



**21<sup>st</sup> Century School Buildings Program**  
WHS + BPI Feasibility Study Meeting  
04.22.2021



| Presenters  | Agenda   |
|---|--|
| <p><b>Renee Stainrod</b><br/>Manager, Community &amp; Public Relations<br/>21<sup>st</sup> Century School Buildings Program</p> <p><b>Ivy McNeill</b><br/>Sr. Coordinator, Community &amp; Public Relations<br/>21<sup>st</sup> Century School Buildings Program</p> <p><b>Alicia Thomas</b><br/>Sr. Coordinator, Community &amp; Public Relations<br/>21<sup>st</sup> Century School Buildings Program</p> <p><b>Dorothy Hellman</b><br/>Executive Director, 21<sup>st</sup> Century Buildings Program<br/>Baltimore City Public Schools</p> <p><b>Michael McBride</b><br/>Design Director<br/>21<sup>st</sup> Century Buildings Program<br/>Baltimore City Public Schools</p> <p><b>Charlie Ravenna</b><br/>Project Director<br/>Maryland Stadium Authority</p> <p><b>Michael Glaros</b><br/>Senior Vice President<br/>CannonDesign</p> | <ul style="list-style-type: none"> <li>• Overview Schools</li> <li>• Existing Conditions &amp; Solutions</li> <li>• Building Area &amp; Programming</li> <li>• Design Proposals</li> <li>• Questions &amp; Discussion</li> </ul> |

This feasibility study is being developed in conjunction with other BCPS High School feasibility studies. Only after all studies are finalized, a decision will be made as to which Building(s) and Option(s) move forward.

As part of the process, the design team will present options for review to the internal team, the community, and other entities. The team will then incorporate feedback as it develops each option and present these at subsequent meetings.



## Overview

### Purpose of Feasibility Study

- The purpose of the feasibility study is to determine the optimal location of all program elements within the building footprint, and on the site to serve as the basis for the design and for use in establishing the budget.
- The feasibility concept options will be developed based on the educational specification program prepared by 21<sup>st</sup> Century Schools program.
- The goal of the feasibility study is to determine which option best accomplishes the goals of the program in an economical manner.





# Overview

## Engagement Process



### 21st Century School Buildings Engagement Process

The essential role of school stakeholders in the 21st Century School Buildings process.

Each school is unique. Creating modern, high-quality learning environments that meet the needs of individual school communities and support their vision for student success is a collaborative effort. The process for the design of each school building takes 18-24 months. The process for the construction of a school takes an additional 18-24 months marked by multiple opportunities for school communities to provide input and feedback.



Updated 1/13/2020

### HISTORY:

- Founded 1844
- Liberal Arts College-Prep High School
- all-girls school, now co-ed

### ACHIEVEMENTS:

- Blue Ribbon School of Excellence (2009)
- High Achievement Academic Programs
- Dual Enrollment for BCCC college credits
- Advanced Placement (AP) + Honors courses
- Teacher Academy of Maryland (TAM)
  - teacher shadowing
- Project Lead The Way (PLTW)
  - project-based curricula





### HISTORY:

- Founded 1883
- Science & Technology College-Prep High School
- 1 of first schools to integrate, before the SCOTUS Brown v. Board of Ed. (1955)
- Previously all-boys school, now co-ed

### ACHIEVEMENTS:

- Blue Ribbon School of Excellence
- High Achievement Academic Programs
- Advanced Placement (AP) + Honors courses
- Ingenuity Project
  - high academic achievement
- Project Lead The Way (PLTW)
  - project-based curricula



## Overview

## Current Enrollment + Use

### Western

- Current Enrollment – 1,142
- Future Enrollment – 1,488
- All-girls high school

### Poly

- Current Enrollment – 1,584
- Future Enrollment – 1,959
- Coeducational high school

### Rec / other

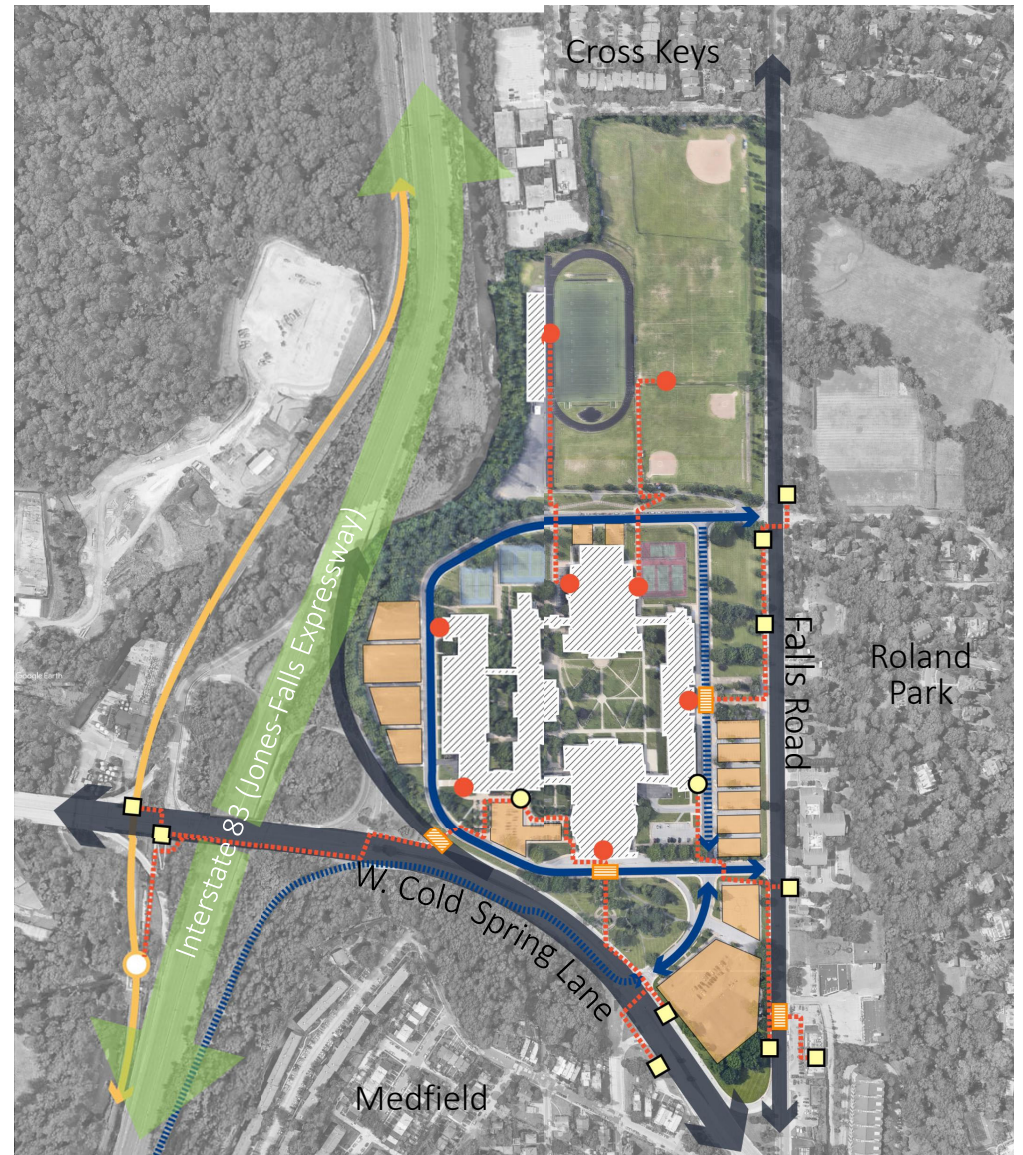
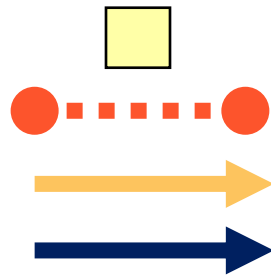




## Overview

## Site Overview

- Bus stops
- Pedestrian Routes
- Light Rail
- Campus Streets



## Overview

## Existing Building

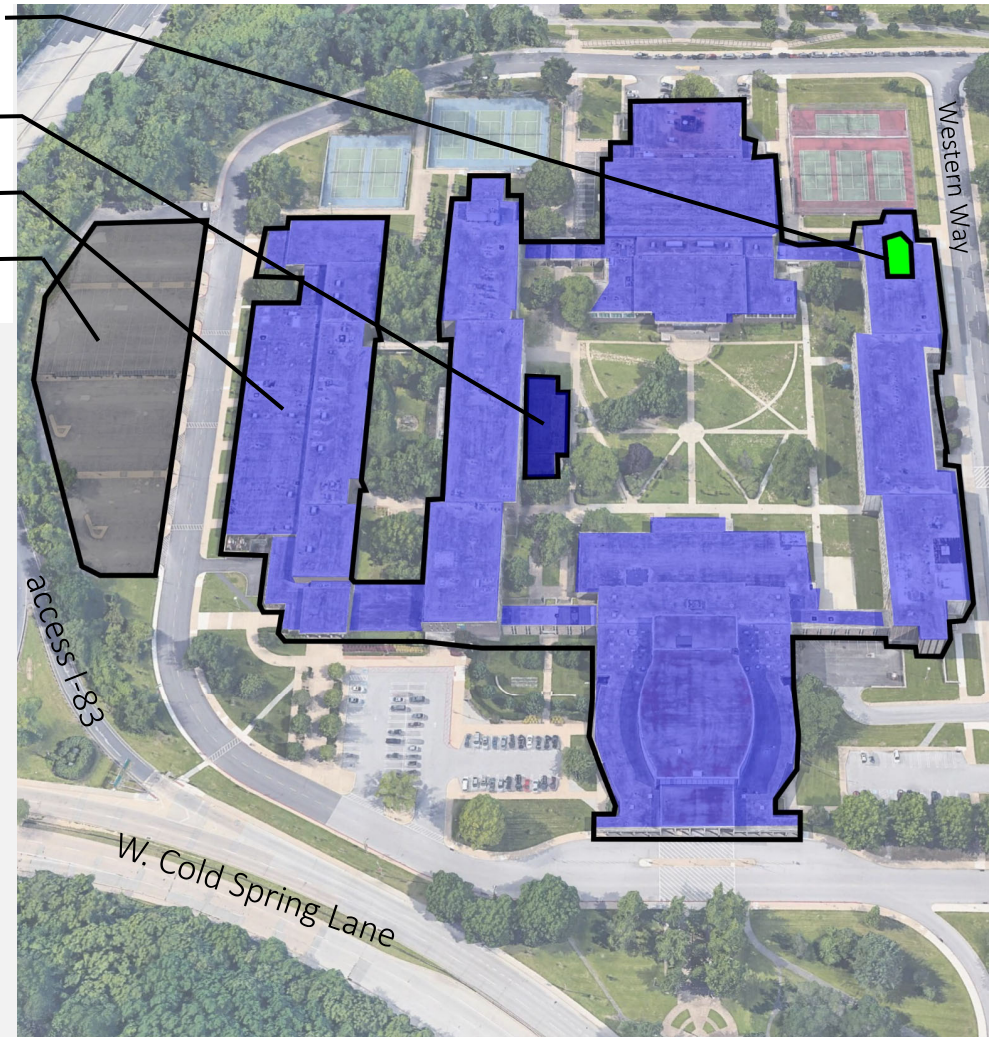
1. Original structure
  - built 1967
2. Greenhouse added to roof of Western
  - built 1967
  - demolished, 2020
3. Poly library renovation
  - renovated, 2011
4. Solar Panel Lot
  - built 2018
5. Full roof replacement
  - completed 2020

GREENHOUSE,  
Western

LIBRARY,  
Poly

ROOF work

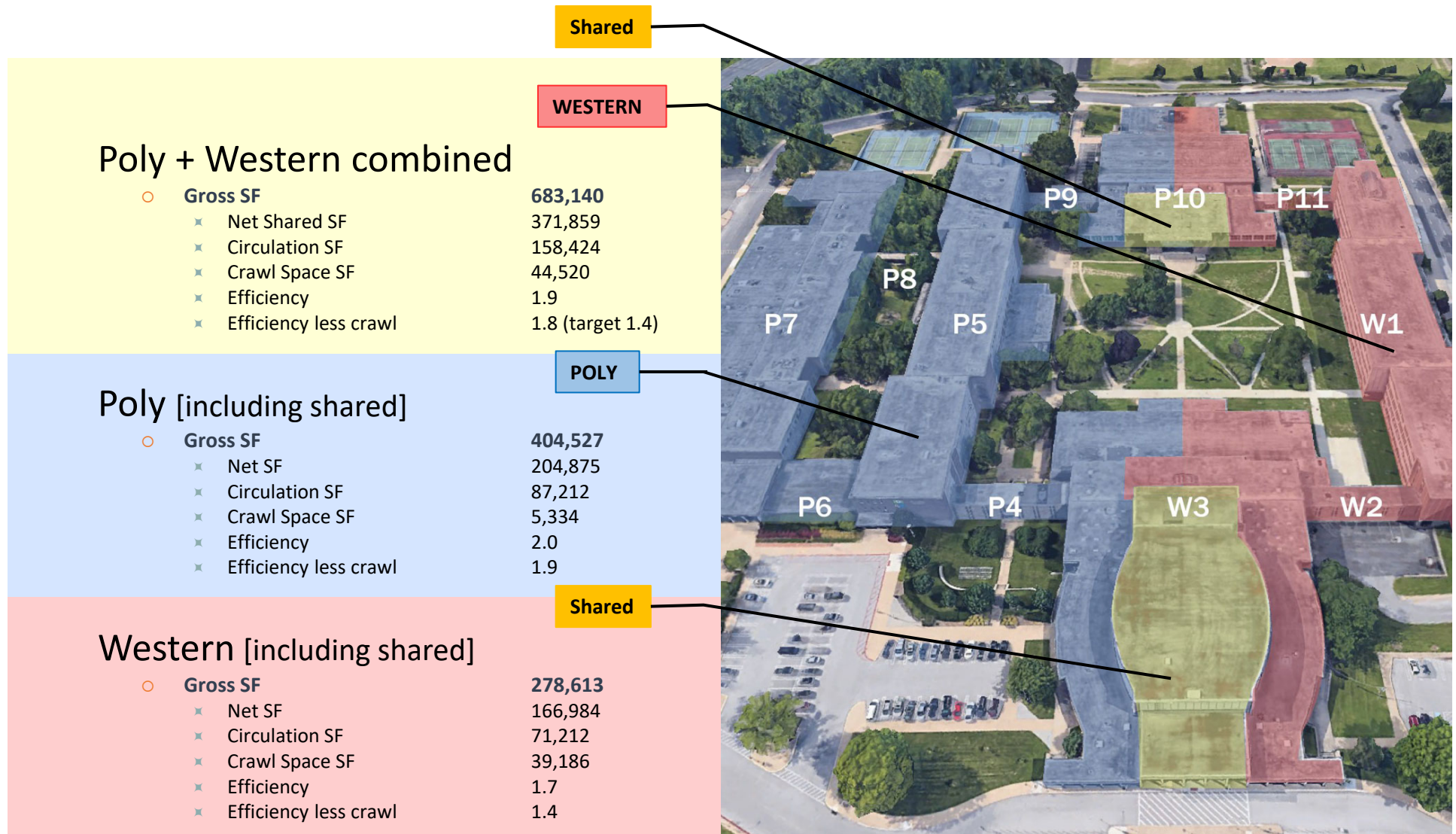
SOLAR  
PANEL LOT





## Overview

## Building Overview





# Existing Conditions & Solutions

- Campus & Surroundings
- School Buildings



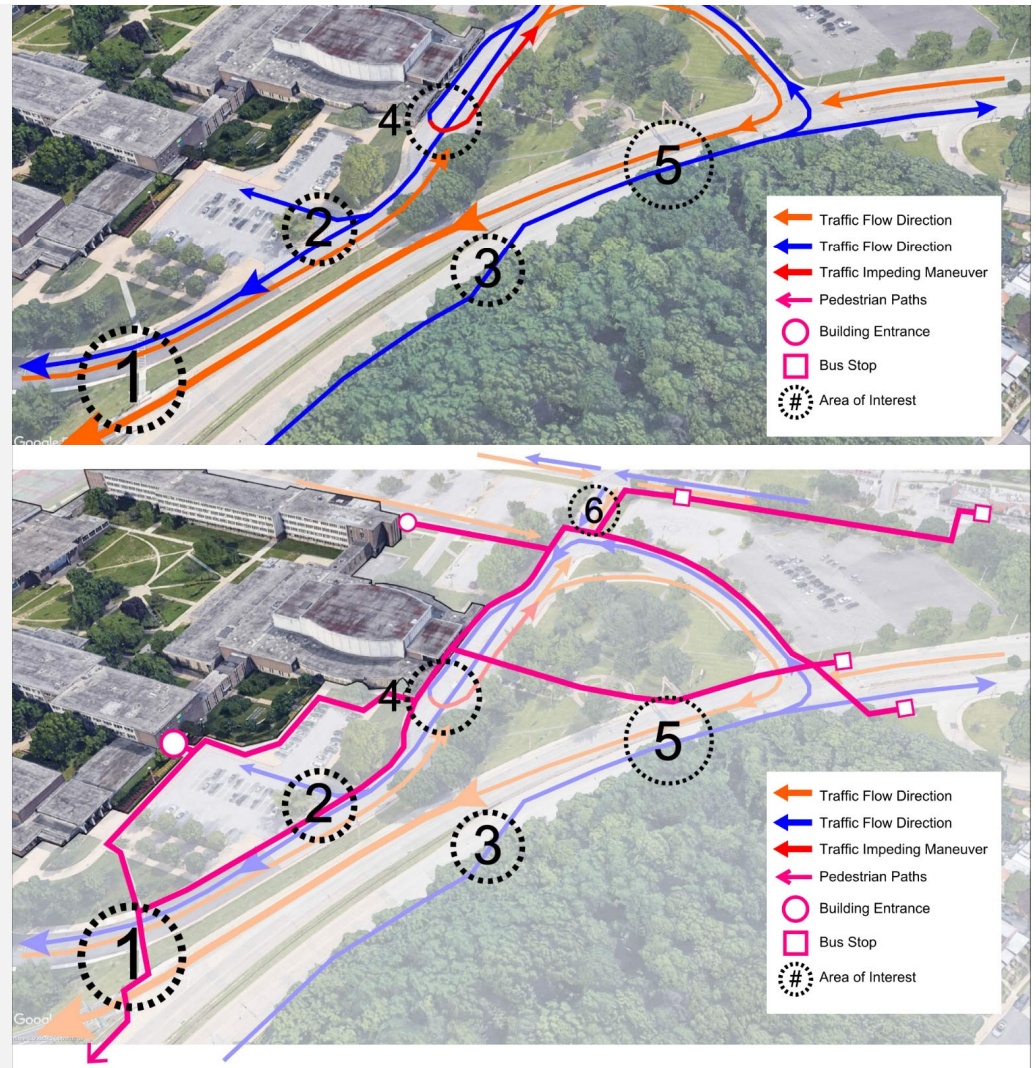


- Missing sidewalk curb ramps throughout site
- Crosswalks not located on accessible routes
- Handicap Parking lack compliant access
- No existing accessibility to athletic fields
- Athletic complex requires additional:
  - Athletic courts
  - Field house with concessions, restrooms and ticket booths
  - Bleachers and scoreboards
- Site descends with the Jones Falls watershed
  - 100-yr management is required
- Drainage issues in some areas
- Several inlets clogged & SWM in poor condition

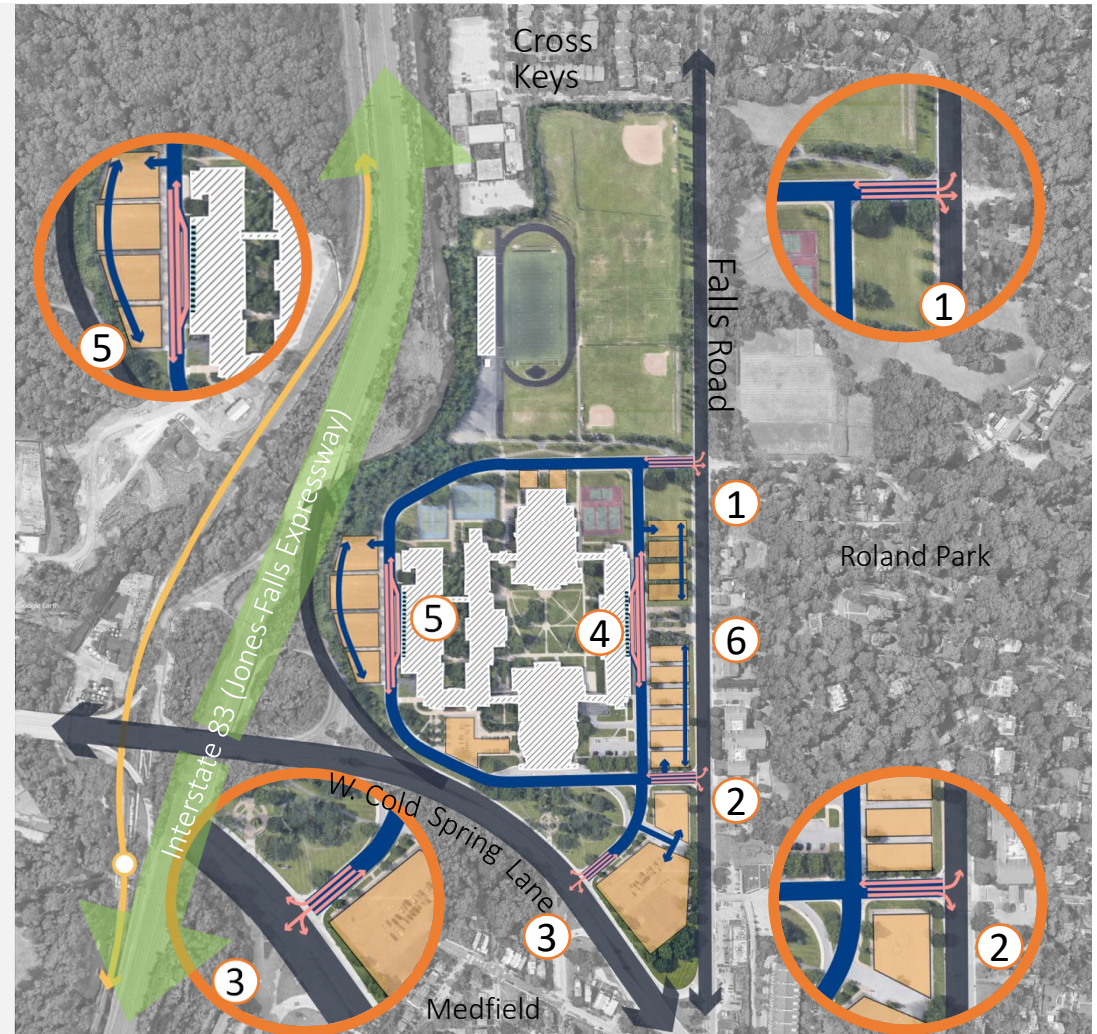




1. Students, faculty, and visitors cross major thoroughfare to access school
2. Congested morning/afternoon drop-off at faculty parking
3. People exiting I-83 North, must transfer multiple lanes in fast traffic to make left turn into campus
4. Visitors prone to make dangerous U-turn at Auditorium drop-off to exit campus quicker
5. Left turn lane is typically backed up during pick-up and drop-off times
6. Students must cross several streets to reach bus stops



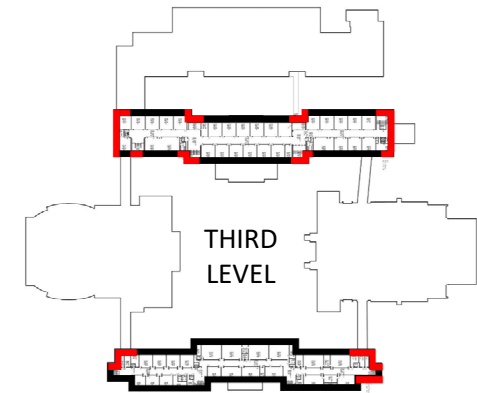
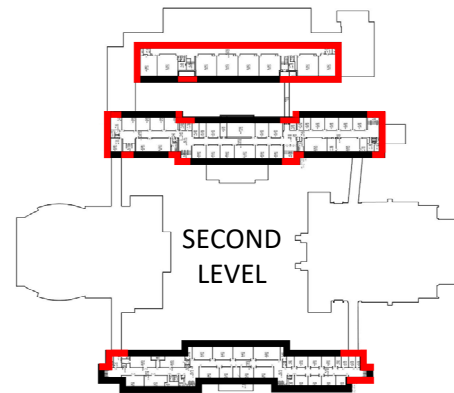
1. Hillside Rd + Falls Rd
  - Left Turn only
  - Straight + Right Turn Lane
2. Falls Rd
  - Left Turn only
  - Straight + Right Turn Lane
3. Coldspring Lane + Grandview Ave
  - Right Only Lane
  - Straight + Left Turn Lane
4. Formalized drop off loop + potential for two-way traffic (Western)
5. Formalized drop off loop (Poly)
6. Re-configure parking at Western





### Walls

- No insulation
- No air cavity
- No moisture barrier protection



### Glazing Systems

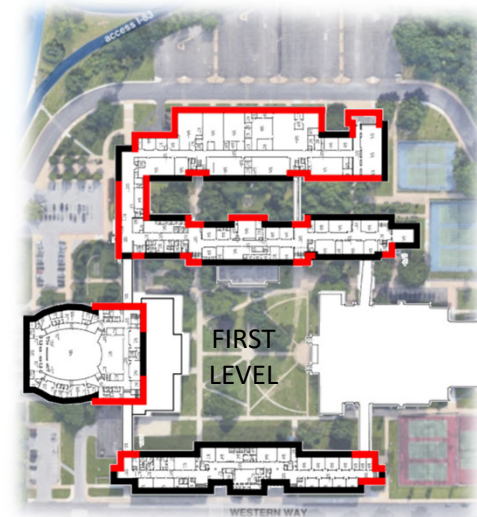
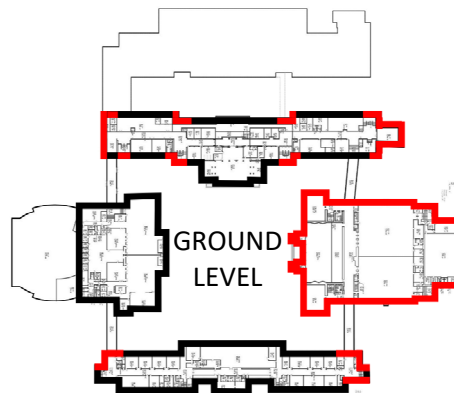
- Letting heat in/out of building
- No insulated glazing
- Spandrel panels minimally insulated



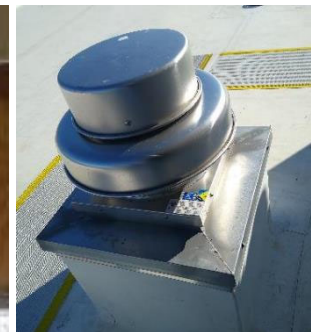
Brick Wall



Stone or Plaster Wall



- **Outdated Systems:**
  - **Heating, Ventilation, Air Conditioning**
  - **Plumbing System**
  - **Campus Electrical Distribution System**
  - **CCTV Surveillance System**
  - **Telecommunications System**
  - **CRT Televisions in classrooms**
- **Systems in Good Condition:**
  - **Roof System**
  - **Fire Alarm + Sprinklers**

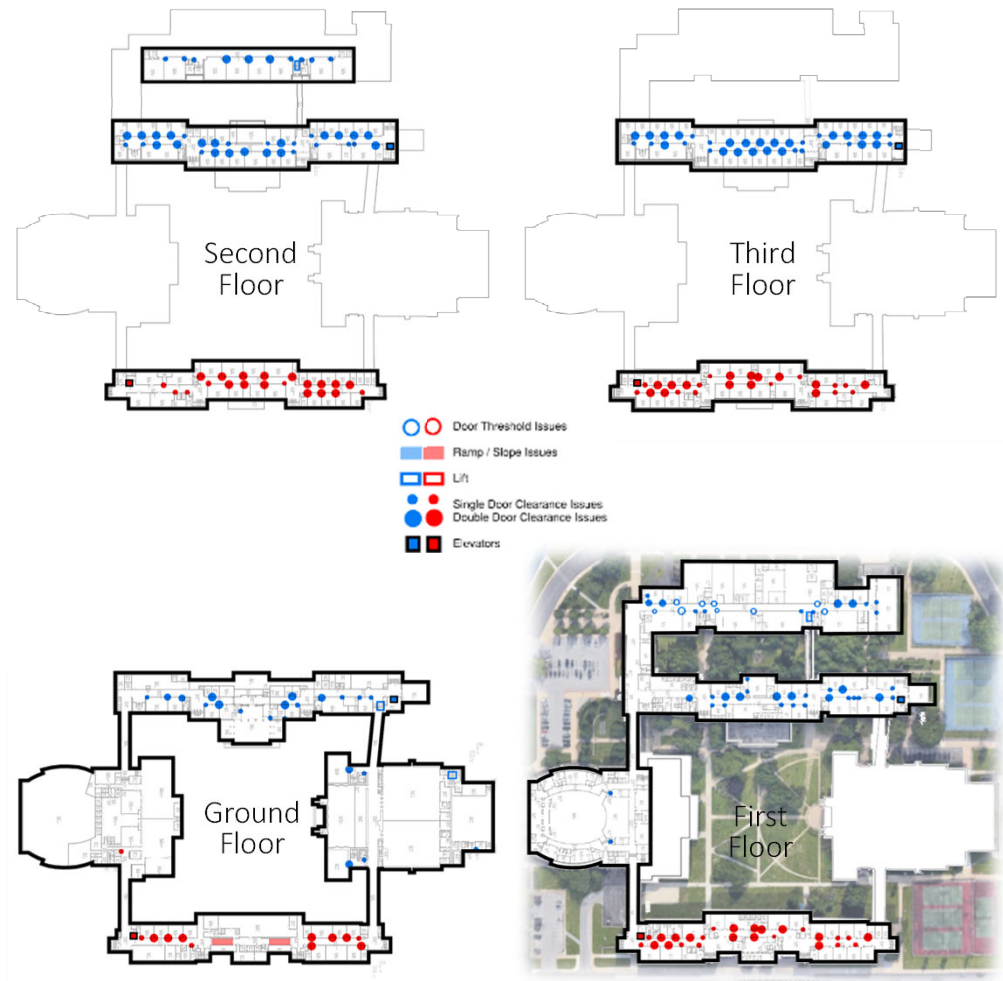




- Restroom deficiencies
  - **No accessible stalls provided in multi-stall restrooms**
- Classroom Doors do not meet ADA door clearance and egress requirements
  - **Most classroom entries are not ADA-compliant**
- Typical restroom entry does not meet ADA door clearance requirements
- Vertical Circulation
  - **There is one elevator in both schools**
  - **Not all lifts are currently operable (Poly)**



Basement



# Building Area + Programming

- **Square-Footage Analysis Review**
- **ADA + Wheelchair Access Challenges**





### Western

- Overall square footage decreases
- Area in the classroom wing INCREASES ~7,000 NSF
- Flexibility in DINING and PHYSICAL EDUCATION

Shared

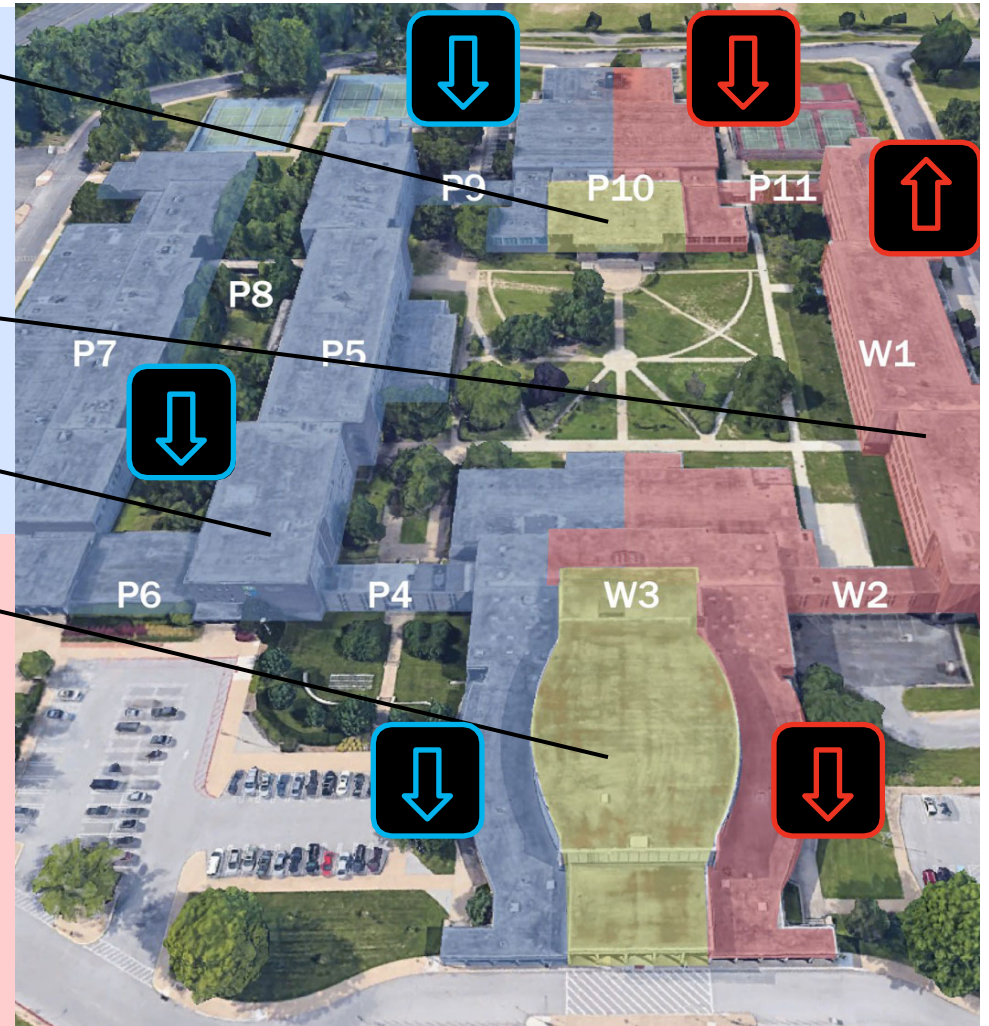
WESTERN

POLY

### Poly

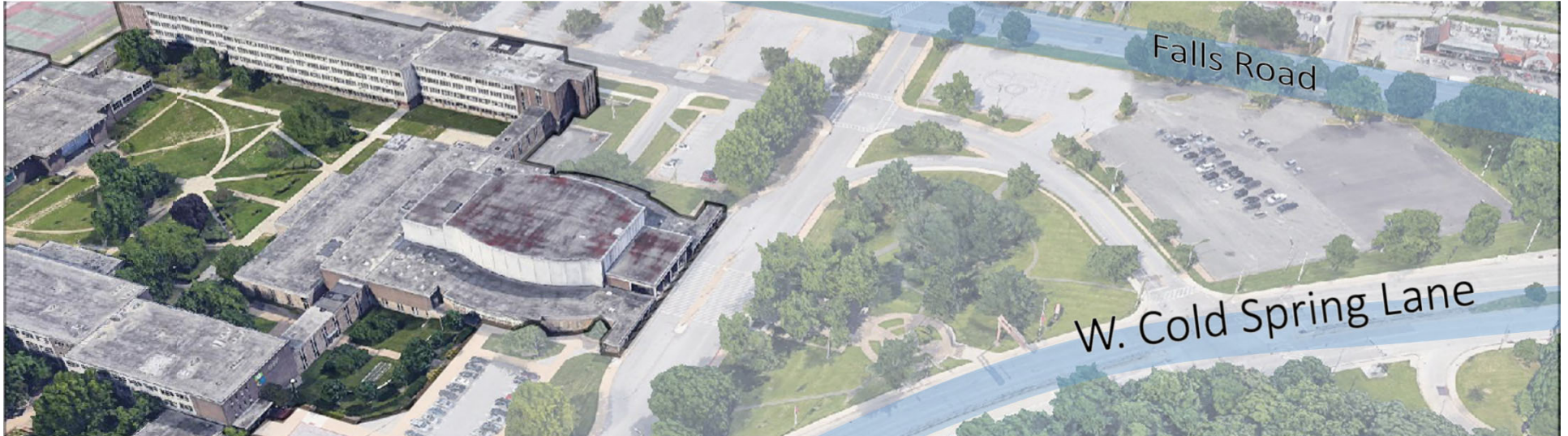
- Overall square footage decreases
- Flexibility dependent on SHARED spaces
- Classroom wings reduce by approximately 15,000 NSF

Shared



# Design Proposals

- **Shared Building Proposals**
- **Poly & Western Options**
- **Construction Phasing**





### Athletic Building (P-10):

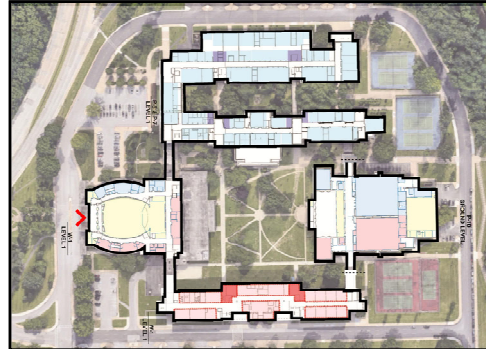
1. Keep Boiler room where it is
2. Convert current Boiler room to Auxiliary Gym

### Western:

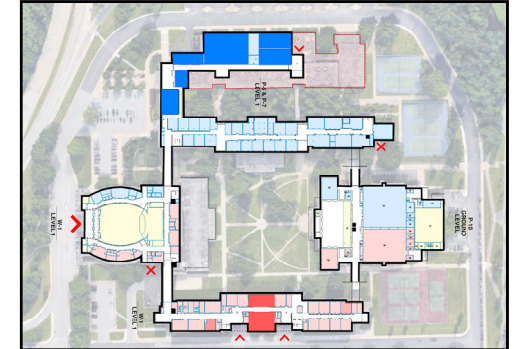
1. Option 1

### Poly:

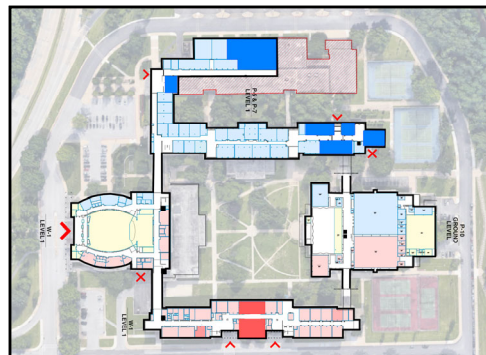
1. Option 1 – No demolition
2. ~~Option 2 (removed)~~
3. Option 3 – increase courtyard by demoing 2-story portion of P-7 building
4. Option 4 – Maximize drop-off zone by demoing 1-story portion of P-7 building



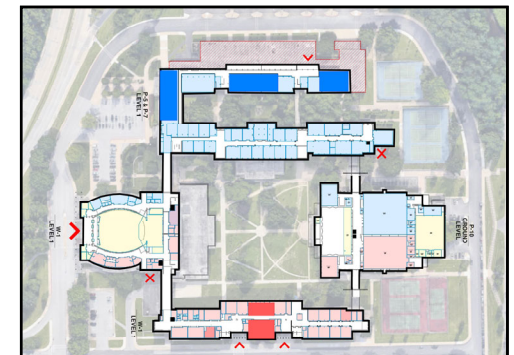
Option 1



Option 3.1



Option 3.2



Option 4

- Shrink hallways to increase size of classrooms
- Reconfigure classroom entries to achieve ADA Door Clearances

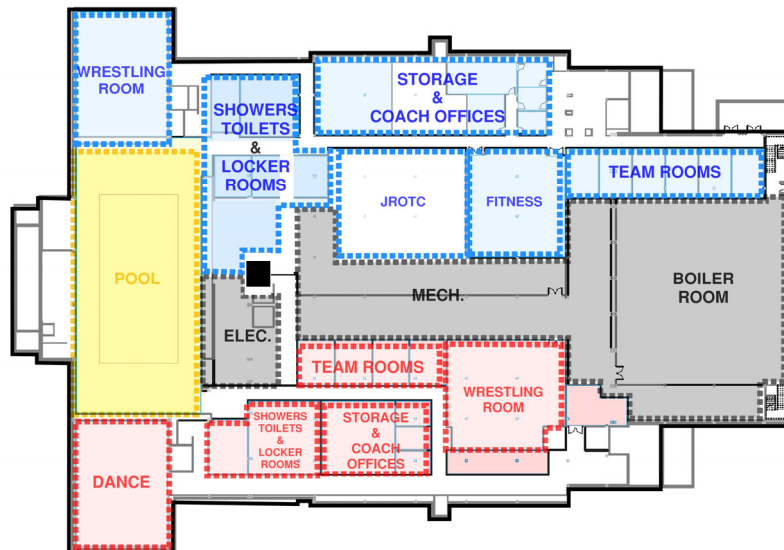




## Planning

### Athletic Building Option – Keep Boiler Room Where It Currently Is

- Least amount of new work performed in P-10 building
- Excess Mechanical space
- Has the option to include JROTC in P-10 building to free up space in Academic buildings



**BASEMENT  
P-10 BUILDING**

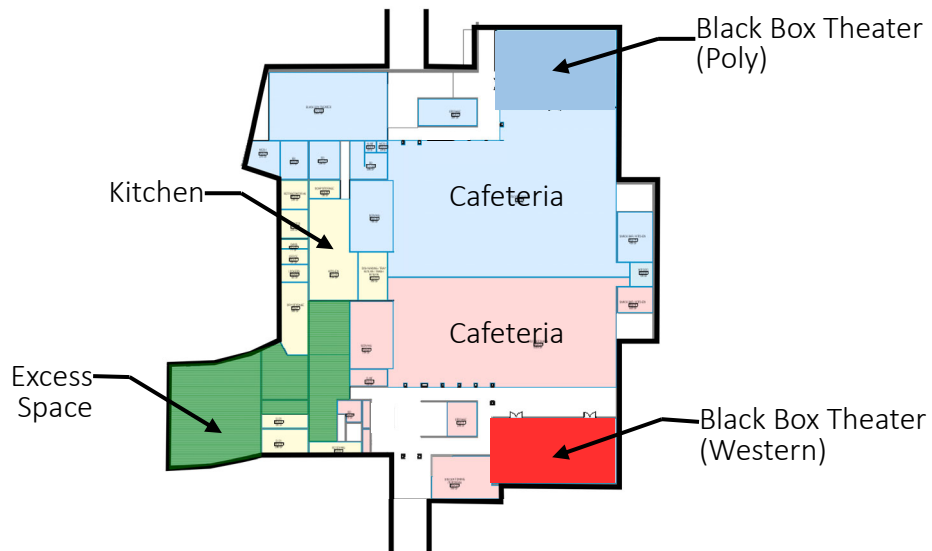
## Planning

### Auditorium + Cafeteria Building – Black Box In Cafeteria Area

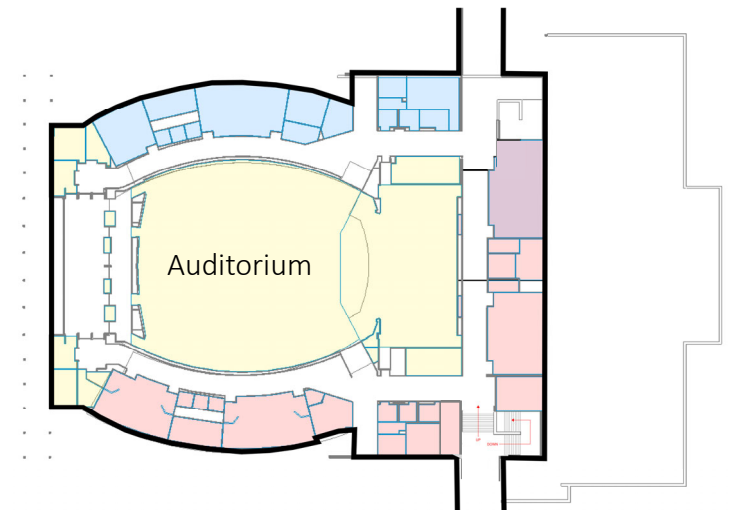
- Minimal new work done in Auditorium/Cafeteria building
- Excess space on cafeteria level of this building



**GROUND LEVEL**



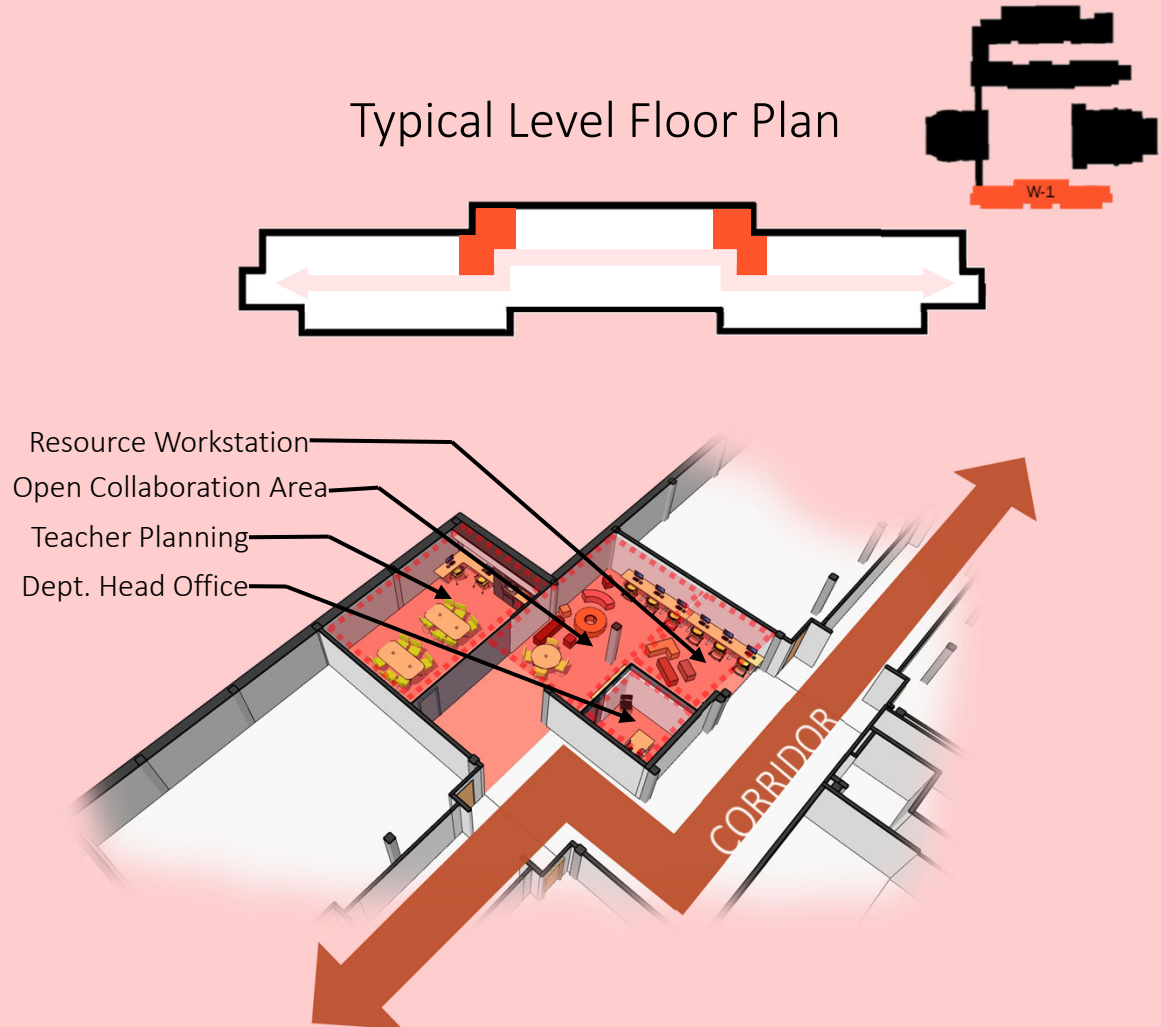
**LEVEL 1**

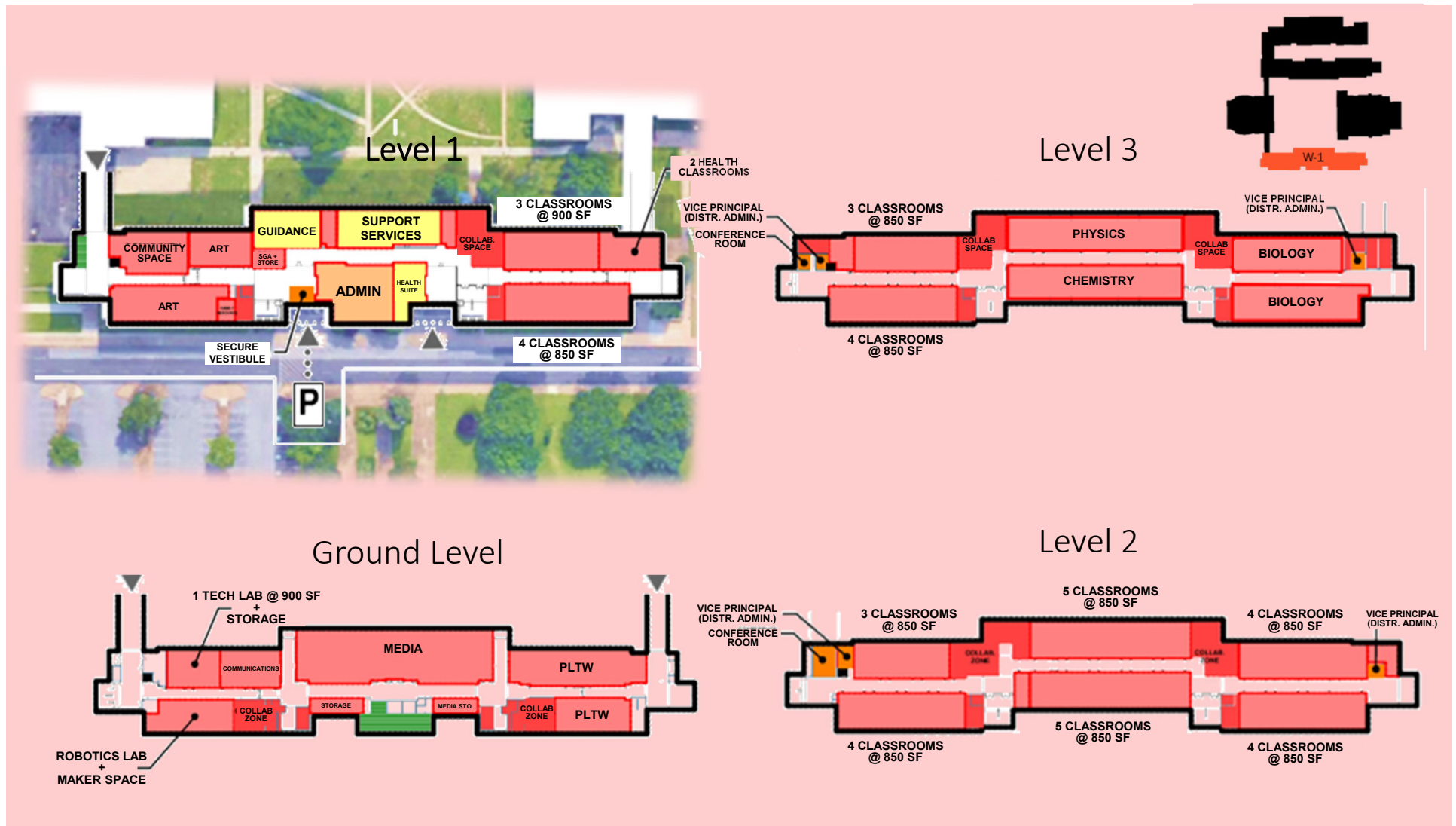




Includes:

- Resource Workstation Area
- Teacher Planning Office
- Department Head Office
- ESL Pull-Out Spaces
- Open Collaboration Area





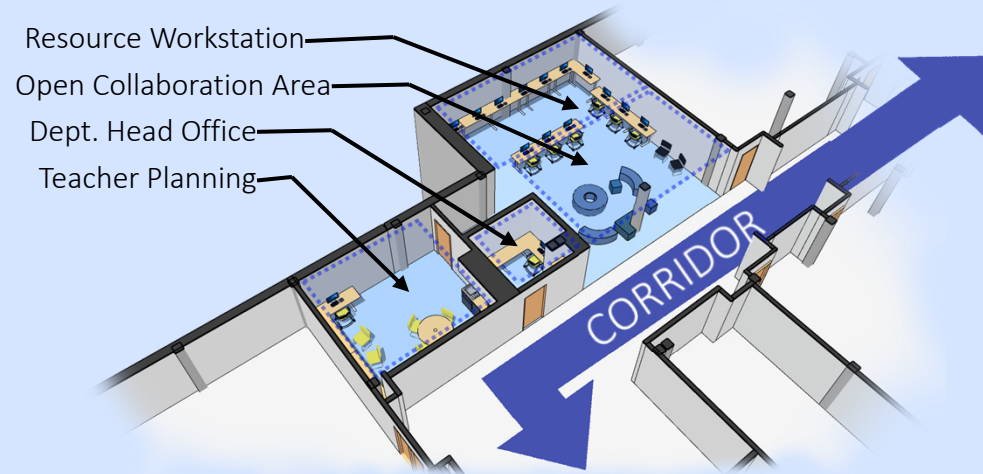
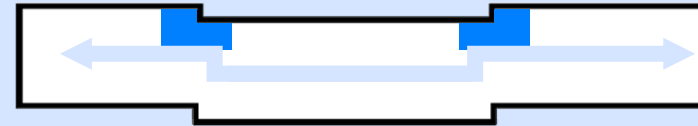


Includes:

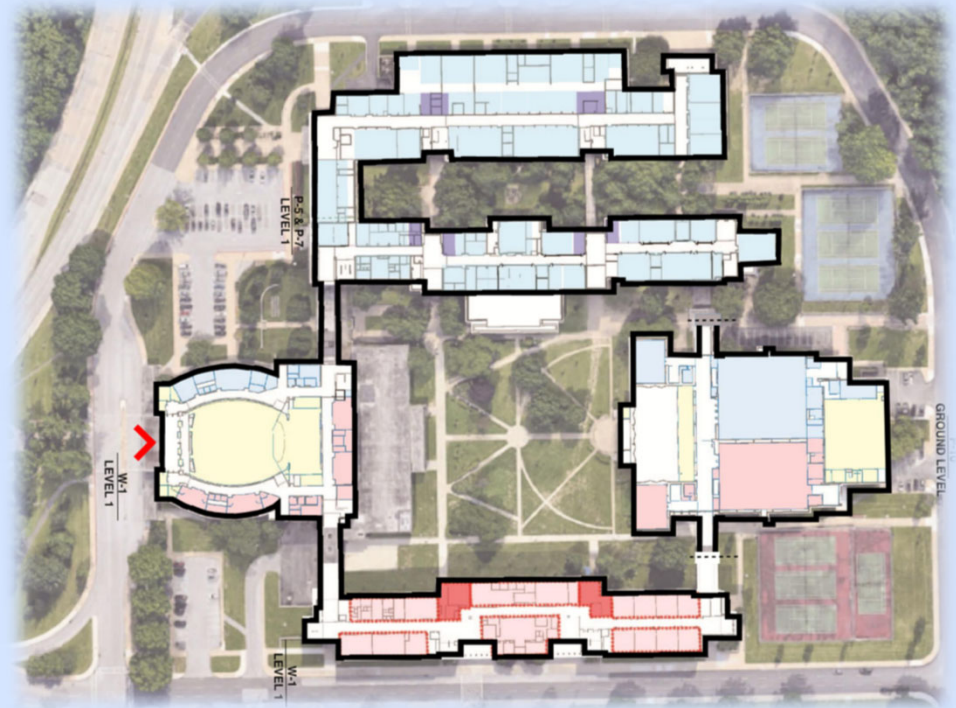
1. Resource Workstation Area
2. Teacher Planning Office
3. Department Head Office
4. ESL Pull-Out Spaces
5. Open Collaboration Area



Typical Level Floor Plan

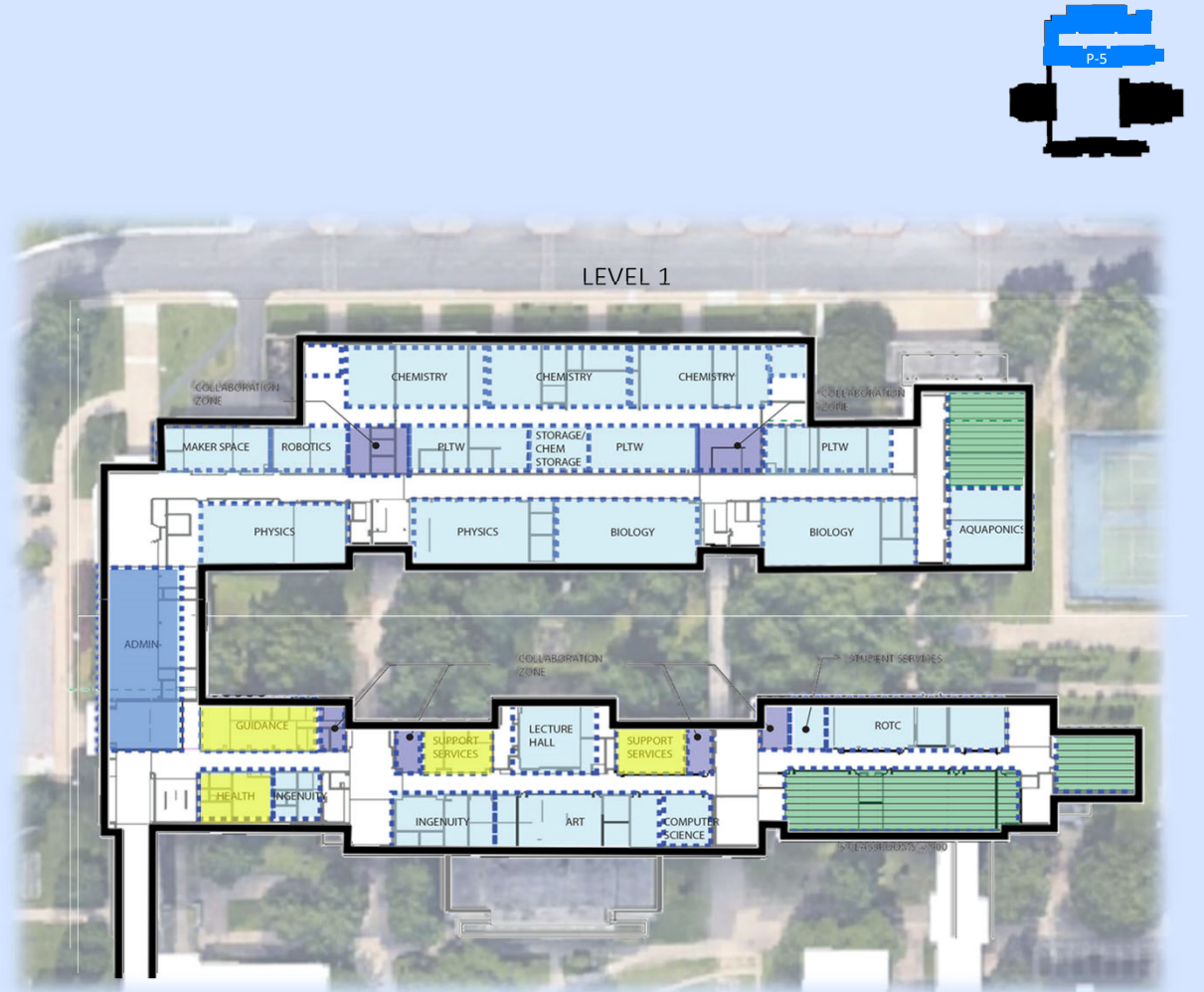


1. Utilize historic entry
2. No space for proposed drop-off
3. Admin suite adjacent to entry
4. Shift circulation along expanded courtyard
5. Focus sciences near front door
6. Use crossroads to form collaboration space





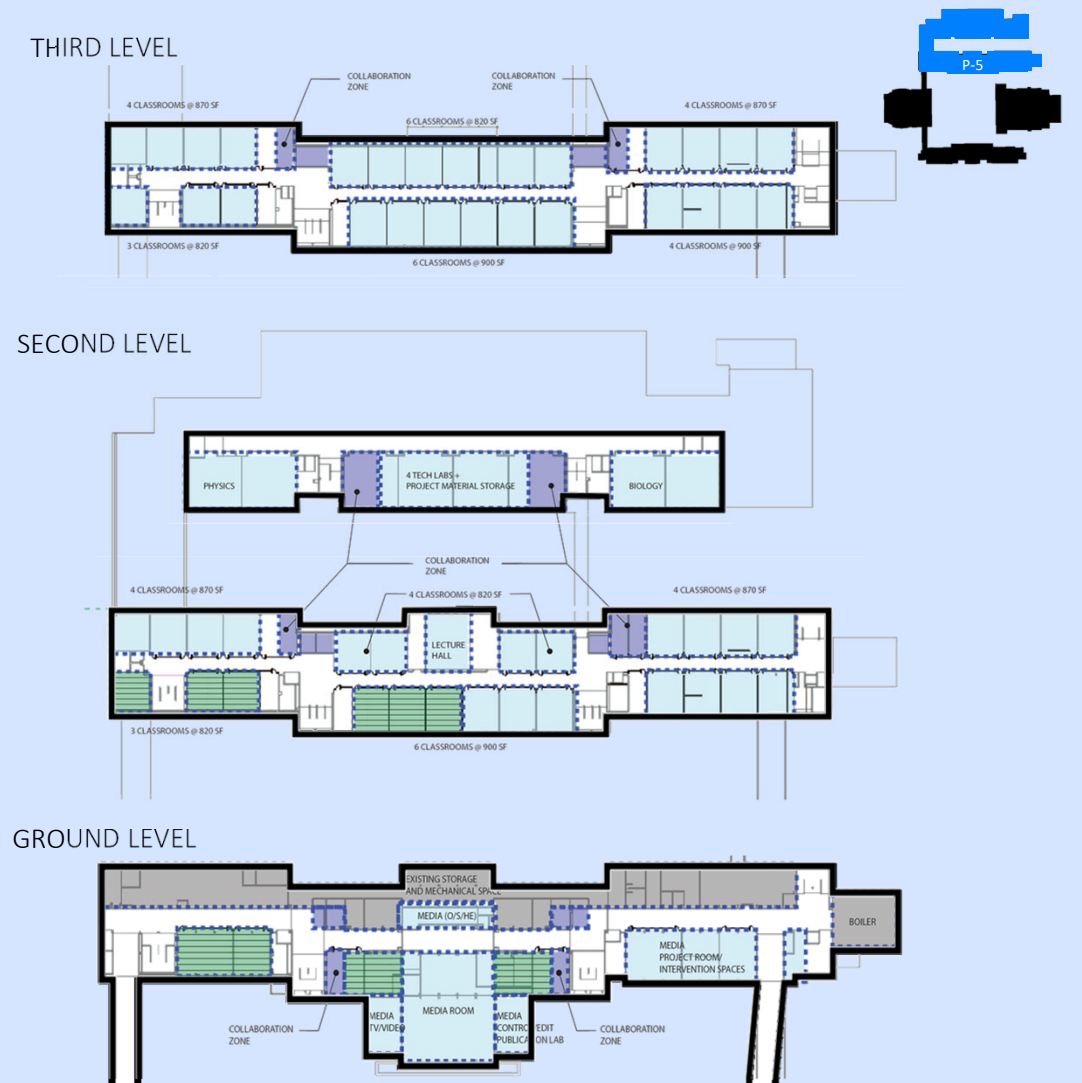
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# Planning

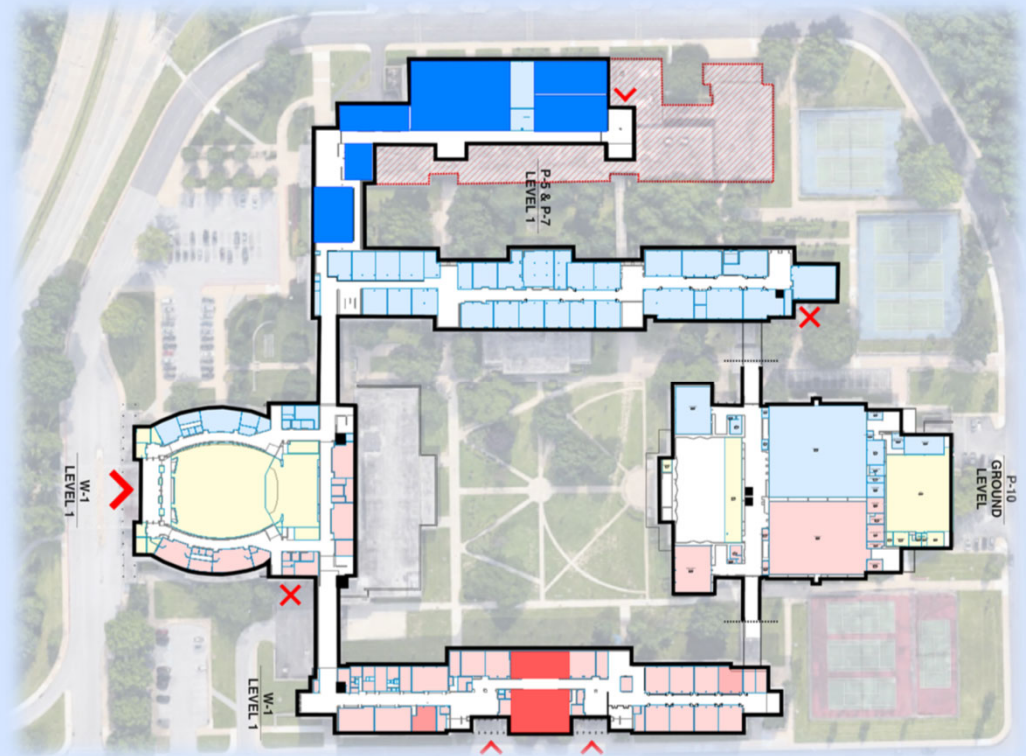
## Option 1 – No Demolition of P-7 Building

1. Utilize historic entry
2. No space for proposed drop-off
3. Admin suite adjacent to entry
4. Shift circulation along expanded courtyard
5. Focus sciences near front door
6. Use crossroads to form collaboration space
7. Lots of unprogrammed space

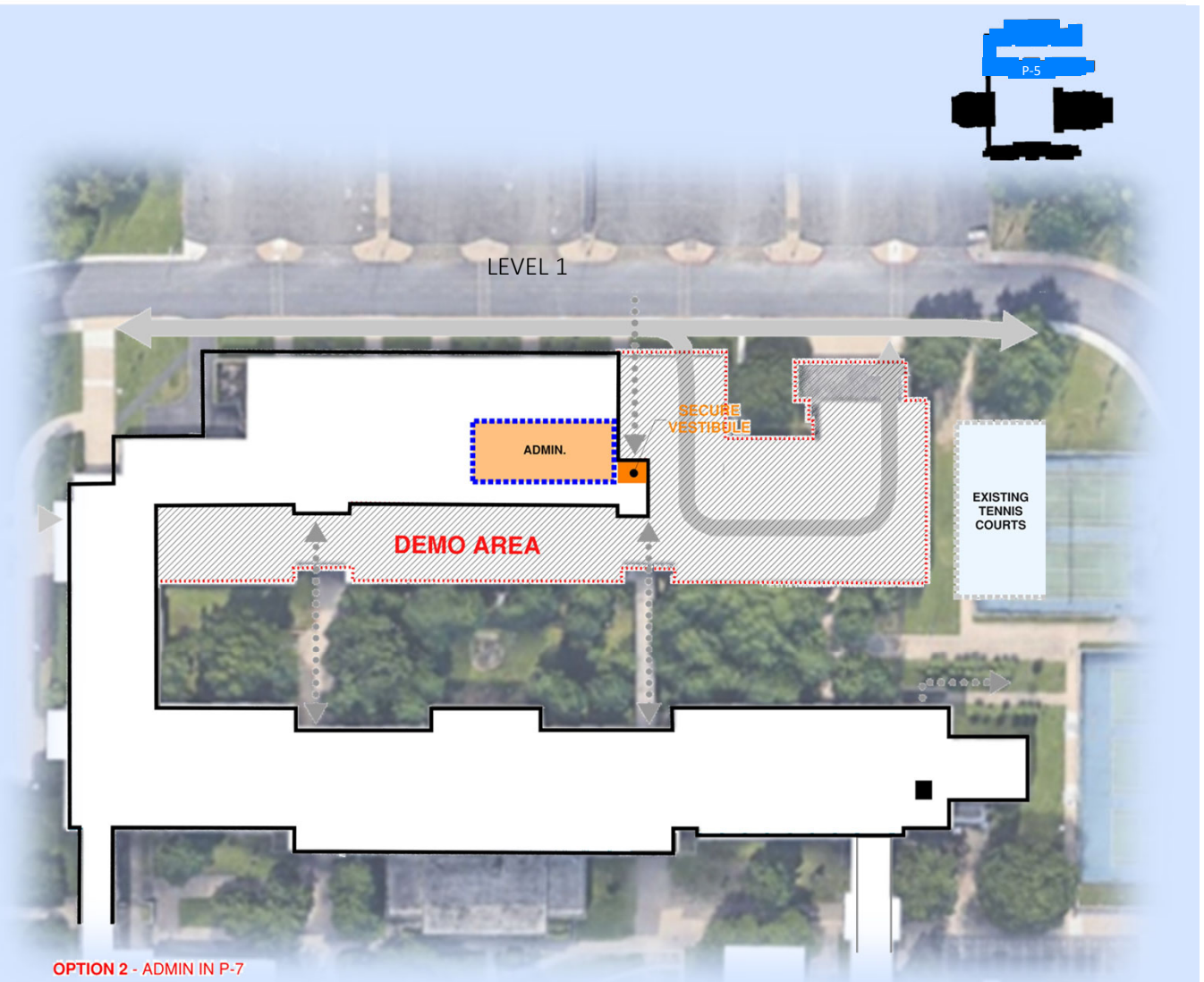




1. Remove 2nd story portion of P-7 building
  - **No need for new elevator in P-7 building**
2. Provide New Drop-Off / Pick-Up
3. Large / anchor programs situated near entries
  - **Media Room / Library**
  - **Administration + Support**

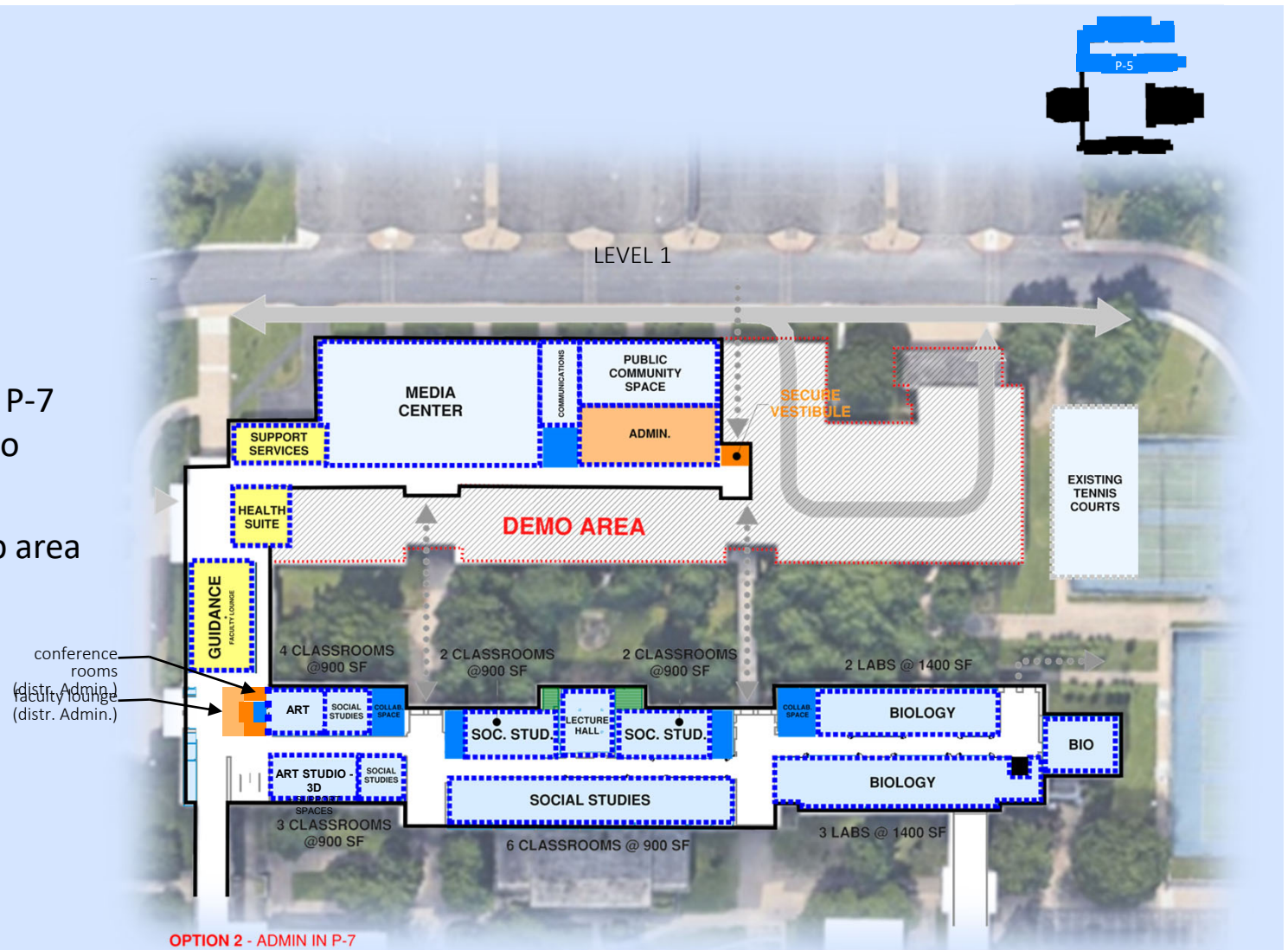


1. Administration in P-7 building, closest to parking lot
2. Drop-off / Pick-up area inlet

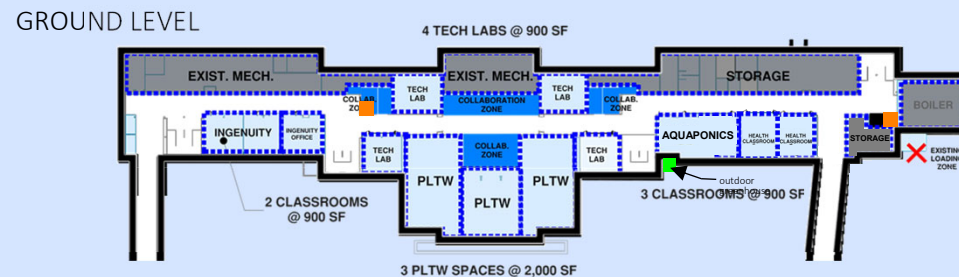
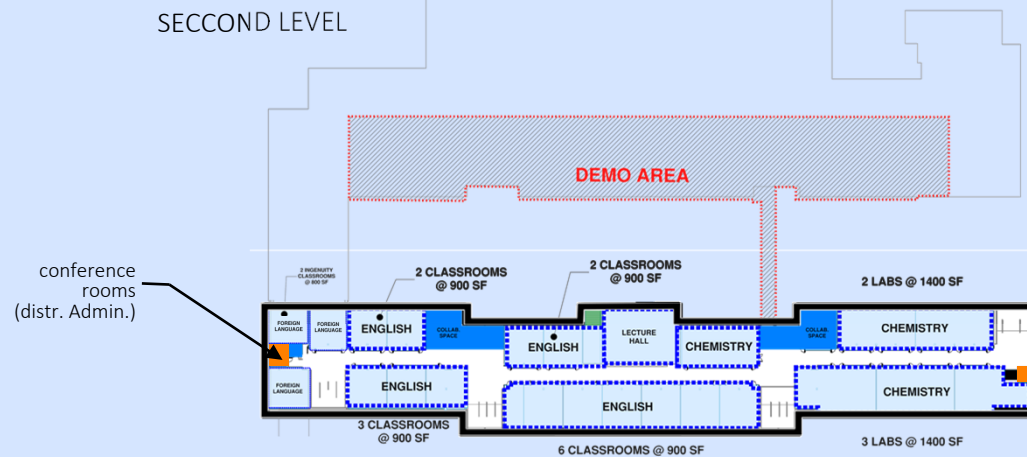
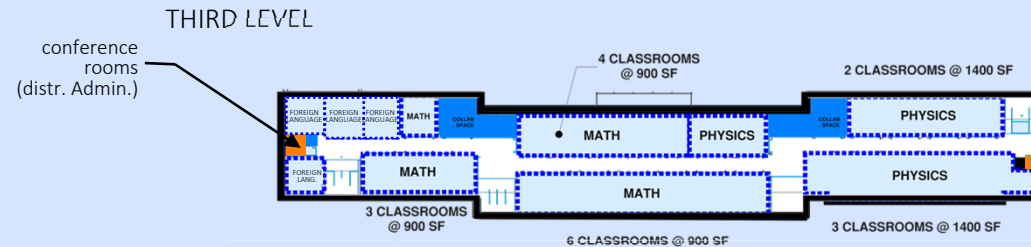




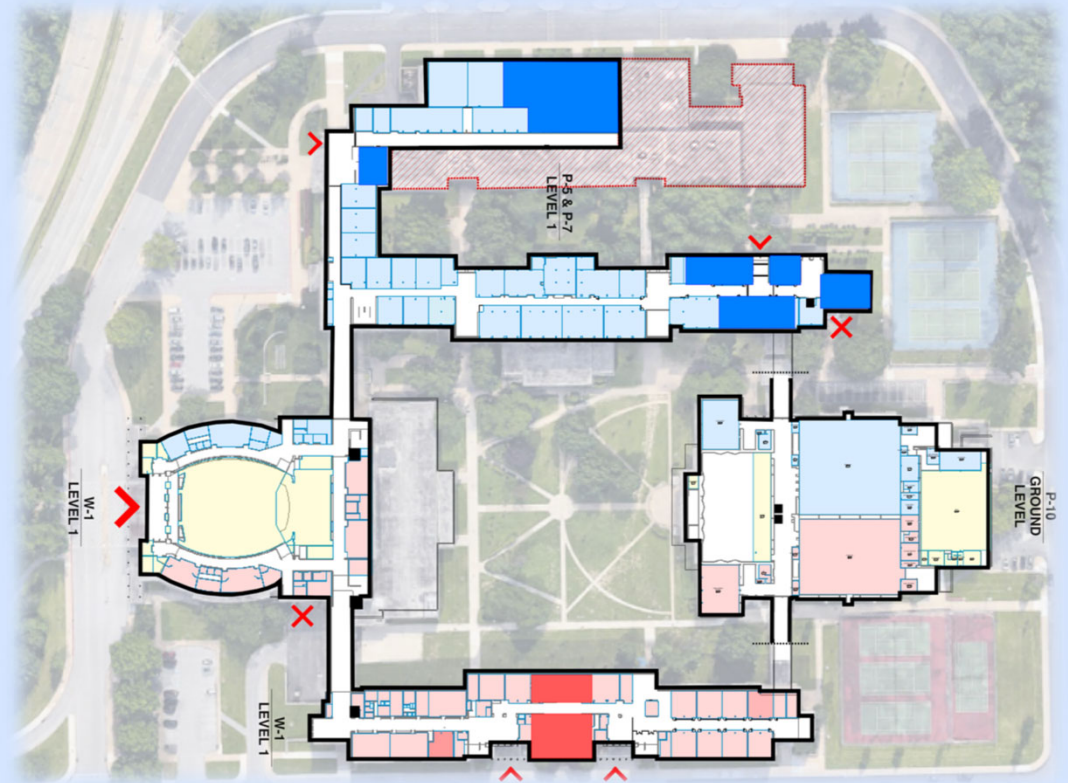
1. Administration in P-7 building, closest to parking lot
2. Drop-off / Pick-up area inlet



- a) Health classrooms in closest proximity to Physical Education Dept.
- b) Tech Spaces grouped in Ground Level with connection to Main Courtyard

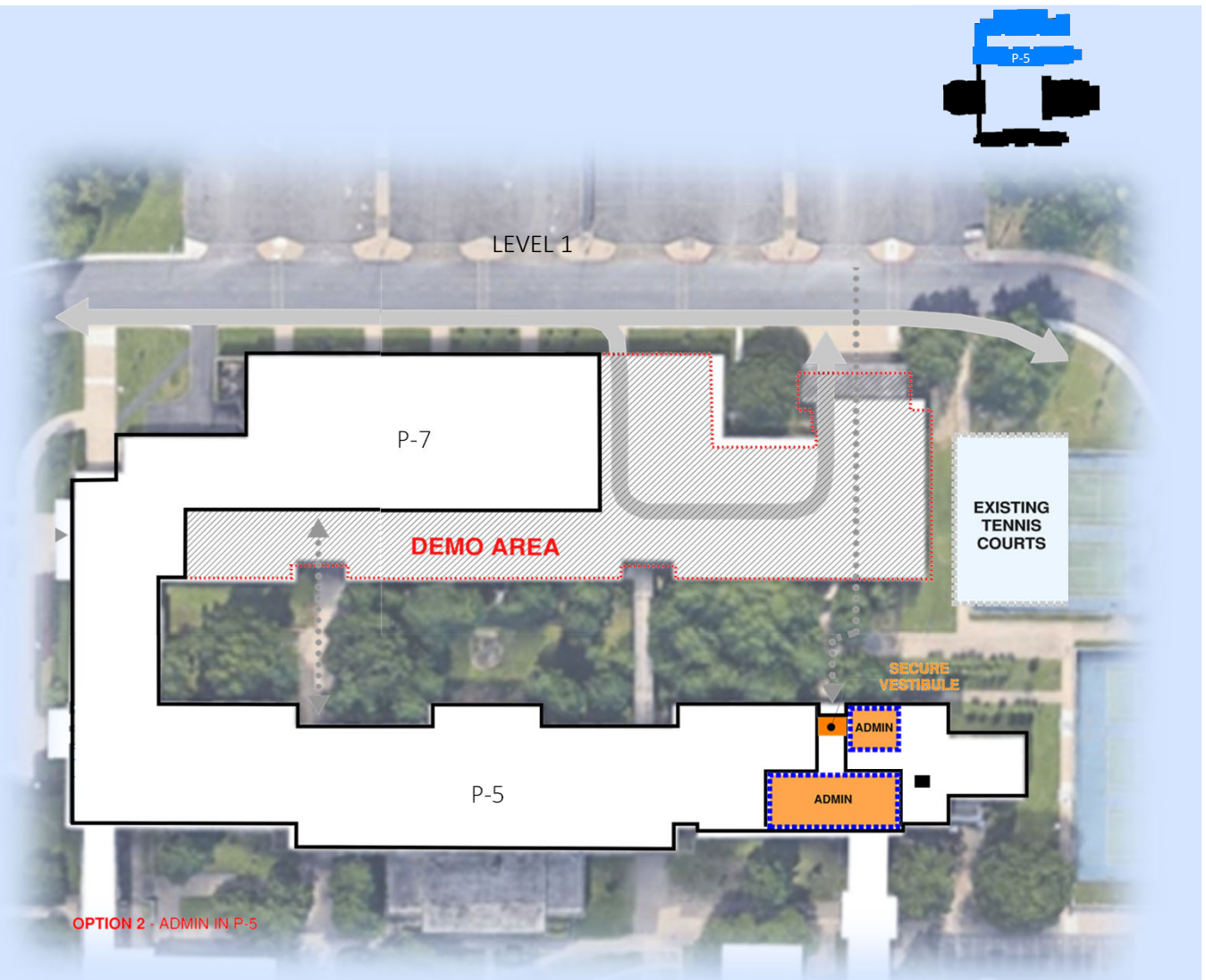


1. Remove 2nd story portion of P-7 building
  - **No need for new elevator in P-7 building**
2. Provide New Drop-Off / Pick-Up
3. Large / anchor programs situated near entries
  - **Media Room / Library**
  - **Administration + Support**
  - **PLTW Spaces**

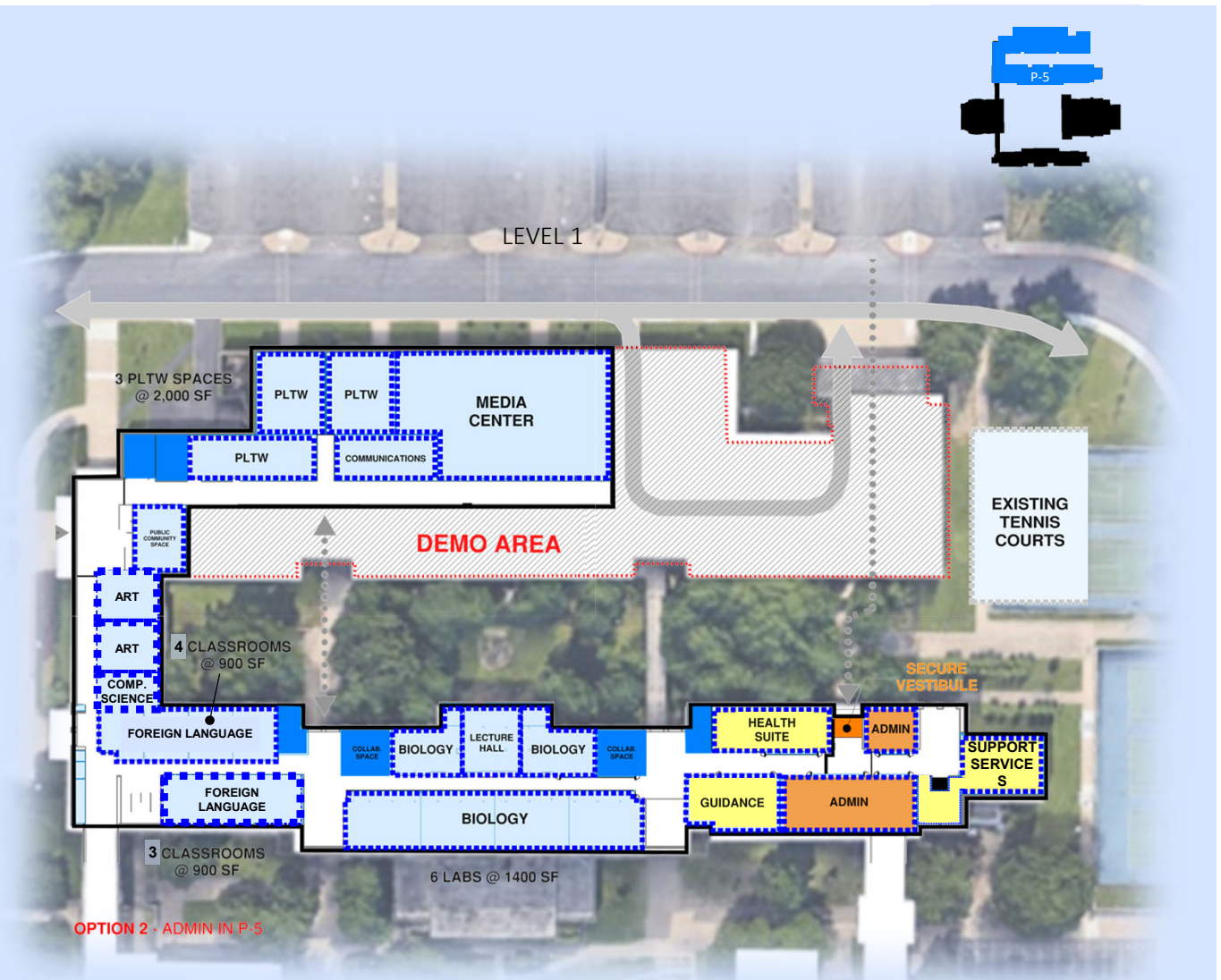




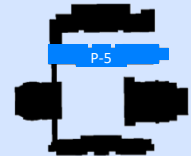
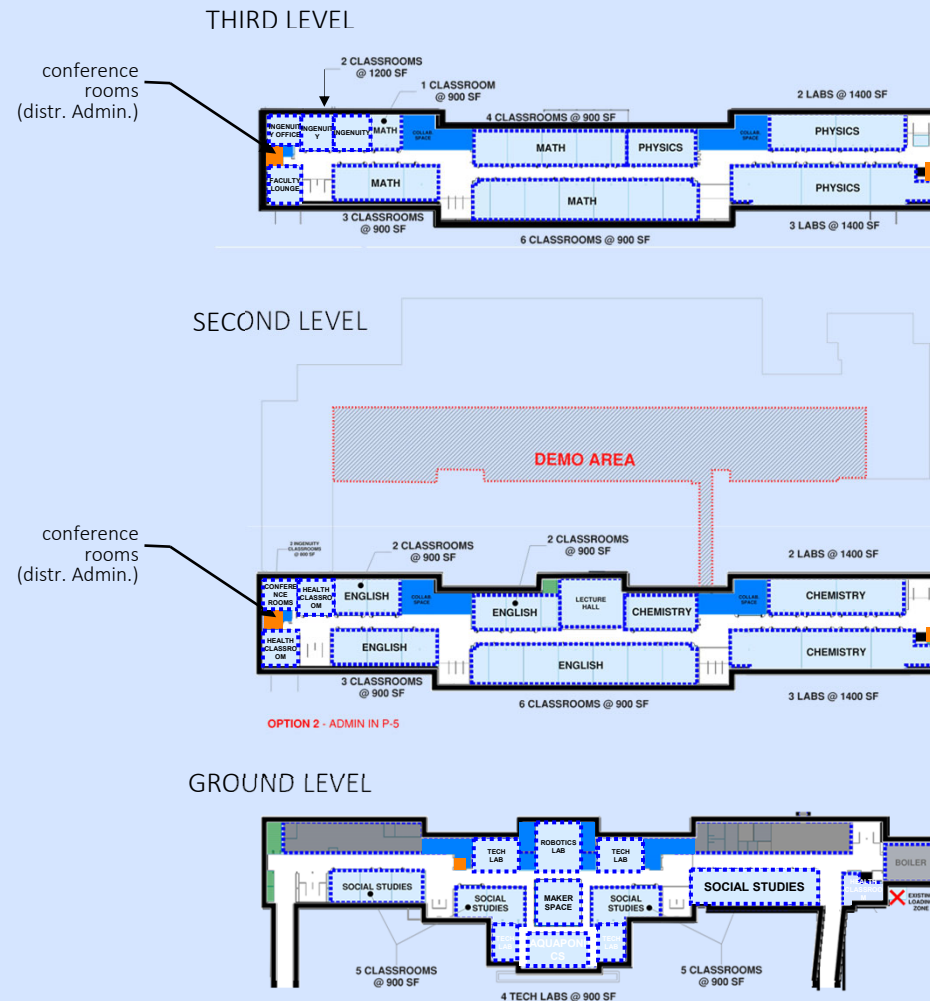
1. Administration in P-5 Academic wing, closest to classrooms
2. Make use of existing entry to P-5 as secure vestibule
3. Drop-off / Pick-up area inlet



1. Administration in P-5 Academic wing, closest to classrooms
2. Make use of existing entry to P-5 as secure vestibule
3. Drop-off / Pick-up area inlet

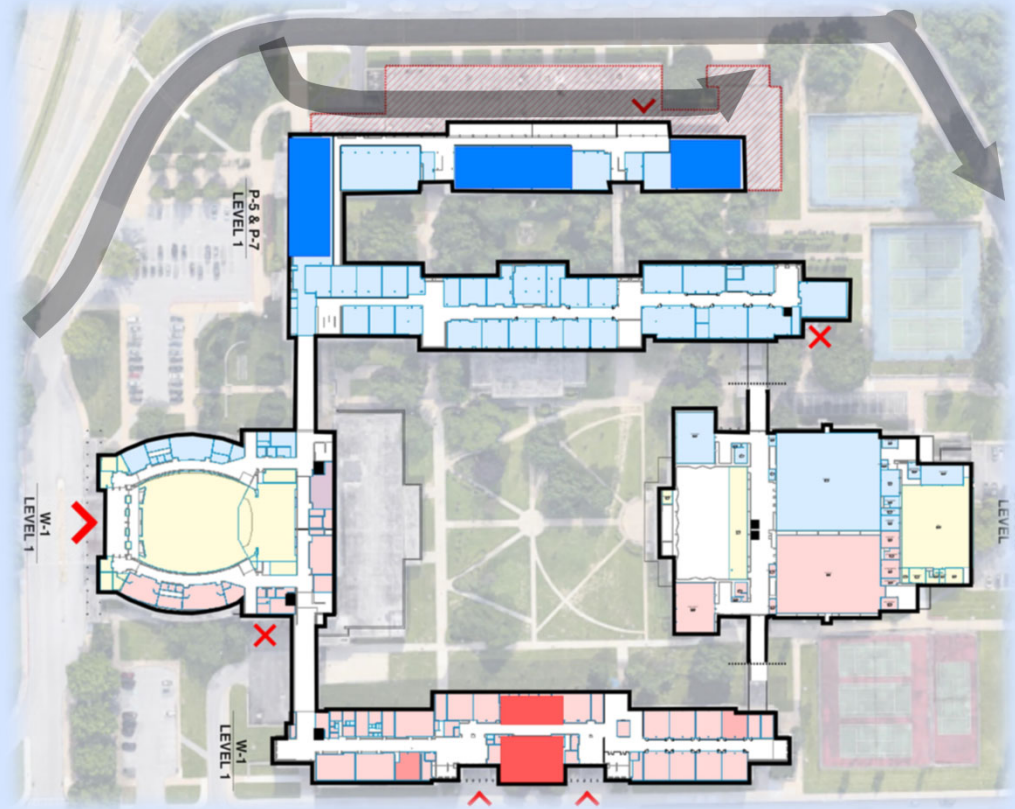


1. Administration in P-5  
Academic wing, closest to classrooms
2. Make use of existing entry to P-5 as secure vestibule
3. Tech Spaces grouped in Ground Level with connection to Main Courtyard





1. Remove 1st story portion of P-7 building
  - **Need for new elevator in P-7 building**
2. Provide New Drop-Off / Pick-Up
3. Large / anchor programs situated near entries
  - **Media Room / Library**
  - **Administration + Support**
  - **PLTW Spaces**

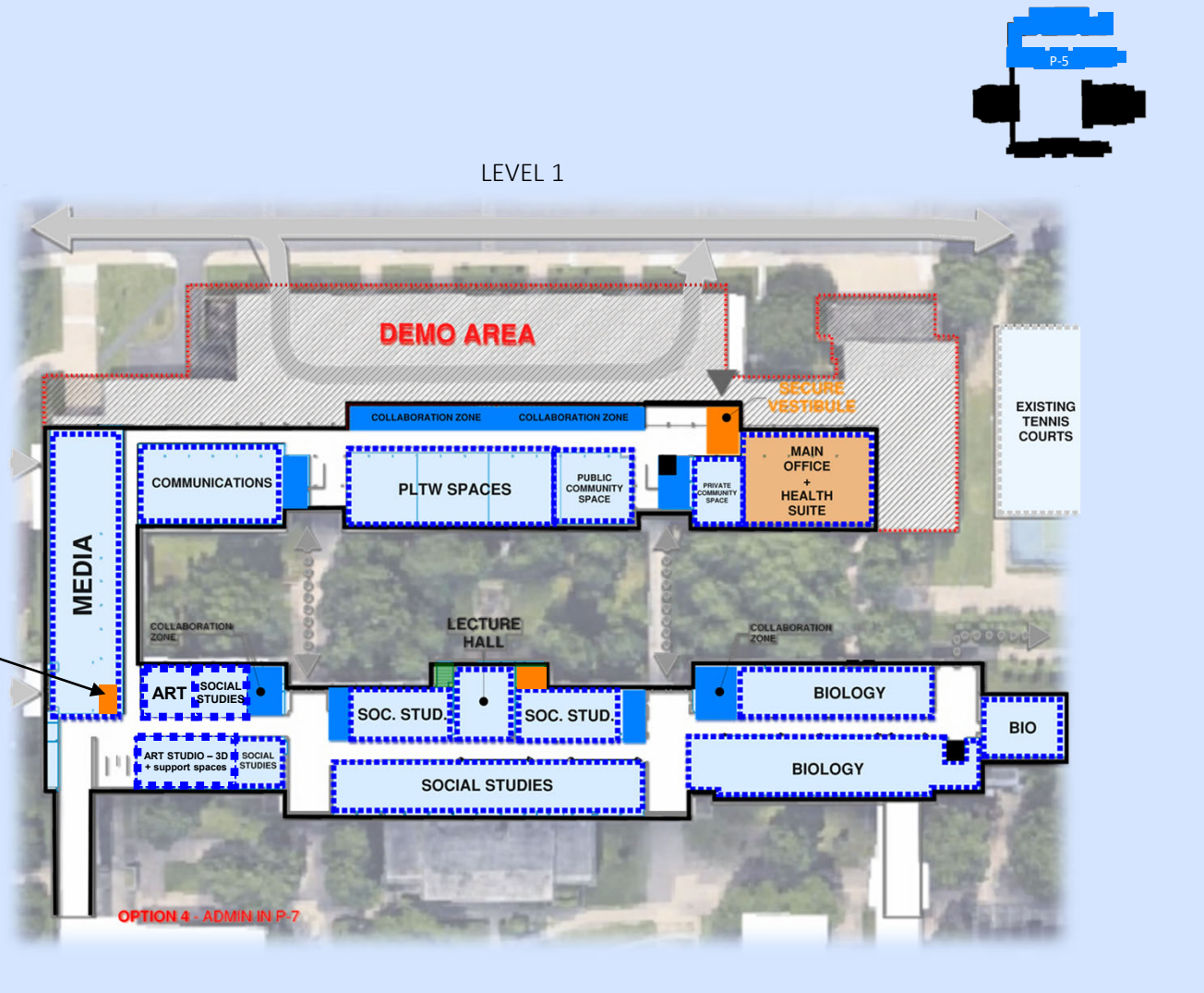


1. Administration in P-7 building, closest to parking lot
2. Drop-off / Pick-up area inlet



1. Administration in P-7 building, closest to parking lot
2. Drop-off / Pick-up area inlet
3. Large / anchor programs situated near entries
  - **Media Room / Library**
  - **Administration + Support**
  - **PLTW Spaces**

conference rooms  
(distr. Admin.)

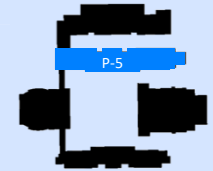
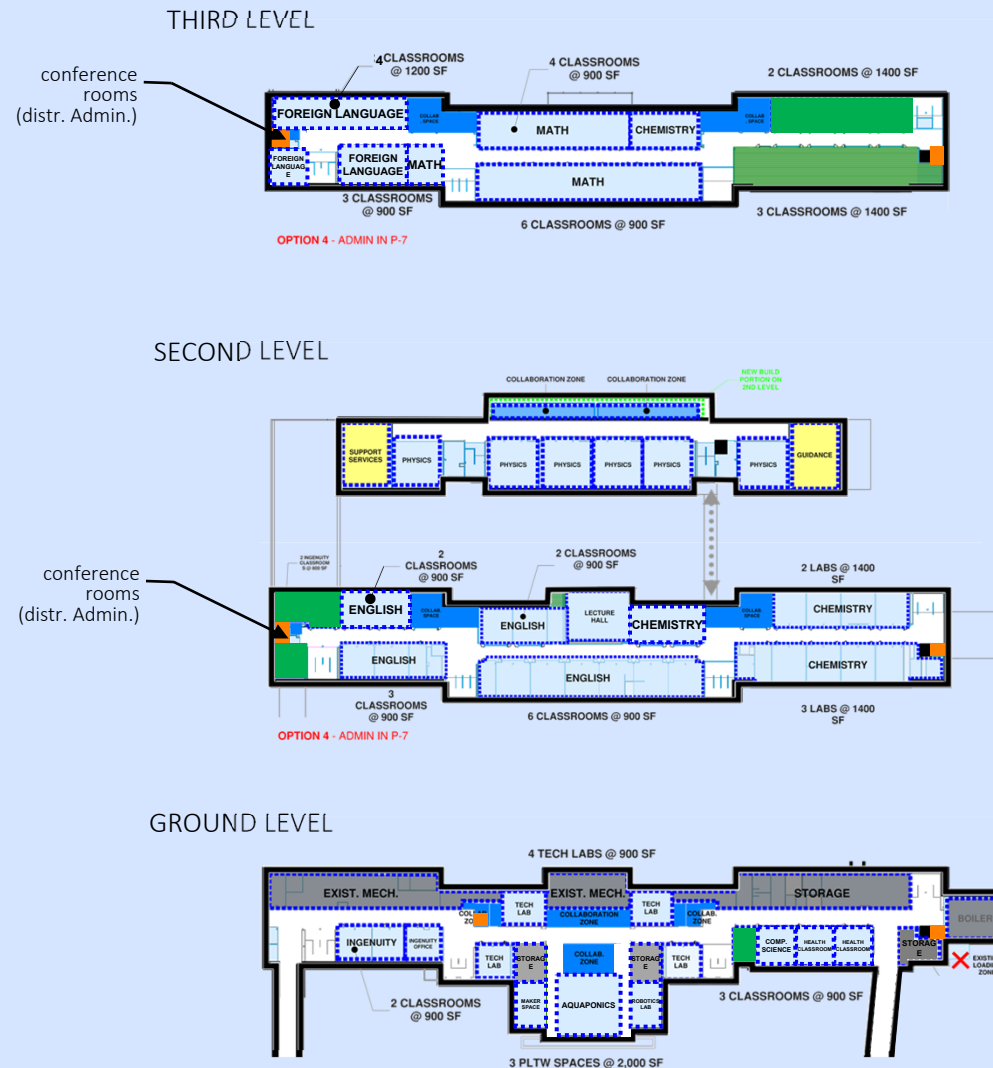


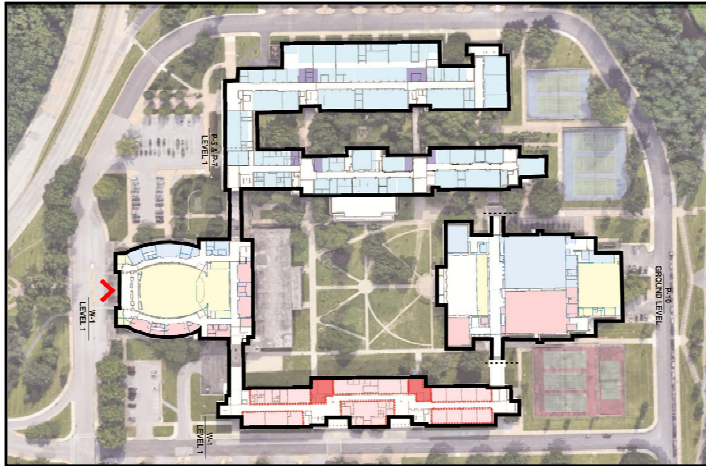


# Planning

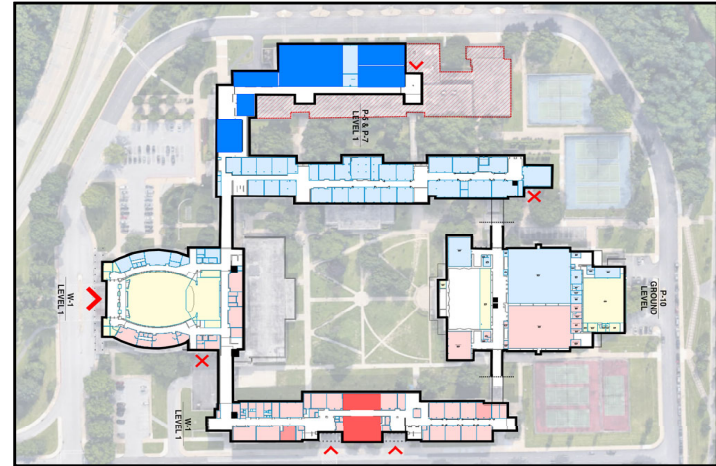
## Option 4 – Keep 2-story Portion of P-7 Building

1. Sciences focused in P-7 building mostly
2. Lots of unprogrammed space
3. Health classrooms in closest proximity to Physical Education Dept. and Health Suite
4. Tech Spaces grouped in Ground Level with connection to Main Courtyard

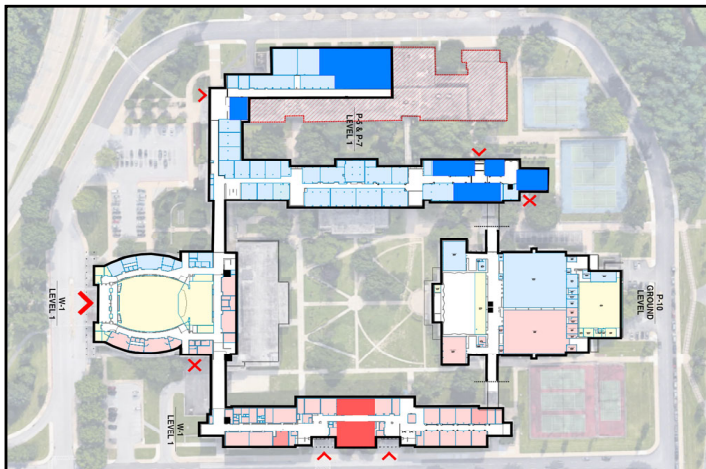




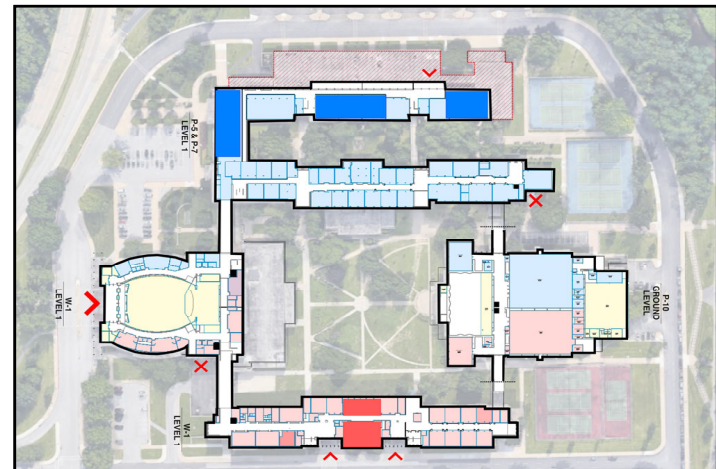
Option 1



Option 3.1



Option 3.2

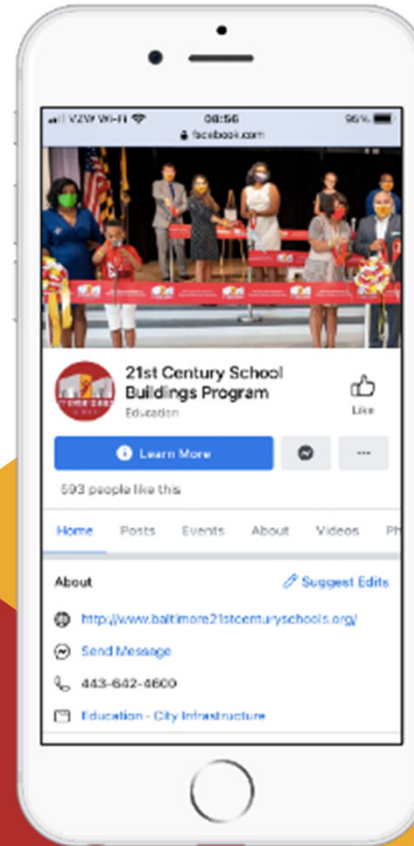
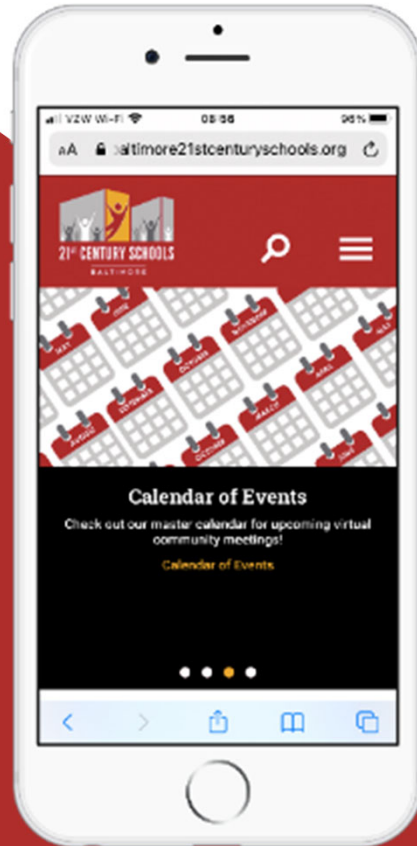


Option 4

## Overview

## Community Meeting Info

[www.baltimore21stcenturyschools.org](http://www.baltimore21stcenturyschools.org) @21stCenturySchoolBuildingProgram





# Questions?

## Project Contacts

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21stCSBaltimore



21stCenturySchoolBuildingsProgram



21stCSBaltimore



Thank You.

This presentation was brought to you by the 21<sup>st</sup> Century School Buildings Program.



[www.baltimore21stcenturyschools.org](http://www.baltimore21stcenturyschools.org)

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City of Baltimore – Office of Children and Family Success

**Robert Gorrell**

Executive Director, Public School Construction Program

State of Maryland

