

**re-thinking a space where  
studious environments meet  
freedom, flexibility +  
a LEED accreditation**

Interior Architecture Design Research Studio | Pakakinakina Project

# re-designing the future

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FORWARD

OF CAMPUS  
CULTURE





Victoria University of Wellington's Faculty of Architecture and Design Innovation / Te Wāhanga Waihanga-Hoahoa is a home base for students studying Architectural Studies, Building Science and Design. A four story concrete structure featuring a central atrium running north-south bringing in natural daylight and an open central atmosphere.

# THE SCOPE

# 01



# design hub central

The Te Aro campus is University of Victoria's, center of Architecture and Design Innovation.

Being the schools campus closet to the central hustle and bustle of Wellingtons city, it also attracts students studying in different departments from the school.

139 Vivian St. Te Aro, Wellington







# existing level 03

This new interior fit out will address level 03 of the building - the top floor. Outside of the atrium, elevator and five stairs, is **2545 NET SQ. METERS** of usable space. Many trials of test fitting are needed in order to develop a completely new atmosphere to this level, while trying to keep as many existing walls as possible. With a huge goal of this project being to meet the requirements of a LEED certification, lessening the load of construction waste will contribute to a sustainable focused design.

- open studio space
- private offices
- admin offices
- enclosed seminar/class /computer rooms

# 02

How can we design architectural experiences that help reverse climate change and support people who inhabit them? There are two big components for this project. First, the users and redefining their environment to support them and secondly, a sustainability aspect with seeing what it takes to choose a forward thinking process with the aim to acquire LEED accreditation.

## RESEARCH PROCESS





best feature?

**atrium**  
**big studios**  
**windows**

worst feature?

**dark spaces**  
**library is too small**  
**large open studios**

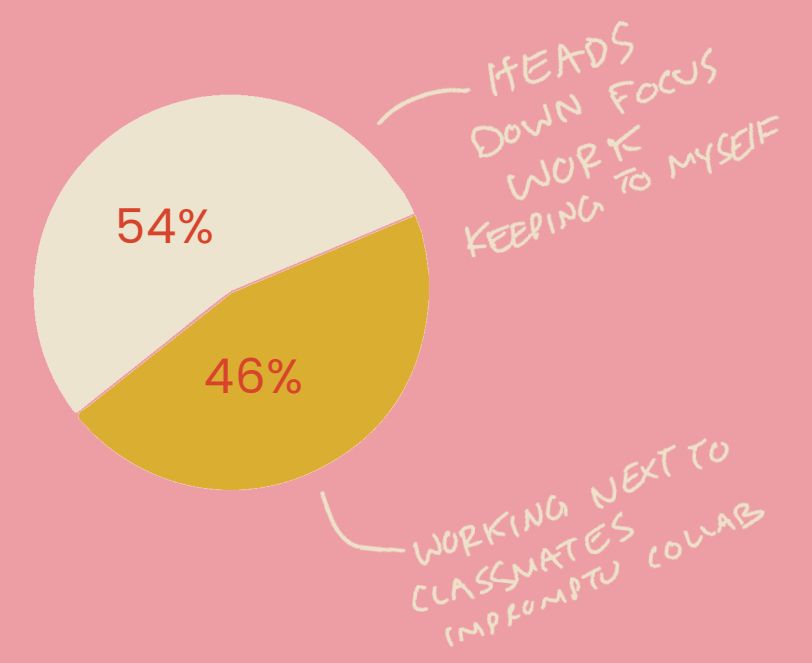
I would spend more time on campus if...

**more privacy**  
**quiet spaces**  
**hang out spaces**

what factor is most important  
in your learning environment?

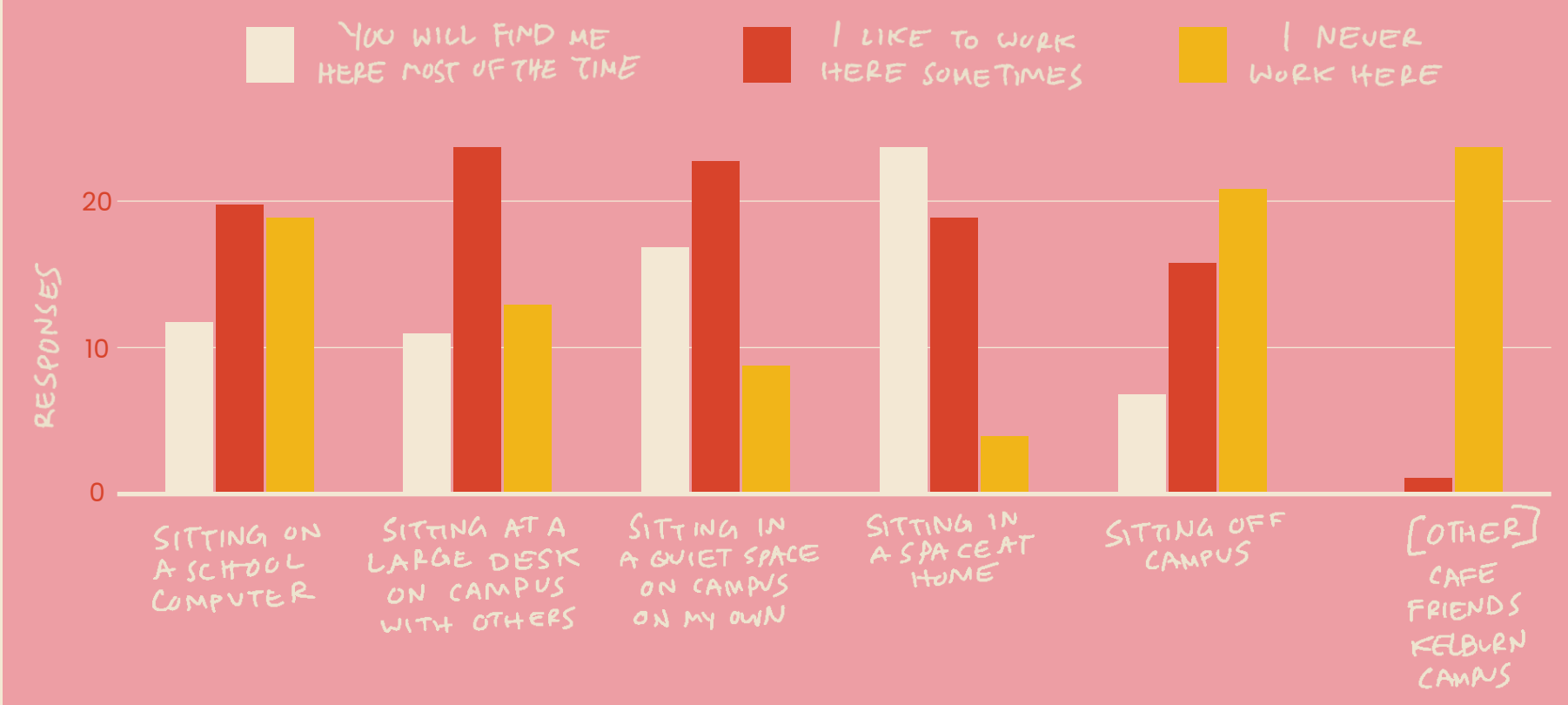
**natural light**  
**comfortable spaces**  
**variety of places to work**

# THE SURVEY [63 results]



When I am on campus, I am most likely?

The best way to see how students thought about their current environment was to simply ask them! A 12 question survey was created to allow student to anonymously speak their mind about what features of the Te Aro campus that they liked/disliked, thought there was too much of, or not enough. They had the freedom to write in answers about what they valued most in their learning environment and what words described their ideal atmosphere of a classroom studio. Here are key highlights from the results.









LEED is a rating system that provides a framework for healthy, efficient, carbon and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement and leadership.

To achieve LEED certification, a project earns points by adhering to prerequisites and credits that address carbon, energy, water, waste, transportation, materials, health and indoor environmental quality. Of the 8 building categories, this project falls under ID+C Interior Design and Construction. This project will explore ways to meet at least the minimum of 40 points to receive a LEED Certified rating.

**GOING FOR LEED**

03



# LEED v4 FOR ID+C: COMMERCIAL INTERIORS

What does it take to reach the bare minimum of a LEED accreditation? It can be as simple as thinking sustainability about the design process. This identifies how 40 points can be acquired from 5 of the 7 categories. Most of these points can be achieved with just the extra effort of planning and picking the right new materials and products.

LOCATION + TRANSPORTATION		18/18
	Surrounding Density and Diverse Uses	0/8
	Access to Quality Transit	0/7
	Bicycle Facilities	0/1
	Reduced Parking Footprint	0/2
WATER EFFICIENCY		6/12
prerequisite	Indoor Water Use Reduction	6/12
	Indoor Water Use Reduction	
MATERIALS + RESOURCES		9/13
prerequisite	Storage and Collection of Recyclables	
prerequisite	Construction and Demo Waste Management Planning	
	Long-Term Commitment	1/1
	Interiors Life-Cycle Impact Reduction	4/4
	Environmental Product Declarations	1/2
	Sourcing of Raw Materials	1/2
	Material Ingredients	1/2
	Construction and Demolition Waste Management	1/2
INDOOR ENVIRONMENTAL QUALITY		6/17
prerequisite	Minimum Air Quality Performance	
prerequisite	Environmental Tobacco Smoke Control	
	Enhanced Indoor Air Quality Strategies	0/2
	Low-Emitting Materials	1/3
	Construction Indoor Air Quality Management Plan	0/1
	Indoor Air Quality Assessment	1/2
	Thermal Comfort	0/1
	Interior Lighting	1/2
	Daylight	2/3
	Quality View	0/1
	Acoustic Performance	2/2

ENERGY + ATMOSPHERE		0/38
prerequisite	Fundamental Commissioning and Verification	
prerequisite	Minimum Energy Performance	
prerequisite	Fundamental Refrigerant Management	
	Enhanced Commissioning	0/5
	Optimize Energy Performance	0/25
	Advanced Energy Metering	0/2
	Renewable Energy Production	0/3
	Enhanced Refrigerant Management	0/1
	Green Power and Carbon Offsets	0/2
REGIONAL PRIORITY		0/4
	Regional Priority: Specific Credit	0/4
INNOVATION		1/6
	Innovation	0/5
	LEED Accredited Professional	1/1





## location + transportation

- 6 PTS      Surrounding Density within 400 meters of project  
-----
- 2 PTS      Buildings main entrance is within 800 meter walking distance of 8+ diverse uses
- 7 PTS      entrance is 400 meters walking distance from bus, transit, ride share stops ●
- 1 PT      Bicycle storage within 180 meters and shower room —
- 2 PTS      Reduced Parking Footprint

## 18 total points

Te Aro Campus LVL 03 Re-Design

# materials + resources

1 PTS	Use Wood products that are FSC Forest Stewardship Council Certified
1 PT	Material ingredient reporting
1 PT	Represent Environmental Product Declaration with at least 20 different materials
1 PT	Occupant must remain in same location for at least 10 years
2 PT	Reuse or salvage interior non structural elements for at least 50% of surface area.
2 PTS	Increase project space flexibility, accessible ceiling systems, implement flexible lighting control system, with wall controls and sensors

## 9 total points



**PREREQUISITE:** Storage and collection or recyclables at a designated location.

**PREREQUISITE:** Establish waste diversion goals for at least 5 materials.





**PREREQUISITE:** Meet minimum requirements of required outdoor airflow rates

**PREREQUISITE:** Prohibit smoking within 7.5 meters of all entries

# indoor environmental quality

- 1 PT Low emitting materials no VOC's flooring, furniture, interior paints
- 1 PT Develop an indoor air quality management plan for construction workers and building occupants during construction
- 1 PT Perform a building flush out before occupancy
- 1 PT For 90% of individual occupant spaces, provide individual lighting controls - on, off, mid level
- 1 PTS Provide a direct line of sight to the outdoors for 75% of regularly occupied space.
- 1 PT Implement masking Systems, meet STC ratings, meet minimum HVAC noise levels

## 6 total points



# water efficiency + innovation

**PREREQUISITE:** New fixtures must have watersense label [reducing 20% from baseline 1.6gpf]

6 PTS      35% total reduction in new water use fixtures [1.1 gpf is additional 14% increase in efficiency]

1 PTS      LEED accredited professional



## 7 total points





# 04

## KEY FINDINGS + INSIGHTS



What is the current programming?  
What is it missing? What additional  
spaces can be added to support  
the users and promote a healthy  
and positive environment? How  
does this new space shape the  
new way of working, teaching, and  
learning? What needs to change  
outside of just interior design?



# existing programming

- ~~18 private offices~~
  - ~~2 male restrooms~~
  - ~~2 female restrooms~~
  - ~~2 seminar rooms~~
  - ~~3 computer labs~~
  - ~~1 dedicated classroom~~
  - ~~3 admin offices~~
  - ~~1 prayer room~~
  - ~~1 wet room~~
  - ~~1 IT room~~
  - ~~5 studio work zones~~
- EXPAND SIZE
- TURN TO ONE OPEN ROOM
- BIGGER ZONES, NOT DESIGNATED

Large monitor	[x10]
desktop monitor	[x230]
printers	[x1]
projector	[x1]

single lockers	[10/88]
double size locker	[96/221]
wide locker	[8/38]

\*counts for locks on lockers + 10% added to count for non-locked used space

white high top	[1440 x 700] x2
black straight leg	[2000 x 800] x56
white wheel leg	[1600 x 800] x22
white wheel leg	[2000 x 1000] x14
white single	[1400 x 700] x19
black single	[1400 x 700 ] x27
white square	[1400 x 1400] x 14
double side bench	x2[1200 x 800] x16
double side bench	x2[2400 x 800] x11

354 total desks outside of lecture/seminar/computer rooms

**community/social space**  
**1-2 person private rooms**  
**2-4 person collab rooms**  
**4+ private meeting space**  
**designated pin up space**  
**project storage space**  
**material library**  
**photography studio**  
**presentation space**  
**wellness room** — x2  
**shared offices**  
**staff storage spaces**

FLEX  
SPACE

BECAUSE  
ELIMINATING  
DESIGNATED  
OFFICES

## **additional programming**

Based on the survey results, the following programming will need to be added in addition to the existing required spaces. These additional spaces will help contribute to creating the best type of learning environment with a variety of places to work, and amenities to encourage more culture on campus.



# **new way of working**

You cant just change the layout and expect everyone to continue business as usual, you have to create the new way of working too. Thinking of new ways to organize timetables and class locations, sharing lecture and work spaces across the whole floor. Re-thinking the way content is delivered, and how the layout of spaces can create new ways of learning and collaborating.

# **technology advancement**

Smart buildings = smart working styles. Implementing technology where all enclosed spaces have a scheduling manager. Users can check in with their ID and rent spaces for an allocated amount of time. Staff share office spaces and a shared storage space. Enclosed lecture spaces can be scheduled across the levels for tutorial times. All students get access to the cloud for software and can remote in from their student accounts.

# **1:3 is the new 1:1**

Calling in from Zoom is the part of the new norm. With classes not being physically full to max capacity anymore, how can this be reflected in the spaces and quantity of working locations. 1 person for every 3 seats allows for movement, curated zones and hybrid working styles.

# **across level coordination**

How are these ideas and design moves implemented from floor to floor? This isn't about creating flexibility on one level, how can it influence the movement and engagement from above and below? Are there connections that bridge engagement from students across disciplines and even their year level in school?



Level 01 Library sourced: <https://architectus.co.nz/work/victoria-university-of-wellington-faculty-of-architecture-and-design/>

Who are the main users of the space? What are their most important need or uses for the space? Who uses the space most, who uses it least?

The new space design needs to account for everyone who may pass through. This also includes those who may not currently feel a desire to use the space, how does the new design draw them in and encourage them to be engaged in the new environment?

# CREATING PERSONAS

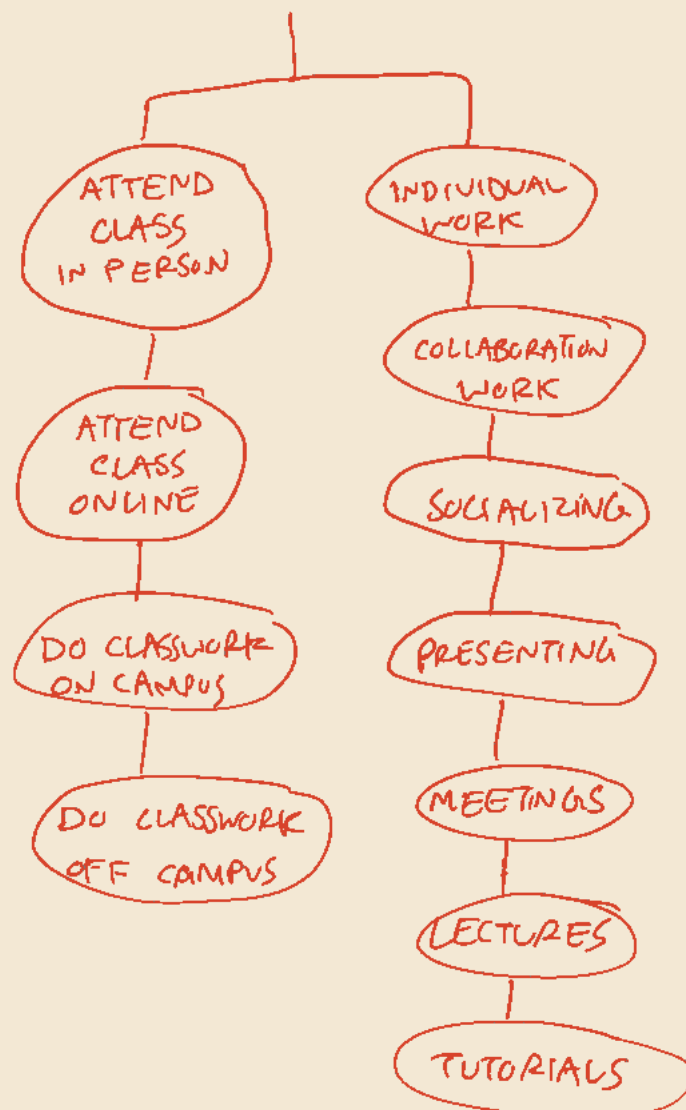
# 05



# primary users

The space is occupied most by the staff and students. Both with a mix of focus and collaboration work.

## STUDENT



## STAFF

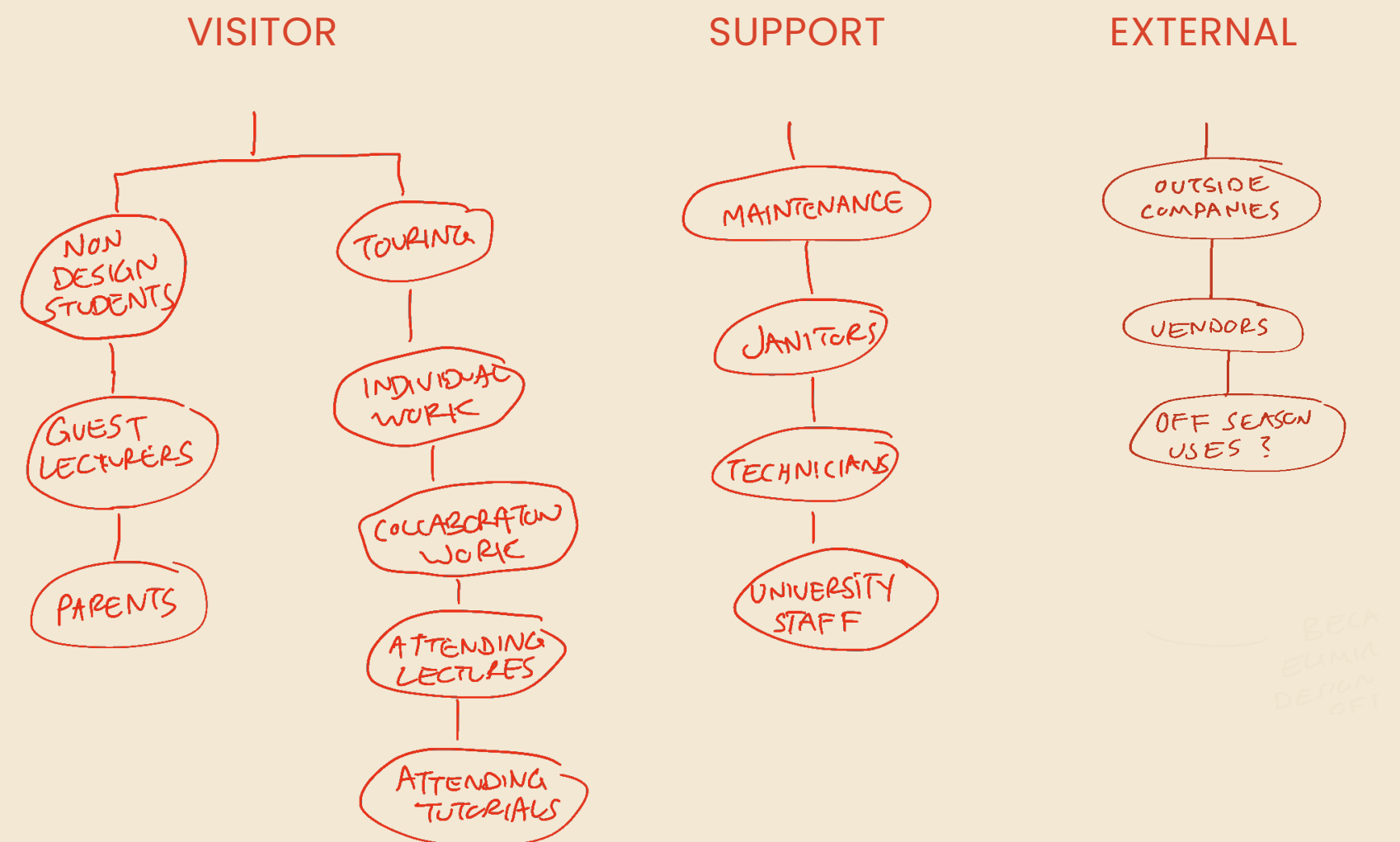






# secondary users

The secondary users may not be in the space as often, however their experience throughout should be just as important. The question is how can the new space attract more of these secondary users? Could these users turn more primary?



BECA  
ELMIA  
DESIGN  
OFI





Identifying the different types of spaces and what define them. How are they different? How do they connect? How can they serve multiple functions and can they become flexible?

# SPACE TYPOLOGIES

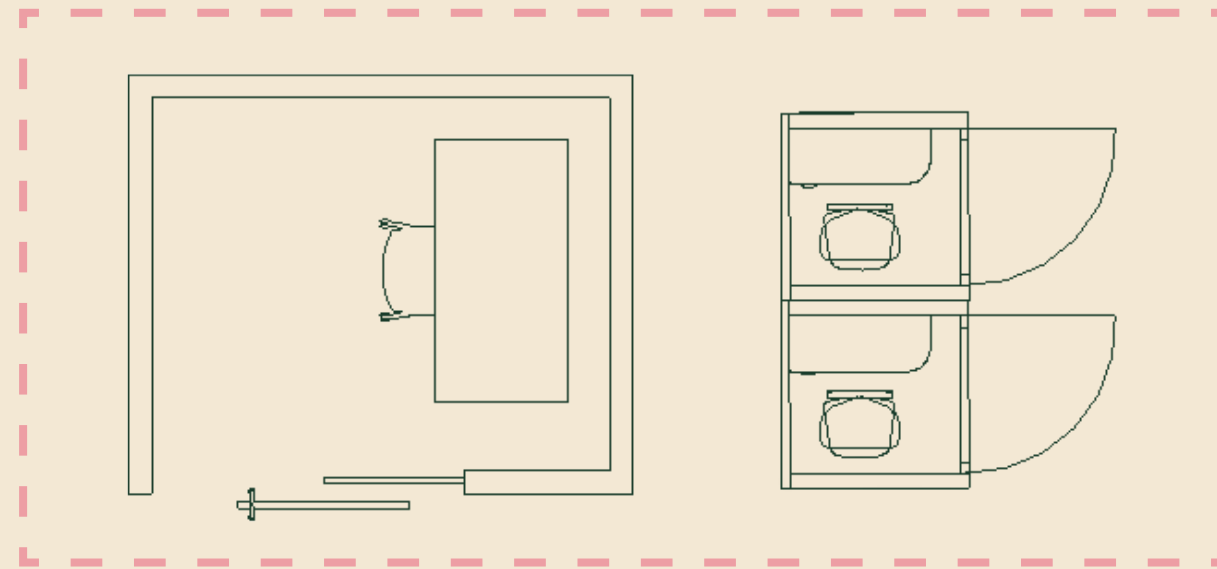
# 06

# focus collaborate socialize amenity

There are four space types. What differentiates them? Looking at the break down the components that attribute to that “zone” show what elements are key. Then taking it further to see how there are cross connections between them. Could some zones be interchangeable...



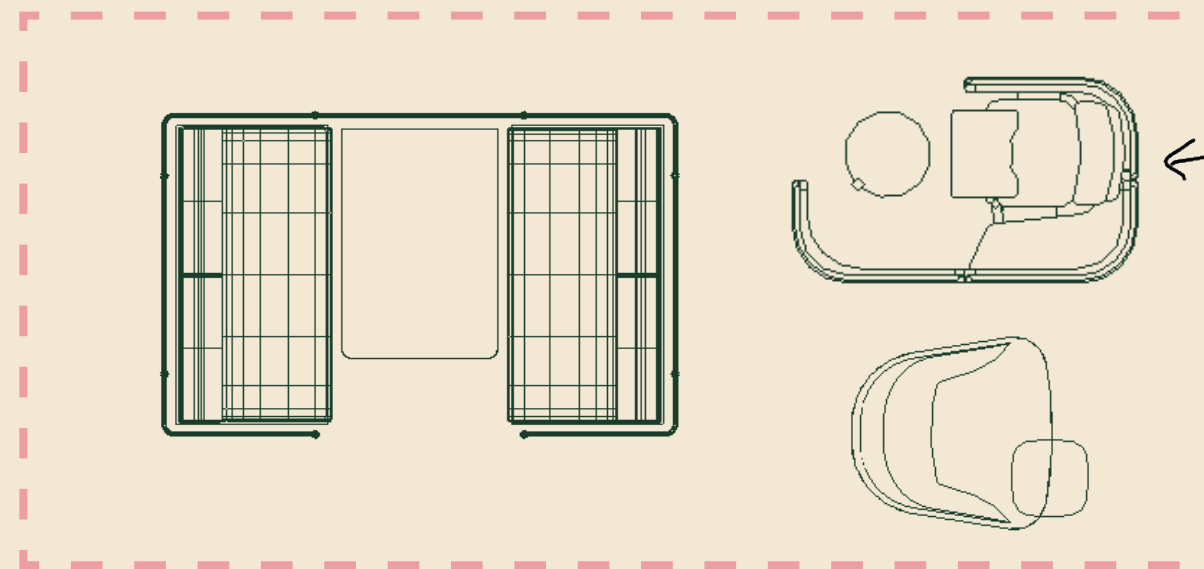




personal productivity,  
focused individual work  
+ deadline work

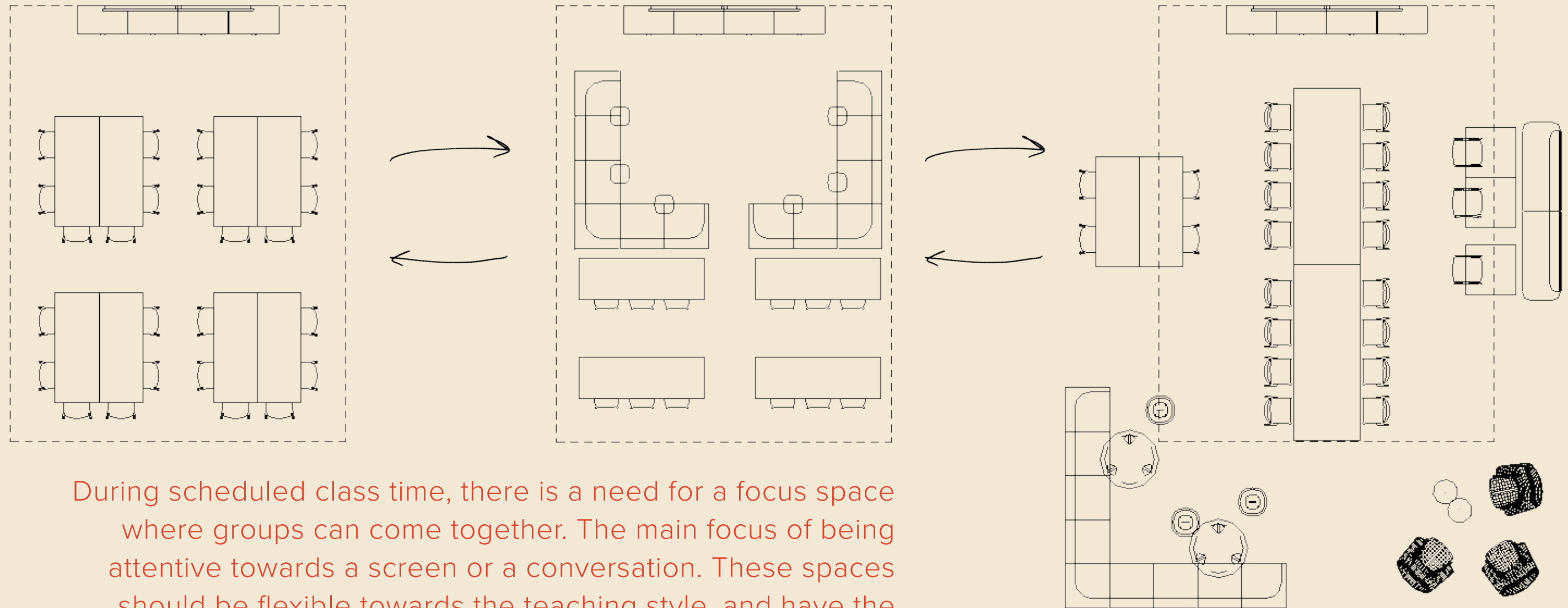
## open + enclosed focus

Spaces that allow  
for the privacy and  
noise control.

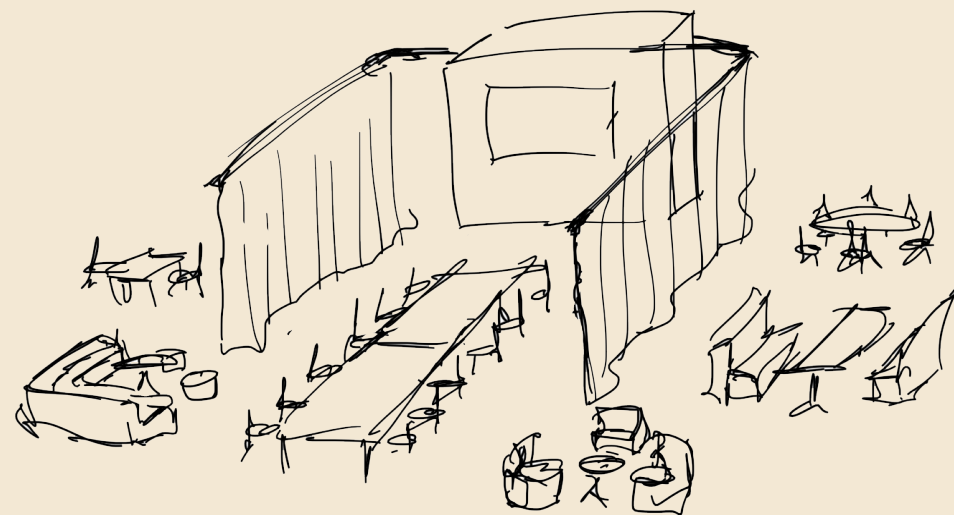


ADDED  
COMPONENT  
FOR PRIVACY

# re-thinking how to gather



During scheduled class time, there is a need for a focus space where groups can come together. The main focus of being attentive towards a screen or a conversation. These spaces should be flexible towards the teaching style, and have the ability to be expansive and interchangeable.



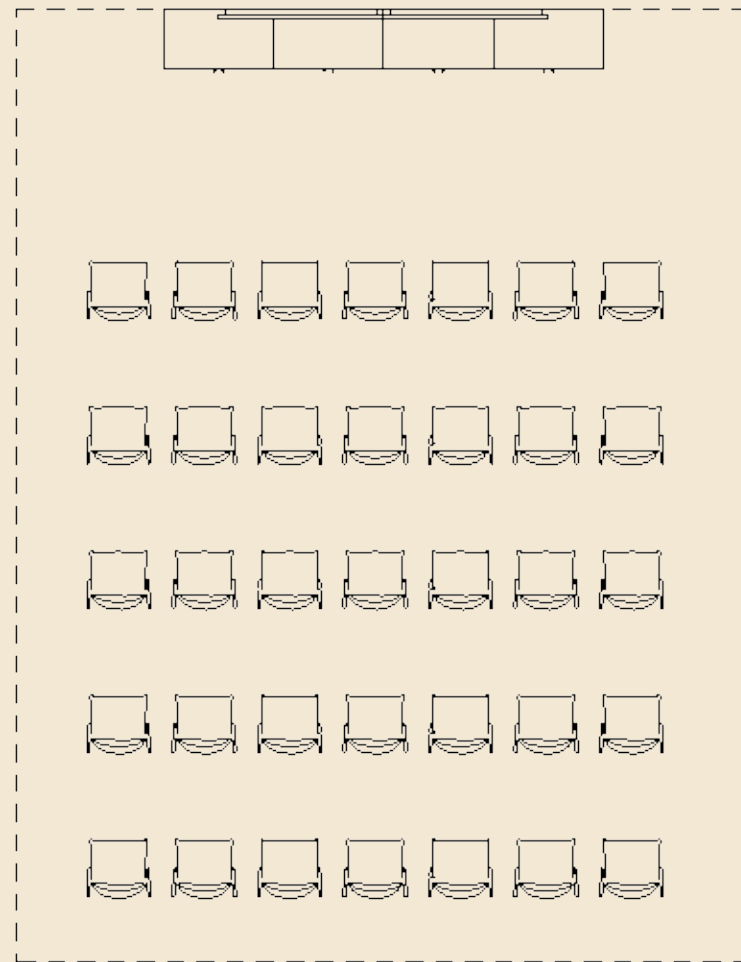
During scheduled class time, there is a need for a focus space where groups can come together. The main focus of being attentive towards a screen or a conversation. What are ways that the design can influence

**flexibility**

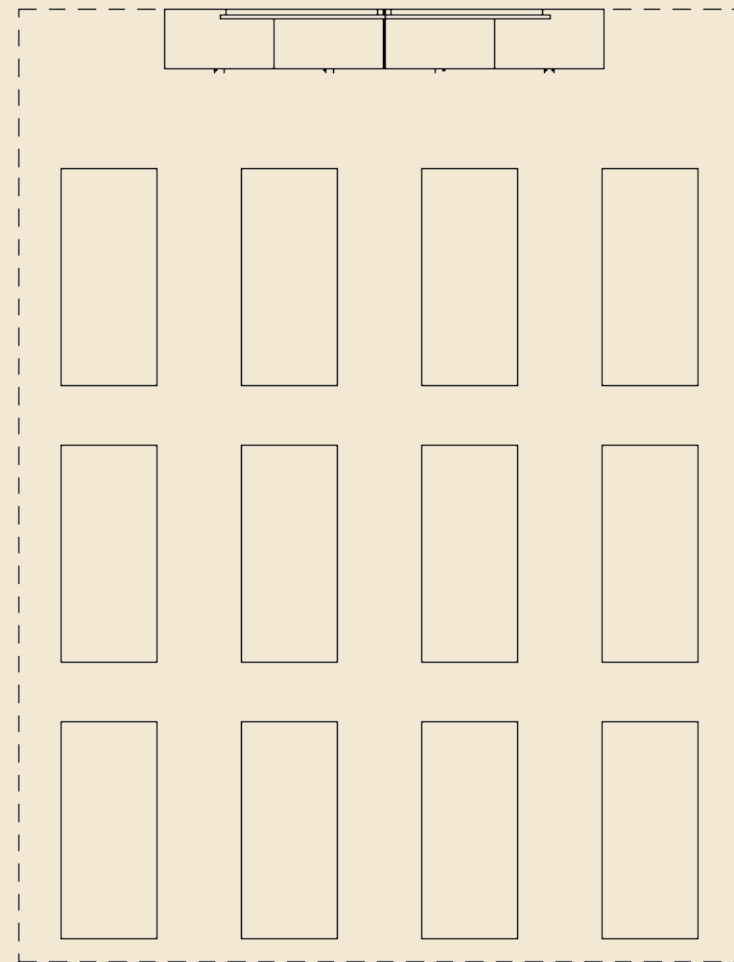




# how can these spaces continue to transform?



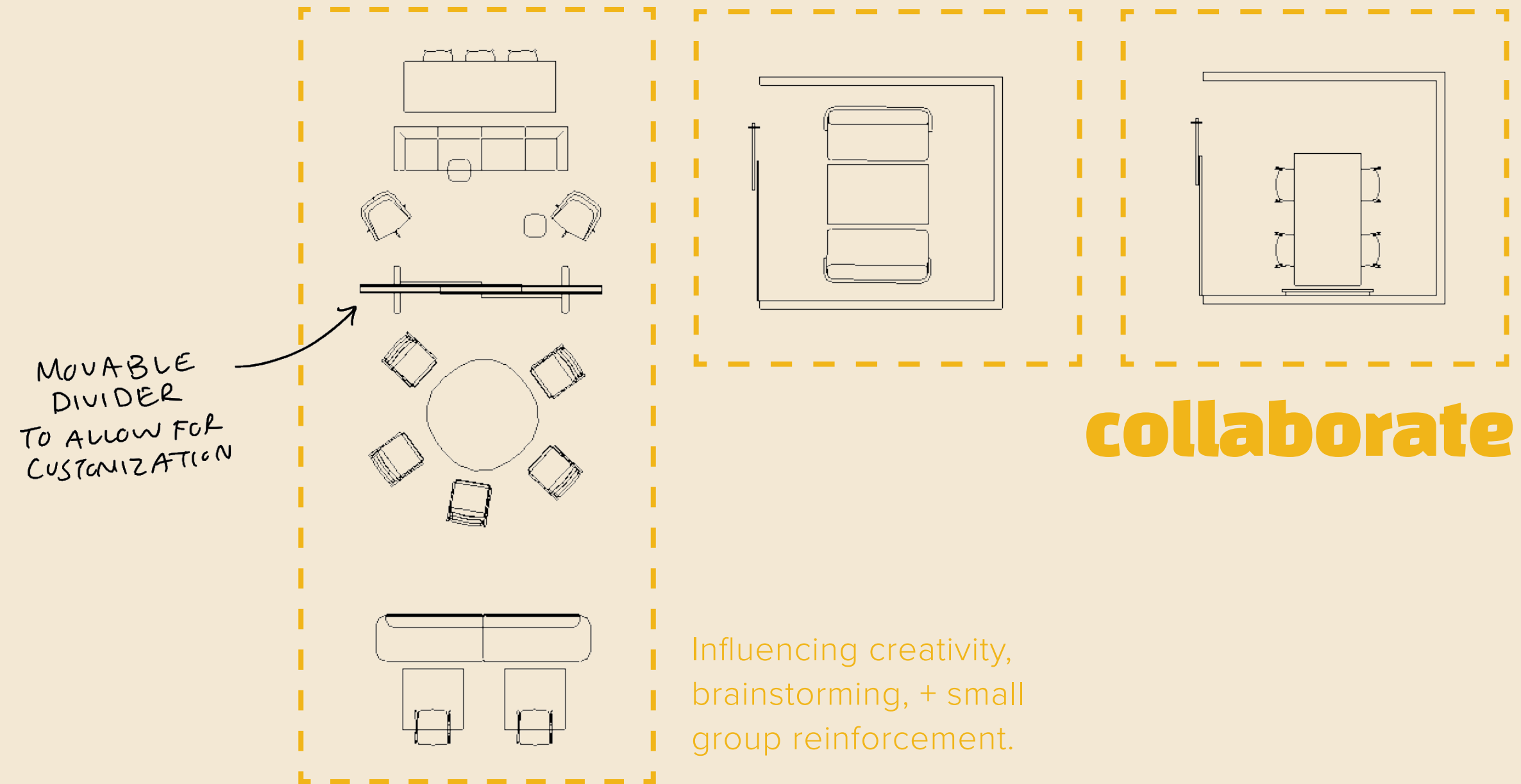
formal presentations?



early morning yoga?

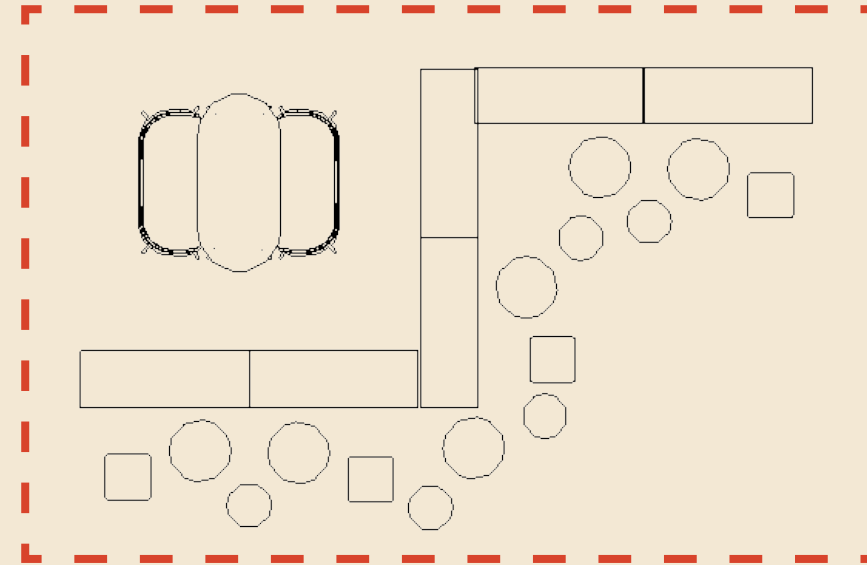


tuesday night movie nights?

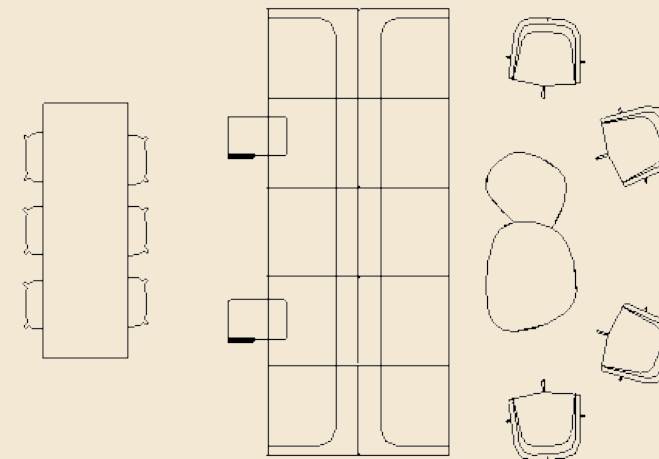
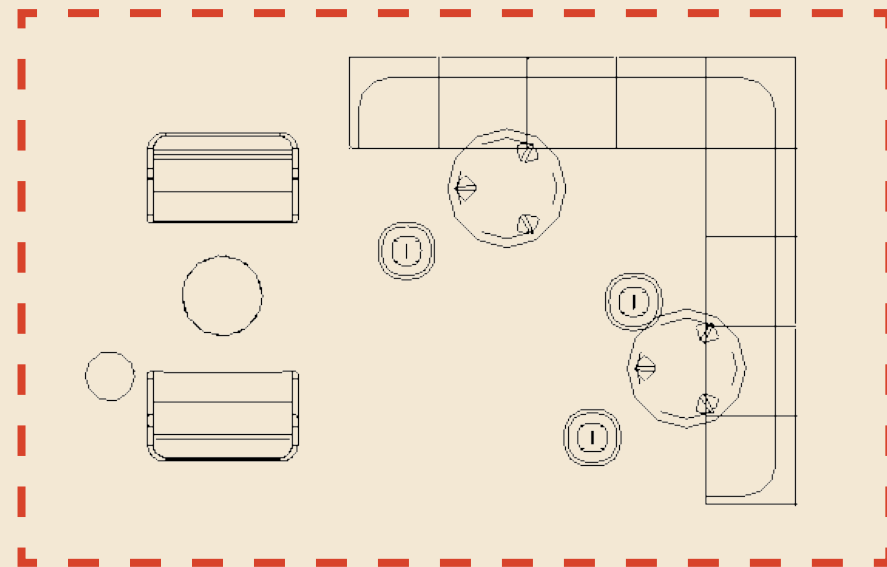
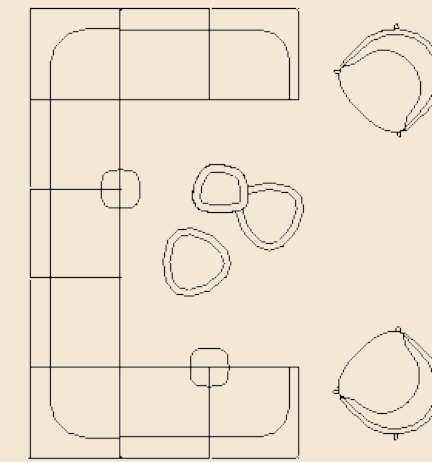




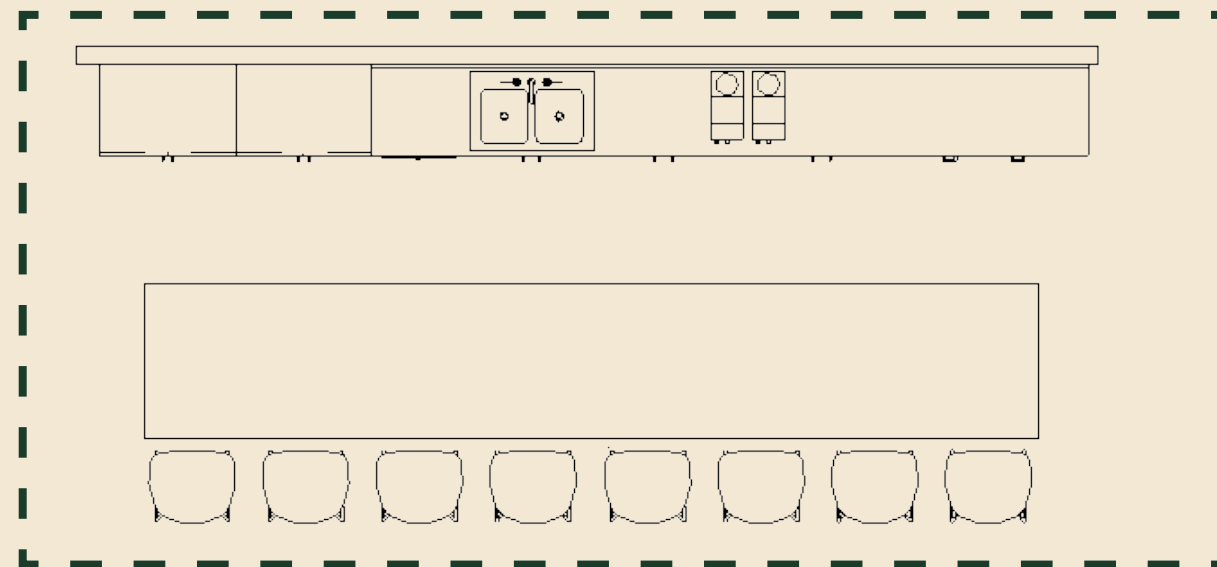
Comfortable,  
energetic, + large  
spaces with variety.



**socialize**

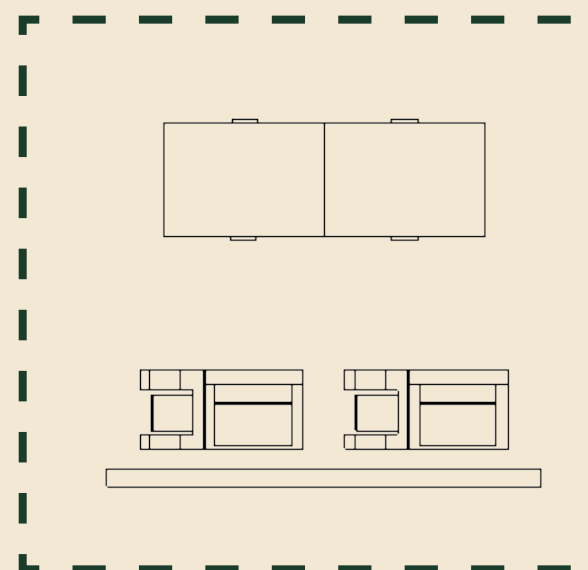


COMPLETELY  
FREE TO MOVE  
AROUND AND  
CHANGE UP SPACE



## amenity :

a desirable or useful feature or facility of a building or place



Rendering Computers

Material Library

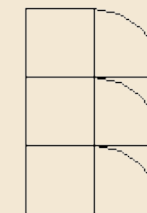
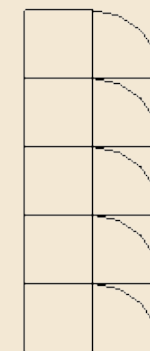
Photo Studio

Kitchen/Prep Space

Print Labs

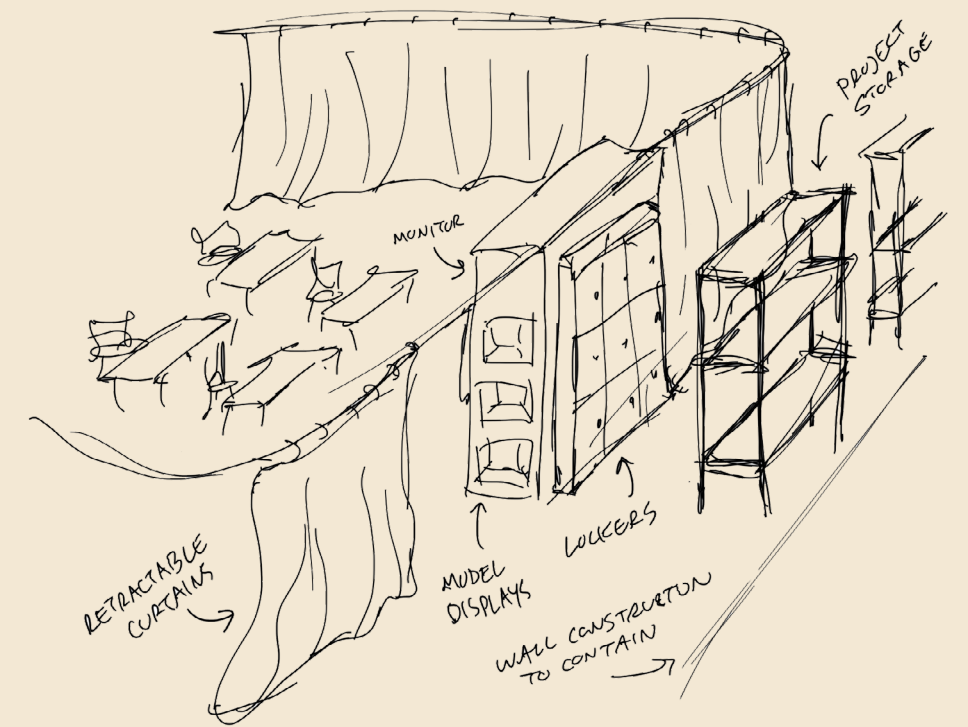
Storage Spaces

Access to Technology



REUSE/  
PAINT  
EXISTING  
LOUVERS





Currently, project storage is wherever you can find a flat surface out of the way. Designated spaces within each zone will allow for students to have a place they can leave completed or in progress concepts in safe **storage**



# integrating technology

in the day to day life without feeling tethered to a computer or charging port is a forward thinking approach that can be implemented simply by updating technology and access. Seamless integration reduces friction and provides convenience. Transferring the highly used softwares to the cloud will give freedom and flexibility to work wherever, and eliminate the excess monitors throughout the space.

Wire management is also a must! Eliminating the power lines hanging from the ceiling, cleaning up the cords and allowing for retractable power plugs and hidden access will make the space feel more advancement and less cluttered.







Atrium View sourced: <https://architectus.co.nz/work/victoria-university-of-wellington-faculty-of-architecture-and-design/>

Exploring ways of how the space can be laid out through bubble diagrams. Testing multiple concepts and finalizing two ideas – then merging them.

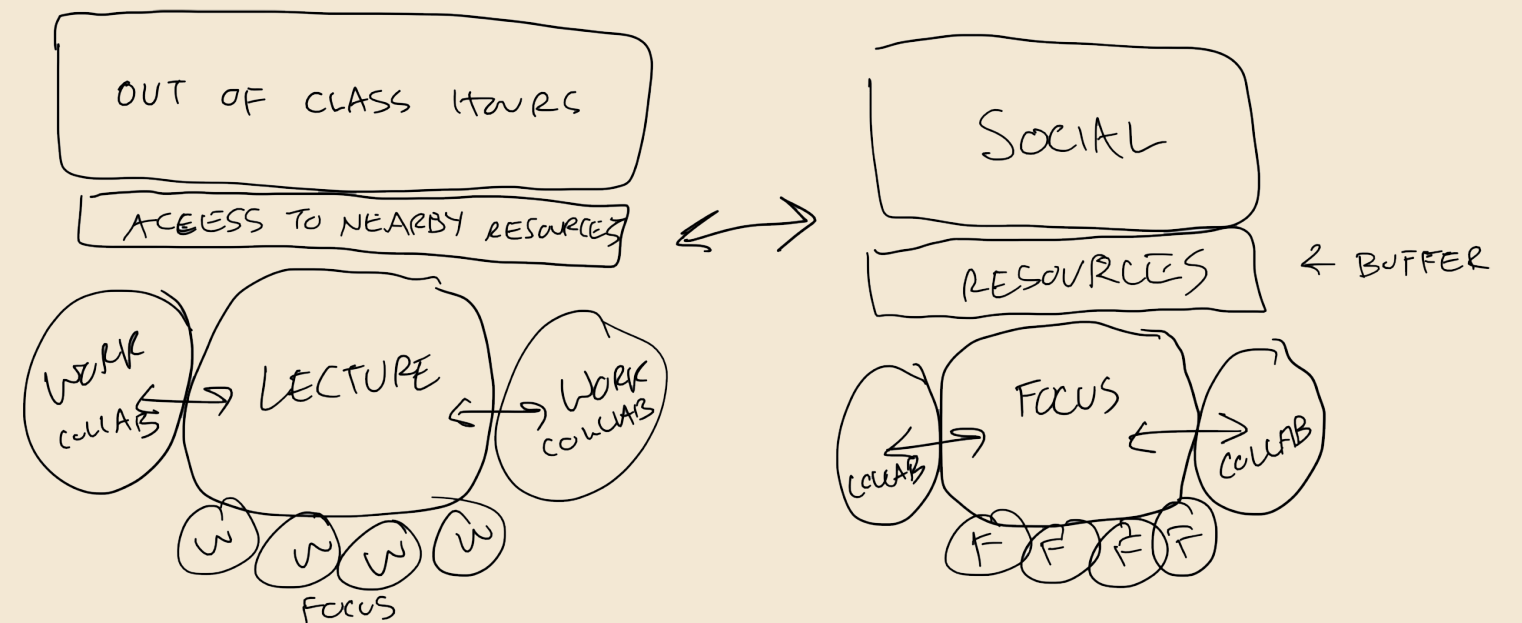
# CONCEPT DIAGRAMS

# 07



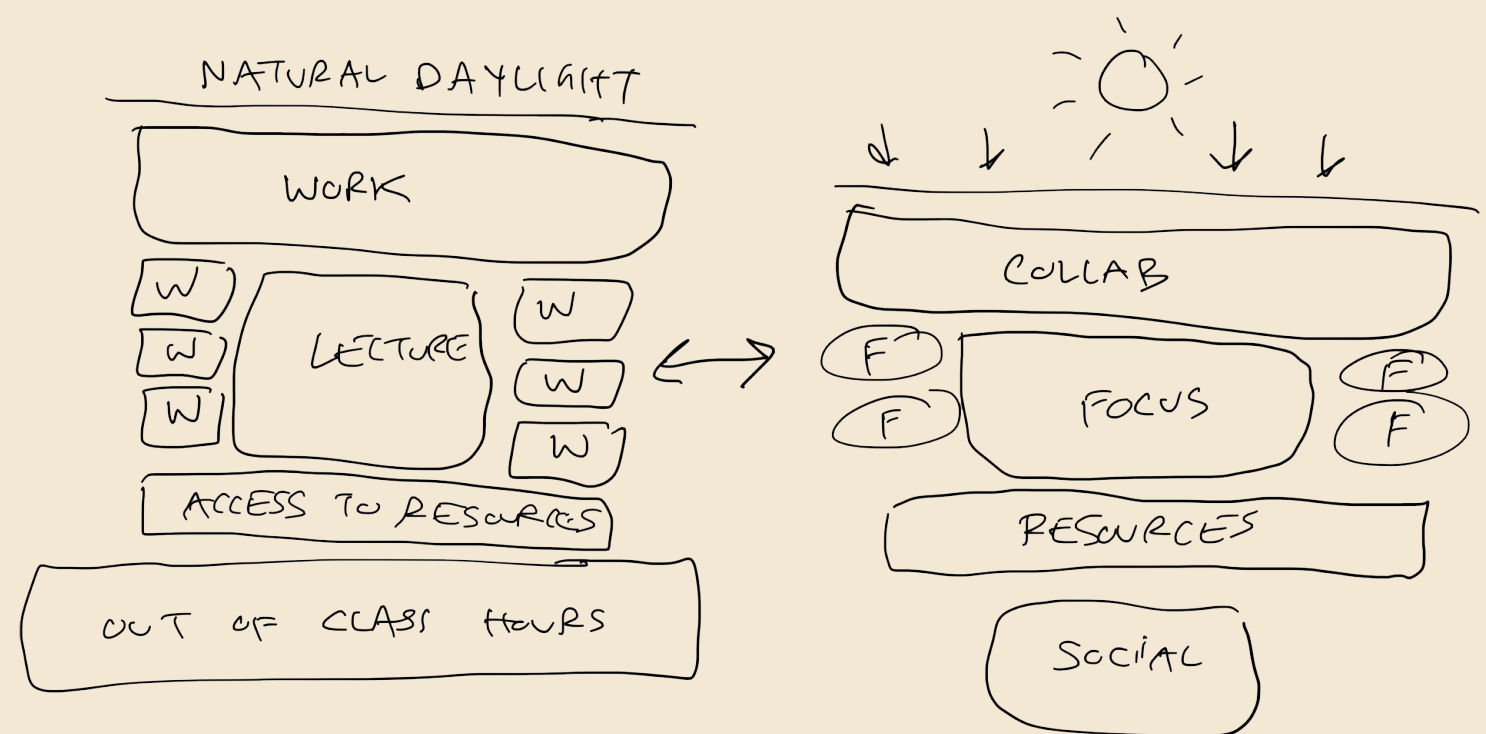
# concept 1:

## central focus hubs



# concept 2:

## emphasis on natural daylight







# central focus hubs

- FOCUS ZONE
- COLLABORATION ZONE
- SOCIAL ZONE
- AMENITIES

WZ - WORK ZONE

C - COLLABORATION ZONE

F - FOCUS ZONE

C/F - CAN BE BOTH

# emphasis on natural light



- FOCUS ZONE
- COLLABORATION ZONE
- SOCIAL ZONE
- AMENITIES

WZ - WORK ZONE

C - COLLABORATION ZONE

F - FOCUS ZONE

C/F - CAN BE BOTH

# merging concepts



- FOCUS ZONE
- COLLABORATION ZONE
- SOCIAL ZONE
- AMENITIES

- WZ - WORK ZONE
- C - COLLABORATION ZONE
- F - FOCUS ZONE
- C/F - CAN BE BOTH



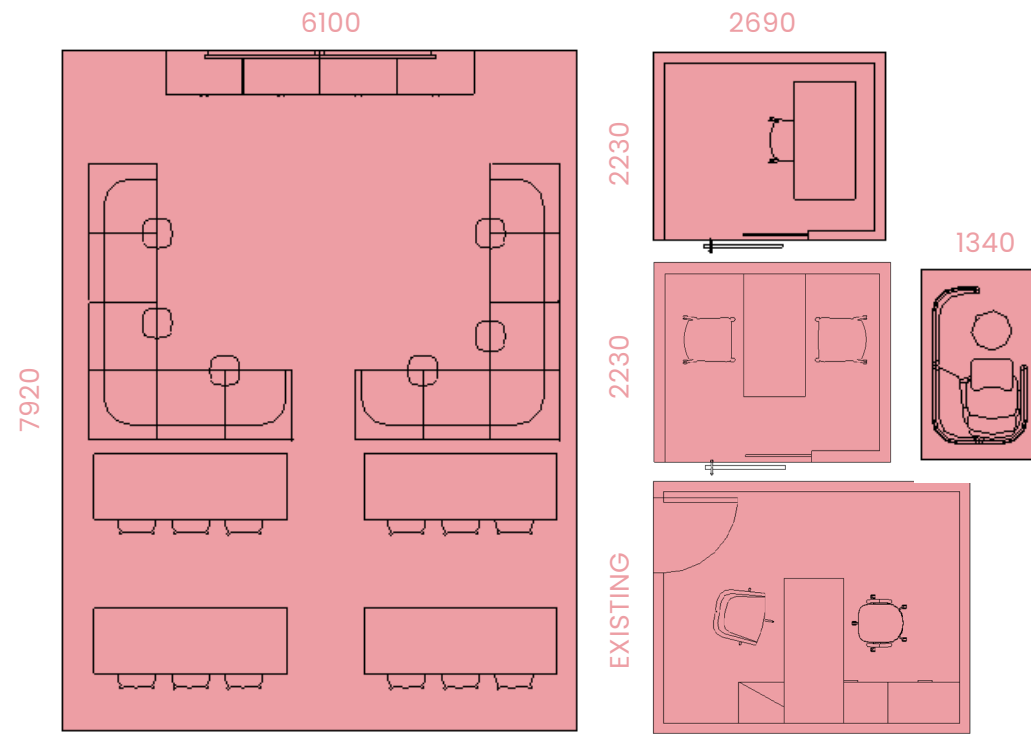


Creating a kit of parts to replicate across the floor. Sizes that are interchangeable with the use. Each zone will have a variety of the different space typologies which allows the users to always have access to a need within a short range.

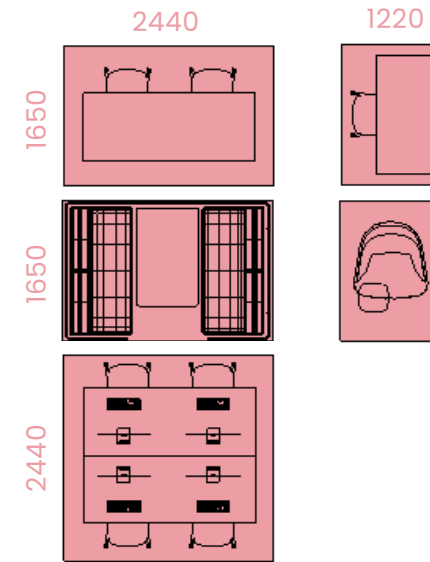
# BLOCKING + TEST FITS

# 08

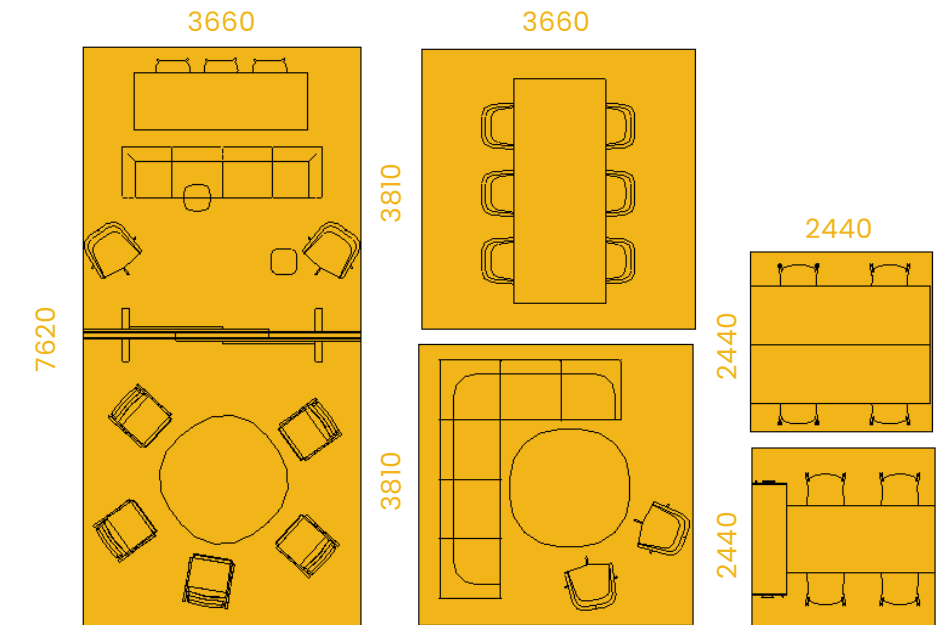
# the puzzle pieces



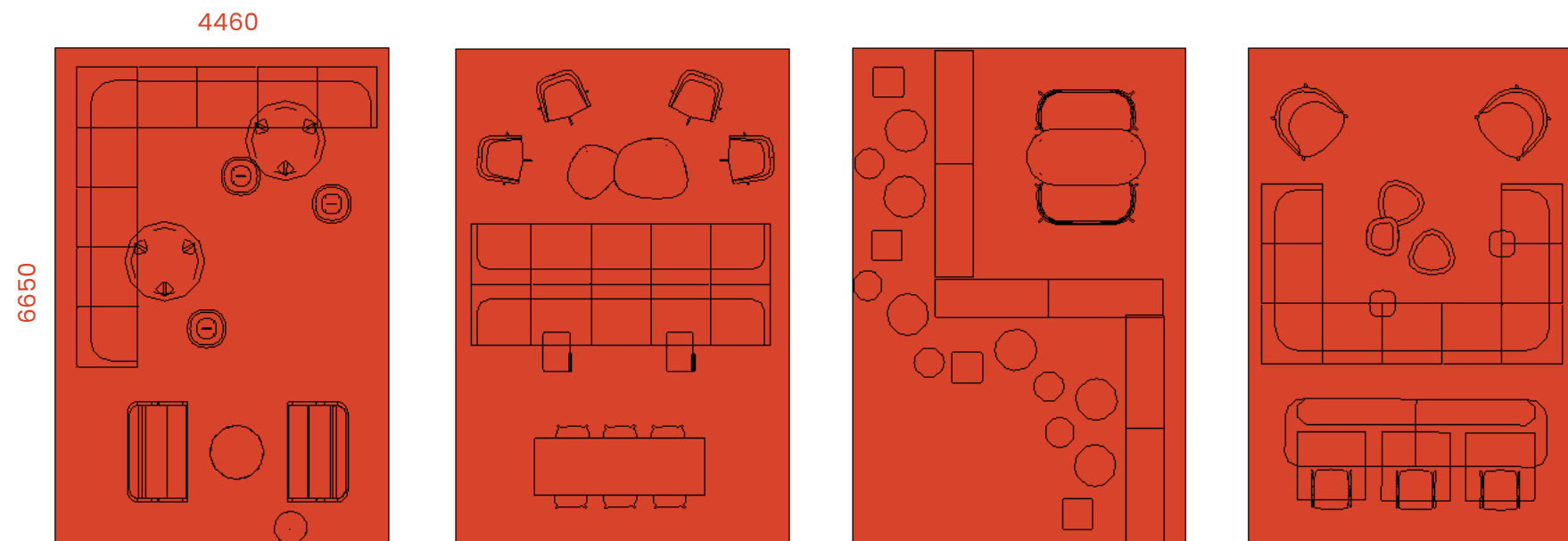
FOCUS ENCLOSED



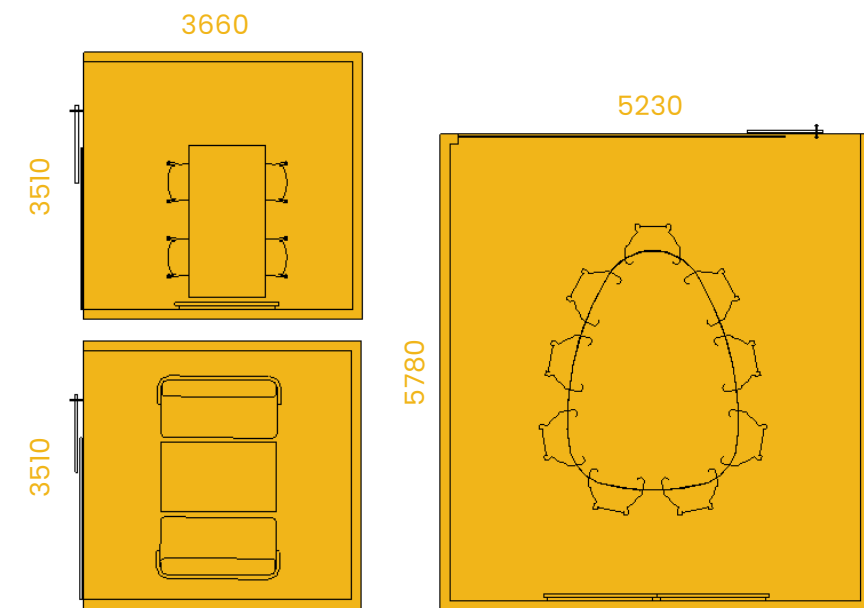
## FOCUS OPEN



COLLABORATION OPEN



## SOCIAL



## COLLABORATION ENCLOSED

# initial blocking



- FOCUS ZONE
- COLLABORATION ZONE
- SOCIAL ZONE
- AMENITIES
- E = EITHER FULLY ENCLOSED OR FLEXIBLE TO BE SO



# final blocking

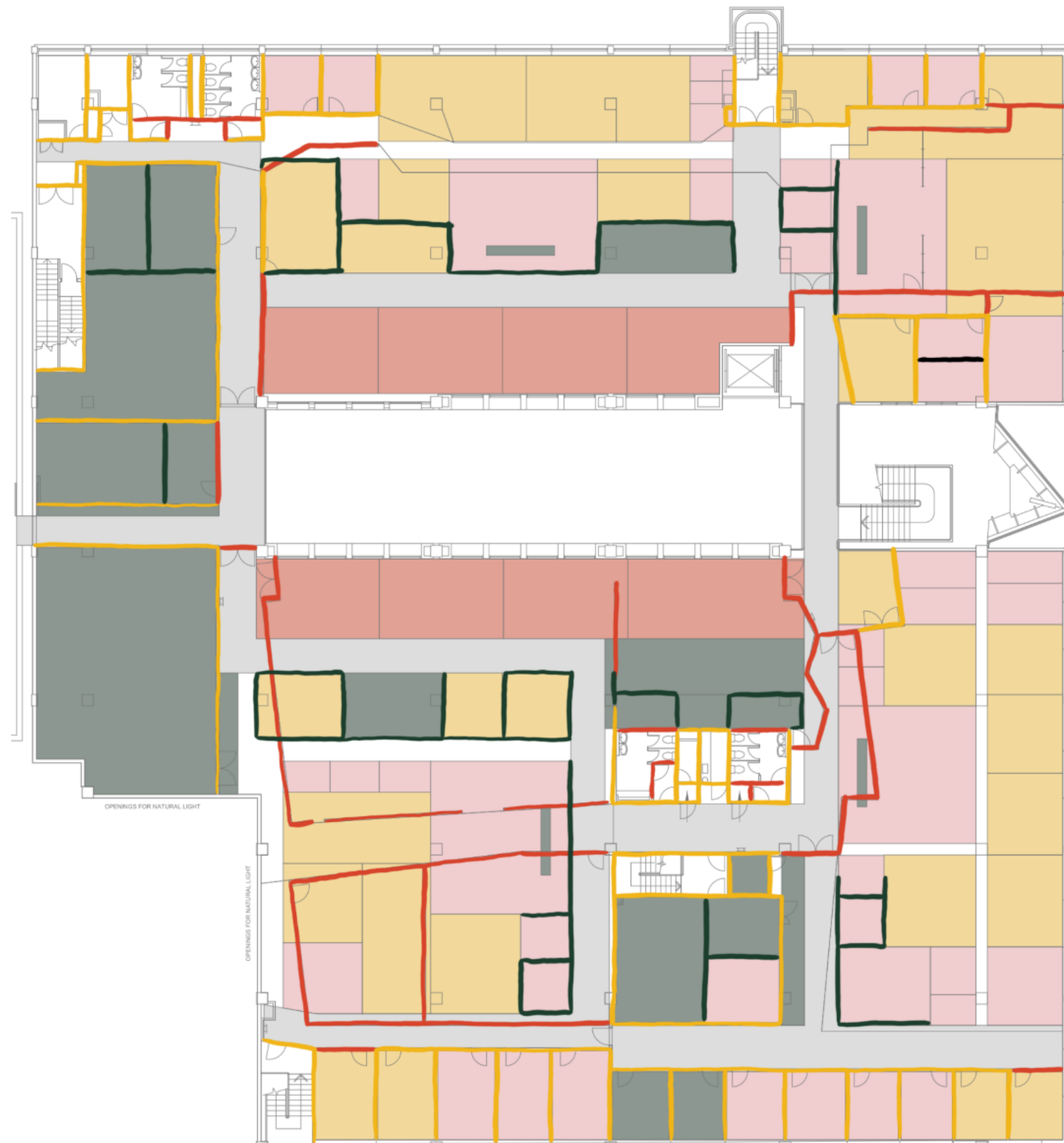


- FOCUS ZONE
- COLLABORATION ZONE
- SOCIAL ZONE
- AMENITIES

E = EITHER FULLY ENCLOSED  
OR FLEXIBLE TO BE SO

- PLANTS
- PIN UP SURFACE
- SOLID WALL

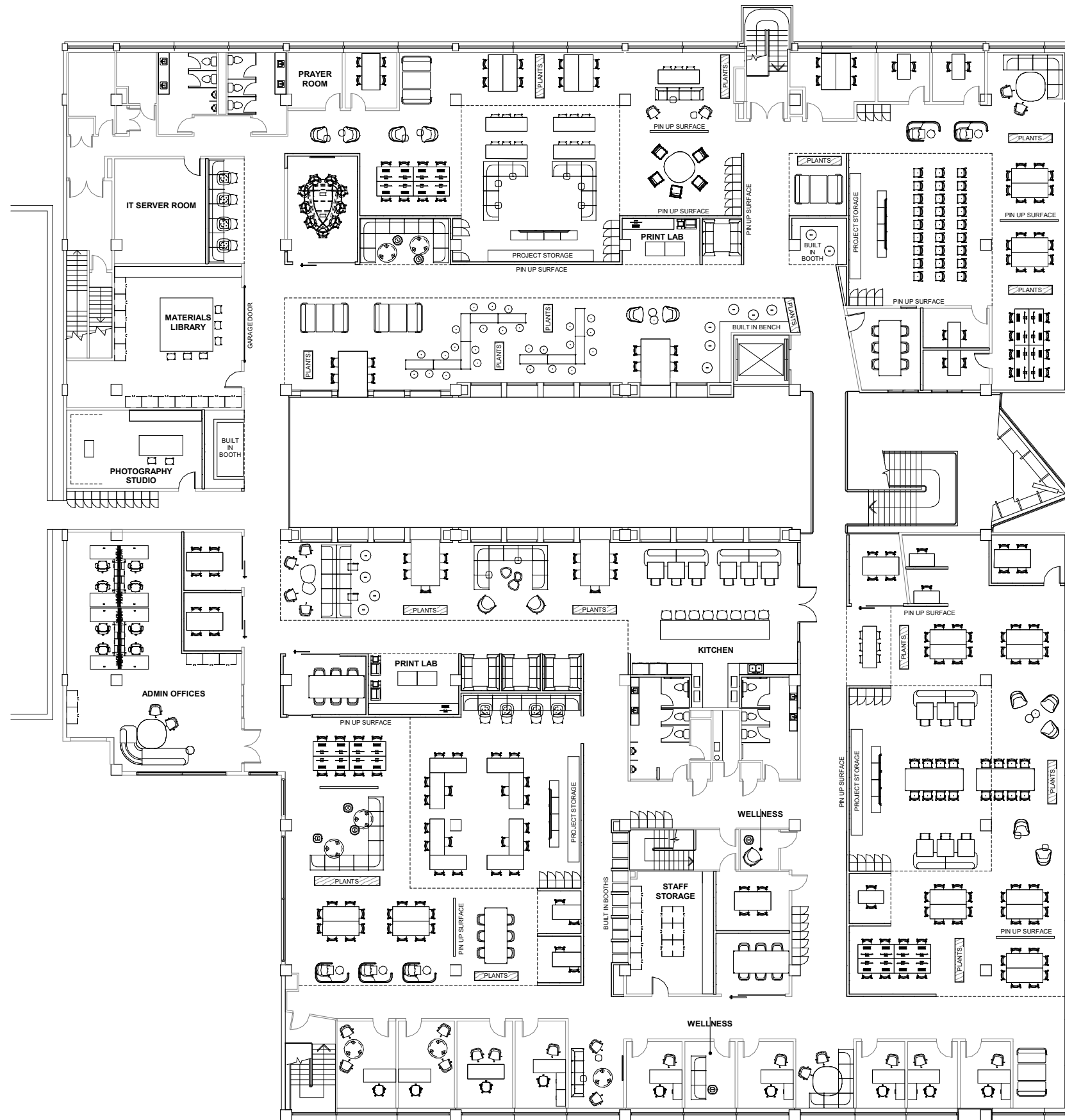
# new vs. existing



- WALL DEMOLITION
- EXISTING WALL REMAINS
- NEW WALL CONSTRUCTION



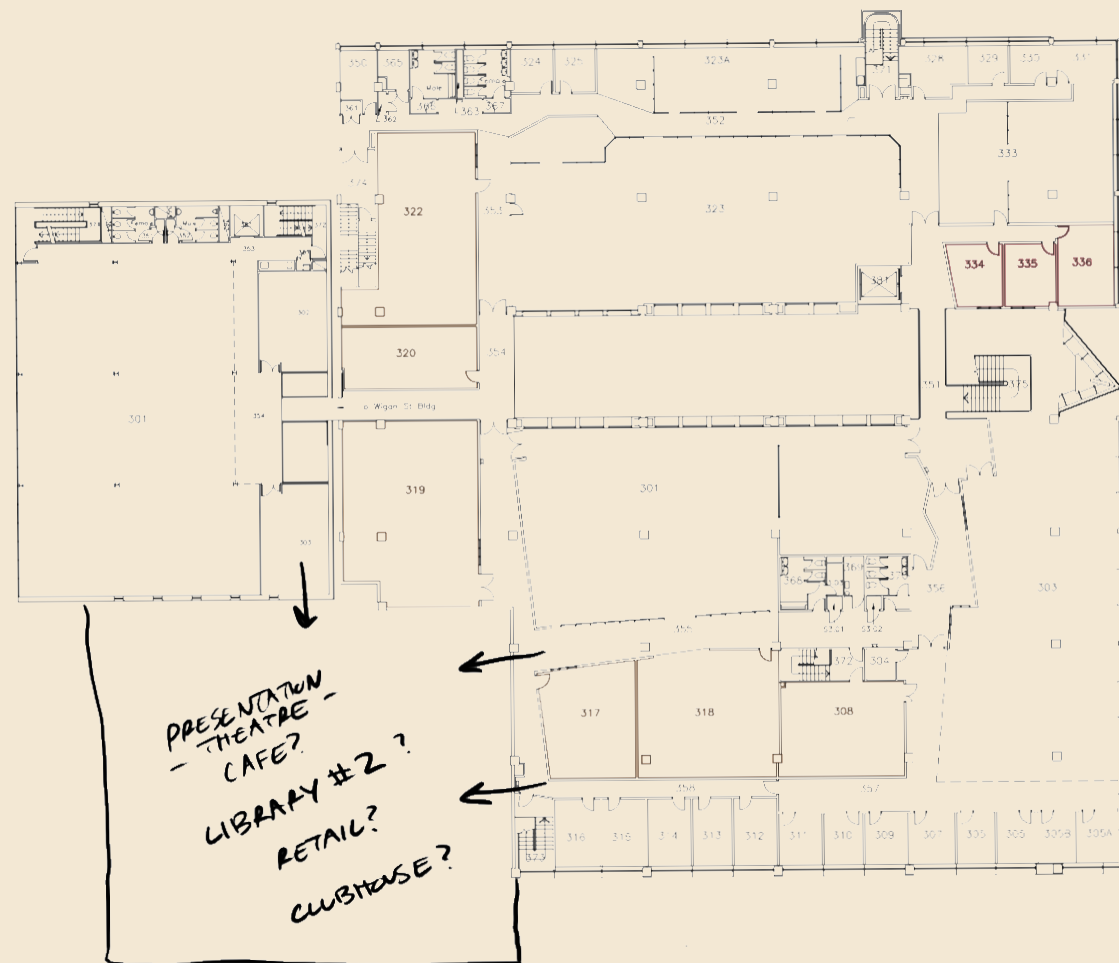
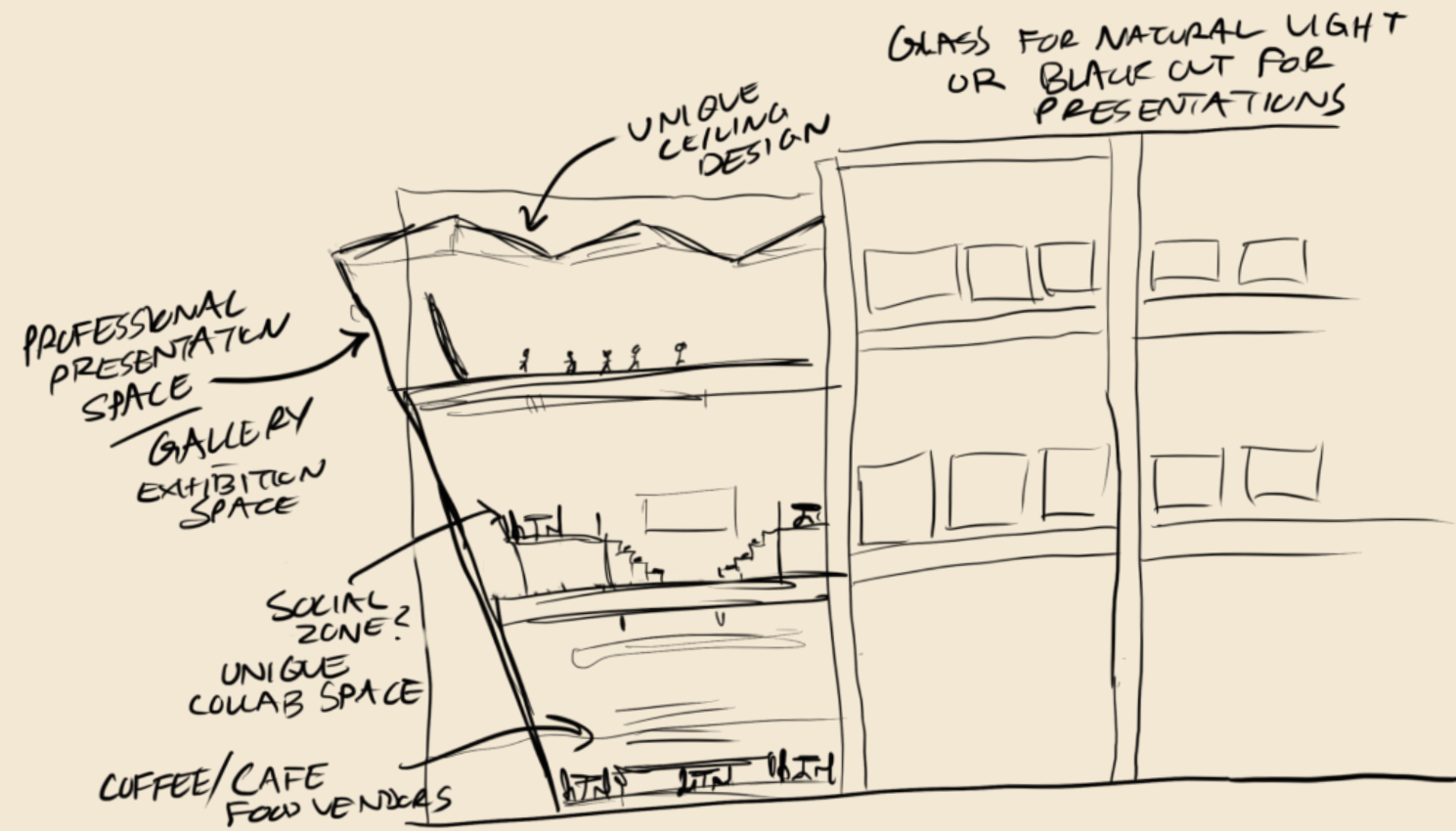
# initial test fit



446 TOTAL WORK SURFACES

- 1 PERSON PRIVATE FOCUS [x25]
- 2 PERSON PRIVATE FOCUS [x12]
- 4 PERSON ENCLOSED ROOM [x7]
- 6-8 PERSON ENCLOSED ROOM [x3]

PERSONAL LOCKERS [x122]



# MOVING FORWARD

09

3D EXPLORATION OF SPACE  
 COLOR BRANDING  
 MATERIALS AND FURNITURE  
 VERTICAL OPENINGS  
 PLANT INTEGRATION  
 FURTHER LEED PROCESS  
 TECHNOLOGY INTEGRATION