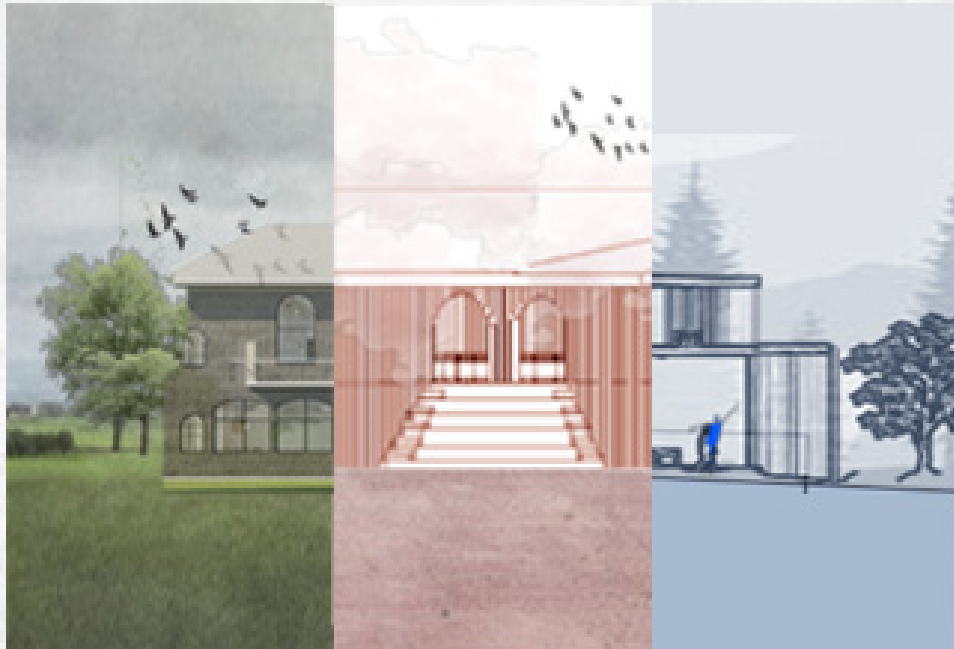


ARCHITECTURAL  
**P O R T F O L I O**



**THANGADURAI PRASHANTHI**

2024-2027



THANGADURAI **PRASHANTHI**

Architecture Graduate

**COLLABORATION**

**INNOVATION**

**CRITICAL THINKING**

**CURIOUS**

Architecture student interested in design, digital modelling, and creating spaces that feel meaningful and engaging. I enjoy exploring different ideas through projects, visuals and spatial experiences.



3prashanthi@gmail.com



THANGADURAI PRASHANTHI LINKEDIN



83118501

## QUALIFICATIONS

- **Diploma in Architecture**

*Nanyang Polytechnic*

2024 - 2027

- **O level Graduate**

*Sembawang Secondary School*

2020 - 2023

## WORK EXPERIENCE

- **Kitect Studio**

*Architecture Intern*

Aug '26 - Feb '27

- **Math Private Tutor**

*Private*

May '26 - Present

*Math Vision*

Feb '26 - Apr '26

## INTEREST



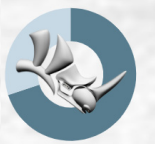
## LANGUAGE

**English | Tamil**

## SOFTWARE



AUTOCAD



RHINO



ENSCAPE



D5 RENDER



INDESIGN



REVIT



GRASSHOPPER



TWINMOTION



ADOBE  
PHOTOSHOP

# CONTENT

## STUDIO INTEGRATED PROJECTS

---

- THRESHOLD | Art & Discovery Hub
- FIBERFLOW | Biomimicry

## DIGITAL & TECHNICAL EXPLORATIONS

---

- TIMBER DRIFT | Sustainable
- CASA NOVA | Residential
- SO DRAMA! DIGITAL TWIN | Industry Project

## COMPETITION

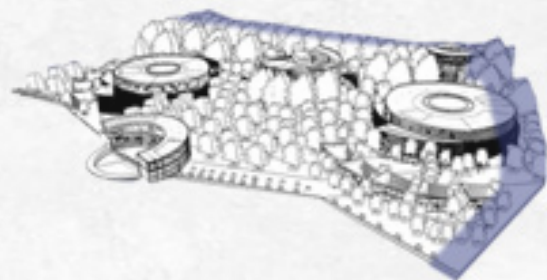
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- WORLD WITHIN | Landscape Design Workshop Entry

## INTEREST

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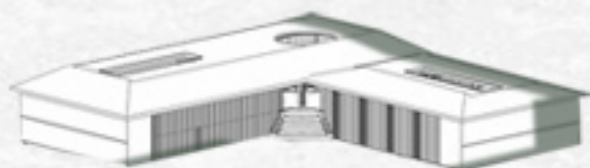
- PHOTOGRAPHY



**01**  
THRESHOLD



**02**  
FIBERFLOW



**03**  
TIMBER DRIFT



**04**  
CASA NOVA





# 01



## THRESHOLD

### THE ART OF UNFOLDING

*This art centre turns exploration into an intuitive journey, where visitors move through layered spaces guided by curiosity. From lively social hubs to quiet retreats, the design encourages people to discover, pause, and claim spaces that match their comfort and expression, restoring a sense of freedom within a highly visible environment.*



## SITE AS A FIELD OF EXPOSURE



Today, surveillance cameras, digital tracking and public visibility create a constant awareness of being watched. At **SAF Yacht Club**, the open waterfront and long sightlines similarly heighten exposure, leaving visitors connected yet constantly seen.



EXPOSURE



CONTROL



GAZE

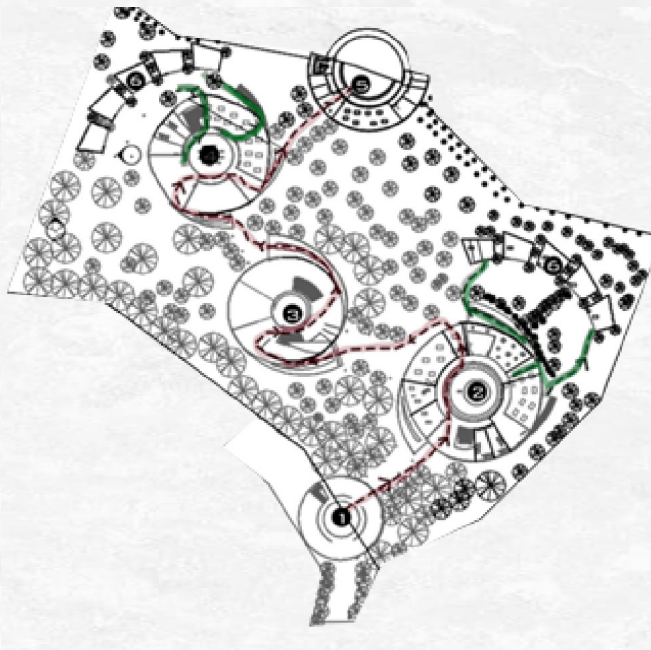


PRESSURE



VISIBILITY

## CIRCULATION



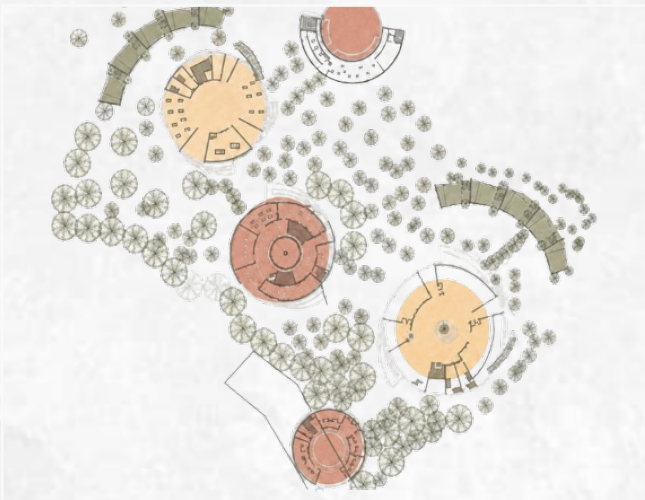
The circulation is divided into two paths: the red guided path and the green exploration path. The guided path directs visitors through the main spatial sequence, while the exploration path allows them to move more freely based on curiosity.

Semi-public nodes act as pause points, offering slight glimpses into private spaces. These moments give visitors a choice to continue, pause, or change direction, making both routes feel guided by personal feeling rather than fixed movement.

- 1 THE GALLERY SPACE
- 2 CRAFT CLUB
- 3 THE EXHIBIT HALL
- 4 MAKERSPACE
- 5 THE BAY STAGE
- 6 SEASIDE HAVEN



# ZONING: GRADIENT OF VISIBILITY



The zoning is arranged as a gradual shift from open public areas to quieter private spaces. Public zones are placed where visibility and activity are highest, while semi-public zones act as transitional spaces that filter movement and views. Private zones are more enclosed and protected, allowing visitors to retreat from exposure and

-  PUBLIC - Open, visible, social.
-  SEMI-PUBLIC - Shared, filtered, transitional.
-  PRIVATE - Quiet, enclosed, protected.



EXPOSURE



FILTERED  
VIEW



GUIDED  
PATH



DISCOVERY  
PATH



FREEDOM

## FILTERED VIEW



DENSE GREEN  
BUFFER



TIMBER  
CLADDING



FILTERED  
SCREEN



GLASS  
FAÇADE



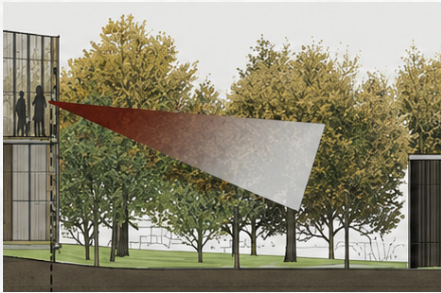
FRAMED  
OPENINGS

Using these elements, views of the outside world are gradually filtered, balancing privacy with visual connection.

## THRESHOLD AS DESIGN STRATEGY

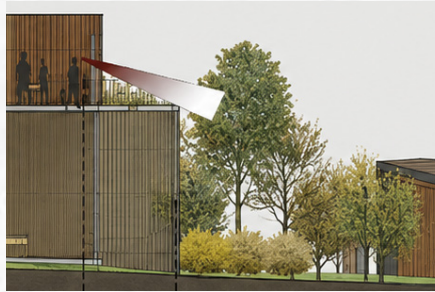
Using topography, threshold transforms exposure into a gradual journey from openness to retreat. The changing ground levels, curved movement, greenery, and filtered views guide visitors between public, semi-public, and private zones, allowing quieter spaces to unfold slowly.

### PUBLIC



LONG AND WIDE SIGHTLINE

### SEMI PUBLIC



SHORT AND NARROW SIGHTLINE

### PRIVATE



FILTERED VIEW AND RETREAT



A wider view reveals the next destination while keeping the journey partially hidden.



The view becomes tighter through walls, timber panels, and greenery, slowing movement



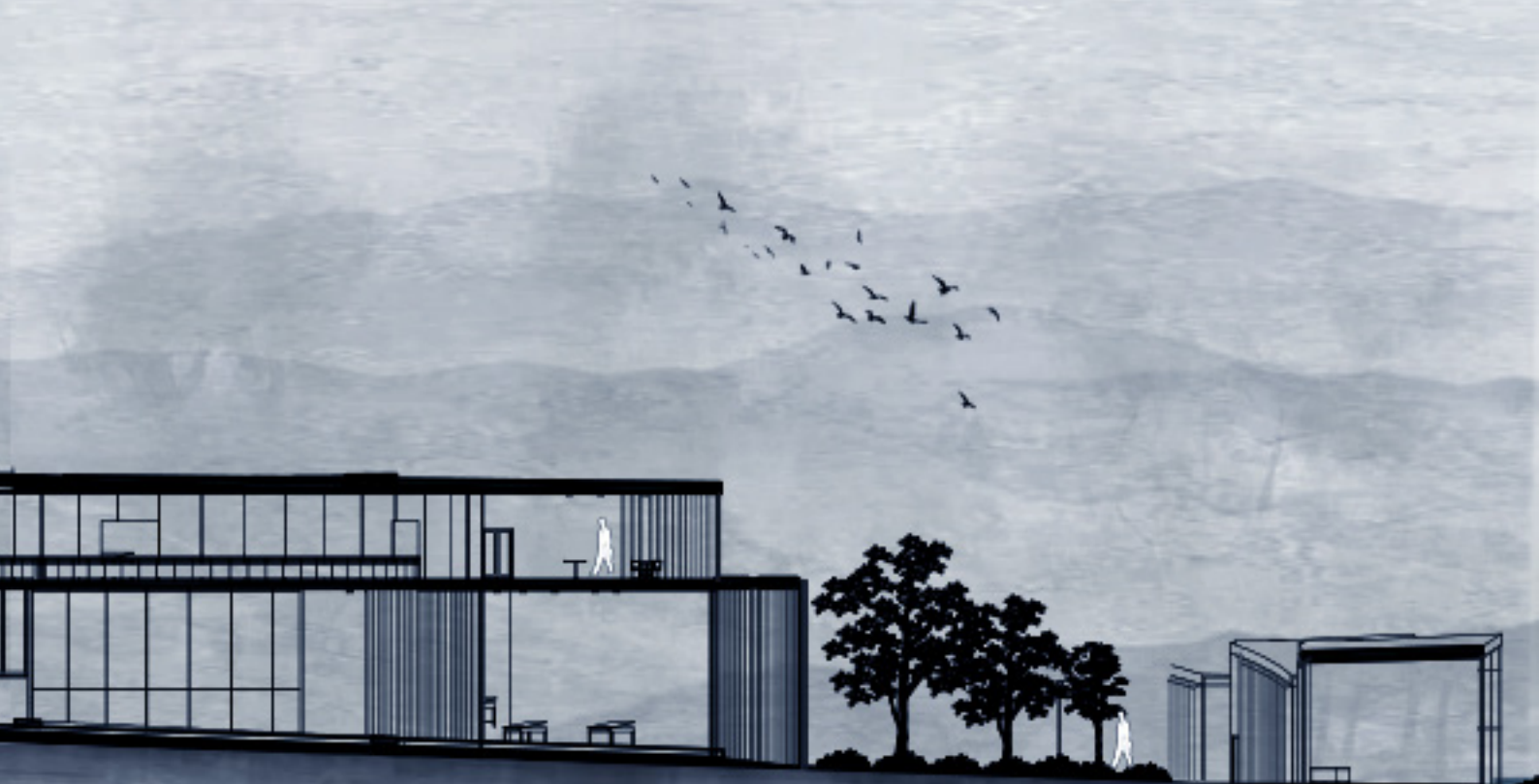
Screens and greenery soften visibility, creating a calmer space where visitors feel more protected and

SPATIAL JOURNEY



PUBLIC ZONE

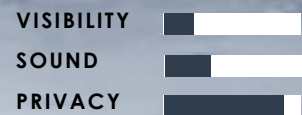




## TRANSITION ZONE

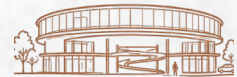


## PRIVATE ZONE





# 02



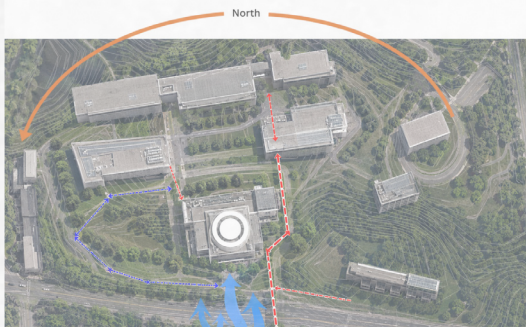
## FIBERFLOW

**WHERE NATURE BECOMES STRUCTURE**

*This project draws from bamboo's natural structure and musical rhythm to reimagine Block P1 at Nanyang Polytechnic as a vibrant community space. Through regenerative design, it creates a place where students and the neighbourhood can connect, share, and experience music together..*



## SITE CONTEXT



The building responds to wind, sunlight, rainwater, and heat through passive ventilation, kinetic shading, green roof systems, and water treatment. These strategies help improve comfort, reduce energy use, and create a sustainable learning and performance hub.

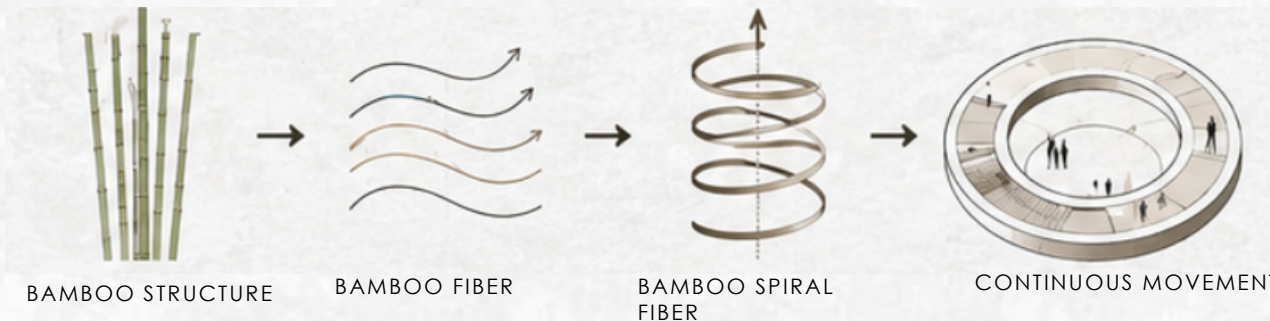
## REGENERATIVE STRATEGY

The building responds to wind, sunlight, rainwater, and heat through passive ventilation, kinetic shading, green roof systems, and water treatment. These strategies help improve comfort, reduce energy use, and create a sustainable learning and performance hub.



## BIOMIMICRY

Inspired by bamboo's spiral fibre structure, FiberFlow translates strength and flexibility into a continuous spatial movement. Like bamboo fibres that connect and support each other, the design links different spaces through a flowing path, creating a building that feels strong, adaptable, and connected.





## DESIGN TRANSLATION

### MOVEMENT



Become one continuous spiral route



### MUSIC



Become a shared performance core



### COMMUNITY



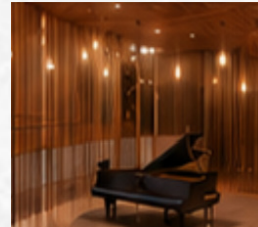
Become cafe, workshop and library life



### FOCUS



Become quieter practise and recording zone



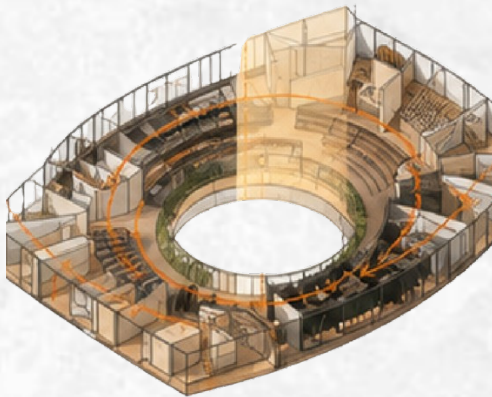
### CLIMATE



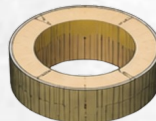
Become roof, water and comfort system



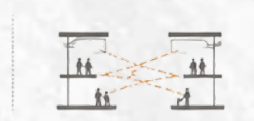
## BAMBOO-INSPIRED HOLLOW CORE



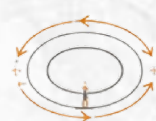
The central void acts as the heart of the building, bringing light, connection, and orientation through the spiral circulation.



HOLLOW  
CORE  
CONCEPT



VISUAL  
CONNECTIVITY



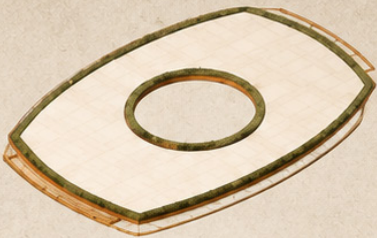
MOVEMENT  
LOOP



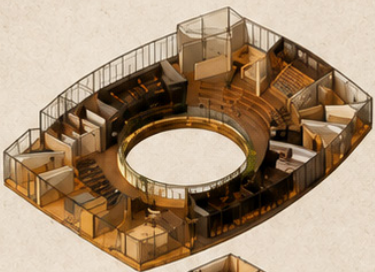
SOCIAL  
GATHERING

ZONING

GREEN ROOF



LEVEL 4



RECORDING STUDIO



MUSIC HALL

LEVEL 3



LIBRARY



PRACTISE ROOM

FLOATING STAGE



LIBRARY

LEVEL 2

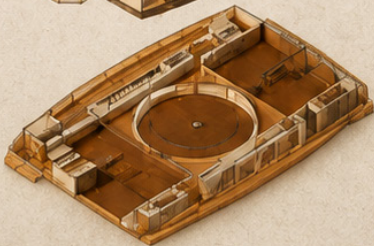


MUSIC WORKSHOP  
AREA



CAFE

LEVEL 1



WATER TREATMENT

## SECTIONAL PERSPECTIVE

### THEATRE / DRAMA SPACE

A flexible performance area for drama, storytelling, rehearsals, and small productions.

### PUBLIC GATHERING ZONES

Open shared spaces across different levels encourage informal learning and interaction.

### WATER TREATMENT AREA

An integrated service zone that supports rainwater collection, filtration, and reuse within



## SPIRAL CIRCULATION

A continuous path guides people through the heart of the building.

## GREEN ROOF

Planting on the roof improves thermal comfort and supports biodiversity.

## CENTRAL CORE

The main structural and spatial anchor that organizes movement, views, and programme.

## PERFORMANCE SPACE

A flexible open volume for gatherings, performances, and community events.





# 03



## TIMBER DRIFT

**ROOTED IN NATURE, SHAPED BY TIMBER**

A sustainable architectural design responding to Penang's tropical coastal climate, cultural heritage, and ecological context. The project integrates durable local materials, passive climate strategies, and renewable energy systems to create a resilient and harmonious environment.

# SITE CONTEXT

Located along the coastal edge of **Centre for Marine and Coastal Studies (CEMACS)**, **Penang**, the site is shaped by sea breeze, high humidity, strong sunlight, and monsoon rain. These climate conditions guide the green strategies, focusing on natural ventilation, shading, durable materials, solar energy, and water-sensitive design.



SEA  
BREEZE



HUMIDITY  
&  
RAIN



STRONG  
SUN



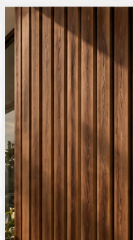
SLOPPING  
TERRAIN



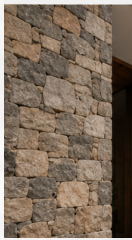
DENSE  
VEGETATION

# LOCAL MATERIAL STRATEGY

Local materials reduce transport-related carbon impact while responding to Penang's coastal climate. Timber cladding adds warmth, stone improves durability and thermal mass, and asphalt roofing protects against heavy rain and strong sun.



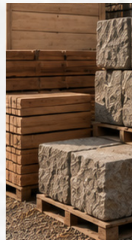
TIMBER  
CLADDING



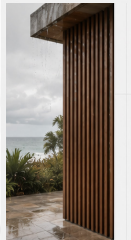
STONE  
WALL



ASPHALT  
ROOF



LOCAL  
SOURCING



COASTAL  
DURABILITY

Local sourcing can reduce transport-related carbon impact by approximately 20–40%, depending on supplier distance, material weight, and delivery method.



## PASSIVE GREEN DESIGN STRATEGIES

Timber Drift uses simple green strategies to create a cooler and brighter coastal space, balancing natural comfort, daylight, water management, and long-term environmental care.



NATURAL  
VENTILATION



SKYLIGHT



SOLAR  
ENERGY



DURABLE  
MATERIAL



RAINWATER  
HARVESTING

## VENTILATION

Ocean breeze enters through aligned openings, improving air circulation and keeping the interior cooler naturally. Warm air rises and escapes through high roof openings, reducing heat build-up inside the space.



STACK VENTILATION

CROSS VENTILATION

## SKYLIGHT DAYLIGHTING STRATEGY



Skylights brighten common areas with soft daylight, improving comfort while reducing daytime lighting use.



### SOLAR PANEL

Sloped roofs guide rainwater into gutters and downpipes, where it is collected in a storage tank for irrigation and maintenance.

### RAINWATER HARVESTING + TOPSOIL RECHARGE



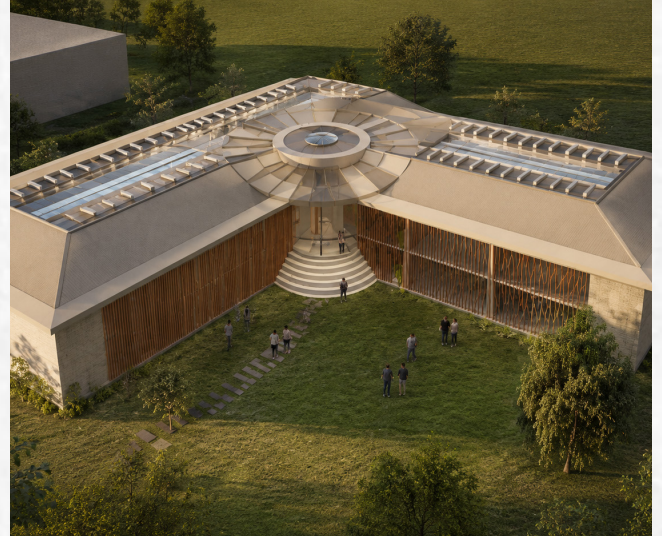
Rainwater is guided from the roof into storage and planted topsoil areas, reducing runoff while supporting landscape irrigation and natural ground absorption.

## SPACES

CLASSROOM



AMPHITHEATRE

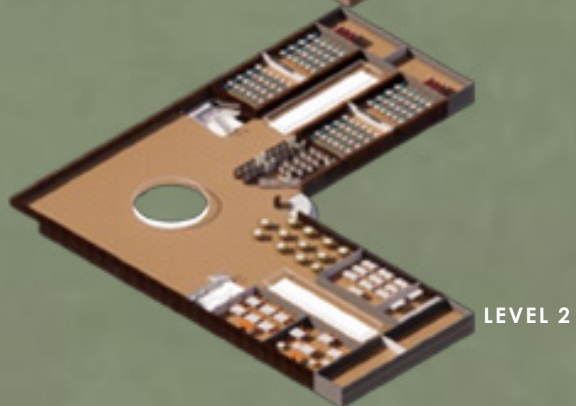
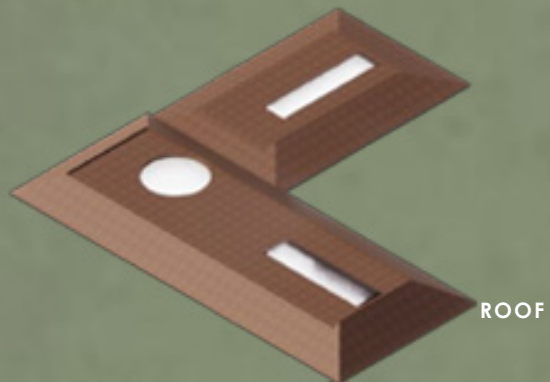


CLASSROOM CORRIDOR



GATHERING ZONE







# 04



## CASA NOVA

**MODERN LUXURY VILLA | SENTOSA COVE**

*Casa Nova is a modern luxury villa in Sentosa Cove that balances heavy stone massing with transparent arched glass openings. The double-height living spaces create a strong indoor-outdoor connection, bringing natural light into the interior while framing views towards the pool, marina, and greenery. Through its contrast of solid and transparent materials, the villa presents a calm yet sophisticated coastal retreat.*



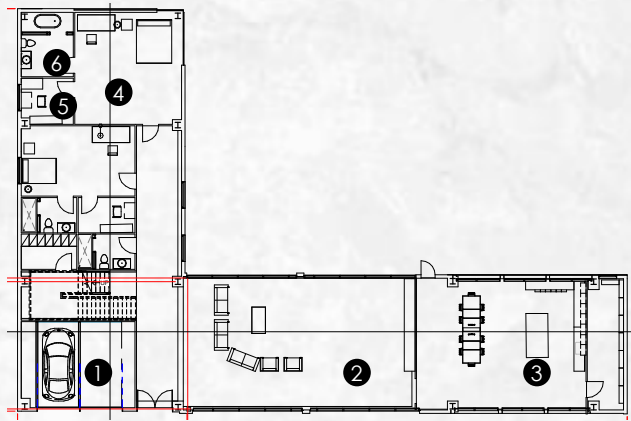
# NORTH VIEW



The north elevation highlights Casa Nova's material logic, where solid stone walls create privacy and a grounded character, while mirrored arched glass openings soften the façade by reflecting light, greenery, and the surrounding view. This contrast allows the guest house to feel protected yet open, creating a calm family retreat with bright shared spaces and quieter private areas.

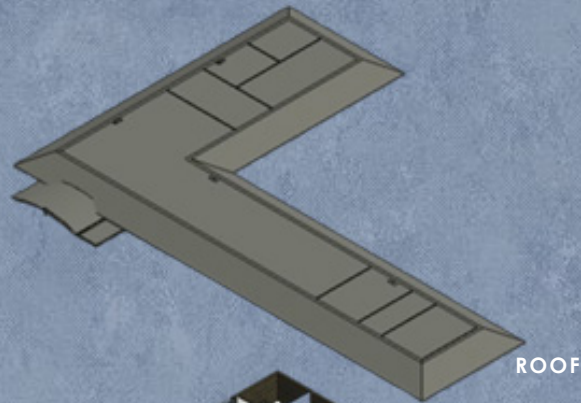
## SPACES

### LEVEL 1



Casa Nova is organised to separate shared family spaces from quieter private areas. The lower level holds the arrival, living, kitchen, garage, and outdoor pool spaces, while the upper levels contain bedrooms, bathrooms, walk-in wardrobe, balcony, and library. This creates a guest house that feels open and social below, then calmer and more private above.

- |   |             |   |                 |
|---|-------------|---|-----------------|
| 1 | Garage      | 4 | Master Bedroom  |
| 2 | Living room | 5 | Walking Wadrobe |
| 3 | Kitchen     | 6 | Toilet          |



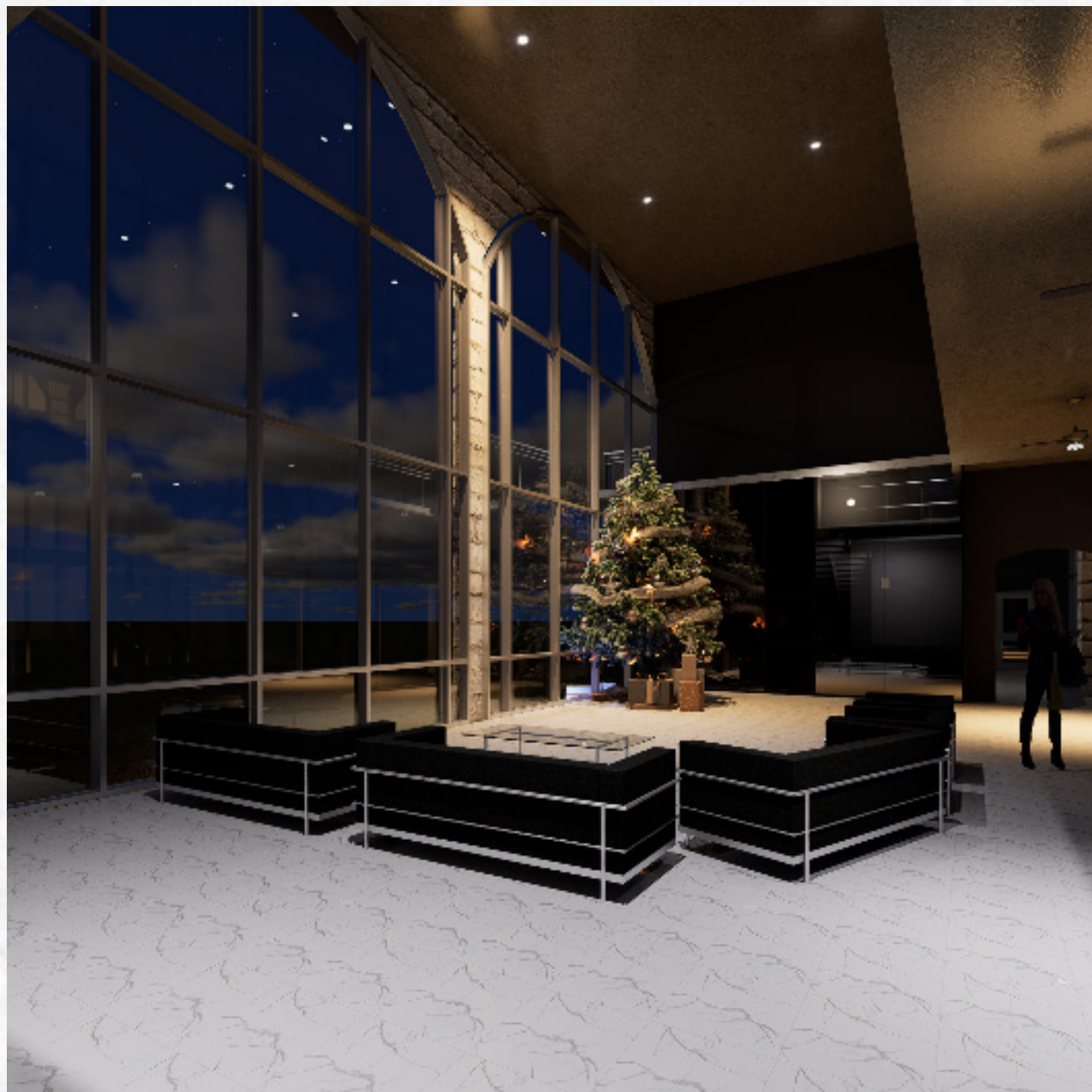
ROOF



LEVEL 2 -  
REST & RETREAT



LEVEL 1 -  
ARRIVAL & GATHERING



MASTER BEDROOM



A private retreat with corner glass openings and a staggered brick wall that balances framed views, texture, and privacy.

BALCONY



A quiet outdoor extension that connects the room to fresh air, greenery, and surrounding views.

ELEVATIONS







# 05



## SO DRAMA! DIGITAL TWIN

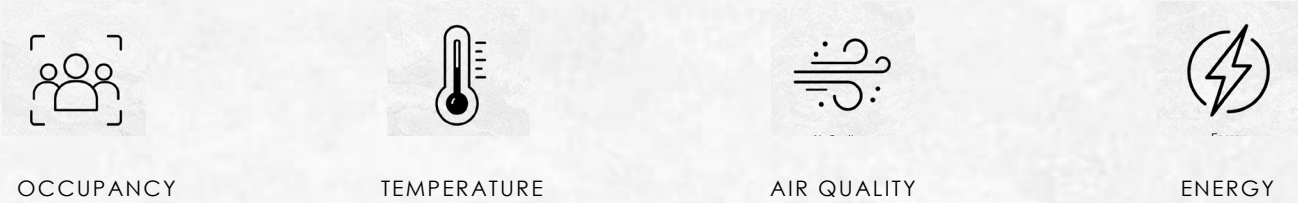
***TWINVIEW DIGITAL TWIN SOLUTIONS***

*A creative learning hub that uses digital twin systems to monitor comfort, crowd flow, and studio conditions. The project transforms data into smarter spatial decisions, creating a more responsive, efficient, and enjoyable environment for visitors, students, and staff.*



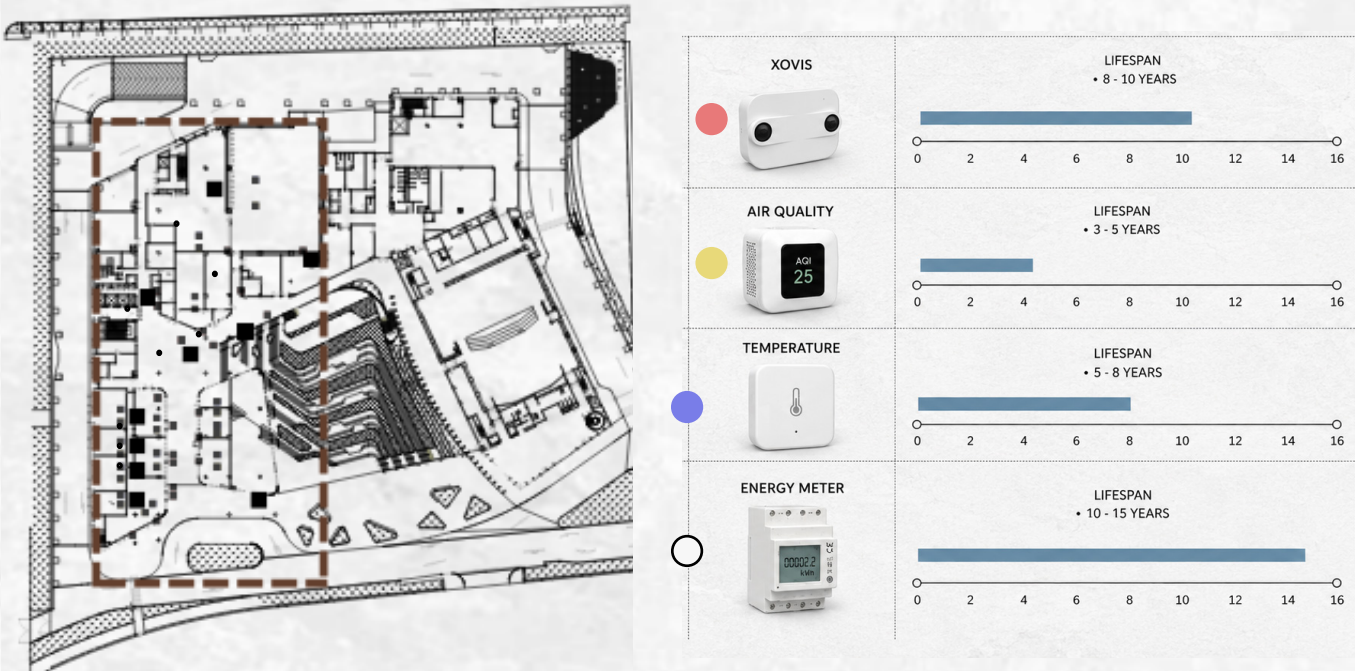
# STUDIO FOCUSED

So Drama! requested the studio to maintain the best indoor conditions for visitors, students, and staff. To support this, the diorama studio needs to be monitored through four key categories: occupancy, temperature, air quality, and energy use.



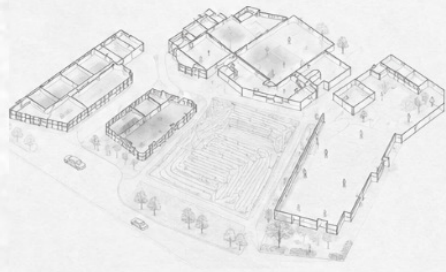
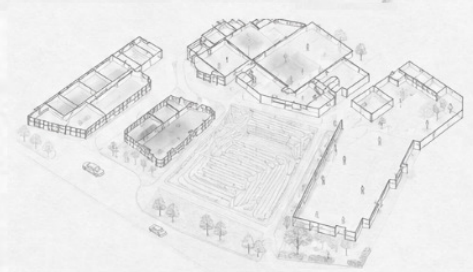
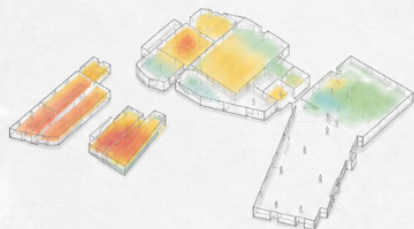
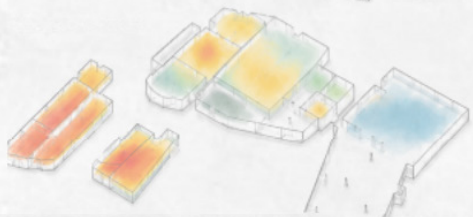
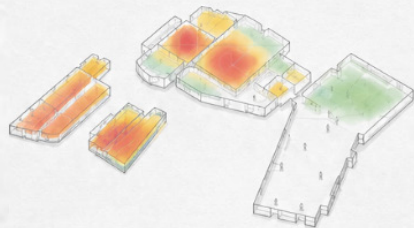
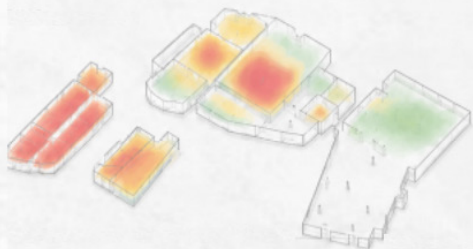
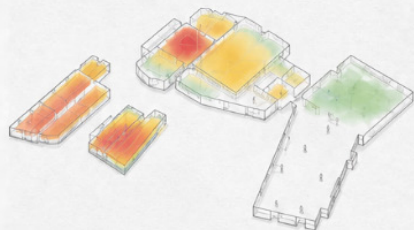
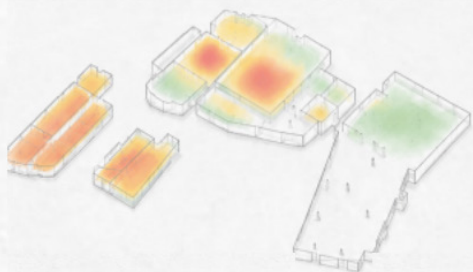
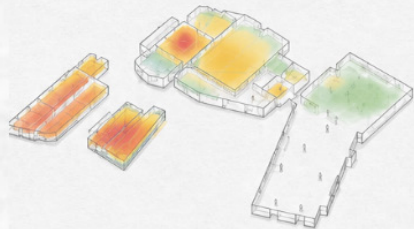
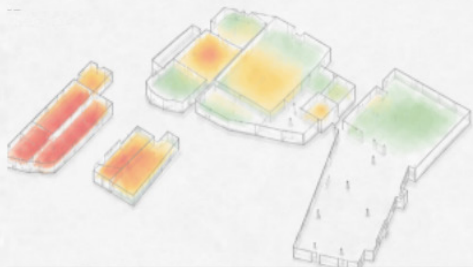
These help detect crowding, heat build-up, poor ventilation, and high energy demand, allowing the space to stay comfortable, controlled, and efficient.

# SENSORS PLACEMENT



NON-PEAK TIME

PEAK TIME



# 06

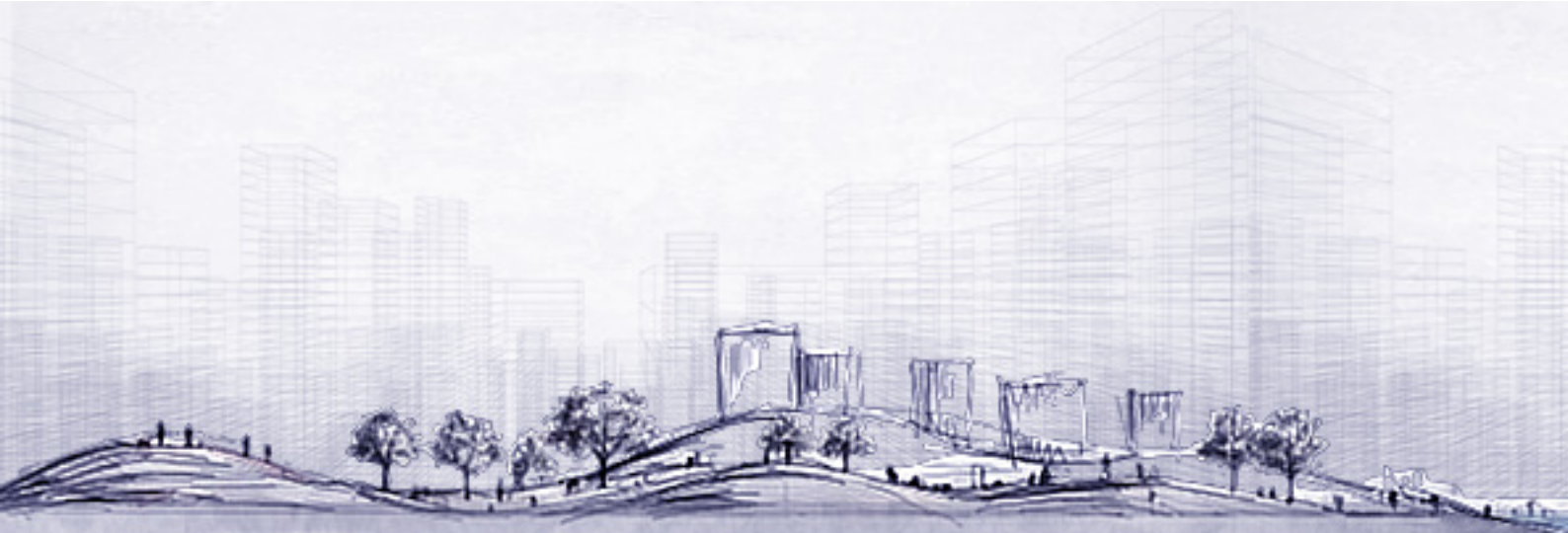


## WORLD WITHIN

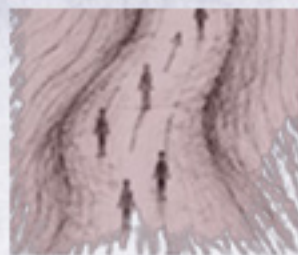
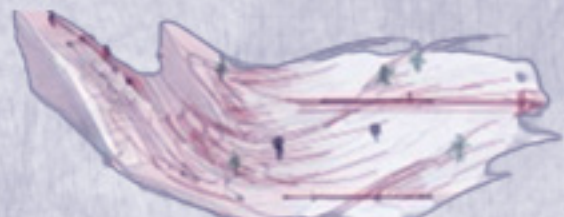
### **NUS SINGAPORE LANDSCAPE ARCHITECTURE WORKSHOP**

*In the fast-paced CBD, constant movement and pressure leave little room for pause or reflection. This project proposes a condensed landscape inspired by natural terrains, using moments of compression, stillness, and wandering to guide visitors from urban intensity into reflection, before returning them with a renewed sense of clarity and connection.*



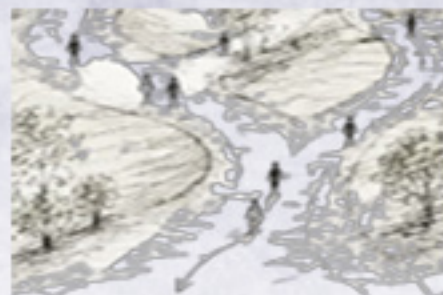


## COMPRESSED

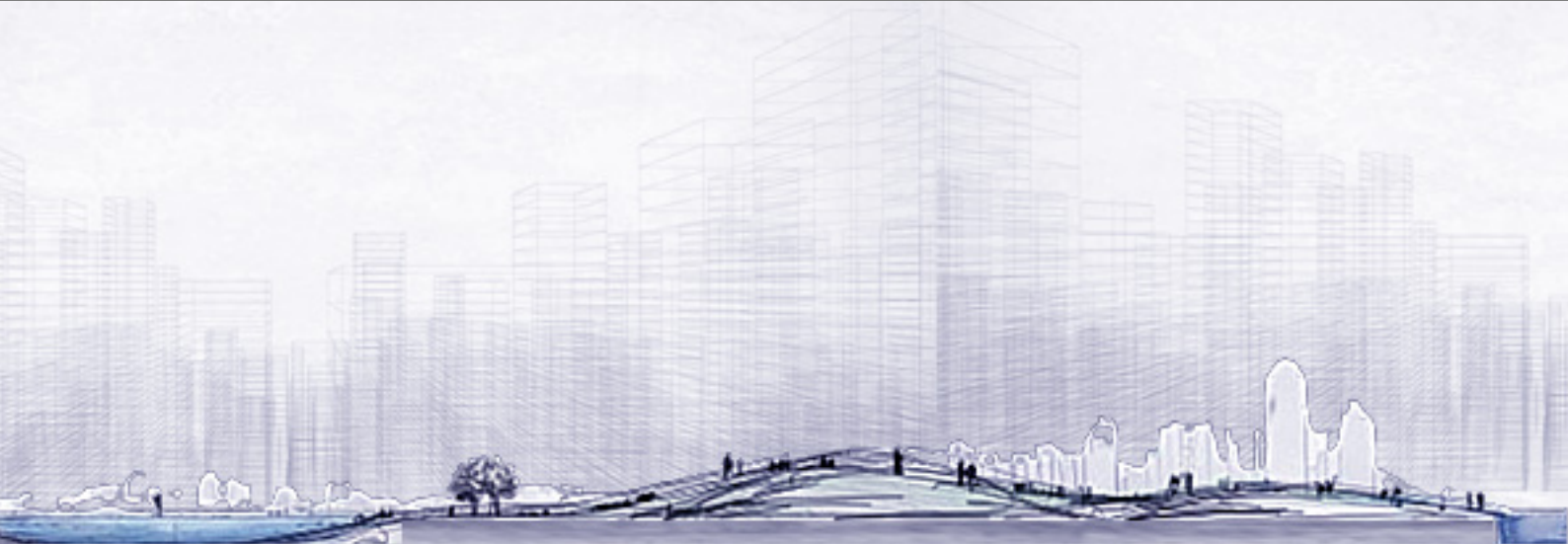


The city takes over. Everything feels tight and overwhelming. You move fast without thinking, like you're being carried along. Your awareness starts to fade, and you lose touch with your own pace

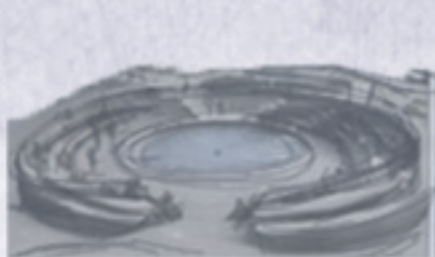
## DRIFT



The pressure softens and you slow down without realizing it. The noise fades in sharpness, and you begin to notice yourself again. You stop directing movement and start following the space, as thoughts quiet and the rush dissolves into a calm, floating detachment.

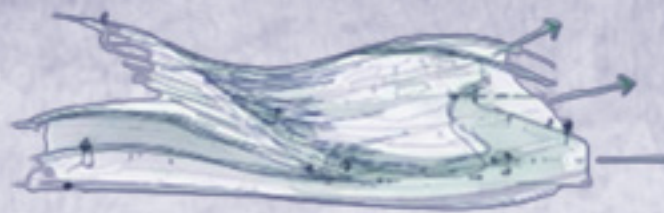


## PAUSE



Everything pauses. You stop. There is silence in your mind. For a moment, you feel yourself again present, grounded, aware. The weight of the city is no longer pressing on you.

## REAWAKENING



Feeling returns slowly. You become aware of your body, breath, and surroundings. Movement feels lighter and more intentional. You are no longer lost in the space you begin to belong again, reawakened and grounded as you re-enter the city's rhythm.

# 07



## PHOTOGRAPHY

*Photography captures the character of places and preserves moments in time. Through light, composition, and perspective, it reveals the atmosphere, details, and stories embedded within different environments, encouraging a deeper appreciation of the spaces that shape everyday experiences.*



