

# BLOOMING CITY

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Architecture.com

جامعة أبوظبي  
Abu Dhabi University



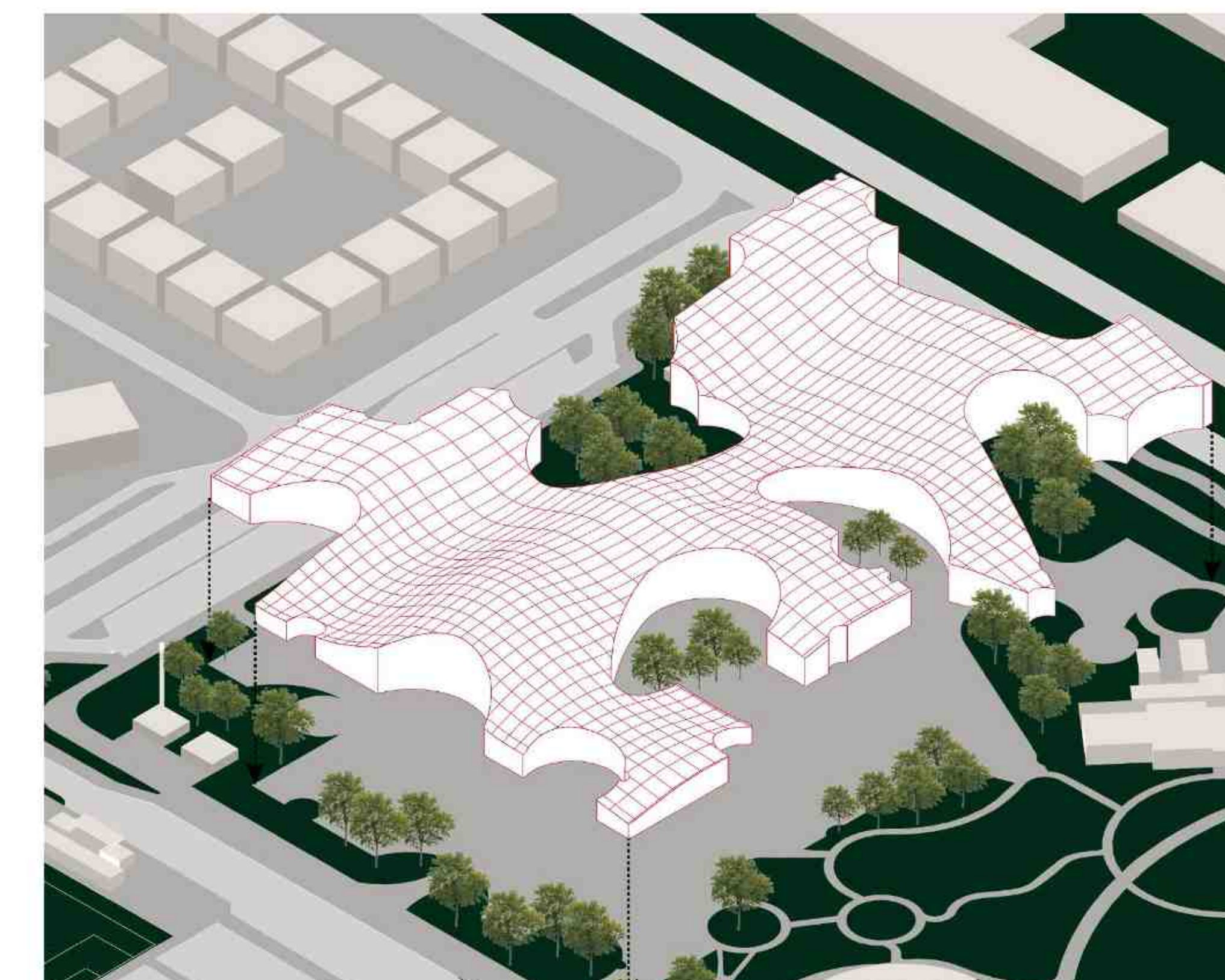
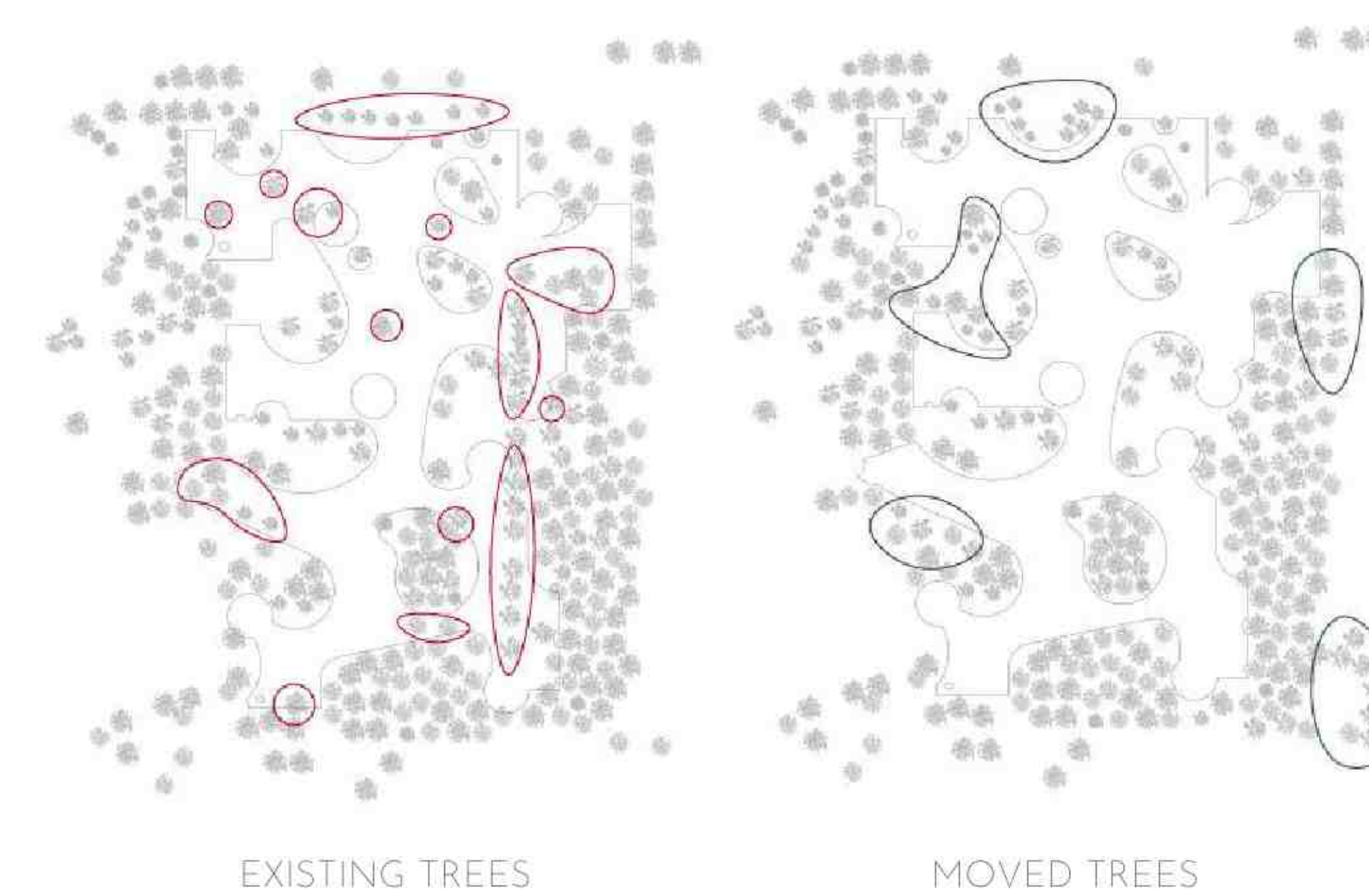
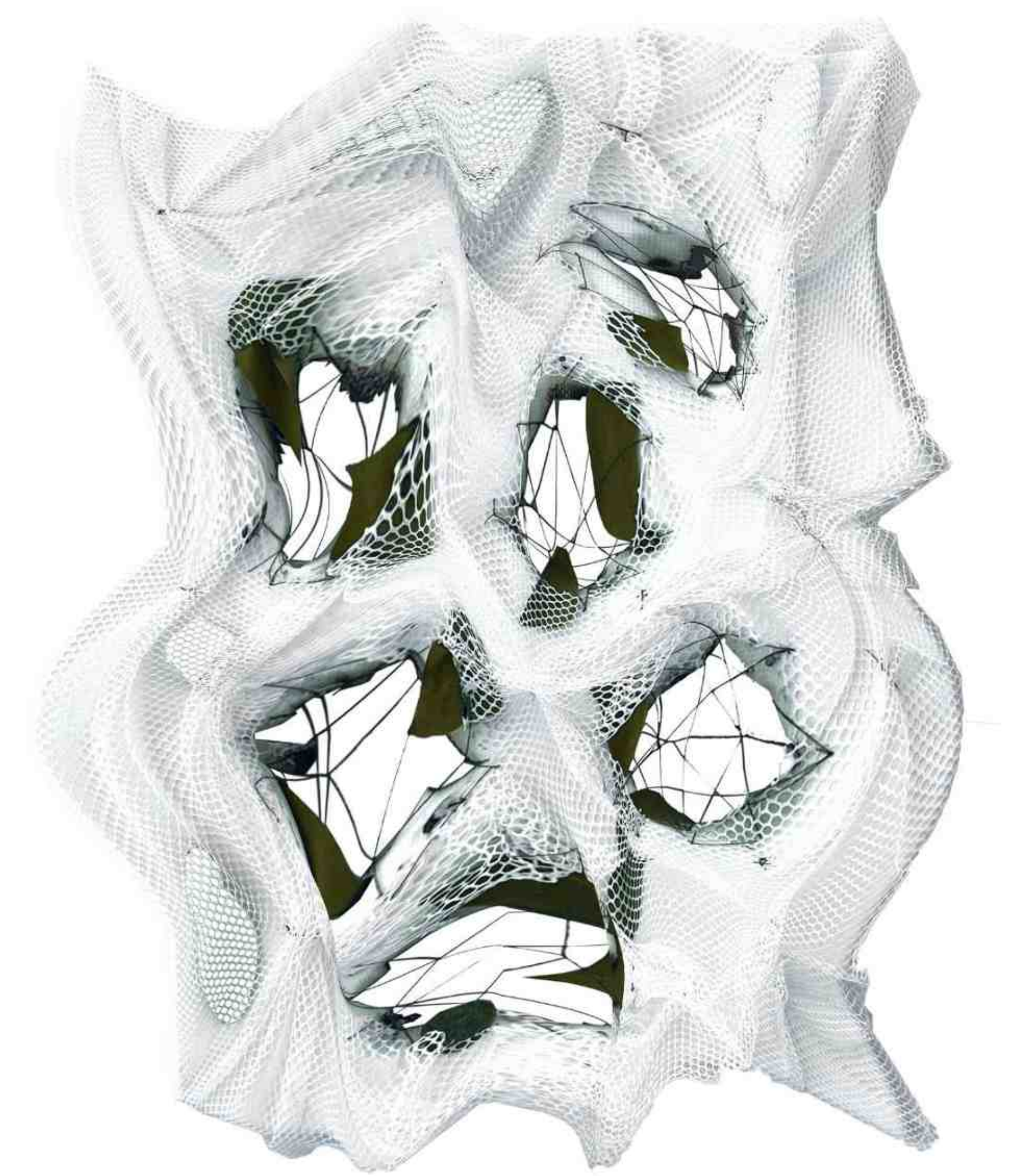
## PROJECT DESCRIPTION

Blooming City is an urban farming project that reintroduces agriculture into the premises of the city and its community. The story began with reflection on architecture's relation to farming and nostalgia for a time when architecture and nature coexisted. By unveiling the past, we realize the importance of being connected to nature and the possibility of inhabiting a city without harming it.

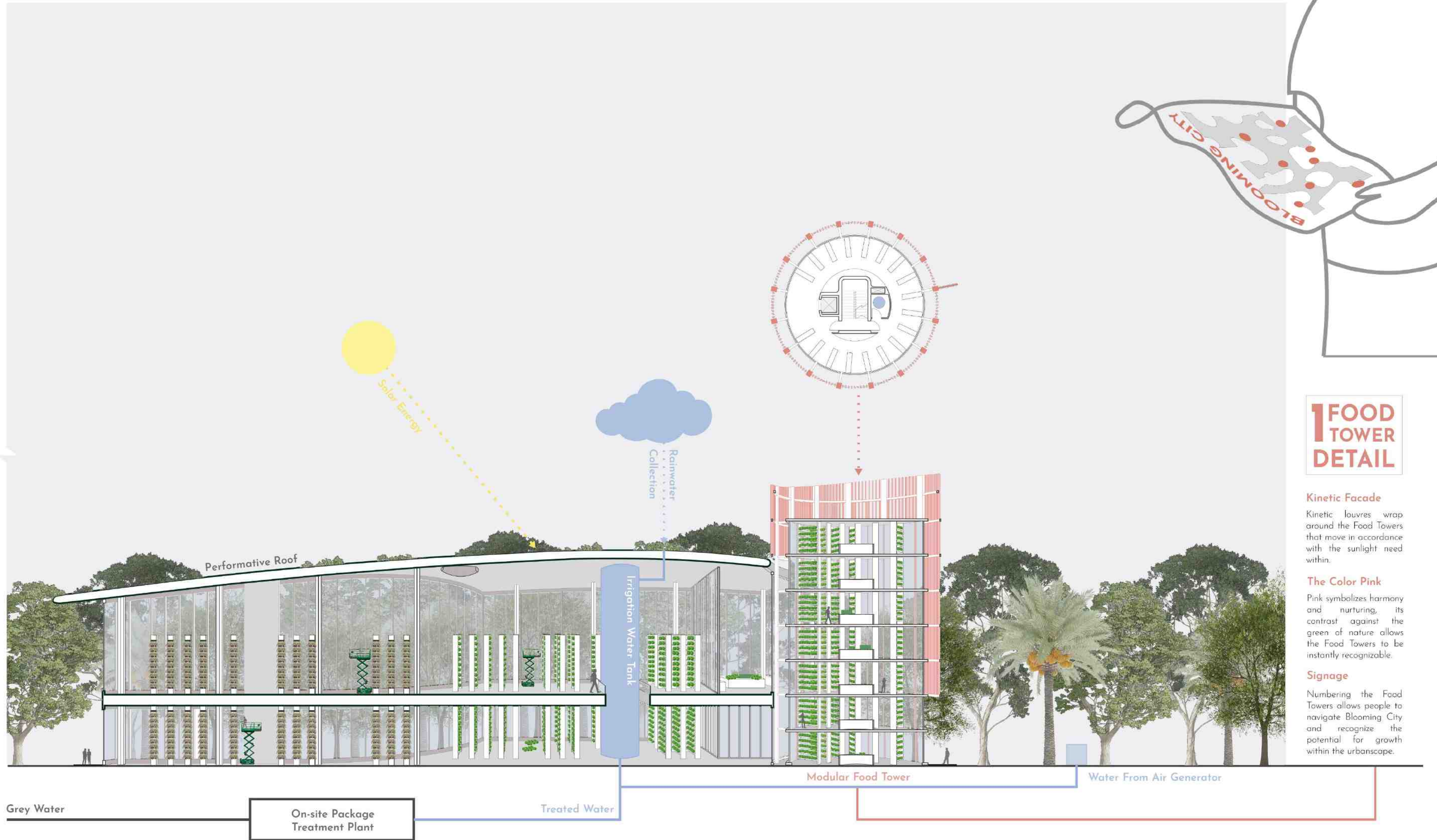
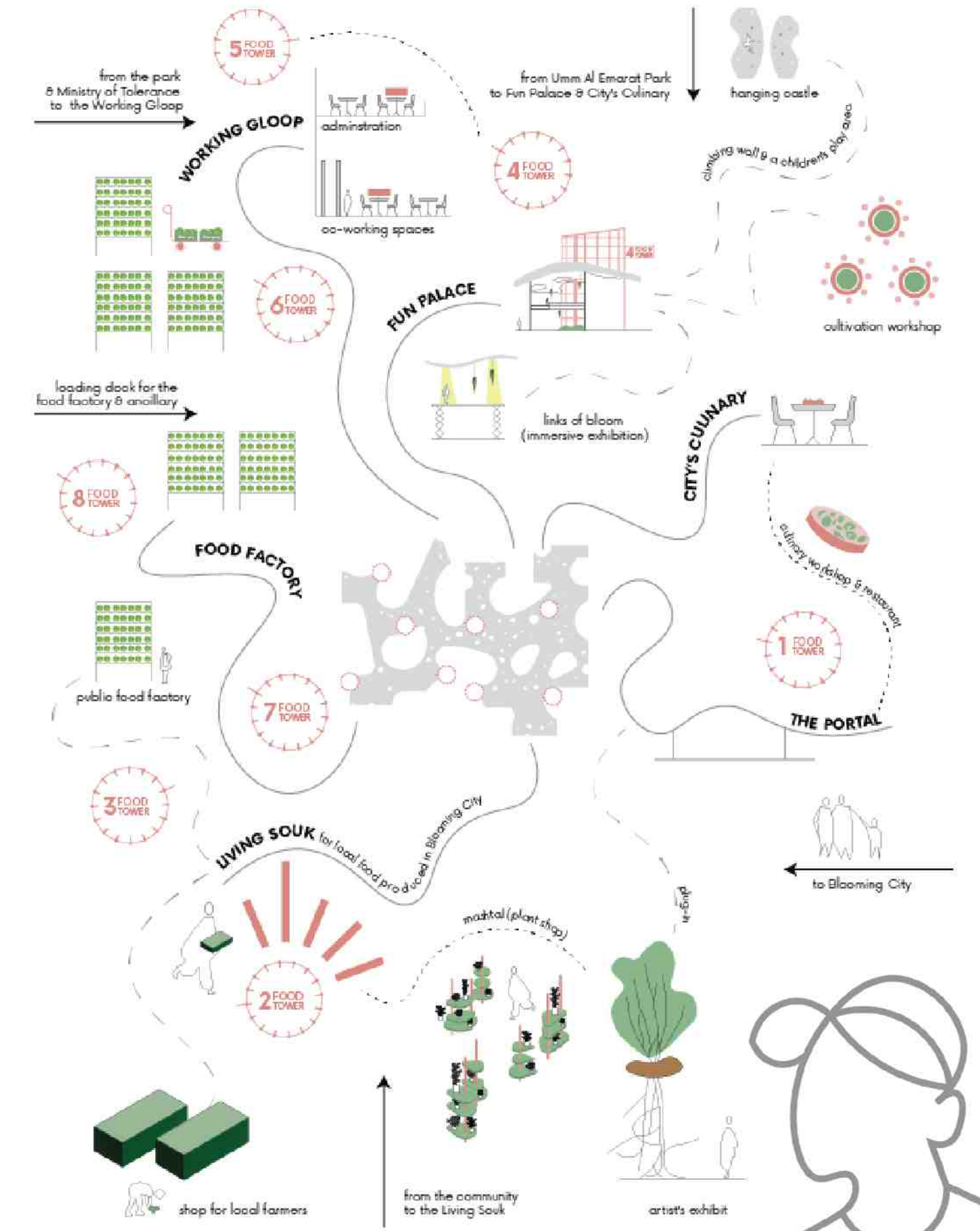
Blooming City's limitless form contrasts between the natural and manmade, irregular and regular, solid and void, to protect the site's ecosystem. Using architecture as a tool of urban cultivation and self-reliance. Blooming City's introduction to the urban fabric of Abu Dhabi will raise awareness on topics of food security and sustainability.

By exhibiting the process of vertical farming and encompassing flexible spaces for community interactions through exhibits, workshops, and recreation. The project aims to become a productive driver of change in the community.

The performative roof of Blooming City curves harmoniously around the site's ecosystem, filters light, provides shade, and collects rainwater. To cover the water intake of the vertical farms and site's flora an on-site package treatment plant, and water from air generators are used. In support of urban food production "Food Towers" are designed as modular structures for vertical farming supplying the City with produce and allowing visitors to navigate.





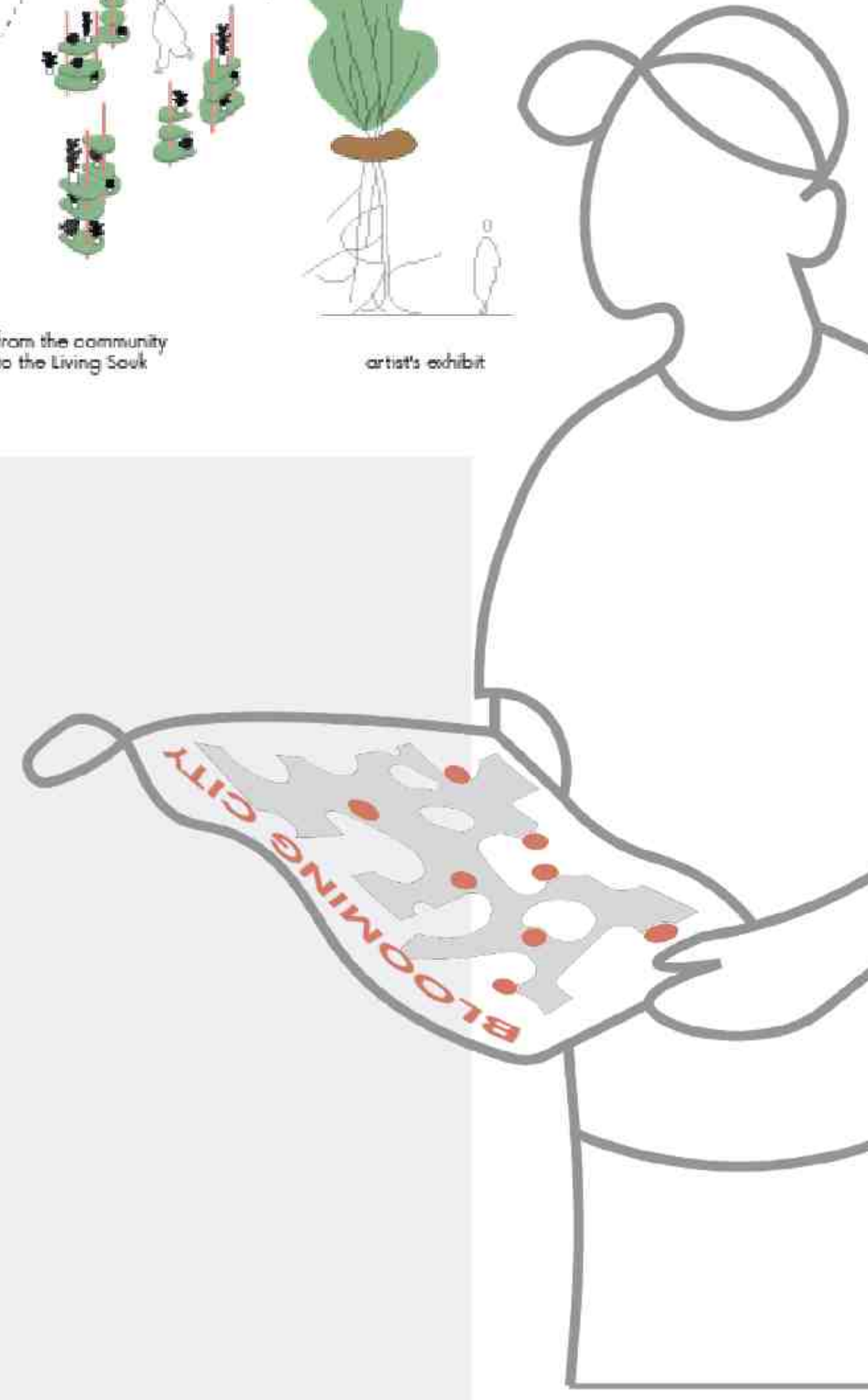


### 1 FOOD TOWER DETAIL

**Kinetic Facade**  
Kinetic louvers wrap around the Food Towers that move in accordance with the sunlight need within.

**The Color Pink**  
Pink symbolizes harmony and nurturing, its contrast against the green of nature allows the Food Towers to be instantly recognizable.

**Signage**  
Numbering the Food Towers allows people to navigate Blooming City and recognize the potential for growth within the urban scape.



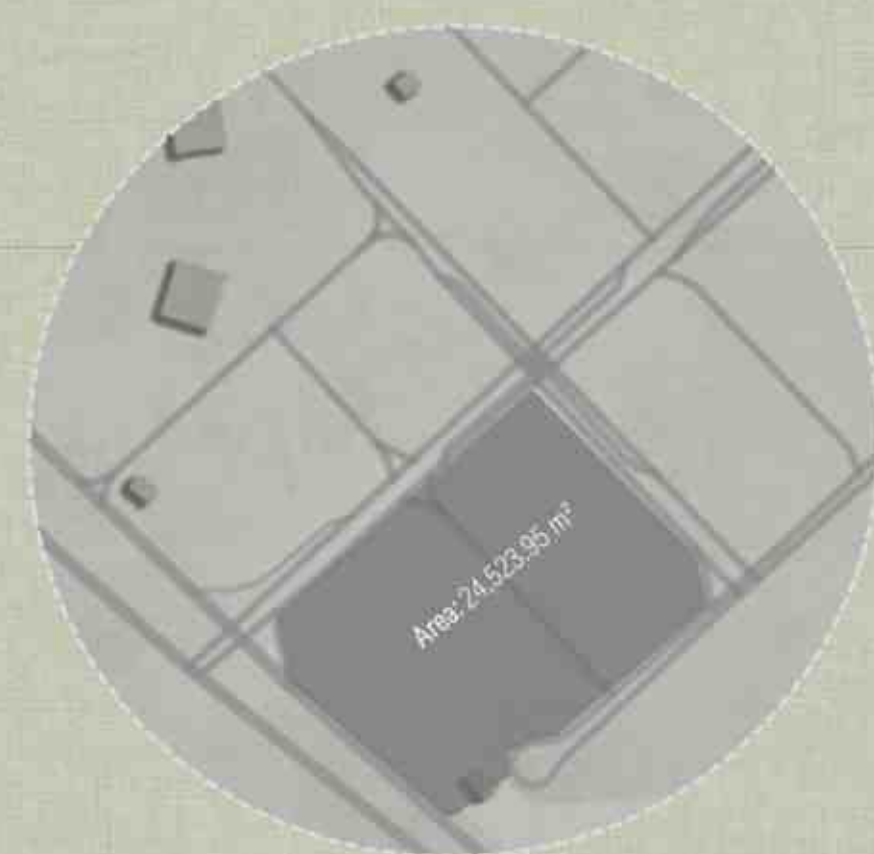


# CONCEPT CONCEPT

Inspired by the Holy Quran, the concept behind the Islamic Cultural Institute is a symbolic and transformative narrative. The institution, which is intended to serve as a spiritual and intellectual guide, takes architectural and thematic cues from the deep voyage, producing a setting that spiritually uplifts and educates visitors.

## Location

United Arab Emirates, Abu Dhabi  
Al saadiyat Island (cultural Distract)



## Introduction

The Shro'e Islamic Cultural Institute in Abu Dhabi is in the forefront of cultural inclusivity, welcoming citizens from all walks of life as well as tourists interested in Islamic culture.

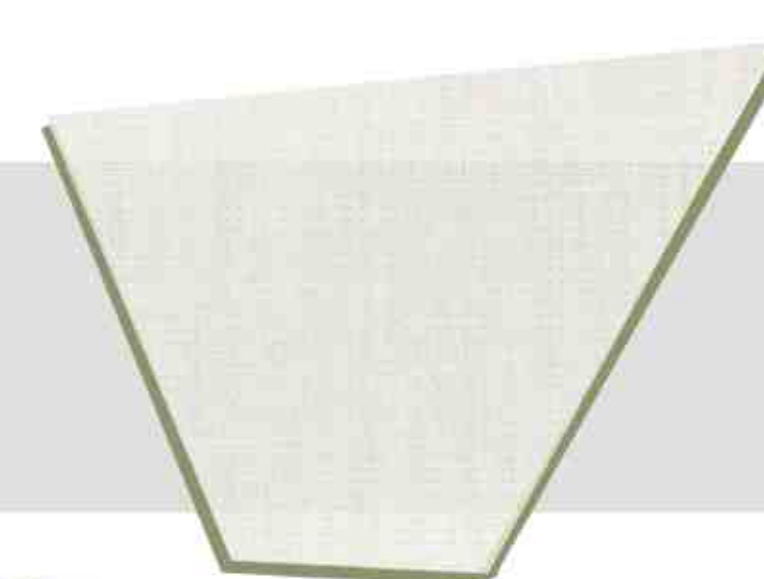
The institution, as opposed to simple monuments, is envisioned as a dynamic environment for ongoing learning, teaching, and discovery. Local people participate in cultural immersion programs, educational activities, and community events. Meanwhile, guided tours, engaging activities, and access to informative cultural exhibitions are available to travelers.



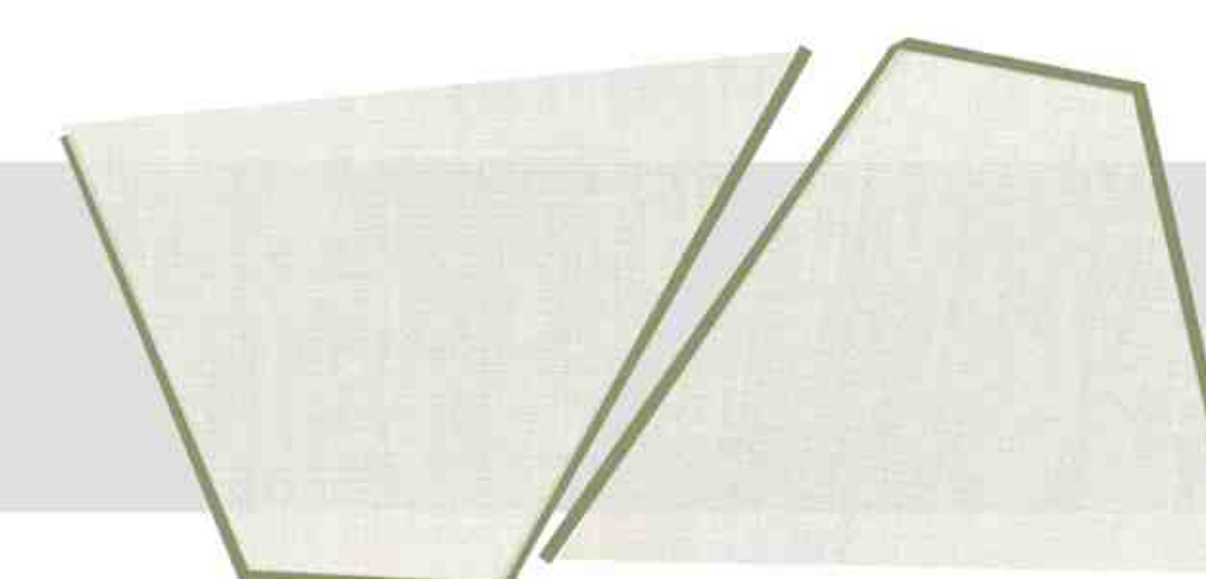
## Shape Inspiration



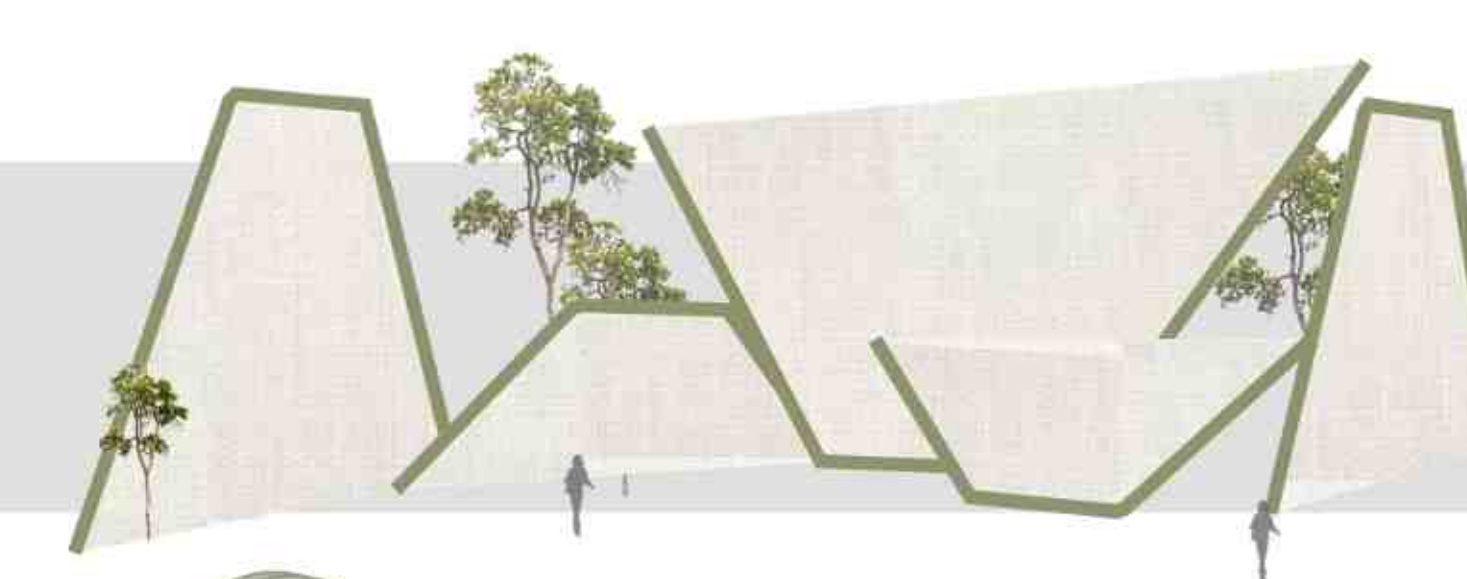
1 The building's design was inspired by the form of a Muslim's hand engaged in prayer, known as "duaa."



2 Got the outer line of the building shape.



3 The shape of the building was related to optimize natural lighting and create a narrower illumination pattern.



4 The buildings were scattered across the entire site, varying in size and distribution.

## User Identifications

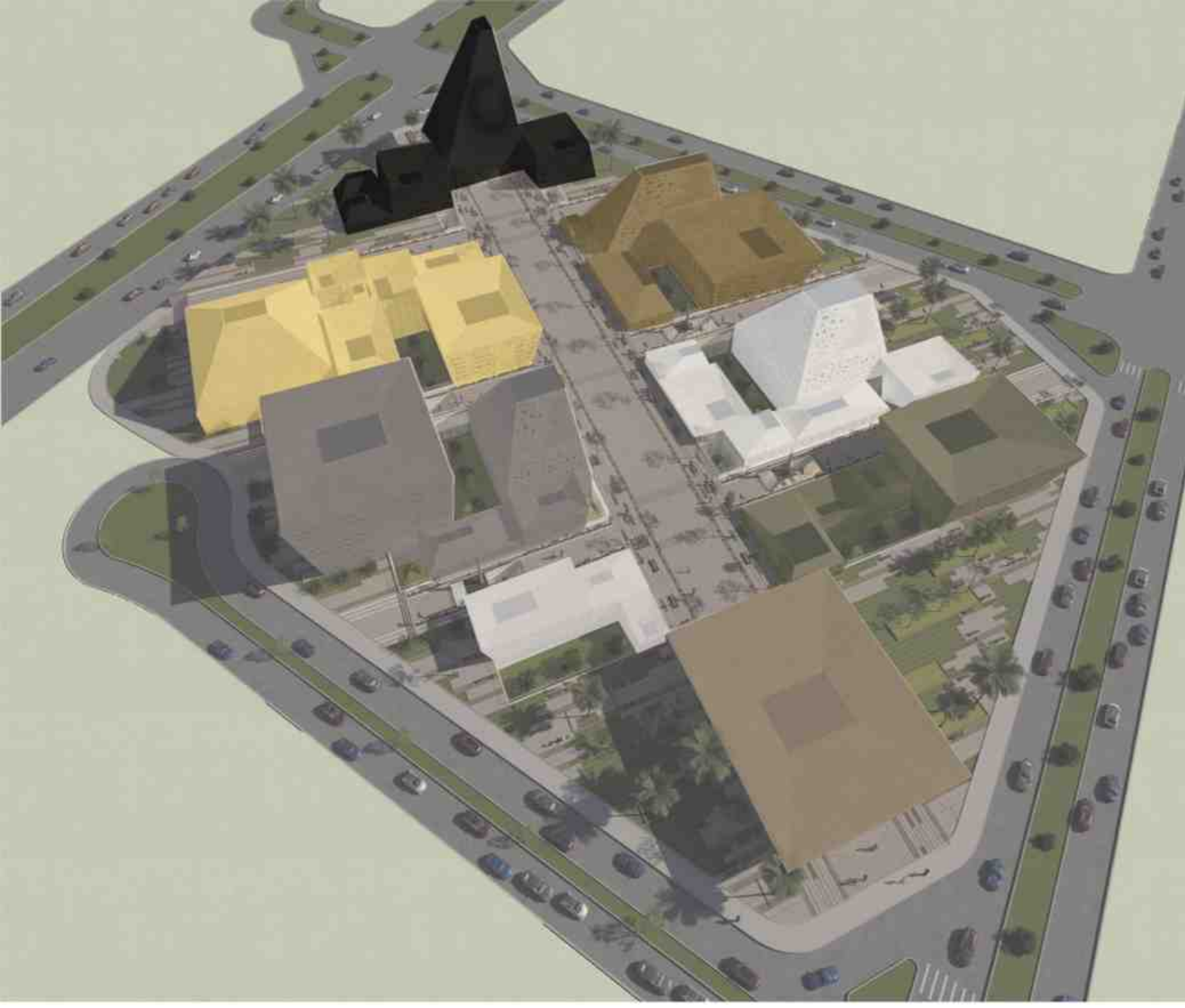
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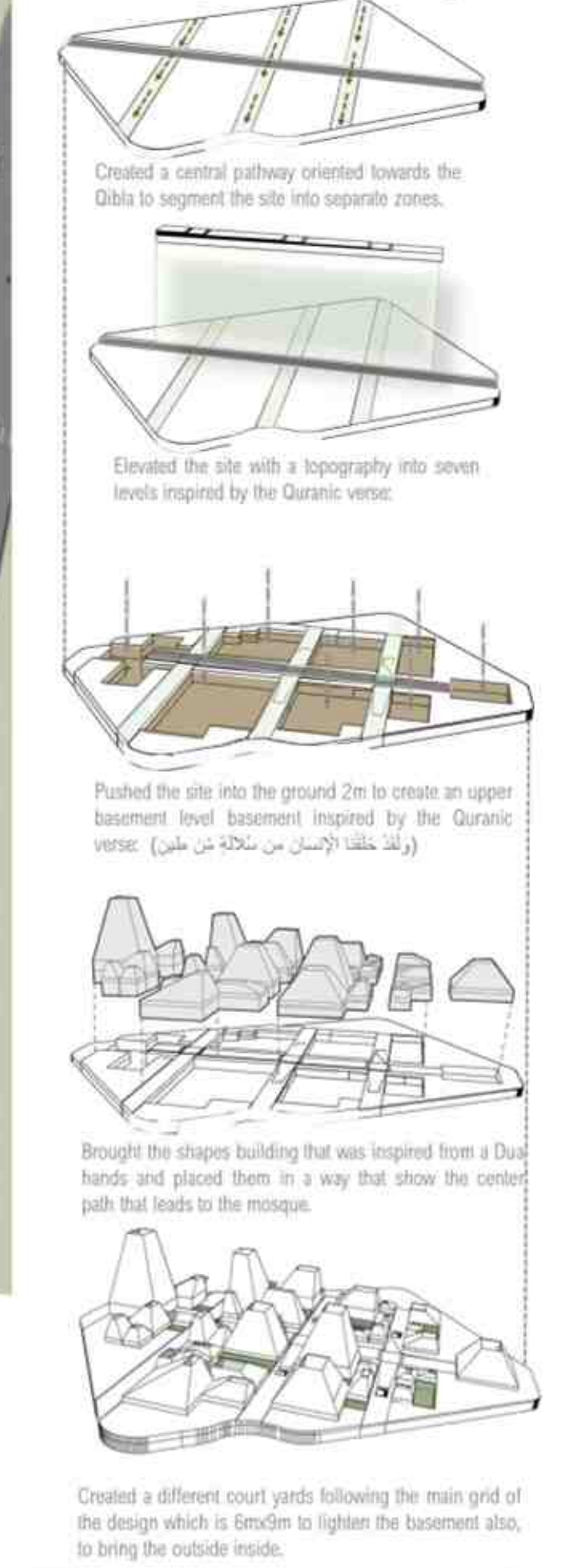
The institution provides a catalyst for mutual understanding by encouraging interfaith conversation and conducting cultural exchange activities. The Shro'e Islamic Cultural Institute seeks to be a vibrant and dynamic hub for grasping and celebrating Islamic heritage in the heart of Abu Dhabi City, with a strong commitment to inclusion and cultural respect.

- I. Worshipers
- II. Explores
- III. Learners
- IV. Facilitators
- V. People who inquire
- VI. The journey seekers

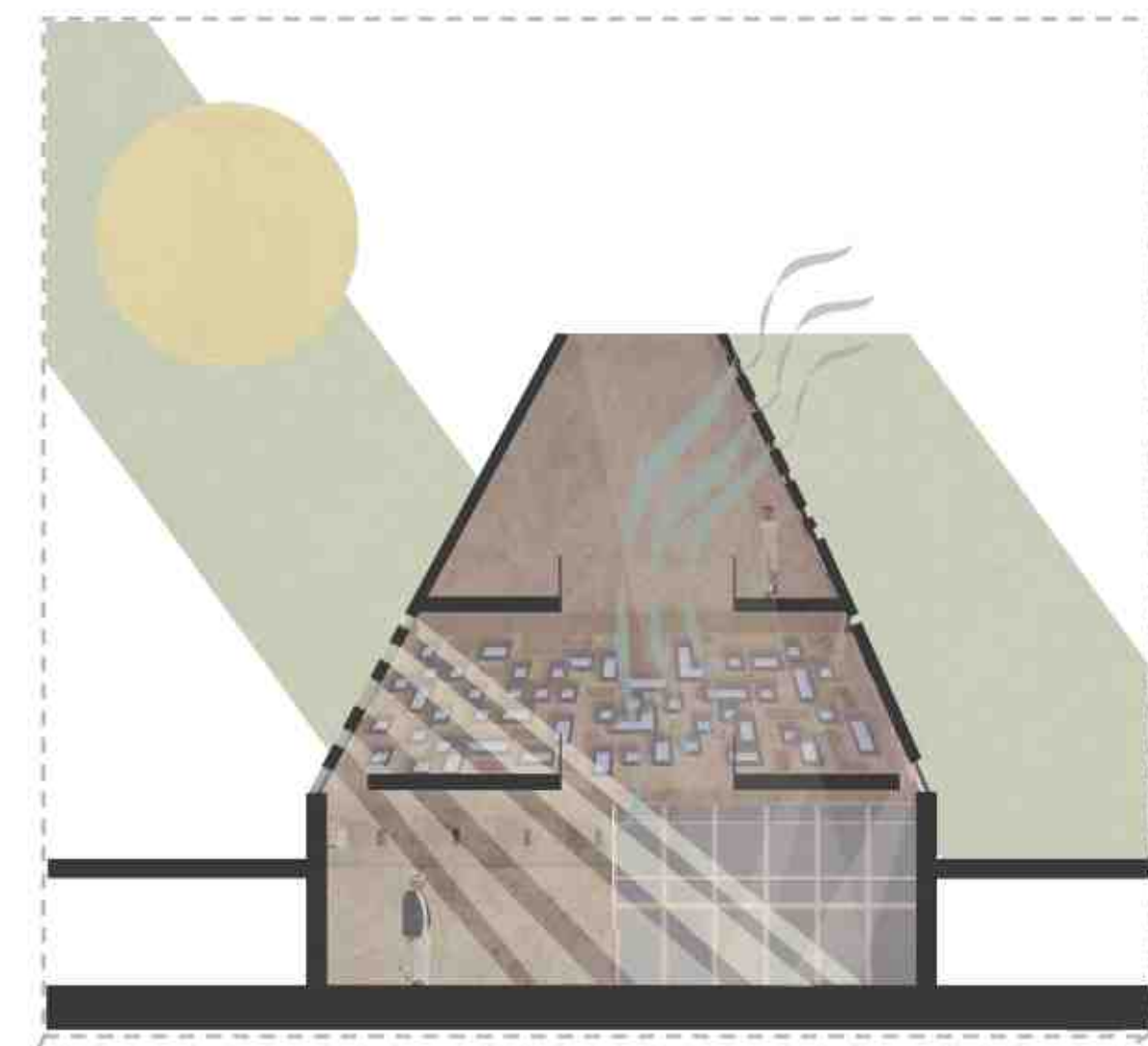




### Development Diagram



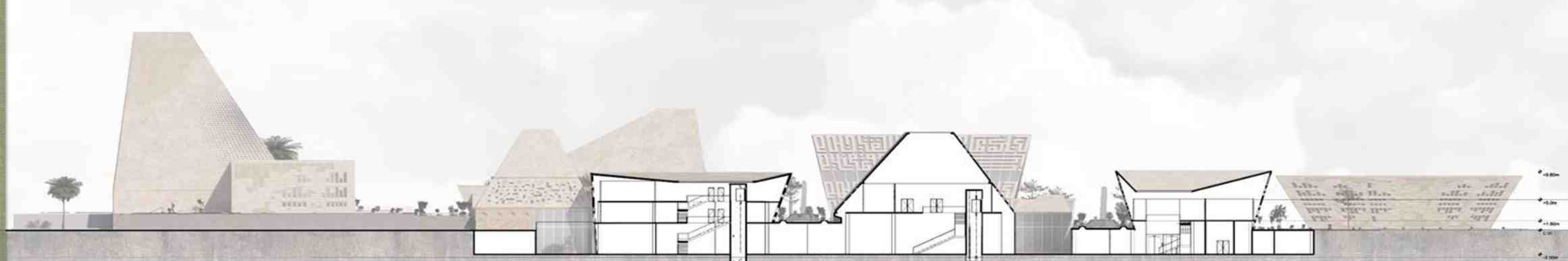
### Environmental Diagram



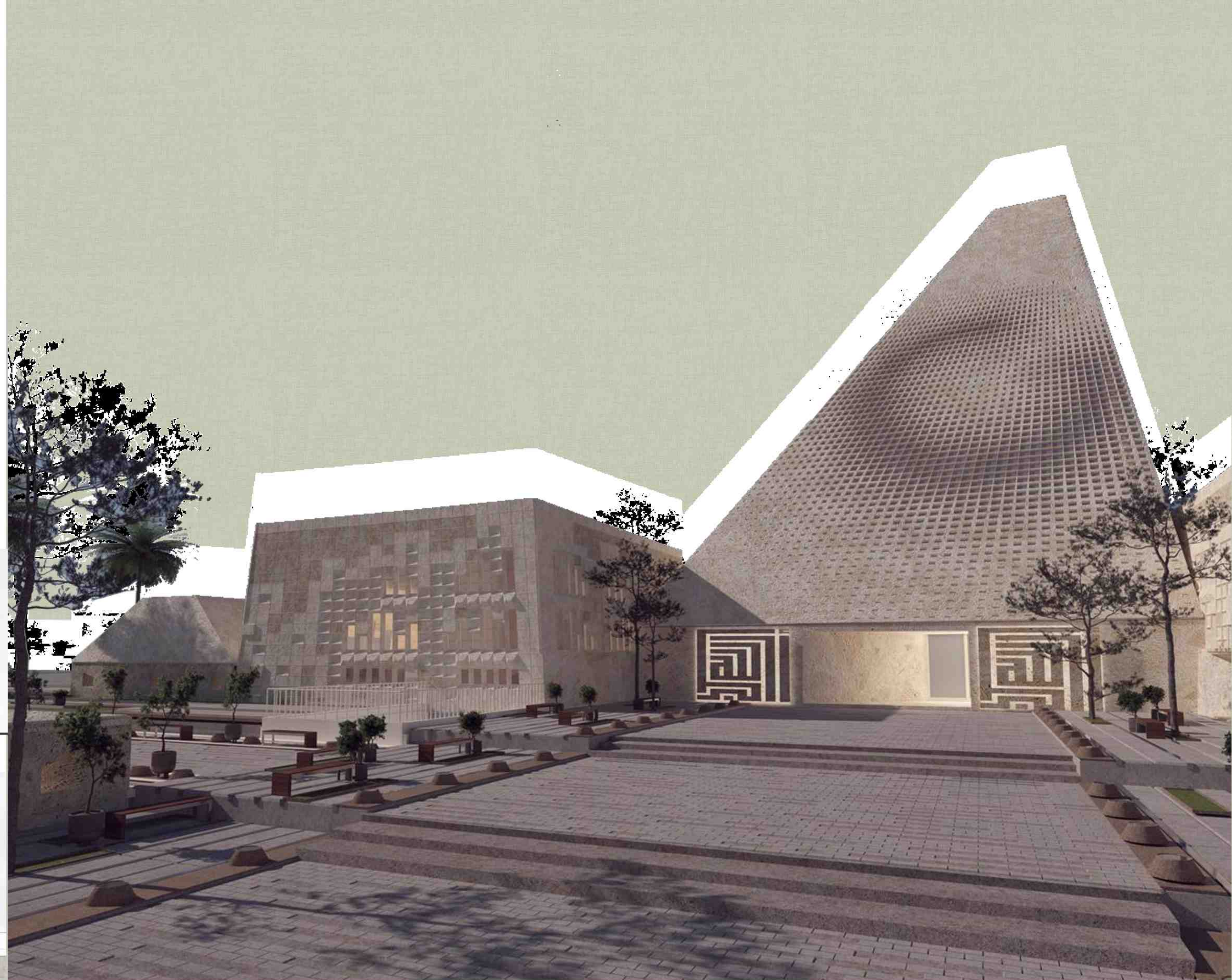
### Zoning Diagram



EAST ELEVATION  
Scale 1:500

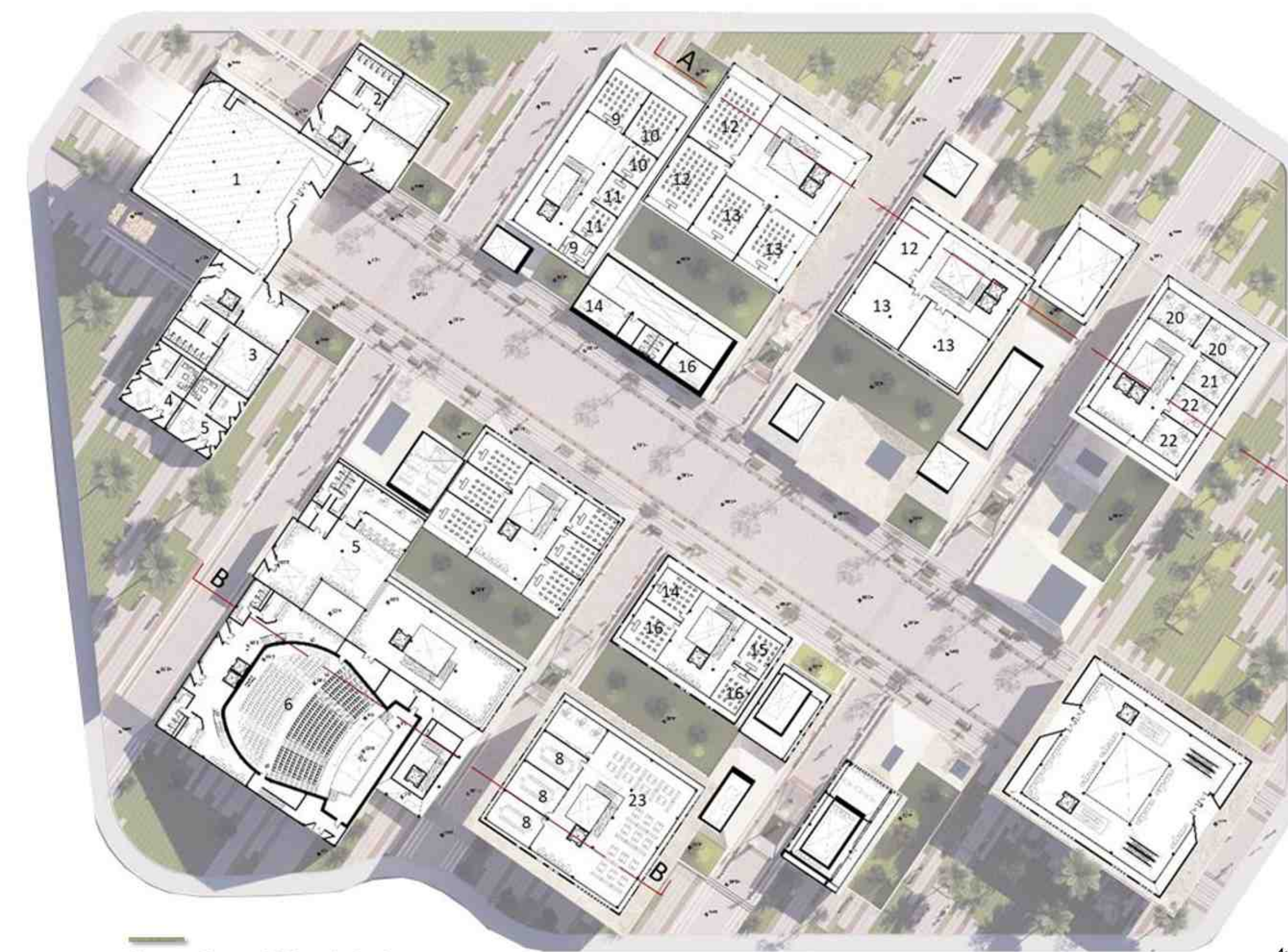


SECTION A-A  
Scale 1:500



Upper Basement Plan (-2m)  
Scale 1:500

- |                       |                                       |  |                      |
|-----------------------|---------------------------------------|--|----------------------|
| 1. New Muslim offices | 9. Cultivation & Preparation Workshop | 17. Art of Binding Workshop              | 25. Restaurant       |
| 2. Management offices | 10. Farming Workshop                  | 18. Theater                              | 26. Interactive Area |
| 3. Finance            | 11. Al Kazaf Workshop                 | 19. Architectural Islamic Art Workshop   |                      |
| 4. Meeting Room       | 12. Calligraphy Workshop              | 20. Architectural Islamic Art Exhibition |                      |
| 5. Manager Room       | 13. Written Literary Arts Workshop    | 21. Gallery                              |                      |
| 6. Storage            | 14. Fabric & Carpet Weaving Workshop  | 22. Event Hall                           |                      |
| 7. Toilets            | 15. Glass Decoration Workshop         | 23. Library                              |                      |
| 8. Shop               | 16. Wood Decoration Workshop          | 24. Kids Library                         |                      |



Upper Ground Plan (+2m)  
Scale 1:500

- |                        |                                   |                              |
|------------------------|-----------------------------------|------------------------------|
| 1. Mosque              | 9. Quran Classroom                | 17. Poetry Classroom         |
| 2. Women Ablution      | 10. Hadeth Classroom              | 18. Anashid Classroom        |
| 3. Men Ablution        | 11. Figh Classroom                | 19. Al Khithaba Classroom    |
| 4. Imam's Residences   | 12. Arabic Classroom              | 20. Fatwa Office             |
| 5. Muathans Residences | 13. Lecture Hall                  | 21. Zakat Office             |
| 6. Auditorium          | 14. Herbal Medicine Lab           | 22. Faceliffing Umrah & Haji |
| 7. Toilets             | 15. Historical Approach Classroom | 23. Library                  |
| 8. Meeting rooms       | 16. Historical Wisdom Classroom   |                              |



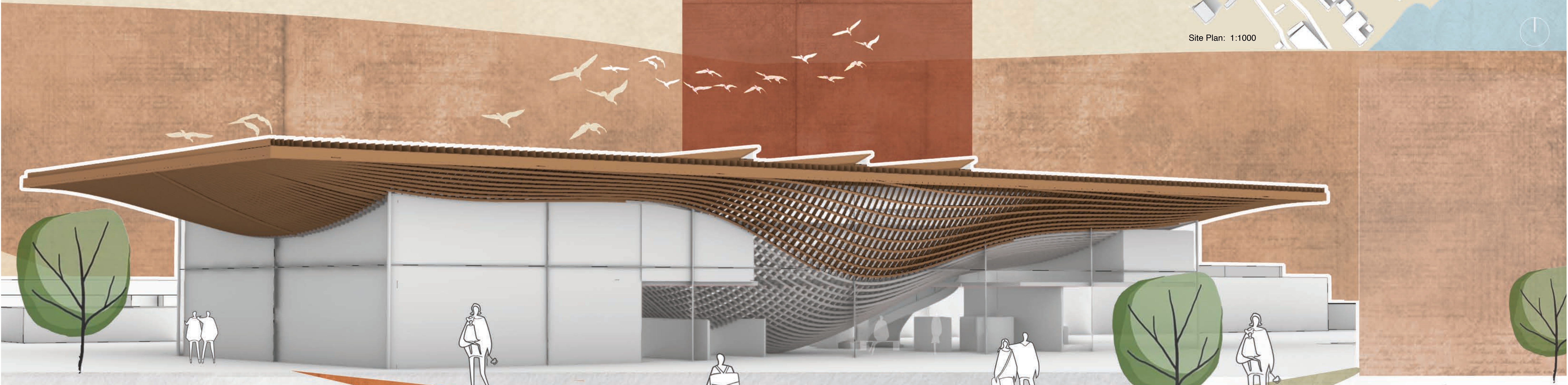
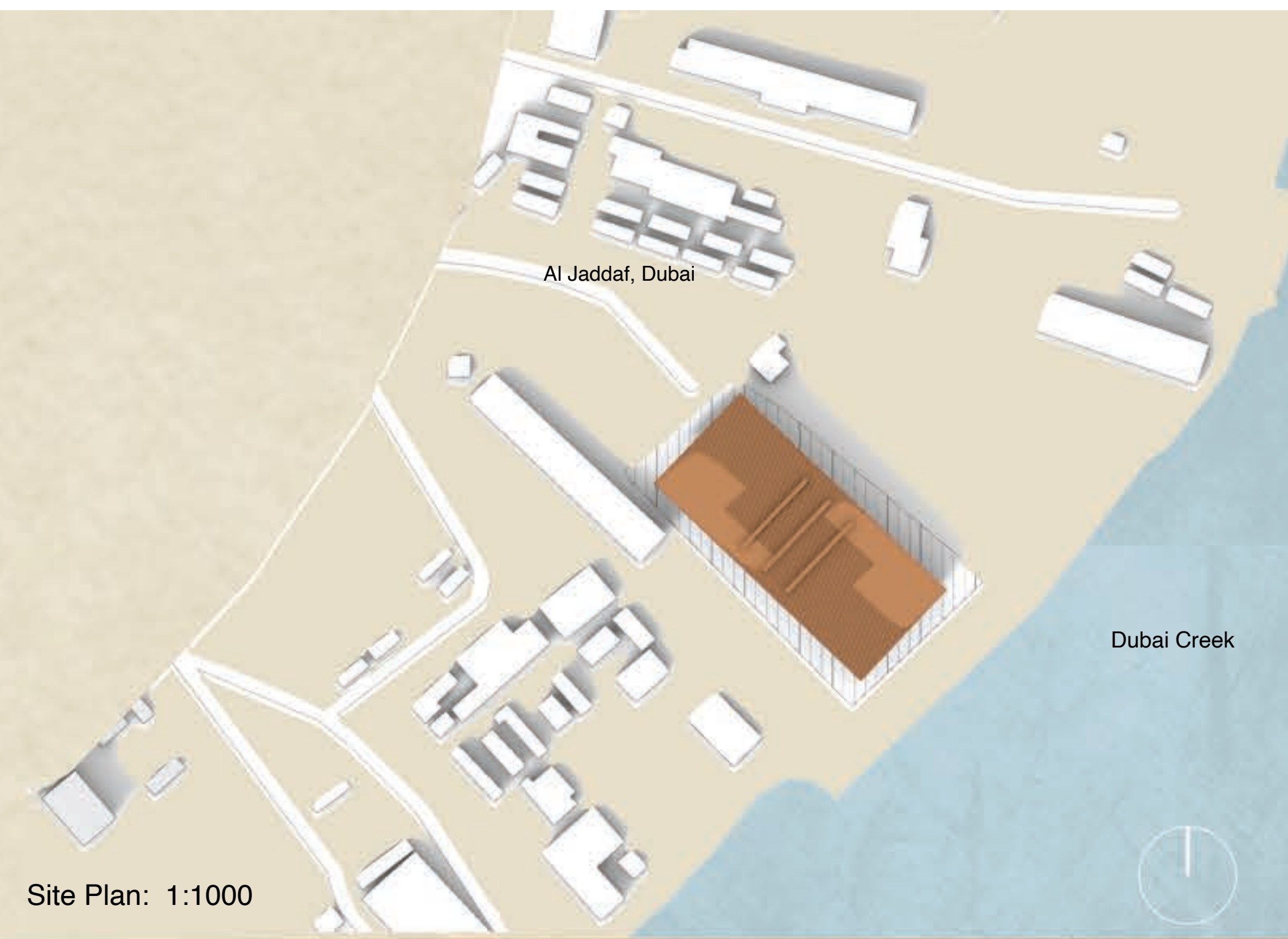
First Floor Plan (+2m)  
Scale 1:500

- |                       |                                   |                           |
|-----------------------|-----------------------------------|---------------------------|
| 1. Mosque             | 9. Figh Classroom                 | 17. Al Khithaba Classroom |
| 2. Women prayer area  | 10. Arabic Classroom              |                           |
| 3. Imam's Residences  | 11. Lecture Hall                  |                           |
| 4. Toilets            | 12. Historical Approach Classroom |                           |
| 5. Auditorium         | 13. Herbal Medicine Lab           |                           |
| 6. Audio Visual rooms | 14. Historical Wisdom Classroom   |                           |
| 7. Visual rooms       | 15. Poetry Classroom              |                           |
| 8. Hadeth Classroom   | 16. Anashid Classroom             |                           |

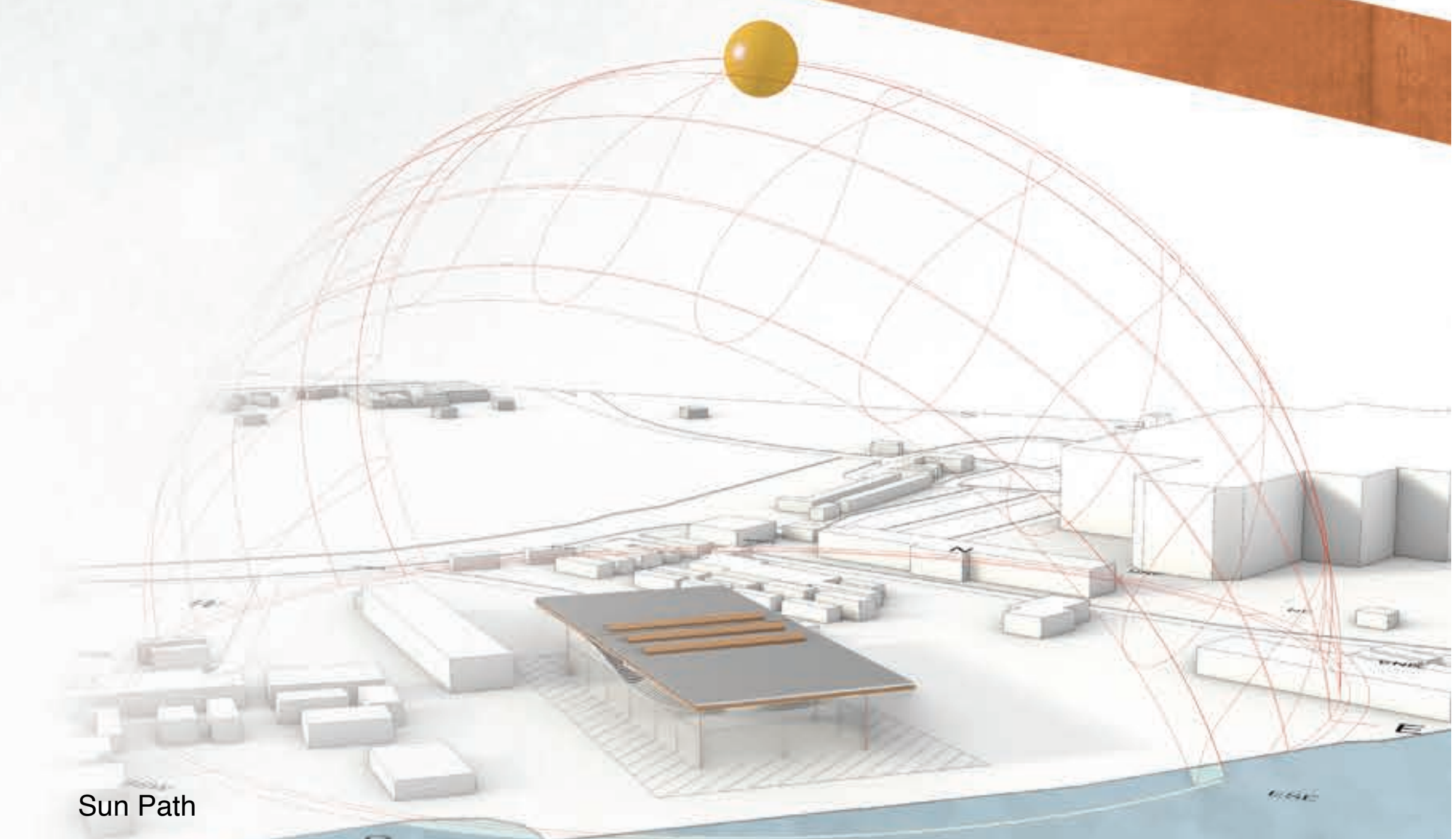
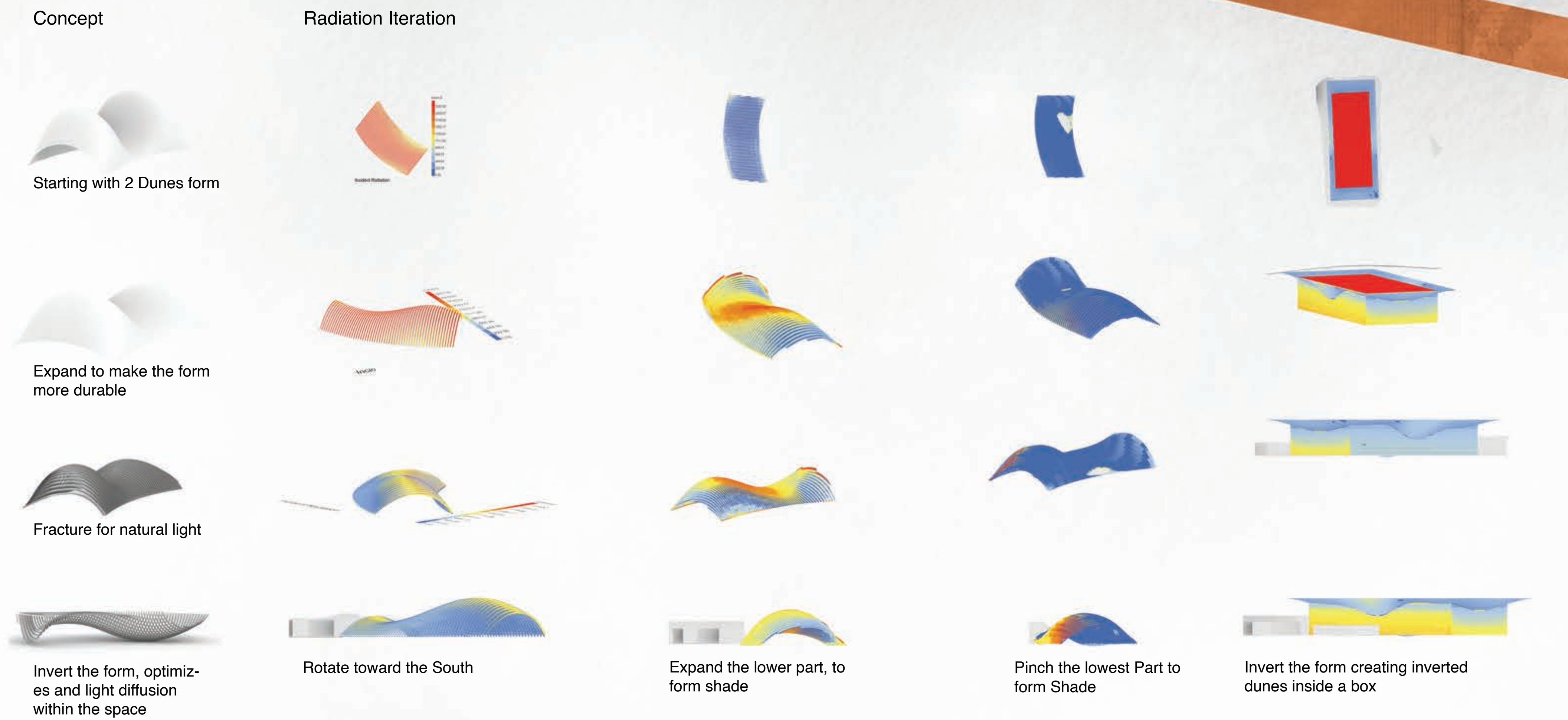
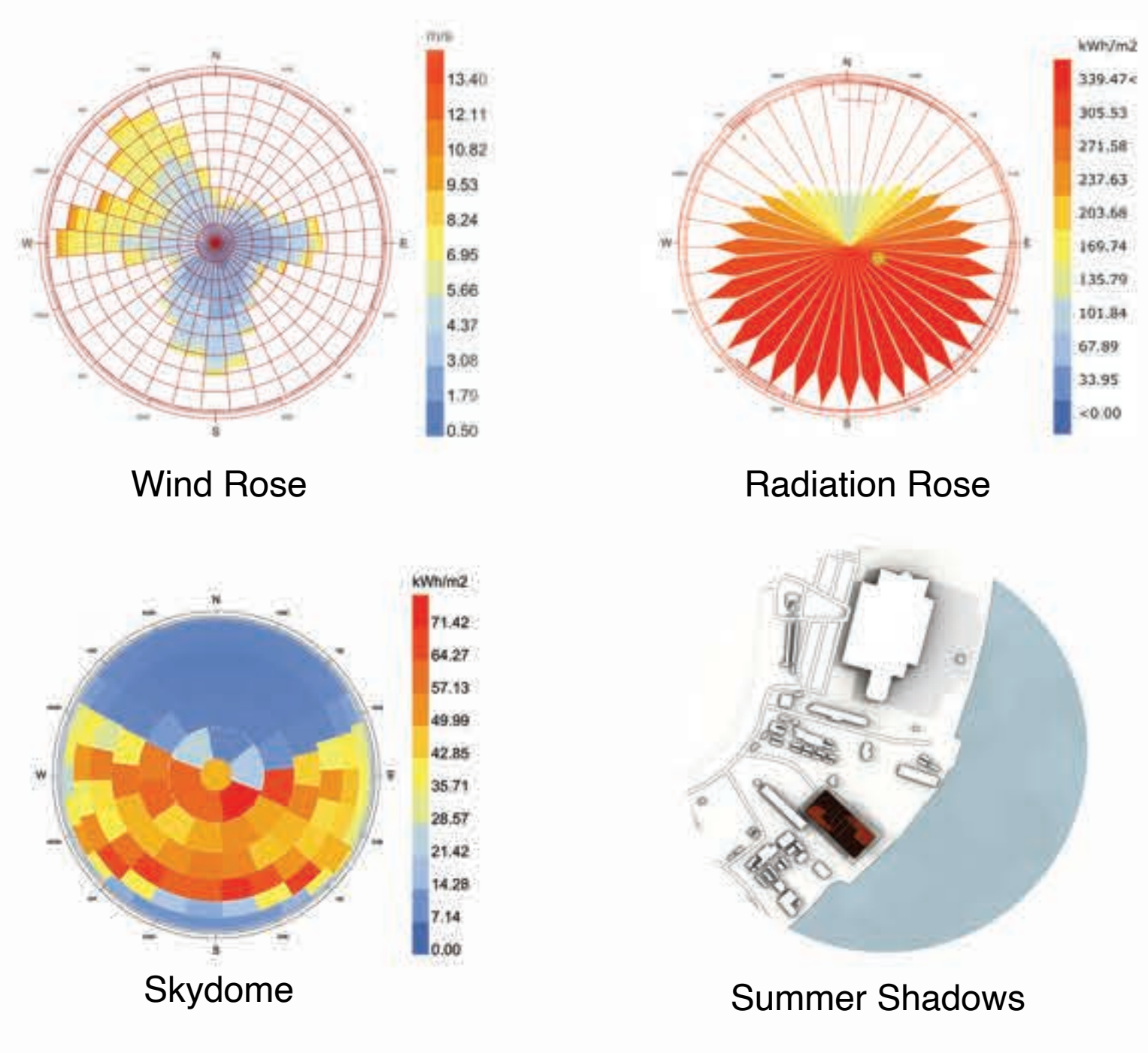
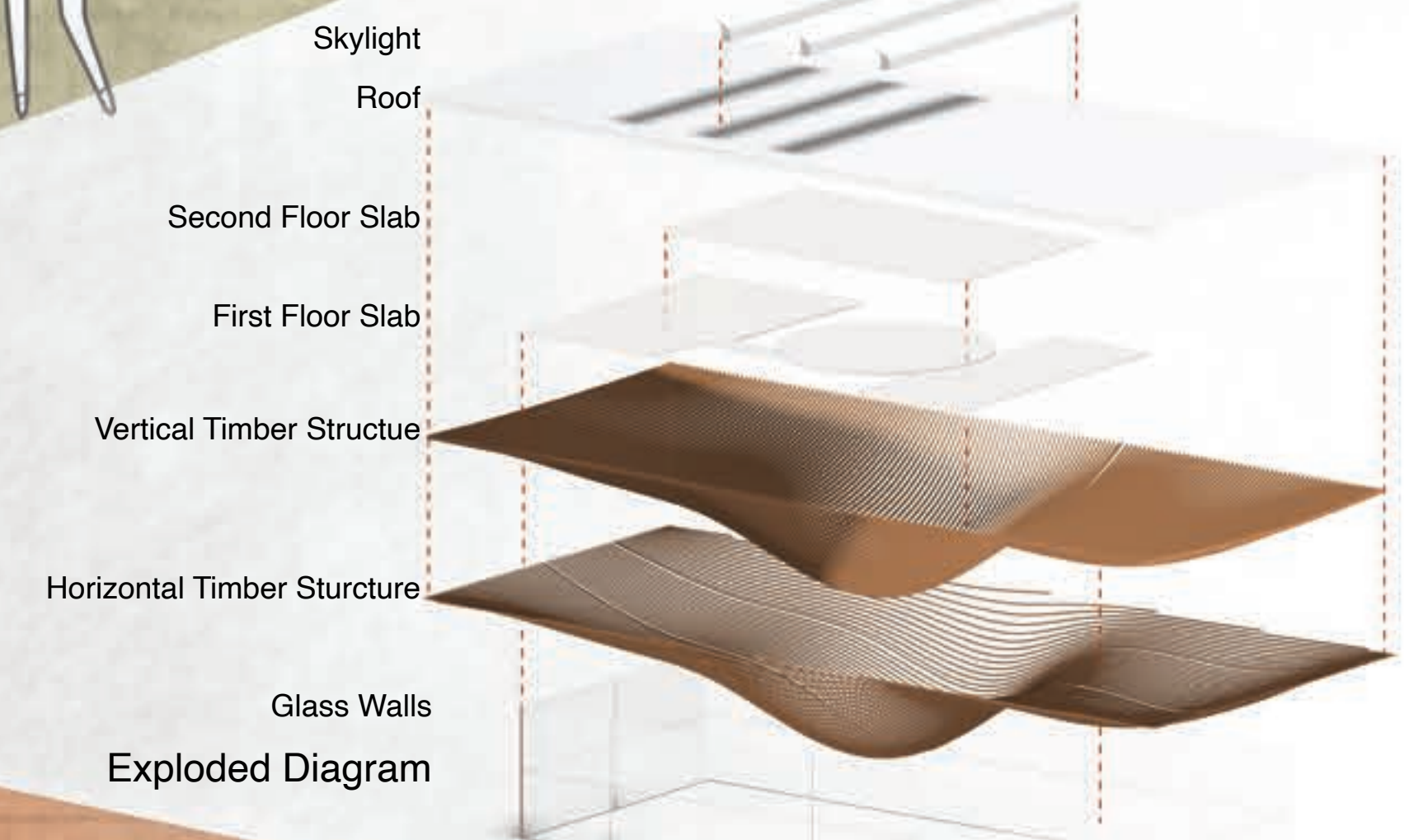


# DuneEssence

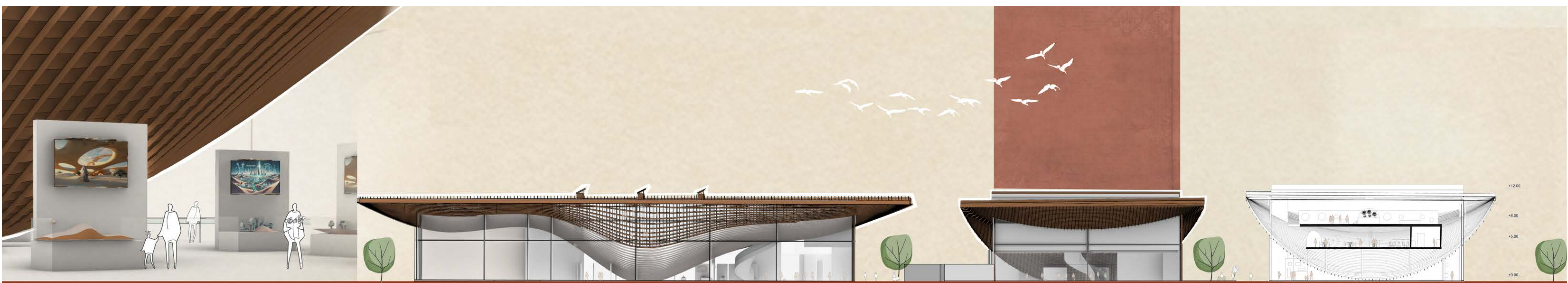
## The Inverted Encounter



The captivating beauty of dunes meets innovative architectural design in Al Jaddaf, Dubai. Encased in a stunning glass facade, our museum mimics the undulating forms of the desert while introducing a captivating twist: inverted dunes that invite exploration from a new perspective. Inside, experience the mesmerizing sight of flipped dunes, with their majestic contours and shadows beautifully captured within the timber structure. Engage with interactive exhibits that showcase the wonders of the desert ecosystem, merging nature with cutting-edge technology.



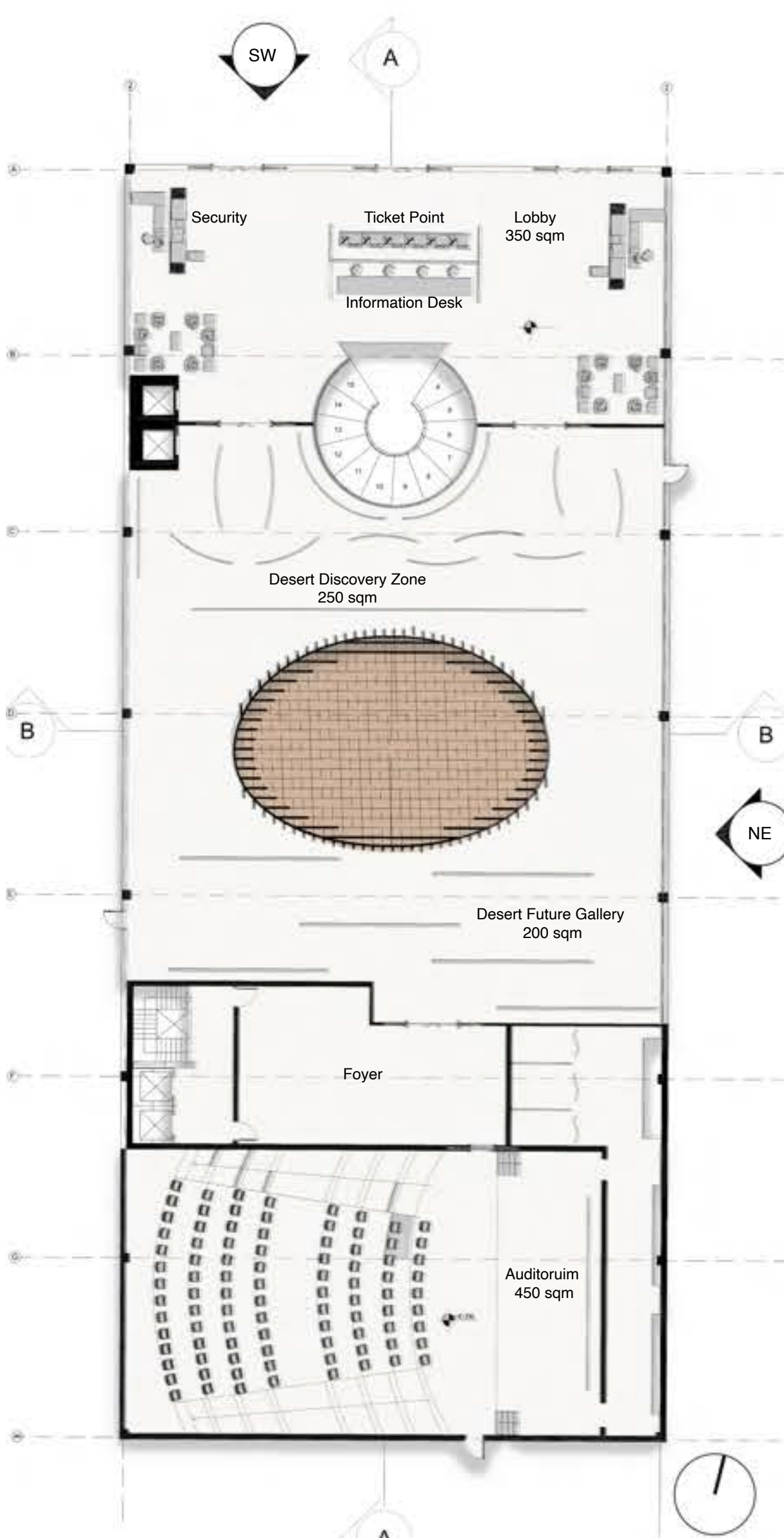




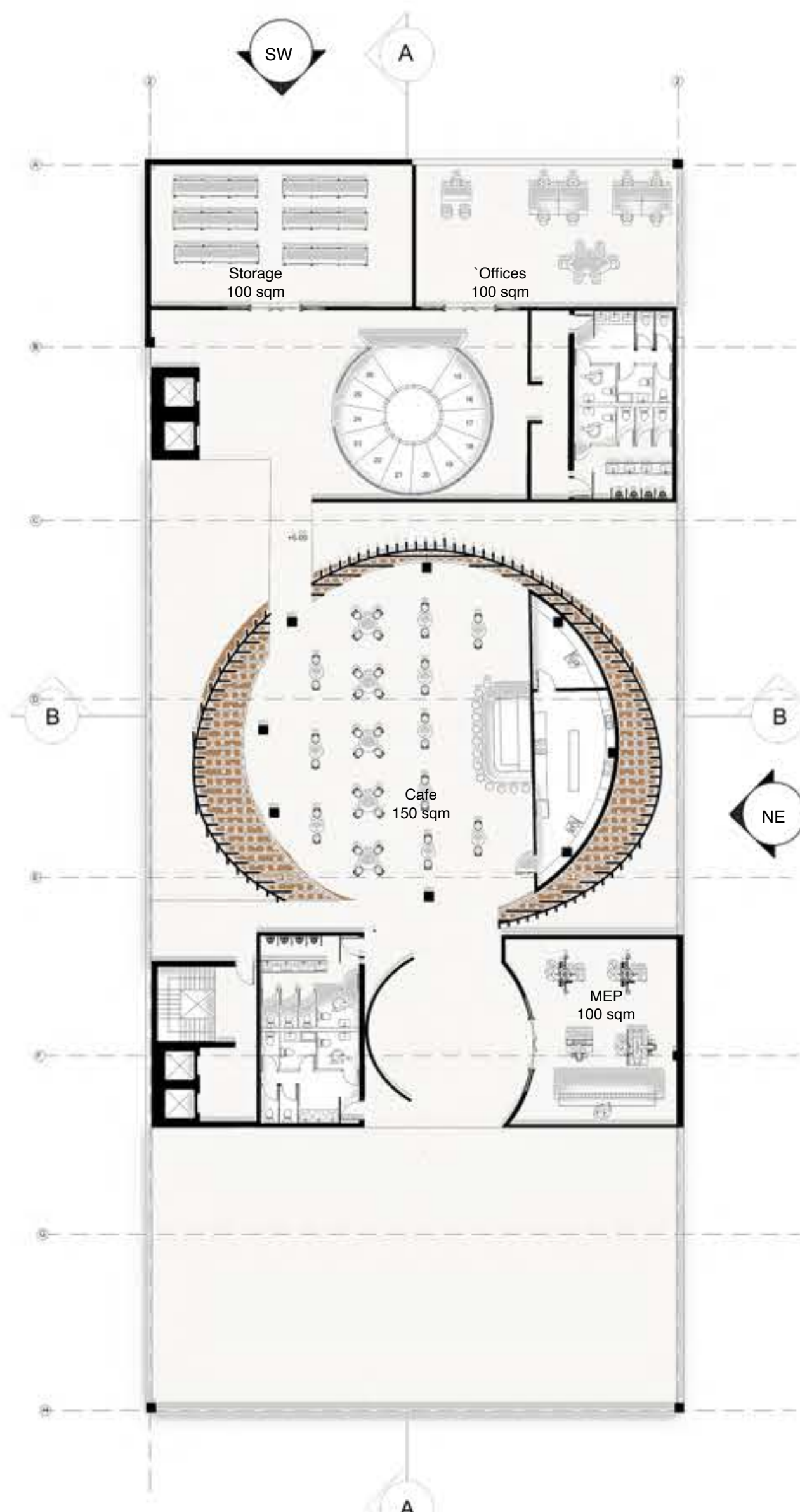
North-East Elevation  
1:200

South-East Elevation  
1:200

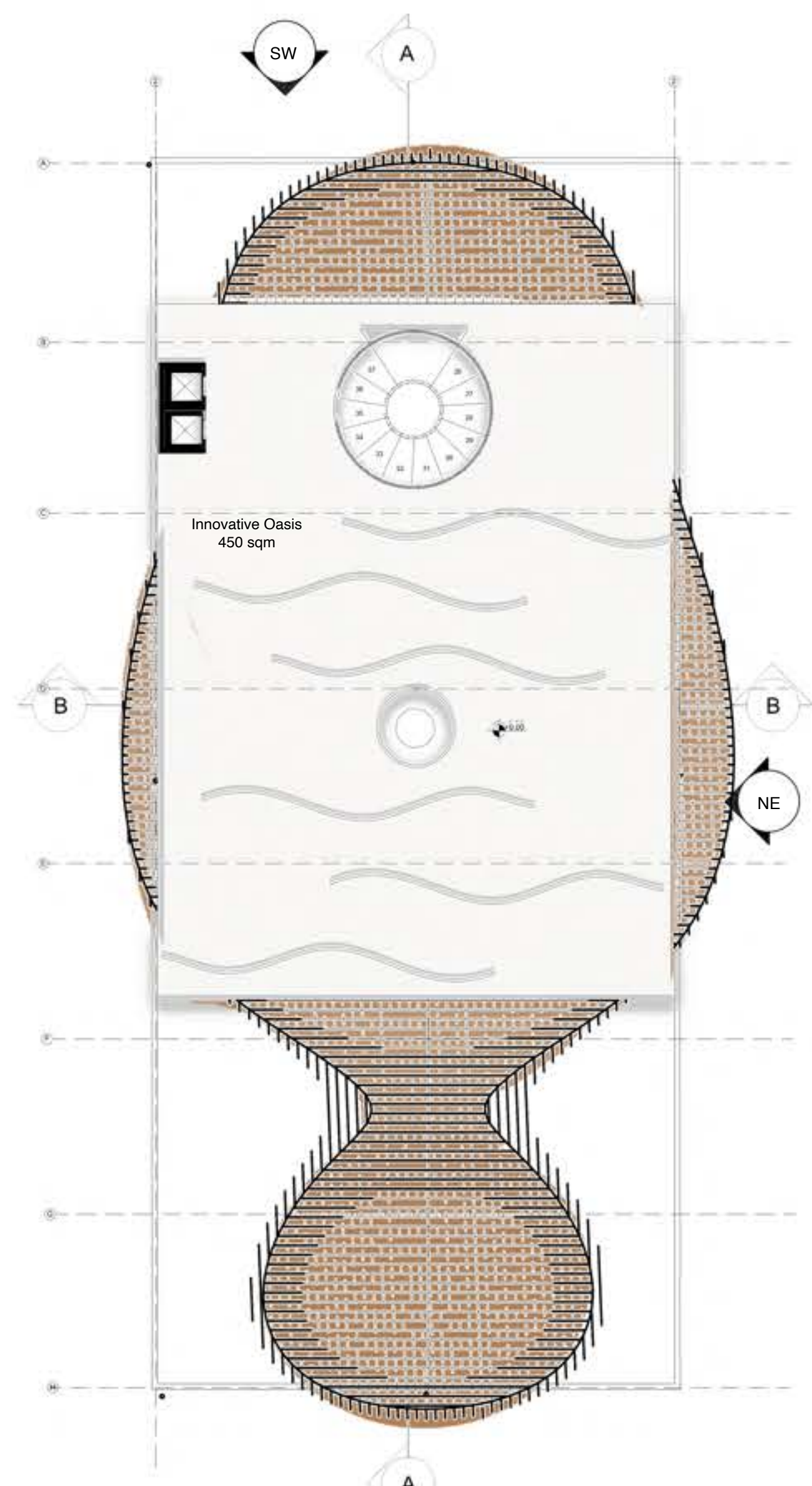
Section B-B  
1:200



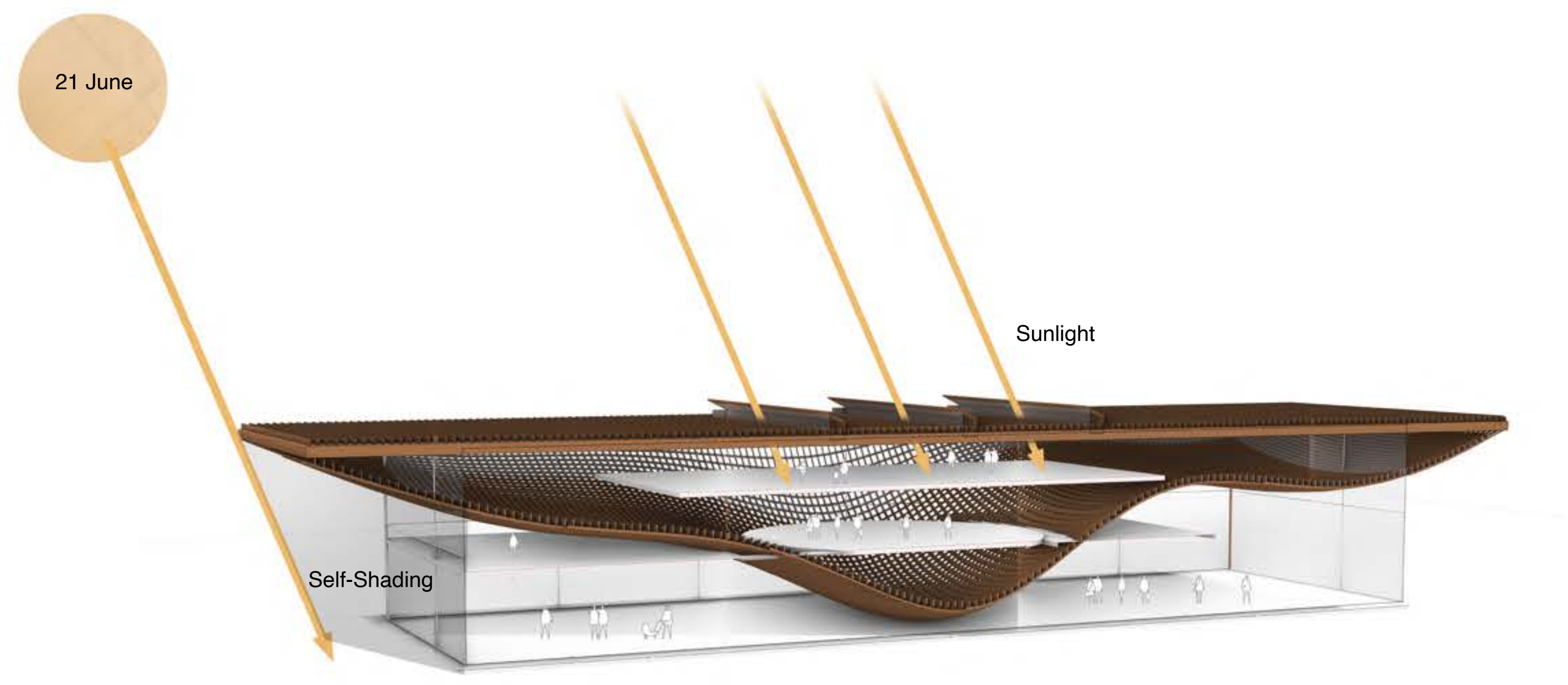
Ground Floor  
1:200



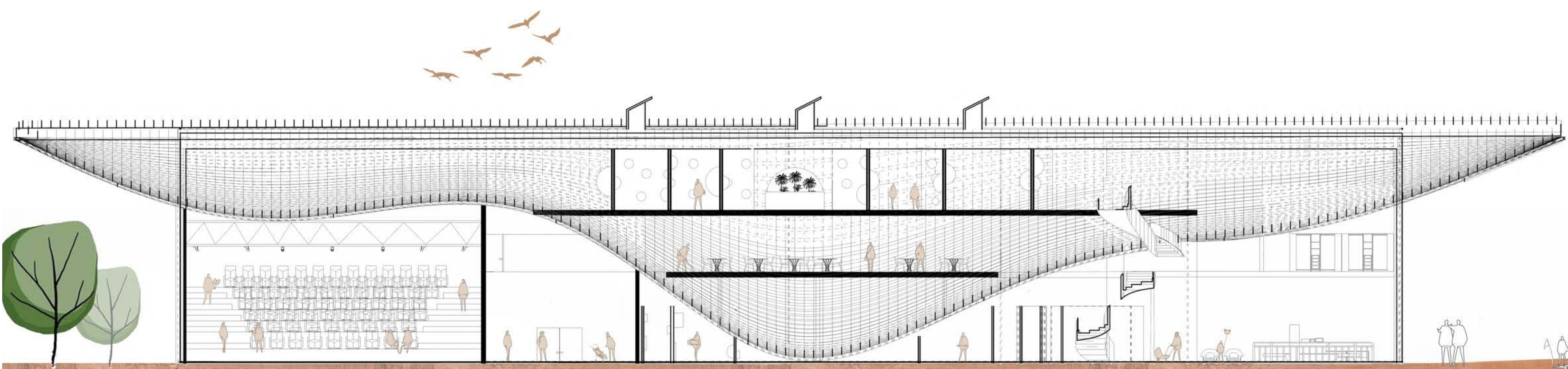
First Floor  
1:200



Second Floor  
1:200



Environmental Diagram



Section A-A  
1:100

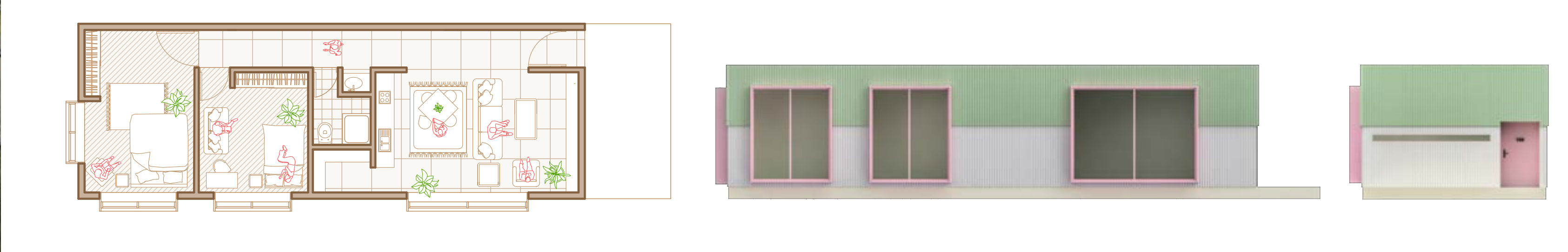
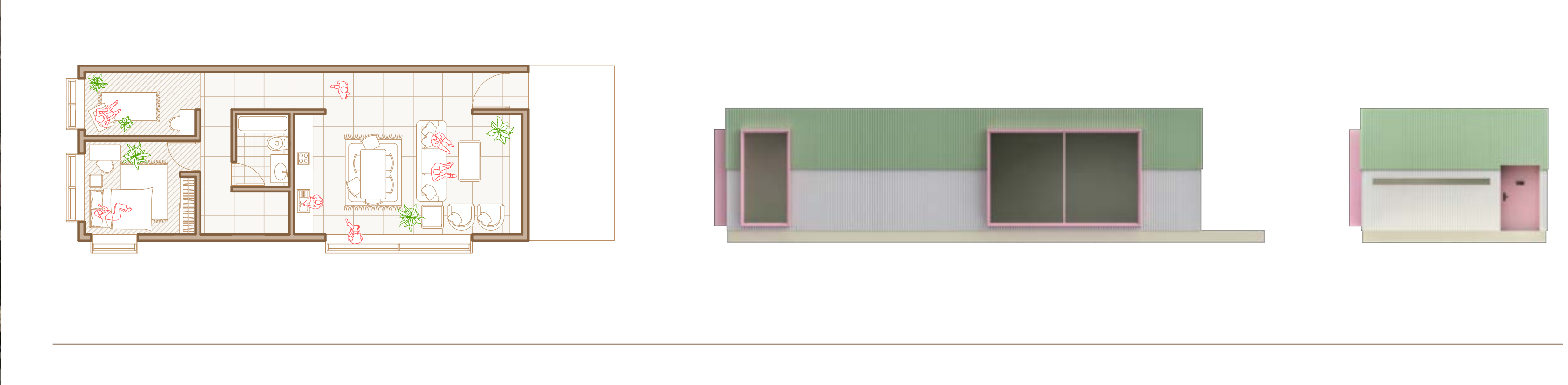
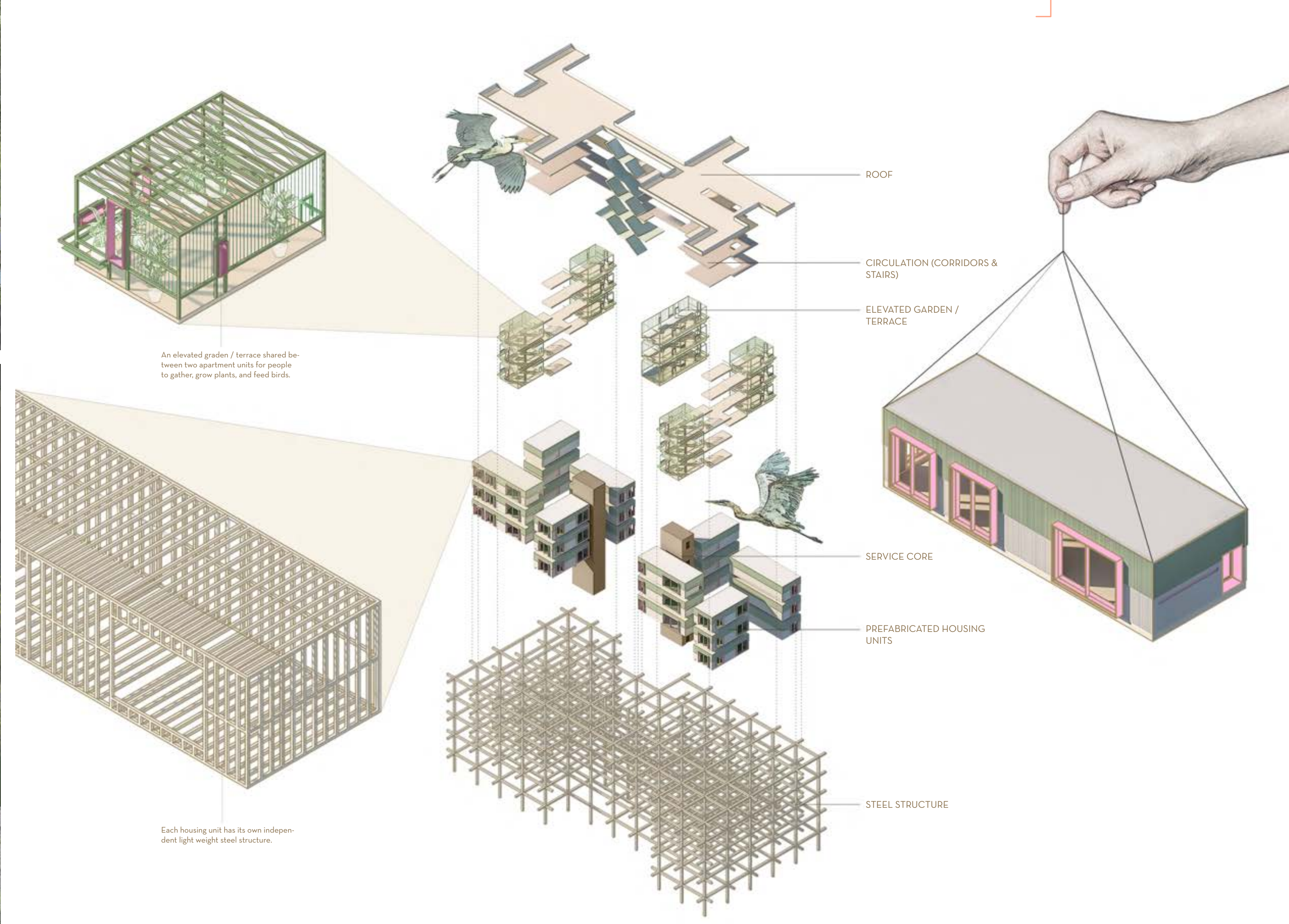




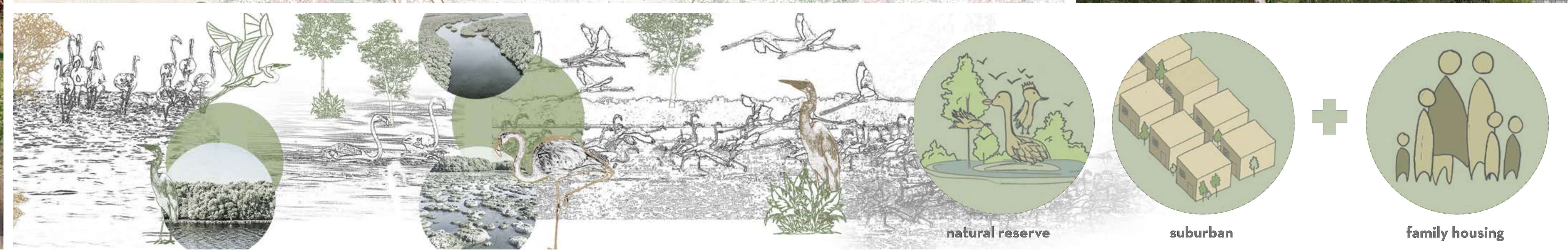
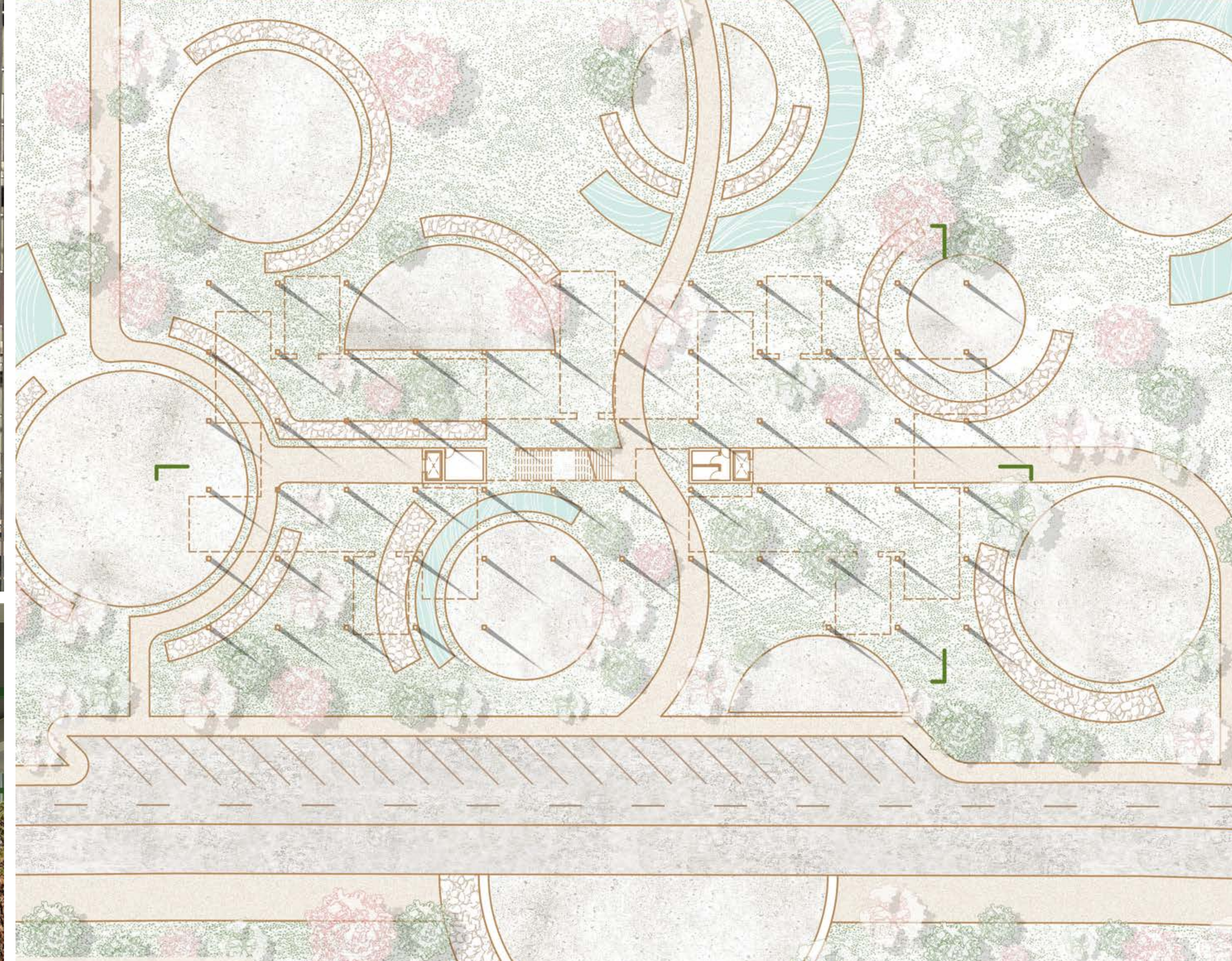
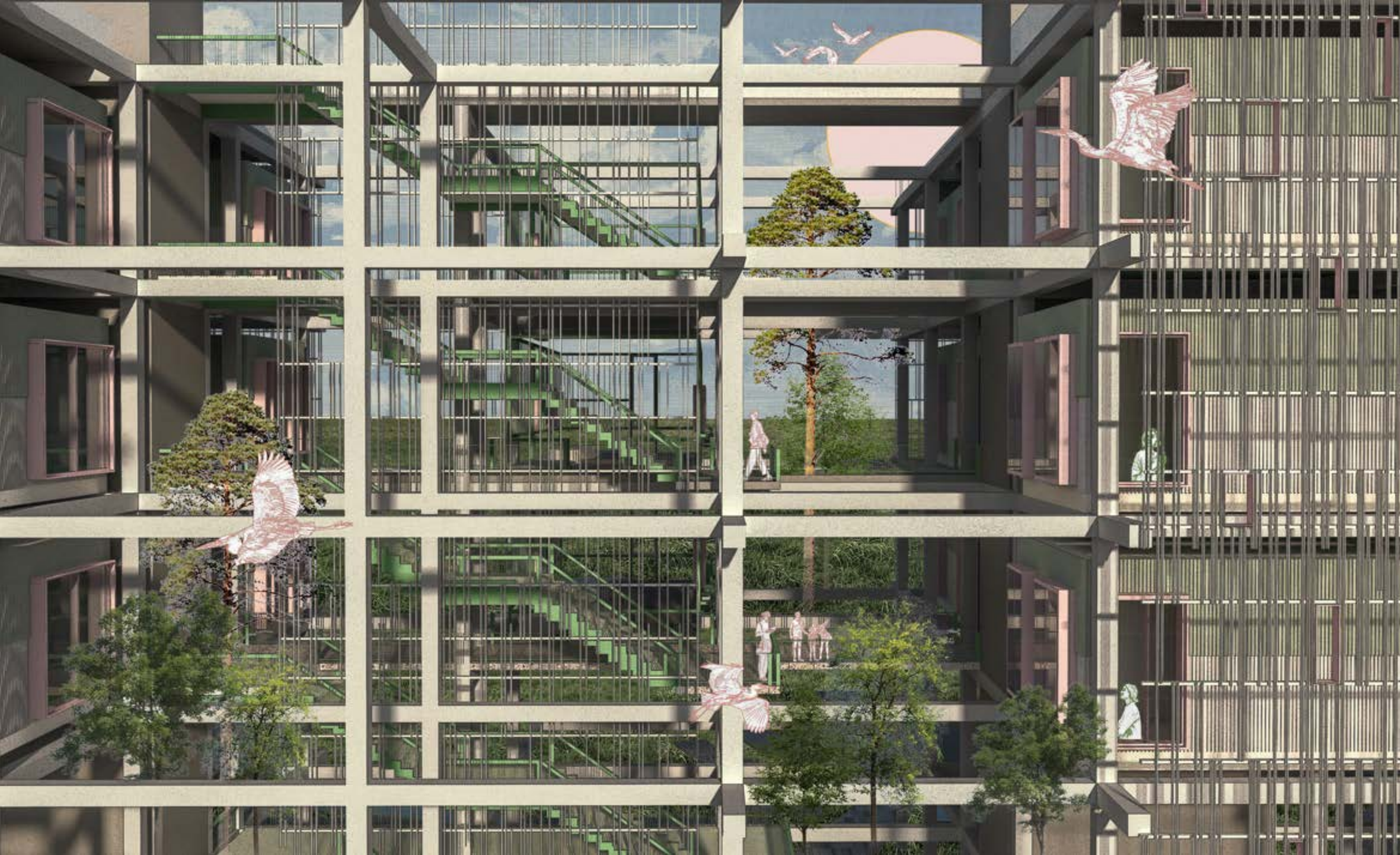
# THE TREEHOUSE

SARA SULIMAN | PROFESSOR. ROBERTO CASTILLO | AMERICAN UNIVERSITY OF SHARJAH | ARC502 | SPRING 2024

"The Treehouse" is a proposal for a residential building located next to Al-Zorah natural reserve in Ajman, UAE. It explores social sustainability and focuses on enhancing people's well-being. The design addresses common housing issues around the UAE such as the lack of gathering spaces and social interaction. Considering that the site is home to many bird species, the design incorporates bird-friendly elements like minimized glass use, lush trees, and bird feeding stations. The housing units are prefabricated off-site to avoid pouring concrete on such a fragile land. The outcome is a residence that takes advantage of the natural environment yet does not abuse it.









# AN ANCHOR IN TIME

At the core of this design lies the idea of creating an “anchor point” in time—a fixed marker against the ceaseless movement of natural elements. Inspired by the perpetual movement of sand dunes shaped by the wind and the celestial bodies’ rotation, the architecture draws on the region’s rhythms and cycles. The design captures these themes, transforming the residence into a meditative space that connects the earth and sky, grounding the client within the natural passage of time.



Abu Dhabi Desert, UAE  
Yusuf Alqasimi

## CABINET OF CURIOSITIES

INFO Place: Um AlQwain, United Arab Emirates  
Year: 2024  
Project: Cabinet of Curiosities  
Professor: Gregory Spaw

Salma Hani Mubarak Ali

## THE COLLECTION

### COSMOS THROUGH TIME

The **Celestial Collection** is a rich assemblage of **ancient astronomical instruments** “Objects” gathered from across the globe, representing a deep and diverse history of humanity’s quest to understand the cosmos.



## THE CLIENT

### YOUSUF ALQASIMI



Yusuf Alqasimi is an Emirati astronomy photographer with a Bachelor’s degree in Geographic Information Systems (GIS) from the United Arab Emirates University.

His interests in mapping, astronomy, and storm chasing align with his role as a member of the Emirates Astronomical Society, where he participates in celestial events and expeditions. He is also fascinated by the historical contributions of Arab scholars to astronomy and ancient equipment reflecting the region’s scientific heritage.

## THE PROGRAM

### INTEGRATED DOMESTIC AND OBSERVATORY LIVING



Hala Desert, UAE  
Yusuf Alqasimi

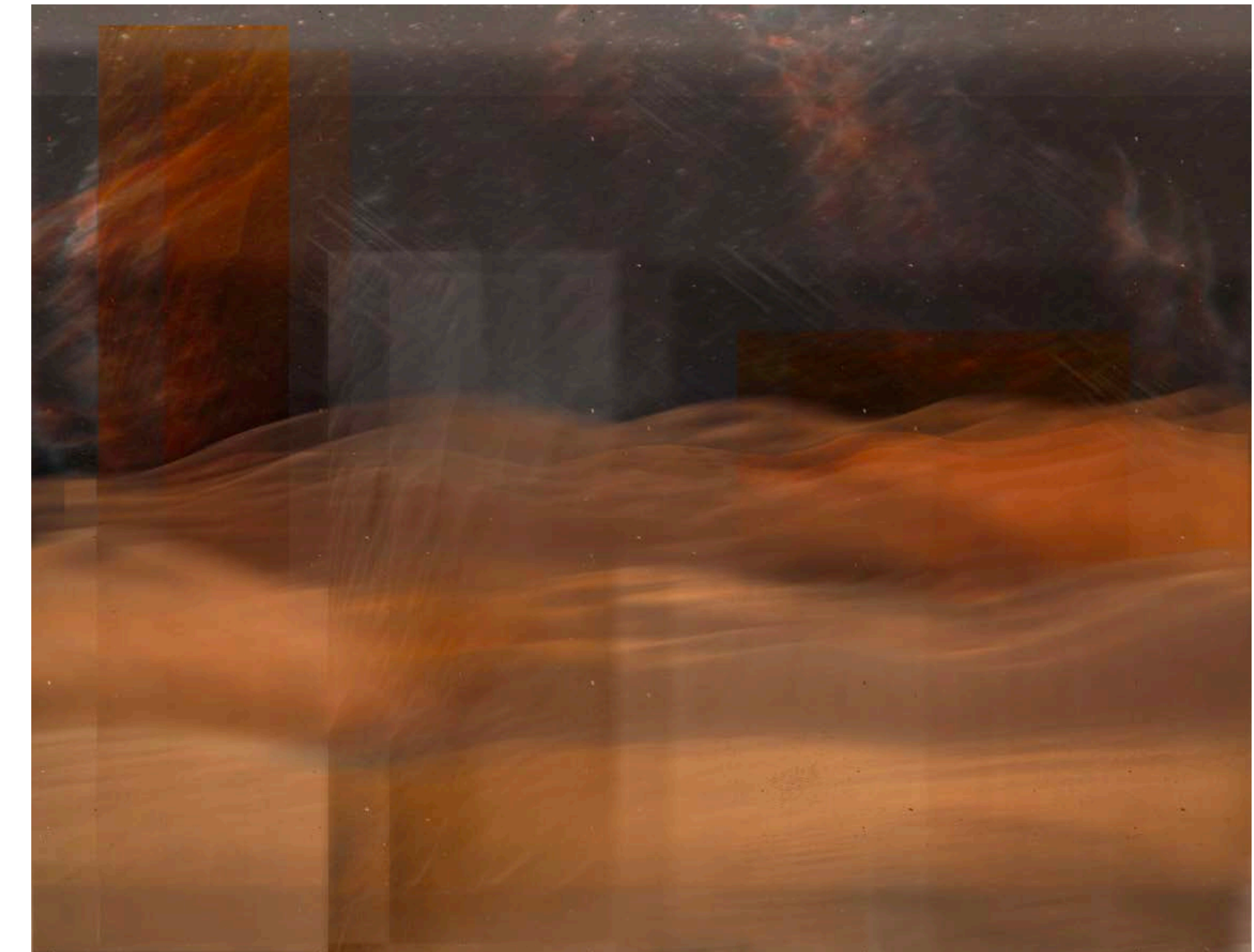
Yusuf Alqasimi’s Observatory living project will showcase ancient astronomical instruments alongside his celestial and storm photography. The domestic program includes living quarters integrated with observatory platforms for easy stargazing and photography. It will also serve as a retreat for personal research and intimate educational gatherings or workshops.

## THE PROPOSAL

### COSMOS THROUGH TIME

In the tranquil desert, this residence serves as a compass of time, where shifting sands mirror the stars and connect life to the cosmos. Designed as a seasonal retreat for a client inspired by the natural landscape of Umm Al Quwain, the residence is a sanctuary for astronomical observation, study, and photography in winter. It integrates the client’s collection of astrological apparatuses, becoming a living museum where history, science, and artistry converge.

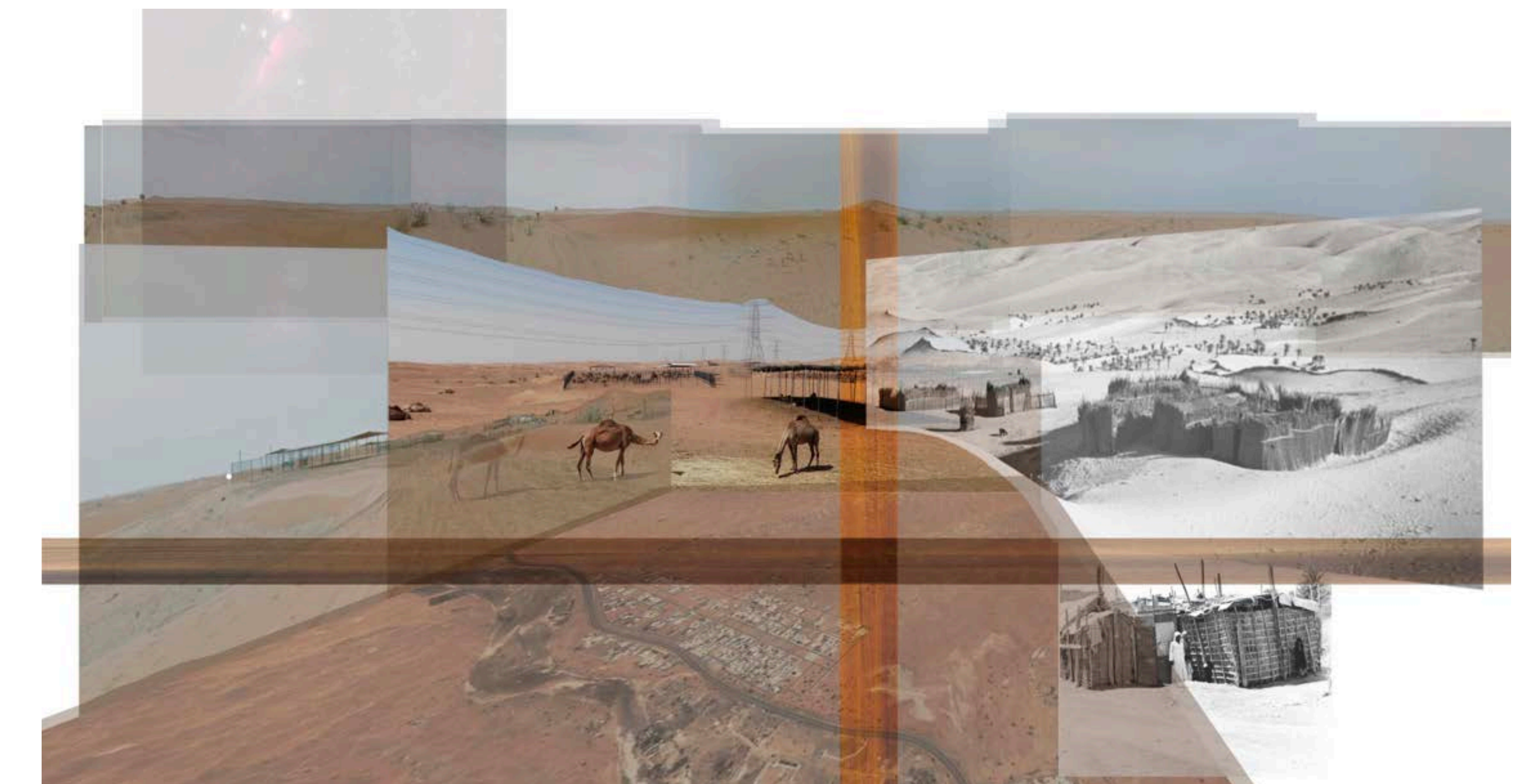
“AMID SHIFTING SANDS AND DRIFTING STARS, THIS DWELLING ANCHORS THE RHYTHMS OF CHANGE.”



A Collage representing the continuous movement of the Sand Dunes and the Stars with imposing orthogonal forms

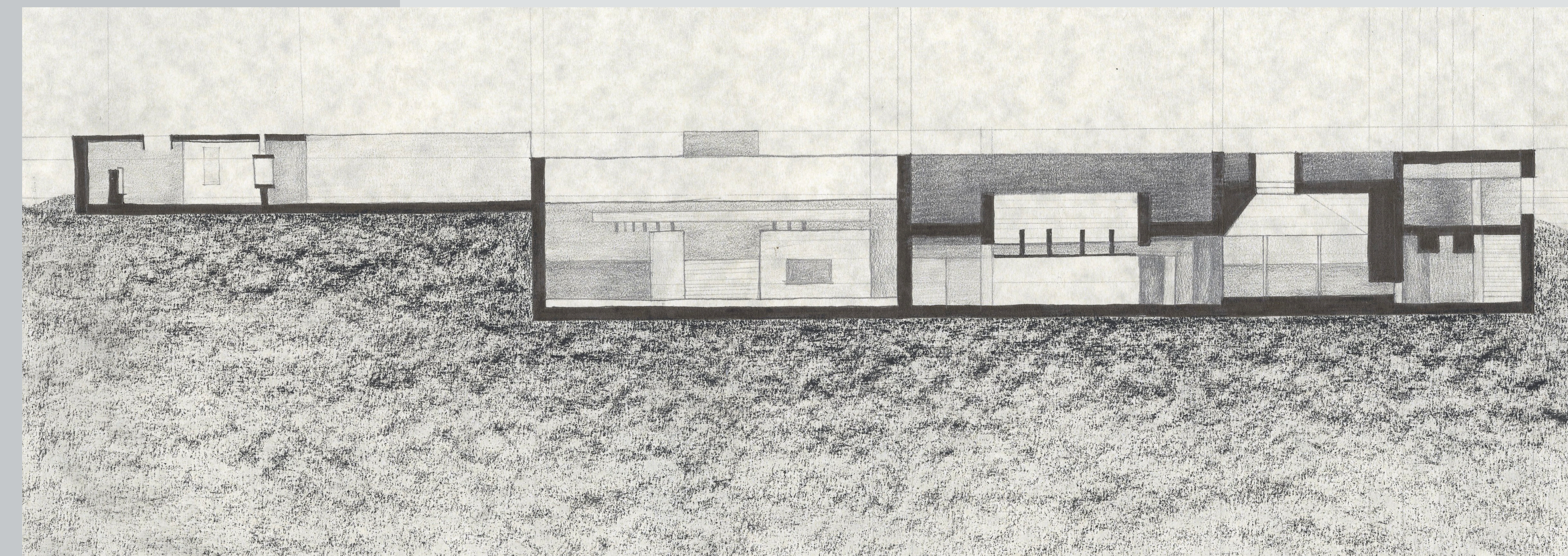
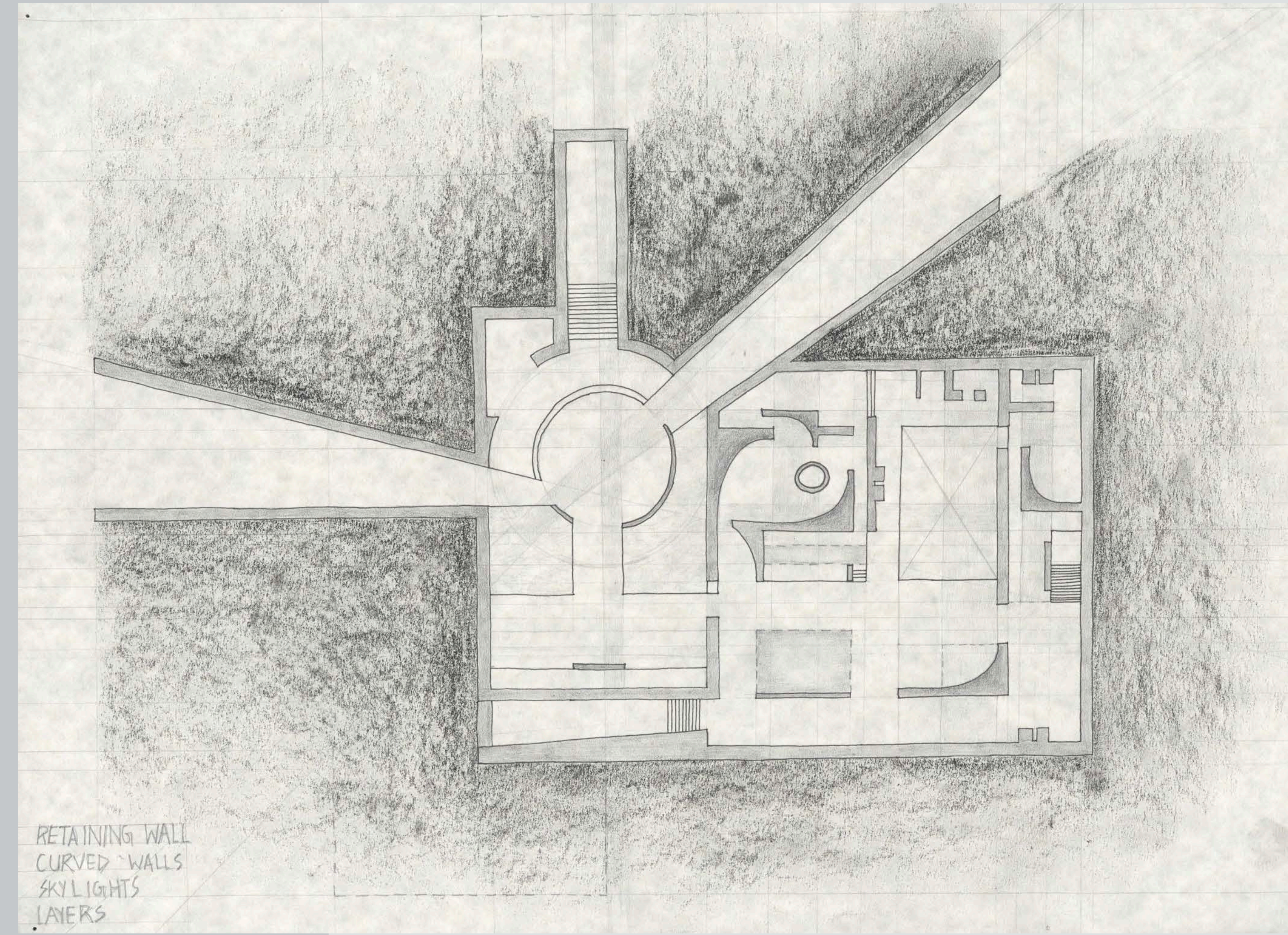
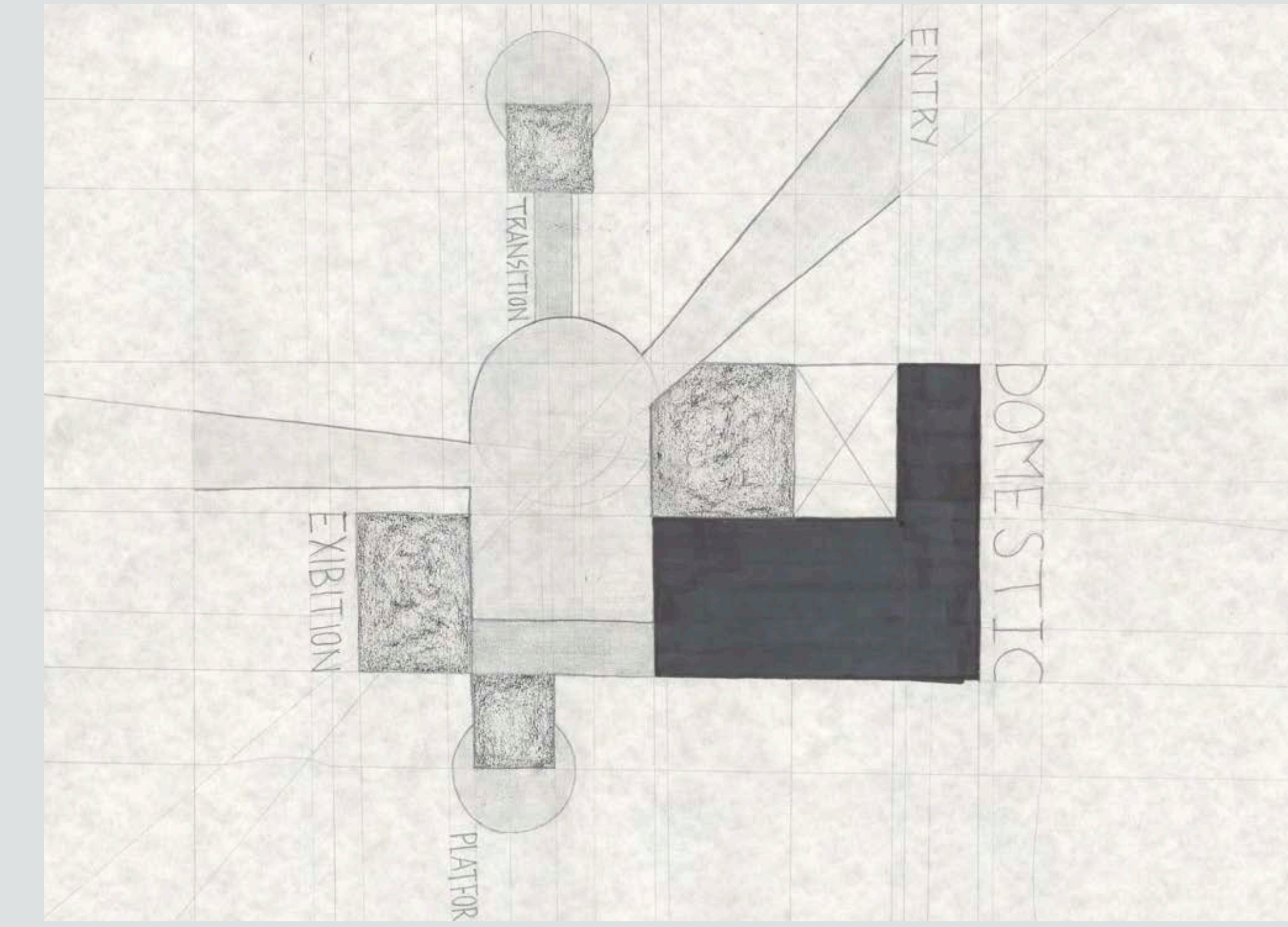
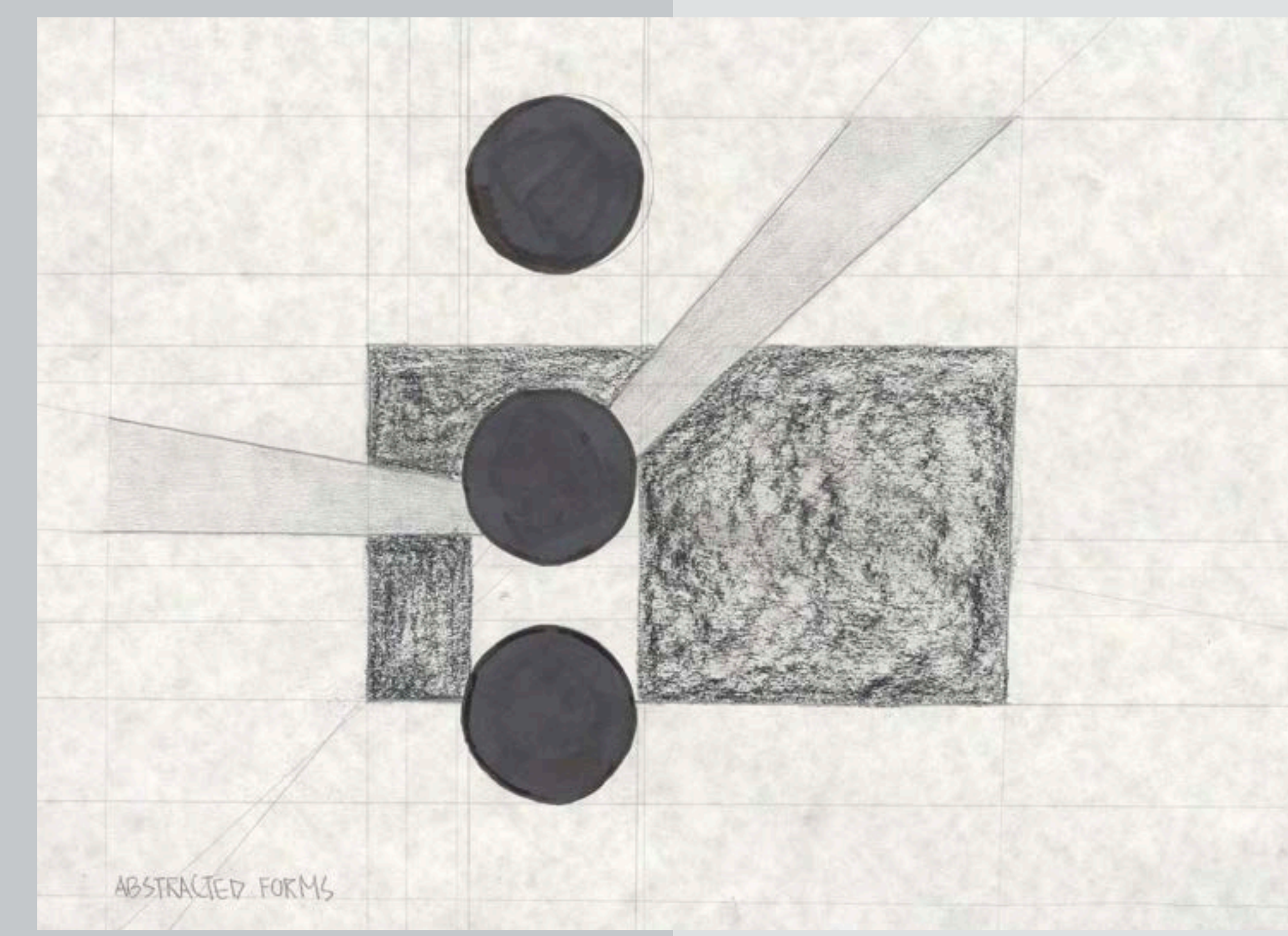
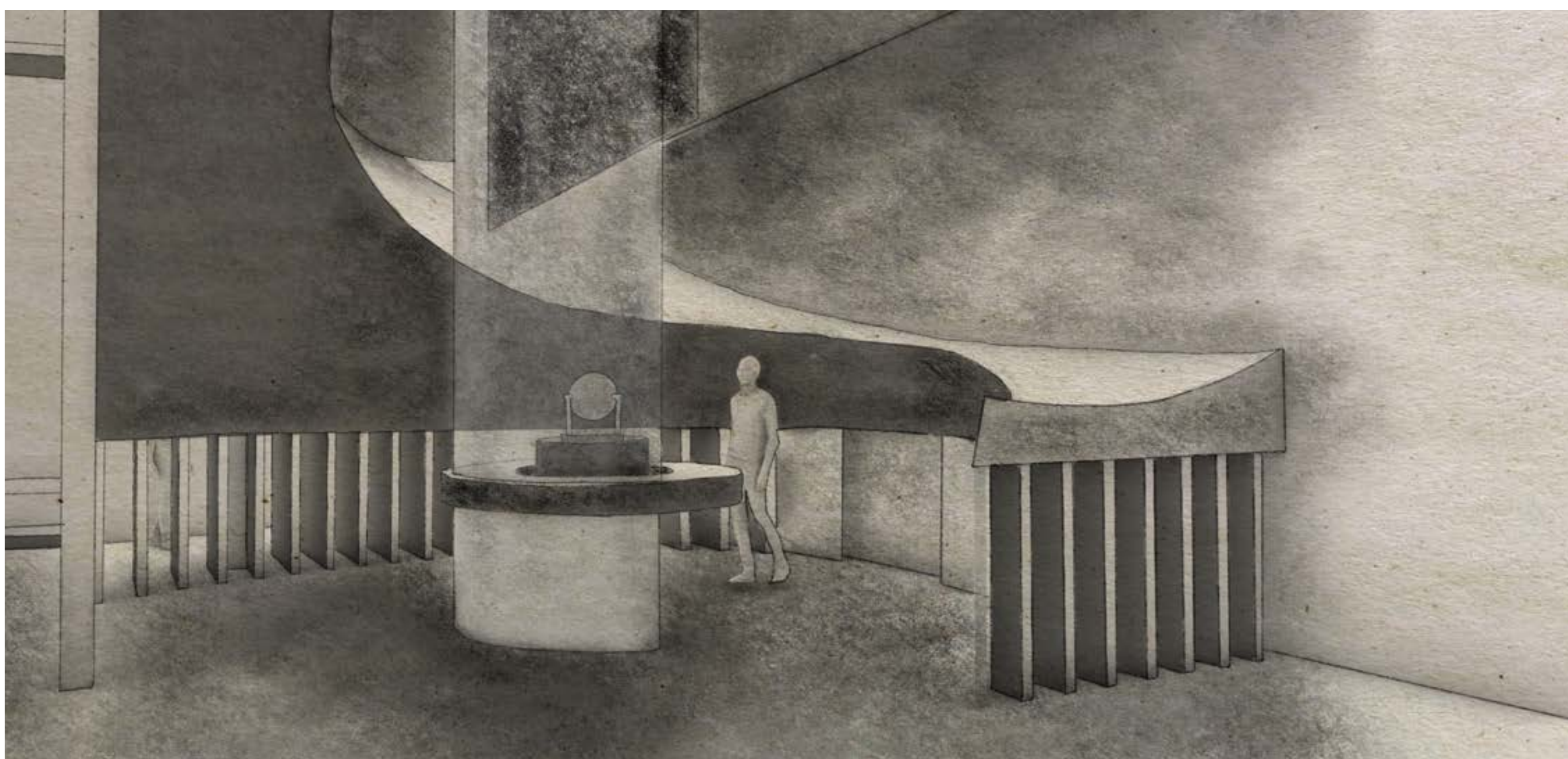
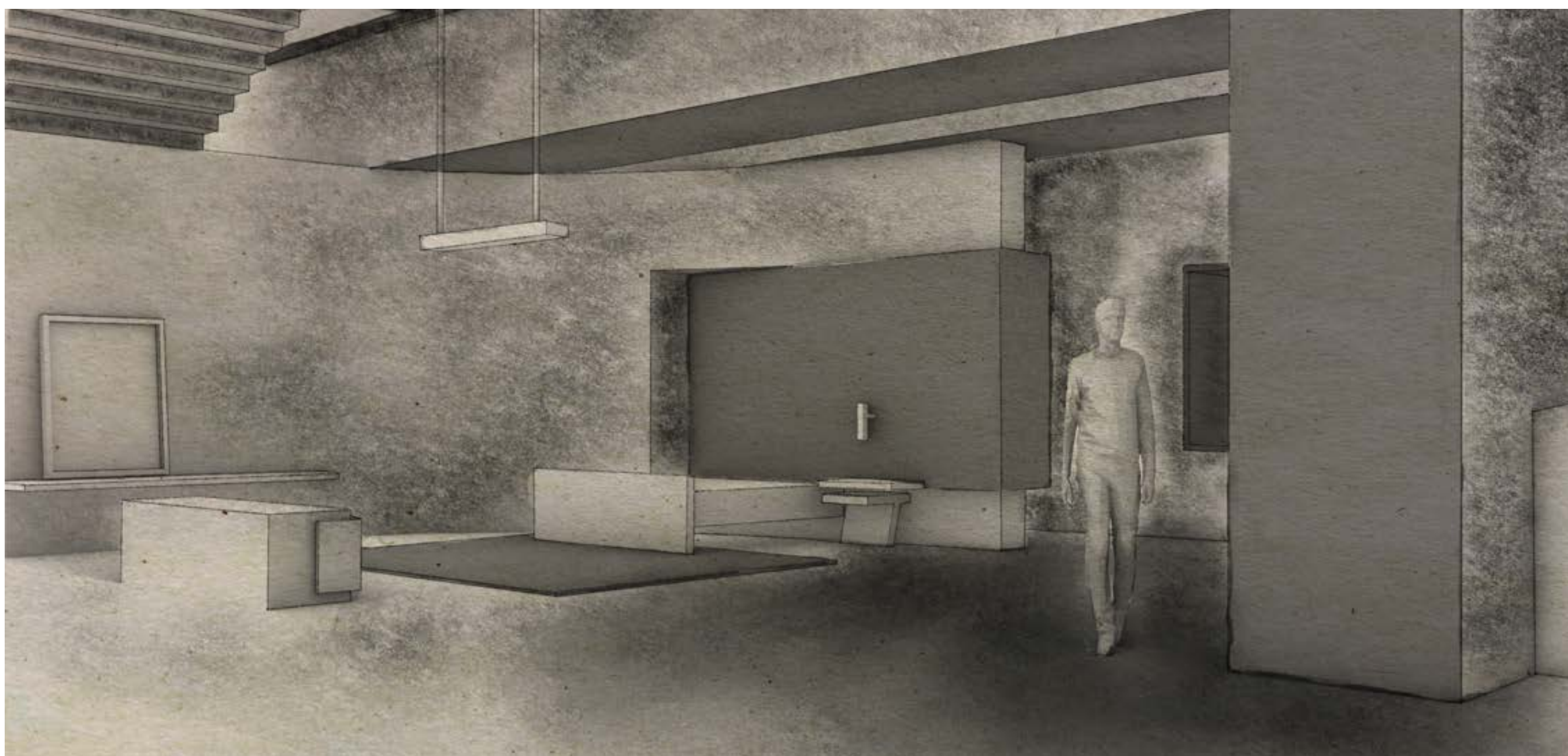
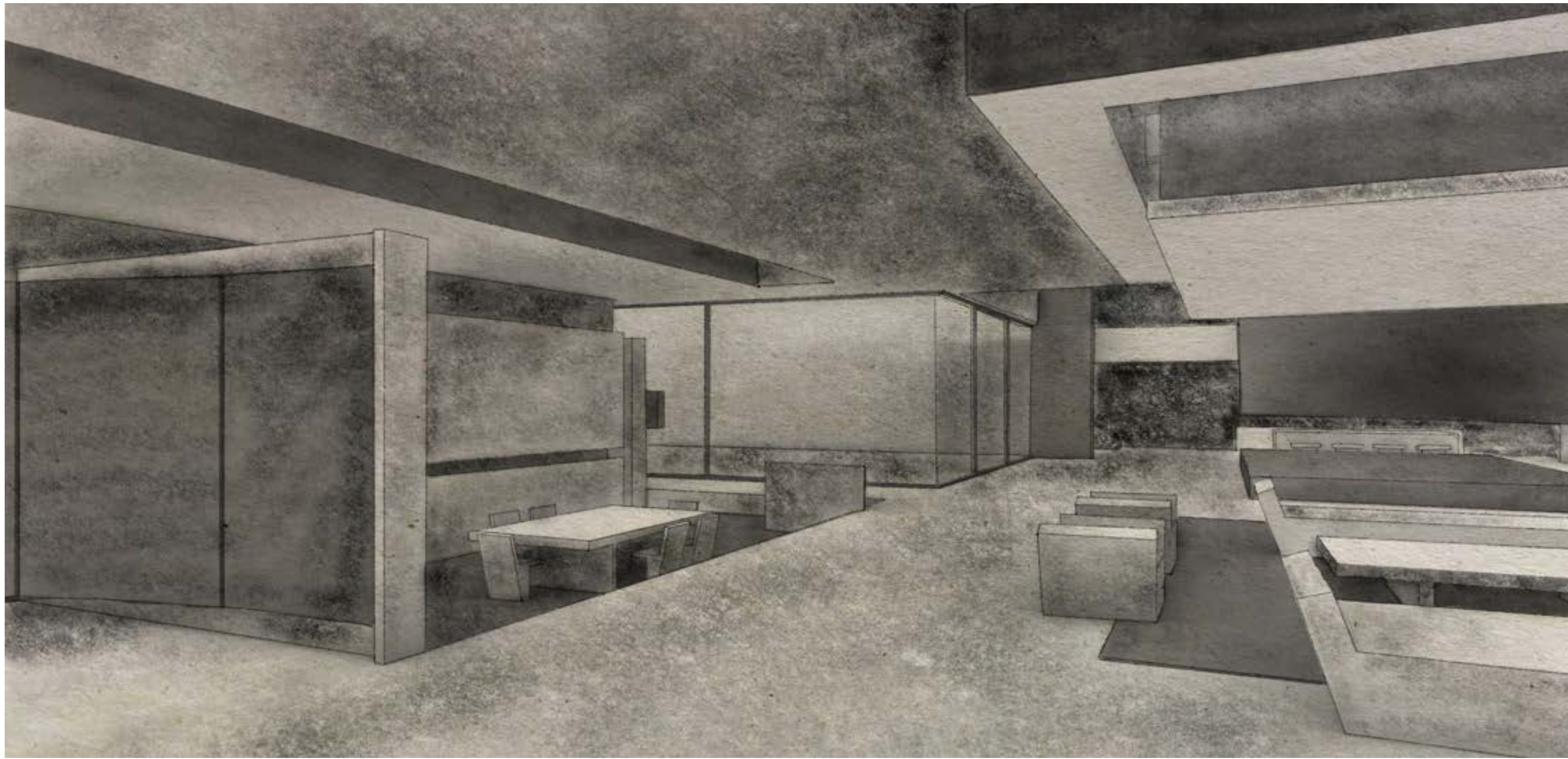
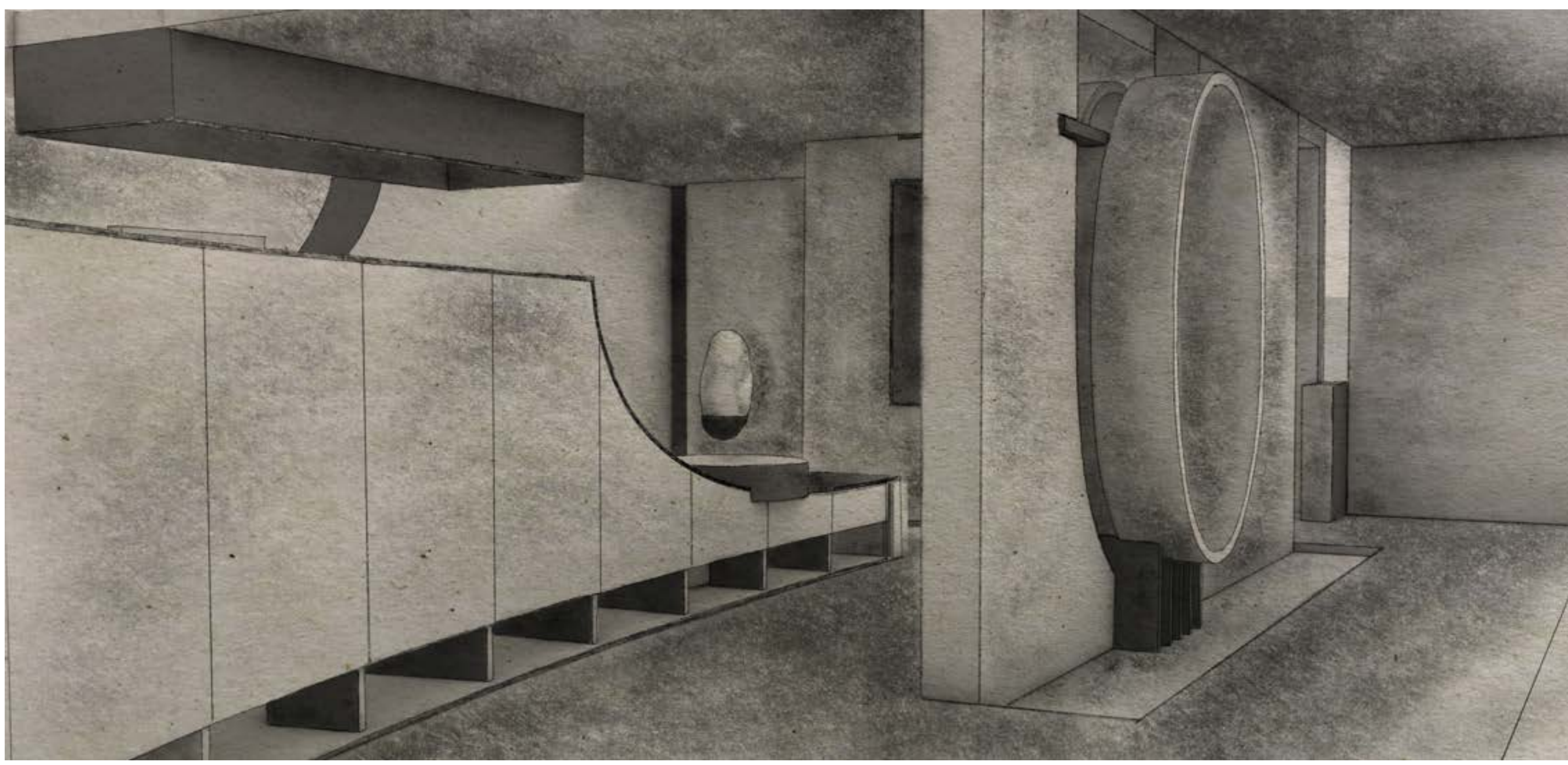
## THE SITE

### FALAJ AL MUALLA DESSERT, UM AL QUWAIN





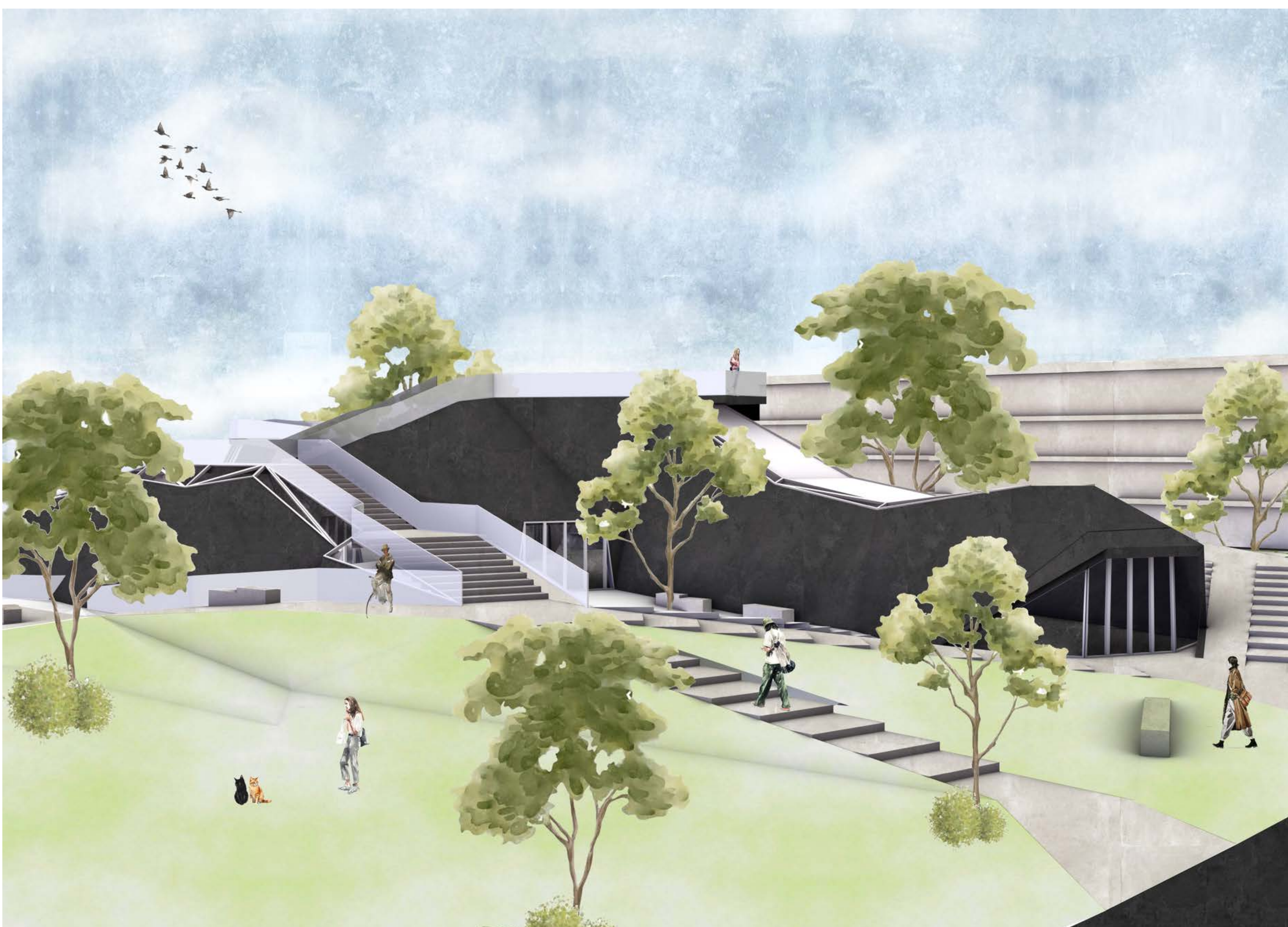
# OBJECTS AS CATALYSTS



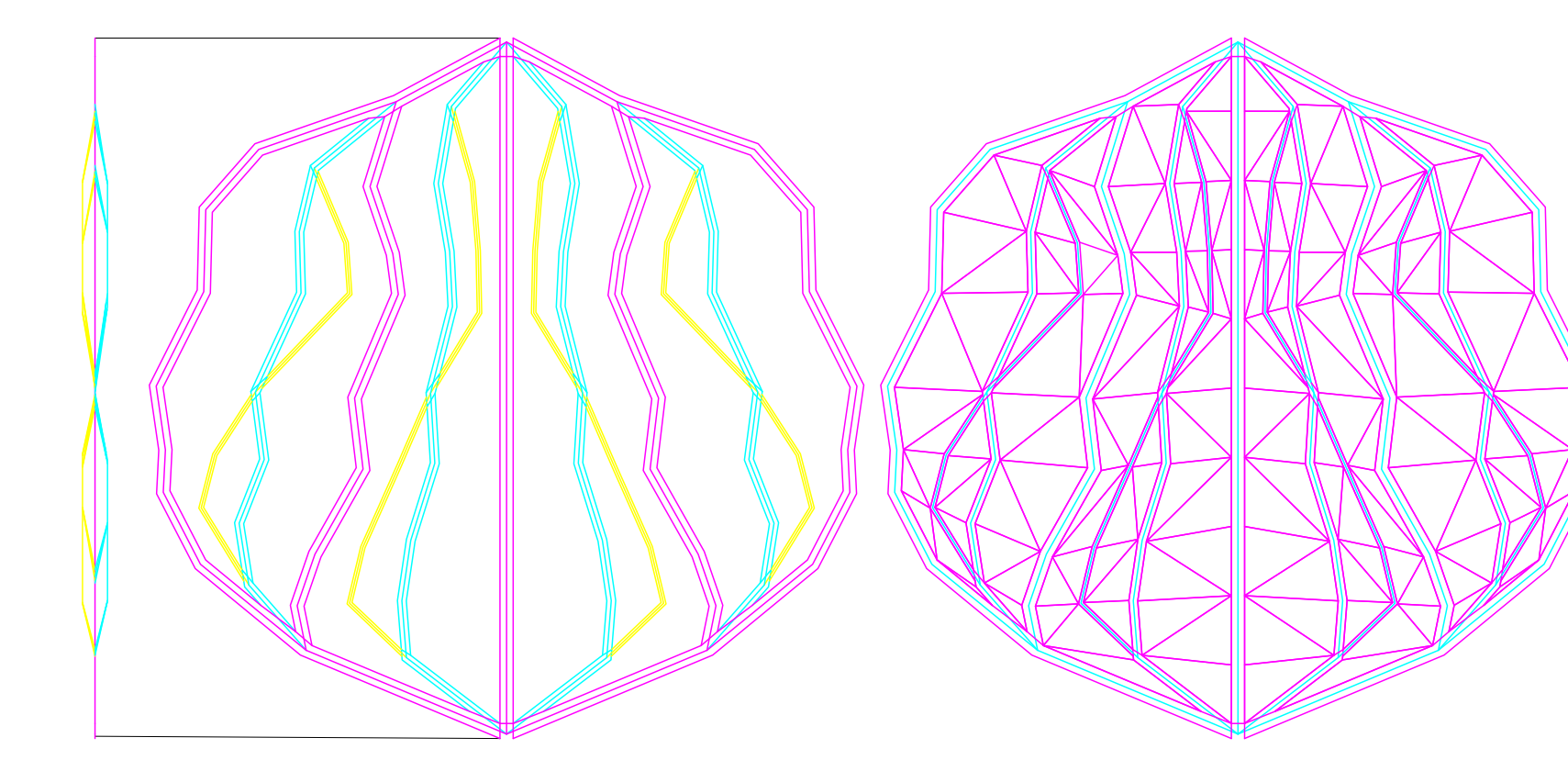
The astrological instruments serve as both functional tools and aesthetic focal points, influencing the layout, flow, and character of the space. Each object can guide the design, determining not just their placement but also the surrounding space's form and function.

As the design unfolds from the objects outward, space arrangements create a logical flow for their use. Strategically positioned windows frame views of the night sky and desert, enhancing the experience with the astrological instruments and maximizing sightlines to celestial bodies, fostering a dialogue between interior and exterior.

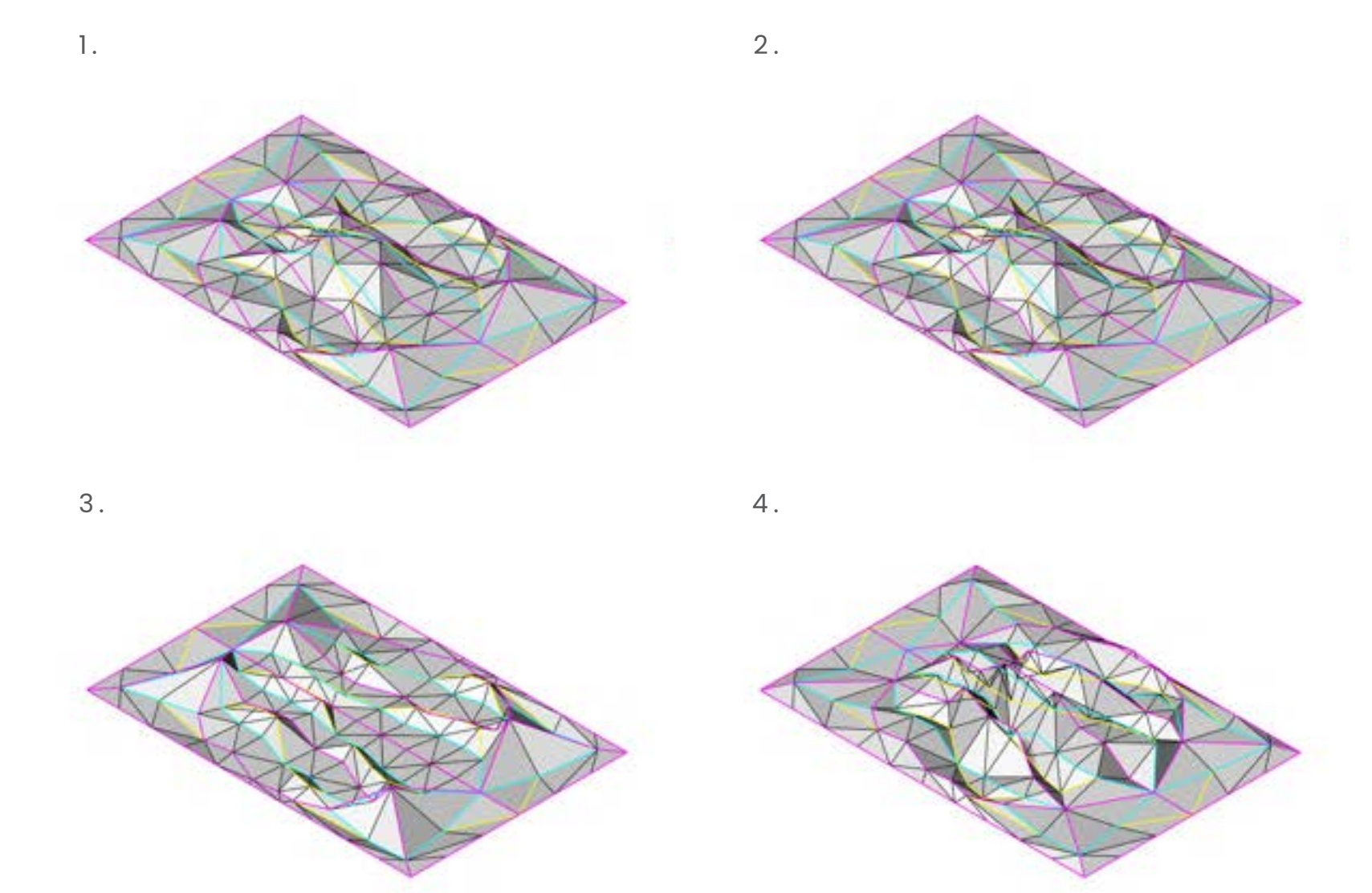




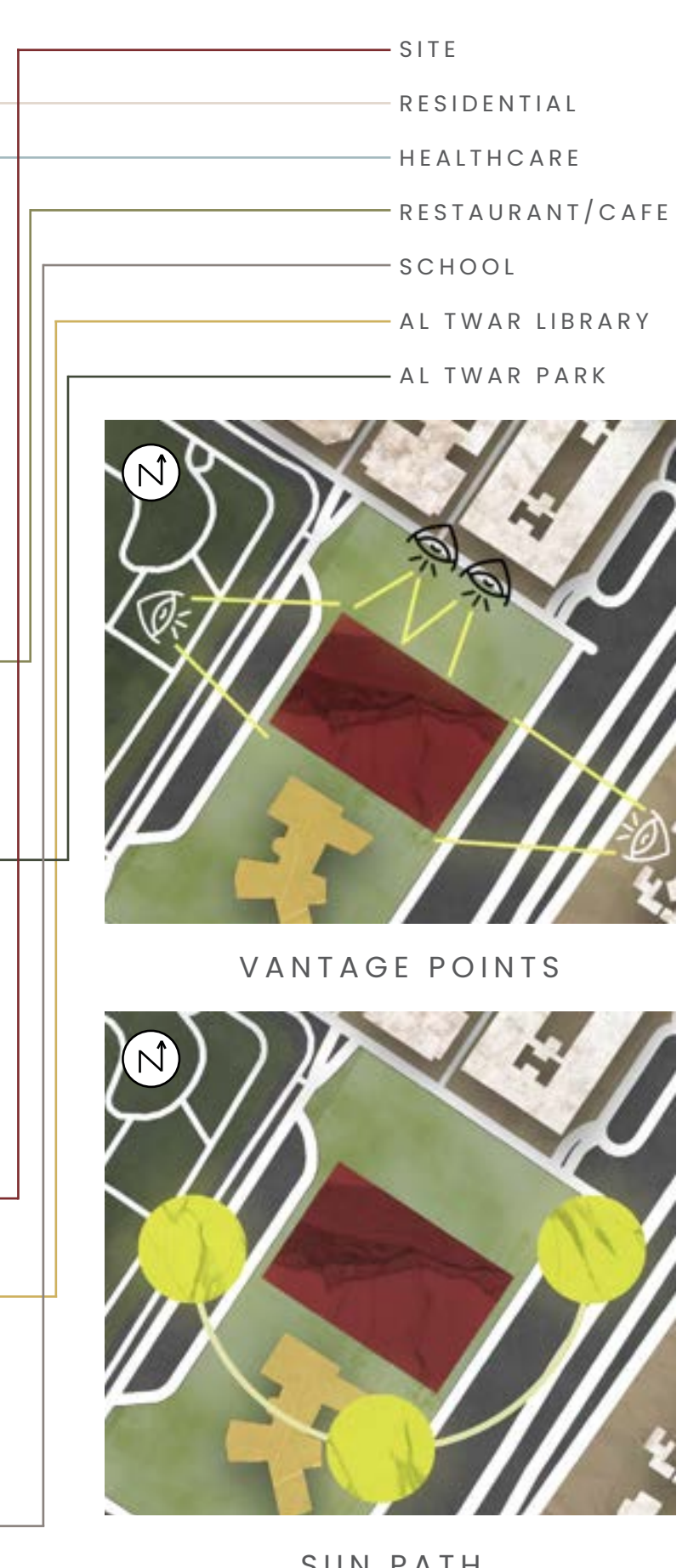
CASE STUDY- FLOWING GARDENS ARCHITECT- PLASMA STUDIOS LOCATION- XI'AN, CHINA ASPECT EXTRACTED AND ANALYZED- MEANDERING PATHWAYS.



SINGULARITY MODEL VERSATILE MODEL DESIGNED TO HAVE THE CAPACITY TO VARY. LEFT- HIERARCHY OF PATHWAYS WITH DIFFERENT THICKNESSES AND HEIGHTS + SECTION. RIGHT- PATHWAYS WITH AXES.



1. RANDOM MOVEMENTS OF CONTROL POINTS TO FORM SPACES. 2. YELLOW PATHWAYS AND FOUR INTERSECTIONS RAISED UP. 3. YELLOW PATHWAYS AND FOUR INTERSECTIONS RAISED UP; CYAN PATHWAYS MOVED DOWN. 4. MAGENTA AND CYAN PATHWAYS RAISED UP IN A UNIFORM GRADIENT; CORNER INTERSECTIONS RAISED. 5. CENTRAL PORTION OF X AND Y AXIS RAISED TO FORM A SLOPED FORM THAT AFFECTS THE GEOMETRY OF THE REST OF THE SITE (FINAL ITERATION).



SITE ANALYSIS TAKEAWAYS- WORKERS AND PASSERBYS. CAR/BUS- USED BY VISITORS AND WORKERS. WALKING- PASSERBYS, STUDENTS, WORKERS, VISITORS. SUN PATH- LOCATE AREAS WITH FUNCTIONS THAT REQUIRE MOST SUNLIGHT NEAR SOUTH OF SITE.



SITE DEPLOYMENT THE PARK BRINGS TOGETHER THE COMMUNITY IMPROVING SOCIAL SUSTAINABILITY. BEING A PARK PROJECT, THE LANDSCAPE WITH ITS TREES WOULD ALSO HELP WITH COOLING AND CREATING SHADED SPACES. ELEVATED FORMS HELP CREATE SHADED OUTDOOR SPACES. ADDITIONALLY, INCLINED SURFACES HELP RAINWATER TO FLOW DOWN. SPACES BELOW THE GROUND HAVE A NATURAL COOLING AND WOULD ALSO REDUCE COSTS. INCLINED SURFACES HELP WIND CLIMB UP.

SUSTAINABLE STRATEGIES CERTAIN SUSTAINABLE STRATEGIES WERE IMPLEMENTED TO HELP ALLEVIATE THE PERFORMANCE OF THE BUILDING SUCH AS MOVING PRIVATE SPACES BELOW THE GROUND LEVEL, MODULATING HEIGHTS OF MASSES, AND ADJUST THE FACADE INCLINES TO ACHIEVE DIFFERENT DESIRED BENEFITS IN A SUSTAINABLE WAY.

**HERIOT WATT UNIVERSITY**  
UK | DUBAI | MALAYSIA

# THE CAVE

CULTIVATING CREATIVITY FROM EARTH TO ART.

RONIT SEHGAL

YEAR 2 | SEMESTER 2

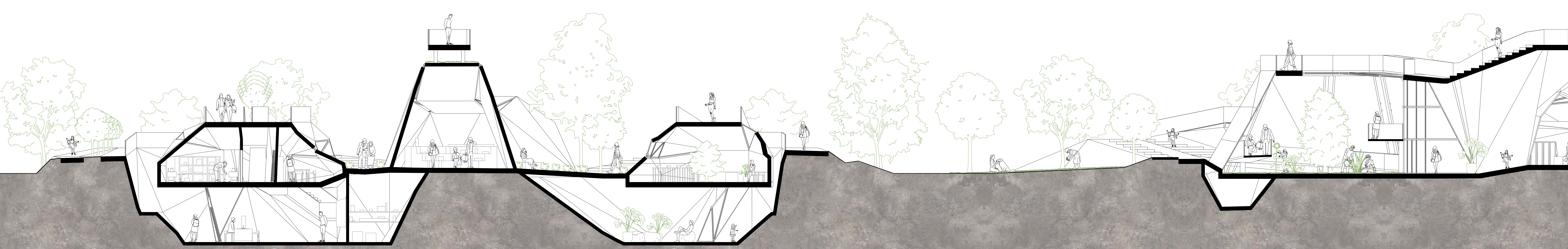
LOCATION- DEIRA, DUBAI, UNITED ARAB EMIRATES  
TYPOLOGY- RECREATIONAL AND EDUCATIONAL  
AREA- 3750 SQM

THE CAVE IS A PARK PROJECT THAT IS CENTERED AROUND THE CONCEPT OF 'BUILDING AS A GARDEN/GARDEN AS A BUILDING.' LOCATED ADJACENT TO AL TWAR LIBRARY AND AL TWAR LIBRARY, THIS PROJECT ACTS AS A CULTURAL HUB THAT FOSTERS COMMUNITY ENGAGEMENT AND ACTS AS A PEACEFUL RETREAT WITHIN THE CITY.

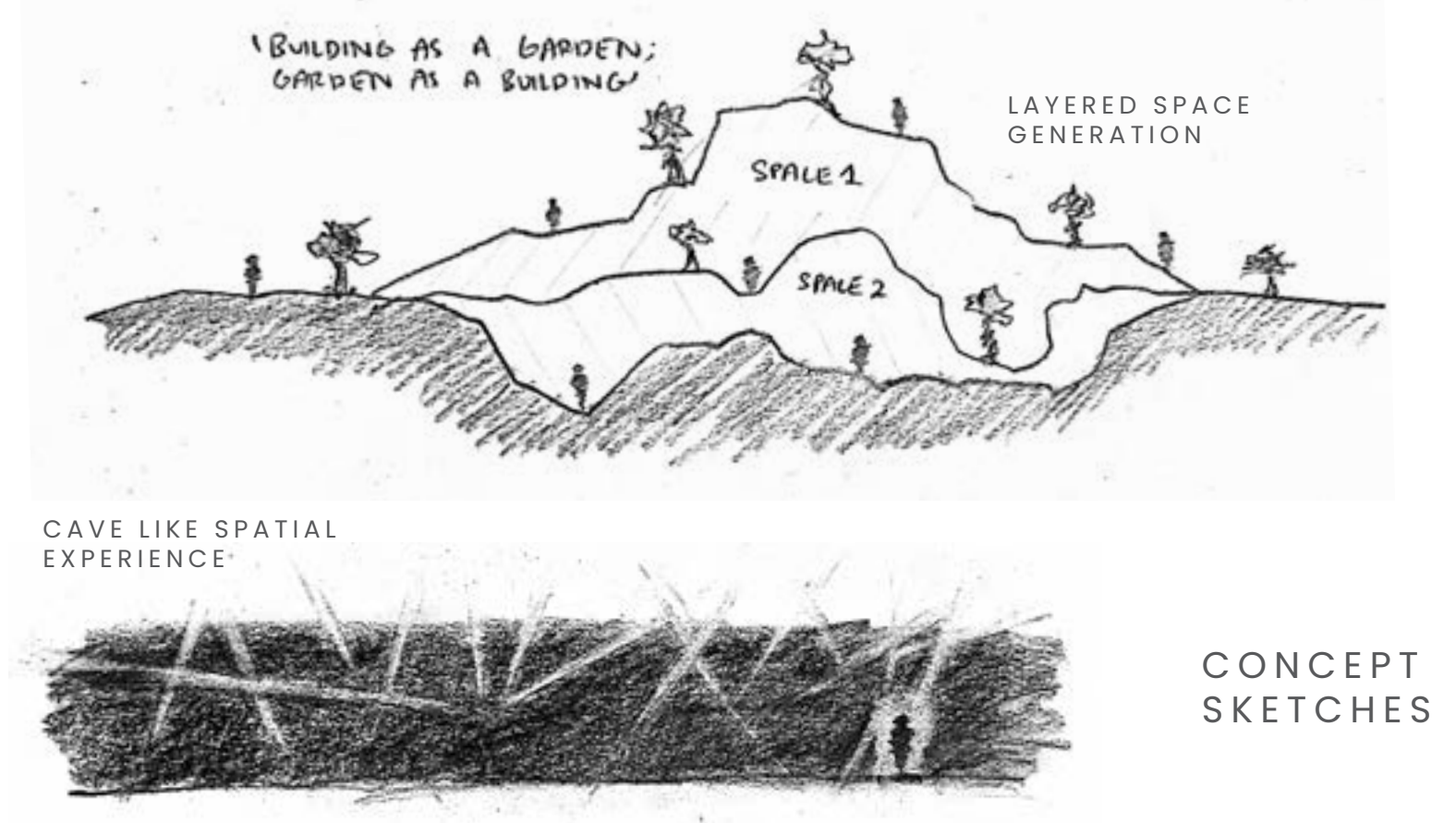
AS USERS WALK INTO THE PARK, THEY ARE WELCOMED WITH PATHWAYS EMBEDDED IN LUSH GREENERY THAT LEAD TO A LARGE, MOUNTAIN-LIKE BUILDING WITH MULTIPLE OPENINGS. THESE PATHWAYS EXTEND INTO STAIRCASES THAT ENVELOP THE ROOF OF THE ENTIRE STRUCTURE, CREATING SPOTS WITH VARIOUS VIEWS OF THE SURROUNDING LANDMARKS. INCLUDING AN AERIAL VIEW OF AL TWAR PARK. WHEN THE USERS ENTER THE BUILDING, THEY ARE TRANSPORTED INTO A SPACE WITH A UNIQUE SPATIAL EXPERIENCE RESEMBLING A CAVE WITH ITS DIM INTERIOR. THE BUILDING FEATURES VARIOUS SPACES BRANCHING OUT FROM A CENTRAL RECEPTION AND LOUNGE, SUCH AS A MARKETPLACE, GREENHOUSE, CAFE, AR/VR ZONE, PECHA KUCHA ZONE, AND CLASSROOMS.

THE EDUCATIONAL ZONE OFFERS CLASSES IN THE ART OF POTTERY AND ORIGAMI. STUDENTS OF THESE CLASSES CAN SELL THEIR WORKS IN THE MARKETPLACE OR KEEP THEM, AND WHEN IN NEED FOR INSPIRATION, THEY CAN VISIT THE GREENHOUSE TO CONNECT WITH NATURE AND LET THEIR CREATIVE JUICES FLOW IN THE ENCLOSED SPACE. IN THE LOWER LEVEL LIES THE PRIVATE WET AND DRY LABS, WHERE STUDY ON AGRI-TECH IS CONDUCTED TO FIND EFFICIENT WAYS TO IRRIGATE THE PLANTS OF THIS PARK USING DRONES.

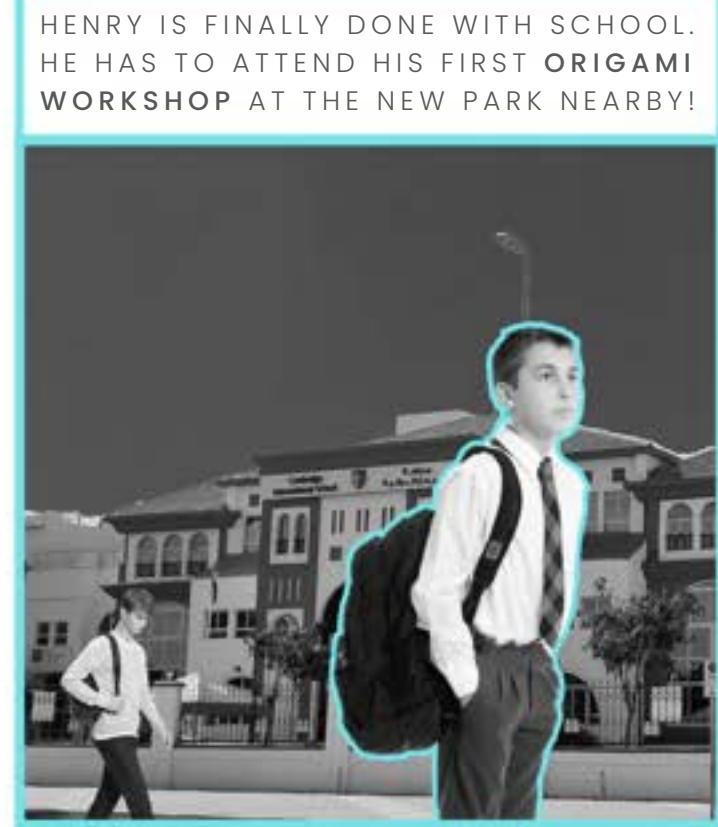
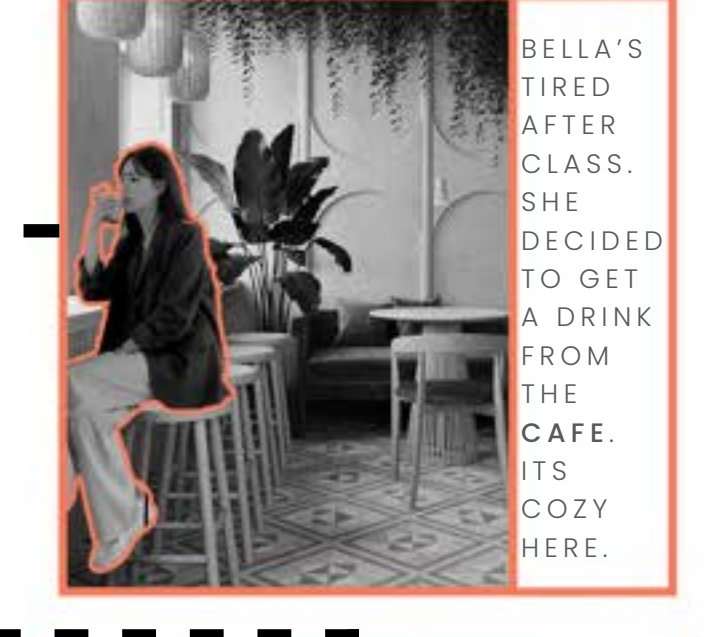
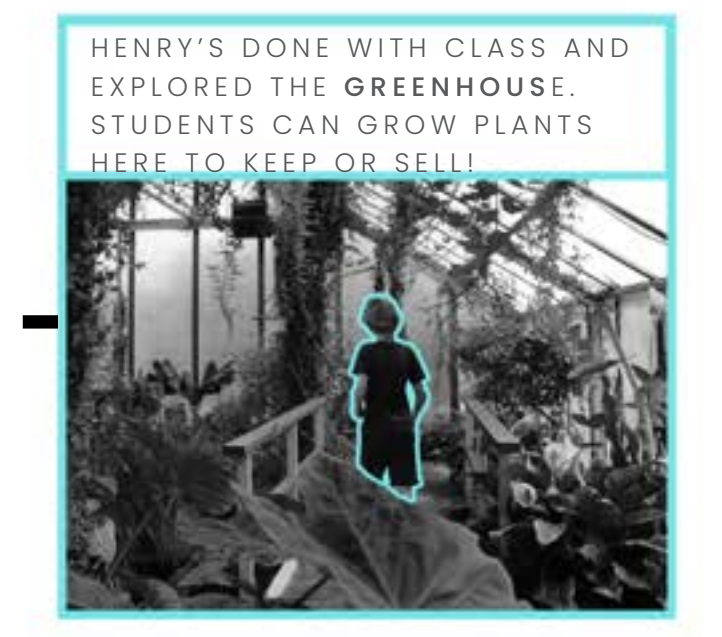
DESIGNING A PARK PROJECT IN A DISTRICT LIKE DEIRA HELPS GIVE THE LAND BACK TO THE PEOPLE BY CREATING SPACES THAT ENGAGE THEM AND HELP THEM DESTRESS AND FIND COMFORT IN BECOMING ONE WITH NATURE. THIS INTEGRATION OF NATURAL AND BUILT ENVIRONMENTS CREATES A SEAMLESS TRANSITION BETWEEN THE PARK AND THE CITY OFFERING A SANCTUARY WHERE USERS CAN REFLECT, LEARN, AND UNWIND. BY FOSTERING BOTH COMMUNITY INTERACTION AND INDIVIDUAL CONTEMPLATION, THE PROJECT BECOMES A VITAL CULTURAL LANDMARK, ENRICHING THE DISTRICT OF DEIRA.





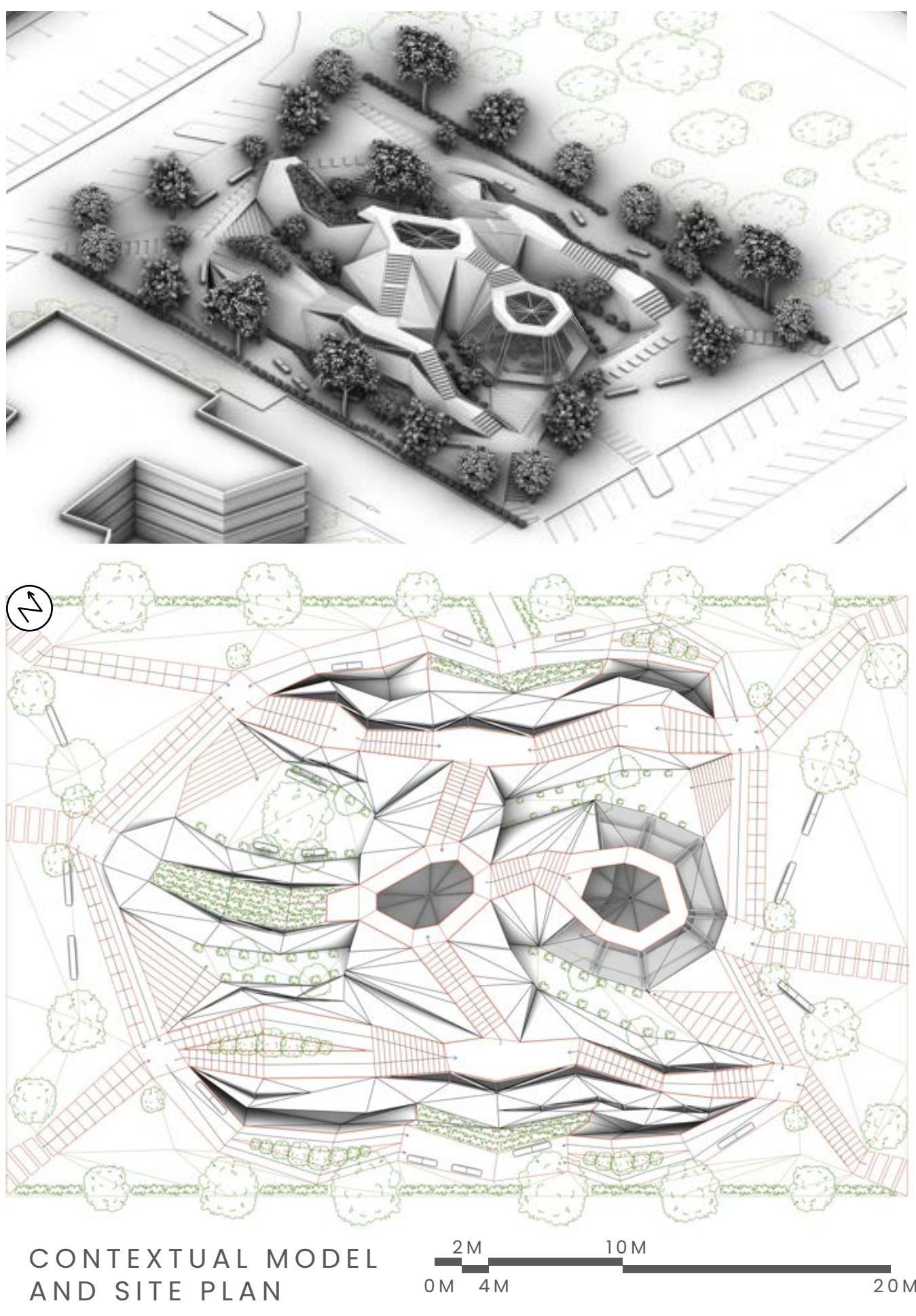
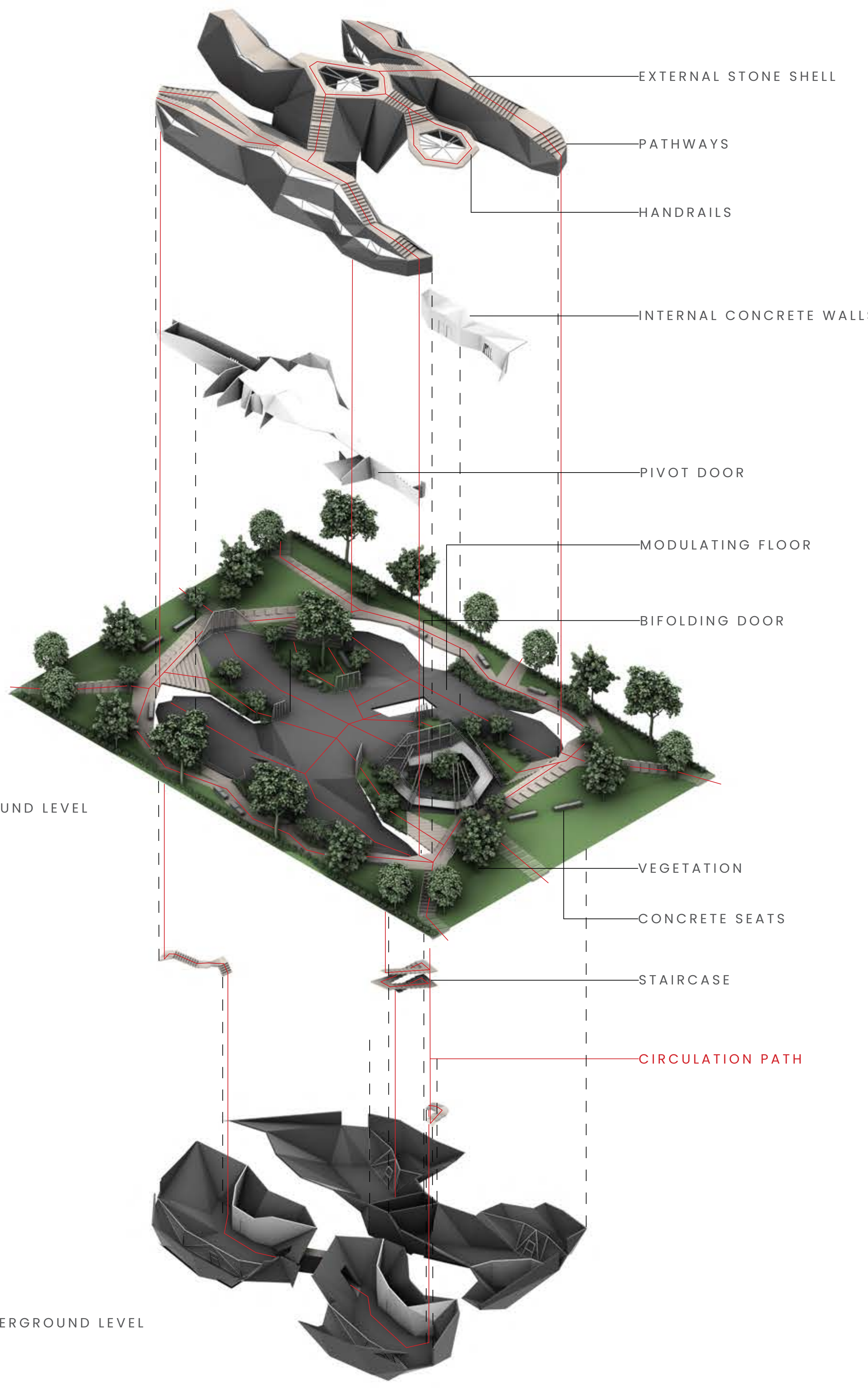
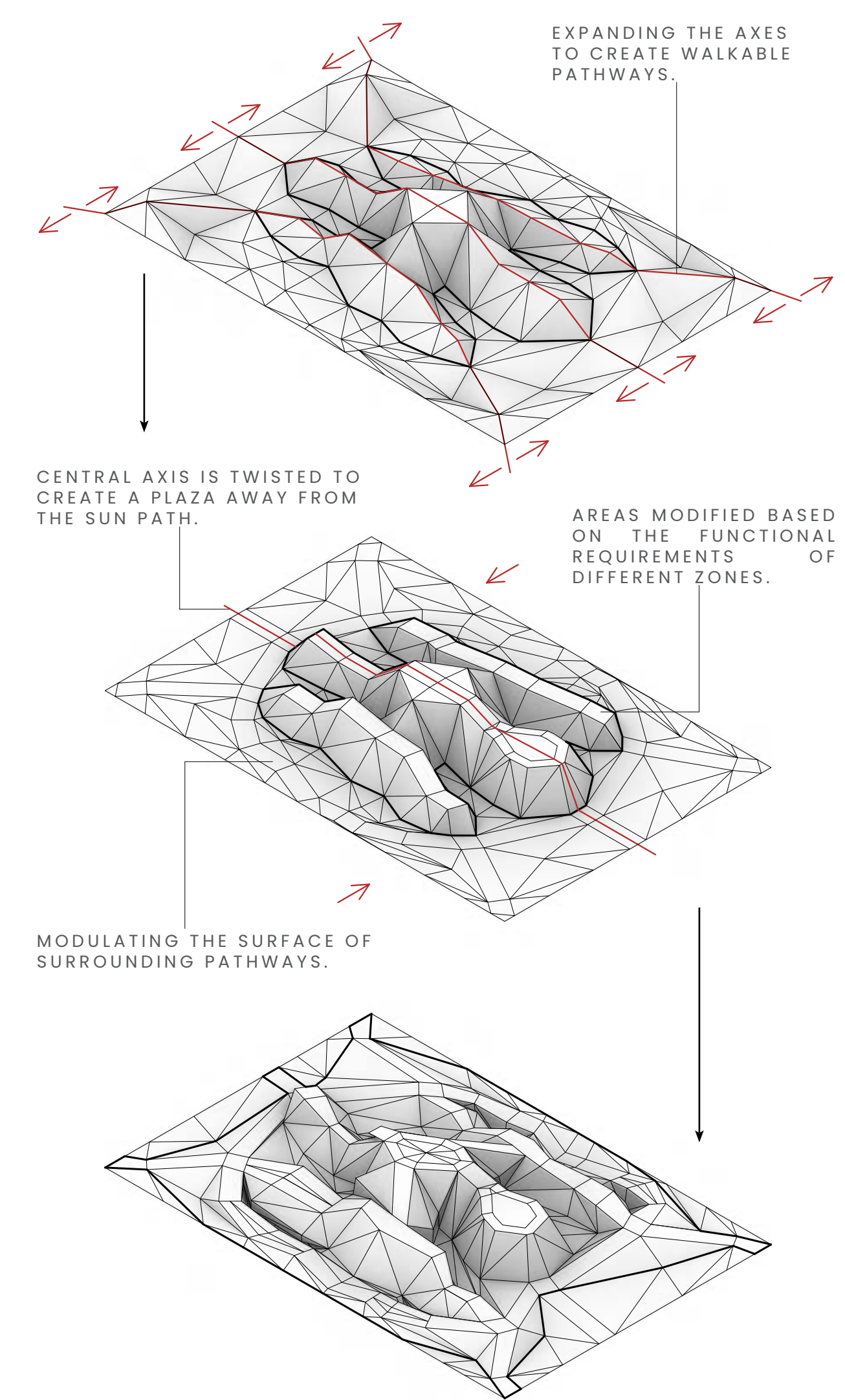


THIS IS THE CONCEPTUAL MODEL OF THE PARK MADE USING METAL WIRE, STOCKING AND A HARD BASE (SCALE 1:200). IT SHOWS THE SITE DEPLOYMENT OF SINGULARITY MODEL. THE SPATIAL QUALITIES OF THE STRUCTURE INTERNALLY CAN BE SEEN DUE TO THE TRANSLUCENT STOCKING. LASTLY, OPENINGS BETWEEN THE BRANCHES OF THE FORM ARE USED AS ENTRYPWAYS INTO THE MASS.

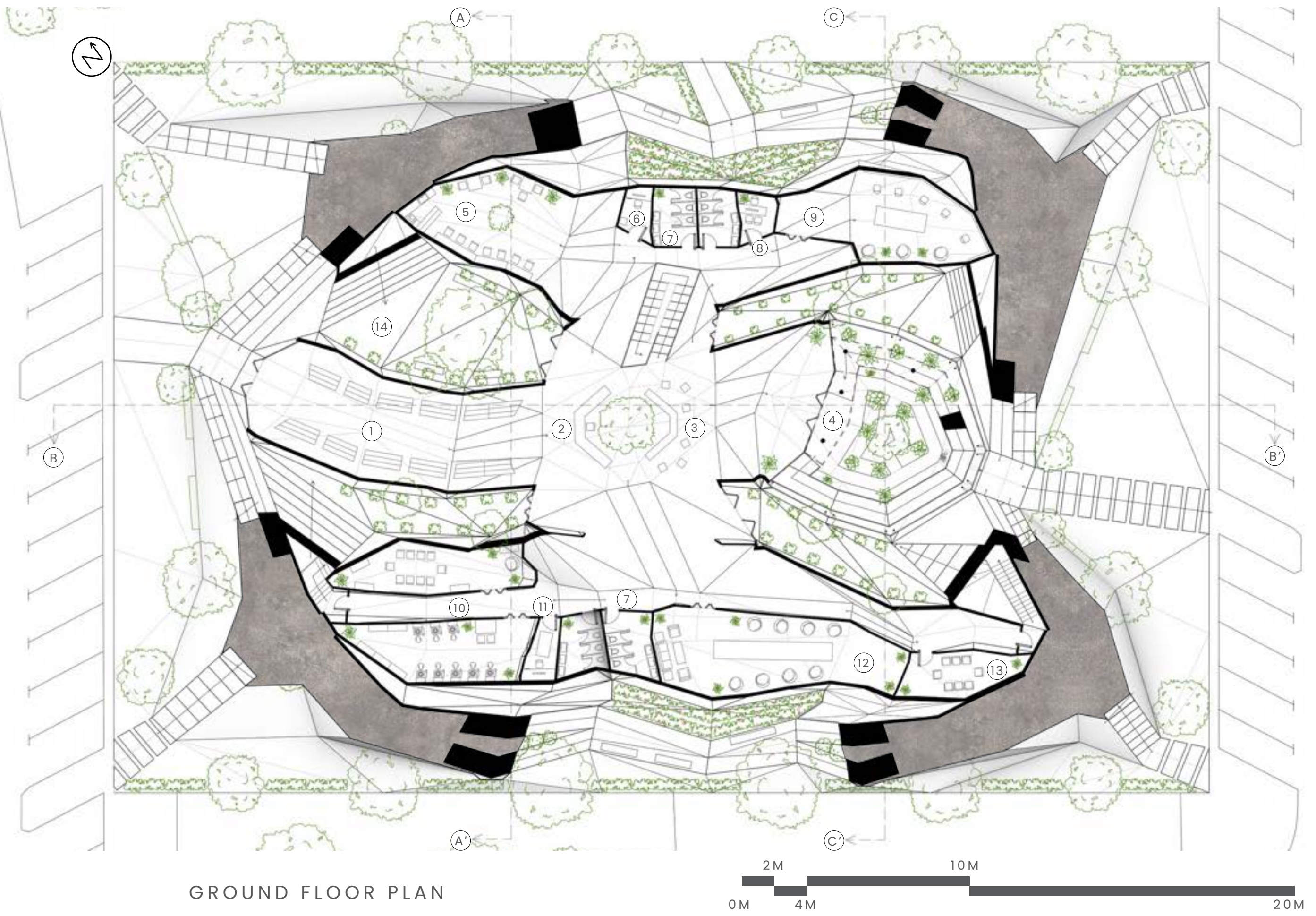


NARRATIVE COLLAGE STORYBOARD

THIS NARRATIVE COLLAGE STORYBOARD DEPICTS THE PRIMARY PUBLIC ASPECTS OF THE PROJECT. USERS COME TOGETHER IN THIS SPACE AND ENJOY THE SERENE VIEWS OF THE LANDSCAPE IN A SPACE THAT PROMOTES COMMUNITY PARTICIPATION THROUGH ACTIVITIES THAT BRING PEOPLE TOGETHER.



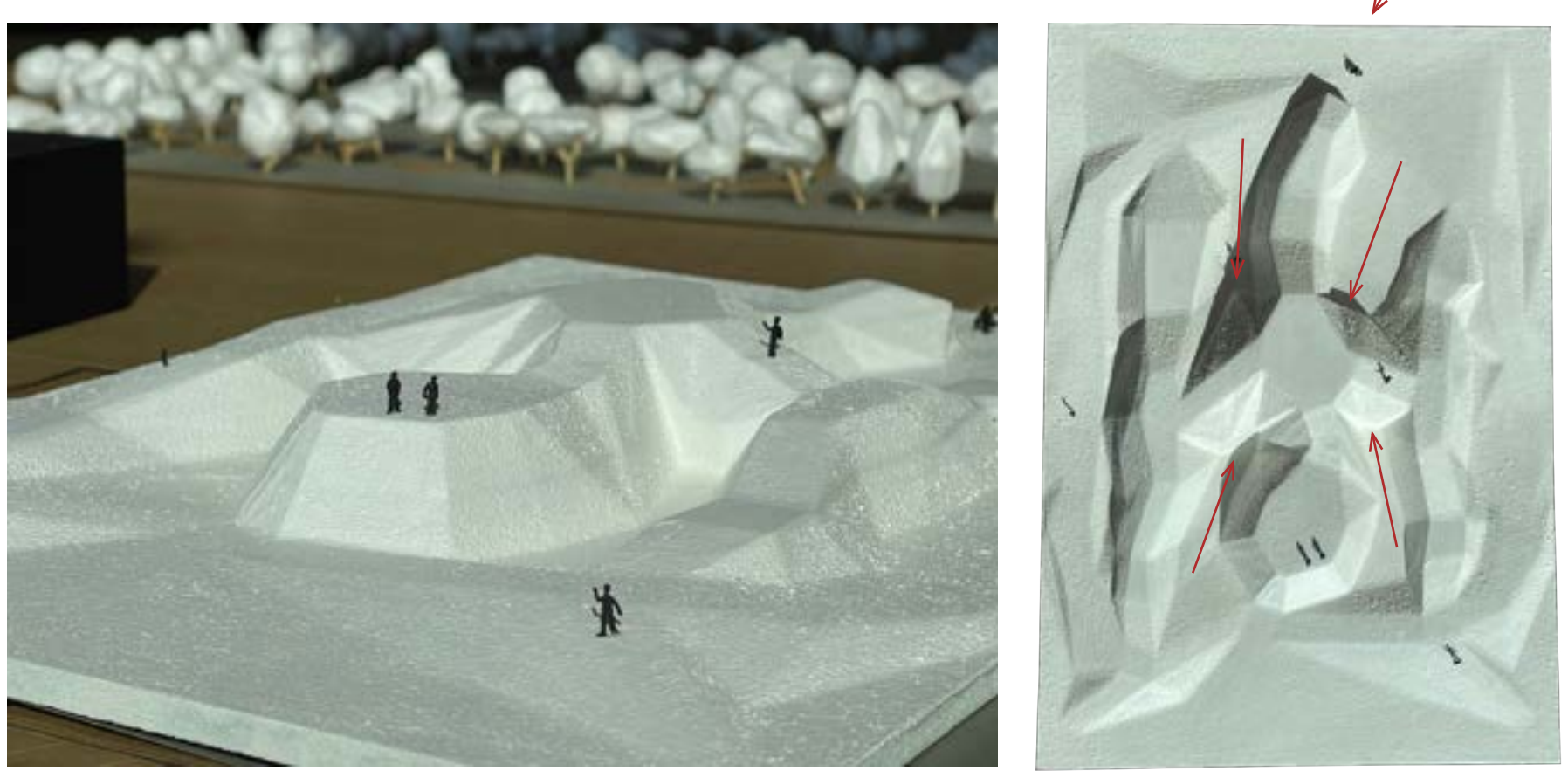
THE SITE PLAN OF THE PARK SHOWS THE BRANCHED CIRCULATION OF MEANDERING PATHWAYS ALL AROUND THE PARK AND ABOVE THE BUILDING IN RED. THE CIRCULATION IS MADE UP OF INCLINED PATHWAYS WHICH BIFURCATE AT POINTS AND STAIRCASES AT DIFFERENT LEVELS. THE PARK BY NATURE IS COVERED IN VEGETATION PLACED STRATEGICALLY TO HELP WITH COOLING AND THE DIFFERENT HEIGHTS OF THE BUILDING MASS SHADE THE OUTDOOR SPACES.



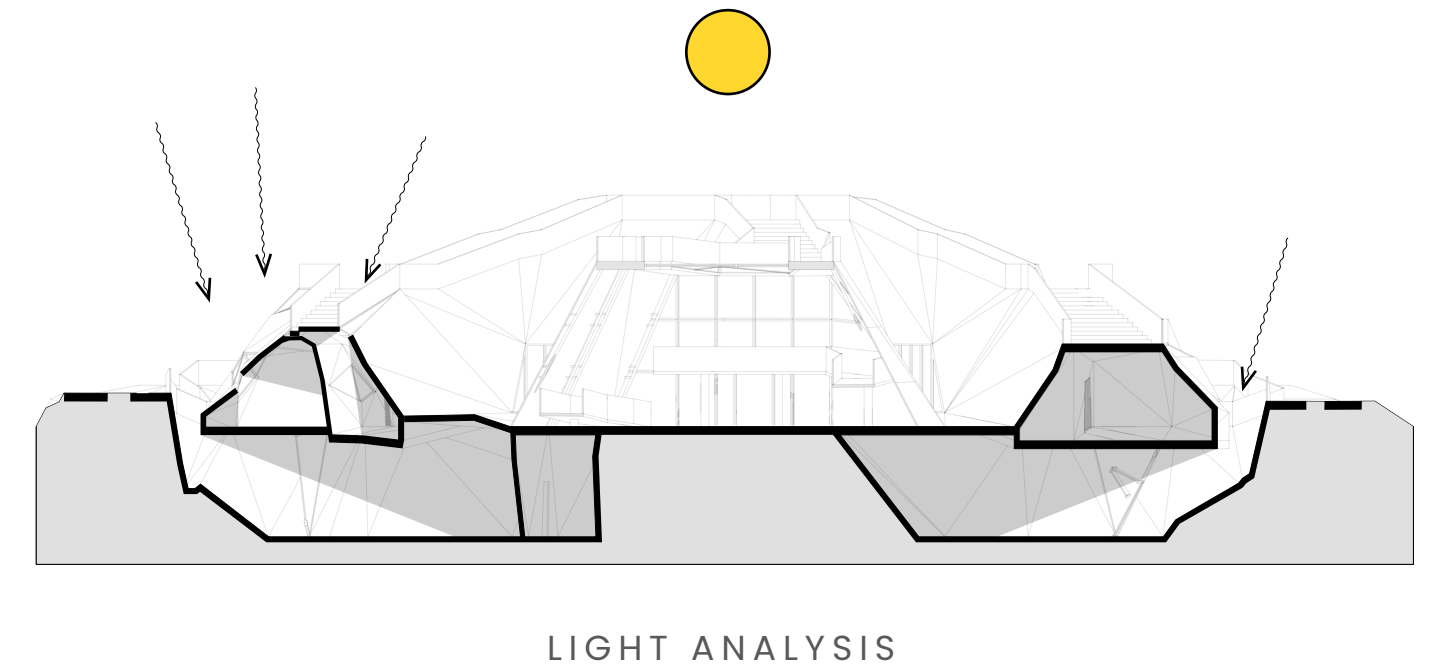
THE GROUND FLOOR PLAN OF THE PARK SHOWS THE CENTRALIZED ARRANGEMENT OF THE VARIOUS SPACES AROUND THE RECEPTION AND LOUNGE. THE GREENHOUSE FEATURES A SPIRAL RAMP WHICH OFFERS VIEWS OF THE LARGE TREE AT THE CENTER AS WELL AS THE REST OF THE PARK OUTSIDE. BRANCHED CIRCULATION PROVIDES A NEW EXPERIENCE FOR THE USER AT EVERY TURN. THE CLASSES TEACH ART THAT HELP BRING THE COMMUNITY TOGETHER.

KEY-

- 1. MARKET SPACE
- 2. RECEPTION
- 3. LOUNGE
- 4. GREENHOUSE
- 5. CAFE
- 6. JANITOR ROOM
- 7. WASHROOM
- 8. ADMIN ROOM
- 9. AR/VR ZONE
- 10. CLASSROOM
- 11. SECURITY
- 12. PECHA-KUCHA
- 13. FORMAL MEETING SPACE
- 14. CASUAL MEETING SPACE/PLAZA



THIS IS THE FINAL MODEL OF THE PARK MADE USING AN MDF BLOCK (SCALE 1:200). IT SHOWS THE EXTERIOR FORM OF THE STRUCTURE AND THE MOVEMENT OF PEOPLE ON THE SURFACES WHERE THEY HAVE ACCESS TO VIEWS OF THE PARK, LIBRARY, AND BUILDINGS. ADDITIONALLY, INSTEAD OF HAVING PROPER ENTRANCES TO THE BUILDING, THE FORM HAS MULTIPLE OPENINGS TO MIMIC THE FEEL OF WALKING THROUGH A LANDSCAPE RATHER THAN ENTERING A BUILDING. A LARGE PRIMARY OPENING IS SITUATED AT THE END OF THE BUILDING INVITING USERS INTO THE MARKET SPACE. THEIR JOURNEY THEN CONTINUES INTO THE CAVERNOUS SPACE AS THEY MAKE THEIR WAY THROUGH THE BUILDING AND PARK.



THE CAVE-LIKE INTERIOR OF THE DESIGN IS LIT UP BECAUSE OF OPENINGS MADE IN THE BUILDINGS SHELL. THE UNDERGROUND SPACE HAS BEEN STRETCHED OUT TO CREATE A BALCONY SPACE THAT CAN INVITE LIGHT WITHIN THE SPACES DEEP IN THE GROUND.

THIS EXPLODED DIAGRAM HIGHLIGHTS THE THREE LAYERS OF THE CAVE. STARTING FROM THE TOP, THE UPPER SHELL HAS OPENINGS ALONG THE UPPER EDGES TO LET CONTROLLED AMOUNT OF LIGHT WITHIN THE INTERNAL SPACE. THE GROUND LEVEL SEAMLESSLY BLENDS WITH THE MODULATING FLOORS MOVING DOWN THE FURTHER YOU ENTER THE SPACE. THE UNDERGROUND LEVEL SHOWS THE FOUR SPACES, THREE OF WHICH ARE PRIVATE. EVEN UNDERGROUND, TUNNEL LIKE CONNECTIONS ARE CREATED TO MIMIC THE MOVEMENT THROUGH CAVES. LASTLY, THE CIRCULATION THROUGHOUT THE SPACE HAS BEEN HIGHLIGHTED THROUGH EACH OF THE THREE LAYERS. PEOPLE CAN WALK ON TOP OF THE CAVE, WITHIN IT, AS WELL AS BELOW IT.

