

Northeast Metro Tech

Building Committee

DRA



PMA Consultants

July 01, 2021

Agenda

- SBC Vote to Approve Prior Minutes (05/13/2021)
- OPM Update
 - Budget, Schedule
- Designer Update
 - Schematic Design Updates
 - Building Design
 - Cost Estimates
 - Committee Members Feedback
 - SBC to vote to approve SD submission package and all documents included, and to authorize PMA/DRA to submit the SD submission package to the MSBA
- New Business

Schedule/Key Project Milestones

MSBA Module #2 <i>Forming the Project Team</i>	MSBA Module #3 <i>Feasibility Study</i>	MSBA Module #4 <i>Schematic Design</i>	MSBA Module #5 <i>Funding the Project</i>
<u>AUGUST 2019</u> OPM Selection	<u>JANUARY 2020</u> Begin Feasibility Study	<u>JANUARY 2021</u> Begin Schematic Design	<u>LATE DECEMBER 2021</u> Local funding approval deadline
<u>JANUARY 2020</u> Designer Selection	<u>AUGUST 2020</u> SBC approves PDP Submit PDP to MSBA	<u>JUNE or JULY 2021</u> SBC approves SD/DESE design package	
	<u>SEPTEMBER 2020</u> SC approves Education Plan	<u>JULY 2021</u> Submit SD/DESE to MSBA MSBA FAS Meeting	
	<u>DECEMBER 2020</u> SBC approves PSR Submit PSR to MSBA	<u>AUGUST 2021</u> MSBA BOD approves project scope & budget	
	<u>JANUARY 2021</u> MSBA FAS Meeting		
	<u>FEBRUARY 2021</u> MSBA BOD approves PSR		



Acronym glossary

BOD – Board of Directors (MSBA)
DESE – Massachusetts Department of
Elementary & Secondary Education
Ed. Plan – Educational Plan
FAS – Facilities Assessment Subcommittee

ISS – Initial Space Summary
MSBA – Mass. School Building Authority
OPM – Owner's Project Manager
PDP – Preliminary Design Program
PSR – Preferred Schematic Report

SBC – School Building Committee
SC – School Committee
SD – Schematic Design

Updated 07.01.2021

Budget Update

Northeast Metro Tech- Budget Update			
	Contract Amount	Billed to Date	Remaining
PMA Consultants	\$ 510,056.00	\$ 305,365.50	\$ 204,690.50
DRA (Base Contract)	\$ 1,075,000.00	\$ 998,300.00	\$ 76,700.00
CDW (Haz-Mat)	\$ 19,547.00	\$ 18,073.84	\$ 1,473.16
LGCI (Geotech.)	\$ 99,318.00	\$ 86,141.00	\$ 13,177.00
Nitsch (Traffic/Site Survey)	\$ 176,440.00	\$ 129,635.00	\$ 46,805.00
Gilbane (Schematic Design Estimate)	\$ 50,000.00	\$ -	\$ 50,000.00
Totals	\$ 1,930,361.00	\$ 1,537,515.34	\$ 342,845.66
Northeast Metro Tech- MSBA Reimbursement			
	Amount Submitted	Reimbursement Received	Percentage
Propay Request #001	\$ 103,348.00	\$ 65,461.00	63.34%
Propay Request #002	\$ 131,385.00	\$ 83,219.00	63.34%
Propay Request #003	\$ 111,965.00	\$ 70,919.00	63.34%
Propay Request #004	\$ 237,087.00	\$ 150,170.00	63.34%
Propay Request #005	\$ 244,945.00	\$ 155,148.00	63.34%
Propay Request #006	\$ 97,222.00	\$ 61,580.00	63.34%
Propay Request #007	\$ 279,109.00	\$ 176,788.00	63.34%
Pending Propay Request #008	\$ 176,070.00	\$ 111,522.74	63.34%
Projected Propay Request #009	\$ 156,387.76	\$ 99,056.01	63.34%
Totals	\$ 1,537,518.76	\$ 973,863.75	63.34%

MSBA Funding Policy Changes (effective 06/01/2021)



- Under updated policy, the MSBA funds up to:
 - 3.5% of an upper limit of \$500/sf or construction budget, whichever is less, for otherwise eligible Owner's Project Management basic services;
 - 10% of an upper limit of \$500/sf or construction budget, whichever is less, for otherwise eligible Designer basic services;
 - 0.5% of the construction budget for new construction and up to 1.0% of the construction budget for an addition/renovation project for otherwise potentially eligible Owner's Contingency costs; and
 - \$360/sf plus eligible demolition and abatement.

Total Project Cost

Northeast Metro Tech- Budget Update		
	Preferred Schematic (December 2020)	Schematic Design (July 2021)
Square Footage	383,000	380,000
Design Enrollment	1,600	1,600
Reimbursement Rate	63.34%	79.67%
Total Project Cost	\$317,422,620.00	\$317,422,620.00
Est. MSBA Share	\$117M	\$140-146M
Est. District Share	\$200M	\$172-177M

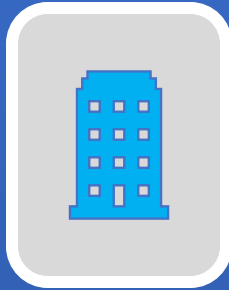
NOTE: The budget information provided above is based on probable cost estimate of record (Architect's) with input from the CMR and OPM. The budgets above are all subject to further review with the MSBA.

Recent Activities

- Design Team Meetings- School, local Officials, Police, Fire & Security
- Community Meetings – Abutters, Chelsea
- Finalized Schematic Plans & Building System Narratives
- Developed Preliminary Construction Cost Estimates
- Reconciled & Refined Cost Estimates (Value Management)
- Prepared MSBA Schematic Design Submission materials

SCHEMATIC DESIGN SUBMITTAL

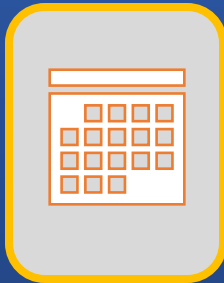
- Scope



- Budget



- Schedule



- Department of Elementary and Secondary Education (DESE)
Submittal *(regarding Special Education)*
- Schematic Design Binder
- Schematic Design Drawings
- Schematic Design Project Manual (Outline Specifications)

Table of Contents

SCHEMATIC DESIGN SUBMITTAL

4.1.2 Schematic Design Binder

4.1.2-01 Introduction

4.1.2-02 Final Design Program

Educational Space Summary (Signed)

Space Measurement Analysis w/ Designer Certification

Site Plan

Phasing Plans

4.1.2-03 Traffic Analysis

4.1.2-04 Environmental & Existing Building Assessment

4.1.2-05 Geotechnical Analysis

4.1.2-07 Code Analysis

4.1.2-07 Utility Analysis

4.1.2-08 Massing Study

4.1.2-09 Building Systems Narrative

4.1.2-10 Sustainable Design Guideline Documents

4.1.2-11 ADA/MAAB Analysis

4.1.2-12 Room Data Sheets

4.1.2-13 Proposed Construction Methodology

4.1.2-14 District's Anticipated Reimbursement Rate

4.1.2-15 Total Project Budget

Total Project Budget Spreadsheet – Form 3011

District Financial Projections

Furniture and Equipment Budget

Technology FFE Budget

4.1.2-16 Designer's Construction Cost Estimate

4.1.2-17 OPM's Construction Cost Estimate

4.1.2-18 Updated Project Work Plan

Project Work Plan

Project Schedule

Project Directory

4.1.2-19 Local Actions and Approvals

Module-4 Local Actions and Approval Certification

Meeting Minutes

4.1.3 Schematic Design Project Manual Table of Contents (2 complete Project Manuals submitted separately)

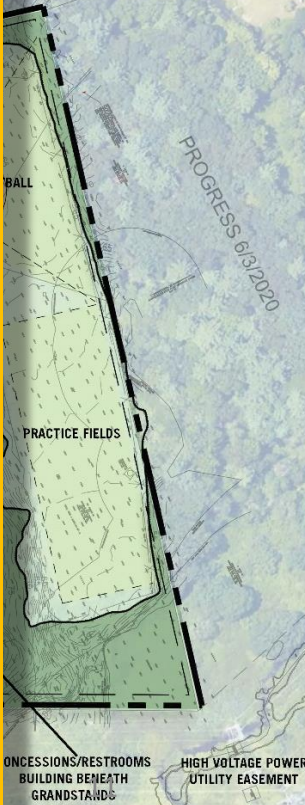
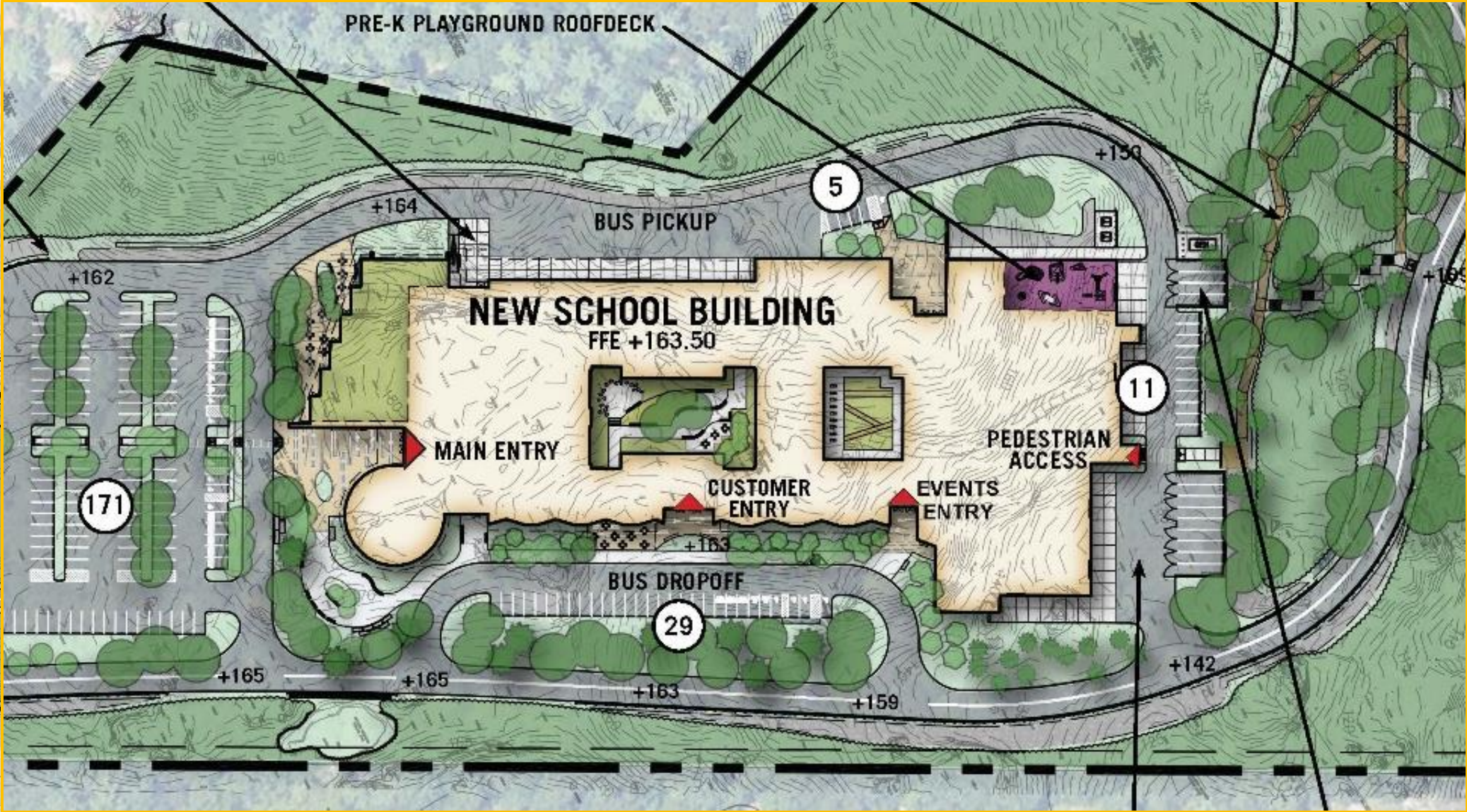
4.1.4 Schematic Design Drawing List (2 half-size drawing sets submitted separately)

Appendix A Consultant Reports

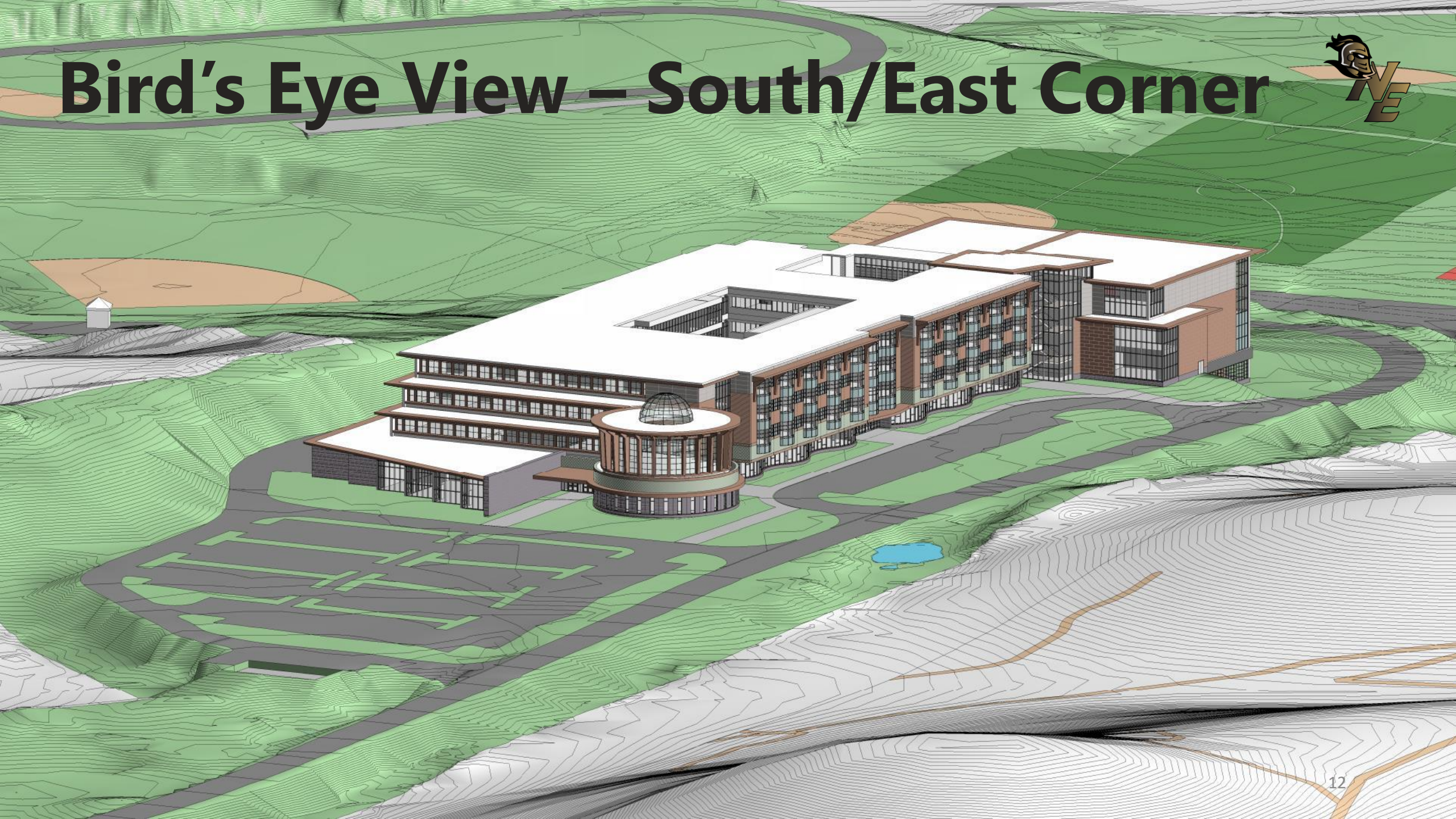
Appendix B Response to MSBA's Review Comments

Appendix C Thumb Drive

Site Plan



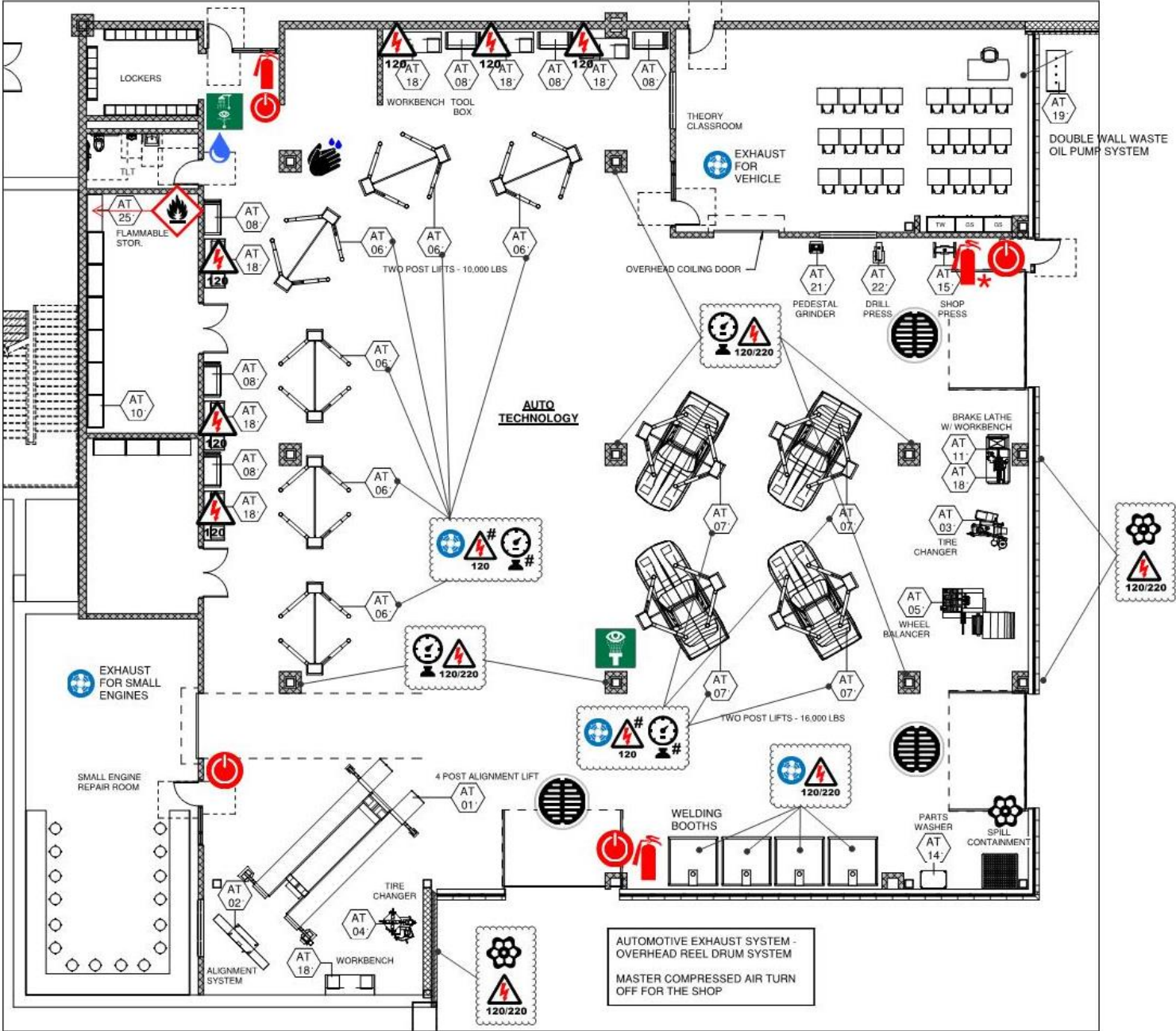
Bird's Eye View – South/East Corner



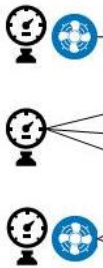



First Level - Floor Plan

Automotive Technology

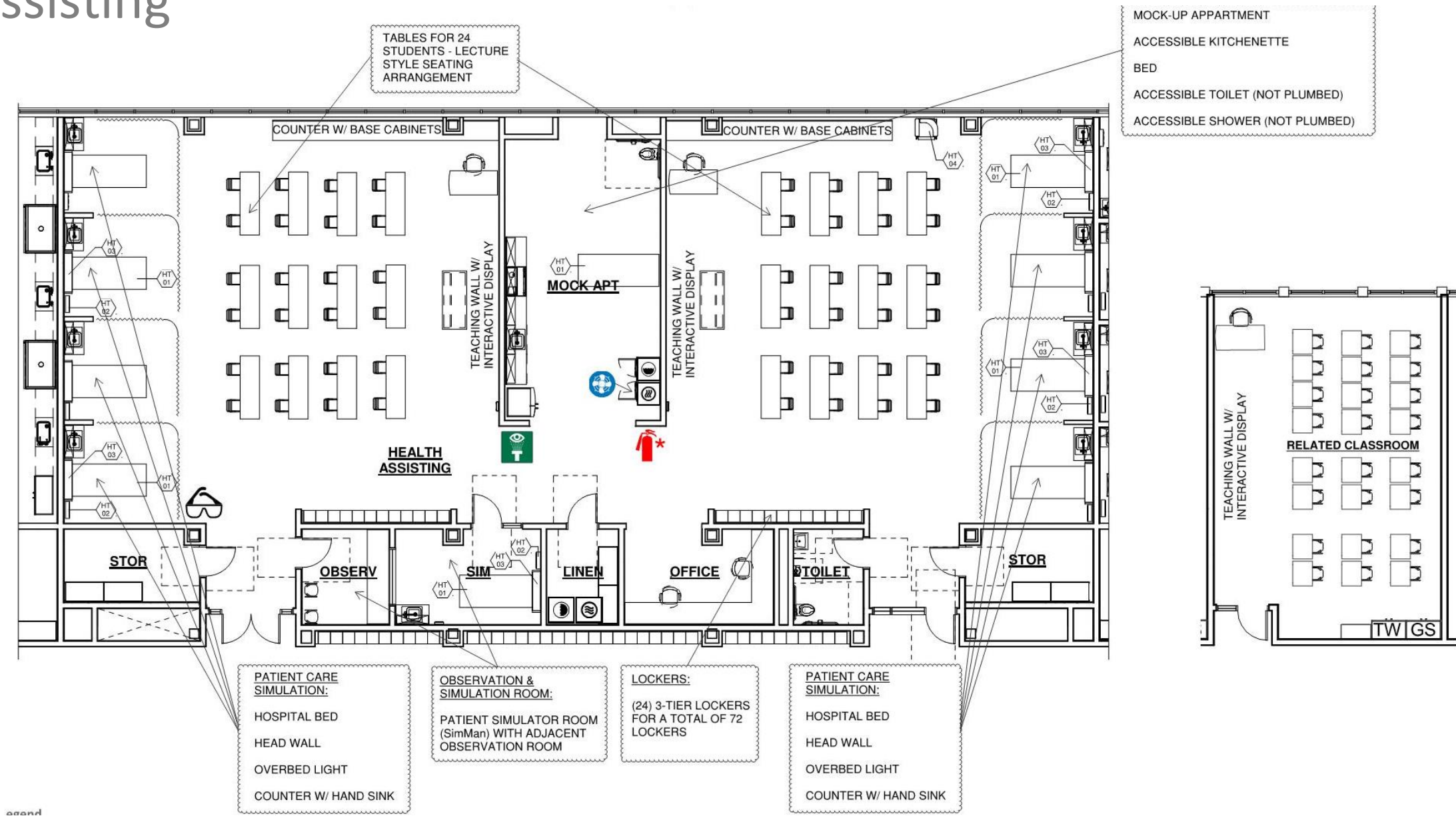


Automotive Technology



AUTO TECHNOLOGY SCHEDULE												
ITEM#	Q.T.Y.	NEW	EXIST.	OWNER/G.C.	DISCRIPTION	MAKE & MODEL	AMPS	HP	VOLT	PHASE	REMARKS:	
→ AT-01	1	•		G.C.	FOUR POST ALIGNMENT LIFT	HUNTER L451L	26	---	208-230	1	AIR SUPPLY 90-150 PSI (6.2-10.3 BAR)	
AT-02	1	•		G.C.	ALIGNMENT SYSTEM	HUNTER WA600	15	---	115-230	1	ETHERNET CABLE	
→ AT-03	1	•		G.C.	TIRE CHANGER	HUNTER TCR1X	30	---	208-230	1	125 ± 25 PSI (8.6 ± 1.7 bar) / 1 SCFM (27 L/Min)	
→ AT-04	1	•		G.C.	TIRE CHANGER	HUNTER TCX53	10	---	220	1	AIR: 110-145 PSI; 14 CFM	
→ AT-05	1	•		G.C.	WHEEL BALANCER	HUNTER ROAD FORCE ELITE	10	---	196-253	1	AIR: 100-175 PSI; CFM	
→ AT-06	6	•		G.C.	TWO POST LIFT - 10,000 LBS	ROTARY SPOA 10	---	---	208-230	1	W/ AIR CONNECTION; 6.0 SCFM REQUIRES 12' OVERALL HEIGHT	
→ AT-07	4	•		G.C.	TWO POST LIFT - 16,000 LBS	ROTARY SPO16 CARGO	---	---	---	1	W/ AIR CONNECTION; 6.0 SCFM REQUIRES 16'-8" OVERALL HEIGHT	
AT-08	6	•		OWNER	TOOL BOX	SNAP-ON EPIQ SERIES	---	---	208-230	---		
AT-10	1	•		OWNER	HD SHELVING UNIT	MSC/GRAINGER	---	---	---	---		
AT-11	1	•		OWNER	BRAKE LATHE	HUNTER	15	---	115	1		
AT-14	1	•		OWNER	SAFETY CLEAN PARTS WASHER	SAFETY CLEAN	---	---	110	1		
AT-15	1	•		OWNER	SHOP PRESS	SNAP-ON	---	---	---	---		
AT-18	8	•		OWNER	BENCH	LAPPENS	---	---	---	---	NOTE: POWER OUTLET AT ALL WORKBENCH LOCATIONS	
AT-19	1	•		PLUMBER	WASTE FLUIDS/ NEW OIL TANKS	LAPPENS	---	---	---	---	LOCATED OUTSIDE	
AT-21	1	•			PEDESTAL GRINDER	SNAP-ON	---	---	115	1		
AT-22	1	•			DRILL PRESS	SNAP-ON	---	---	120	1		
AT-25	1	•			FLAMMABLE STORAGE CABINET	SURE-GRIP EX SAFETY CABINET-45 GAL 8945008	---	---	---	---		
NOTE: LIFTS SHALL BE PROVIDED WITH 120V DUPLEX ELECTRICAL AND AIR OUTLET IN ADDITION TO LIFT REQUIREMENTS. OVERHEAD VERTICAL EXHAUST SYSTEM SHALL BE BY HVAC. FINAL LIFT WIRING, INCLUDING SAFETY WIRING, SHALL BE BY ELECTRICAL CONTRACTOR												

Health Assisting





Front Entry Rendering

Events Lobby – View from Entry





Auditorium



Cafeteria

Construction Cost



Construction Cost Budget (per PSR submission):

\$243.6 Million (\$630 per SqFt)

Preliminary Construction Cost Estimate:

\$265.5 Million

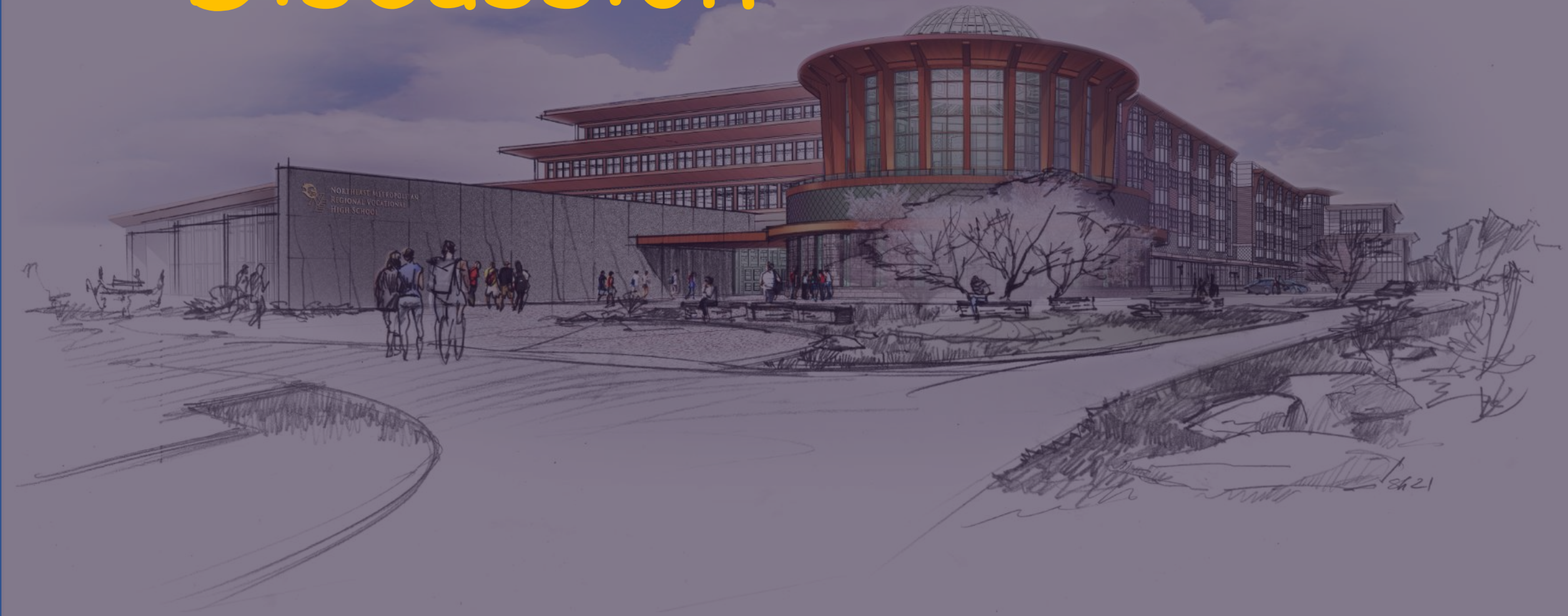
Value Management process:

\$22 Million cost reductions

current Schematic Design Construction Cost Estimate:

\$243.6 Million

Discussion



Thank You!

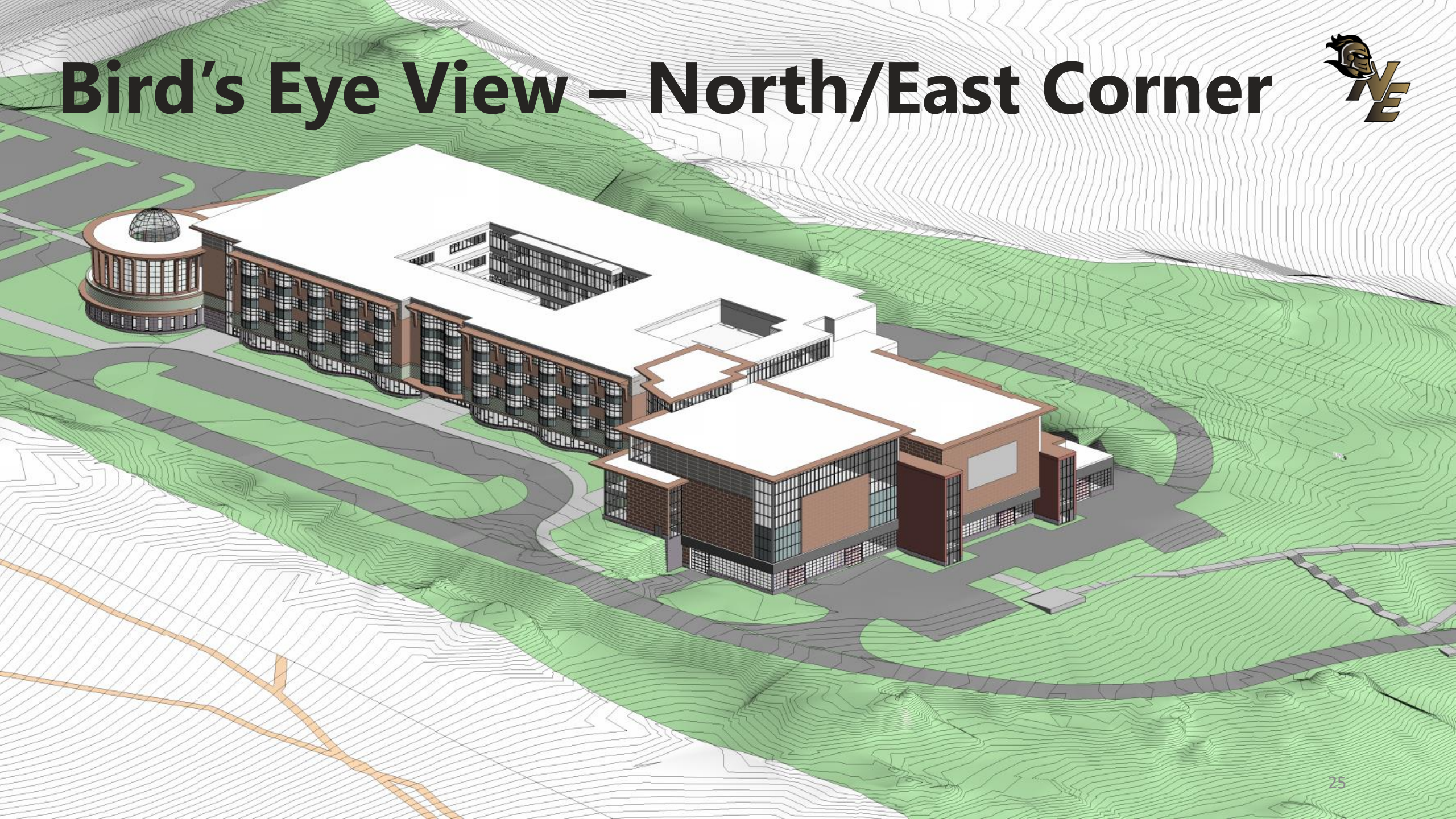
NEMT



AERIAL VIEW – LOOKING SOUTH



Bird's Eye View – North/East Corner





First Level - Floor Plan



3

Third Level - Floor Plan



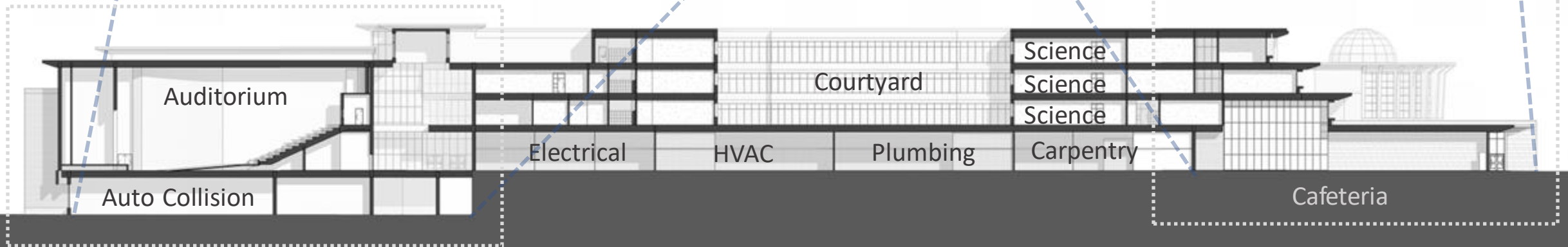
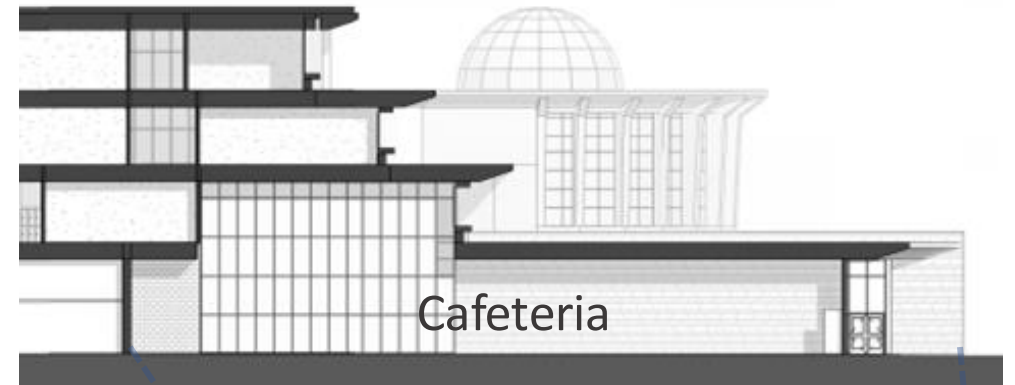
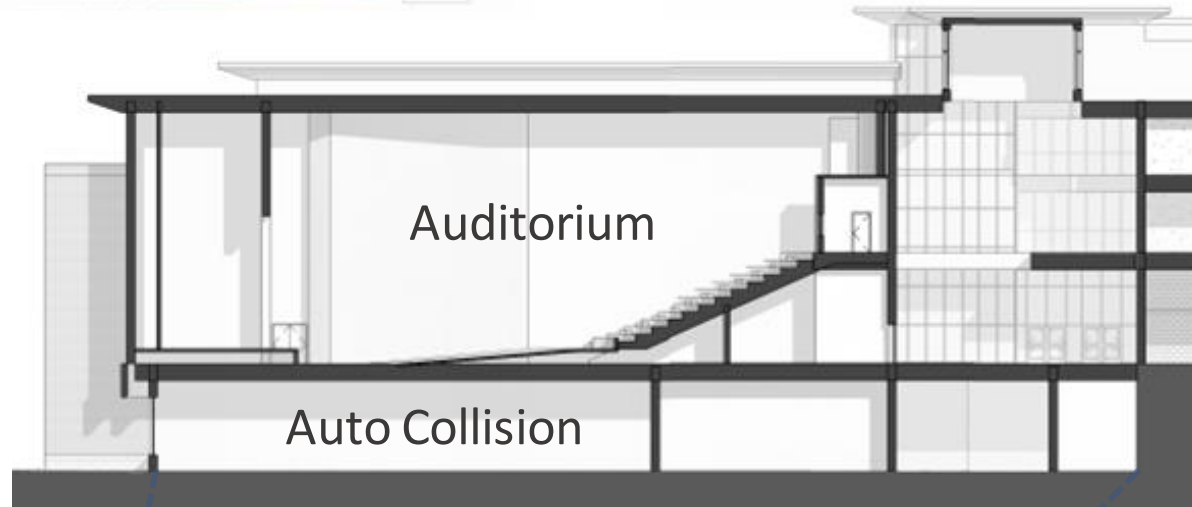
Fourth Level - Floor Plan



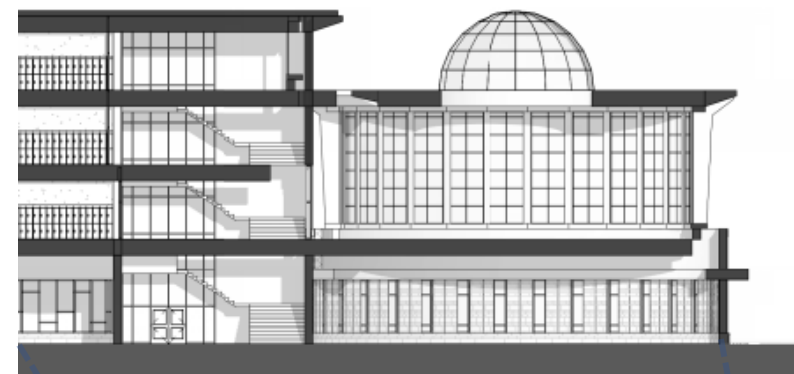
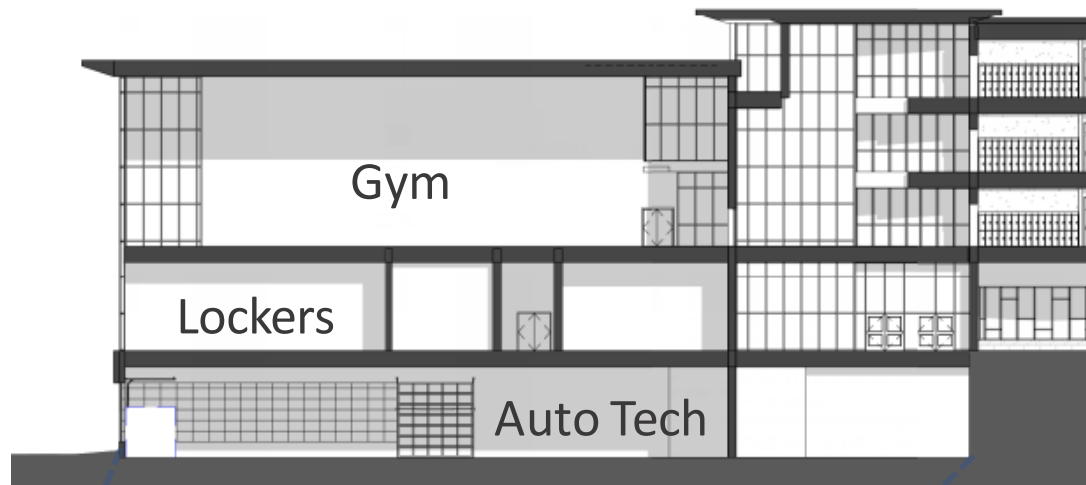
Department Legend

1.0 Core Academic	9.0 Medical
2.0 Special Education	10.0 Administration & Guidance
4.0 Vocations & Technology	11.0 Custodial & Maintenance
5.0 Health & Physical Education	12.0 Other
6.0 Media Center	13.0 Non-Programmed Spaces
7.0 Auditorium / Drama	13.1 Core
8.0 Dining & Food Service	13.2 Toilets

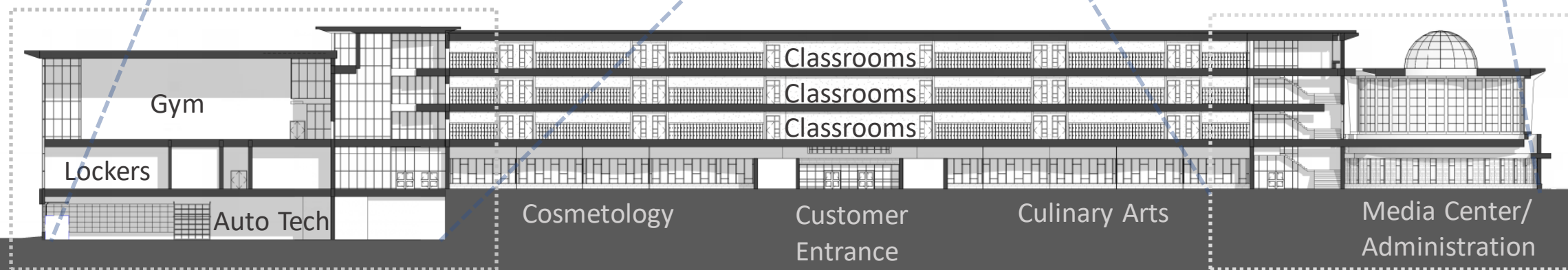




Building Sections



Media Center/
Administration



Building Sections



Front Entry Rendering





Exterior View Towards Media Center, Classrooms, Culinary Arts & Cosmetology

Events Lobby



Events Lobby – Second Floor



Events Lobby Second Floor





Media Center



Terrazzo / Wood



Terrazzo



Terrazzo / Porcelain Tile



Sheet Vinyl Flooring



Resilient Carpet



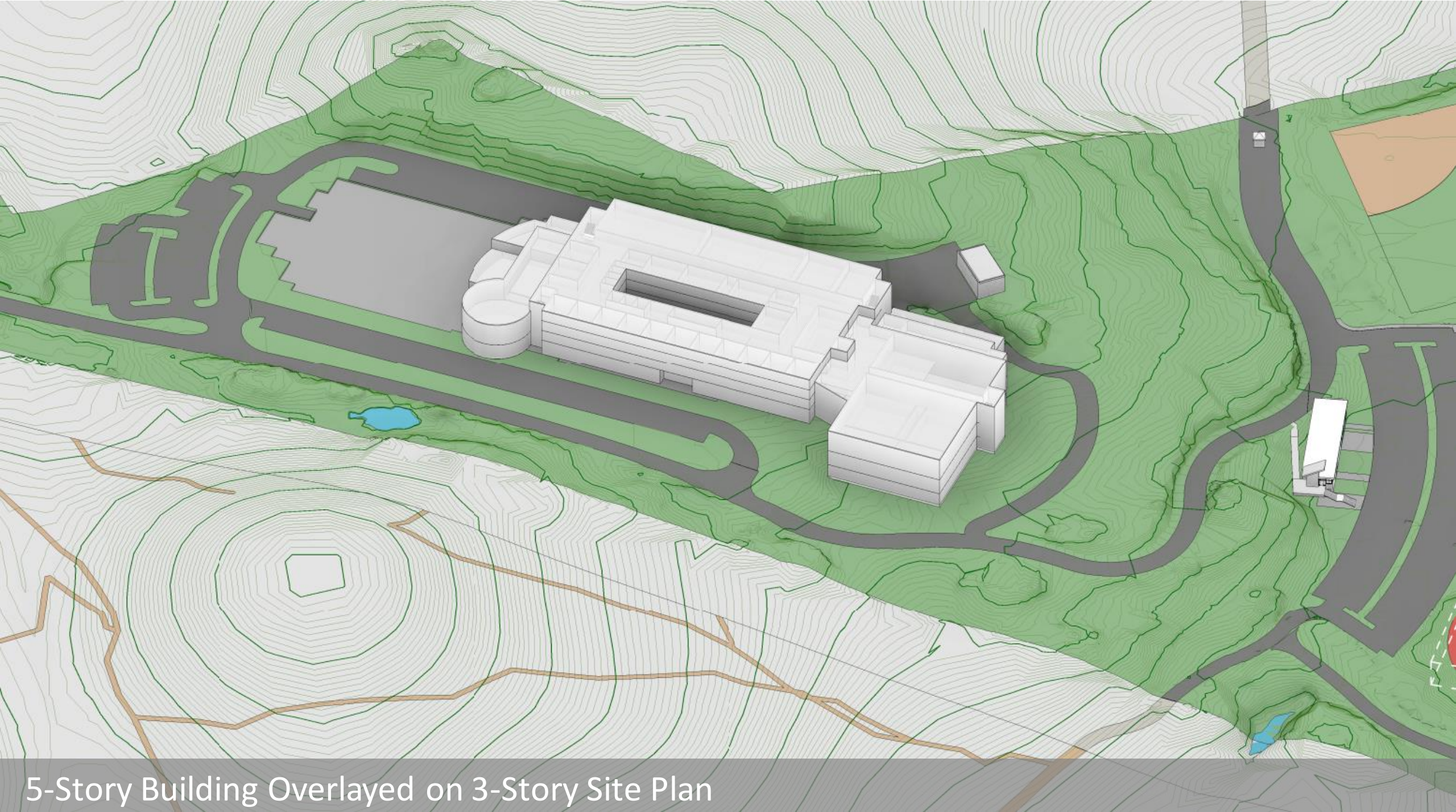
Rubber / Railing



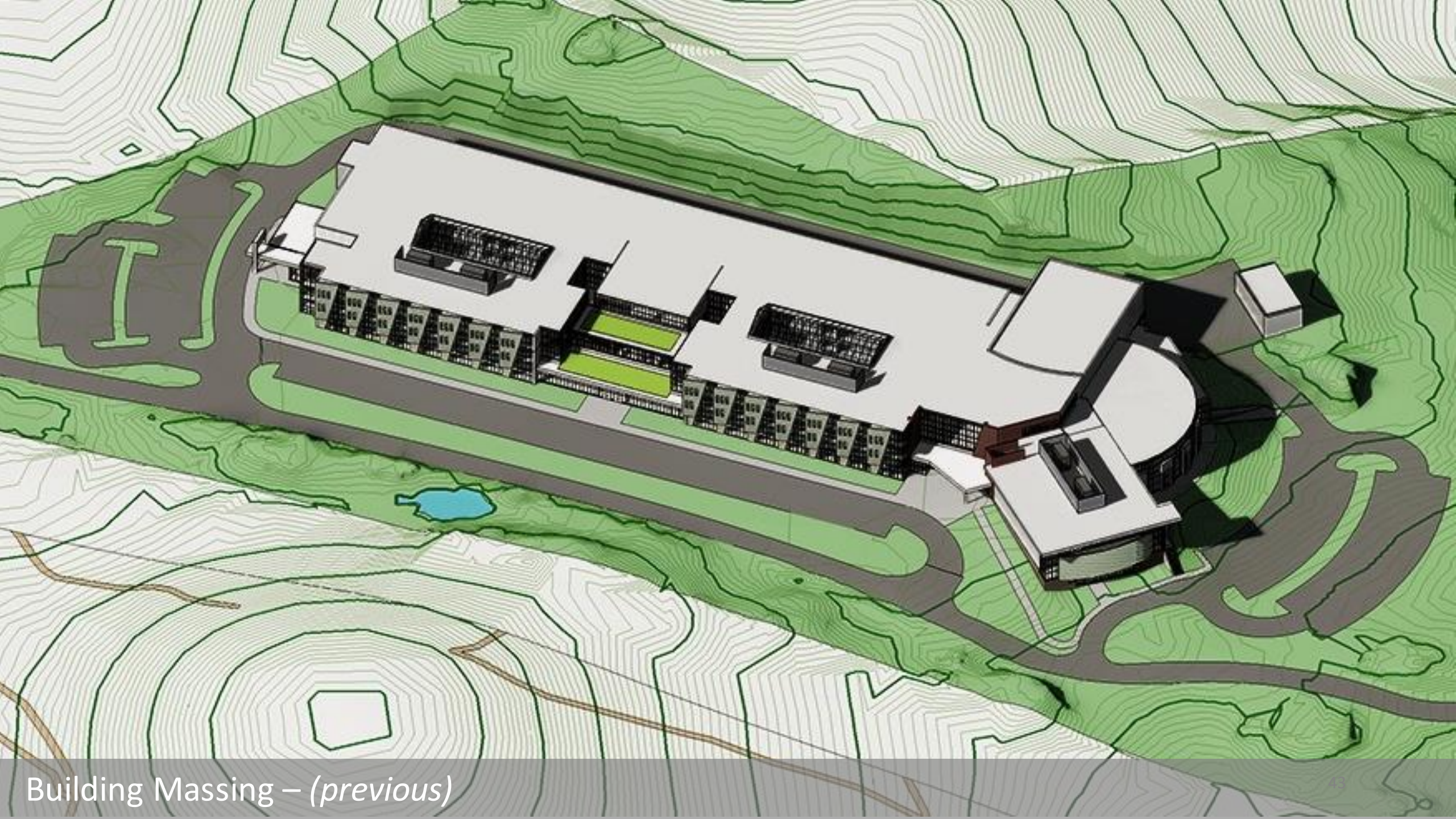
Rubber / Wall Tile



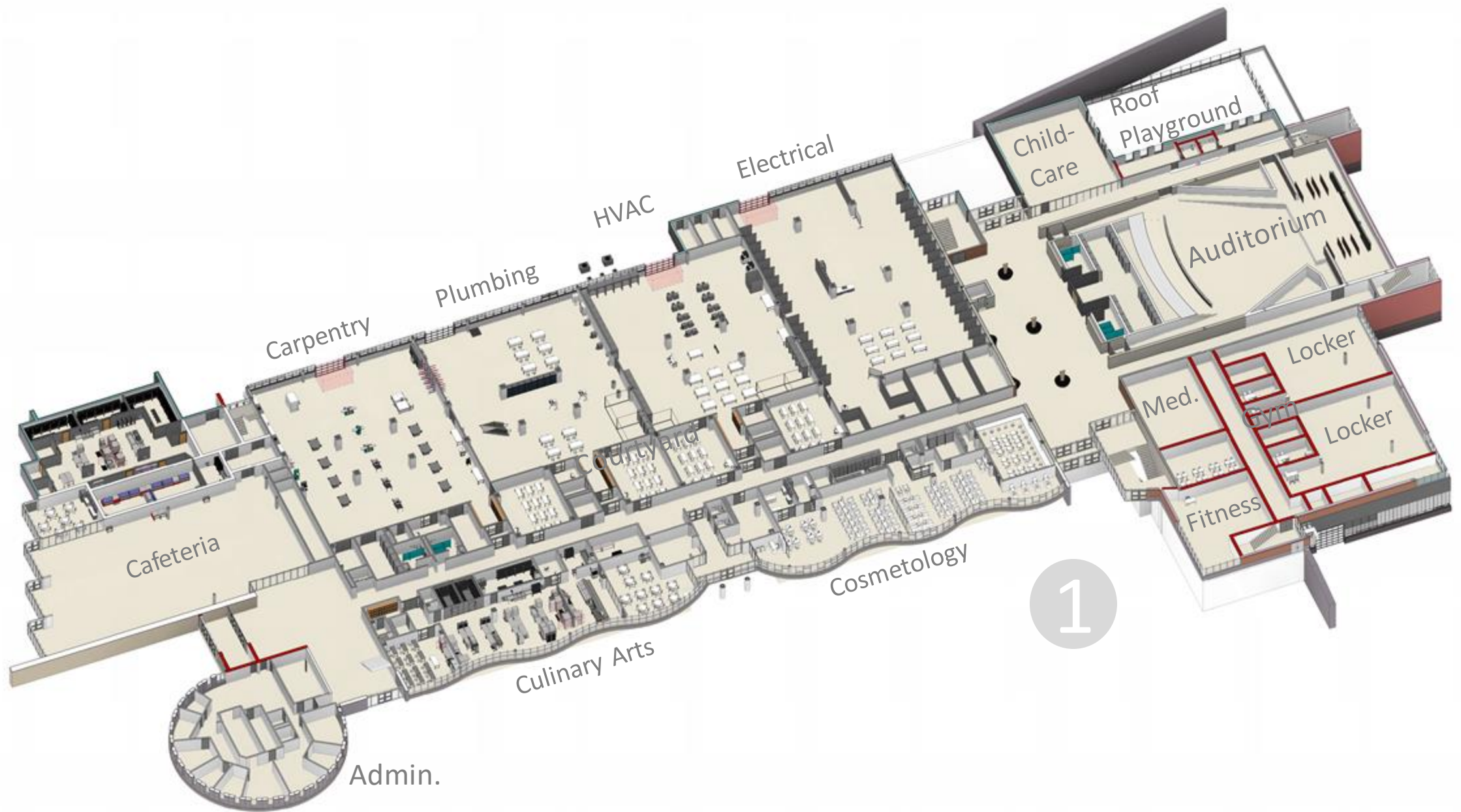
Linoleum



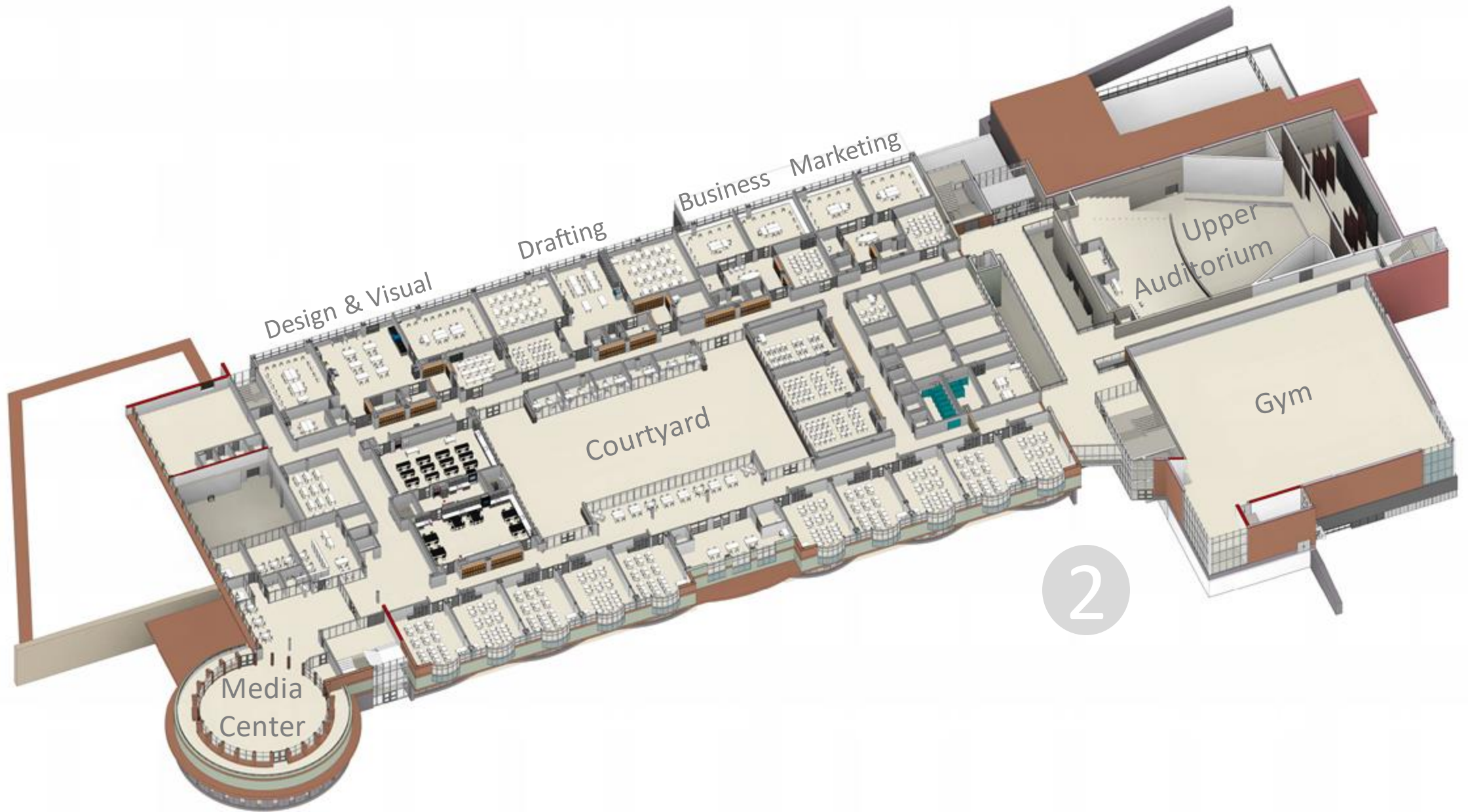
5-Story Building Overlaid on 3-Story Site Plan



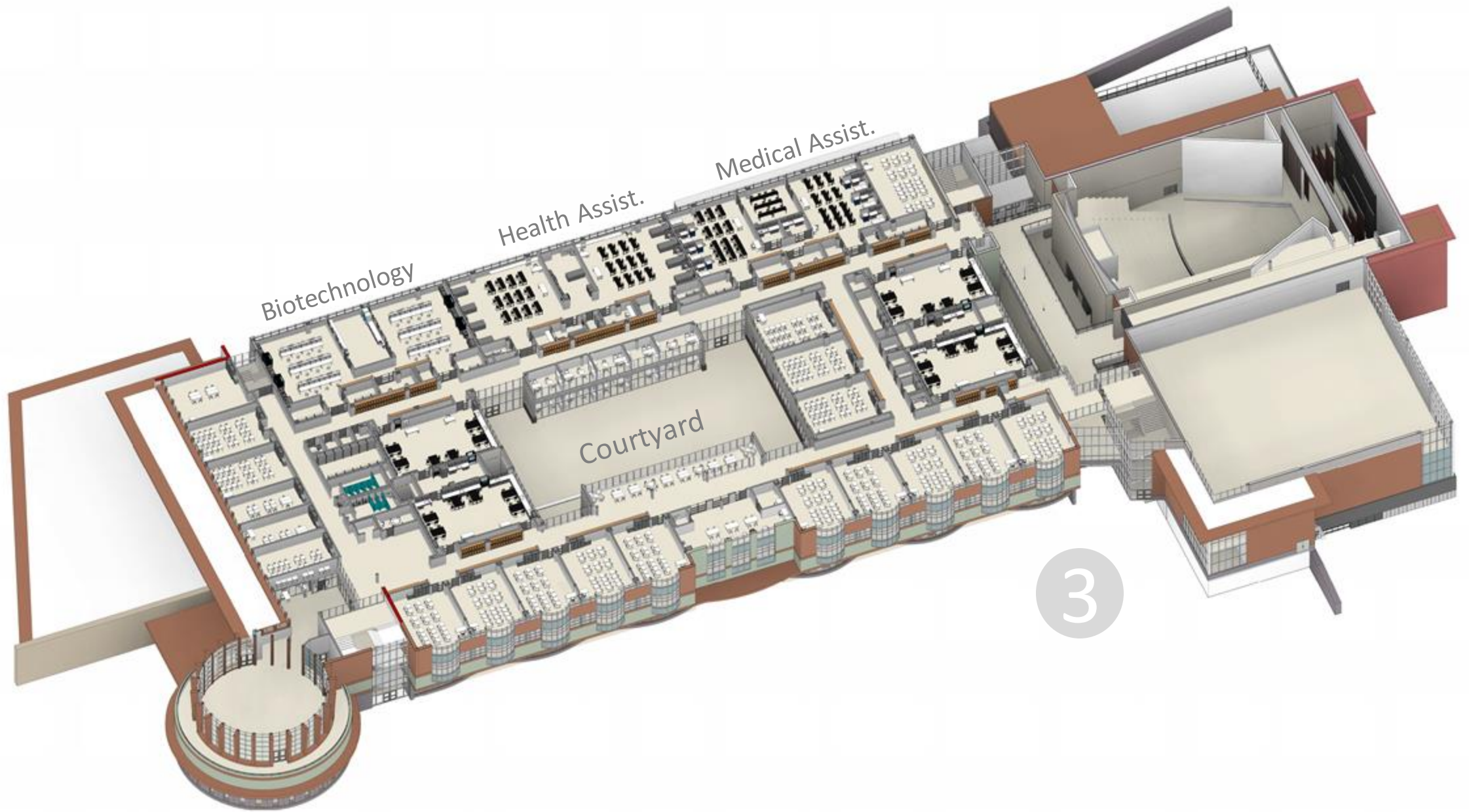
Building Massing – *(previous)*



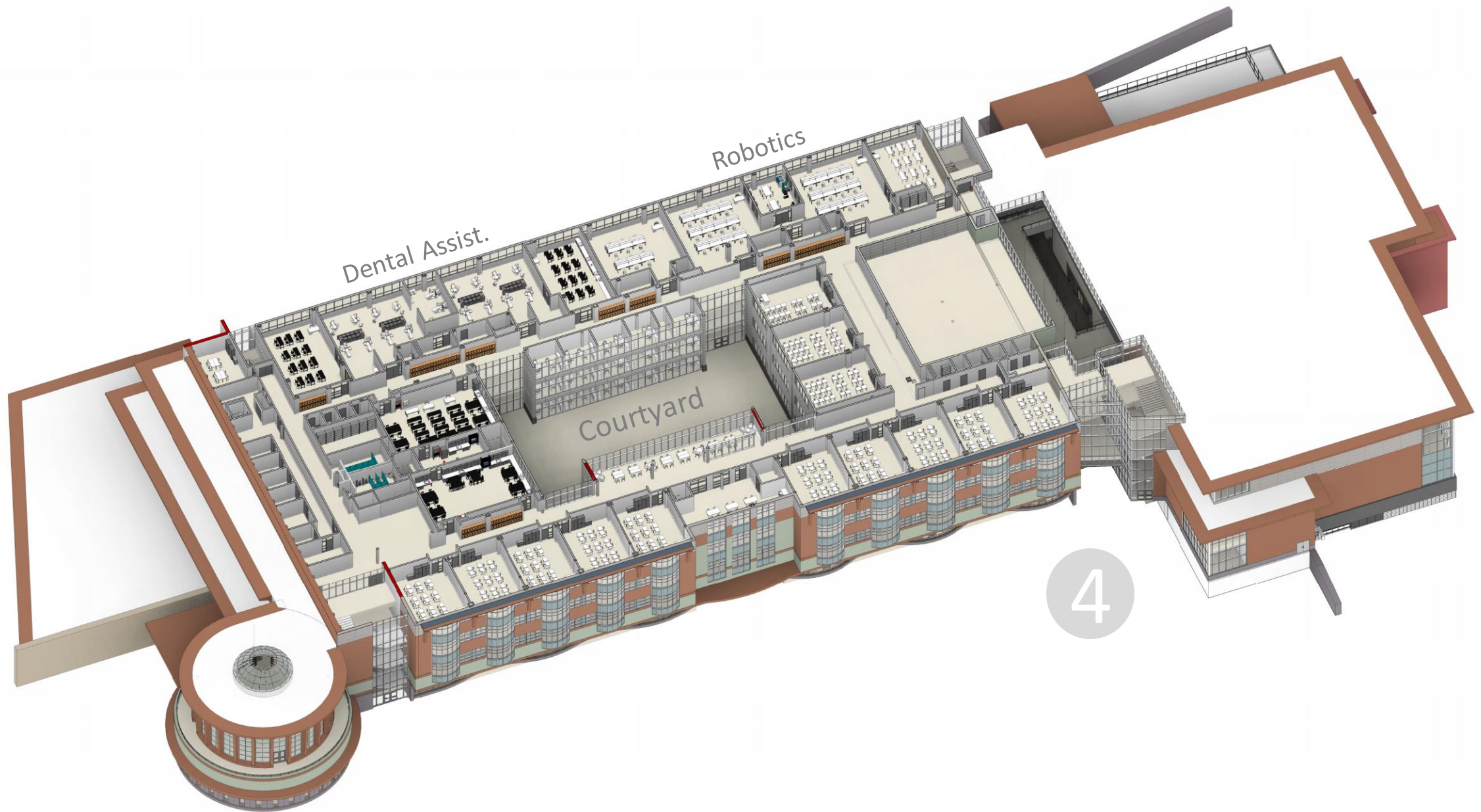
First Level - Floor Plan Axonometric



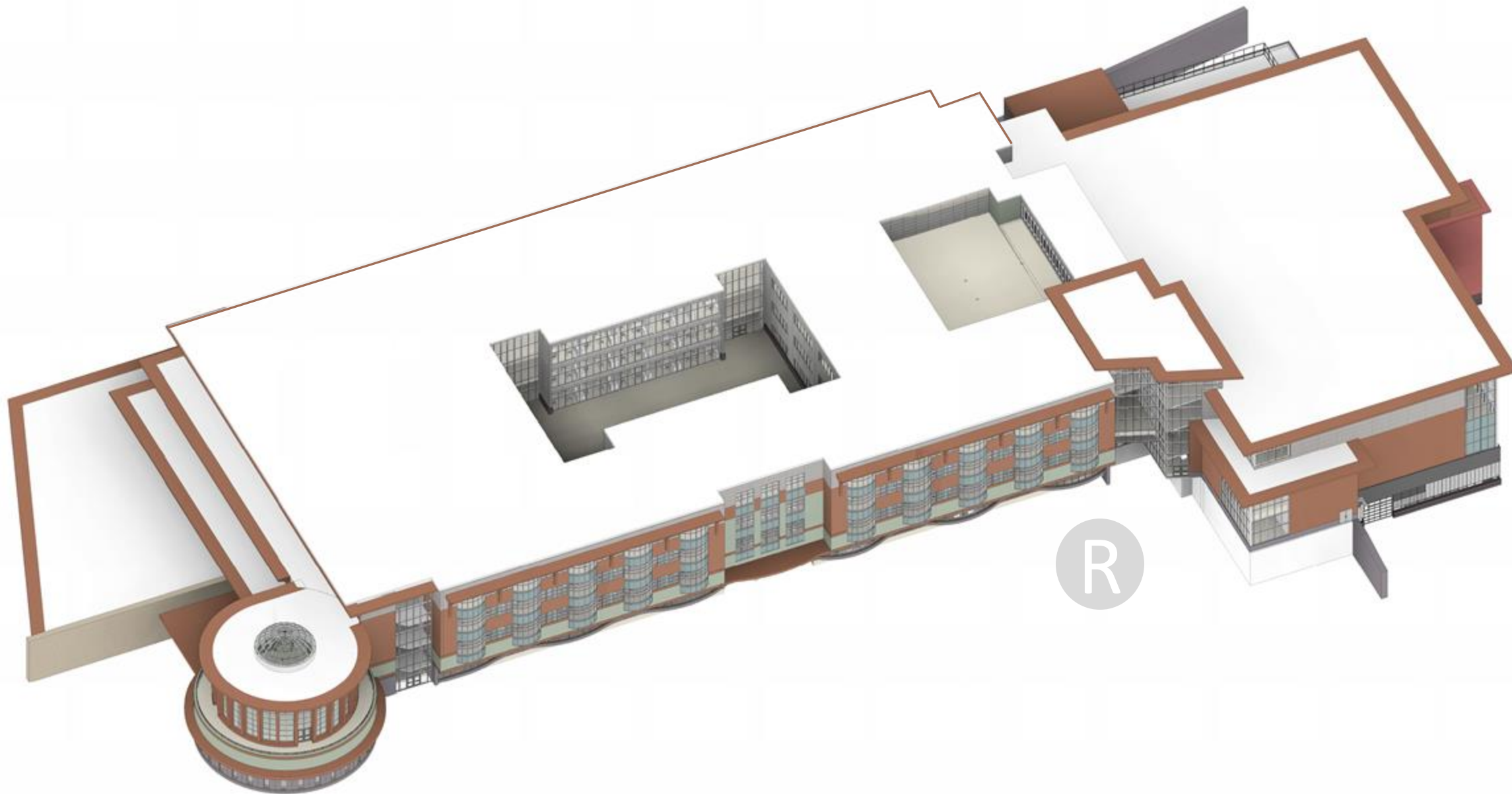
Second Level - Floor Plan Axonometric



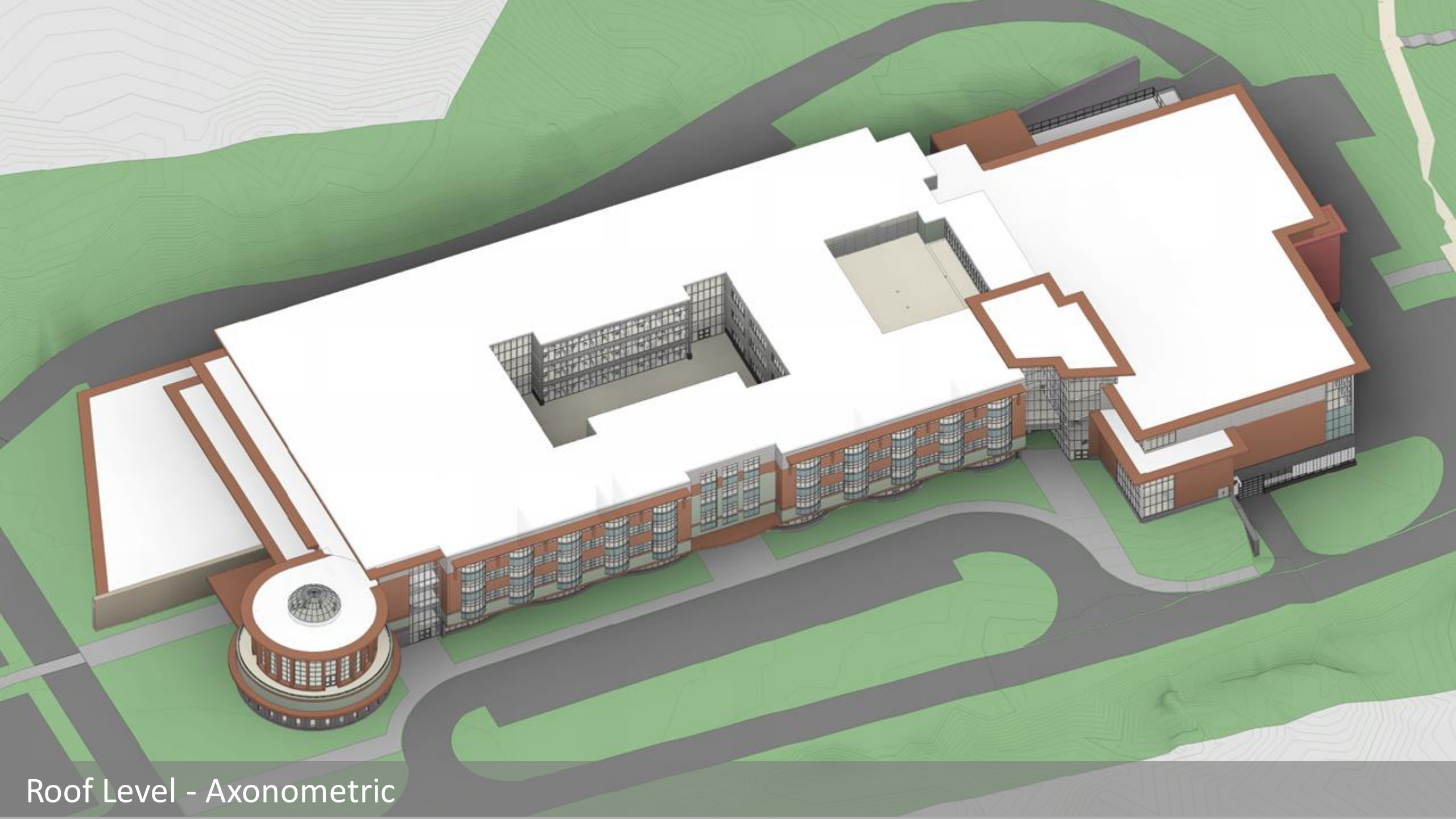
Third Level - Floor Plan Axonometric



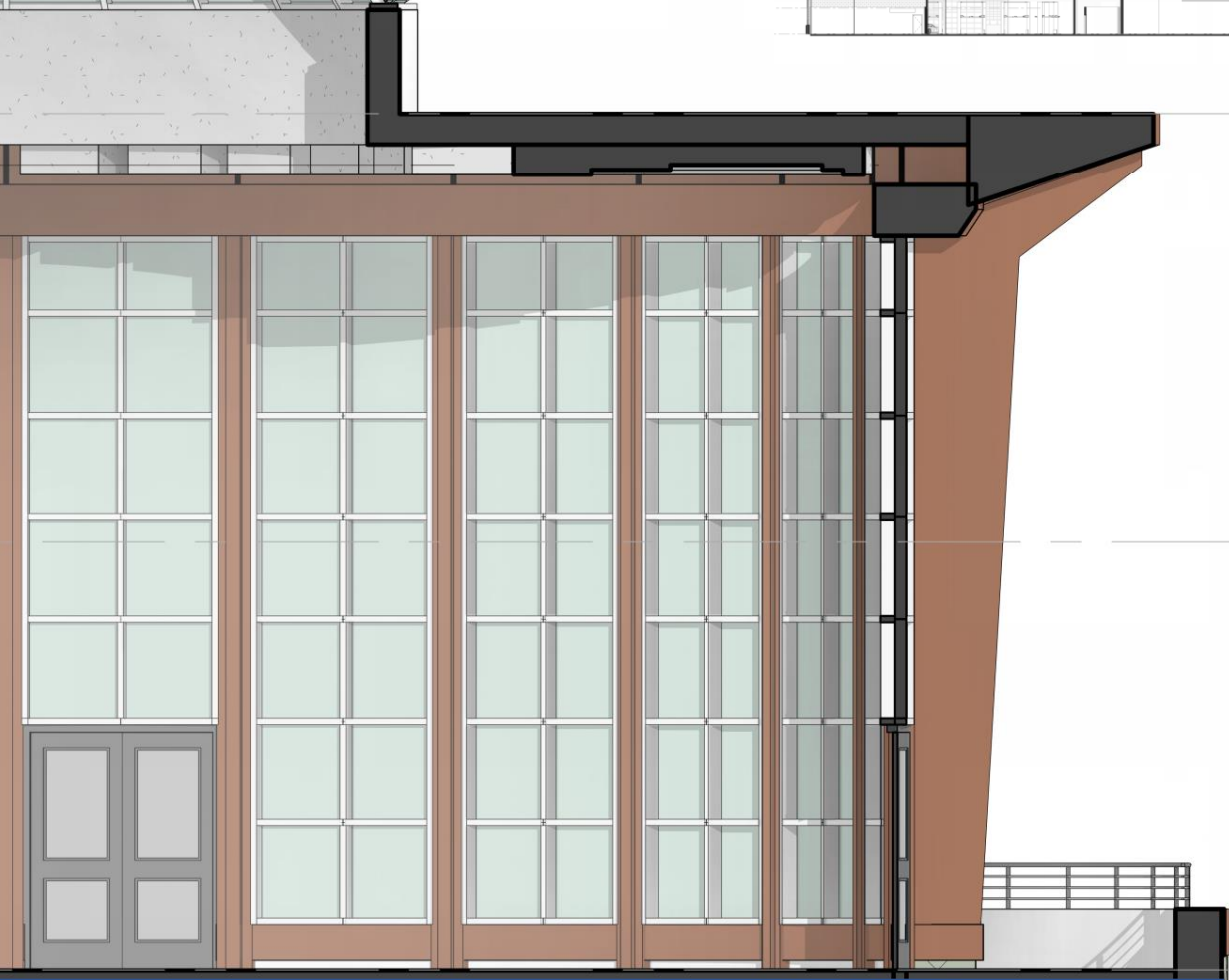
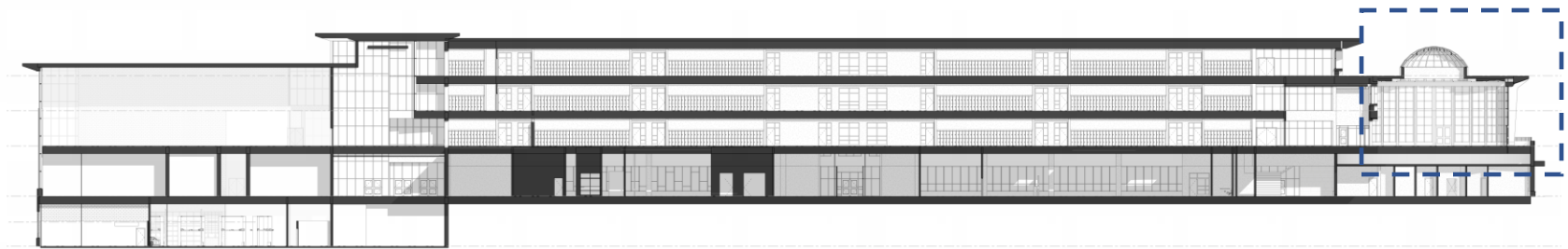
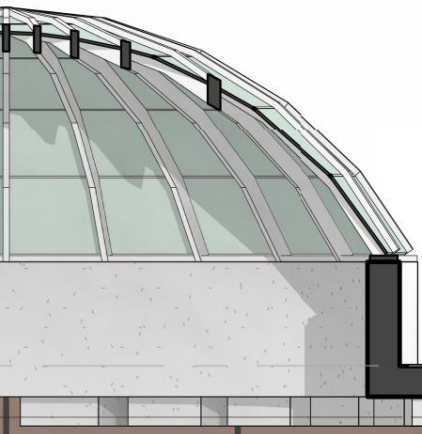
Fourth Level - Floor Plan Axonometric



Roof Level - Axonometric

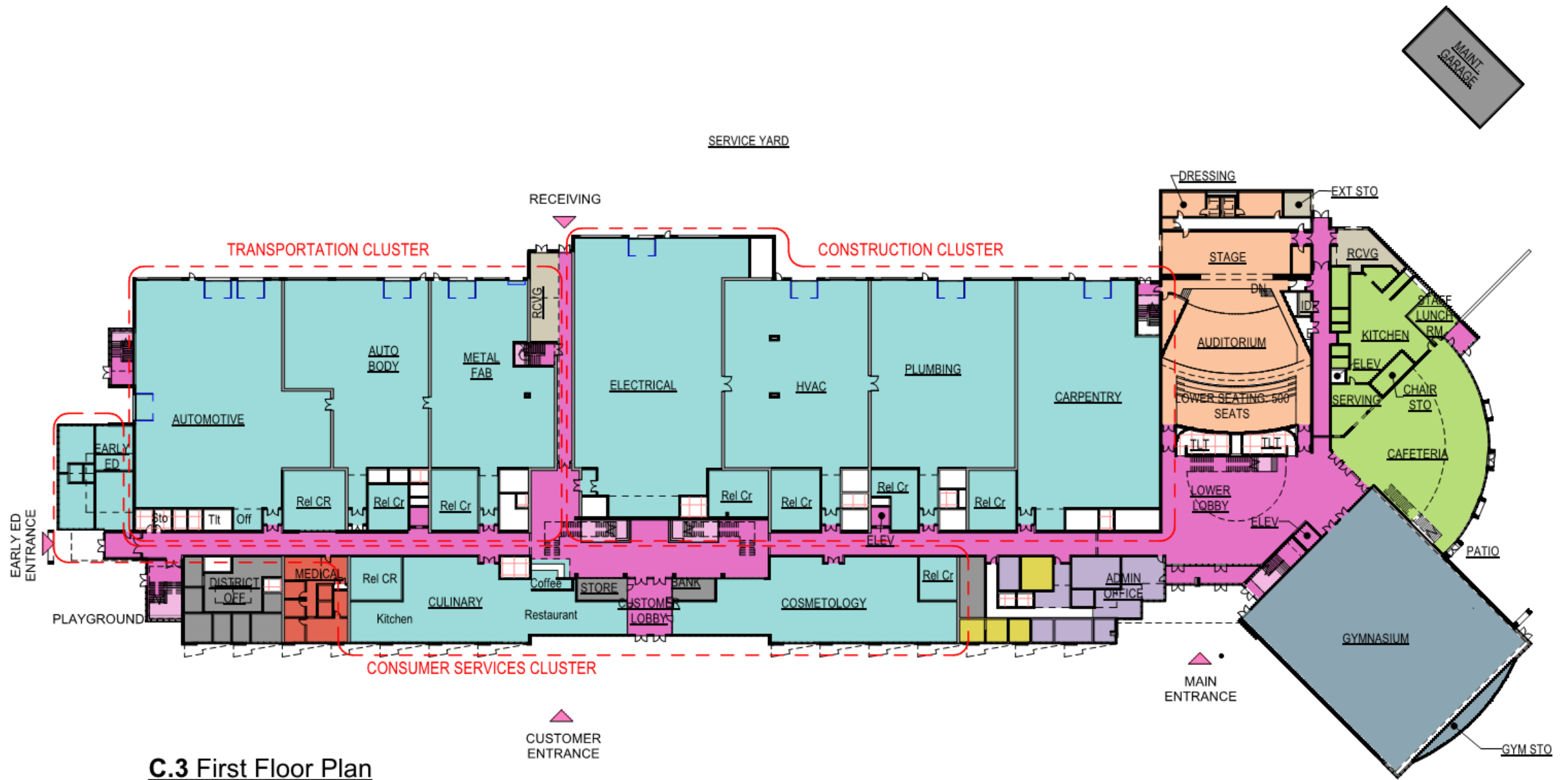


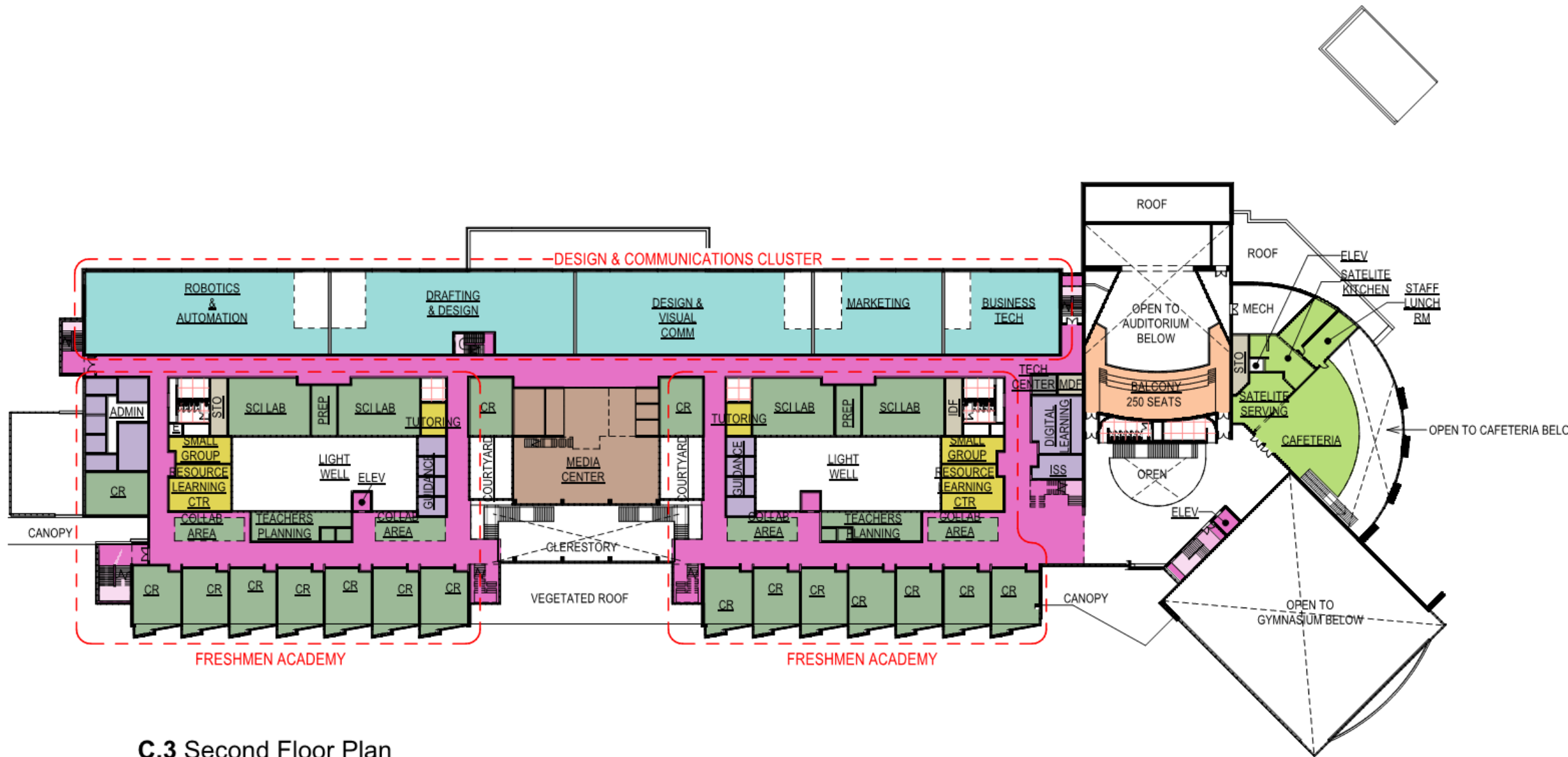
Roof Level - Axonometric



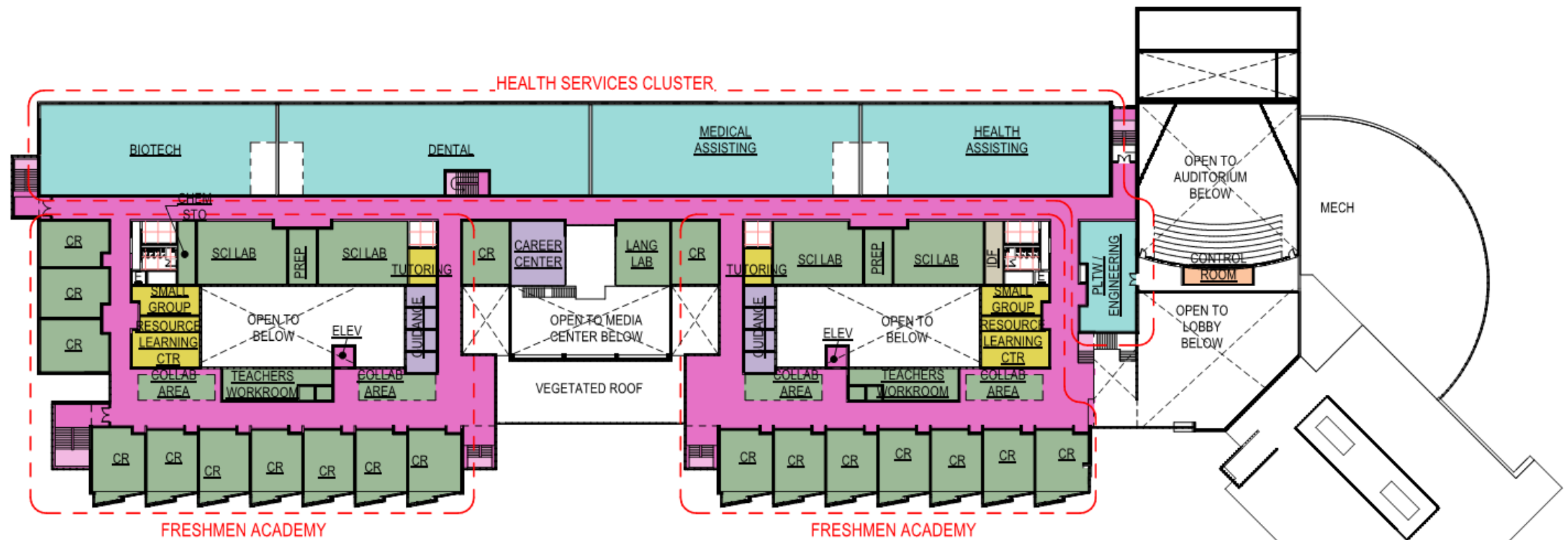
Media Center







C.3 Second Floor Plan



C.3 Third Floor Plan



Context





Context



Inspiration

stone



“wood”



copper