

GREENE COUNTY PUBLIC SCHOOLS ADDITIONS + RENOVATIONS

SCHOOL BOARD UPDATE | Schematic Design

10 May 2017



VMDO



Greene County
Public Schools

PROCESS

FEB	09	Owner Kick-off	
FEB	23	Principals Review	
FEB	27	Traffic, Circulation + Safety	Transportation Dept.
MAR	13	MS User Workshop 01	Program, Innovation, + Visioning
MAR	27	HS User Workshop 01	Program, Innovation, + Visioning
MAR	29	Site Masterplan Update	Administration + Maintenance
MAY	04	Administrative Review	
MAY	10	School Board Update	Schematic Designs
MAY	30	MS + HS Teachers	
JUN	14	School Board Update	Cost Estimates

REVIEW

LONG-RANGE STUDY CONCLUSIONS

PHASE 1 PROJECTS

SHORT (HIGH PRIORITY)	H1A HS Dining/Kitchen/Media	RANGE: \$16.7M - \$19.03M
	S1 Monroe Drive Reconfig	
	S2 WMHS + NG Parking	
	S4 Ruckersville Parking/Circ	
	M1A MS Dining/Kitchen/Media	

- MID**
- E1** New Elementary School
 - H6** HS Auxiliary Gym
 - G1A** Central Operations Facility
 - *S3** Interior Landscaping & Walk Paths (Stanardsville)

- LONG**
- H4** AG/Shop Relocation
 - H8** HS Classroom Addition
 - H10** Tech Center Addition/Renovation
 - M3** MS Classroom Addition / Quad
 - E3** Combined NGES

SITE PROJECTS

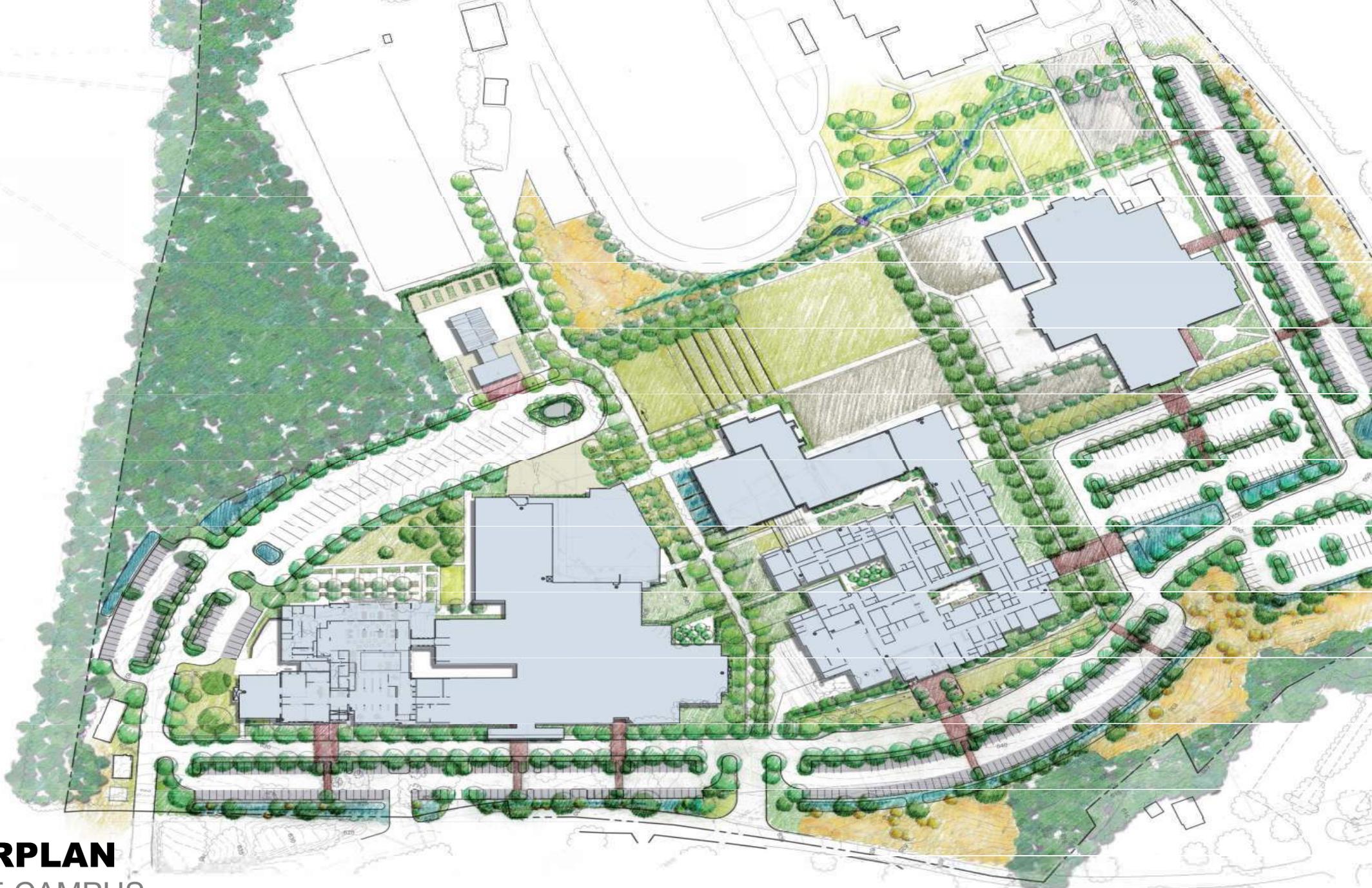
LONG-RANGE SITE MASTERPLAN

S1 RE-CONFIGURATION OF MONROE DR.

S2 NEW PARKING – STANARDSVILLE

S4 NEW PARKING - RUCKERSVILLE

waterstreet studio



SITE MASTERPLAN
STANARDSVILLE CAMPUS



MEADOW GRASSES (rural character)

OUTDOOR SEATING

AMPITHEATRE / LAWN TERRACES

ENVIRONMENTAL / AGRICULTURAL EDUCATION

ATHLETIC EDGES

CULINARY GARDENS

OUTDOOR CLASSROOMS / TERRACES

MEADOW GRASSES (rural character)



SITE MASTERPLAN

STANARDSVILLE CAMPUS

SITE GOALS

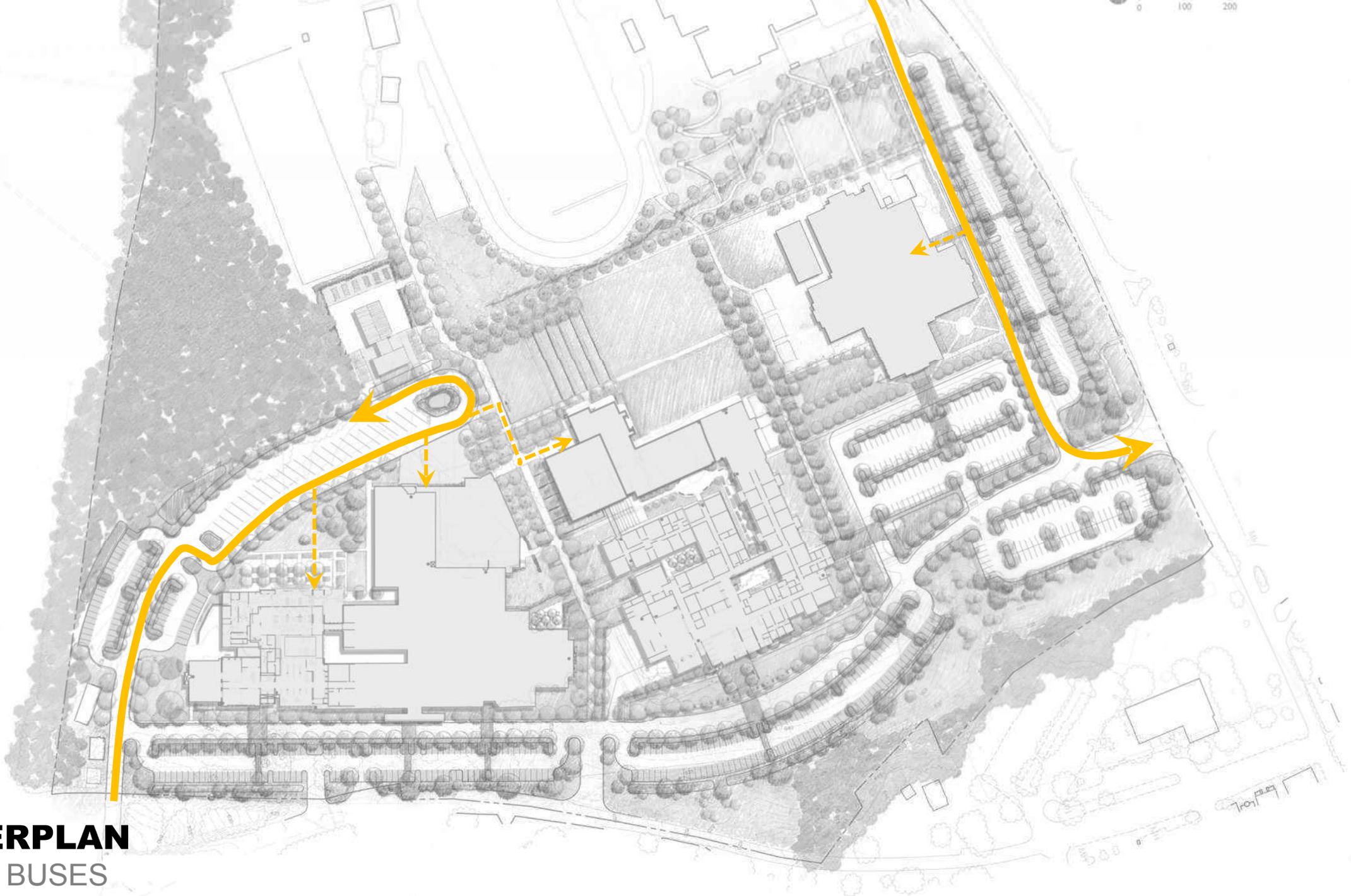
SAFETY + CIRCULATION

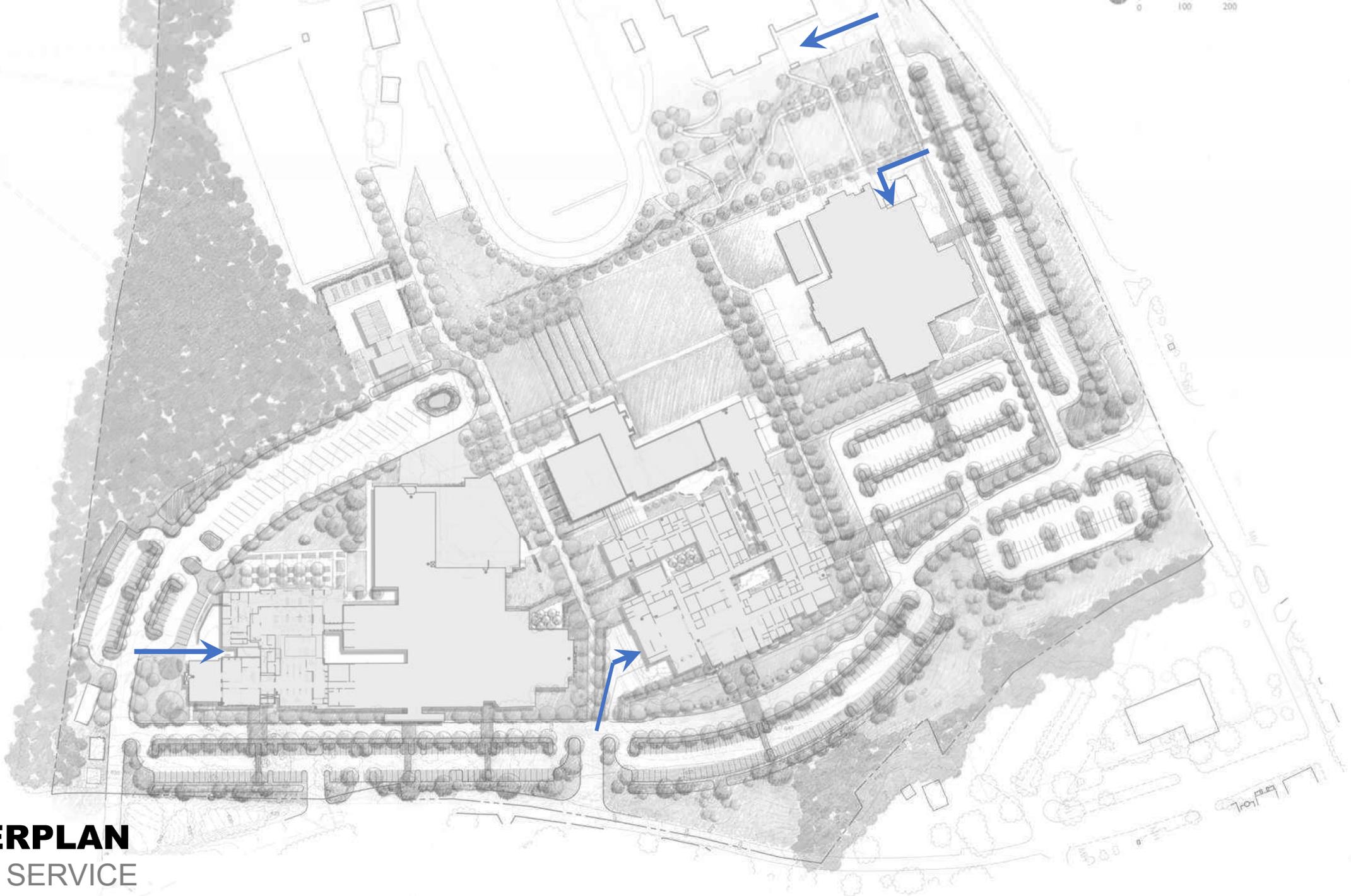
- **Clarify + separate** vehicular flows (car, bus, service) + **better define** drive aisles + parking areas; clearly **define pedestrian crossings**
- Remove bus + service vehicles from the fronts of schools – to **enhance identity and pedestrian safety + access.**

IDENTITY + CONNECTION

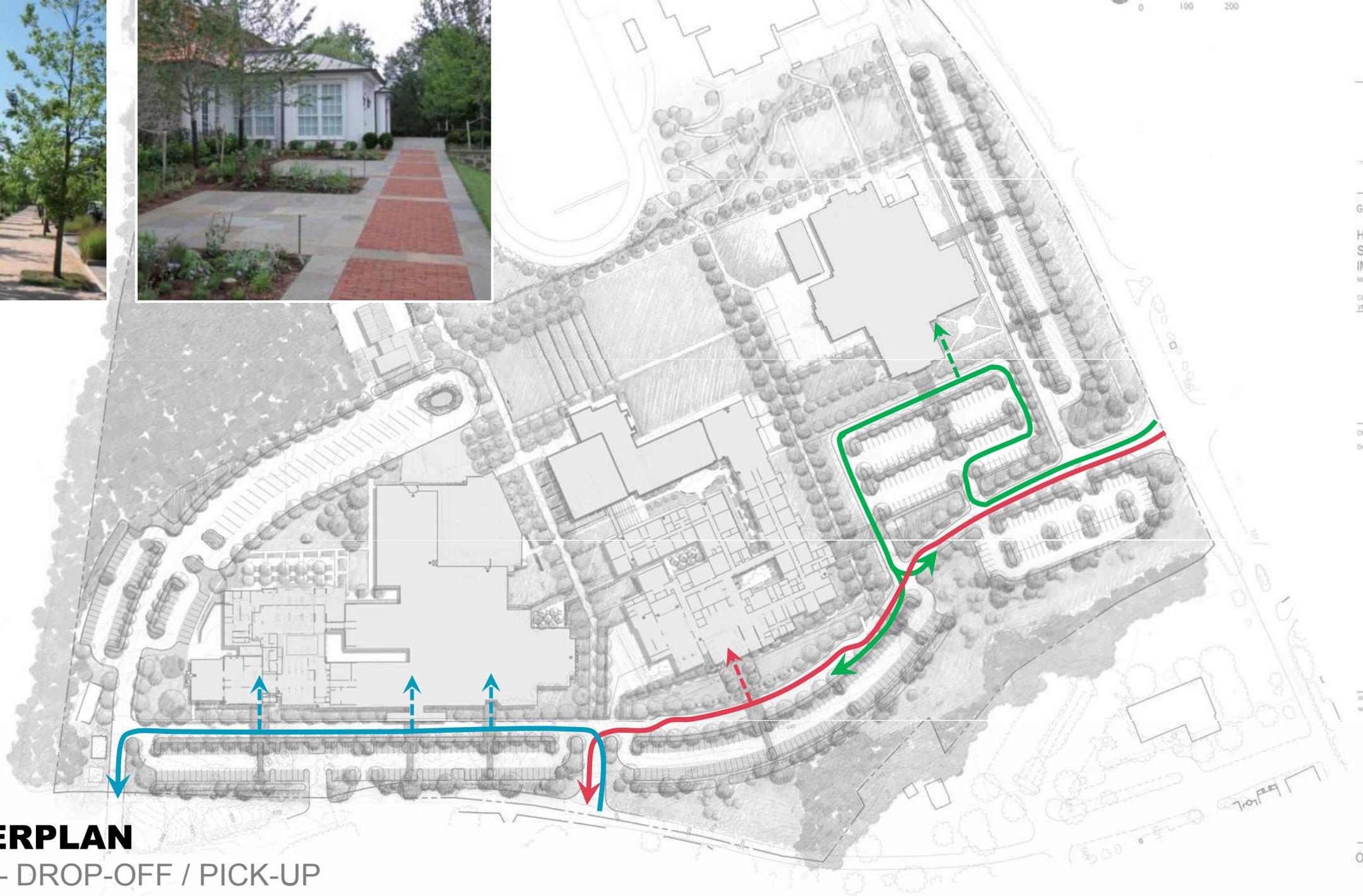
- **School + Campus Identity** can be improved through site moves
- Make the Stanardsville Campus **more green**, in the character of Greene County; create a **cohesive, integrated campus** feel
- Increase opportunities to **connect to the campus** through outdoor learning, recreation + athletic space
- Always strive for **integrated solutions** (stormwater, landscape, learning)

SITE MASTERPLAN
CIRCULATION - BUSES





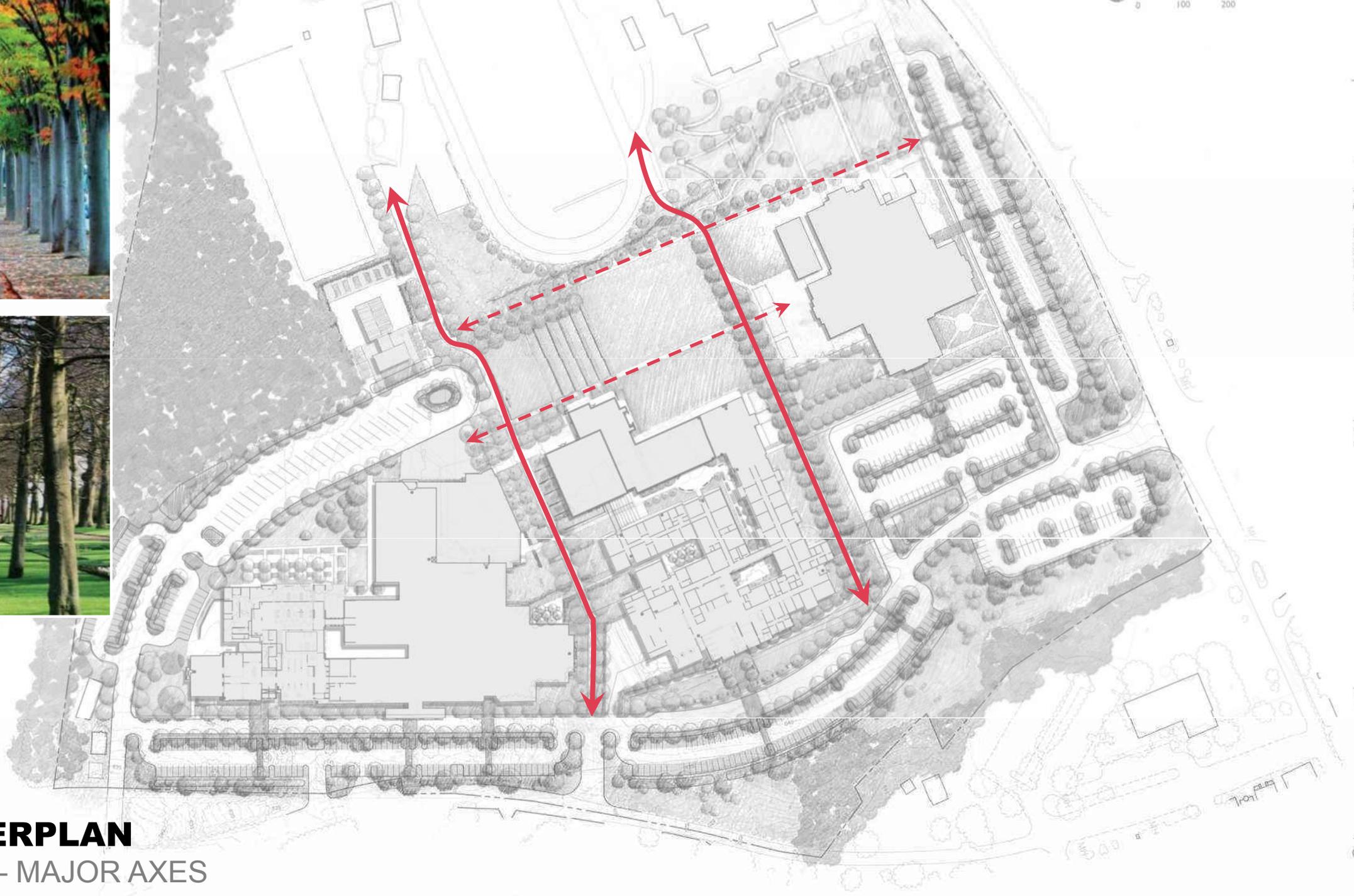
SITE MASTERPLAN
CIRCULATION - SERVICE



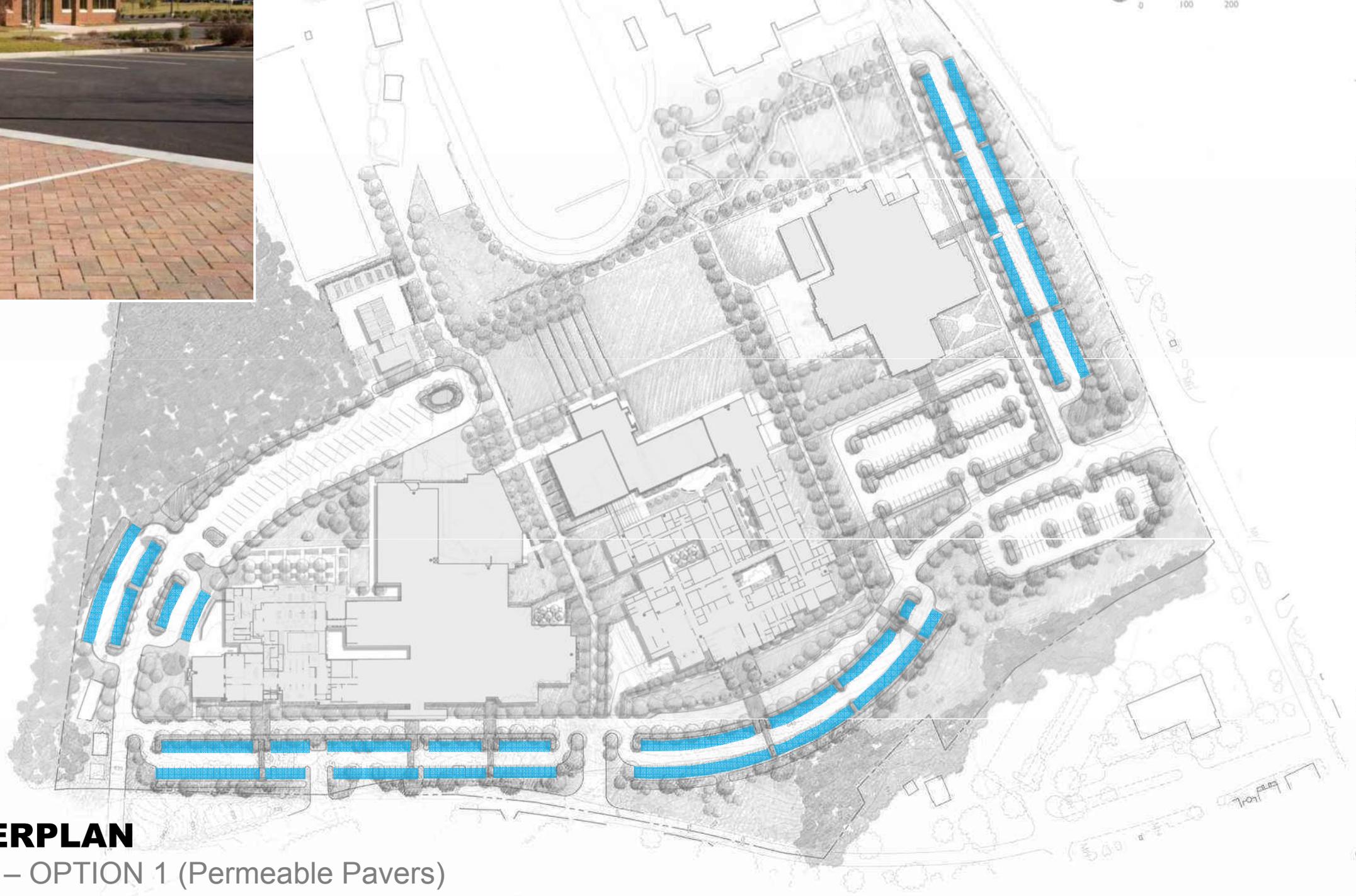
SITE MASTERPLAN
CIRCULATION – DROP-OFF / PICK-UP



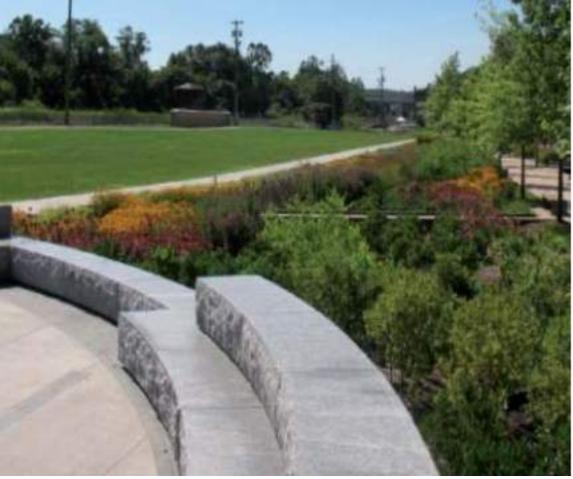
SITE MASTERPLAN
CIRCULATION – PARKING TO BUILDING



SITE MASTERPLAN
CIRCULATION – MAJOR AXES



SITE MASTERPLAN
STORMWATER – OPTION 1 (Permeable Pavers)



SITE MASTERPLAN

STORMWATER – OPTION 2 (Bio-Retention)



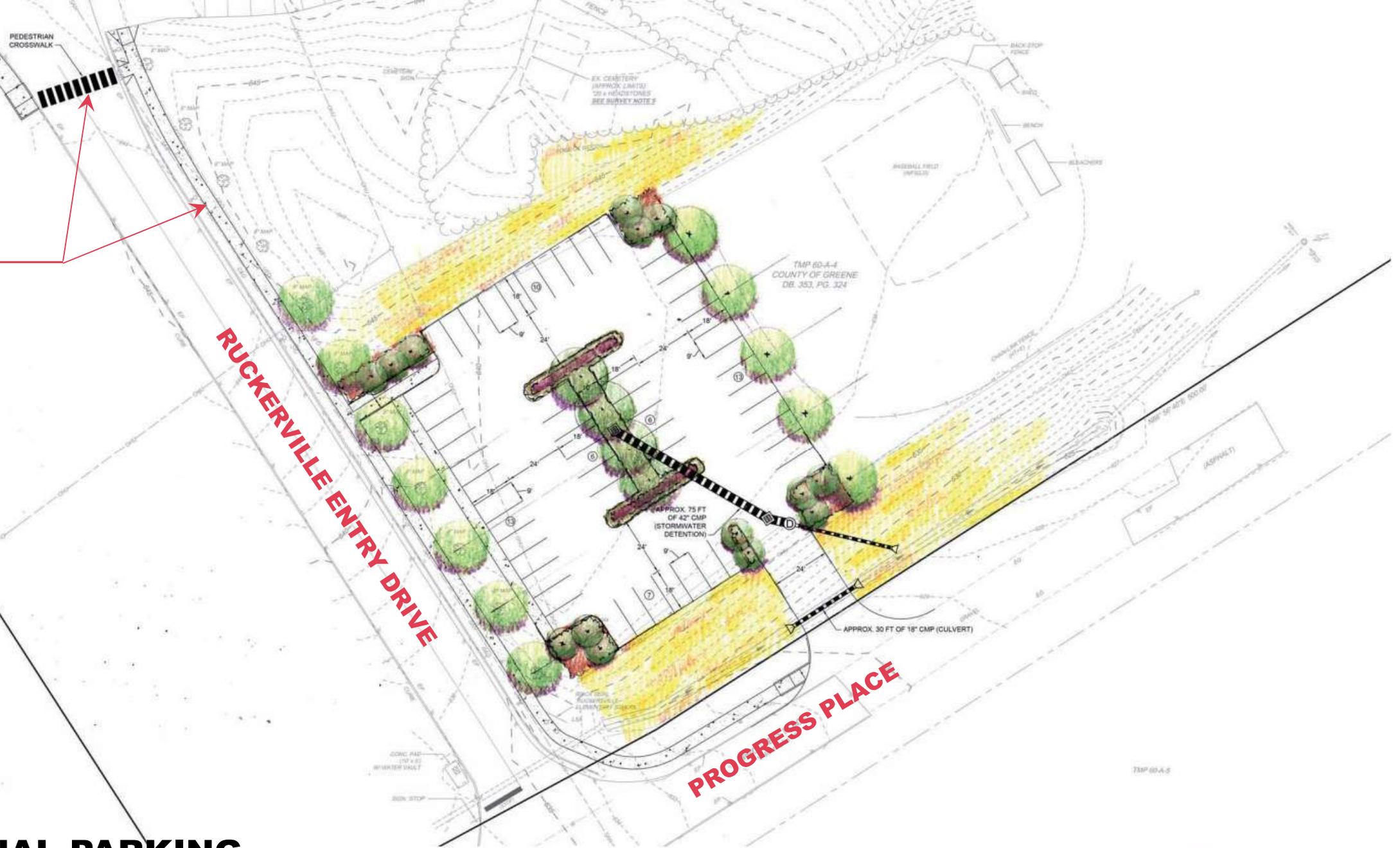
SITE MASTERPLAN
PHASE 1 SCOPE



SITE MASTERPLAN

RUCKERSVILLE

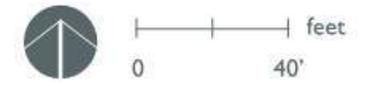
NEW SIDEWALK
+ CROSSWALK



RUCKERVILLE ENTRY DRIVE

PROGRESS PLACE

ADDITIONAL PARKING
RUCKERSVILLE



PARKING ANALYSIS

STANARDSVILLE CAMPUS

Existing **579**

Proposed **621**

RUCKERSVILLE CAMPUS

Existing **105**

Proposed **160**

* All PROPOSED numbers account for total parking after completion of Phase 1 work.

** Stanardsville Campus totals (existing + proposed) do NOT count (70) spaces in County Lot (NE), where some buses currently park.

TRAFFIC STUDY

EXISTING CONDITIONS SUMMARY
IMPACT OF PROPOSED CHANGES

Existing Conditions Summary

Figure 2 Study Intersections

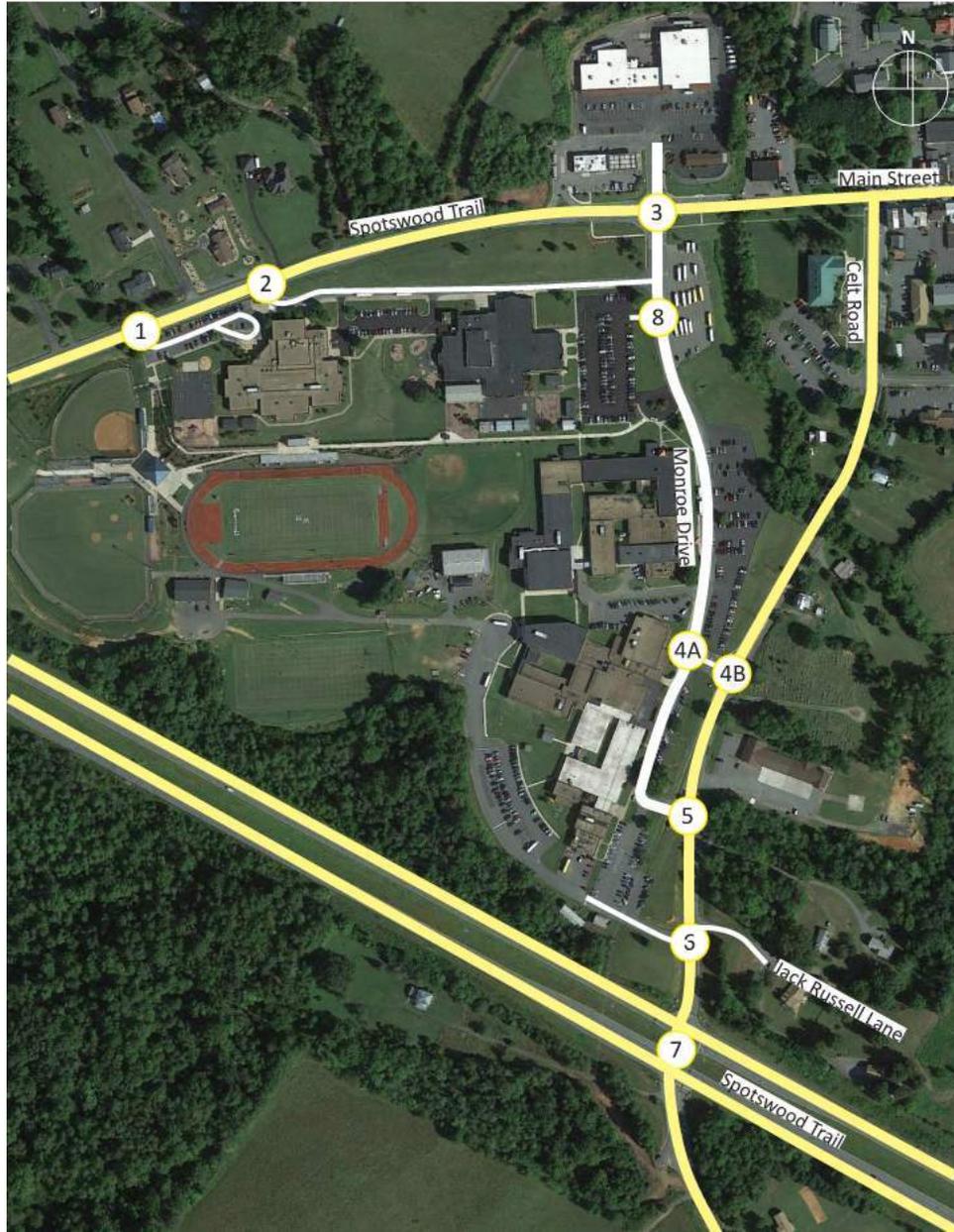


Figure 3 Existing Traffic Volumes (Combined)



Transportation Planning

- Providing bus zones where only bus traffic is allowed
- Creating drop-off / pick-up lanes separate from general travel lanes
- Placing the access roads outside of the parking lots which provide for an ability to access the parking lot without crossing a road.
- Providing sidewalks along parking lots to allow students and others to not have to walk within parking lots.
- Separating faculty and employee parking from student parking
- Eliminating conflicts between ingress and egress traffic
- Releasing students who are loading onto buses in advance of the general release of all students. This allows the buses to load and leave the premises prior to the walker and rider release.
- Staggering school schedules for co-located schools

Transportation Analysis

CONCEPT BENEFITS

- One-way travel will help to **organize traffic** south of the primary school, and **reduces traffic conflicts** at the primary school access points
- The access to parking east of Monroe Drive is more organized and orderly, thus **improving driver expectation** for when conflicts might occur.
- The strong pedestrian crossings should help to create a more **orderly and safe pedestrian** environment.

Transportation Analysis

EXTERNAL ROAD ACCESS – MAIN ST. IMPACTS

- More ingress traffic is concentrated at the Main Street/Monroe Drive entrance.
 - The left turn volume doubles to nearly 400 vehicles in the AM hour.
 - Left turns from Monroe will be more difficult, thus additional traffic control will be required.
 - The ideal intersection would be a traffic signal, or possibly a roundabout.
- Main Street at Celt Road – Traffic formerly using the Celt Rd entrance to go north on Monroe will now arrive as a left turn at Celt/Main.
 - The resulting delays and queuing will necessitate consideration of all-way STOP control (three way STOP) at the intersection.

Transportation Analysis

EXTERNAL ROAD ACCESS – CELT RD IMPACTS

- As the northerly entrance is moved further north, the left turn lane will be lengthened.
- The new access to the parking lot in front of the high school should either be right in/out only, or if left turn access is allowed then the turn lane should not be continuous with the turn lane to the entrance noted above (next entrance for access to Monroe Drive)
- The egress traffic at the southerly access point will increase substantially, as (1) former exit is proposed to be removed. As a result, some of the former southbound queue (on Celt) will be shifted to the southerly entrance (near Jack Russell Ln).
 - Police control will still be needed in the future for major events and school loading/un-loading hours.
- It is advisable to construct a 2nd southbound approach lane at Celt/33-Bypass resulting in an exclusive left turn lane and a shared left/through/right turn. This will help to mitigate the queuing that will occur at that intersection with the additional future traffic.

Transportation Analysis

Increase in left turns will result in additional northbound left turn delay. Consider traffic signalization or roundabout (if allowed by VDOT)

A substantial amount of traffic that previously entered at this entrance to make a right on Monroe will shift up to Main Street. As a result a multi-way STOP (three way stop control) will be needed at Main/Celt. This could accompany the streetscaping project and resulting curb extensions.

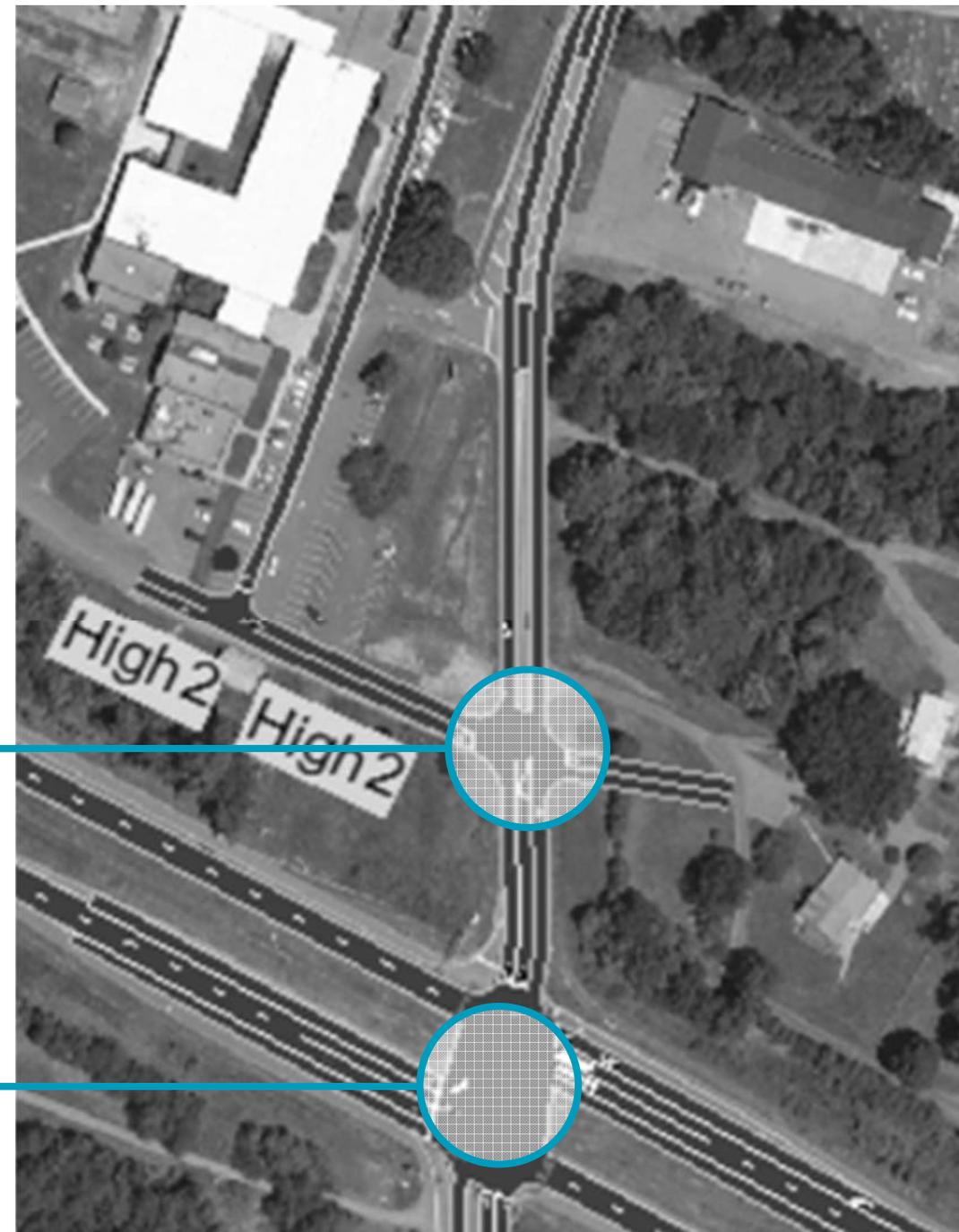
Two-way STOP control.



Transportation Analysis

More traffic will be leaving the site at this location. Police control will continue to be needed.

Adding a 2nd approach lane to Route 33 will help the traffic leaving campus clear the intersection. This will help to mitigate the queue as overall more traffic will use this intersection.



BUILDING PROJECTS

H1A HS ADDITION/RENOVATION [DINING, KITCHEN, MEDIA, LEARNING]

M1A MS ADDITION/RENOVATION [DINING, KITCHEN, MEDIA, ADMIN]

EARLY DESIGN CONCEPTS

Schematic Design

Outline Priorities

Identify Resources | Contacts | Collect data

Highlight Variables | Negotiables

Confirm Facts

Reflect on Space Design Opportunities:

Transparency | Connection

Sustainability | Enjoyment

Flexibility

Learner-centered Spaces

Mobility | Interconnectivity

Multi-age | Multi-use

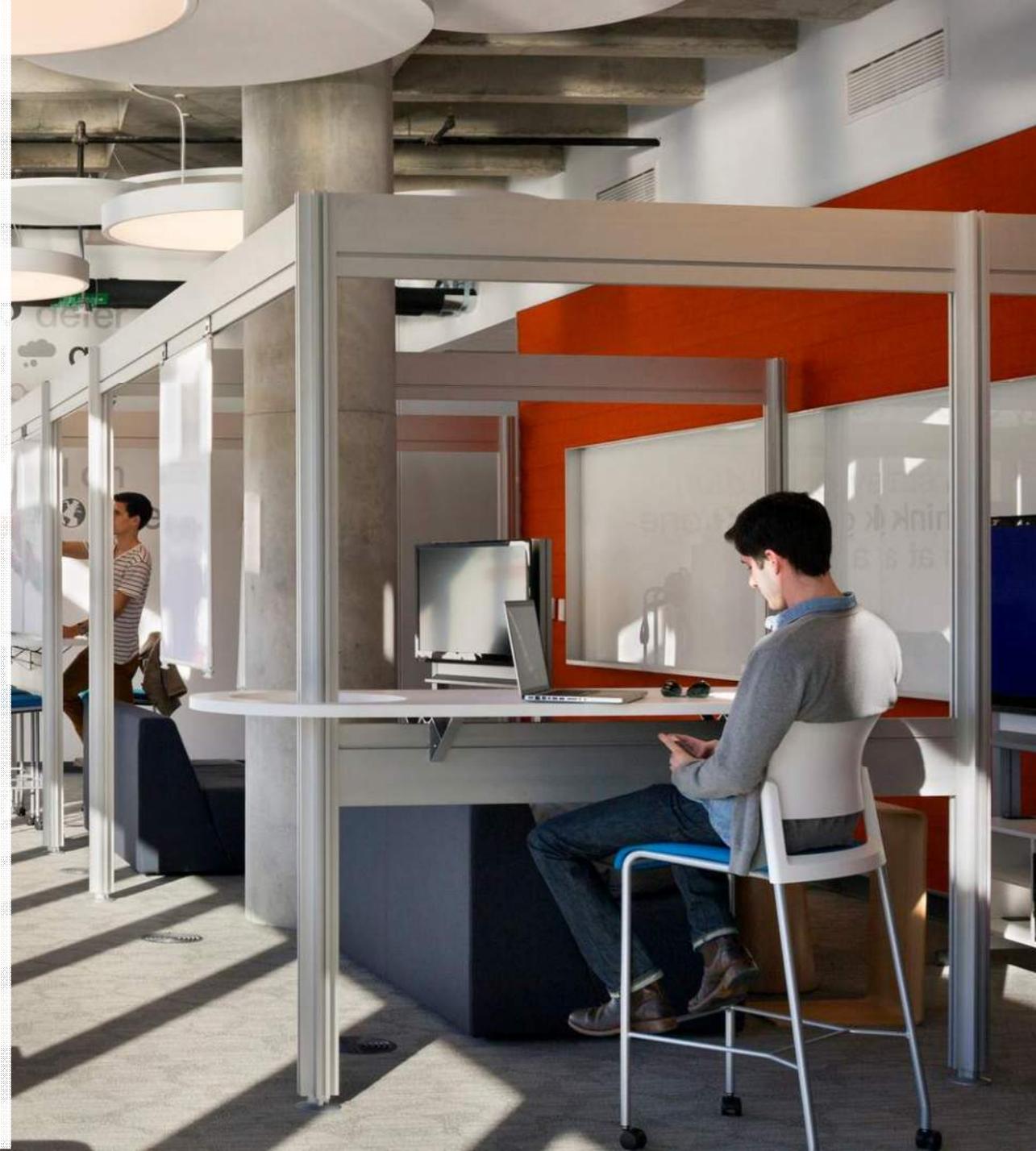
Learner-crafted environments

Learning | Making Throughout

Choice and Comfort Options

Inside | Outside Learning Connectivity

Space Design (not Classroom Design)



PROGRAM + USES

SPACES FOR TODAY

SPACES FOR TOMORROW



Learning | Spaces:

Space Design Considerations:

Resources | student, teacher & spaces
Learner-centered design vs presenter
Adaptable + Flexible for evolving pedagogies
Overlapping Use with technology rich and
Mix of density + energy | group + individual



Library | Media Center:

Space Design Considerations:

Balance of User Space + Collection Space
Role of the Librarian – Service Model
Complementary Functions
Technology as Feature or Function
Library as Social + Intellectual Crossroad



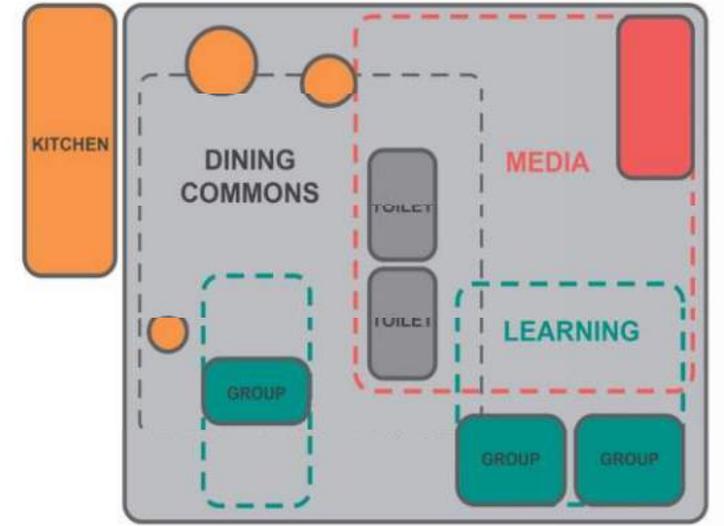
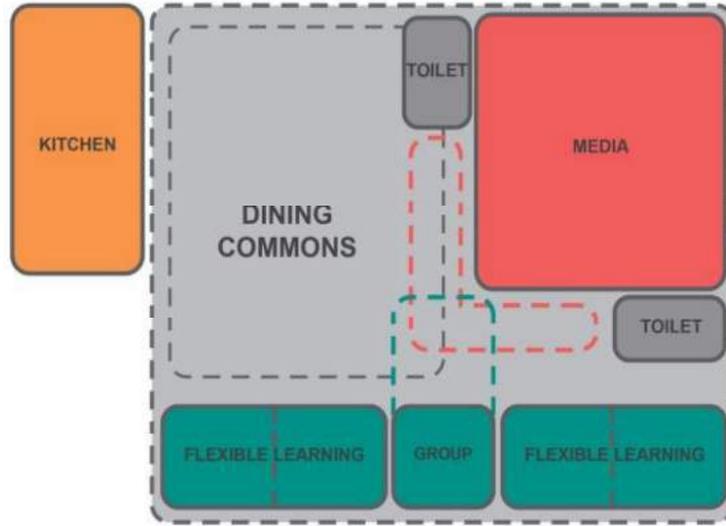
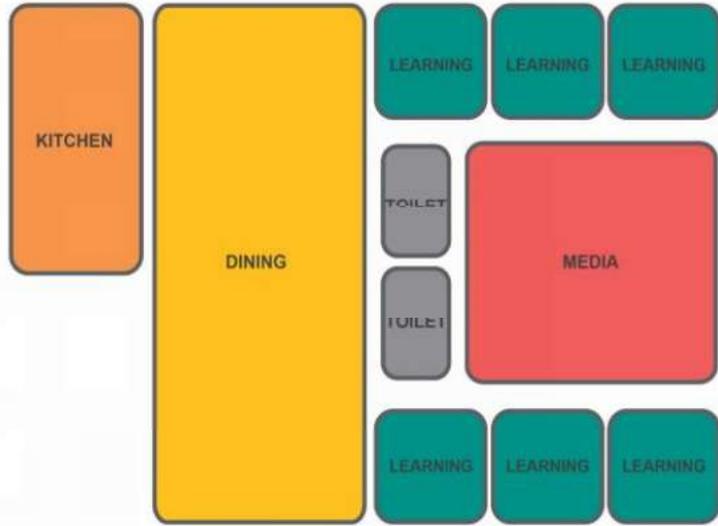
Cafeteria | Dining:

Space Design Considerations:

Number of Students/Dining Opportunities
Service Model – Platforms + Menu
Complementary Functions
Multi use as Feature or Function
Dining as Social + Intellectual Crossroad

DEFINITIONS OF SPACE + USE

SPATIAL CONTINUUM



**Traditional
Individual**

**Proximate
Shared / Linked**

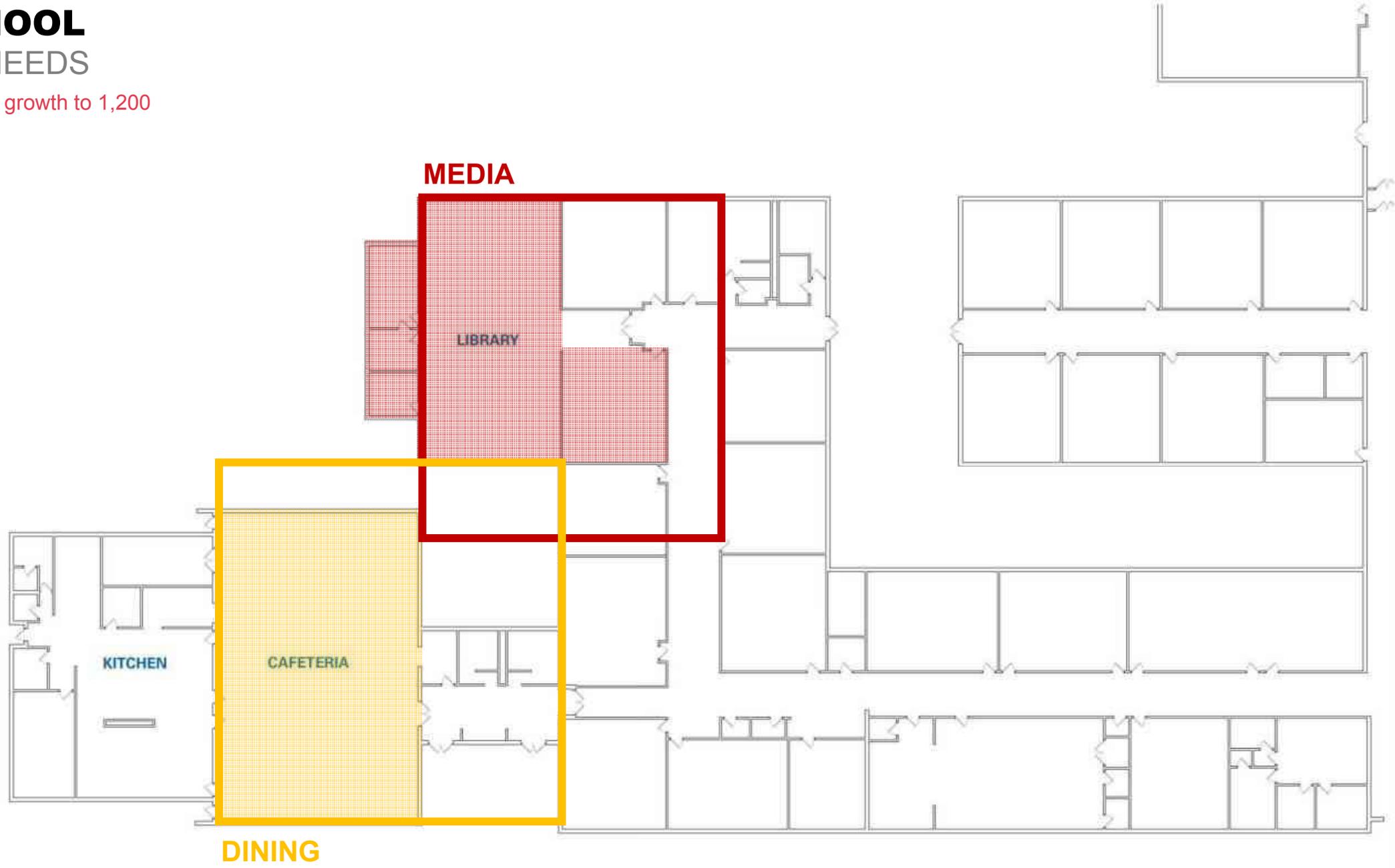
**Integrated
Multi-use**



HIGH SCHOOL

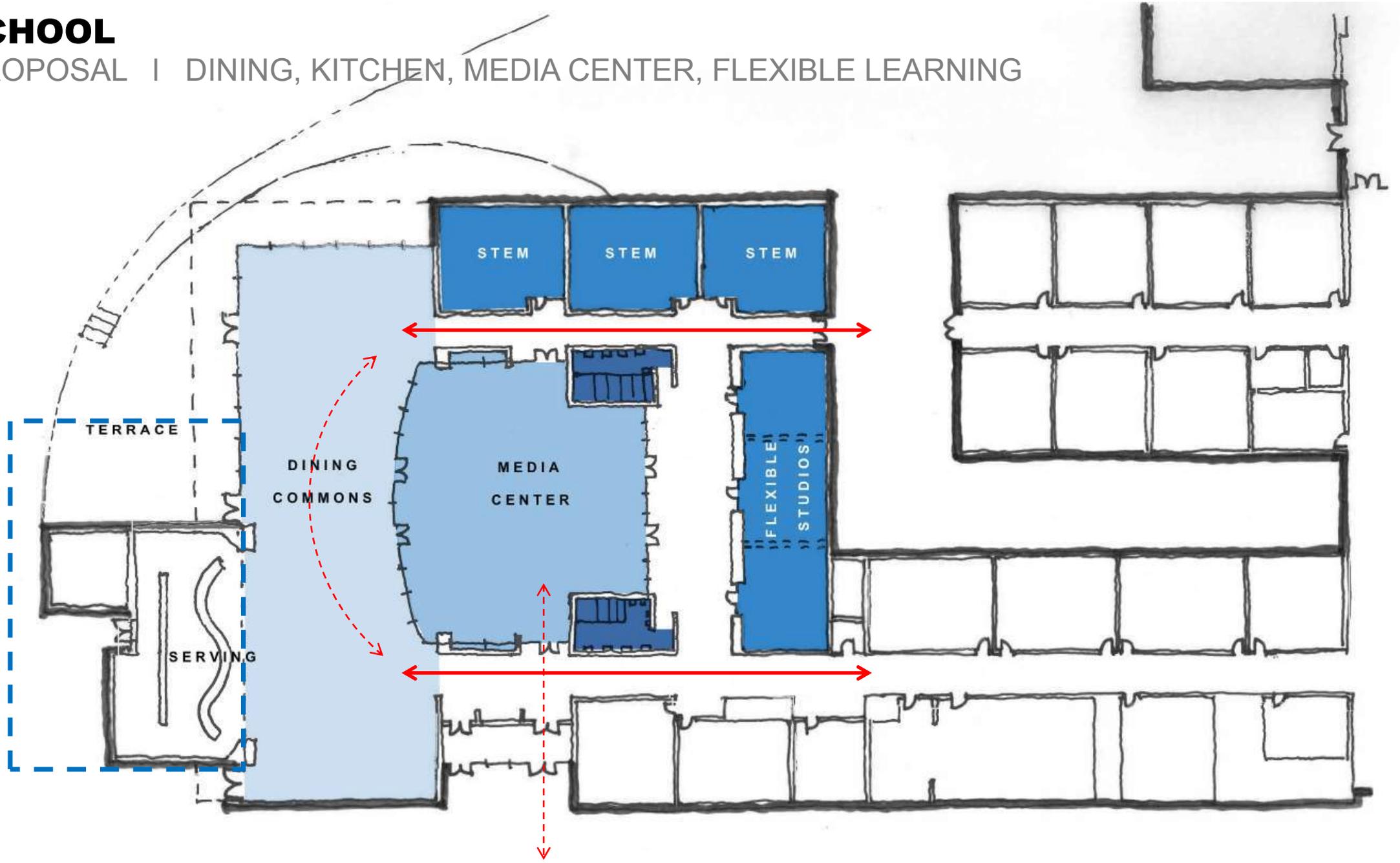
PROGRAM NEEDS

Assumes enrollment growth to 1,200

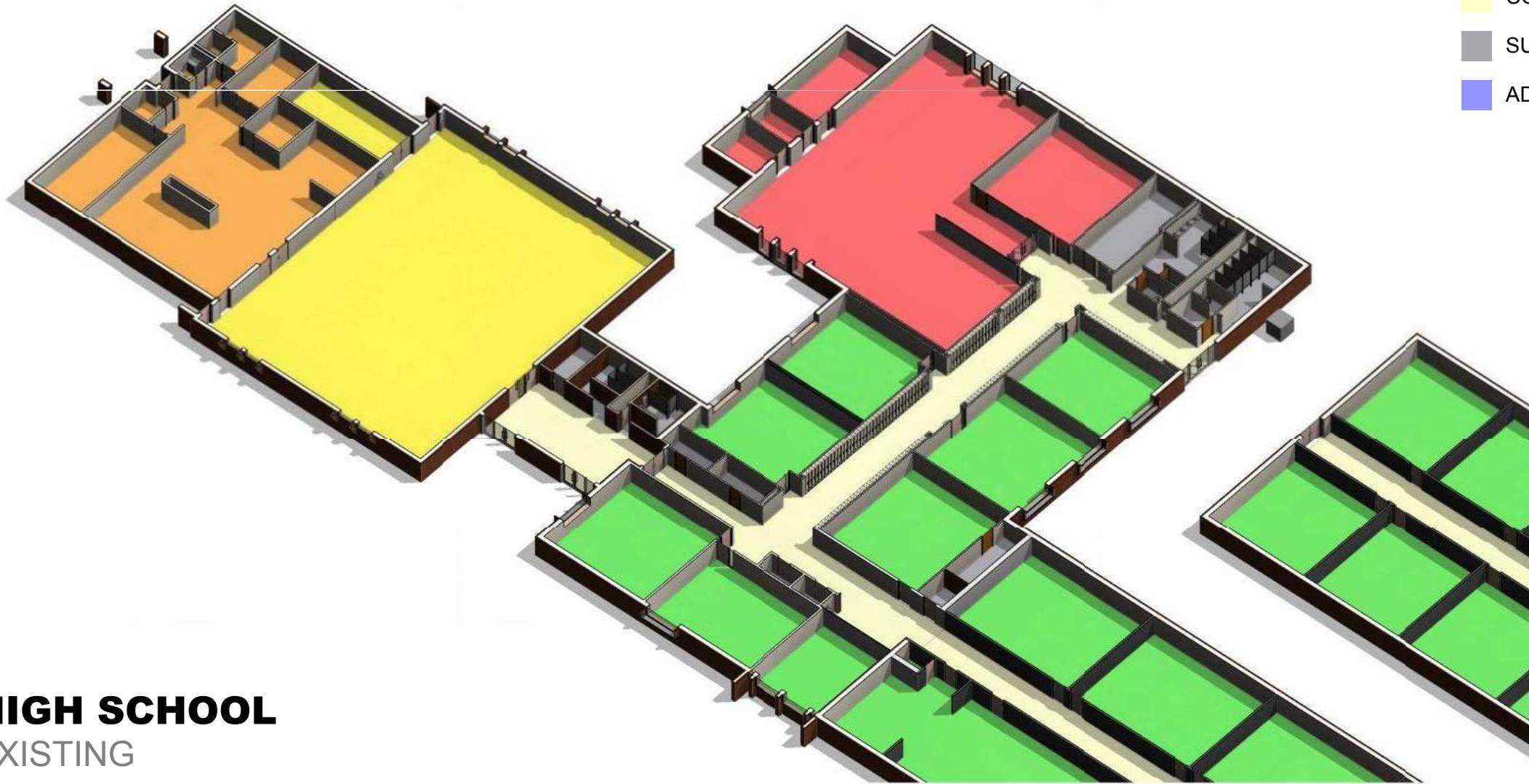


HIGH SCHOOL

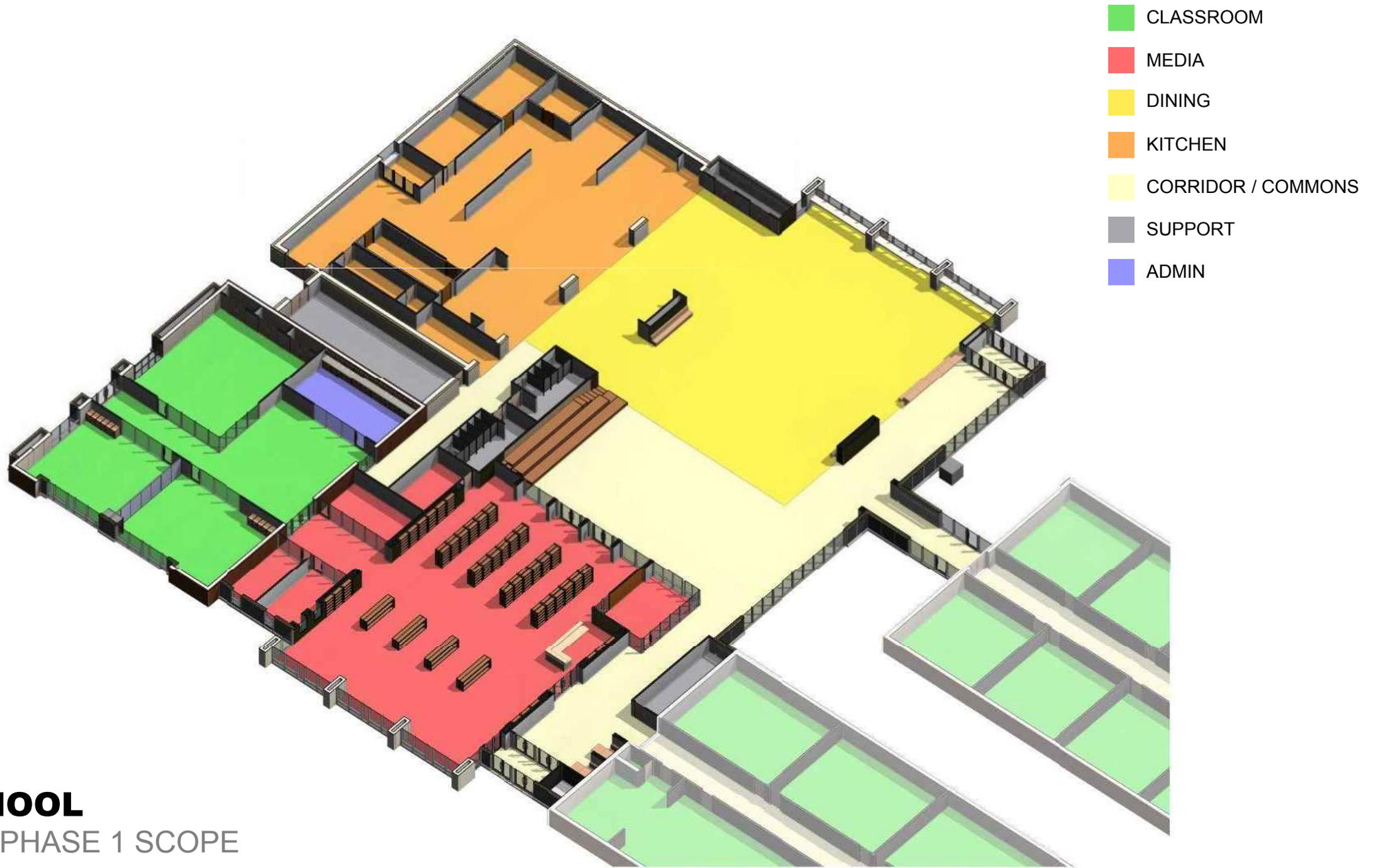
STUDY PROPOSAL | DINING, KITCHEN, MEDIA CENTER, FLEXIBLE LEARNING



- CLASSROOM
- MEDIA
- DINING
- KITCHEN
- CORRIDOR / COMMONS
- SUPPORT
- ADMIN



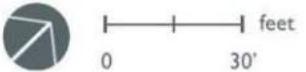
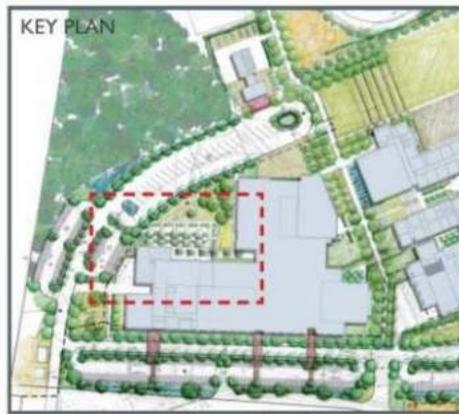
HIGH SCHOOL
EXISTING



HIGH SCHOOL
PROPOSED PHASE 1 SCOPE

LEGEND

- 1 - Adjusted parking layout
- 2 - Planting bed with groundcover and medium deciduous
- 3 - Small trees with groundcover
- 4 - Concrete sidewalk
- 5 - Picnic tables
- 6 - Seatwalls
- 7 - Raised planter bed for kitchen garden
- 8 - Crushed stone
- 9 - Groundcover
- 10 - Planting bed
- 11 - Lawn



HIGH SCHOOL
COURTYARDS + TERRACES

HIGH SCHOOL GOALS

- **Increase dining capacity** for current + future enrollment
- **Reduce lunchtime congestion** with multiple circulation + access routes
- New Dining Commons doubles as a **flexible space** for instruction + project work, as well as school + community events
- Expand and **update Media Center**
- Create some **flexible + adaptable classroom typologies** not currently available
- Project to start to create a **new identity** for high school (in concert with Monroe Drive moves)

LEGEND

- 1 - Adjusted parking layout
- 2 - Planting bed with groundcover and medium deciduous
- 3 - Small trees with groundcover
- 4 - Concrete sidewalk
- 5 - Plastic mulch
- 6 - Grass
- 7 - Raised planter bed for kitchen garden
- 8 - Crushed stone
- 9 - Groundcover
- 10 - Planting bed
- 11 - Lawn



DESIGN STRATEGIES

- Build core spaces for **50 year life** (and for anticipated growth)
- Use **durable, healthy materials** (for indoor occupant health/comfort)
- Introduce **natural light + connections to outdoors** wherever possible
- Establish building **identity through massing + materials**
- Establish + reinforce **campus-feel** through massing + materials
 - Similar materials at both schools, employed differently

LEGEND

- 1 - Adjusted parking layout
- 2 - Planting bed with groundcover and medium deciduous
- 3 - Small trees with groundcover
- 4 - Concrete sidewalk
- 5 - Plastic tables
- 6 - Benches
- 7 - Raised planter bed for kitchen garden
- 8 - Crushed stone
- 9 - Groundcover
- 10 - Planting bed
- 11 - Lawn





HIGH SCHOOL

EXISTING EAST ENTRY (CAFETERIA)



HIGH SCHOOL

PROPOSED EAST ENTRY (MEDIA CENTER + DINING)



HIGH SCHOOL

EXISTING KITCHEN + DINING (FROM SOUTHEAST)



HIGH SCHOOL

PROPOSED LEARNING COMMONS (FROM SOUTHEAST)



HIGH SCHOOL

EXISTING MEDIA CENTER + DINING (FROM SOUTHWEST)



HIGH SCHOOL

PROPOSED KITCHEN + DINING (FROM SOUTHWEST)



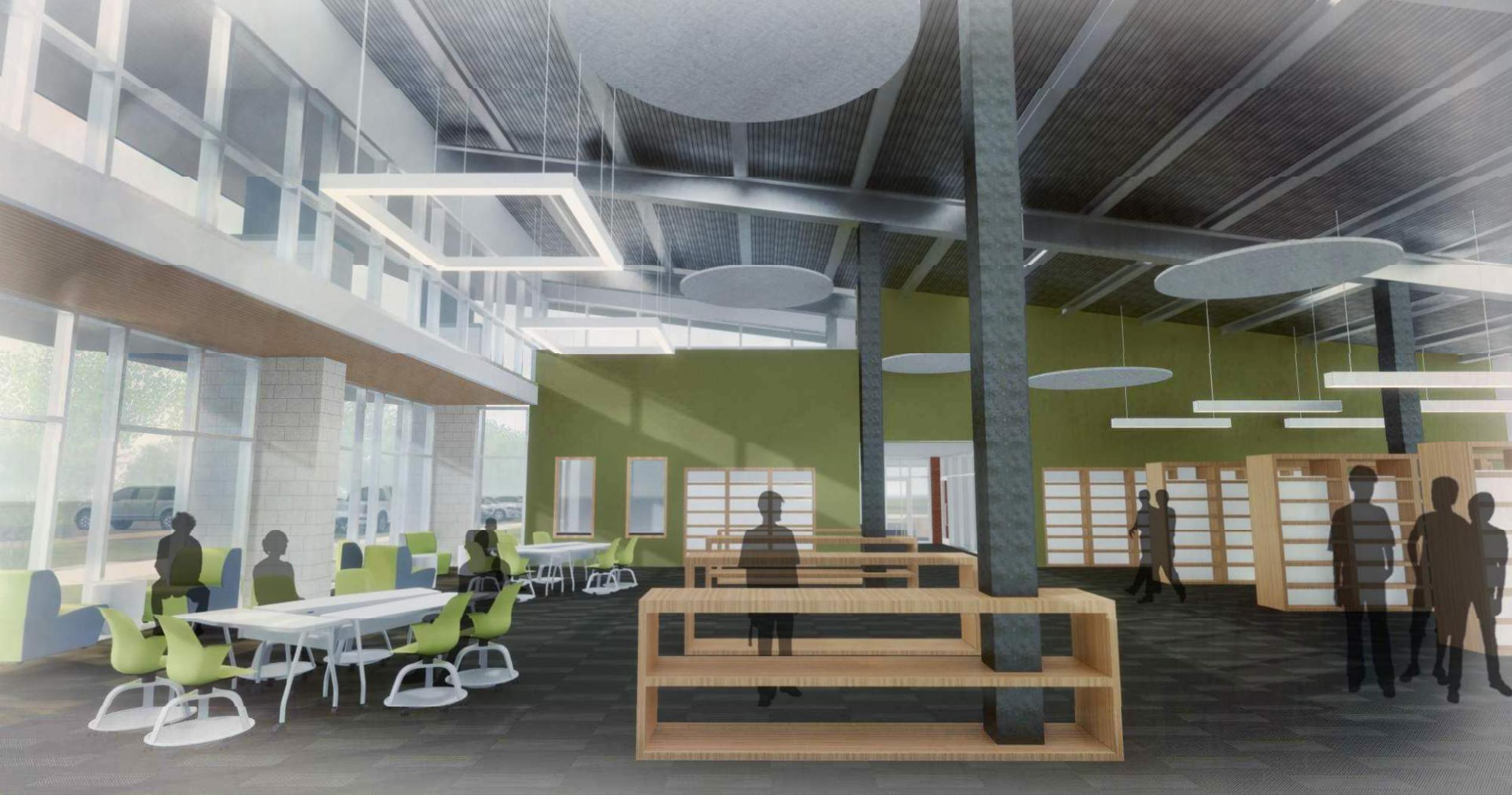
HIGH SCHOOL

EXISTING MEDIA CENTER (FROM NORTHWEST)



HIGH SCHOOL

PROPOSED DINING COMMONS + CONNECTION (FROM NORTHWEST)



HIGH SCHOOL

PROPOSED MEDIA CENTER



HIGH SCHOOL

PROPOSED DINING COMMONS



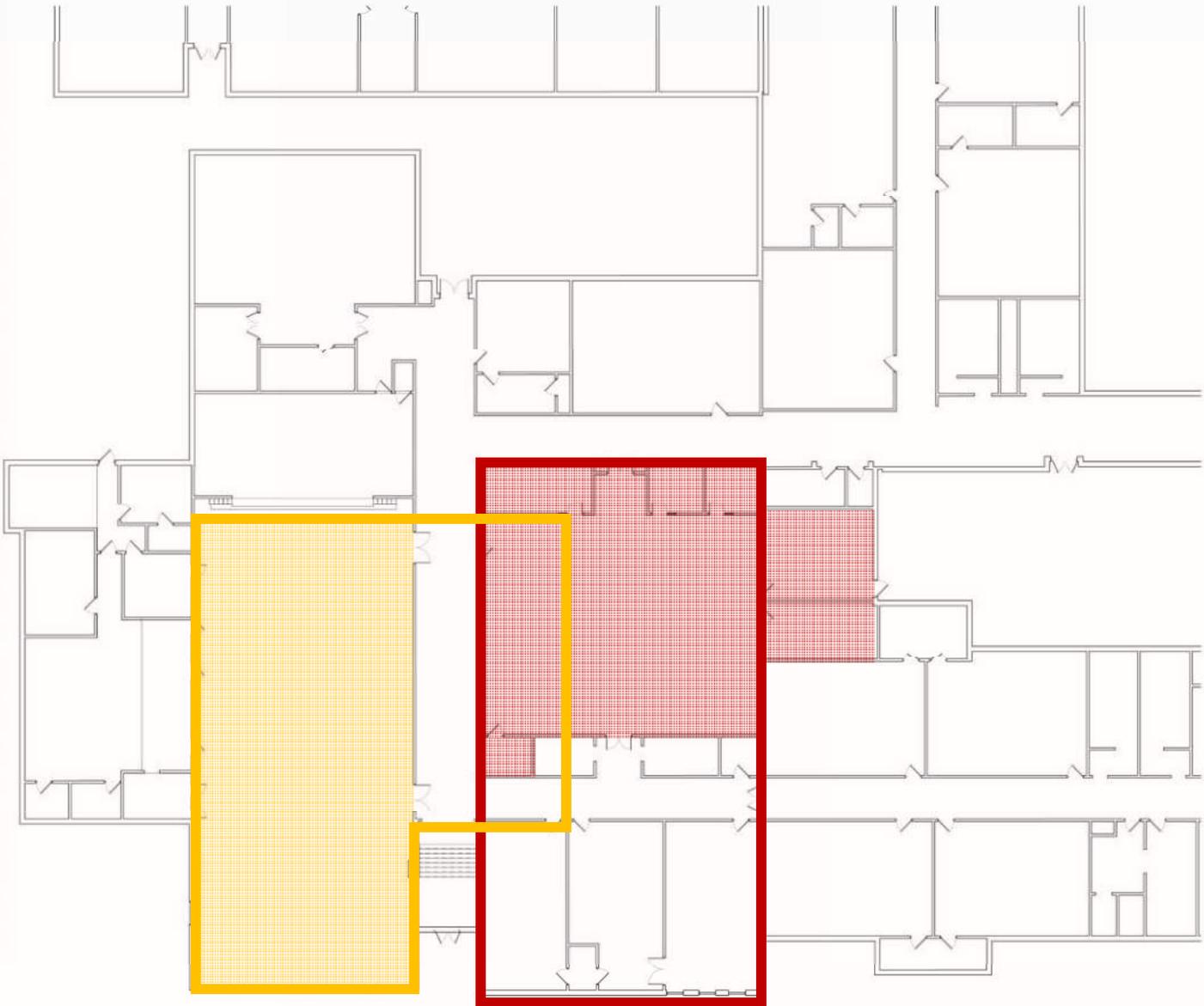
HIGH SCHOOL

PROPOSED DINING COMMONS

MIDDLE SCHOOL

PROGRAM NEEDS

Assumes enrollment growth to 900

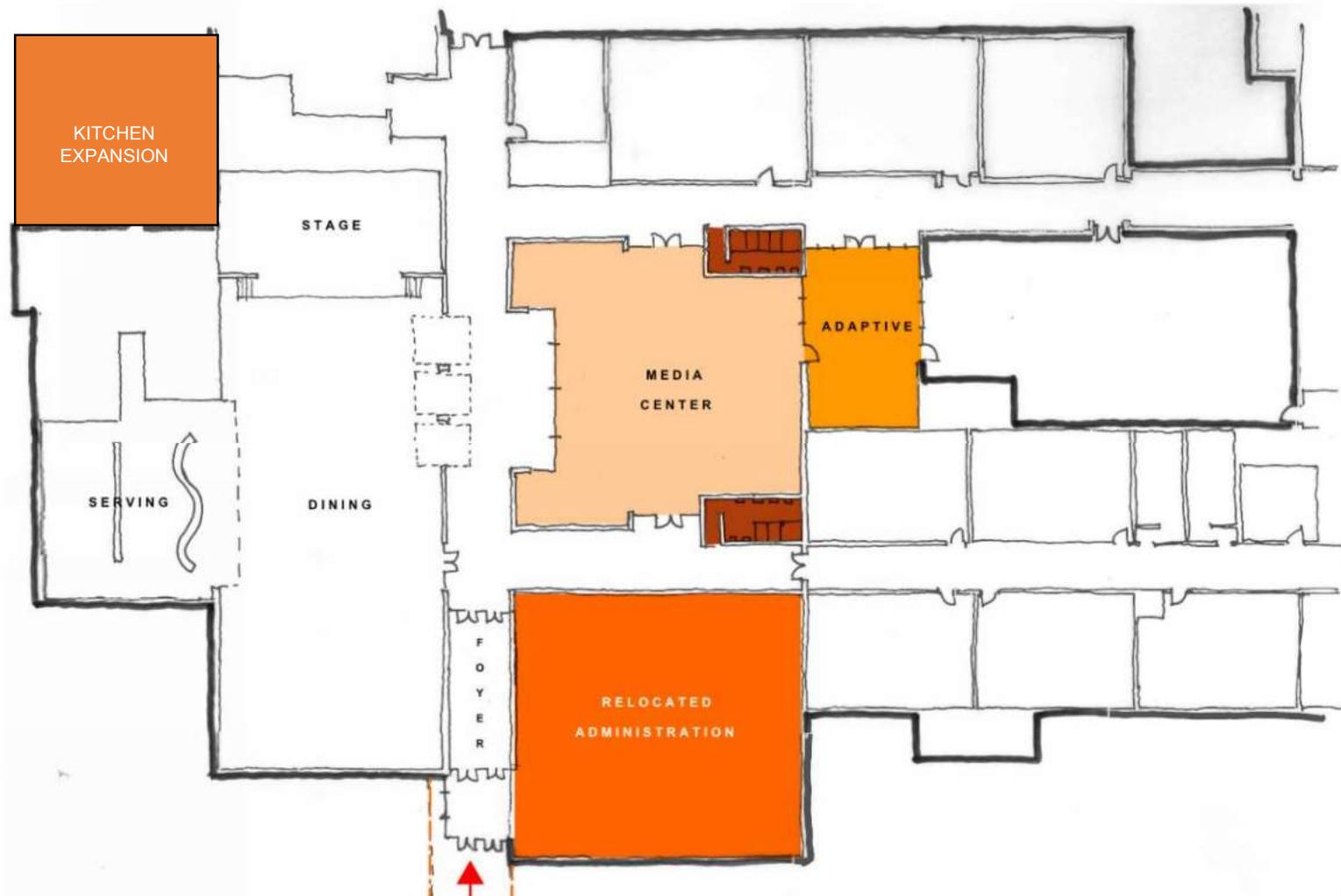


DINING

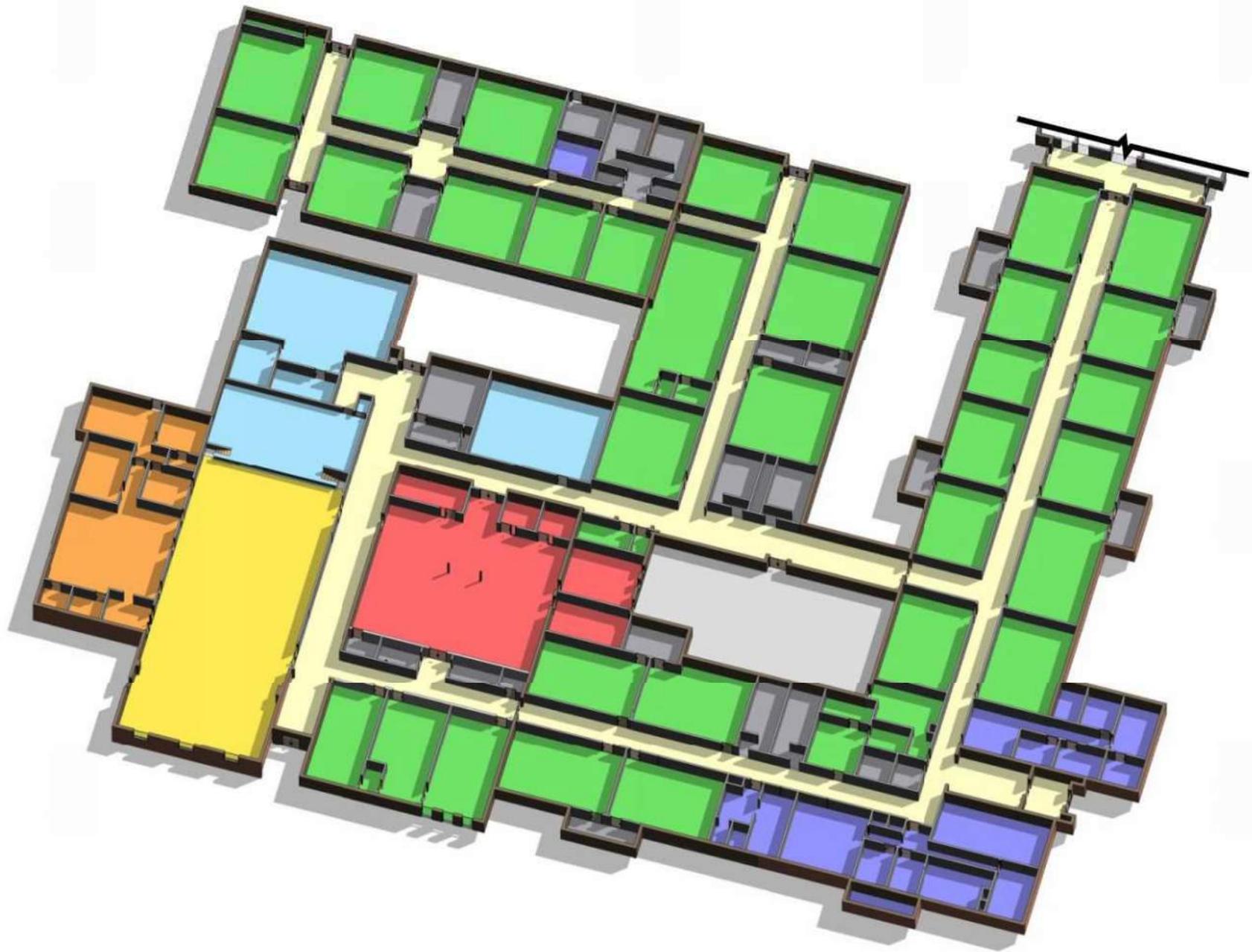
MEDIA

MIDDLE SCHOOL

STUDY PROPOSAL | DINING, KITCHEN, MEDIA CENTER



- CLASSROOM
- MEDIA
- DINING
- KITCHEN
- CORRIDOR / COMMONS
- SUPPORT
- ADMIN
- ARTS

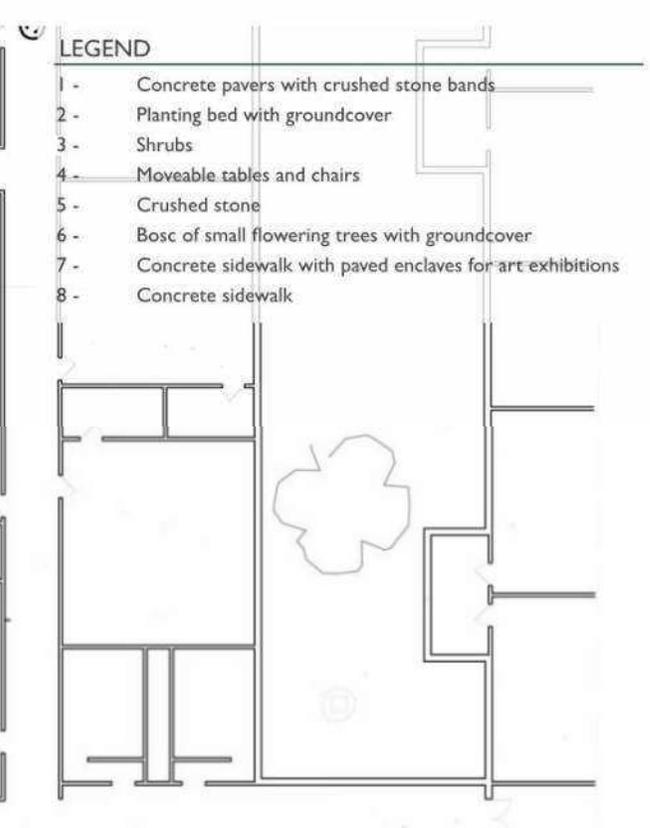


MIDDLE SCHOOL
EXISTING

- CLASSROOM
- MEDIA
- DINING
- KITCHEN
- CORRIDOR / COMMONS
- SUPPORT
- ADMIN
- ARTS

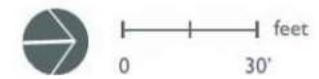
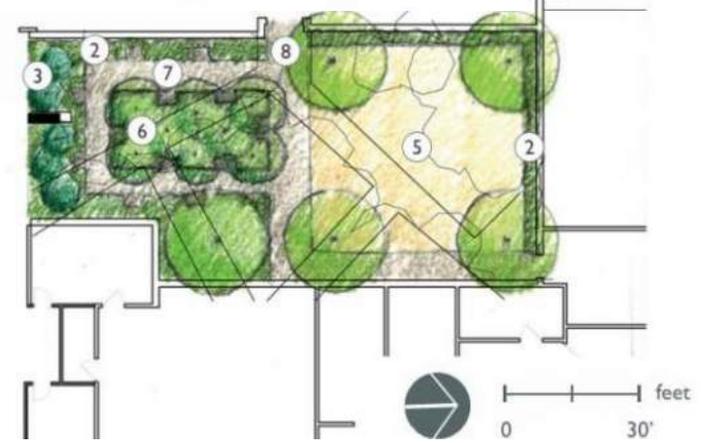


MIDDLE SCHOOL
 PROPOSED PHASE 1 SCOPE



LEGEND

- 1 - Concrete pavers with crushed stone bands
- 2 - Planting bed with groundcover
- 3 - Shrubs
- 4 - Moveable tables and chairs
- 5 - Crushed stone
- 6 - Bosc of small flowering trees with groundcover
- 7 - Concrete sidewalk with paved enclaves for art exhibitions
- 8 - Concrete sidewalk



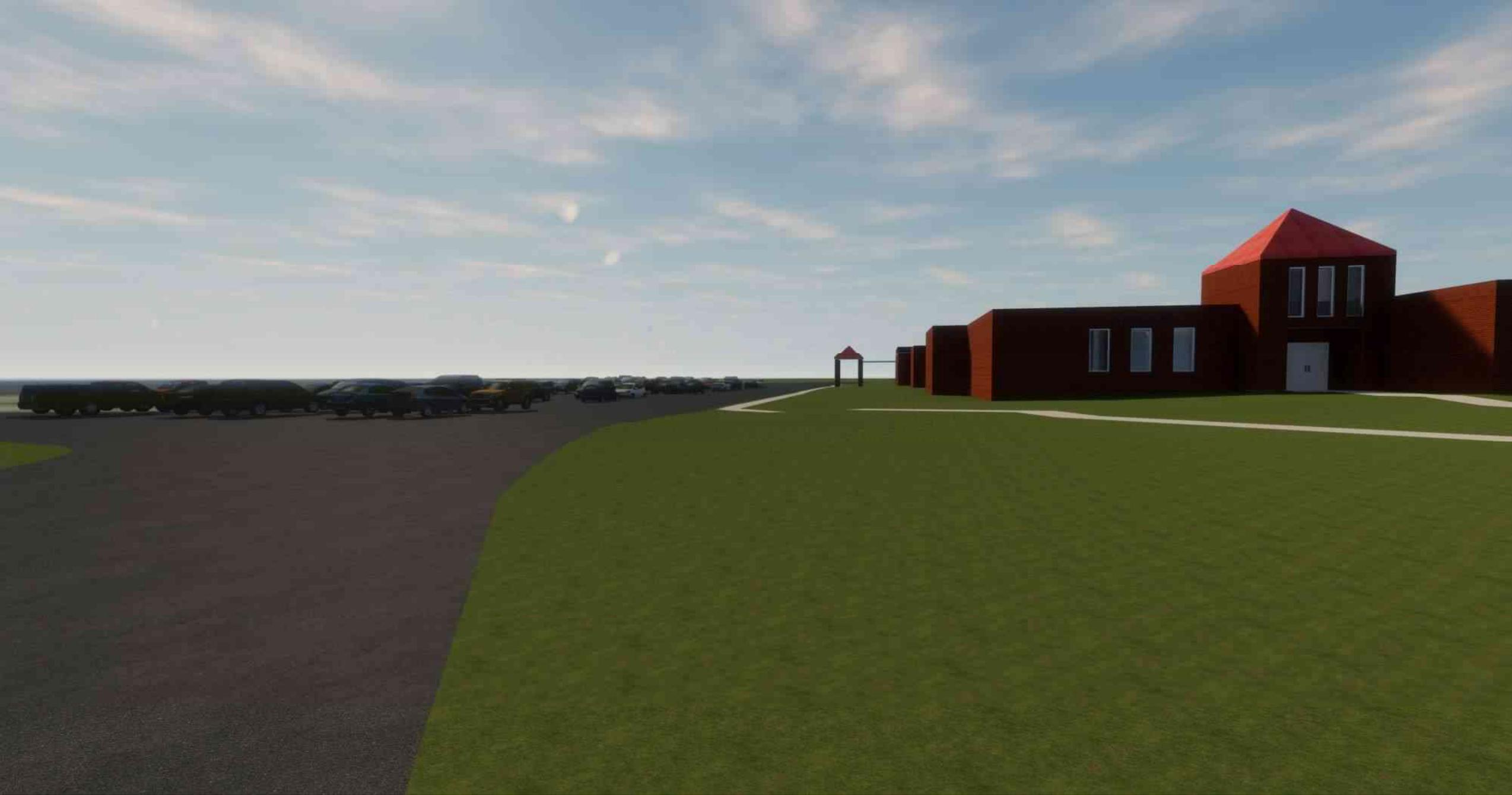
MIDDLE SCHOOL
COURTYARDS + TERRACES

MIDDLE SCHOOL GOALS

- Relocate, expand, and **update Media Center**
 - Transparency between Media Center and school works to bring **natural light** into middle of building
- **Expand corridors** in this area of high congestion
 - Commons doubles as **pre-function space** for events held in cafeteria
- **Additional dining capacity** (56 seats) accommodated in Commons outside of Dining and Media Center (250 seats within Dining Commons)
- Provide opportunities for **meeting, conference + professional** space
- **Relocate Admin + Main Entry** to east side, in concert with Monroe Drive changes
 - Provide **clarity of circulation + access** from parking to entry
 - Enhance **security, safety + operations**
 - Match program + entry with **new identity**

LEGEND

- 1 - Concrete pavers with crushed stone bands
- 2 - Paving bed with groundcover
- 3 - Shrubs
- 4 - Movable tables and chairs
- 5 - Crushed stone
- 6 - Box of small flowering trees with groundcover
- 7 - Concrete sidewalk with joint cracks for articulation
- 8 - Concrete sidewalk



MIDDLE SCHOOL

EXISTING MONROE DRIVE APPROACH



MIDDLE SCHOOL

PROPOSED MONROE DRIVE APPROACH



MIDDLE SCHOOL

EXISTING EAST FAÇADE (ALONG MONROE DR.)



MIDDLE SCHOOL

PROPOSED EAST FAÇADE (ALONG MONROE DR.)



MIDDLE SCHOOL

EXISTING ENTRY @ DINING (FROM MONROE DR.)



MIDDLE SCHOOL

PROPOSED MAIN ENTRY (FROM MONROE DR.)



MIDDLE SCHOOL

EXISTING ENTRY @ DINING (FROM MONROE DR.)



MIDDLE SCHOOL

PROPOSED MEDIA CENTER



MIDDLE SCHOOL

PROPOSED ENTRY LOBBY (COMMONS + GALLERY)



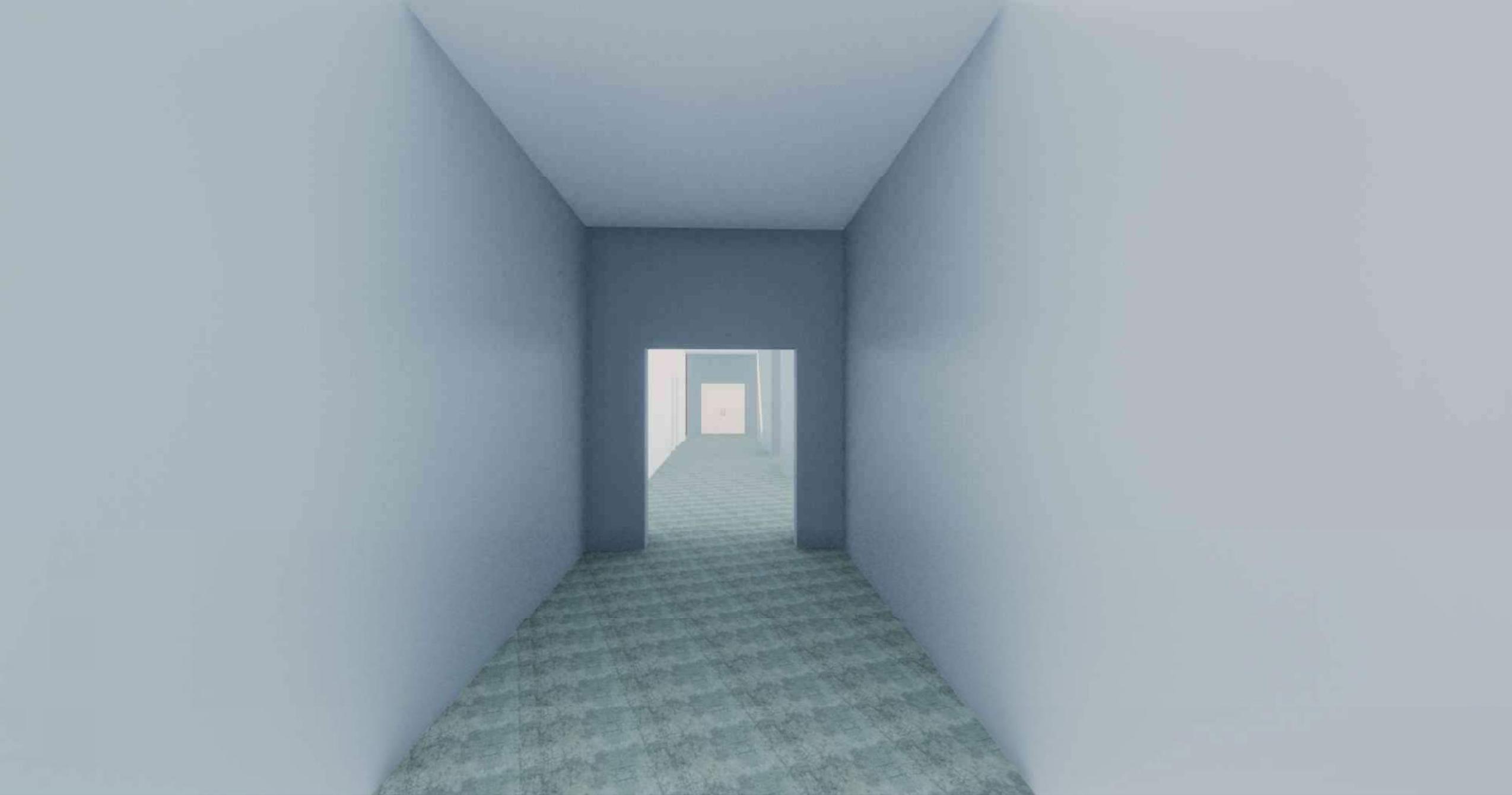
MIDDLE SCHOOL

PROPOSED COMMONS



MIDDLE SCHOOL

PROPOSED MEDIA CENTER



MIDDLE SCHOOL

EXISTING CORRIDOR



MIDDLE SCHOOL

PROPOSED ENTRY + COMMONS

NEXT STEPS

Review + Reconcile Cost Estimates

Teacher Presentation

Program Reconciliation + Design Development

Preliminary Stormwater + Planning Meetings w/ County

Understanding + Planning for Phased Construction

VWID O