

PENN STATE UNIVERSITY

POLLOCK HALLS RENOVATIONS

July 27, 2023



PennState

EWING
COLE

WT
WILLIAM T. RAYMOND



HANBURY

SAFETY MOMENT





VICE PRESIDENT | SPIDERMAN
MIKE PALOTAS
ENTHUSIASTIC • RESILIENT

ON YOUR PROJECT

Mike will use his **web of experts** to provide solutions to challenges and create an innovative, collaborative environment.



POLLOCK HALLS KEY PLAYERS

WHITING-TURNER



DESIGN-BUILD MANAGER / **HULK**

NATHAN VOTH

INTUITIVE • VERSATILE

ON YOUR PROJECT

Nathan's **versatility** enables him to react to any challenges that may arise. He will use his power to coordinate a cohesive design-build team.



POLLOCK HALLS KEY PLAYERS

WHITING-TURNER



SENIOR PROJECT MANAGER | NICK FURY

CONRAD TALLEY

COLLABORATIVE • DEDICATED

ON YOUR PROJECT

Conrad will leverage his organizational skills and attention to detail to “**architect**” a high-performing team that efficiently tests ideas.



POLLOCK HALLS KEY PLAYERS

EWINGCOLE



STUDENT LIFE EXPERT | CAPTAIN MARVEL
JESSICA PAGAN AELLO
ANALYTICAL • ENERGETIC

ON YOUR PROJECT

Jessica will leverage her student housing experience to empower the design-build team, trade partners and the Penn State stakeholders to develop **collaborative visions** that will transform Pollock.



POLLOCK HALLS KEY PLAYERS

HANBURY



LEAD DESIGNER | **SILVER SURFER**

JARED COFFIN

THOUGHTFUL • ADVENTUROUS

ON YOUR PROJECT

Jared's vision and focus will ensure the built environment of Pollock has a positive impact on **each students well-being.**



POLLOCK HALLS KEY PLAYERS

HANBURY



SENIOR PROJECT DESIGNER | **SUPERMAN**
BRETT SPEARMAN

METICULOUS • COMPASSIONATE

ON YOUR PROJECT

Brett's attention to detail and drive is infectious. When needed, this **"Man of Steel"** can help the team resolve any obstacle they face.



POLLOCK HALLS KEY PLAYERS

EWINGCOLE

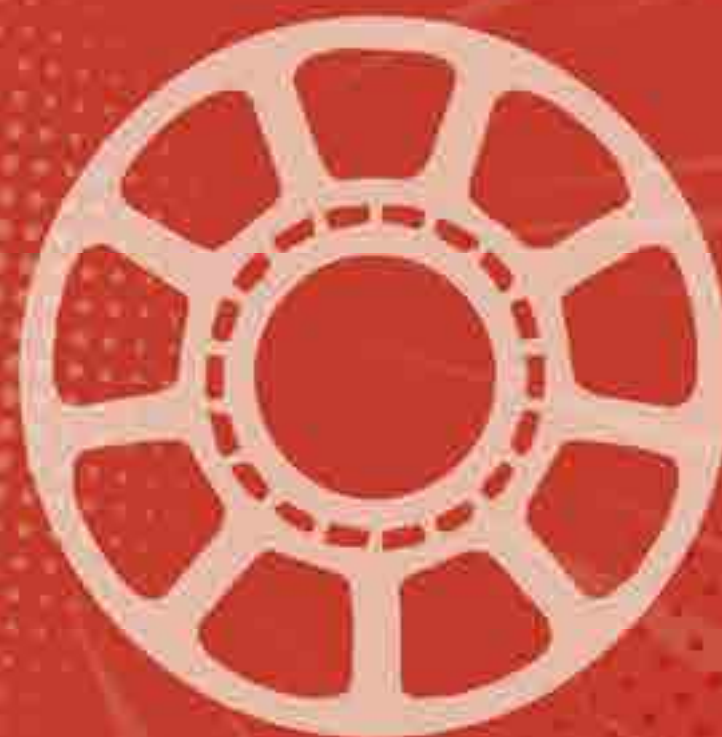


MECHANICAL & PLUMBING ENGINEER | IRONMAN
ROB KORNELUK

CONFIDENT • INNOVATOR

ON YOUR PROJECT

Rob will be available to **fly in** and creatively help the team when analyzing design solutions.



POLLOCK HALLS KEY PLAYERS

EWINGCOLE



LANDSCAPE ARCHITECT | **STORM**
PENG GU

NURTURING • SELFLESS

ON YOUR PROJECT

A steward of the environment, Peng will design a landscape that incorporates the many perspectives and student experiences for the residents of Pollock.

POLLOCK HALLS KEY PLAYERS

MAHAN RYKIEL





SUPERINTENDENT / BATMAN
PAUL DRIPPS

FOCUSED • PLANNER

ON YOUR PROJECT

Paul will **keep the construction activities in the shadows**, maintaining an invisible presence on campus while staying laser focused on safety and quality.



POLLOCK HALLS KEY PLAYERS

WHITING-TURNER



VISION Transformation of the Pollock Halls District

“ A renewed and transformed Pollock Halls that is set up for decades of additional successful service to the University, with a focus on the student experience, campus place making, durability, low maintenance and operating costs, and energy efficiency. ”

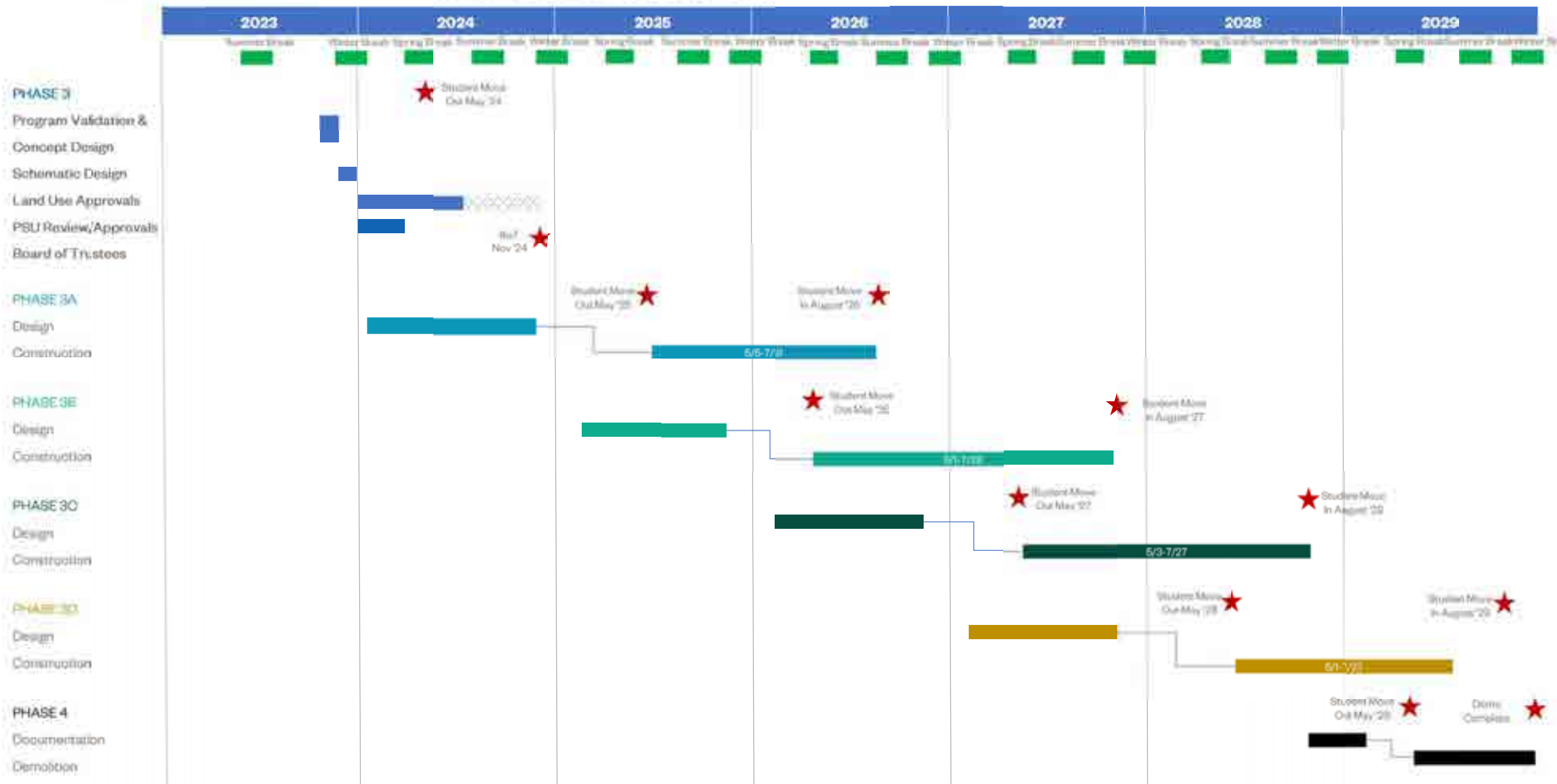
APPROACH



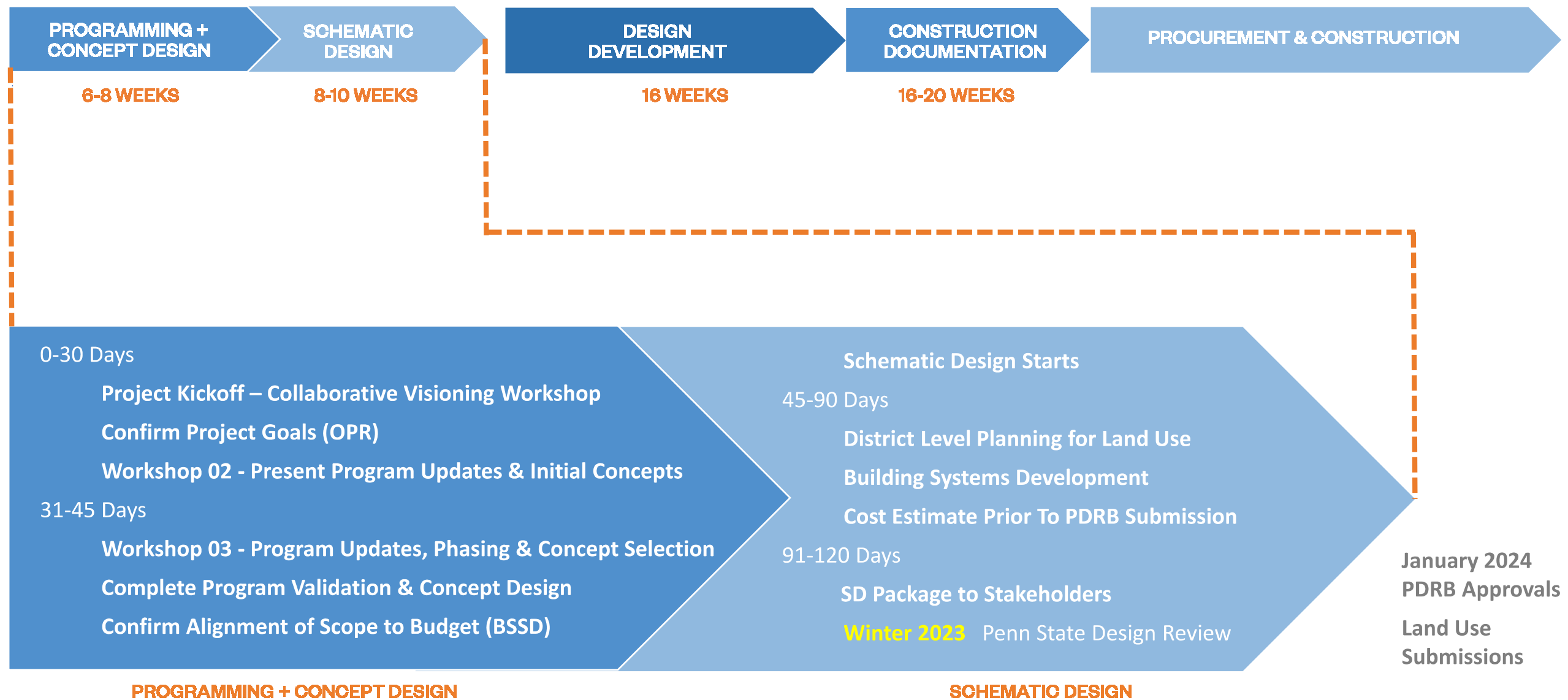
EXPERIENCE



SCHEDULE Milestones & Drivers



DISTRICT LEVEL PLANNING



SCHEDULE Risks and Mitigation



Misalignment of Budget to Scope

Competing Stakeholder Agendas

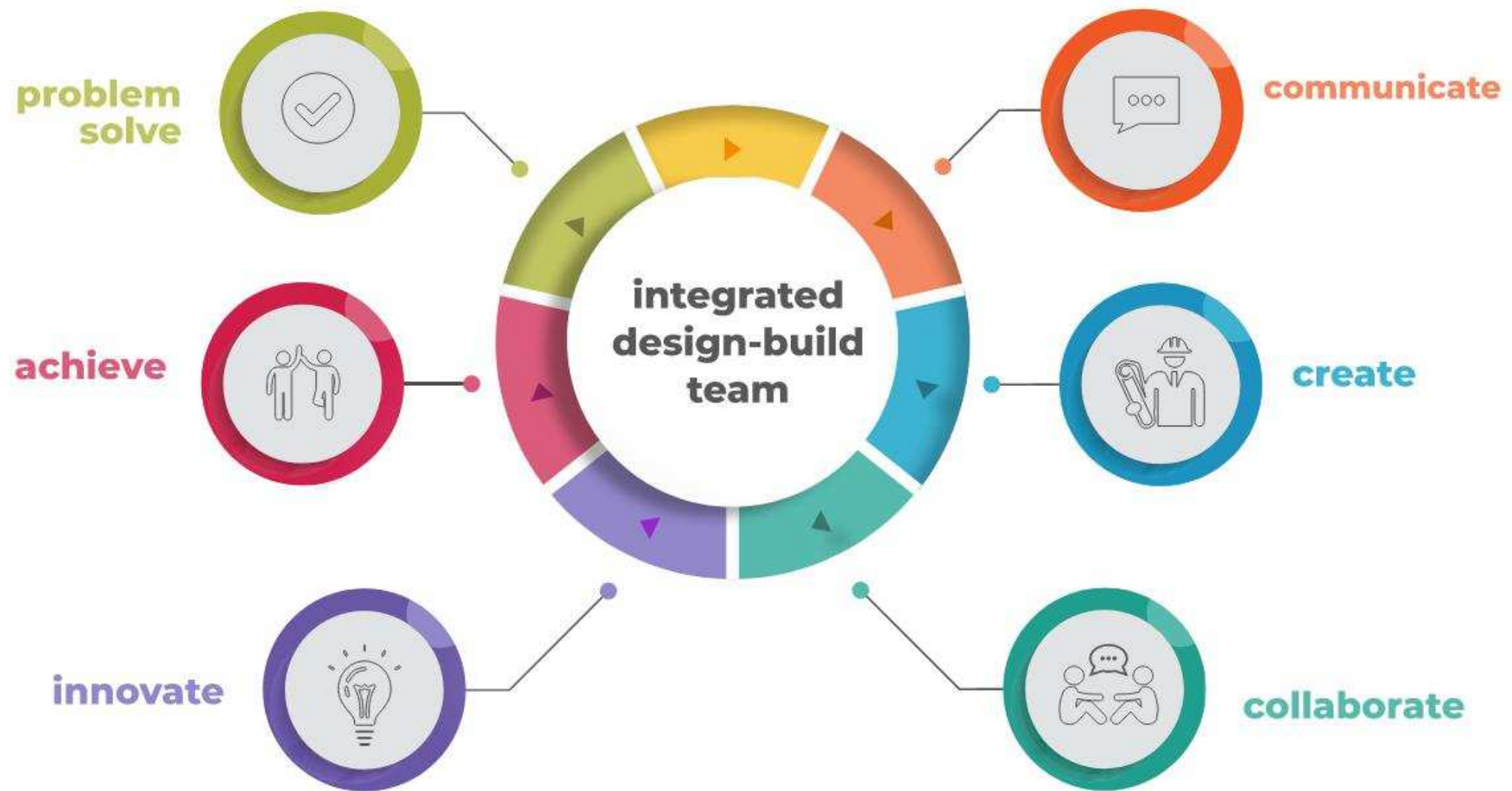
Unknowns of Existing Conditions

Supply Chain / Long Lead Realities

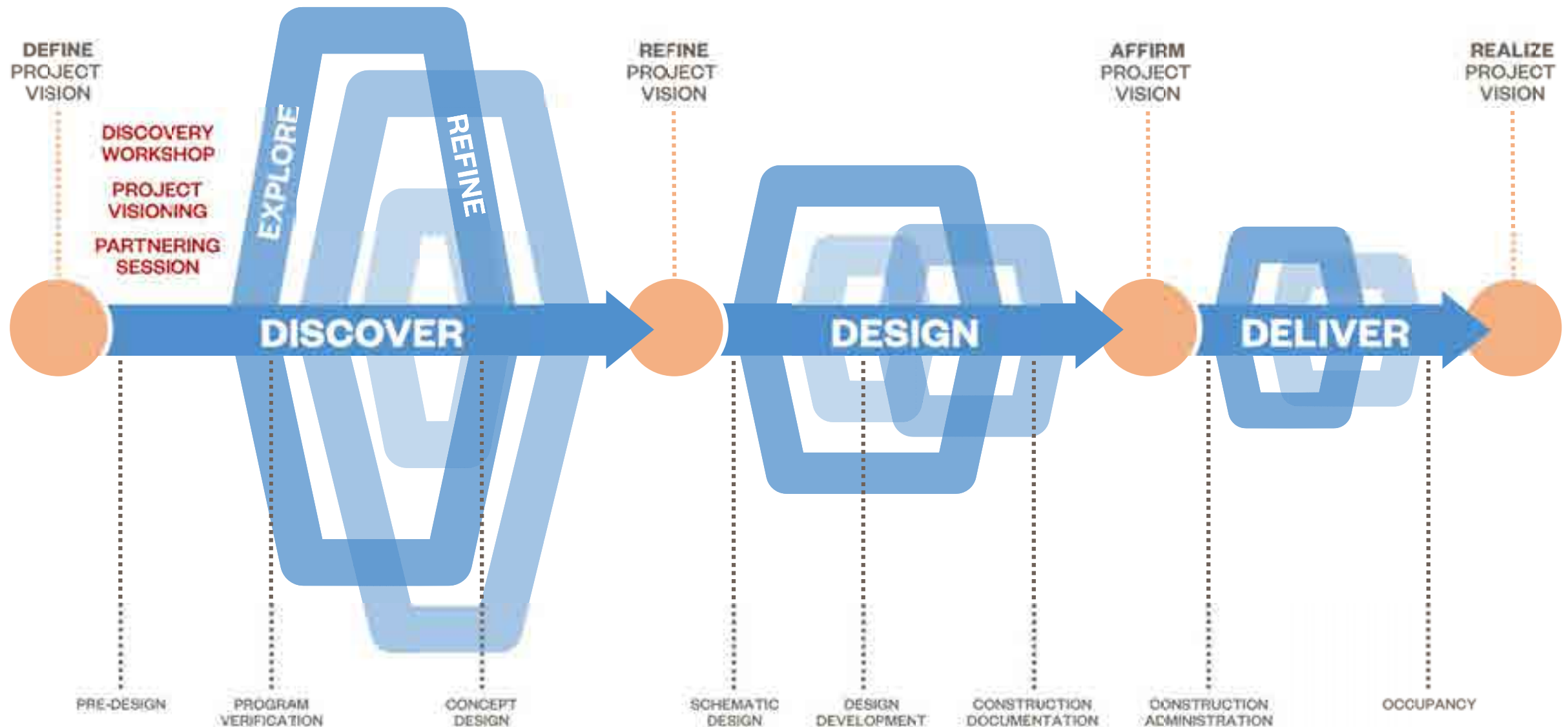
Market Conditions

Workforce

PLANNING + EXECUTING DESIGN Process for Success

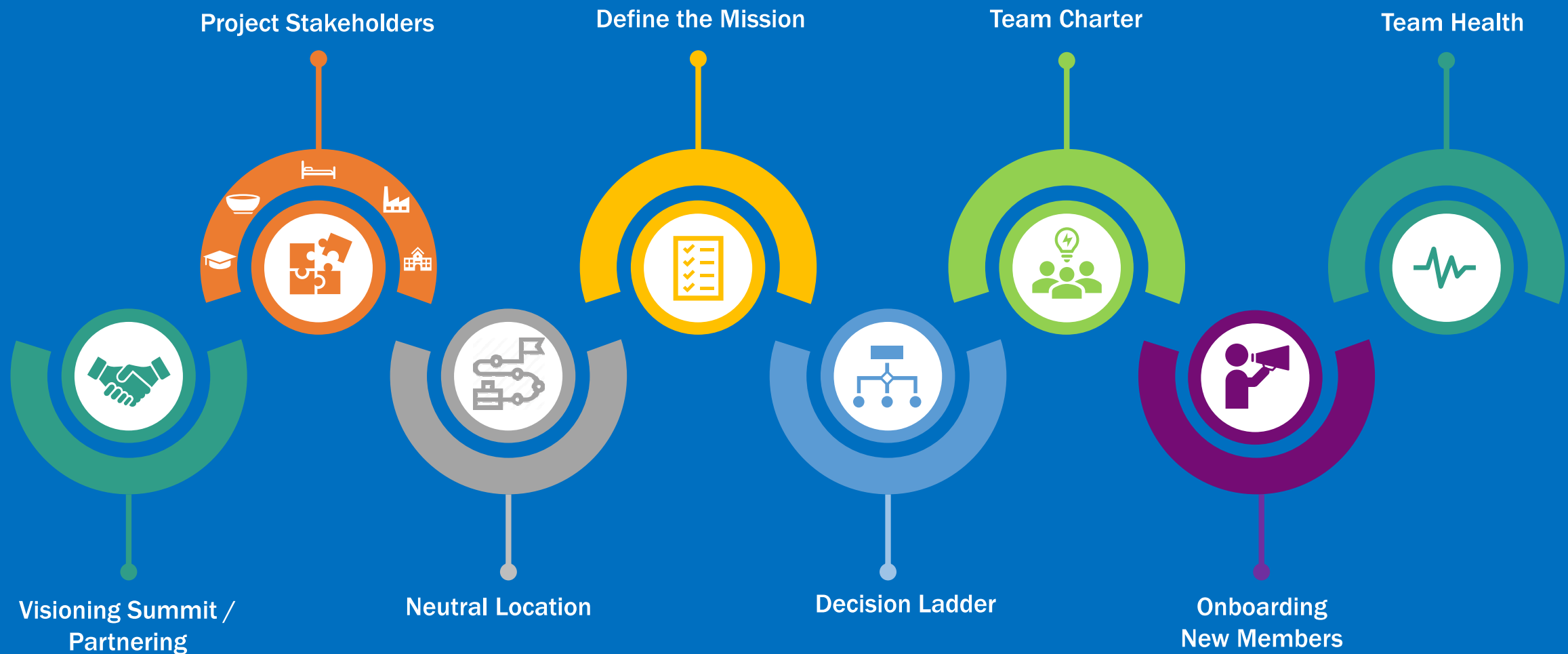


WORKPLAN Fact Finding & Active Listening



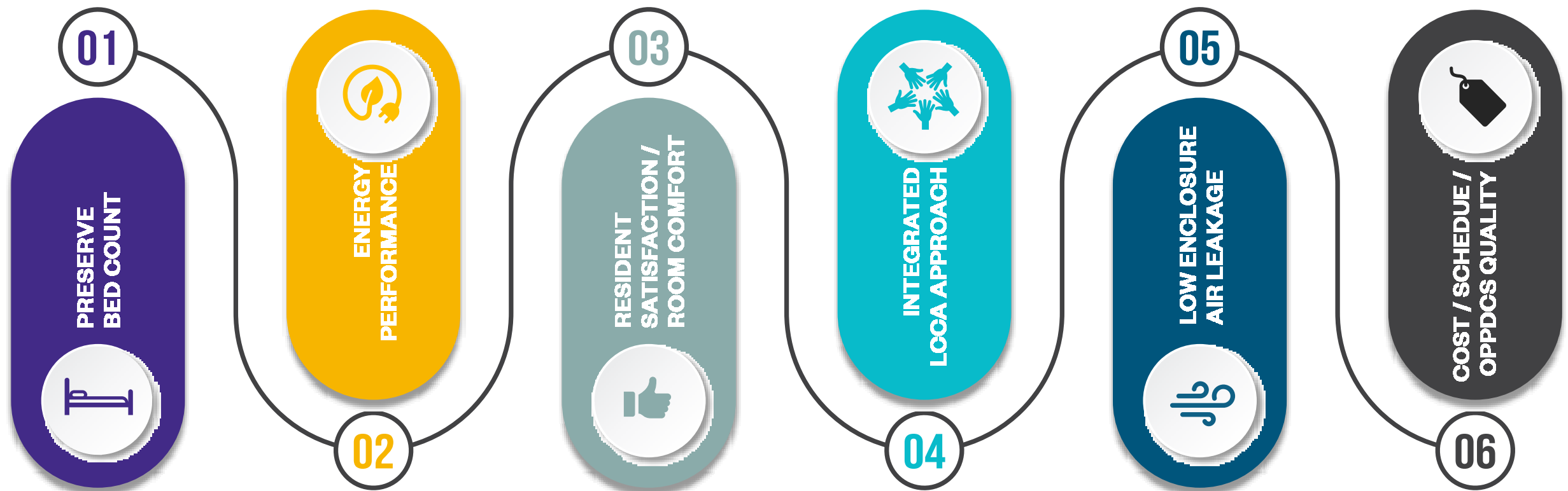
TEAM BUILDING Project Mission Alignment

"A renewed and transformed Pollock Halls that is set up for decades of additional successful service to the University, with a focus on the student experience, campus place making, durability, low maintenance and operating costs, and energy efficiency."

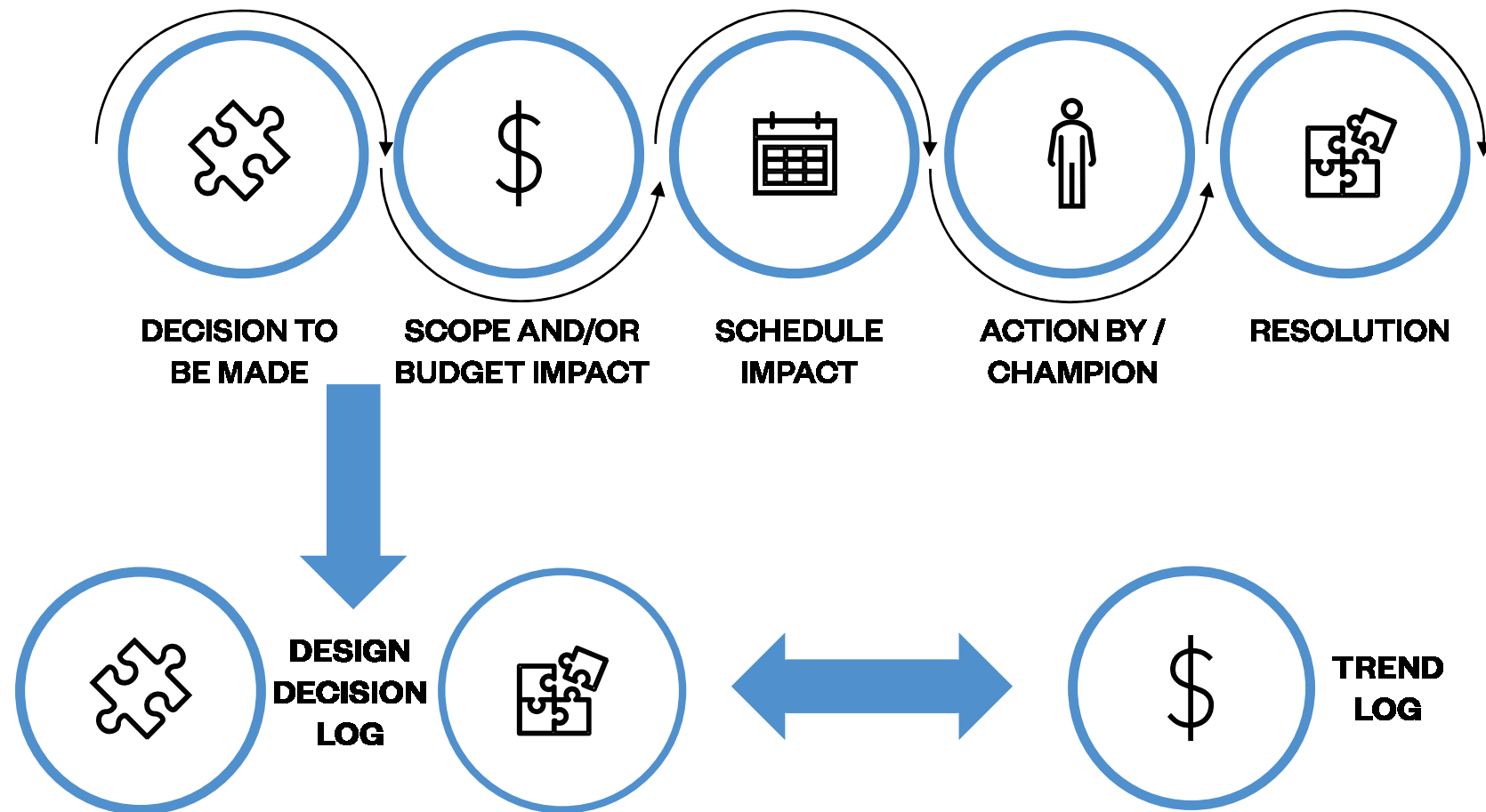


CONDITIONS OF SATISFACTION

Defining Value



DECISION TRACKING



ID	Description	Impact	Champion	Resolution
1	...	...	...	...
2	...	...	...	...
3	...	...	...	...
4	...	...	...	...
5	...	...	...	...
6	...	...	...	...
7	...	...	...	...
8	...	...	...	...
9	...	...	...	...
10	...	...	...	...

Trend Log Summary		
Base WTJO GMP	\$72,914,629	Dated 09/18/2020 - GMP*
Accepted Adds / Deducts	\$247,840	NOT in GMP
Accepted Adds Already Included in GMP		\$53,641.00
Pending Adds	\$17,877	NOT in GMP*
Potential Final Cost	\$73,180,346	Base GMP + Accepted + Pending
POTENTIAL BUDGET DELTA	\$265,717	\$53,641
Potential VE	(\$274,720)	
POTENTIAL TOTAL BUDGET DELTA	(\$9,003)	

WORKSTREAM CLUSTER GROUPS



DESIGN DOMAIN	PENN STATE RESOURCE	DESIGN-BUILD LEAD
Custodial Requirements	Chad Williams	Jessica Pugh Aalto
Environmental Compliance	Brandon Schmitt	Maria Pappas
Building Design and Performance	Tom Ersgaard	Ruth Kornelut
Enclosure Systems	University Architect (Doug Kidwell) & Tom Ersgaard	Ari Kassar & Brett Spearman
Fine Supplement	Steve Thrope & Ray Alexander	Mike Ratotto
Plumbing	Ray Alexander	Ruth Kornelut
HVAC	Ray Alexander	Ruth Kornelut
RAA	Don Key	Joe Walsh
Electrical	Mike Lach, Maria Matus, Maria Mylotte & Don Wilcox	Anthony Arnone
Communications	Todd Myers	Chris Vadas
Firearm, Safety and Security	Stacy Edla	Anthony Arnone
Landscape Requirements	Tom Flynn	Peng Gu
Attic (Mapping)	Karlén Rydén	Mark Saville
Water	Charles Stovel	Mark Saville
Sanitary Sewer	Dawn Gahner	Ruth Kornelut
Storm Drainage	Tracy Olcott	Steve Kelly
Campus Chilled Water	Glenn Lilko	Mark Saville
Steam & Fuel Distribution	Ron Pristas	Paul Driggs
Utilities (Metering)	Mike Pinkney	Mike Palotas

CO-LOCATION

Big Room Environment



BIG ROOM SCENARIOS

- Recurring; Face-to-Face when possible
- Hybrid: Virtual when necessary

**OUR TEAM IS
ALREADY READY!**

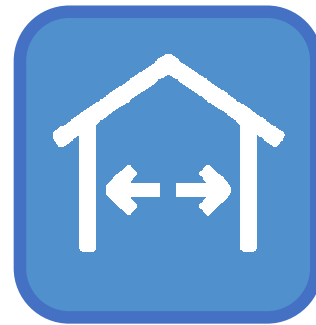
PROJECT DRIVERS



**Student
Experience**



Capacity



Phasing



Schedule



**Cost/
Budget**

PROJECT DRIVERS

Lens for Evaluation

CAMPUS



BUILDING



INDIVIDUAL



COLLABORATIVE PROCESS Stakeholder Input & Feedback



Build Consensus Through an **Inclusive Process**

PROJECT DRIVERS

Stakeholder Input & Feedback



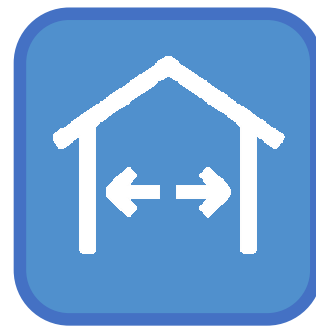
Student Experience

- Campus Connections
- Community Building
- Wellness & Sustainability
- Indoor/Outdoor Connections
- 24 -Hour Activity
- Security & Safety
- Operations



Capacity

- Total Student Capacity
- Balance with Common Space to Create Student Experience
- Swing Space
- Enrollment Trends
- Future Demand/Enrollment Changes



Phasing

- Support Capacity
- Create Sense of Place Day 1
- Security & Safety During Construction
- Site Infrastructure
- Operations



Schedule

- Support Capacity & Phasing
- Overall Timeline
- Overall Site & Concept Design
- Approvals
- Impact to Procurement & Budget
- Concept/SD Timeline



Cost/ Budget

- Schedule
- Procurement & Long Lead Times
- Cost of Capital
- Escalation
- Life Cycle Costs
- Maintenance Costs
- Operations

DESIGN APPROACH Individual

STUDENT ROOM



BATHROOM



LOUNGE / STUDY



DESIGN APPROACH Building

TECHNOLOGY



MEP



FACADE



DESIGN APPROACH Campus

AMENITY / PROGRAM



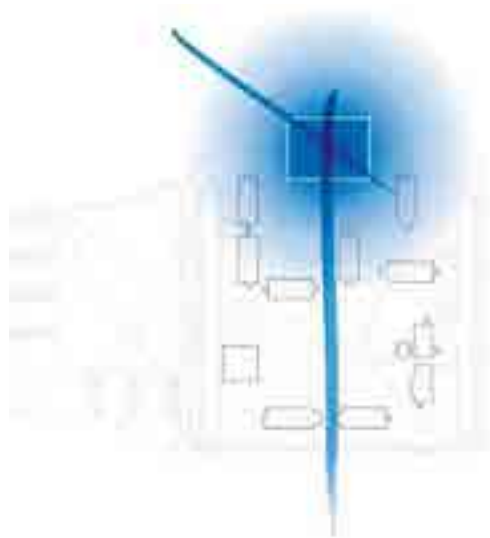
FLEXIBILITY/ ADAPTABILITY



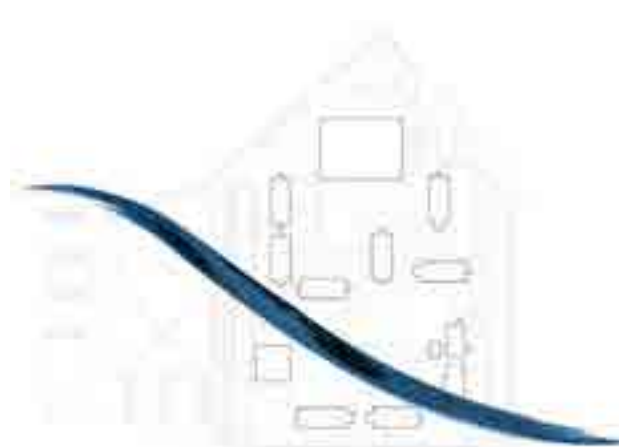
INDOOR / OUTDOOR



DISTRICT DRIVERS



SOCIAL ANCHOR/
COMMUNITY HUB



SOFT LINK



TRANSITION



INNOVATION

DISTRICT DRIVERS



DISTRICT DRIVERS



DISTRICT DRIVERS



DISTRICT DRIVERS



Pollock Logistics Plan

Phase 3A

Pollock Rd.

Wolf Hall

Ritner Hall

Bieler Rd.

PEDESTRIAN PATH

Maintain accessibility throughout phase of construction



WT CONTRACTOR TRAILER

CONSTRUCTION FENCE

POTENTIAL OFFICE SPACE
IN POLLOCK COMMONS



BEING A GOOD NEIGHBOR



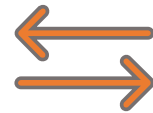
Dust / Debris Control



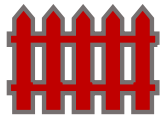
Noise Restrictions



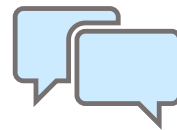
Delivery Schedule



Wayfinding



Site Fencing



Communication



Site Appearance



Pedestrian Safety



SCHEDULE MANAGEMENT



DESIGN-ASSIST



PULL PLANNING



PRE-PURCHASING

The 3 Phases of Quality



PREPARATORY
(pre-Installation meetings)



INITIAL
(first work inspections)



FOLLOW-UP
(QCs)

Quality Management is “from preconstruction through close-out”

STUDENT ENGAGEMENT



IMPRESSIONS TO DATE

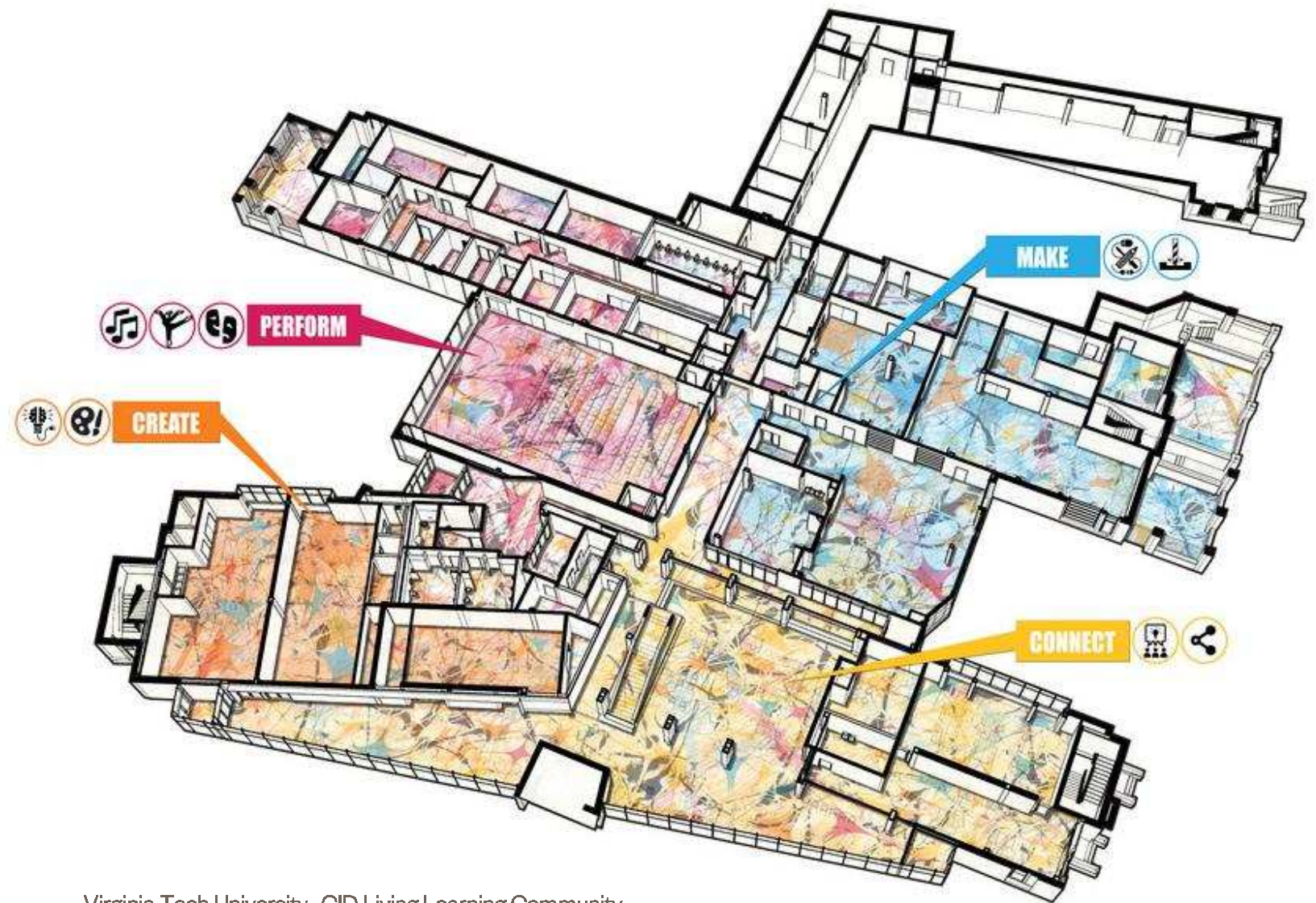
Student & Resident Satisfaction



EMERGING TRENDS

Mixed Use – Creating an Active Ground Plane

- Living Learning Communities
- “Create a City” & Integration of Retail
- Dining or Community Kitchens
- Open & Shared Community Amenities
- Indoor/Outdoor Connections & Seasonality
- Multipurpose Space
- Wellness/Meditation/Worship Space
(Body, Mind, and Soul)

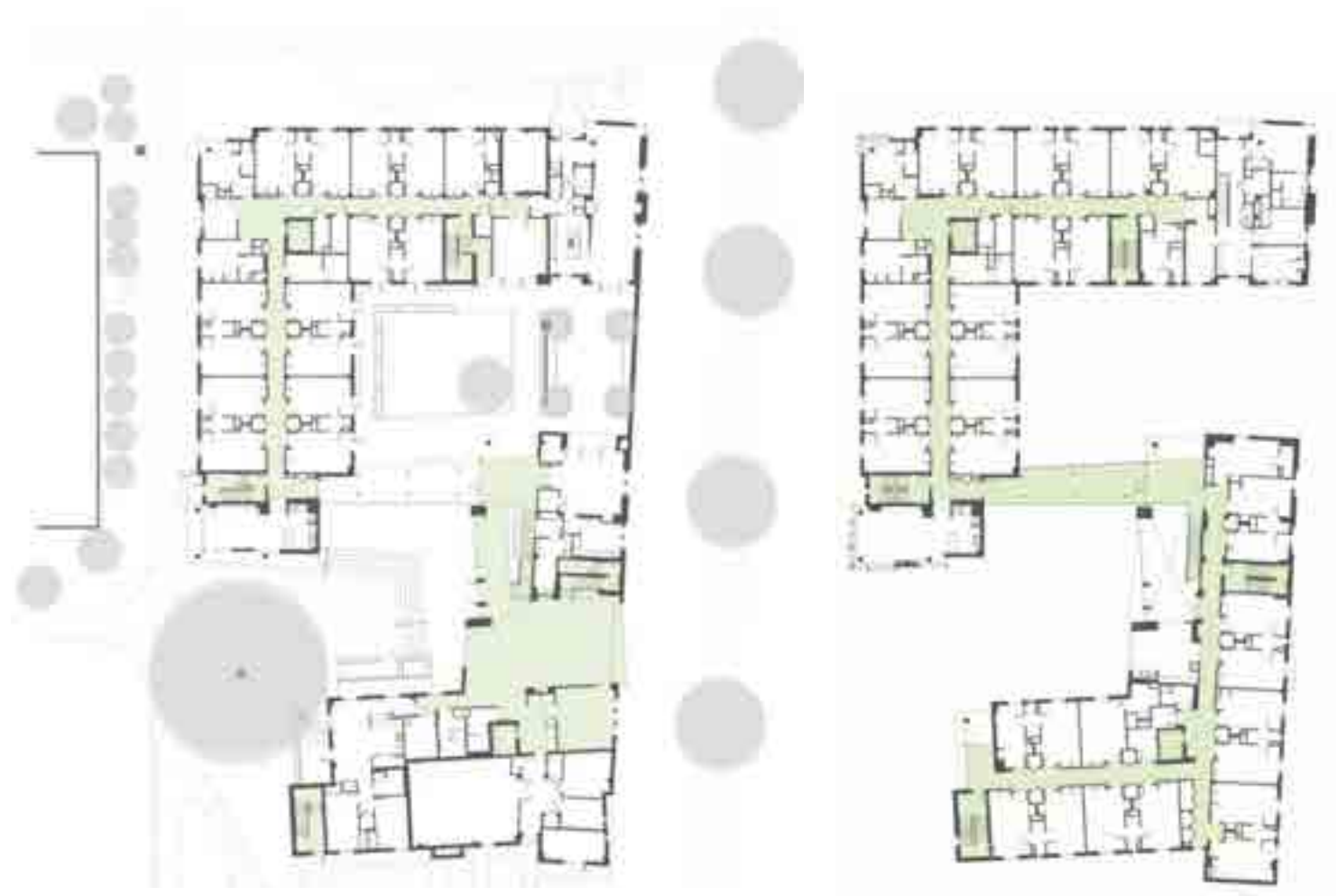


Virginia Tech University, CID Living Learning Community

EMERGING TRENDS

Building Community

- Breaking Down Scale of Community
- Pod-Style Housing
- Shared (Wet-Core) Private Bathrooms
- Increased Day Light
- Flex/Study/Wellness
- Increased SF of Common Spaces :
Create Intentional Collisions

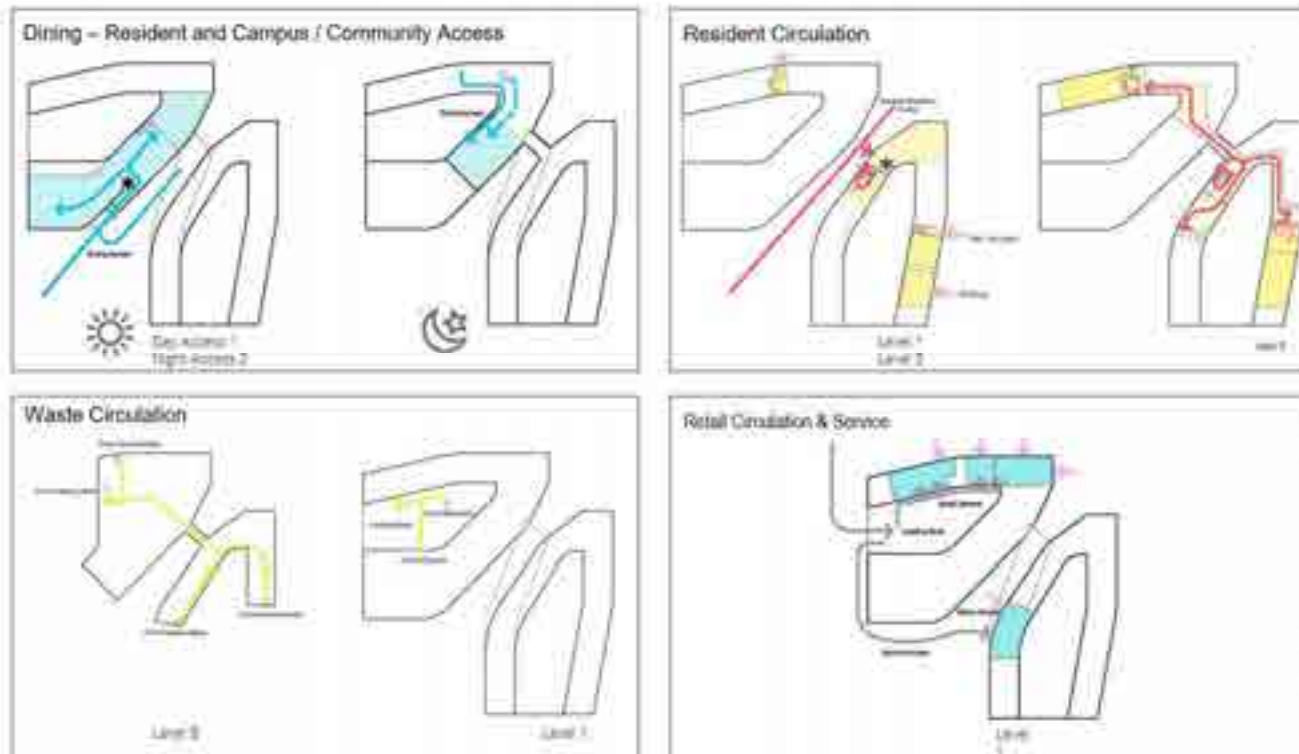


Tulane University, Weatherhead Hall

BUSINESS CASE

Integrating Operations_University of Chicago

MISSION CRITICAL CIRCULATION SYSTEMS



RENOVATION

Small Moves, Big Impact at University of Michigan



Section Diagram - University of Michigan, East Quad

Before & After- University of Michigan, East Quad

Team Experience

RENOVATION

De-Densification at University of Michigan



Alice Lloyd Hall, Existing Level 2 Plan - "Typical"



Alice Lloyd Hall, Renovated Level 2

Team Experience

RENOVATION

Opportunities for Pollock Residence Halls

EXISTING POLLOCK
AVERAGE



INDUSTRY STANDARD
AVERAGE



EAST HALLS
AVERAGE



RECOMMENDED
AVERAGE



Student Housing Metric Comparison: **Common Space per Student**

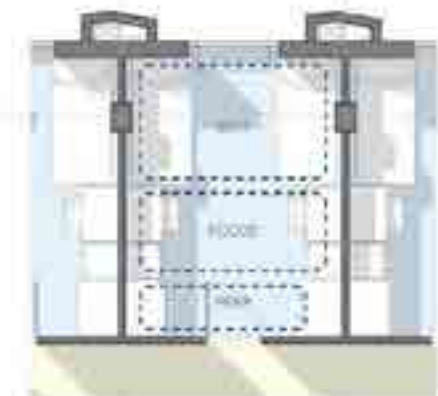
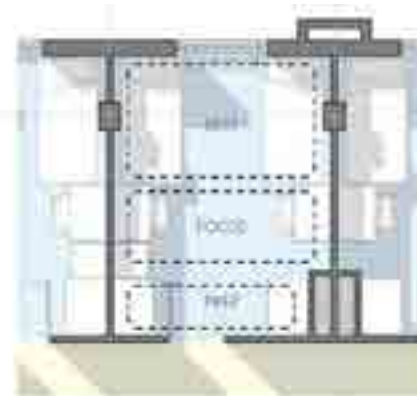
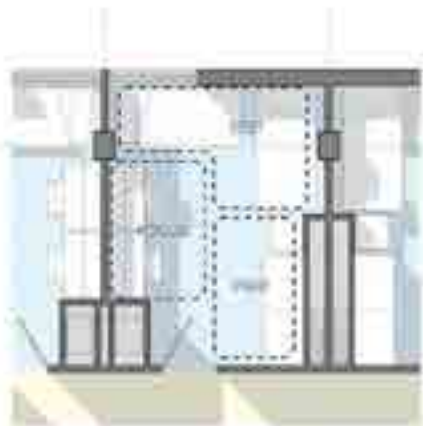
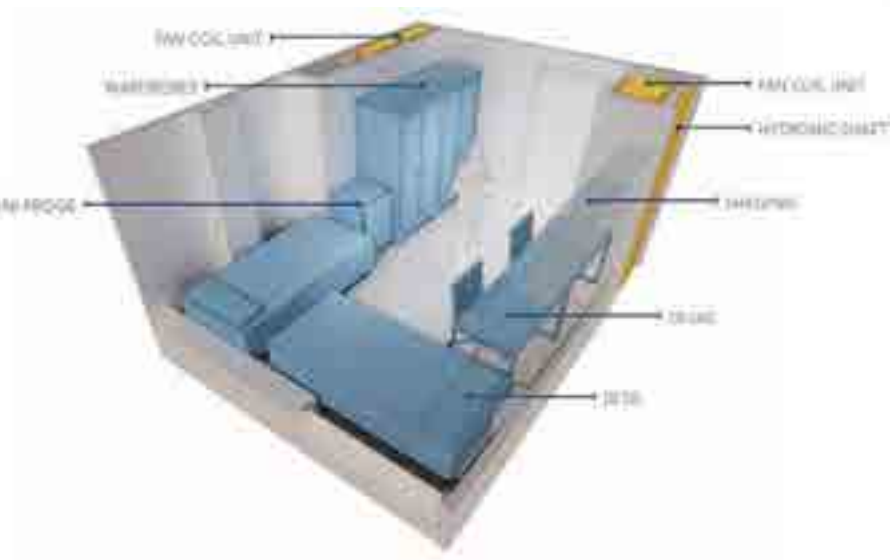


Type C- Typical Floor Plan (Wolf, Shulze, Ritner, Hiester) Baseline Option

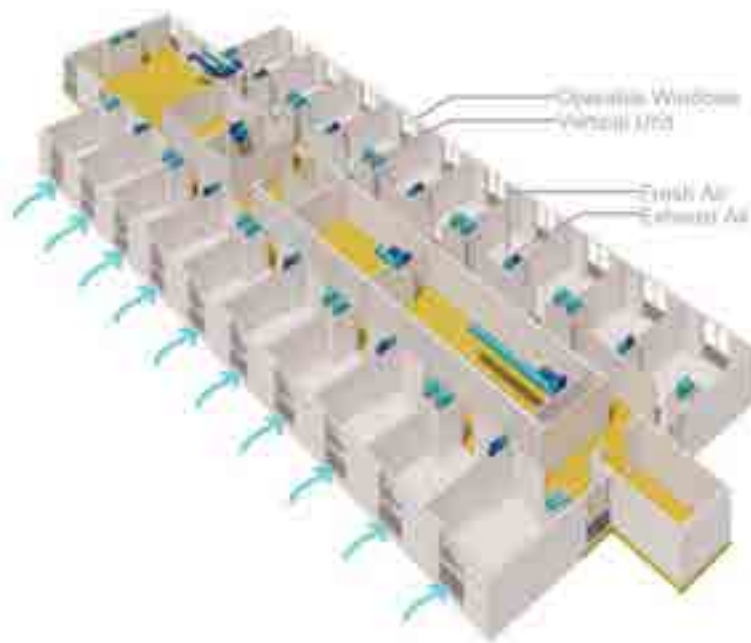


Type C- Typical Floor Plan (Wolf, Shulze, Ritner, Hiester) _ De-Densification Options 1 & 2

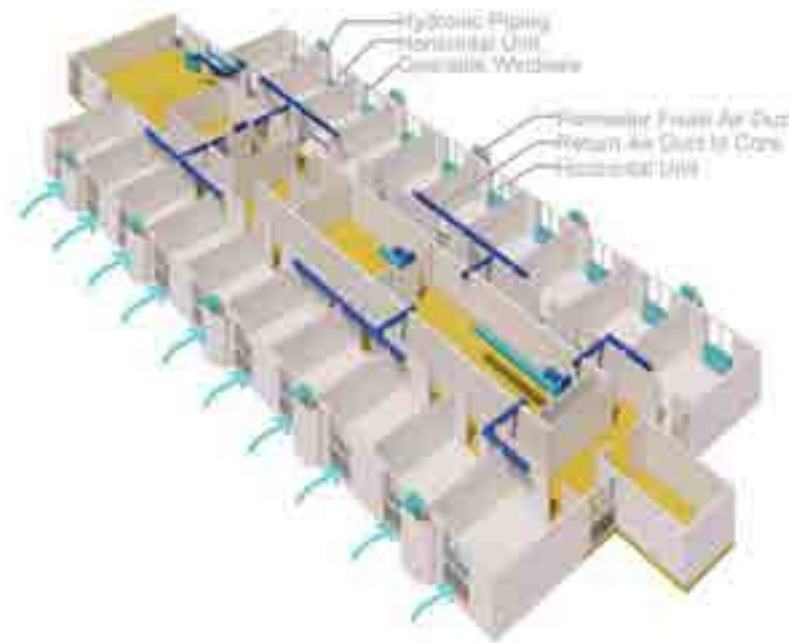
BUILDING SOLUTIONS Student Rooms Flexibility



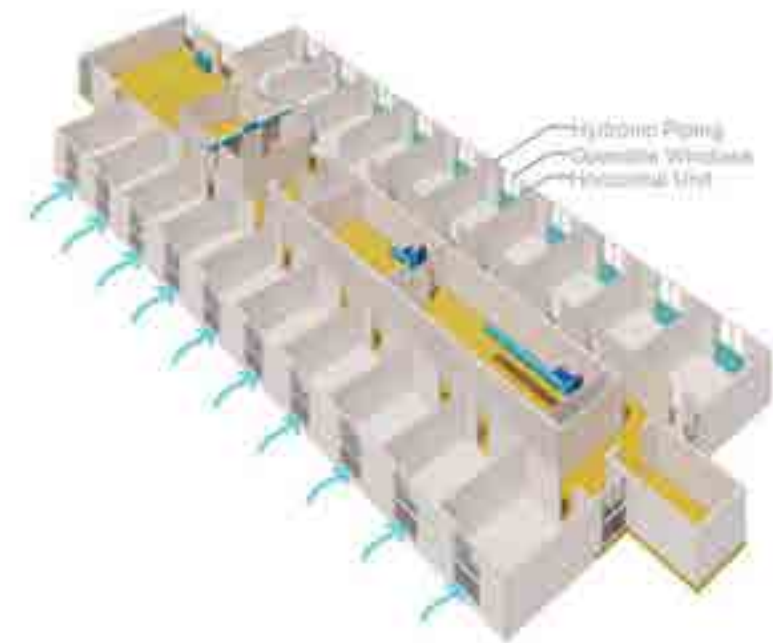
BUILDING SOLUTIONS Mechanical Systems Approach



Option A. Ducted Through Slab



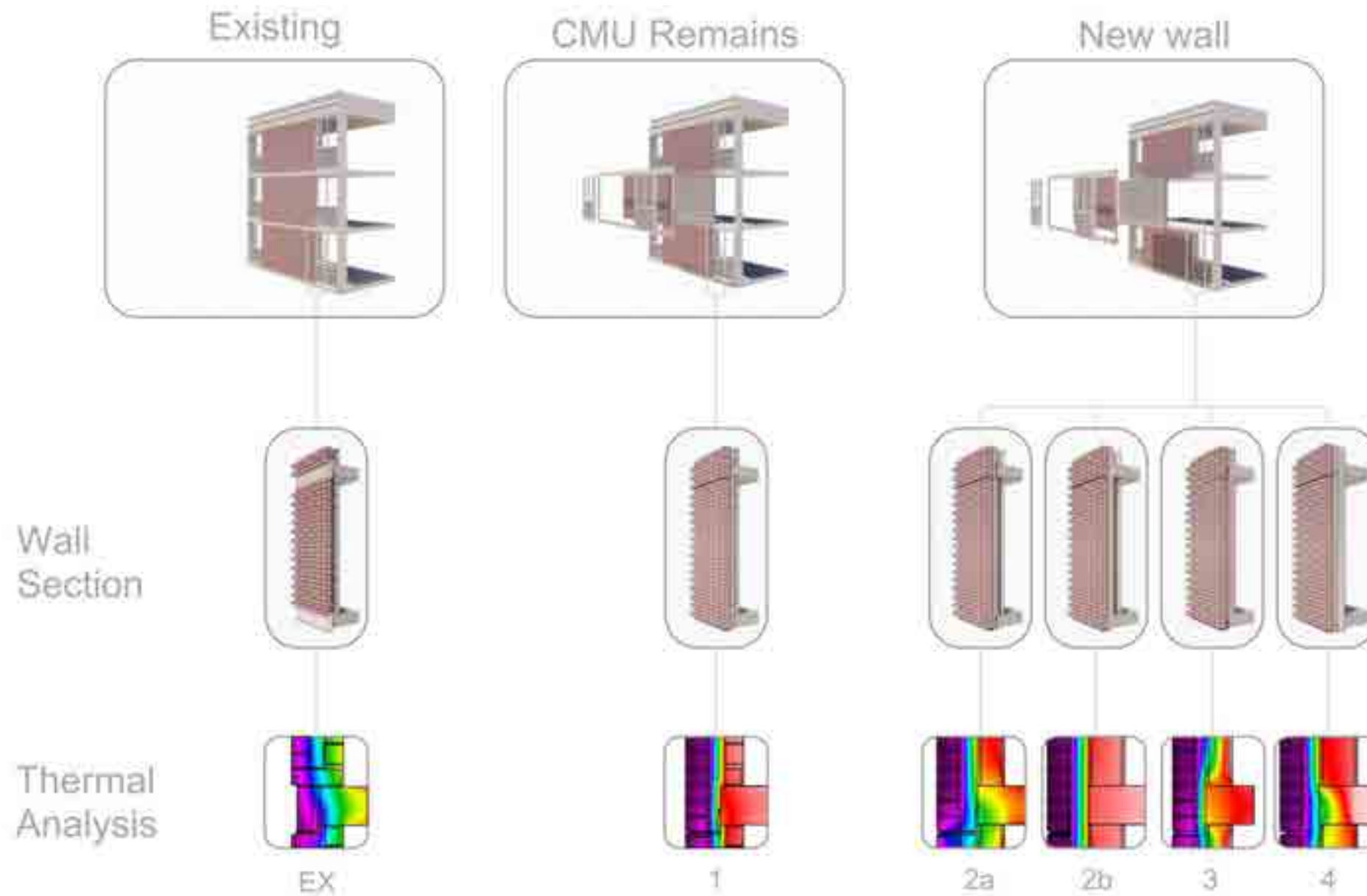
Option B. Building Perimeter Ducts



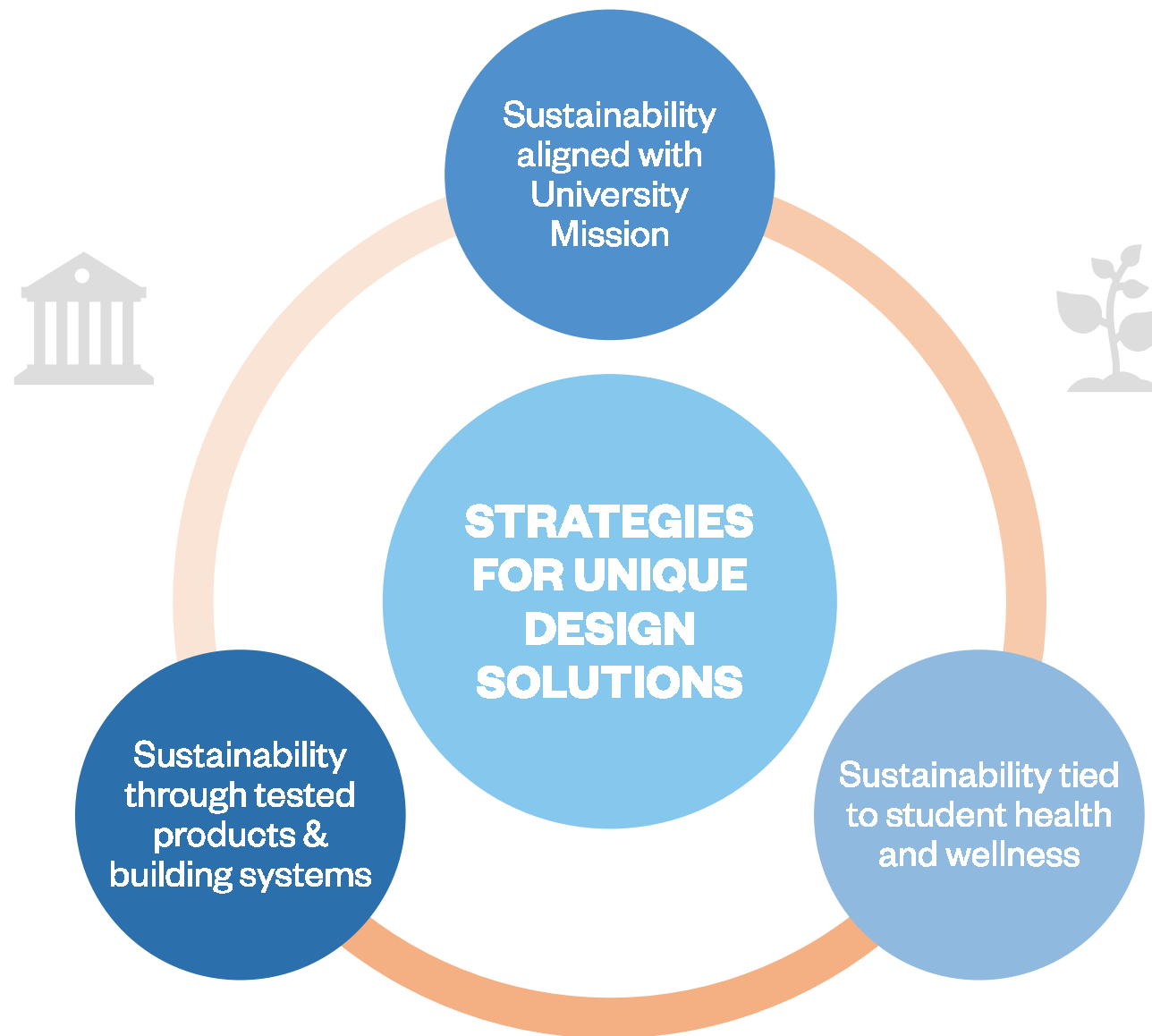
Option C. Operable Windows

BUILDING SOLUTIONS

Enclosure Considerations



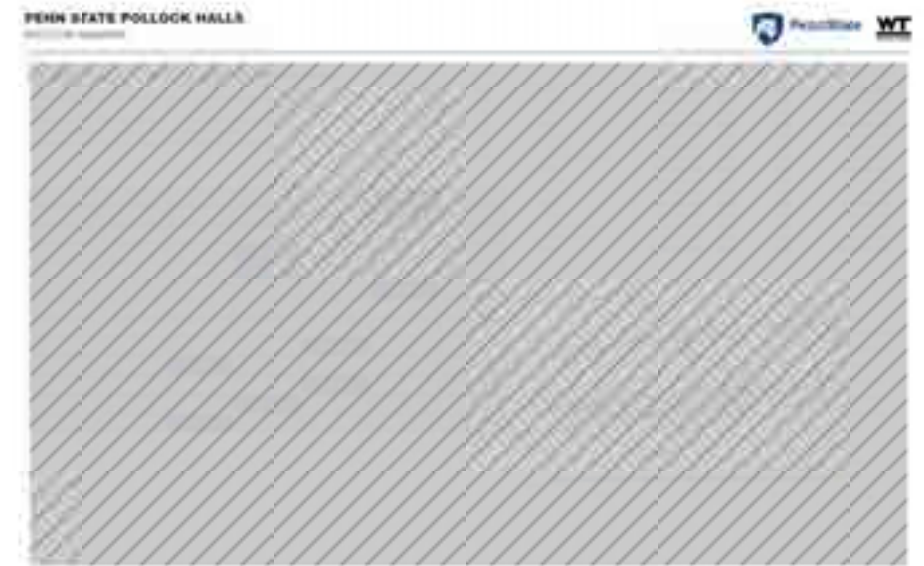
SYSTEMS INTEGRATION



SYSTEMS INTEGRATION USMA Lee Barracks

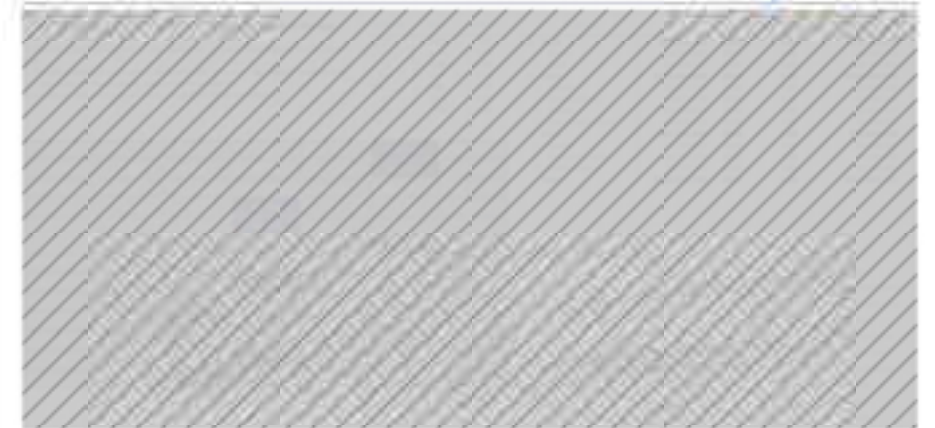


COST CONTROL Client App



COST CONTROL Phasing Scenarios

PENN STATE POLLOCK HALLS
Phase 2022-2024



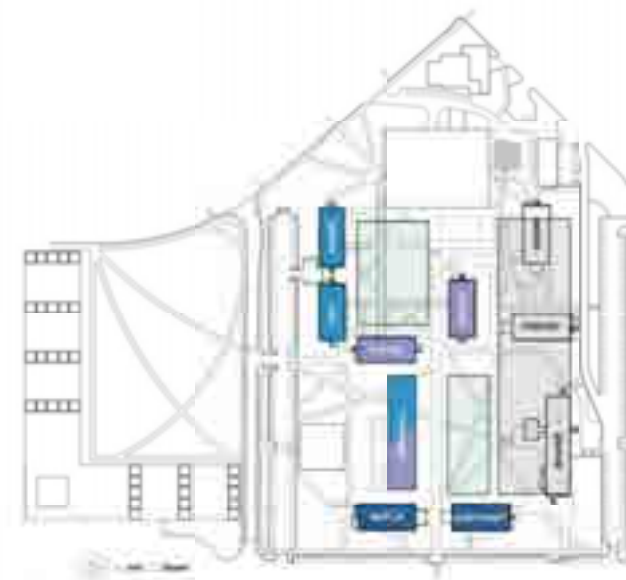
2022-2024 WEST HALL - INTERIOR CORE + 100% HALL COMPLETE
2023-2024 EAST HALL - INTERIOR CORE + 100% HALL COMPLETE
2024-2025 EAST HALL - 100% COMPLETE
2025-2026 EAST HALL - 100% COMPLETE

SCENARIO 1



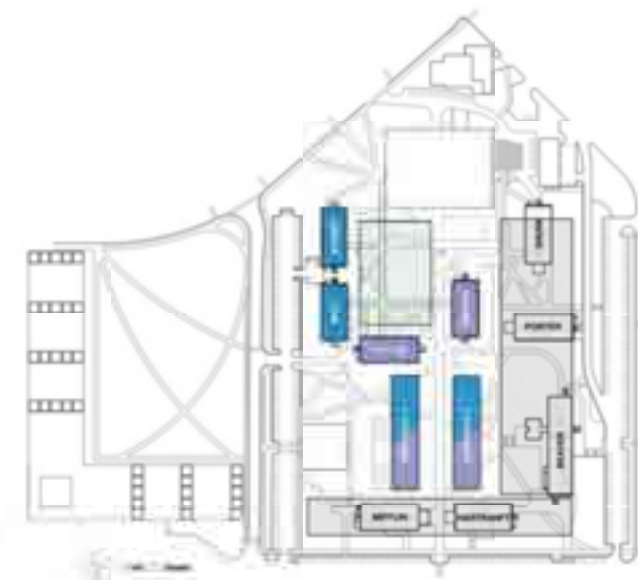
2022-2024 WEST HALL - INTERIOR CORE + 100% HALL COMPLETE
2023-2024 EAST HALL - INTERIOR CORE + 100% HALL COMPLETE
2024-2025 EAST HALL - 100% COMPLETE
2025-2026 EAST HALL - 100% COMPLETE

SCENARIO 2A



2022-2024 WEST HALL - INTERIOR CORE + 100% HALL COMPLETE
2023-2024 EAST HALL - INTERIOR CORE + 100% HALL COMPLETE
2024-2025 EAST HALL - 100% COMPLETE
2025-2026 EAST HALL - 100% COMPLETE

SCENARIO 2C



2022-2024 WEST HALL - INTERIOR CORE + 100% HALL COMPLETE
2023-2024 EAST HALL - INTERIOR CORE + 100% HALL COMPLETE
2024-2025 EAST HALL - 100% COMPLETE
2025-2026 EAST HALL - 100% COMPLETE

SCENARIO 3

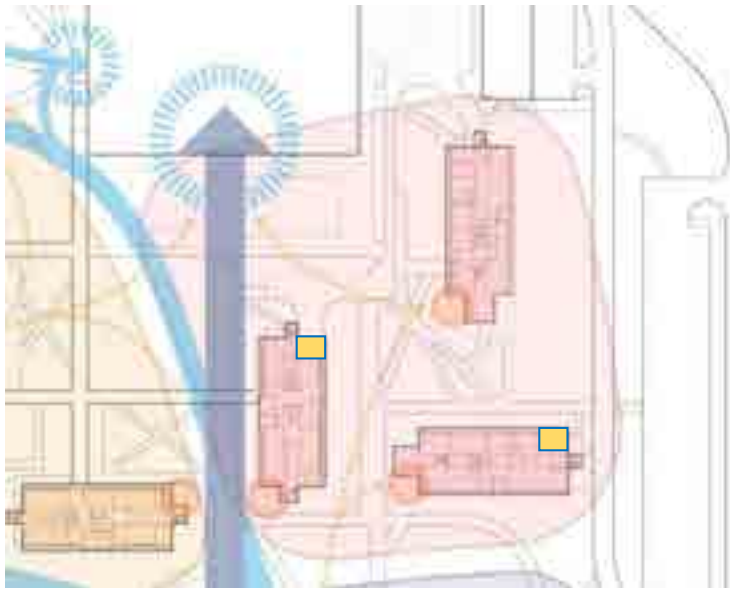
TRANSFORMATION

Creating an identity for Pollock



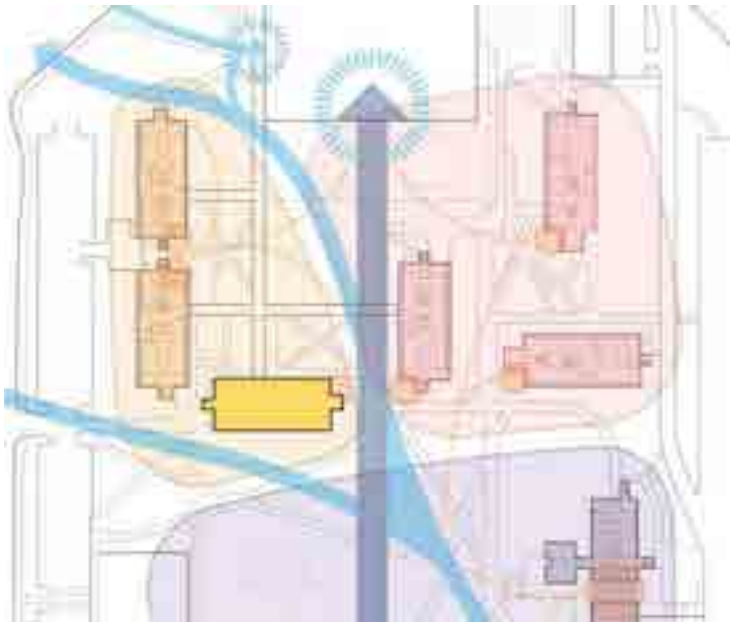
TRANSFORMATION

Build Community & Support Individual Wellness

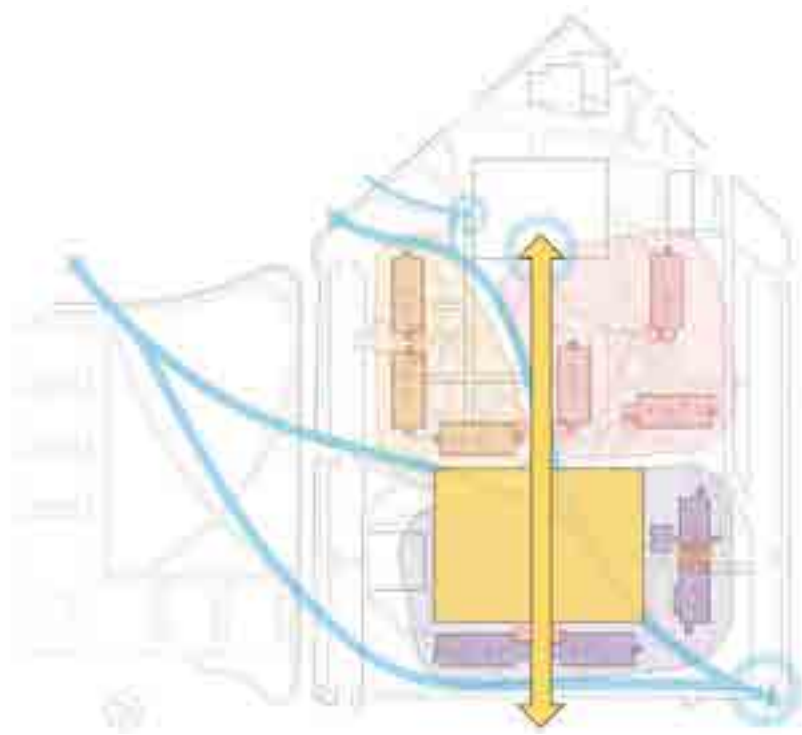


TRANSFORMATION

Integrate Learning & Create a Sense of “Home”



TRANSFORMATION Create an Active and Connected Campus



THANK YOU

Questions & Answers



PennState

EWING
COLE

WT
WILSON TOWNSHIP



HANBURY

PENN STATE UNIVERSITY

POLLOCK HALLS RENOVATIONS

July 27, 2023



PennState

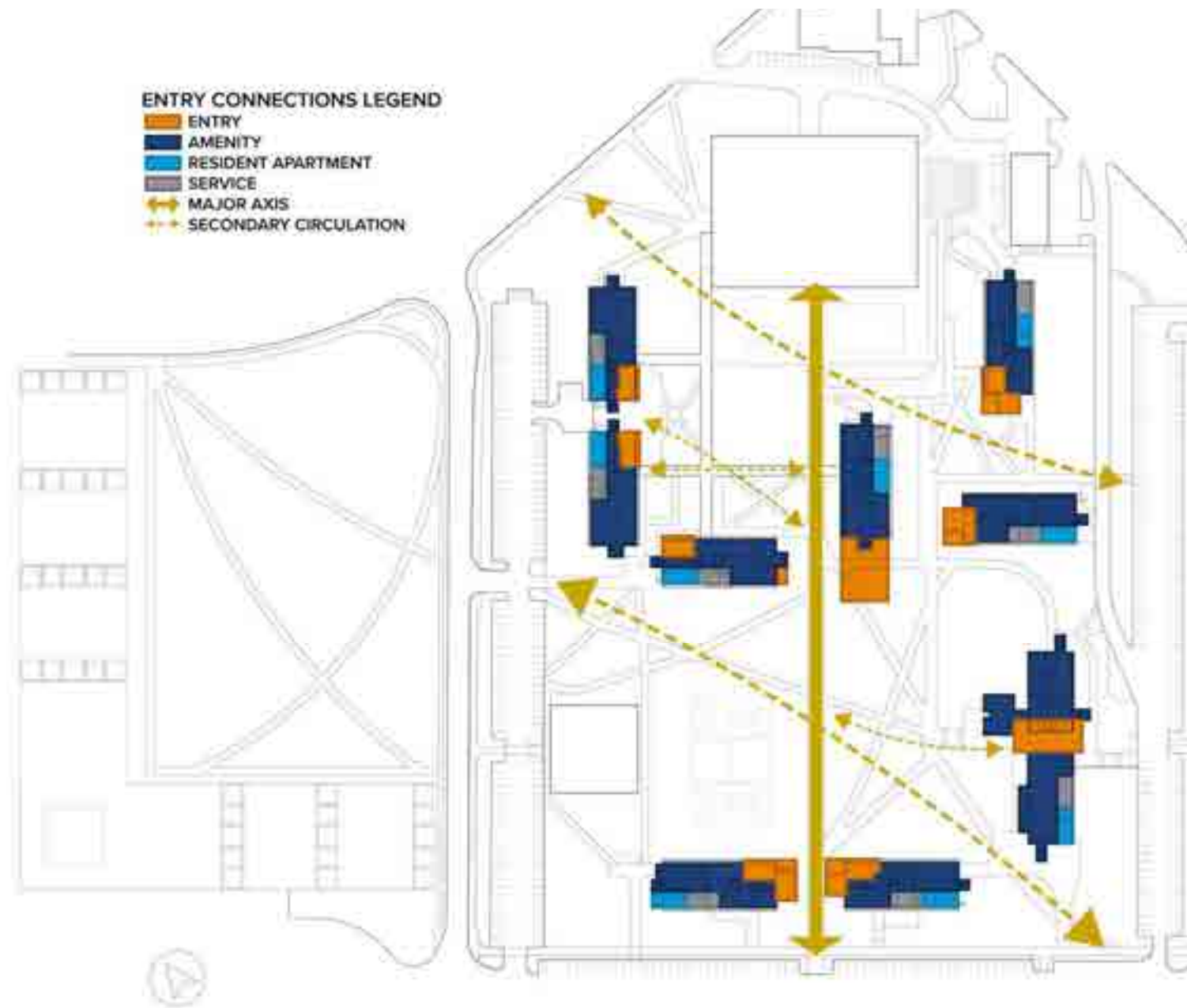
EWING
COLE

WT
WILLIAM T. RAYMOND



HANBURY

HOME









APPENDIX

TEAM EXPERIENCE

PROJECT APPROACH

PROJECT SCHEDULE/STAFFING

CAMPUS DRIVERS

WORKING ON PSU'S CAMPUS

PROJECT SPECIFIC CONSIDERATIONS

Program & Project Goals

Want to hear more about...

TEAM EXPERIENCE

TEAM EXPERIENCE

University of Michigan



East Village, University of Michigan

RENOVATION

Small Moves, Big Impact at University of Michigan



Floor Plan Diagram - University of Michigan, East Quad



Section Diagram - University of Michigan, East Quad

Team Experience

TEAM EXPERIENCE

Baylor University



Brooks Village, Baylor University

TEAM EXPERIENCE

Virginia Commonwealth University



Johnson Hall, Virginia Commonwealth University

PROJECT APPROACH

CAMPUS OPERATIONS

Utilization and Space Needs Analysis



Space Use Category	Current Year 2020 Student Headcount = 11,598				Future Horizon 2030 Student Headcount = 13,013			
	Current ASF	Calculated Space Requirement	ASF Difference	Percent Difference	Future Built ASF	Calculated Future Space Requirement	ASF Difference	Percent Difference
Classrooms and Service	94,701	111,000	(17,039)	(18%)	91,475	125,000	(34,125)	(37%)
Class Laboratories and Service	105,802	113,000	(8,008)	(8%)	125,101	127,000	(2,409)	(2%)
Open Laboratories and Service	42,843	48,400	(3,557)	(8%)	47,820	52,350	(4,530)	(9%)
Research and Service	28,181	36,400	(8,219)	(29%)	45,413	45,200	213	0%
Office and Service	304,216	228,500	75,716	25%	309,438	247,000	61,838	20%
Study/Library	121,963	115,150	6,803	0%	121,134	120,850	(5,516)	(5%)
Physical Education/Recreation	135,502	143,000	(7,408)	(5%)	135,502	157,400	(21,908)	(16%)
Athletics	57,517	175,000	(117,483)	(204%)	57,517	195,000	(137,483)	(239%)
Special Use	27,281	26,150	1,131	4%	28,026	20,300	(754)	(3%)
Assembly & Exhibit	98,748	100,800	(8,054)	(8%)	98,748	115,300	(16,554)	(17%)
Student Center	64,748	104,400	(39,652)	(61%)	64,748	117,200	(52,452)	(61%)
General Use	45,133	58,570	(13,437)	(30%)	45,813	65,900	(20,087)	(44%)
Support	57,847	78,700	(20,853)	(36%)	57,950	80,000	(22,044)	(38%)
Health Care	3,246	5,800	(2,554)	(79%)	3,246	6,500	(3,254)	(100%)
Residential Facilities	1,393,099	1,291,100	102,599	7%	1,586,079	1,567,480	(861)	(0%)
TOTAL	2,581,655	2,641,670	(60,015)	(2%)	2,819,594	3,079,160	(259,566)	(9%)
Inactive	4,326				4,326			
Conversion	37,291				37,291			
Highlands Biological Station	18,096				18,096			
WCU Programs in Asheville	30,091				30,091			
TOTAL	2,672,259				2,910,106			

Campus-wide Space Analysis by Space Category

CAMPUS OPERATIONS

Space Needs Assessment

Weekly Student Contact Hours (WSCH) help us frame the current use capacity of how you schedule classes and frame the future guideline benchmarks



Weekly Student Contact Hours per College
for Face-to-Face Classes

*Does not include hybrid or online classes



Appx # Students per
Class Delivery Method
per College



Enrollment per College

CAMPUS OPERATIONS Utilization and Space Needs Analysis

Intensity of Classroom use
by Time of Day

Generally like to see at or
above 75% classes filled
during the typical 'heavy
class load' times of the day.
(i.e. 10am - 2pm)

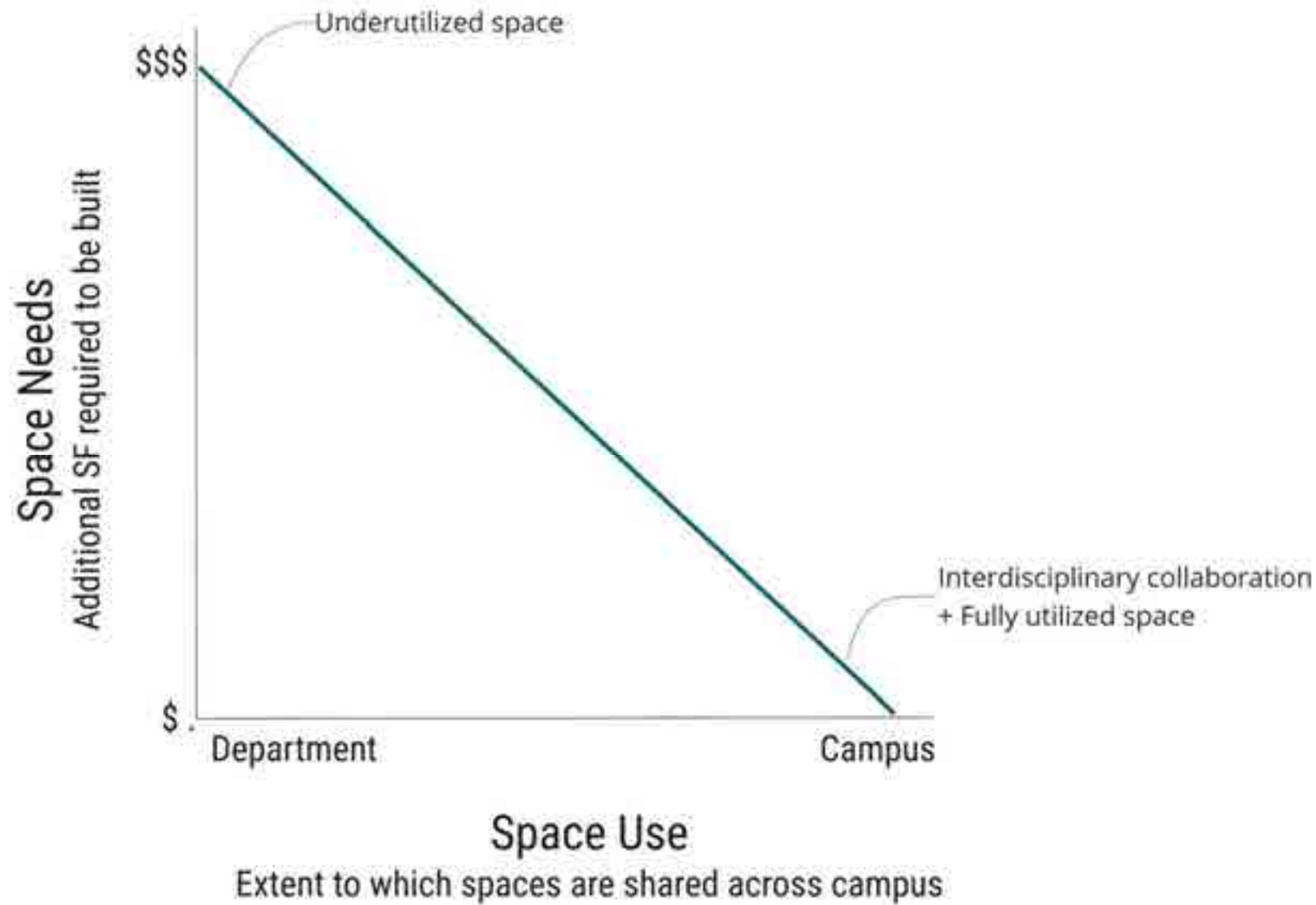
UNCW
Classroom Use by Day and Time of Day
Room Use Code 110
Total # Classrooms: 162

Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Monday-Thurs Average	
	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms
6:00 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
6:30 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
7:00 AM	0	0%	5	3%	15	9%	2	1%	0	0%	0	0%	6	3%
7:30 AM	0	0%	5	3%	15	9%	2	1%	0	0%	0	0%	6	3%
8:00 AM	37	22%	65	39%	52	31%	60	36%	26	17%	10	6%	54	32%
8:30 AM	39	23%	72	43%	55	33%	60	36%	29	17%	10	6%	57	34%
9:00 AM	92	55%	76	46%	110	66%	71	43%	77	46%	10	6%	87	52%
9:30 AM	97	58%	114	68%	115	69%	148	89%	78	47%	10	6%	129	77%
10:00 AM	114	68%	113	68%	111	67%	149	89%	102	61%	10	6%	117	70%
10:30 AM	114	68%	111	67%	127	76%	147	88%	102	61%	10	6%	118	71%
11:00 AM	110	66%	135	81%	124	74%	129	77%	91	54%	10	6%	125	75%
11:30 AM	110	66%	135	81%	124	74%	132	79%	91	54%	10	6%	125	75%
12:00 PM	74	44%	114	68%	80	48%	133	80%	52	31%	10	6%	107	64%
12:30 PM	88	51%	138	83%	99	59%	137	82%	49	29%	10	6%	113	68%
1:00 PM	96	58%	117	70%	113	68%	137	82%	54	32%	0	0%	121	73%
1:30 PM	97	58%	118	71%	112	67%	131	78%	52	31%	0	0%	118	70%
2:00 PM	103	62%	121	72%	118	71%	134	80%	25	15%	0	0%	114	68%
2:30 PM	102	61%	121	72%	118	71%	134	80%	25	15%	0	0%	114	68%
3:00 PM	87	52%	118	71%	98	59%	111	66%	10	6%	0	0%	104	62%
3:30 PM	83	50%	92	55%	95	57%	87	52%	9	5%	0	0%	89	53%
4:00 PM	77	46%	90	54%	96	57%	83	50%	4	2%	0	0%	87	52%
4:30 PM	74	44%	88	53%	93	56%	80	48%	4	2%	0	0%	84	50%
5:00 PM	44	26%	38	23%	71	42%	33	20%	1	1%	0	0%	47	28%
5:30 PM	43	26%	38	23%	75	45%	33	20%	1	1%	0	0%	48	28%
6:00 PM	45	27%	41	25%	75	45%	34	20%	0	0%	0	0%	49	29%
6:30 PM	23	14%	22	13%	33	20%	11	7%	0	0%	0	0%	22	13%
7:00 PM	23	14%	21	13%	34	20%	11	7%	0	0%	0	0%	22	13%
7:30 PM	15	9%	19	11%	33	20%	9	5%	0	0%	0	0%	19	11%
8:00 PM	10	6%	12	7%	30	18%	7	4%	0	0%	0	0%	15	9%
8:30 PM	8	5%	11	7%	22	13%	7	4%	0	0%	0	0%	11	7%
9:00 PM	8	5%	9	5%	21	12%	5	3%	0	0%	0	0%	11	6%
9:30 PM	0	0%	5	3%	15	9%	2	1%	0	0%	0	0%	6	3%
10:00 PM	0	0%	5	3%	15	9%	2	1%	0	0%	0	0%	6	3%

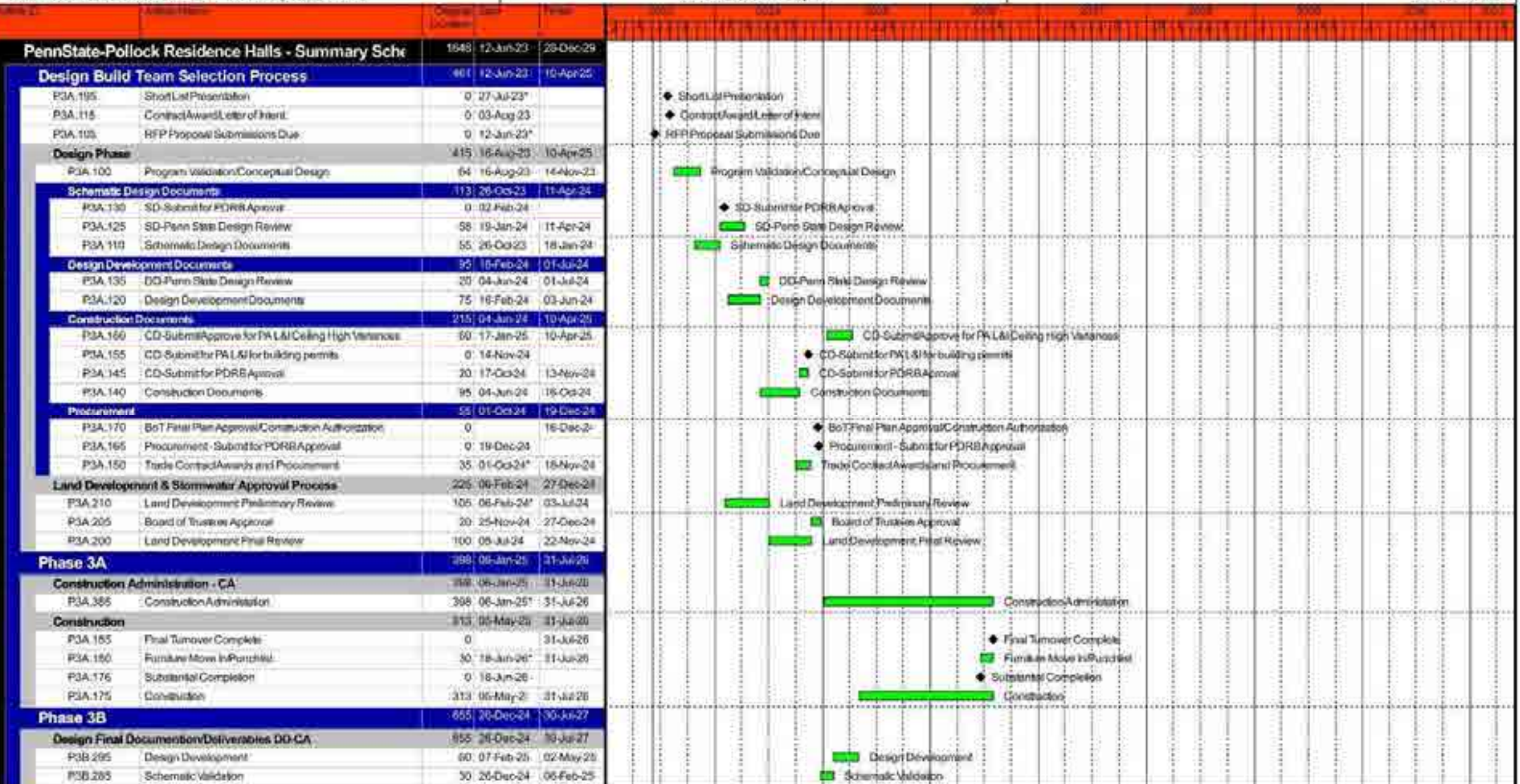


CAMPUS OPERATIONS

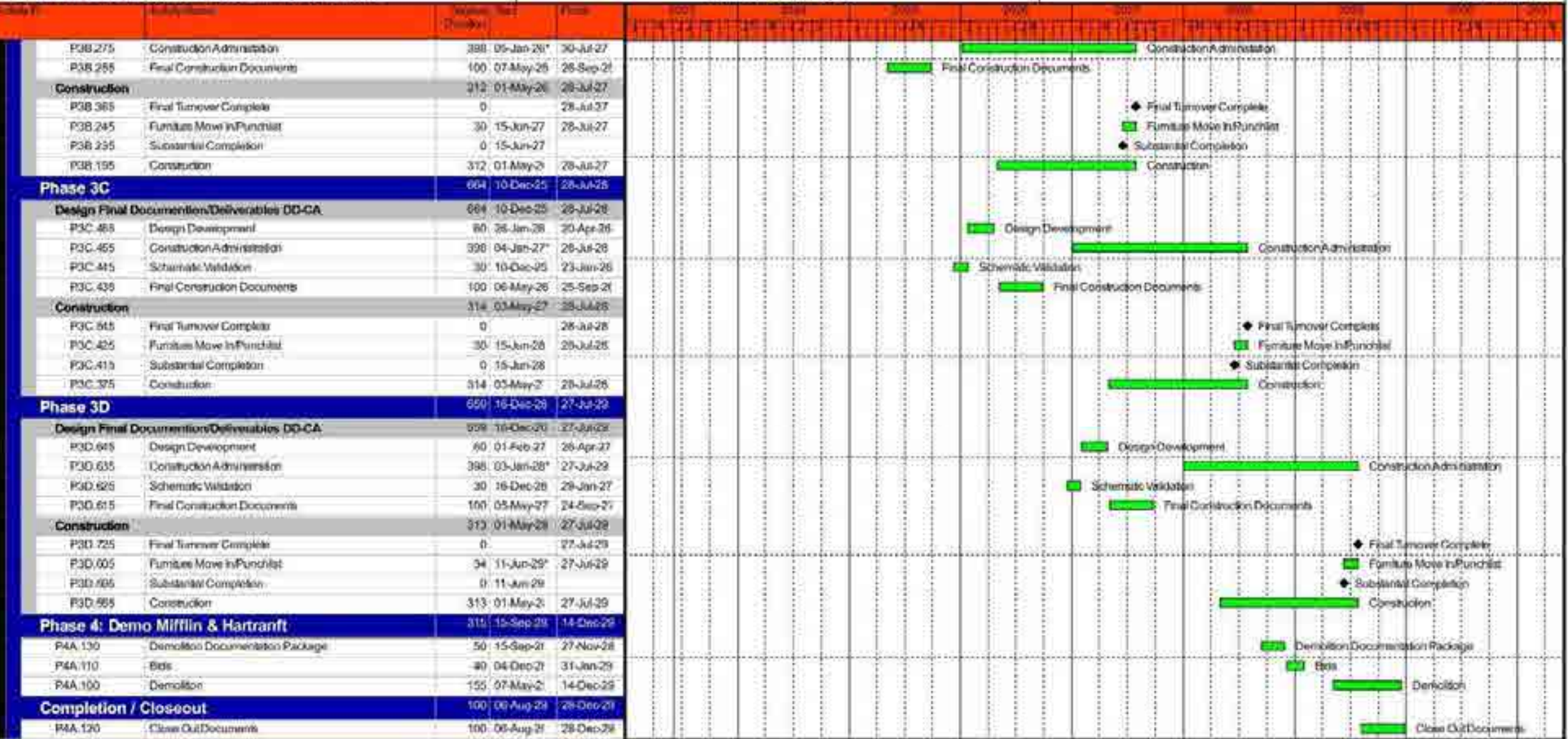
Maximizing Instructional Capacity



PROJECT SCHEDULE/STAFFING



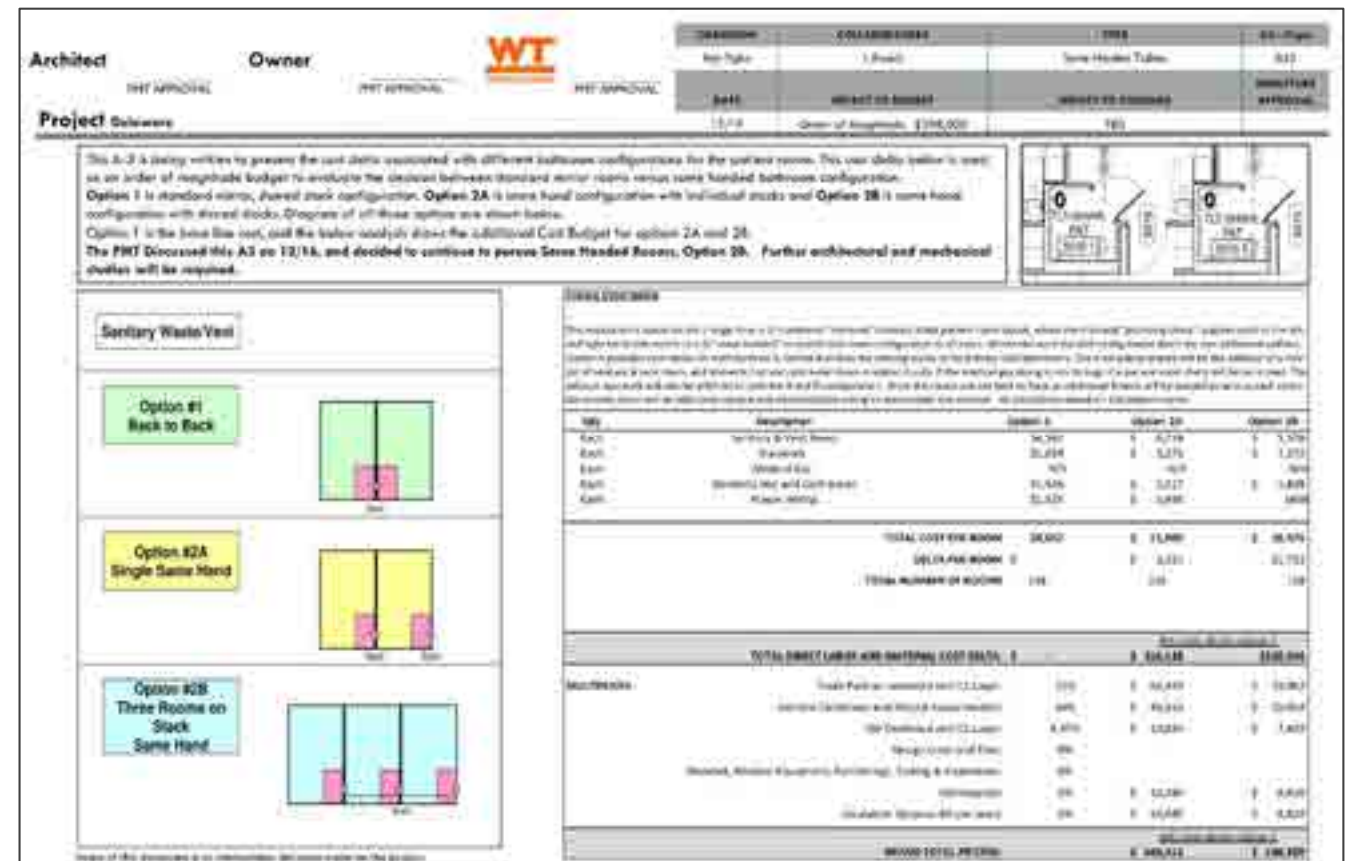
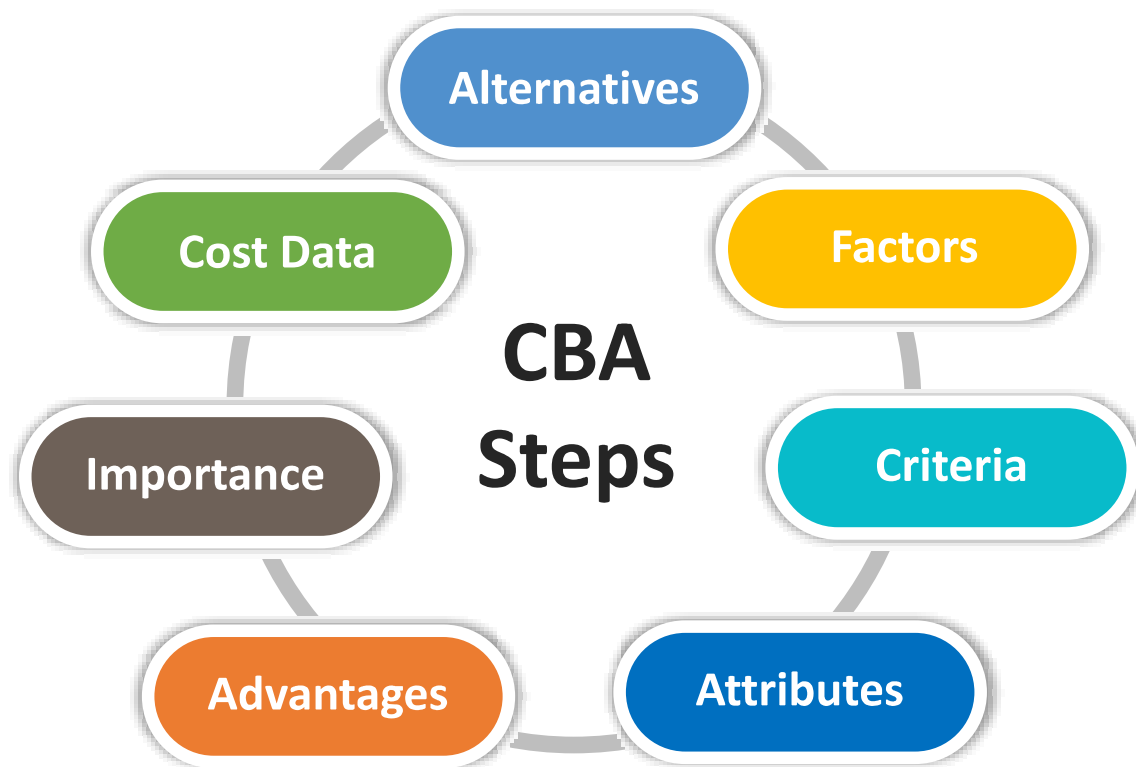
■ Actual Work
 ■ Critical Remaining Work
 ■ Remaining Work
 ◆ Milestone



■ Actual Work
 ■ Remaining Work
 ■ Critical Remaining Work
 ◆ Milestone

WORKING ON PSU'S CAMPUS

EFFICIENT DECISION MAKING CBA / A3s



Pollock Quad

Phase A

LEGEND

-  Subcontractor Trailers
-  Storage Containers



Pollock Logistics Plan

image 36



CONSTRUCTION FENCE

CONTRACTOR TRAILER

POTENTIAL OFFICE SPACE
IN POLLOCK COMMONS

PEDESTRIAN PATH

New crosswalk to
accommodate
pedestrian traffic

Pollock Logistics Plan

Phase 3C





Pollock Logistics Plan

Phase A

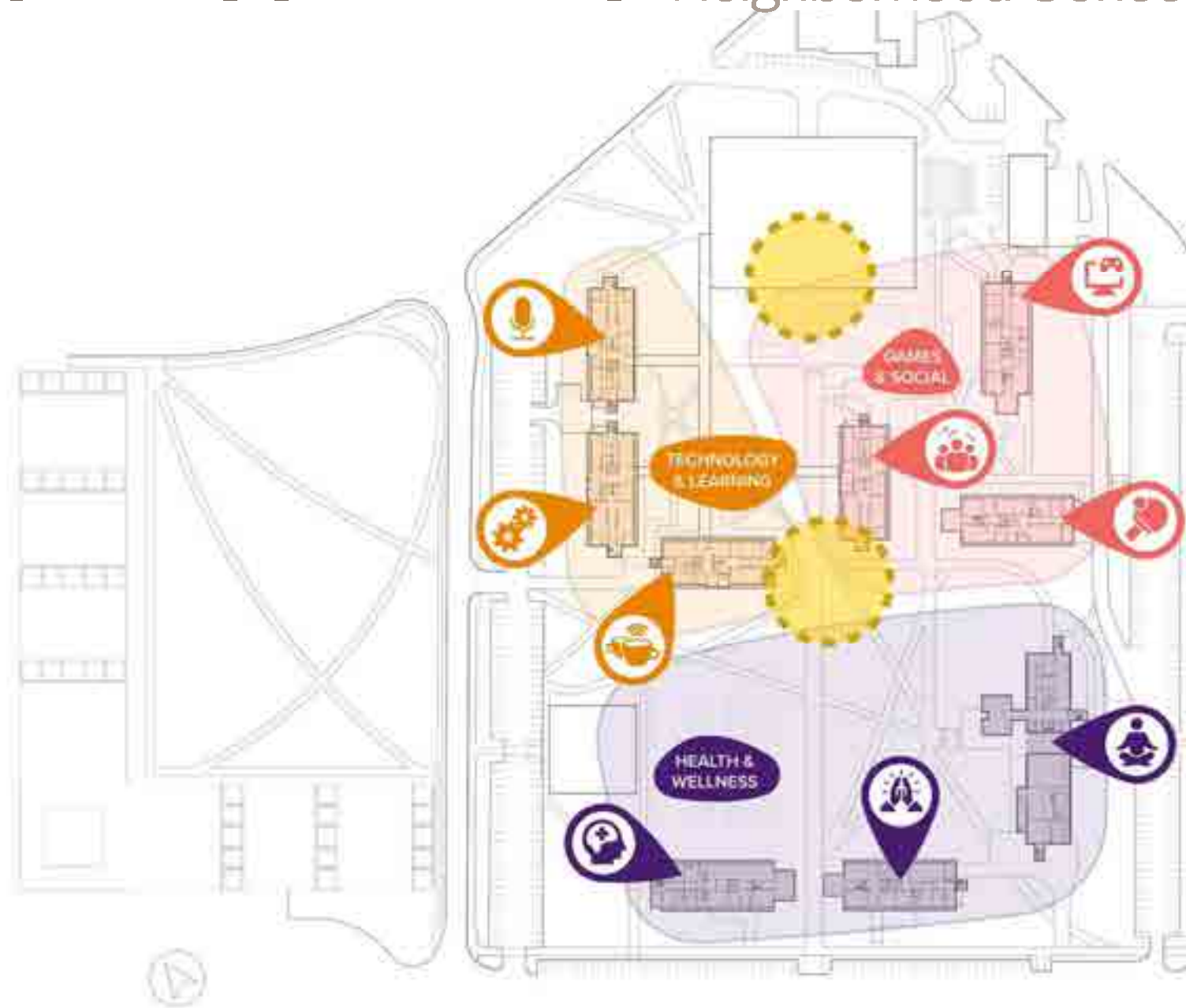


CONSTRUCTION FENCE

PEDESTRIAN PATH
Maintain accessibility
through phase of
construction

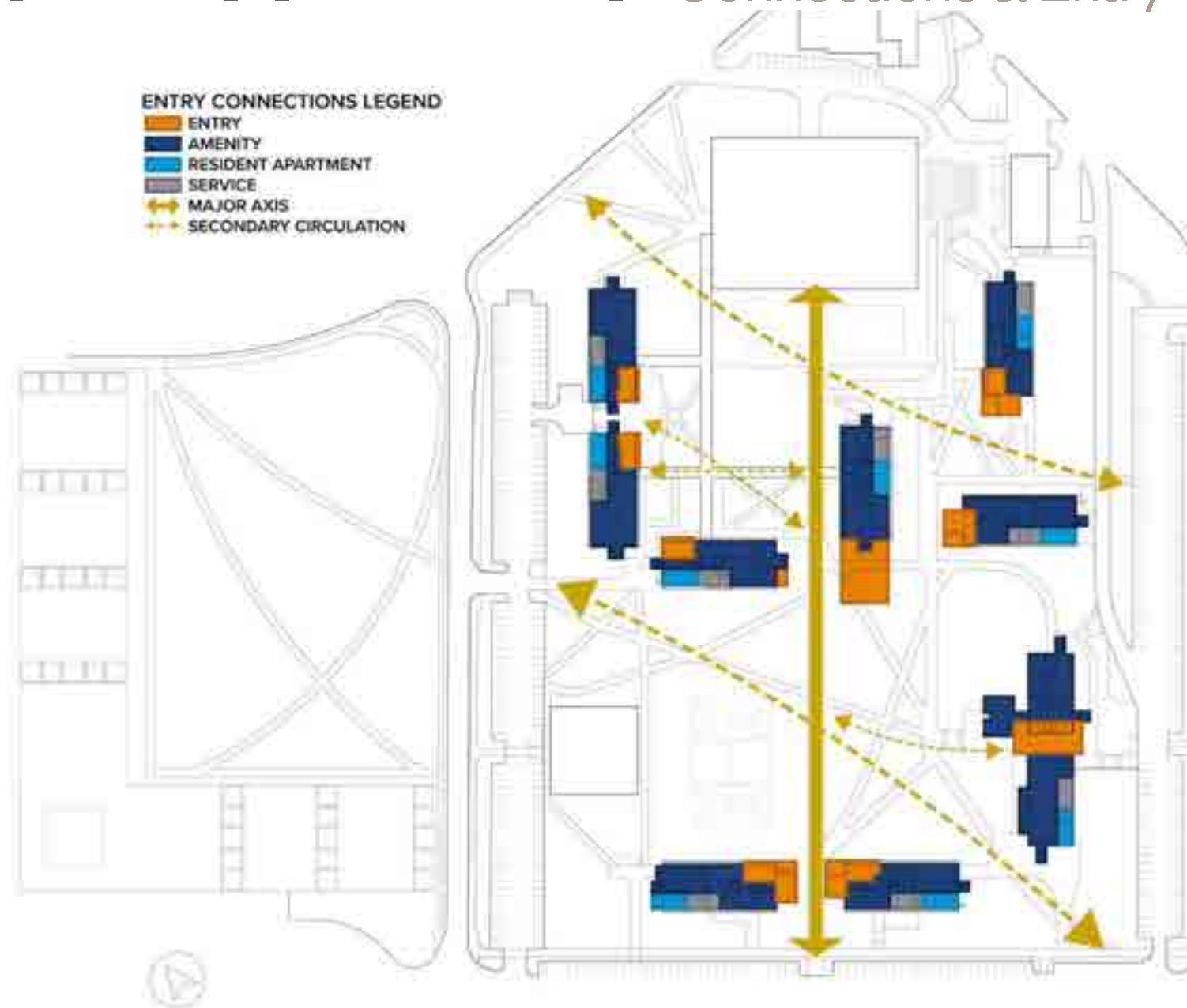
CAMPUS DRIVERS

CAMPUS DRIVERS Neighborhood Concept



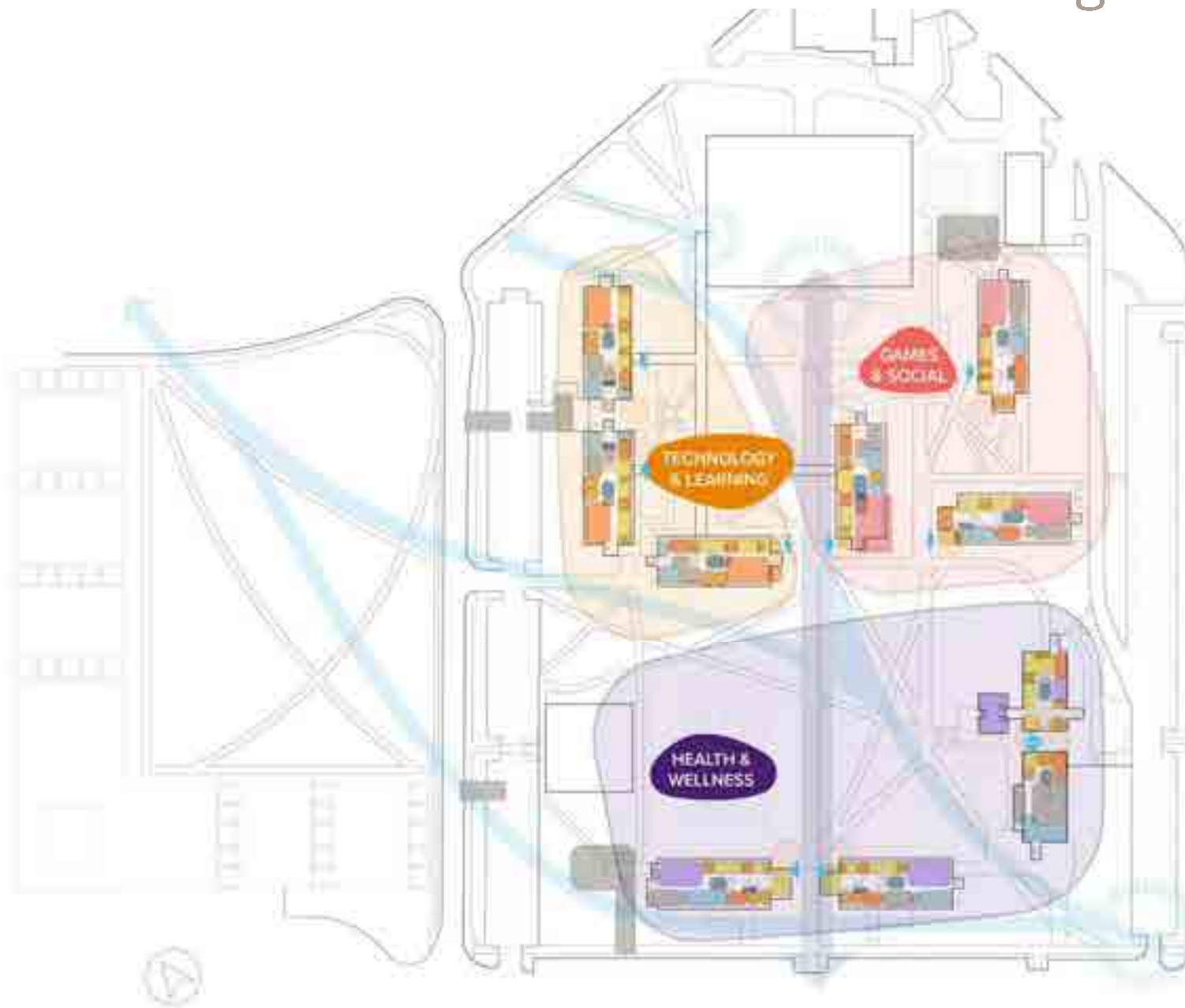
CAMPUS DRIVERS

Connections & Entry



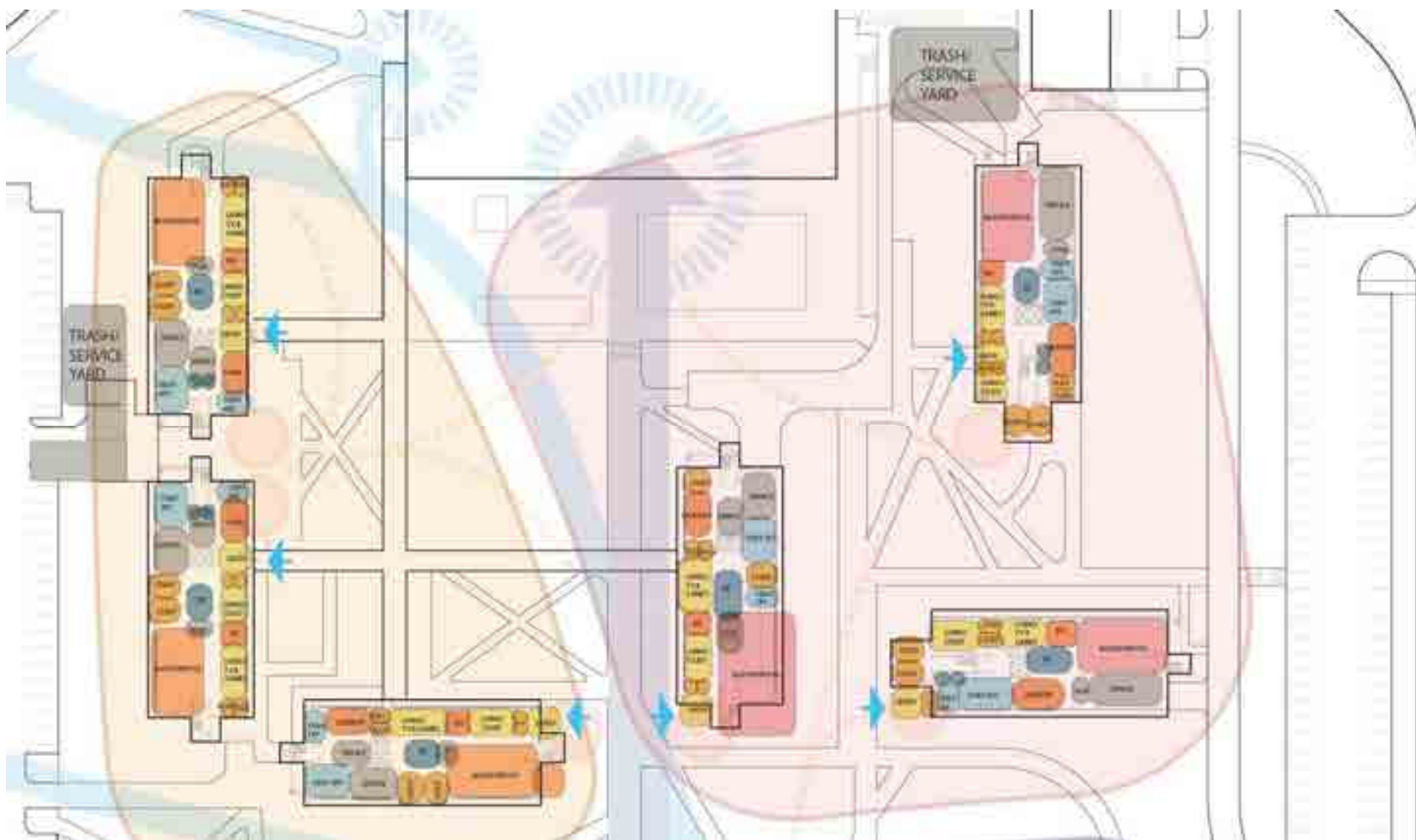
CAMPUS DRIVERS

Ground Floor Program Opportunities



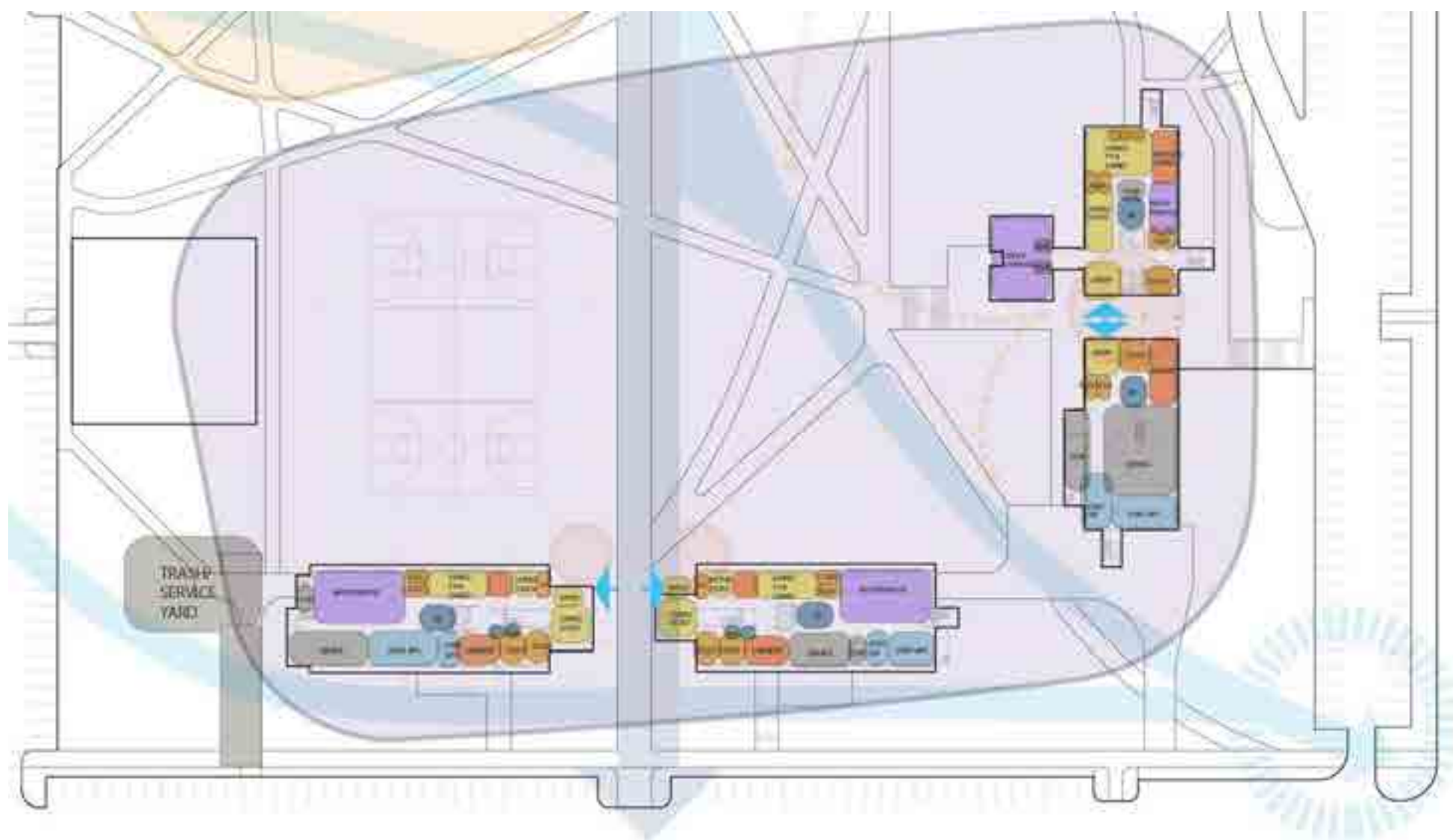
CAMPUS DRIVERS

Ground Floor Program Opportunities

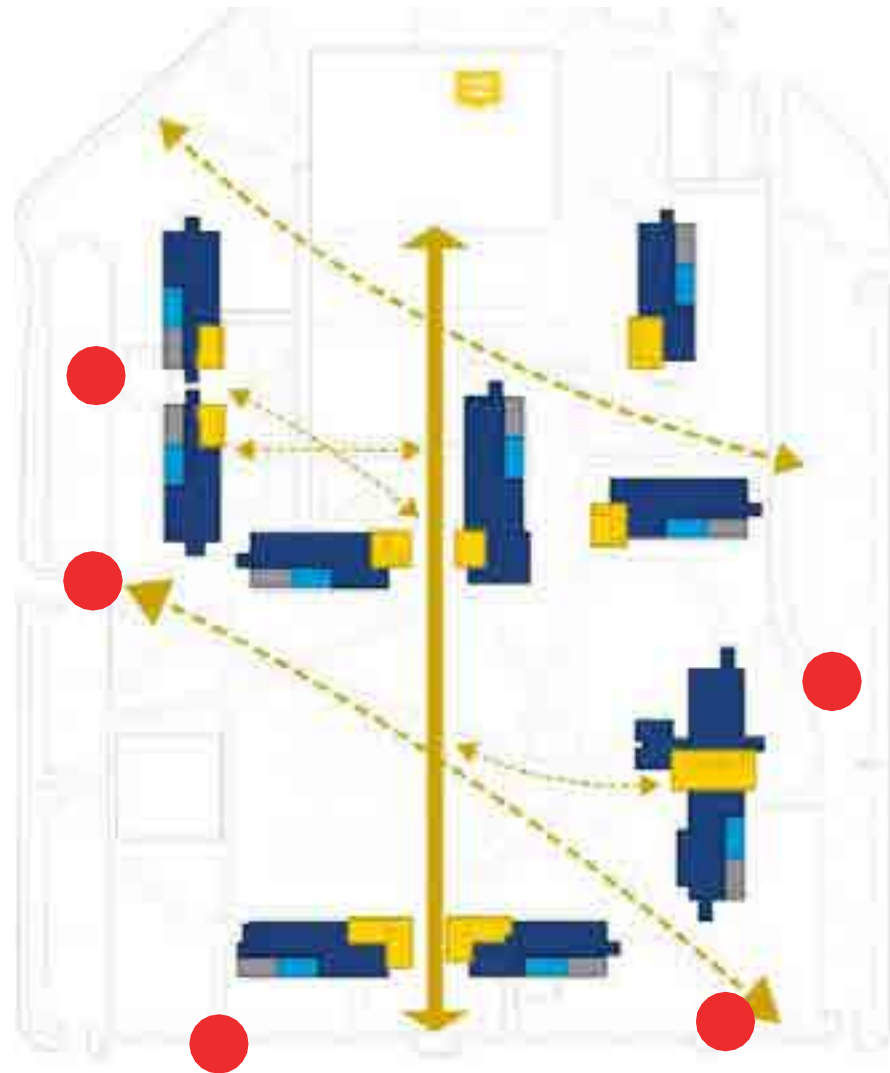


CAMPUS DRIVERS

Ground Floor Program Opportunities



PARKING



CONSOLIDATING
SERVICE ENTRANCES



MAKE A STATEMENT
WITH PLANTING



PAVING STRATEGIES

UTILITY/TREES/COVERED WALK



GRADES



BRING IN NATURE

CREATE SPACES

SHOWCASE RAINWATER

INCORPORATE FITNESS

COST SAVING STRATEGIES



BRING IN NATURE/IDENTITY

SMALL INVESTMENT, BIG
IMPACT

SIMPLE MATERIALS
GOOD SCALE

COST SAVING STRATEGIES



FLEXIBILITY/RESILIENCY



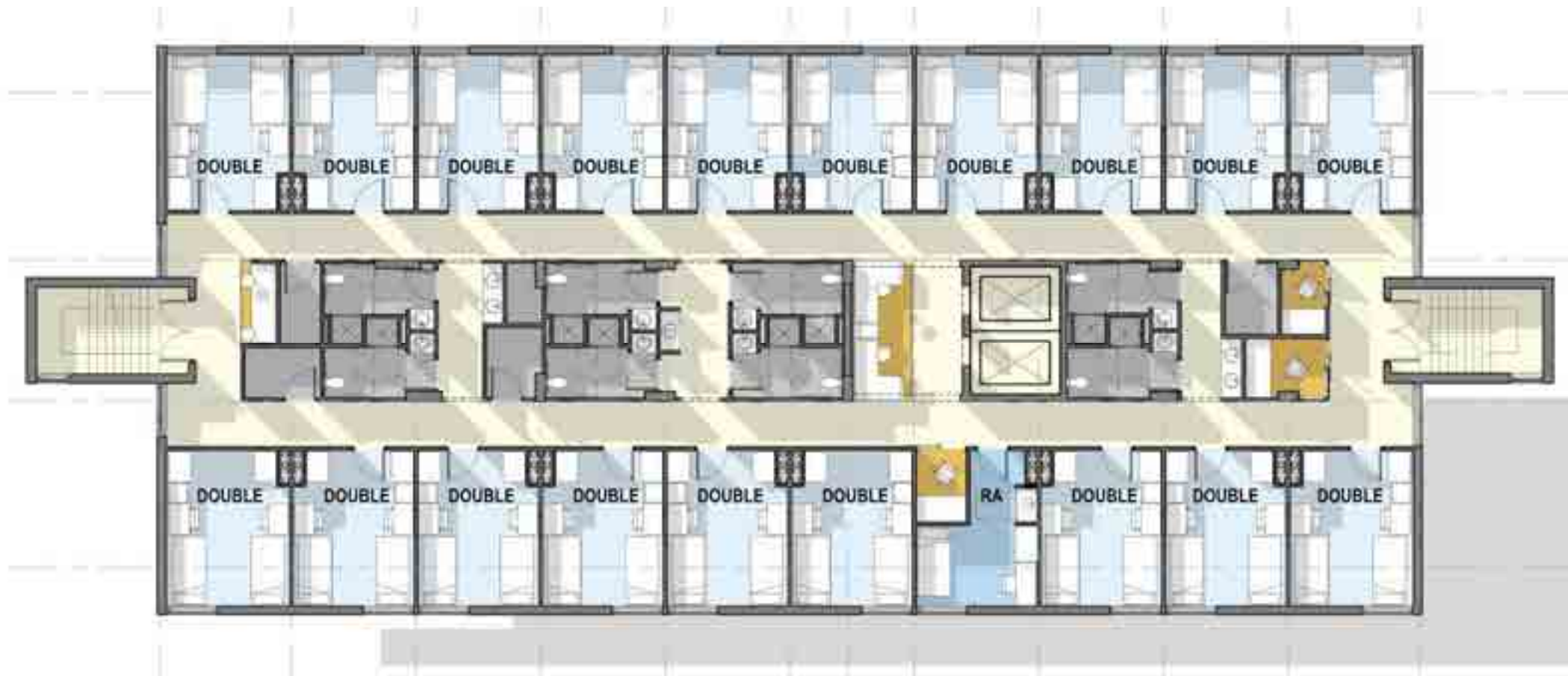
MULTIFUNCTION

PROJECT SPECIFIC CONSIDERATIONS

Program & Project Goals

PROJECT SPECIFIC CONSIDERATIONS

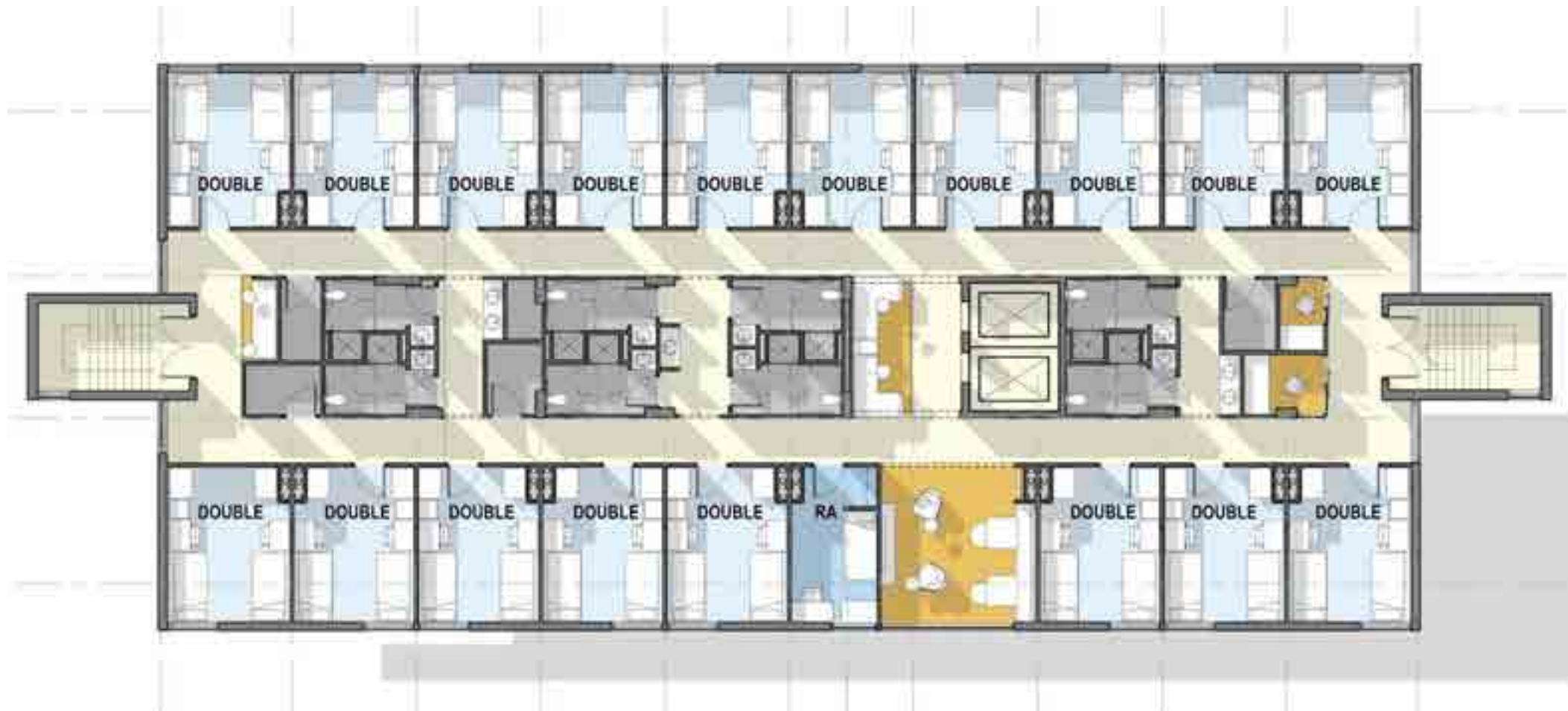
Floor Plan Studies



Baseline Option _ Type C-Pollock Halls Typical Floor Plan (Wolf, Shulze, Ritner, Hiester) _ 39 Beds

PROJECT SPECIFIC CONSIDERATIONS

Floor Plan Studies



Option 1: Lounge Conversion_ Type C-Pollock Halls Typical Floor Plan (Wolf, Shulze, Ritner, Hiester) _ 37 Beds

PROJECT SPECIFIC CONSIDERATIONS

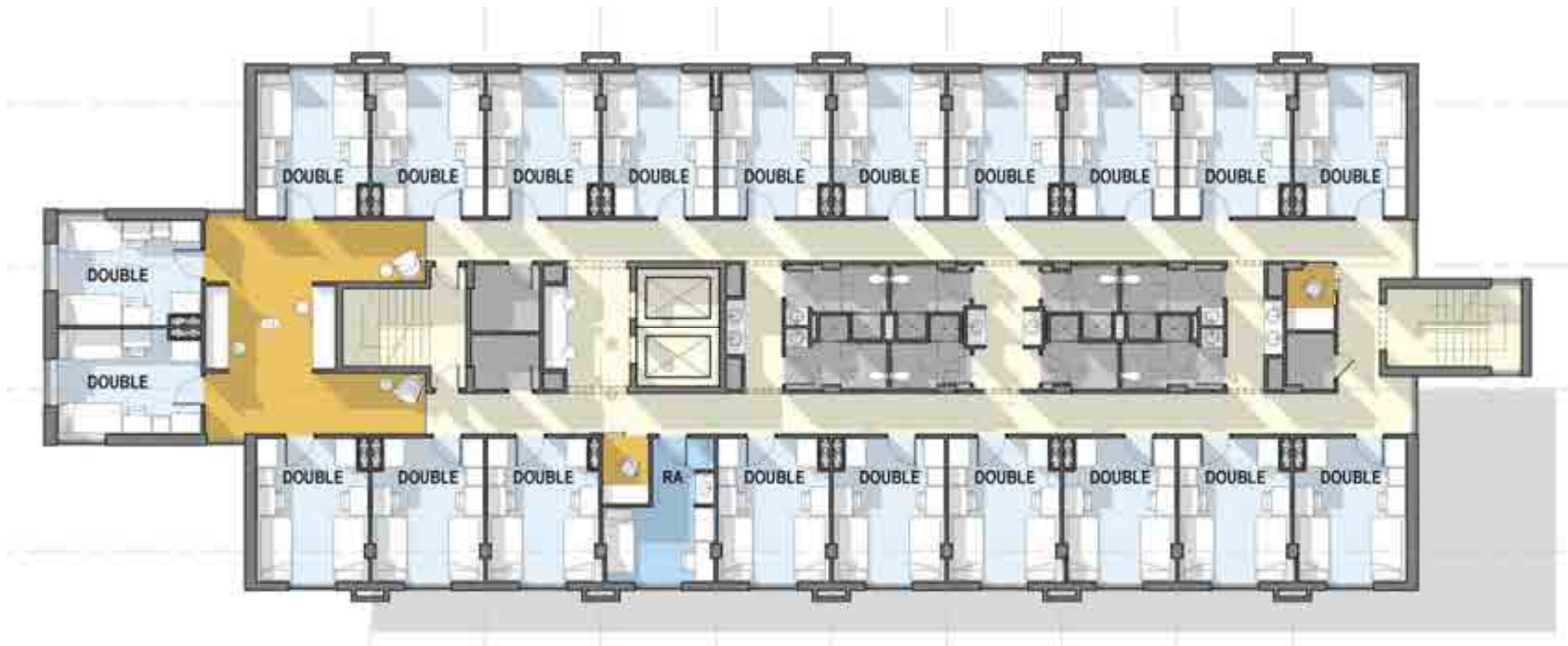
Floor Plan Studies



Option 2: Lounge Addition_ Type C-Pollock Halls Typical Floor Plan(Wolf, Shulze, Ritner, Hiester) _ 39 Beds

PROJECT SPECIFIC CONSIDERATIONS

Floor Plan Studies



Baseline Option_ Type A-Pollock Halls Typical Floor Plan (Shunk, Porter, Hartranft, Mifflin) _ 44 Beds

PROJECT SPECIFIC CONSIDERATIONS

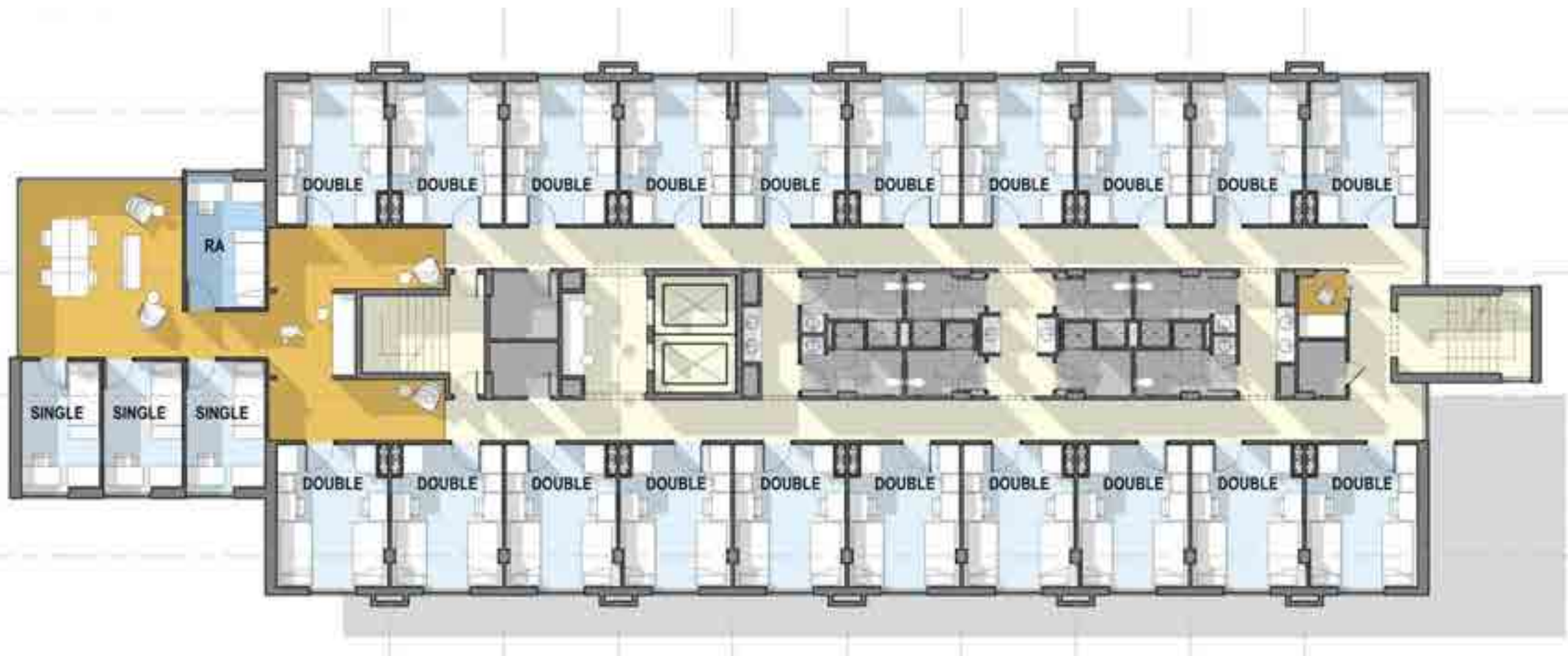
Floor Plan Studies



Option 1: Lounge Conversion _ Type A-Pollock Halls Typical Floor Plan (Shunk, Porter, Hartranft, Mifflin) _ 41 Beds

PROJECT SPECIFIC CONSIDERATIONS

Floor Plan Studies



Option 1: Lounge/Pod Addition_ Type A-Pollock Halls Typical Floor Plan (Shunk, Porter, Hartranft, Mifflin) _ 44 Beds

PROJECT SPECIFIC CONSIDERATIONS Axon Studies

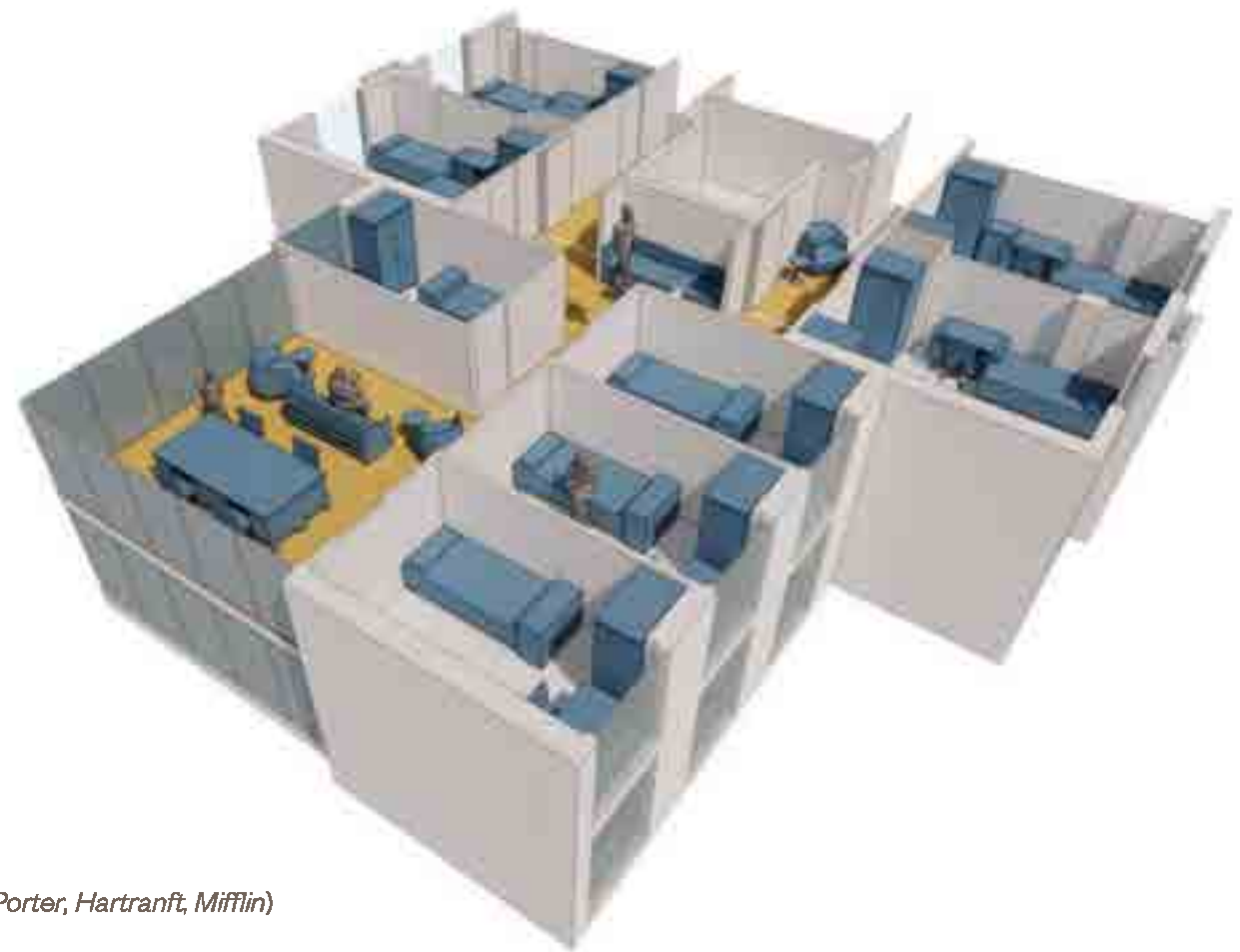
Community Focus - Lounge Below | Study Pods Above

STUDY ROOM ALTERNATES



Unit Focus - Additional Units & Lounge at Each Floor

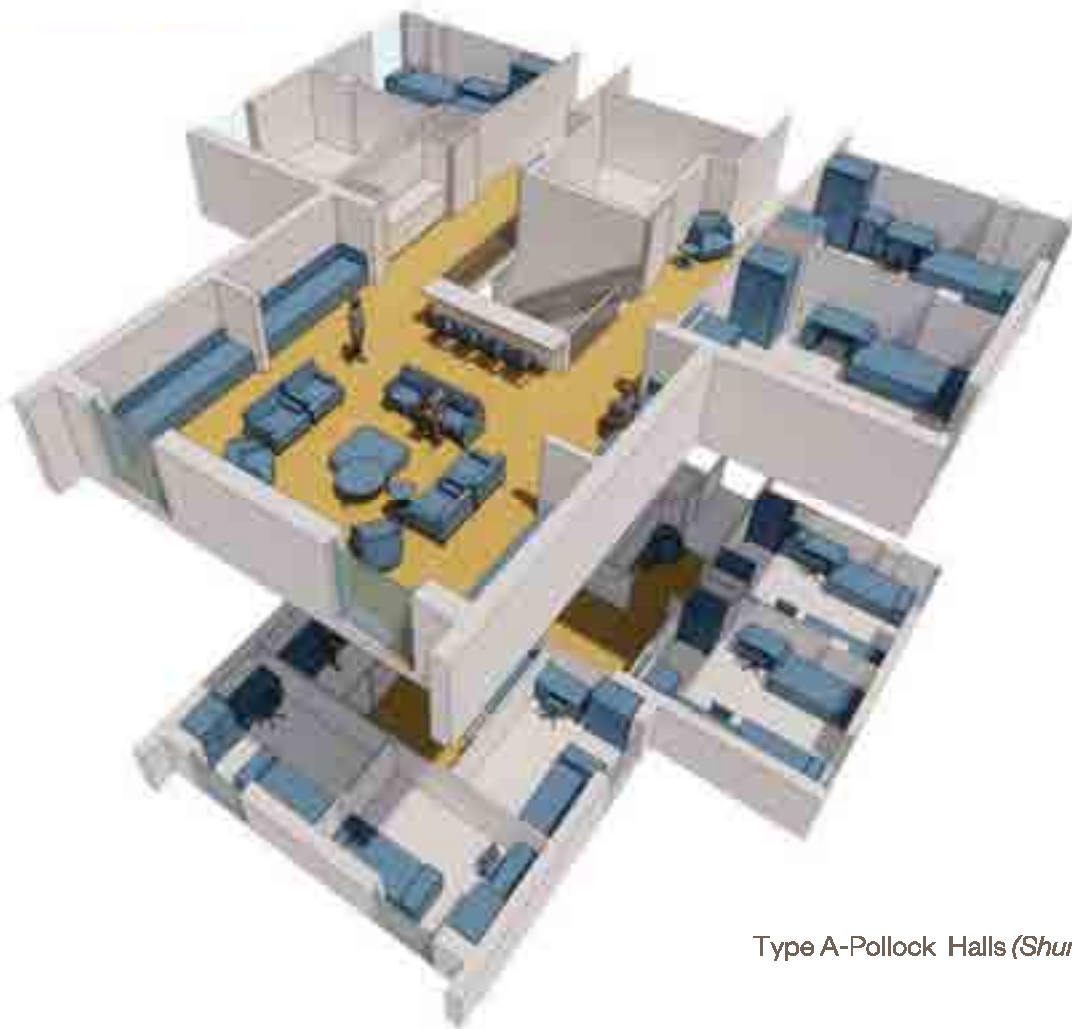
UNIT / MECHANICAL STRATEGY



Type A-Pollock Halls (*Shunk, Porter, Hartranft, Mifflin*)

PROJECT SPECIFIC CONSIDERATIONS Axon Studies

Hybrid Focus - Units Below | Lounge Above
STUDY ROOM ALTERNATIVES



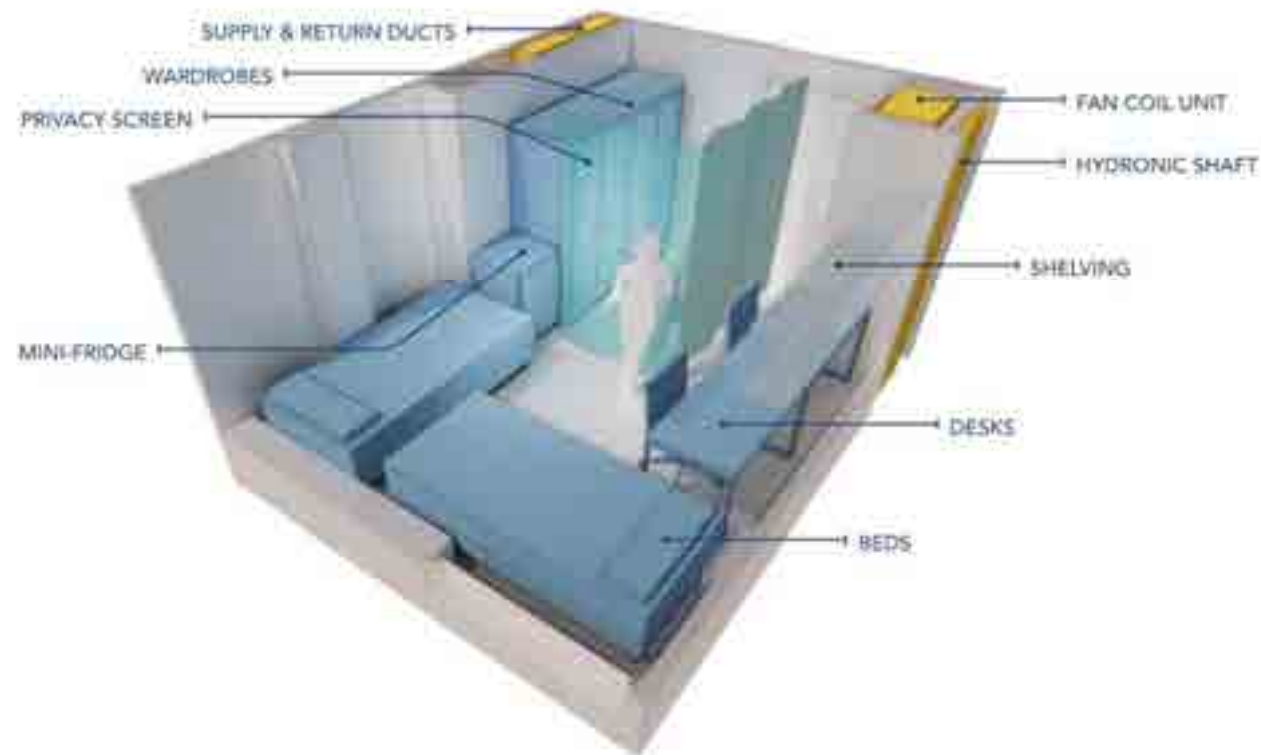
Type A-Pollock Halls (*Shunk, Porter, Hartranft, Mifflin*)

PROJECT SPECIFIC CONSIDERATIONS

Unit Studies

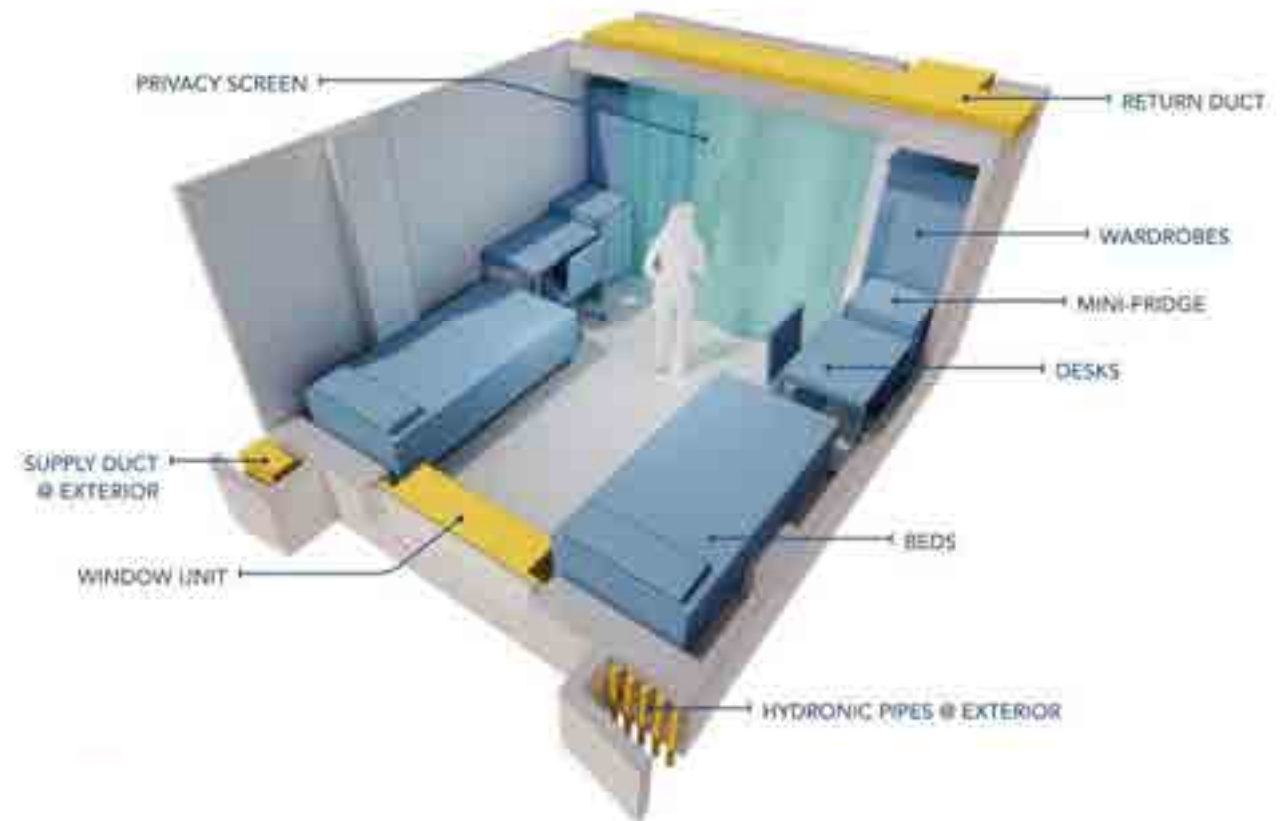
Option A - Mechanical Internal to Unit

UNIT MECHANICAL STRATEGY



Option B - Supply Duct & Hydronics External to Unit

UNIT MECHANICAL STRATEGY

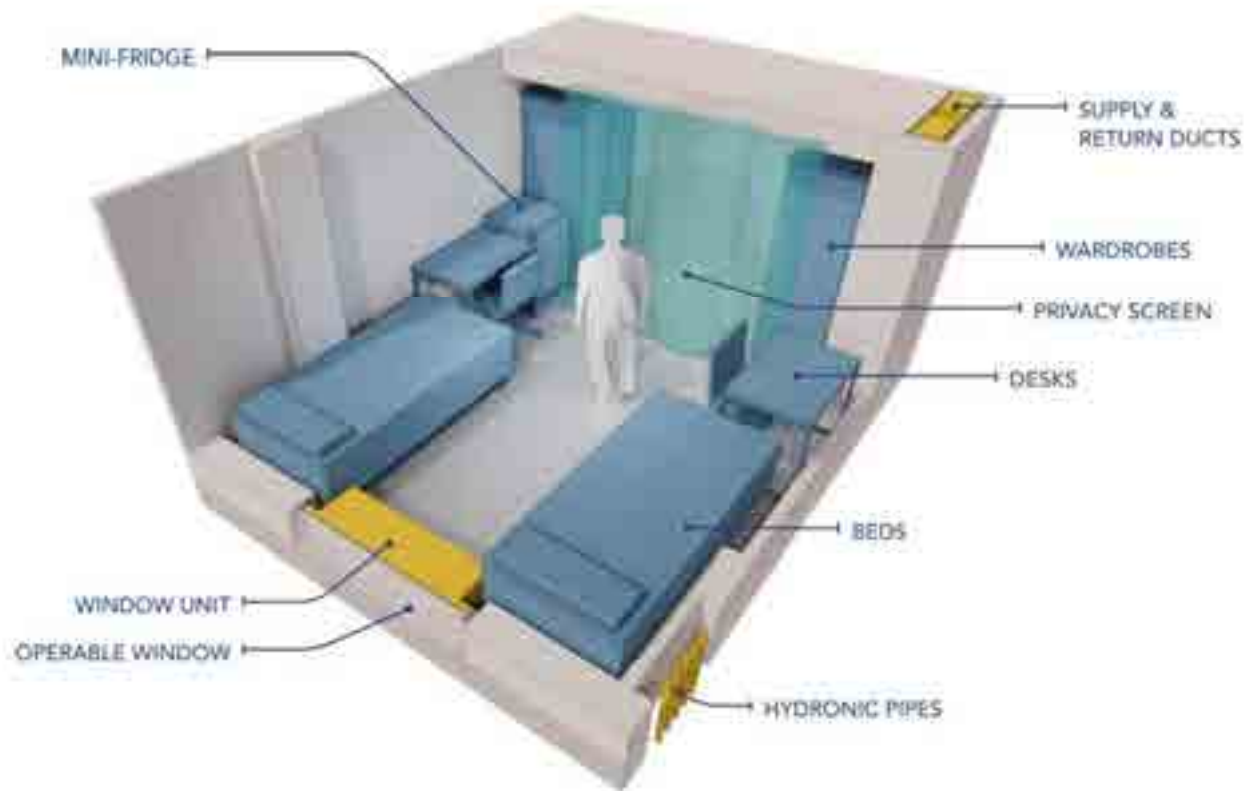


PROJECT SPECIFIC CONSIDERATIONS

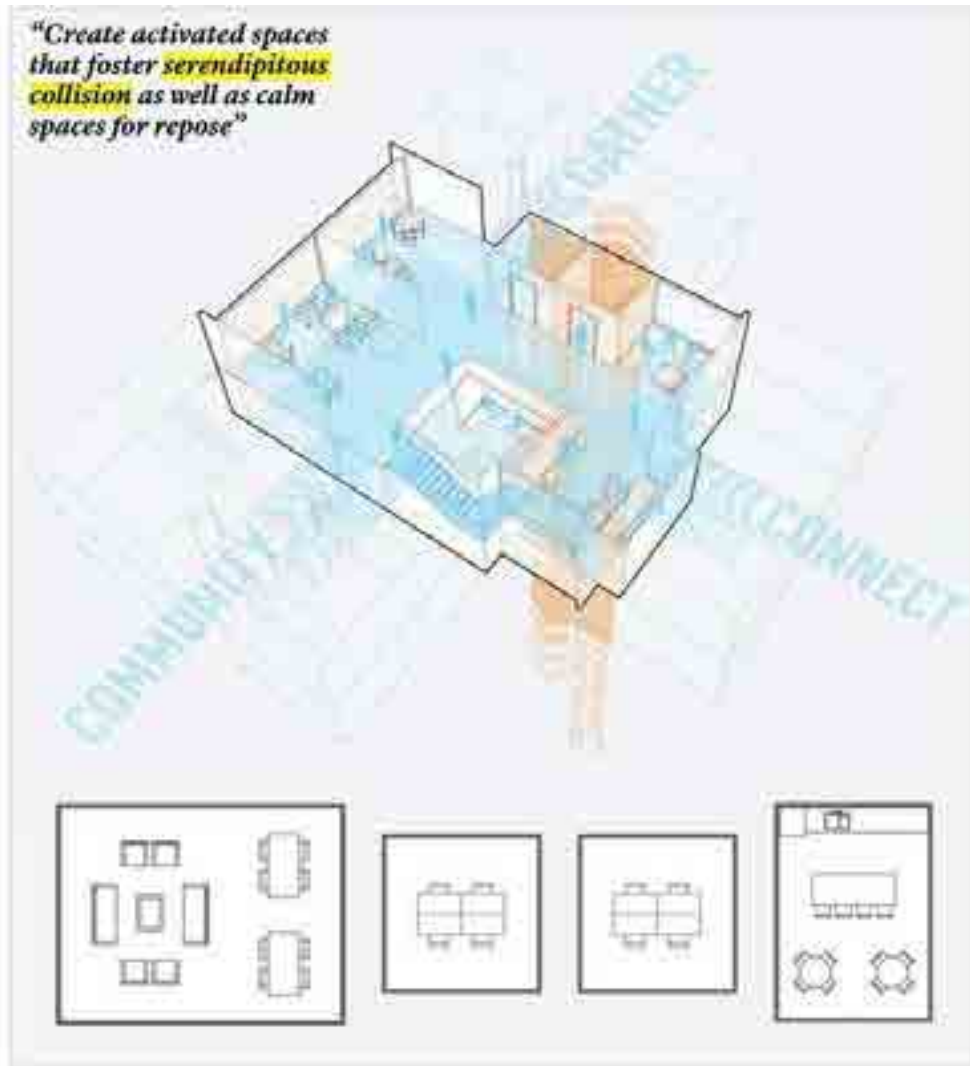
Unit Studies

Option C - Hydronics External | Supply/Return Internal

UNIT / MECHANICAL STRATEGY



PROGRAM SPECIFIC CONSIDERATIONS Emerging Trends



Community Cluster Prototype



Freshman 'Zee Group' Prototype



Reimagined Suite Prototype

©ISA

PROGRAM SPECIFIC CONSIDERATIONS Emerging Trends



GSF/BED: 221 SF
AMENITY/BED: 27 SF
COMMUNITY RATIO: 1:18
RA RATIO: 1:36
FIXTURE/BED: 1 PER 3.5



GSF/BED: 285 SF
AMENITY/BED: 32 SF
COMMUNITY RATIO: 1:12
RA RATIO: 1:24
FIXTURE/BED: 1 PER 3



GSF/BED: 210 SF
AMENITY/BED: 19 SF
COMMUNITY RATIO: 1:16
RA RATIO: 1:32
FIXTURE/BED: 1 PER 2

PROGRAM SPECIFIC CONSIDERATIONS Emerging Trends

FRESHMAN



TYP. COMMUNITY RATIO: 1:18 TO 1:19
TYP. RA RATIO: 1:30 TO 1:36
TYP. RES AMENITY/BED: 18-26 SF
BATHROOM TYPE: SHARED
LAUNDRY LOCATION: GROUND LVL
TYPICAL LEVEL AMENITY USES:
STUDY, KITCHENETTES, TV LOUNGE,
ACTIVE LOUNGE, LAUNDRY, RA
MEETINGS, LAUNDRY

SOPHOMORE



TYP. COMMUNITY RATIO: 1:18 TO 1:
TYP. RA RATIO: 1:36 TO 1:40
TYP. RES AMENITY/BED: 14-18 SF
BATHROOM TYPE: ENSUITE
LAUNDRY LOCATION: GROUND LVL
TYPICAL LEVEL AMENITY USES:
STUDY, KITCHENETTES, TV LOUNGE,
ACTIVE LOUNGE, LAUNDRY, RA
MEETINGS

JUNIOR



TYP. COMMUNITY RATIO: 1:18 TO 1:20
TYP. RA RATIO: 1:40 TO 1:45
TYP. RES AMENITY/BED: 10-18 SF
BATHROOM TYPE: ENSUITE
LAUNDRY LOCATION: TYPICAL FLOOR
TYPICAL LEVEL AMENITY USES:
STUDY, TV LOUNGE, LAUNDRY,
SMALL LOUNGE SPACES, RA
MEETINGS

SENIOR



TYP. COMMUNITY RATIO: N/A
TYP. RA RATIO: 1:40 TO 1:50
TYP. RES AMENITY/BED: 5-12 SF
BATHROOM TYPE: ENSUITE
LAUNDRY LOCATION: IN UNIT
TYPICAL LEVEL AMENITY USES:
STUDY SPACES, SMALL LOUNGE
SPACES

PROGRAM SPECIFIC CONSIDERATIONS Emerging Trends

FRESHMAN



TYP. AMENITY/BED : 25-40 SF
TYPICAL LEVEL AMENITY USES:
 STUDY ROOMS, COMMUNITY
 KITCHEN, FITNESS, YOGA, LEARNING
 ACTIVE LOUNGE/TV LOUNGE, GAME
 ROOM, MEDITATION, CLASSROOM/
 CONFERENCE, LAUNDRY, VENDING
NON-RESIDENTIAL USES:
 ACADEMIC, DINING, WELLNESS,
 STUDENT CENTER

SOPHOMORE



TYP. AMENITY/BED : 20-35 SF
TYPICAL LEVEL AMENITY USES:
 STUDY ROOMS, COMMUNITY
 KITCHEN, FITNESS, YOGA, LEARNING
 ACTIVE LOUNGE/TV LOUNGE, GAME
 ROOM, MEDITATION, CLASSROOM/
 CONFERENCE, LAUNDRY, VENDING
NON-RESIDENTIAL USES:
 ACADEMIC, DINING,
 ENTREPRENEURSHIP

JUNIOR



TYP. AMENITY/BED : 18-25 SF
TYPICAL LEVEL AMENITY USE:
 STUDY ROOMS, COMMUNITY
 KITCHEN, FITNESS, YOGA, LEARNING
 ACTIVE LOUNGE/TV LOUNGE, G
 ROOM, CLASSROOM/CONFERENCE
 VENDING
NON-RESIDENTIAL USES:
 ACADEMIC, RETAIL,
 ENTREPRENEURSHIP

SENIOR



TYP. AMENITY/BED : 18-25 SF
TYPICAL LEVEL AMENITY USES:
 STUDY ROOMS, COMMUNITY
 KITCHEN, FITNESS, YOGA, LEARNING
 ACTIVE LOUNGE/TV LOUNGE, GAME
 ROOM
NON-RESIDENTIAL USES:
 RETAIL