

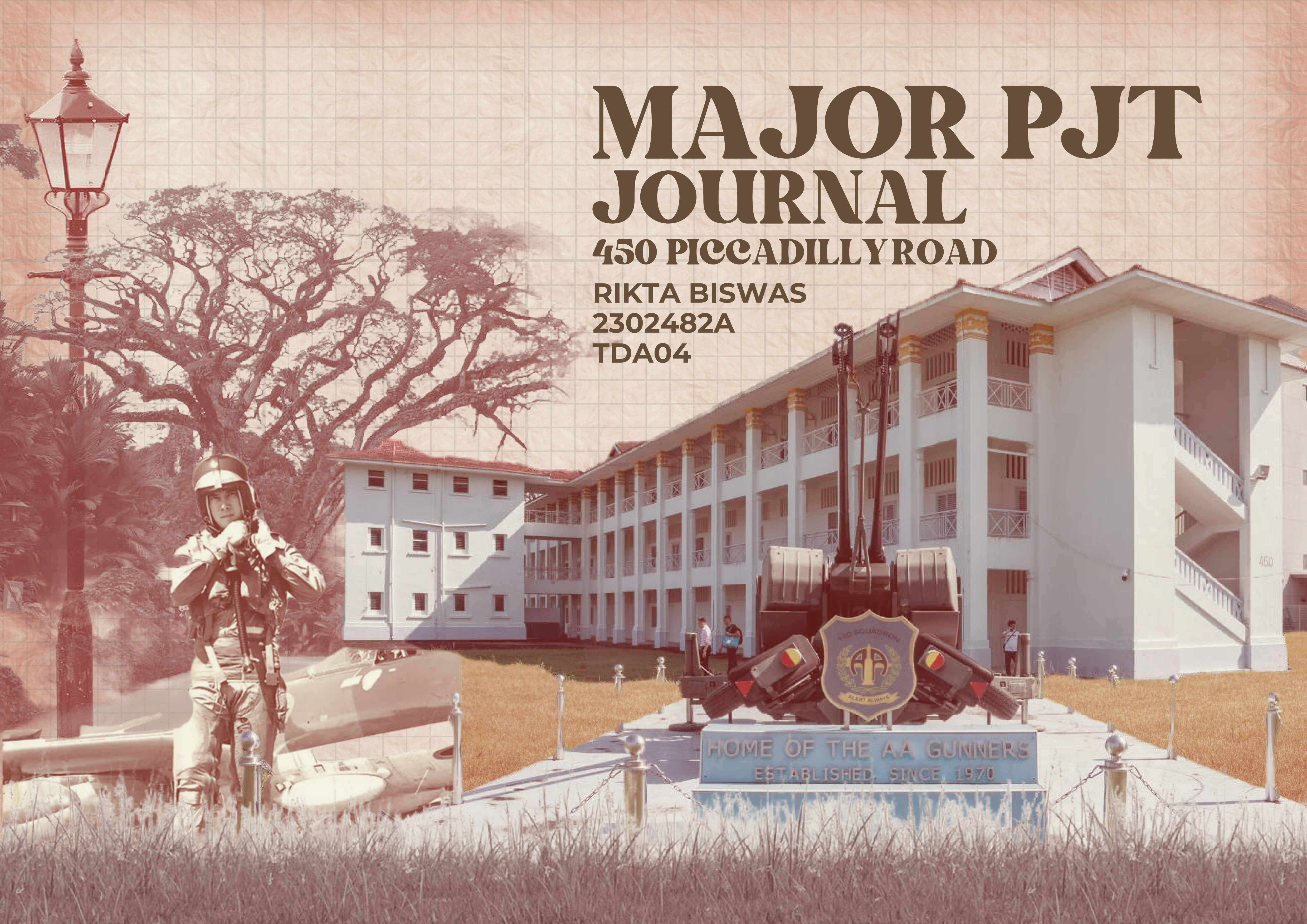
MAJOR PJT JOURNAL

450 PICCADILLY ROAD

RIKTA BISWAS

2302482A

TDA04





Blk 450 Piccadilly Rd

Former RSAF 160 Alpha Squadron Barrack Block

- **DATE & EVOLUTION:** Built 1930 as a two-storey RAF barrack; third storey added in 1936. It served RAF personnel and later became the base for the RSAF 160 Squadron — Singapore's earliest air-defence unit. The URA has described Block 450 as the “birthplace of Singapore's air defence fraternity.”
- **MILITARY & COMMUNITY MEMORY:** The block holds layered memories — colonial RAF life, WWII-era events in the Seletar area, post-war military use, and veteran associations (160 Squadron alumni have produced storyboards and heritage walks). This social memory makes the building culturally significant beyond pure fabric.
- **CONSERVATION STATUS:** Block 450 (together with Block 179 and a set of bungalows) was gazetted for conservation in recent URA rounds (conserved for future reuse and interpretation). The site is managed by state agencies (SLA/URA) and is periodically opened for curated heritage tours.



Historical Timeline

1920s:

- Land for RAF Seletar acquired

1923:

- The Straits Settlements government bought around 240 hectares of land
- Provided the land to the Royal Air Force (RAF) to build a base

1930:

- The base officially opened as an RAF station on 1 January
- Block 450 was constructed as a two-storey block

1936:

- 3rd storey was added
- During its early years, the base also functioned temporarily as Singapore's first civil-airport before the completion of Kallang Airport in 1937.

1942:

- During World War II the Japanese occupied Singapore and taken over the airbase.

1971:

- After the war, the RAF base remained operational; over time as British forces withdrew (Singapore's full withdrawal of British forces was in this year) the site transferred to local armed services.

2014:

- In more recent decades, the site has been repurposed under conservation and redevelopment. Block 450, along with Block 179 (former HQ)
- A set of heritage bungalows were gazetted for conservation

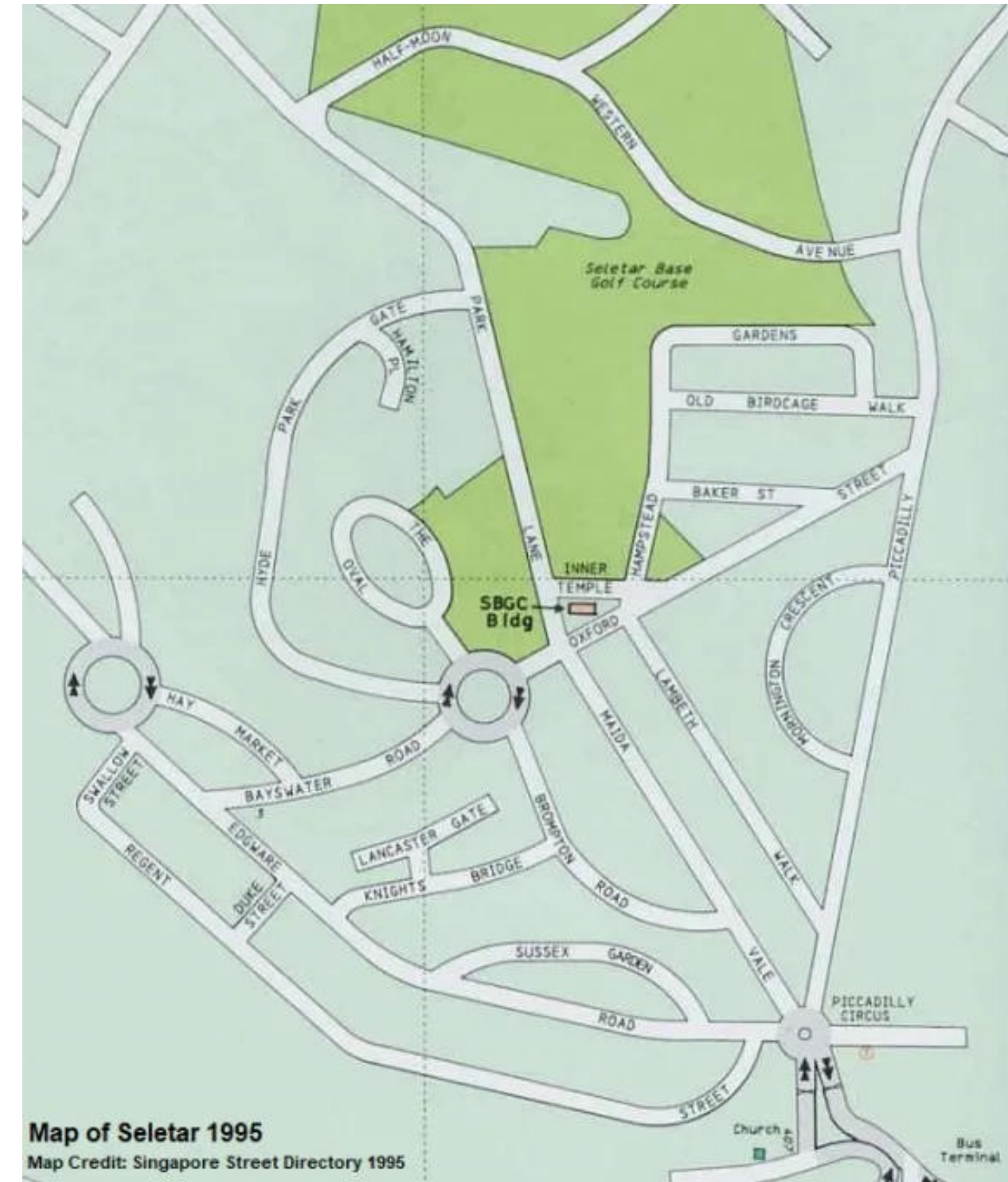
2015:

- A heritage storyboard was launched at Block 450 to mark its significance as home to the 160 Squadron (RSAF) (Singapore's first air-defence unit).



Site Context & Cultural Layering

- The site is part of the larger 'Seletar' area (named after the indigenous Orang Seletar). Before the airbase, it was swampy, with coconut and rubber plantations and mangrove edges.
- The neighbourhood layout: roads around the base were named after familiar British/English streets (e.g., Piccadilly, Bayswater Road) to ease culture shock and reflect the British servicemen lifestyle.
- After military withdrawal, parts of the site were adapted for civilian, residential, aerospace industry uses. The conservation of the heritage buildings amidst redevelopment tells a narrative of transformation: from colonial military to modern aerospace hub.
- Heritage trees and greenery: The site is also significant for its mature tree landscape (planted when RAF built the base) and existing heritage trees provide a green and contemplative setting.



A Residential Bungalow along Bayswater Rd



Orang Seletar

Architectural & Social significance

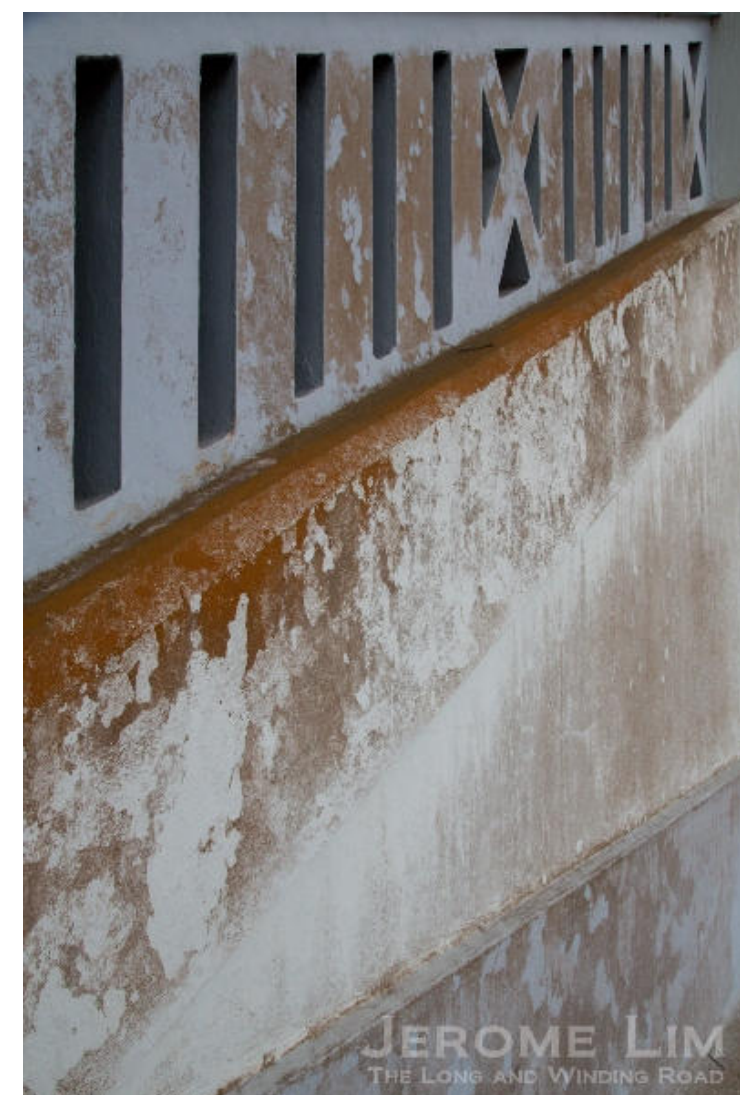
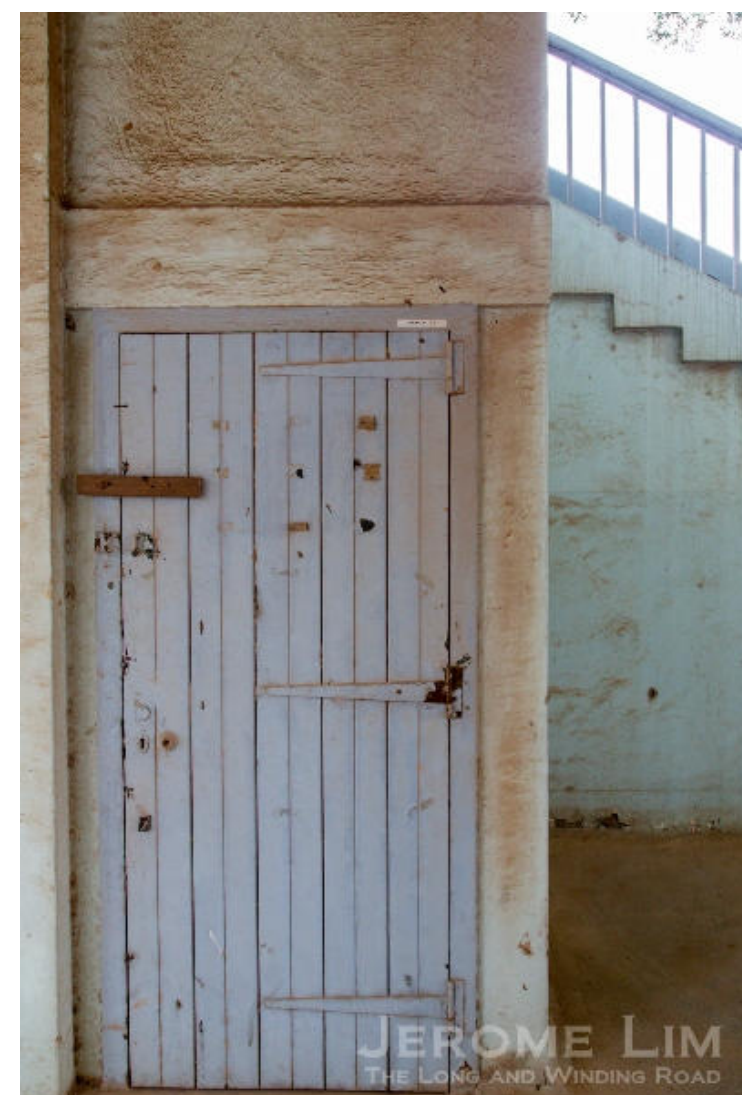
- Block 450 is a long (~90 m) linear barrack building with two service blocks projecting in the centre, continuous verandahs wrapping around, generous stair-cores at each end.
- Architecturally it synthesises tropical climate adaptation and early modern/Art-Deco style: reinforced concrete structure, timber-louvred windows, pre-cast concrete vents, deep overhangs for shade and cross-ventilation.
- Socially, the area wasn't just functional military accommodation: the surrounding housing, roads named after London streets (Piccadilly, Oxford, Park Lane etc) helped create a semblance of "home away from home" for British servicemen and their families.
- The base's strategic importance: It was one of the largest RAF stations in the Far East, guarding vital trade and transport routes. Its establishment was part of British imperial defence in the Asia Pacific region.
- Heritage of memory: Block 450 later became the barracks for the 160 Squadron — the first air defence unit of the Republic of Singapore Air Force (RSAF). That gives the building dual significance: colonial/British military heritage and Singapore's post-independence defence heritage.



The wooden louvred doors along the generously sized verandah. The moulded Art Deco style motifs can be seen at the top of the pillars.



Service Block



Louvred doors and windows



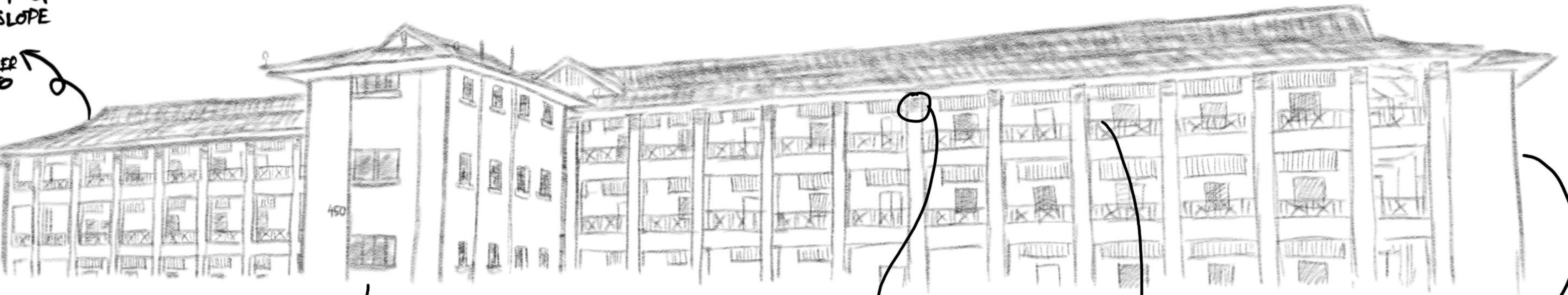
Concrete vents in the rooms for natural ventilations

- CORRUGATED ASBESTOS/
METAL SHEETS FOR
EASIER MAINTENANCE

- PITCH GABLED ROOF
WITH MODERATE SLOPE

- OVERHANGS 1.5-2m
SUPPORTED BY TIMBER
& STEEL BRACKETS TO
SHAPE VERANDAH

3 STOREY



TOILET AT GROUND FLOOR
SERVICE BLOCK



INSIDE OF REPORTING ROOM



UNIQUE ART DECO
MOTIF ON THE
COLUMNS CAPITALS



OPENING CONCRETE PARAPETS
ABOVE ON THE WALL



STAIR CORES AT CORNER END



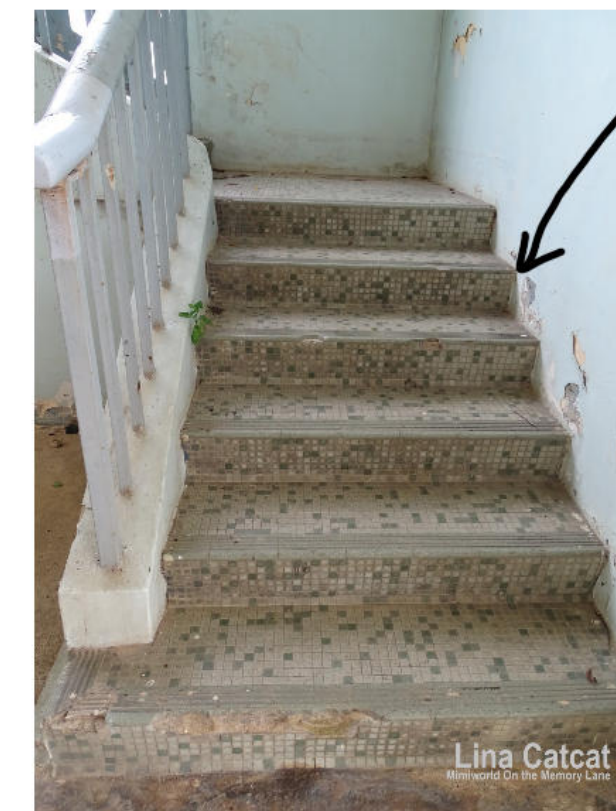
HOLE THRU A SMALL HOLE



ARMOURY STOREROOM
ENTRANCE



INSIDE SERVICE BLOCK ARMOURY



FLOORING STONE GLASS
PATTERNS



1930 PLAGUE ON WALL



BOOT SCRAPER



LOUVRE FROSTED
WINDOW



BATHROOM & TOILET ON BOTH SIDES



FACING SELETAR AIRPORT



FACING EXCEL CENTRE



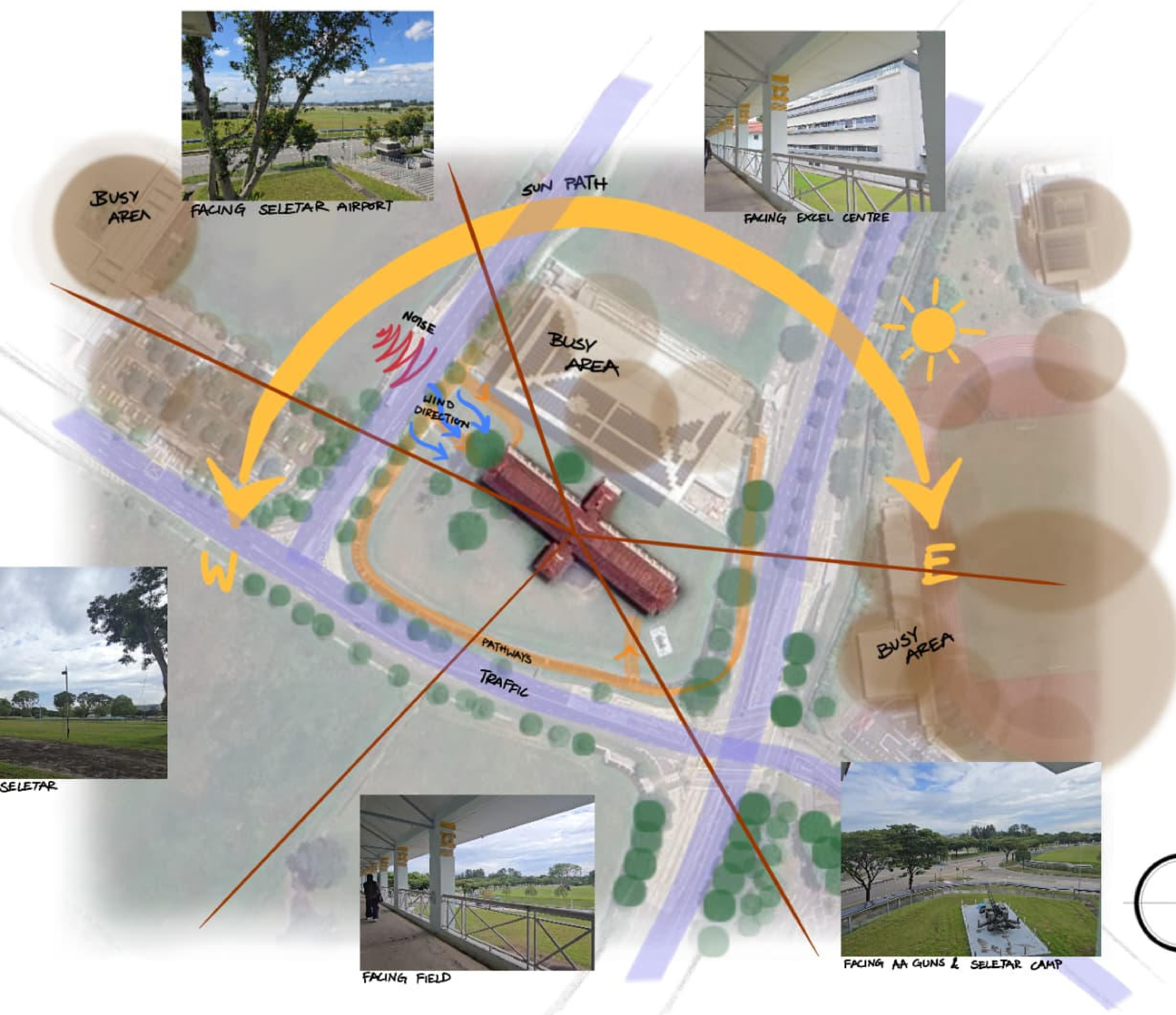
FACING FIELD & SELETAR
AEROSPACE PARK



FACING FIELD



FACING AA GUNS & SELETAR CAMP





Seletar Airport

-  : Institution
-  : Aviation Use
-  : Open Space
-  : Conserved
-  : Commercial
-  : Idle Property
-  : Residential

Seletar Airport

SELETAR AIRPORT
PASSENGER TERMINAL

SELETAR AIRPORT
CONTROL TOWER

PPG INDUSTRIES
SINGAPORE

PUNGLUOL
BARAT ISLAND

BLK 450

EXCEL
CENTRE

SELETAR
CAMP

SELETAR AEROSPACE
PARK

FORMER RAF
SELETAR HQ

RAIN
TREE

WHEELER'S
ESTATE

HAMSTEAD
WETLANDS
PARK

OLD SELETAR
CAMP

PICCADILLY
RESIDENTIAL

ROUND
ISLAND
ROUTE

TEMBUSU

PICCADILLY

User Study: Recovering Cancer Patients

"CANCER SURVIVORSHIP"

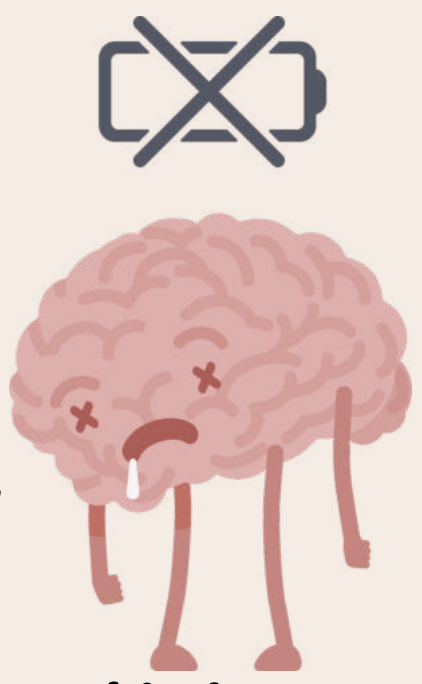
refers to the health and well-being of a person from the time of their cancer diagnosis until the end of their life, encompassing those actively receiving treatment, those who have finished treatment, and even those living with metastatic cancer.



Common Physical & Cognitive issues:

- Fatigue
- Pain
- Sleep disturbance
- Lymphedema
- Neuropathy
- "chemo brain" (concentration / memory problems)

These affect daily functioning and spatial needs.



Why focusing on recovering cancer patients matters for Singapore?

Singapore has among the highest age-standardised cancer incidence rates globally and a rising number of survivors.

GLOBOCAN / National sources report:

~25,250

NEW CASES

~80,000

5-YEAR PREVALENT CASES

survival rates are improving, producing a growing survivorship population with long-term needs. Designing environments for this population is therefore a pressing local priority.

Singapore's National Cancer Centre (NCCS) and local hospitals have begun explicit survivorship programmes and forums (e.g., NCCS's Survivorship Forum) to coordinate holistic care — indicating institutional readiness for built-environment interventions that support psychosocial and rehabilitative recovery.



Psychological & Social challenges:

~31%

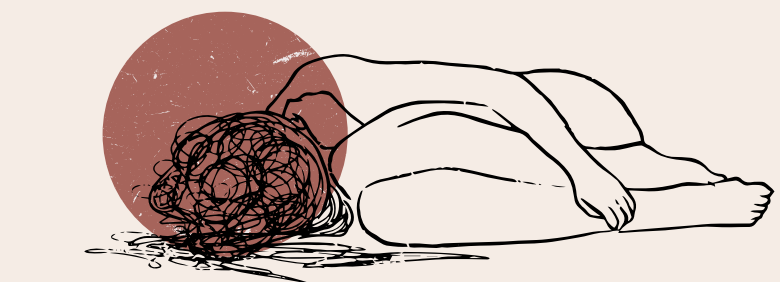
With ANXIETY

amongst other feelings of:

- Distress
- Fear of recurrence



~33%



With DEPRESSION

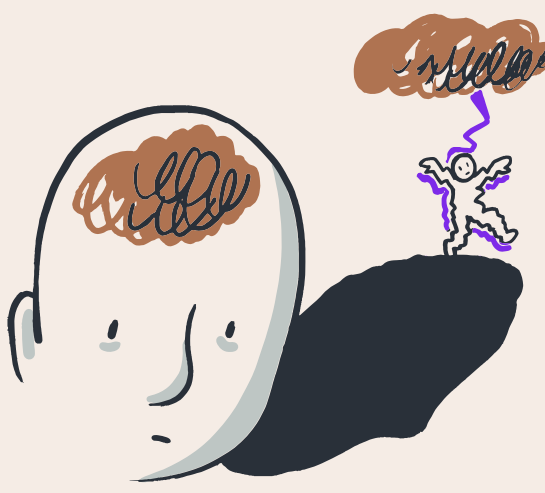
- Social isolation
- Identity / Body-image issues

Social / Cultural considerations:

- Stigma
- Family expectations
- Caregiving norms

shape how survivors seek support.

In Asian contexts, family plays a central role.



"STIGMA" can lead to...

- under-reporting of mental health needs
- lower help seeking



UN Sustainable Development Goals:



Exploring this user base directly supports UNSDG 3 & 11, targetting to ensure healthy lives and promote well-being for all ages while integrating community access and social support.

How Architecture & Interior Design help Recovering Cancer Patients?

1. Nature, Views, Daylight - reduce stress & pain

Ulrich's classic study (1984) showed patients with views of natural scenes recovered faster and required less pain medication. Subsequent research and meta-analyses continue to support nature, daylight and views as stress-reducing, restorative elements. Maggie's Centres explicitly base much of their design on access to light, gardens and domestic scale to support emotional recovery.

Source: <https://www.healthdesign.org/sites/default/files/article-pdfs/Ulrich-1984-CHD-KPS.pdf> & <https://www.maggies.org/>



Verdant Maggie's Centre, Leeds, England

Design moves (Site specific): orient counselling rooms and quiet rooms to garden or parade lawn views; create a sequence of shady verandahs and garden courtyards that permit gentle movement; include planted courtyards and therapeutic planting (scented herbs, tactile plants).

Emotional effect: views of greenery offer a sense of refuge and continuity; they interrupt worry loops and offer visual "soft focus" which reduces rumination and physiological arousal.

2. Privacy, Control, Dignity - reduce anxiety & traumatisatisation

Clinical guidance emphasises control over privacy and environment as important for mental health in survivors; trauma-informed design principles recommend giving users choice and control over exposure and interaction.

Source: <https://ascopubs.org/doi/10.1200/JCO.23.00293>



Principles of Trauma-Informed Research

Source: <https://melresearch.co.uk/trauma-informed-research/>

Design moves: provide a mix of private counselling rooms, small multipurpose rooms for family sessions, and semi-private verandah niches for quiet reflection. Allow users to control lighting, ventilation (fans/windows) and acoustic privacy (soft partitions). Ensure discreet entry and exit routes to counselling spaces for dignity.

Emotional effect: control reduces helplessness and fosters agency — especially vital for people whose bodies have felt out of control during treatment.

How Architecture & Interior Design help Recovering Cancer Patients ?

3. Social Connection & Community - structure belonging without pressure

Psychosocial interventions (support groups, peer programmes) show benefits for mood and coping; NCCS offers group support as a core programme. Architecture must physically enable safe, non-clinical social encounters (kitchens, lounges, flexible group rooms).

Source: <https://www.nccs.com.sg/our-specialties/psychosocial-oncology/patient-support-programmes>



NCCS Facebook posts of Support Group leaflets

Design moves: create an approachable ground floor 'living room' / community hub opening to the lawn (for movement therapy, group art therapy, tai chi). Include small scales and domestic furniture to avoid clinical feel. Program "drop-in" times to reduce barriers.

Emotional effect: reduces isolation, rebuilds social identity, and normalises help-seeking.

4. Sensory Modulation & Multisensory Rooms - for grounding and coping

Multisensory interventions (music, tactile stimuli, controlled lighting) are widely used in psychiatric and palliative care; they help regulate arousal and support relaxation. While cancer-specific RCTs are variable, clinical practice recommends sensory approaches for anxiety, insomnia and pain management.

Source: [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(24\)00521-2/](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(24)00521-2/)



Music Therapy in Supportive Care for Cancer

Source: <https://theancientayurveda.com/music-therapy-in-supportive-care-for-cancer-patients/>

Design moves: provide a multisensory "calm room" with diffuse daylight, soft seating, tactile materials, controlled soundscapes, and options for aromatherapy (consider allergies). Ensure reversible fit-outs and medical safety. Emotional effect: offers a safe container to de-escalate panic, rest, or practice breathing/grounding.

How Architecture & Interior Design help Recovering Cancer Patients ?

5. Accessibility, Rehabilitation & Occupational spaces

Physical rehabilitation and occupational therapy are core to survivorship. Spaces for physiotherapy, gentle exercise, horticulture therapy and maker-therapy have demonstrable functional and psychosocial benefits. Singapore survivorship models emphasise integration of rehab into survivorship programs.

Source: <https://annals.edu.sg/beyond-survival-addressing-gaps-in-psychosocial-support-for-survivors-of-childhood-cancer/> & <https://pmc.ncbi.nlm.nih.gov/articles/PMC6223422/>



Cancer Rehabilitation

Source: <https://sukino.com/cancer-care/>

Design moves: retrofit service blocks for occupational therapy (maker spaces, wood/arts therapy), provide smooth circulation for mobility aids, clear step-free routes, and discrete treatment rooms for physio. Include storage for mobility aids and privacy for post-treatment needs (dressings, sensitive exams) if clinical linkage exists.

Emotional effect: restores competence and independence; tangible progress in physical function supports mental resilience.

6. Heritage & Narrative - meaning-making & identity continuity

Maggie's Centres and other cancer support architecture show that considered storytelling and "place" matters; meaningful spaces can help people integrate illness into life story and promote dignity. In Block 450, the site's military history can be reframed as themes of resilience, community, and protection—powerful metaphors for survivorship.

Source: <https://www.sciencedirect.com/science/article/pii/S027795361930557X> & <https://www.salus.global/article-show/ehd2018-p24>.



Maggie's Centre, Lanarkshire, United Kingdom

Source: <https://architizer.com/blog/inspiration/collections/maggies-centres/>

Design moves: create heritage interpretation corners (oral histories, memory walls) that survivors can engage with voluntarily; use materials and craft that respect conservation while adding warmth (textured timber furniture on top of original floors, reversible inserts).

Emotional effect: fosters belonging, intergenerational bonds, and narrative that moves from "battle" to "recovery".

Local Case Study: Khoo Teck Puat Hospital

BY CP6 CONSULTANTS

SITE STRATEGY:

KTPH embraces its adjacent Yishun Pond and rehabilitated catchment area, intentionally integrating the hospital into a "park" rather than a hard-edged campus. The design preserves and amplifies water bodies and vegetation. This gives patients and visitors a sense of escape and restorative contact with nature without requiring travel.

PUBLIC PARK

SHELTERED COURTYARD

BEDSIDE VIEWS

FORM & DAYLIGHTING:

The massing is broken into lower-scale blocks and courtyards rather than one monolith. Wards are sited and oriented to catch breeze and views; subsidised wards were deliberately located at breezier parts of the site. Deep verandahs, louvres and shaded balconies buffer solar gain while allowing daylight and cross-ventilation in non-critical spaces. The overall strategy interweaves daylight access, passive ventilation and visual contact with greenery.

INSPIRED BY LANDSCAPE & WATER:

The landscape is not decoration — it is the organizing device: courtyards, a "forest-like" central garden with water features, cascading planting to upper levels and planted balconies create a continuous green thread. Planting was selected to attract birds/insects and create multisensory experiences (sound of water, scent, textured leaves). The roof and terrace planting also act as thermal buffers and biodiversity pockets.

MATERIALITY & TACTILE EXPERIENCE:

Materials in public and patient-facing spaces emphasize natural textures — timber cladding/benching, earthy paving, and planted planters — to reduce the institutional feel. Detailing supports human scale (benches, shaded verandahs, intimate courtyards) and accommodates maintenance/operations (durable paving, accessible planting beds).

OPENED IN 2010



Case Study: Maggie's Leeds Centre

BY HEATHERWICK STUDIO

FORM & SPATIAL CONCEPT:

The concept takes a biomorphic / pavilion approach: a cluster of three tiered timber pavilions grouped around a communal court/garden, rather than one rectangular block. The volumes are warm, tactile and domestic in scale (a "treehouse" or sheltered pods).

The plan organizes the central kitchen/social hub as a focus, with counselling spaces and smaller rooms placed around and behind it: a spatial choreography that supports both accidental social encounters and private retreats. This is a consistent Maggie's typology (kitchen at the heart).

PUBLIC

SOCIAL

SEMI-PRIVATE

PRIVATE



OPENED IN 2020

LEEDS, UNITED KINGDOM

SITE CONTEXT:

- The chosen site was "the last patch of greenery" within the St James's hospital campus — a small, steeply sloped wooded area. Heatherwick's design embraces the slope and woodland setting, intentionally providing visual removal from the main hospital massing and connecting users to nature.
- Analytical note: the site strategy deliberately seeks detachment within proximity — near enough to the hospital for referral & access, but physically and perceptually separated to offer retreat.

MATERIALS, STRUCTURE & DETAILING:

- Primary palette: pale/white-washed timber cladding, engineered timber structure, bronze/dark metal trim, warm natural finishes internally (timber joinery, cork/soft surfaces). The interior is dense with plants, soft materials and tactile finishes.
- Custom joinery & furniture: Heatherwick designed some bespoke tables and fittings (inspired by the timber fins) — detailing intentionally domestic, hand-crafted feeling.

Case Study: Maggie's Leeds Centre

BY HEATHERWICK STUDIO

LANDSCAPE & OUTDOOR RELATIONSHIPS:

The centre nestles into woodland gardens; paths and terraces engage with the slope, producing sheltered outdoor rooms for group activities and quiet sitting. The garden is not an afterthought — it's integral: views, courtyards and planting are used as therapeutic devices.

LANDSCAPE + BUILDING = ONE THERAPEUTIC SYSTEM

OPERATIONS, STAFFING & DAILY USE:

Maggie's run a daily program of group support, 1:1 sessions, practical support for benefits/finances, workshops and community activities. They are staffed by professional staff and volunteers; the architecture supports flexible uses and different group sizes. Maggie's model emphasises low barriers (free services, drop-in culture).

EVIDENCE & IMPACT:

- Maggie's as an organisation has an established evidence-based programme and internal research agenda; they publish evaluations showing benefits for psychological wellbeing, reduced distress, and value for health systems (e.g., easing pressure on oncology services). Maggie's is engaged in academic partnerships to quantify cost-savings and health outcomes.
- While individual building-level RCTs are limited, architectural / environmental psychology literature supports the design moves used by Maggie's (nature, daylight, social domestic scale) as beneficial to patient wellbeing; case studies and qualitative evaluations of Maggie's Centres report strong subjective outcomes.

Source: https://www.maggies.org/media/filer_public/78/3e/783ef1ba-cd5b-471c-b04f-1fe25095406d/evidence-based_programme_web_spreads.pdf & <https://www.archdaily.com/941540/maggies-leeds-centre-heatherwick-studio> & <https://www.biophiliccities.org/case-study-maggies-center>



Case Study: Maggie's Dundee Centre

BY FRANK GEHRY PARTNERS

SITE & CONTEXT:

- Elevated above hospital complex, facing an estuary
- With expansive views & a sense of escape from the clinical setting
- Surrounding landscape of garden and labyrinth

FORM:

- cottage-like white rendered volumes
- Dramatic folded stainless-steel roof inspired by Scottish vernacular "buth n' ben" dwellings
- a cylindrical "tower" element

MATERIALS:

- warm timber interiors
- white rendered walls
- stainless-steel roof
- generous glazing to capture landscape & views

SPATIAL ORGANISATION:

- plan encourages movement, social interaction & moments of reflection
- central kitch/living space as a hub

- library in tower
- lounge
- therapy rooms

LANDSCAPE & HEALING ENVIRONMENT:

GARDEN:

- The labyrinth design is a strong metaphor for journey, recovery, reflection
- the outdoor space is integral to the healing programme

VIEW & NATURE:

- Large openings capture the estuary, trees & sky
- provide visual relief
- connection with nature
- calming vista

SENSORY ENVIRONMENT:

- Materials
- Light
- View
- Interplay of indoor-outdoor all to support well-being, important precedents for mental health focus



OPENED IN 2003

DUNDEE, SCOTLAND, UK





MAGGIE'S DUNDEE CENTRE

RELEVANT OUTCOMES & EVIDENCE:

USER SATISFACTION:

- Views
- Comfort
- Sense of well-being

AWARDS & RECOGNITION:

- "Building of the Year" by the Royal Fine Art Commission for Scotland (2004)
- Nominated for the RIAS Andrew Doolan Award for Architecture

INSIGHTS GATHERED:

WHAT WORKS:

- Domestic scale and informal atmosphere reduce anxiety and create a sense of "home" rather than hospital.
- Strong landscape integration—views, gardens, and outdoor spaces—play a vital role in emotional and therapeutic support.
- Materiality and form support emotional resonance: the dynamic roof gives optimism, light-filled spaces give openness, timber gives warmth.
- Central social hub (kitchen/living) as the heart of the facility fosters community and interaction.

WHAT TO CONSIDER:

- Translating dramatic form into a heritage adaptive reuse context: Blk 450 already has strong heritage character, so the lesson is to adapt rather than replicate.
- Balancing iconic form with usability and comfort: Gehry's design is expressive, yet the user experience (comfort, accessibility, flow) remains paramount.

APPLICATION TO MY PROJECT:

- Use the central social hub + living kitchen model for your well-being centre: encourage gathering, community, shared support, rather than purely clinical spaces.
- Maximise views to nature, use gardens or terraces as part of therapy programming.
- Use warm, human-scaled materials (timber, natural light, soft finishes) to shift away from institutional feel.
- Consider a metaphoric architectural gesture—not necessarily a sweeping roof, but a subtle adaptation of heritage forms that signal transformation, hope, continuity.
- Embed outdoor-indoor relationships actively: verandahs, terraces, gardens as extensions of therapy spaces.

SOURCE:

- ChatGPT
- <https://repository.falmouth.ac.uk/2825/1/Angela%20Butterfield%20online%202014.pdf>

**MAGGIE'S CENTRE
- BUILDING HOPE -
BBC DOCUMENTARY**

Design that is
bold & powerful,
contrasting in hospital

"This is a way forward,
this is a way to humanize in
a not very human situation"

COMPASSIONATE

Comfortable &
with company

Heavy on emotional
than a technical
function

Make you feel yourself,
not a cancer victim

SUPPORT PROGRAMMES
& CLASSES

Environment that
encourage conversation
& interaction between
humans

TINY HAVENS
WITH BIG HAVENS

Having no energy,
feeling crushed

PLACE THAT SAVE LIVES

A thought-through journey

COLORS & TEXTURES

Encouraging a growing foothold

Not left behind, if it
is not over

ARCHITECTURE OF HOPE

Transparent,
unhidden

CREATIVE
FREEDOM

Help respond
to needs

Proactively using the
nature elements
around

Remission
eternal is life

Open destination
in the building

Learn to value things
that are beautiful & comfortable
afterwards

Create a sense
of indoors & outdoors

Bright,
tranquil space
by maximising
daylight

Every centre is
unique in its own
right

Experiment in
a petridish

The centre as a
place from the world
outside

A place of
sanctuary

Making materialities
into a journey through
design
Tailored
programmes to fit the
local need & context

Inspiring a diverse
demographic, rebutting
social stigmas, etc.

Pluralism in
response to issues
addressed by architecture

Become acclimated
in the world of
architecture

Peace, calm,
spaciousness

Welcome anyone
who has touched cancer

Talk & converse
openly

Life of inspiration
& motivation

Family-centric,
Help the families
of patients

beautiful architecture
can impact people
with cancer significantly

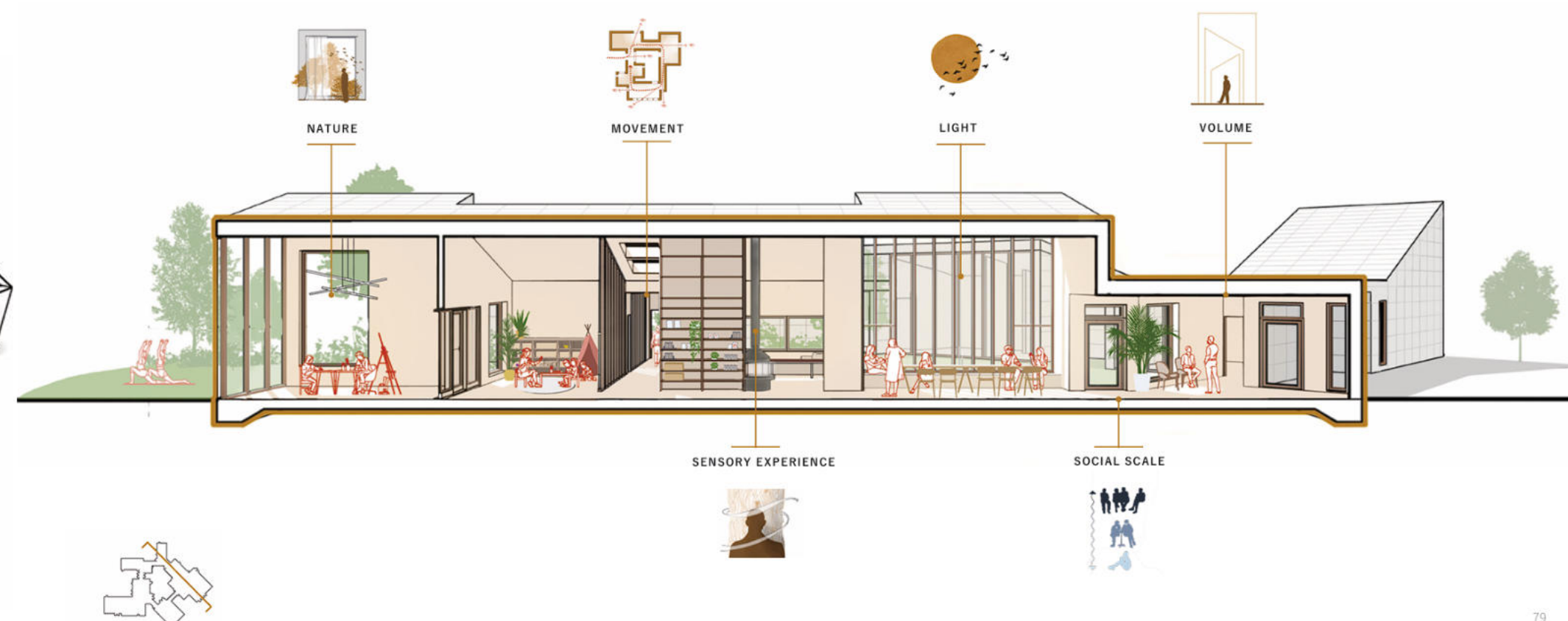
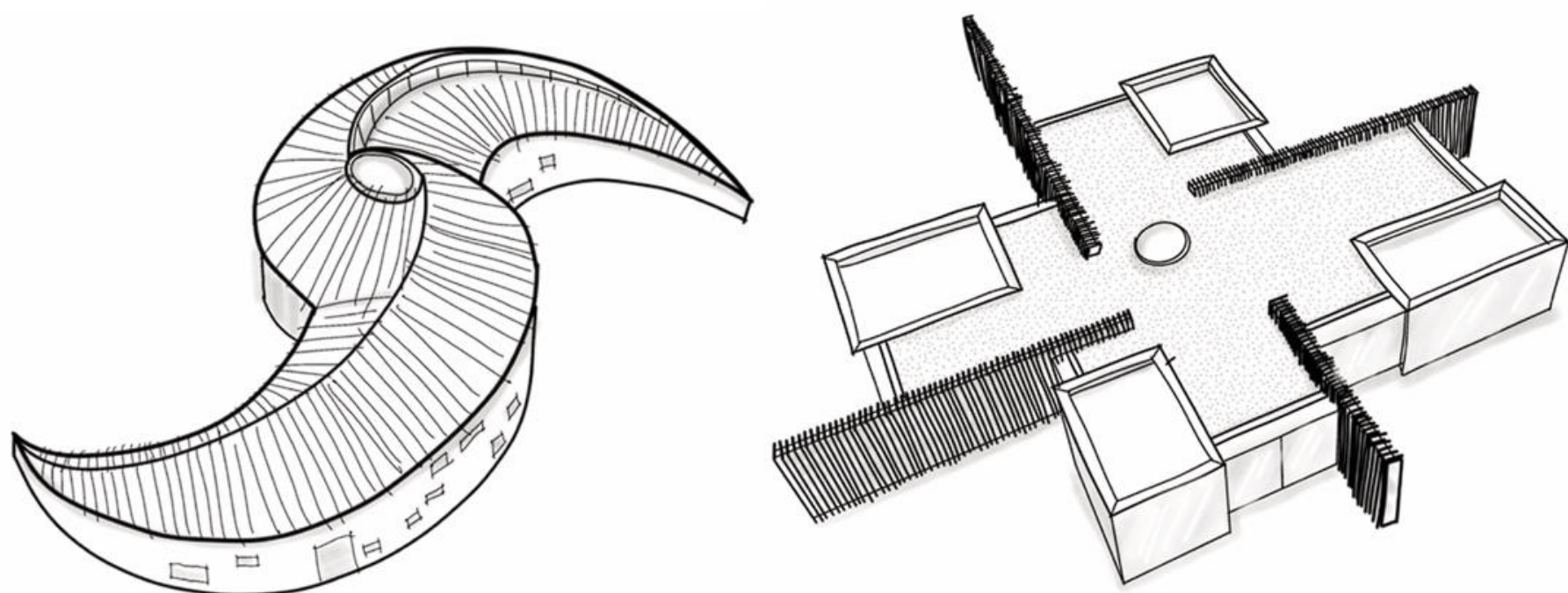
Attract
humanism

Living with
& beyond

The Architecture of Hope

STUDY OF BOOK

- Recognises that healing extends beyond medicine — emotional and mental recovery are equally vital.
- Creates calm, non-clinical environments that reduce anxiety and promote comfort.
- Uses natural light, greenery, and ventilation to improve mood and encourage relaxation.
- Provides spaces for reflection and mindfulness, supporting emotional processing and self-awareness.
- Encourages social connection and community support through shared lounges and activity areas.
- Restores dignity and independence with inclusive, human-centered design.
- Incorporates familiar, domestic materials and scales to evoke warmth and safety.
- Symbolically transforms the space from one of discipline (heritage barrack) to one of compassion and renewal.
- Reminds patients they are more than their illness — capable of hope, creativity, and healing.

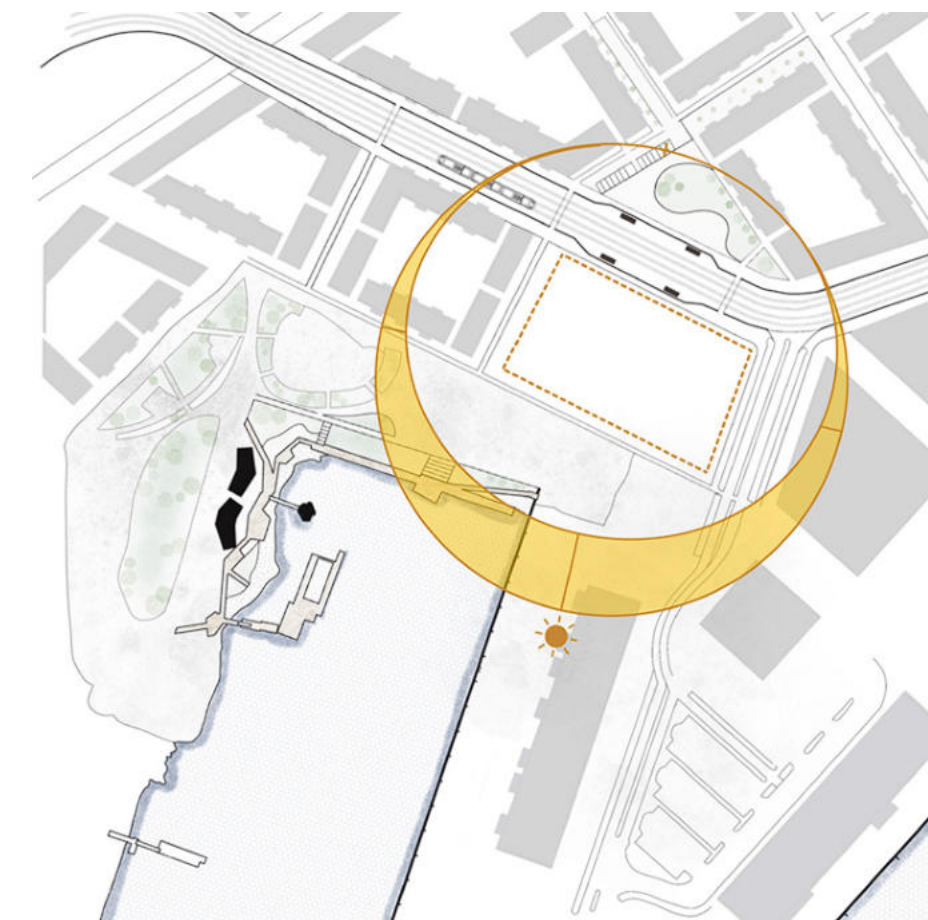


The Architecture of Hope

The power of architecture
in cancer care

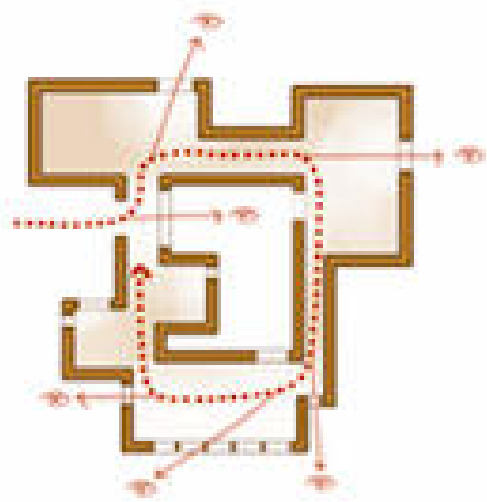


Ida Dahlberg, 2024
Supervisor: Lin Tan
Examiner: Cristiana Caira
Chalmers School of Architecture,
Department of Architecture & Civil Engineering



The Architecture of Hope

STRATEGIES



MOVEMENT

A space that encourages movement, choice and flexibility through spatial seduction

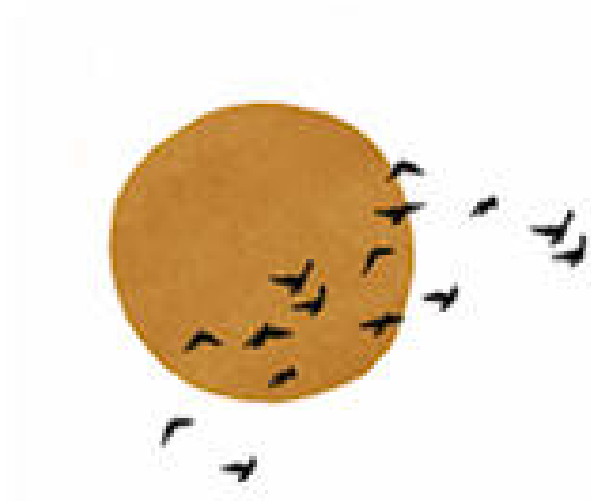
MOVEMENT/CHOICE
BETWEEN
COMPOSURE AND
SEDUCTION



SOCIAL SCALE

Spaces for different levels of privacy and socialisation with a suitable transition

SOCIAL SCALE
LEVELS OF
INTIMACY



LIGHT

The introduction of daylight for health benefits and atmosphere

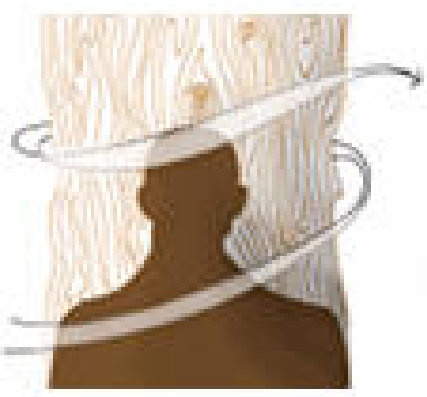
LIGHT
THE LIGHT ON
THINGS



NATURE

A diverse nature experience and a tension between interior and exterior

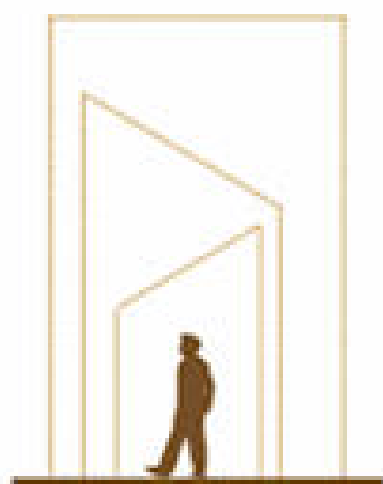
NATURE
TENSION BETWEEN
INTERIOR AND
EXTERIOR



SENSORY EXPERIENCE

Non-spatial experiences of architecture through senses and visual details

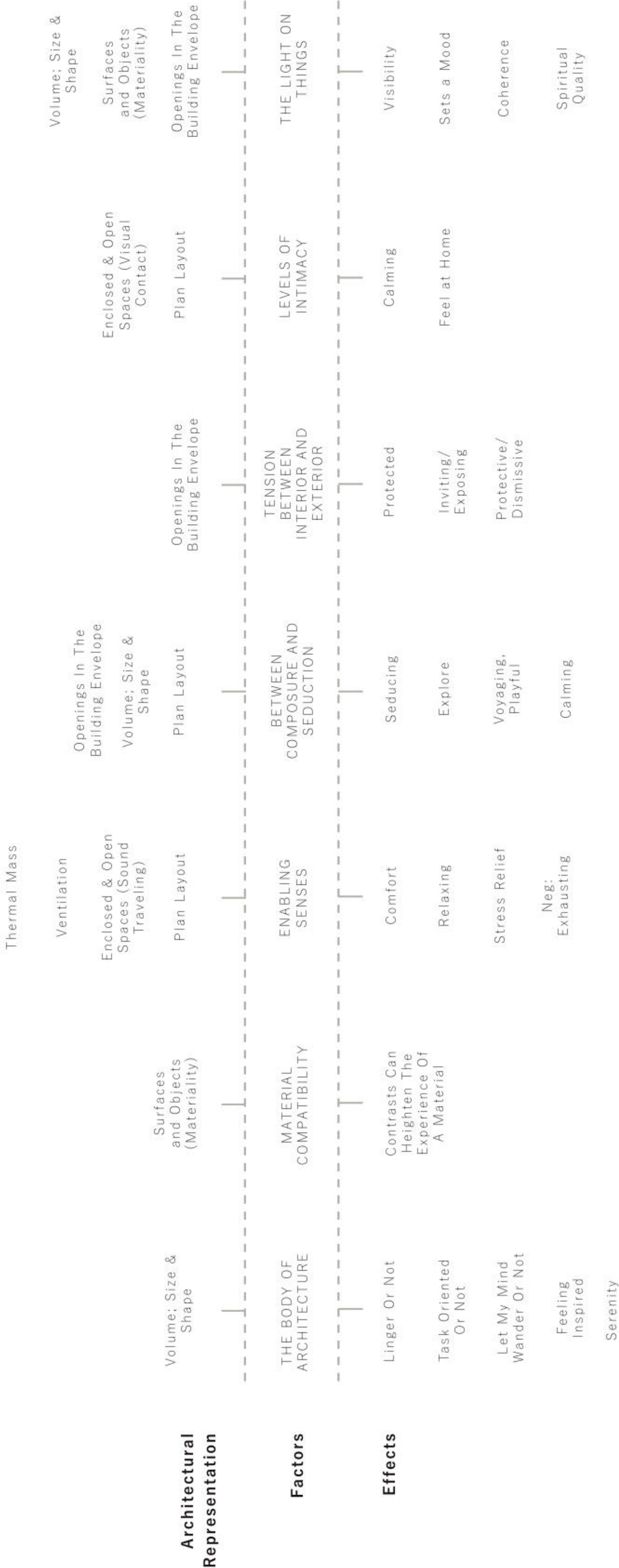
AIR
SENSORY EXPERIENCE
ENABLING SENSES
MATERIAL
COMPATIBILITY



VOLUME

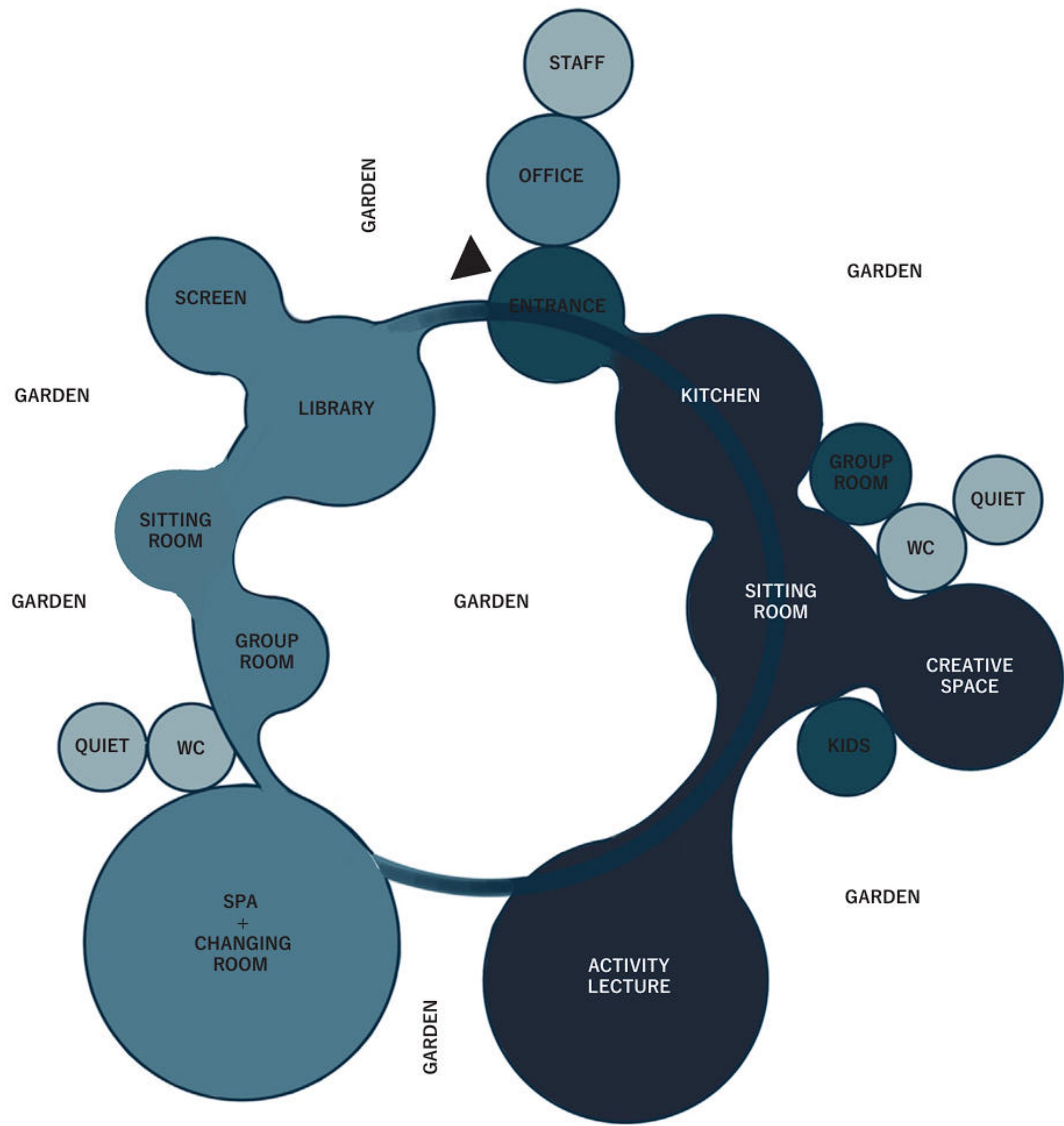
A volume that is adapted to accommodate the feeling the space should convey

THE BODY OF
ARCHITECTURE



The Architecture of Hope

PROGRAMMES



Example of ideal zoning & circulation within the spaces

Privacy	The Space	Summary	People
	ENTRANCE	A welcoming space for greeting, pause before proceeding. Overview, drawn inwards.	2-5
	KITCHEN	Main Hub in the centre. Providing a domestic feeling and socialisation on many levels. Workshops. Buffets and fika.	12-16
	SITTING ROOM	A place for socialisation on different levels of the socialisation scale. Different meetings and conversations that are enabled by furnishing and spaces.	15-20
	QUIET ROOM	Space for retreat. A space for relaxation, sleep, private meditation or crying. Could be furnished for one-on-one sessions.	2
	TOILETS	Restrooms, but also retreat spaces when a quiet room feels to visually exposed.	1
	GROUP ROOM	Space for group sessions, group counselling and meetings for staff. Flexible for different groups' needs. Storage.	8-10 5-6
	ACTIVITY/ LECTURES	A bigger room with high flexibility and nearby storage to accommodate lectures, big meetings and yoga sessions.	40
	LIBRARY	A space to seek information. Bookshelves and computers. Seating.	3
	SPA	A small spa for heat treatments with a small warm bath and sauna.	6
	CHANCING ROOMS	Small gender-neutral changing possibilities and showers to primarily serve the spa, but reachable from activities.	8
	CREATIVE SPACE	Space for art therapy and creation.	8-10
	OFFICE	Office space for employees. Desks and shelves. (Co-working space in group room.)	4-5
	STAFF	Break room. Kitchenette.	4
	KIDS	A kids' area with toys and books.	4
	SCREEN/TV	A group room equipped with a large TV.	12-15
	GARDEN	A space similar to the sitting room, but outdoors. A place for socialisation on different levels. Fika.	15-20

SOCIAL

PRIVATE

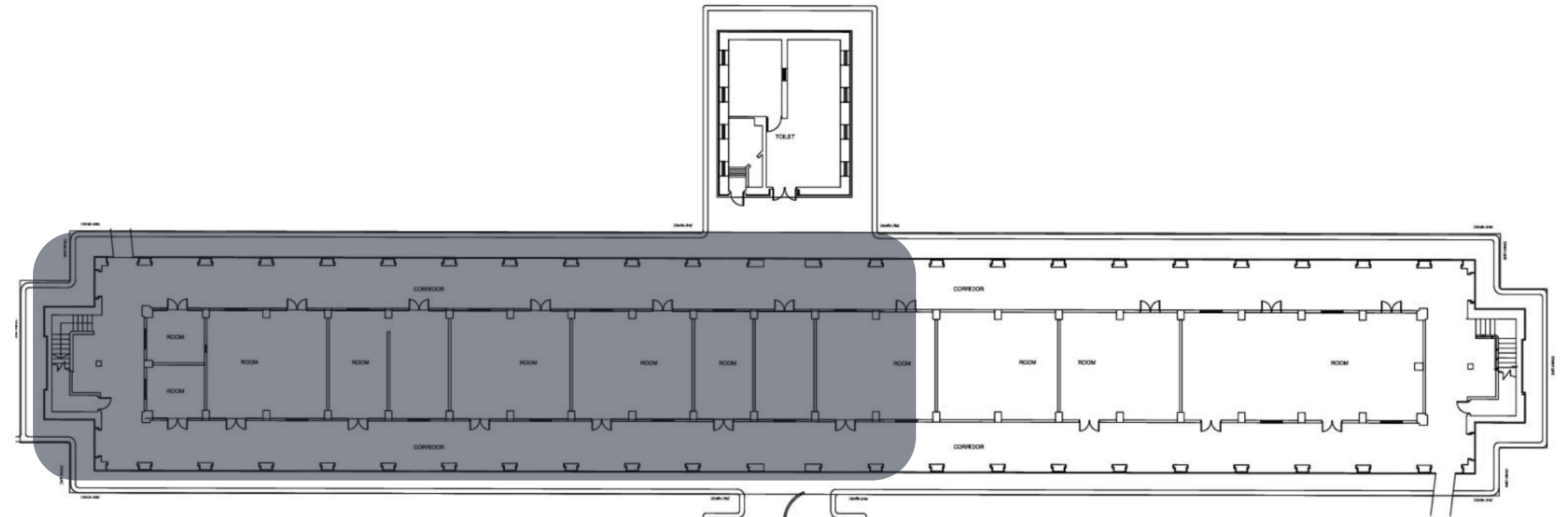
An overview of the program. How many people the space is intended to hold and the privacy aspect.

The social scale indicates if the space enables larger gatherings where one can socialise or quieter with smaller meetings or full privacy.

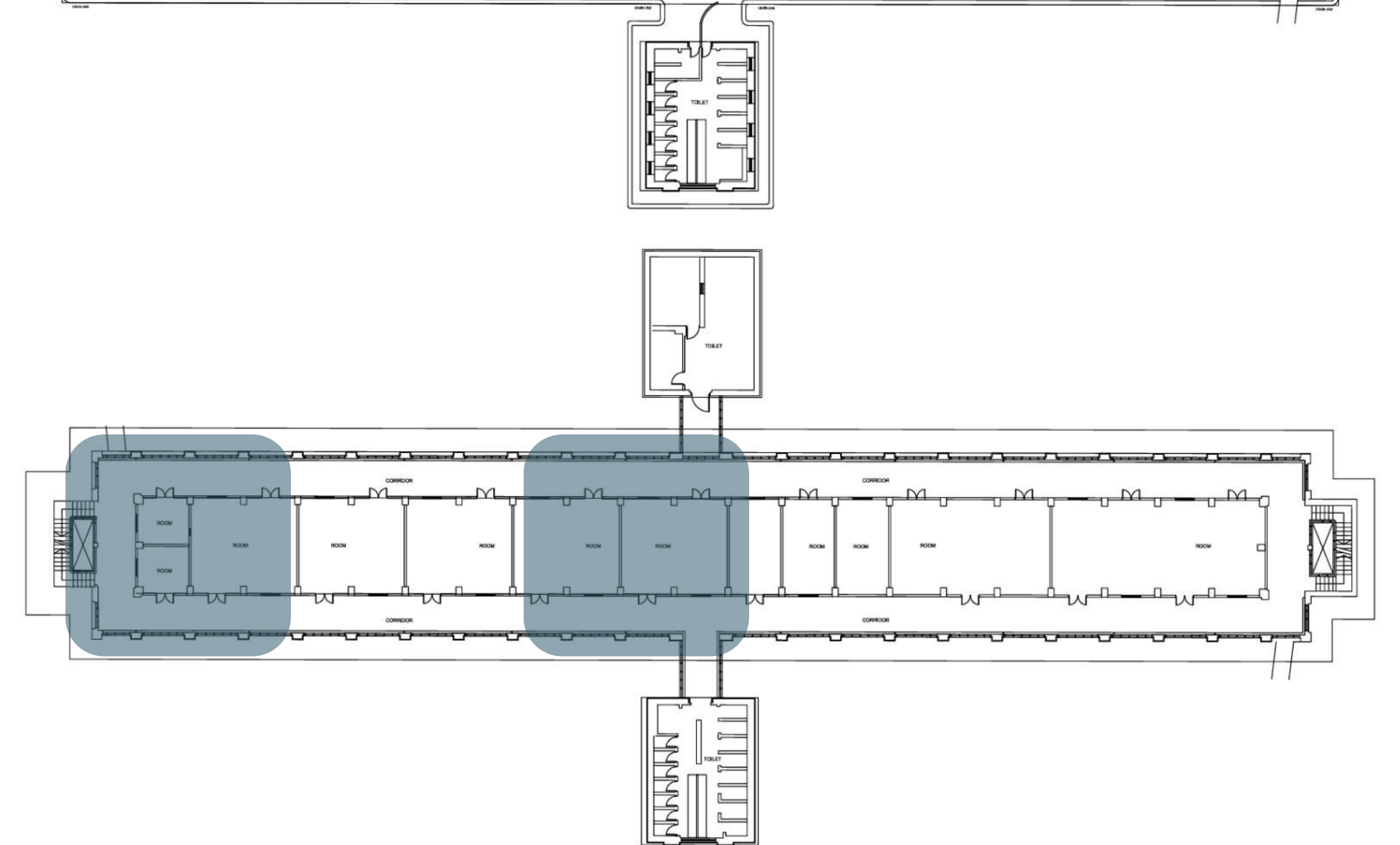
PROGRAMME IDEATION

- Entrance
- Kitchen
- Sitting Room
- Quiet Room
- Toilets
- Group Room
- Activity
- Library
- Creative Space
- Office
- Staff
- Kids
- Screen/TV
- Garden

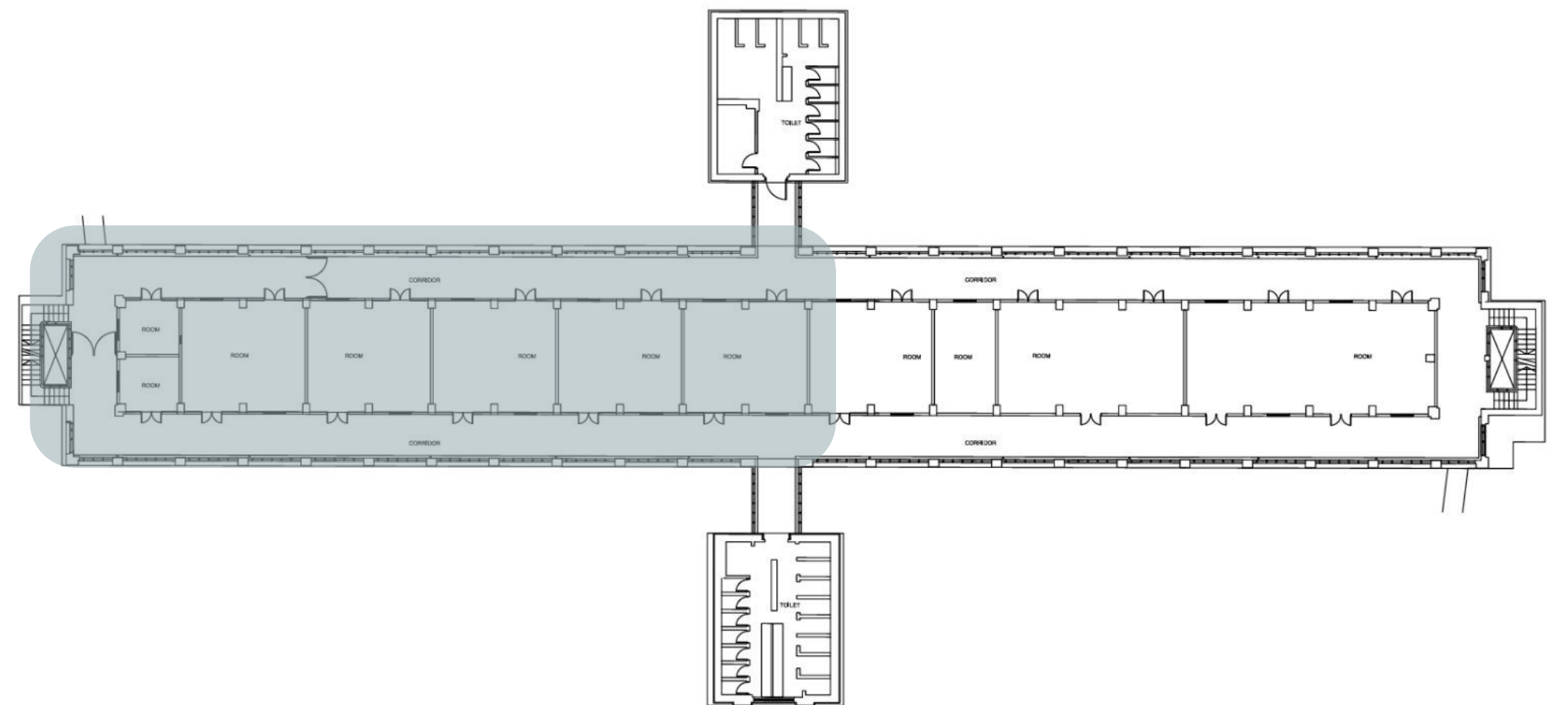
L1



L2



L3



SPACIAL USAGE

PROGRAMMES:

FROM / ENTRANCE ZONE:

- ① ENTRANCE
- ② ORIENTATION SPACE

SOCIAL & COMMUNAL ZONE:

- ③ KITCHEN / COMMUNAL
- ④ GROUP ROOM
- ⑤ CREATIVE SPACE
- ⑥ ACTIVITY AREA
- ⑦ SCREEN / TV CORNER

HIGH
SOCIAL

QUIET REFLECTIVE ZONE:

- ⑧ LIBRARY

LEAST
SOCIAL

AMENITIES:

- ⑨ TOILETS

OUTDOOR HEALING ZONE:

- ⑩ GARDEN
(VIEW + ENGAGEMENT)

MEDIUM
SOCIAL

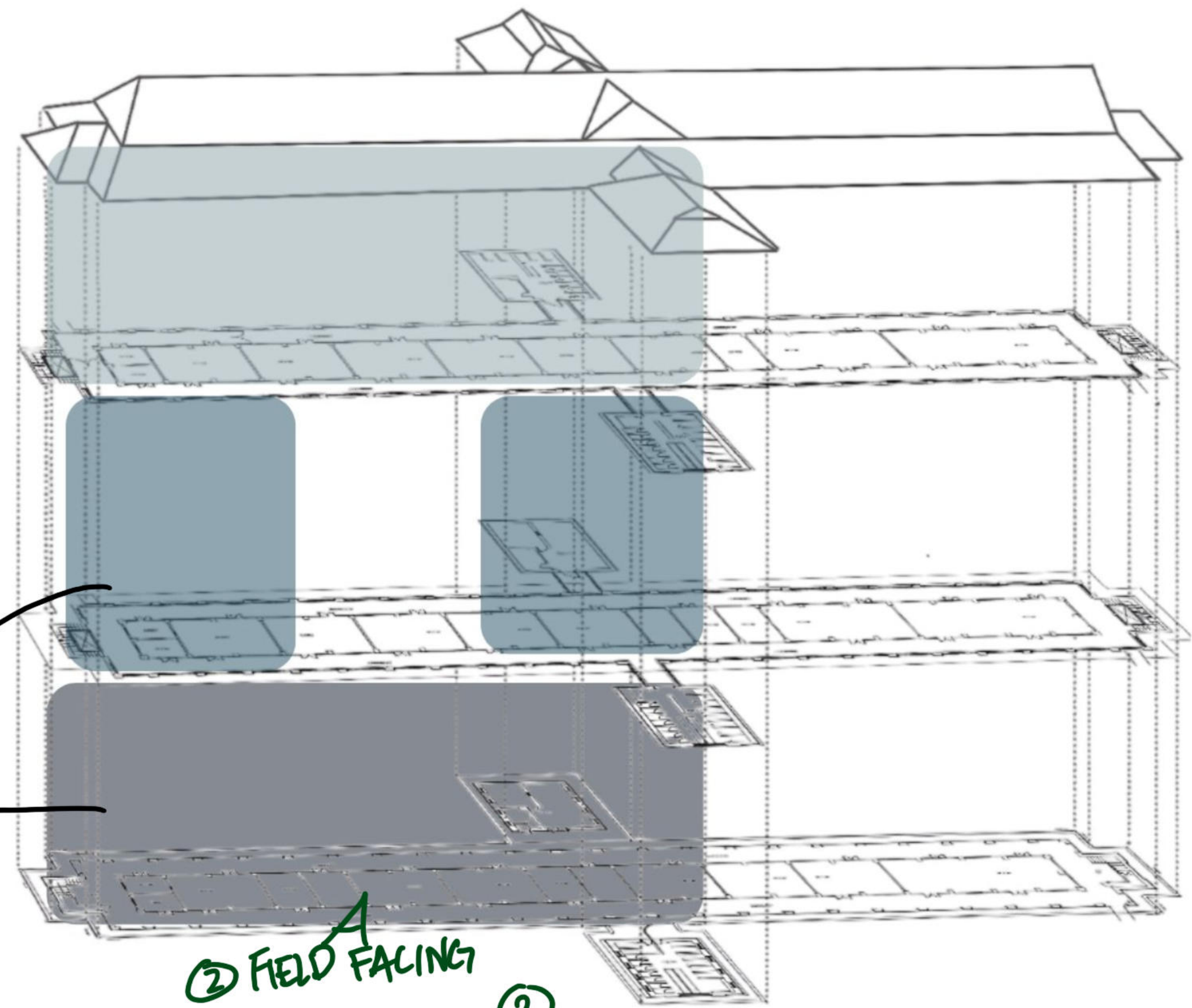


SOCIAL SCALE

Spaces for different levels of privacy and socialisation with a suitable transition

① FACING
SELETAR AIRPORT

USE OF
VOLUMES
& SPACIOUS



VAST PANORAMIC
VIEWS

CONTEXTUALISING

How it supports UNSDG GOALS:



- Provide non-clinical healing spaces for recovering cancer patients
- Promotes mental wellness through restorative architecture
- Encourages holistic recovery
- Uses biophilic design
- Aligns with Singapore's efforts for mental health awareness and community care



- Adaptive reuse of site, preserving heritage
- Reduces demolition waste
- Revives a conserved military barrack into a meaningful community wellness hub
- Strengthens social inclusivity through shared public and therapy spaces
- Applies passive design for energy efficiency
- Encourages connection with nature
- Builds resilience in community and humans

How the Site supports Design Intends:

- Blk 450 carries layers of memory—a **quiet symbol of resilience**
- Cancer survivors, much like heritage buildings, carry “scars” yet remain standing — **the metaphor of preserving but transforming resonates powerfully**
- The site is a low-density enclave away from urban intensity—naturally fostering **tranquility & privacy**
- Materials used for Blk 450's architecture age gracefully - offering **warmth and tactile honesty**
- The verandas offer safe semi-public thresholds—ideal for **human interactions, group therapy or private reflection**
- The site has a open green landscape—offering opportunities with **framed views and integration of a biophilic design**
- The nearby **open skies, wide runways, and unobstructed horizons** evoke a sense of **expanse and calm**, rare in dense Singapore
- The **gentle hum of distant aircraft** can be curated as part of the **soundscape**, evoking life, movement, and continuity — unlike harsh urban noise
- The Seletar area is being positioned as a **creative, lifestyle, and aerospace hub** — wellness centre can become a **complementary public anchor**



Strengths

- Conserved colonial barrack with strong historical and architectural character.
- Lush landscape, natural light, and openness suitable for healing design.
- Peaceful, slightly secluded yet accessible — ideal for recovery spaces.
- Large, flexible floorplates that can be reprogrammed for new uses.
- Support natural comfort and tropical passive design.

S W

Weaknesses

- Aging structure: Requires careful conservation and upgrades for safety and accessibility.
- Limited vertical circulation: May need lifts or ramps to meet universal design standards.
- Lighting and services: Existing infrastructure not suited for modern needs.
- Weathering and moisture issues: Common in older colonial buildings in tropical climates.
- Conservation restrictions: Limits drastic structural changes or extensions.



Threats

- Adaptive reuse for wellness: Transform heritage into a healing environment promoting mental health.
- Community integration: Engage nearby residents, institutions, and healthcare organisations.
- Sustainable design showcase: Use passive cooling, daylighting, and biophilic design strategies.
- Education and awareness: Position as a pilot project for mental health and well-being in Singapore.
- Cultural revival: Celebrate history while reprogramming for modern, human-centric use.

T O

Opportunities

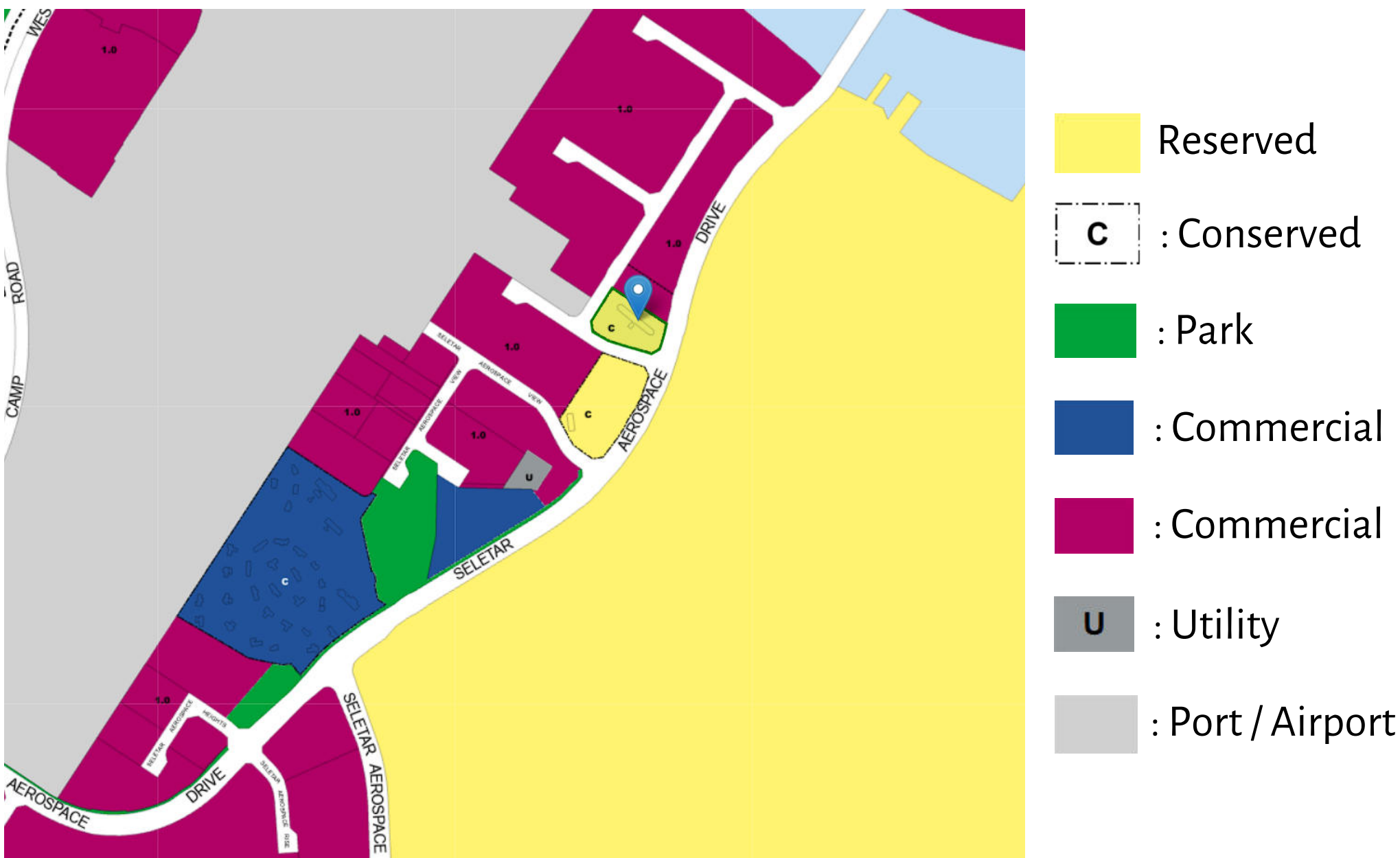
- High restoration cost: Heritage preservation can be expensive and time-consuming.
- Regulatory limitations: Stringent URA and conservation guidelines.
- Site access disruptions: Construction constraints within conserved areas.
- Urban development pressure: Risk of being overshadowed by newer developments.
- Climate and maintenance challenges: Long-term upkeep of materials and finishes in tropical weather.

FUTURE PLANNING

- 34 buildings in the former Seletar Air Base were conserved in 2014, the area will undergo **further development as an aerospace hub**
- **Blk 450 will become a significant landmark** for future generations to visit and learn about Singapore’s heritage

According to **URA Master Plan 2025**,

- the 138-ha Seletar East Industrial Estate are set aside for high value industries
- Emphasis on jobs, aesthetic & ecological integration, with a focus on the aviation industry
- No large-scale housing redevelopment
- Safeguard built heritage in the area
- Heritage sites to remain as anchored features within any possible large redevelopments in the future



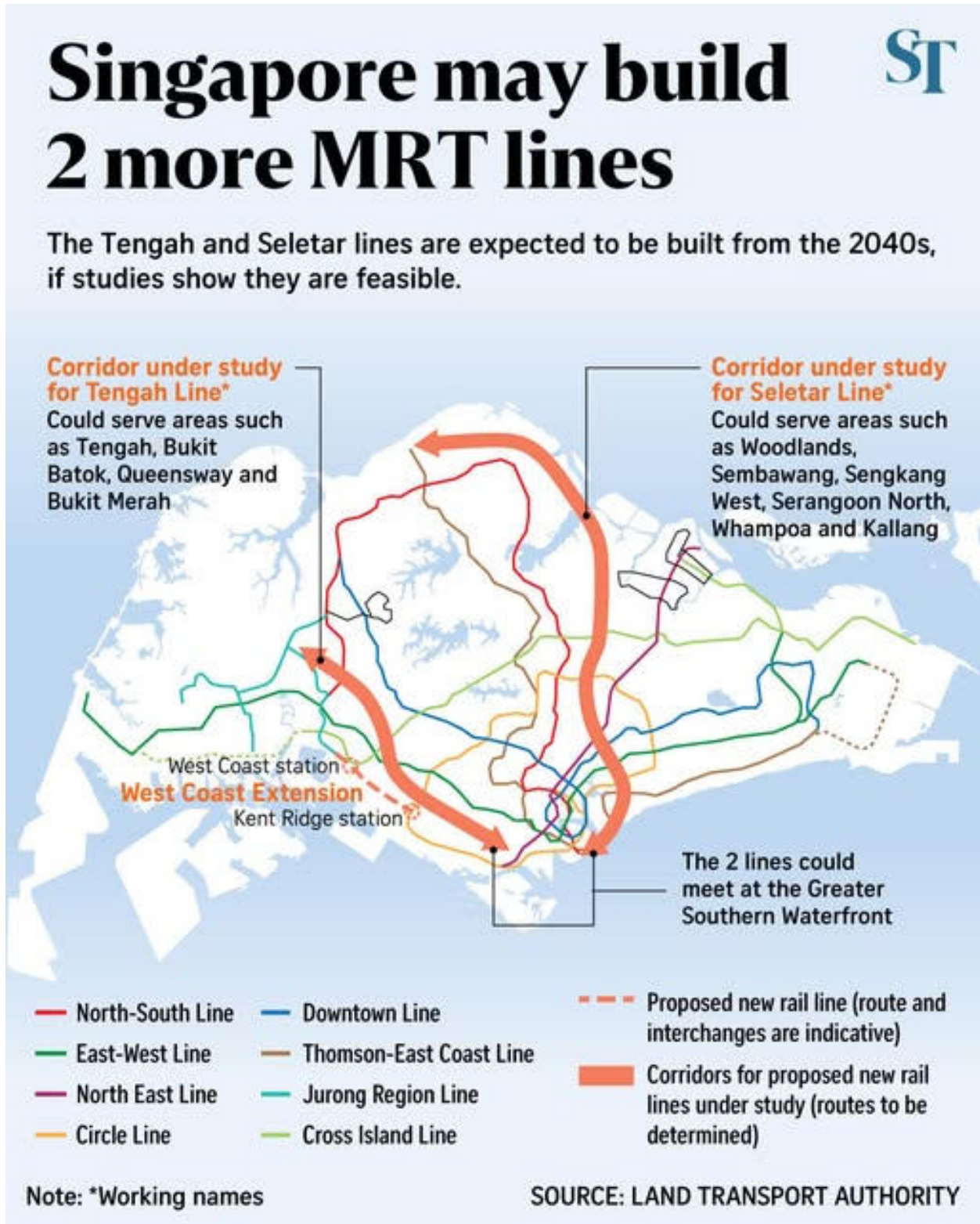
A new MRT line to serve Seletar undergoing studies. The **Seletar Line is a proposed MRT line currently undergoing feasibility studies, with potential completion by 2040s**. The line is tentatively planned to serve areas including Woodlands, Sembawang, Sengkang West, Serangoon North, Whampoa, and Kallang, possibly linking to the Greater Southern Waterfront.



Conserved spaces in Seletar redeveloped into recreational spaces



Expanded aviation hub in the Seletar Aerospace Park



Study of Seletar Line posted by Straits Times

URA CONSERVATION GUIDELINES

1. Core Conservation Principle: the “3R” Principle

- Can: You should retain as much of the original structure, architectural details, and material as possible. URA emphasises maximum Retention, sensitive Restoration, and careful Repair.
- Can (with conditions): Replacement is allowed only when absolutely necessary, e.g. for damaged or unsafe components. Even then, URA typically requires one-for-one replacement (same design, same material).
- Cannot: You generally should not completely reconstruct or replicate entire elements unless they are missing, because full reconstruction “goes against accepted international conservation practices.”

2. Structural Alterations & Strengthening

- Can: Strengthening the building structure (e.g., adding reinforcements) is allowed — but it must be done in a sympathetic, unobtrusive way. Use traditional techniques or materials where possible.
- Cannot: Major structural changes that significantly alter the building’s architectural character or spatial integrity must be carefully justified and designed. These require Conservation Permission.
- Cannot (without caution): Structural interventions that risk damaging the original fabric or adjacent conserved structures. URA warns against careless structural work that might cause settlement or vulnerabilities.

3. Additions, Extensions & Alterations

URA categorises A&A (Additions & Alterations) works into three categories, each with different levels of restriction: Category 1, 2, and 3.

Category 1 (High Impact)

- Works Included: Changes to roof profile (pitch, height), removal/addition of skylights, major façade changes (windows, doors), structural changes, large new extensions.
- Requirement: Must be submitted by a QP (Qualified Person, usually a Registered Architect), and detailed structural investigation + method statement + conservation plan required.
- Approval Needed: Conservation Permission from URA + Building Plan approval from BCA.

Category 2 (Moderate Impact)

- Works Included: Replacement of roof tiles, addition of non-load bearing shelters, airwell window changes, adding or removing internal stairs or lifts (but limited).
- Requirement: Submission by QP (Architect or Professional Engineer).
- Approval Needed: Yes, Conservation Permission.

Category 3 (Low Impact / Maintenance)

- Works Included: Localised maintenance or repairs (e.g., one-for-one roof tile replacement, repairing decorative features, localized door/window repair, adding/replacing security grills or canopies).
- Requirement: These are less strict; a Qualified Person isn’t always required. Owners or contractors can apply.
- Approval Needed: Yes, before starting work. After completion, URA will inspect before issuing a “Letter for Endorsement of Completed Works.”

4. Façade, Windows, Doors, and Architectural Features

- Original windows, doors, fanlights, vents, and decorative architectural elements should be retained and restored.
- For some conservation typologies, enclosing balconies or verandahs with fixed glazing is not allowed.
- New internal walls or partitions should not be placed immediately adjacent to original windows, doors, or vents — they should be set back so the original features remain visually legible.
- False ceilings should not obscure original high-level architectural features (cornices, ceiling-level vents, transoms). If ceilings are dropped, they should maintain a setback from these historic features.
- If replacing frames (e.g., metal window frames), they should be “of similar appearance.” For example, if original frames were mild steel, aluminum frames must mimic the original look (colour coating, profile) where allowed.
- Original decorative tiles (dado tiles) or ornamentation: retain if intact; if damaged, replace with matching tiles or patch with matching colour-cement.

5. Roof & Roof Extensions

- You may restore or repair the roof profile to the original. [Urban Redevelopment Authority](#)
- New rooftop structures (“jack roofs” or skylights) are allowed only under certain conditions, and because they are “key elements,” they fall under stricter review. [Urban Redevelopment Authority](#)
- In residential historic districts, rooftop additions may be allowed if setback criteria are met (e.g., minimum distance from street-facing elevations) so that they are not too visible. [Urban Redevelopment Authority](#)
- URA generally does not support building-integrated photovoltaic (BIPV) systems that radically change the appearance of the roof, unless they are evaluated on a case-by-case basis.

6. Murals

- Murals can be allowed on some gable walls (like end gable walls), but they should not obscure key architectural features (e.g., windows, decorative elements). [Urban Redevelopment Authority](#)
- The content of a mural should be appropriate to the character of the building and the area; it must not contain profanity or controversial subject matter. [Urban Redevelopment Authority](#)
- URA may consider the community context when approving murals.

7. Change of Use / Adaptive Reuse

- Can: URA allows adaptive reuse of conserved buildings, as long as the interventions respect the original building’s structure and character. [Urban Redevelopment Authority+1](#)
- When converting to a new use, the original building structure should be retained and strengthened rather than replaced. [Urban Redevelopment Authority](#)
- However, any internal alteration (partitioning, new rooms) must be carried out sensitively, so that key architectural and spatial characteristics are not lost

IMPORTANT IMPLICATIONS

1. Structural Interventions:

- When adding or modifying staircases, voids, or internal volumes, you'll likely fall under Category 1 or 2 works, because you're affecting "key elements" or spatial integrity.
- You must use sympathetic detailing and possibly retain or restore original beams, structural lines, or wall surfaces.

2. Interior Partitions:

- Be careful placing new walls or partitions: they should not abut or hide original windows, doors, or vents.
- Use setbacks to preserve the visibility and legibility of original features.

3. Ceilings & Levels:

- If you're dropping ceilings, make sure they're set back above or away from original decorative cornices or fanlights.
- For your voids and double volumes: this is allowed if done in a way that respects the building's character, but URA will scrutinize how much you're altering the "spatial integrity."

4. Roof / Skylights / Extensions:

- Any addition on the roof (new rooftop structures) must be carefully justified. You'll need Conservation Permission.

5. Windows & Doors:

- If you want to increase transparency (e.g., make windows larger, or change window types), you must retain original proportions / materials or use matching replacements.
- Avoid enclosing verandahs or balconies with permanent glazing that changes the character.

6. Materials & Finishes:

- Use materials that reflect or echo the original ones where possible for restored parts.
- For new interventions, choose finishes that don't greatly contrast or clash with the conserved elements.

7. Murals / Decorative Interventions:

- If you want to use mural art or decorative feature walls (e.g., for healing zones), ensure they don't obscure or paint over original facades' important features.

8. Maintenance & Documentation:

- Before any design or construction, conduct detailed historical research and documentation. This supports faithful restoration.
- Document every stage of your intervention (technical, construction) — URA expects good documentation.

CHANGES IN AREAS OF USE

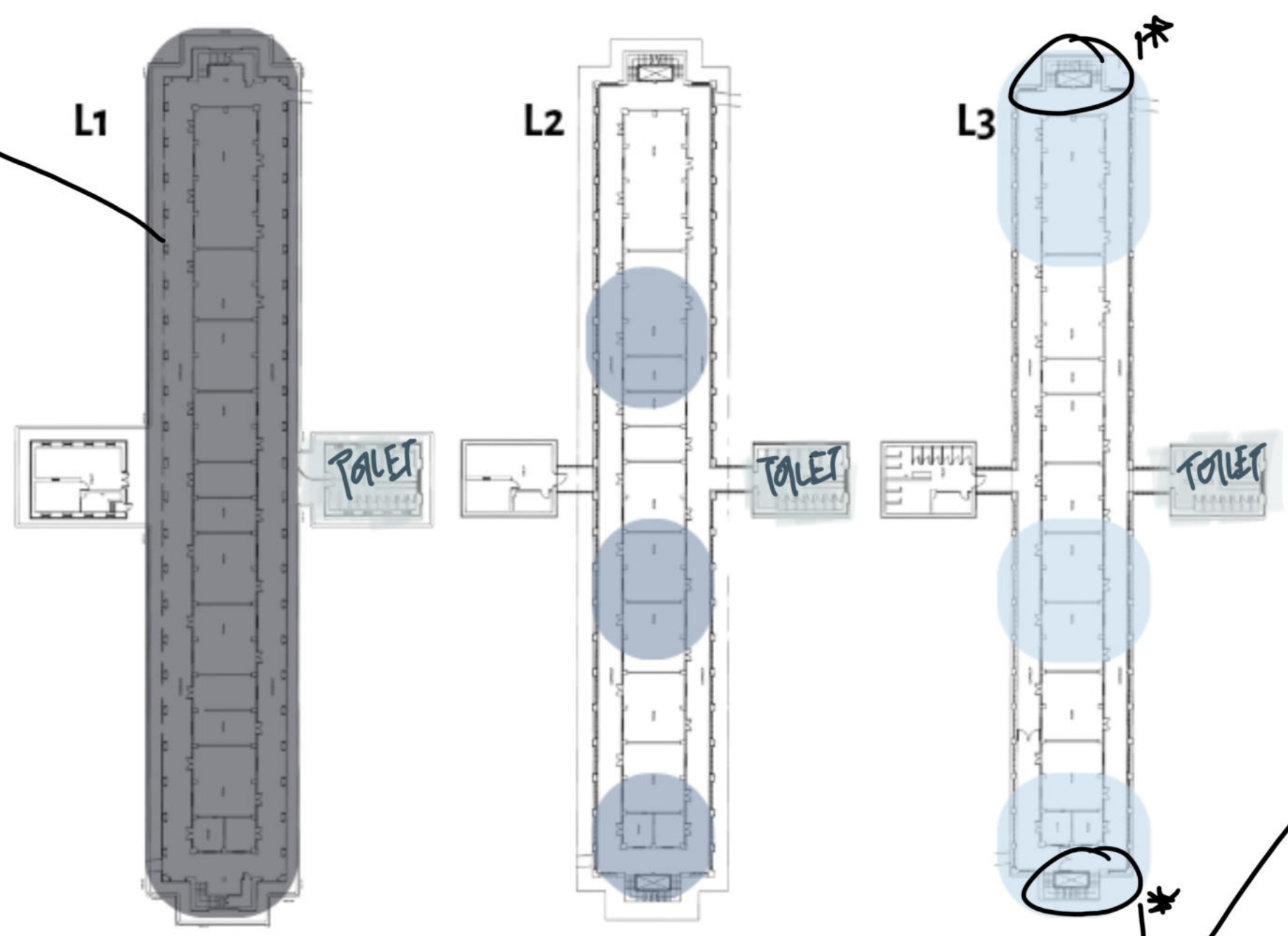
- L1 IS MOST SOCIAL, OPEN, ACTIVE & CONNECTIVE
- ★ COMMUNAL ENERGY STRONGEST
 - ★ OUTWARD-LOOKING
 - GENEROUS VOLUMES
 - CLEAR VISIBILITY & WAYFINDING
 - WARM & ROBUST MATERIALS
 - COMMUNITY SPACE FOR EVENTS???
- ★ GROUNDING LAYER OF THE BUILDING'S INTENTIONS
- BRIGHT NATURAL LIGHT
 - WIDENING & NARROWING TO CREATE SOCIAL POCKETS
 - CLEAR CONNECTION TO SURROUNDINGS

- L2 CONDUCIVE FOR ACTIVITY & CREATIVITY
- ★ CREATIVE FOCUS
 - ★ SELF EXPRESSION WITHIN GROUPS
 - SOFT ACOUSTICS
 - LOWER CEILING HEIGHTS/ FRAMED VOLUMES FOR INTIMACY
 - SHORTER STRETCHES OF SPACE
- ★ THERAPEUTIC ACTIVITY
- ★ INDIVIDUALITY DEVELOPMENT
 - DIFFUSED LIGHTS
 - TOWARDS CALMER EXTERIOR VIEWS
 - SEMI-OPEN STUDIO-LIKE

FACING AIRPORT

- ENTRANCE/ ORIENTATION
- WELCOMING NODES
 - WIDE & OPEN ENTRANCE
 - NO VISUAL CLUSTERS

THE HEART OF THE BUILDING WHICH TIES ALL CIRCULATION IN L1 & ALL THE LEVELS



①★ STAIRCASES

- ↓ JOURNEY UPWARD
- ↓ CLIMB SLOWS USERS DOWN
- ↓ OPPORTUNITY TO SLOW CIRCULATION

- SOFT ACOUSTIC EXPERIENCE
- TIMBER HANDRAILS FORM WARMTH
- CLEAR LINES, CLEAR CIRCULATION
- GENTLE LIGHT
- EXISTING STRUCTURE CREATE A FRAME FOR THE VAST VIEWS

L3 CONDUCIVE FOR SOLITUDE INTROSPECTION & DEEP EMOTIONAL RESTORATION

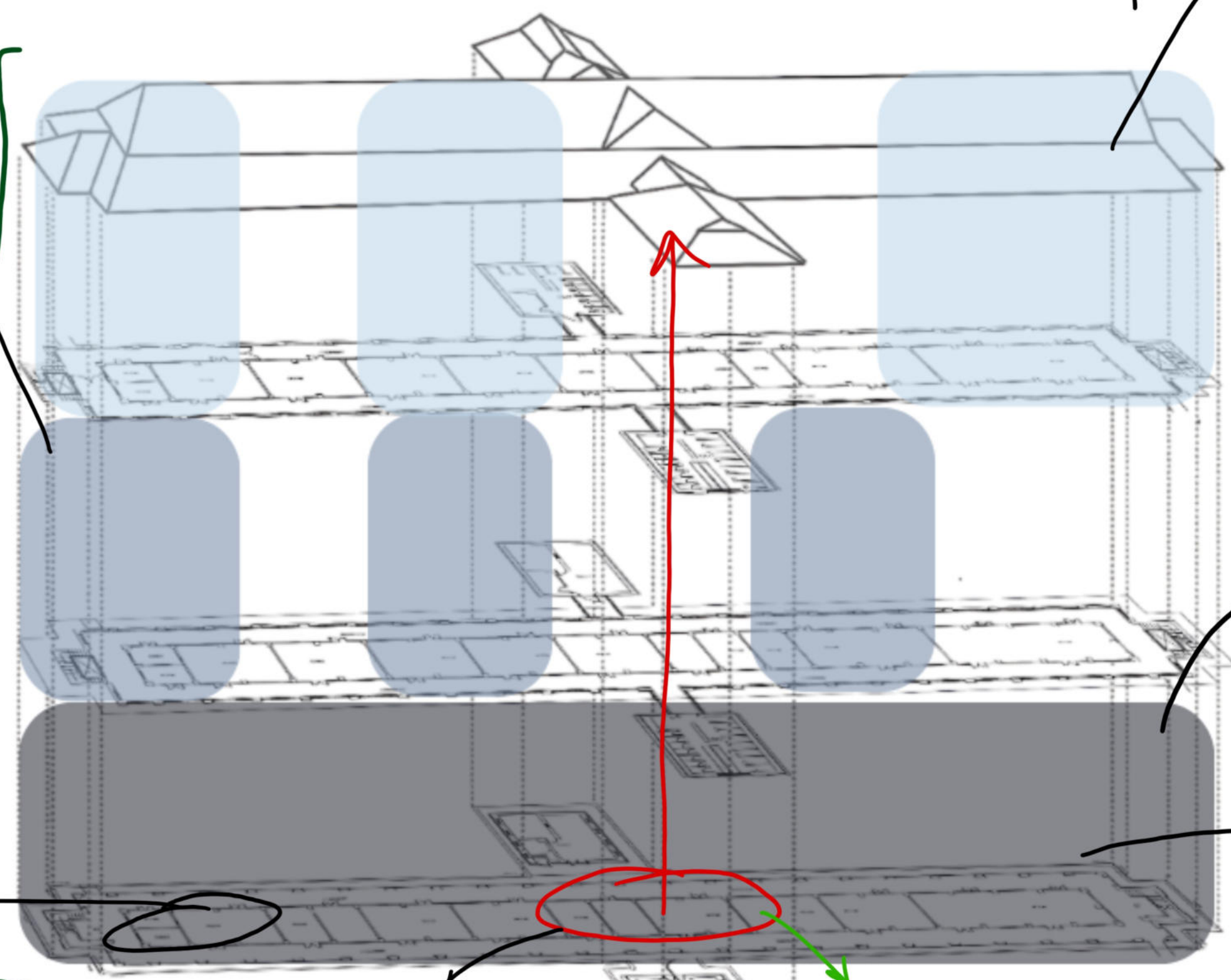
- ★ MIN. SOCIAL INTERACTION
 - ★ CONNECTION WITH NATURE & SKY
 - INTIMATE SCALE
 - SOFT DIFFUSED NATURAL LIGHT & ART. LIGHT
 - LIGHT TOUCH OF OUTDOOR TERRACES FOR PRIVATE CONT.
- ★ MAX. PRIVACY
- ★ FINDING INNER FREEDOM
 - ★ GENTLE, CONTEMPLATIVE MOVEMENT
 - ELEVATED VIEWS
 - MUTE, CALMING COLOUR PALETTE
 - MIN. HAR SURFACES
 - SUBTLE WAY FINDING "SHALL RETREATS"
 - NOOKS/PODS/ACLOVES
 - GENTLE CORRIDORS & CIRCULATION GUIDES

USE LONG CORRIDORS AS A "SOCIAL SPINE"

- SEATING ACLOVES
- DISPLAY NICHEs
- PLANTER RECESSES
- A STROLL SPACE
- SOFT INFORMAL CONVERSATIONS
- CLEAR NAVIGATION

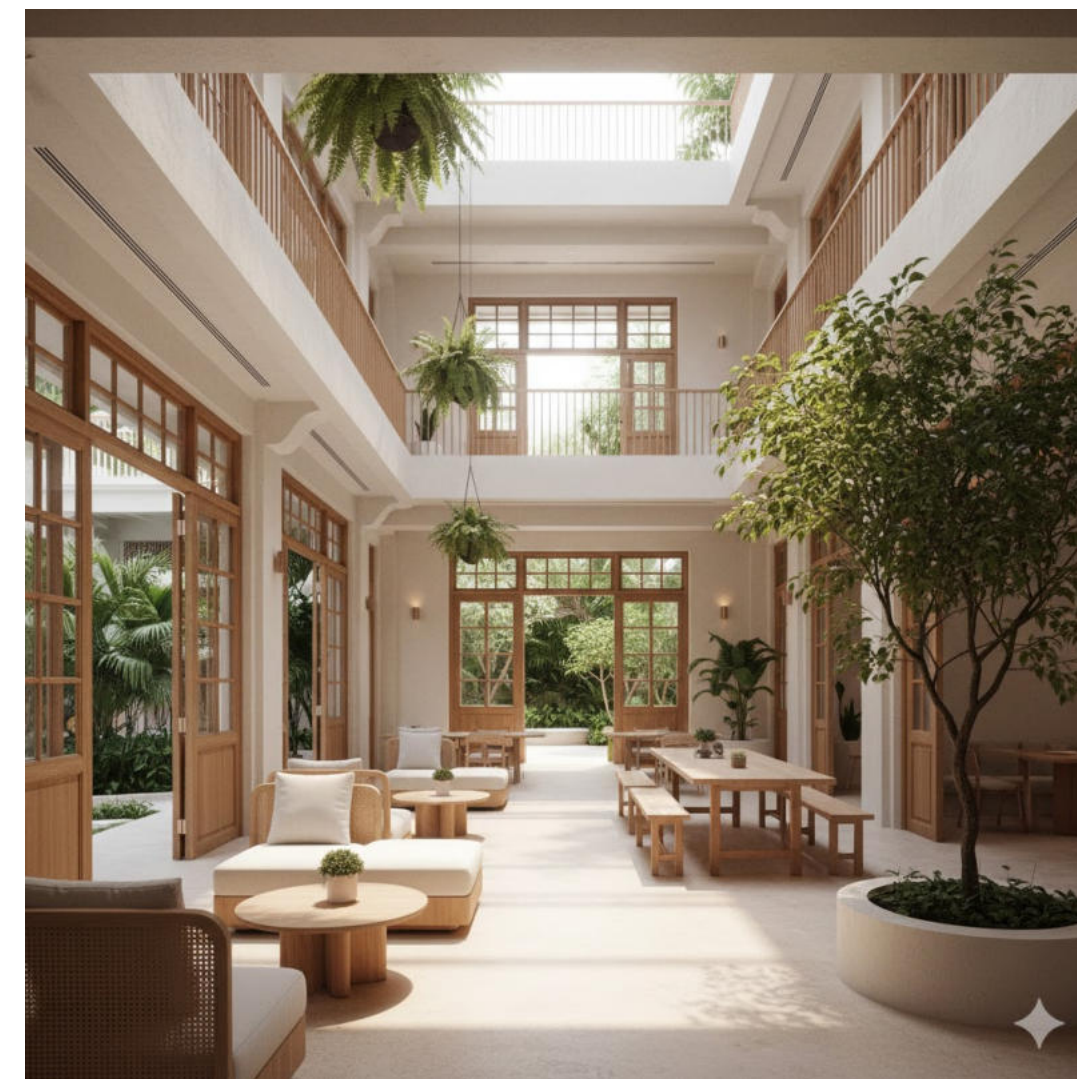
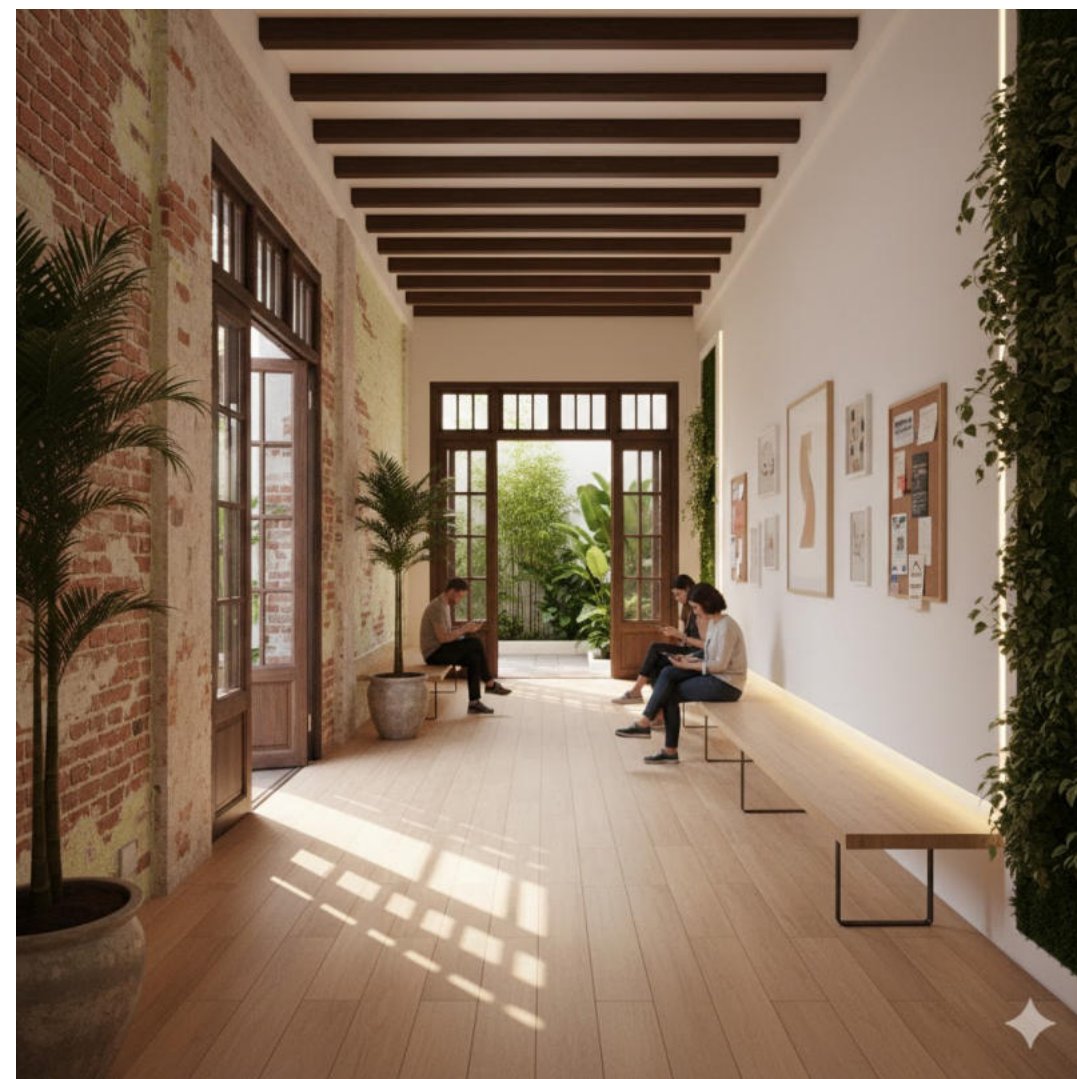
L1 COMMUNAL SPACES

- OPENINGS & LARGE WINDOWS
- VERTICAL VOIDS
- SOFT WARM LIGHTING
- NATURAL VENTILATION
- WARM TONES & SOFT SPACES
- LAYERED LIGHTING



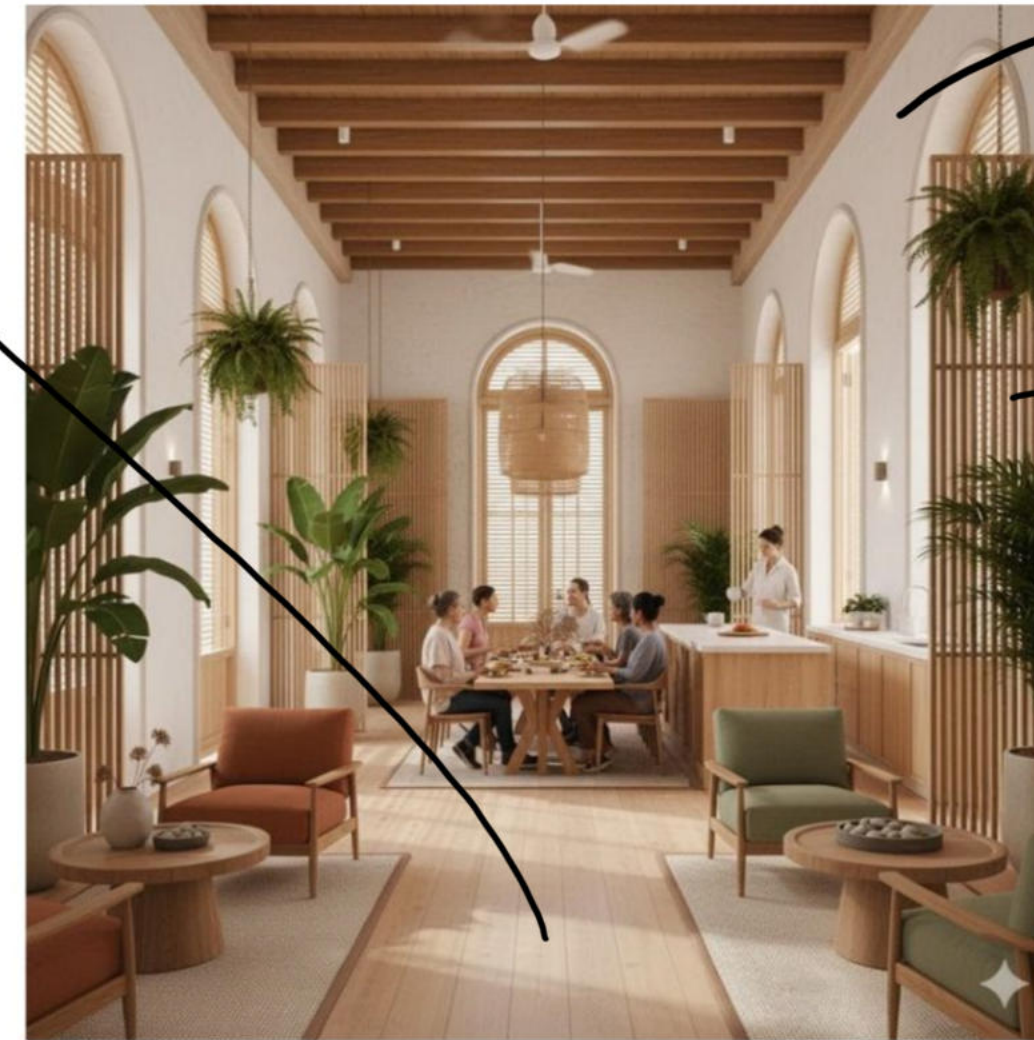
PERFORMANCE STAGE???

AI IMAGES FOR POSSIBLE INTERIOR CONCEPTS



MOODBOARD

SOFT INDIRECT LIGHTING
TO REVEAL TEXTURE OF
ORIGINAL SURFACES



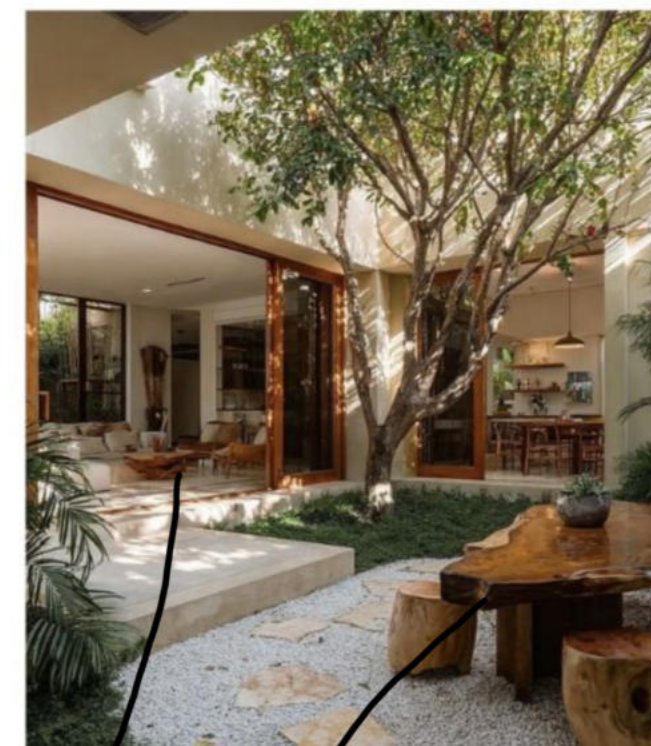
SOFT MATERIALS:
- TIMBER
- FABRIC
-

THIN TIMBER/FELT LININGS
APPLIED WITHOUT DAMAGING
ORIGINAL SURFACES



SEMI-CLOSED COZY
SPACES THAT IS COMFORTABLE
BUT NOT OVERSTIMULATING

CORNERS & NOOK



VIEWS INTO TREES & FOLIAGE

OPEN OPTIONS FOR
ACTIVITIES/SEATING/LOCATIONS

ALLOWING VISIBILITY
& LITTLE CROWDING

LONG CORRIDORS BECOME
"LIGHT GALLERIES"

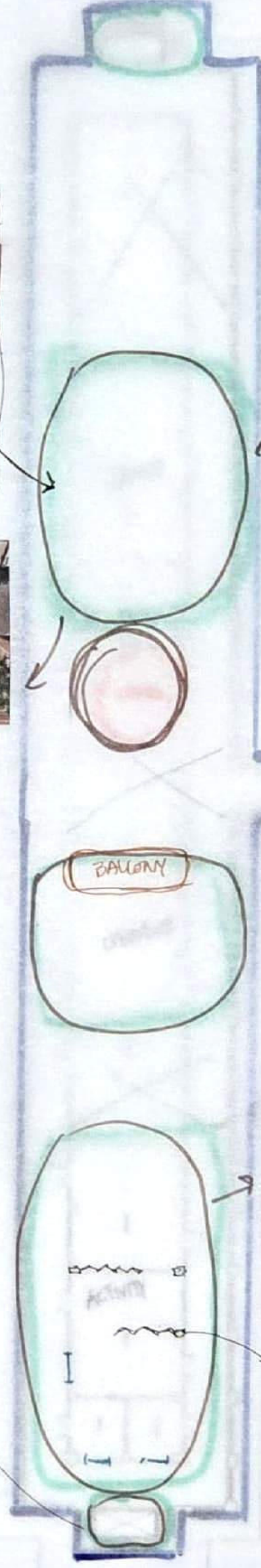
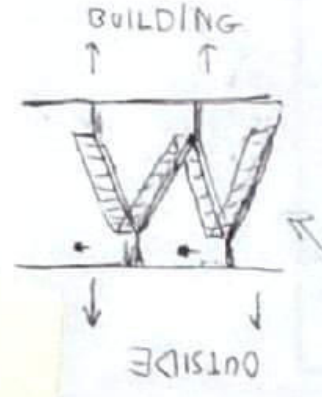
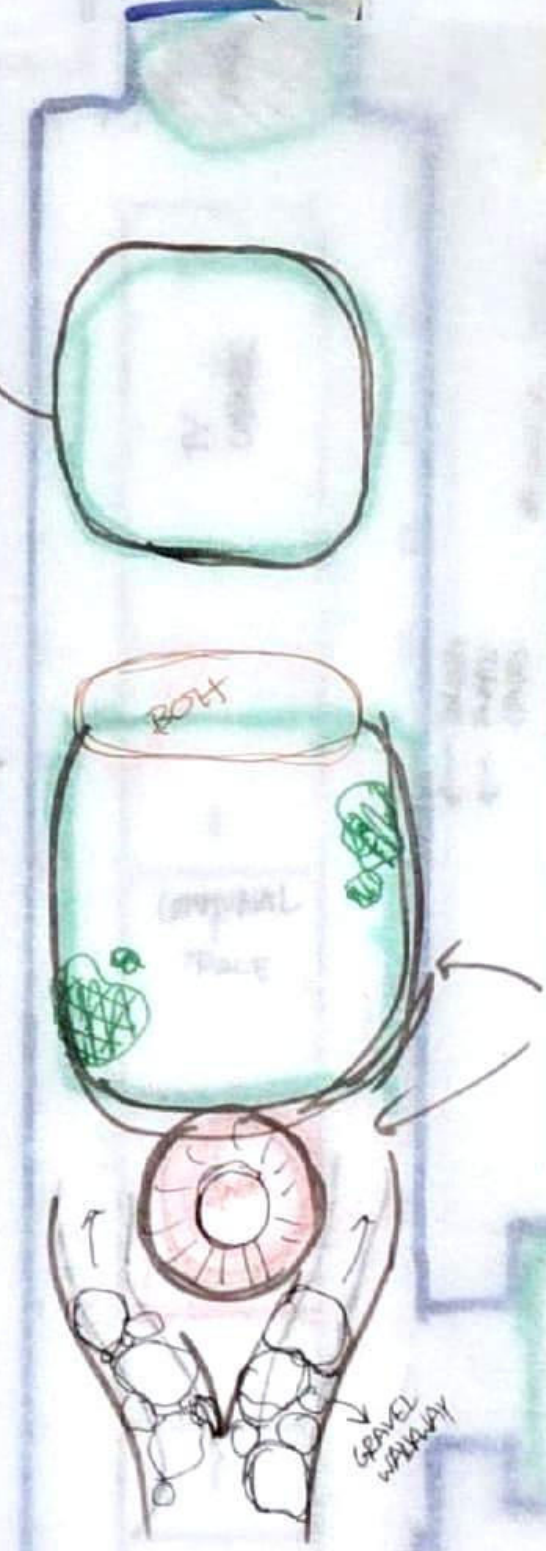
USING VOIDS TO DEFINE
SPATIAL SOCIAL SCALE



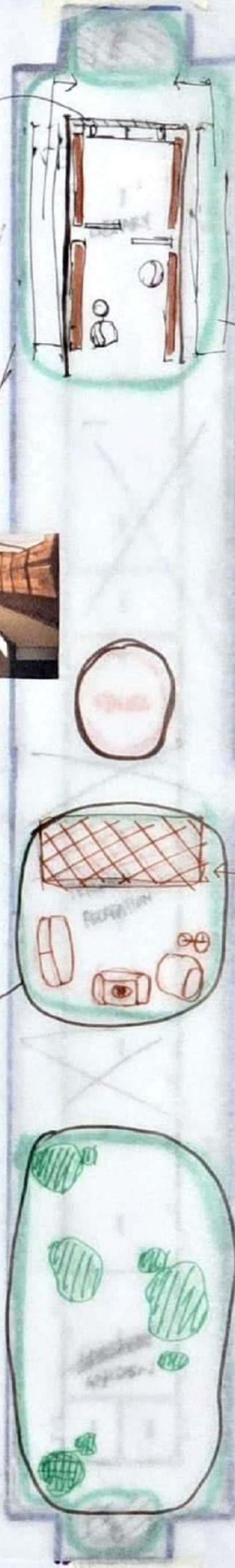
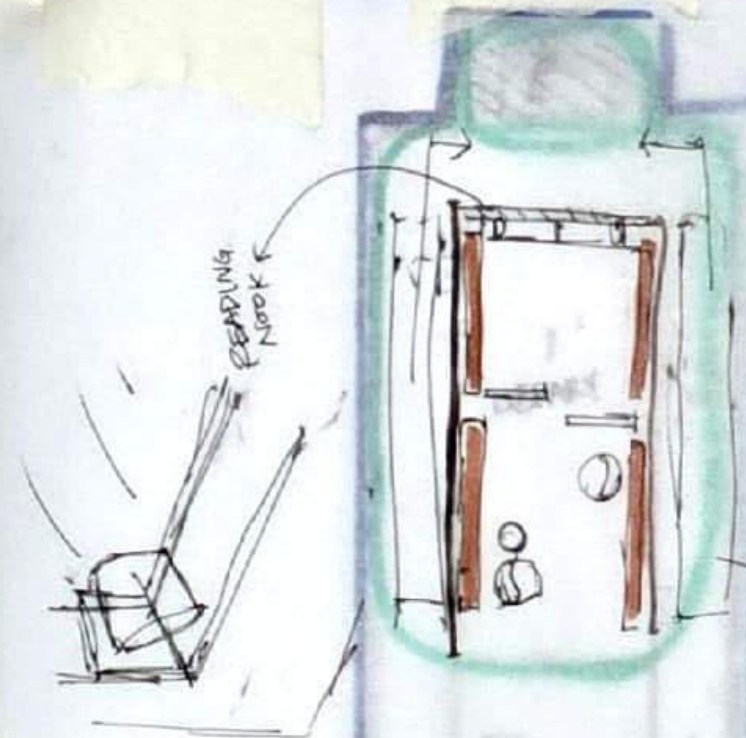
WORK WITH THE
BUILDING'S GEOMETRY
RATHER THAN CHANGING IT

MUTED COLOURS
THAT ARE NOT
STIMULATING

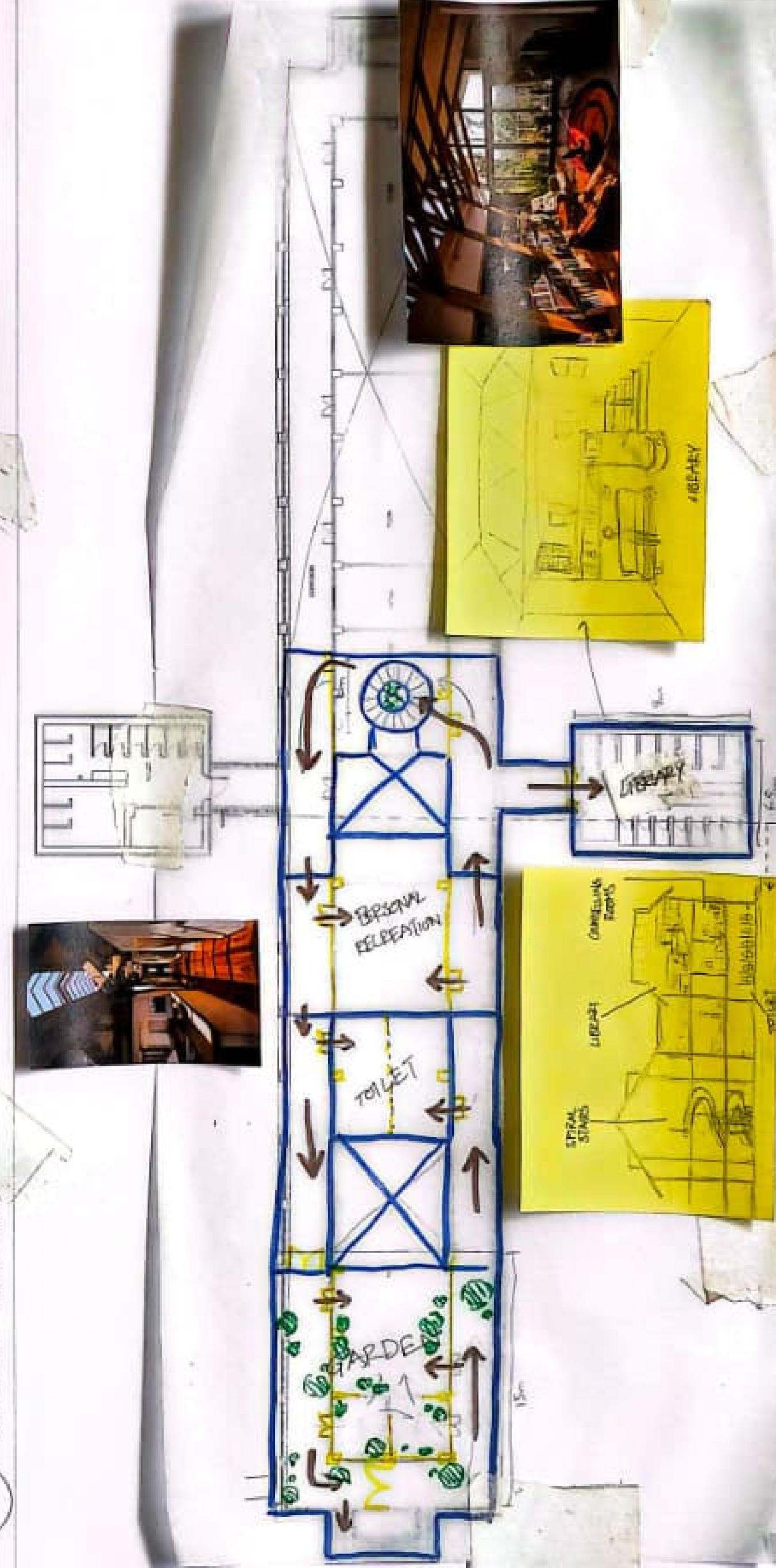
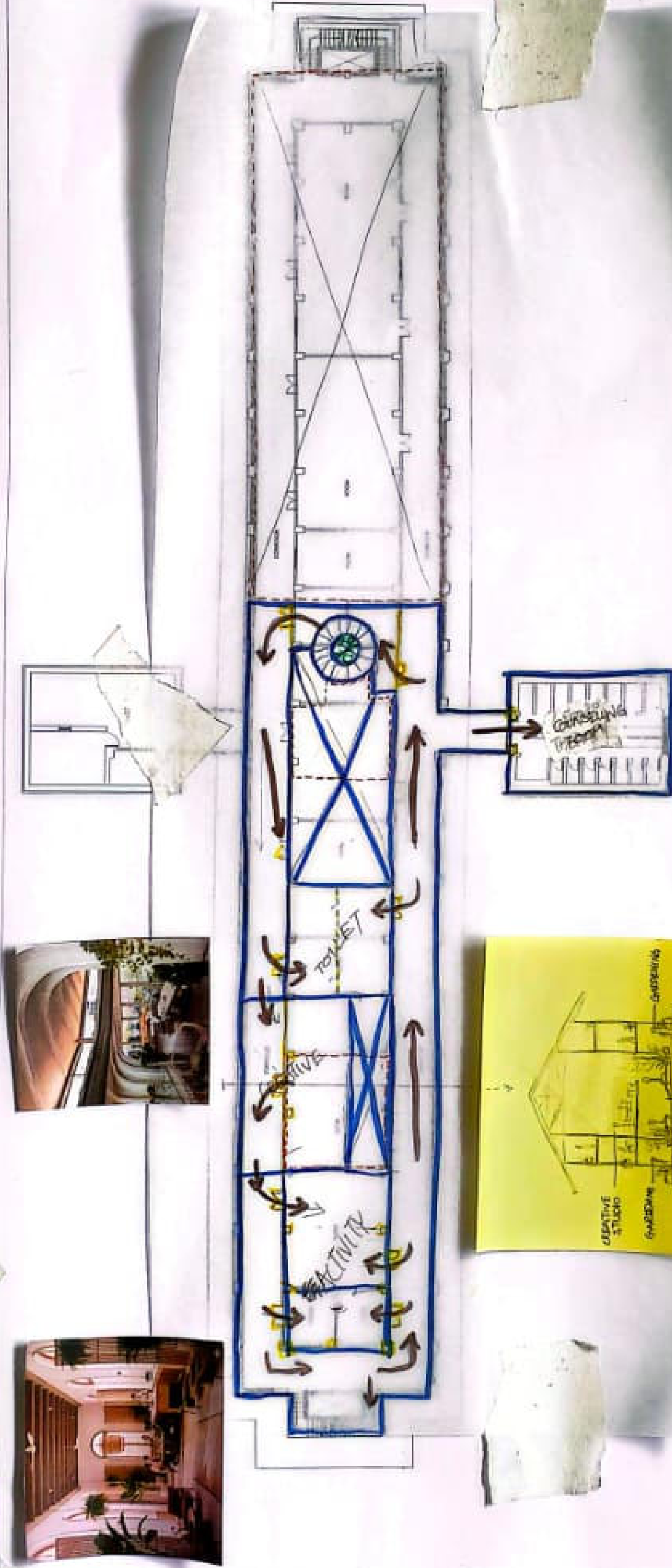
- SOFT BEIGES
- SAND
- WHITE OAK
- PALE SAGE
- MIST GREY
- MINERAL PINK



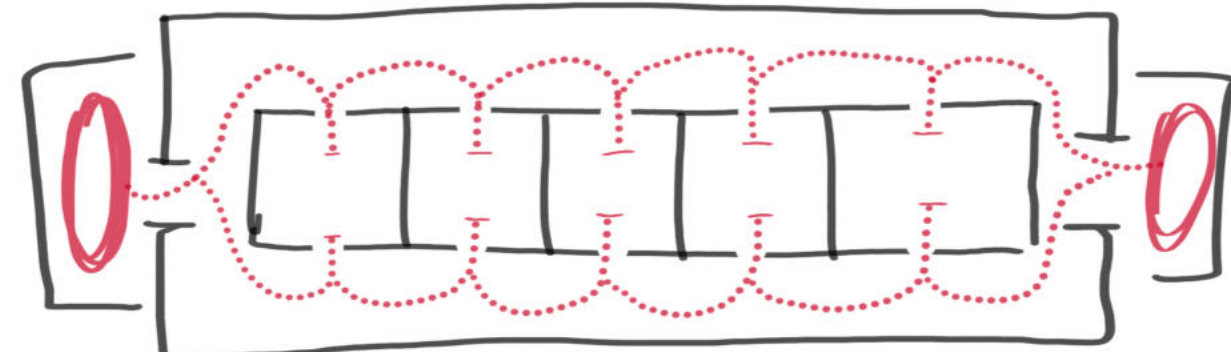
2nd Storey
Scale 1:200 1306 73 mm



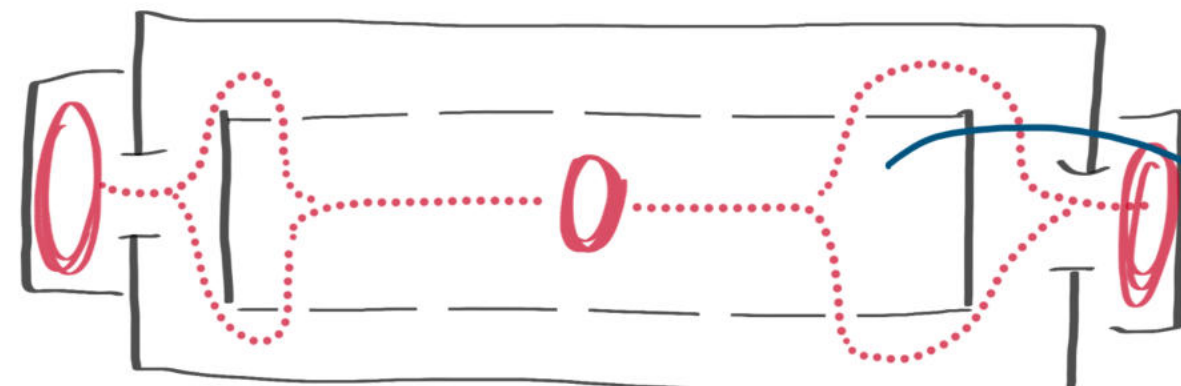
3rd Storey
Scale 1:200



CONCEPT DIAGRAM

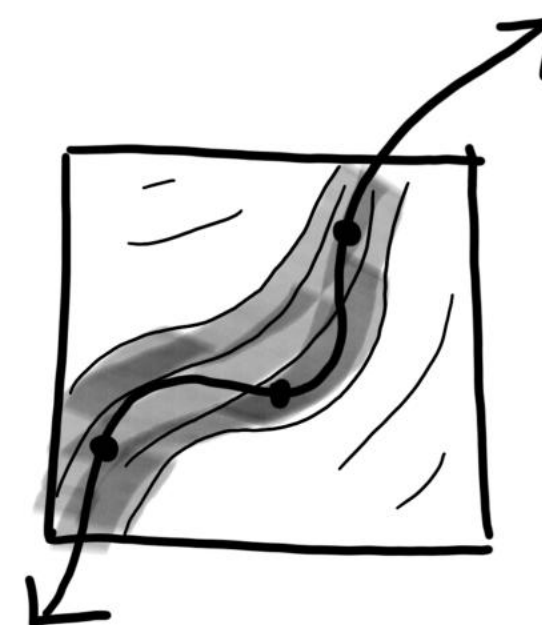


↳ CIRCULATION OF EXISTING BUILDING

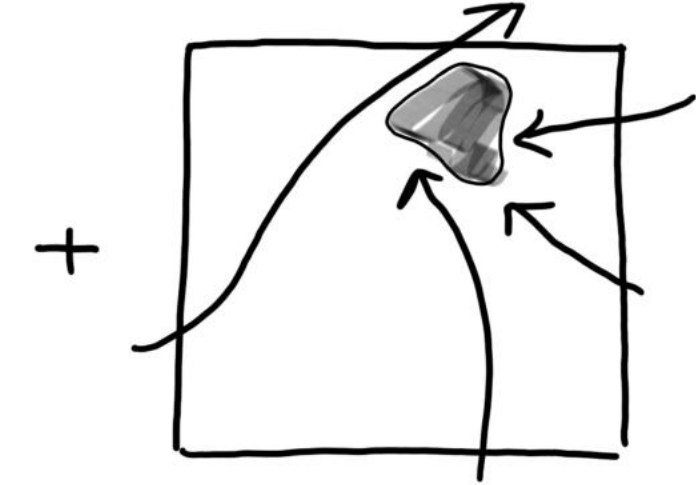
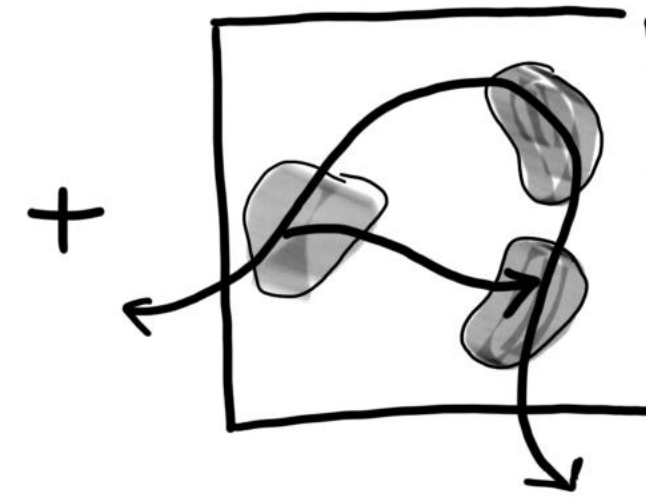


↳ INTENDED CIRCULATION OF BUILDING

OPEN UP THE ROOMS TO BREAK FREE THE RIGIDNESS OF THE BUILDING'S INTERIOR



SEQUENCE

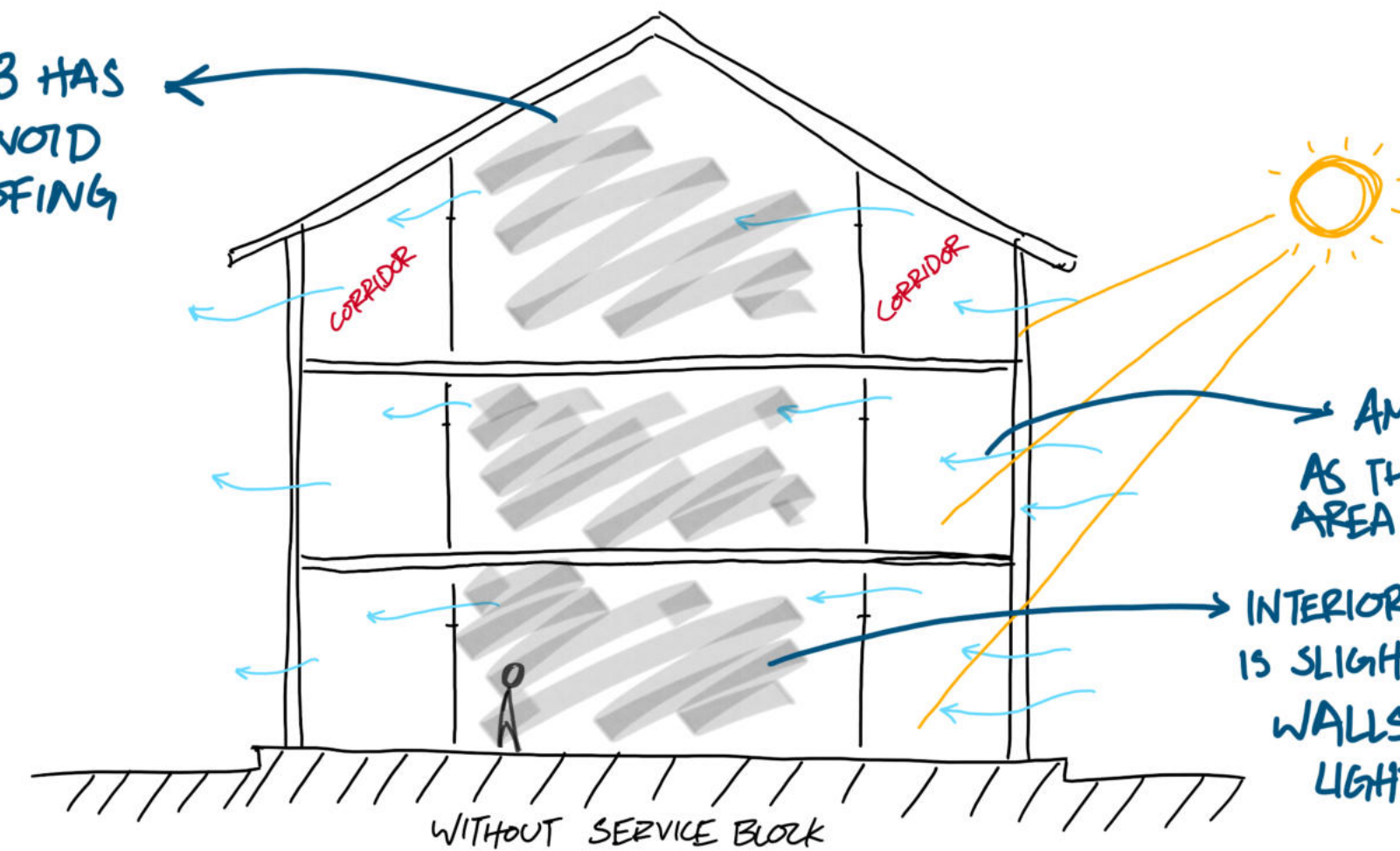


FOCAL POINT

↳ ALLOW USERS TO JOURNEY THROUGH THE SPACE WHILE HAVING A GROUNDING FACTOR OF THE DESTINATION

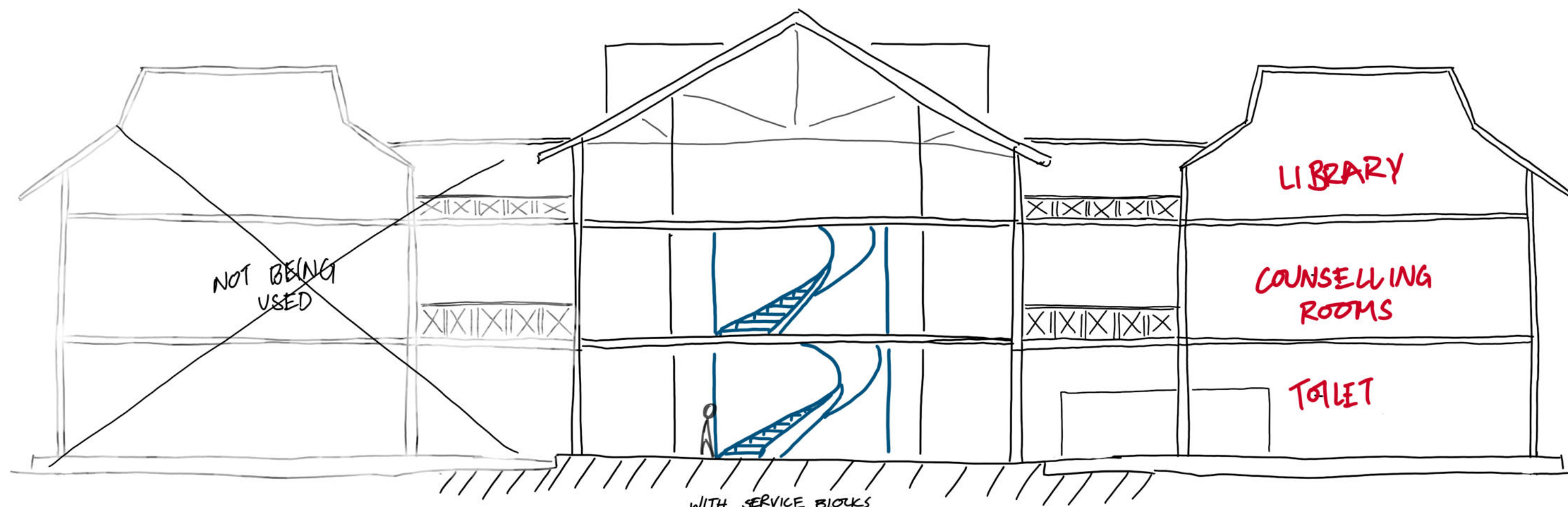
- WORKS WITH THE EXISTING LINEAR FORM & CIRCULATION OF THE BUILDING

L3 HAS BIGGEST VOID DUE TO ROOFING



AMPLE NATURAL VENTILATION AS THERE'S MUCH WIND IN THE AREA & WALL HAS VENT. OPENING

INTERIOR OF BUILDING IS SLIGHTLY DARK AS THE WALLS BLOCK NATURAL LIGHT FROM COMING IN



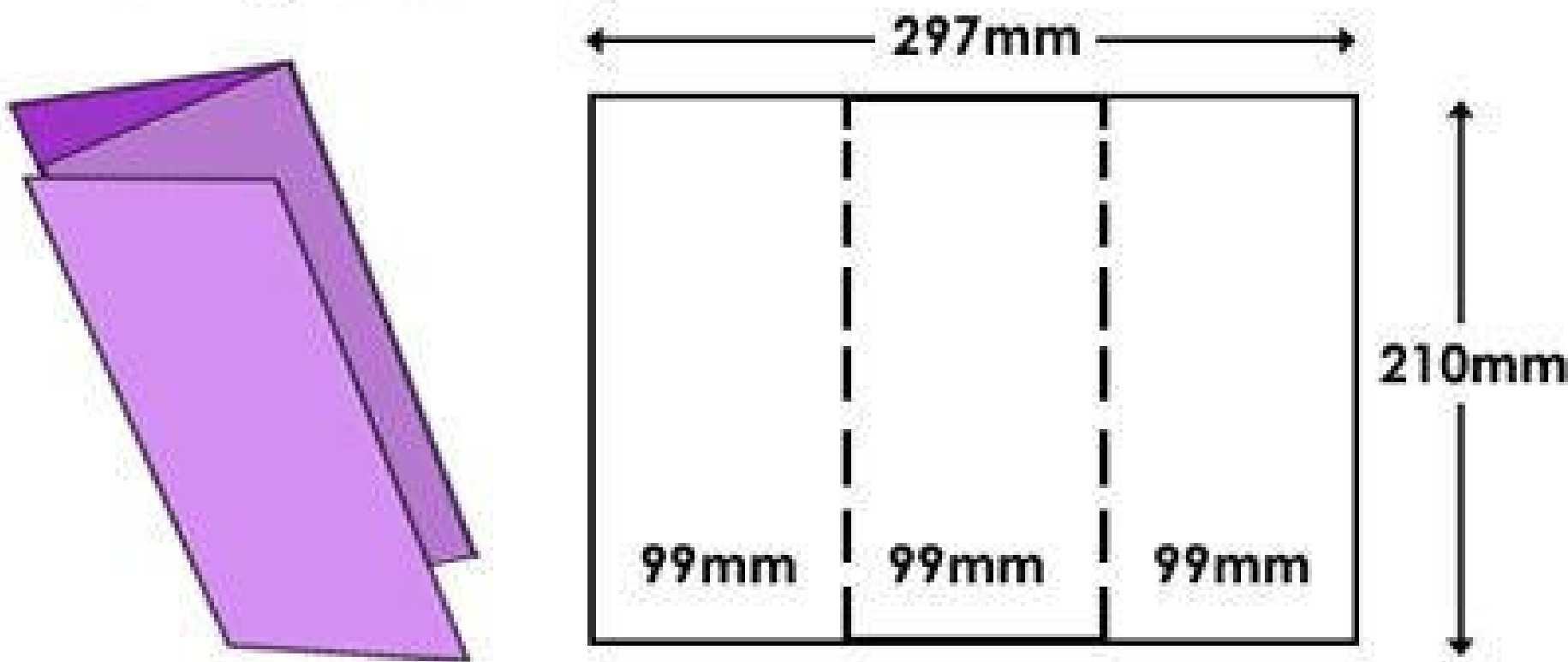
WITH SERVICE BLOCKS

OCCUPIED

BROCHURE DESIGN



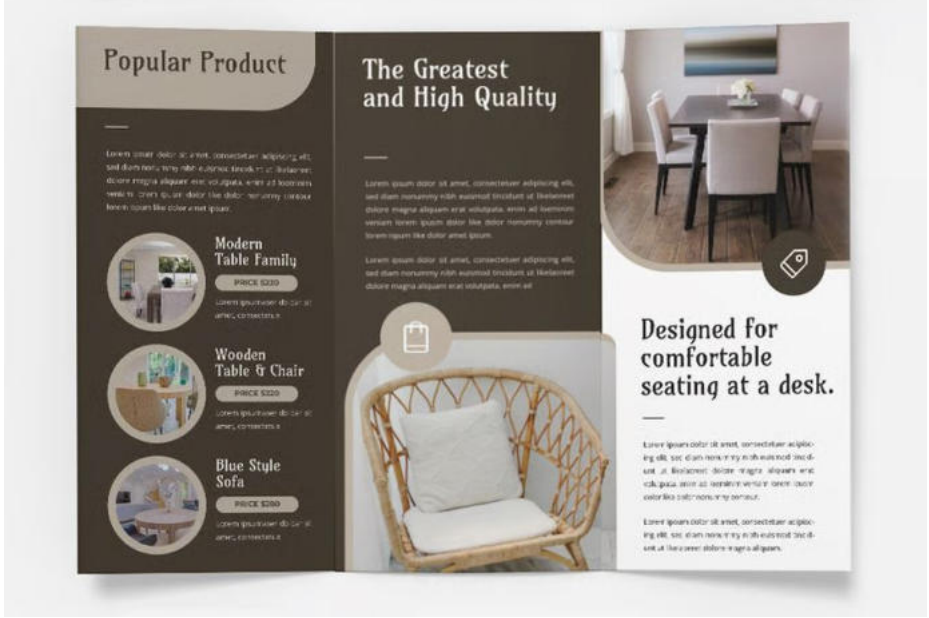
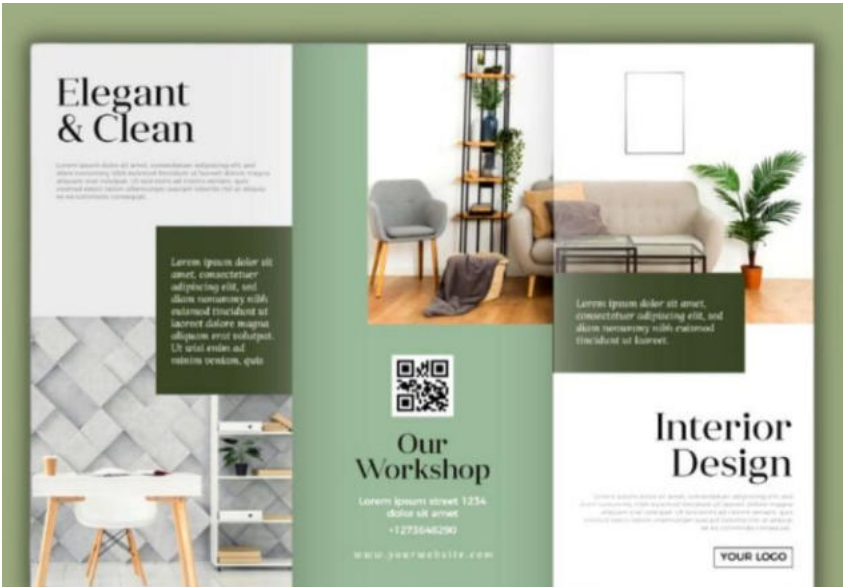
Z FOLD (concertina)



WELLNESS BROCHURE



INTERIOR DESIGN BROCHURE



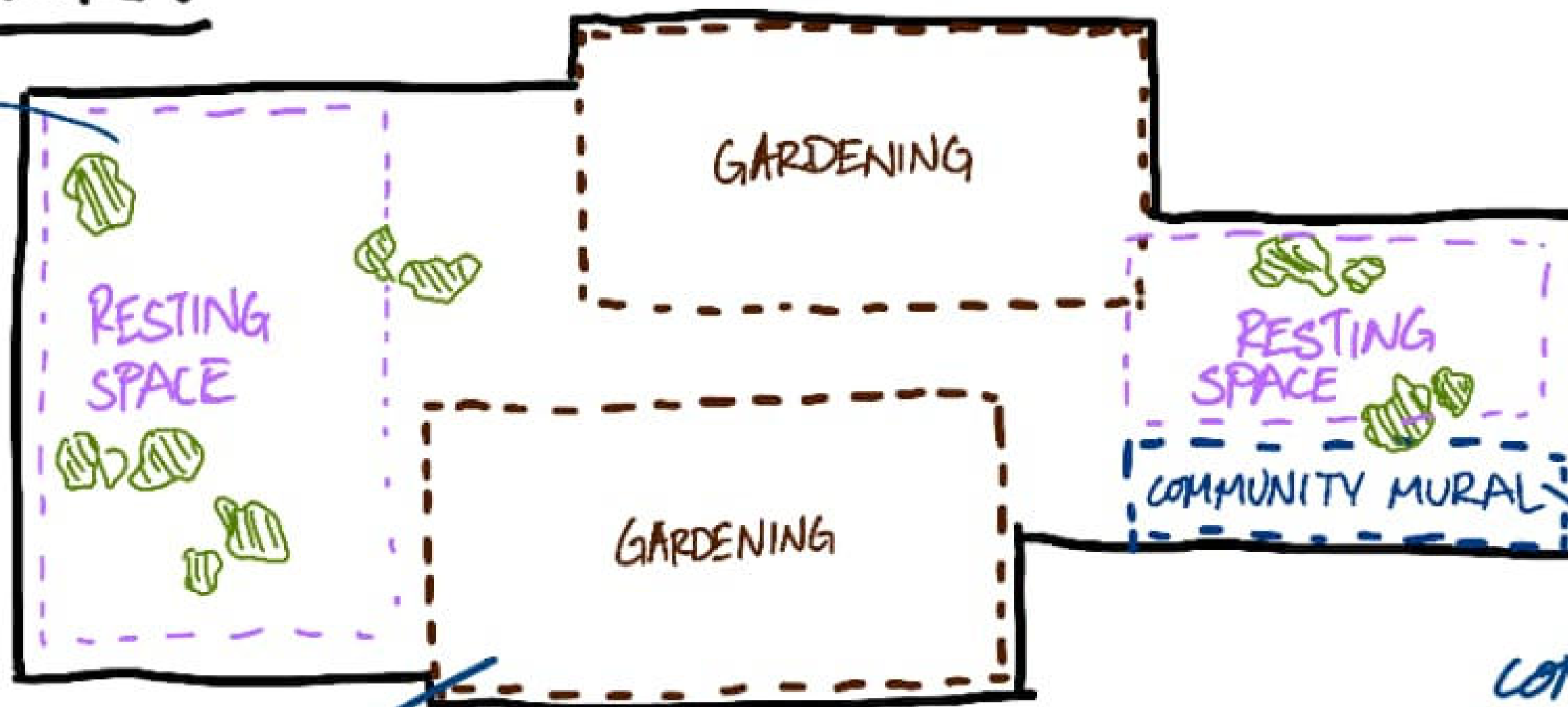
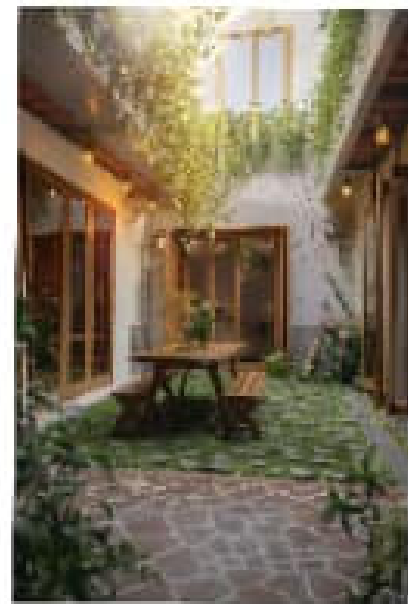
COMMUNAL GARDEN

RESTING SPACE



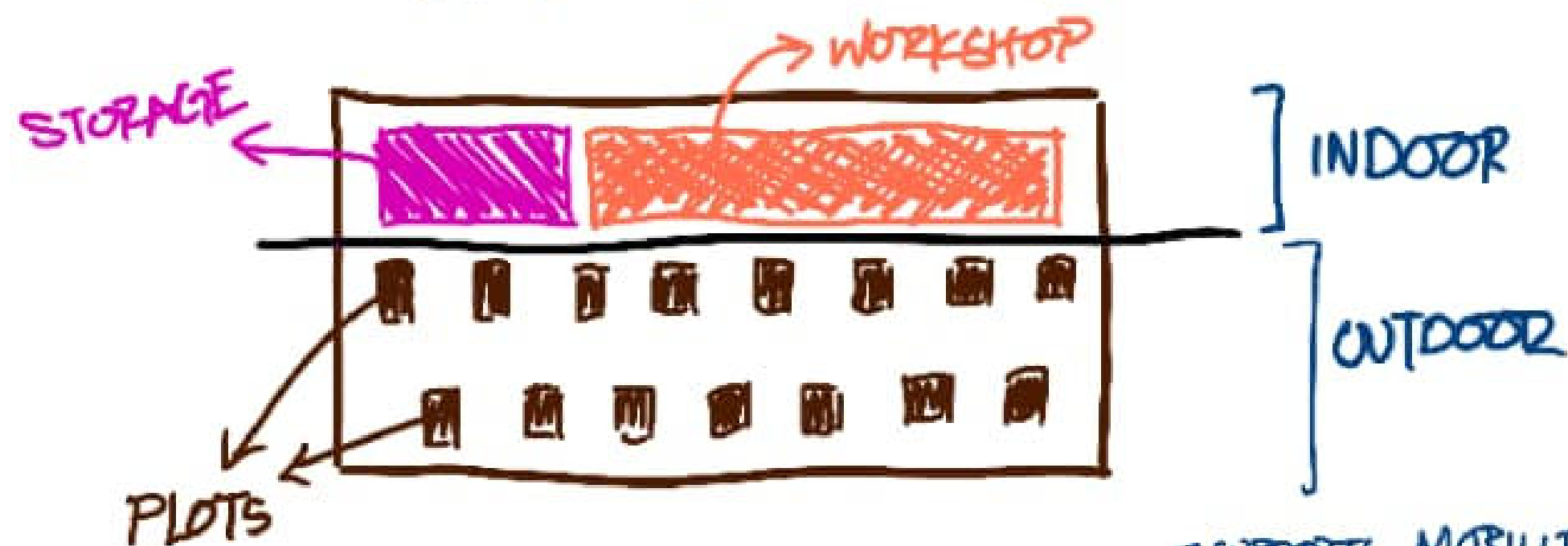
★ DYNAMIC SEATING SPACES IN A GARDEN

★ AREAS THAT ENCOURAGES RELAX & INFORMAL CONVERSATIONS



COMMUNITY MURAL

COMMUNITY GARDEN



★ USERS CAN HAVE THEIR OWN PLOTS

★ GARDENING WORKSHOPS AS A THERAPEUTIC ACTIVITY

★ HERBS & VEGGIES GROWN CAN BE USED FOR COOKING WORKSHOP AT COMMUNAL KITCHEN

SUPPORTS MOBILITY

REDUCES STRESS & ANXIETY

MINDFULNESS & SENSORY STIMULATION

ENCOURAGES TEAMWORK & CONVERSATION



PLOTS FOR DIFFERENT HERBS & VEGGIES

WALL PAINTINGS



BANNER ART

ADDITIONAL CANVAS WALL

EXISTING BUILDING WALL

★ REPRESENTS EVERYONE/COMMUNITY, NOT A SINGLE ARTIST
★ CREATES A VISUAL STORY OF COMMUNITY EVOLUTION
★ BECOMES A REASON TO VISIT THE AREA

SENSE OF BELONGING

COLLABORATION BETWEEN PEOPLE

EXPRESS THINKING & CREATIVITY

KEEP SPACE VISUALING INTERESTING



GREENHOUSE-LIKE CONCEPT

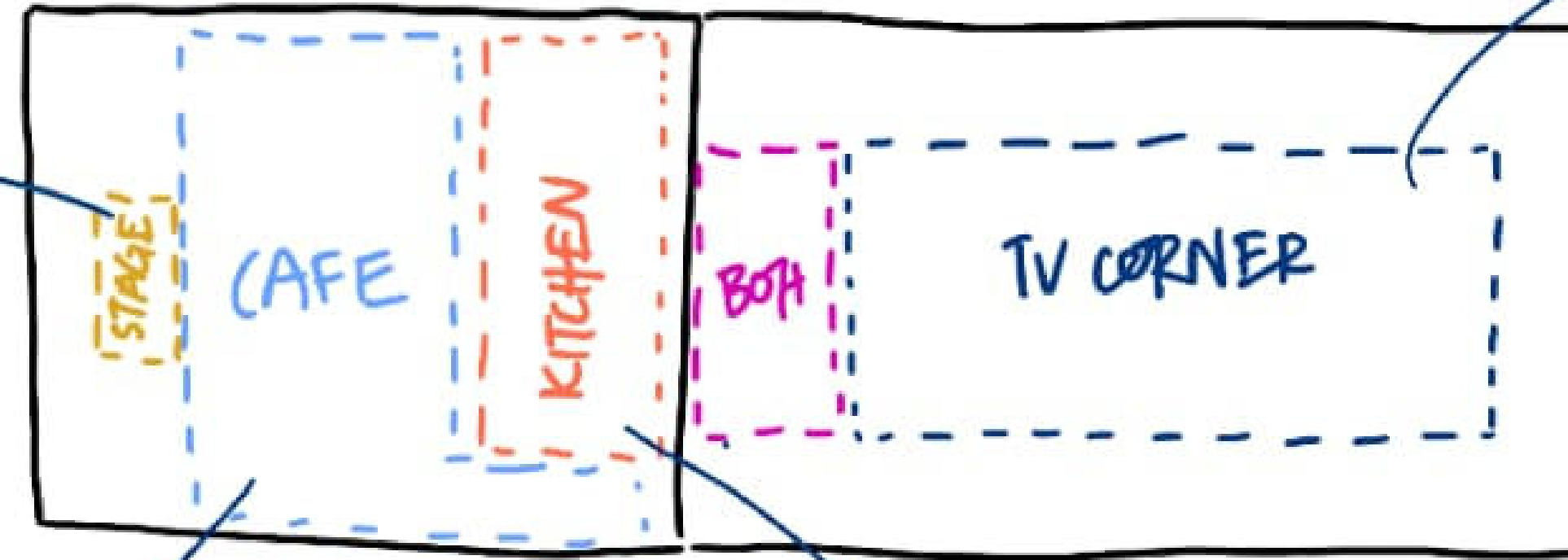
VINTAGE LIGHTING

WORKSHOPPING AREA

DIFFERENT TYPES OF PLOTS

GRAVEL PATHS IN A DYNAMIC WAY

COMMUNAL CAFE/KITCHEN

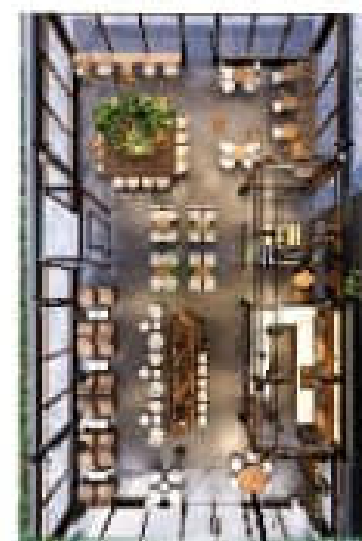


- ★ BALANCES STIMULATION & COMFORT
- ★ SUPPORTS ROUTINE & NORMALCY



- ★ SHARED CREATIVE EXPERIENCE
- ★ WAY TO WORK ON SELF-CONFIDENCE
- ★ IN-HOUSE ENTERTAINMENT GIVES A SENSE OF BELONGING

COMMUNAL CAFE



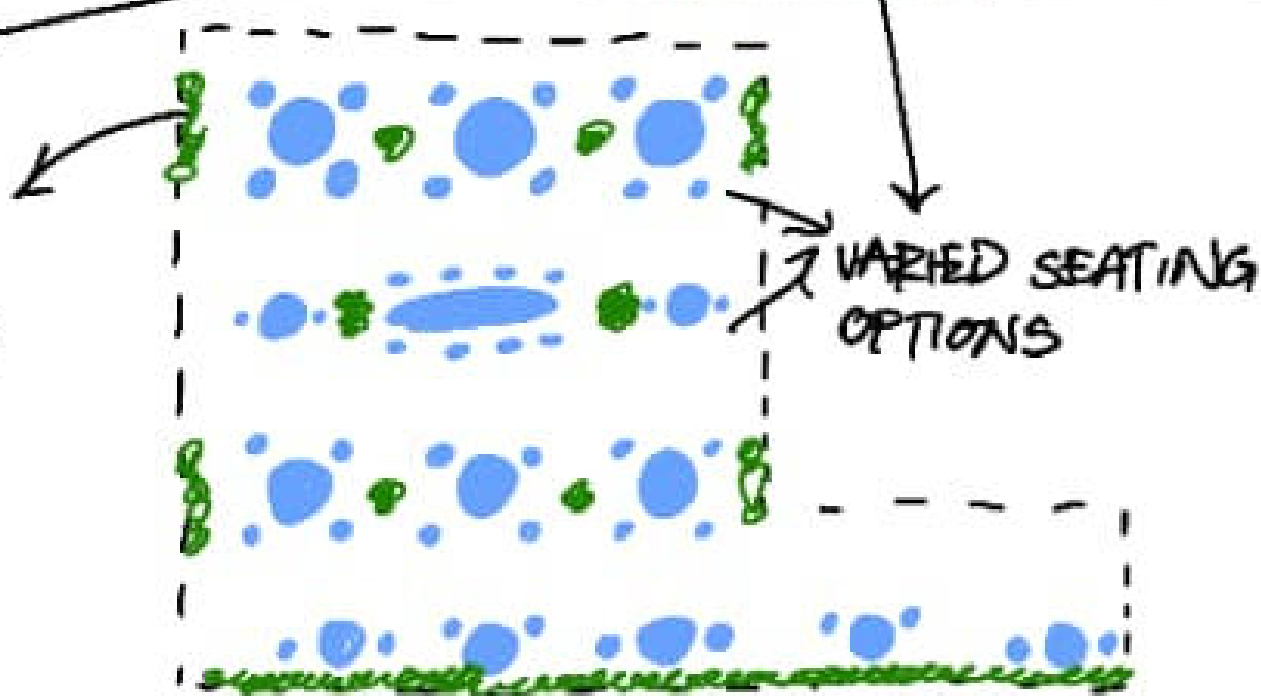
PATIO/CORRIDOR SCENE



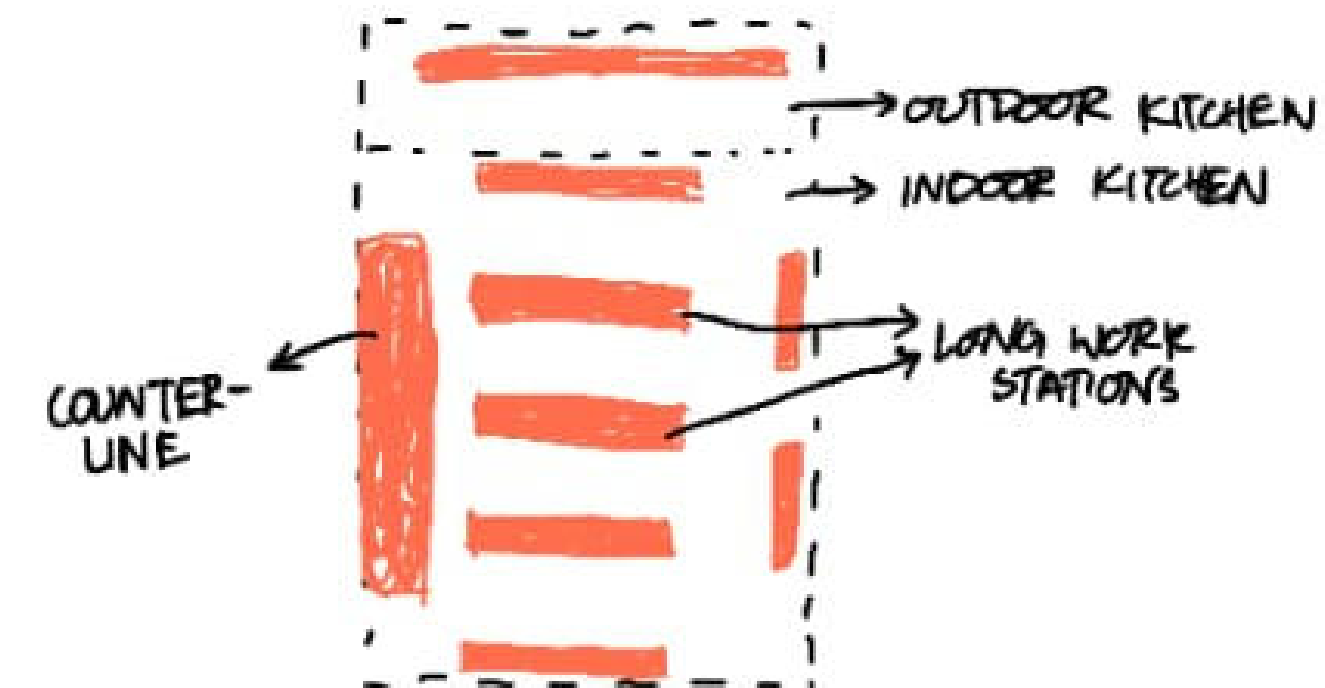
- DOUBLE-VOLUME
- VINTAGE LIGHT
- COMFORTABLE SEATING

TILE FLOORS

BIOPHILIC ELEMENTS



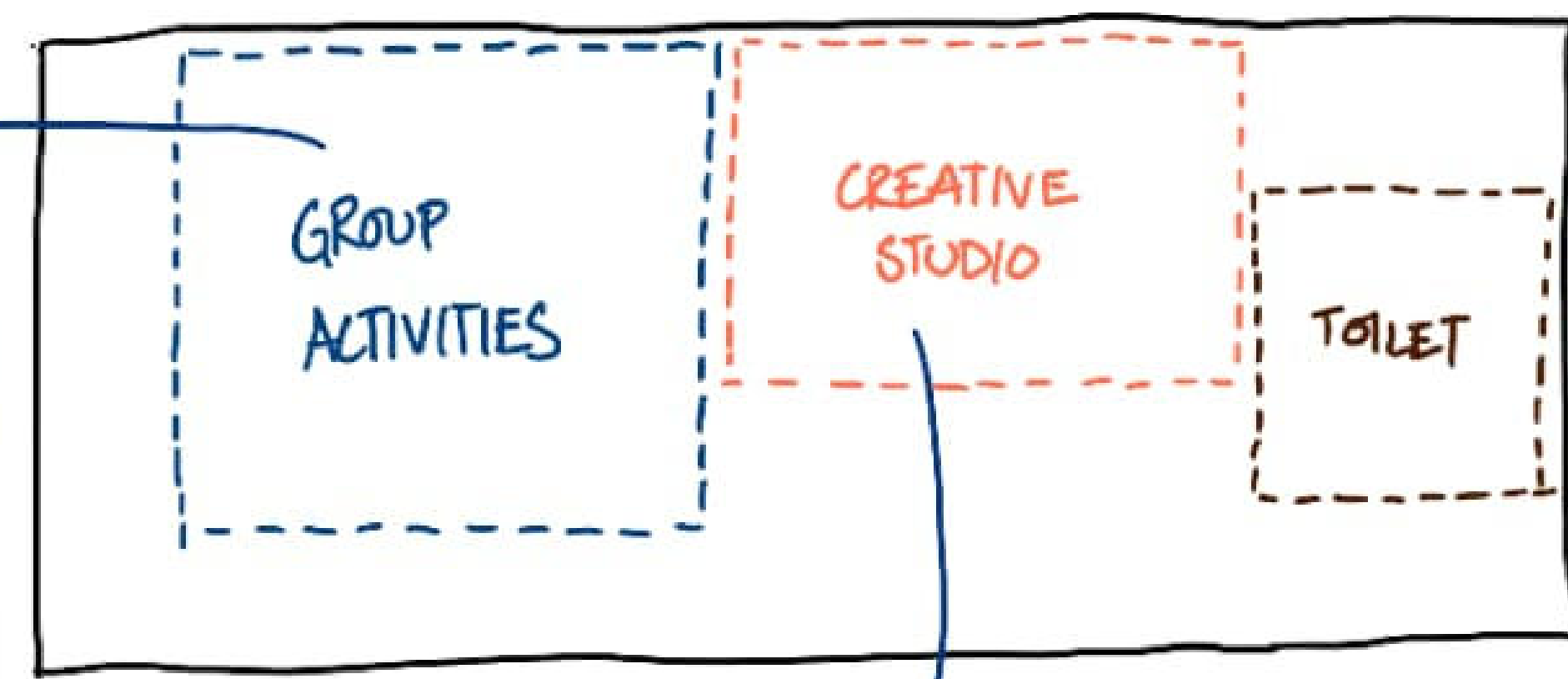
- ★ DINING AREA FOR USERS TO DINE AFTER COOKING IN THE KITCHEN
- ★ SENSE OF "HOME" & "COMFORT"
- ★ KEEP USERS ENGAGED & ENCOURAGE COMMUNAL INTERACTIONS



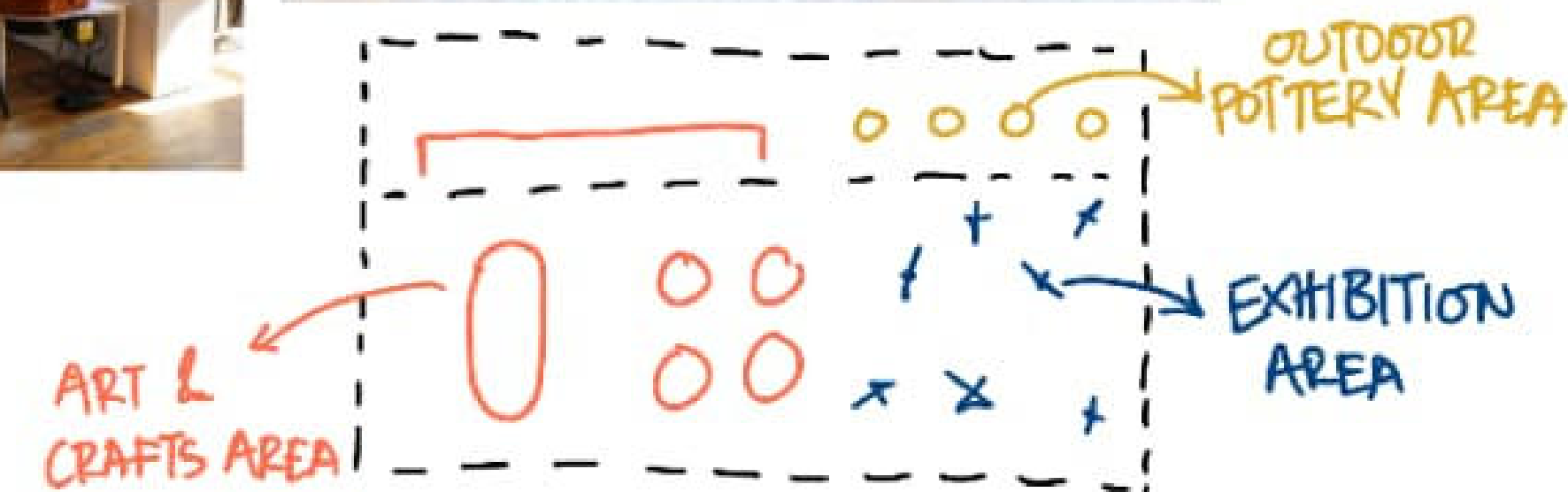
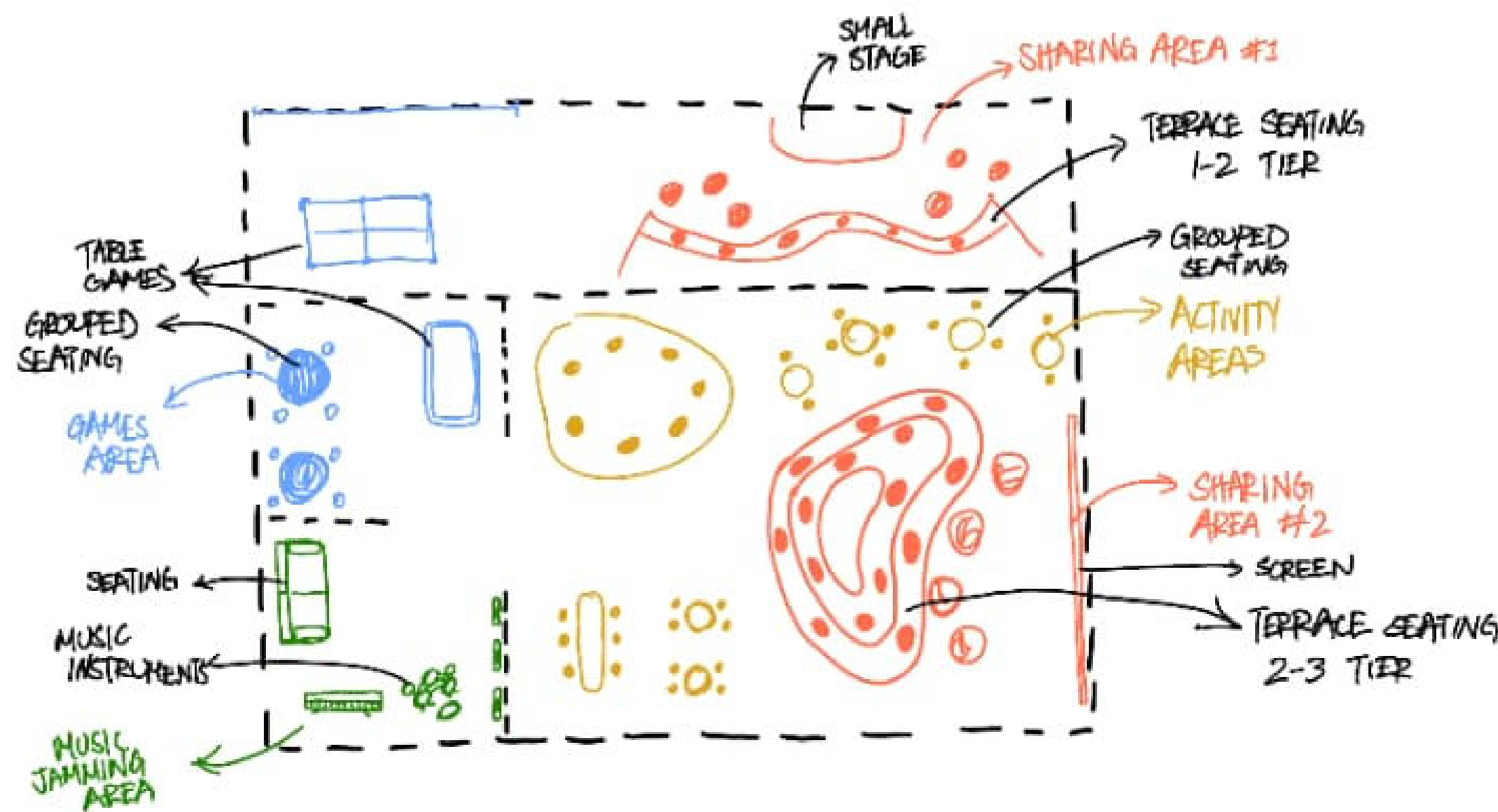
- ★ COOKING WORKSHOPS COULD BE HELD HERE WITH THE USE OF IN-HOUSE GROWN HERBS & VEGGIES
- ★ SHARED EVERYDAY ACTIVITY THAT BUILDS A COMMUNITY
- ★ ENCOURAGES ROUTINE & PARTICIPATION
- ★ ENHANCES AWARENESS FOR WELL-BEING & HEALTHY LIFESTYLE
- ★ REINFORCES HOME CONCEPT

LEVEL 2

GROUP ACTIVITIES AREA



CREATIVE STUDIO



MUSIC AREA

- ★ NON-VERBAL EMOTIONAL OUTLET
- ★ JAMMING TOGETHER FOSTER TRUST, RHYTHM & COLLECTIVE PARTICIPATION
- COZY & INSPIRING
- OPENS UP TO THE USER GENTLY
- HAVE THE MUSIC LINGER IN THE AREAS SOFTLY



GAMES AREA

- ★ LIGHT-HEARTED INTERACTION & INFORMAL BONDING
- ★ ACTIVITY-LED INTERACTION, USERS CAN CONNECT WITHOUT EMOTIONAL EXPOSURE
- PLAYFUL BUT COORDINATING WITH THE HOMELY & VINTAGE CONCEPTS
- INDOOR & OUTDOOR AREAS OFFER THE USER OPTIONS



OPEN GROUP ACTIVITY & SHARING AREA

- ★ GUIDED GROUP SESSIONS, REFLECTION & PEER SHARING
- ★ INDOOR PROVIDES SAFETY FOR DEEPER CONVOOS, & OUTDOOR OFFER MORE RELAXED & GROUNDING SETTING
- ★ SMALLER GROUPED ACTIVITIES AREAS ALLOW MORE PRIVATE BONDS, MAKING FRIENDS FOR LIFE, ETC
- OPEN & DYNAMIC WHILE OFFERING A COMFORTING ENVIRONMENT
- GROUPED AREAS WITH SEATING AROUND

★ HANDS-ON CRAFTS & USING CREATIVITY ALLOWS USERS TO PRACTICE FOCUS, THINKING & EXPRESSIONS

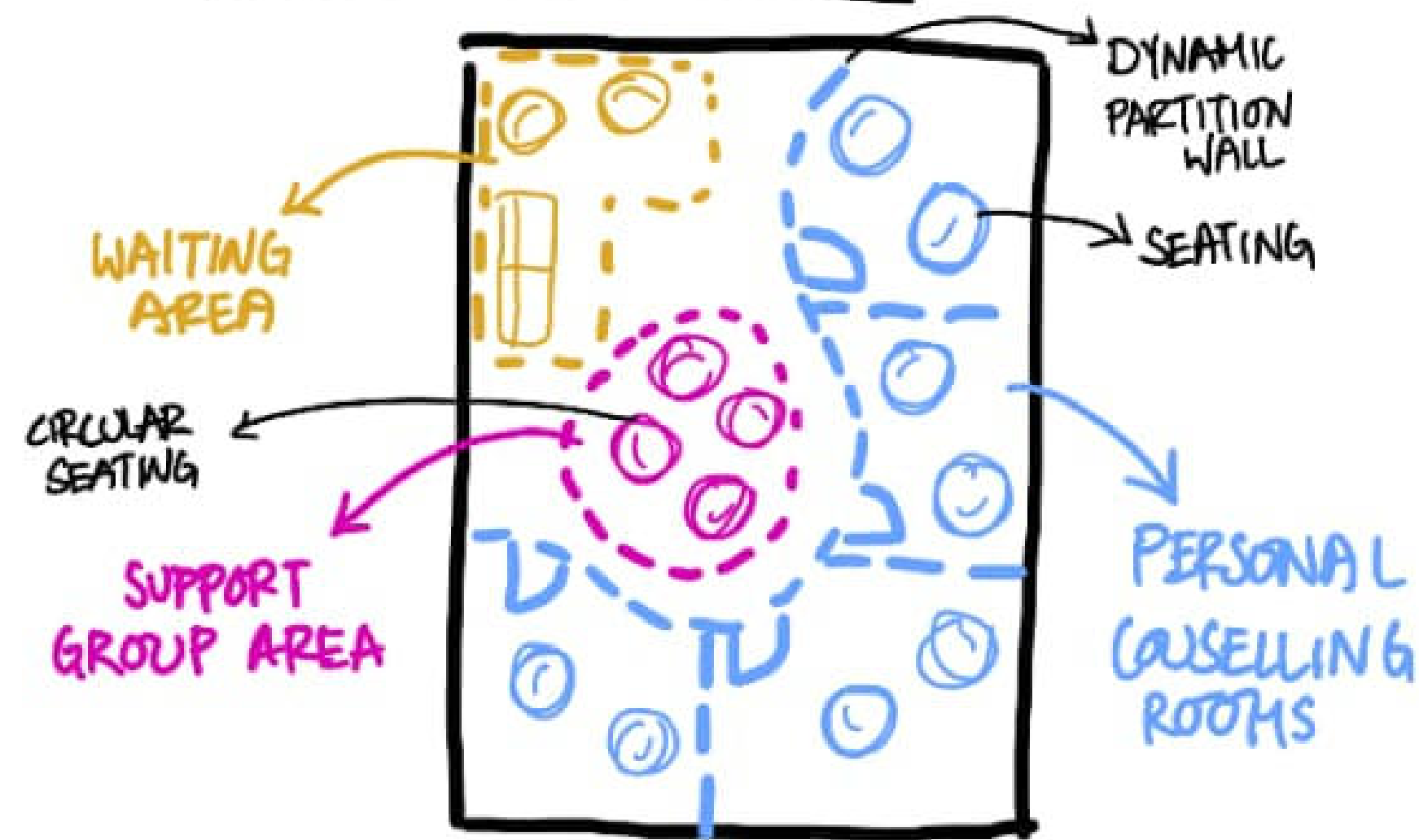
★ DEEPLY TACTILE & GROUNDING EXPERIENCE

★ CREATION IN SMALLER GROUPS OFFERS THE USER GENTLE PEER SUPPORT WITHOUT PRESSURE

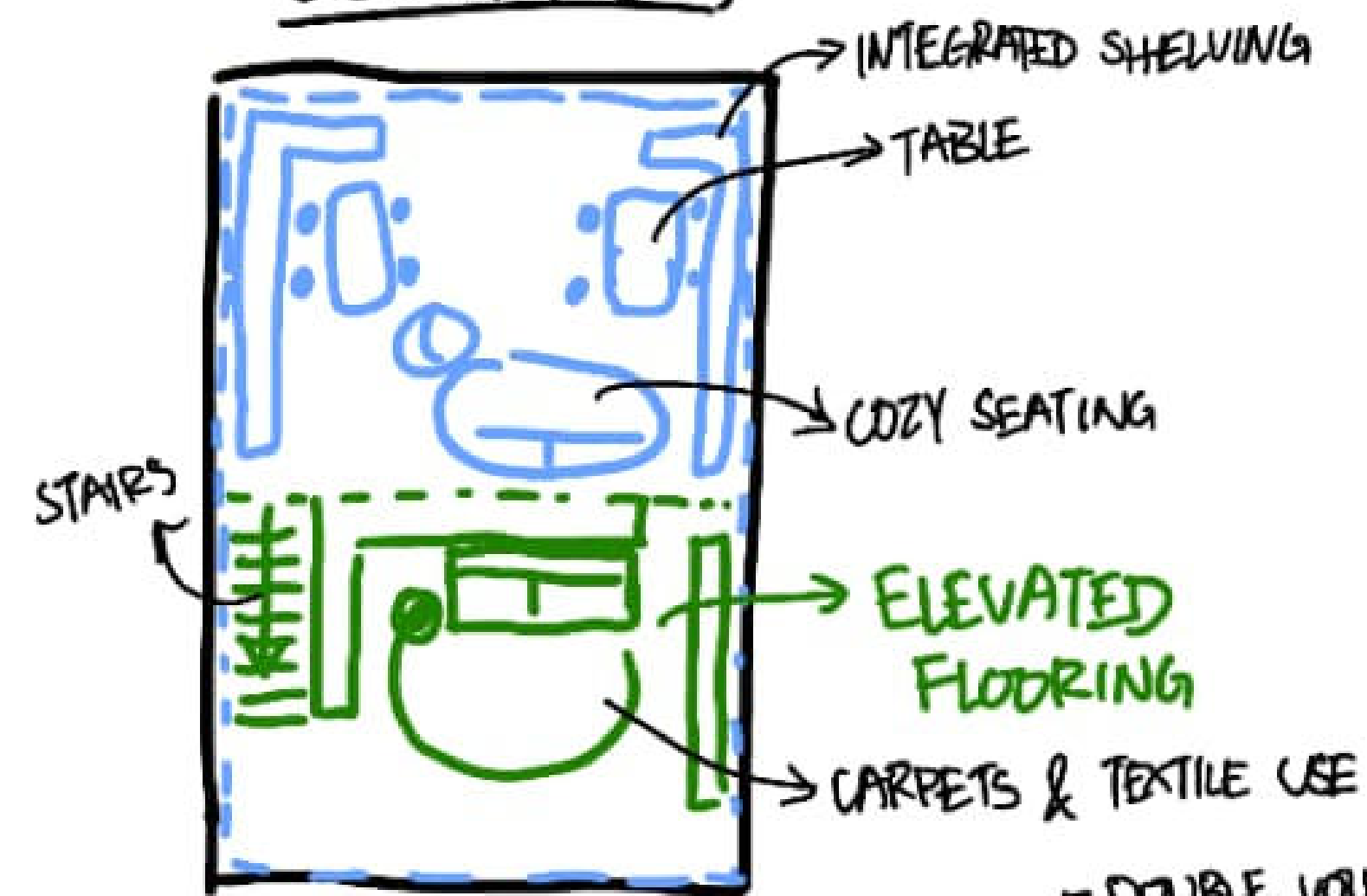
- INSPIRING INTERIOR
- EXHIBITS USER WORKS TO SHOW PERSONAL EFFORTS & GROWTH
- OUTDOOR & INDOOR SPACES INTERCONNECTED TO OFFER A WHOLE EXPERIENCE

L2&3 SERVICE BLOCK

COUNSELLING ROOM (L2)



LIBRARY (L3)



CIRCULAR SEAT



THERAPIST SEATING

PATIENT SEAT IS BIGGER & COMFORTABLE

INTEGRATED SHELVING

COZY SEATS



TABLE FOR STUDY/WRITING, ETC.



RAISED FLOORING



HOME-LIKE FEEL

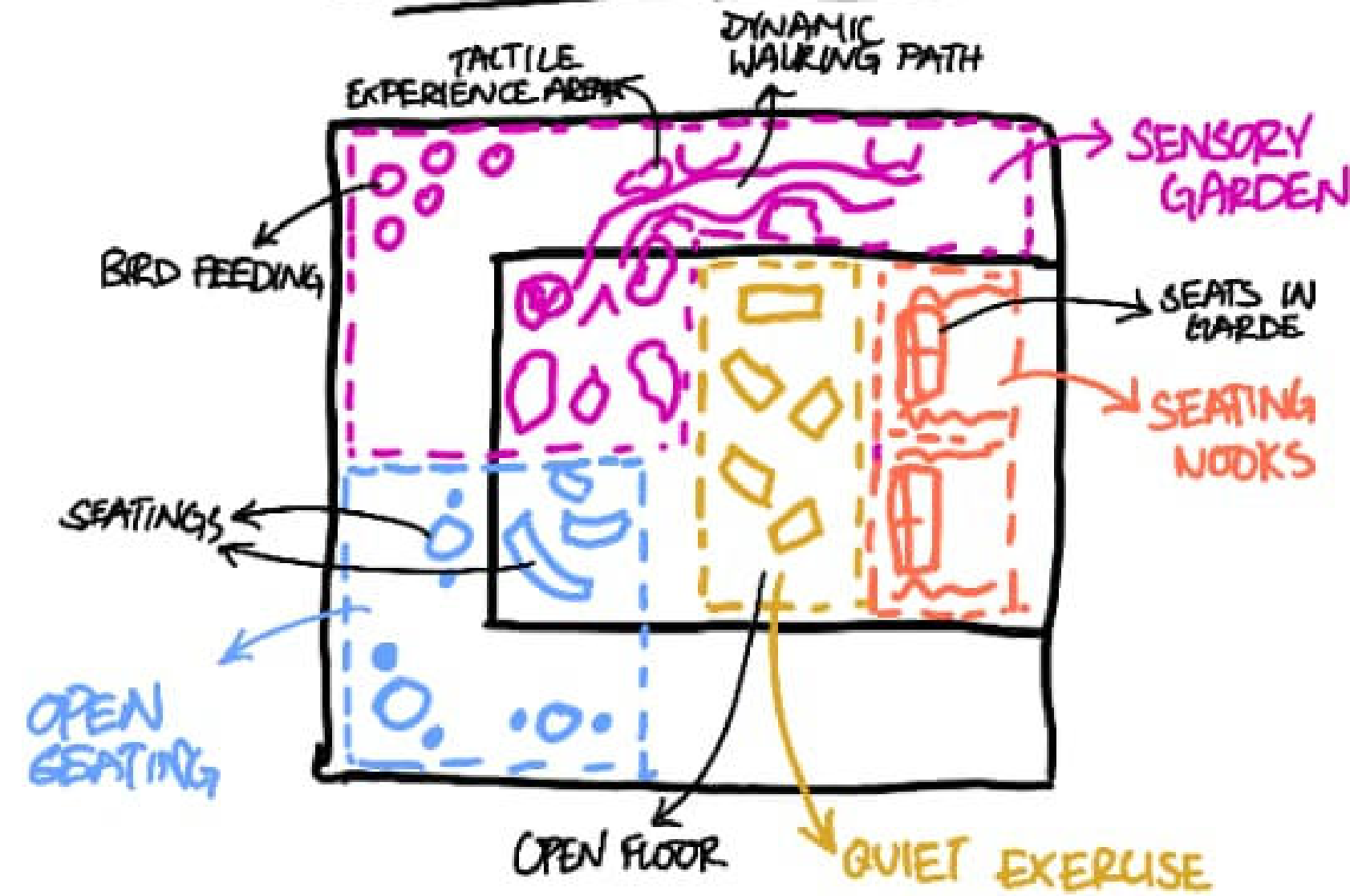
NOOKS

- ★ PROVIDE HIGH PRIVACY FOR 1-1 THERAPY SESSIONS
- ★ CALM & NON-CLINICAL → SOFT LIGHTING, COLOURS, TEXTURES
- ★ ROUNDED FURNITURE EDGES, MINIMAL VISUAL CLUTTER
- ★ PROMOTE HIGH LEVEL OF COMFORT & EMOTIONAL OPENNESS
- ★ SUPPORT SHARED HEALING THROUGH PROFESSIONAL GUIDANCE
- ★ MORE ENCLOSED TO MAINTAIN INTIMACY
- ★ SEATS ARRANGED IN A CIRCLE TO REMOVE HIERARCHY & ENCOURAGE QUALITY EYE CONTACT
- ★ TRANSITIONAL BUFFER ZONE BETWEEN OUTSIDE & THE THERAPY SPACES
- ★ CALMING & REASSURING
- ★ COMFORTABLE SEATING, BIOPHILIC ELEMENTS & MUTED COLOURS

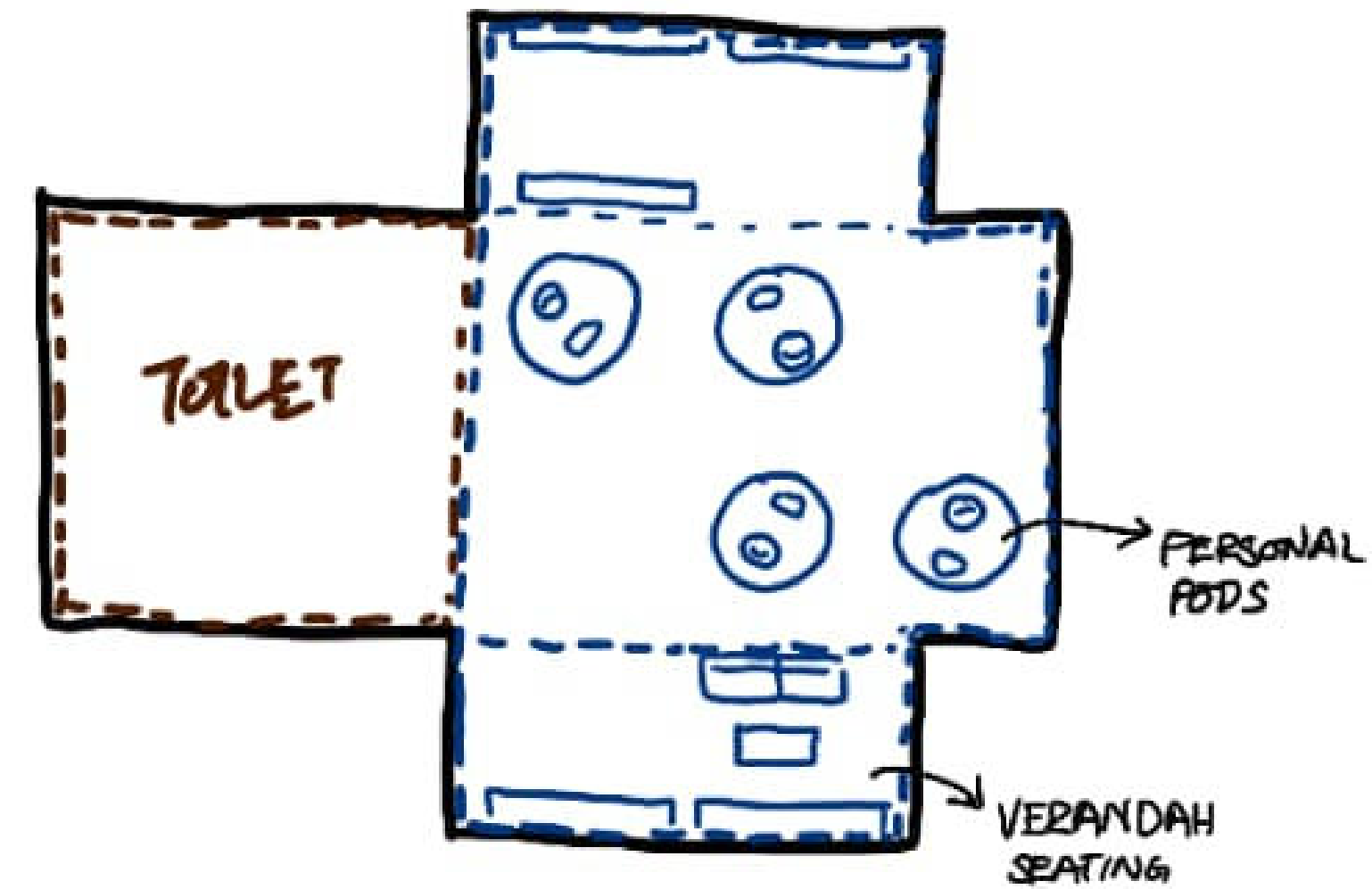
- ★ QUIET REFUGE FOR LEARNING, REFLECTION & SELF-GROWTH, THROUGH LITERACY, LANGUAGE DEVELOPMENT, CALM MENTAL ENGAGEMENT
- ★ WARM TIMBER SHELVING, SOFT FURNISHINGS, LOW BOOKCASES & WARM NEUTRAL COLOUR PALETTES CREATE A COZY & FAMILIAR ATMOSPHERE
- ★ UPHOLSTERED ARM CHAIRS, READING NOOKS & COMMUNAL TABLES SUPPORT INDIV. READING & QUIET STUDY
- ★ SOFT DIFFUSED LIGHTING REDUCE VISUAL STRAIN
- ★ RAISED PLATFORM INTRODUCE PRIVACY & HIERARCHY
- ★ OFFERS PSYCHOLOGICAL SEPARATION, IDEAL FOR FOCUSED READING, JOURNALING
- ★ CUSHIONS, RUGS & LOWER CEILING OR OVERHEAD ELEMENTS ENHANCE SENSE OF ENCLOSURE & SAFETY

LEVEL 3

SENSORY GARDEN



PERSONAL RECREATION



- ★ CASUAL SEATING, OBSERVATION & QUIET CONVERSATION
- ★ NATURAL TIMBER BENCHES, STONE/MOSAIC PAVING, SHADE-PROVIDING STRUCTURES
- ★ CORE THERAPEUTIC ELEMENT — TEXTURE CHANGES UNDERFOOT & HAND LEVEL
- ★ GRAVEL, TIMBER-DECKING, SMOOTH STONE, PLANTING, TEXTURED WALLS/RAILINGS
- ★ SUPPORT LOW-IMPACT, SELF-DIRECTED PHYSICAL ACTIVITY
- ★ OPENNESS ALLOW FREEDOM OF MOVEMENT
- ★ PLANTING ACT AS A SOFT VISUAL, REINFORCING CONNECTION WITH THE BODY & MINDFULNESS
- ★ MOST INTIMATE & EMOTIONALLY PROTECTIVE SPACE IN THE GARDEN
- ★ ENCLOSED BY PLANTING & SCREENS, SENSE OF BEING HELD
- ★ BUILT-IN SEATING, CUSHIONS, TIMBER SCREENS & FILTERED LIGHT
CREATE A COOON-LIKE ENVIRONMENT IDEAL FOR DEEP REFLECTION
OR EMOTIONAL DECOMPRESSION



PERSONAL PODS:

- ★ HIGHEST LEVEL OF PRIVACY IN THE RECREATION ZONE
- ★ SEMI-ENCLOSED ALLOW USERS TO REST WITHOUT INTERRUPTION, SUPPORTING EMOTIONAL OVERWHELM, FATIGUE OR NEED FOR SOLITUDE
- ★ UPHOLSTERED SEATING/DAYBEDS, ACOUSTIC LINING, WARM TIMBER FINISHES & MUTED COLOUR PALETTES CREATE COOON-LIKE ENVIRONMENT
- ★ MINIMAL VISUAL CLUTTER REDUCE SENSORY INPUT

VERADAH SEATING:

- ★ SOFTER ALTERNATIVE TO COMPLETE ENCLOSURE, MAINTAINING A GENTLE CONNECTION TO THE OUTDOORS
- ★ ALONG BUILDING EDGE, BENEFITS FROM NATURAL LIGHT, AIRFLOW & VIEWS
- ★ TIMBER BENCHES, CUSHIONED SEATING, PLANTERS & SCREENS CREATE COMFORT WHILE PRESERVING PRIVACY



Communal Garden



Library



L3 Verandah



Counselling Area

COLOURS & MATERIALS

JAPANDI AS A HEALING DESIGN LANGUAGE

- Visual simplicity reduces cognitive load, helping users feel mentally at ease.
- Warm, muted tones prevent the space from feeling cold or institutional.
- The focus on natural materials and honest textures fosters a sense of authenticity and safety, which is important for emotional recovery.

COLOUR PALETTE: SOFT, WARM AND GROUNDING

- Terracotta tones introduce warmth and an earth connection, creating a grounding effect that can help reduce anxiety and emotional tension.
- Soft neutral whites (rather than stark white) enhance natural light while maintaining a calm, non-harsh atmosphere.
- Subtle contrasts keep the space visually interesting without becoming overwhelming.

CREATING BALANCE BETWEEN STRENGTH AND SOFTNESS

- Hard, solid materials (white concrete, terrazzo, brick) communicate stability, safety and structure.
- Soft, warm materials (wood, terracotta, fabrics) provide emotional warmth and comfort.

TERRACOTTA



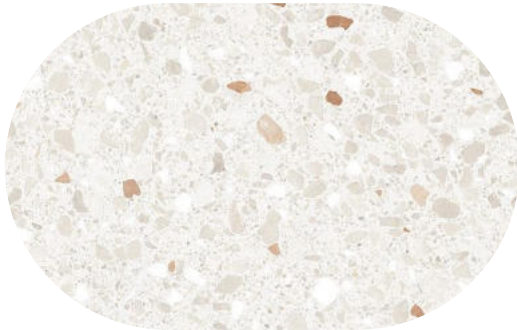
TERRACOTTA TILES

OLIVE



PLANTS

OFF WHITE



TERRAZZO



WHITE CONCRETE



OFF WHITE FABRICS

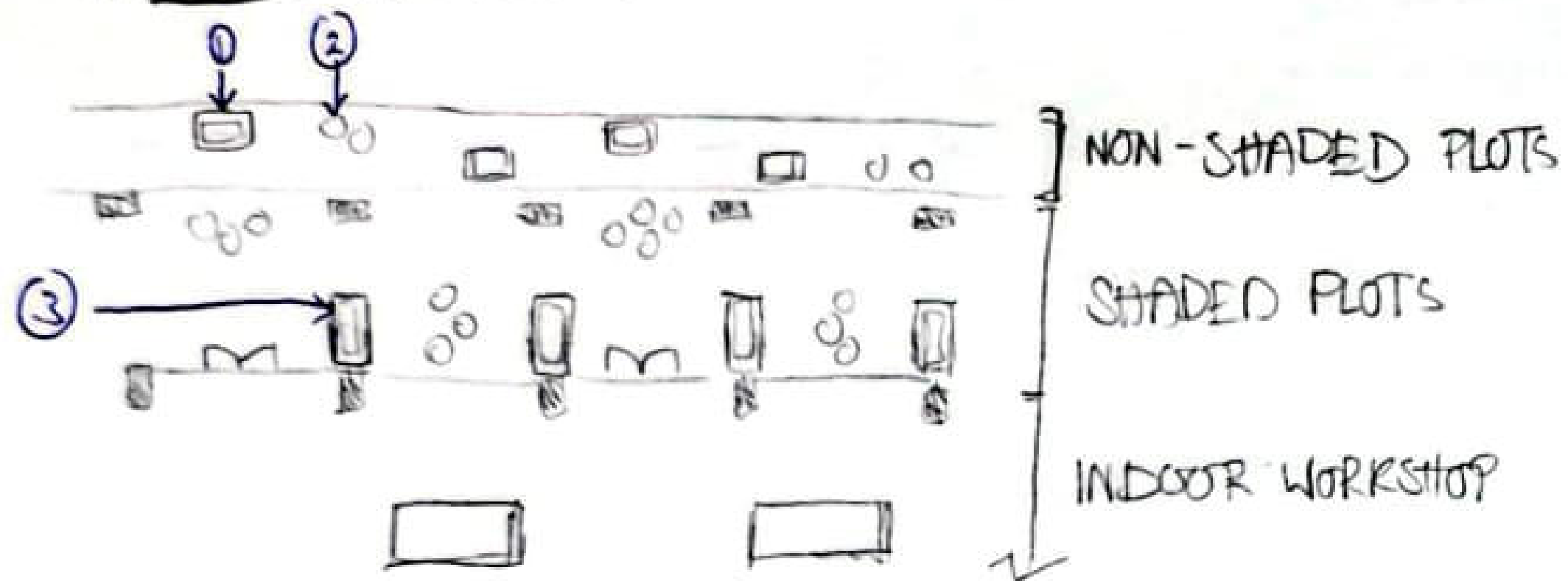
WARM WOOD



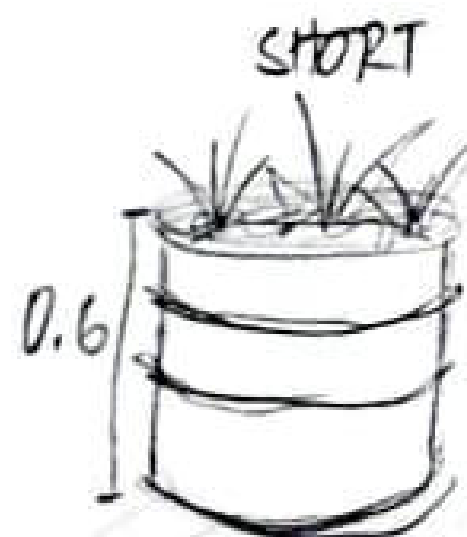
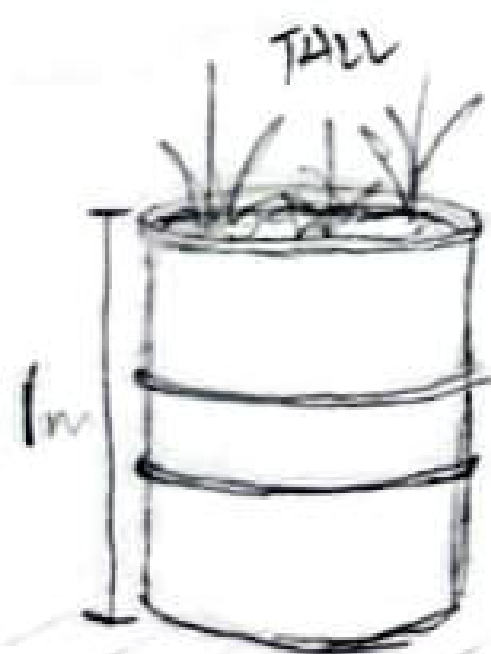
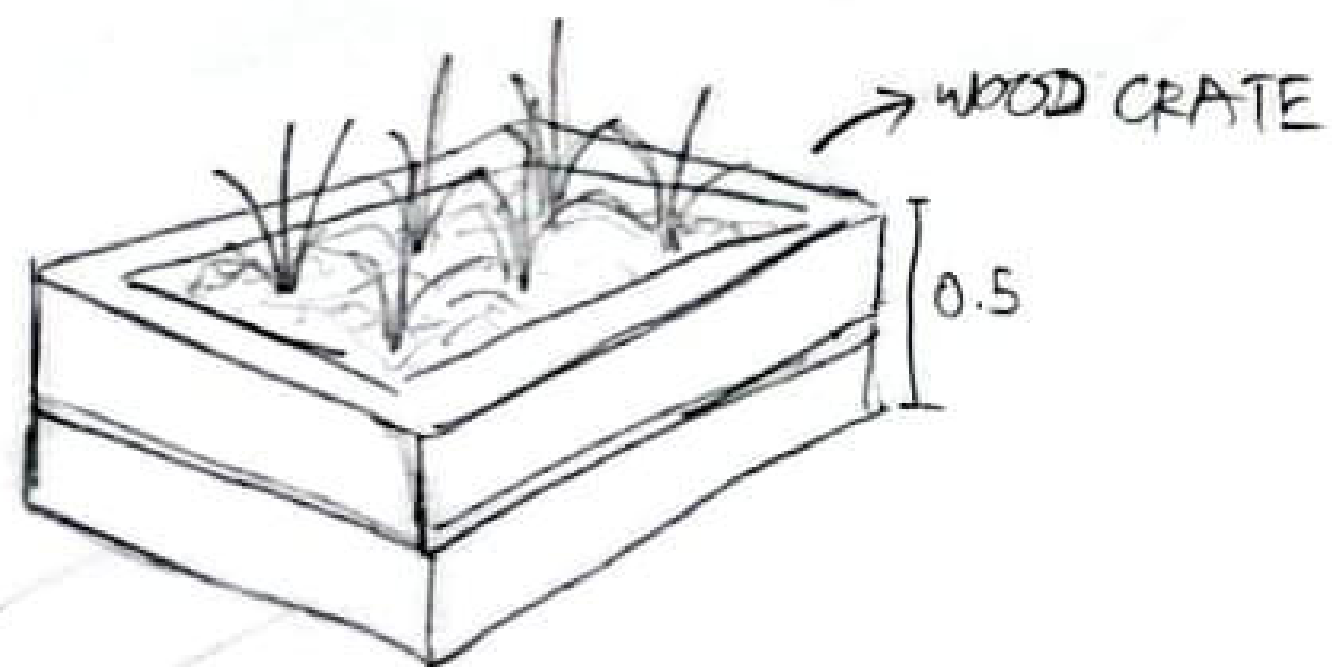
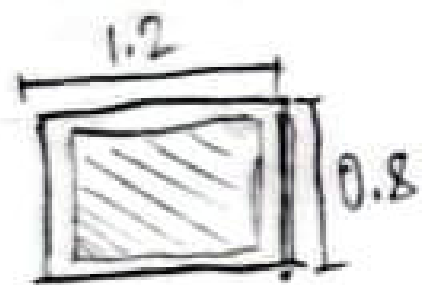
WARM WOOD



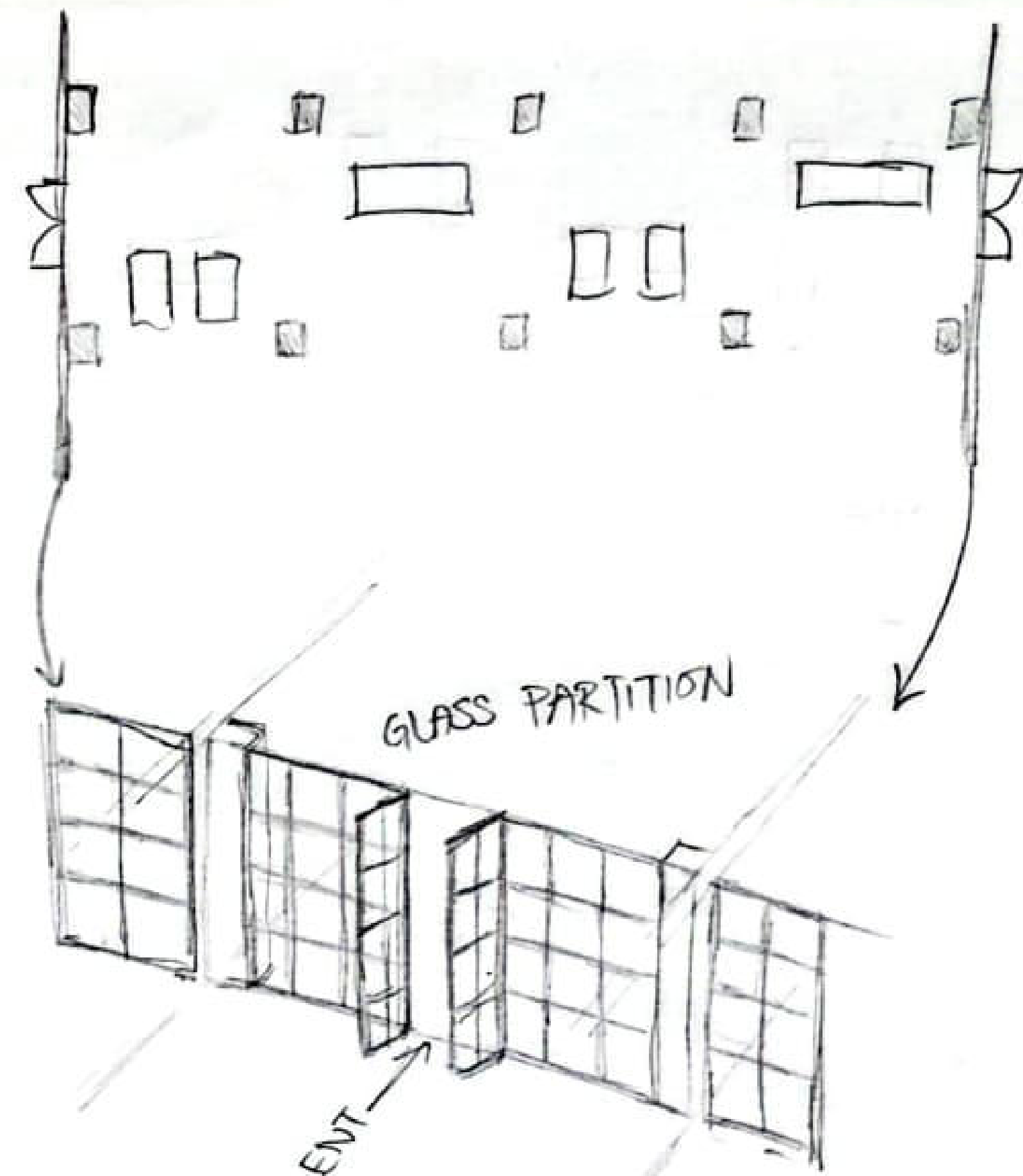
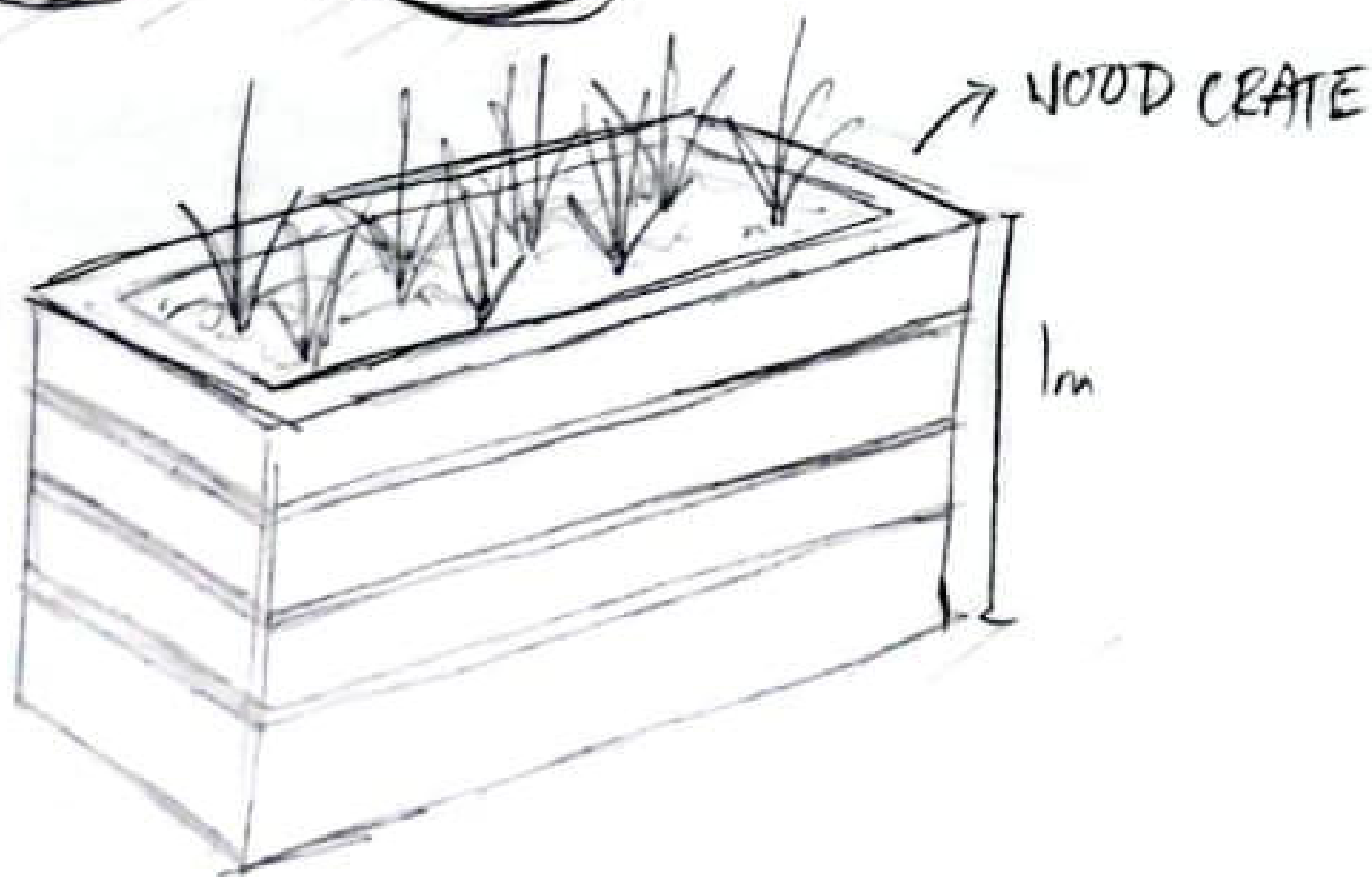
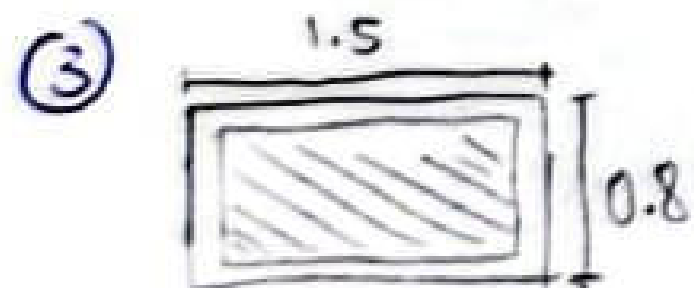
LEVEL 2 GARDENING



PLOT TYPE (1)

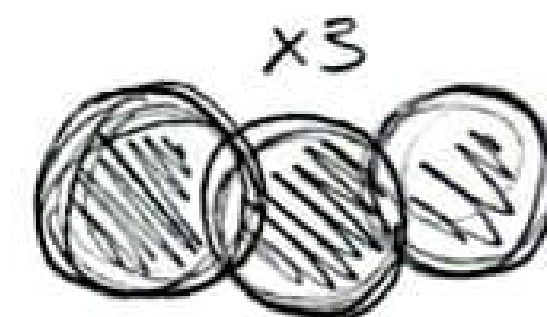
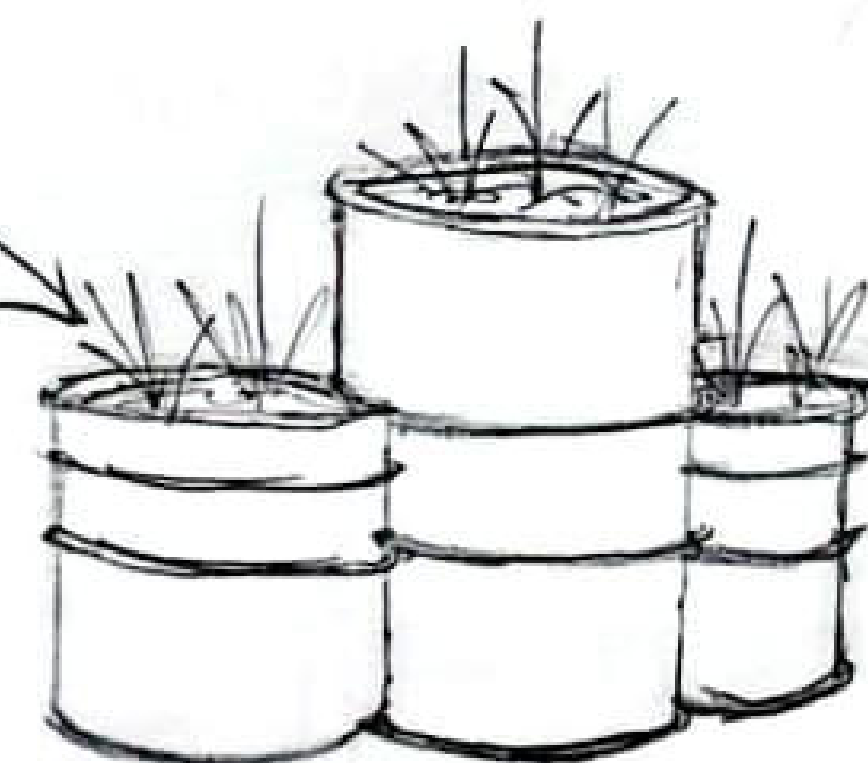


METAL BARREL/CANISTER

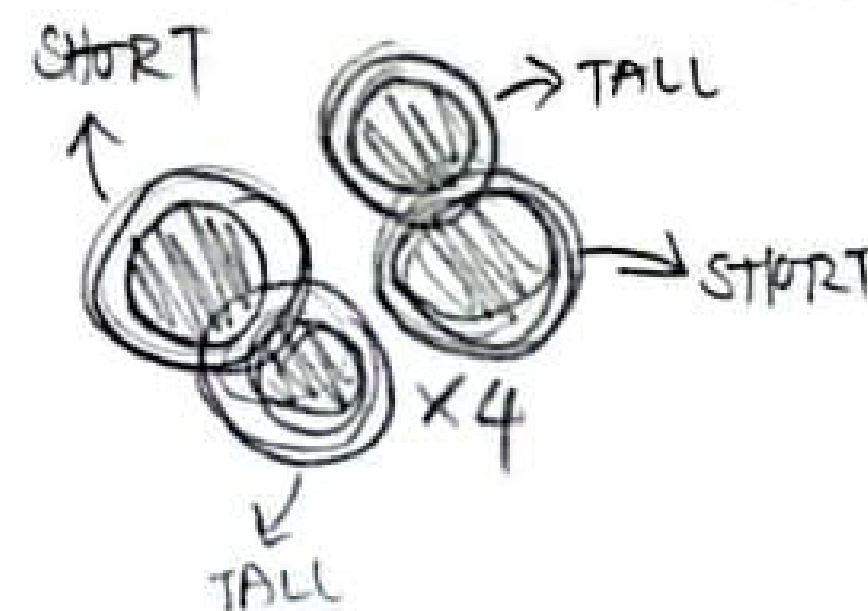
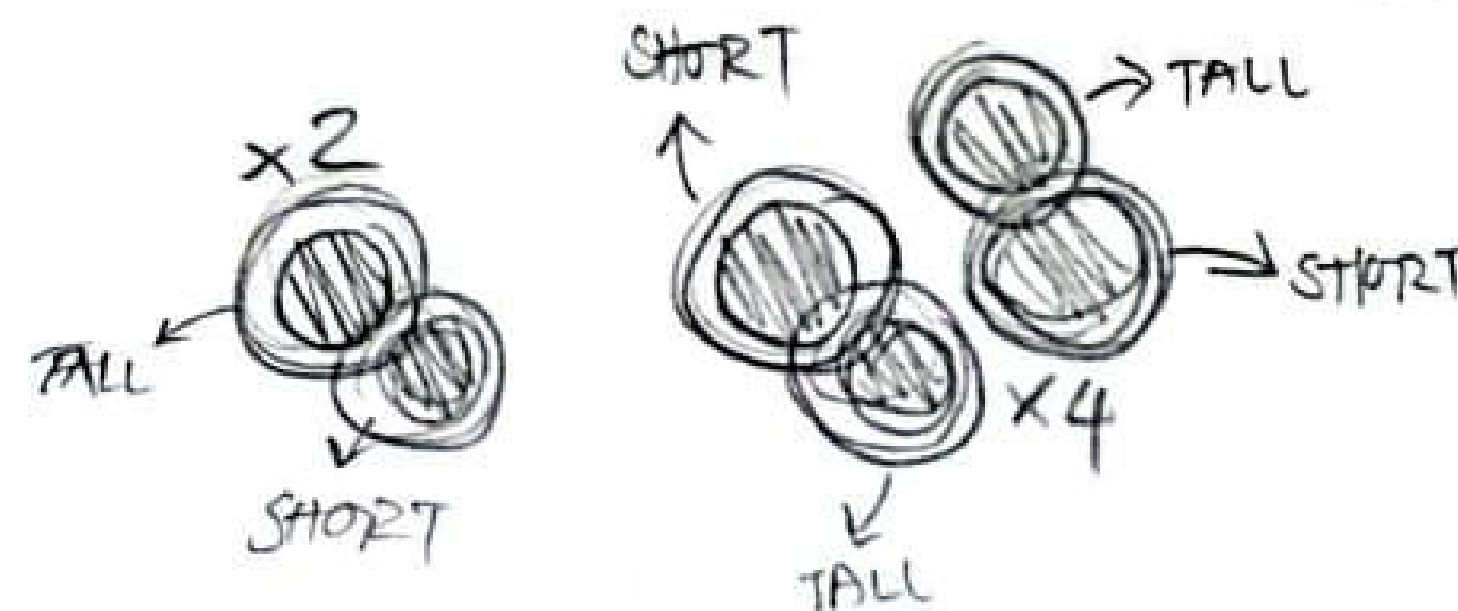


GLASS PARTITION

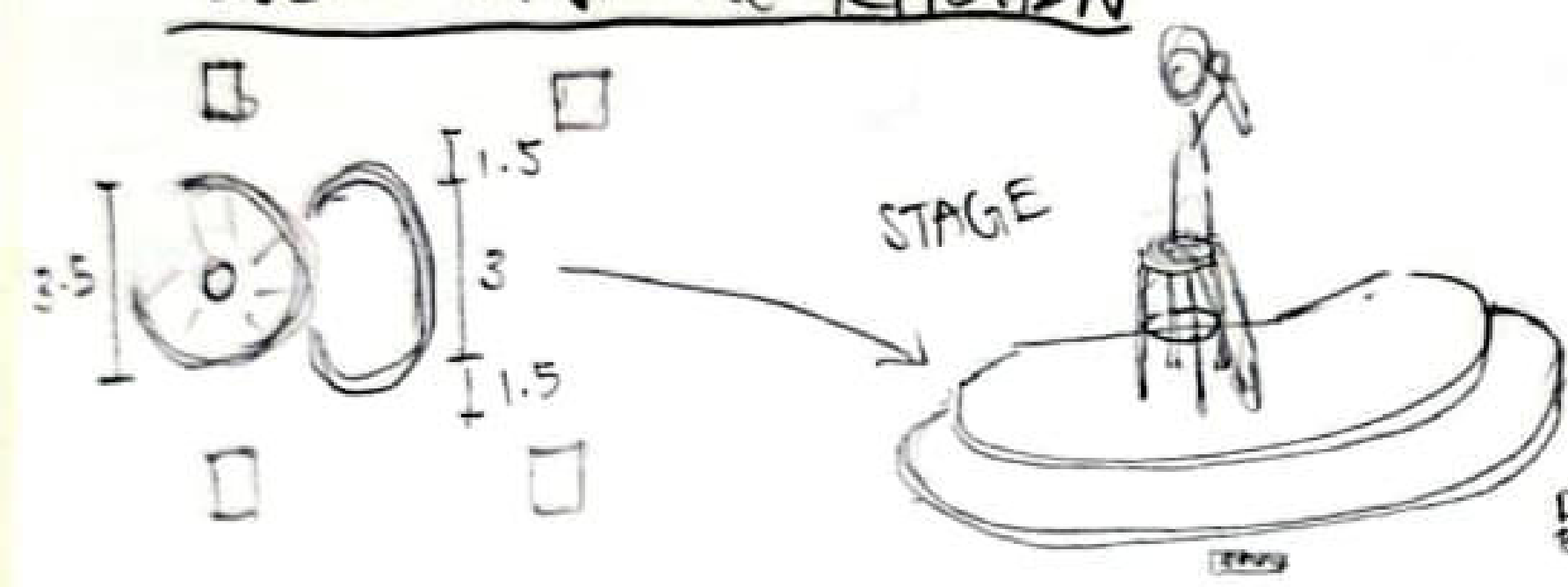
ENT



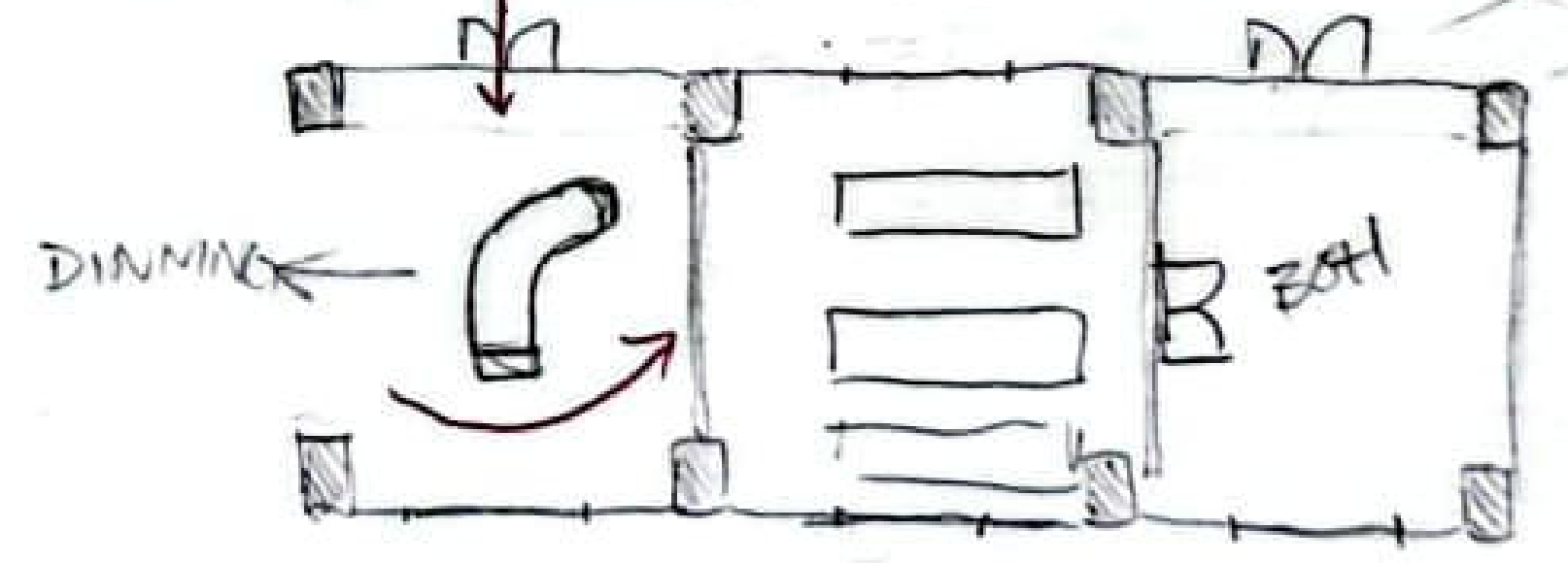
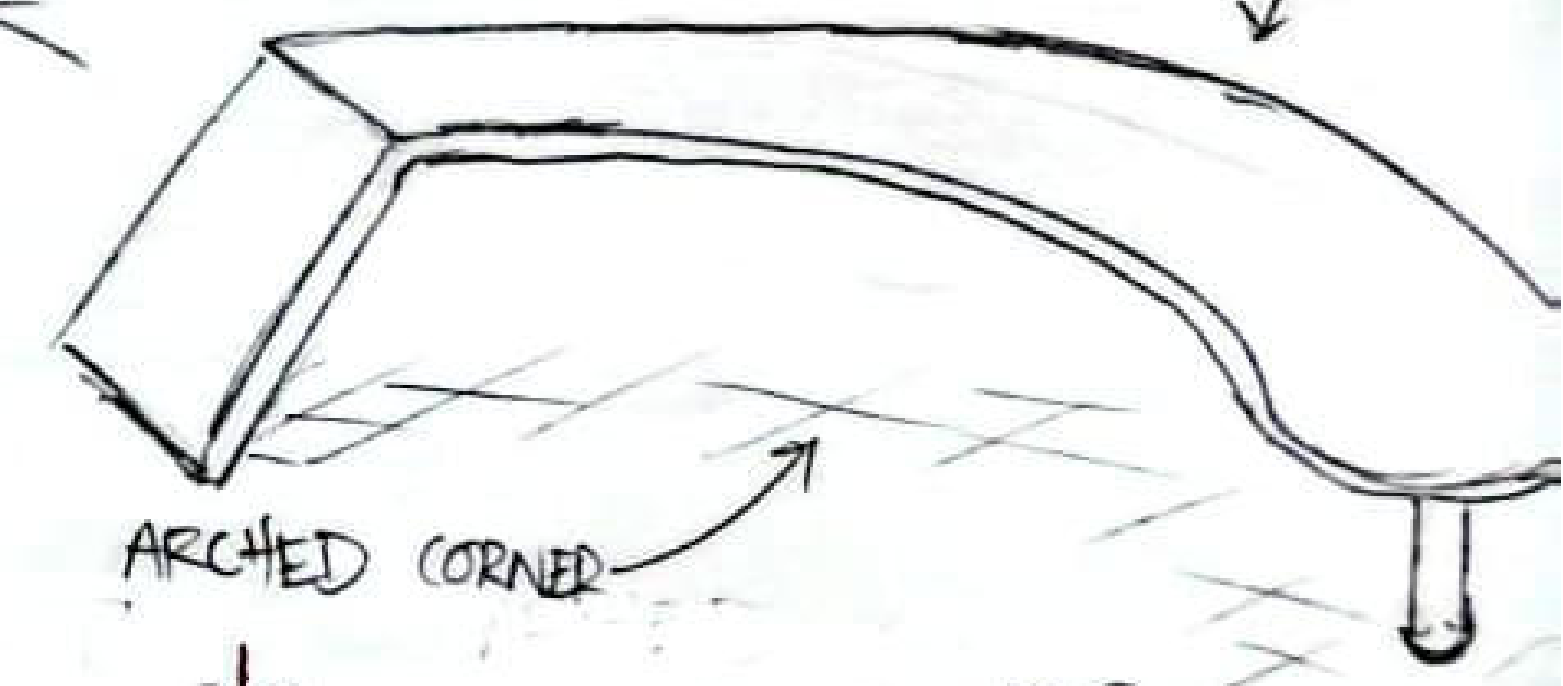
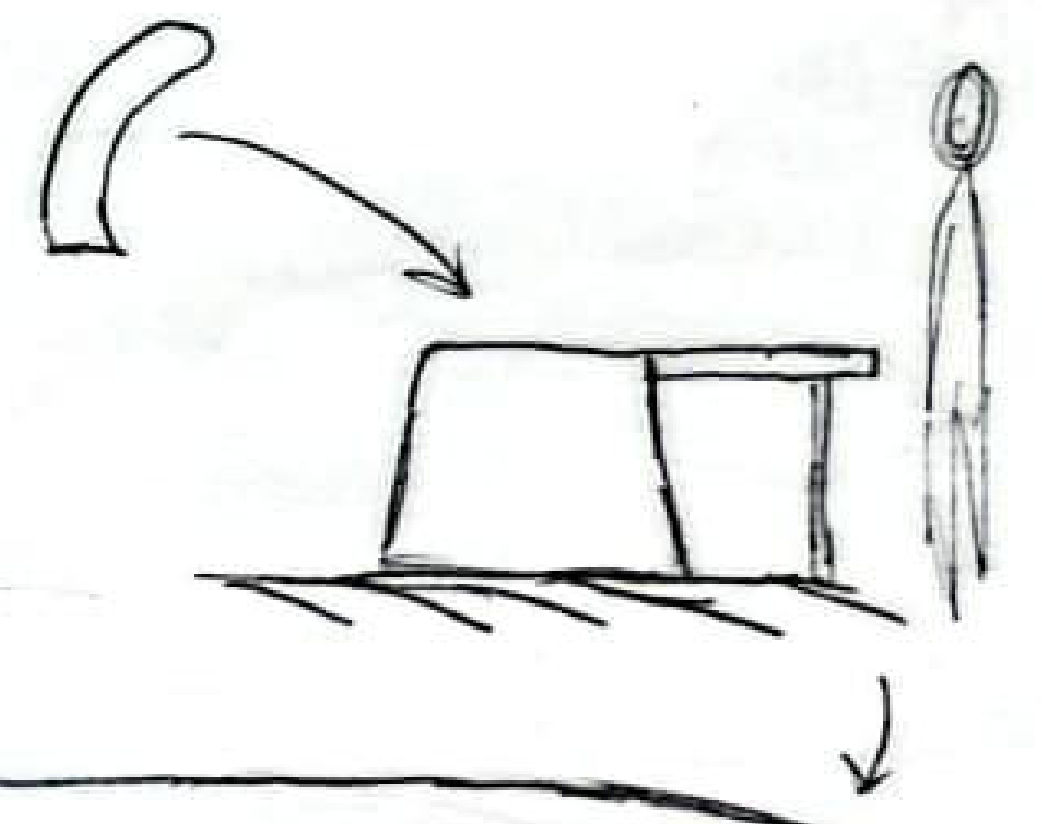
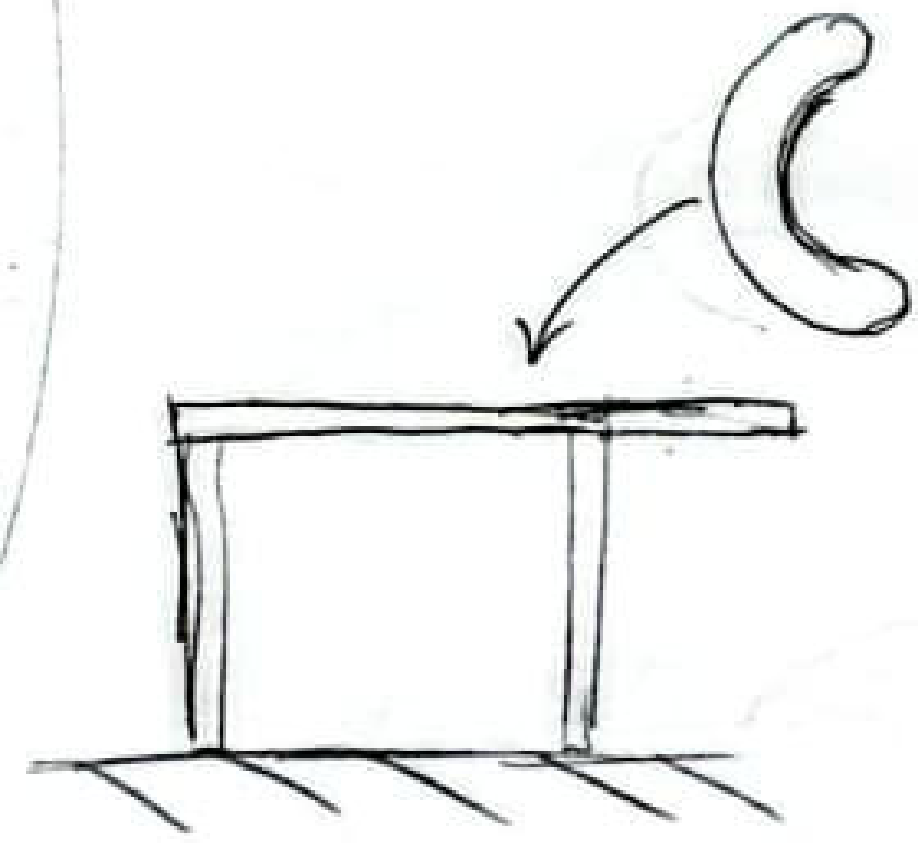
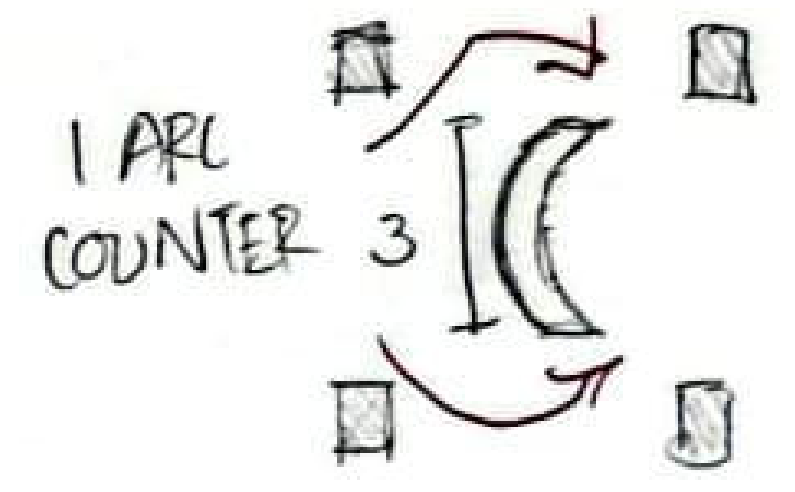
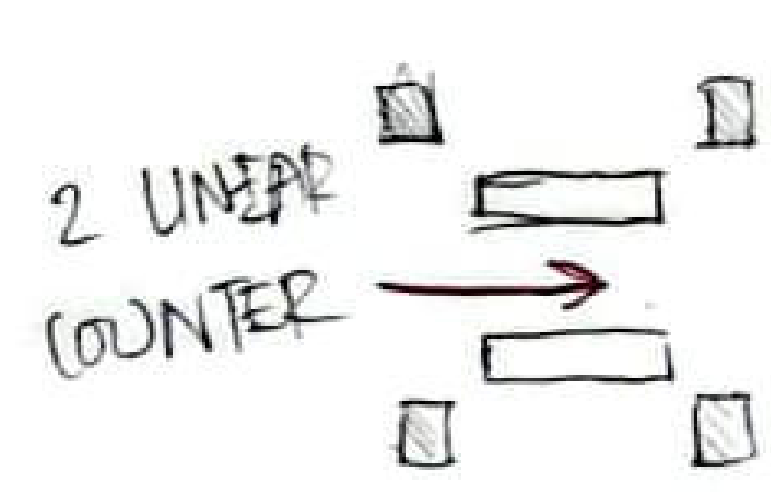
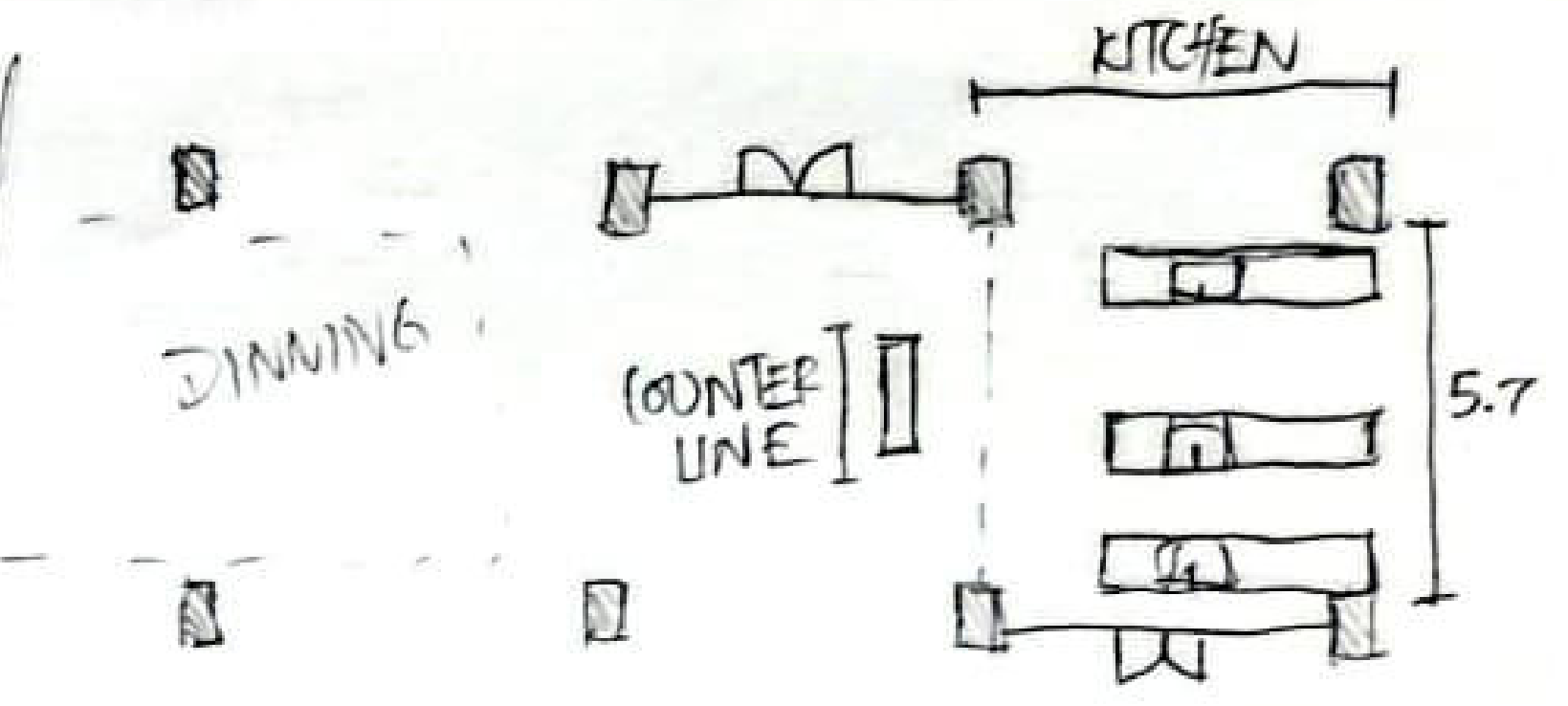
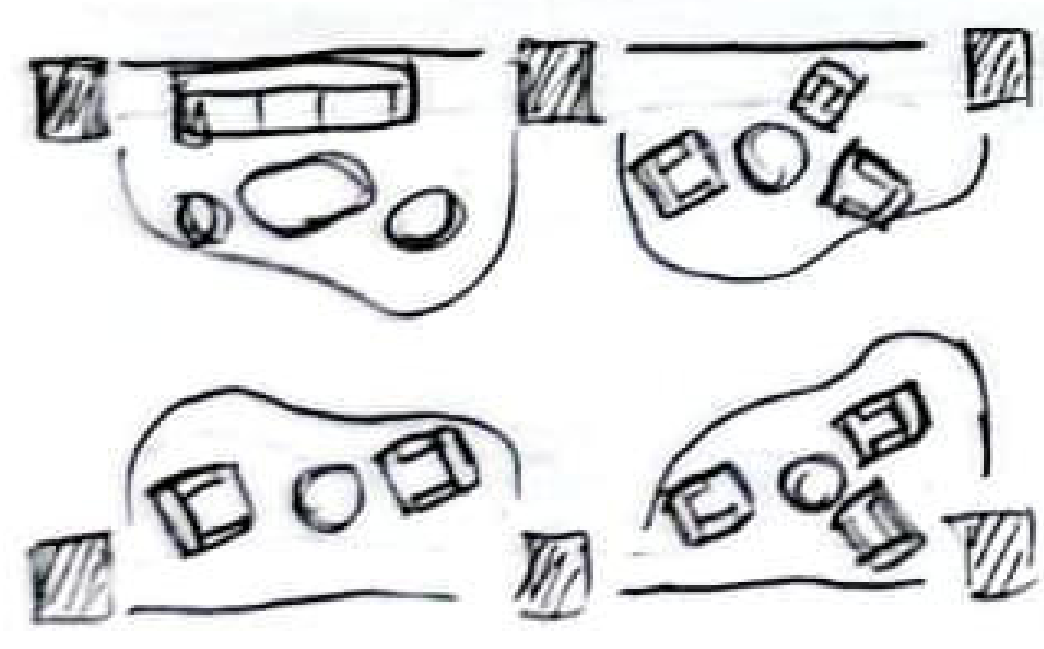
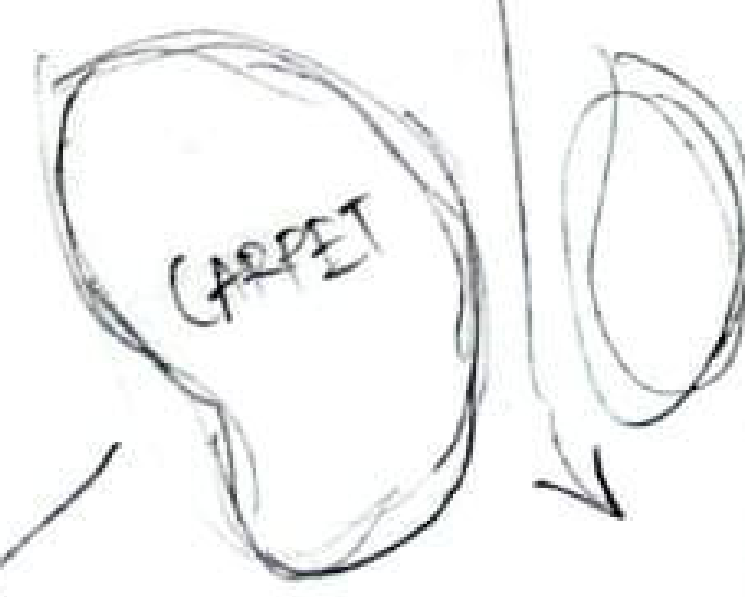
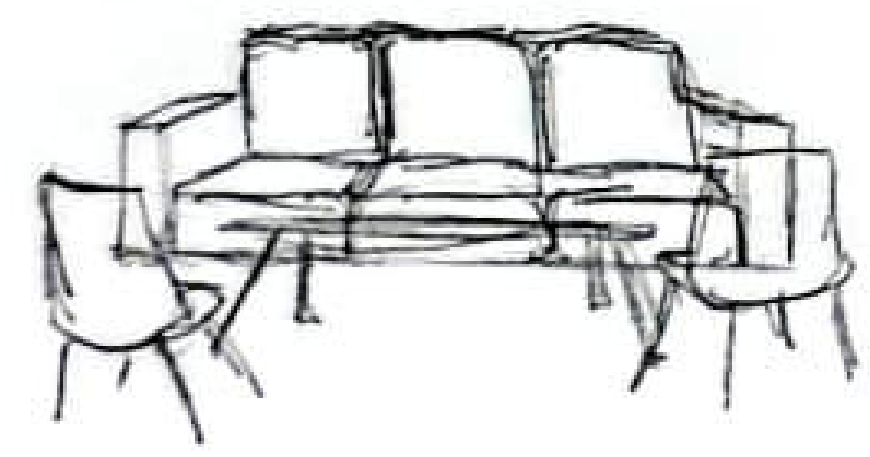
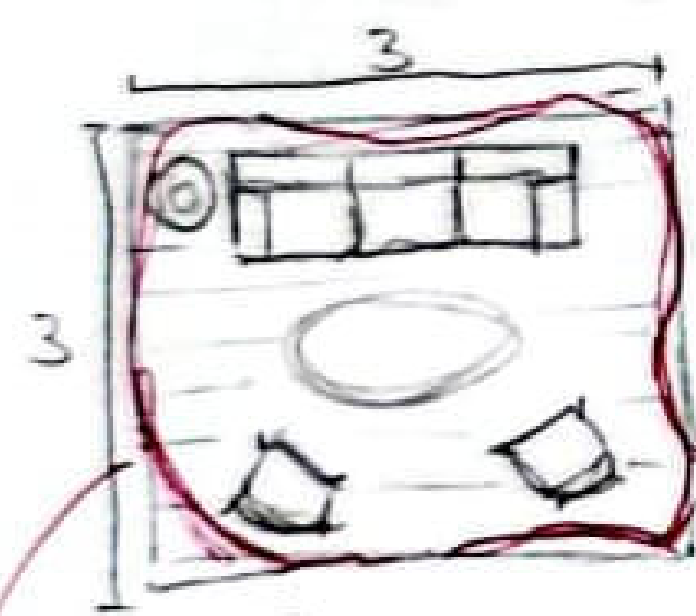
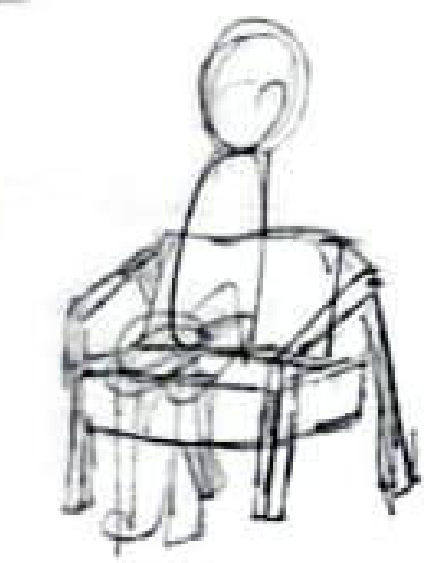
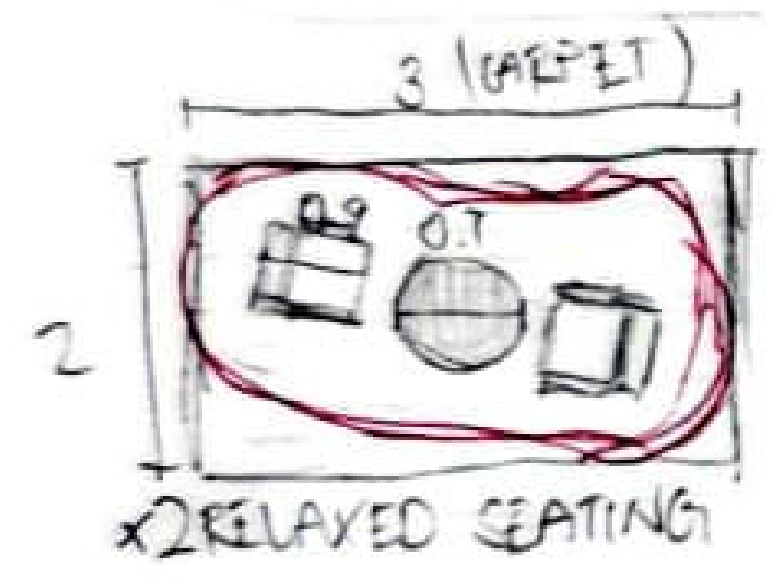
CANISTERS IN A OVERLAPPING CLUSTER



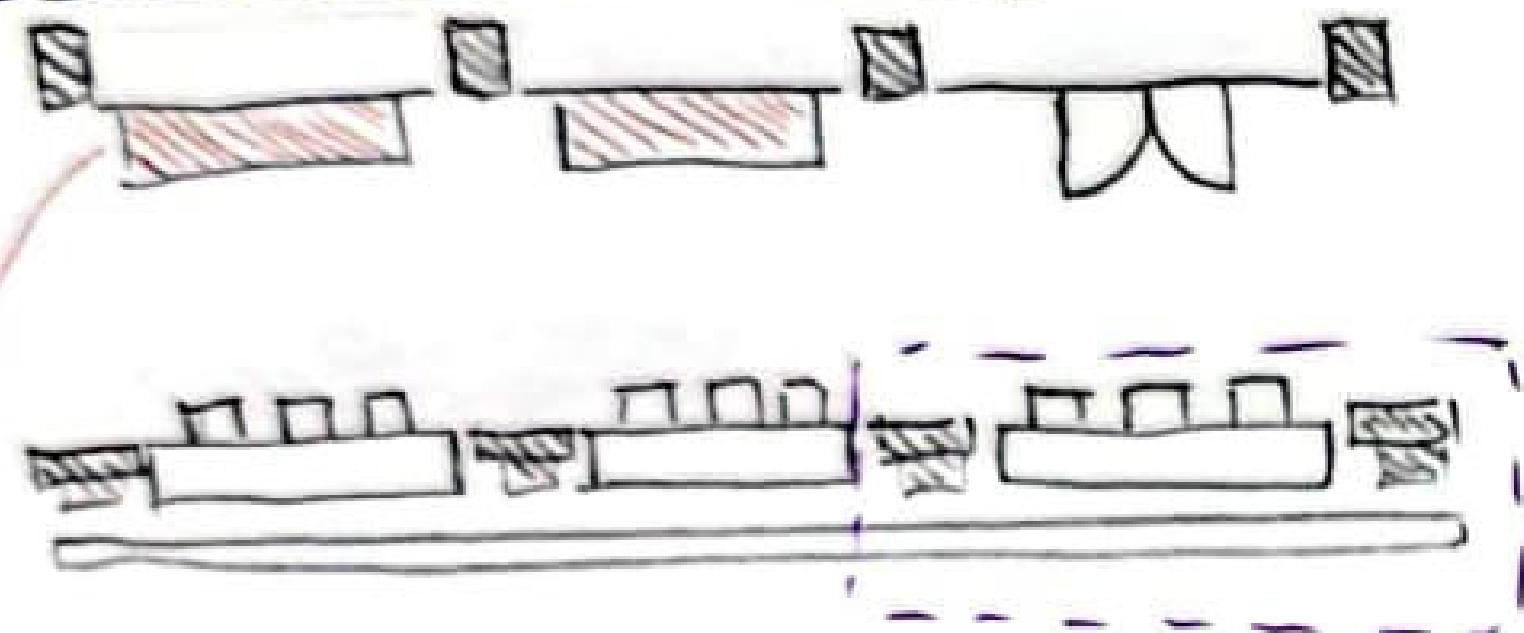
LEVEL 1 DINING & KITCHEN



CAFE FURNITURE



LEVEL 1 OUTDOOR DINING



OUTDOOR DINING BOTH

ADD CUSHION

INTEGRATED SEATS

INTERIOR LIGHTING

WOODEN STRUCTURE

HIGH TABLE

A FACING VIEW

PLANTER

LEVEL 1 GARDEN

DYNAMIC CIRCULATION

IRREGULAR DYNAMIC FORMS BUT FOLLOWING SYMMETRY

MAKE THE TABLE BUILT-IN

VARIOUS SEATING CHOICES

SEATING

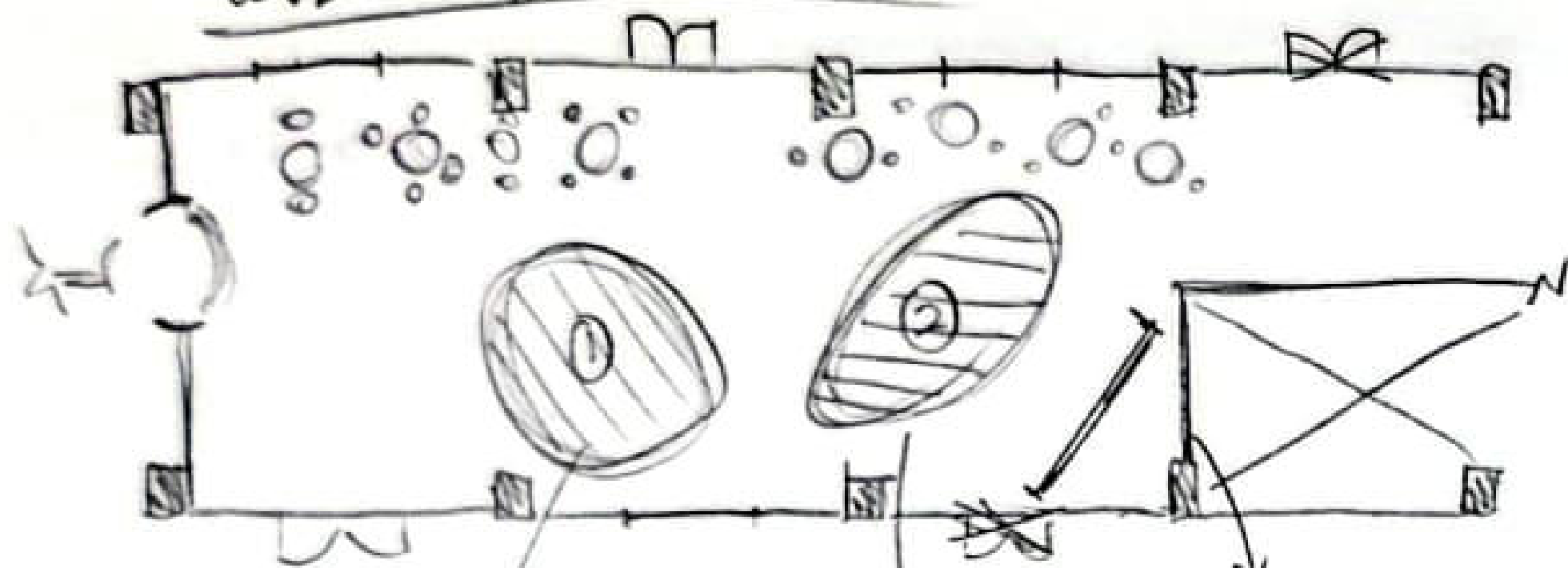
PLANTER

CIRCULAR PLANTER

LOOSE FURNITURE

RAISED PLATFORMS

LEVEL 2 GROUP ACTIVITIES



1:100

1:75

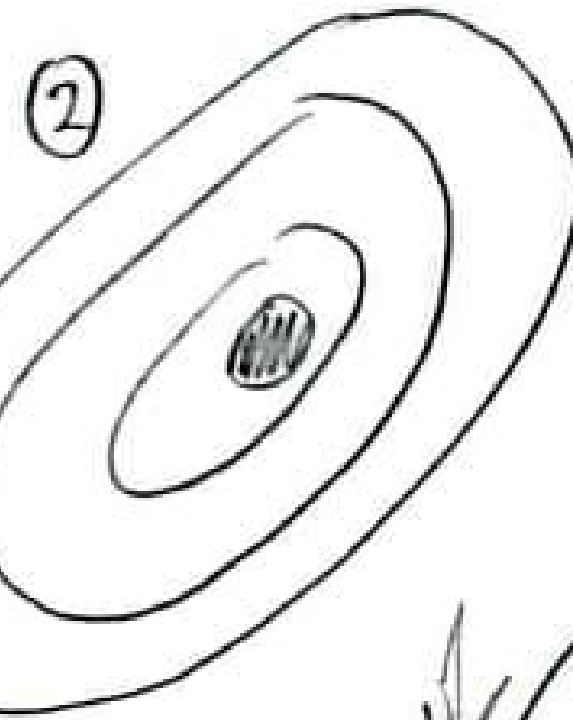
SHARING SEAT.

RAILING

SUPPORT GROUP

CARPET FLOOR

SEATING CUSHION



LAST TIER PLANTER

BOTTOM 2 TIERS IS FOR SEATING

ADAPTIVE REUSE

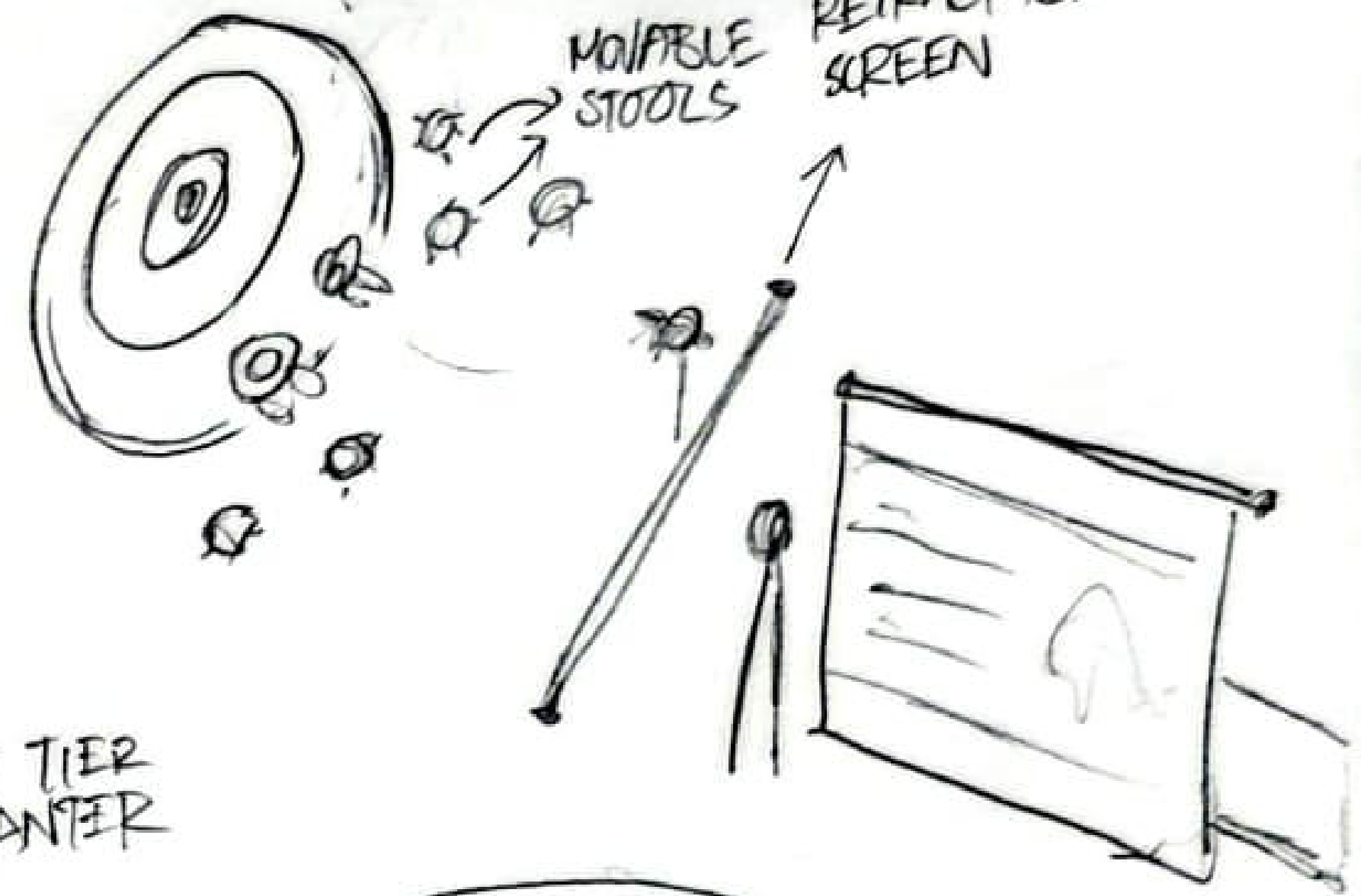
RAILING:

EXISTING EXTERIOR RAILING

EXISTING DESIGN USE AS INTERIOR RAILINGS

MOVABLE STOOLS

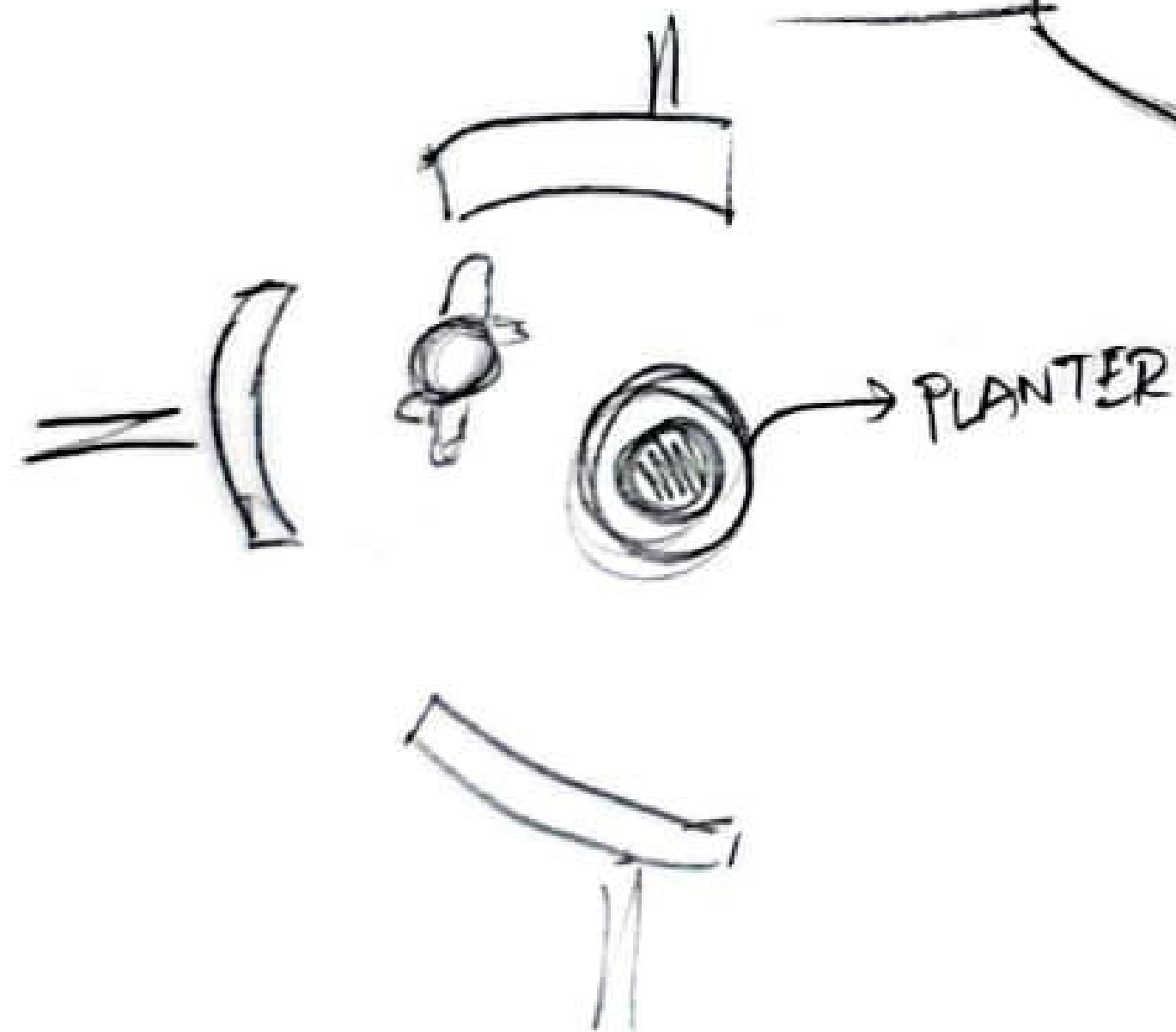
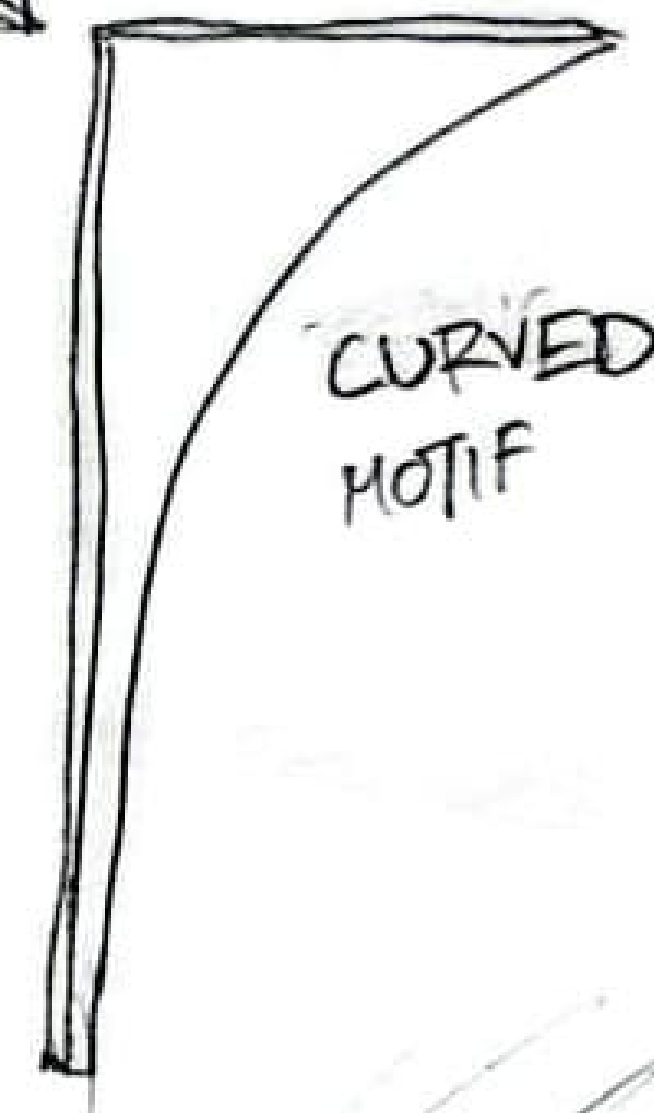
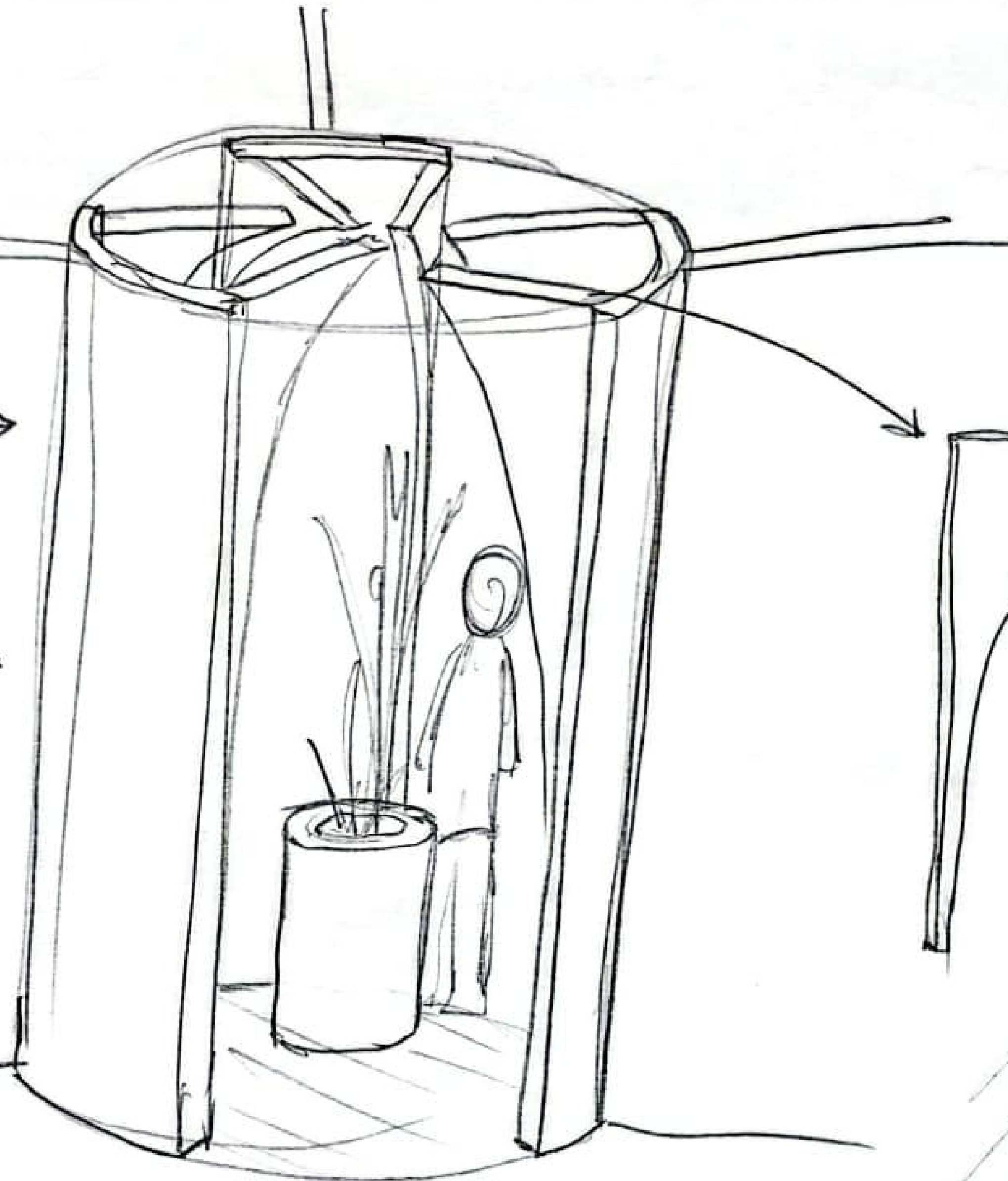
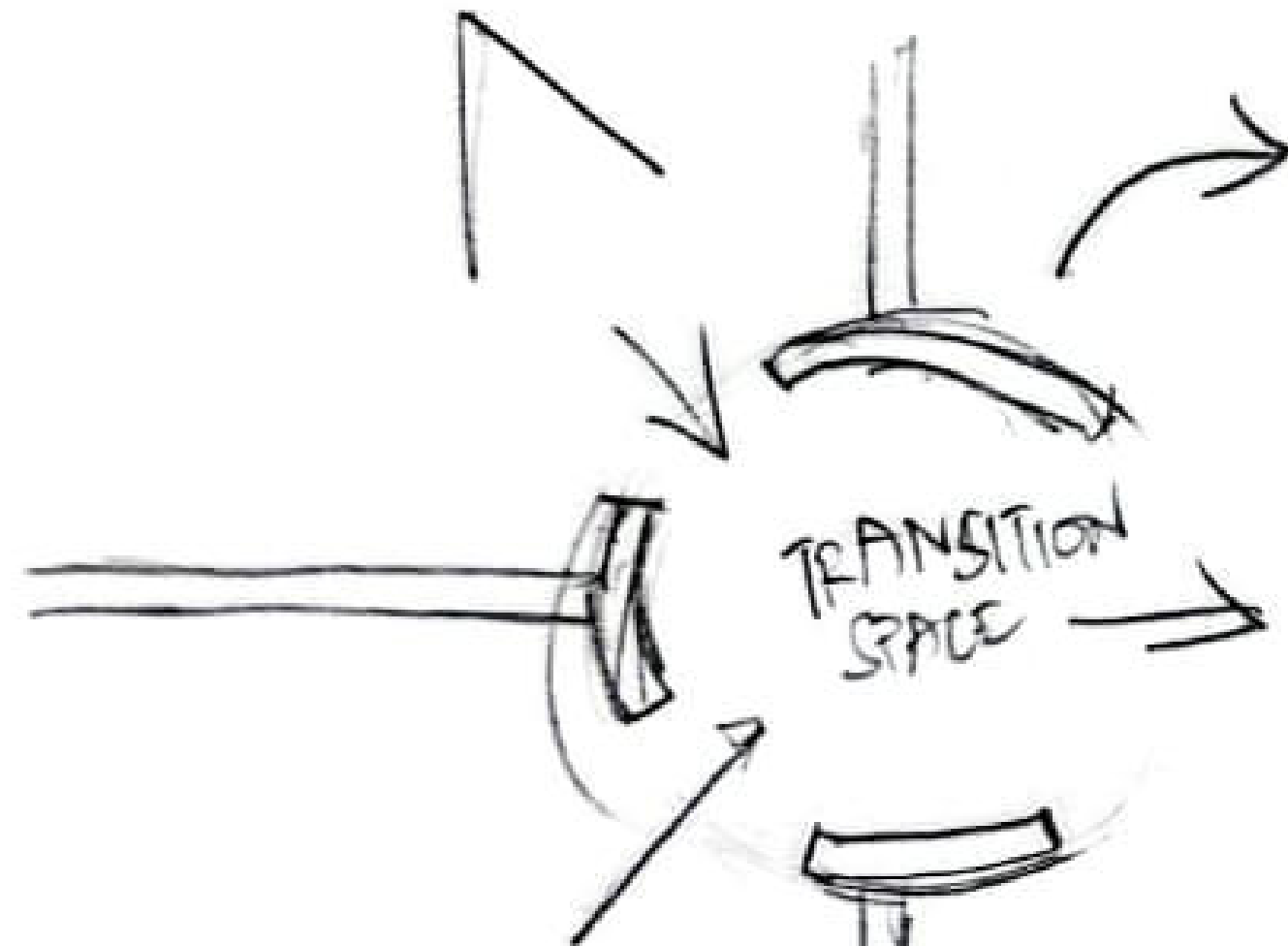
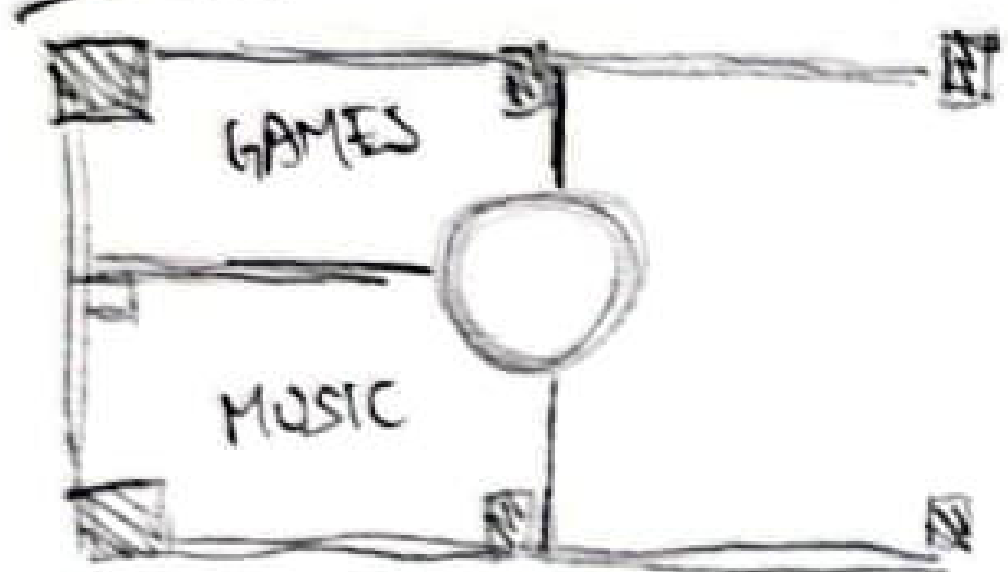
RETRACTABLE SCREEN



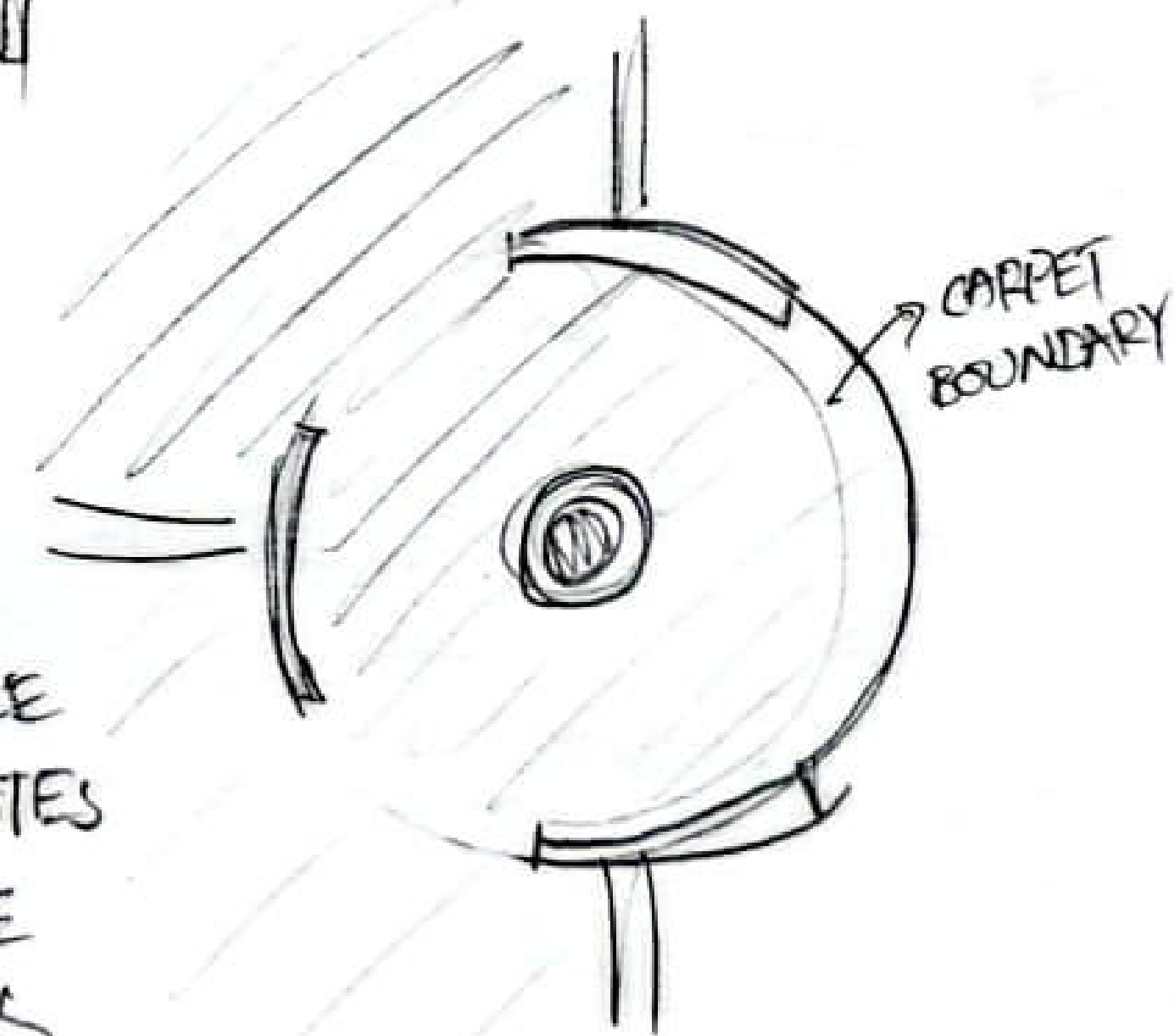
DESIGN IS MISLEADING AS IT LOOKS LIKE ITS STEPS FACING OUTWARD

ALLOW THE USER TO NATURALLY SIT INWARDS FACING EACH OTHER

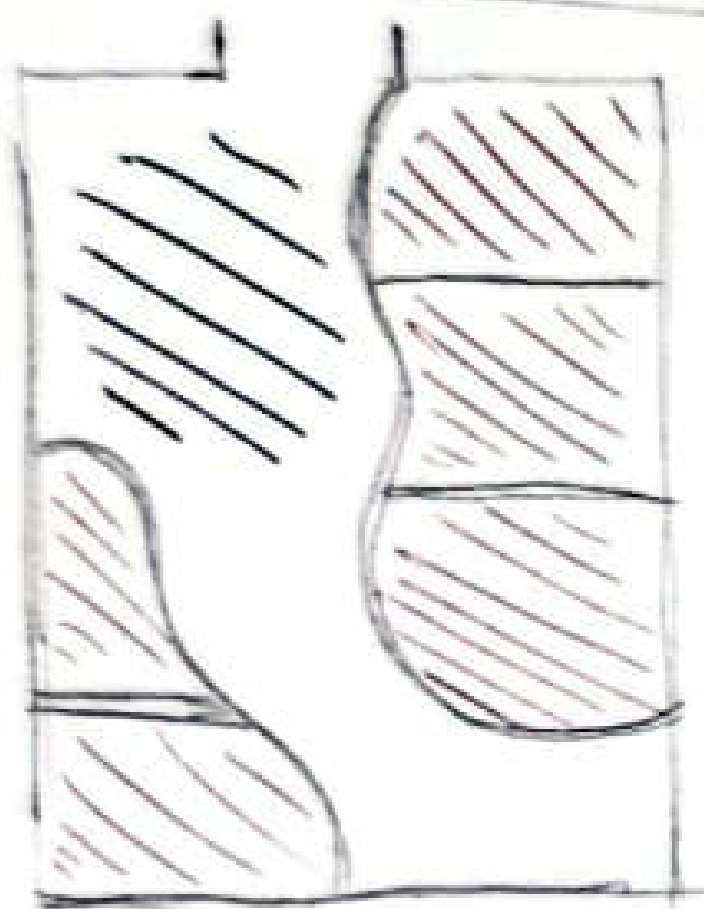
LEVEL 2



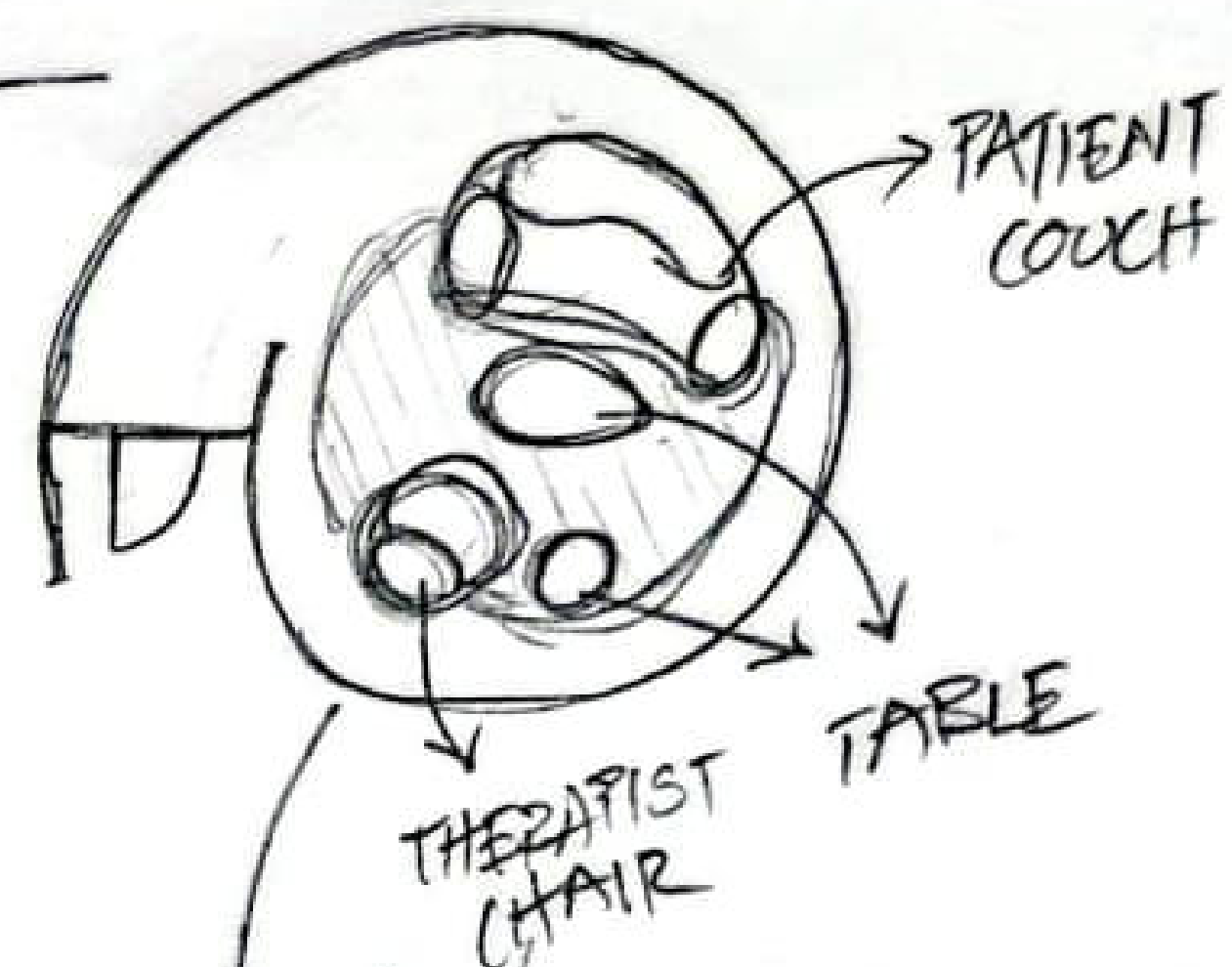
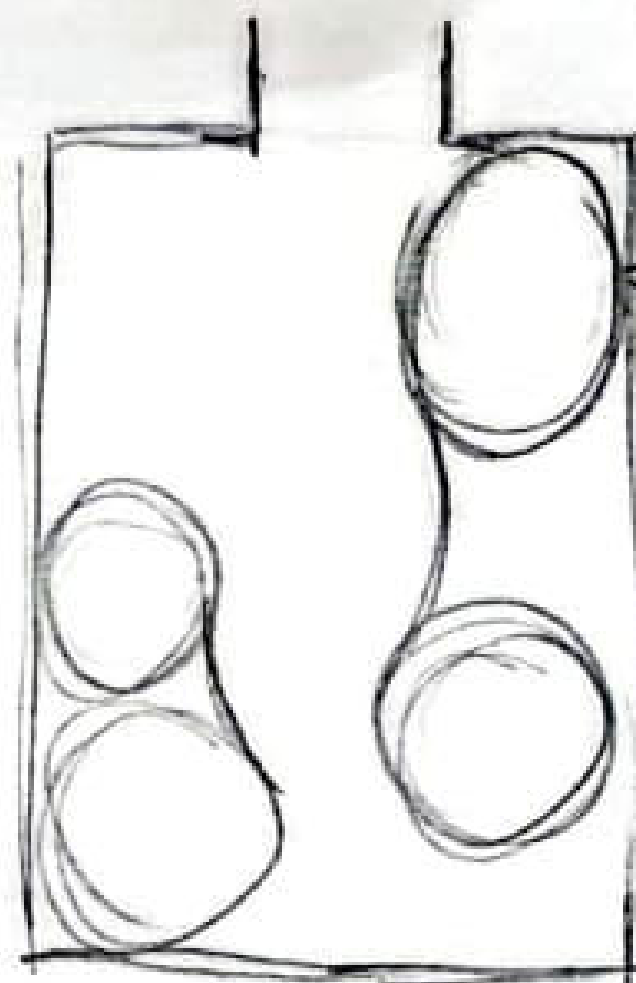
SERVES
AS A PORTAL-LIKE
SPACE & CREATES
A BUFFER TO THE
INTERIOR SPACES



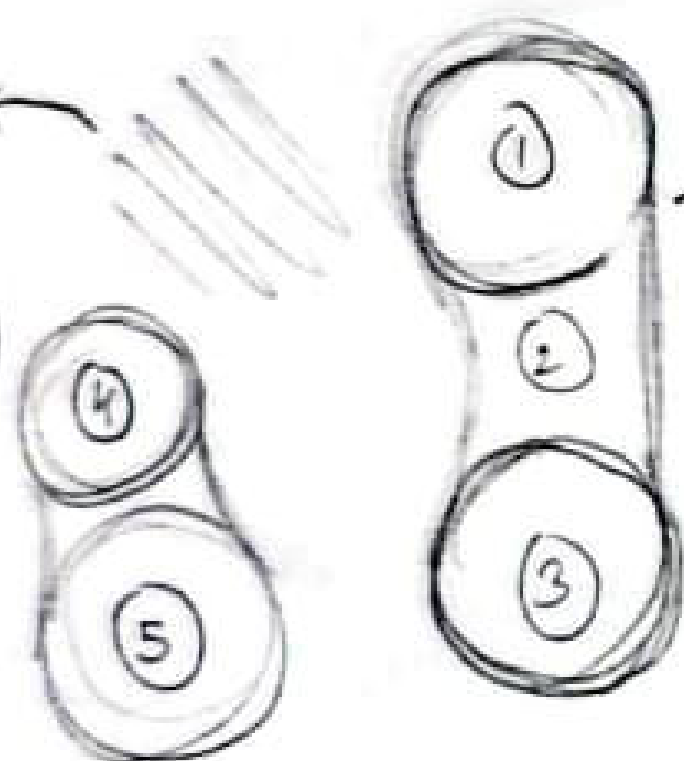
COUNSELLING ROOMS



/// - GROUP
/// - PRIVATE/INDIV.

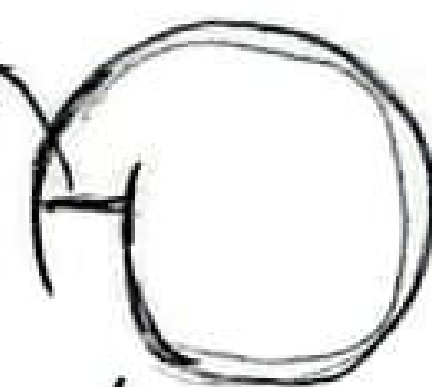


OPEN AREA
(GROUP THERAPY)

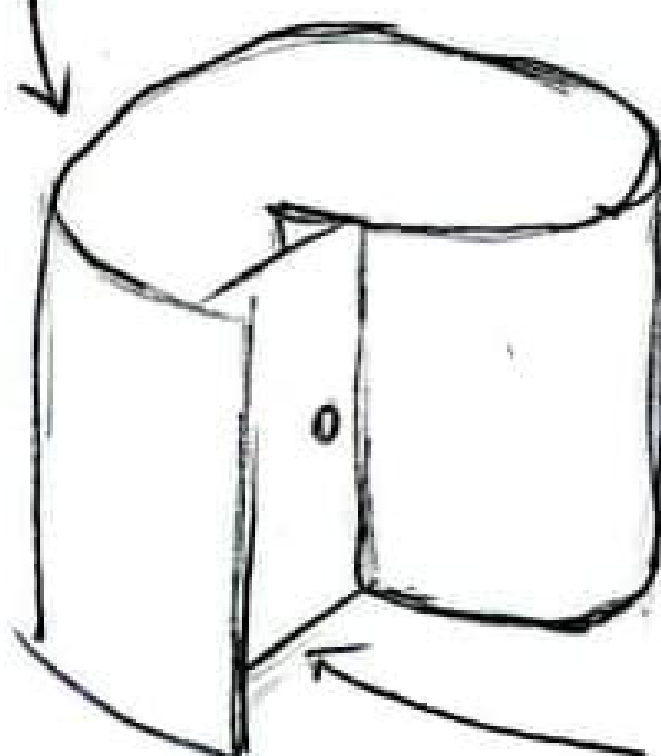


CIRCULAR/ORGANIC FORMS GIVE A SOFTER AMBIANCE

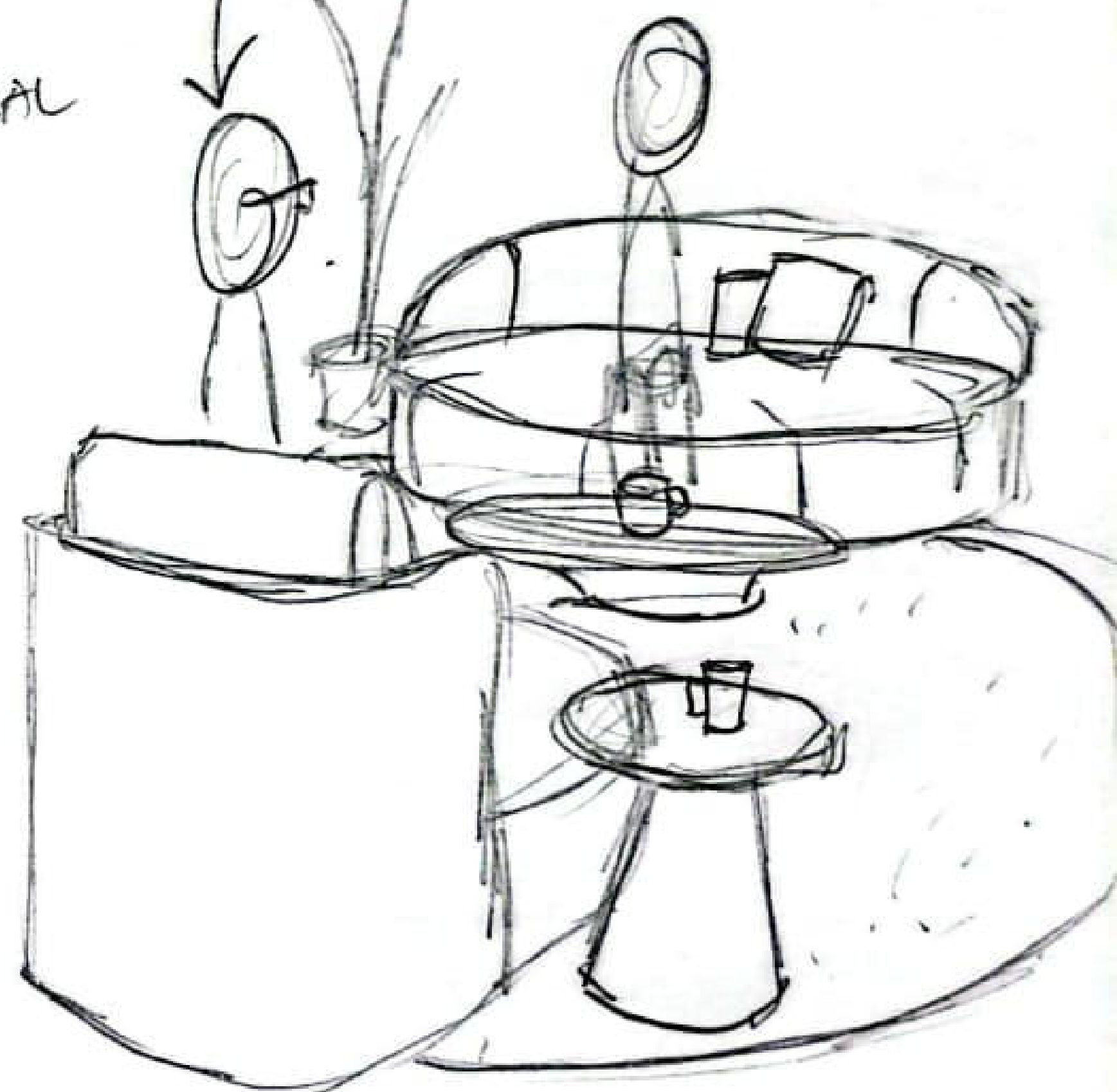
HIDDEN DOOR



FLAT DOOR, MORE PRACTICAL



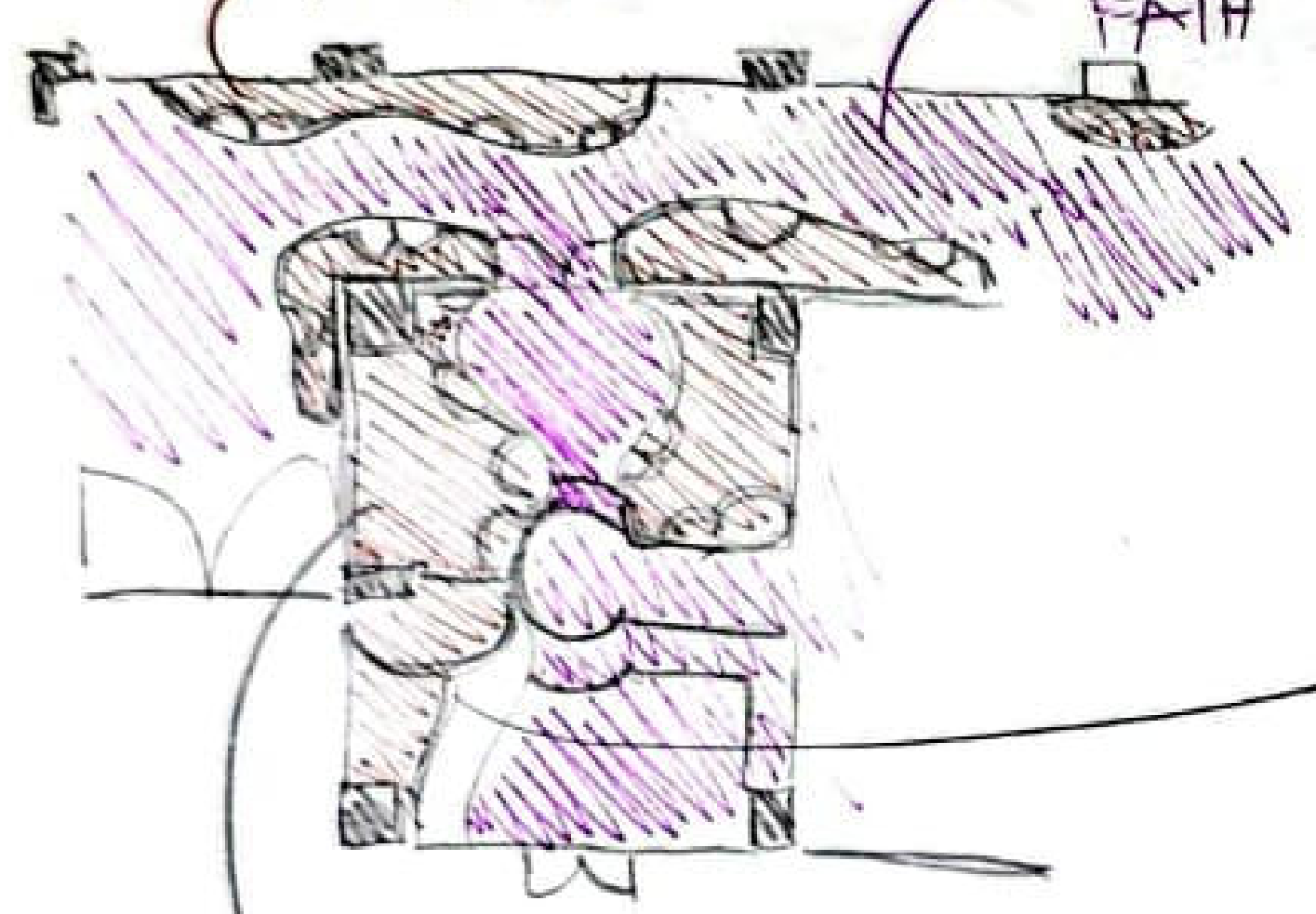
CHANGE *
CURVE DOOR



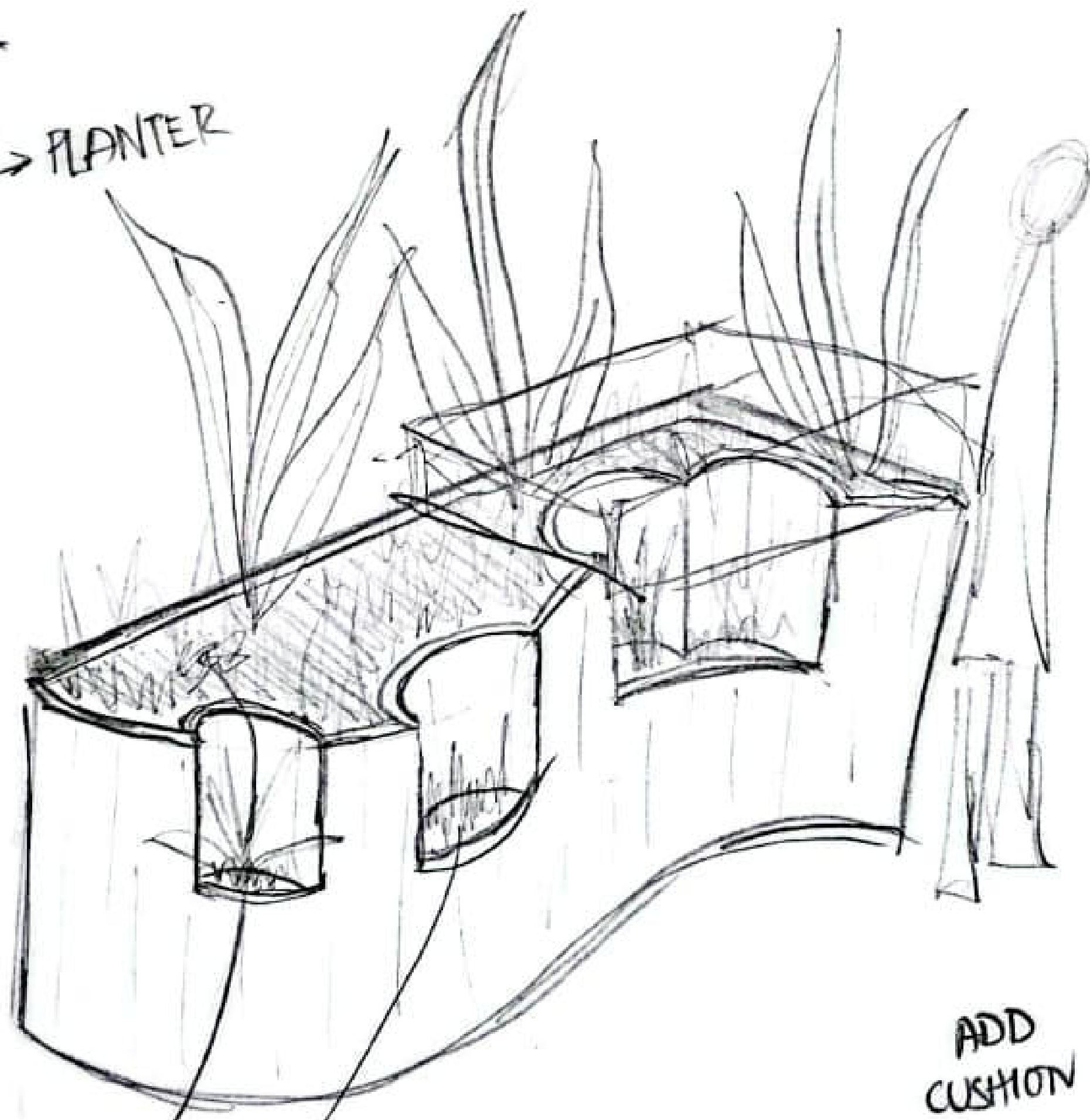
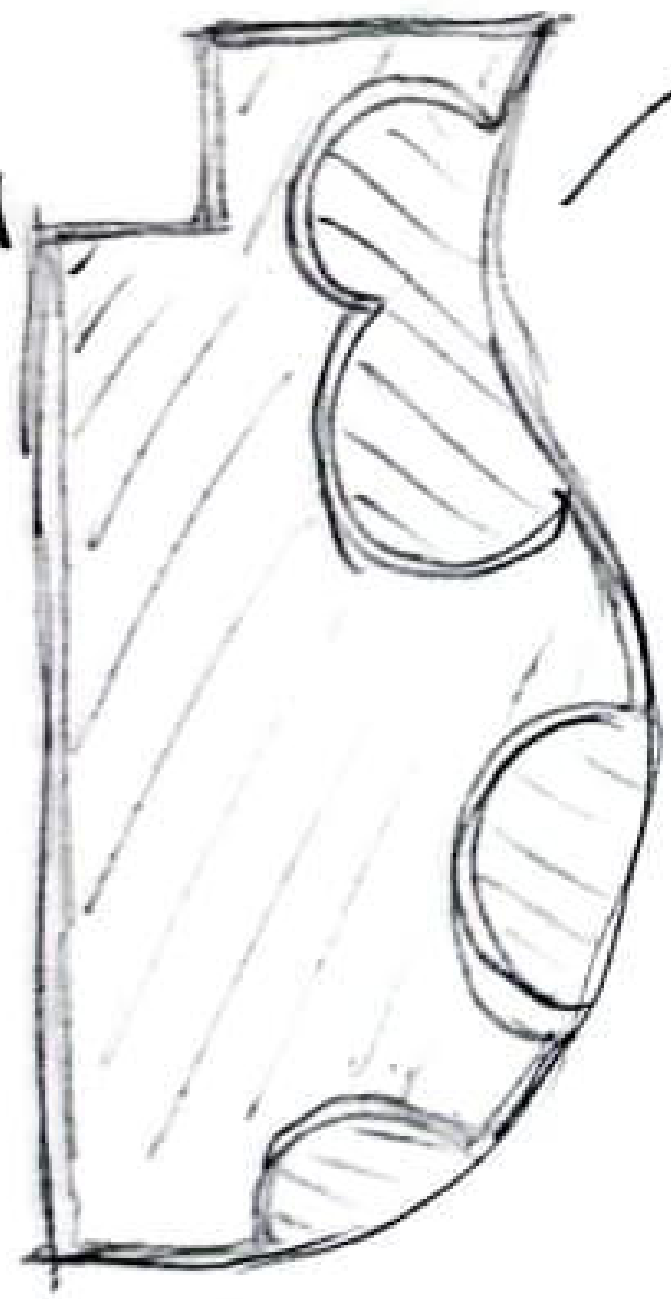
LEVEL 3

PLANTERS

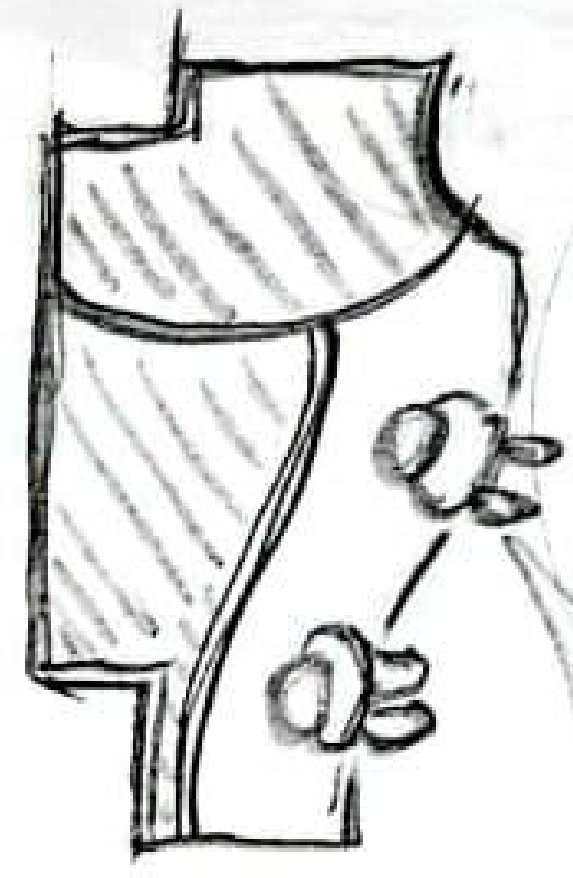
CIRCULATION
PATH



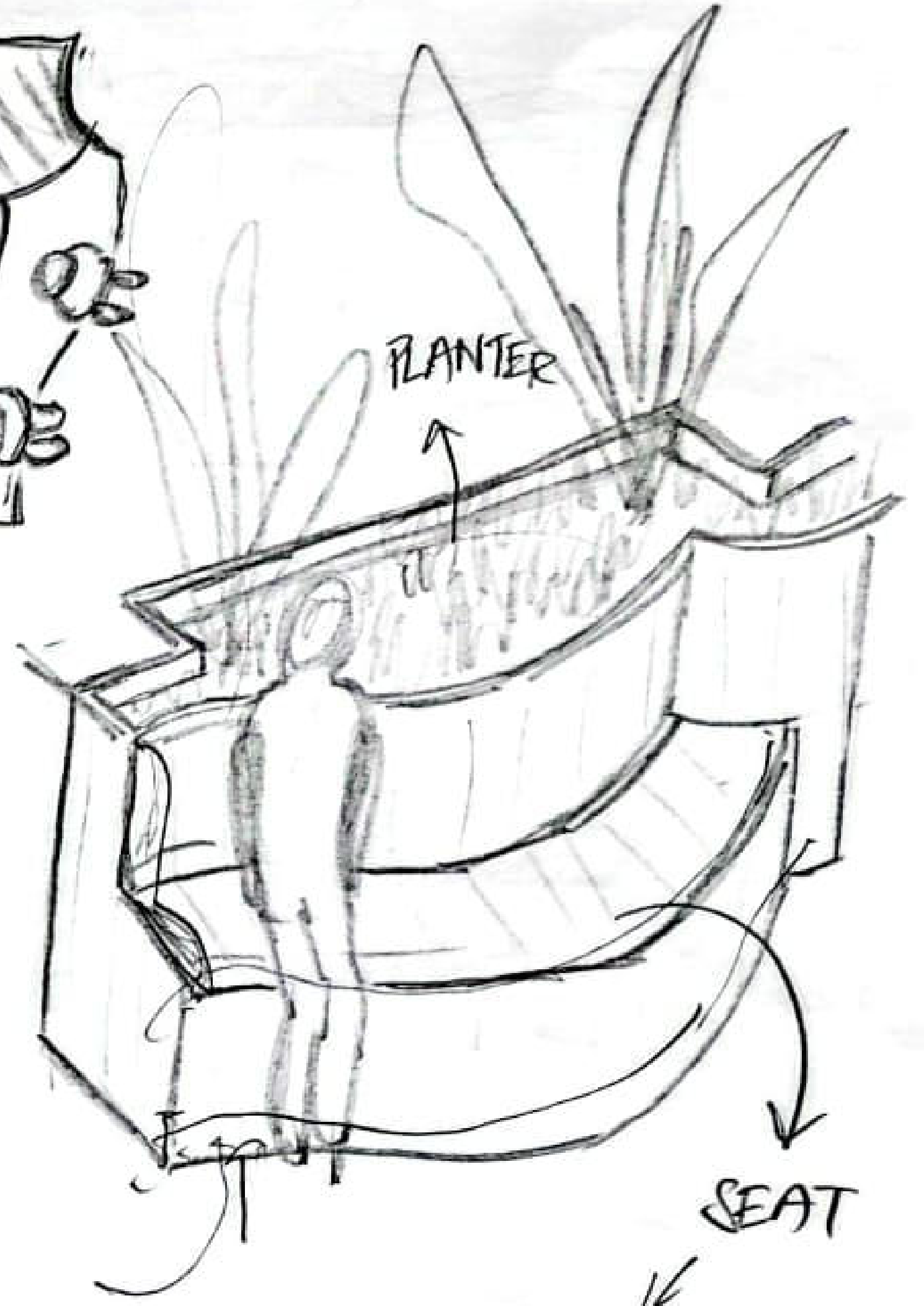
PLANTER



TACTILE &
STIMULATING SPOTS:
SIGHT, SMELL & SIGHT



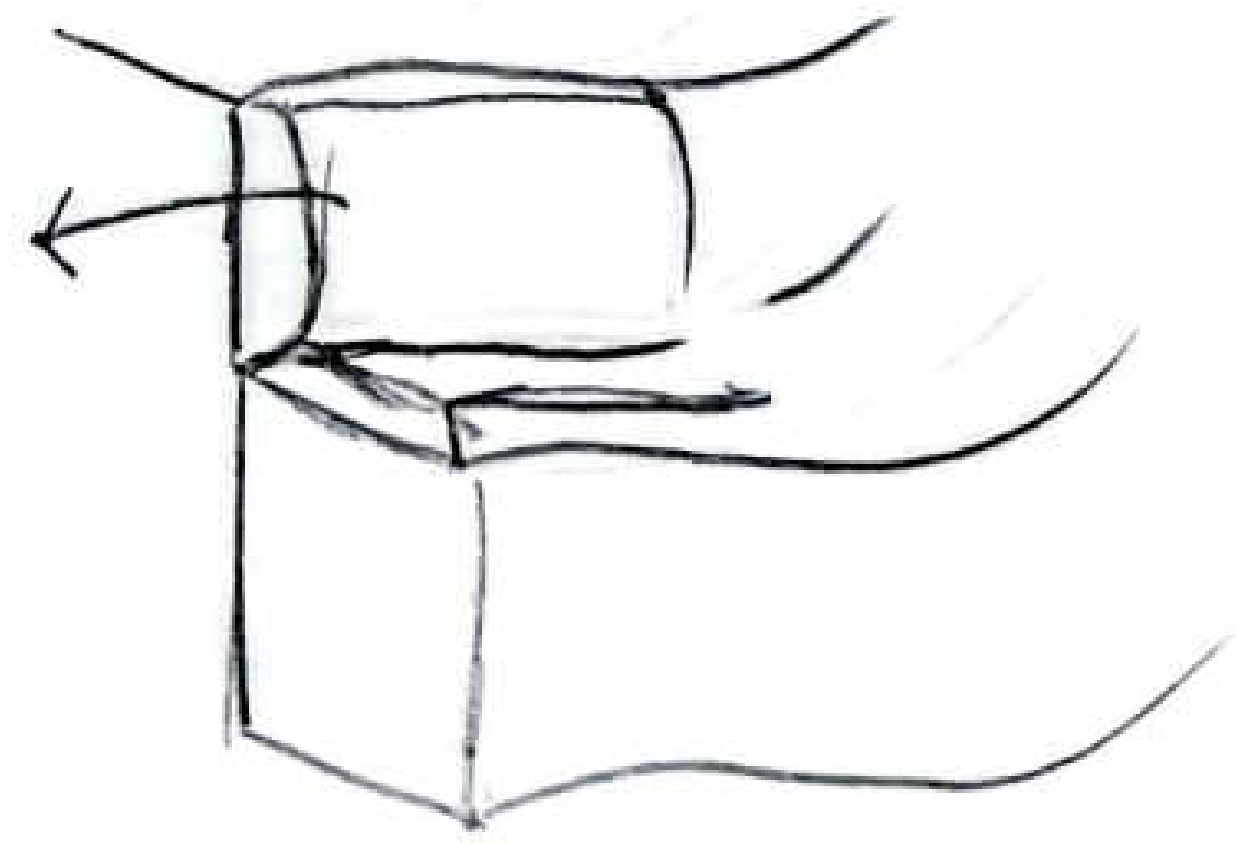
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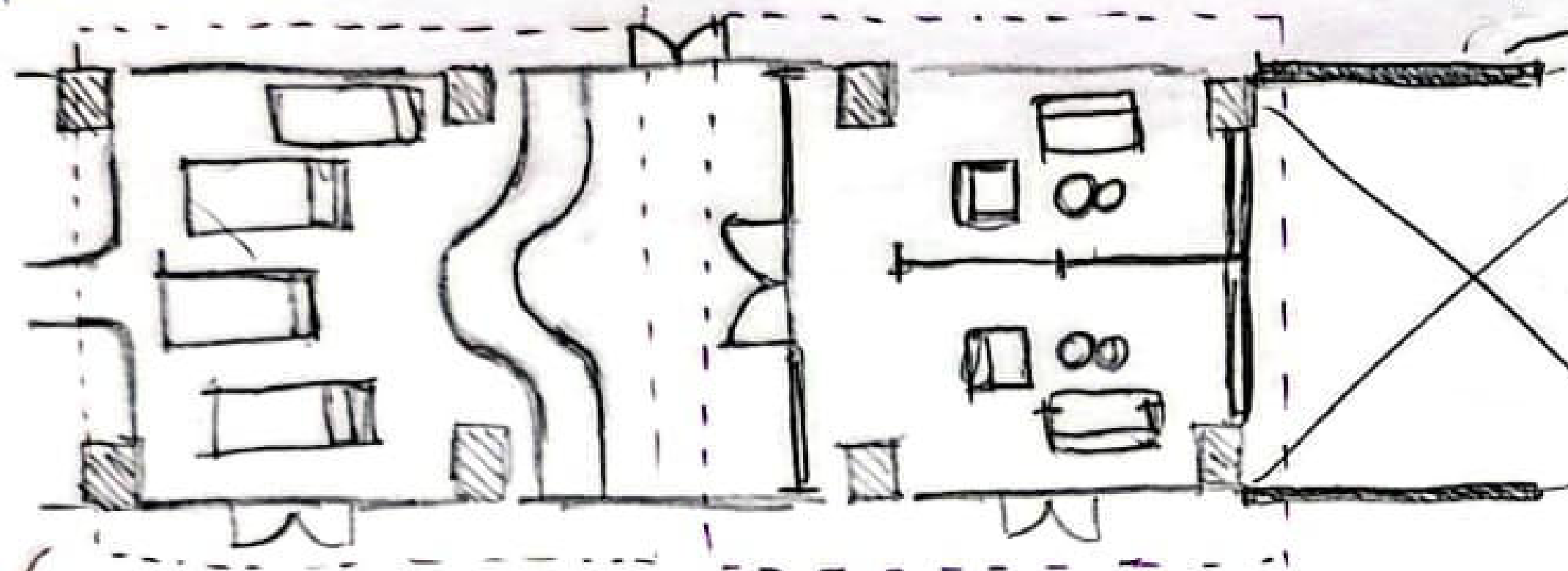
SEAT

USED IN OTHER
SPACES

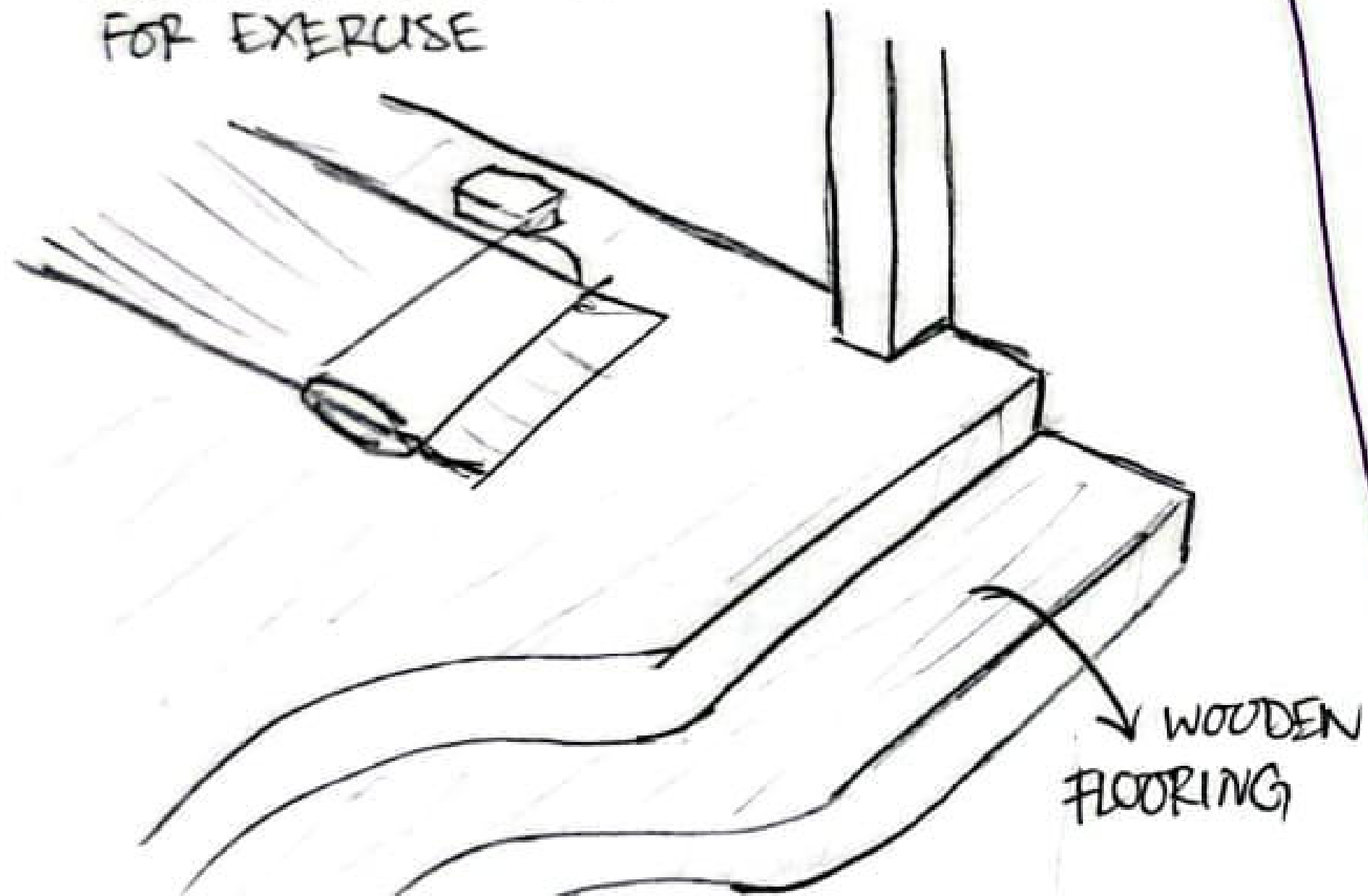
ADD
CUSHION



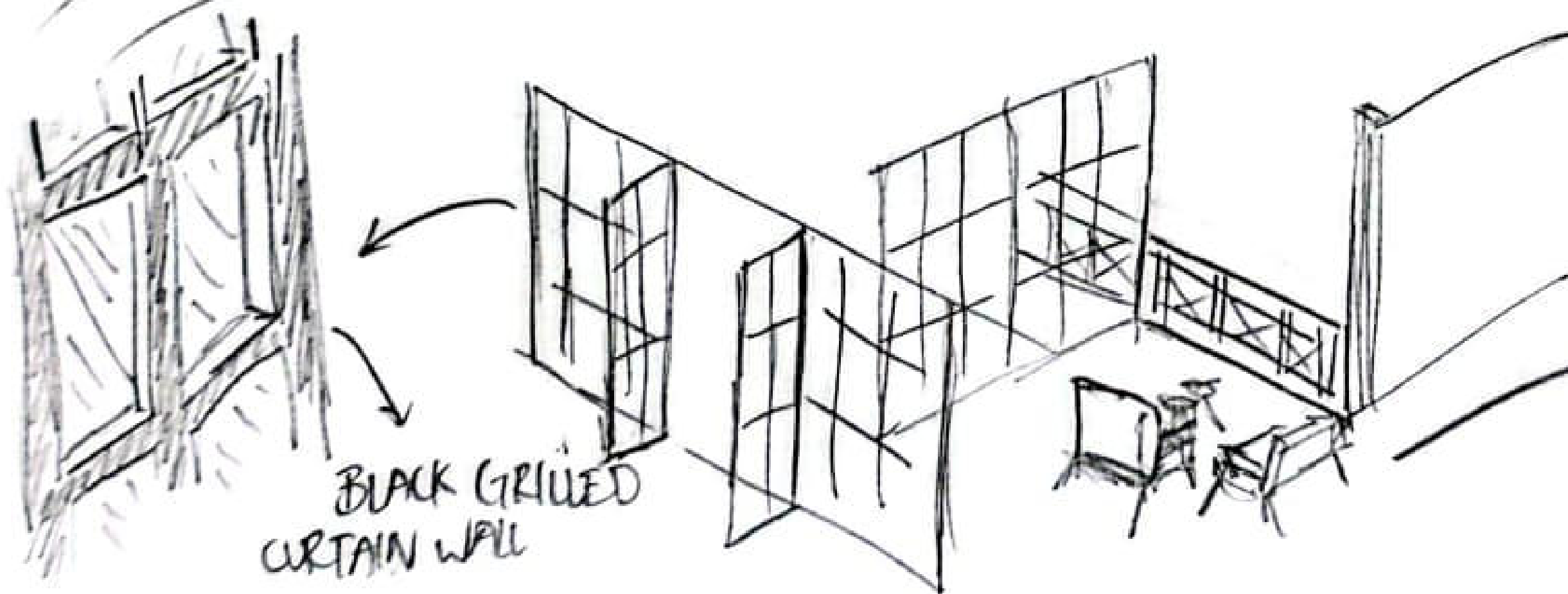
LEVEL 3 GARDEN



ELEVATED PLATFORM
FOR EXERCISE



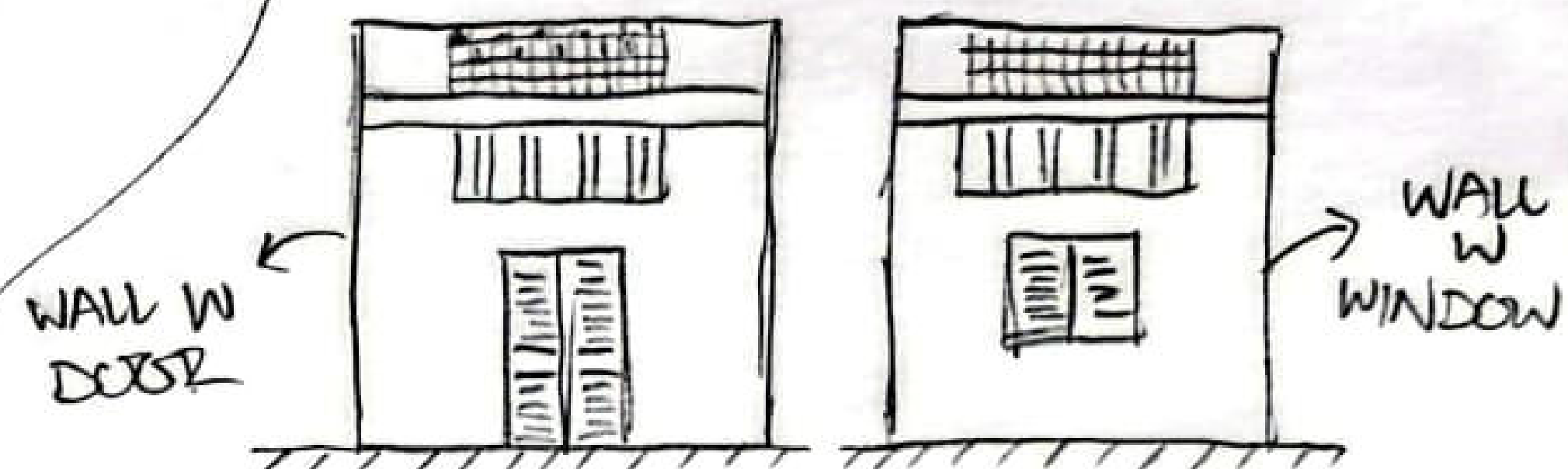
WOODEN
FLOORING



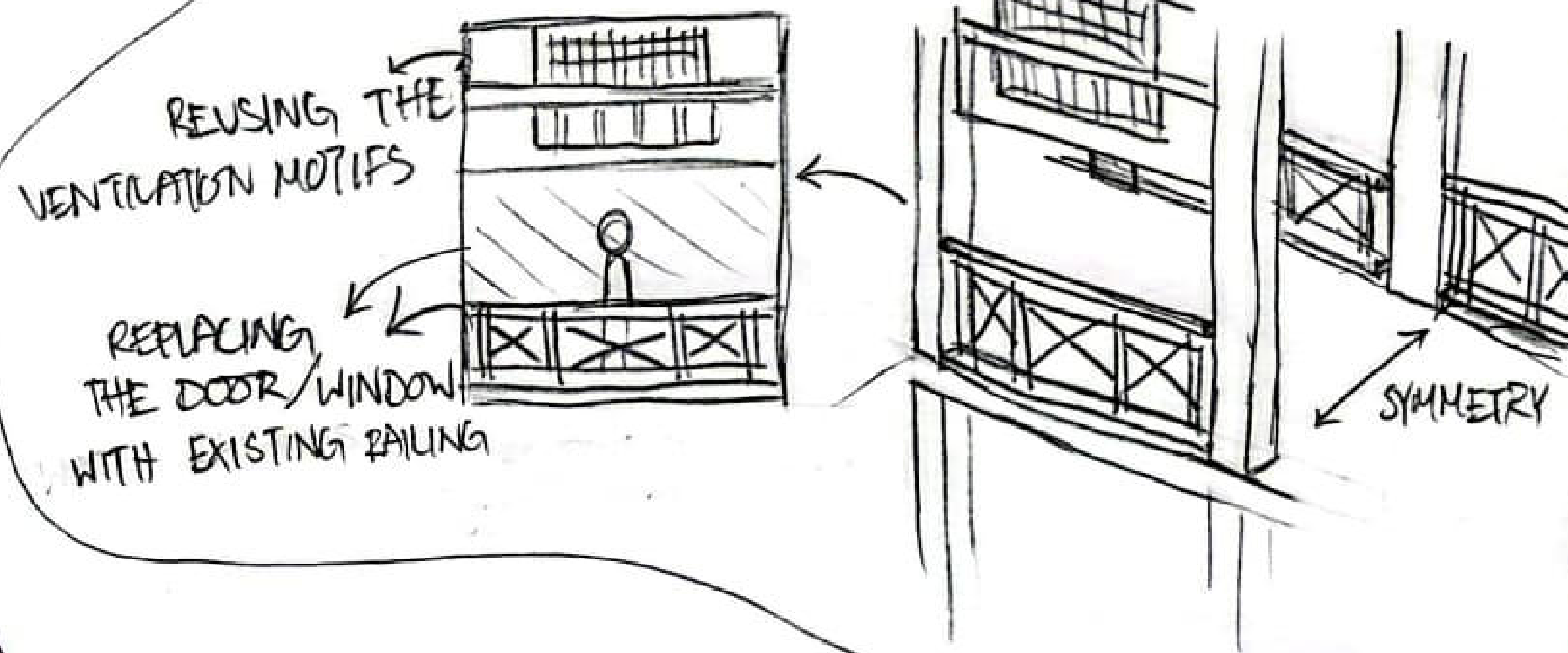
BLACK GRIDDED
CURTAIN WALL

ADAPTIVE REUSE

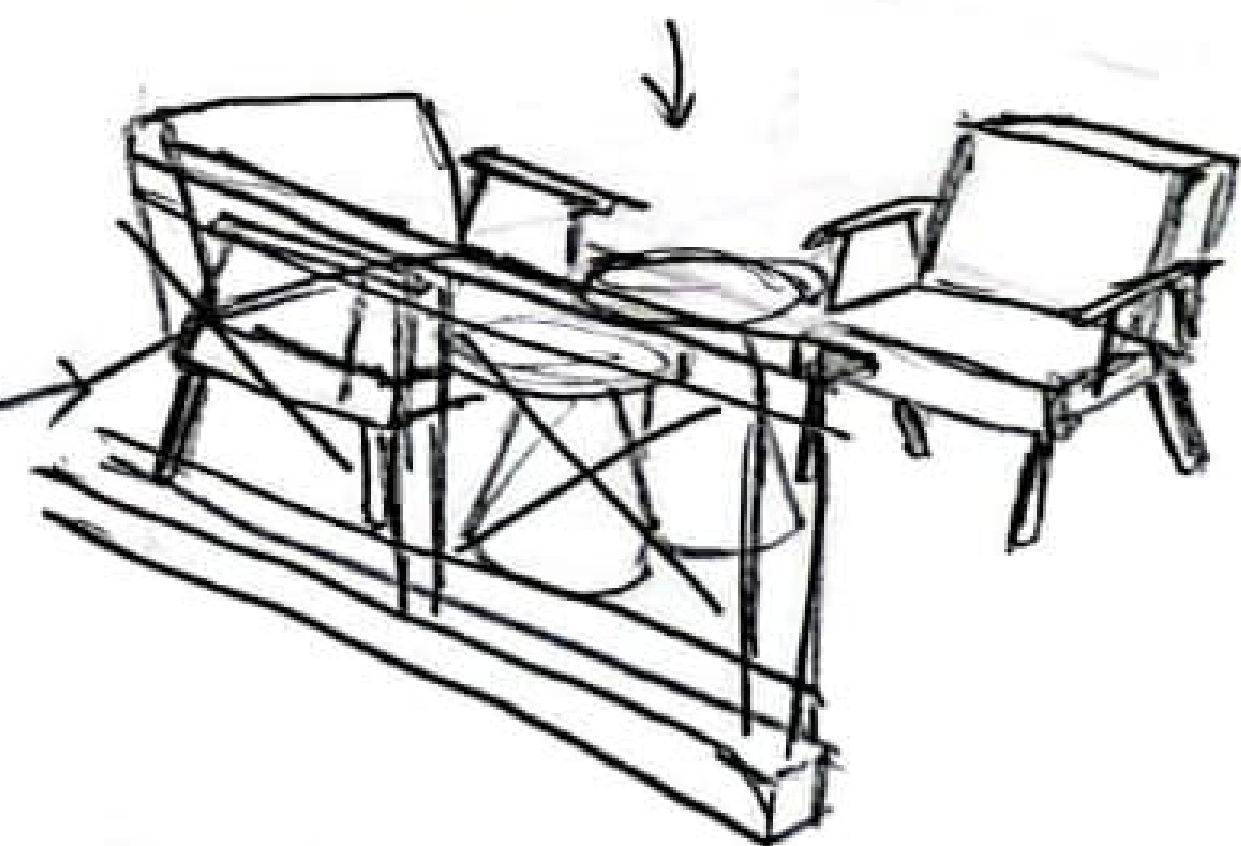
EXISTING:



REUSE PROPOSING:



SMALL & COZY
SEATING SPACE



LEVEL 3 LIBRARY

CURVED PLATFORM, USING THE DESIGN OF THE OTHER AREAS

ELEVATED PLATFORM

SHELVING

COMFORTABLE SEATING

CLOSE PROXIMITY TO THE SHELVES

CARPETING

SMALL TABLE

PROTRUDING PLATFORM FROM WINDOW CREATE A NOOK FOR USERS

TABLE*

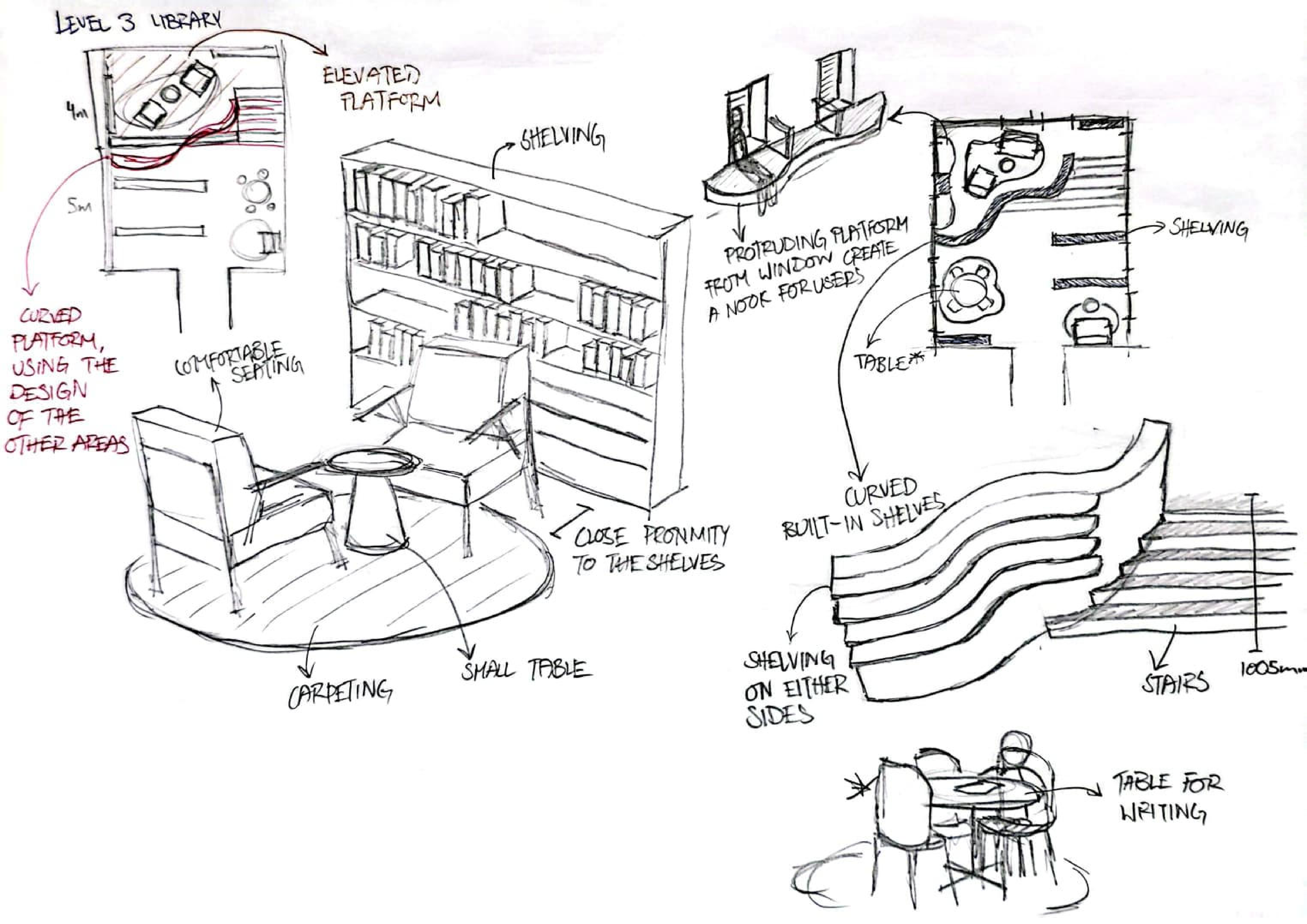
CURVED BUILT-IN SHELVES

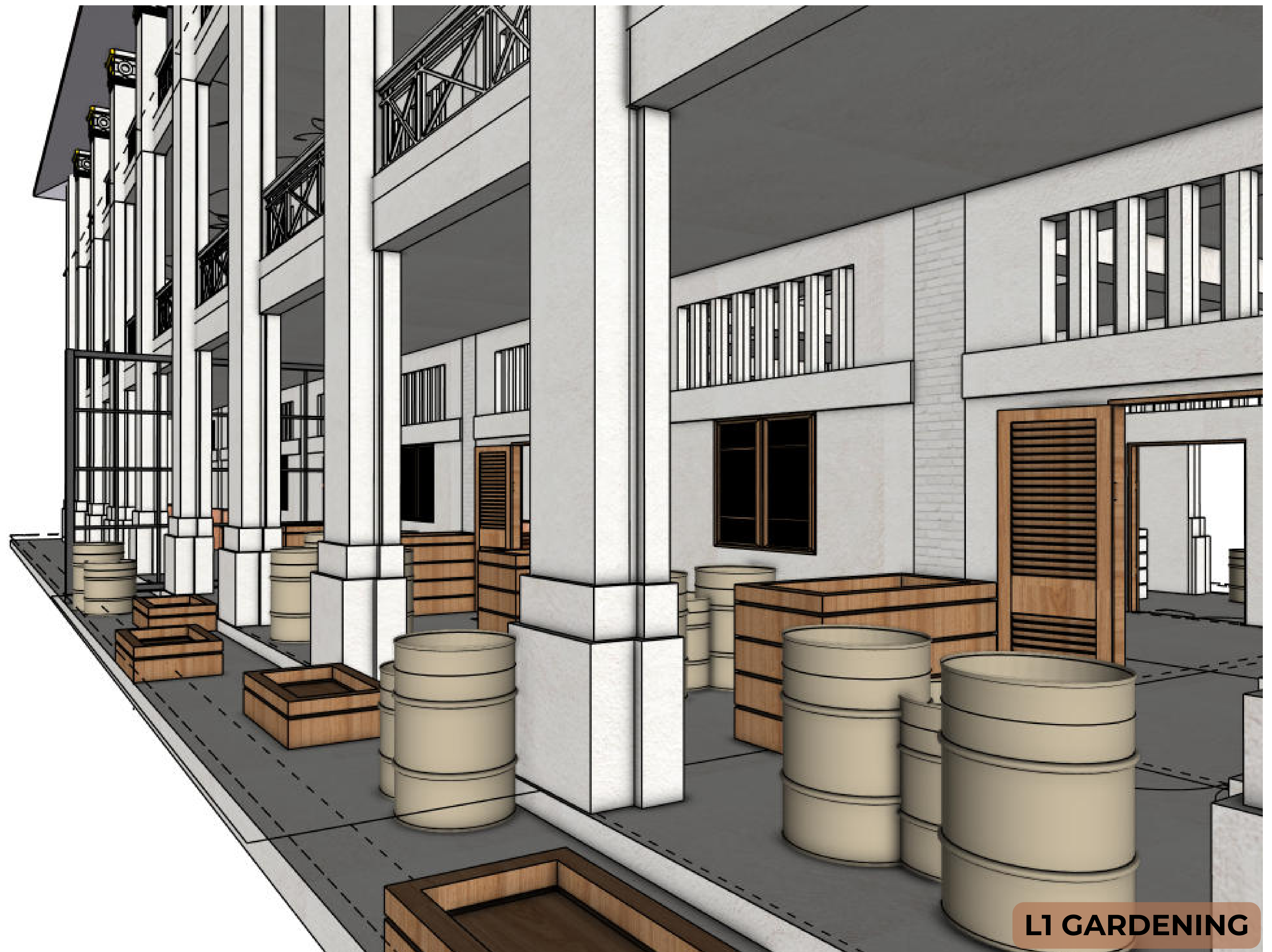
SHELVING ON EITHER SIDES

STAIRS

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TABLE FOR WRITING

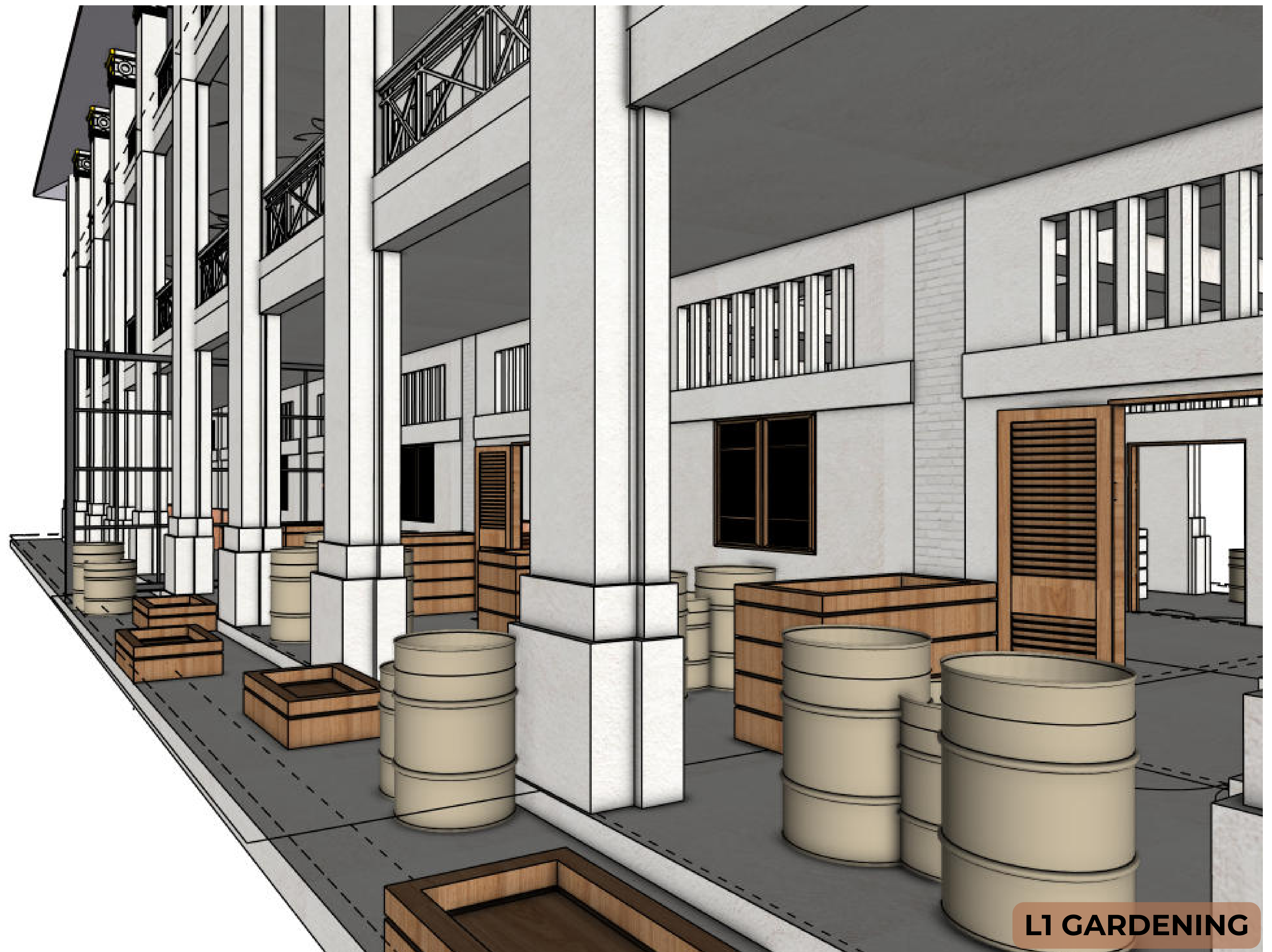




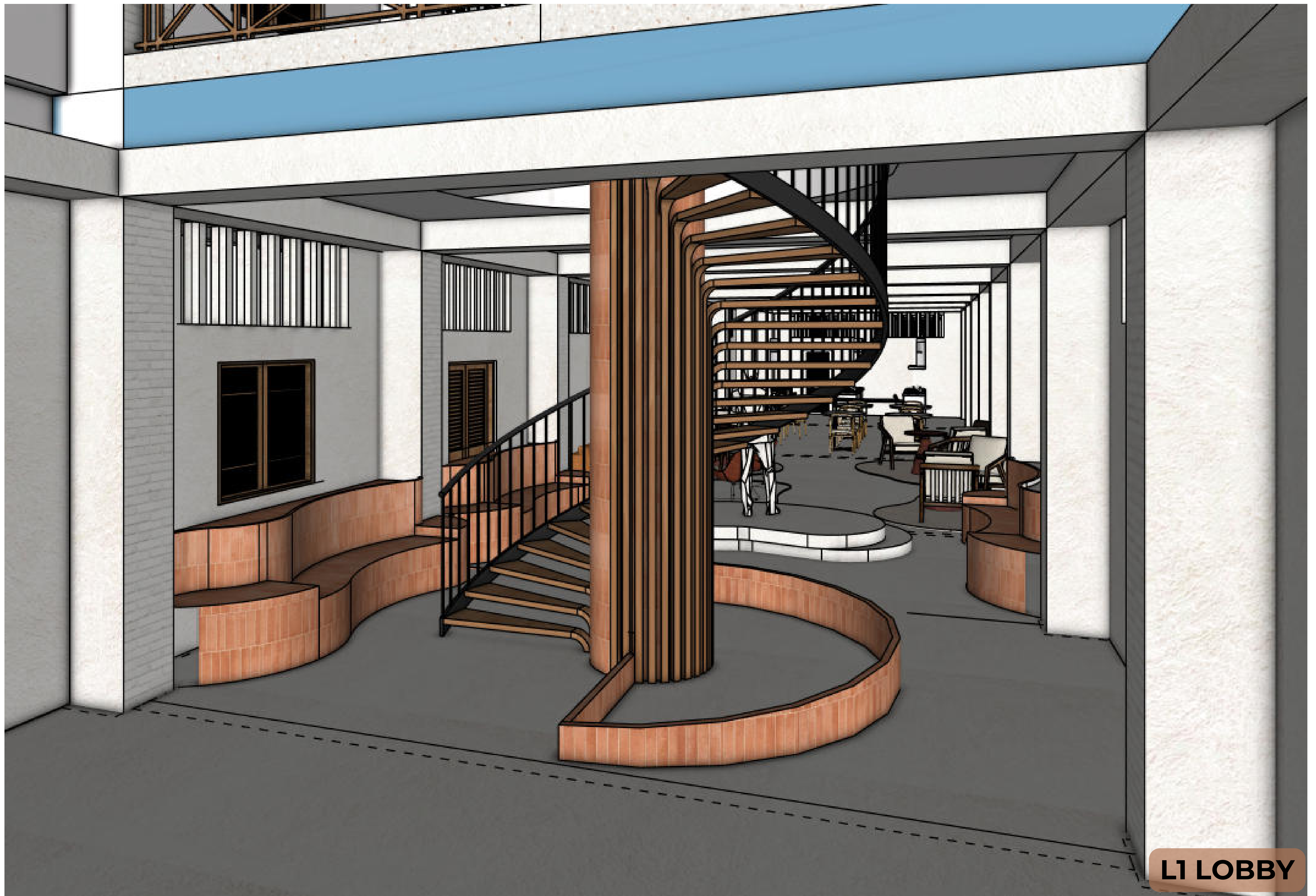
L1 GARDENING



L1 DINING



L1 GARDENING



L1 LOBBY



L1 DINING OUTDOOR



L2 ACTIVITIES



L2 CREATIVE STUDIO



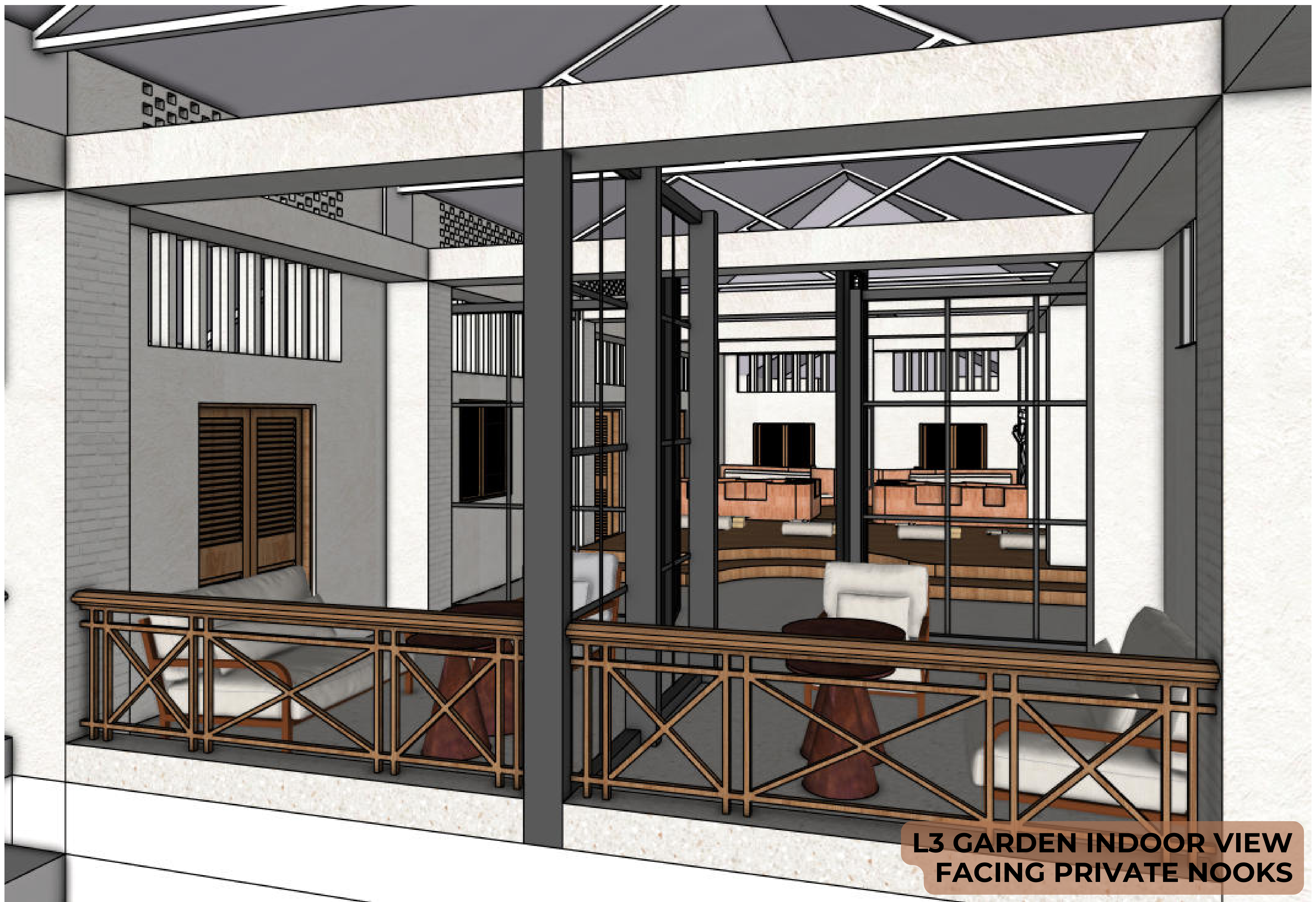
L2 VIEW INTO TOILET



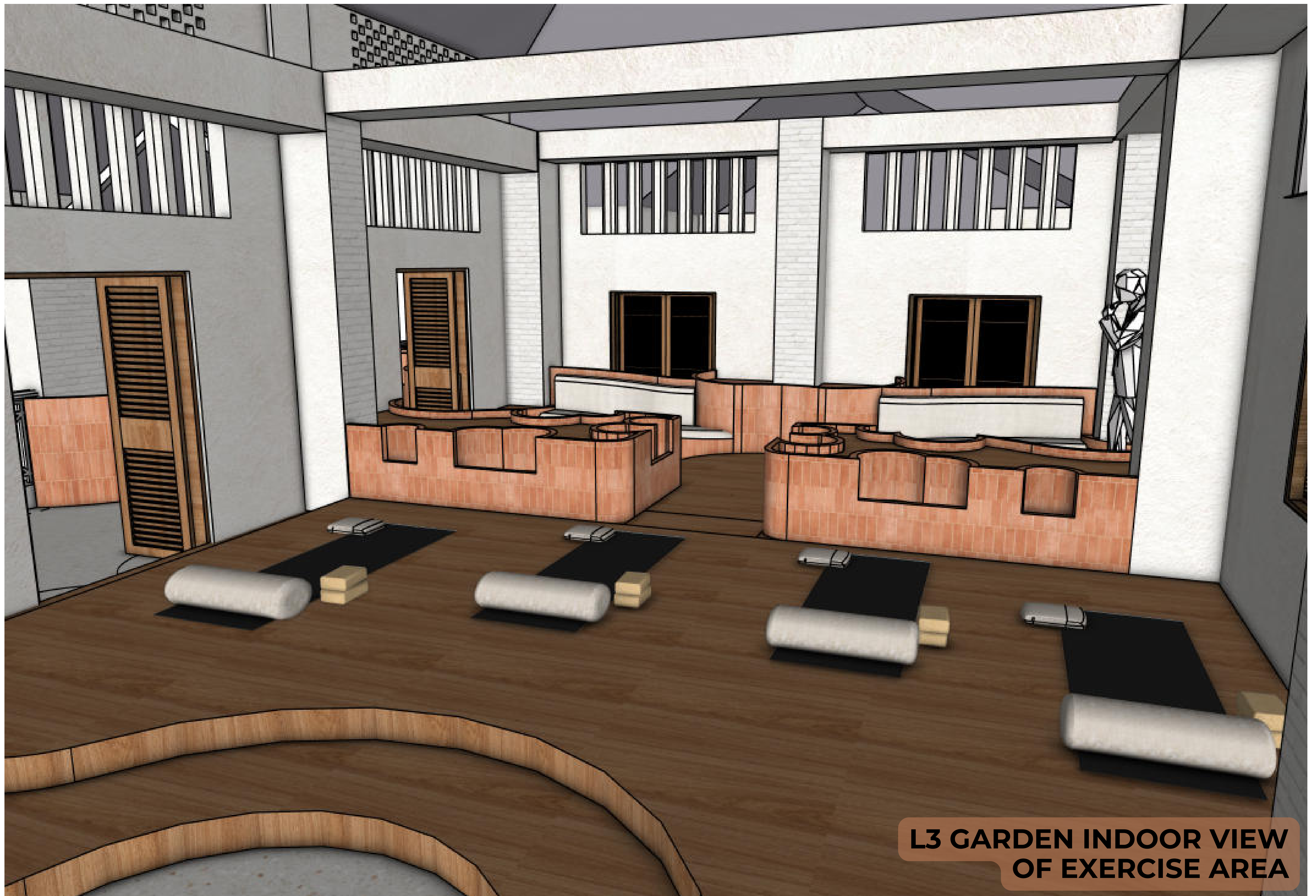
**L2 PRIVATE
COUNSELLING ROOM**



L3 GARDEN OUTDOOR



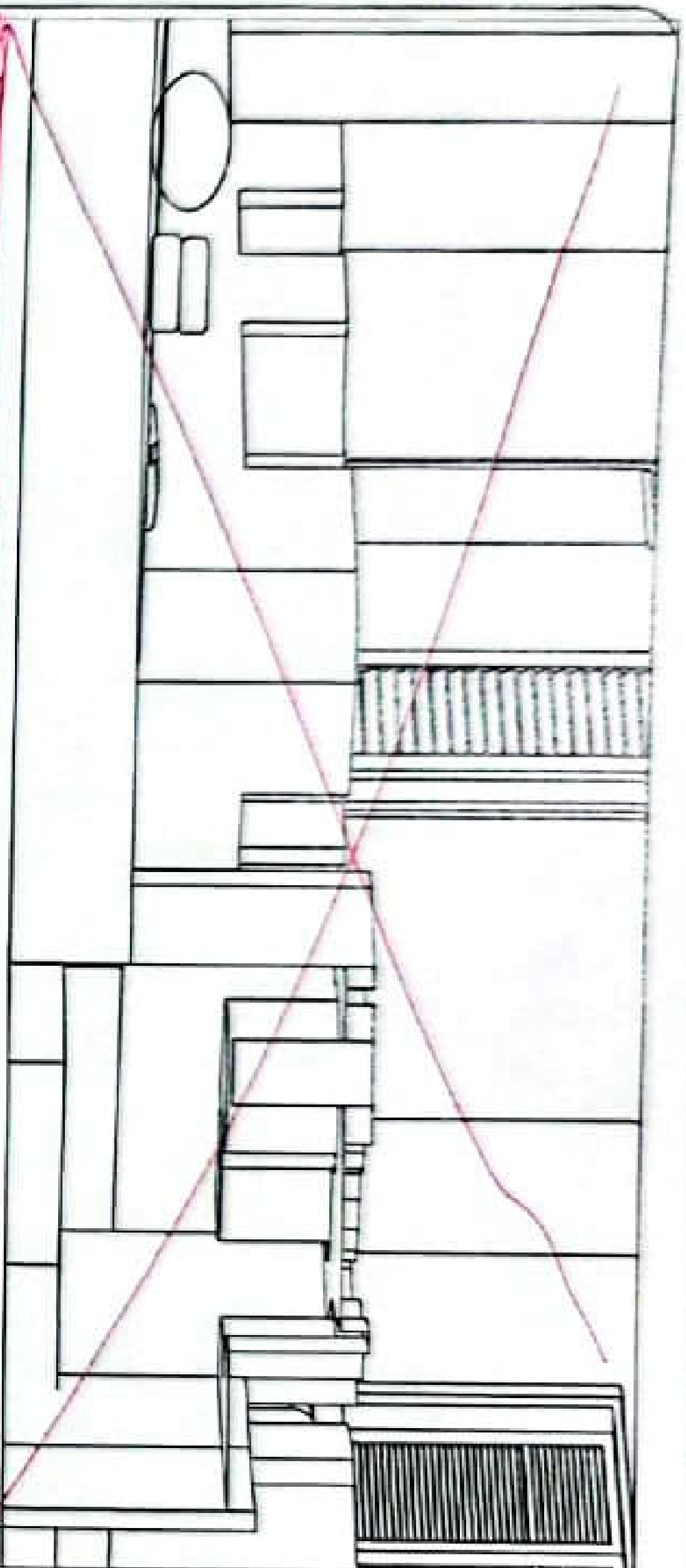
**L3 GARDEN INDOOR VIEW
FACING PRIVATE NOOKS**



**L3 GARDEN INDOOR VIEW
OF EXERCISE AREA**



L3 LIBRARY



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~~X~~ no bear

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1:25

RT	DESCRIPTION	BY	DATE

Hold Me

PROJECT_TITLE

References

DRAWING_TITLE

THE
W. W. NORTON & CO.

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ATTACHED IS

DATE: 08/04/2000

CS

CLIENT NAME

Abstract

E-mail: edward@cs.cmu.edu
 E-mail: edward@cs.cmu.edu

FIRM NAME

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© 2007 AETI MEDIA

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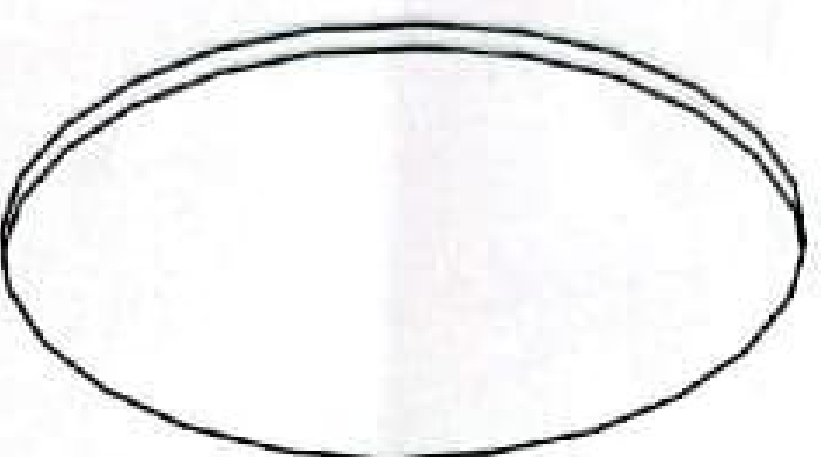
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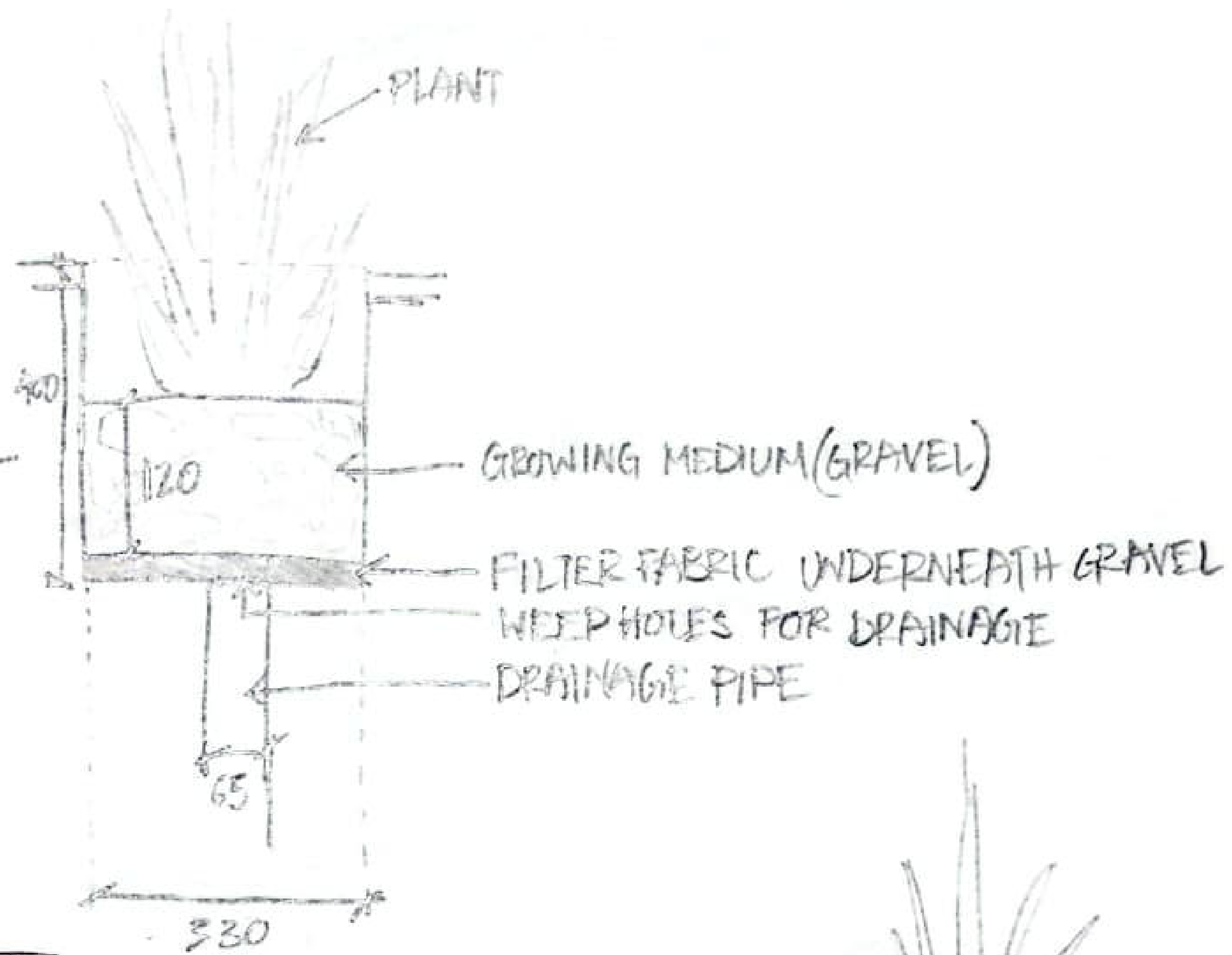
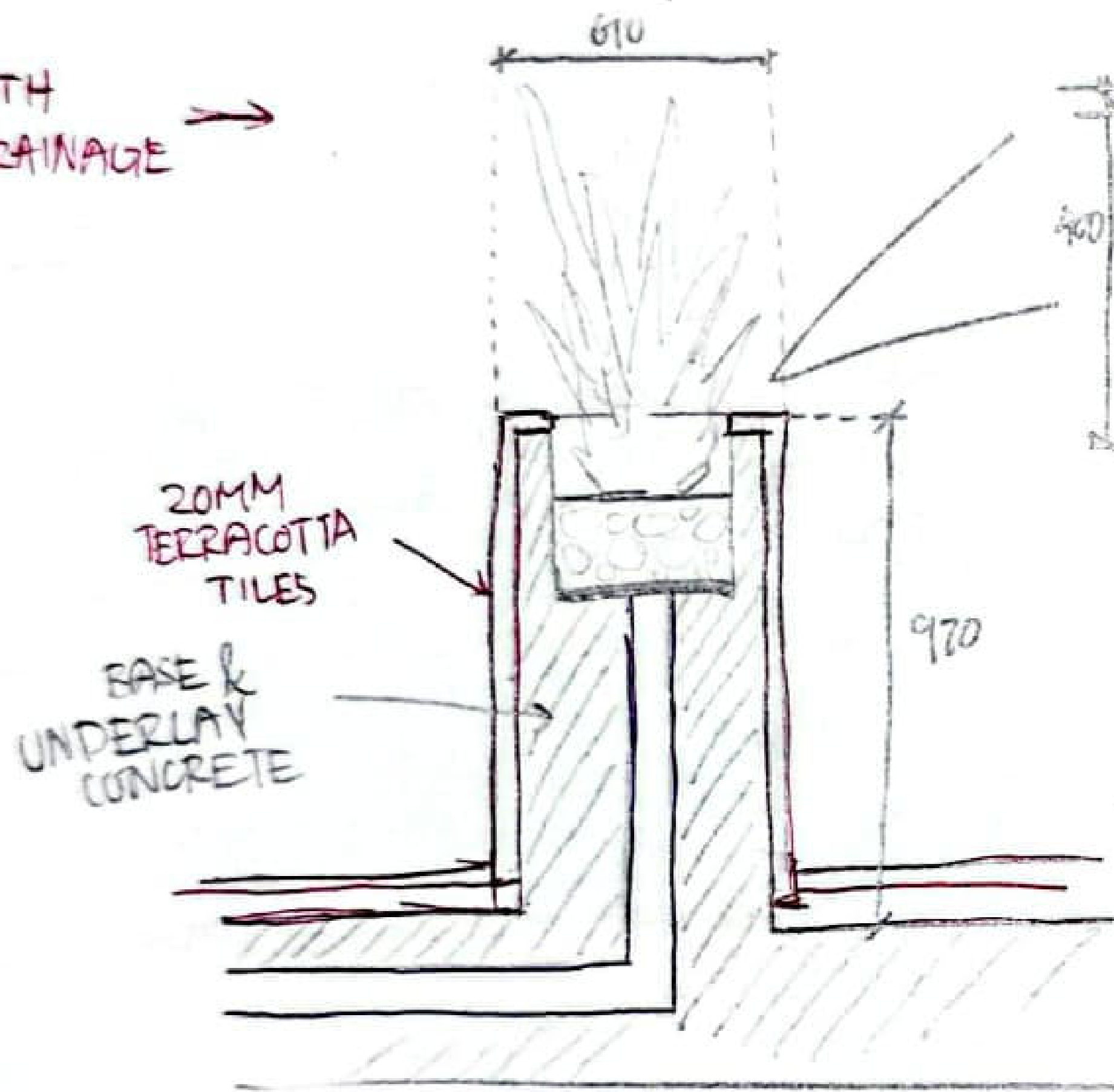
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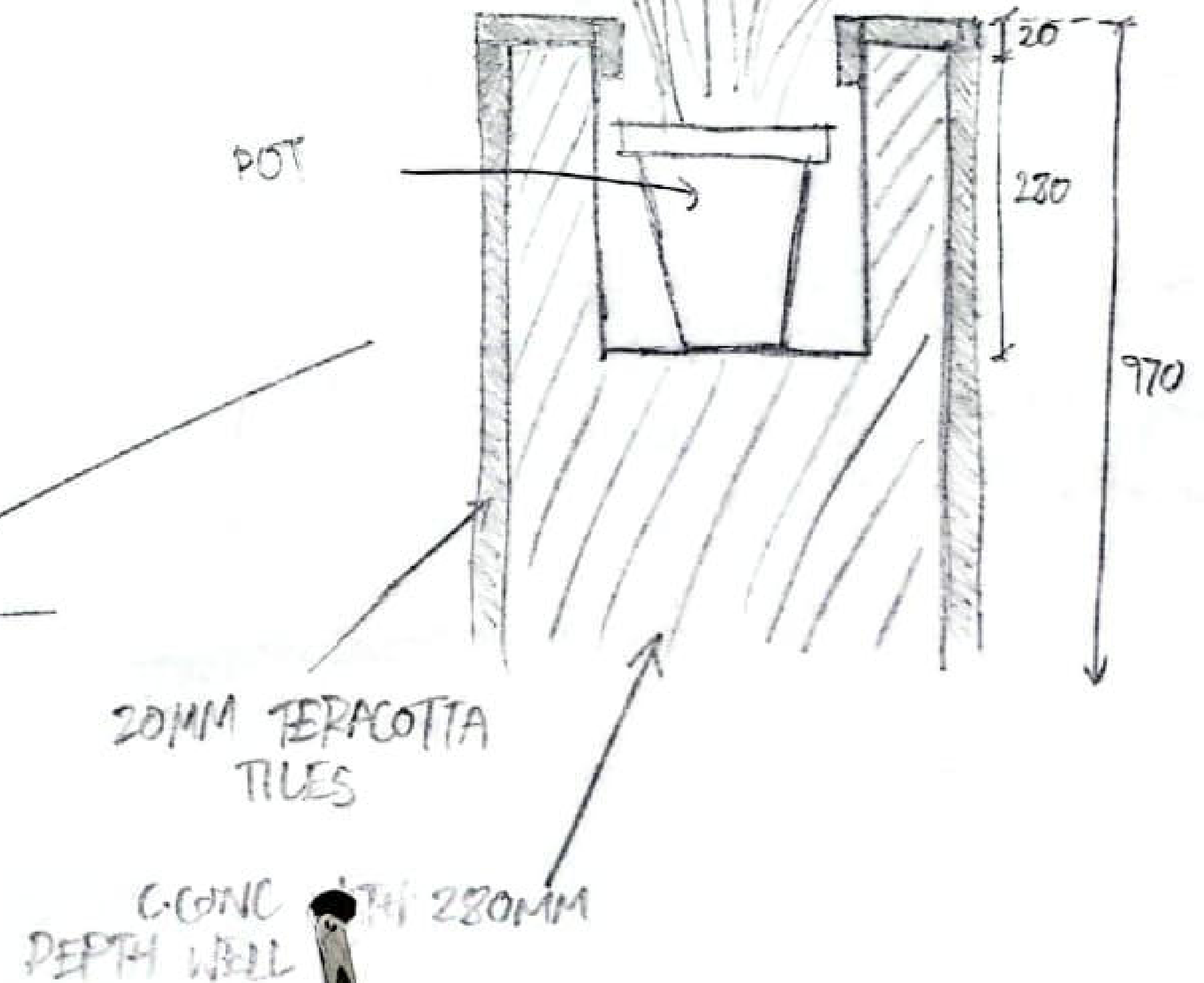
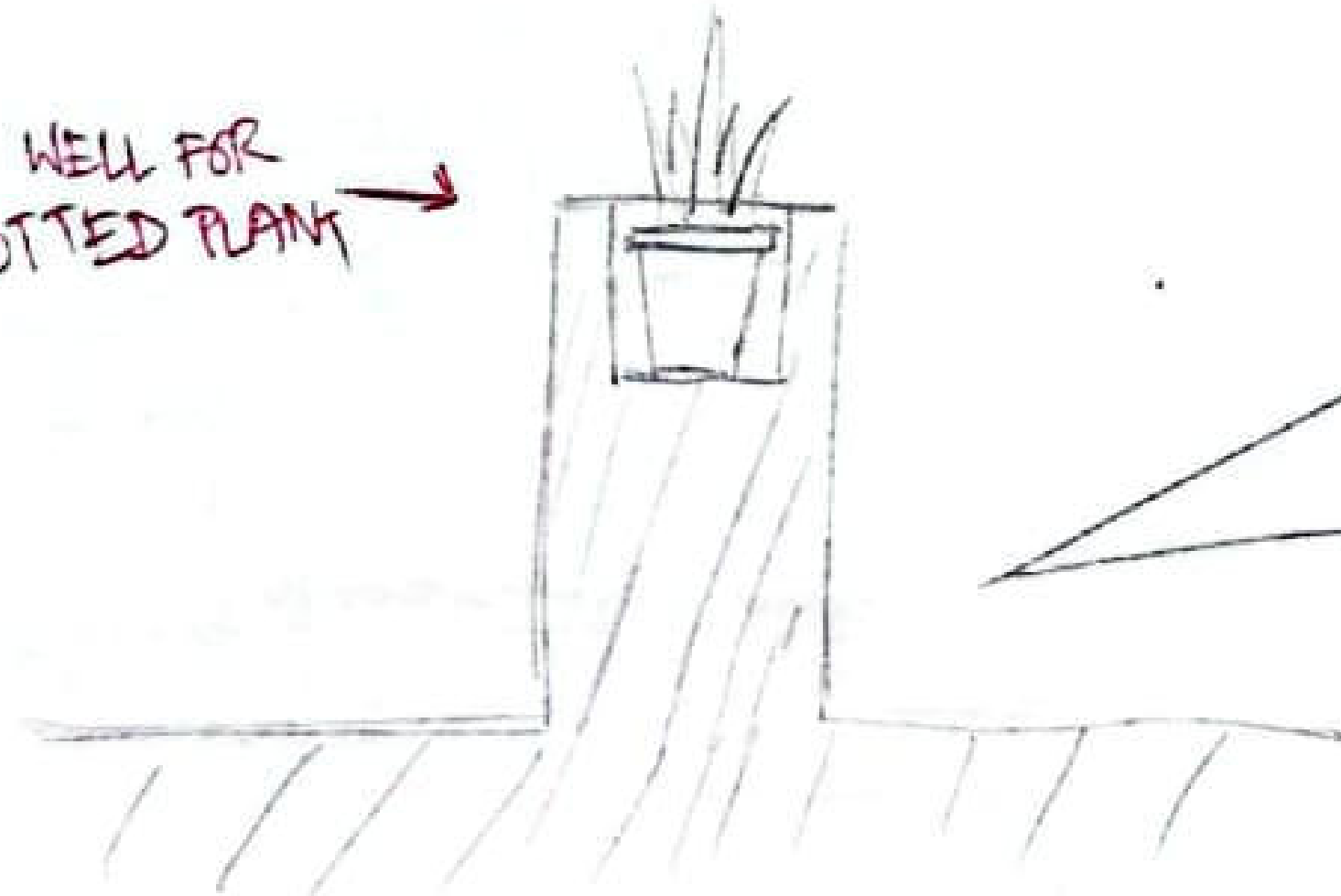
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PLANTER DETAIL

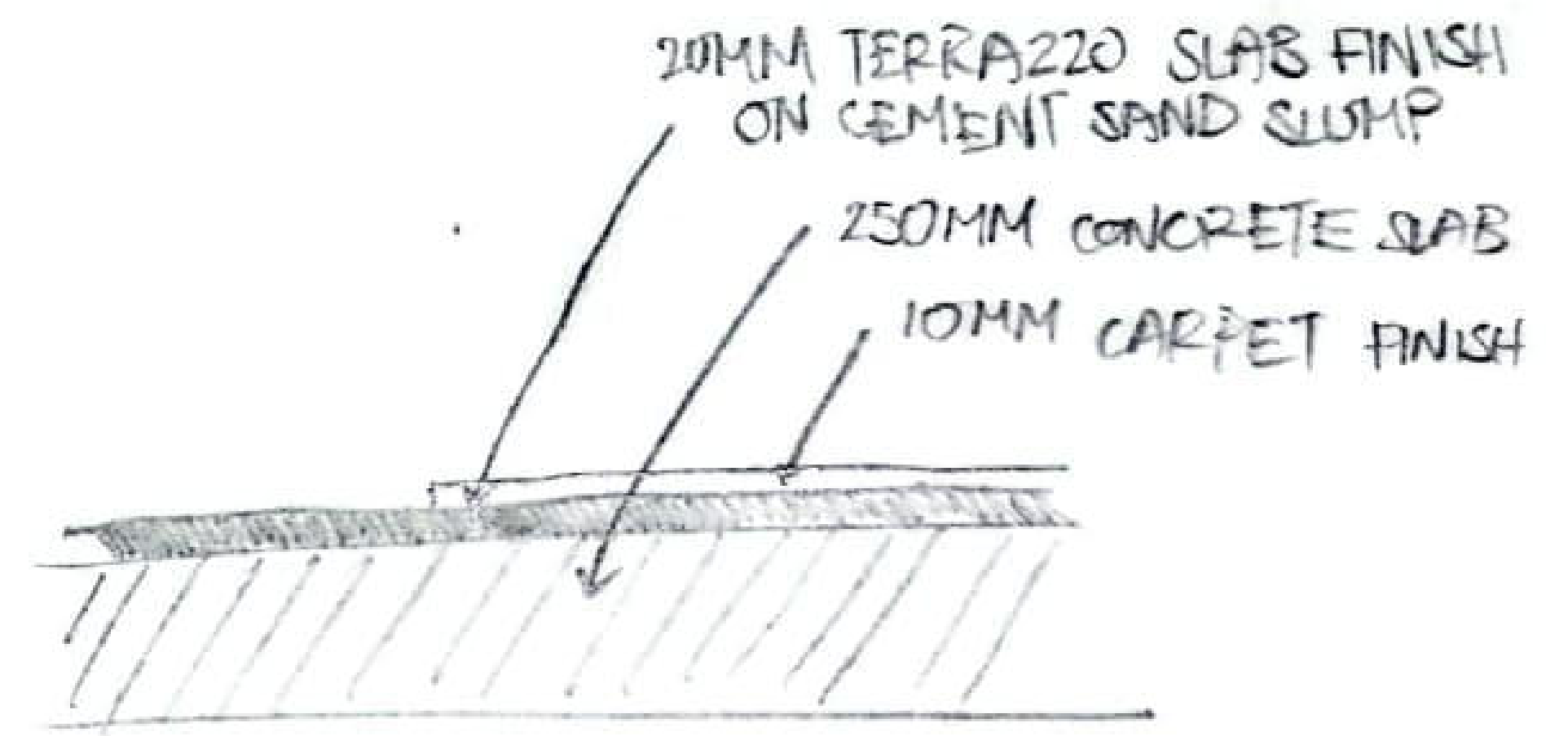
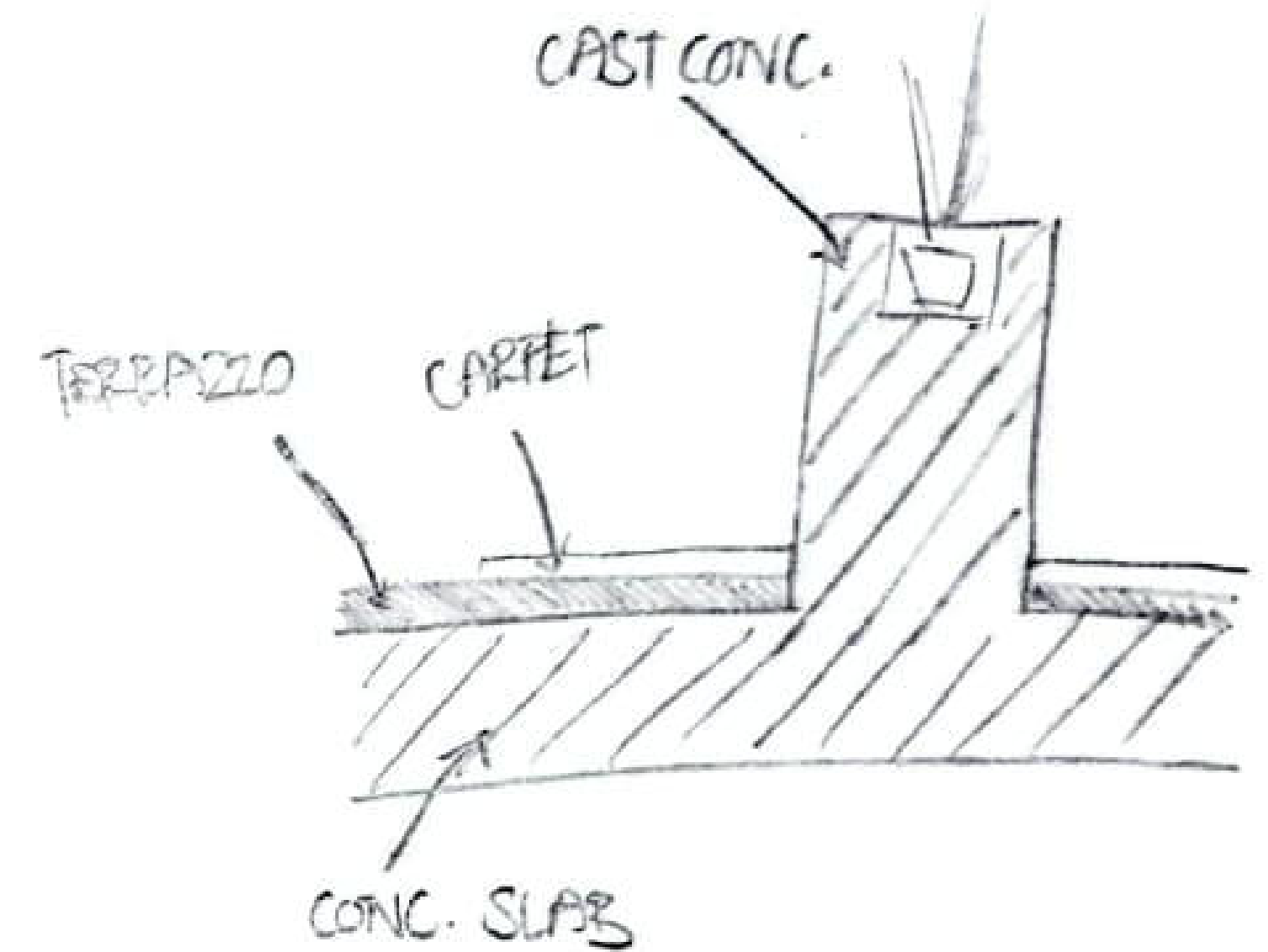
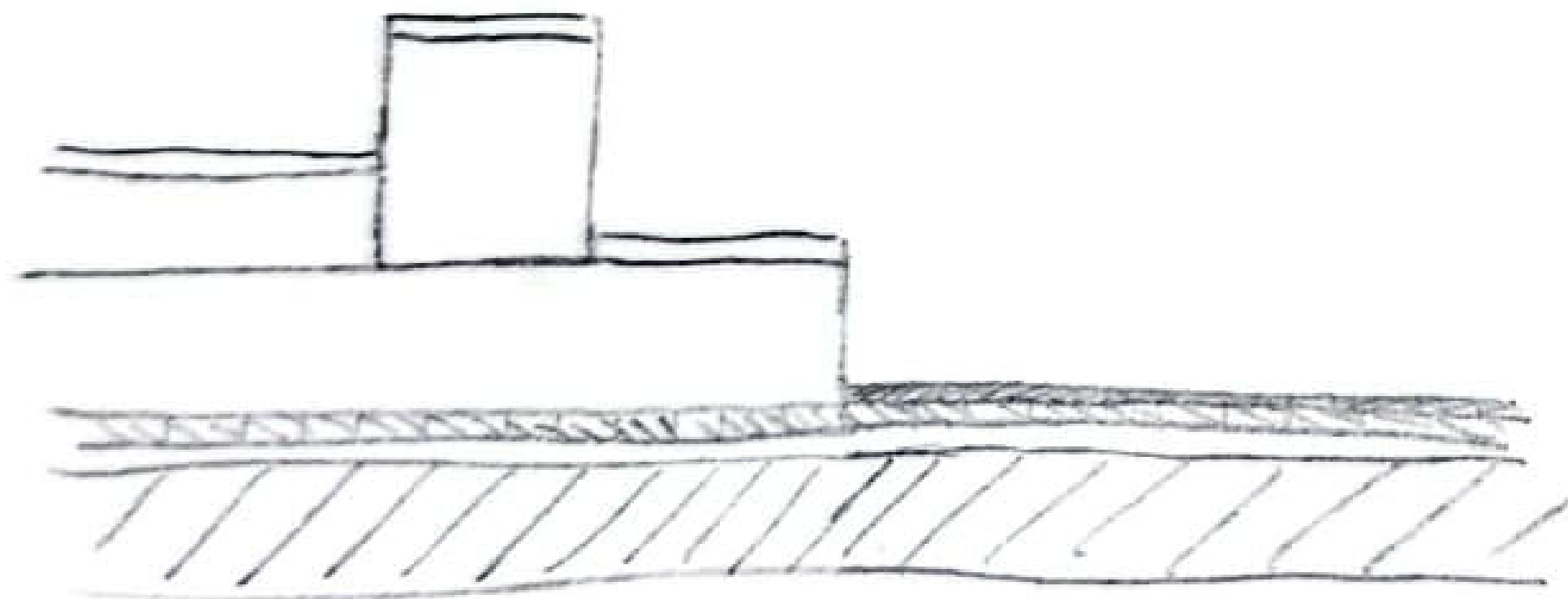
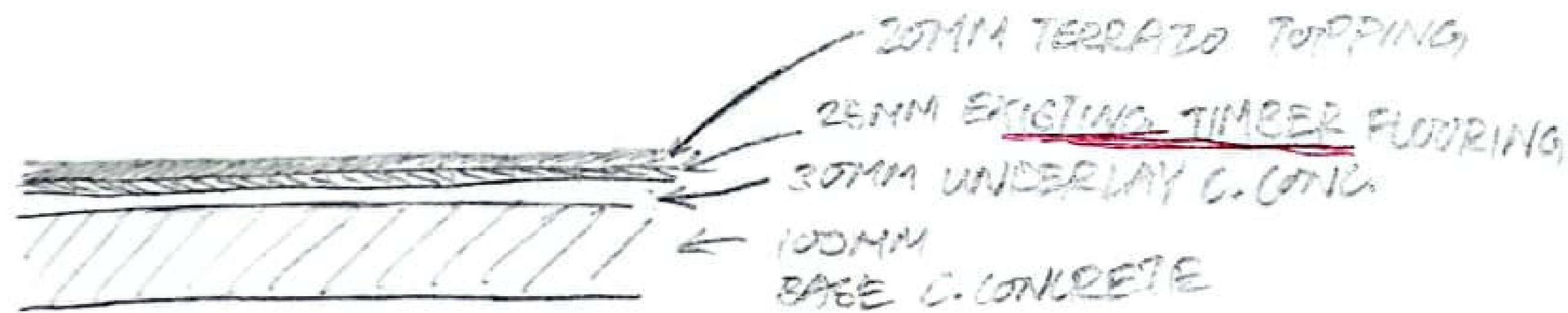
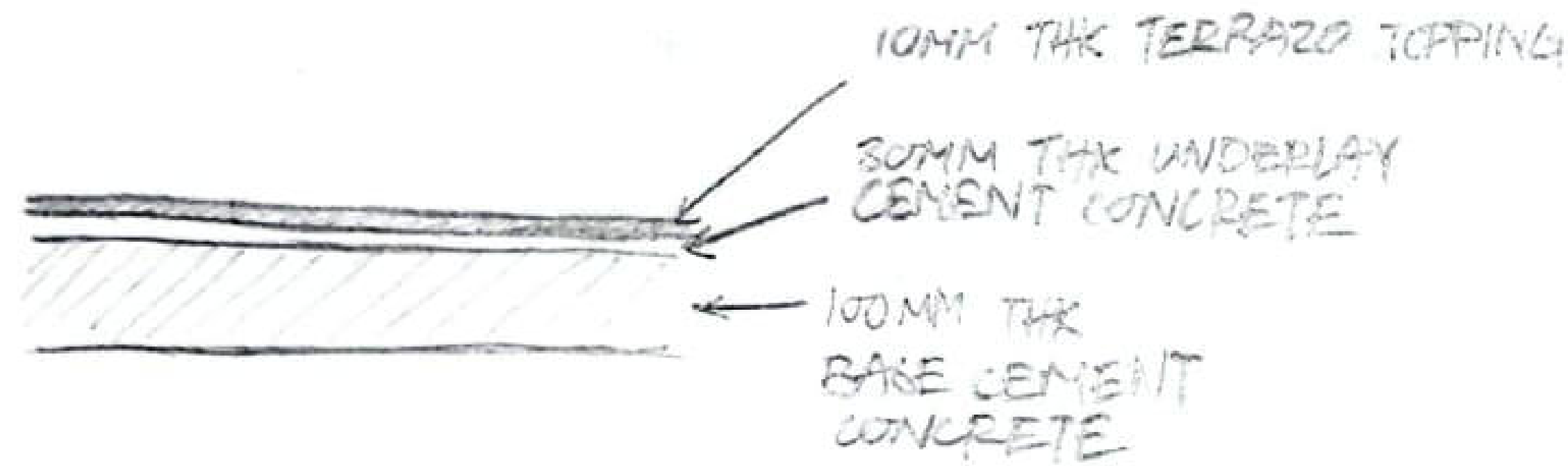
WITH DRAINAGE →



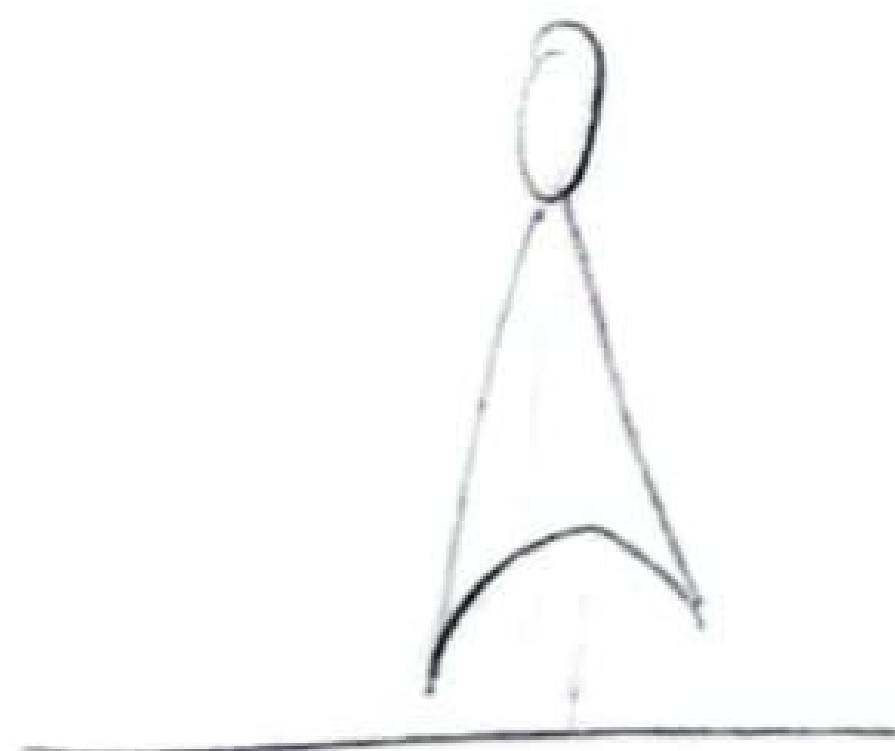
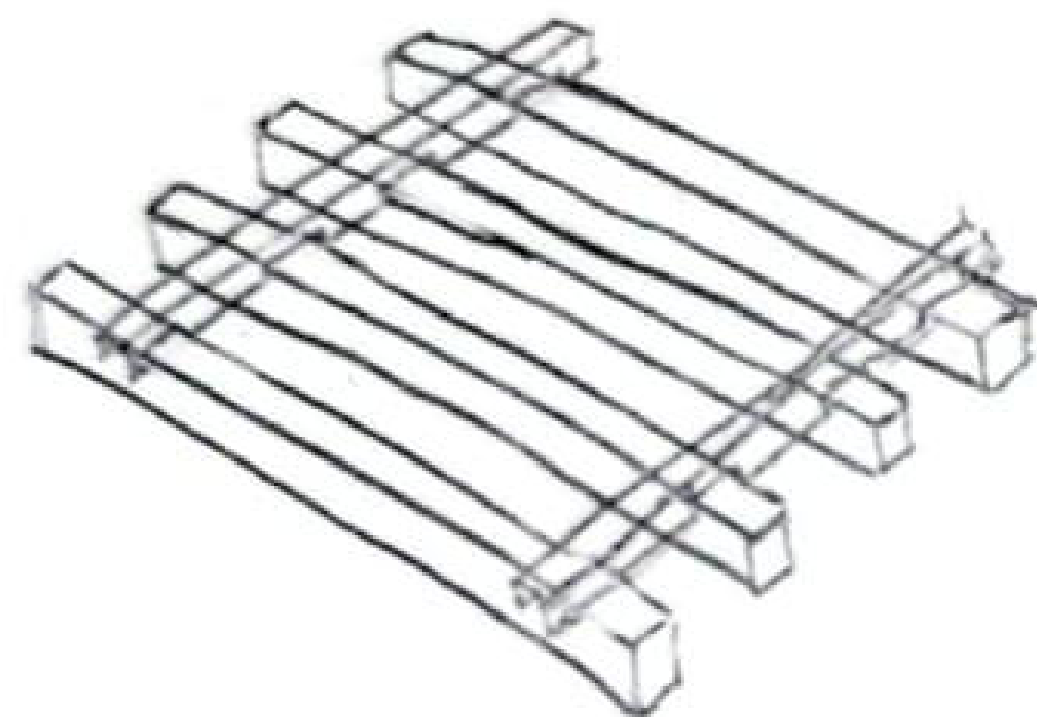
WELL FOR POTTED PLANT →



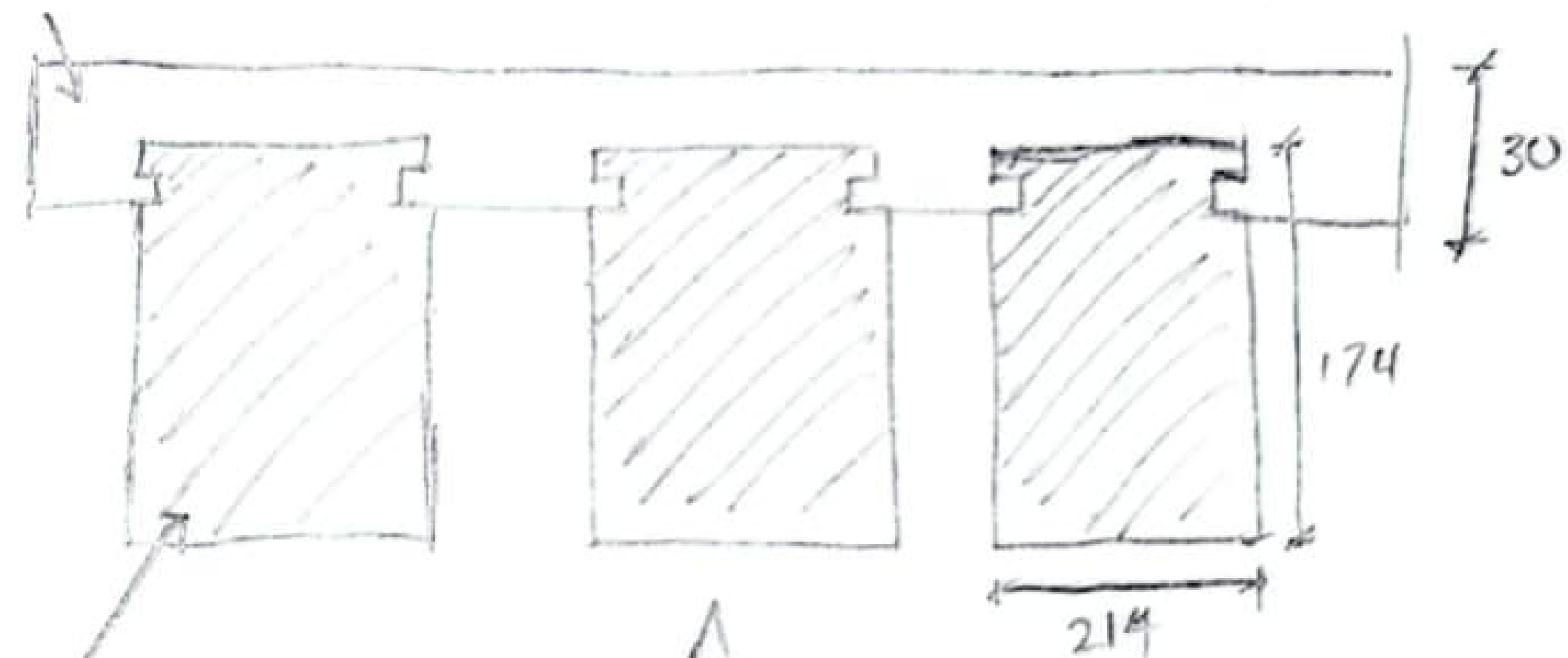
FLOORING DETAIL



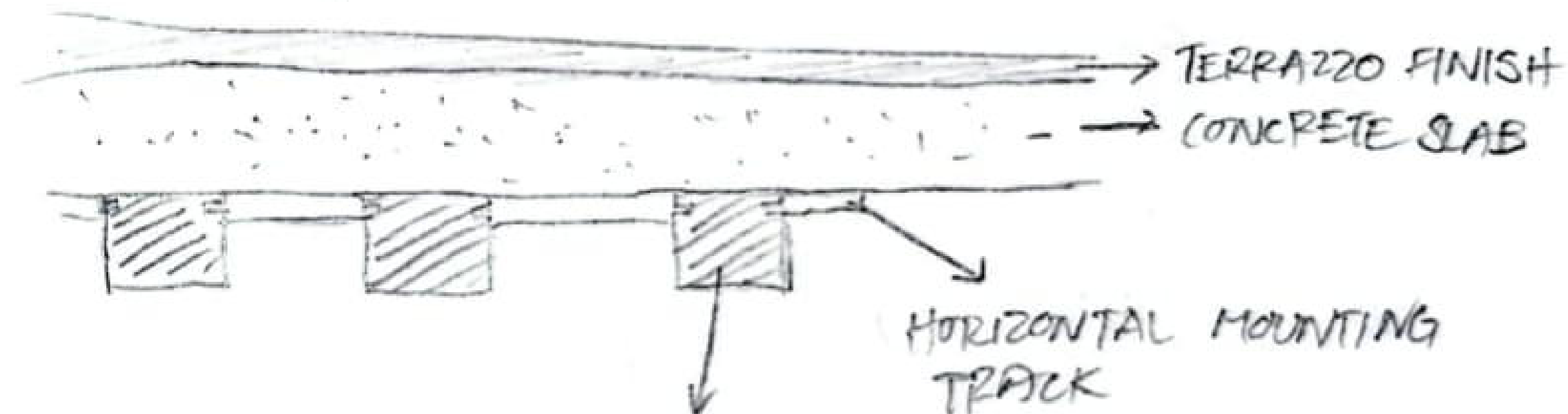
CEILING SLAT DETAIL



HORIZONTAL
MOUNTING TRACK

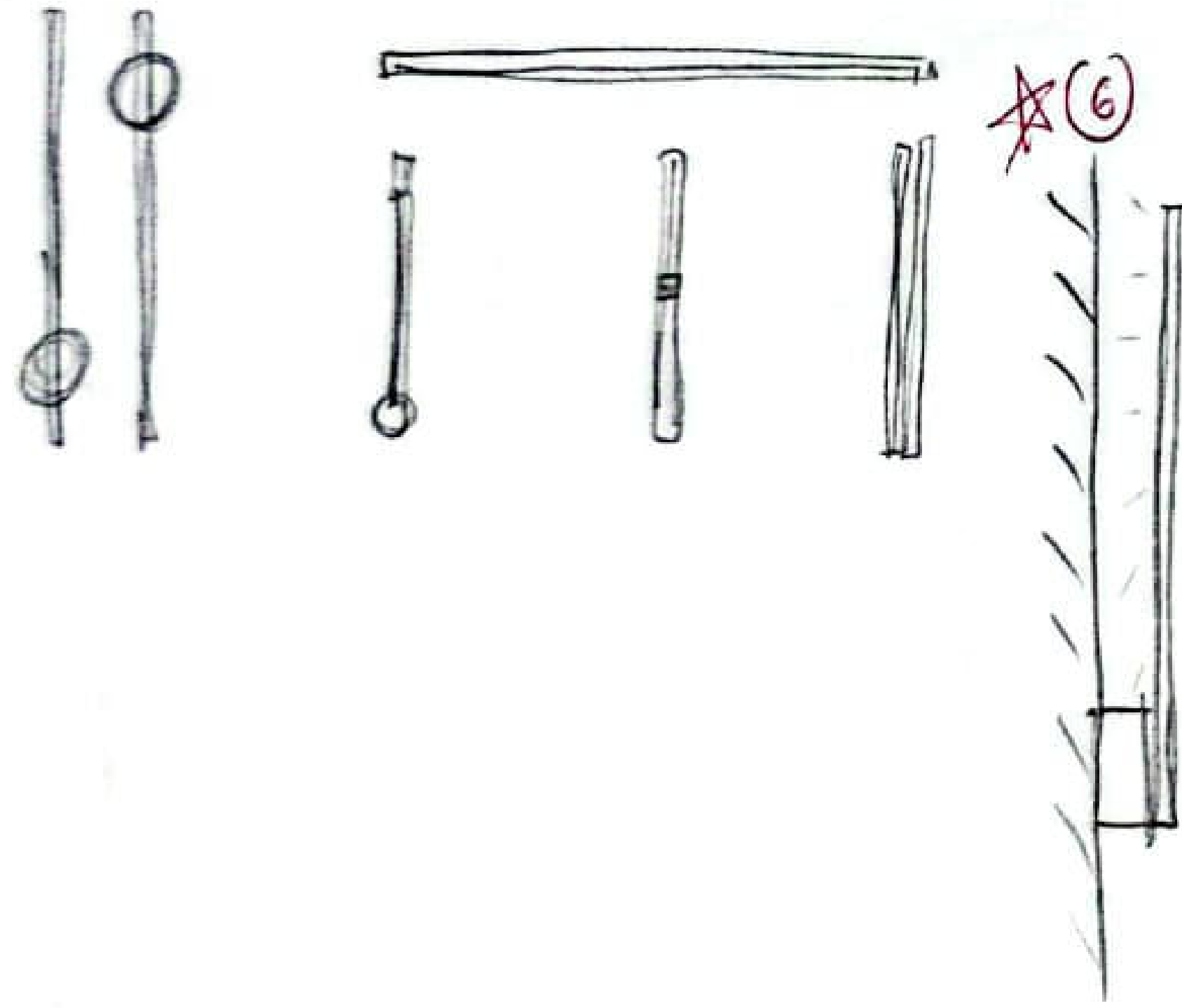
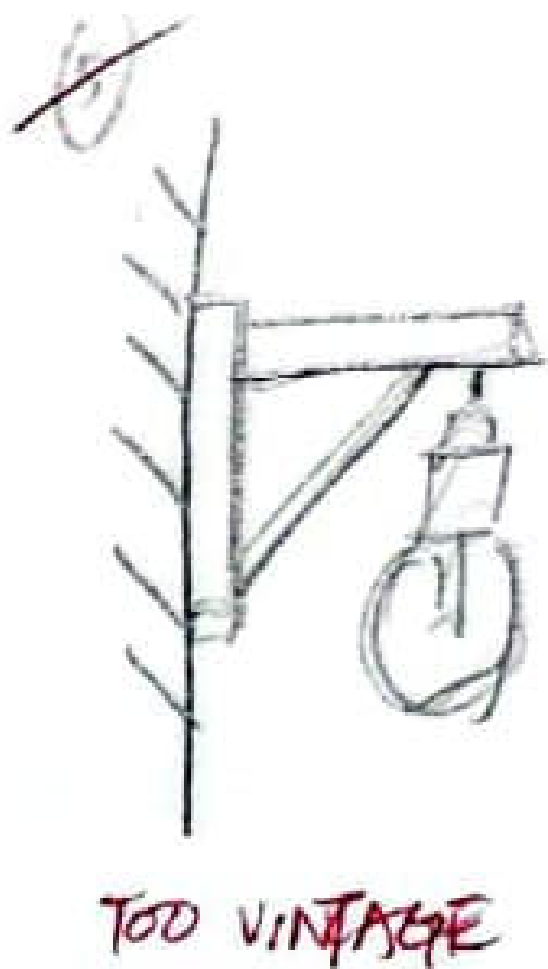
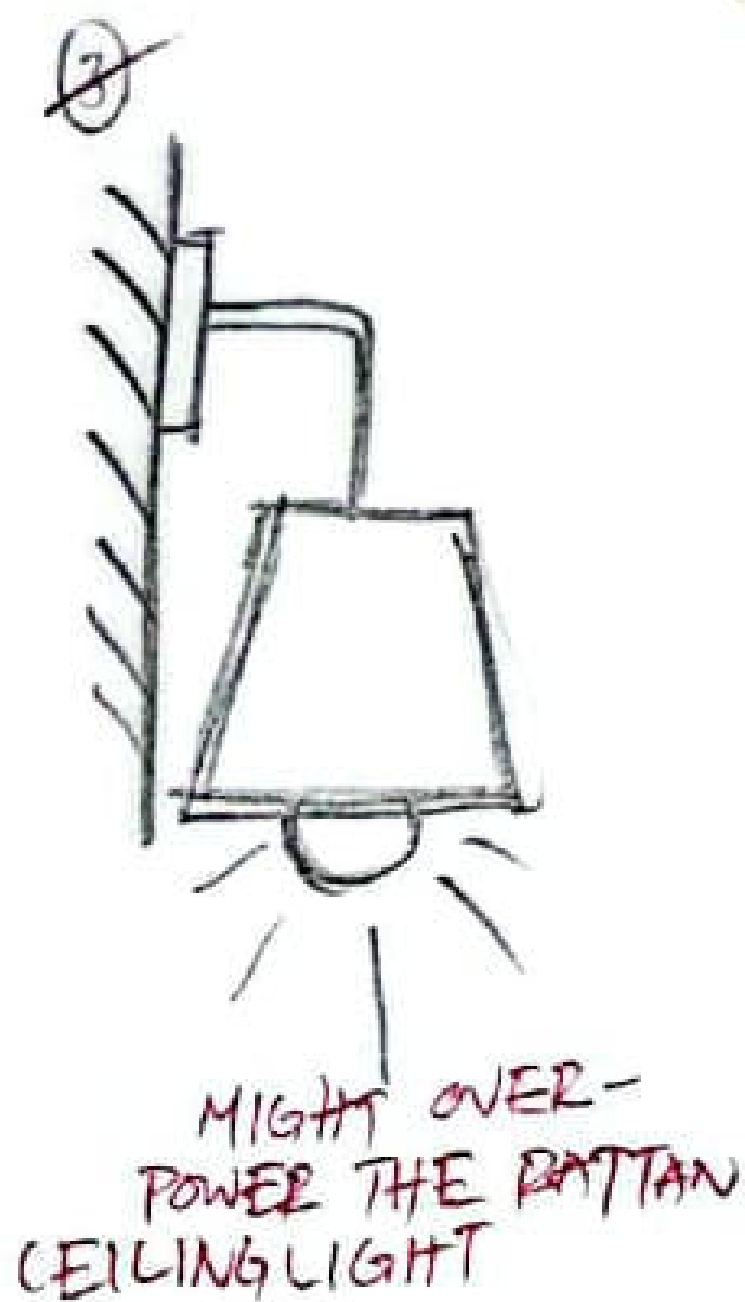
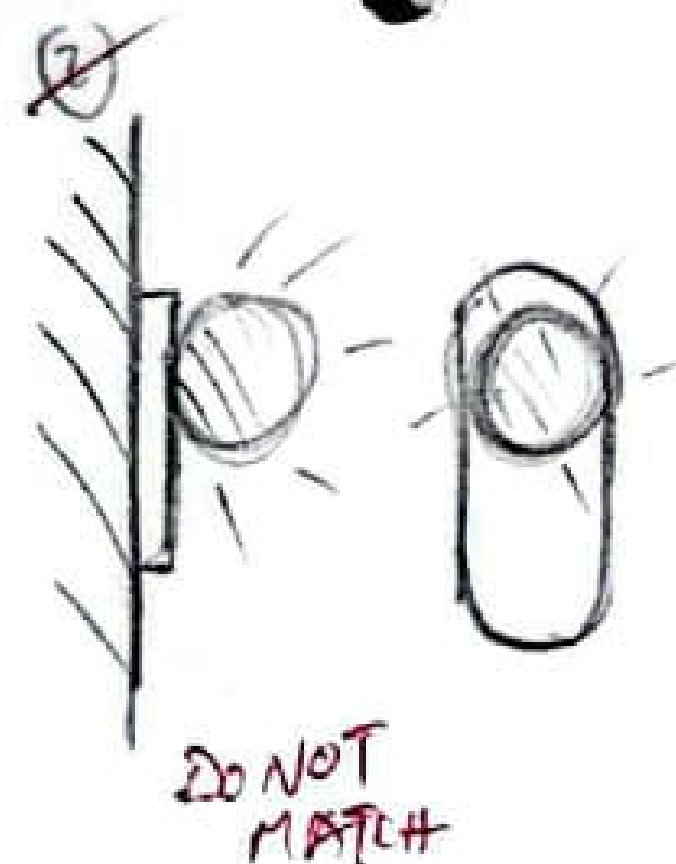
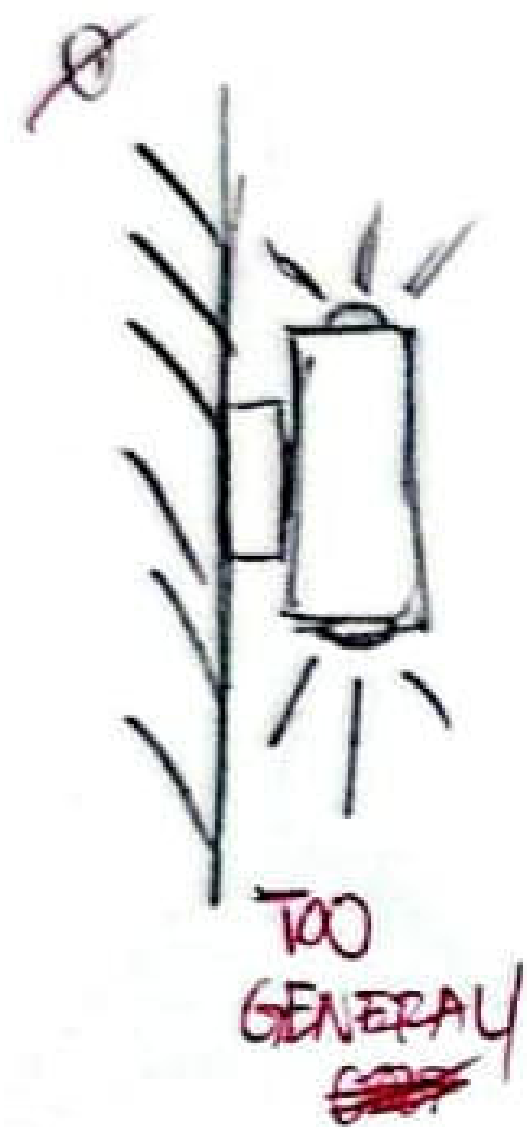


WOOD FEATURE
SLAT ON CEILING



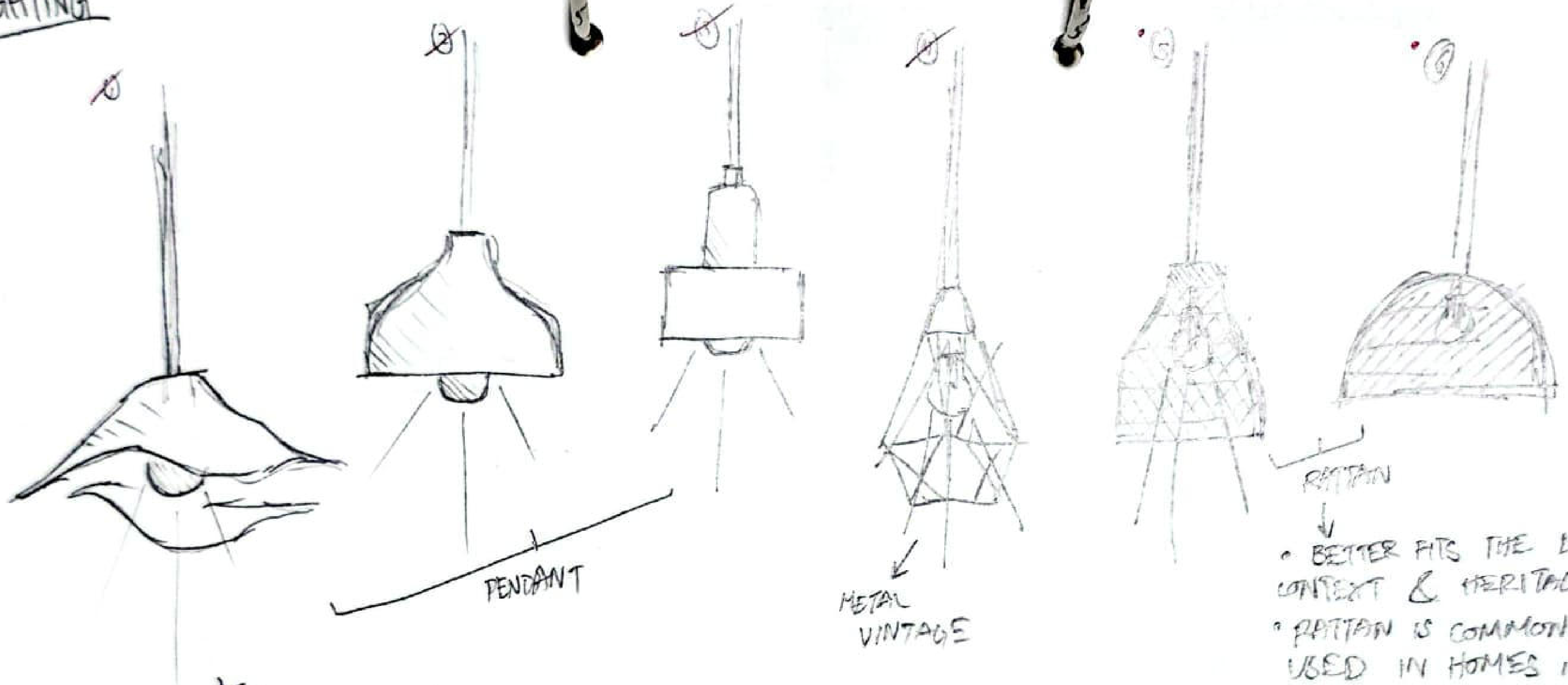
FEATURE WOODEN SLAT
MOUNTED ON MOUNTING TRACK

LIGHTING



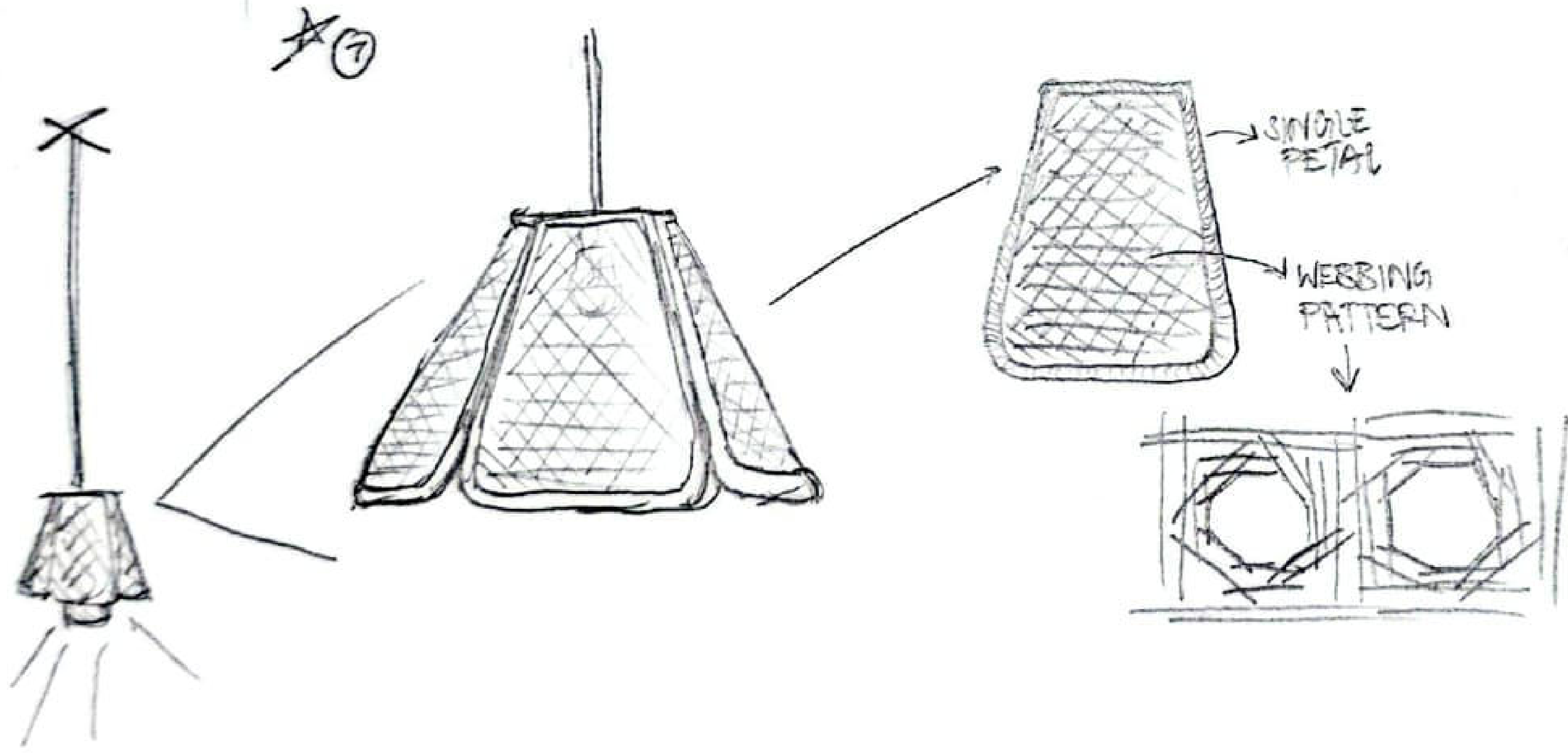
- MODERN MINIMALIST LINEAR LIGHT
- AMBIENT & SOFT
 - DEFINE WALL/FACADE TEXTURES
 - SIMPLE & DOES NOT OVER-POWER OTHER LIGHTINGS

LIGHTING



• BETTER FITS THE LOCAL
CONTEXT & HERITAGE.
• RATTAN IS COMMONLY
USED IN HOMES IN SG
PREFERENCE: SOMETHING QUIET BUT
DEFINING.

WEBBER
PATTERNS?
↓
WARM/
COOL
↓
BRIGHT/
AMBIENT



← HEXAGONAL WEAVE

HORIZON HOUSE

ALTA DIGITAL STUDIO

DESIGN BRIEF

The project encompasses Block 455 in... as a restorative environment where cancer survivors can find... through creativity, community, and... spaces for family, education, storytelling, and social interaction, promoting dignity and emotional... through a life giving... design blends indoor and outdoor solutions.

PROBLEM STATEMENT

Cancer survivors often lack accessible non-clinical spaces that support emotional recovery, self-expression, and social connection. This project reimagines the building to provide restorative... sitting, meetings, parties, and... spaces to encourage nature movement and mindfulness. Strategic elements of Block 455 are preserved with light touch contemporary interventions, while shared art, cooking, and dialogue areas strengthen community connections across survivors and the wider neighborhood.



Figure 1: Project Site Context

Figure 2: Building Footprint and Surroundings

Figure 3: Building Footprint and Surroundings

Figure 4: Building Footprint and Surroundings



Figure 5: Project Site Context

Figure 6: Building Footprint and Surroundings

Figure 7: Building Footprint and Surroundings

DESIGN STRATEGIES

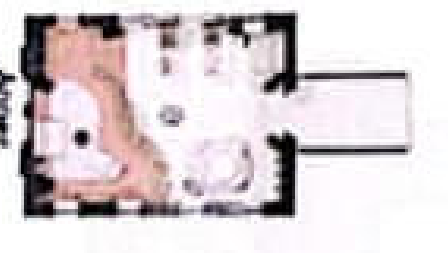
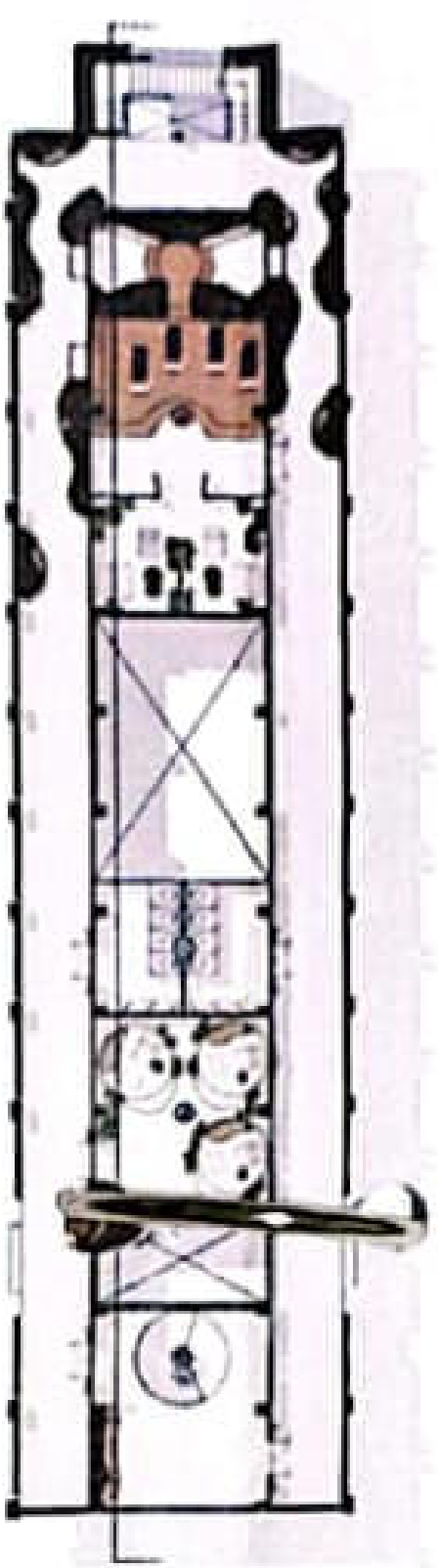
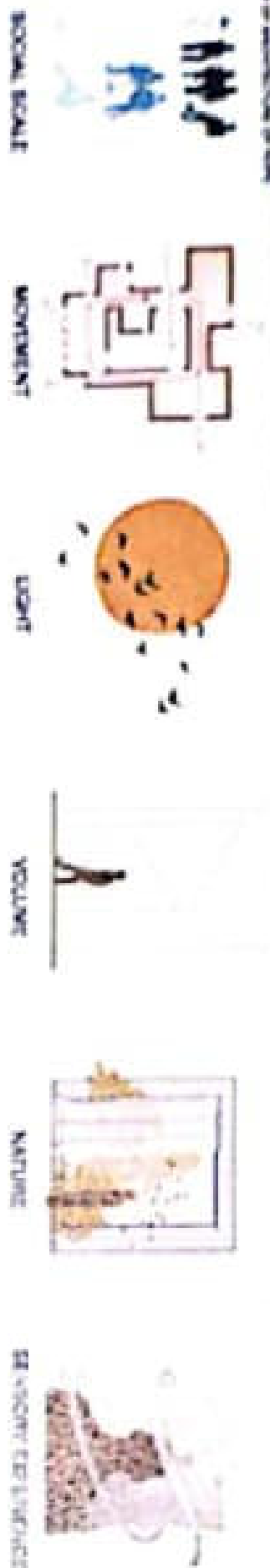


Figure 8: Building Footprint and Surroundings

Figure 9: Building Footprint and Surroundings

CONCEPT OF SPACES

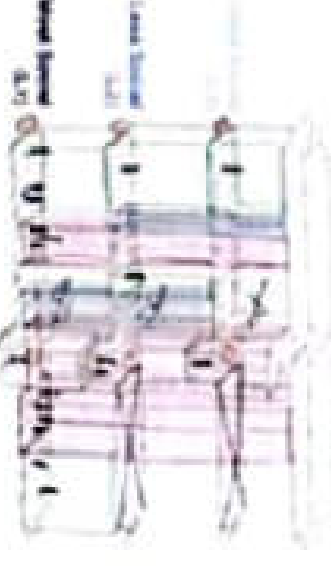


Figure 10: Building Footprint and Surroundings

Figure 11: Building Footprint and Surroundings

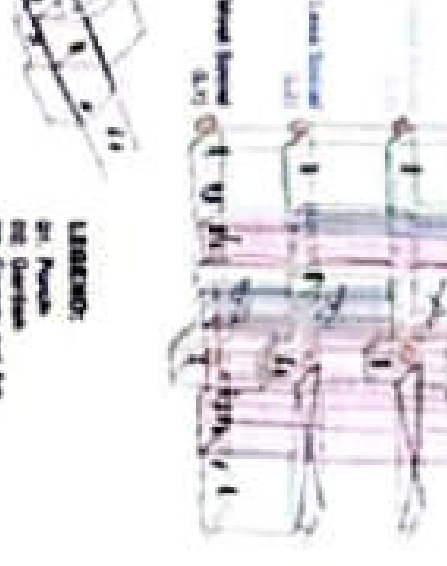
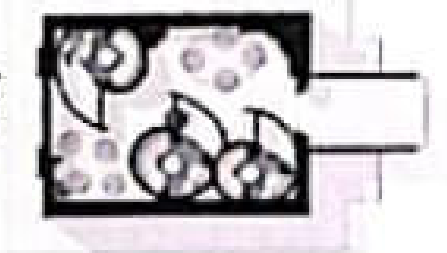
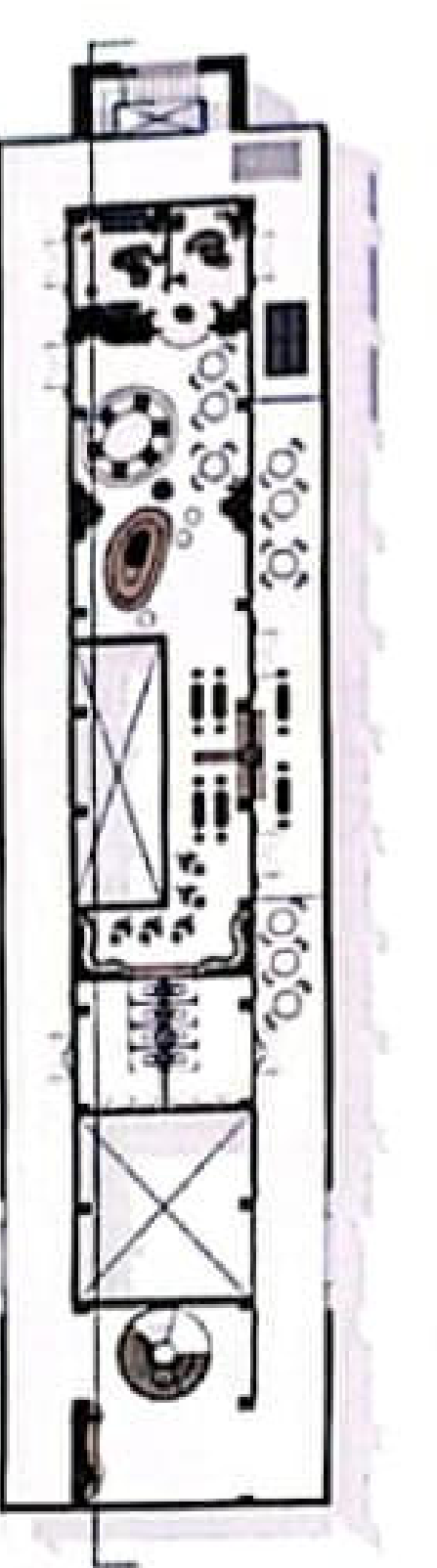


Figure 12: Building Footprint and Surroundings

Figure 13: Building Footprint and Surroundings

SCENIC
LANDSCAPE
FOCAL POINT
SCENIC
LANDSCAPE
FOCAL POINT



Figure 14: Building Footprint and Surroundings

Figure 15: Building Footprint and Surroundings

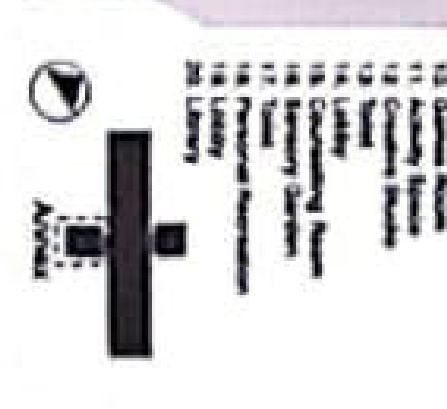
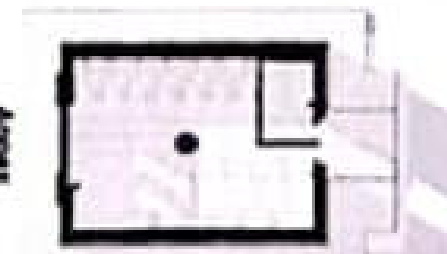
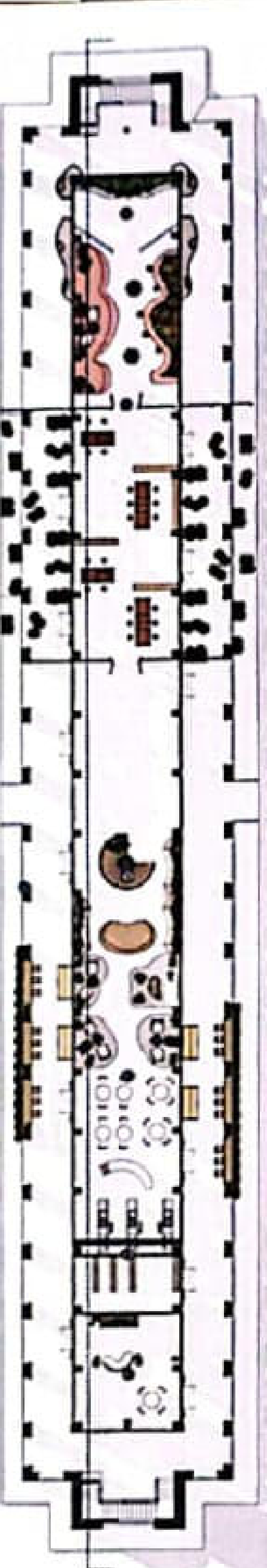


Figure 16: Building Footprint and Surroundings

Figure 17: Building Footprint and Surroundings

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