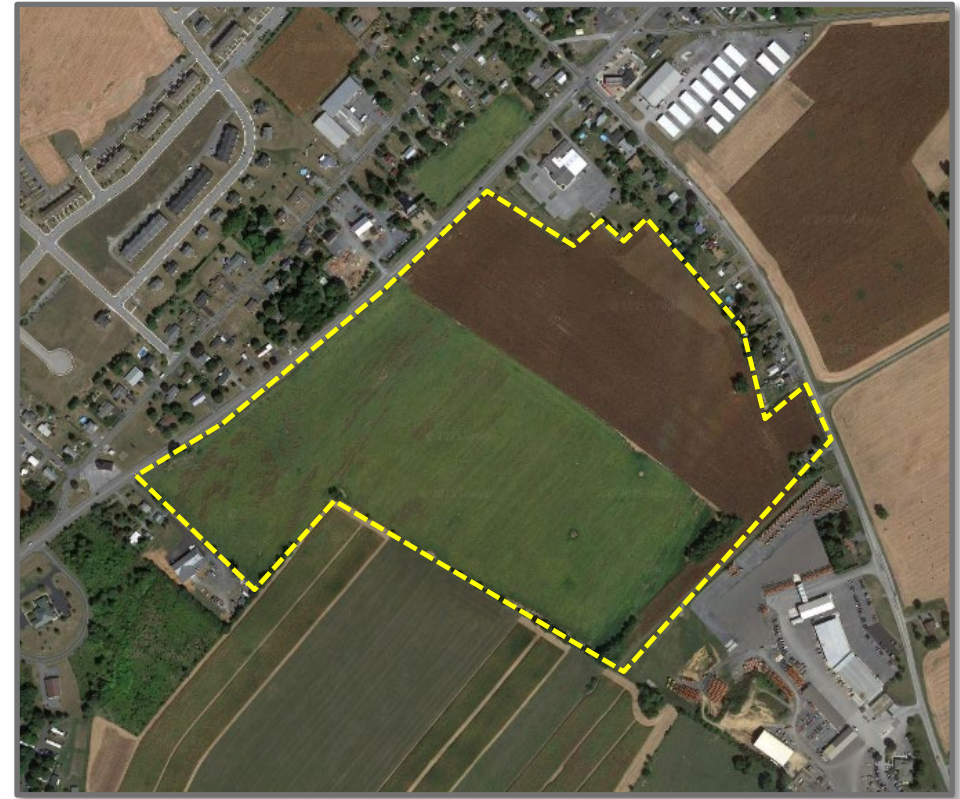
- Both Auditorium & Gym are undersized
- Multiple floor levels & accessibility
- Density of floor plan = internal classrooms
- No major renovations since 1972



CAMS South



CAMS South Site



Greenvillage Site



7-8 NEW Middle School

Concept Estimate

LOW

HIGH

Estimated Construction Cost
(includes 5% design contingency)

\$88,883,000 ↔ \$99,604,000



Construction Cost Inflation
(4% per year through 2027)

\$ 7,253,000 ↔ \$ 8,128,000



Estimated Soft Costs
(16% to 18%)

\$15,382,000 ↔ \$19,392,000

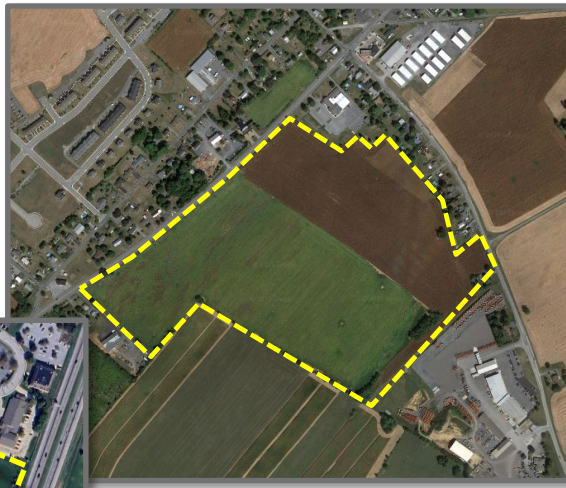
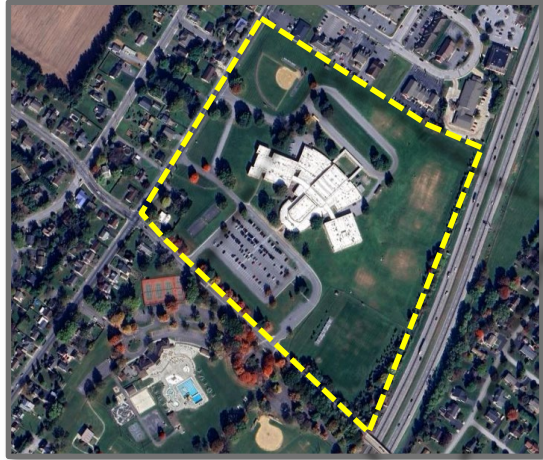
Total Estimated Project Cost

\$111,517,000 ↔ \$127,123,000



7-8 NEW Middle School

**CAMS South
Or Greenvillage
Site**



260,000

TOTAL SQUARE FEET

METRICS

178,605

PROGRAM
SQUARE FEET

186

TOTAL SF
PER STUDENT

124

PROGRAM SF
PER STUDENT

1.50

GROSSING
FACTOR

Benefits

- Could be located at CAMS South or Greenvillage site
- Minimize impact to operation of existing CAMS sites
- Shared spaces = ideal size
- Eliminate existing space challenges
- Maximum flexibility of design

Challenges

- Potentially longer site approval period
- Potential for PennDOT H.O.P. work if state roadway
- Impacts to existing fields if at CAMS South
- Site development costs (Greenvillage)
- Higher costs for 100% new construction



7-8 NEW Middle School

Concept Comparison

North

South

New

1.	Architectural Square Foot	259,910	261,405	260,000
2.	Program Square Foot	165,660	171,178	178,605
3.	Total Square Foot per Student	180.6	181.6	186.15
4.	Educational Environment	+	=	+
5.	Project Phasing	+	⊙	+
6.	Site: Size & Features	⊙	+	+
7.	Location compared to High School	=	+	+ =
8.	Minimize Major Renovations	+	=	+
9.	Building Longevity	⊙	=	+
10.	Operational Expenses	⊙	⊙	+
11.	Budget	+	⊙	=
12.	Estimated Total Project Cost	\$79M – \$91M	\$87M - \$ 99M	\$111M - \$127M



Next Steps

- Respond to Board & Administration feedback
- Fine-tune schemes & cost estimates
- Develop Administration recommendation
- Continue with Athletics & Operations Study
 - Incorporate options into overall Master Plan



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Potential Project Timeline

- **Begin Design: May 2025**
- **Bidding: Fall 2026**
- **Start Construction: Spring 2027**





THANK YOU