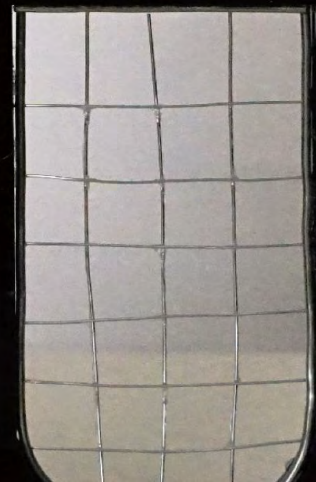
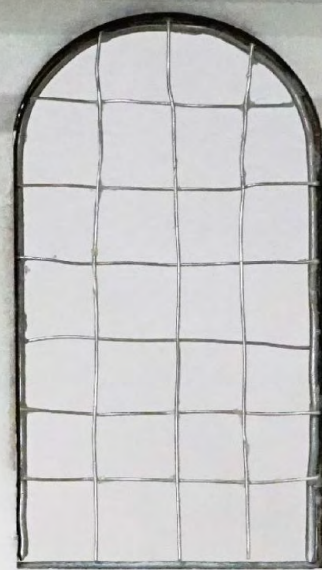


PORTFOLIO

Yishi Xia 10037814



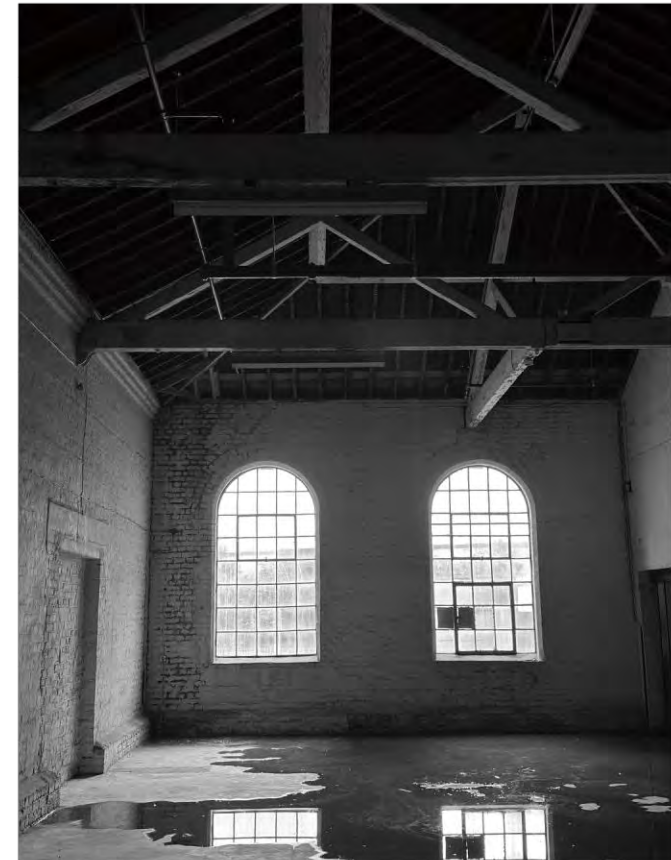
COMPRESSION
ARTEFACT

THE ORIGINAL OBSERVATION



There are not many light sources in this building, they can not illuminate the whole space well, so the place with light sources is like another space, it is brighter than other places.

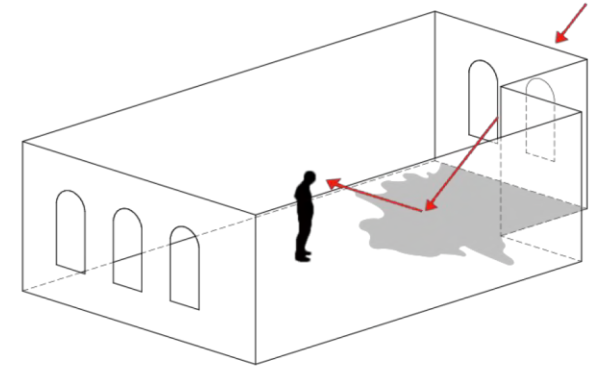
At the same time, there are many Windows in the space without lights, and the sunlight illuminates the whole space through the Windows. Such light and projection bring me a sense of contrast between darkness and brightness.



THE OBSERVATION



After the light shines through the window, it causes reflections on the ground, and the water on the ground acts like a mirror, refracting the space.



The contrast in the space

Colour



Inverted space

The space inside puddles is like an unreal upside down room. The floor is like a mirror, and the opposite space can be seen at different angles.



THE ITERATION OF MODEL



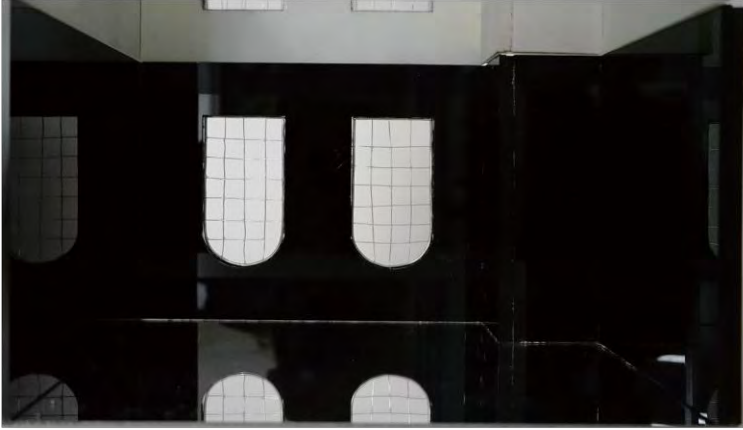
01



02



THE MODEL





WONDER WORLD CENTER

A children's educational library

Catalogue

Wonder World Center |
a children's educational library

RESEARCH

Site research
Reuse
Crowd research
Vision

DESIGN INSPIRATION

Inspiration
Infinite space
Where are the books
Story book

DRAWINGS

Section
Plan

VISUALS

1

2

3

4





SITE



UK



LONDON



Temperate Marine Climate



Most of the time it is between 6 and 22°C



Moist



REUSE

In most cases I want to preserve as many elements of the original building as possible. They are places that reflect the history of the building.

Some recyclable materials I will process and reuse them

Some recyclable materials I will process and reuse them

The size of the doors is different

Most of them are orange

In some places, there are no real doors

different doors

The steel sheets in the sandwich are reused through recycling and painting

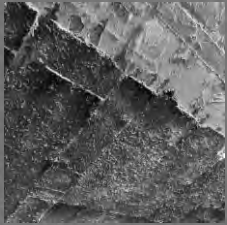
Retaining most of the window positions and basic patterns on the building façade

The steel sheets in the sandwich are reused through recycling and painting

Make the columns as a part of the design



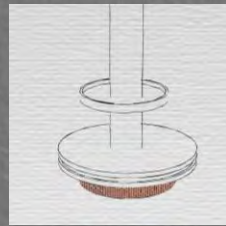
Existing available materials



Bricks



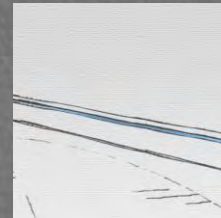
Steel sheet



Handrail



Doors



Steel sheet



Plastic



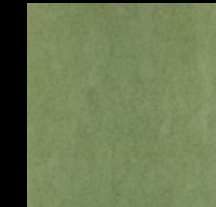
Glass



Wood



Fabric



Fabric

Main materials used in the space



The problem

Different native languages

Different races



In London primary schools pupils often have different skin colours

Age

4-11

Students from different cultural and linguistic backgrounds, often whose native language is not English, always need translators and teachers.

The solution

Multilingual Resources

Provide resources in multiple languages to help children better understand the content.



English support

Hire multilingual staff focused on supporting children's English learning needs.

Translation Services

Ensure students can understand notices, documents, and other important information.



The problem

After-class club

Most of the nearby elementary schools are public and do not offer after-class clubs. But for most children, this is necessary.

Type



Homework assistance, sports activities, arts and crafts activities, language and cultural activities

20%

Proportion of primary schools with after-school classes

The solution

Provide a place for classes

Provide quiet, comfortable study areas where students can complete homework and receive tutoring.



Provide entertainment venues

According to different recreational activities, corresponding spaces are provided to help children develop skills, teamwork and friendship.



The problem

Modern digital technology

Students face challenges using technology in the digital age, including processing online information and developing digital literacy.

The needs



Digital reading and writing, math and science applications, internet literacy, problem solving skills



Modern digital media usage trends

The solution

Develop digital interests

Develop students' skills and awareness in the correct use of technology through the design of spaces.



Provide digital help

Provide computers, tablets and other electronic equipment for simple digital education and inspiration.

WHY A CHILDREN'S EDUCATIONAL LIBRARY?

1. Children's needs

The neighbourhood does not have adequate libraries and recreational facilities. Children need a space where they can study and play after school.

2. History

This building has existed for many years, and now we can only see some traces of the past. We need to keep it so that the next generation can see the history.

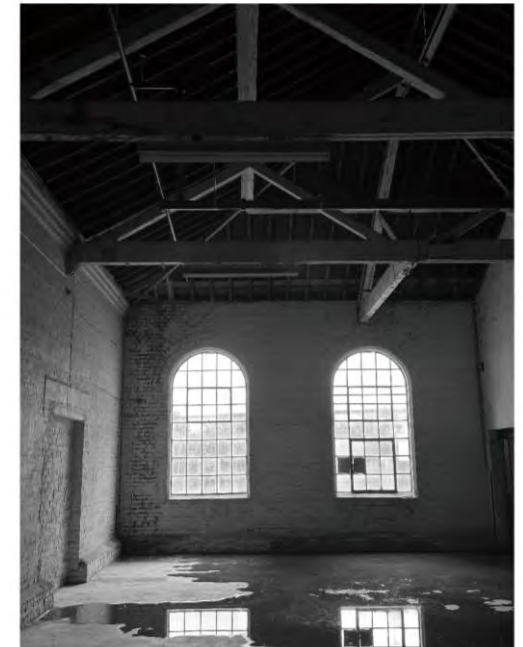
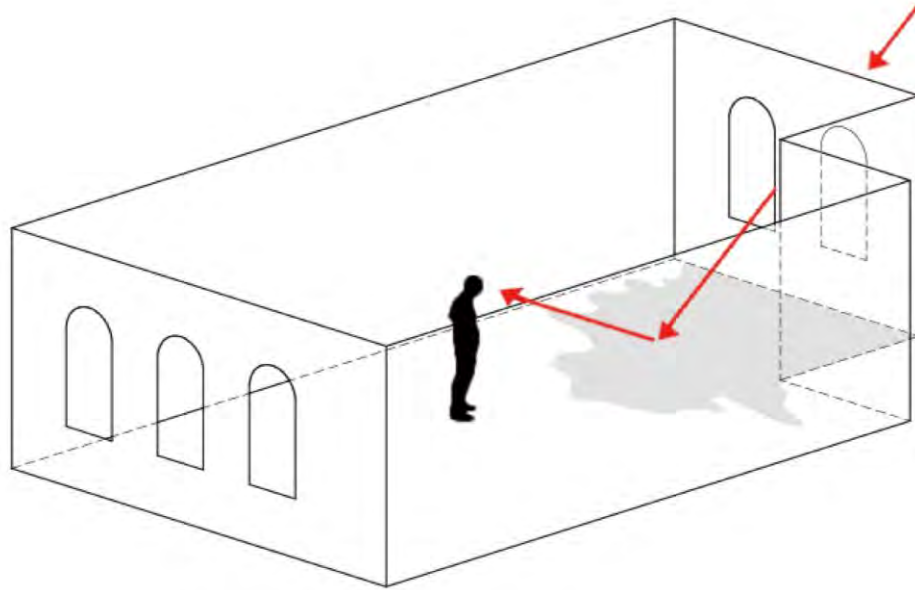


Freely
explore the
joy of
learning in
the world of
books



DESIGN INSPIRATION

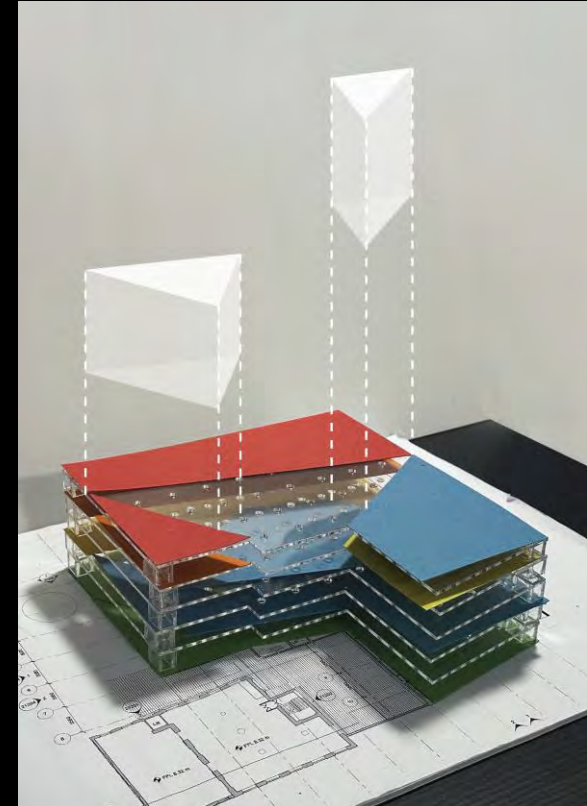
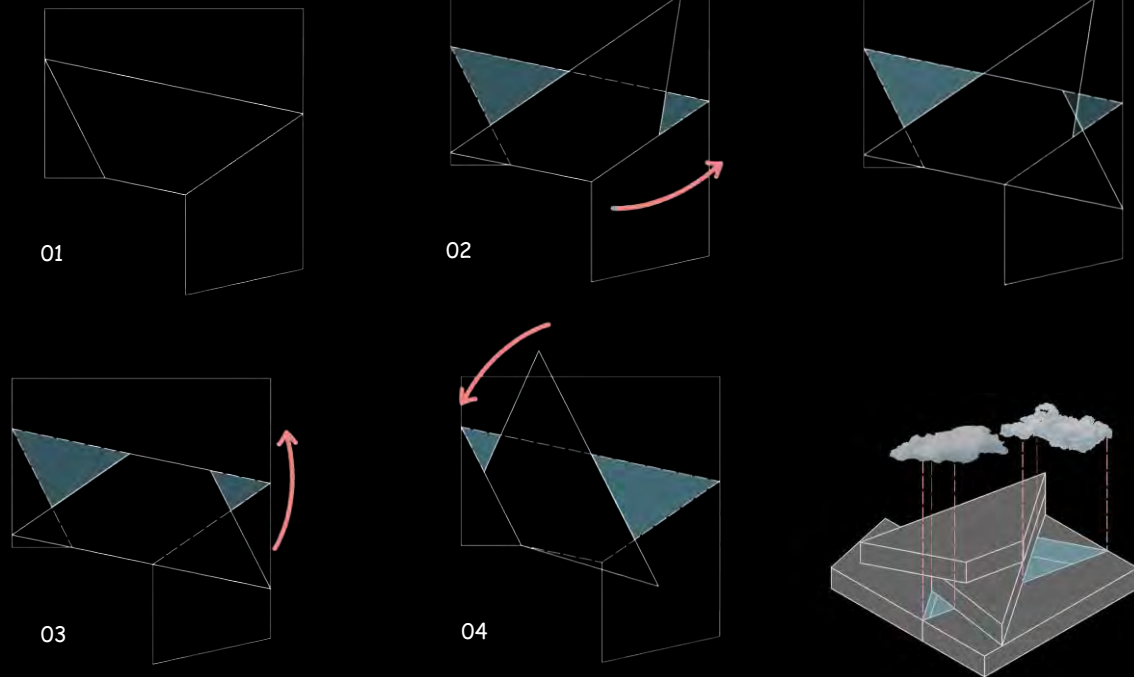
Initial idea:
REFLECTION



DESIGN INSPIRATION

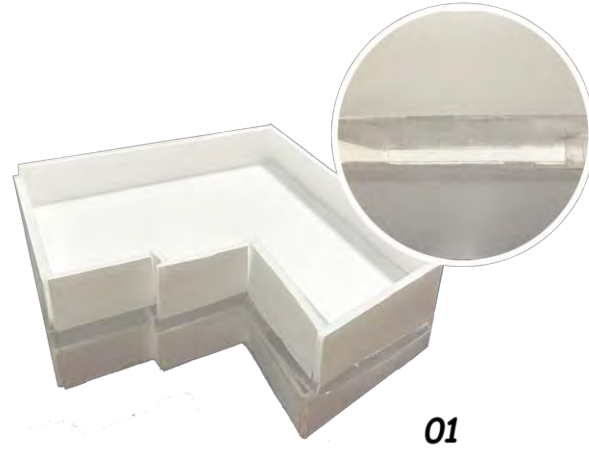
Term 2

Idea 1: infinite



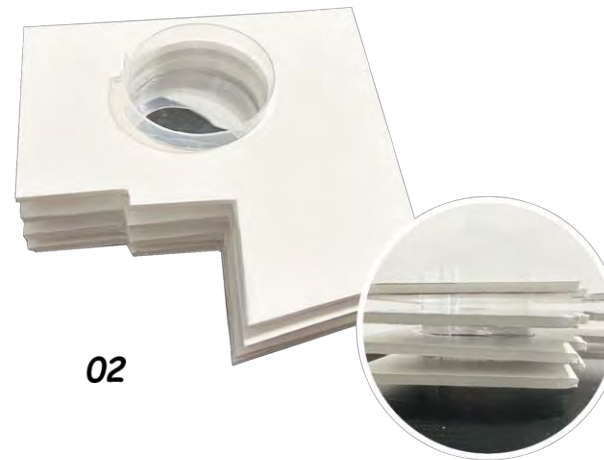
DESIGN INSPIRATION

Term 2: process



Ideas about reflections: reflections need a medium and can use the middle floor as a transition space

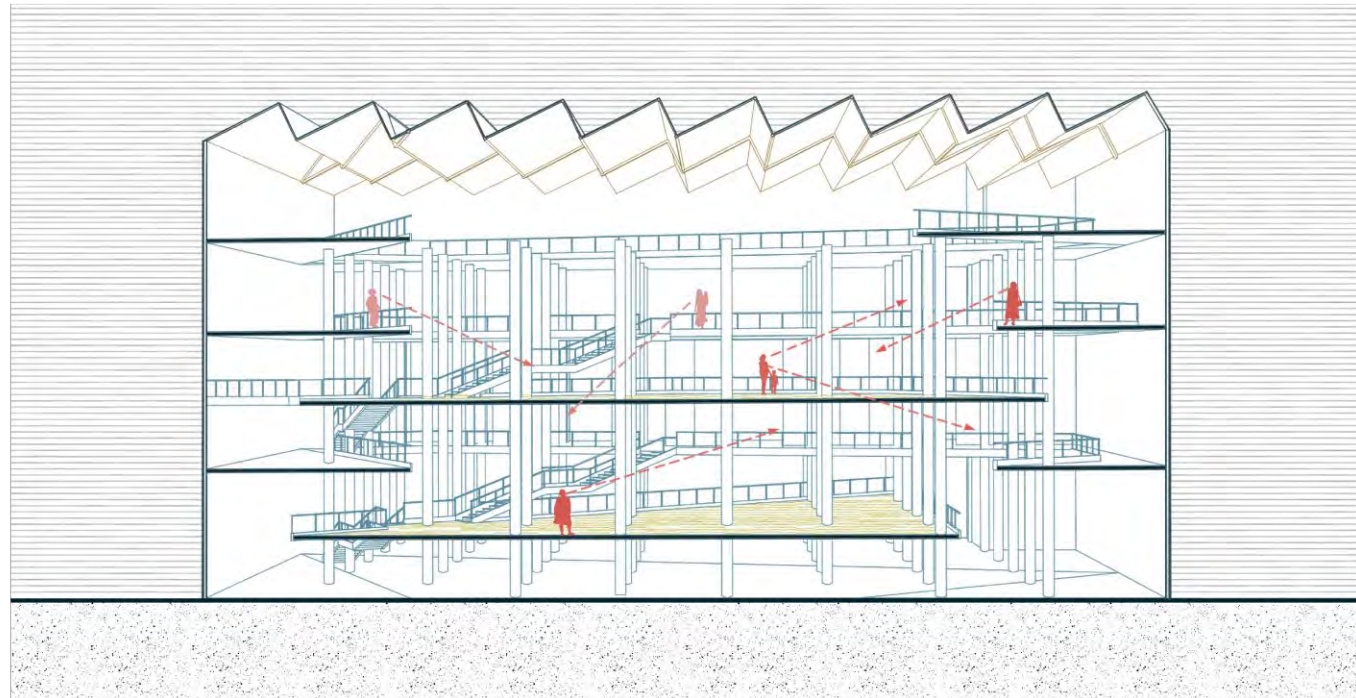
Using mirrors and transparent panels, imagine that it can reflect its surroundings to create an upside-down infinite space.



DESIGN INSPIRATION

Term 2: section

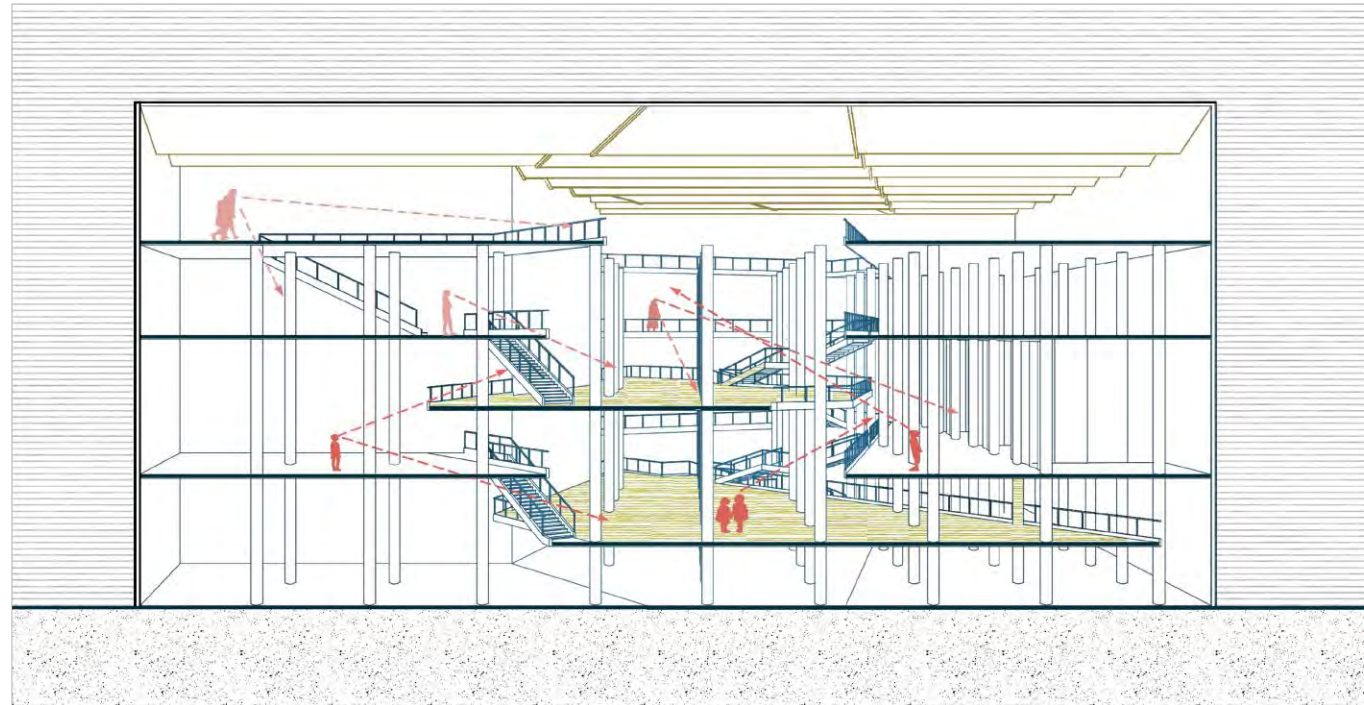
*Because of the different heights of the floors,
people have different views at different locations.*



DESIGN INSPIRATION

Term 2: section

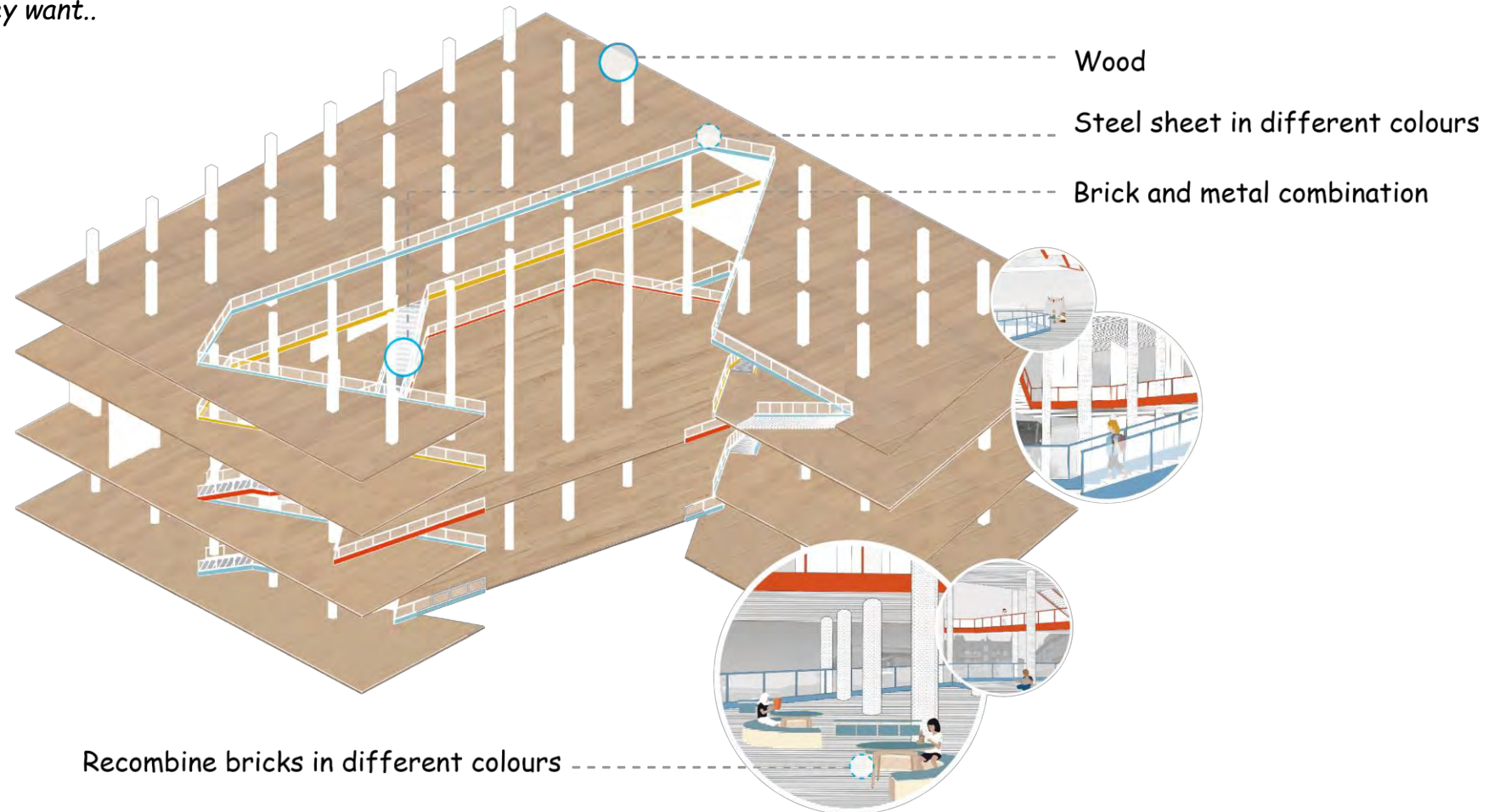
*Because of the different heights of the floors,
people have different views at different locations.*



DESIGN INSPIRATION

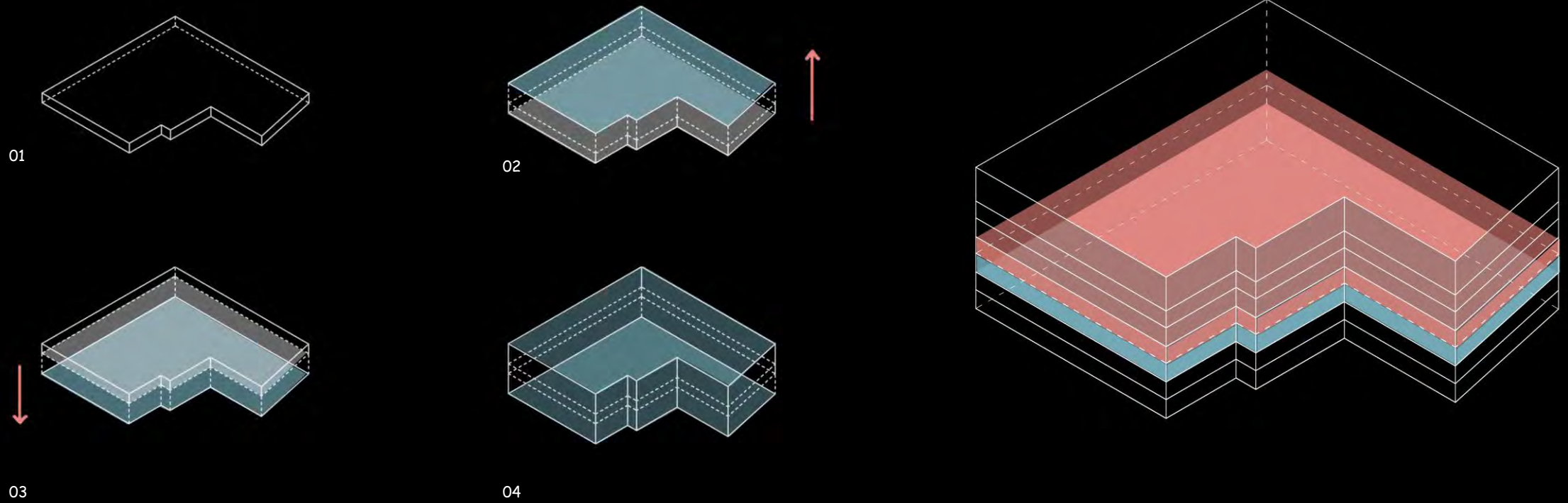
Term 2: Axonometric drawing

I wanted the whole space to look warm. At the same time, it's fun and attractive to children. Additionally, most of the space is open space, so children can stay wherever they want..



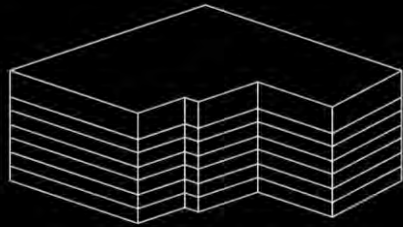
DESIGN INSPIRATION

Idea 2: inverted

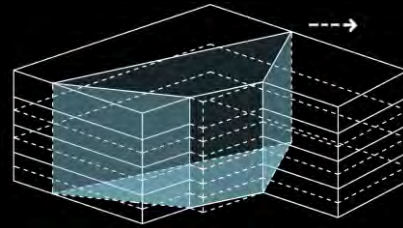


DESIGN INSPIRATION

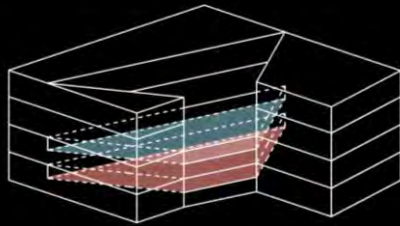
Idea 3: infinite + inverted



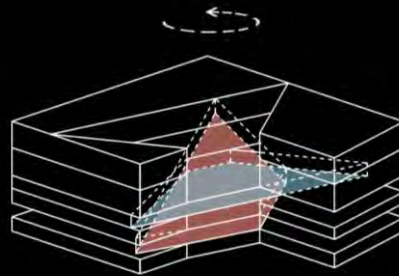
01



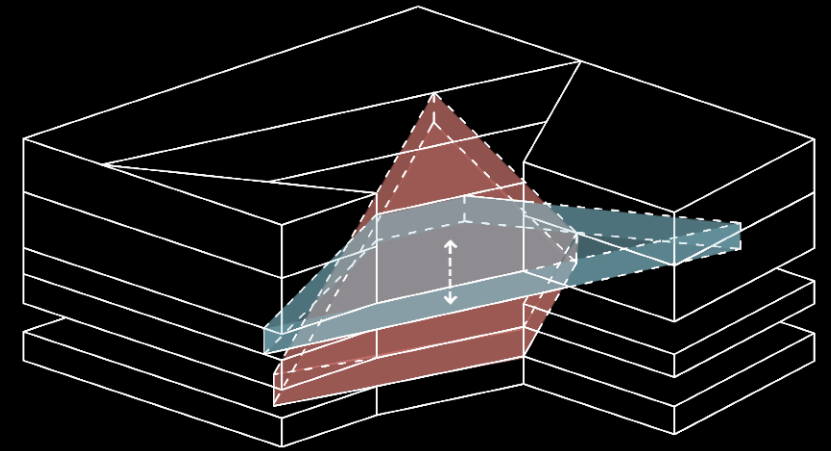
02 Merge +remove



03 Repeat



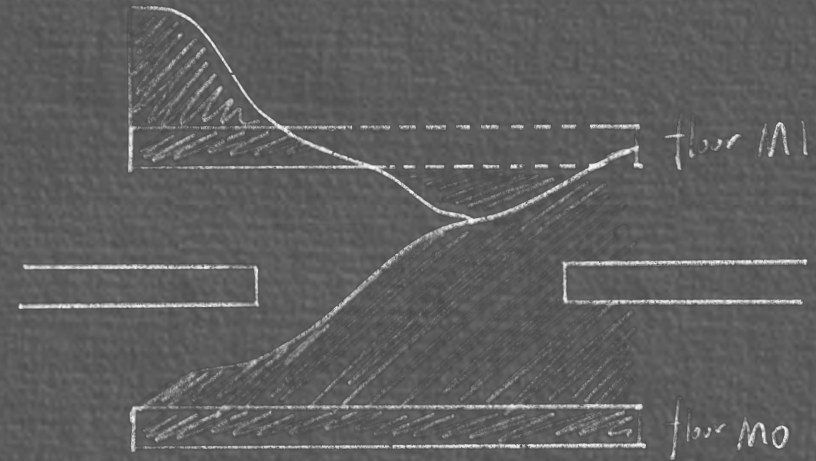
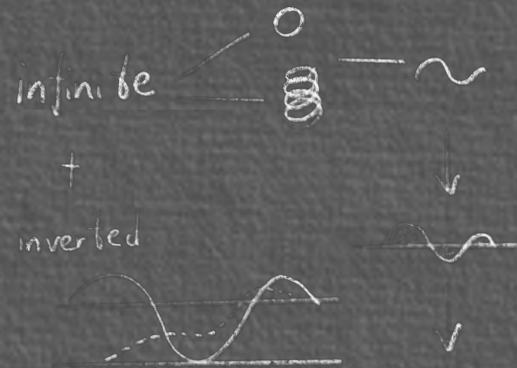
04 Rotate



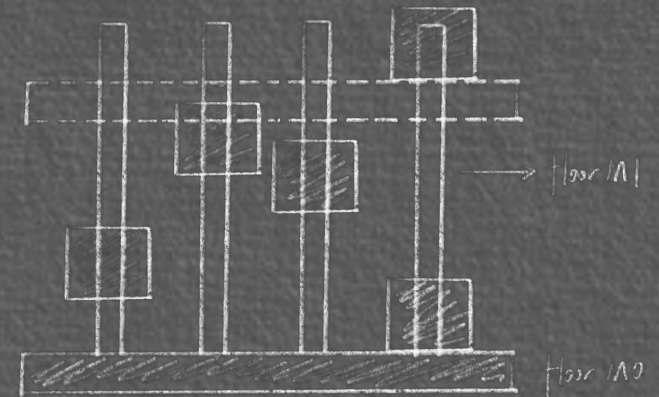
Move the position of the original floor slab up and down to create an internal space.

PROCESS

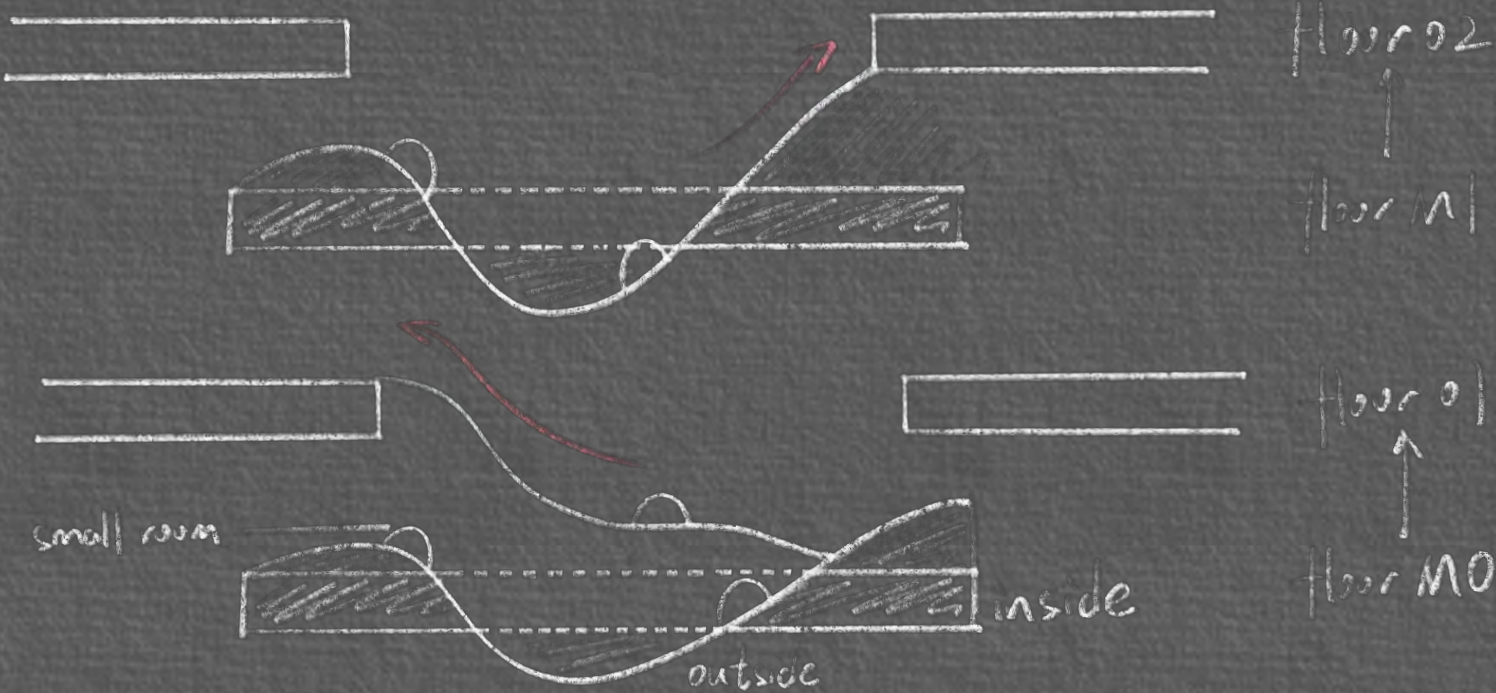
01



02



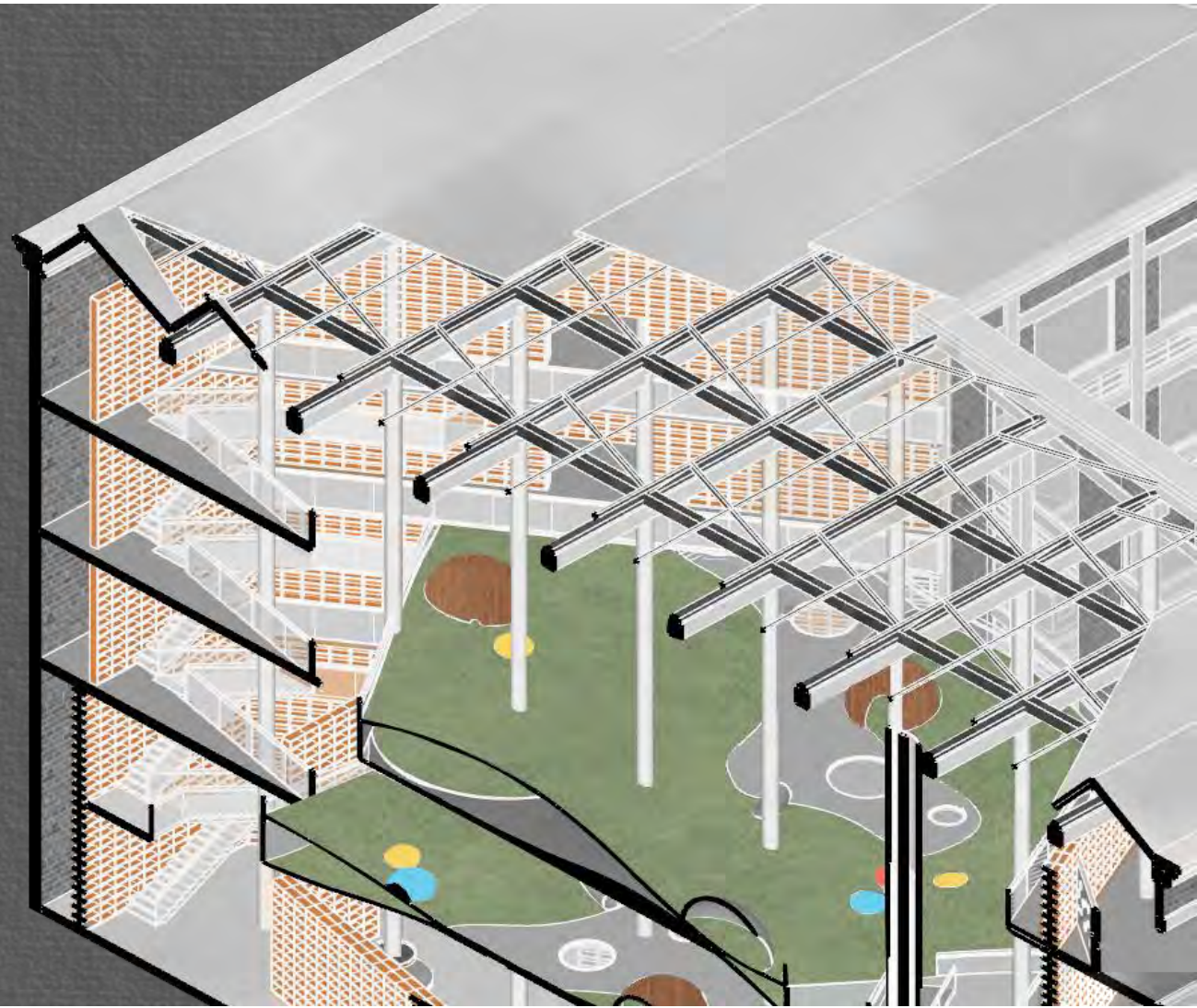
PROCESS



WHERE ARE THE BOOKS ?

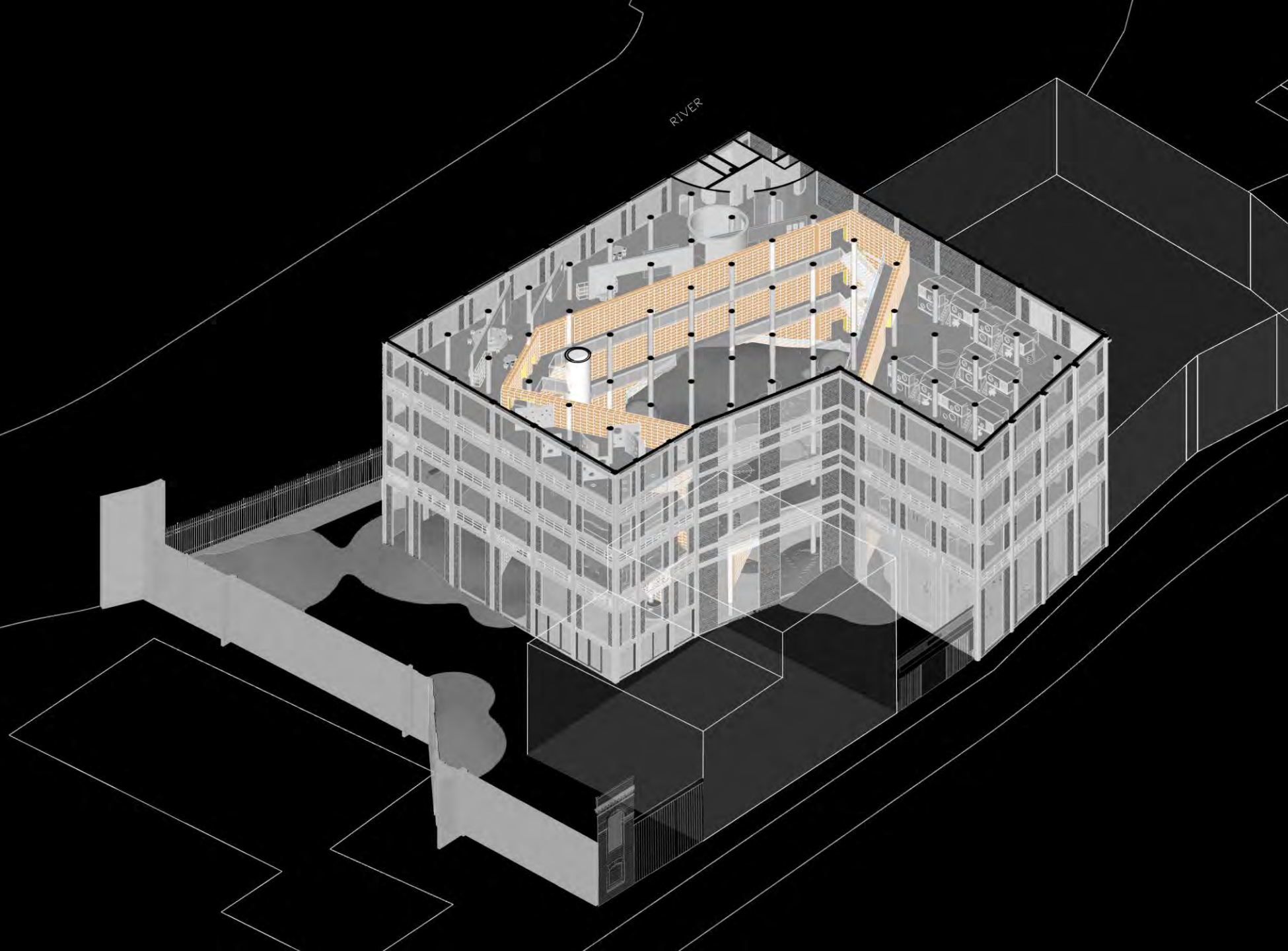
"FOREST"

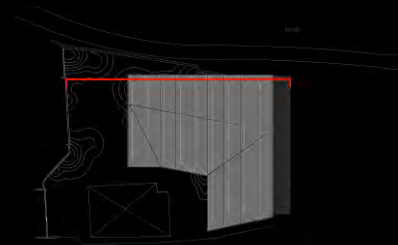
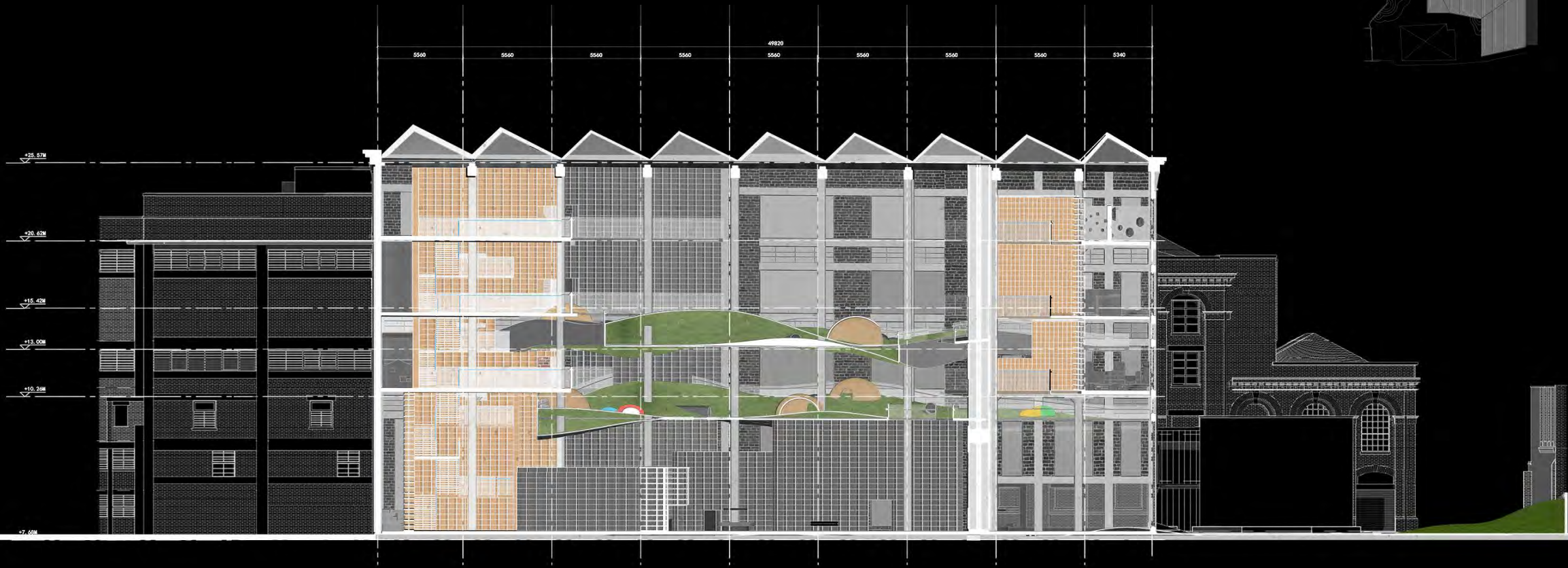
Immerse
in the
books

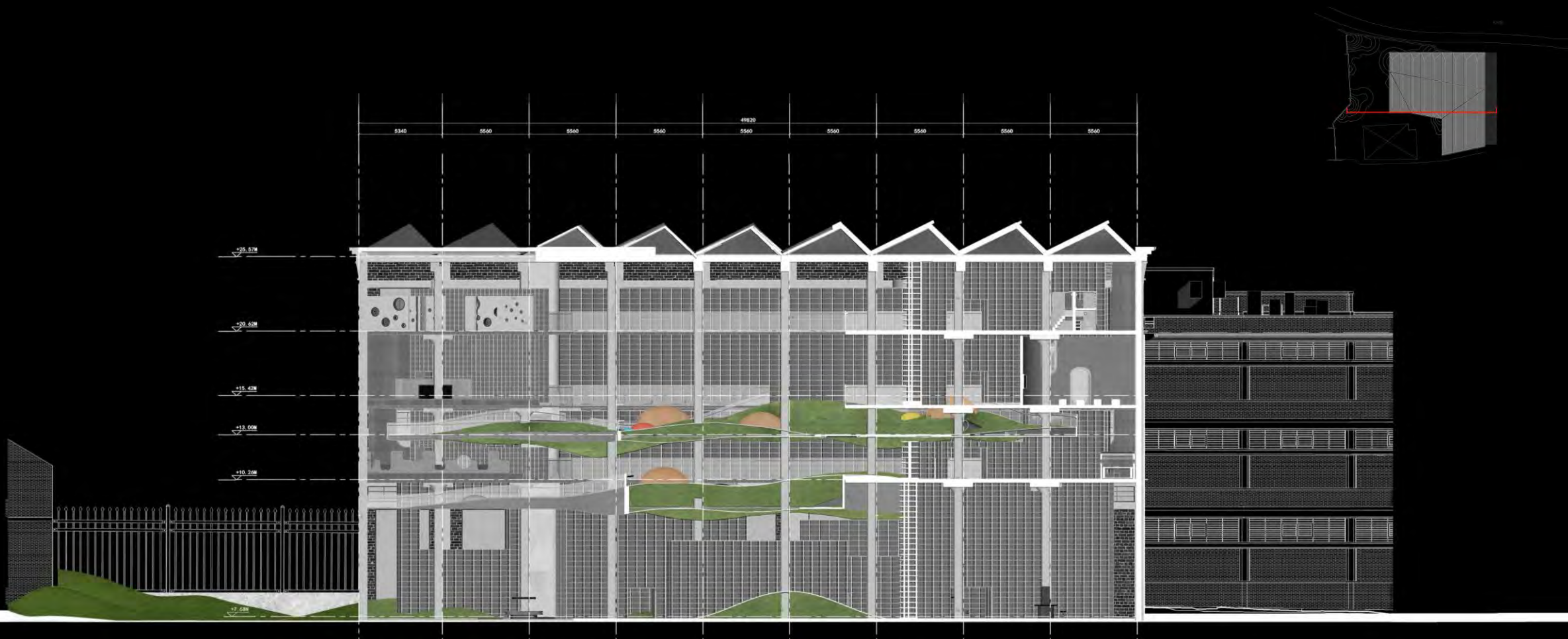


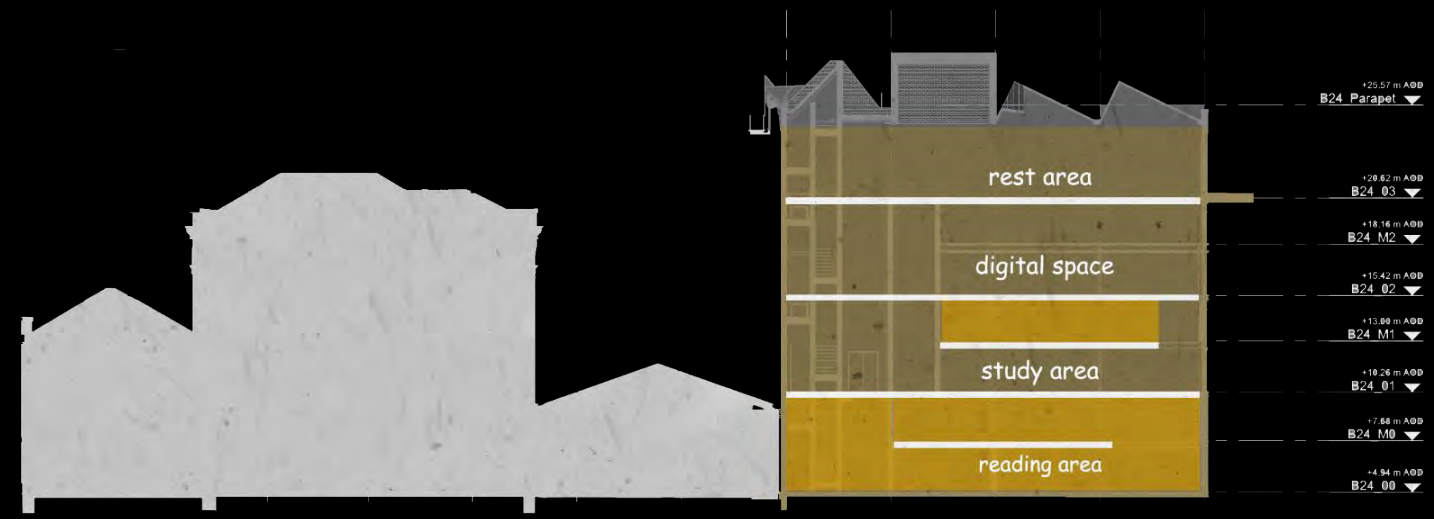
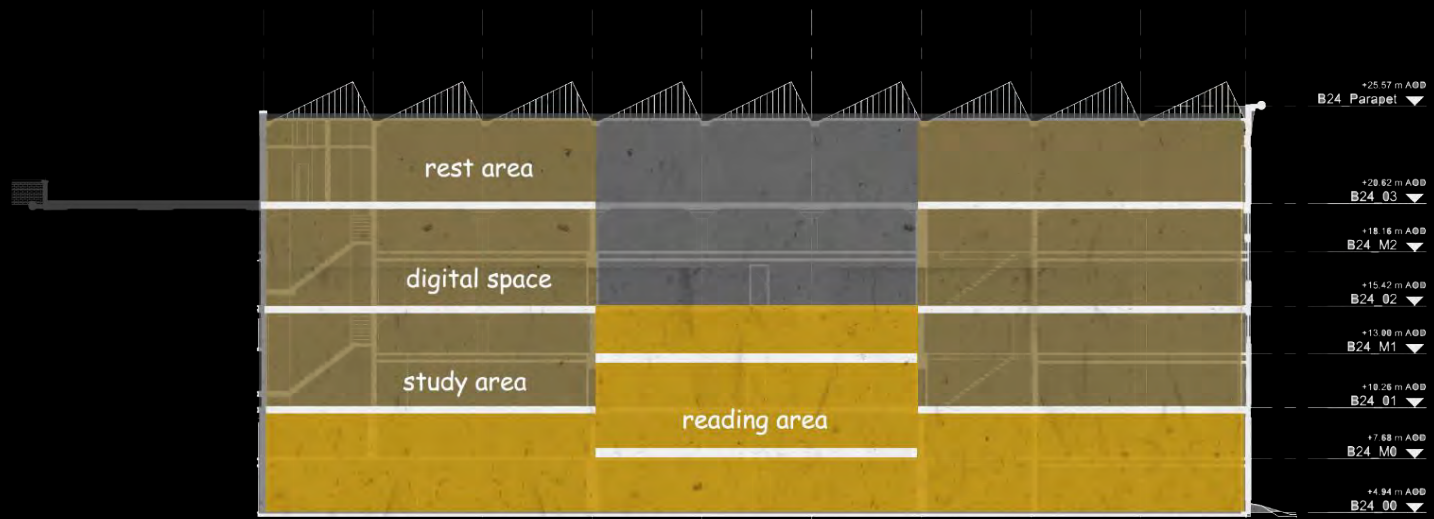
"WALLS"

Books
separate
the
functional
area and
the reading
area like a
wall.



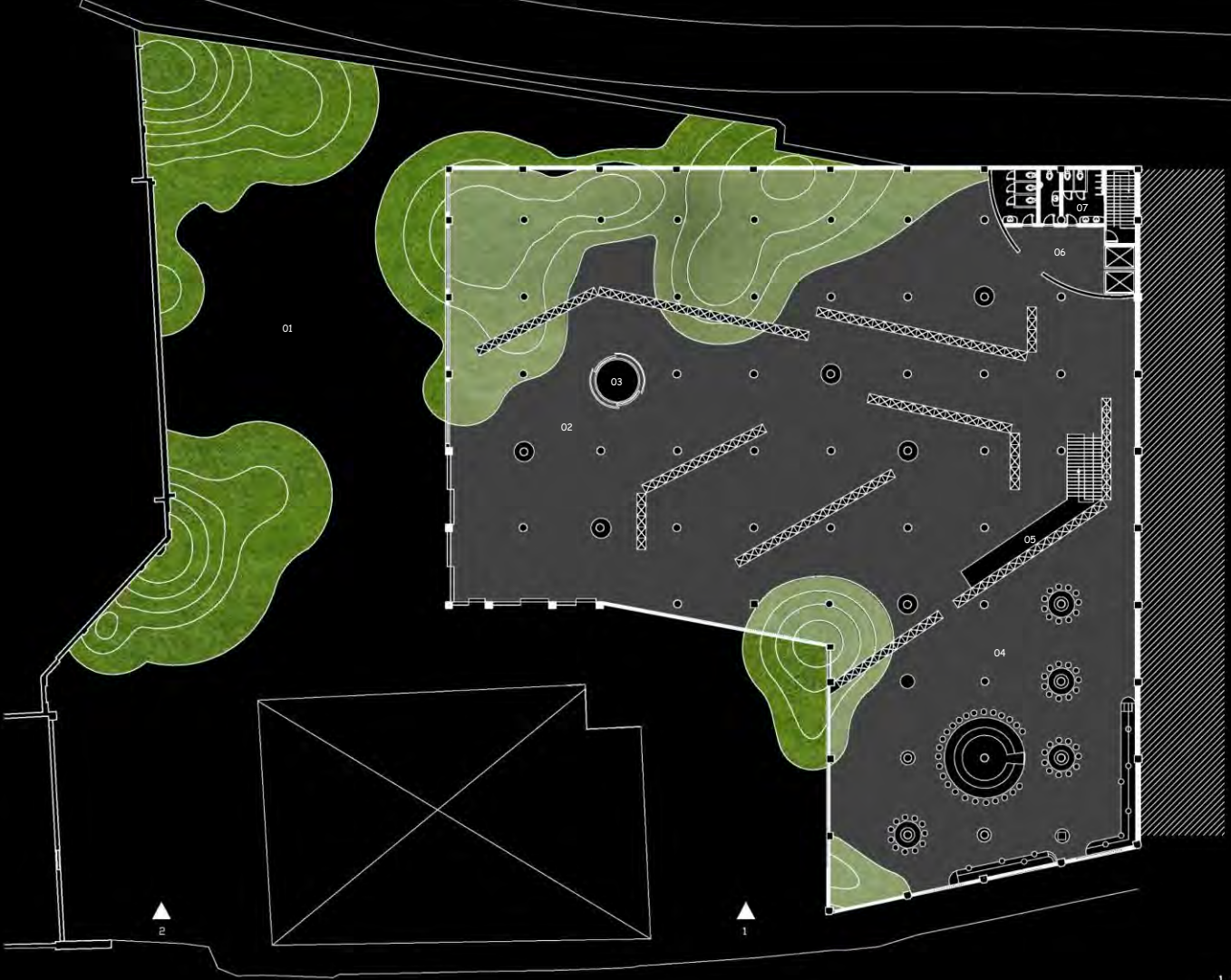






RIVER

- 01 Garden
- 02 Public reading area
- 03 Lift
- 04 Café
- 05 Small mezzanine floor
- 06 Infrastructure room
- 07 Toilet



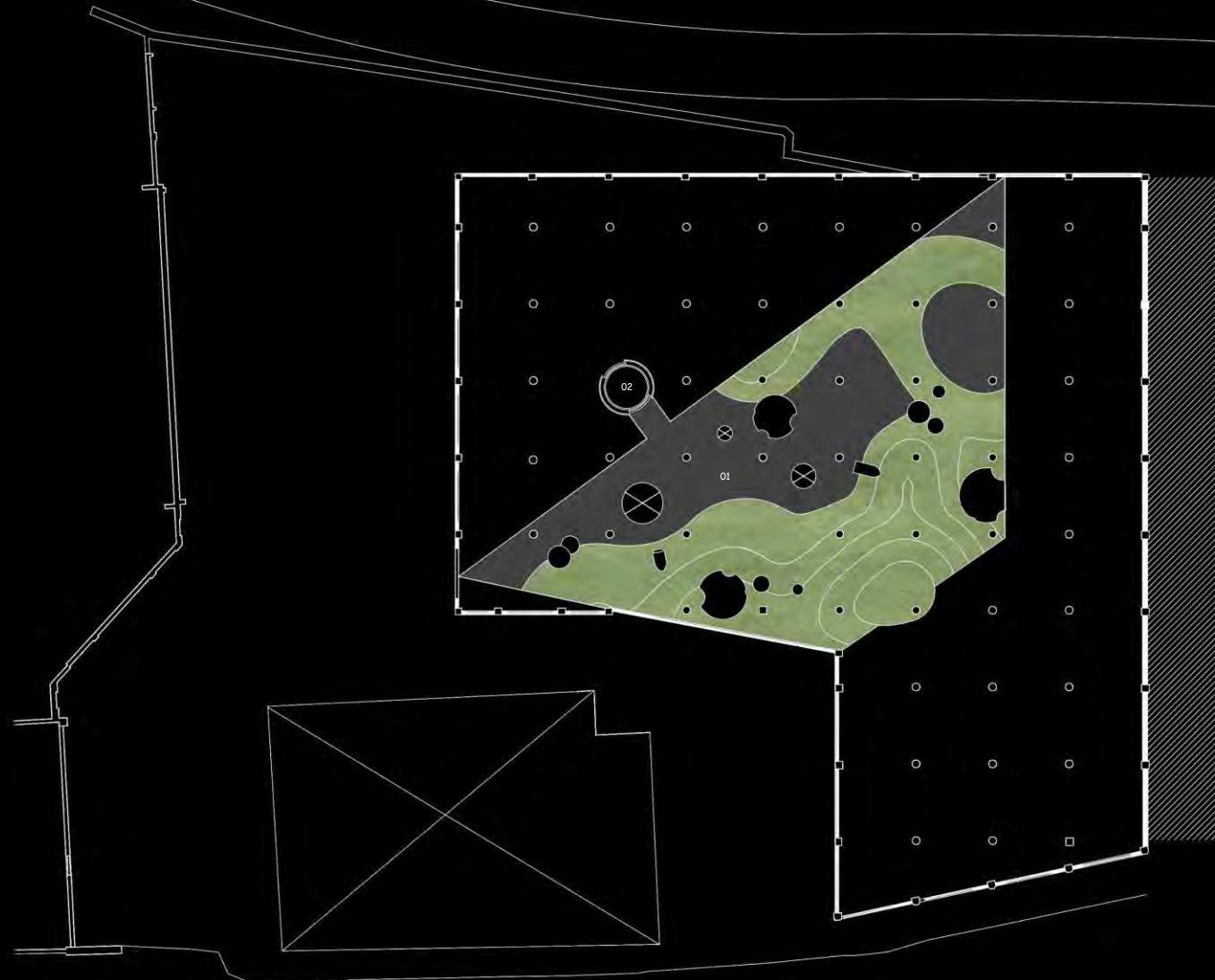
1. MAIN ENTRANCE
2. SECONDARY ENTRANCE

Floor 00

RIVER

01 children's reading area

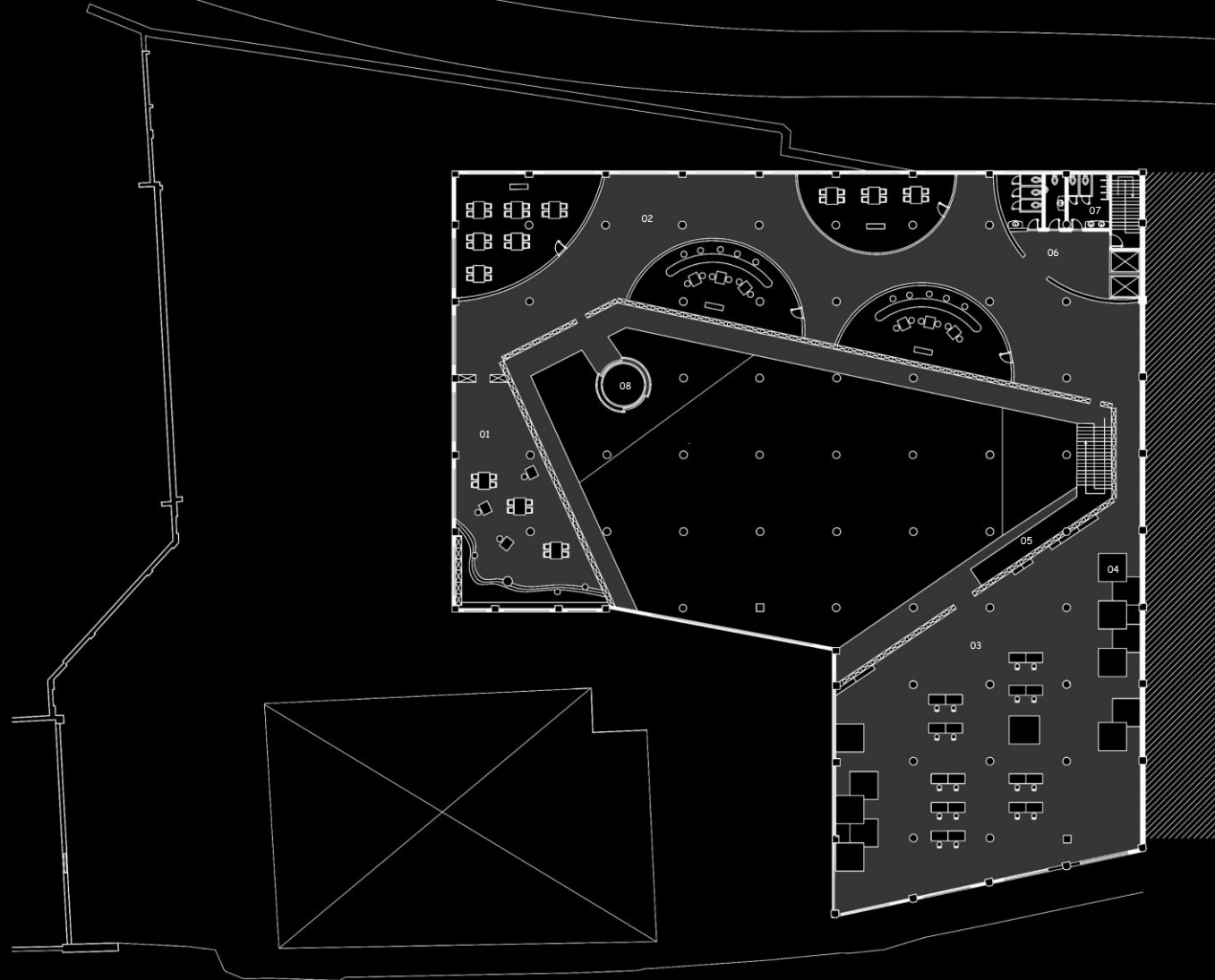
02 lift



Floor M0

RIVER

- 01 Study area (Key Stage 1)
- 02 classroom
- 03 Public study area
- 04 private study room
- 05 Small mezzanine floor
- 06 infrastructure room
- 07 toilet
- 08 lift

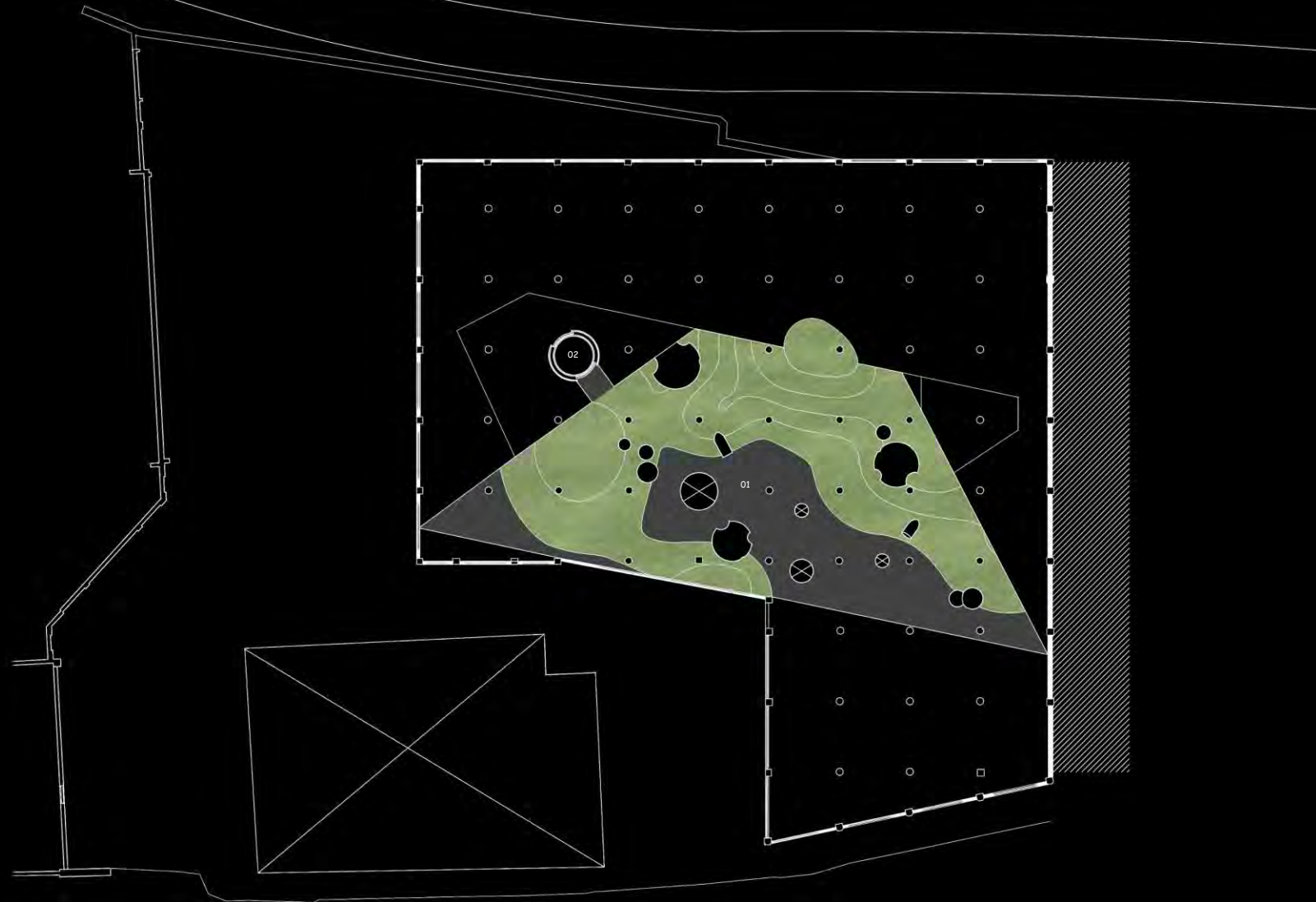


Floor 01

RIVER

01 children's reading area

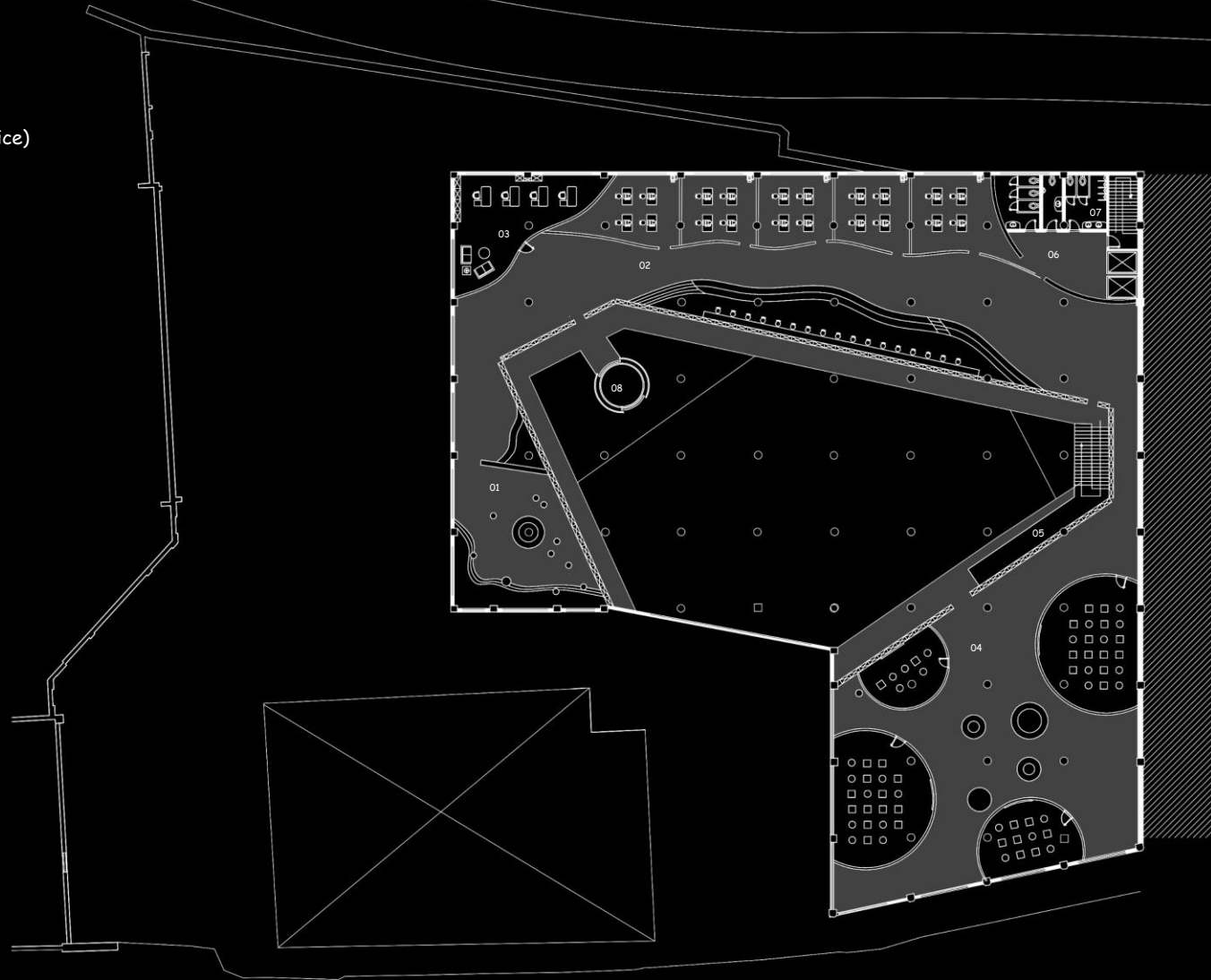
02 lift



Floor M1

RIVER

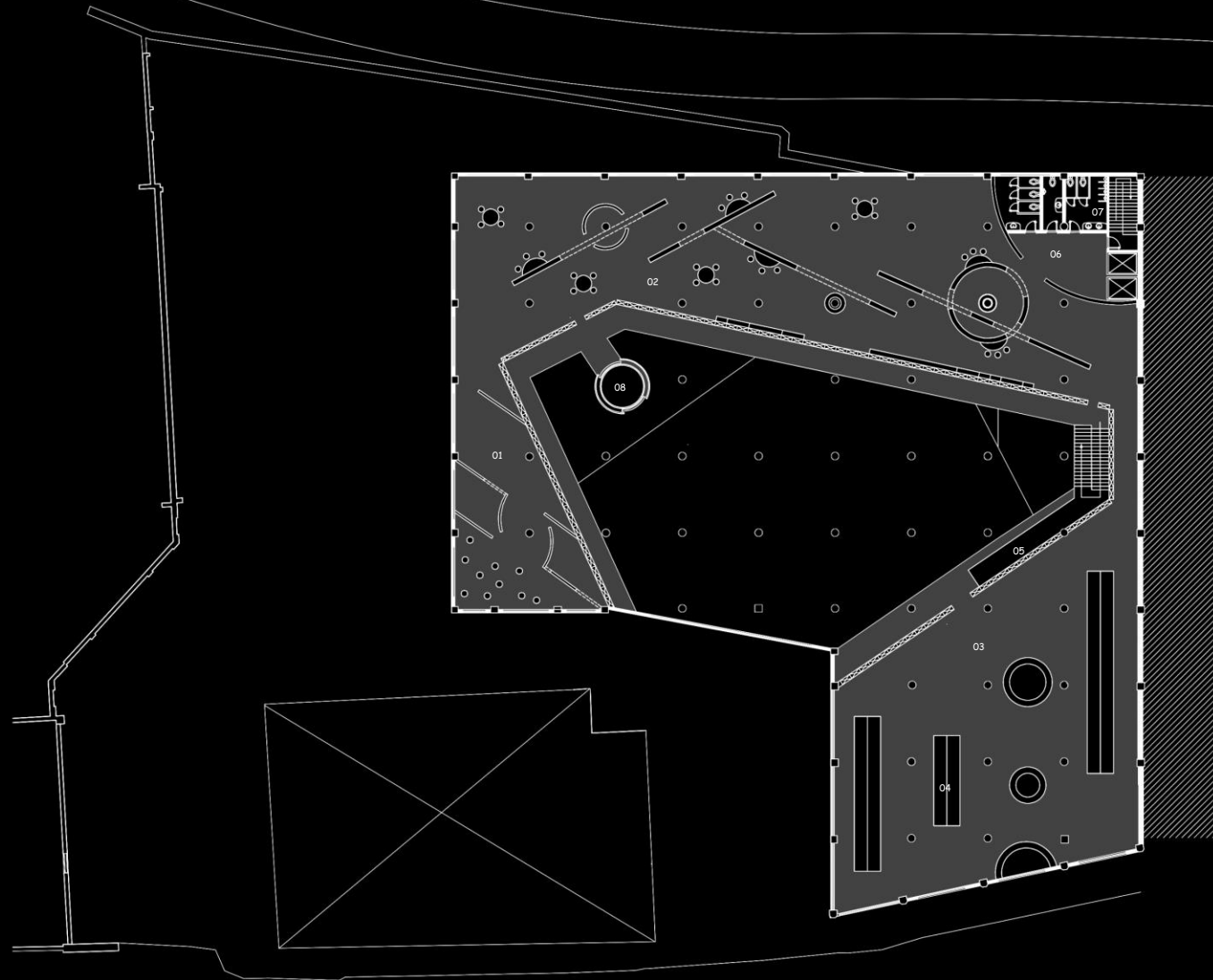
- 01 Video area
- 02 Digital space
- 03 Digital media consulting room (staff office)
- 04 multi-function room
- 05 Small mezzanine floor
- 06 infrastructure room
- 07 toilet
- 08 lift



Floor 02

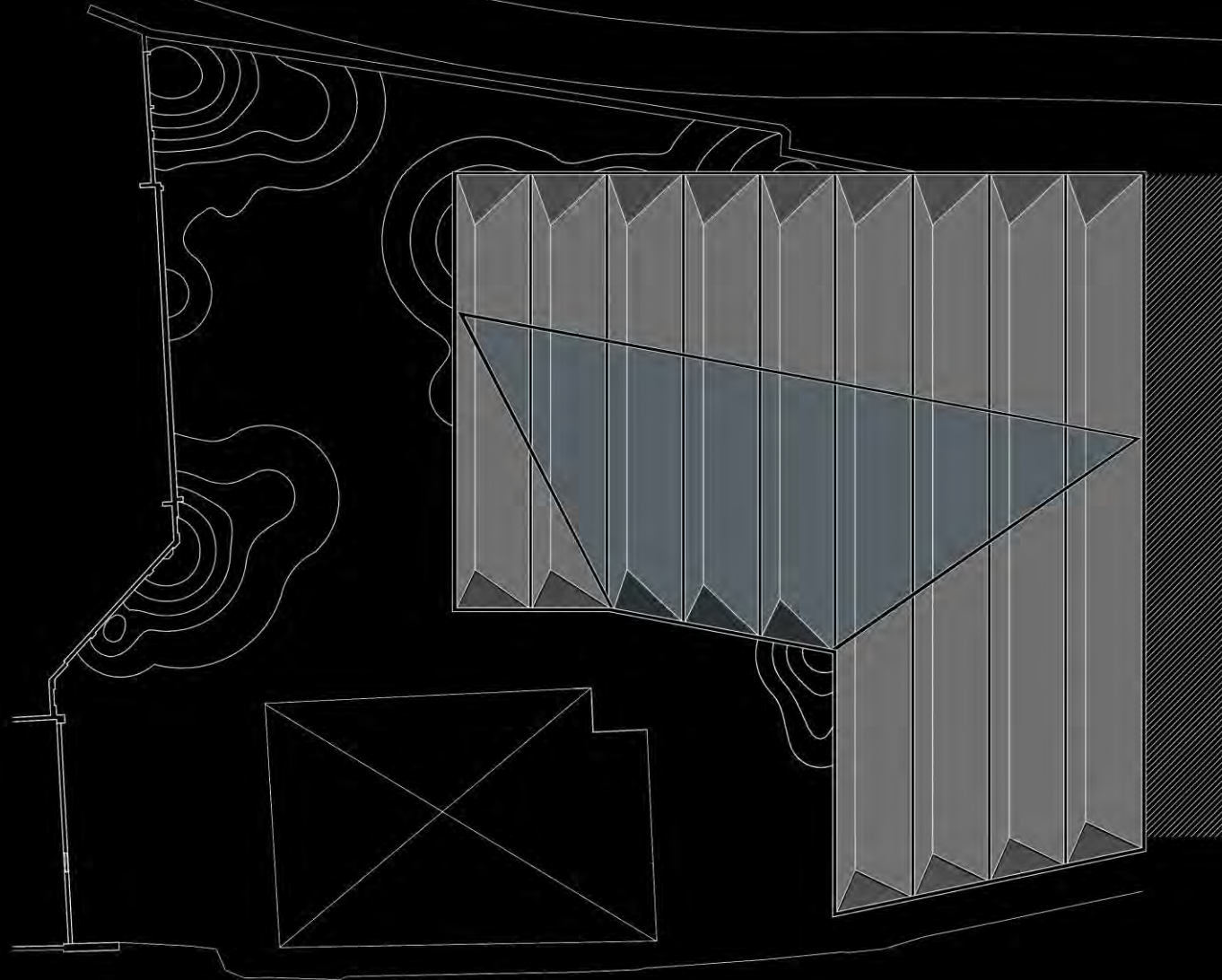
RIVER

- 01 Interactive art space
- 02 Art area
- 03 Rest area
- 04 Sleeping pod
- 05 Small mezzanine floor
- 06 infrastructure room
- 07 toilet
- 08 lift



Floor 03

RIVER



Roof plan

Reading walk



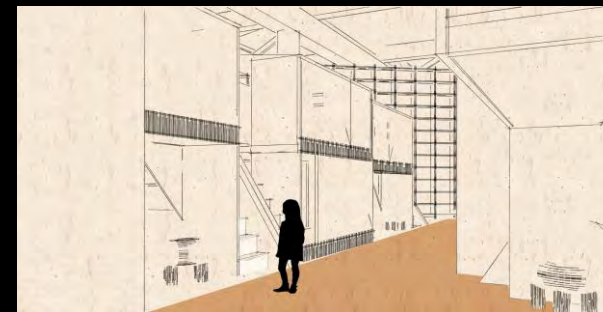
She entered the library through the garden gate.



In the city of books on the ground floor, she picked out books.



She took her book and tried to find a space on the mezzanine floor to read.



She was a bit tired. She went to the sleep pod for a nap.

Study walk



He walked into the elevator that could go directly to every floor.



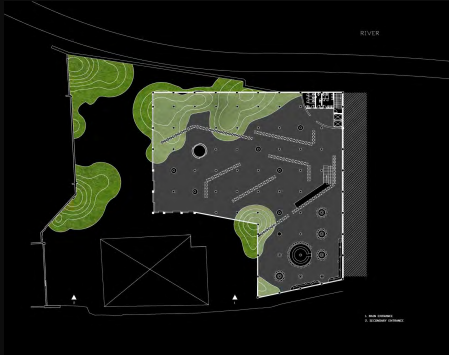
He walked into the classroom for an after-school class.



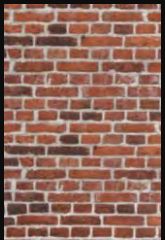
After class, he was going to go to study room to finish his homework.



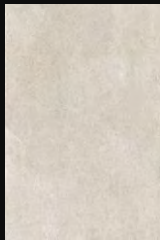
After finishing all his work, he went to the art studio, where he wanted to take a break from painting.



Keep floors, columns and walls in the building.



RE-USED BRICKS

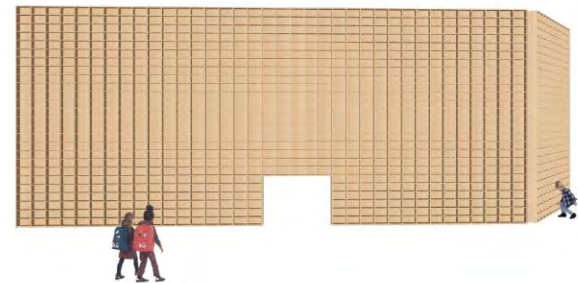
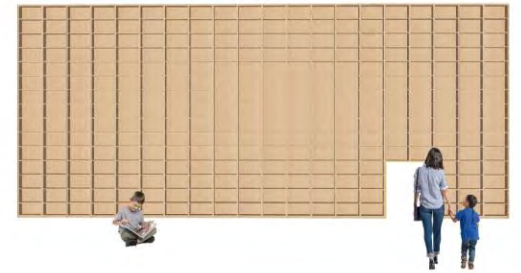
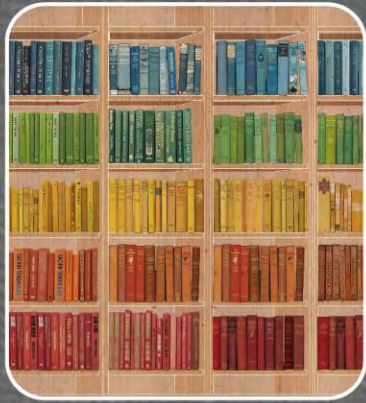


CONCRETE

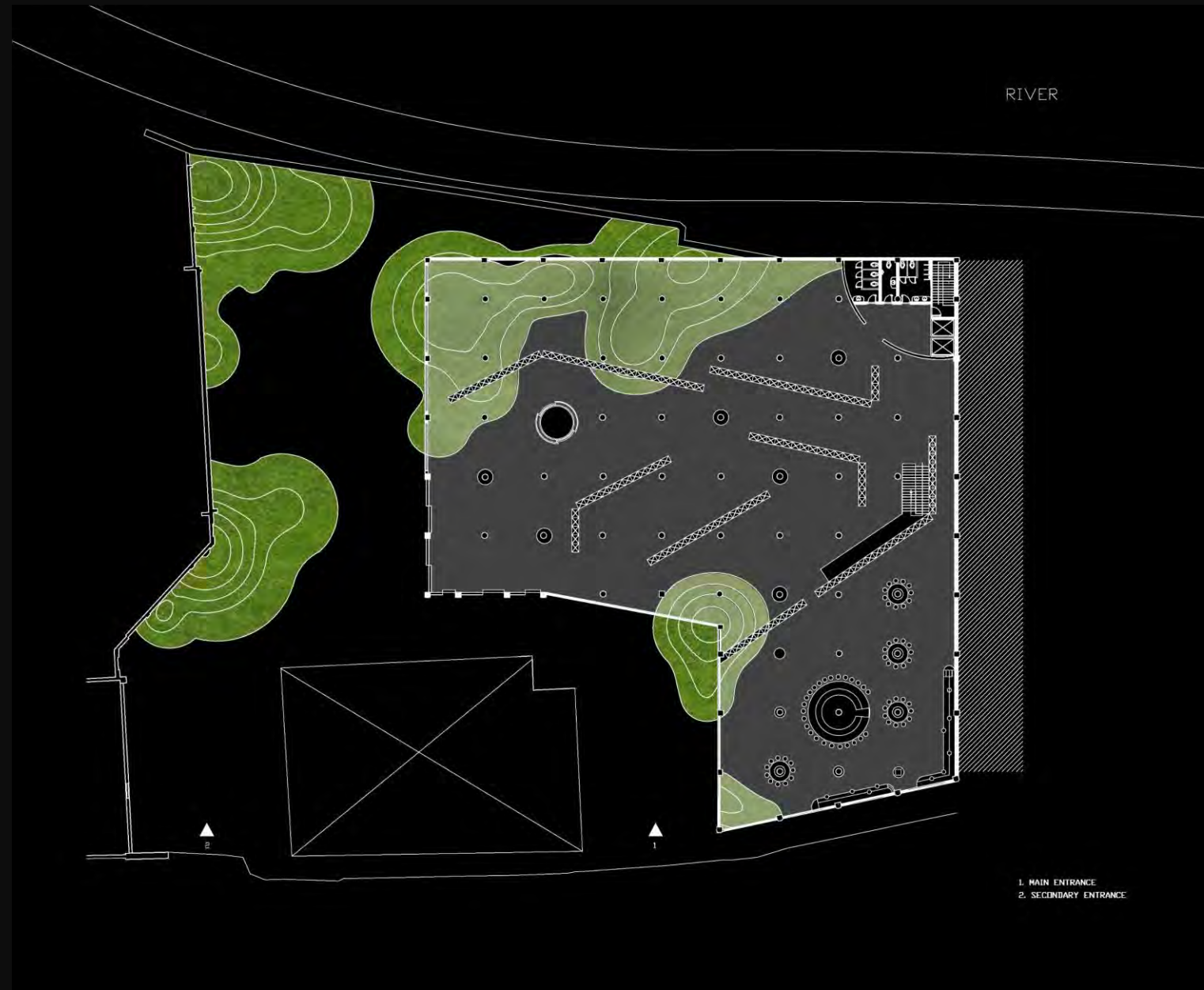


FLOOR 00

BOOKS

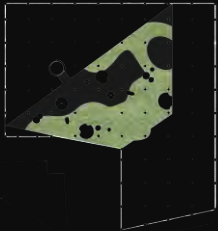


FLOOR 00

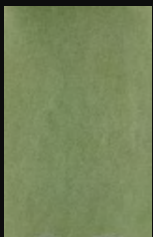


RIVER

1. MAIN ENTRANCE
2. SECONDARY ENTRANCE



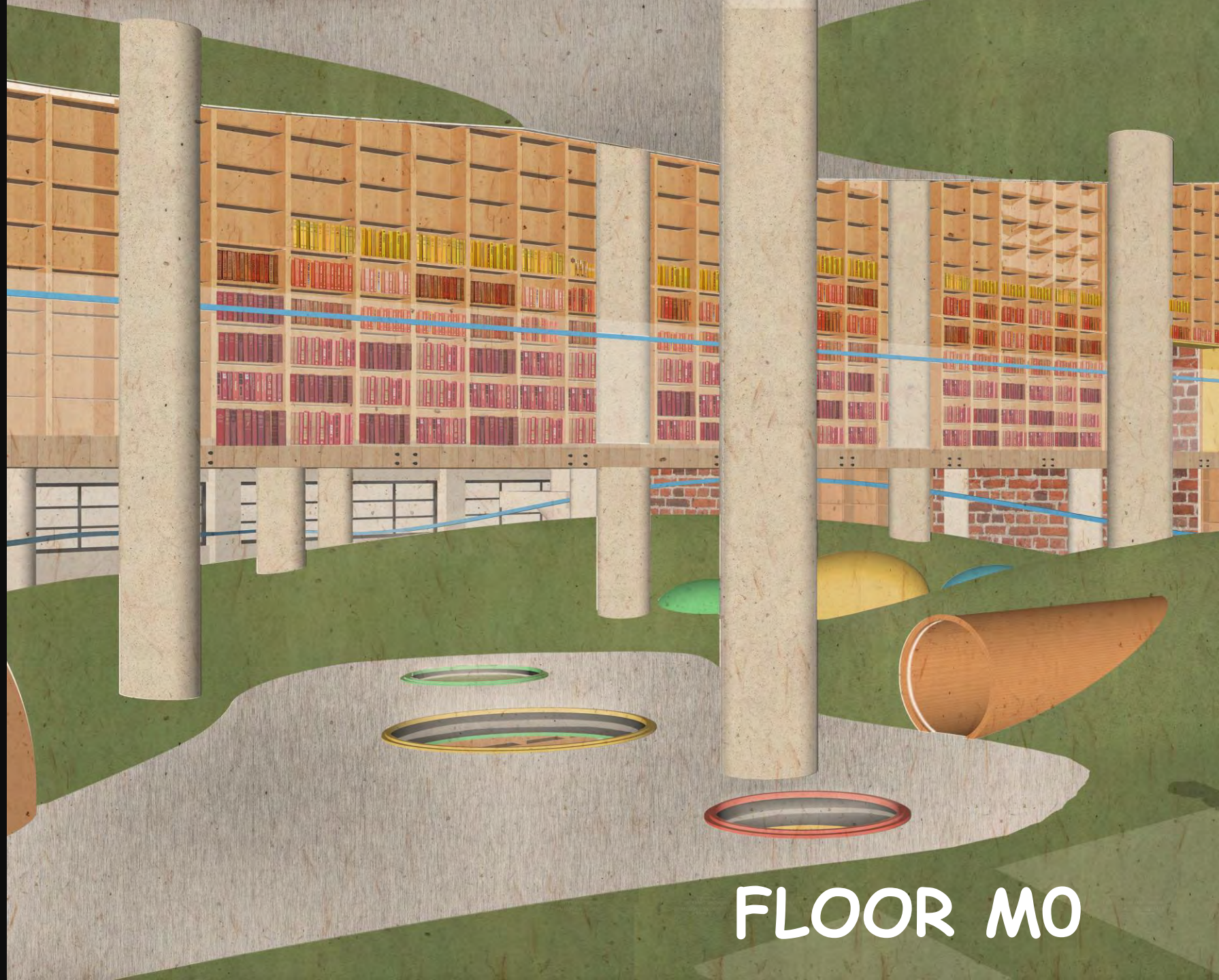
Keep most of the steel sheets on mezzanine floor



Blended
Fabrics



RE-USED
STEEL
SHHEET



FLOOR M0



FLOOR M1

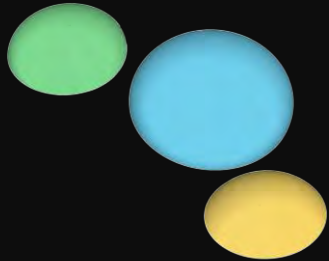
Explore



Mini log cabin



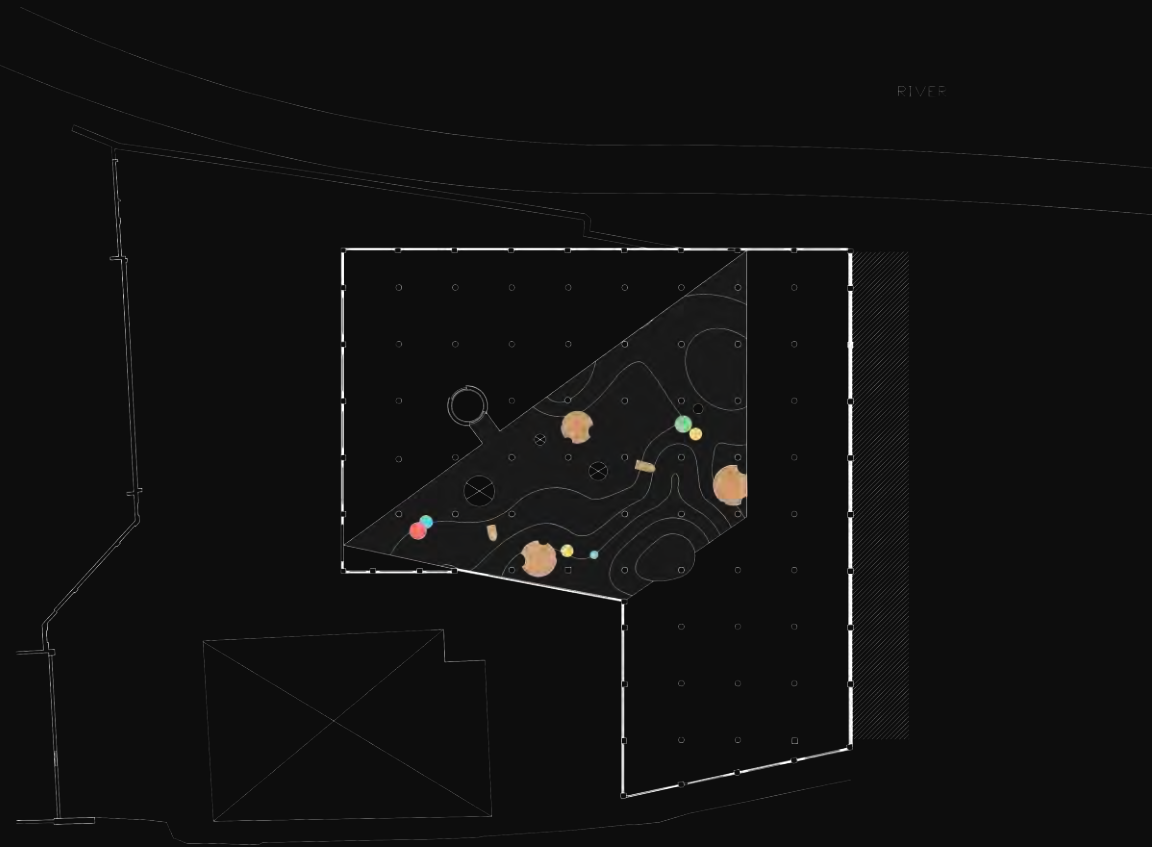
Windows on the floor



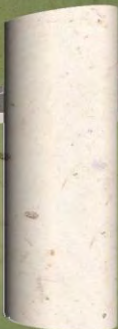
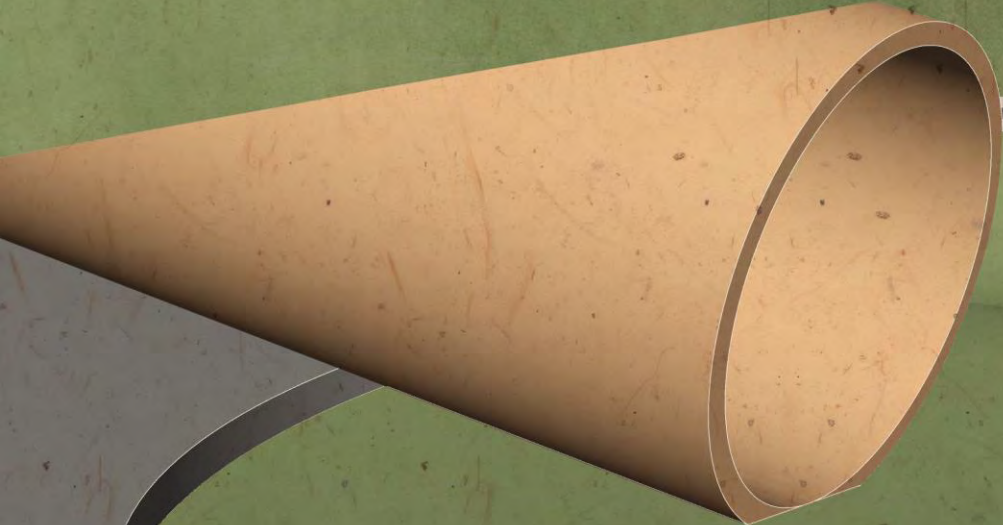
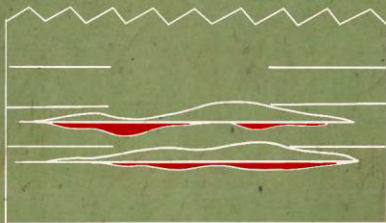
Wood "stone"



Small tunnel

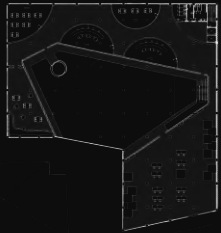


Inside

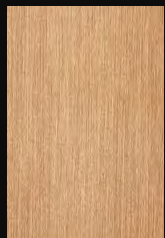


FLOOR 01





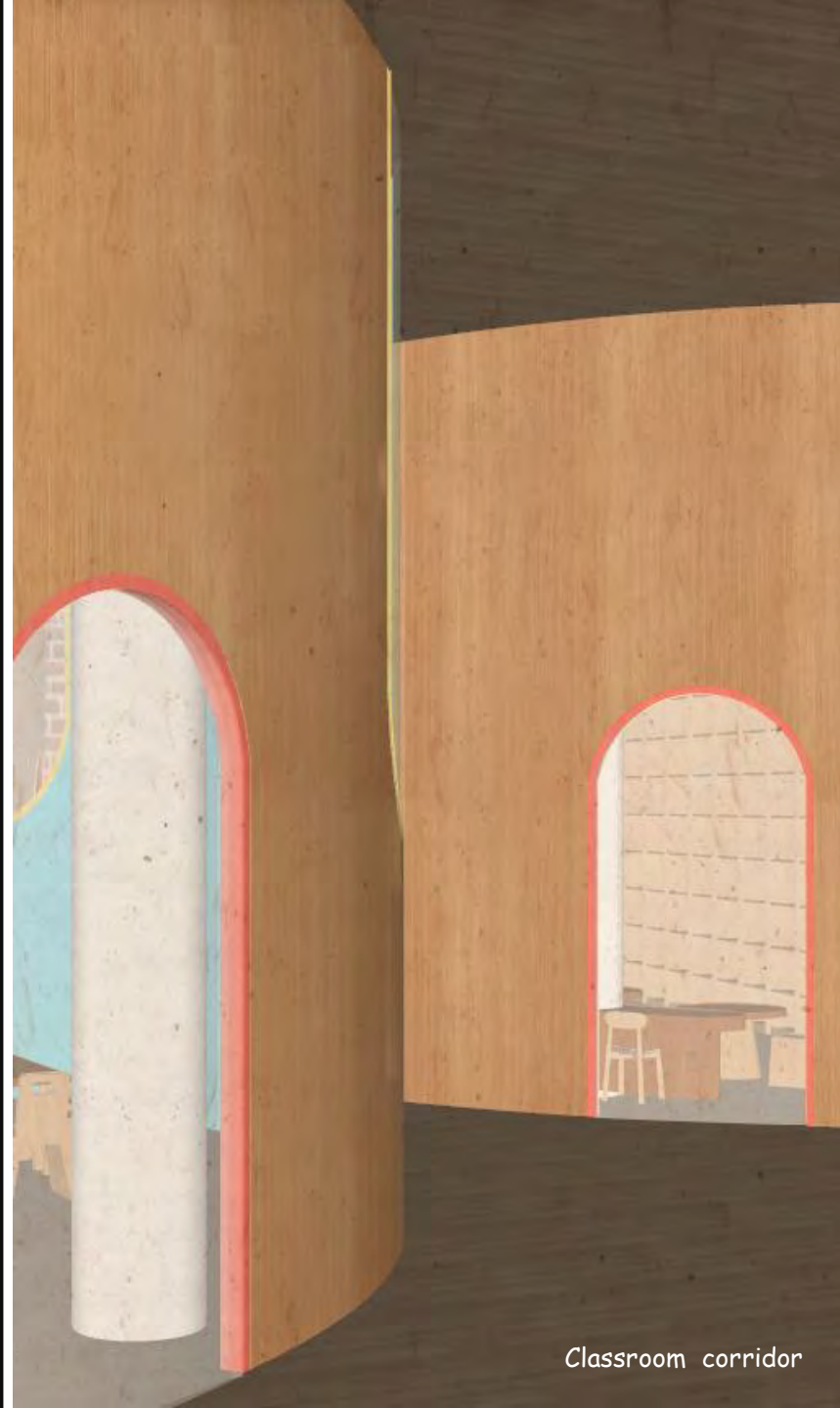
Keep the shape and position of the window



WOOD



RE-USED METAL



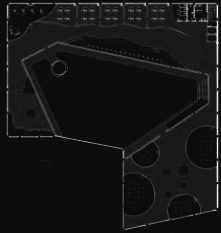
Classroom corridor

Private study room

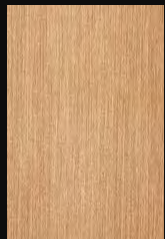


FLOOR 01

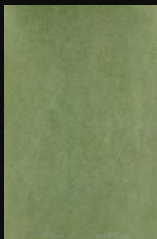
FLOOR 02



Keep the shape and position of the window



WOOD

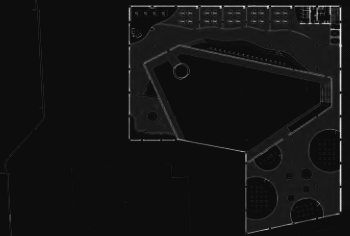


Blended Fabrics

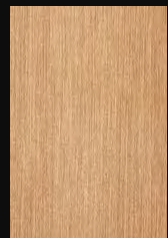




FLOOR 03



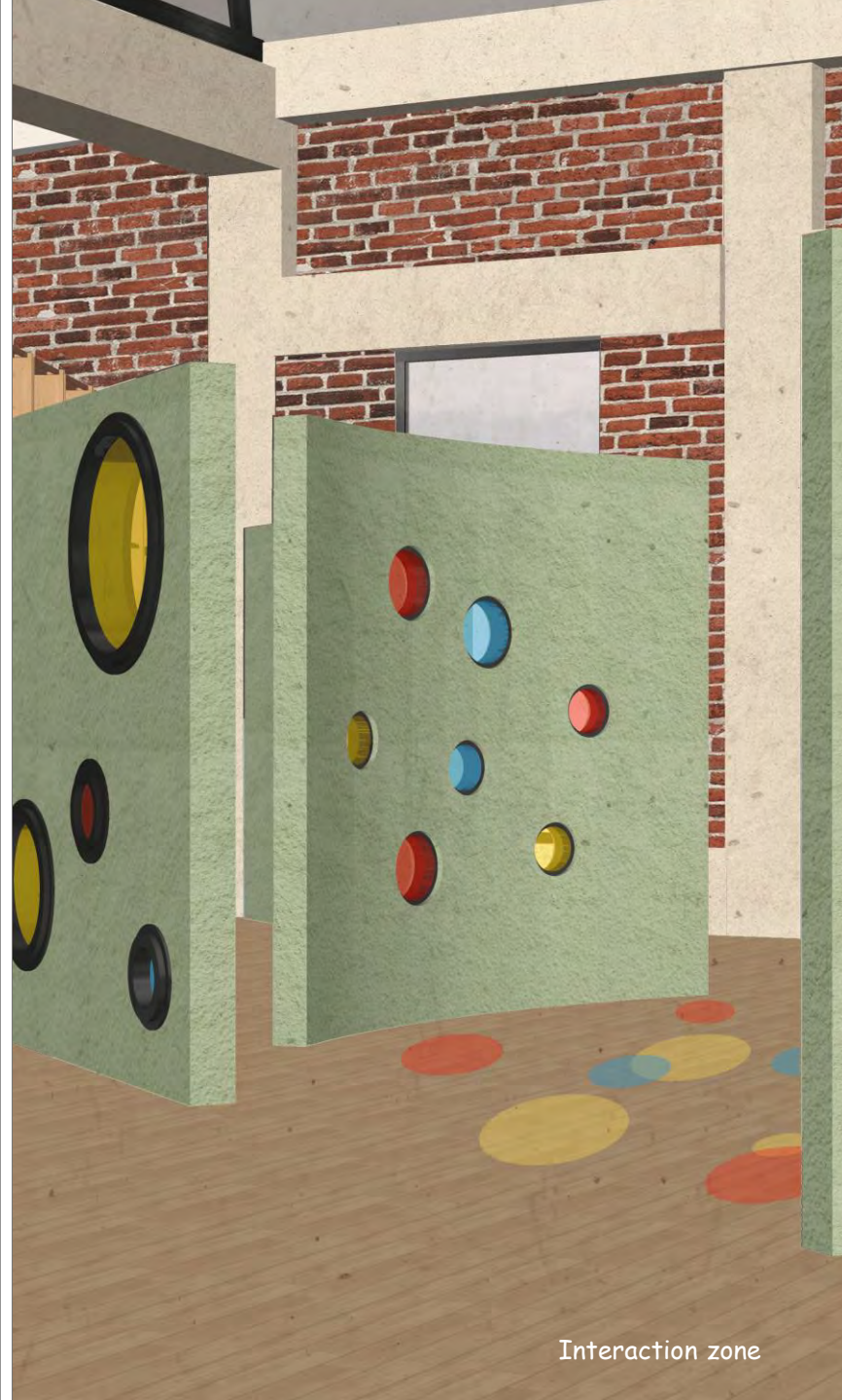
Keep the roof structure



WOOD



Recycled Glass Concrete



Interaction zone



Sleeping pod

FLOOR 03