

Science Labs Building – Phase 2

University of Wisconsin – La Crosse
Schematic Design Review No. 1 – November 9, 2017



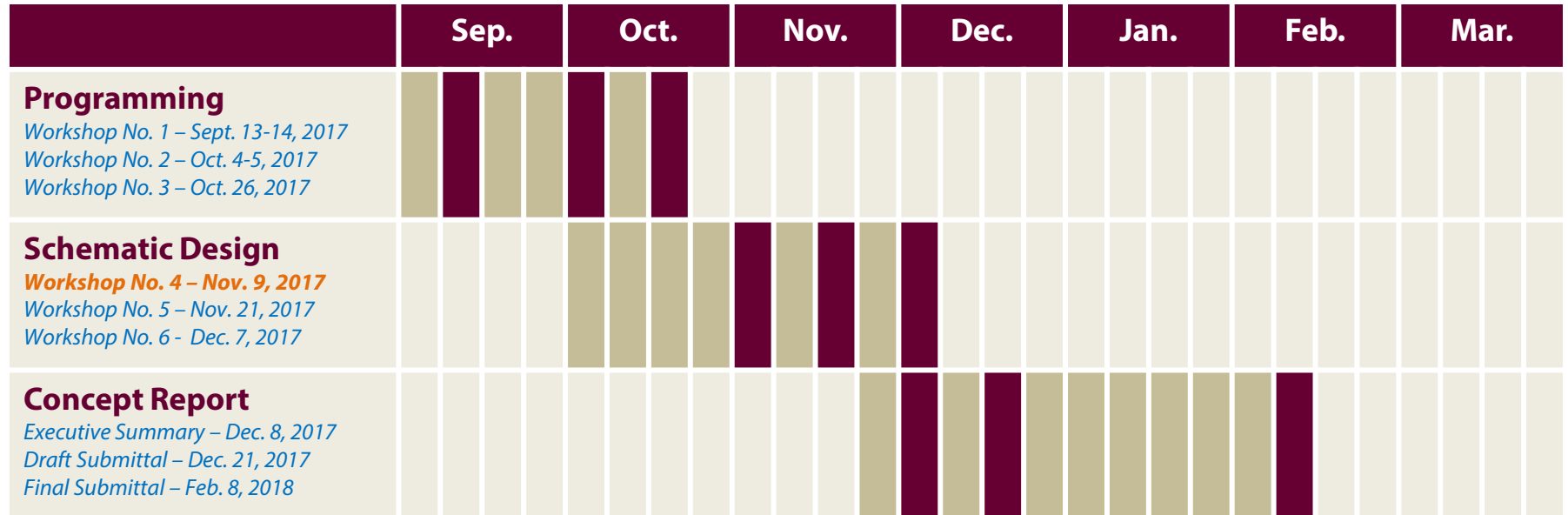
Agenda

Schematic Design

- Schedule Review
- Area Update
- Concept Review
- Budget Update



Project Schedule



Semester Break November 24-26
 Finals December 15-20
 Classes Begin January 22

Workshop No. 5

- Plan & Elevation Refinement

Workshop No. 6

- Concept Design Review & Approval
- Cost Estimate

Phase 2 Area Summary

By Department

Space type	Phase 1 Study	PV 2 mmeeting	PV 3 Meeting	SD 1 Meeting	SD 2 Meeting	Delta	% Growth
Dean's Office Suite	2,299	2,374	2,474	2,474	2,474		
Microbiology	3,043	3,283	3,283	3,283	3,283		
Geography & Earth Science	5,988	5,988	5,956	5,212	5,212		
Chemistry	6,586	6,946	6,946	7,546	7,546		
Physics	7,732	7,732	8,180	8,180	8,180		
Mathematics	9,833	10,253	10,253	10,253	10,253		
Misc Instructional / Support	13,624	13,784	15,554	18,404	19,904	1,500	8.2%
Biology	19,108	20,558	21,680	22,856	22,856		
Classrooms	21,800	21,800	21,800	12,224	16,836	4,612	37.7%
Grand Total	90,013	92,718	96,126	90,432	96,544	6,112	6.8%

Includes

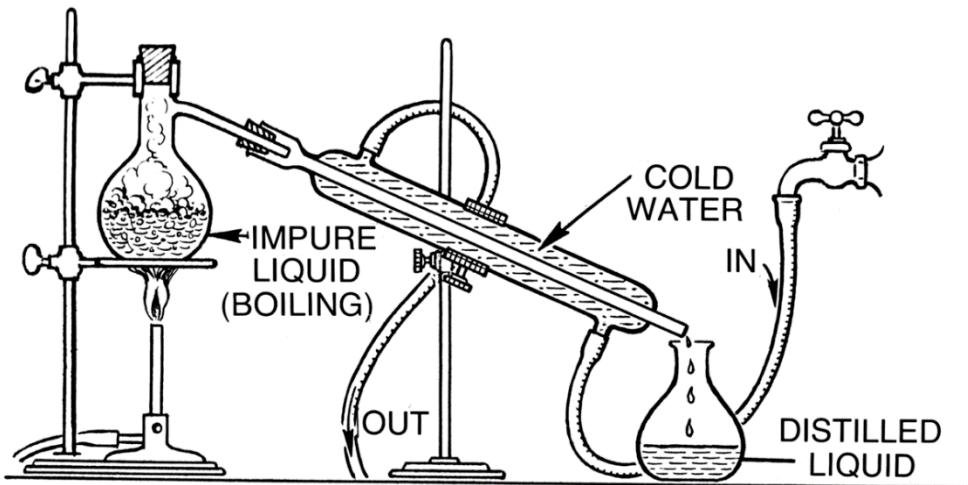
- (9) Classrooms
- (4) Classroom support spaces
- 1,500 NASF Maker Lab

23% reduction in
classroom space from
Phase 1 Study to now

Phase 2 Area Analysis

Distilling the Plans

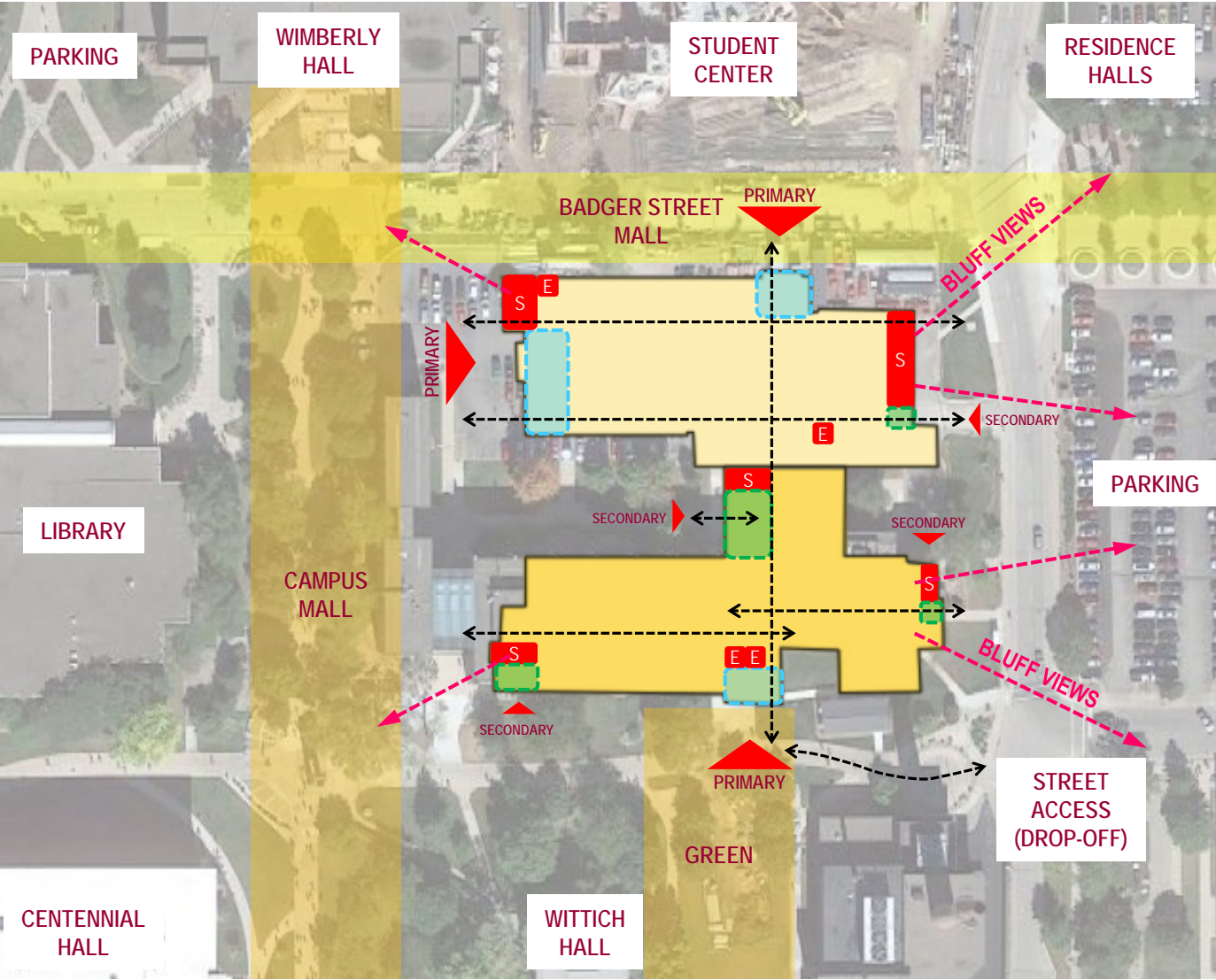
- The plans will be refined based on your feedback today
 - How can we gain efficiency?
 - Could most of the museum display be dispersed into the halls?
- Difference from 63% to 56% efficient plan is **18,556 SF**
 - Extra area not programmed or gross space in the basement
 - This requires approximately 15,000 SF to be removed from the plans without cutting program
 - Could be future expansion if it would be more cost effective than not building
- Still refining the mechanical support spaces and penthouses to seek efficiency



Design Assumptions

- Primary & Secondary Entrance Locations
- Change in grade from north to south
- Courtyard Access
- Distributed Classrooms on Levels 0-3
- Departmental Presence Near Elevators
- Distributed vs Concentrated Museum
- Distributed vs Departmental Faculty Offices
- Natural light into Hallways

Site Analysis



Adjacency Recap – Floor Plan – Level 1

Overall



Adjacency Recap – Floor Plan – Level 1

Phase 2



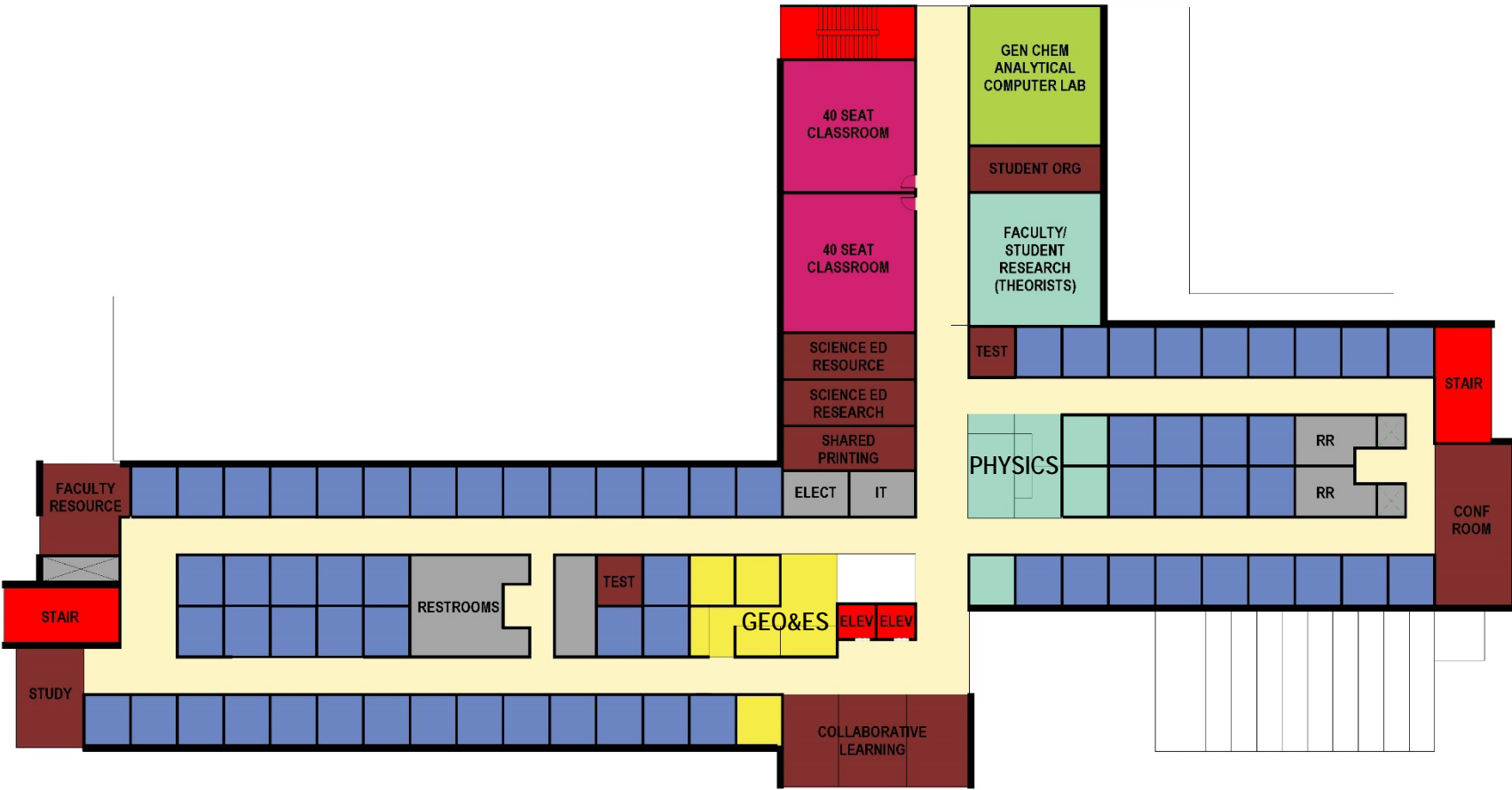
Adjacency Recap – Floor Plan – Level 2

Overall



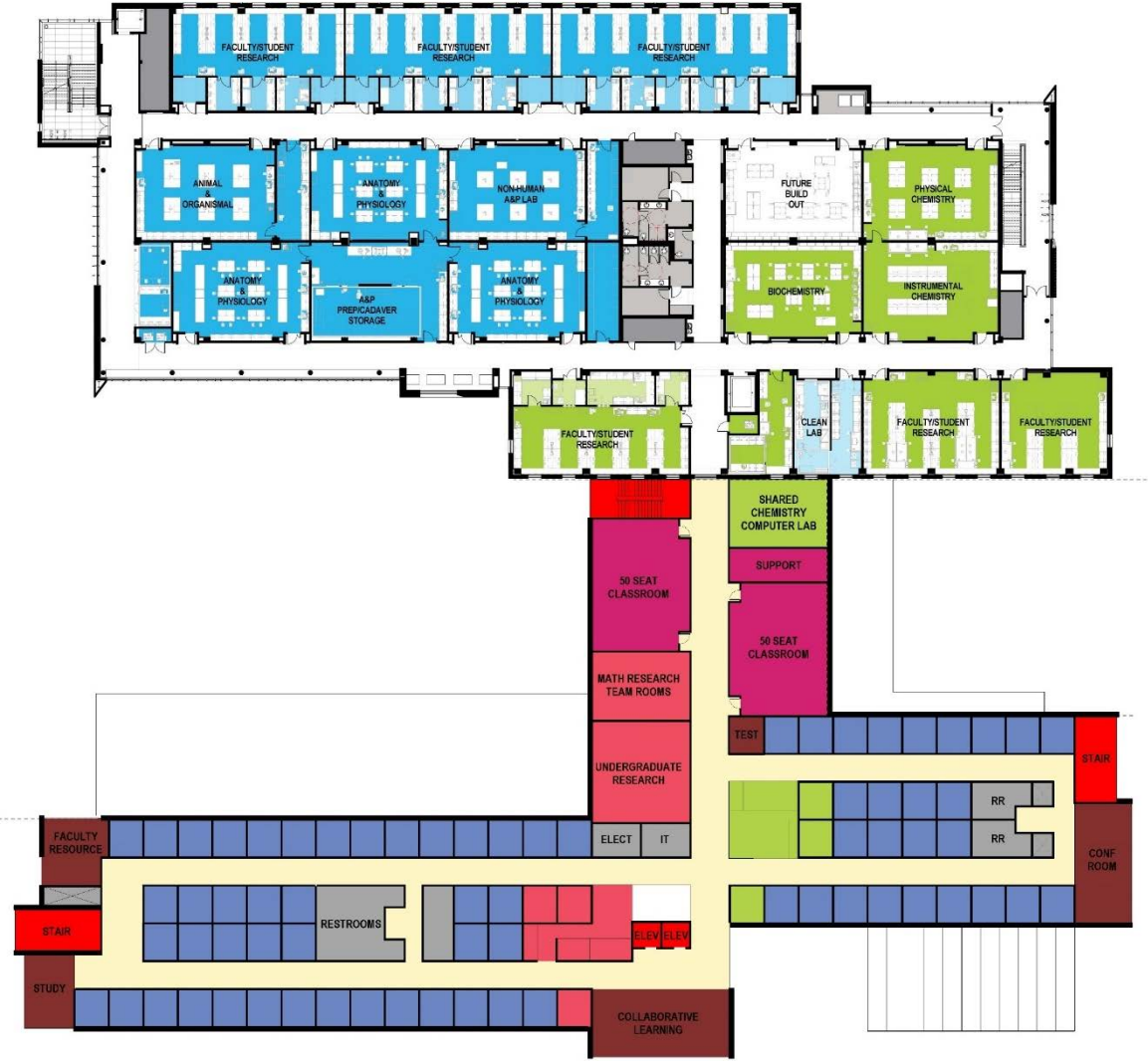
Adjacency Recap – Floor Plan – Level 2

Phase 2



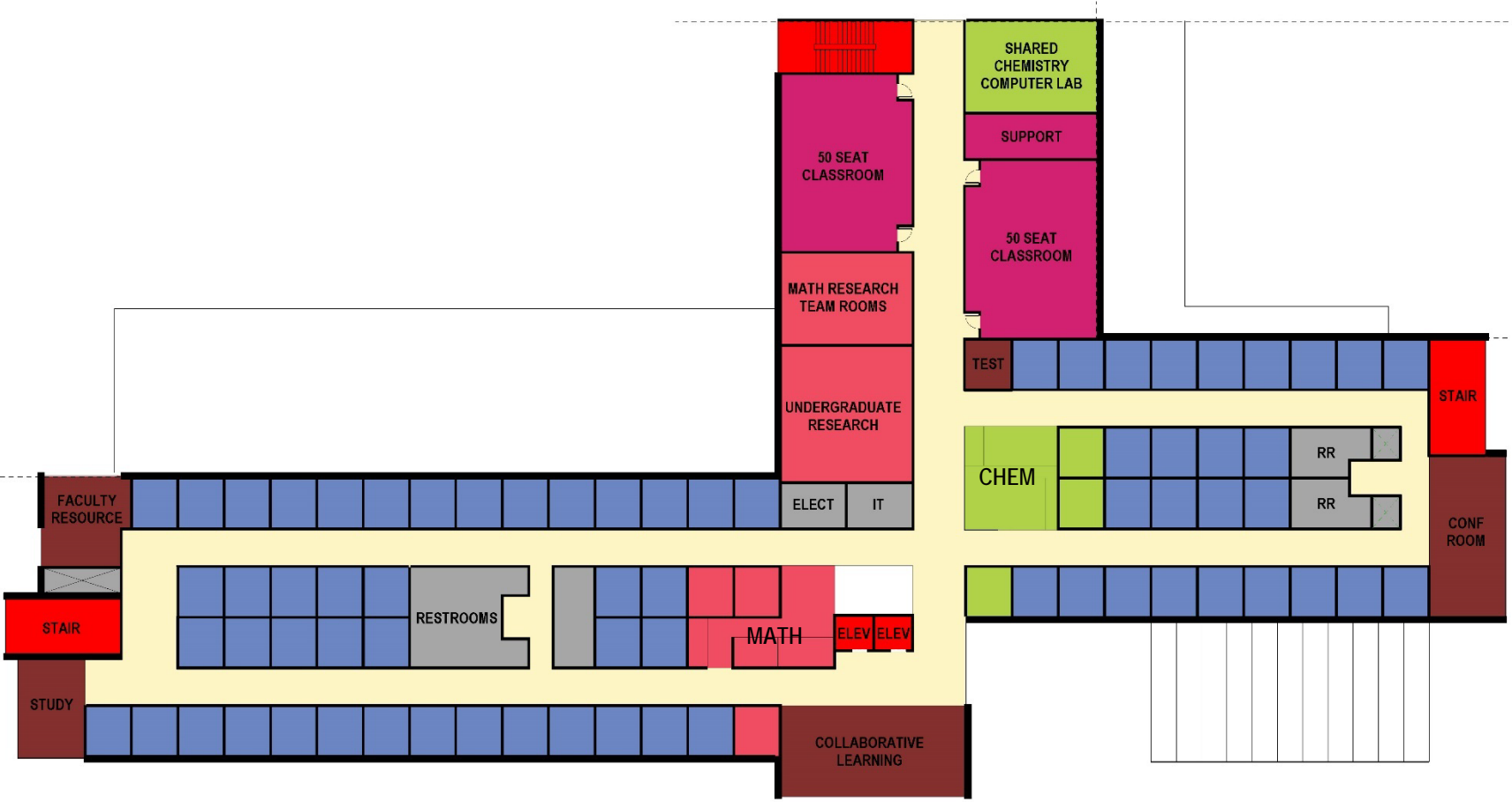
Adjacency Recap – Floor Plan – Level 3

Overall



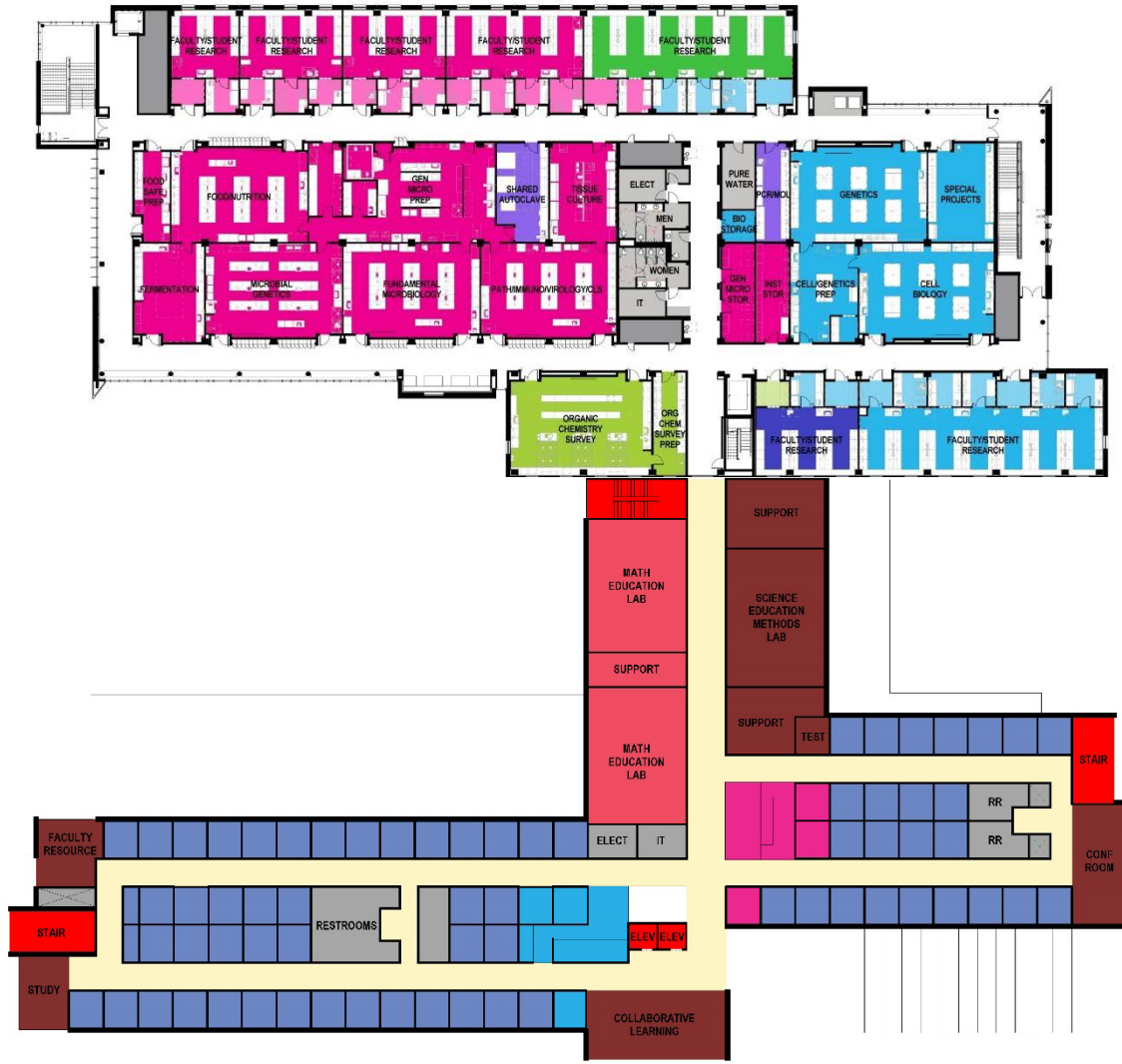
Adjacency Recap – Floor Plan – Level 3

Phase 2



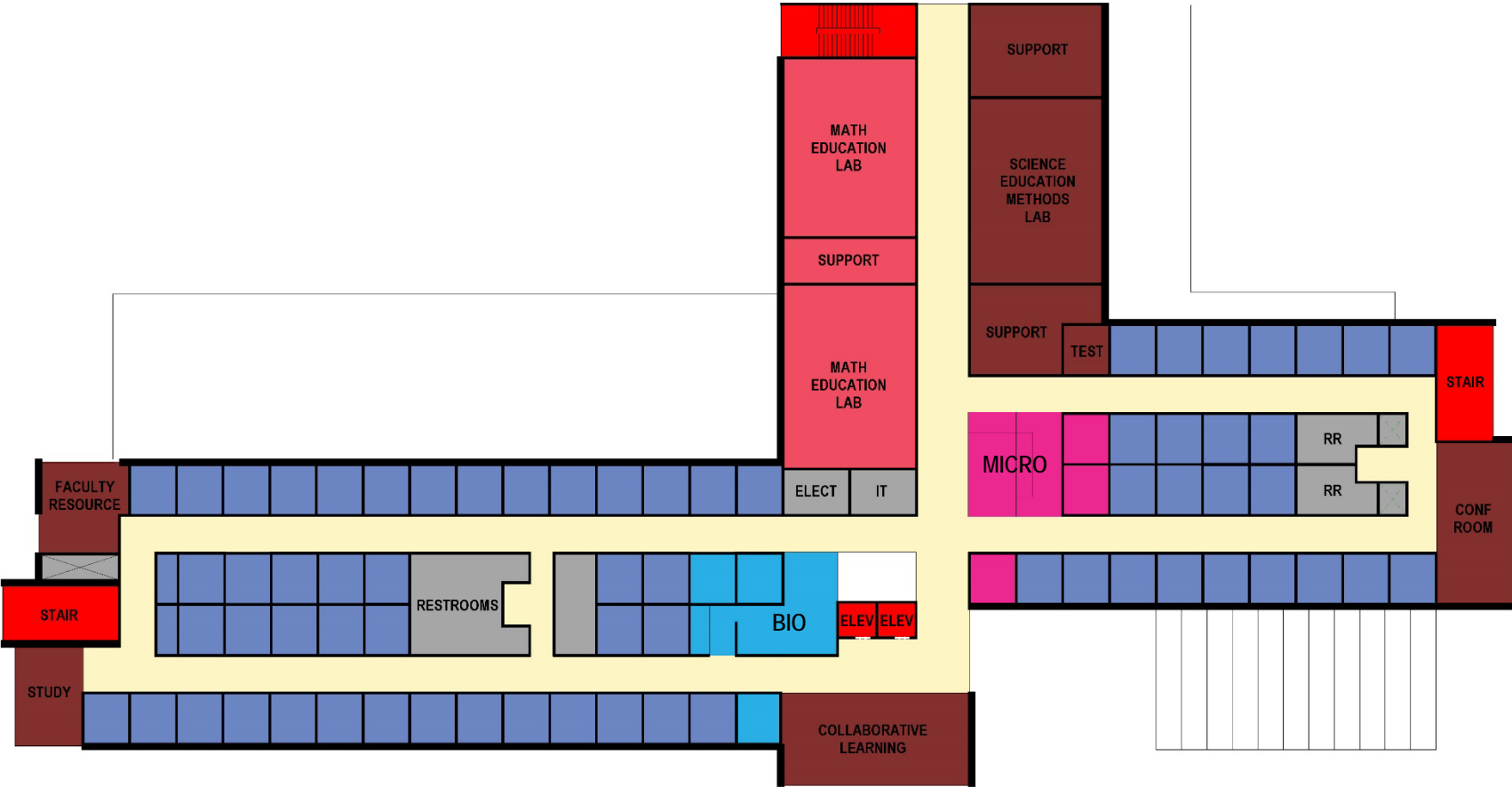
Adjacency Recap – Floor Plan – Level 4

Overall



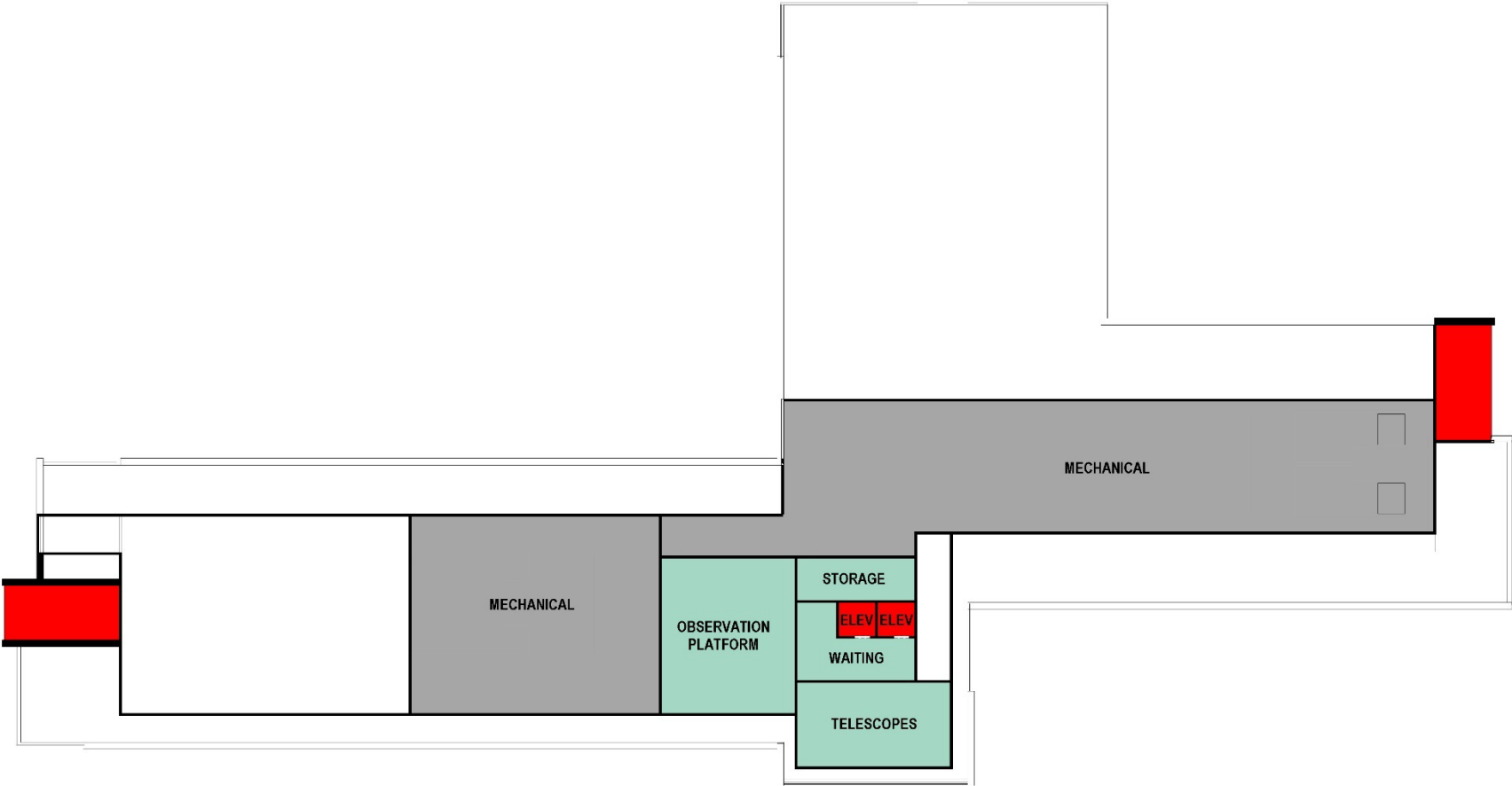
Adjacency Recap – Floor Plan – Level 4

Phase 2



Adjacency Recap – Floor Plan – Roof

Phase 2



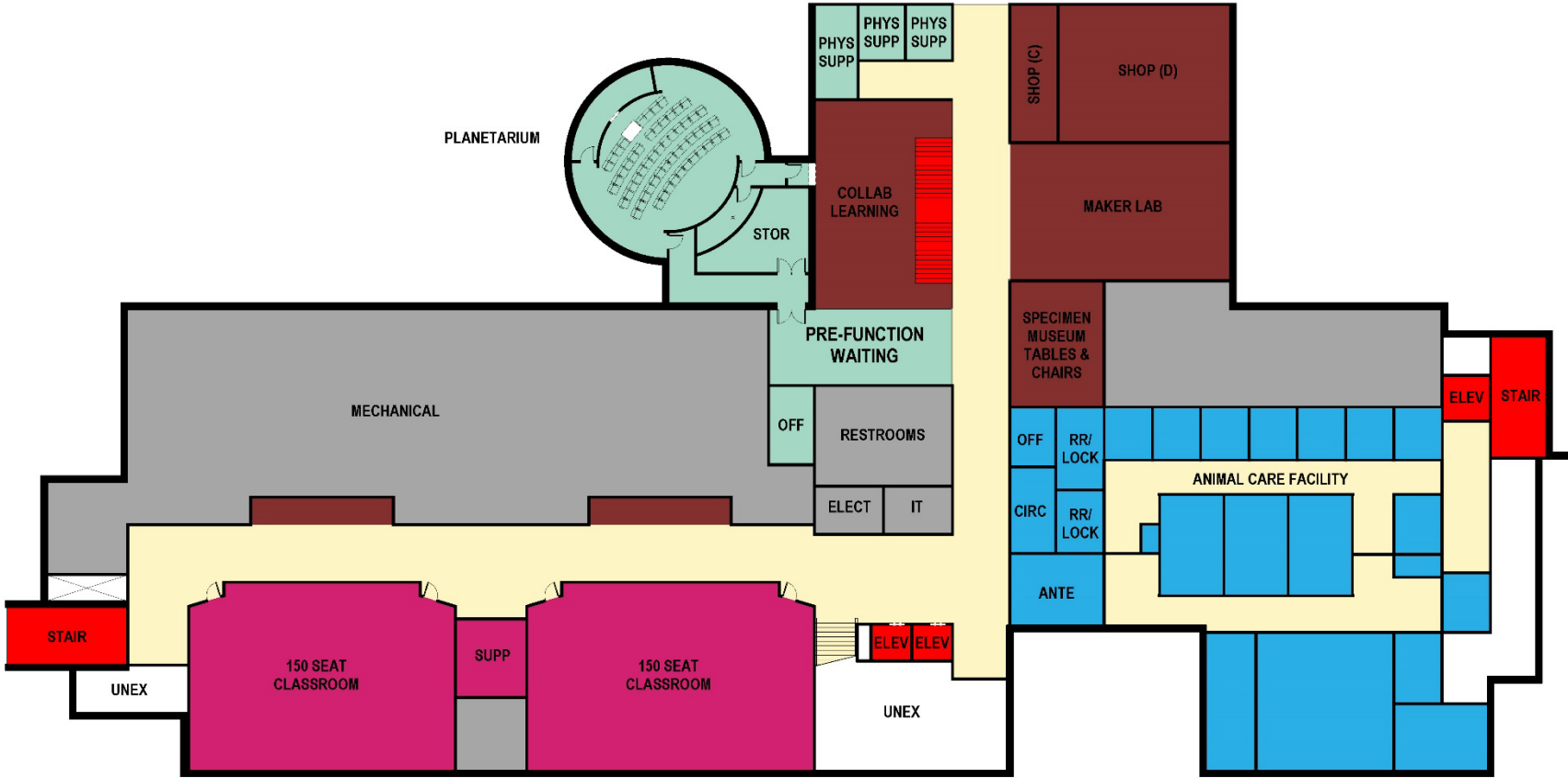
Adjacency Recap – Floor Plan – Level 0

Overall



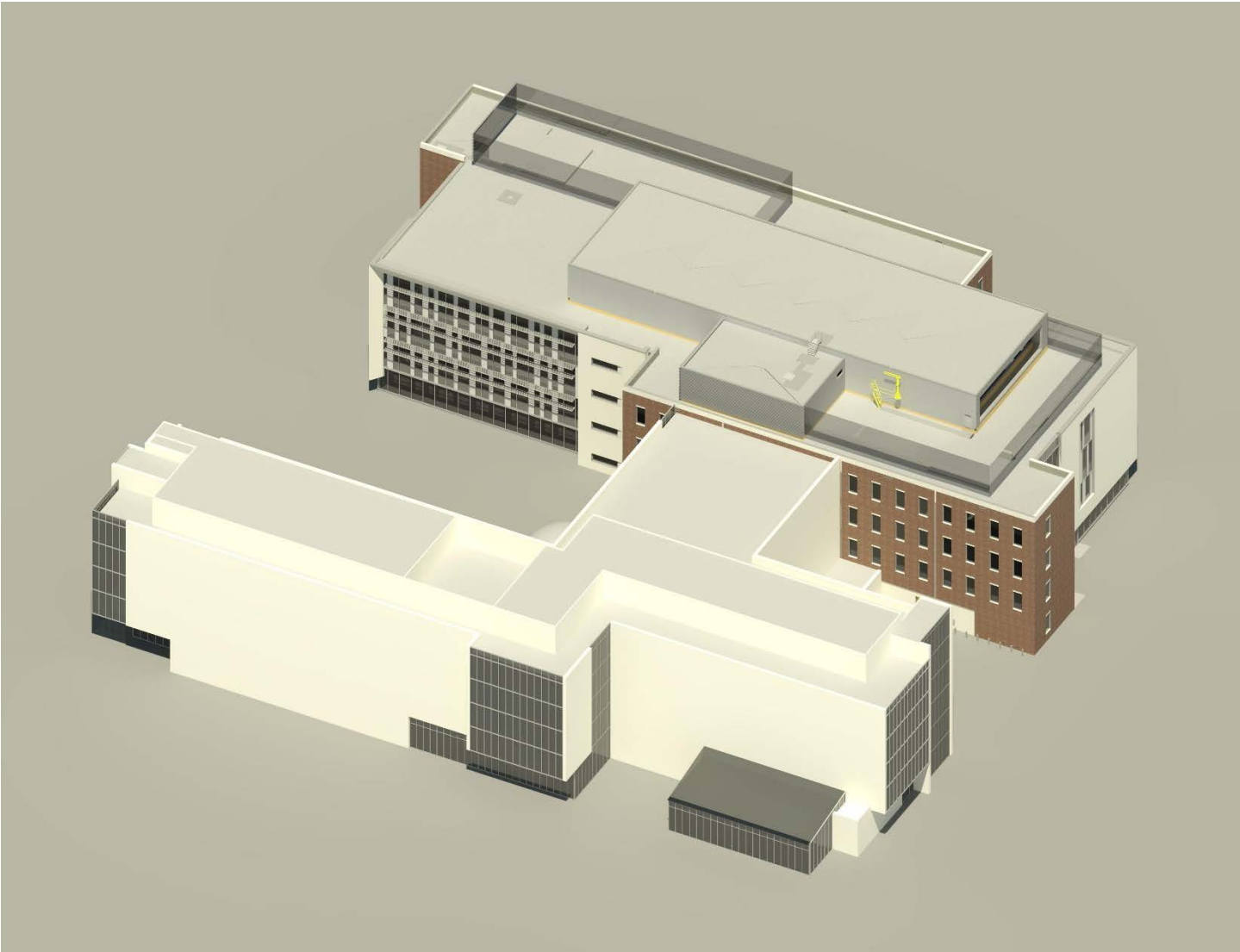
Adjacency Recap – Floor Plan – Level 0

Phase 2



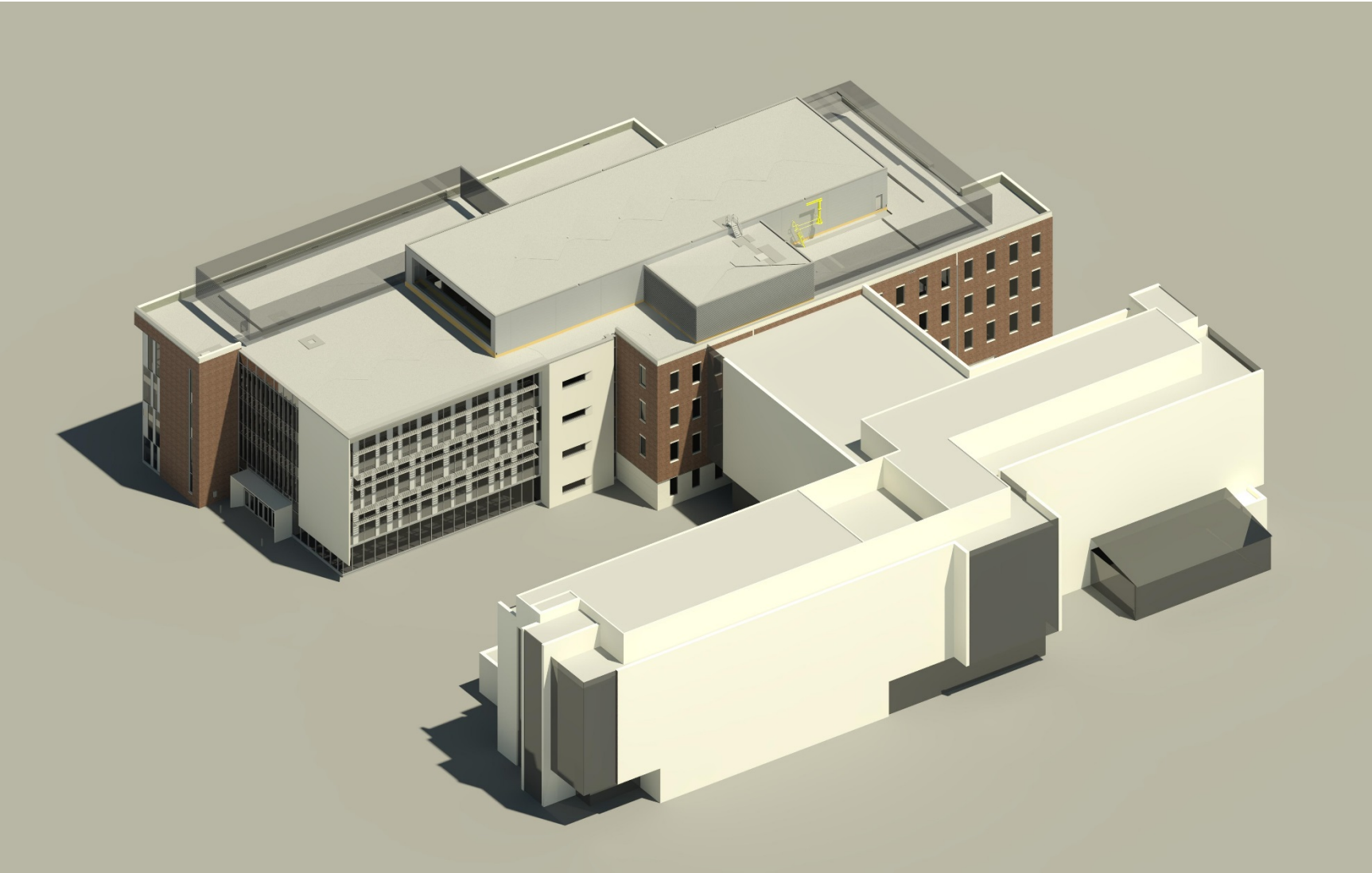
Exterior Massing Development

Phase 2



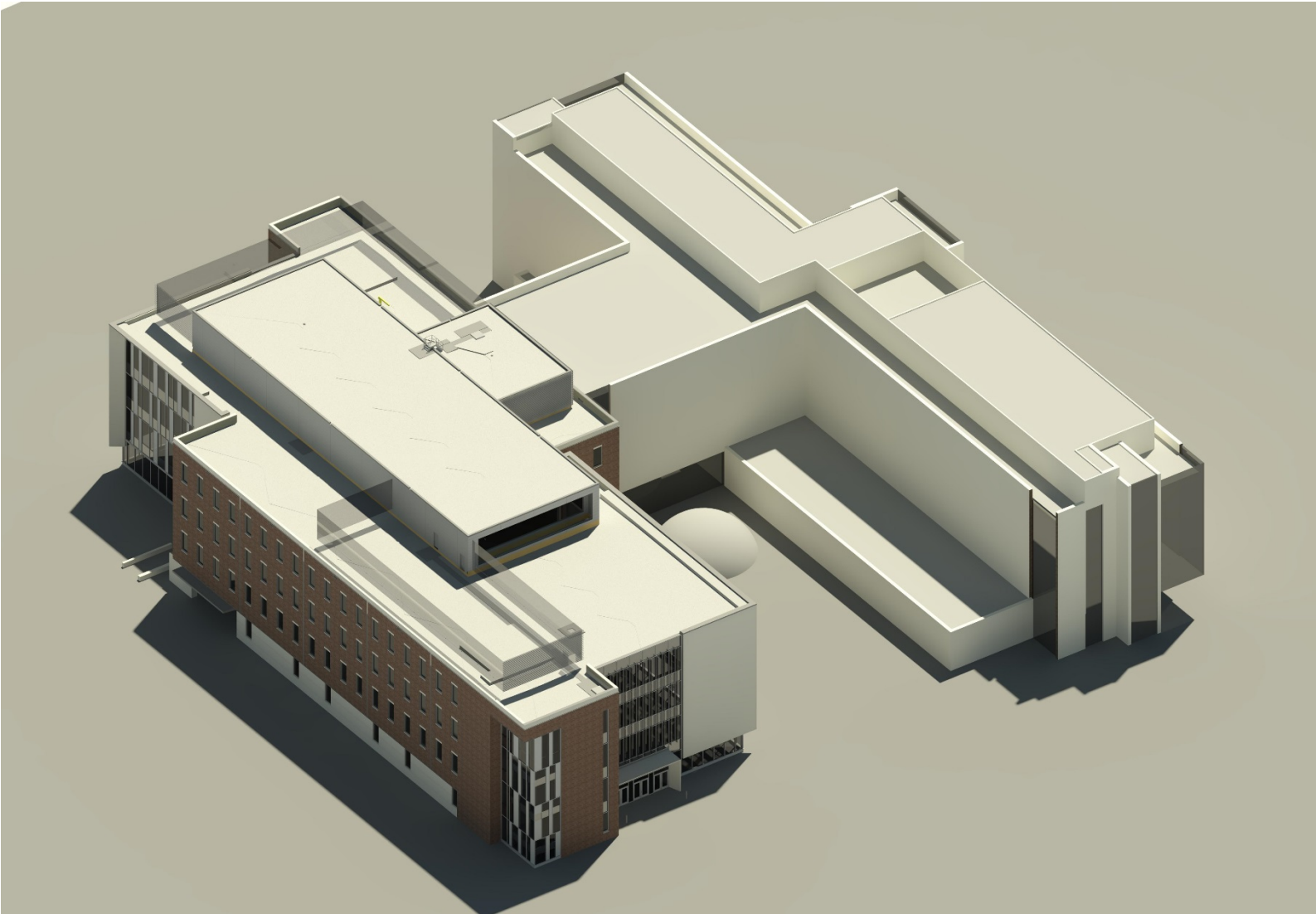
Exterior Massing Development

Phase 2



Exterior Massing Development

Phase 2

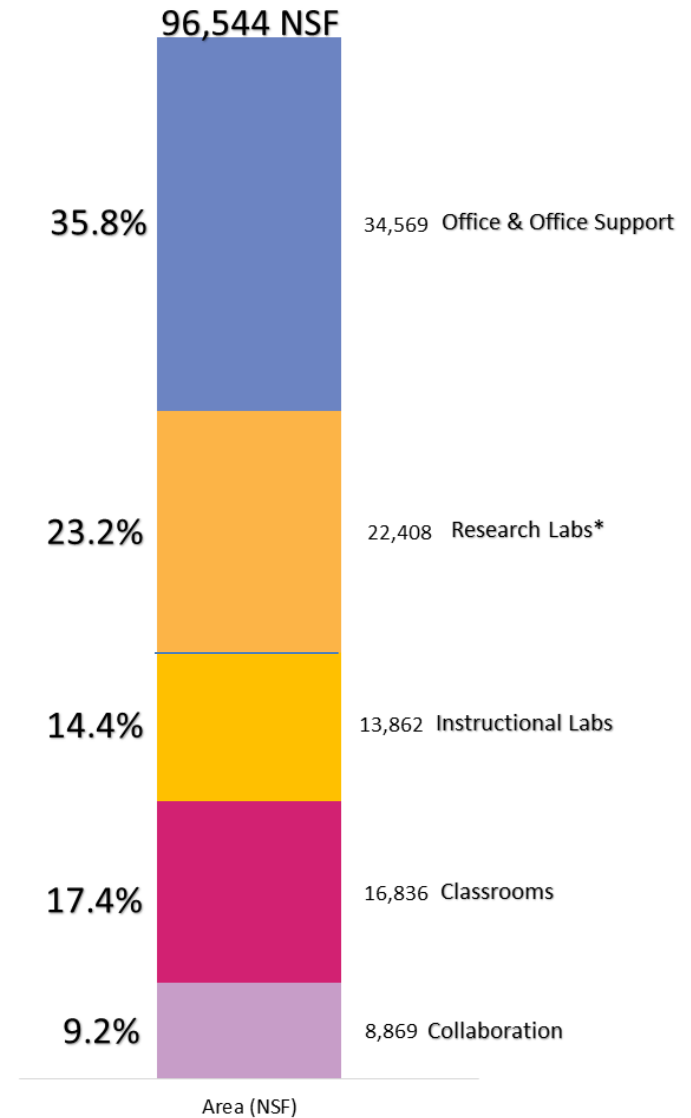


Phase 2 Area Summary

By Space Type

- Excludes percent extra office
- Updated Classroom mix
- Includes maker lab space
- *Maker lab tracked in research labs

- Need campus input on how maker lab will be used
 - Research
 - Curricular
 - Extra-curricular



Phase 2 Area Summary

Plan Efficiency Required

Program Area Summary Options	Preliminary Study	Last meeting #1	Last meeting #2	Last meeting #2
Assumed Efficiency (Net to gross)	63%			
Drawn Efficiency (Net to gross)	56%			
	7 classrooms	10 classrooms	9 classrooms	9 classrooms
Program Type	Low Classroom	From SD1 Meeting	Post SD1 Meeting	Less Efficient
Classrooms	12,224	19,572	16,836	16,836
Collaboration	8,629	8,629	8,629	8,629
Instructional Labs & Support Spaces: Computational	4,632	4,632	4,632	4,632
Instructional Labs & Support Spaces: Mathematics	2,840	2,840	2,840	2,840
Instructional Labs & Support Spaces: Mycology	2,880	2,880	2,880	2,880
Instructional Labs & Support Spaces: S.E.M.	3,270	3,270	3,270	3,270
Sub-total Instructional Labs & Support	13,622	13,622	13,622	13,622
Office	27,855	27,855	27,855	27,855
Office Support	6,834	6,834	6,834	6,834
Sub-total Office & Office Support	34,689	34,689	34,689	34,689
Research & Support: Museum	3,150	3,150	3,150	3,150
Research Lab: Greenhouse & Support	2,080	2,080	2,080	2,080
Research Labs & Support Spaces: Astronomy	3,760	3,760	3,760	3,760
Research Labs & Support Spaces: Computational	2,200	2,200	2,200	2,200
Research: Animal Care	7,974	7,974	7,974	7,974
Research: Building Support (shop & storage)	2,104	2,104	2,104	2,104
Research & Support: Maker Lab		1,500	1,500	1,500
Sub-total Research	21,268	22,768	22,768	22,768
Total Area (NSF)	90,432	99,280	96,544	96,544
Gross Sub-total (Gross- net)	53,111	58,307	56,700	75,256
Total Area (GSF) or Cost	143,543	157,587	153,244	171,800.00

Phase 2 Cost Model

Cost Impact

Program Area Summary Options		Parametric Program Cost model			
63%	Assumed Efficiency (Net to gross)				
56%	Drawn Efficiency (Net to gross)				
		7 classrooms	10 classrooms	9 classrooms	9 classrooms
Program Type		Low Classroom	From SD1 Meeting	Post SD1 Meeting	Less Efficient
Classrooms		\$ 3,063,707	\$ 4,905,340	\$ 4,219,615	\$ 4,219,615
Collaboration		\$ 2,162,691	\$ 2,162,691	\$ 2,162,691	\$ 2,162,691
Instructional Labs & Support Spaces: Computational		\$ 1,160,920	\$ 1,160,920	\$ 1,160,920	\$ 1,160,920
Instructional Labs & Support Spaces: Mathematics		\$ 711,791	\$ 711,791	\$ 711,791	\$ 711,791
Instructional Labs & Support Spaces: Mycology		\$ 1,296,465	\$ 1,296,465	\$ 1,296,465	\$ 1,296,465
Instructional Labs & Support Spaces: S.E.M.		\$ 1,472,028	\$ 1,472,028	\$ 1,472,028	\$ 1,472,028
Sub-total Instructional Labs & Support		\$ 4,641,205	\$ 4,641,205	\$ 4,641,205	\$ 4,641,205
Office		\$ 6,981,313	\$ 6,981,313	\$ 6,981,313	\$ 6,981,313
Office Support		\$ 1,712,809	\$ 1,712,809	\$ 1,712,809	\$ 1,712,809
Sub-total Office & Office Support		\$ 8,694,121	\$ 8,694,121	\$ 8,694,121	\$ 8,694,121
Research & Support: Museum		\$ 1,264,711	\$ 1,264,711	\$ 1,264,711	\$ 1,264,711
Research Lab: Greenhouse & Support		\$ 1,062,868	\$ 1,062,868	\$ 1,062,868	\$ 1,062,868
Research Labs & Support Spaces: Astronomy		\$ 2,058,577	\$ 2,058,577	\$ 2,058,577	\$ 2,058,577
Research Labs & Support Spaces: Computational		\$ 615,626	\$ 615,626	\$ 615,626	\$ 615,626
Research: Animal Care		\$ 5,529,906	\$ 5,529,906	\$ 5,529,906	\$ 5,529,906
Research: Building Support (shop & storage)		\$ 527,327	\$ 527,327	\$ 527,327	\$ 527,327
Research & Support: Maker Lab			\$ 375,946	\$ 375,946	\$ 375,946
Sub-total Research		\$ 11,059,015	\$ 11,434,961	\$ 11,434,961	\$ 11,434,961
Total Area (NSF)		\$ 29,620,739	\$ 31,838,317	\$ 31,152,592	\$ 31,152,592
Gross Sub-total (Gross- net)		\$ 13,311,201	\$ 14,613,588	\$ 14,210,861	\$ 18,861,449
Total Area (GSF) or Cost		\$ 42,931,939	\$ 46,451,905	\$ 45,363,453	\$ 50,014,041
10% Contingency		\$ 4,293,193.92	\$ 4,645,190.53	\$ 4,536,345.29	\$ 5,001,404.10
Sub-Total Construction with Contingency		\$ 47,225,133.12	\$ 51,097,095.83	\$ 49,899,798.14	\$ 55,015,445.08
3% FF&E		\$ 1,287,958.18	\$ 1,393,557.16	\$ 1,360,903.59	\$ 1,500,421.23
7% A/E Fees		\$ 3,005,235.74	\$ 3,251,633.37	\$ 3,175,441.70	\$ 3,500,982.87
4% DFD Management		\$ 1,717,277.57	\$ 1,858,076.21	\$ 1,814,538.11	\$ 2,000,561.64
1% Other Fees		\$ 429,319.39	\$ 464,519.05	\$ 453,634.53	\$ 500,140.41
Grand Total Project Cost		\$ 53,664,924.00	\$ 58,064,881.63	\$ 56,704,316.07	\$ 62,517,551.22

Next Steps

- Incorporate Your Feedback
- Interior Layout Refinement
- Exterior Design Development & Articulation
- Cost Estimate Update