

Crabtree, Rohrbaugh & Associates

PEQUEA VALLEY SCHOOL DISTRICT

BOARD MEETING

December 7th, 2021

AGENDA

- MEETING UPDATES
- SCHEDULE UPDATES
- EASEMENT REQUEST
- PROJECT PHASING
- OVERVIEW OF NEW INTERMEDIATE / HIGH SCHOOL
- OVERVIEW OF DAO, FITNESS, EARLY LEARNING CENTER
- OVERVIEW OF FIELD HOUSE
- PROJECT ALTERNATES – IN PROGRESS
- MARKET TRENDS / ECONOMY UPDATES

MEETING UPDATES

- SINCE LAST BOARD COMMITTEE MEETING:
  - CONTINUED CONSULTANT COORDINATION MEETINGS
  - CONTINUED STEERING COMMITTEE / ADMIN MEETINGS

- Faculty Meetings:

  ROUND 1
  - 9/30 – ELA / MATH / SS / WORLD LANGUAGE / WORLD LANGUAGE / SPECIAL ED / HEALTH & PE / SCIENCE / AGRICULTURE / MEDIA CENTER / PLANETARIUM
  - 10/7 – ONLINE LEARNING / TECH / eSPORTS / CORE / WOOD / STEM / ATHLETICS / MAINTENANCE / DISTRICT OFFICE / EARLY LEARNING CENTER
  - 10/13 – ART / MUSIC / PERFORMING ARTS / COUNSELING / CAREER CENTER / NURSE / ADMINISTRATIVE SUITE / COMMON SPACES

  ROUND 2
  - 10/28 – ELA / MATH / SS / WORLD LANGUAGE / SPECIAL ED / HEALTH & PE / SCIENCE / ATHLETICS / MEDICAL CENTER / PLANETARIUM
  - 11/2 – ONLINE LEARNING / TECH / eSPORTS / CORE / WOOD / STEM / AGRICULTURE / DISTRICT OFFICE
  - 11/11 – ART / MUSIC / PERFORMING ARTS / COUNSELING / CAREER CENTER / NURSE / ADMINISTRATIVE SUITE / COMMON SPACES

MEETING UPDATES

- **UPCOMING MEETINGS:**
  - 12/2 - PLANETARIUM EQUIPMENT COORDINATION W/ SPITZ
  - 12/8 – SHOP EQUIPMENT COORDINATION W/ BLUE BALL MACHINE CO.
  - 12/14 – AUDITORIUM COORDINATION

  ROUND 3
  - JANUARY – MS EDUCATORS /ELA / MATH / SS / WORLD LANGUAGE / SPECIAL ED / HEALTH & PE / SCIENCE / ATHLETICS / MEDICAL CENTER
    JANUARY – ONLINE LEARNING / TECH / eSPORTS / CORE / WOOD / STEM AGRICULTURE / DISTRICT OFFICE / PLANETARIUM
  - JANUARY – ART / MUSIC / PERFORMING ARTS / COUNSELING / CAREER CENTER / NURSE / ADMINISTRATIVE SUITE / COMMON SPACES

- **ACT 34:**
  - JANUARY 2022 – Booklet to Board and PDE
  - FEBRUARY 2022 – Public Hearing
  - APRIL 2022 – Board Vote & PDE Submission

Pequea Valley School District
11/16/2021

Summer 2024 Open Design Timeline
IS/HS New Construction

TASK	2020 OCT	2020 NOV	2020 DEC	2021 JAN	2021 FEB	2021 MAR	2021 APR	2021 MAY	2021 JUN	2021 JUL	2021 AUG	2021 SEPT	2021 OCT	2021 NOV	2021 DEC	2022 JAN	2022 FEB	2022 MAR	2022 APR	2022 MAY	2022 JUN
Board Committee Meeting		3-Nov	1-Dec	4-Jan	2-Feb	2-Mar	30-Mar	4-May	1-Jun	N/A	N/A										
School Board Meeting		12-Nov	10-Dec	14-Jan	11-Feb	11-Mar	8-Apr	13-May	10-Jun	N/A	N/A										
Zoning and Sketch Plan Review																					
Sketch Plan Meeting w/ Towhship Planning Com.									22-Jun												
Zoning Variance Application										30-Jul											
Zoning Hearing Board meeting												21-Sep									
Zoning and Sketch Plan Review																					
Submit to PPL ROW Department											27-Aug										
Submit Land Development Plans - County / Twp												17-Sep									
County Conservation District NPDES Submission												30-Sep									
Planning Commision Meeting													26-Oct								
Land Development Conditional Approval															Dec						
Conservation District Approval																	Feb				
Plan Recordation																		March			
Schematic Design		SD's			19-Feb																
Program Verification			15-Dec	13-Jan																	
Student / Staff / Leadership Design Collab.																					
Preliminary Floor Plans / Elevations																					
Preliminary MEP Design																					
Probable cost of construction																					
Community Meeting																					
Board Presentations				5-Jan	1-Feb																
Design Development:						DD's							October								
Structural Design																					
Develop MEP Design																					
Develop Kitchen Desgin																					
Develop Interior Design - Teacher / Staff																					
Probable Cost of Construction																					
Board Presentation																					
Finalize Code Review																					
Act 34 Hearing																					
Construction Documents														CD's					12-Apr		
Finalize Civil / Landscape Design																					
Finalize Interior Design																					
Finalize Structural Design																					
Finalize Mechanical Selections																					
Finalize Major Electrical Elements																					
Finalize Major Plumbing Elements																					
Finalize Major Fire Protection Elements																					
Finalize Interior Elevations																					
Board Presentation																					
Finalize Specifications																					
Bidding / Construction																			BIDDING / CONSTRUCTION		
Bidding / Post Bidding																			BID 3/15/2022		
Construction - New IS / HS																					
Construction - Existing HS																					
Construction - Existing IS																					

NEW IS / HS COMPLETION SUMMER 2024

MILESTONES

- **PROGRAMMING**
  - JANUARY 2021
- **SCHEMATIC DESIGN**
  - FEBRUARY 2021
- **DESIGN DEVELOPMENT**
  - OCTOBER 2021
- **CONSTRUCTION DOC'S**
  - APRIL 2022
- **BIDDING**
  - UTILITIES JAN. 2022
  - MS/HS JUNE 2022
- **PHASE 1** – NEW HS/MS
  - JULY 2022
  - SUMMER 2024
- **PHASE 2** – RENO HS
  - SUMMER 2025
- **PHASE 3** – RENO IS
  - SUMMER 2026

LAND DEVELOPMENT SCHEDULE

(UPDATED DECEMBER 21')

DERCK & EDSON EST. 1940
CAMPUSES DOWNTOWNS ATHLETICS

December 2021 (revised)

Land Development SCHEDULE

Zoning and Sketch Plan Review

Sketch Plan meeting with Township Planning Comm.	June 22, 2021	completed
Zoning Variance (building height) Application to Twp	July 30, 2021	completed
Zoning Hearing Board Meeting	**September 21, 2021**	completed

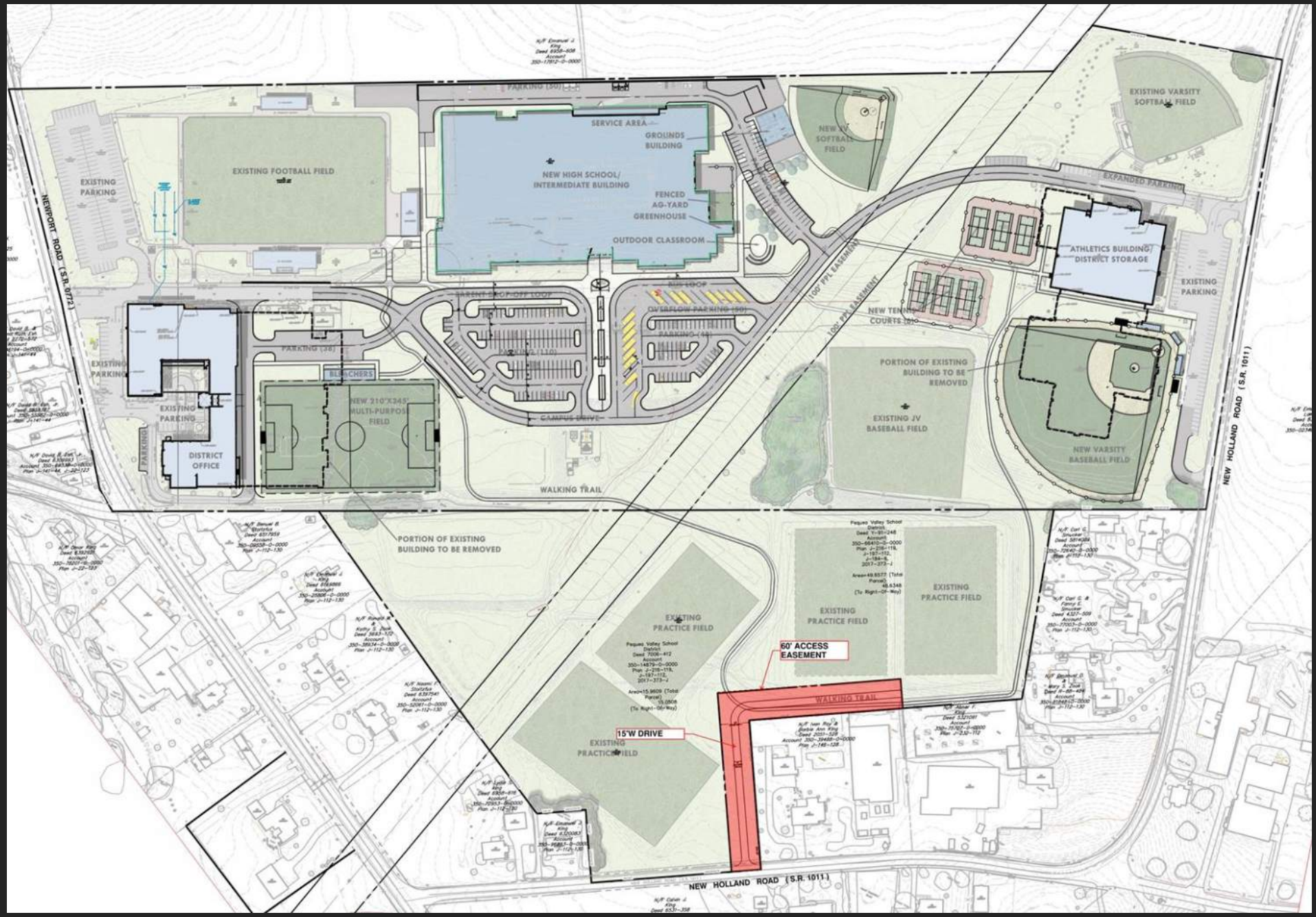
Land Development

Submit Plans to PPL R.O.W. Department	completed	
Submit Land Development Plans– County/Twp.	September 21, 2021	completed
County Conservation District NPDES Submission	November 5, 2021	completed
Planning Commission Meeting	**January 25, 2022**	
Land Development Conditional Approval	March 2022	
Conservation District Approval	February 2022	
Plan Recordation	March/April 2022	
Out to Bid	April 2022	
Start Project Construction	July 2022	

PROPOSED SITE PLAN

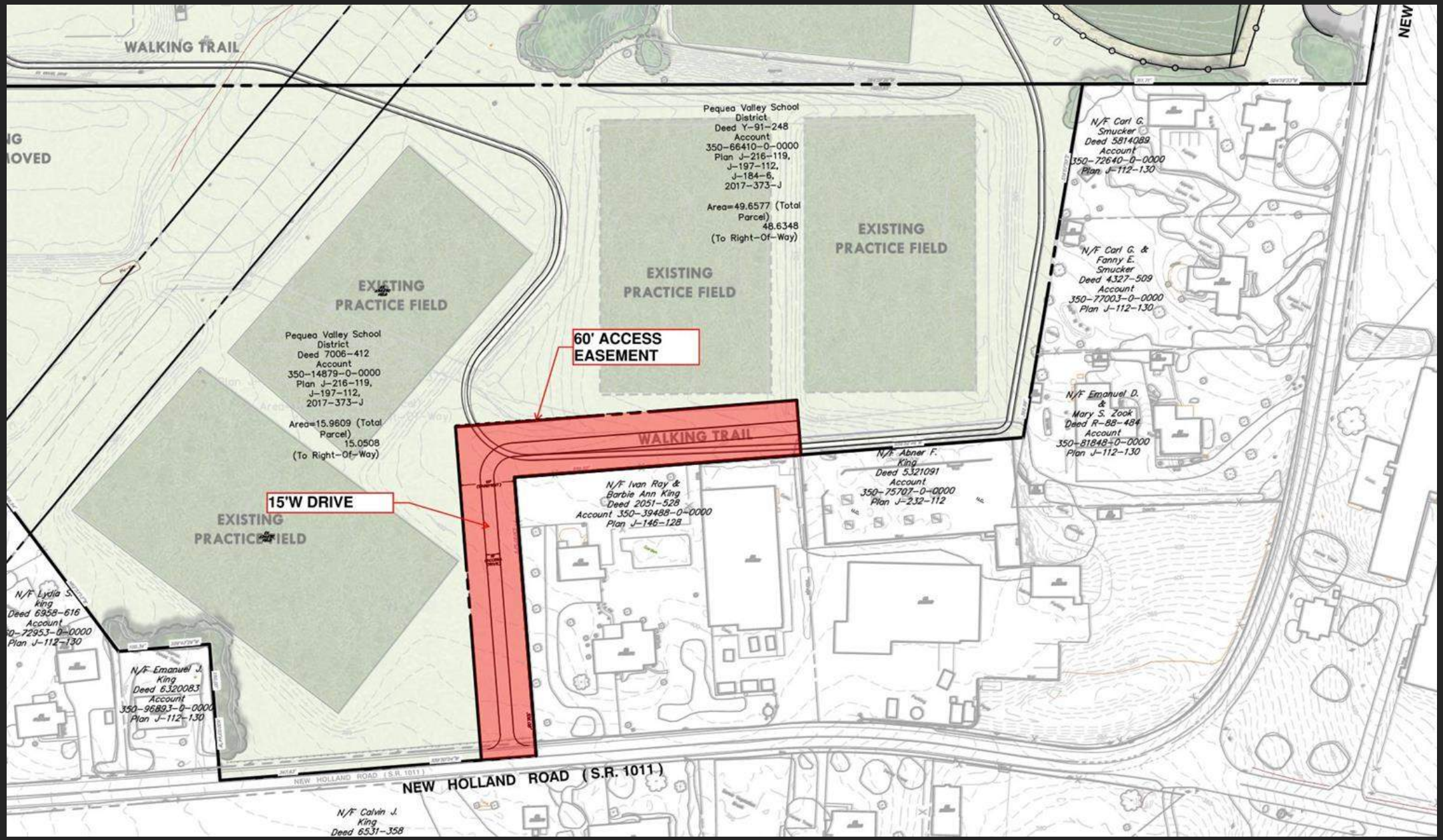


EASEMENT REQUEST - SITE PLAN

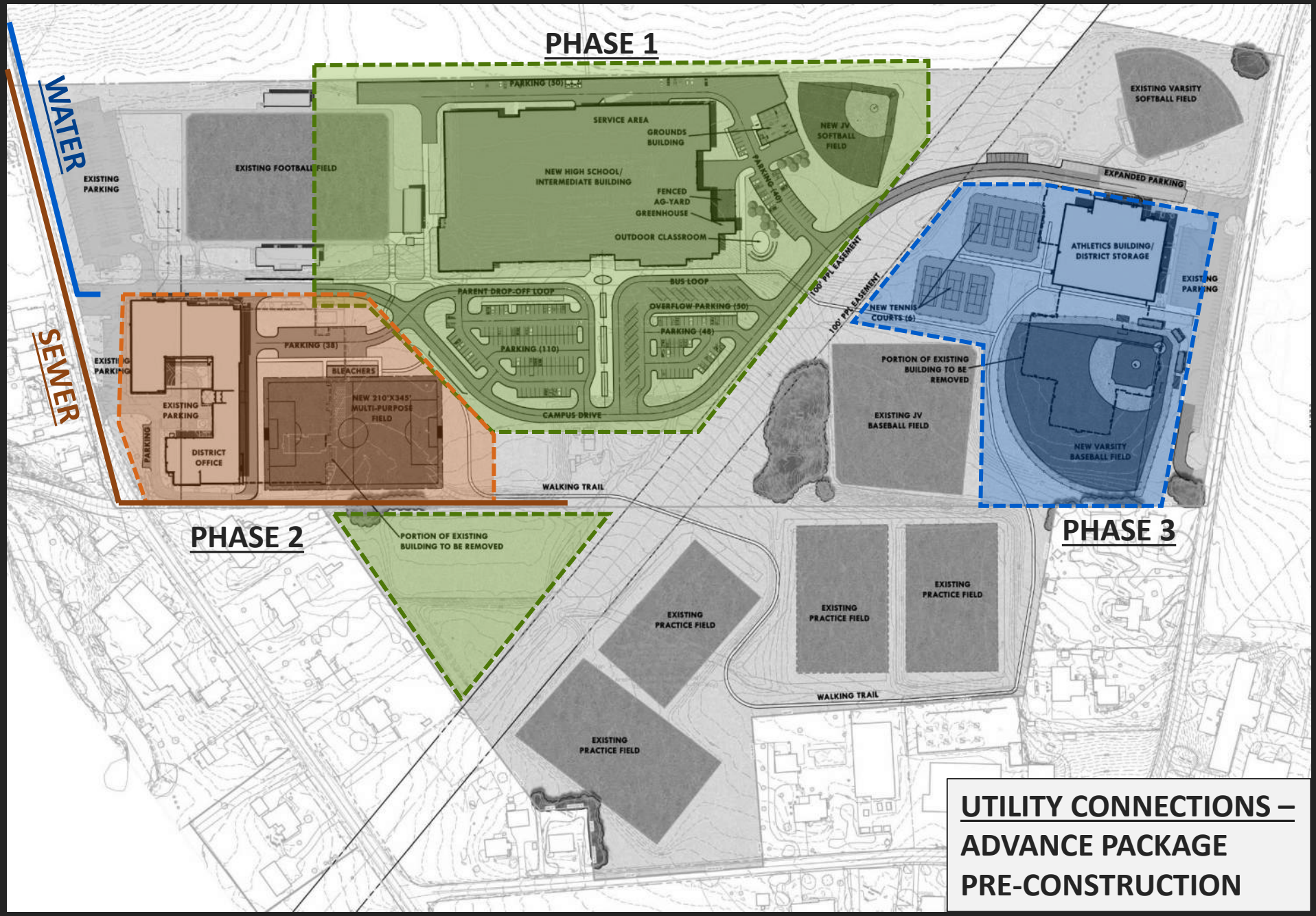


EASEMENT REQUEST - SITE PLAN

EXPLORATION - SEPARATE TRACK TO MAIN PROJECT



PROPOSED PHASING



UTILITY CONNECTIONS – ADVANCE PACKAGE PRE-CONSTRUCTION

PRE-CONSTRUCTION

- CONNECT TO PUBLIC WATER AND SEWER

PHASE 1

- STORMWATER
- EXPAND PARKING AND MODIFY ACCESS ROAD
- NEW MS/HS
- NEW GROUNDS BLD

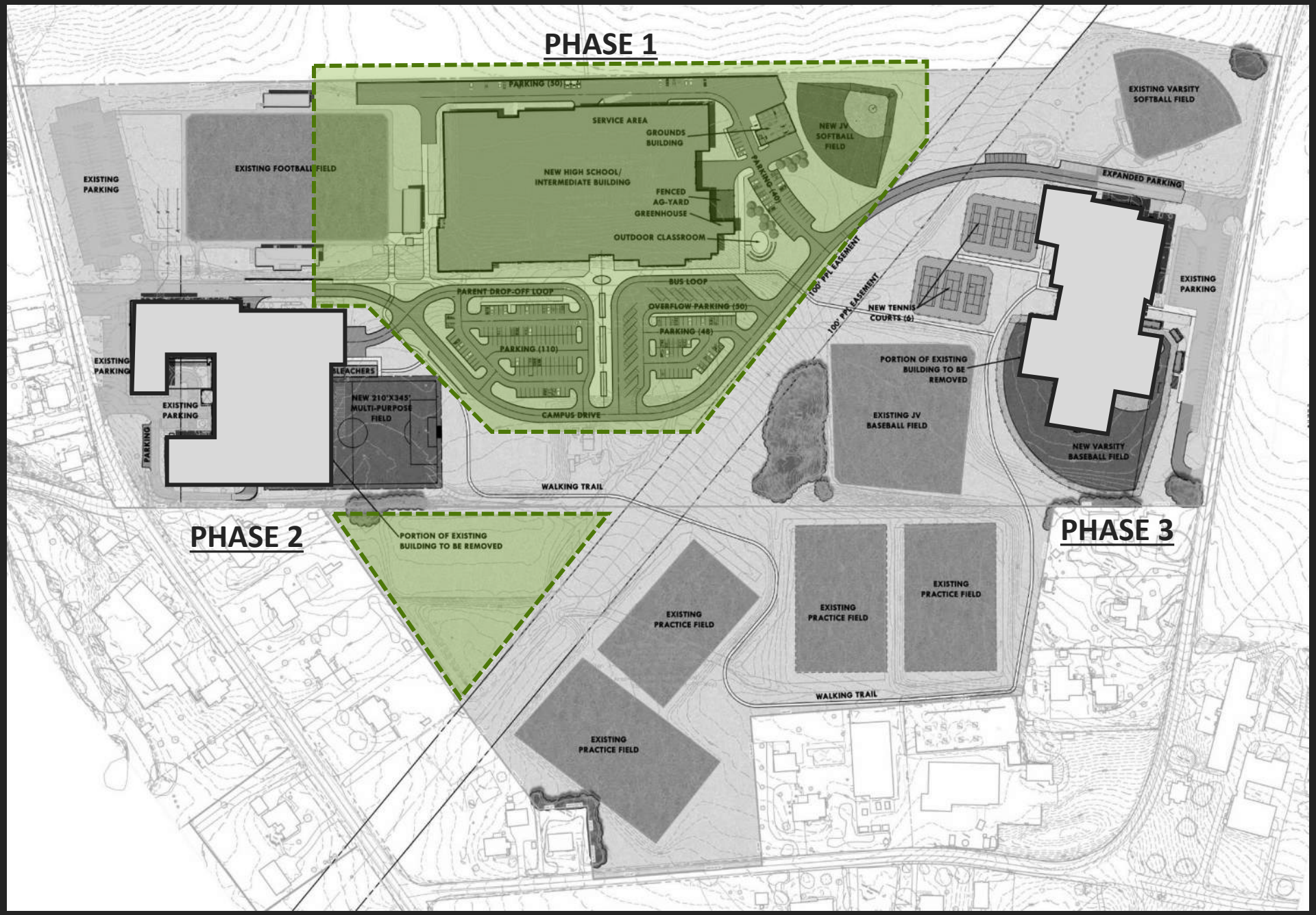
PHASE 2

- DEMO / RENO EXISTING HS
- MULTIPURPOSE FIELD

PHASE 3

- DEMO / RENO EXISTING MS
- TENNIS COURTS
- VARSITY BASEBALL
- FINALIZE SITE

PROPOSED PHASING



PRE-CONSTRUCTION

- CONNECT TO PUBLIC WATER AND SEWER

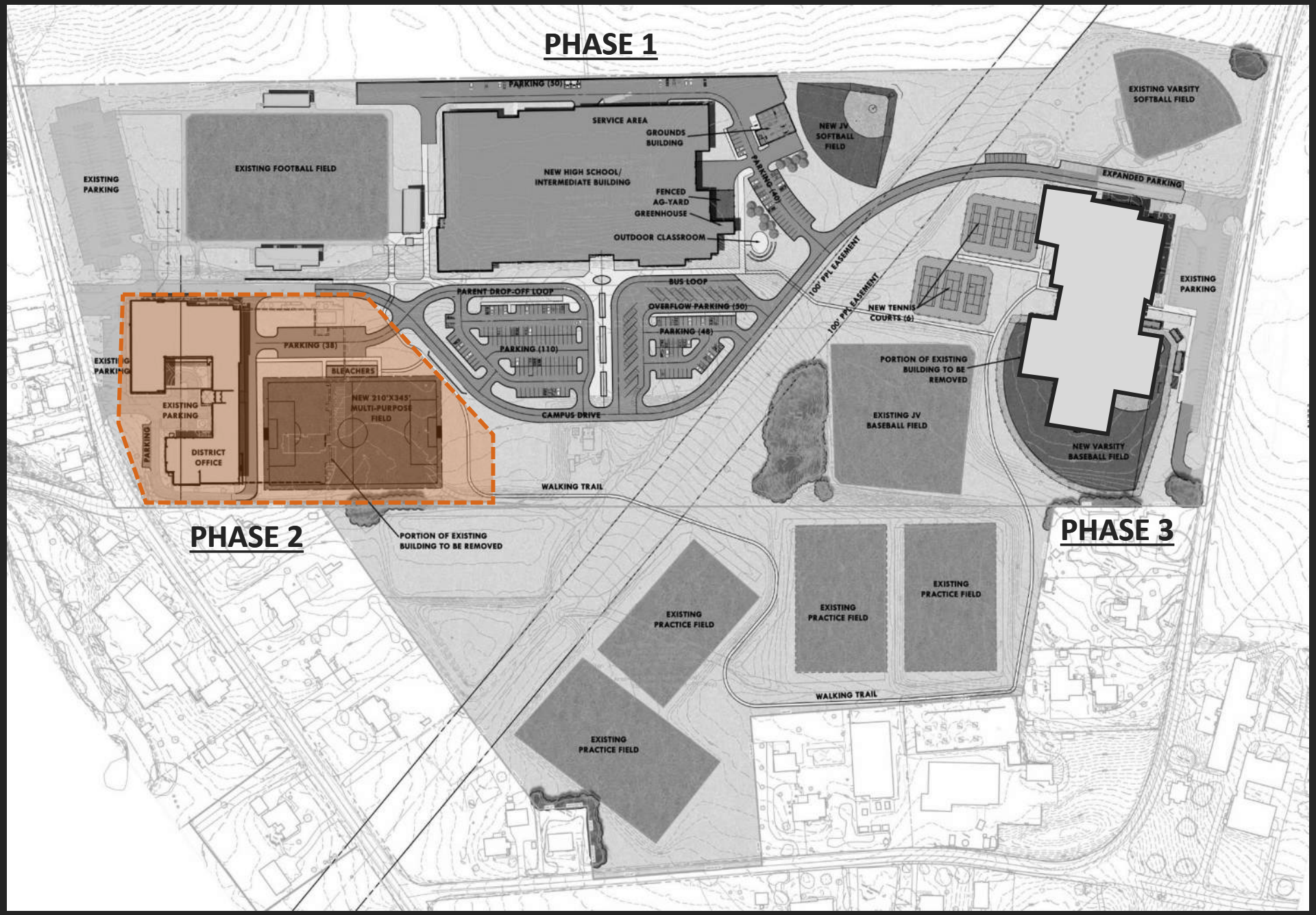
PHASE 1

- STORMWATER
- EXPAND PARKING AND MODIFY ACCESS ROAD
- NEW MS/HS
- NEW GROUNDS BUILDING

IMPACTS 2022 - 2024

- BASEBALL
- SOCCER
- TENNIS
- ACCESS ROAD ACROSS SITE

PROPOSED PHASING



PRE-CONSTRUCTION

- CONNECT TO PUBLIC WATER AND SEWER

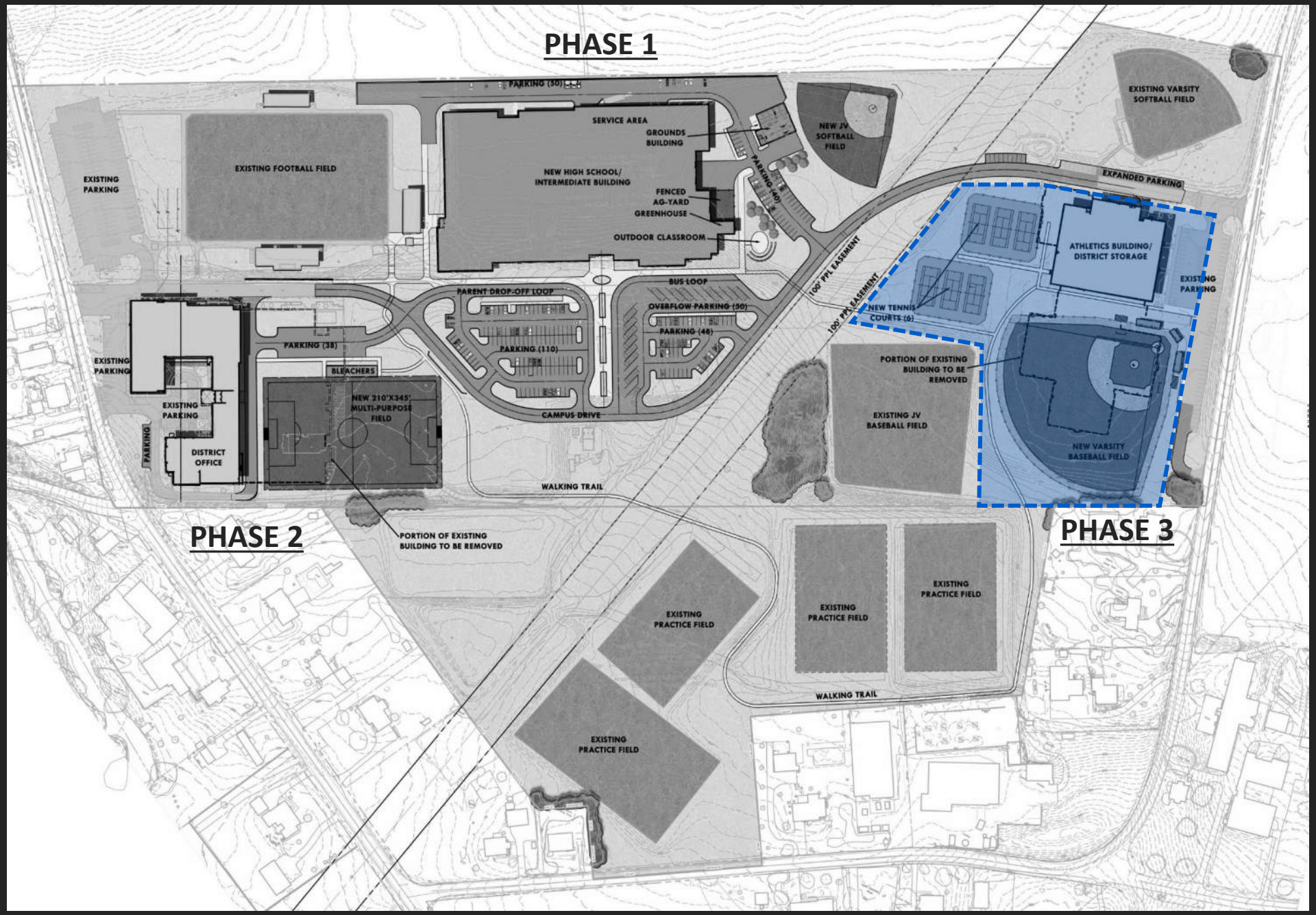
PHASE 2

- DEMO / RENO EXISTING HS
- MULTIPURPOSE FIELD

IMPACTS 2024 - 2025

- BASEBALL
- SOCCER
- TENNIS
- FITNESS CENTER
- MAINTENANCE STORAGE

PROPOSED PHASING



PRE-CONSTRUCTION

- CONNECT TO PUBLIC WATER AND SEWER

PHASE 3

- DEMO / RENO EXISTING MS
- TENNIS COURTS
- VARSITY BASEBALL
- FINALIZE SITE

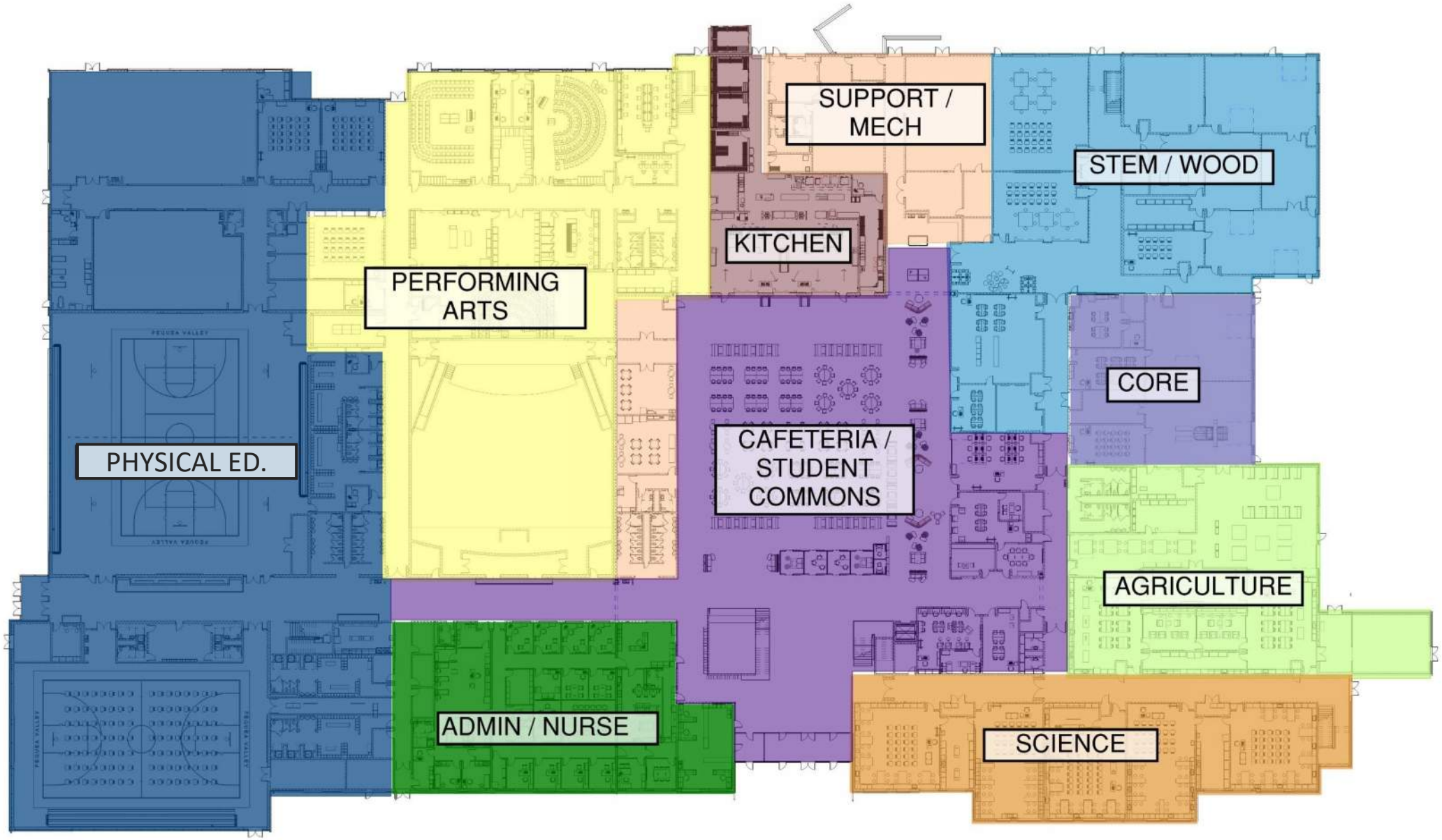
IMPACTS 2025 - 2026

- BASEBALL
- TENNIS
- MAINTENANCE STORAGE

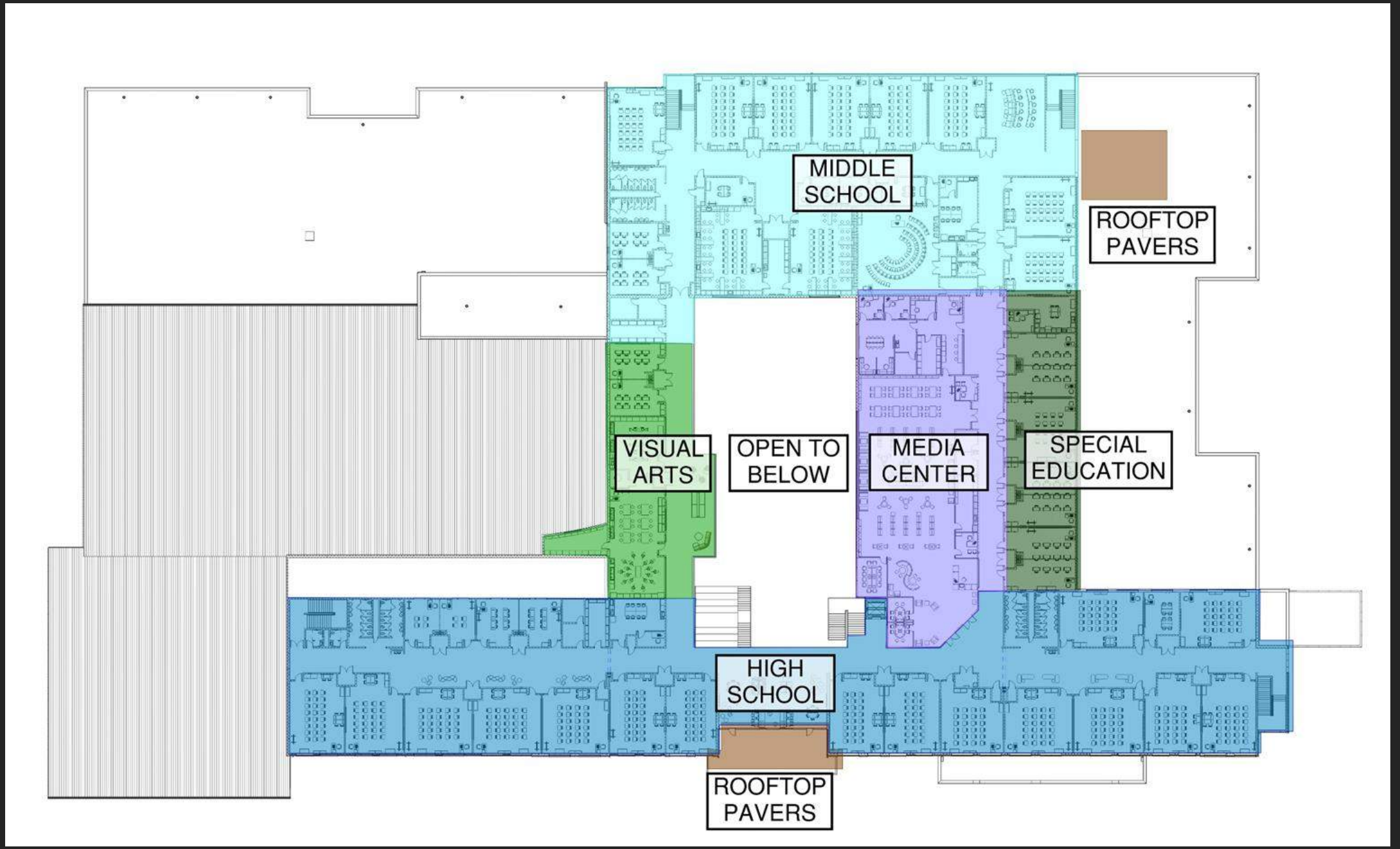
PROPOSED SITE PLAN

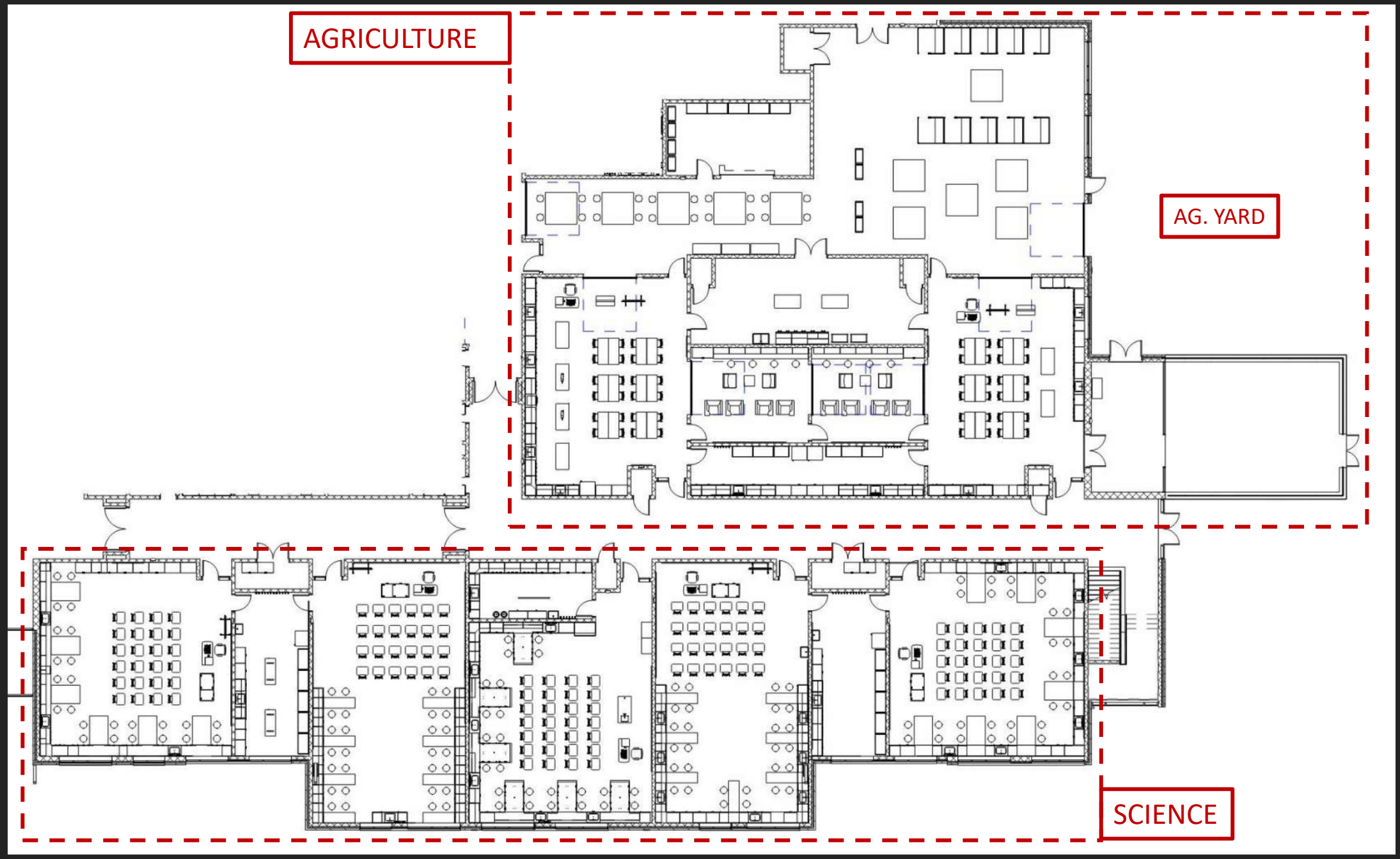


NEW MIDDLE / HIGH SCHOOL FIRST FLOOR

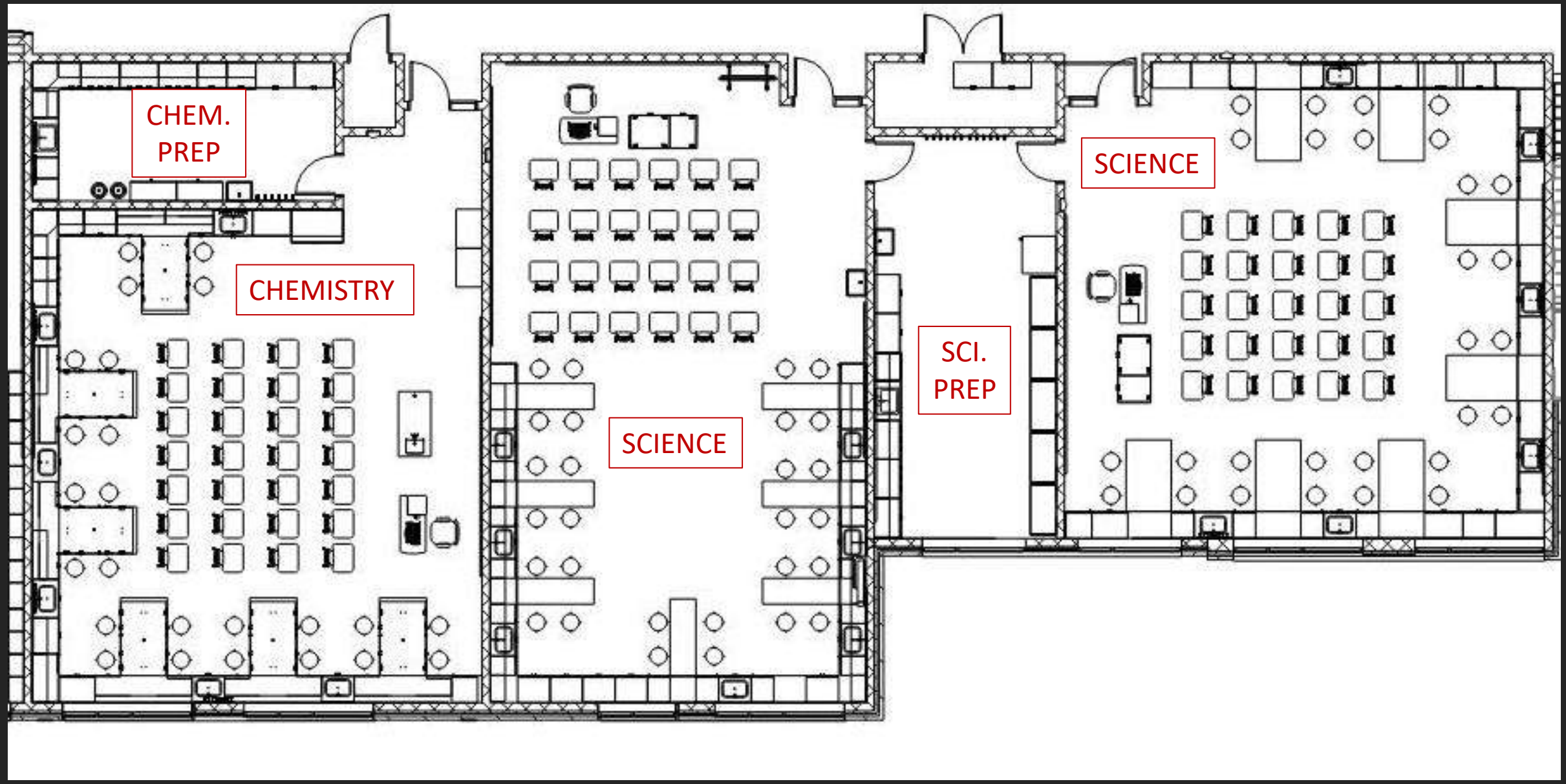


NEW MIDDLE / HIGH SCHOOL SECOND FLOOR

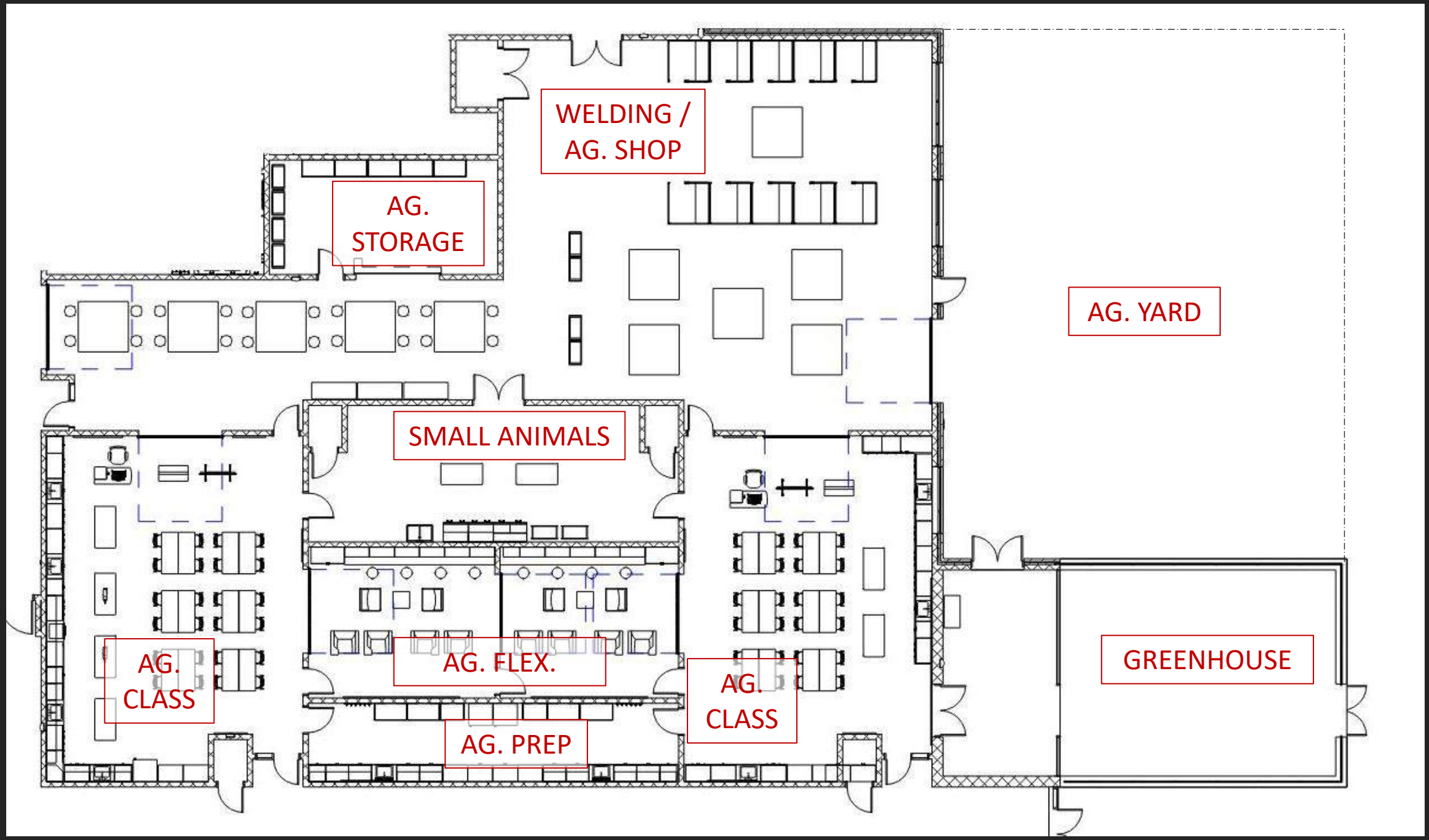


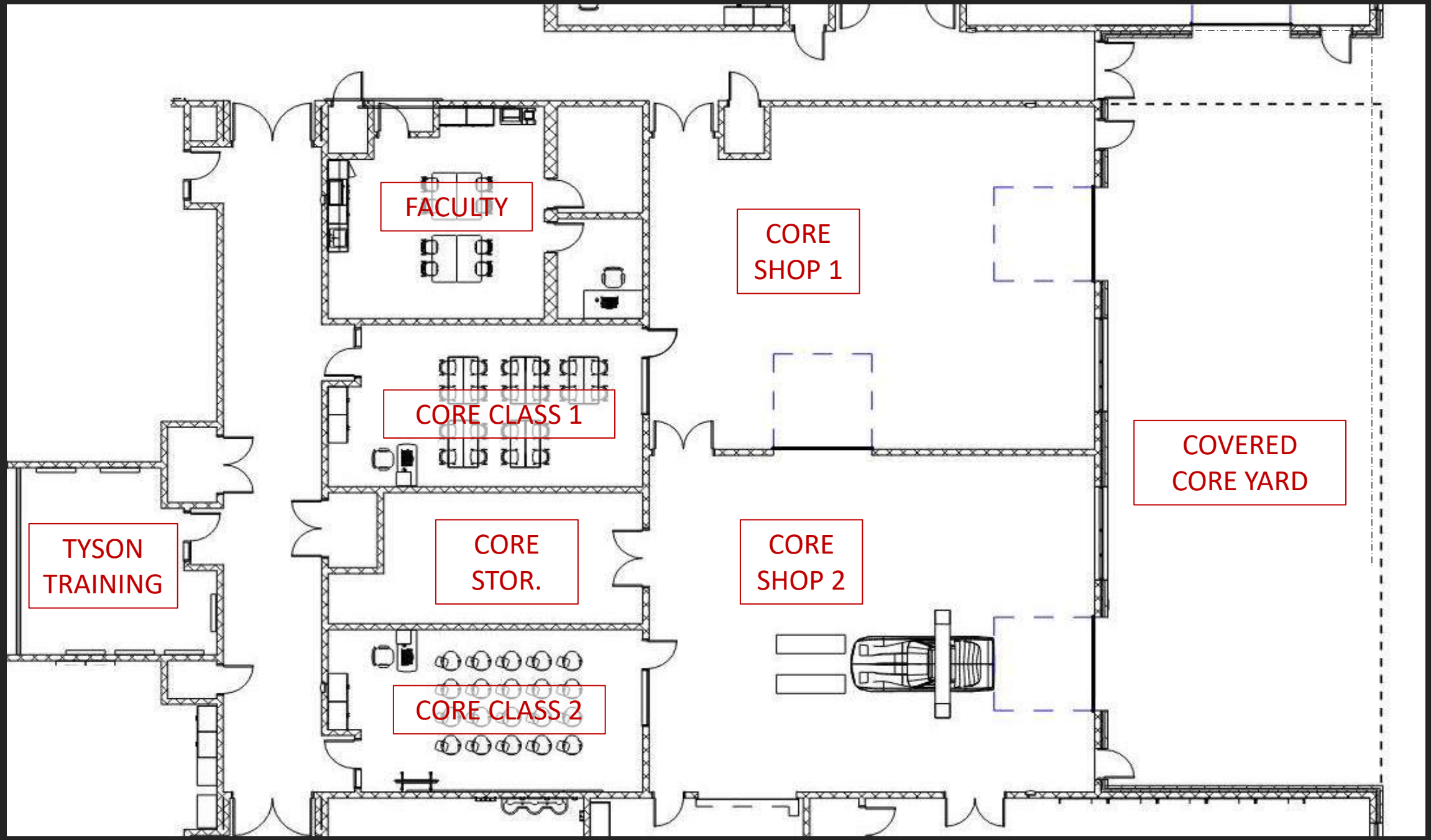

AGRICULTURE
AG. YARD
SCIENCE

SCIENCE – HIGH SCHOOL

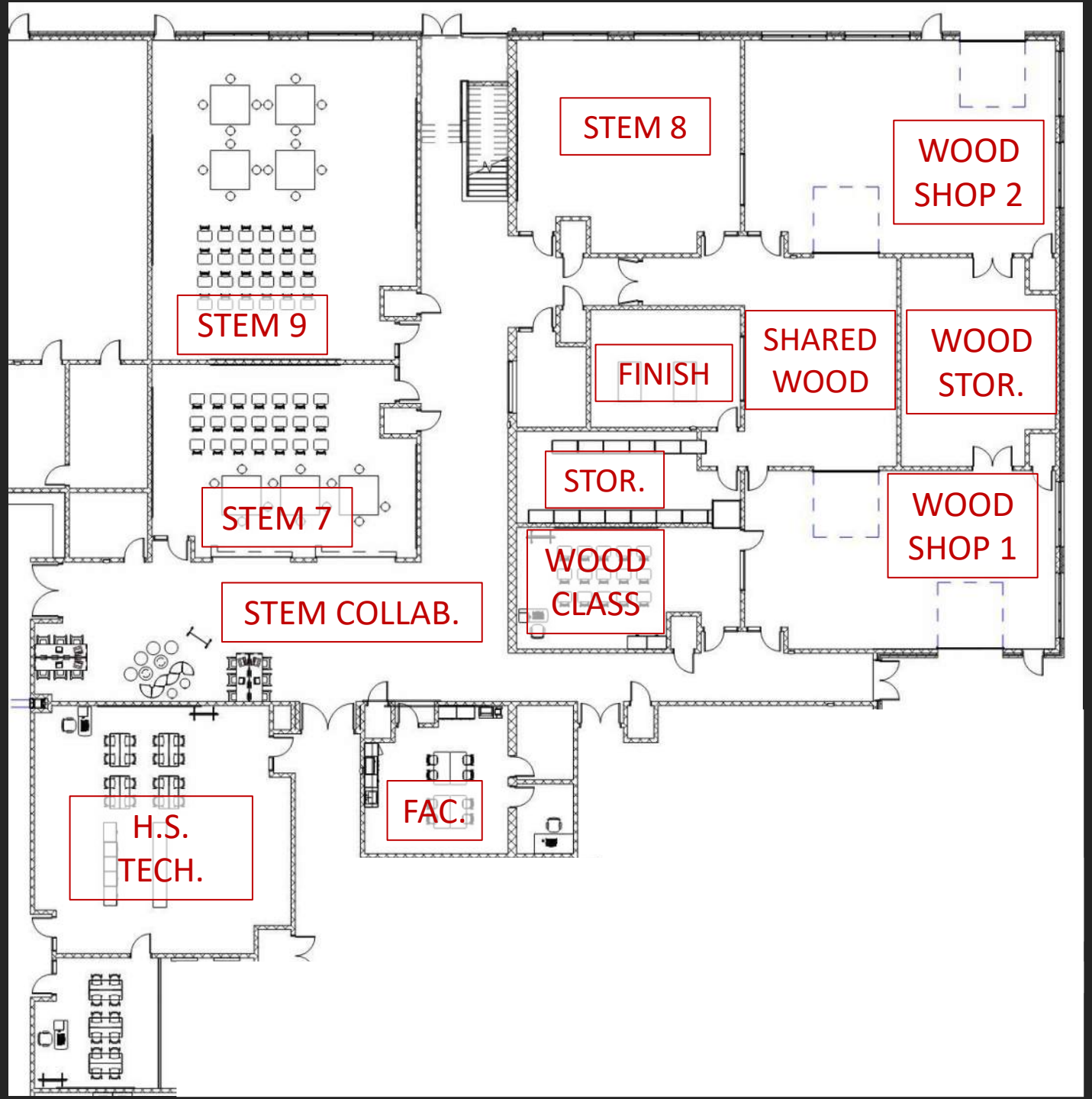


AGRICULTURE PROGRAM

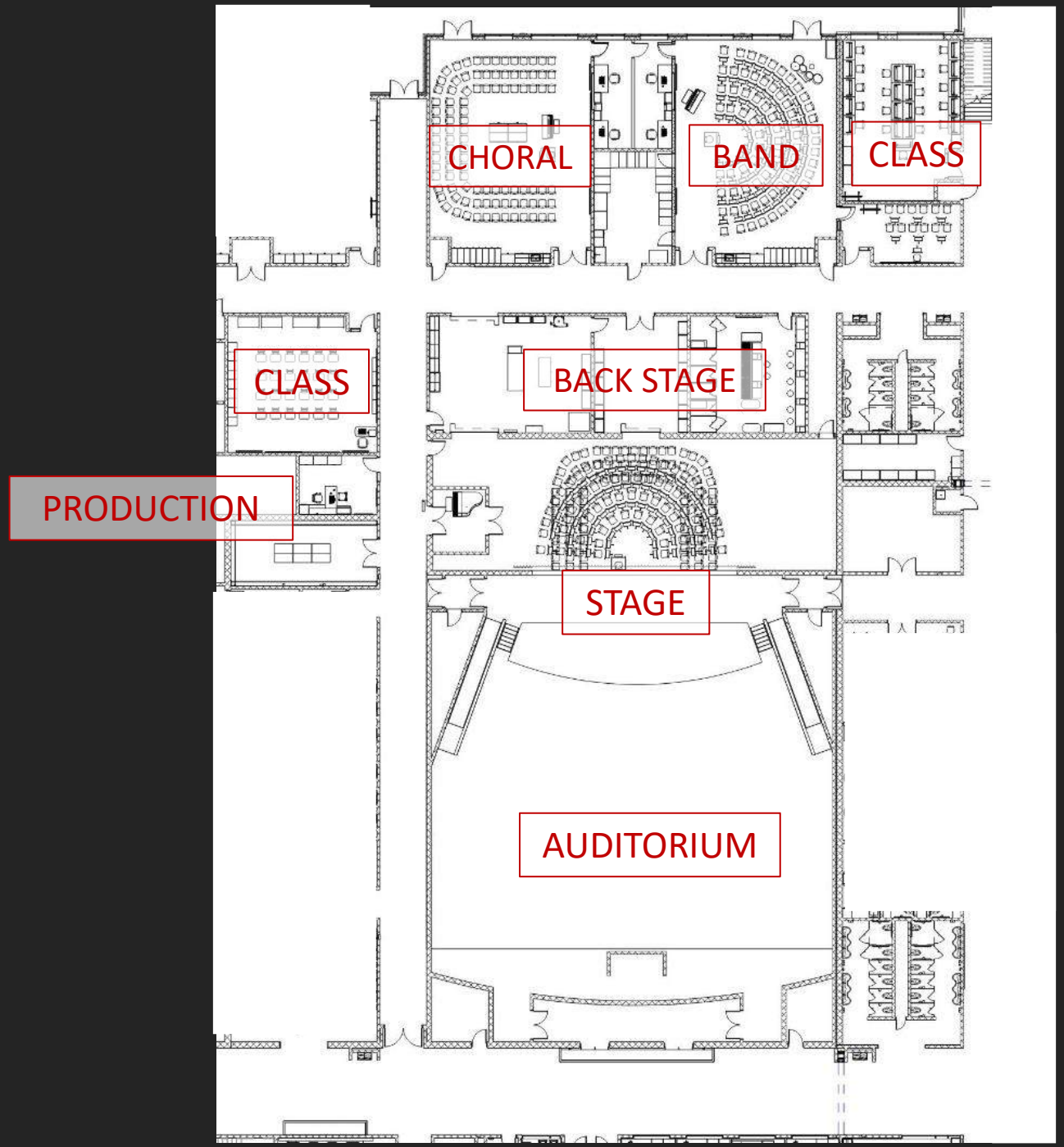



FACULTY
CORE SHOP 1
CORE CLASS 1
COVERED CORE YARD
TYSON TRAINING
CORE STOR.
CORE SHOP 2
CORE CLASS 2

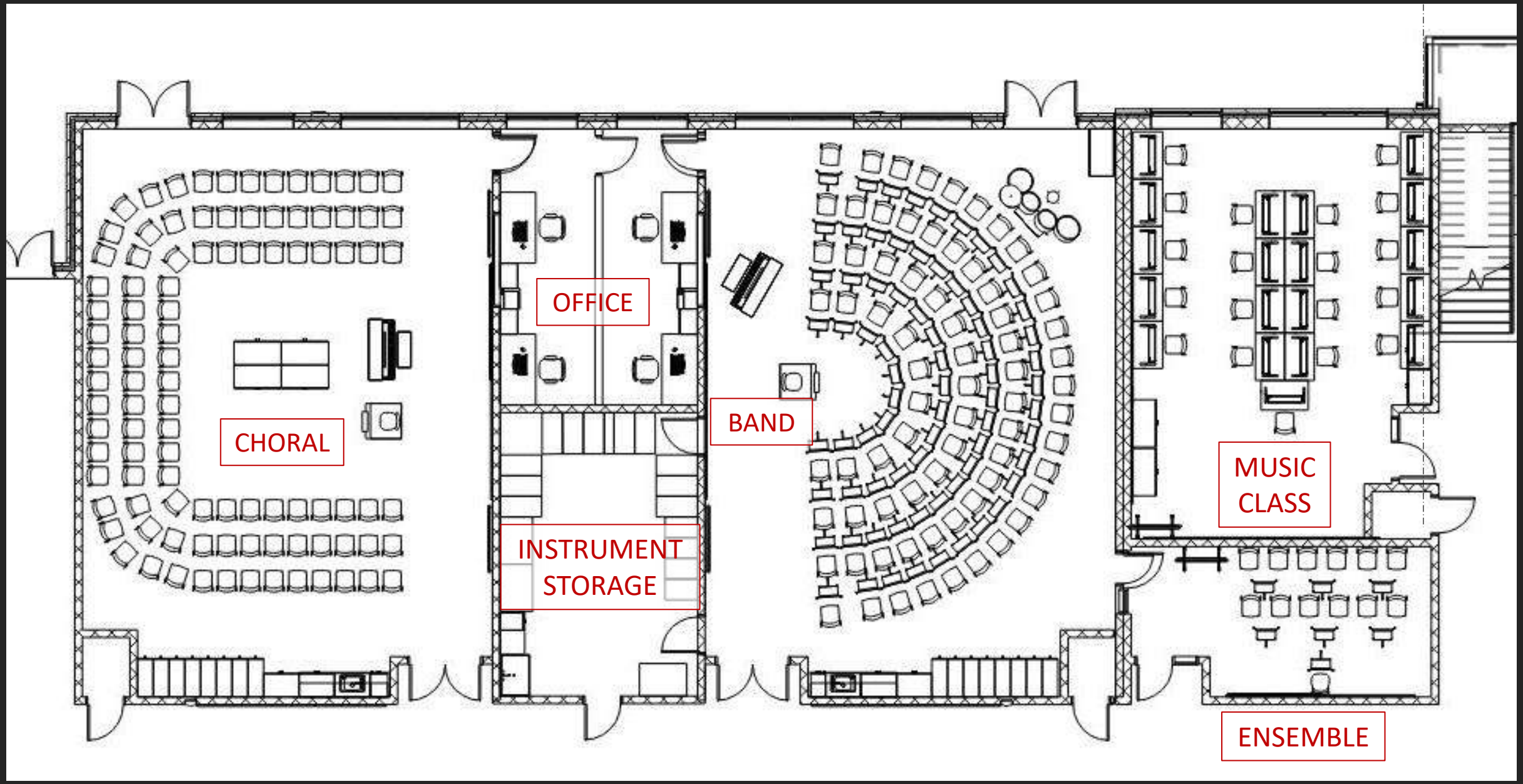
STEM / WOOD / HS TECH



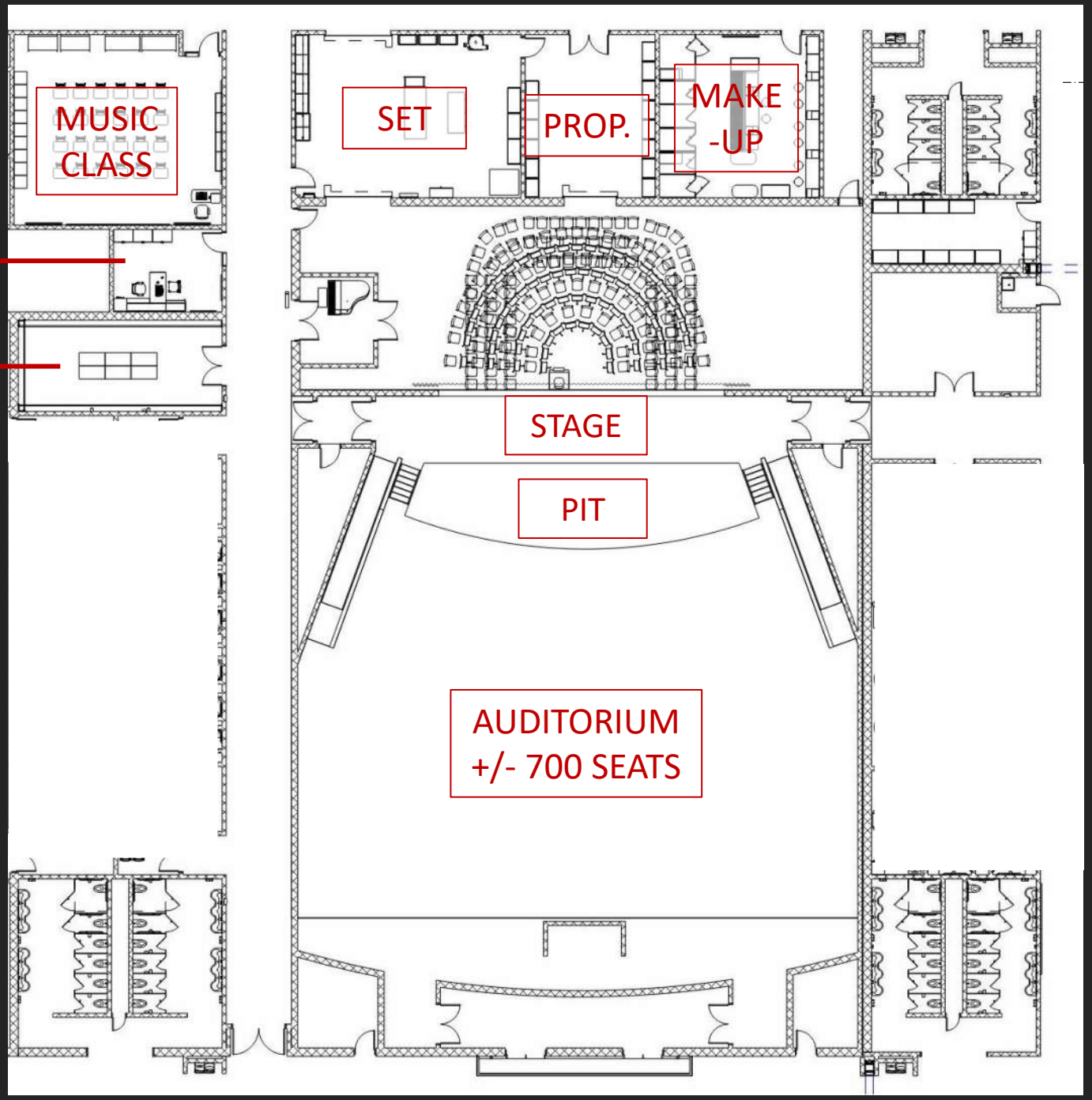
PERFORMING ARTS



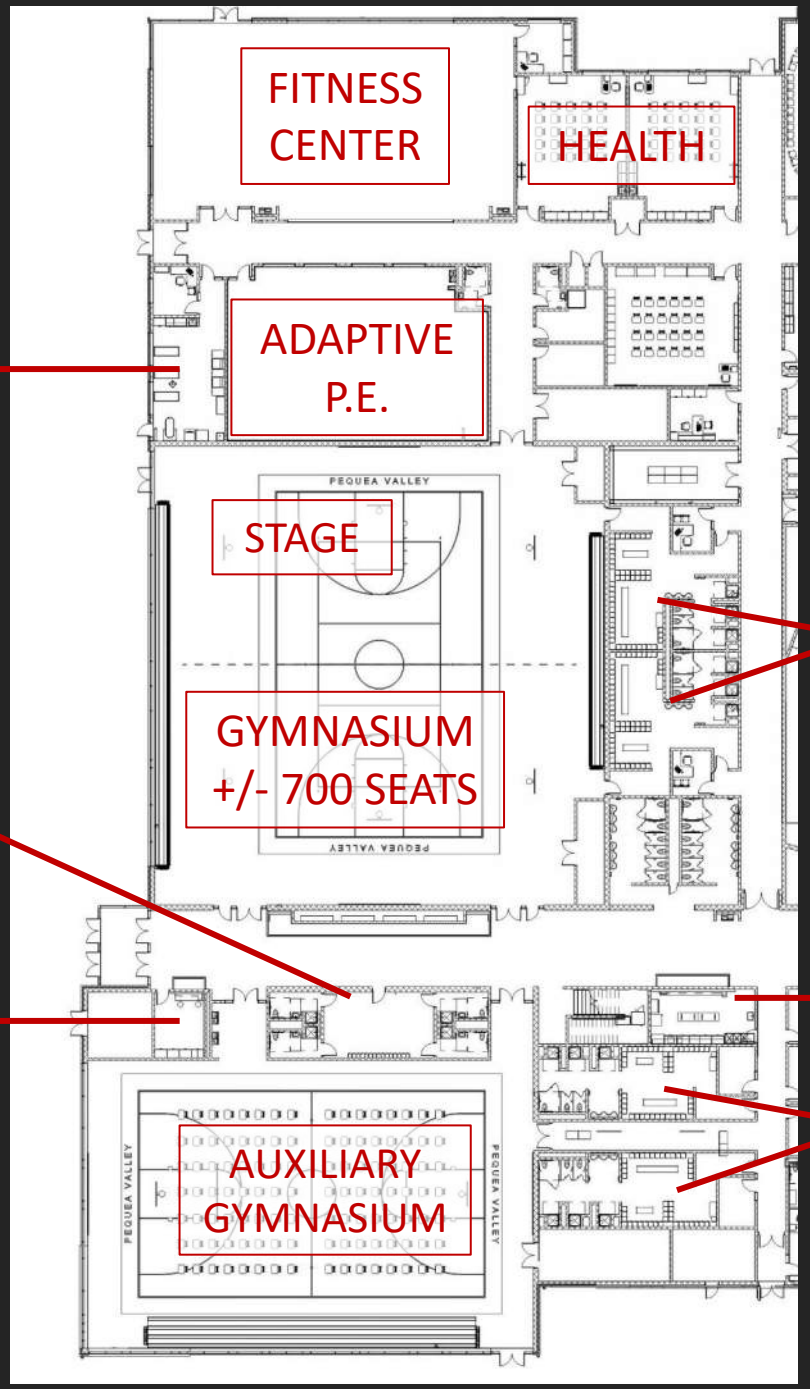
PERFORMING ARTS – BAND / CHORAL



AUDITORIUM / STAGE



PHYSICAL EDUCATION PROGRAM



TRAINER

H.S. LOCKERS

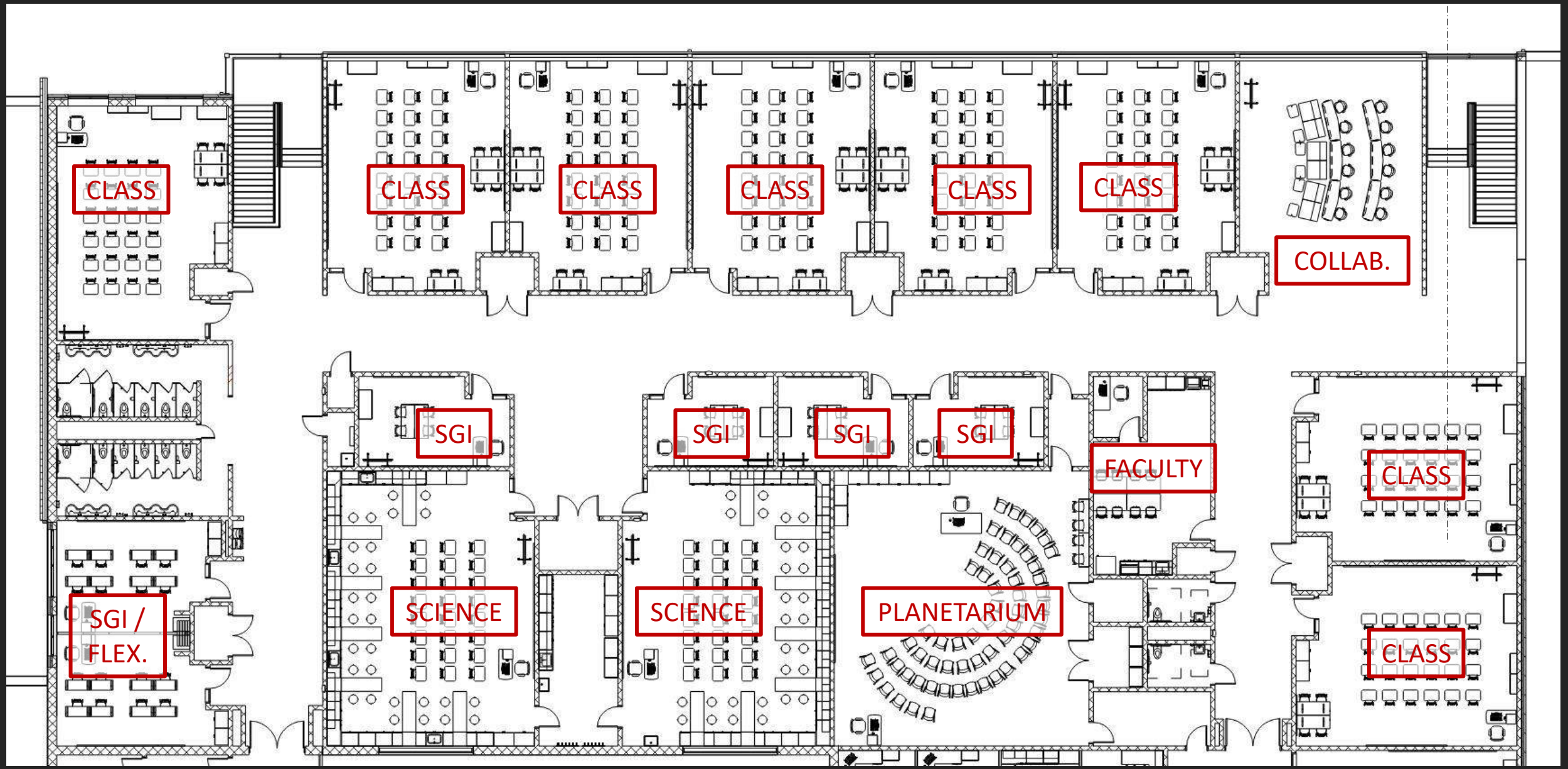
OFFICIALS

TICKETS

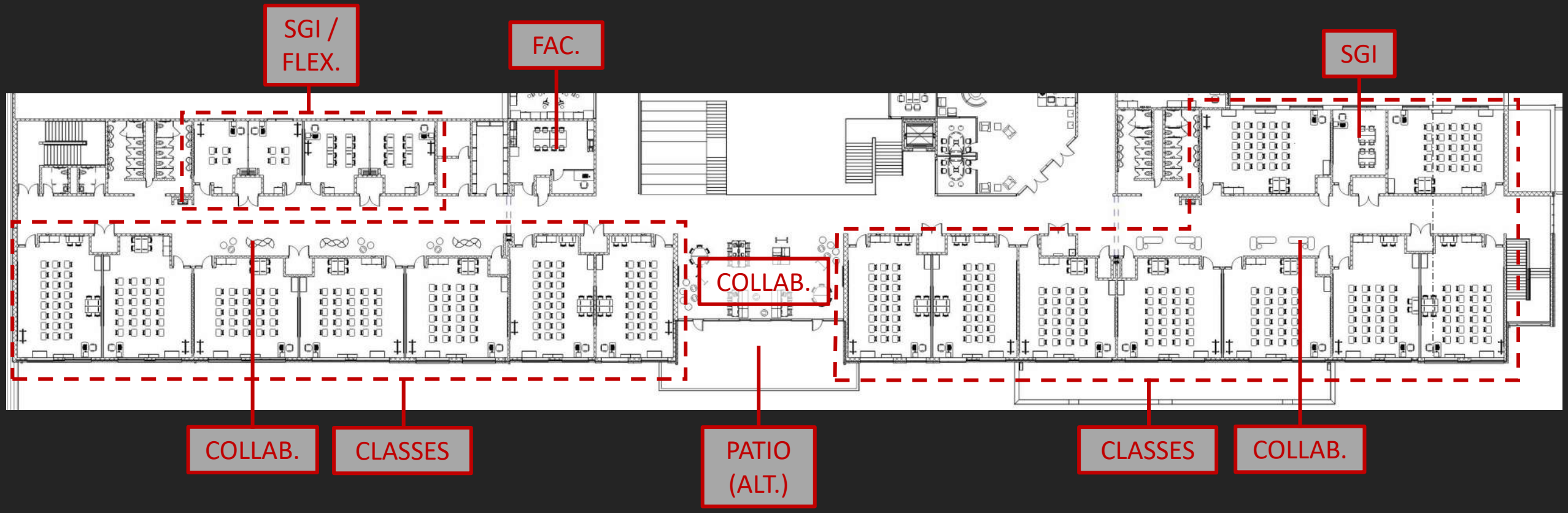
CONCESSIONS

M.S. LOCKERS

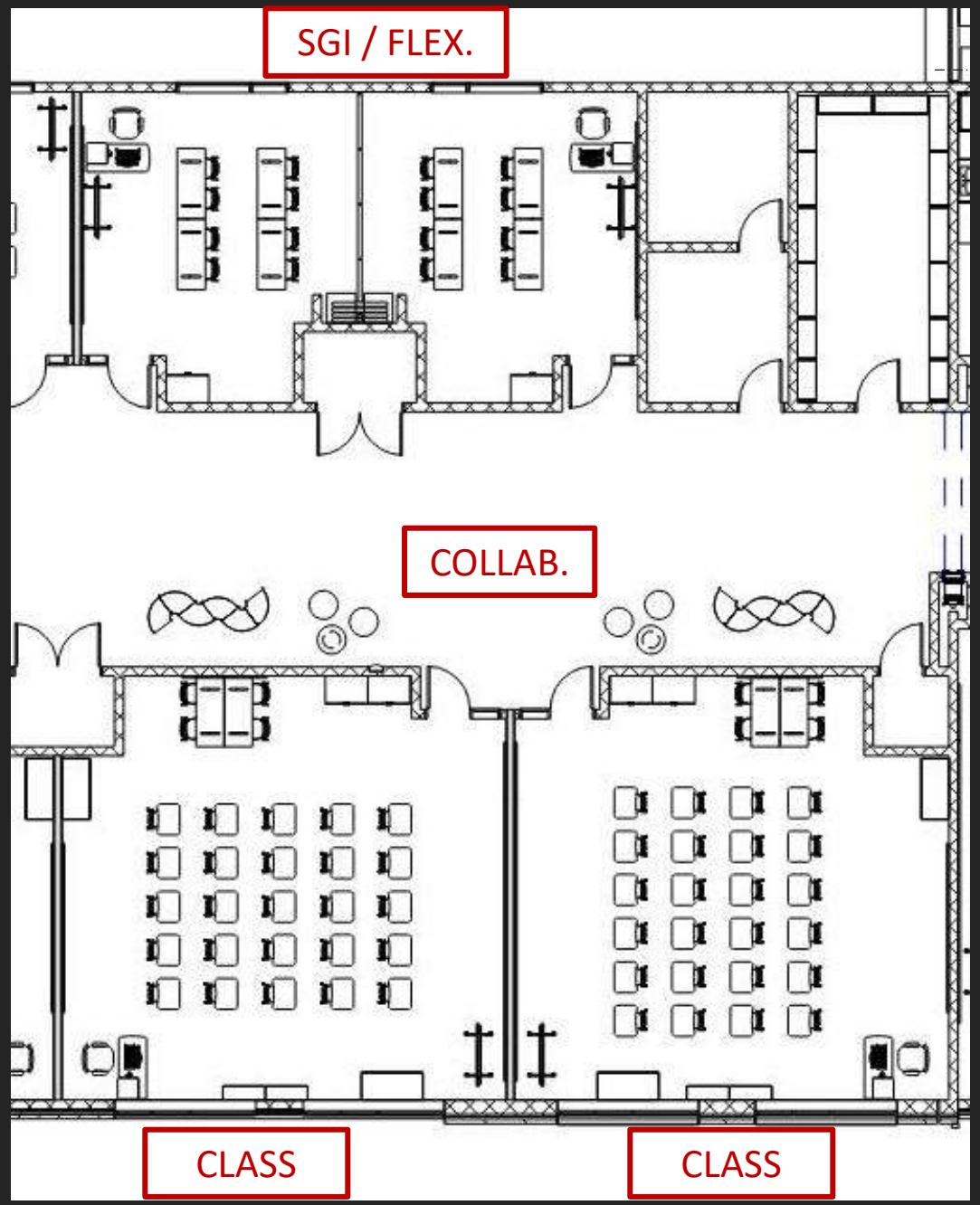
MIDDLE SCHOOL



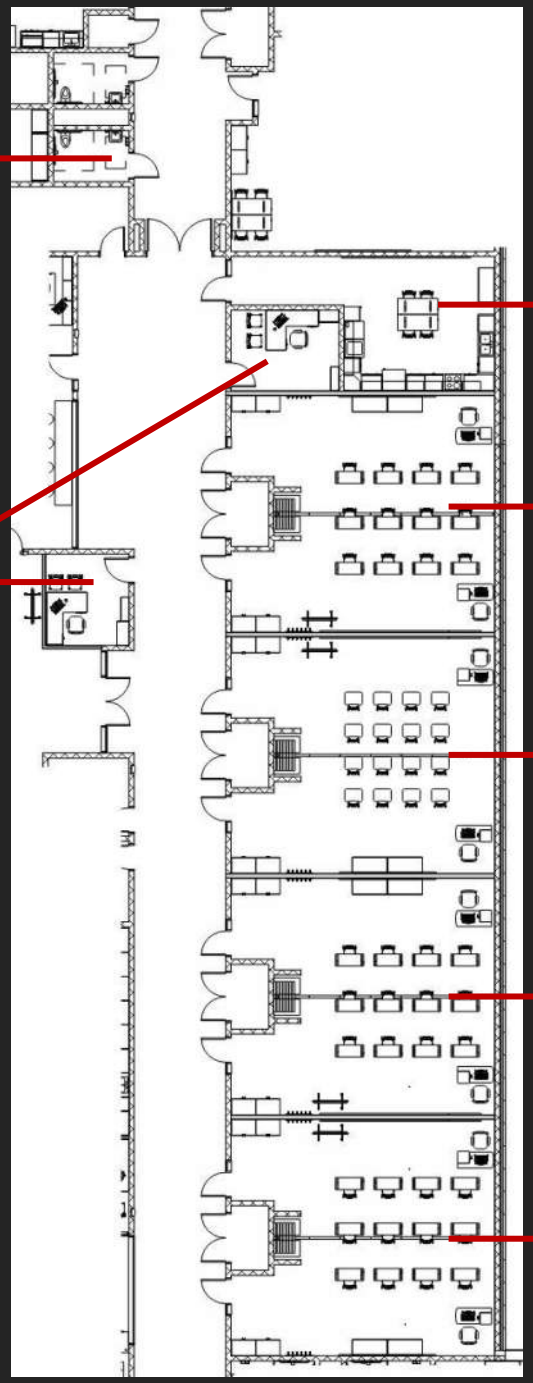
HIGH SCHOOL


SGI / FLEX.
FAC.
SGI
COLLAB.
COLLAB.
CLASSES
PATIO (ALT.)
CLASSES
COLLAB.

TYPICAL CLASSROOM



SPECIAL EDUCATION



RESTROOMS

S.E. OFFICE

LIFE SKILLS

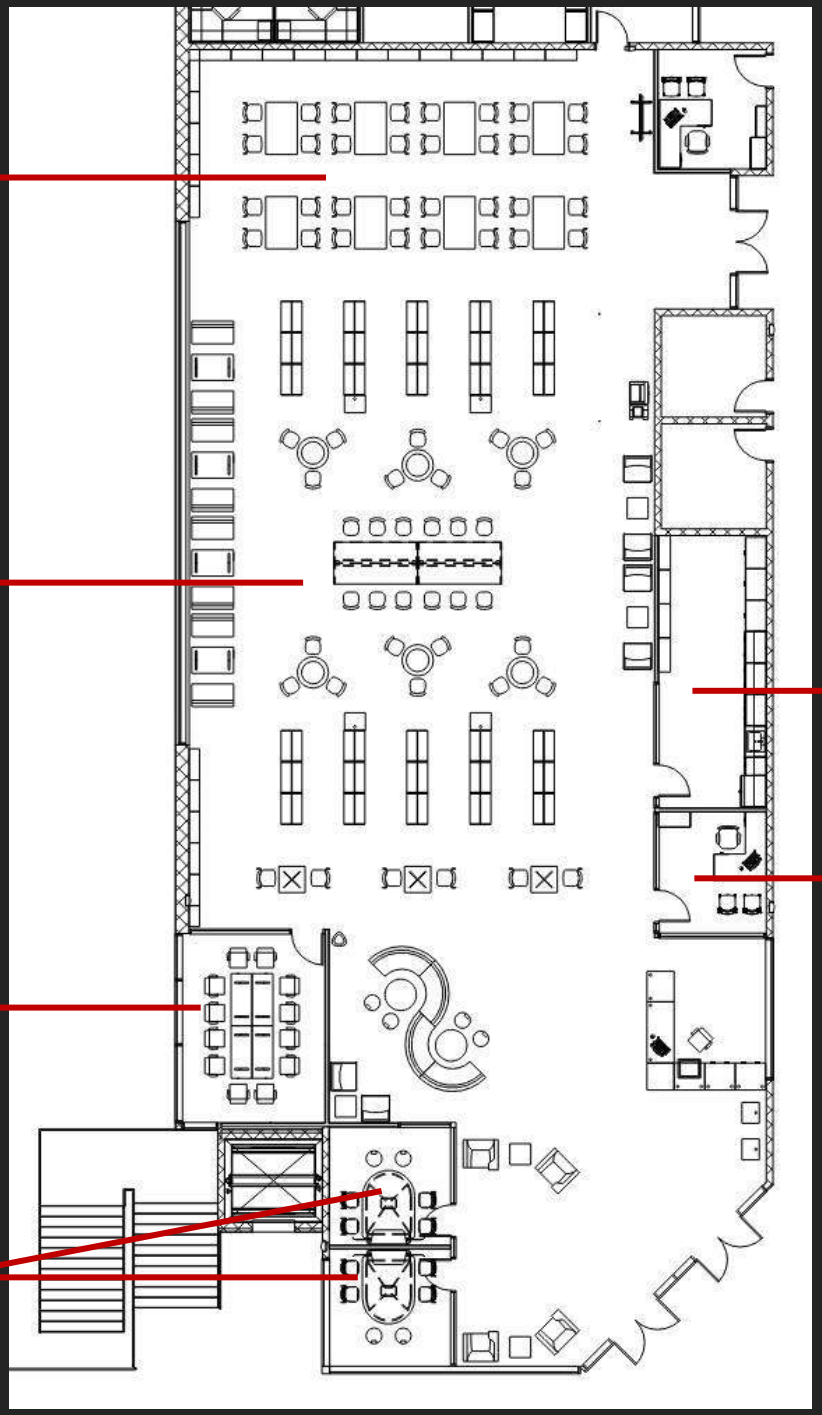
S.E. CLASSROOM

S.E. CLASSROOM

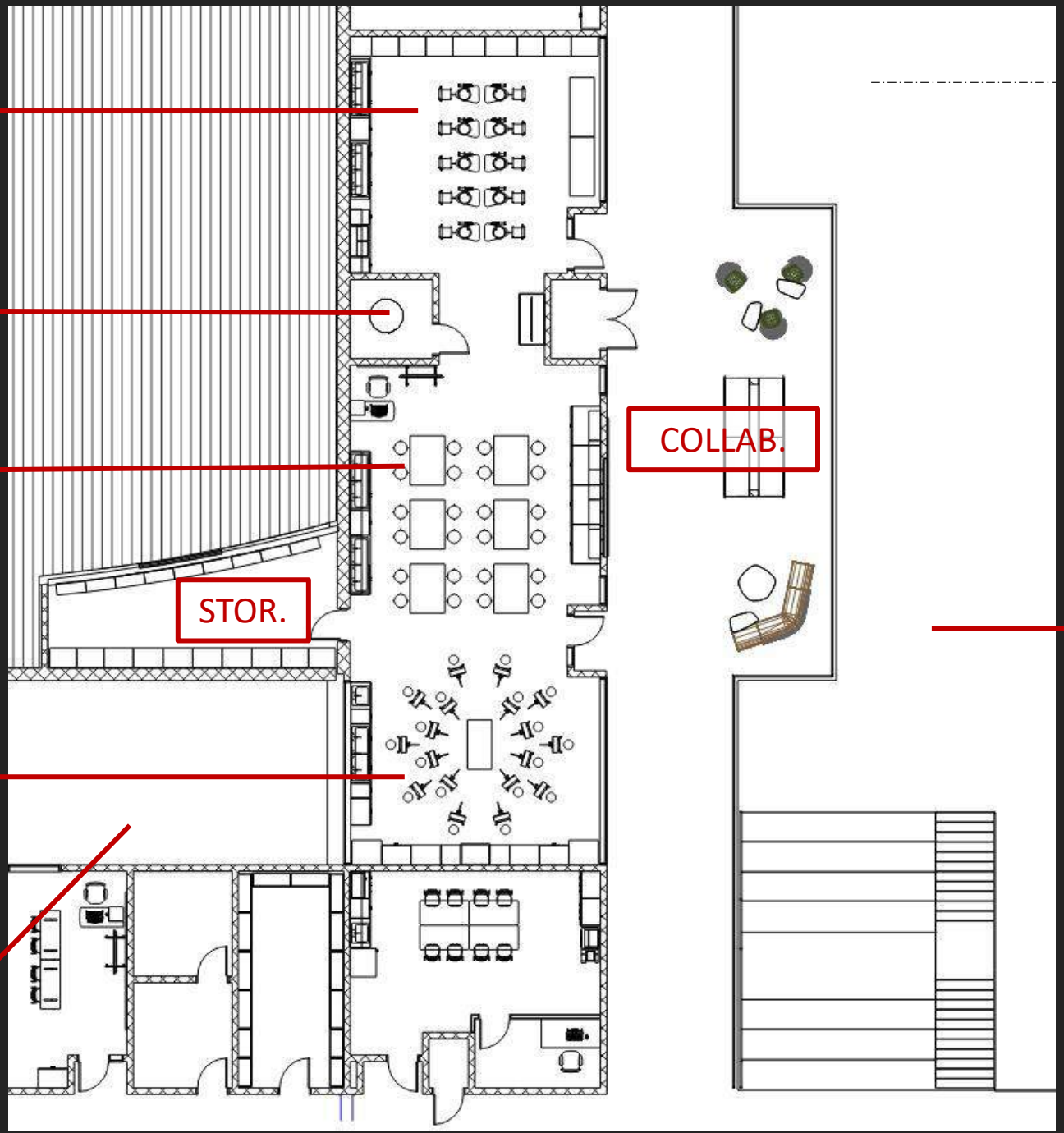
S.E. CLASSROOM

S.E. CLASSROOM

MEDIA CENTER



VISUAL ARTS


CLAY
KILN
INSTRUCT. / COLLAB.
STOR.
FIGURE DRAWING / PAINTING
OPEN TO BELOW / NATURAL LIGHT
COLLAB.
OPEN TO STUDENT COMMONS BELOW / NATURAL LIGHT

EXTERIOR ELEVATION CONCEPTS



MAIN ENTRY VIEW – LOOKING NORTHEAST



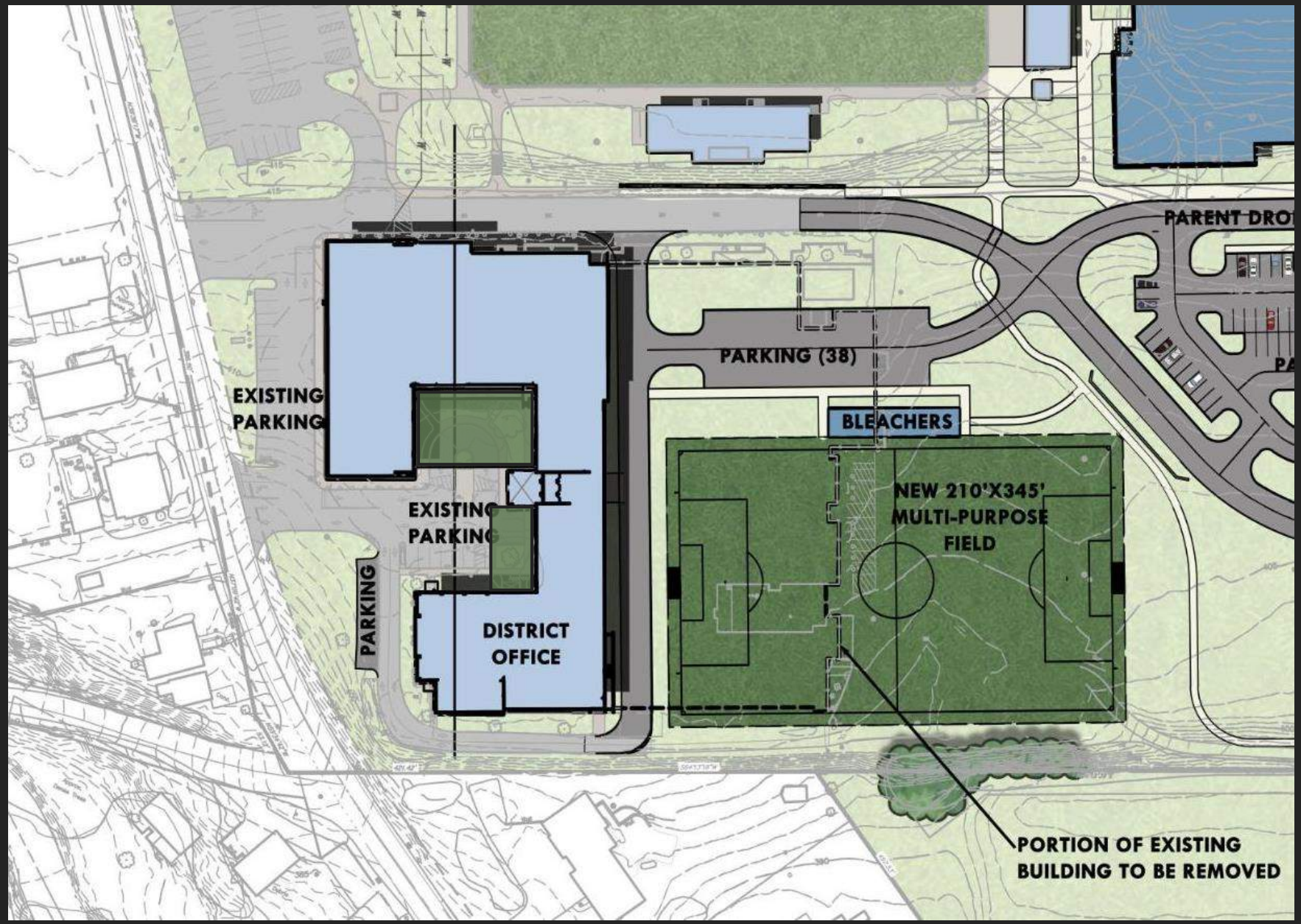
MAIN ENTRY VIEW – LOOKING NORTHWEST

EXTERIOR ELEVATION CONCEPTS

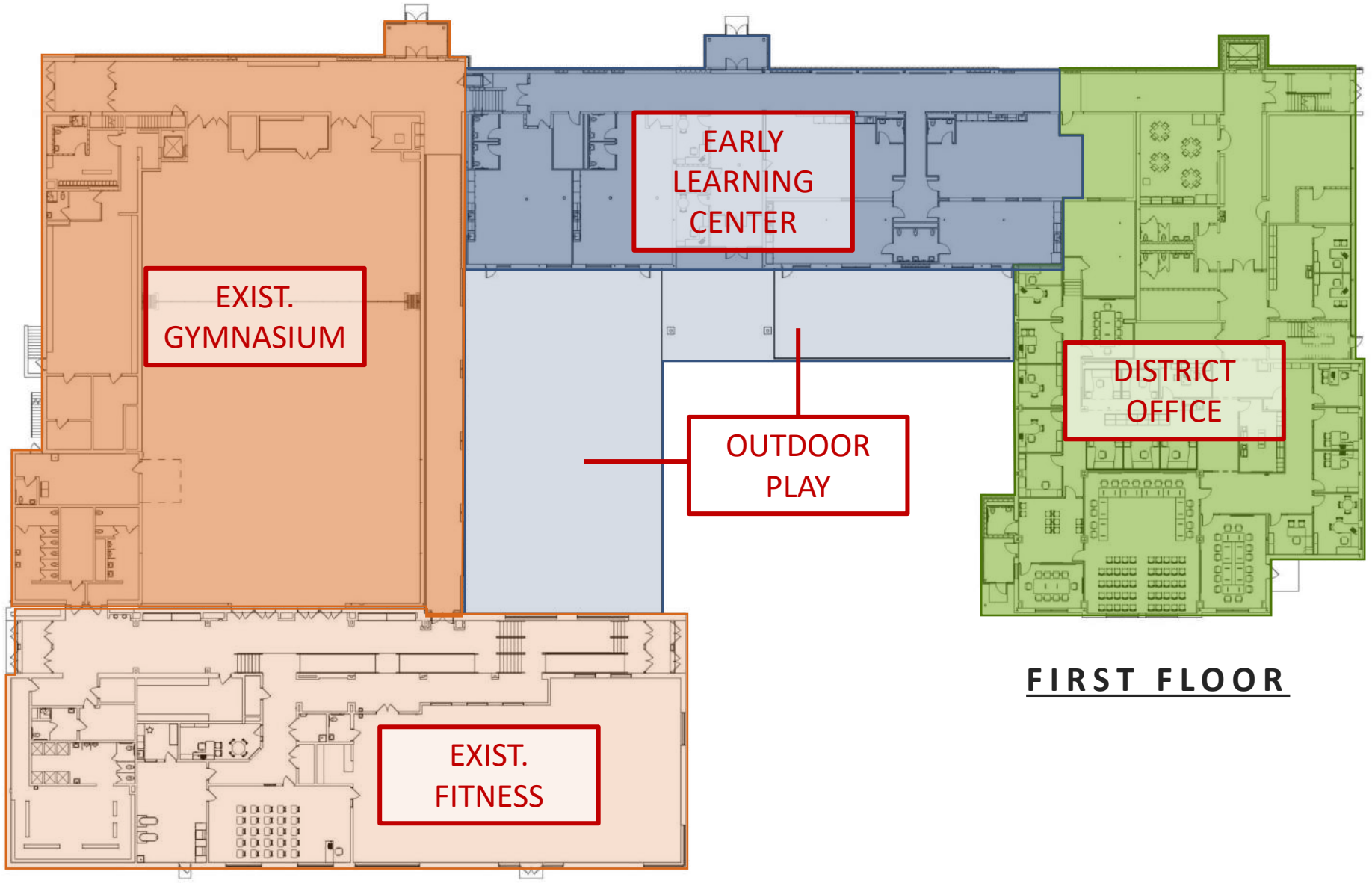


ATHLETIC ENTRY VIEW – LOOKING NORTHEAST

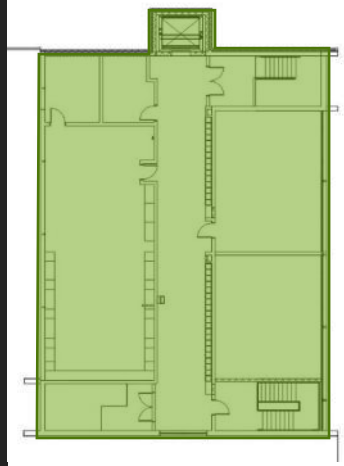
HIGH SCHOOL RENOVATION - PROPOSED SITE PLAN



HIGH SCHOOL RENOVATION TO DAO / FITNESS / EARLY LEARNING CENTER

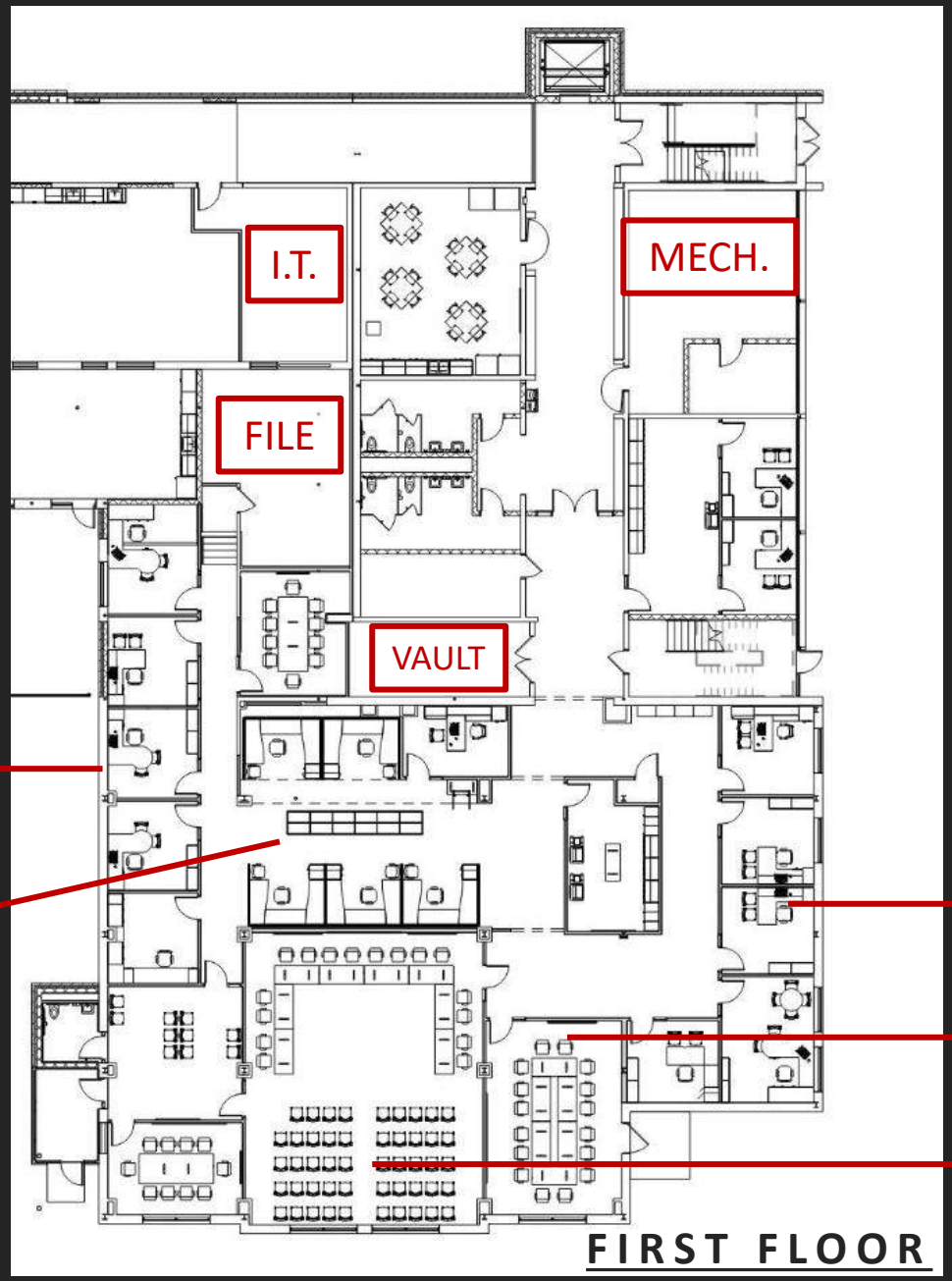


FIRST FLOOR

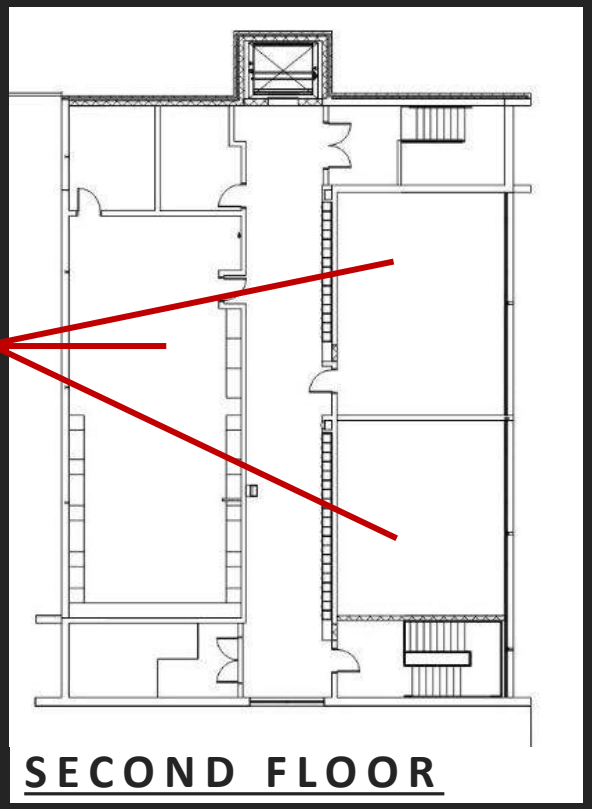


SECOND FLOOR

HIGH SCHOOL RENOVATION TO DAO / FITNESS / EARLY LEARNING CENTER

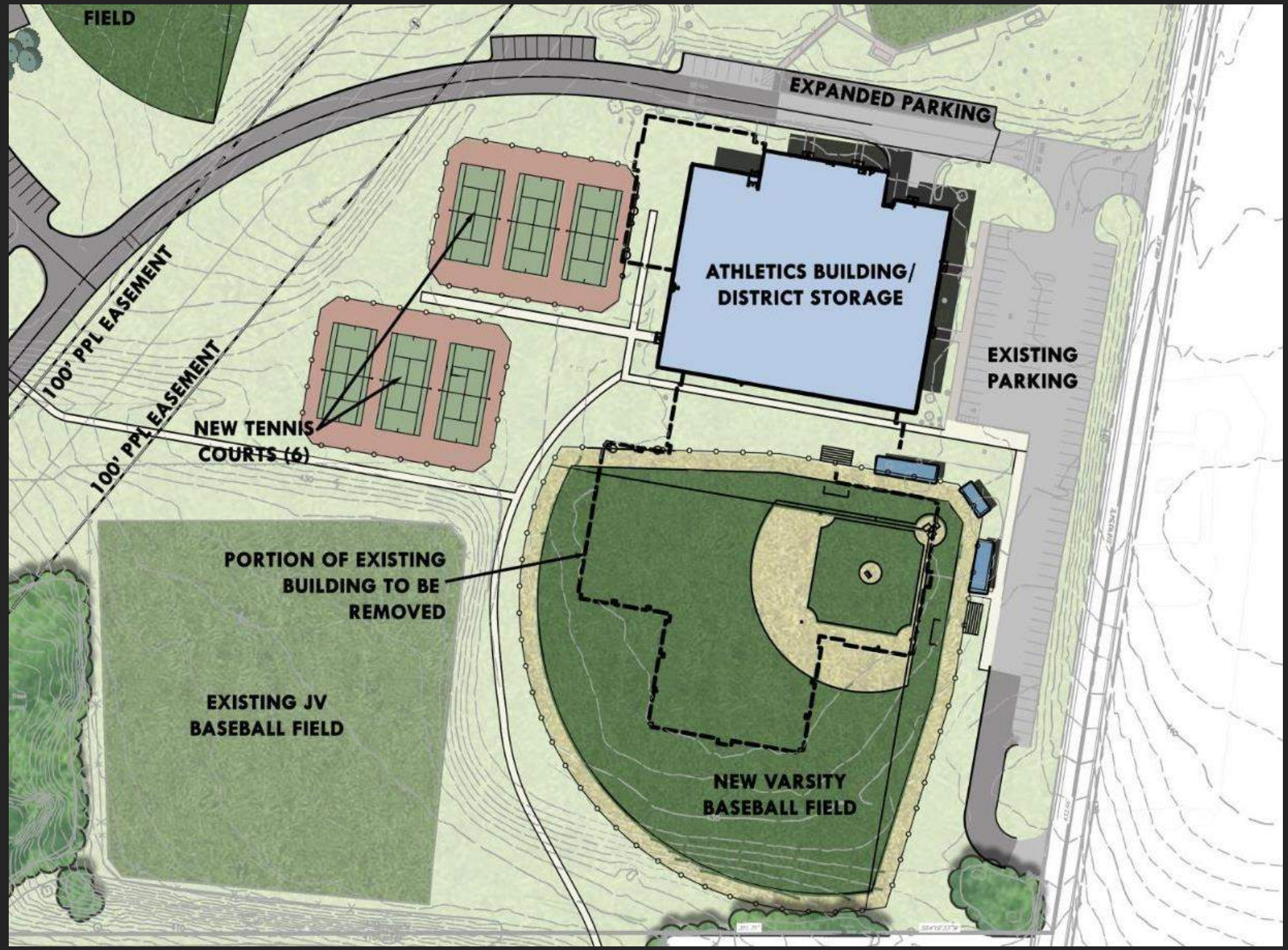


FIRST FLOOR

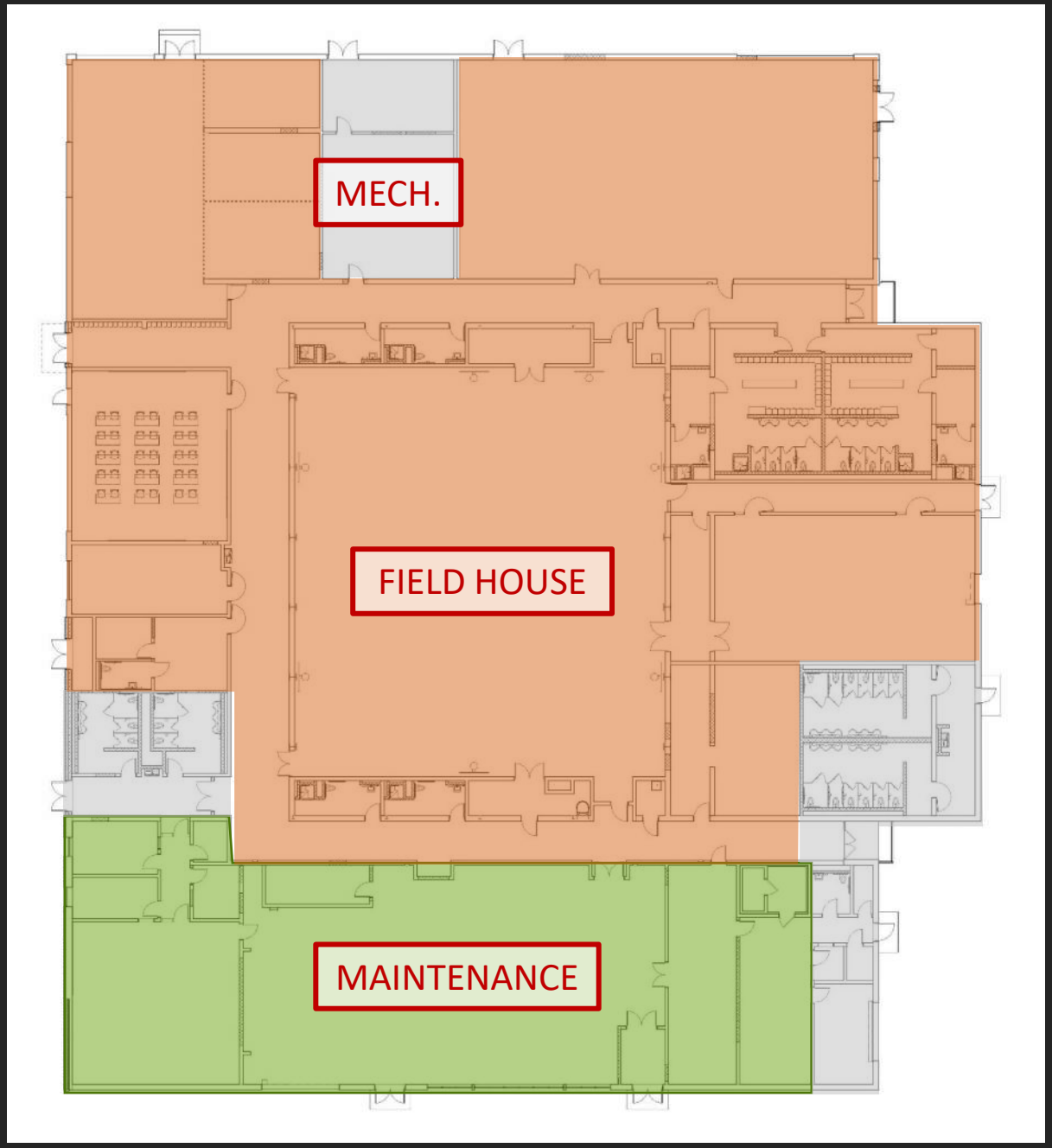


SECOND FLOOR

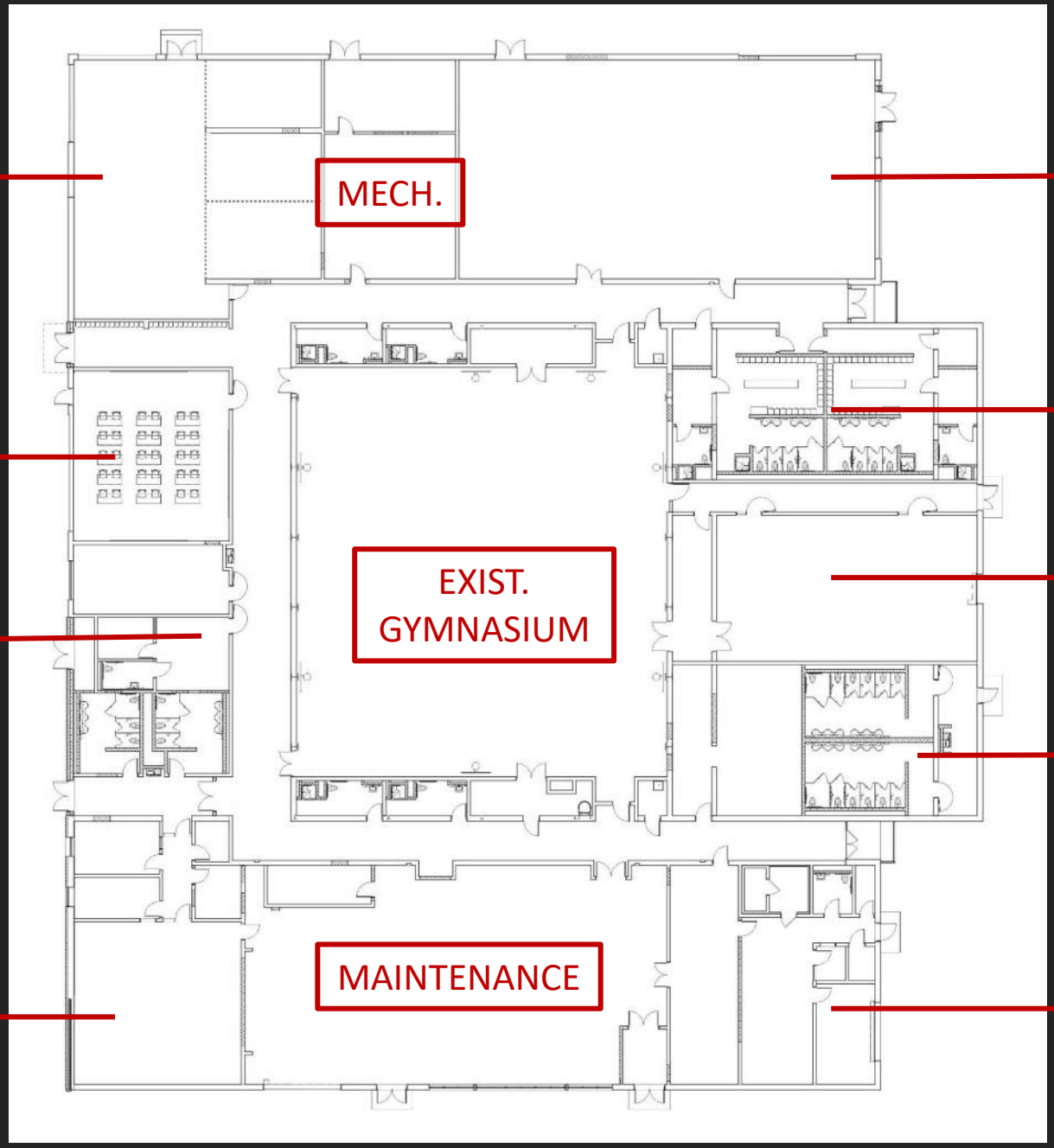
INTERMEDIATE SCHOOL RENOVATION - PROPOSED SITE PLAN



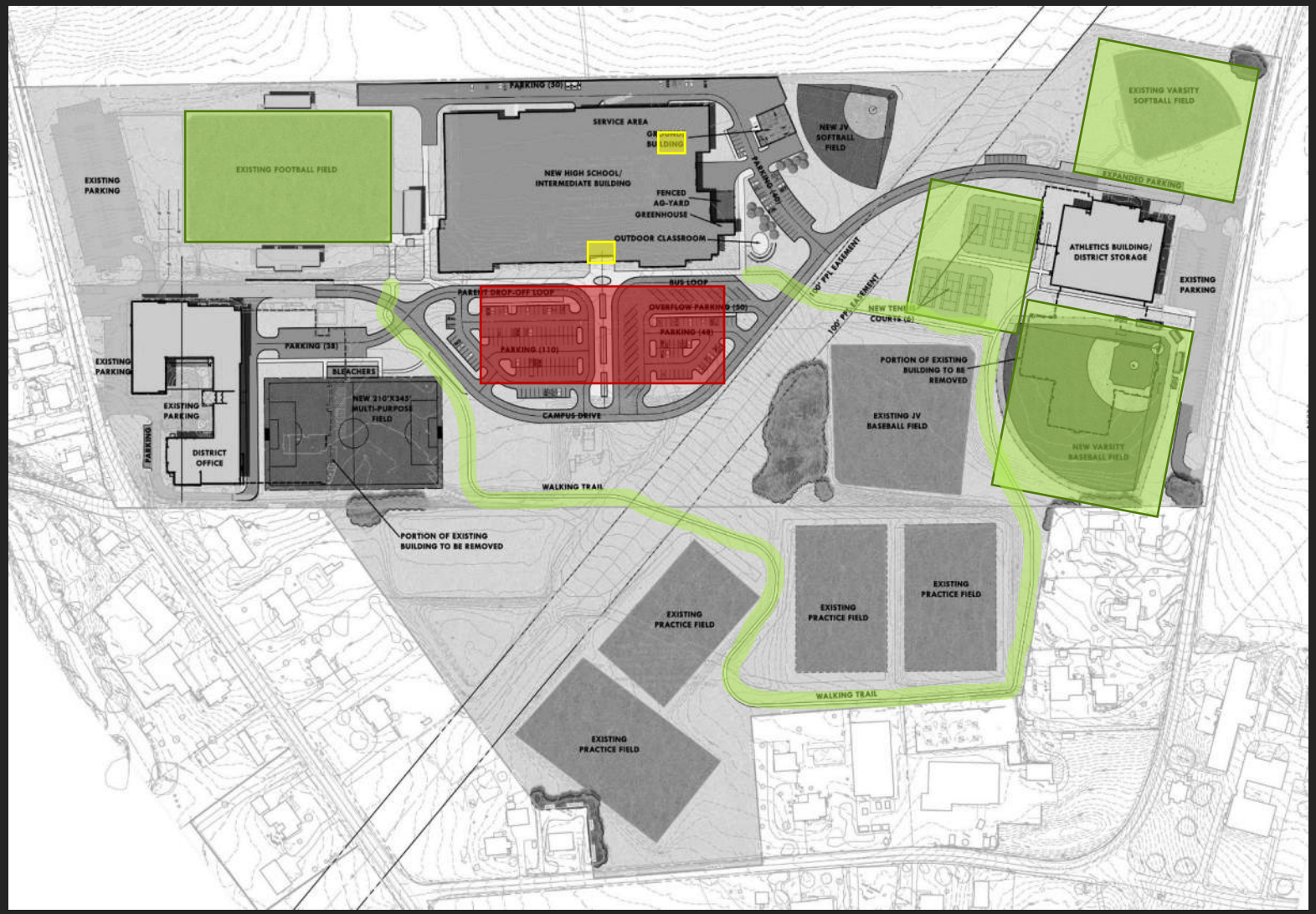
INTERMEDIATE SCHOOL RENOVATION TO FIELD HOUSE / MAINTENANCE



INTERMEDIATE SCHOOL RENOVATION TO FIELD HOUSE / MAINTENANCE



DRAFT - PROJECT ALTERNATES



ARCHITECTURAL

- PATIO 1 – HIGH SCHOOL COLLABORATION
- PATIO 2 – MIDDLE SCHOOL COLLABORATION

MECHANICAL

- GEOTHERMAL MECHANICAL SYSTEM & WELL FIELD

ELECTRICAL

- FOOTBALL FIELD – LED LIGHTING UPGRADE
- VARSITY SOFTBALL & BASEBALL – LED LIGHTING
- TENNIS COURT – LED LIGHTING
- WALKING TRAIL – LED LIGHTING

SCHEMATIC ESTIMATE – WHY COST ESTIMATES EVOLVE:

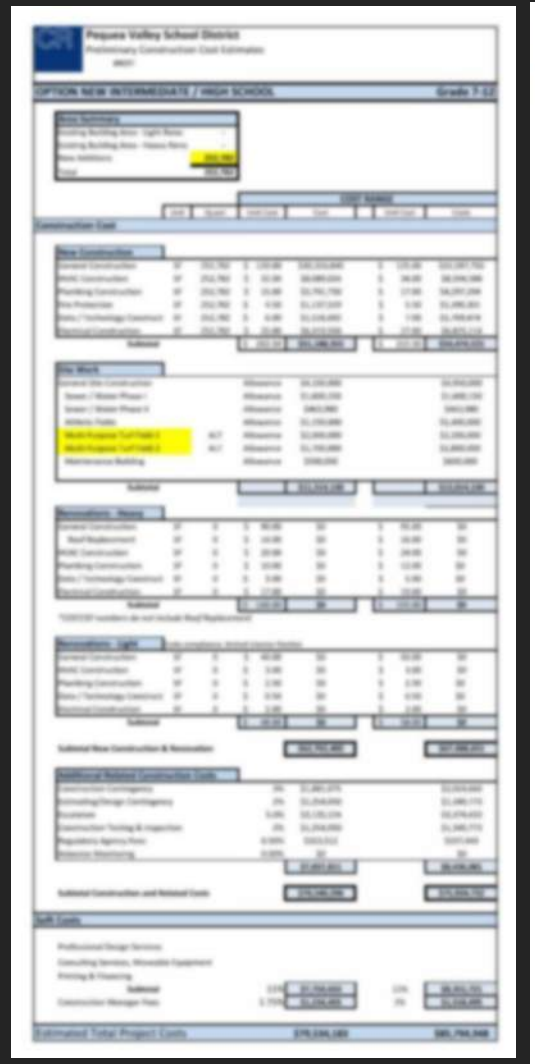
1. **Costs based on general cost per square foot by prime disciplines**
2. **Project costs are adjusted to reflect evolution in scope resulting from design process:**
   - **Meeting with code official – adjustments to building areas and site requirements**
   - **Receipt of detailed site survey and geotechnical report**
   - **Information from Owner – admin & educator meetings**
3. **Contingencies are constantly adjusted as scope is more defined**
4. **Escalation factors are included and adjusted as the scope evolves.**
5. **Soft costs are included to provide an overall estimated project cost.**
6. **Structure Cost + Soft Costs = Estimated Total Project Cost**

IMPACT TRACKING - DRAFT

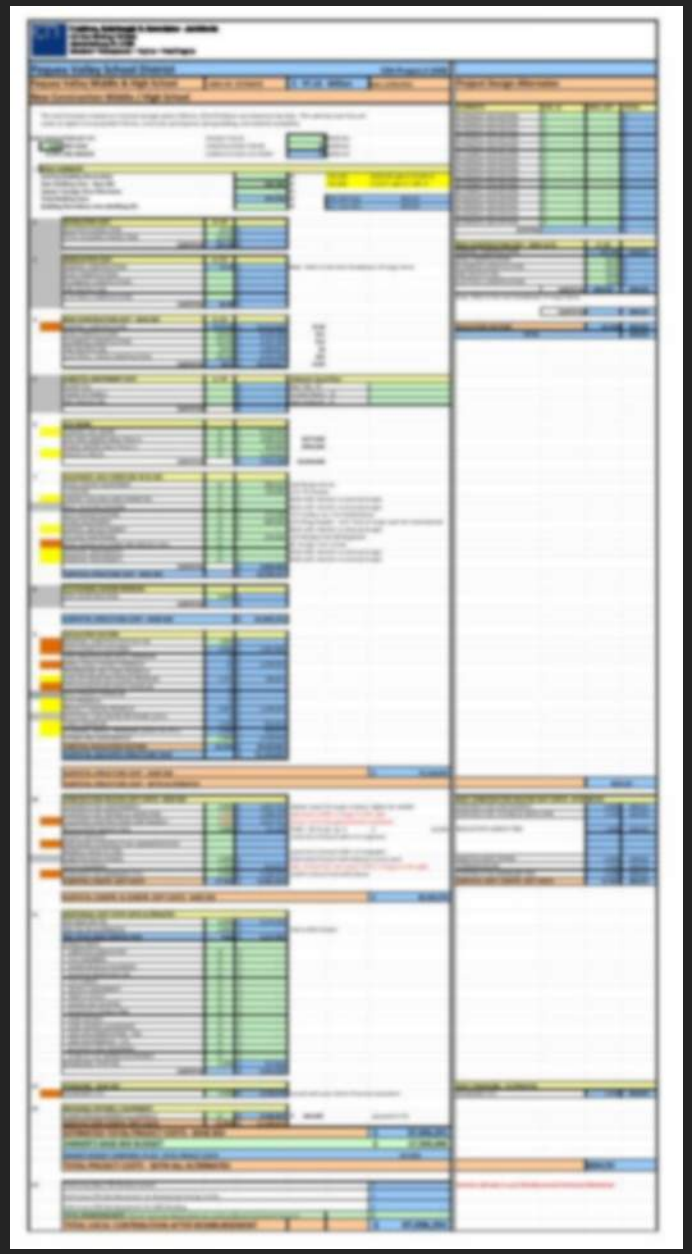
DATE	PROGRAM DRIVEN BUILDING AREA	DESCRIPTION	INFO.	PROTENTIONAL ALTERNATE
10/2020	233,100 SF	SCHEMATIC DESIGN	n/a	n/a
02/2021	243,300 SF	GROUNDS BUILDING TURF FIELDS TURF IN BUILDING(S)	+/- 5,000 SF	NO YES YES
12/2021	252,800 SF	CORE YARD CANOPY ENTRY CANOPIES	+/- 2,200 SF +/- 2,000 SF	YES NO

DETAILED COST ESTIMATE:

1. **Detailed Costs based on revised cost per square foot by prime disciplines with consideration of planned building systems and structure**
2. **Component unit costs derived from industry sources such as RS Means, select product representatives, and data received from other projects recently bid.**
3. **Soft costs included to build grand total of estimated total project costs**
4. **Potential alternates broken out separately, by prime contract**
    - **Soft costs factored in**
    - **Based on overall estimated cost, decisions made with Administration / Board**
    - **Additional non-program construction alternates may be considered**



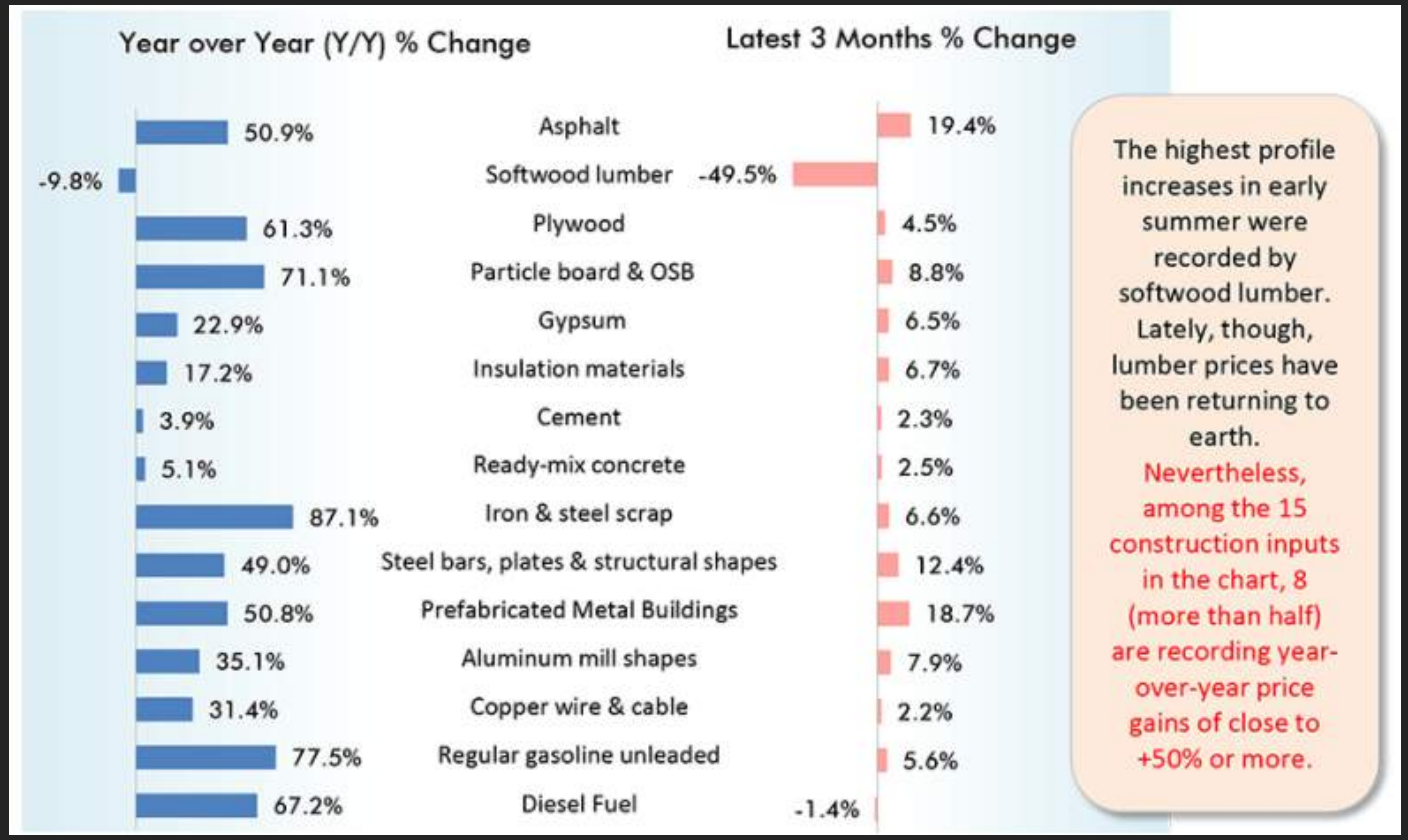
Example SD Estimate



Example Detailed Estimate

CURRENT MARKET CONDITIONS: KEY BUILDING MATERIALS

1. **15% MARKET ADJUSTMENT – DATA BASED ON:**
   - **PA BIDDING MARKET**
     - **Bidding Past 6-8 months**
     - **Contractors**
   - **National Cost Estimators**
     - **TCT Cost Consultants (Mid-Atlantic Region)**
     - **Forella Group Estimators (Eastern United States region)**



Material Costs Change – Bureau of Labor Statistics – August 2021

CURRENT MARKET CONDITIONS: KEY BUILDING MATERIALS

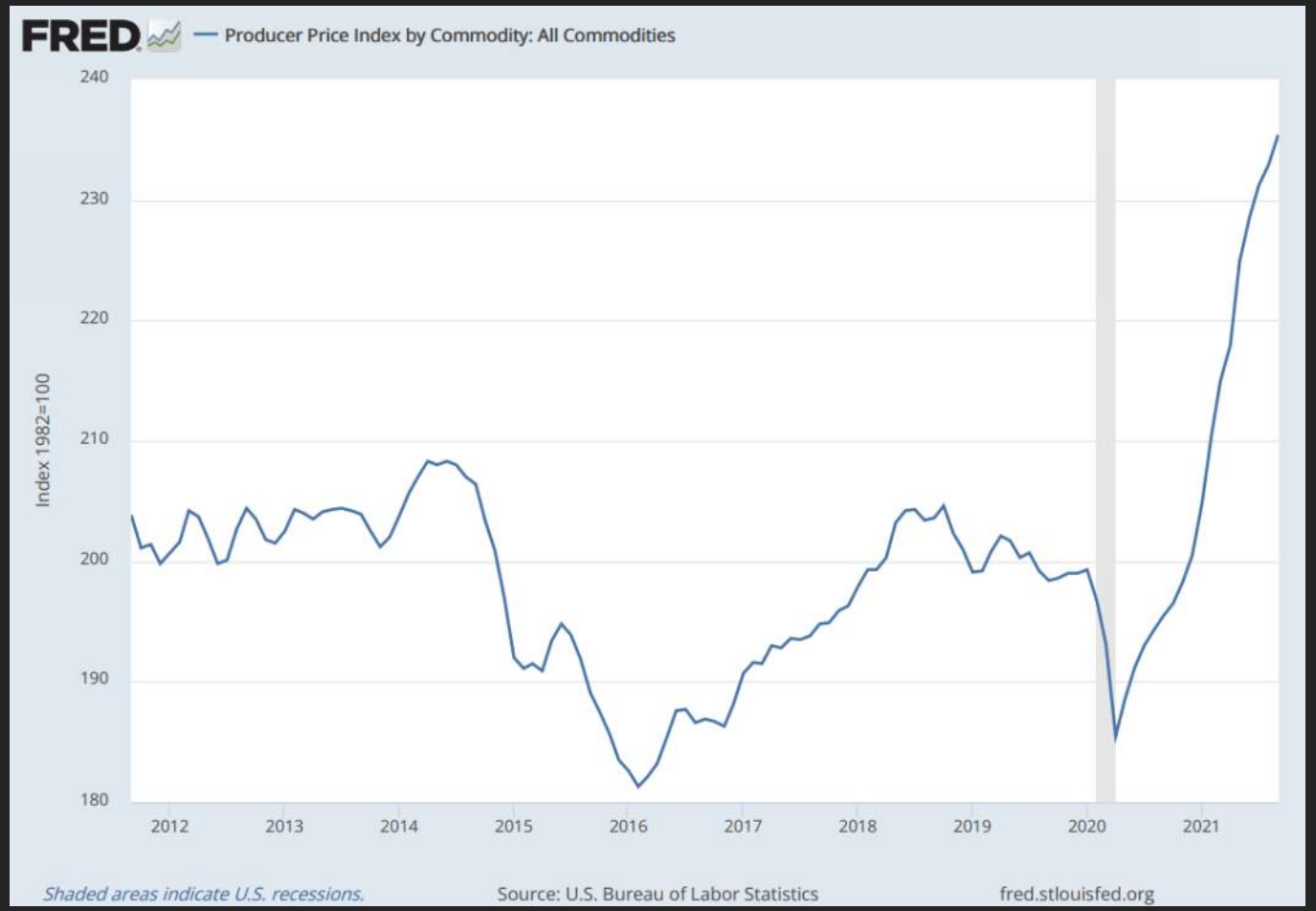
1. **Data gathered indicates that material suppliers are correcting 10 years of material pricing**
   - **Indicates that cost increases are anticipated to be permanent**
2. **Data does not include most notable cost increase: Roofing materials have increased 100% since spring 2021**

	3 YEARS AGO	1 YEAR AGO	6 MONTHS AGO	3 MONTHS AGO	1 MONTH AGO
Gypsum	12.4%	22.9%	14.2%	6.5%	0.5%
Insulation materials	15.1%	17.2%	10.5%	6.7%	4.4%
Construction sand, gravel & crushed stone	13.5%	3.9%	1.9%	0.3%	-0.1%
Cement	8.0%	3.9%	3.1%	2.3%	0.6%
Ready-mix concrete	10.0%	5.1%	3.5%	2.5%	1.6%
Precast concrete products	17.3%	9.5%	5.9%	1.9%	0.5%
Prestressed concrete products	11.3%	9.5%	8.7%	5.5%	-1.1%
Brick (clay)	9.2%	4.5%	2.9%	0.6%	0.2%
Coal	-3.1%	2.7%	3.1%	0.1%	-0.5%
Iron ore	29.6%	23.9%	19.6%	18.8%	0.2%
Iron & steel scrap	37.1%	87.1%	16.1%	6.6%	-3.7%
Steel bars, plates & structural shapes	26.1%	49.0%	26.8%	12.4%	2.4%
Steel pipe & tube	42.6%	63.5%	42.8%	23.8%	9.2%
Fabricated structural metal products	32.9%	32.4%	25.0%	12.1%	3.2%
Prefabricated Metal Buildings	44.0%	50.8%	28.8%	18.7%	3.3%
Aluminum mill shapes	15.2%	35.1%	20.9%	7.9%	3.7%
Flat glass	9.3%	7.1%	4.6%	2.8%	-0.3%
Paints, architectural coatings	22.0%	10.4%	7.2%	5.8%	0.5%
Lighting fixtures	13.4%	5.9%	5.1%	2.3%	1.0%
Plumbing fixtures & fittings	10.9%	4.3%	2.1%	1.5%	0.8%
Elevators & escalators	9.7%	3.9%	2.8%	1.2%	0.2%
Heating equipment	19.5%	13.3%	11.0%	6.6%	2.8%
Air conditioning equipment	14.3%	8.5%	5.4%	2.7%	0.1%
Copper wire & cable	26.7%	31.4%	15.8%	2.2%	1.9%

Producer Price Index - % Change (August 2021)

CURRENT MARKET CONDITIONS: KEY BUILDING MATERIALS

1. **Inflation rate 3.75% / year (2017-2020)**
2. **Factors impacting cost escalation**
   - **Cost of raw materials**
   - **Continued labor shortage**
   - **Continued supply chain disruption**
   - **Cost of shipping (fuel)**
3. **Subcontractor/distributor pricing**
   - **Holding prices for 15-30 days**
   - **Prices not guaranteed until material shipped**



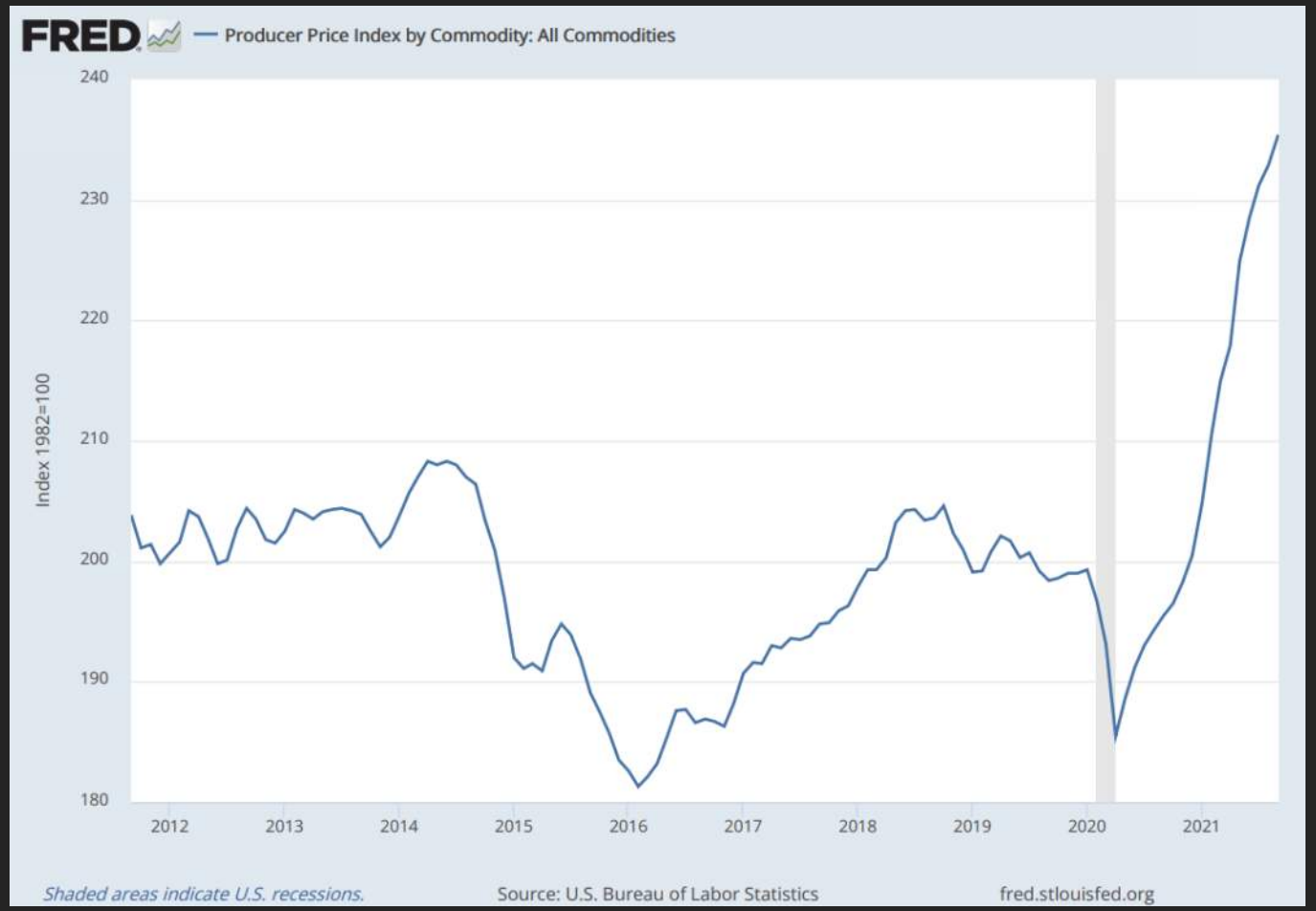
NAVIGATING PROJECTS IN UNCERTAIN BIDDING ENVIRONMENTS

FACTS:

1. **Infrastructure needs and conditions do not change**
2. **Educational Program needs do not change**

ACTION:

1. **Prepare for and discuss options before bid day**
2. **Complete the planning process and create bid packages that provide flexibility**
    - **Alternates**
    - **Separating Project Packages**
3. **Bid project(s) according to established schedule**
4. **Evaluate bids to determine next steps based on available options**



PROPOSED SITE PLAN & RENDERED VIEWS







Pequea Valley School District

Where Each Learner Counts

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