



University of North Georgia – Gainesville Campus Expansion; a Story of Collaboration 09.21.2021



Your Presenters



BILL MOODY
DIRECTOR OF FACILITIES &
OPERATIONS
University of North
Georgia



DOUG HANNAH, AIA LEED AP BD+C PROJECT MANAGER Pond



VAN LYNN, PE
MECHANICAL ENGINEERING/
CONTROLS SPECIALIST
Pond



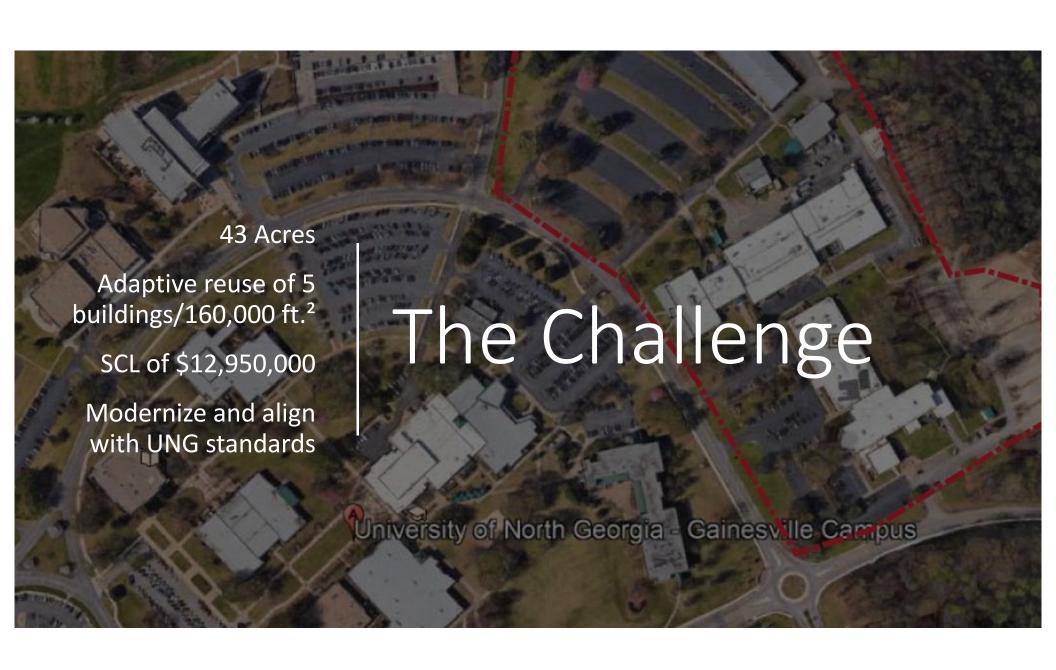
JOHN HAYNES
PROJECT EXECUTIVE
(CONSTRUCTION)
Carroll Daniel
Construction



GEORGE FLYNN, AIA
PROGRAMMING / DESIGN
ASSOCIATE
Flynn Finderup Architects

Agenda





Facility Condition/ Initial Impressions







Hardscape and Landscape

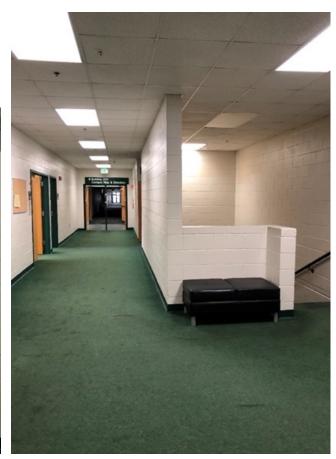




Student Spaces



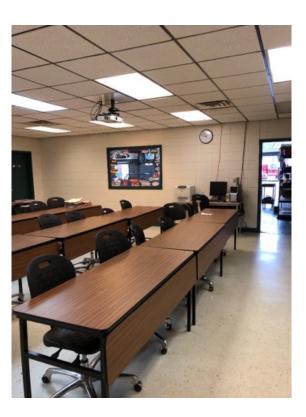




Instructional Spaces





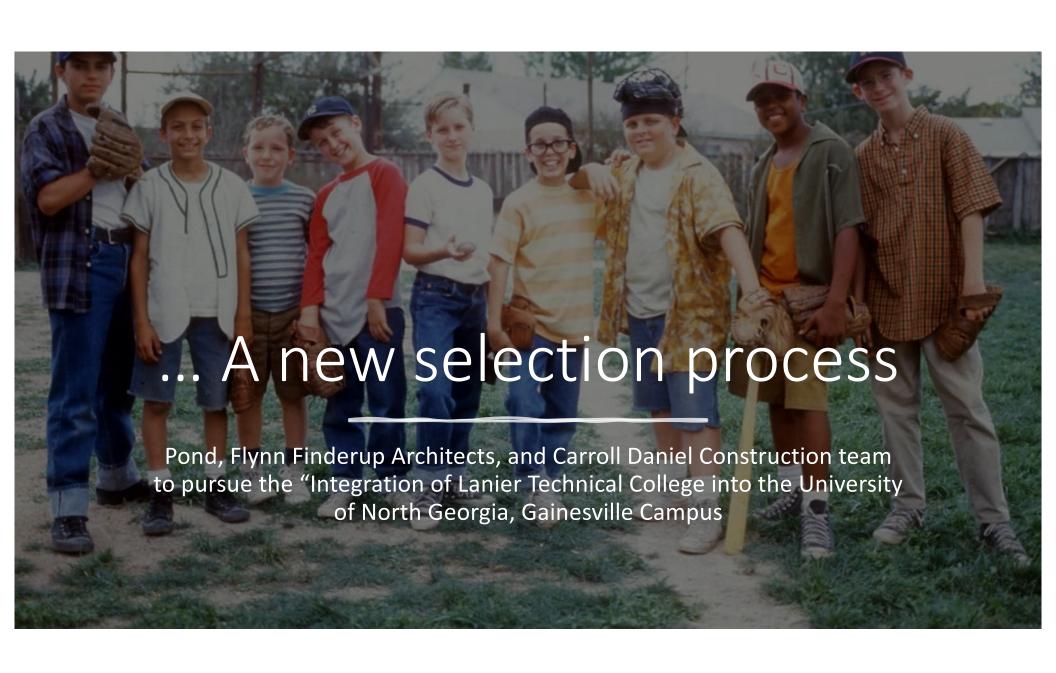


Things That Make You Go Hmm....









Previous Collaborations

- 2014-2018 Carroll Daniel and Pond collaborate for the development of the new Lanier Tech campus
 - CDCC Task Order w/UNG
 - Pond Task Order w/UNG
 - FFA Programming and Design w/UNG since 1999
 - Pond, CDCC Multi-Building Project Delivery
 - Lanier
 - DDS





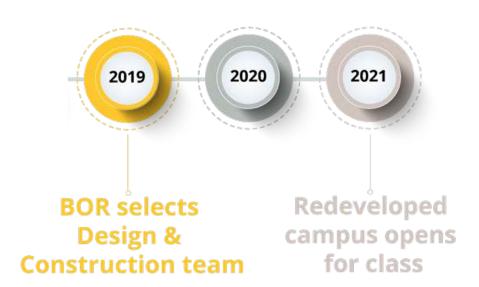
Timeline







Timeline

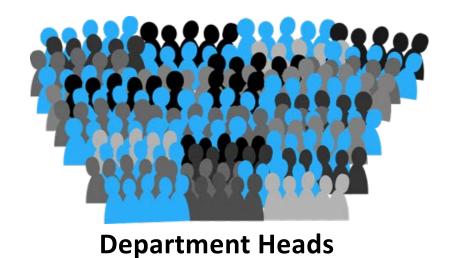


Campus Collaborations

2017 Sector Plan

- UNG Collaborations
 - Steering Committee
 - Department Appeals





Core Planning Objectives

- Accreditation issues
- Scattered departments
- Growing departments, expand in place
- Physical needs match up with available facilities
- Specialty spaces









Visual Arts



Film and Digital Media

2 Approaches to Meeting Needs

- Sector Plan
 - Completely relocate Department



Backfill

Expand once neighbors have been relocated



Sector Program

- Departmental Programs
 - Defined required gross area by department
- Balance department requirements with available building area- 160,000GSF



Marching Orders

MAXIMIZE

renovations where we **NEED** to

MINIMIZE

renovations where we *CAN*."



2019 Team Pre-design Collaboration

- Departmental Programs
- Individual Building/Department Floor plans
- Building Assessment
- Cost Estimate

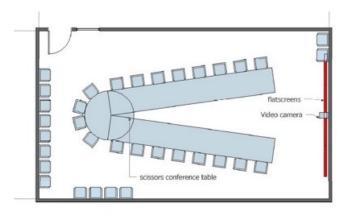
Both Design and Construction team members in every meeting



Program

Goal: stay within the existing building footprint

- Refined room requirements
 - Diagrams
 - Data sheets



Videoconfernce Room - 20 Seats

	Square Footage				
NG Lanier Tec					
No. Space	s Room Name	Total SF	Length x	Width	= Room Area
1	Instructional Technology Storage	120	10	12	120
1	Integrated Sciences Classroom and Lab (32 seats)	2184	42	52	2184
1	Integrated Sciences Lab (32 seats)	1428	42	34	1428
1	Integrated Sciences Storage/Prep	300	300	1	300
3	Kinesiology Offices	360	12	10	120
1	Kinesiology/Human Performance Lab PLACEHOLDER	1000	1000	1	1000
1	Technology & Literature Center	448	28	16	448
70	Department Area Subtotal	21,604.00			
	Department Circulation 20%	4,320.80			
	Total Departmental Area	25,924.80			
Film & Dig	ital Media				
	* construct "back lot" building fronts				
1	Breakroom (4 seats)	120	10	12	120
1	Color Grading Room (seat 12)	280	14	20	280
1	Computer Lab (18 seats) forward facing	728	28	26	728
1	Conference Room (20 seats)	384	32	12	384
1	Copy/Workroom	120	12	10	120
2	Dressing Rooms	560	14	20	280

Department/Plan Development

Building Schematic Designs

Individual Design Sessions

Users, architect, CM, facilities



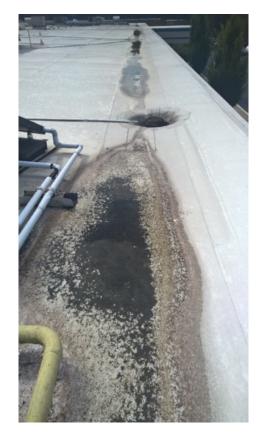


Building Assessment

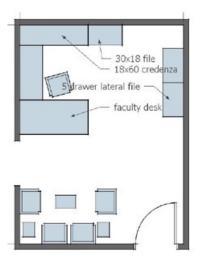
- Establish condition of existing systems
- Subcontractor Participation
- Project life expectancy
- Prioritize replacement







 Each room individually priced with multiple renovation-level considerations



	Adminis	strative Assistant /Reception (140SF)				-		-	
				Lev	elC			Le	rel B	
Div.	Description	Scope	Unit	\$/Unit		Total	\$	/Unit	Total	
02	Selective Demo	Room SF	140	\$ 8.00	\$:	1,120.00	\$	5.00	\$7	00.00
0 6	Millwork	8' Base Cabinet	8	\$ 250.00	\$	2,000	\$	250.00	\$	2,000
08	Doors, Frames, Hardware	(1) HM Frm, HM Door	1	\$ 1,700.00	\$	1,700				
08	Glazing	(1) Door Lite	1	\$ 150.00	\$	150	\$	150.00	\$1	50.00
09	Drywall	48' x 12' height (SF- walls)	576	\$ 6.00	\$	3,456				
		Acoustical Ceiling (SF)	140	\$ 3.00	\$	420		140	\$2	10.00
09	Carpet Tile	Room SF	140	\$ 4.50	\$	630	\$	4.50	\$	630
09	Paint	Room SF (Exposed Deck)	140	\$ 4.00	\$	560	\$	4.00	\$	560
21	Fire Suppression	Room SF	140	\$ 3.00	\$	420				
22	Plumbing	Room SF	140	\$ 10.00	\$	1,400				
23	HVAC	Room SF	140	\$ 12.00	\$	1,680				
26					\$					
26	Low Voltage	Room SF	140	\$ 8.00	\$	1,120				
26	Electrical	Room SF	140	\$ 20.00	\$	2,800				
27	Audio Visual	Room SF	140	\$ 6.00	\$	840				
27	Fire Alarm	Room SF	140	\$ 2.00	\$	280				
28										
		Total	140	\$ 132.69	\$	18,576	\$	30.36	\$	4,250

 Summary of \$/SF rates per room in each program and each level of renovation

		J-329 Building 100 (V is Arts, IE	SA, Cont. E	d)						
% 		Programming - 12/19/	18							
					Le	vel	В		Leve	el C
Department	No. Spaces	Room Name	SF	5	S/Unit		Price	\$/Unit		Price
Building Support										
	1	Breakroom (seat 8)	192	\$	24.34	\$	9,346	\$ 73.73	\$	27,162
	1	Building 100 Existing Custodial	122	\$	13.52	\$	1,650	\$120.07	\$	14,893
	1	Building 100 Existing Electrical Closet	384	\$	12.00	\$	4,608	\$ 97.55	\$	35,156
	1	Building 100 Existing Mechanical	449	\$	12.00	\$	5,388	\$ 95.76	\$	42,995
	1	Building 100 Existing Men's Restroom	516	5	40.64	\$	26,050	\$129.27	\$	68,688
	1	Building 100 Existing Women's Restroom	499	\$	43.72	\$	26,813	\$132.62	\$	68,176
	3	Building 100 New Air Handling Room	1800	\$	4.83	\$	8,700	\$ 31.68	\$	57,032
Conference	1	Conference Room (8 seats)	192	\$	15.00	\$	2,880	\$ 116.90	\$	22,444
Continuing Ed.	1	Administrative Assistant/Reception (seat 4)	140	\$	30.36	\$	4,250	\$ 132.69	\$	18,576
	1	Breakroom/Kitchen (seat 4)	192	\$	56.78	\$	10,902	\$ 136.21	\$	26,152
	2	Classroom -24 seats	1152	5	17.23	\$	19,848	\$ 94.69	\$	109,084
	1	Computer Lab (20 seats) forward facing	728	\$	16.55	\$	12,052	\$ 93.08	\$	67,762
	2	Conference Room (8 seats)	384	\$	34.94	\$	13,416	\$120.75	\$	46,368
	1	Director	160	\$	16.55	\$	2,648	\$113.81	\$	18,210
	1	Lounge (3 computers, 18 table seats, 10 soft seats)	650	\$	13.50	\$	8,773	\$ 97.29	\$	63,241
	1	Lounge Conference Room (4 seats)	100	\$	54.20	\$	5,420	\$146.02	\$	14,602
	7	Offices	840	\$	18.25	\$	15,330	\$ 121.37	\$	101,948
	1	Secure Closet	16	\$	14.00	\$	224	\$ 255.75	\$	4,092
	1	Storage	240	5	12.50	5	3,000	\$102.28	\$	24,548
	1	Vending Alcove (two machines)	48	5	15.50	\$	744	\$109.00	\$	5,232
	1	Workroom	120	\$	58.50	\$	7,020	\$162.62	\$	19,514

 Summary of \$/SF rates per room in each program and each level of renovation

Studio - 2-D/3-D Design (incl. special equip)	1800	\$	16.37	\$	29,460	\$ 83.49	\$	150,290
Studio - Digital Arts	1150	\$	16.86	\$	19,384	\$ 87.82	\$	100,996
Studio-Digital Arts Unisex Restroom	64	\$	64.88	\$	4,152	\$151.28	\$	9,682
Studio-Drawing	1000	\$	25.39	\$	25,386	\$ 97.25	\$	97,254
Studio-Graphic	1050	\$	16.80	\$	17,640	\$ 88.30	\$	92,720
Studio Painting	1000	\$	31.52	\$	31,524	\$103.45	\$	103,446
Studio-Photogaphy-Digital	1100	\$	26.48	\$	29,126	\$ 97.60	\$	107,364
Studio-Photography-Lighting	1000	\$	27.39	\$	27,386	\$ 99.25	\$	99,254
Studio-Printmaking-Cutting	800	\$	29.82	\$	23,852	\$103.52	\$	82,818
Studio-Printmaking-Inking	1750	\$	23.51	\$	41,135	\$ 93.10	\$	162,925
Thesis Studio Space	500	\$	33.22	\$	16,610	\$110.88	\$	55,440
Studio-Ceramic-Firing indoor (incl. equip and sto)	1000	\$	17.86	\$	17,860	\$ 93.90	\$	93,900
Studio-Ceramic-Glazing and Throwing	3000	\$	22.71	\$	68,124	\$ 89.59	\$	268,756
Circulation	7465	\$	28.61	\$	213,542	\$ 106.72	\$	796,675
T-a-l	50350			•	1 100 247		•	5.008.617
iotai	50250			,	1,189,547		3	5,008,617
Price/SF				\$	23.67		\$	99.67
Level B - 42,750 SF				\$1	,011,832.66			
Level C - 7500 SF							\$	747,554.85
Total							64	,759,387.50
	Studio - Digital Arts Studio-Digital Arts Unisex Restroom Studio-Drawing Studio-Graphic Studio Painting Studio-Photogaphy-Digital Studio-Photography-Lighting Studio-Printmaking-Cutting Studio-Printmaking-Inking Thesis Studio Space Studio-Ceramic-Firing indoor (incl. equip and sto) Studio-Ceramic-Glazing and Throwing Circulation Total Price/SF Level B - 42,750 SF Level C - 7500 SF	Studio - Digital Arts Unisex Restroom Studio-Digital Arts Unisex Restroom Studio-Drawing Studio-Graphic Studio Painting Studio-Photogaphy-Digital Studio-Photography-Lighting Studio-Printmaking-Cutting Studio-Printmaking-Inking Thesis Studio Space Studio-Ceramic-Firing indoor (incl. equip and sto) Studio-Ceramic-Glazing and Throwing Total So250 Price/SF Level B - 42,750 SF Level C - 7500 SF	Studio - Digital Arts 1150 \$ Studio-Digital Arts Unisex Restroom 64 \$ Studio-Drawing 1000 \$ Studio-Graphic 1050 \$ Studio Painting 1000 \$ Studio-Photogaphy-Digital 1100 \$ Studio-Photography-Lighting 1000 \$ Studio-Printmaking-Cutting 800 \$ Studio-Printmaking-Inking 1750 \$ Thesis Studio Space 500 \$ Studio-Ceramic-Firing indoor (incl. equip and sto) 1000 \$ Studio-Ceramic-Glazing and Throwing 3000 \$ Circulation 7465 \$ Total 50250 Price/SF Level B - 42,750 SF Level C - 7500 SF Level C - 7500 SF	Studio - Digital Arts 1150 \$ 16.86 Studio-Digital Arts Unisex Restroom 64 \$ 64.88 Studio-Drawing 1000 \$ 25.39 Studio-Graphic 1050 \$ 16.80 Studio Painting 1000 \$ 31.52 Studio-Photography-Digital 1100 \$ 26.48 Studio-Photography-Lighting 1000 \$ 27.39 Studio-Printmaking-Cutting 800 \$ 29.82 Studio-Printmaking-Inking 1750 \$ 23.51 Thesis Studio Space 500 \$ 33.22 Studio-Ceramic-Firing indoor (incl. equip and sto) 1000 \$ 17.86 Studio-Ceramic-Glazing and Throwing 3000 \$ 22.71 Circulation 7465 \$ 28.61 Total Total 50250	Studio - Digital Arts 1150 \$ 16.86 \$ Studio-Digital Arts Unisex Restroom 64 \$ 64.88 \$ Studio-Drawing 1000 \$ 25.39 \$ Studio-Graphic 1050 \$ 16.80 \$ Studio Painting 1000 \$ 31.52 \$ Studio-Photography-Digital 1100 \$ 26.48 \$ Studio-Photography-Lighting 1000 \$ 27.39 \$ Studio-Printmaking-Cutting 800 \$ 29.82 \$ Studio-Printmaking-Inking 1750 \$ 23.51 \$ Thesis Studio Space 500 \$ 33.22 \$ Studio-Ceramic-Firing indoor (incl. equip and sto) 1000 \$ 17.86 \$ Studio-Ceramic-Glazing and Throwing 3000 \$ 22.71 \$ Circulation 7465 \$ 28.61 \$ Total 50250 \$ Level B - 42,750 SF \$1 Level C - 7500 SF \$1	Studio - Digital Arts 1150 \$ 16.86 \$ 19,384 Studio-Digital Arts Unisex Restroom 64 \$ 64.88 \$ 4,152 Studio-Drawing 1000 \$ 25.39 \$ 25,386 Studio-Graphic 1050 \$ 16.80 \$ 17,640 Studio-Painting 1000 \$ 31.52 \$ 31,524 Studio-Photography-Digital 1100 \$ 26.48 \$ 29,126 Studio-Photography-Lighting 1000 \$ 27.39 \$ 27,386 Studio-Printmaking-Cutting 800 \$ 29.82 \$ 23,852 Studio-Printmaking-Inking 1750 \$ 23.51 \$ 41,135 Thesis Studio Space 500 \$ 33.22 \$ 16,610 Studio-Ceramic-Firing indoor (incl. equip and sto) 1000 \$ 17.86 \$ 17,860 Studio-Ceramic-Glazing and Throwing 3000 \$ 22.71 \$ 68,124 Circulation 7465 \$ 28.61 \$ 213,542 Total	Studio - Digital Arts 1150 \$ 16.86 \$ 19,384 \$ 87.82 Studio-Digital Arts Unisex Restroom 64 \$ 64.88 \$ 4,152 \$ 151.28 Studio-Drawing 1000 \$ 25.39 \$ 25,386 \$ 97.25 Studio-Graphic 1050 \$ 16.80 \$ 17,640 \$ 88.30 Studio Painting 1000 \$ 31.52 \$ 31,524 \$ 103.45 Studio-Photography-Digital 1100 \$ 26.48 \$ 29,126 \$ 97.60 Studio-Photography-Lighting 1000 \$ 27.39 \$ 27,386 \$ 99.25 Studio-Printmaking-Cutting 800 \$ 29.82 \$ 23,852 \$ 103.52 Studio-Printmaking-Inking 1750 \$ 23.51 \$ 41,135 \$ 93.10 Thesis Studio Space 500 \$ 33.22 \$ 16,610 \$ 110.88 Studio-Ceramic-Firing indoor (incl. equip and sto) 1000 \$ 17.86 \$ 17,860 \$ 93.90 Studio-Ceramic-Glazing and Throwing 3000 \$ 22.71 \$ 68,124 \$ 89.59 Circulation 7465 \$ 28.61 \$ 213,542 \$ 106.72 Total 50250 \$ 1,189,347 Level B - 42,750 SF Level C - 7500 SF \$ 1,011,832.66	Studio - Digital Arts 1150 \$ 16.86 \$ 19,384 \$ 87.82 \$ Studio-Digital Arts Unisex Restroom 64 \$ 64.88 \$ 4,152 \$ 151.28 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

 Renovation levels were paired with condition assessment reports pricing considerations for MEP items

15	Plumbing	Replace fixtures in restrooms and mop sinks (included in SF pricing)				incld	l in SF value			POND Report (pg 96)
		Replace Water Heaters	1	EA	\$ 12,000.00	\$	12,000			POND Report (pg 103)
		Demolish Solar Hot Water Heating System							TBD	POND Report (pg 103)
		Demolish Gas Piping in Boiler Room							TBD	POND Report (pg 108)
15	HVAC	Condensing Boiler sized for 1600 MBH EA	2	EA	\$ 80,000.00				\$ 160,000	PÓND Report (pg 75)
		Inline pumps (2) at 2 HP & (2) at 7.5 HP	4	EA	\$ 10,000.00				\$ 40,000	POND Report (pg 75)
		RR Exhaust Fan - 200 CFM	2	EA	\$ 3,000.00				\$ 6,000	POND Report (pg 75)
		RR Fan - 70 CFM	3	EA	\$ 1,500.00				\$ 4,500	POND Report (pg 87)
16	Fire Alarm	Replace System (panel only)	61398	SF		\$	30,000			POND Report (pg 116)
16	Electrical	Main Switchgear Replacement (does not include feeders)	1	LS	\$ 43,500.00	\$	43,500.00			POND Report (pg 121)
		Subtotal				\$	93,667	\$ 78,408	\$ 467,781	
		GC's & Fee				\$	11,155.70	\$ 9,338.34	\$ 55,712.72	
		Total				\$	104,822	\$ 87,746	\$ 523,494	

2	- 8	4	Level B	- 1		Level C			Level D			Level E				
Building	Gross Area	Area	Percentage	Value	Area	Percentage	Value	Area	Percentage	Value	Area	Percentage	Value	Total	avg \$/GSF	Percentage
Site Condition Assessment	11/2007/03/2009/2	20/34/39		5,075061			2000000			100000000				\$37,500		
100 100 Condition Assessment	61,398	50,250	82%	\$1,189,347	0	0%	\$0	0	0%	\$0	0	0%	\$0	\$1,189,347.16 \$93,667	\$19.37 \$1.53	82%
200 200 Condition Assessment	26,472	8,400	32%	\$249,257	13,400	51%	\$1,460,241	0	0%	\$0	4,735	18%	\$515,988	\$2,225,487 \$1,104,125	\$84.07 \$41.71	100%
300 300 Condition Assessment	44,770	17,850	40%	\$595,418	15,322	34%	\$1,621,423	990	2%	\$104,765	4,050	9%	\$428,584	\$2,750,190 \$1,107,458	\$61.43 \$24.74	85%
Welding 400 400 Condition Assessment	2,485	0	0%	\$0	0	0%	\$0	0	0%	\$0	0	0%	\$0	\$0 \$10,000	\$0.00 \$4.02	0%
500 500 Condition Assessment	20,721	16,400	79%	\$439,522	4,300	21%	\$486,750	0	0%	\$0	0	0%	\$0	\$926,272 \$252,017	\$44.70 \$12.16	100%
Ammonia 600 600 Condition Assessment	4,043	1,415	35%	\$31,145	2,628	65%	\$236,690	0	0%	\$0	0	0%	\$0	\$267,835 \$30,000	\$66.25 \$7.42	100%
700 (demo & UG plumbing ONLY) 700 Condition Assessment	5,810	5,810	100%	\$110,390	0	0%	\$0	0	0%	\$0	0	0%	\$0	\$110,390 \$3,333	\$19.00 \$0.57	100%
Restrooms to receive paint & Fixtures ONLY, except 200 & 300														(\$158,514)		
Remove Projectors & Screens		25											-	(\$39,000)		
		100,125	\$26.12	\$/SF	35,650	\$106.74 \$	/SF	990	\$105.82 \$	/SF	8,785	\$107.52	\$/SF			

		GC's & Fee		\$1,542,345
Levels		Subtotal		\$11,452,451
A	No Renovations Required	GC's&fee above SCL	11.91%	\$0
В	New Finishes: Carpet, Paint, Ceiling Tiles (no grid or lights)	Contingency	15%	\$1,486,516
c	New Plan: Doors, Partitions, Finishes, Ceilings, Lighting & Electrical	Total		\$12,938,967
D	New Restrooms: Partitions, Finishes, Ceilings, Lighting, Electrical, Plumbing, Toilet Partitions, & Accessories			
E	Nursing and Simulation Labs: New Plan, Doors, Partitions, Finishes, Ceilings, Lighting, Electrical, Casework, Plumbing, and			
	Casework, Plumbing, and Nursing Accessory Walls			

Renovated Area 145,550 \$88.90 avg cost/sq. ft

\$9,910,106 Cost of Work

How It Got Done



- Keeping job on track during Covid19
- Unforeseen condition discovery
- Maintain/deliver contingency for façade improve

How It Got Done



- Laser scanning
- Unable to perform exploratory demo











...unforeseen conditions

...Unique Conditions

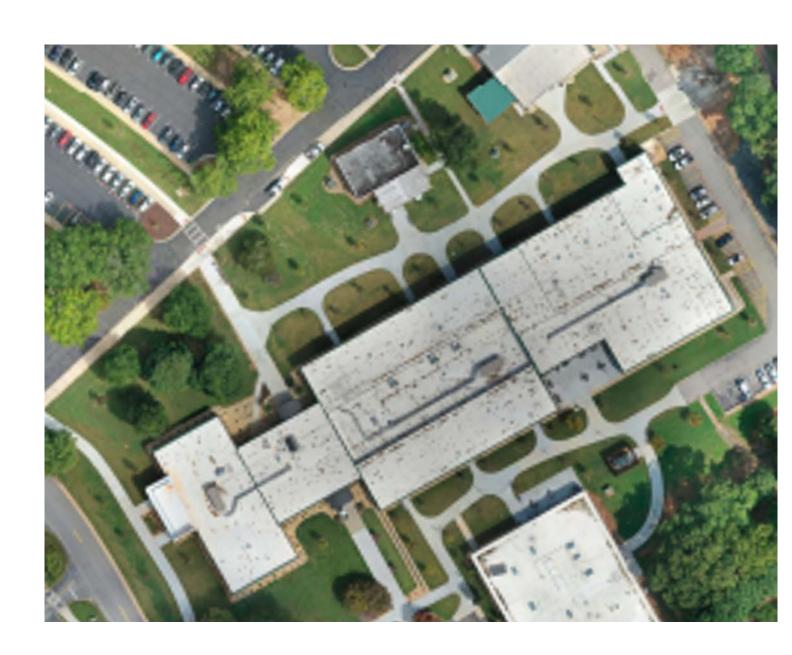
- Existing mechanical; unknown condition; CxA efforts
- Existing conditions not to code (fire rated chase/dampers), storefront hidden in walls, existing door conditions, non-insulated rain leaders, leaky existing ductwork





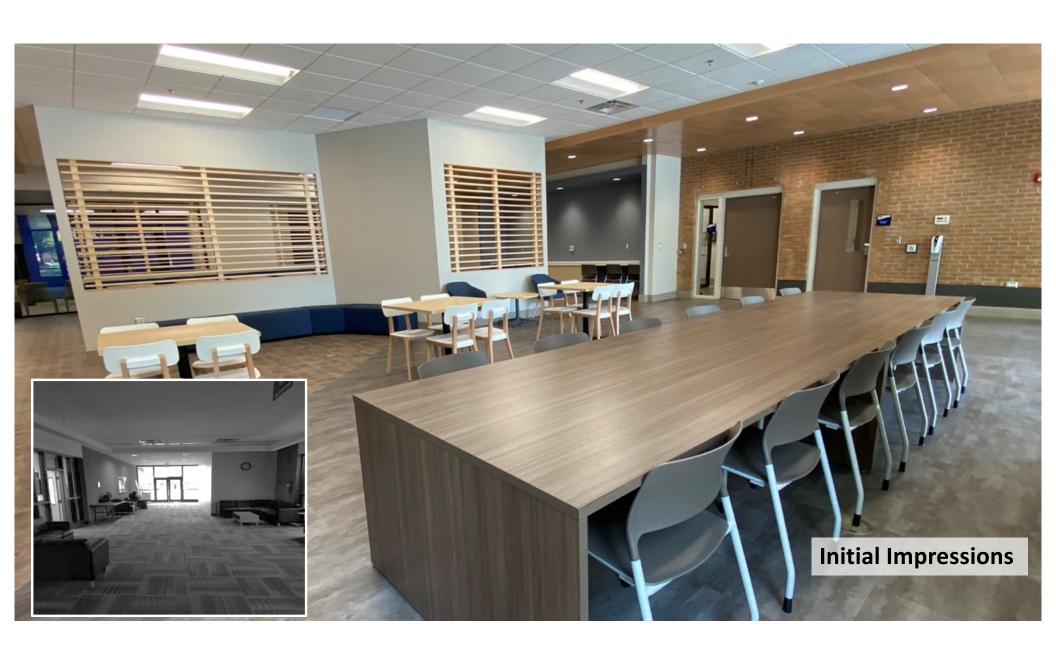


How It Got Done

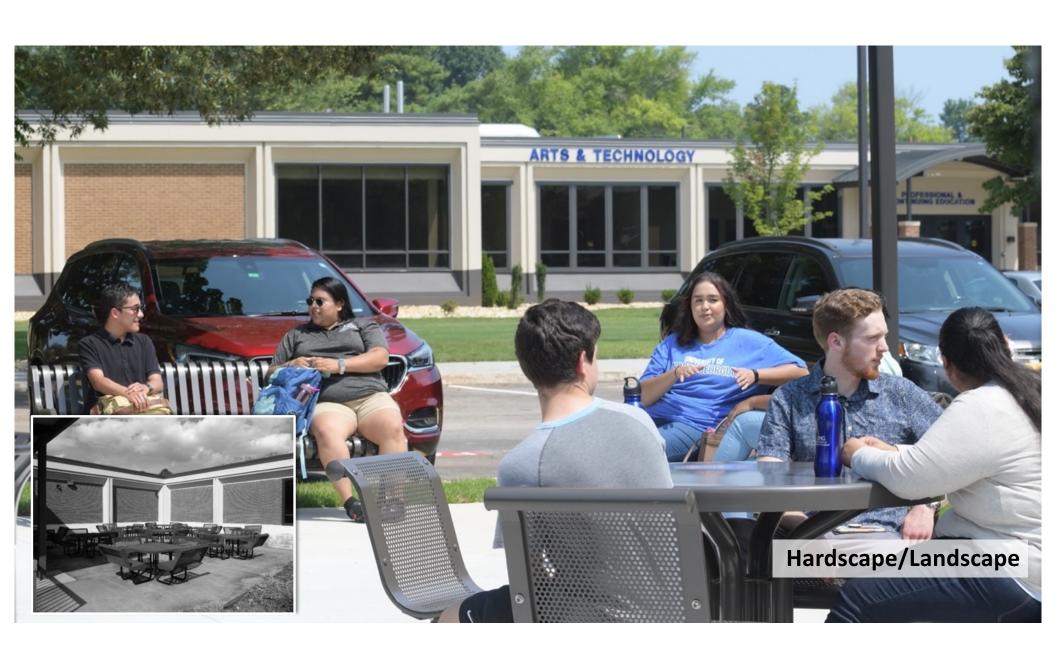




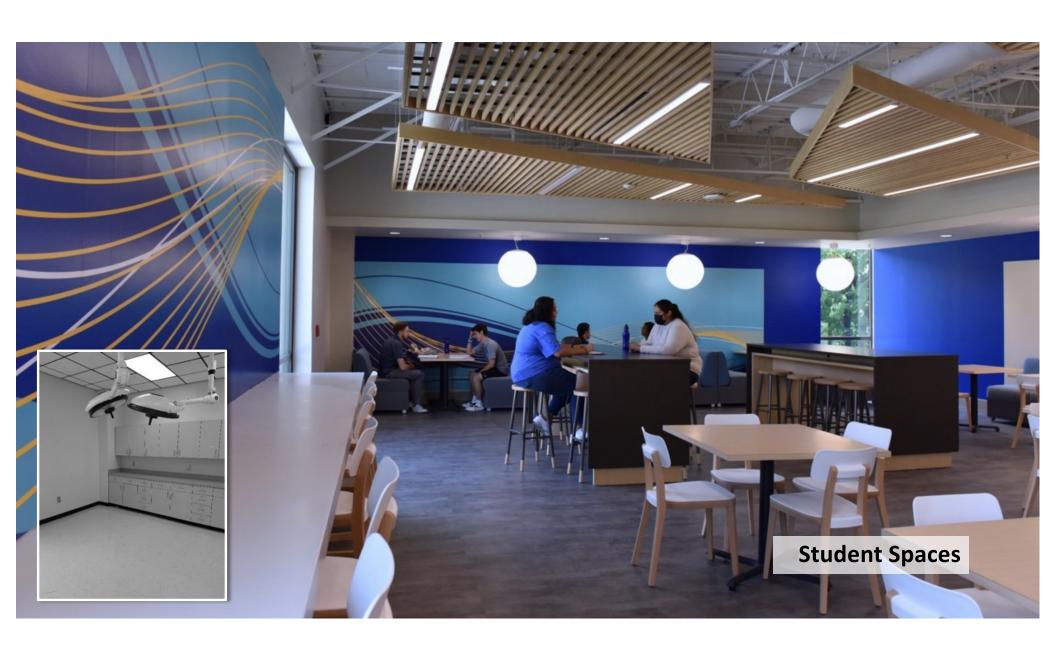




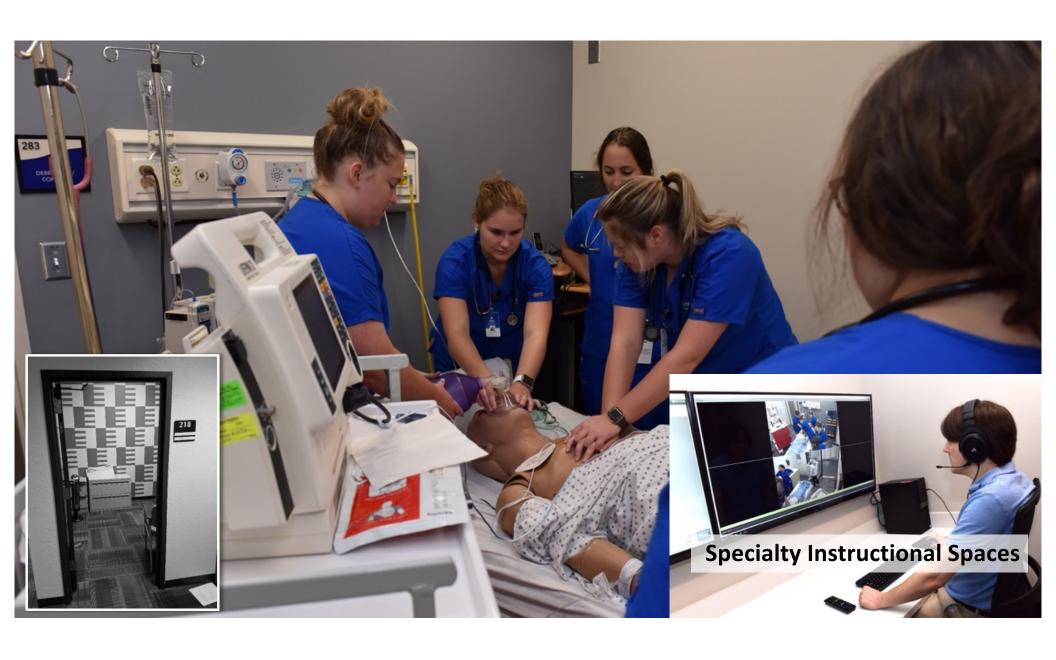


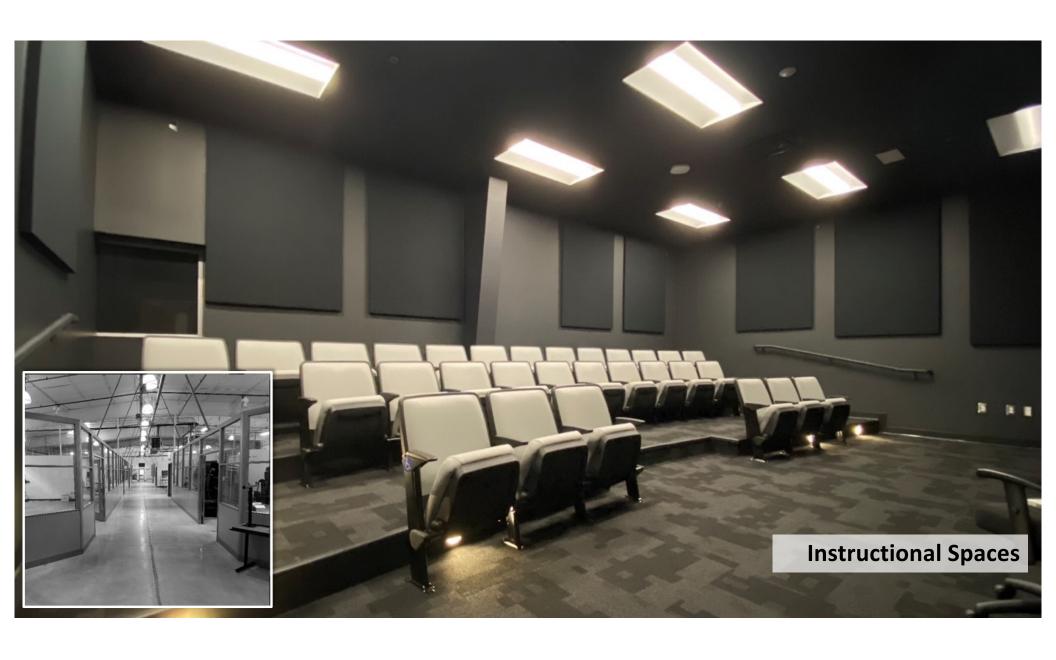


















Benefits of Reuse (Renovate vs Building New)

- Sustainability/reuse/adaptation
- Lifecycle cost (systems updates/replacement)
- Less than \$100/sf vs \$400/sf for equivalent new space/programmed areas
 - existing infrastructure
- Existing facility had some flexibility
- TCSG to BOR system building transfer
- Program was tailored to existing facility; tie-back to levels of renovations

