

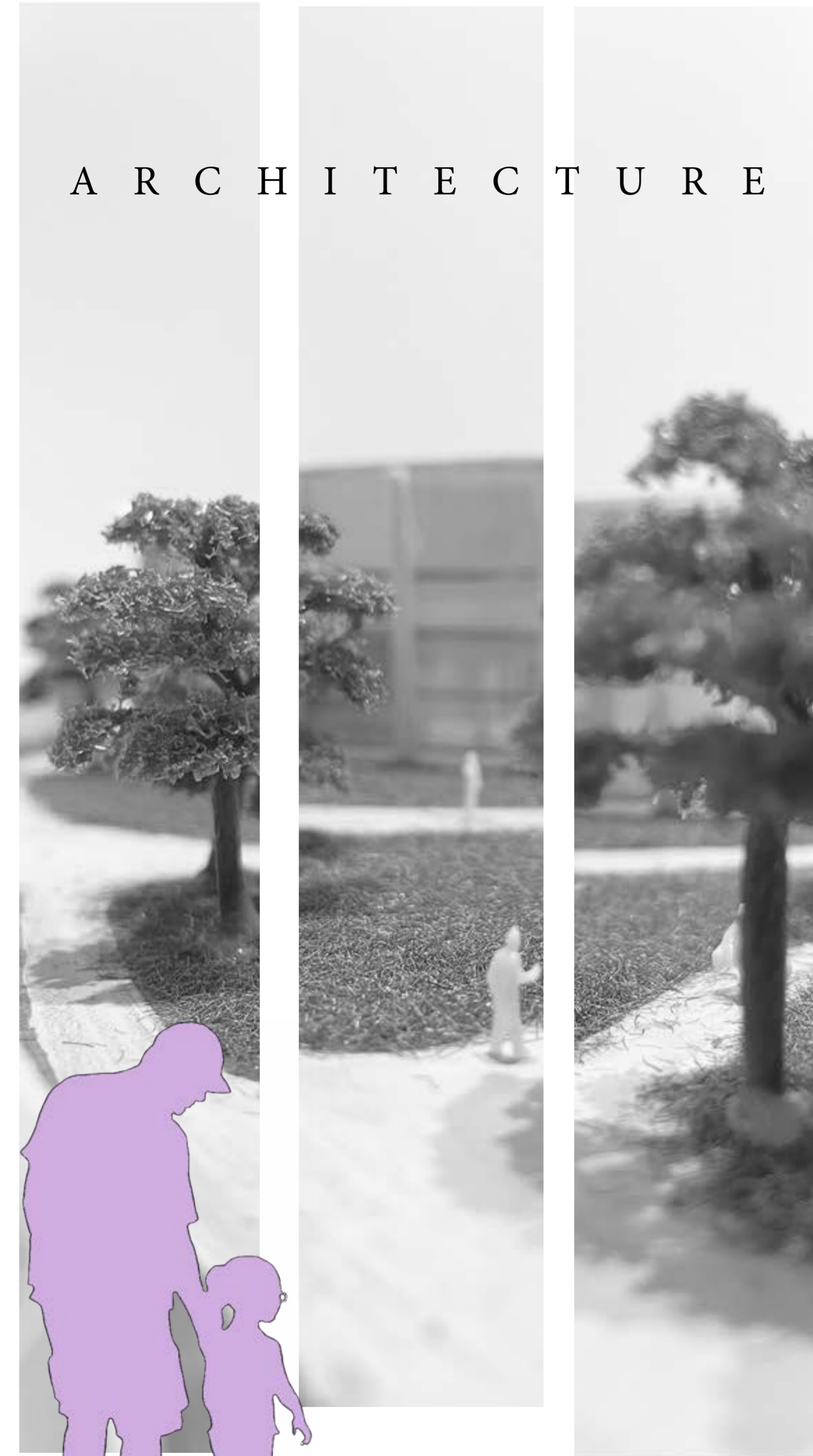
A R C H I T E C T U R E

PORTFOLIO

ARTS AND COMMUNITY CENTRE:
RESEARCH AND DEVELOPMENT

AMY GALEA

T1A1840-2223 DESIGN STUDIO 3:
PLACE AND ARCHITECTURE
JAN 2023



ARTS AND COMMUNITY CENTRE: RESEARCH AND DEVELOPMENT

SITE ANALYSIS

- 01: Routes to the site
- 02-05: Site analysis of the site and marsh
- 06: Culture of the site

PRECEDENT STUDY

- 07-09: Precedent studies
- 10: mood-board
- 11: Client analysis and mind-maps

DESIGN DEVELOPMENT

- 12: Concept idea (1) x2 design ideas
- 13: Concept idea (2) chosen design (3)
- 14- 17: Developing design (3)

TECHNOLOGY

- 18- 20: Thinking about the construction and materials

ARCHITECTURAL DRAWINGS

- 21-24: Sections, elevations and plans

FEEDBACK DEVELOPMENT

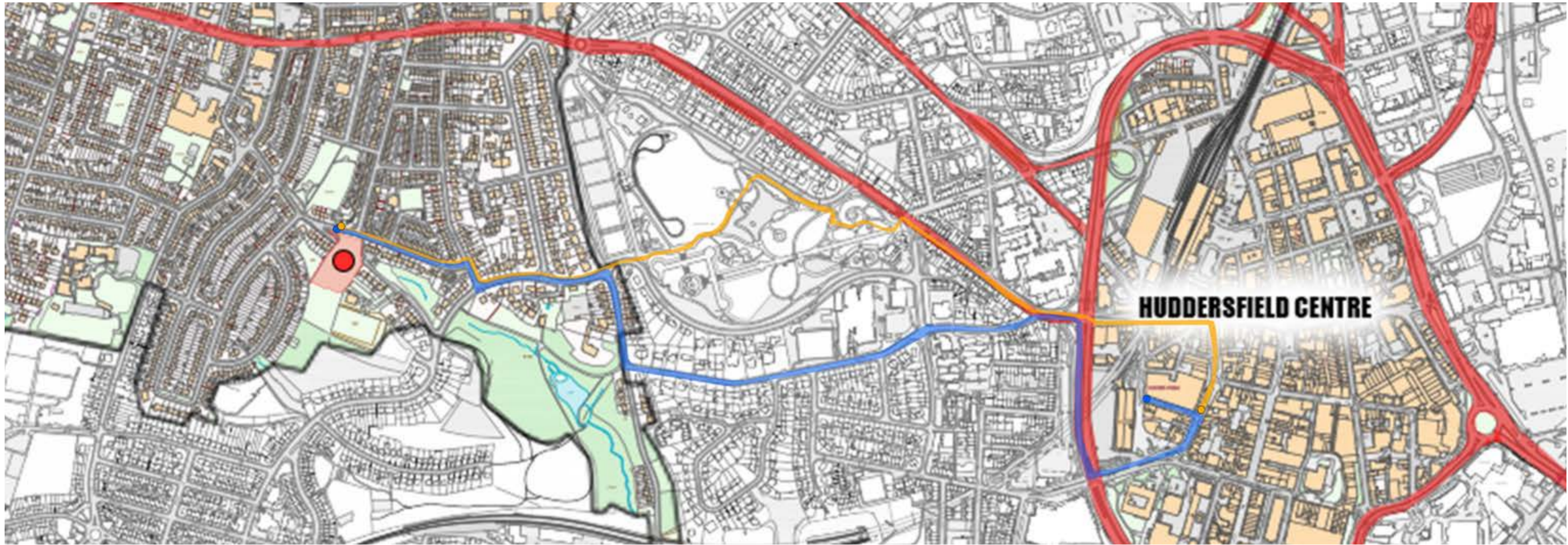
- 25-26: Sections, elevations and plans






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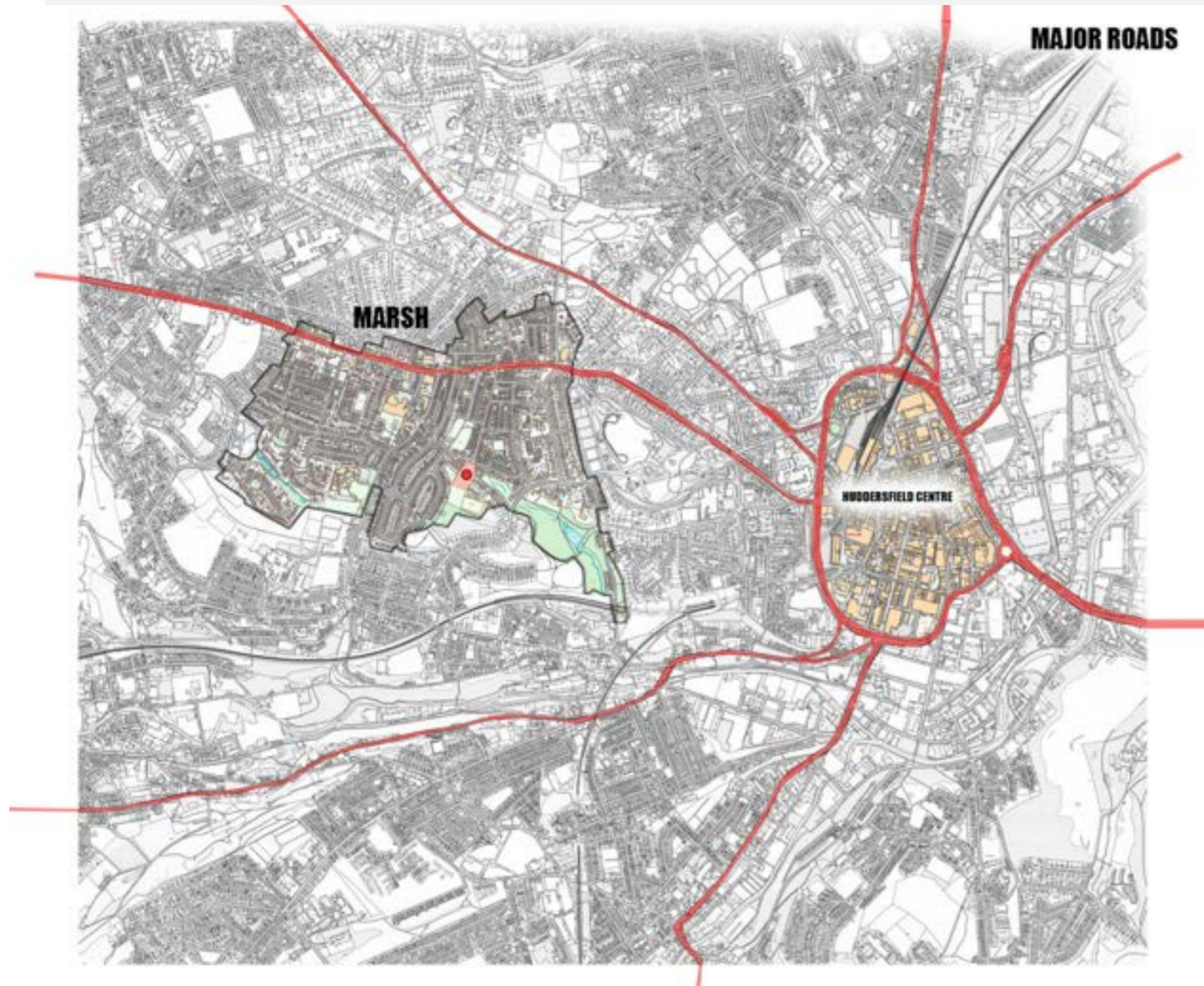
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-  CYCLE ROUTE (10 MINS)
-  BUS ROUTE (8 MINS)
-  MAIN ROADS

HUDDERSFIELD CENTRE

MAJOR ROADS



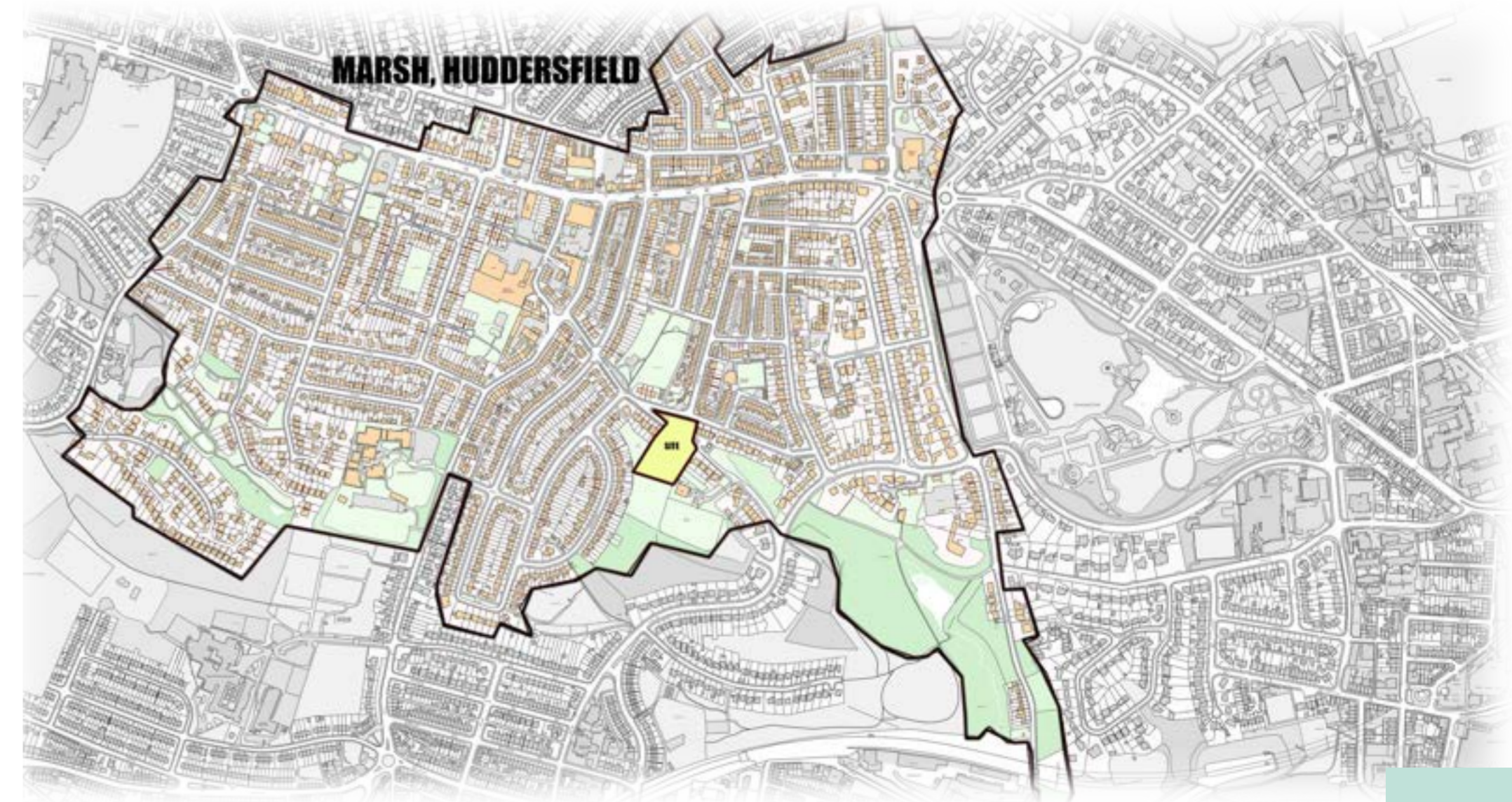
VEGETATION



NODES



MARSH BOUNDARY



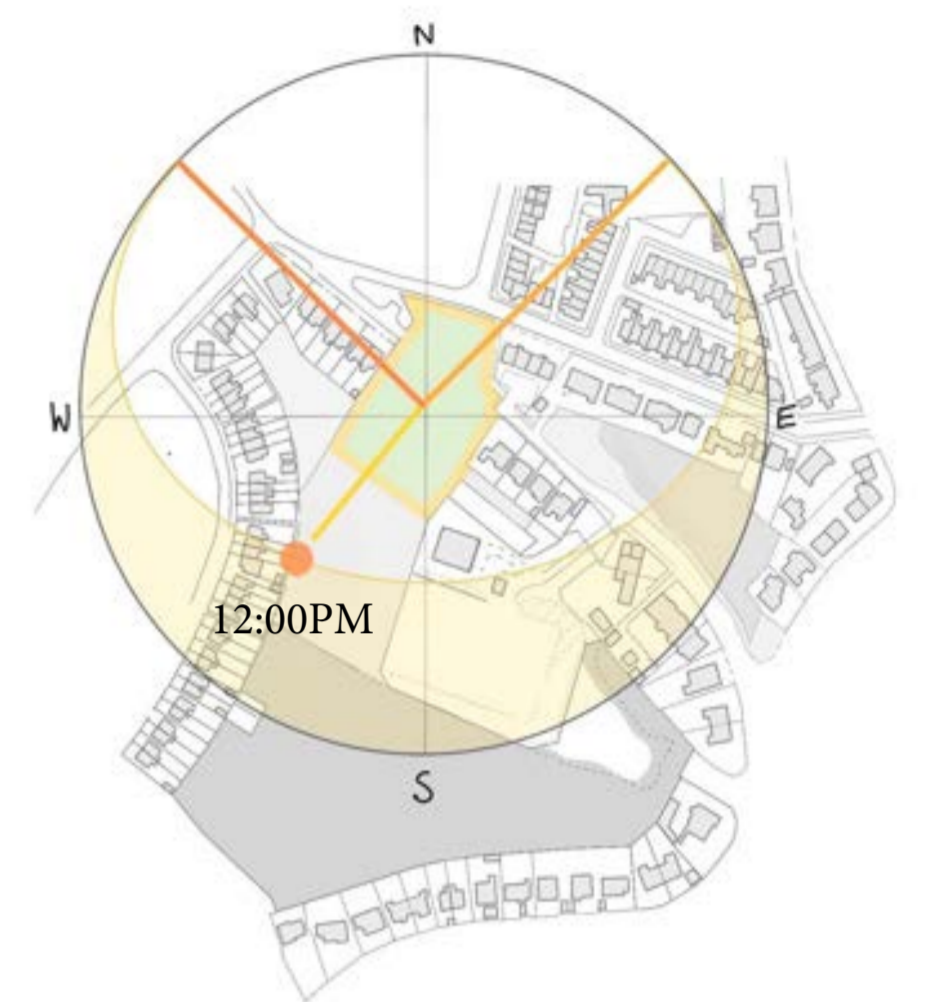
CIRCULATION



WIND DIAGRAMS

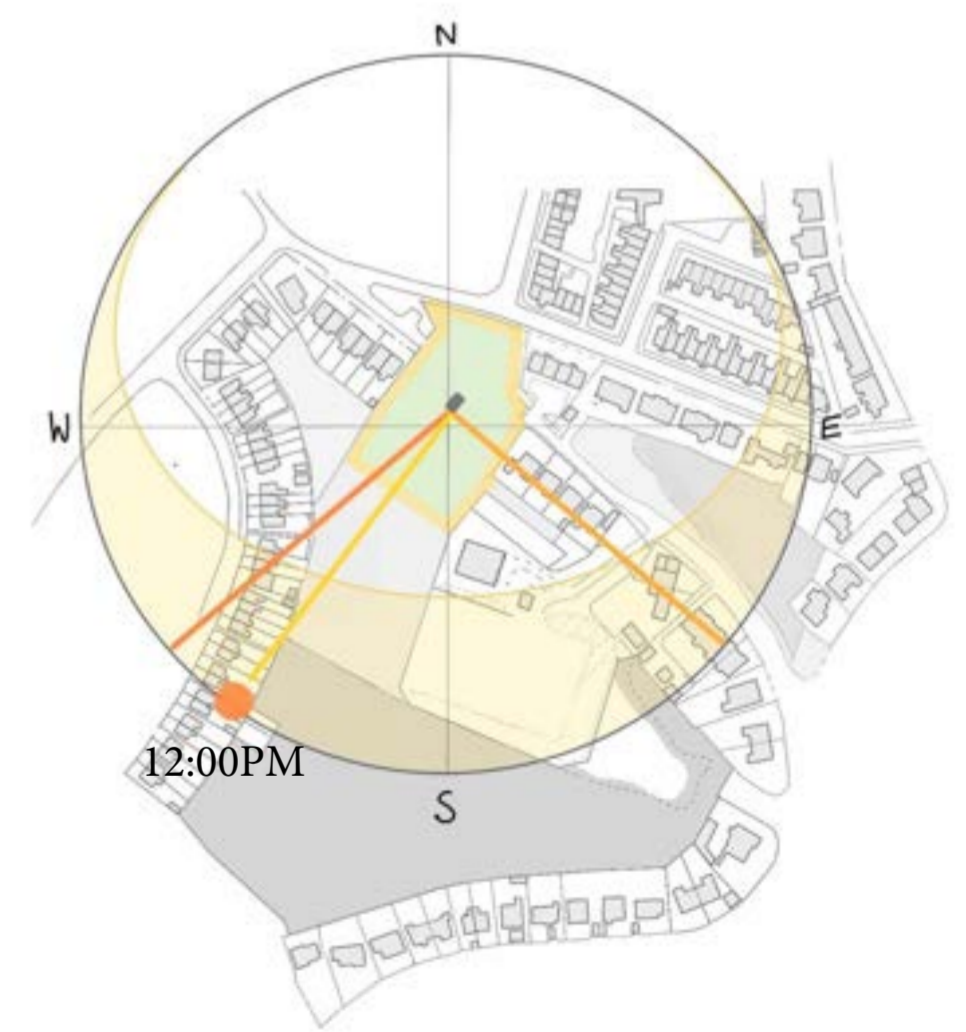
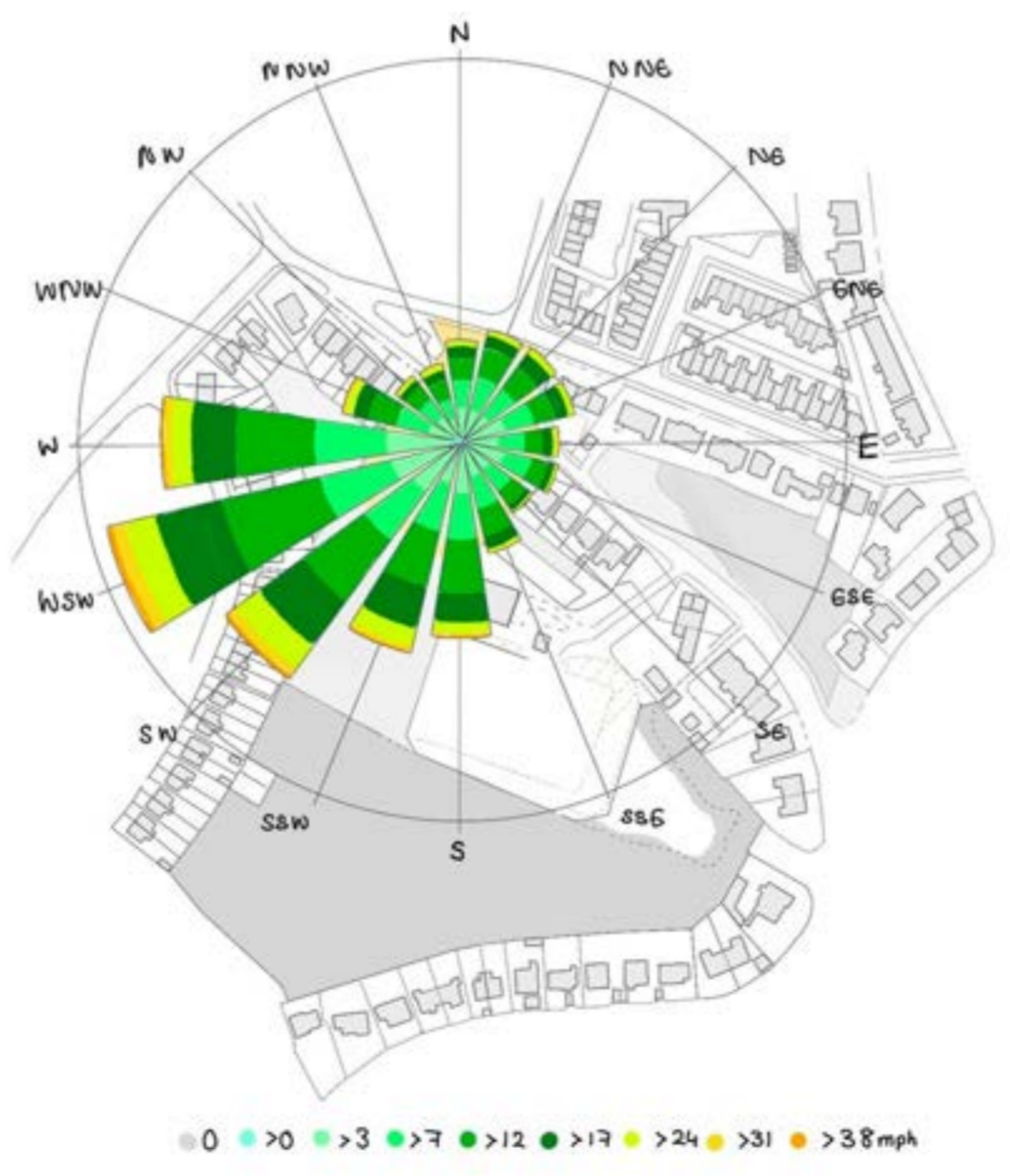


SUN DIAGRAMS



SUMMER SOLSTICE

TOPOGRAPHY CONTOURS



WINTER SOLSTICE



SITE PHOTOS

SEASONS

The effect of the site due to seasons, effects the visual aspects of the site, nature changes, the sun changes and weather conditions these are elements to consider.

Autumn trees



Bus stop

Sun - coming over the hill casting shadows from the surrounding trees.



Junction and road in front of the site.



Slight hill



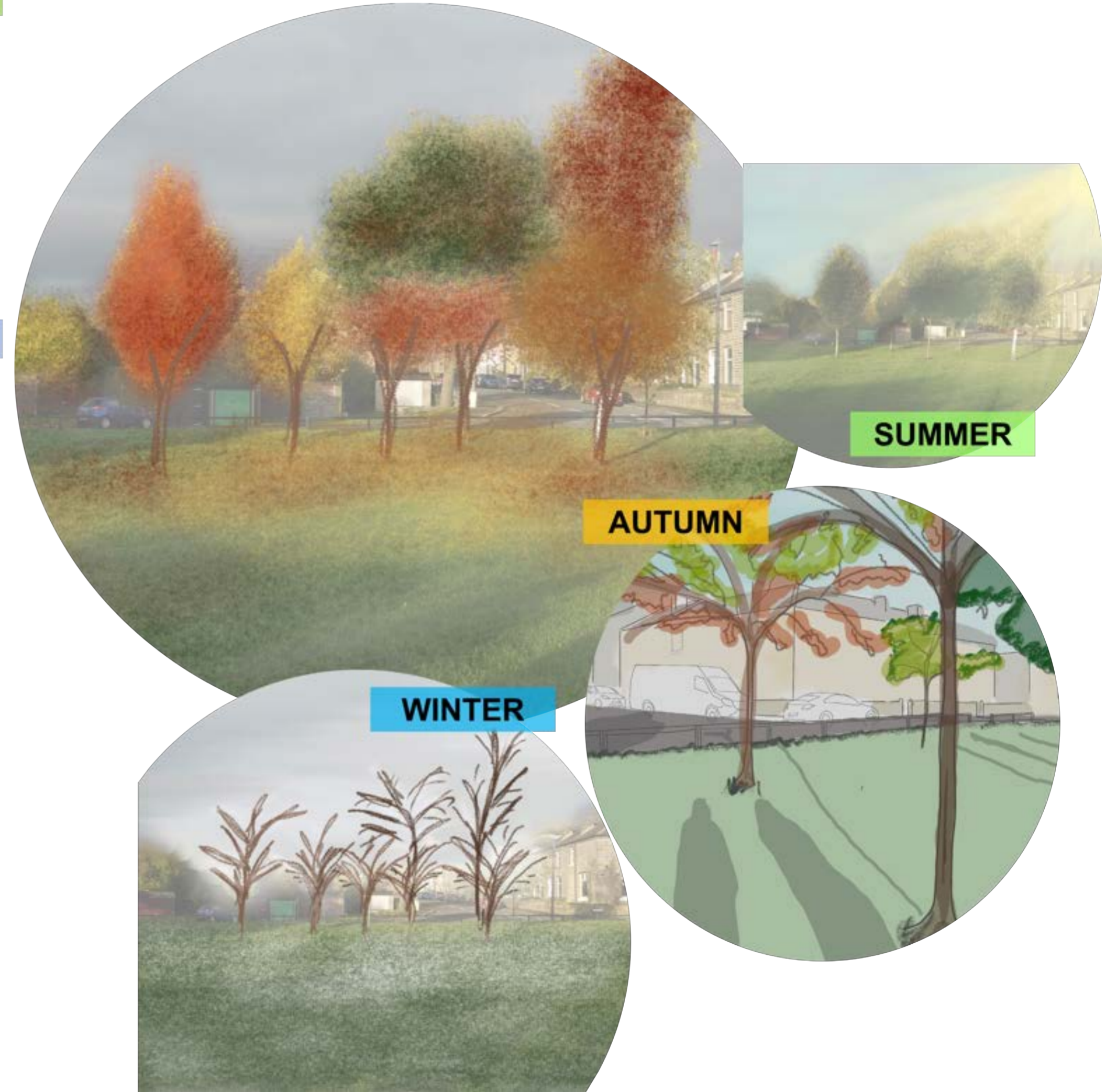
Neighboring house



Measuring boundaries



NATURE

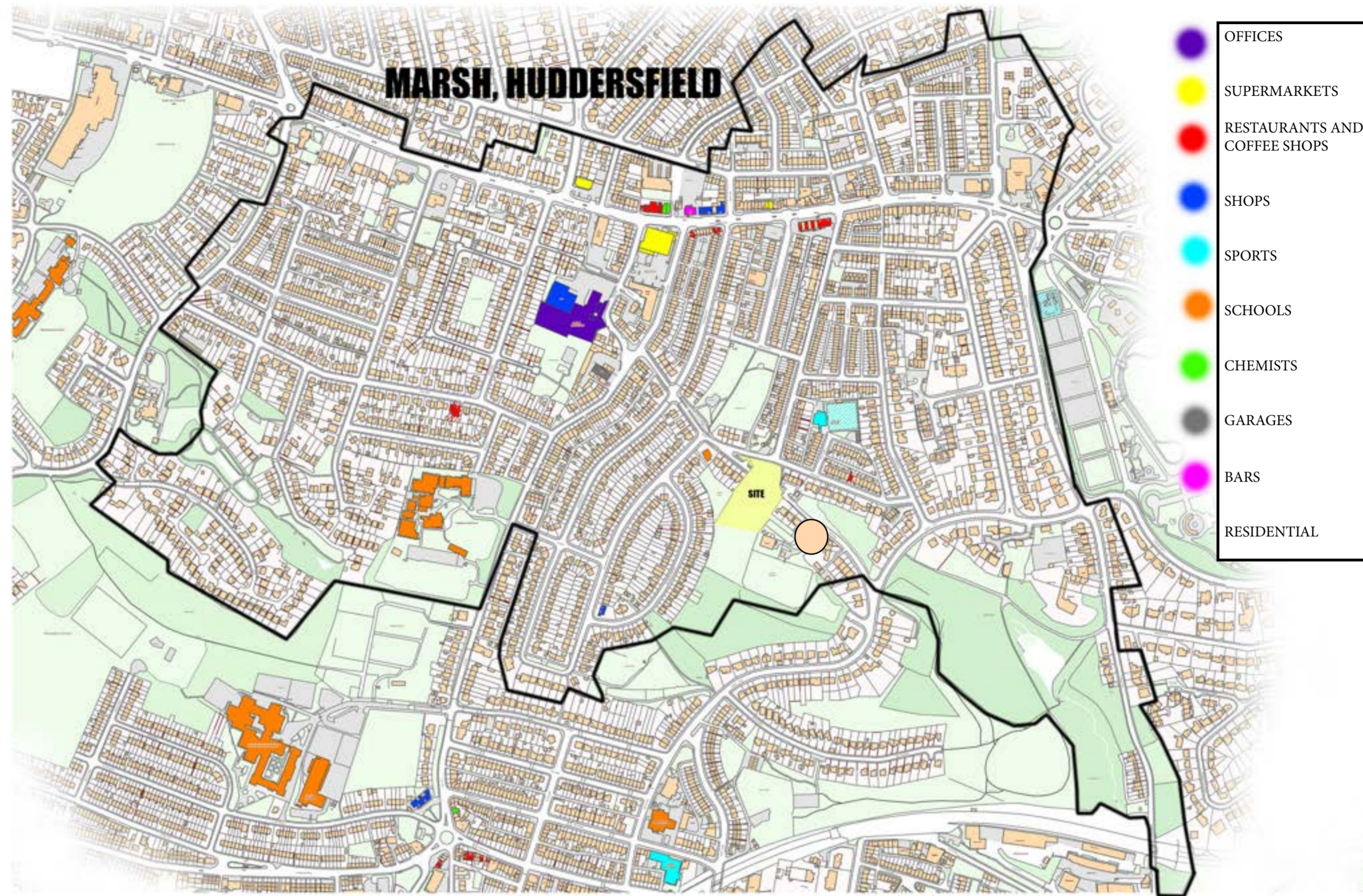


SUMMER

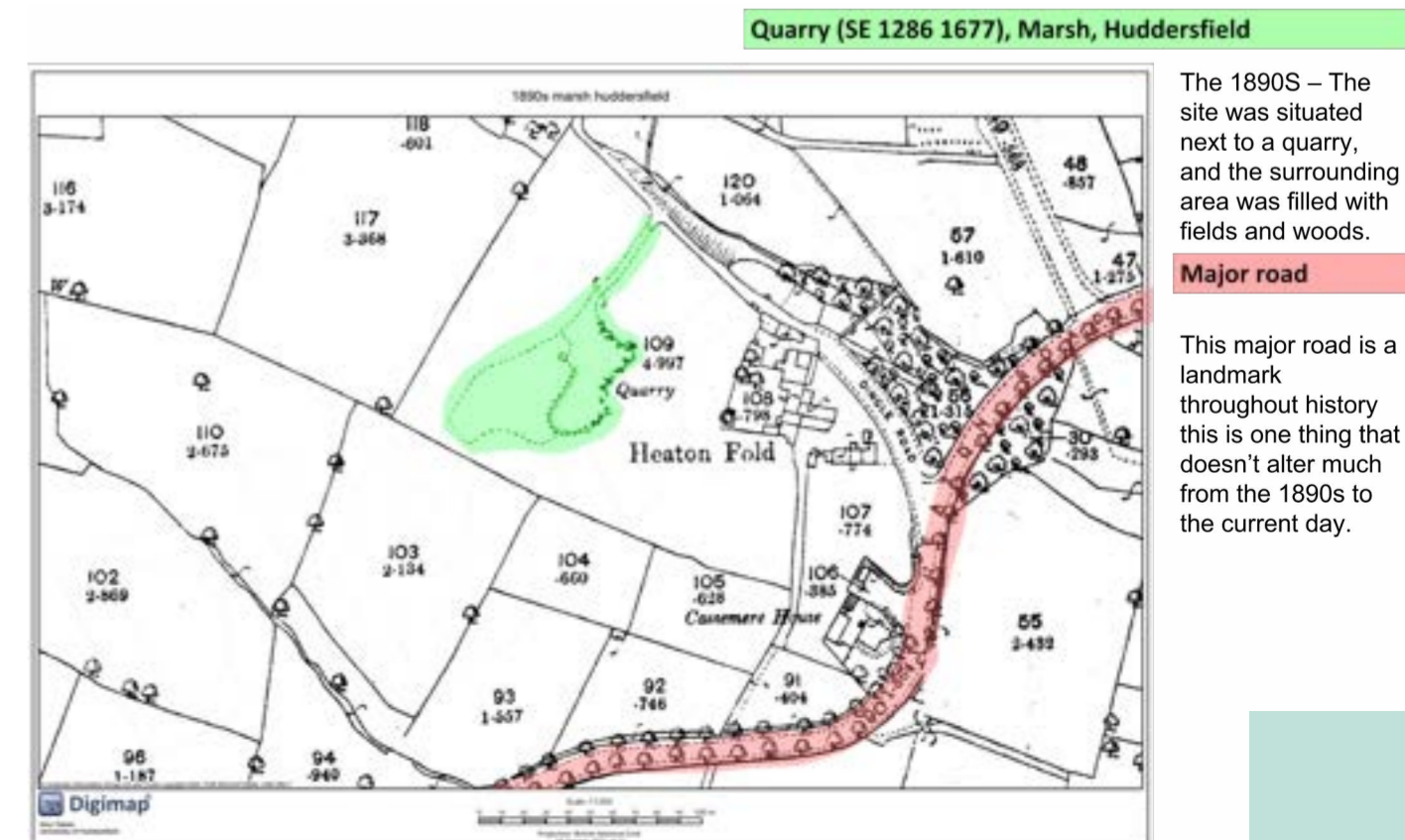
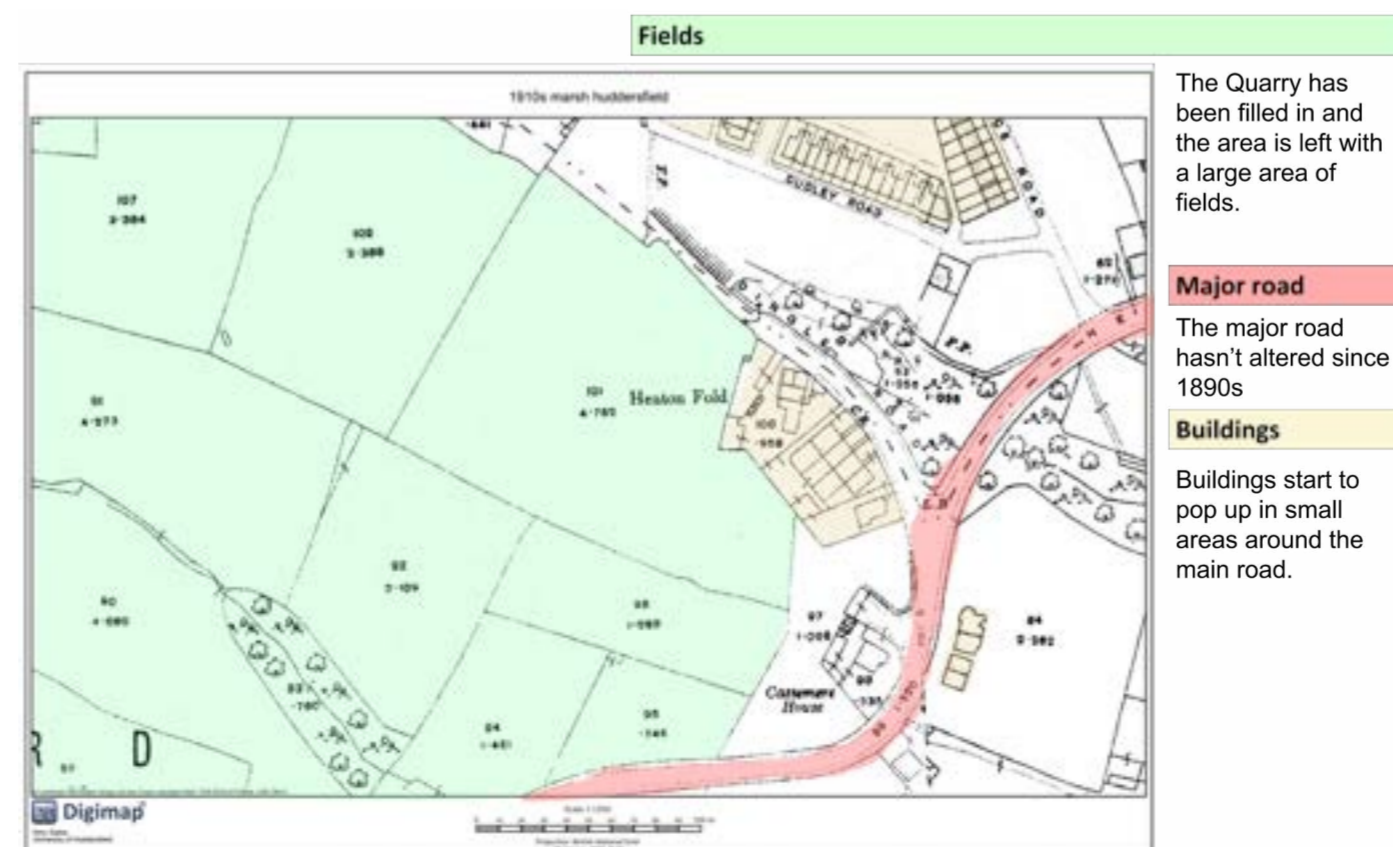
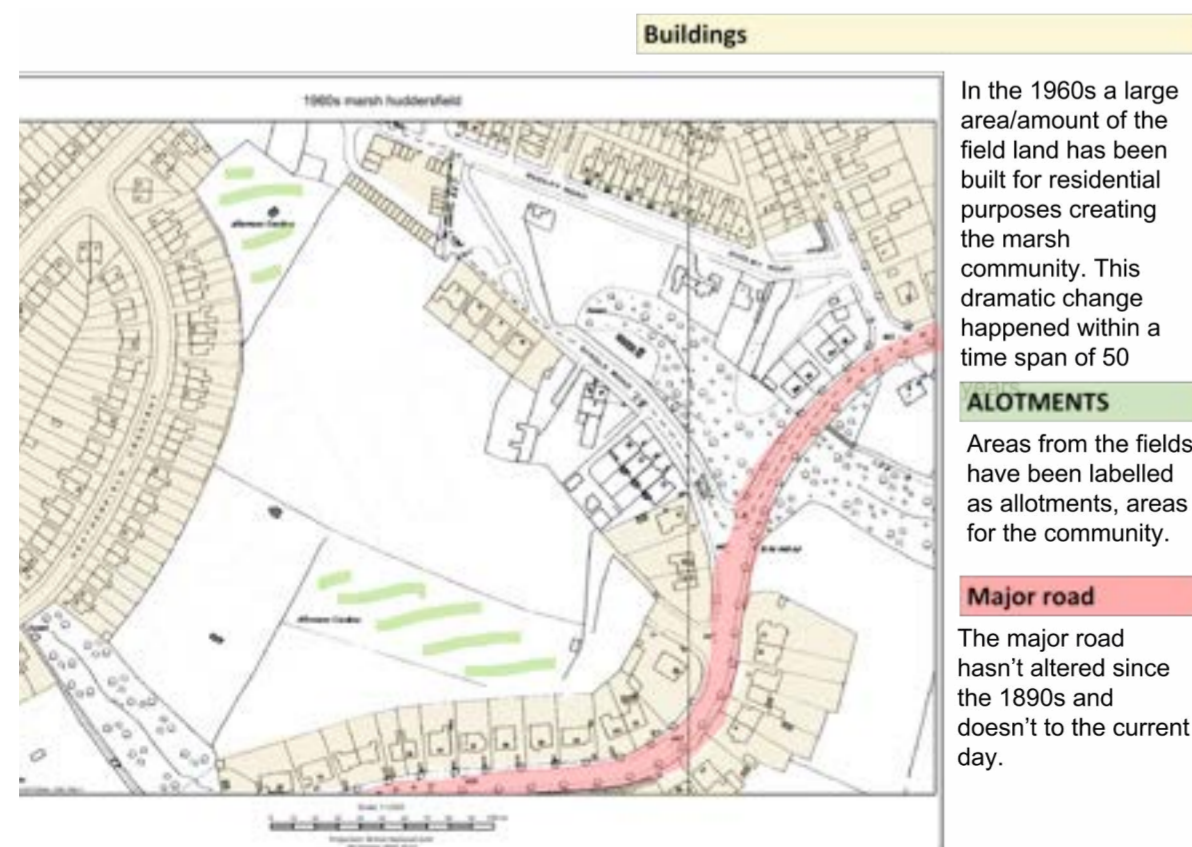
AUTUMN

WINTER

MARSH, LANDMARKS



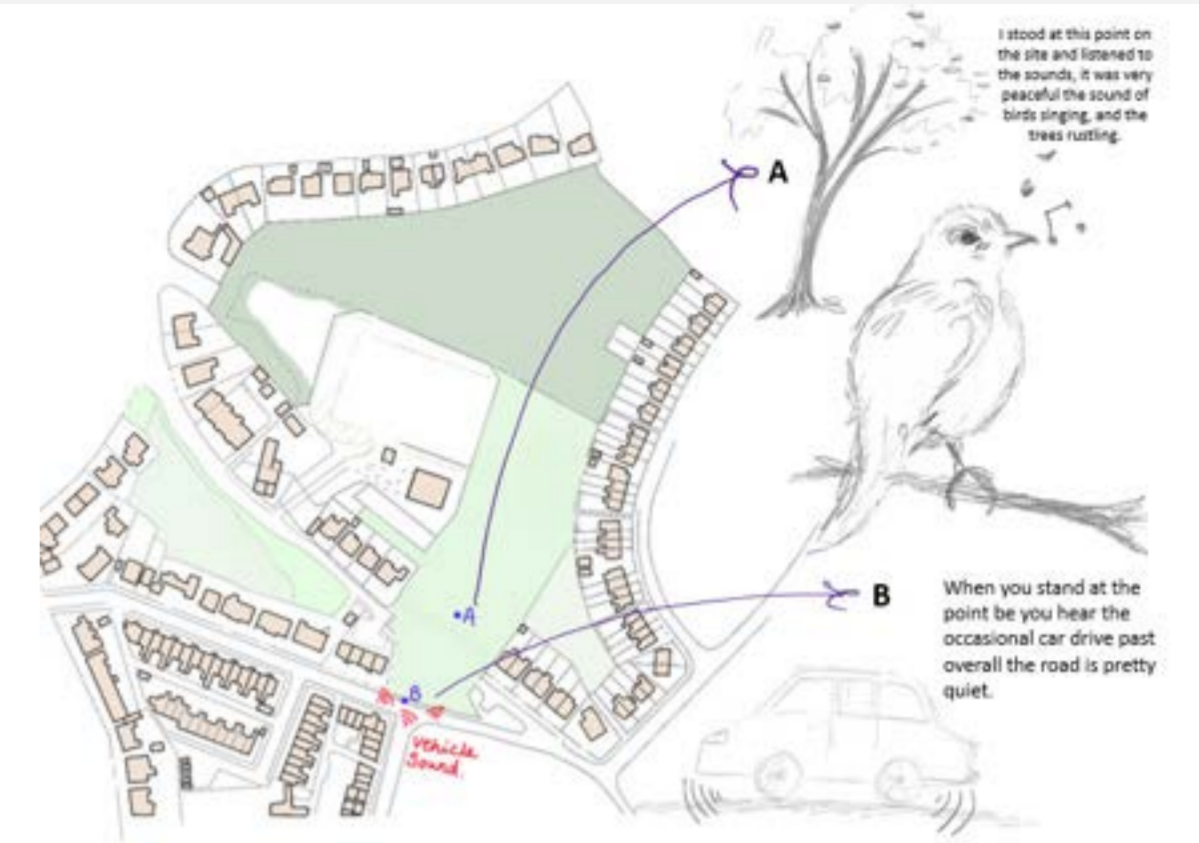
HISTORY OF THE SITE



SITE CULTURE IMAGE



SOUND



SITE BOUNDARIES



SURROUNDING EVENTS



WHAT'S AN ART AND COMMUNITY CENTRE?

- What's the arts?
 - Performing
 - Musical
 - Fine art
 - Painting
 - Sculpture
 - Literature (poetry)
 - Creative
 - Fashion
 - Design
- What sort of spaces?
 - Performing Arts – theatre space? Halls etc...
 - Gallery space
 - Musical performance
 - Workshops
 - Educational facilities
 - Technical equipment
 - Bookshop/library space
 - Music rooms

I have done some research on art and community centers and what they include, facilities, and more to help me understand what sort of spaces my design will want to include and why.

ARKANSAS ART CENTRE, UNITED STATES



This art centre was built as a series of pavilions all with the continuity of the pleated roofs in Arkansas. This was part of a large renovation project.

This art centre is a space to hold exhibitions, education, and performance facilities in Little rock US states capital.

Enticing entrance that pulls people in. Th large glazed opening lets you look into the building from a distance.



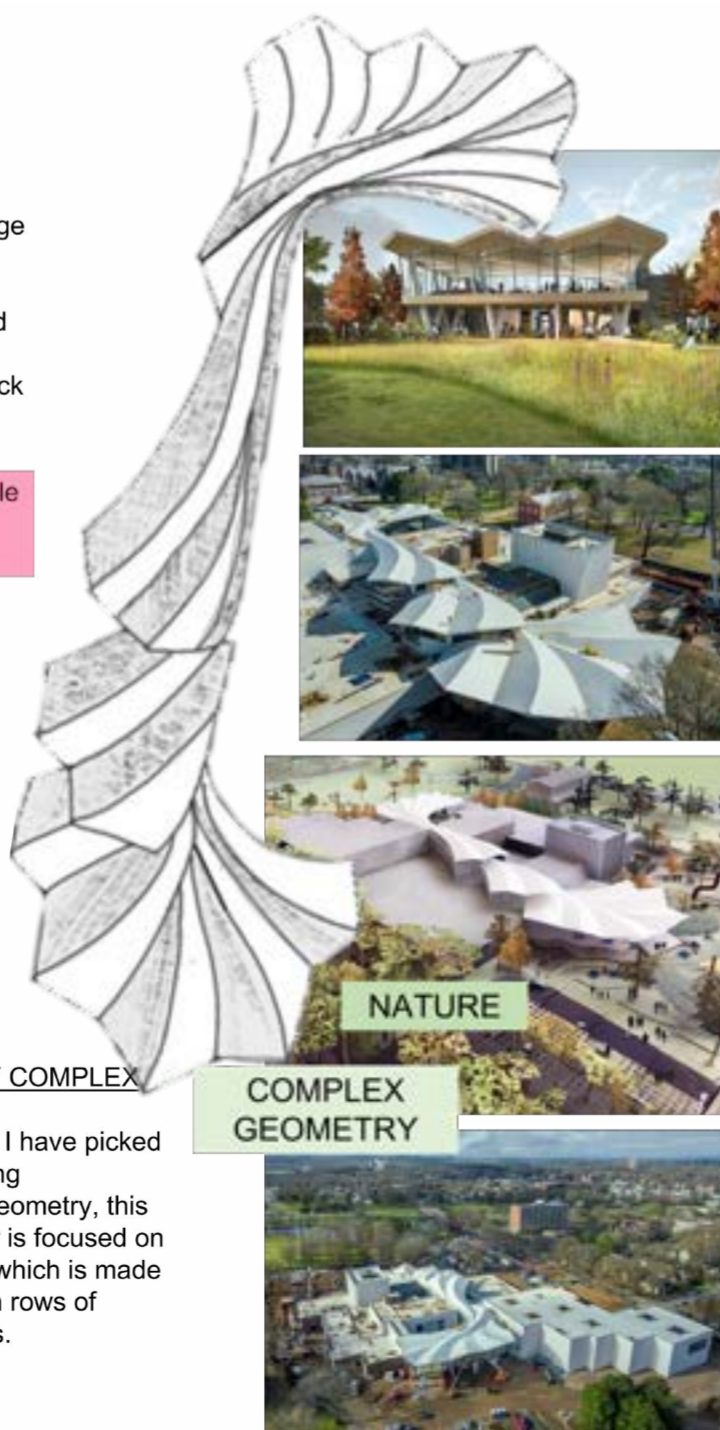
AIRY
LIGHT
BRIGHT
OPEN

OPEN, AIRY, OPEN
The glazed openings in the pleated roof create the space to feel open large and airy. The light bounces off the different angled walls and reflects off the glazed floor.

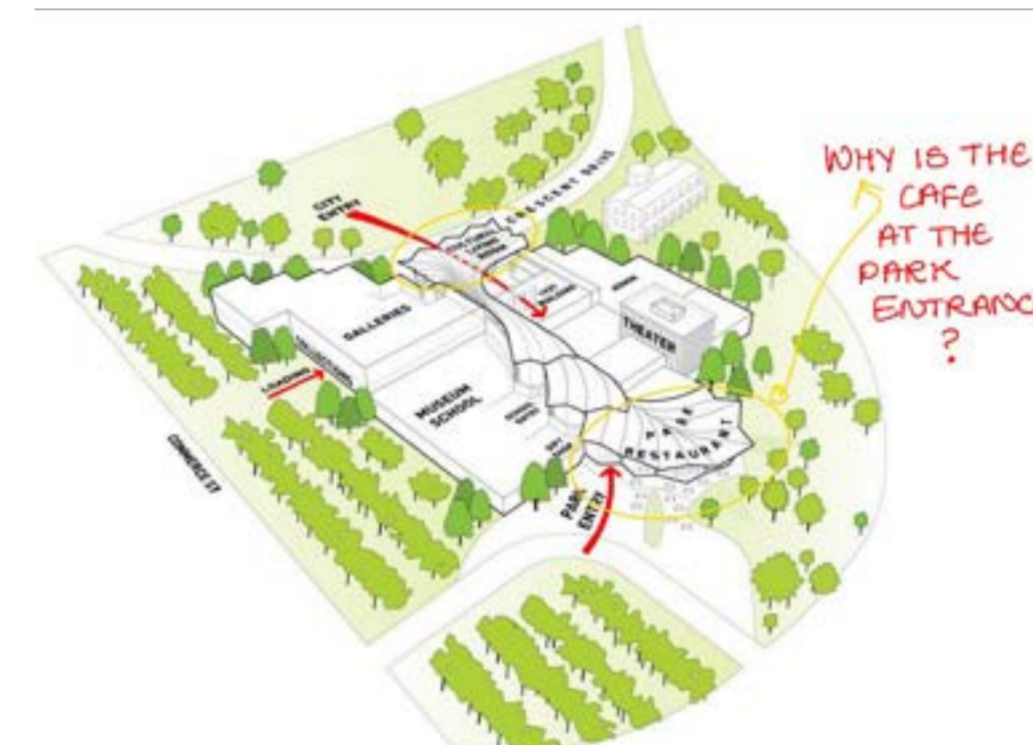
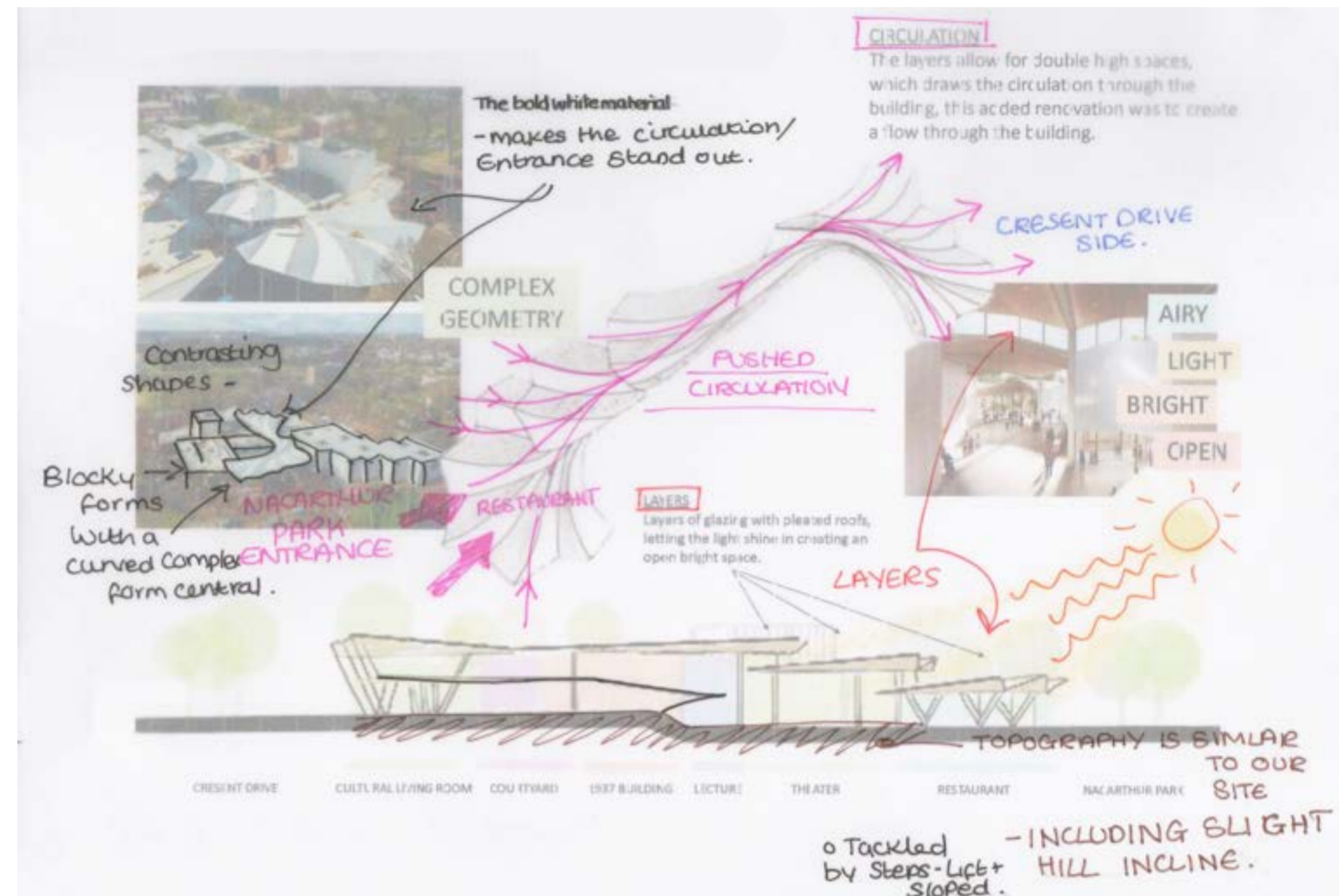


NATURE
This centre is surrounded with trees and greenery creating a welcoming atmosphere.

CONTEMPORARY COMPLEX GEOMETRY
Each precedent I have picked has an interesting contemporary geometry, this one in particular is focused on its pleated roof which is made up of layers with rows of glazed openings.



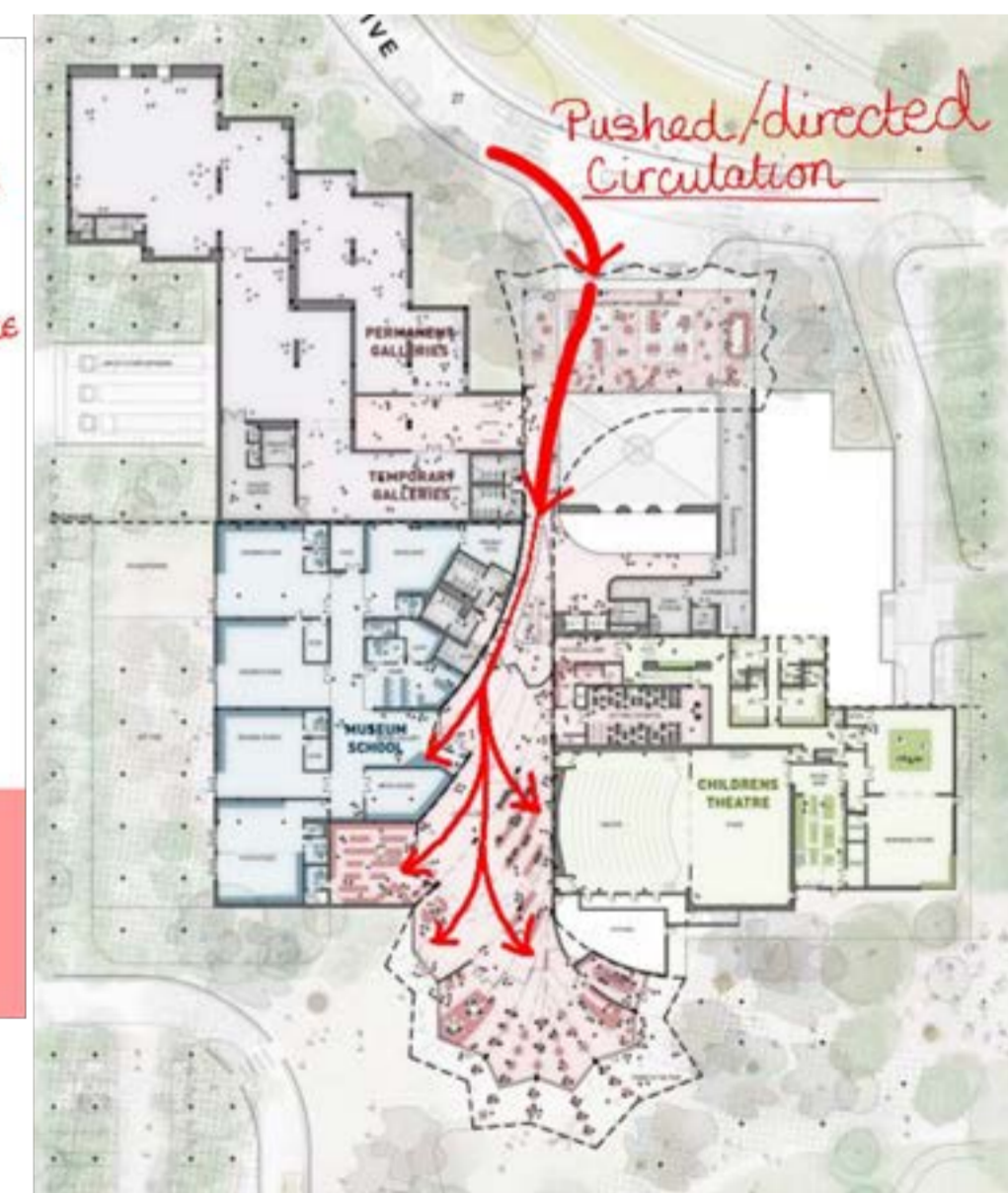
NATURE
COMPLEX GEOMETRY



The Café / restaurant, talks to everyone, the smell of food brings people in, this then means more people are likely to wonder through and see the other facilities.

PUSHED/ DIRECTED CIRCULATION

The interesting complex geometry creates the pursued circulation through this building, the complex geometry creates a welcoming atmosphere, drawing you into the art centre.



LONGMEN QICUN ART AND DESIGN CENTRE, CHINA

PRECEDENT STUDIES



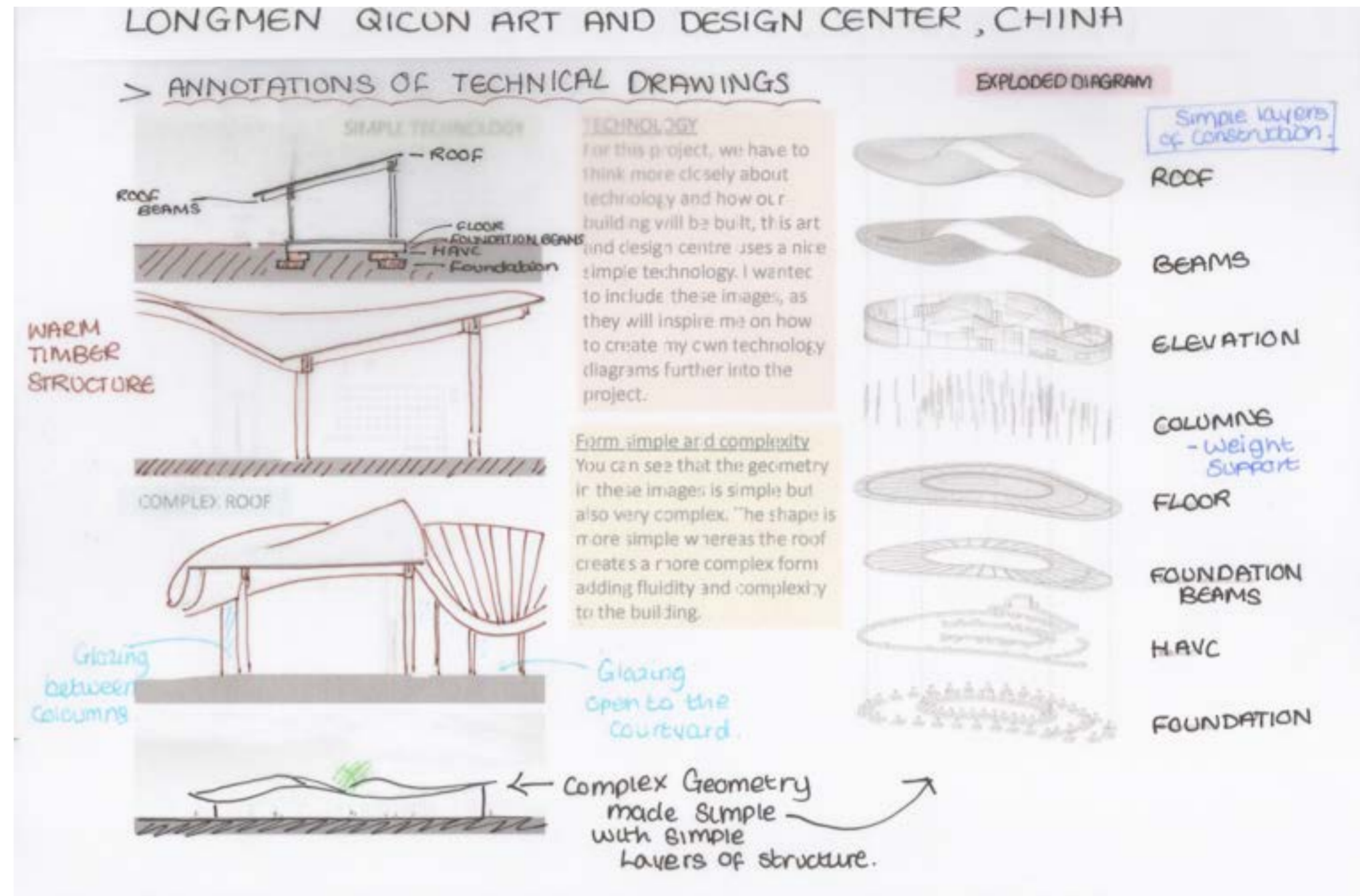
Architects: Studio Dali Architects
Area: 1087 m²
Year: 2022
Based: China

This art and design centre is a space for the local community to hold gallery's, exhibitions, cultural and artistic projects/ activities.

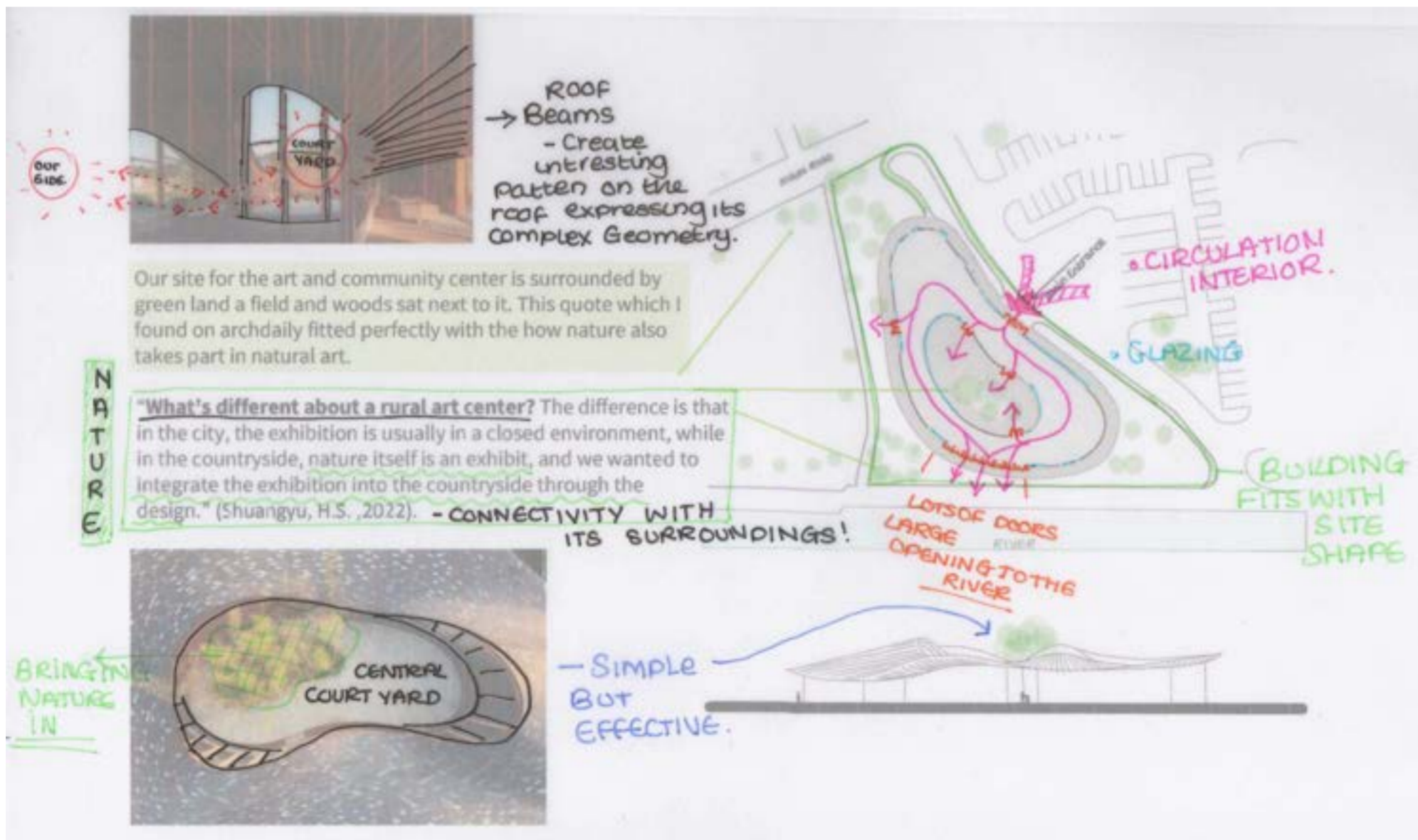
CONTEMPORARY COMPLEX GEOMETRY
I chose to look at this building because of its interesting form and how the warm timber material creates a welcoming cosy atmosphere. Along with the interesting wavy geometry, of the roof and the buildings over all curvy shape.

OPEN, AIRY, LIGHT
I also was interested by the use of the central courtyard and the use of glazed windows most of the way around the courtyard to open it up to the rest of the building.

NATURE
The building fits in with nature as you can see in this image to the right, it creates an important atmosphere improving the wellbeing and feeling of its clients.



OTHER ART AND COMMUNITY CENTRES



Gregson community and arts centre Lancaster

The Gregson art and community centre is a charity-run organization that runs a creative support program. The centre has plenty of spaces, rooms, and facilities to hire. Such as :

1. A bar/ café
2. The main hall, which includes flexible furniture, lighting technology for shows, events, dances etc...
3. The secret cinema – 25 seater small cinema, old school cinema that can be hired.
4. The olive bar and meeting room – includes a bar, a small stage, and space that can hold a small function to just a couple of tables to hold a meeting.

These spaces can be hired and used for various uses by the community such as events like dance classes, salsa, and chess clubs.



Nairn community and arts centre Scotland

The Nairn community and arts centre in Scotland includes an impressive amount of facilities and spaces. The centre also has excellent transport links to the buses, and a short walk to the train station.

The centre includes facilities such as :

1. A theatre (the Culbin theatre)
2. A conference room (The Dava Room)
3. Multiuse space (The Dulsie room)
4. Small music room (The Drynachan room)
5. A youth café (The Delnies room)



SANDS END ART AND COMMUNITY CENTRE, LONDON

The Sands End Arts Community Centre was made to be highly sustainable not just in function but also in construction by using recycled waste blocks. This is the first time this had been done in the UK.

Large open windows creating an airy space - looking down at double height space.

Second Level looking over double height space.

Large open windows creating an airy space - looking down at double height space.

windows within the lodge thought - fully placed.

Simple timber structure.

④ Social Hub - Cafe, Hall and Lobby all close/connected so these can work together.

The Sands End Arts and Community Centre was awarded winning for its ecofriendly construction, through using recycled materials.

The spaces available:

- The lodge and the meeting room is more flexible space to hold conferences, meetings, exercise classes, and exhibitions.
- The hall is open and airy, created by the windows and large floor, and has an openable wall into the cafe.

PLAN ORGANIZATION

MEETING ROOM

LODGE

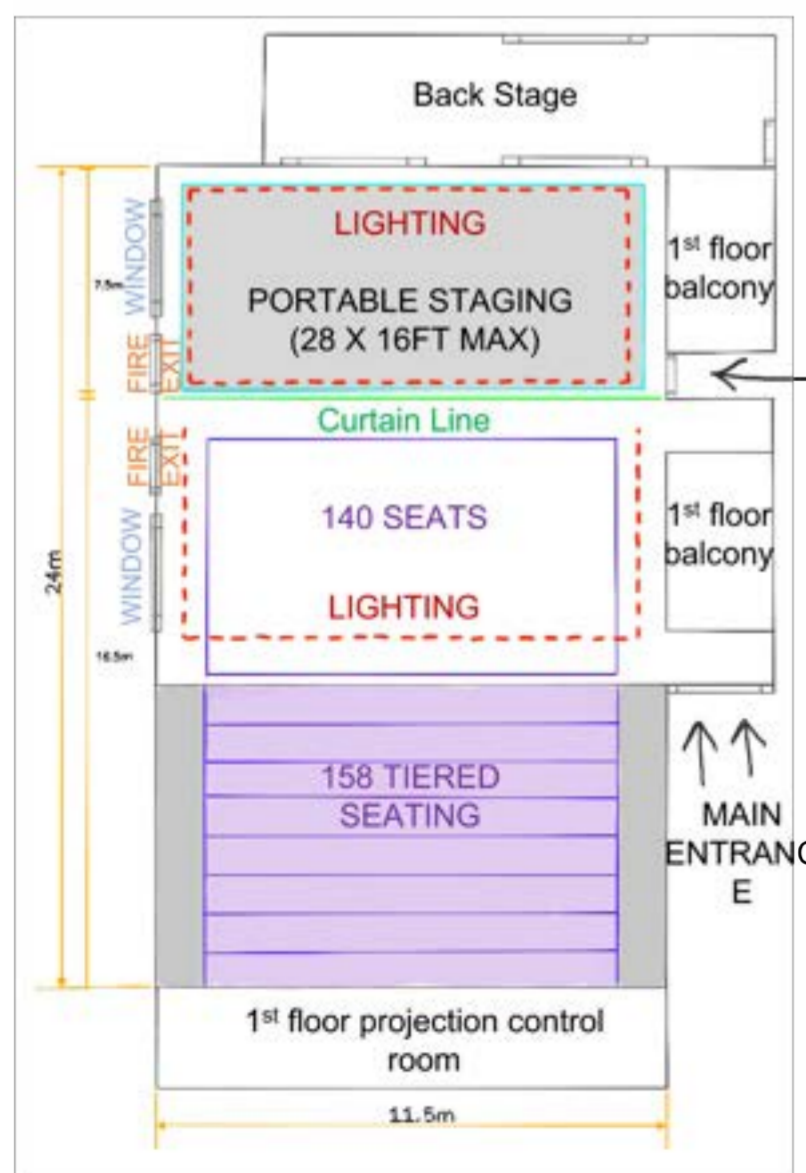
HALL

COURT YARD

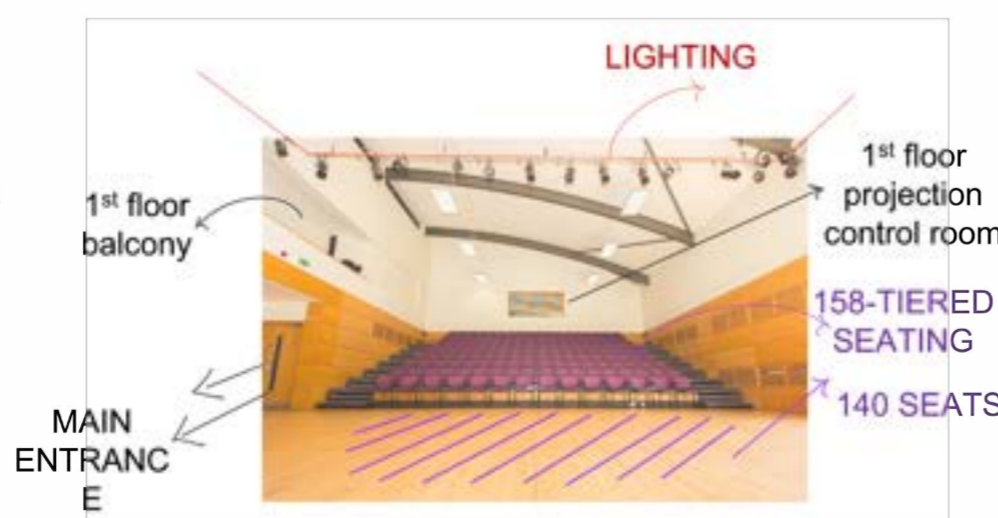
ART YARD

NAIRAN ART AND COMMUNITY CENTRE SCOTLAND

THE CULBIN THEATRE



- 300 seats with both tiered and flat seating spaces.
- Portable stage can also be added to this space when needed
- Full stage lighting
- The theatre can be also used for alternative purposes such as parties, fitness classes and more. These spaces can be made into a small hall and a main hall by using a wall decision
- High quality sound system
- Hard wooden floor
- Disabled access



OTHER SPACES AND FACILITIES

Floor Plan - Music Room

4.6M

5.9M

BREAKOUT AREA

ENTRANCE

MUSIC ROOM - CAPACITY 15

Storage

Break out area: with access to toilets.

- Internet access - wired and wireless
- Carpeted floor
- Disabled access

Each room has available storage.

Floor Plan - Youth Cafe

8.6M

7.2M

Sink Area

ENTRANCE

Toilets & Lift

Support Beam

Computer Area

Plasma TV useful for presentations, entertainment, tv for the café, sports etc.

- Seats a capacity of 30/40 people
- The café also includes an outside area
- An informal space for families, friends to get together.
- A computer area
- Internet access- wired
- Small kitchen area
- This room has a hard gel floor and disabled access.

OTHER SPACES AND FACILITIES

Floor Plan - Conference Room

7.3M

7.5M

STORAGE 1

STORAGE 2

SINK

small sink area

Toilets, Lift & Breakout Area

OVERHEAD PROJECTOR

- Large conference room, which includes a breakout room with toilets.
- This room seats up to 50 people
- Overhead projector with projector screen
- Carpeted floor
- Disabled access

Floor Plan - Multi Purpose Room

9.0M

7.3M

STORAGE 1

STORAGE 2

STORAGE 3

STORAGE 4

MULTI PURPOSE ROOM 1 - CAPACITY 30

RETRACTABLE FOLDING PARTITION

MULTI PURPOSE ROOM 2 - CAPACITY 30

ROLLING SHUTTERS

Disabled access

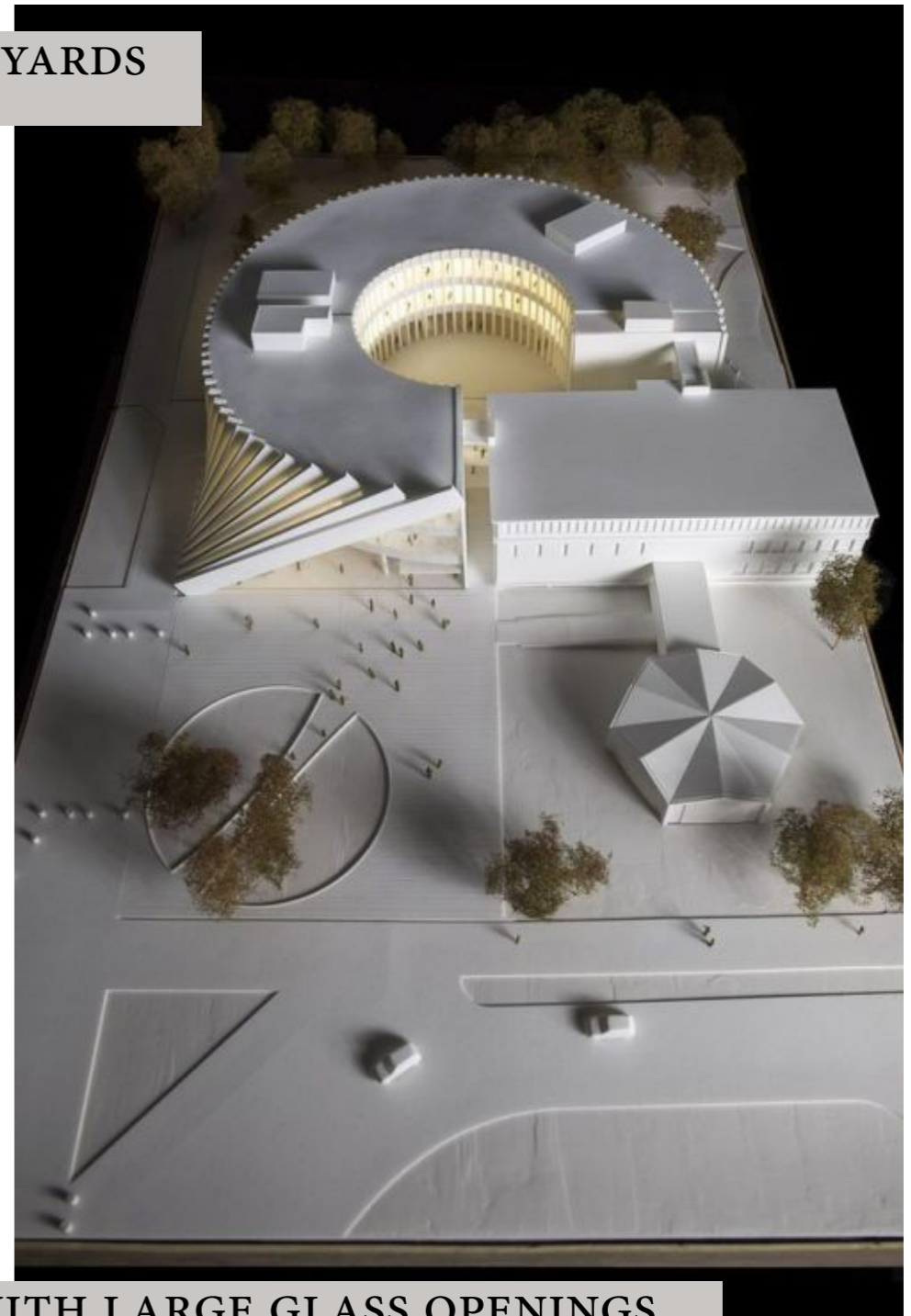
- Internet access and wireless and wired
- Underfloor heating
- Hard-gelled floor
- 2 fire exits

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TIMBER

COURTYARDS



TIMBER, WITH CONCRETE



TIMBER, WITH LARGE GLASS OPENINGS

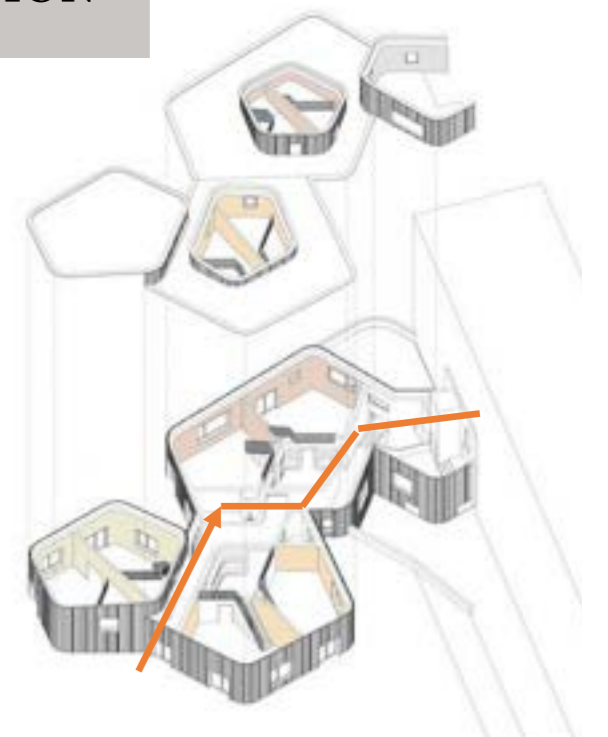


OPEN, AIRY



WELCOMING

CIRCULATION



SUSTAINABILITY



CRIME (SEP 2011 - AUG 2022)

At a glance -

- 55 (96.4 per 1,000 persons) TOTAL NUMBER OF CRIMES
- 241 (42.1 per 1,000 persons) Violence and Sexual offences
- 26 (4.8 per 1,000 persons) Anti-social behaviour

RELIGION (2011)

Religion	COUNT	%
Buddhist	26	0.4
Christian	2,857	49.3
Hindu	54	0.9
Jewish	3	0.1
Muslim	816	13.9
Sikh	87	1.5
Other Religion	27	0.5
No Religion	1,521	26.7
Religion not stated	395	6.7

ECONOMY (2011)

At a glance -

- 70.1% Economically active Population
- 75.9% Economically active males
- 65.5% Economically active females

HOUSING (2011)

At a glance -

- 2,582 - Number of Households
- 2.2% - Average household size
- 4.2% - Households that are overcrowded
- 5,751 - POPULATION ESTIMATE (2020)
- 2,788 (48.5%) - Males
- 2,963 (51.5%) - Females

PROPERTY (2011)

Legend:

- Owned outright
- Owned with a mortgage
- Rented from private landlord
- Rented from social landlord
- Rented from council
- Others

	MARSH	KIRKLEES
Council tax Properties/dwellings	2,650	190,827
Occupied properties/households	2,564	184,315
Single person households	1,108	69,776
Single person household percentage (%)	43.2	37.9

EDUCATION PRIMARY

2018-2019	MARSH	KIRKLEES
Popula at the end of Key Stage 2	51	5,557
Average scaled Score in maths at Key Stage 2	104.5	105
Average scaled Score in Reading at Key Stage 2	105.2	103

GCSE MARSH COUNT %

AGES	MARSH	KIRKLEES	ENGLAND
0-15	11.4%	16.8%	17.9%
16-64	20.3%	17.9%	19.2%
65+	68.3%	64.3%	62.3%

Pupils achieving English and maths GCSEs 5-9 2018-2019

	MARSH	KIRKLEES
	26	44.8

ENVIRONMENT

At a glance -

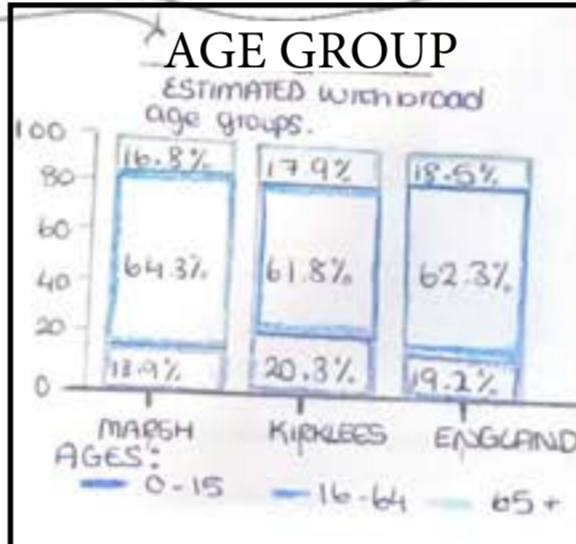
- 2,420 - Sum of cars and vans in the area
- 33% - Households with no car/van
- 6.7% - Households without central heating

ETHNICITY (2011)

Ethnicity	COUNT	%
Asian/Asian British	983	16.8
Black/African/Caribbean/Black British	181	3.1
Mixed/multiple ethnic groups	240	4.1
Other ethnic groups	68	1.2
White	4,383	74.9
Minority Ethnic TOTAL	1,746	29.8

AGE GROUP (2020)

Age Group	COUNT	%
0-15	1,029	17.9
16-29	940	16.3
30-44	1,248	21.7
45-64	1,515	26.3
65+	965	16.8



REQUIREMENTS

GREEN

- MAXIMUM 4 floors
- OPEN, AIRY, SPACIOUS
- WELCOMING, FRIENDLY
- INVITING

Further Spaces

- Theatre - Portable Stage / tiered seating + lighting and sound system. - 510sqm
- Conference / meeting rooms
- Music rooms - Music classes, creativities
- Secret cinema - I loved this idea the Gregson Centre included one it also brings the creative, film/acting feet included.

Circulation

- Lift
- Stairs/ramps
- fire exits
- 10% of floor area

Other Requirements:

- Lobby / Reception - 40-60sqm
- main Hall with Storage - 180-200sqm
- Customer toilets: 5 male, 5 female, 2 Accessible
- CAFE area:
 - Kitchen + storage 15-20sqm
 - Kitchen Serverly area 5-10sqm
 - Seating area 50-65sqm
 } 70-95 sqm



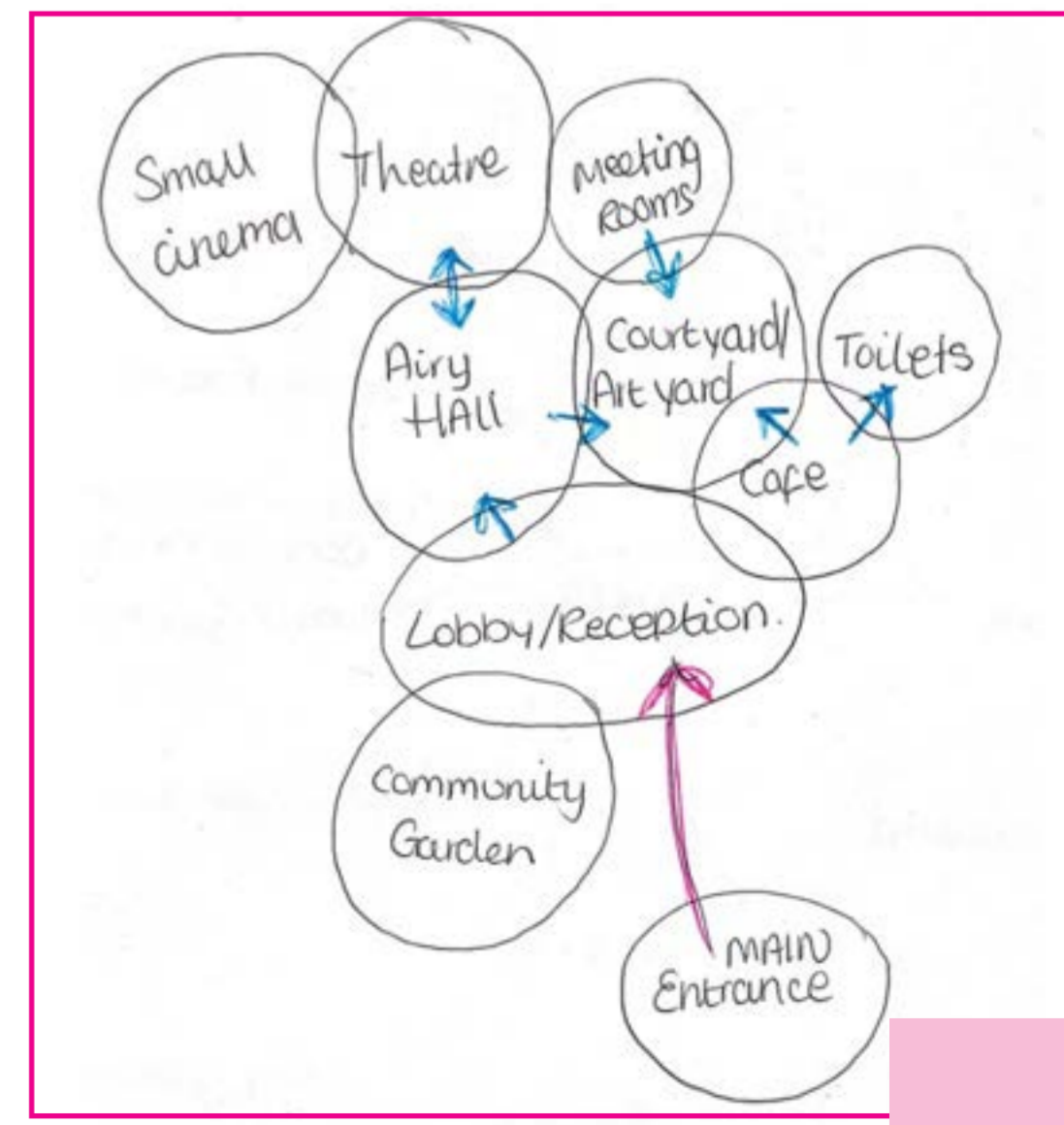
All the Art and Community Centre I have researched all have similar spaces, some of them use slightly different names. Some of them had spaces which the others didn't have which was different such as:

- Sands-end - Art Yard + court yard.
- Gregson Community - Secret Cinema - bar / cafe.
- Naam Community - Theatre - music room.

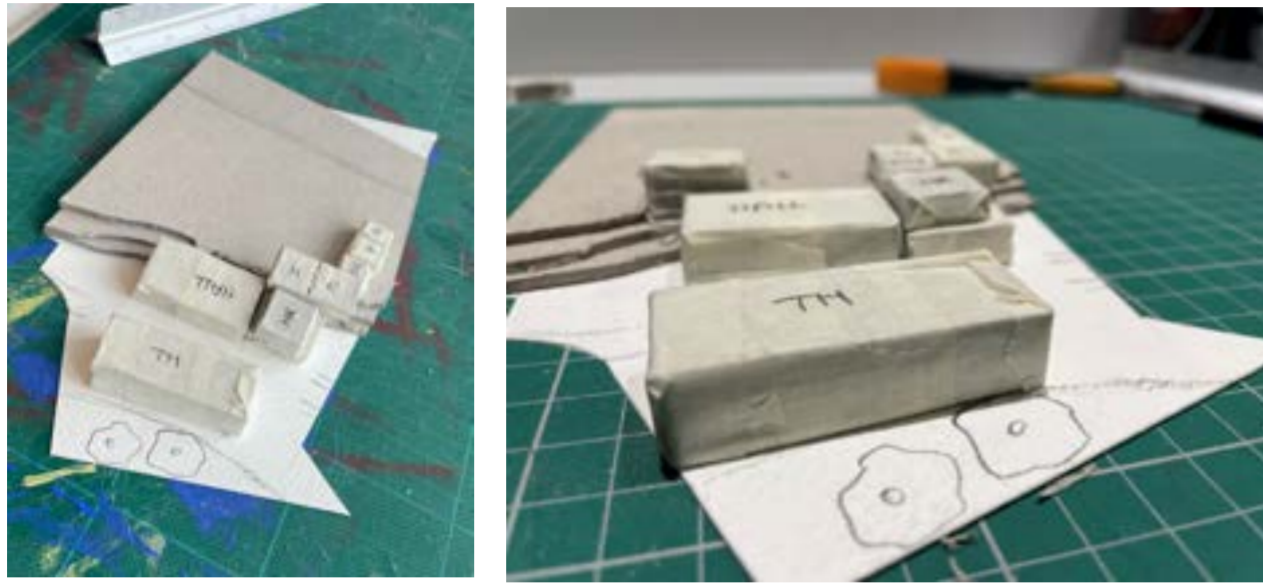
Common overlaps where: Halls, Function rooms, meeting rooms.

After Art and Community Centre Research:

- Secret cinema
- Courtyard
- Meeting Rooms
- Bar/Cafe
- Art yard.
- Conference room
- Reading Space
- Function Halls
- Music room
- Lodge / Exercise Spaces / multiuse space.
- Theatre



DESIGN IDEA (1)

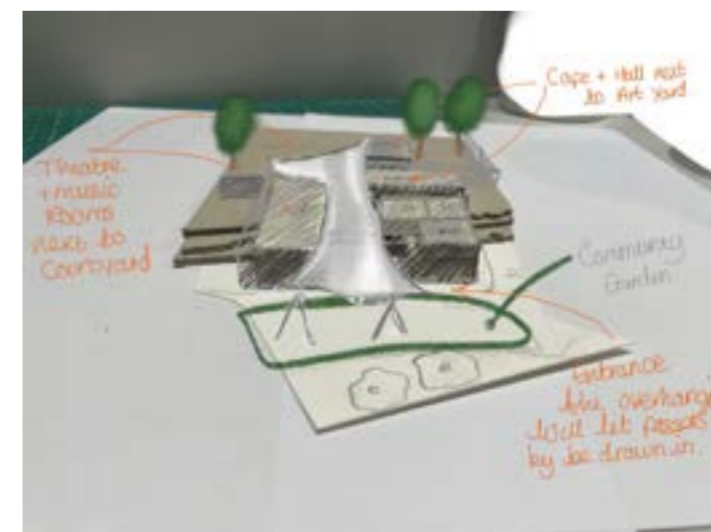
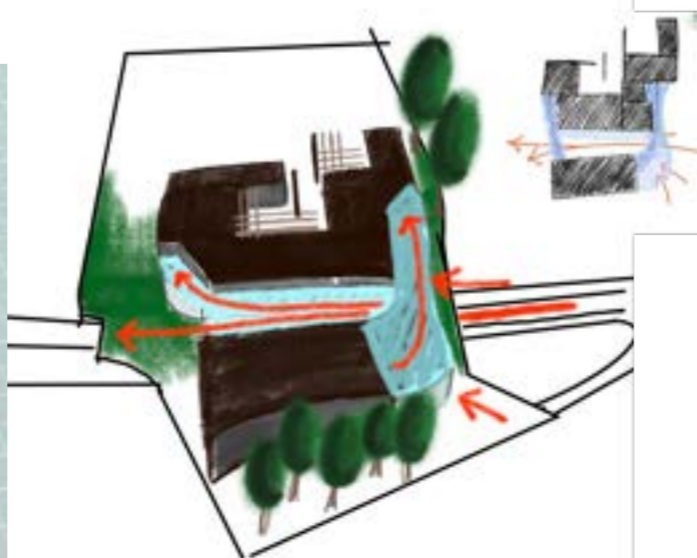
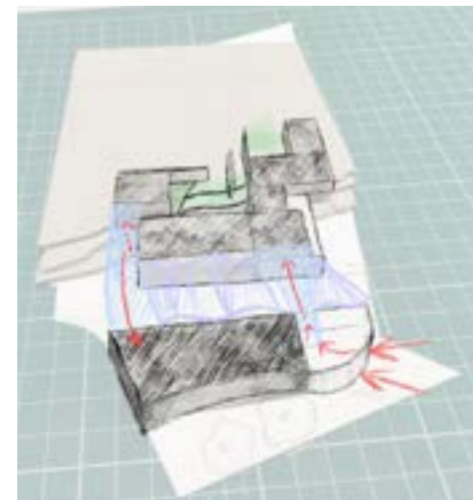
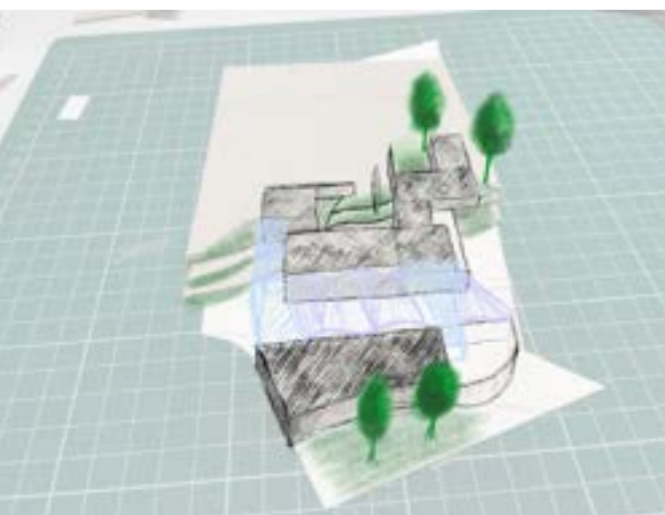
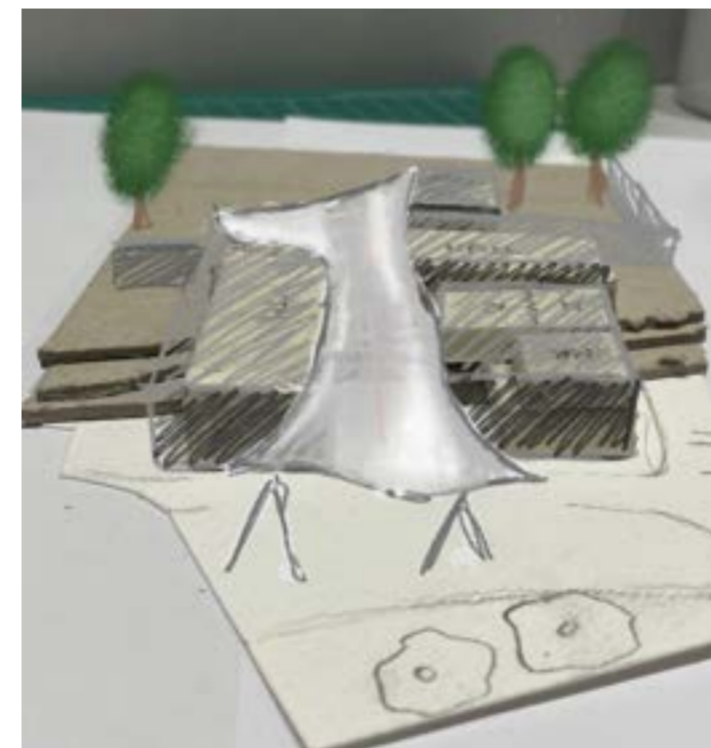
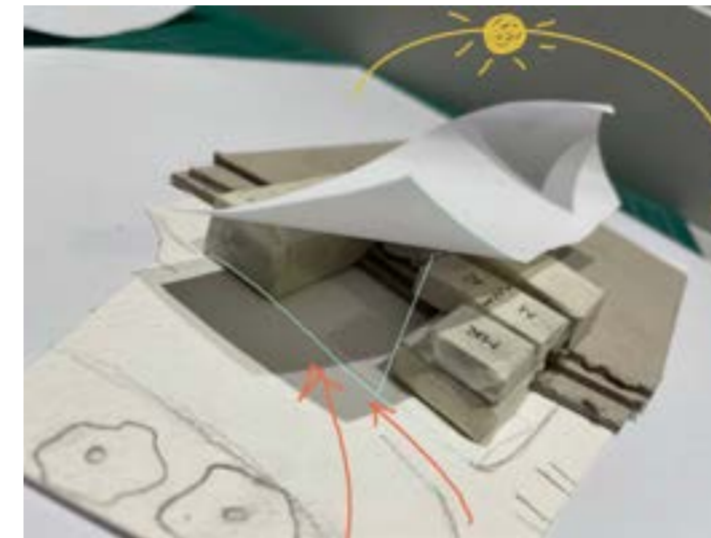
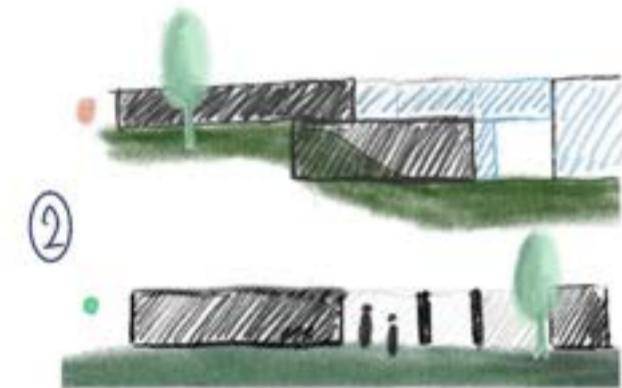
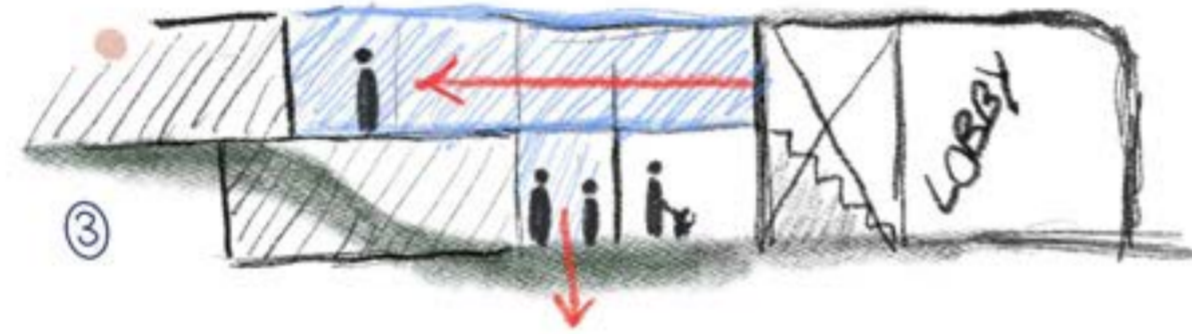
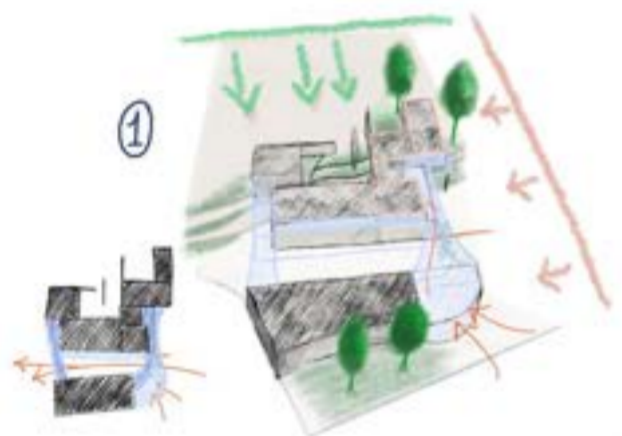


- Influenced by the Arkansas art centre

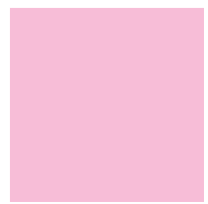
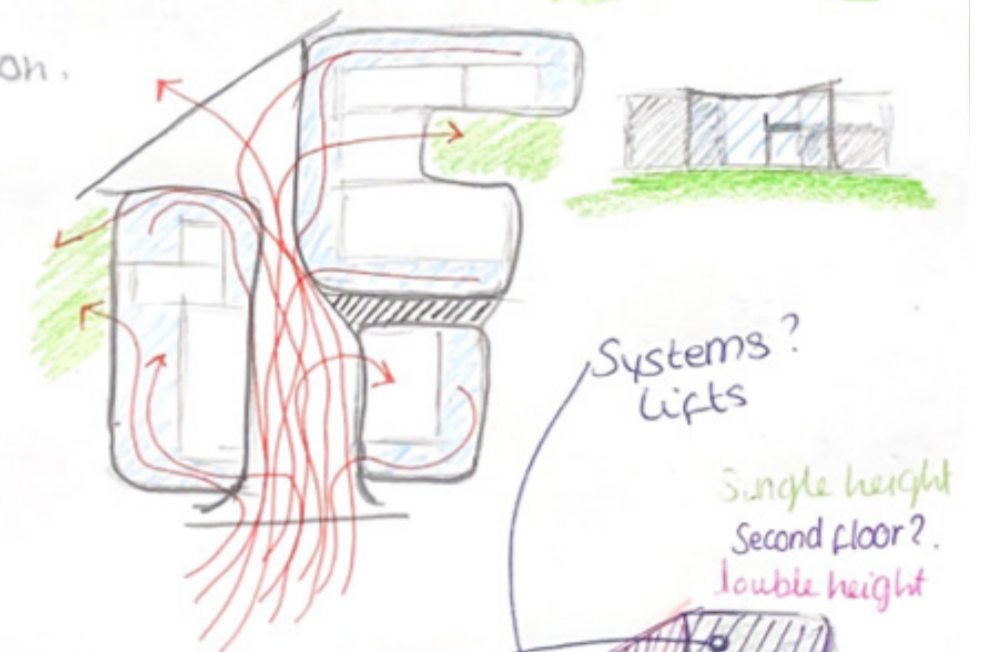
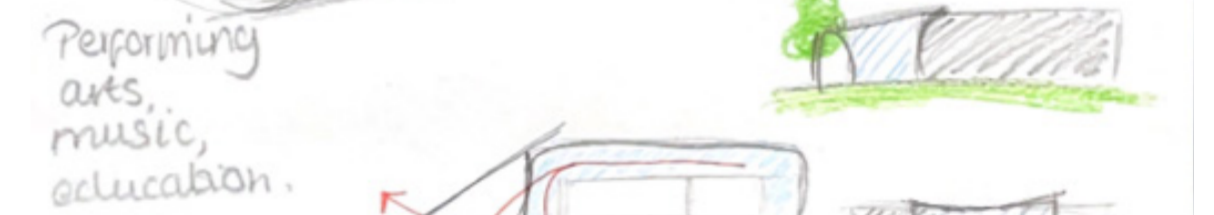
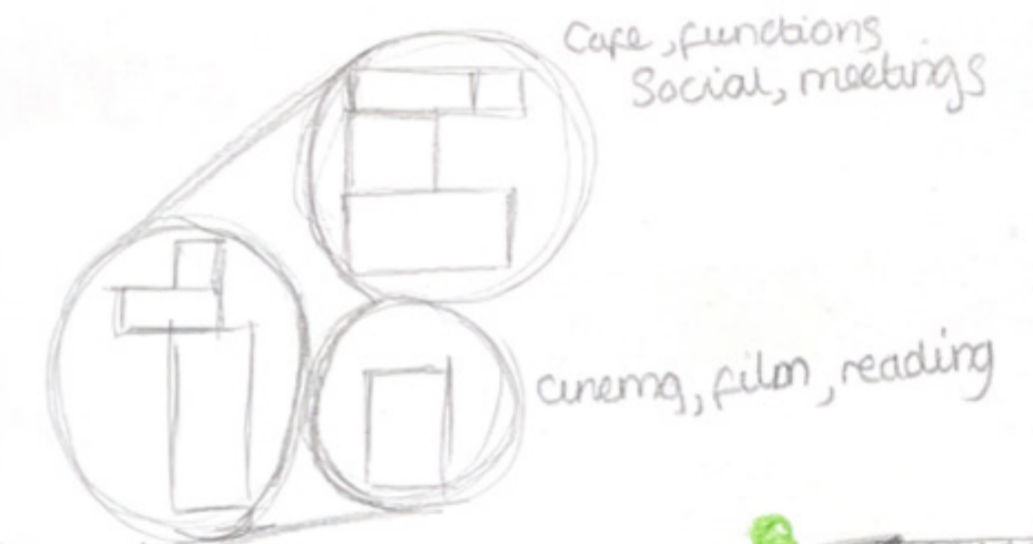
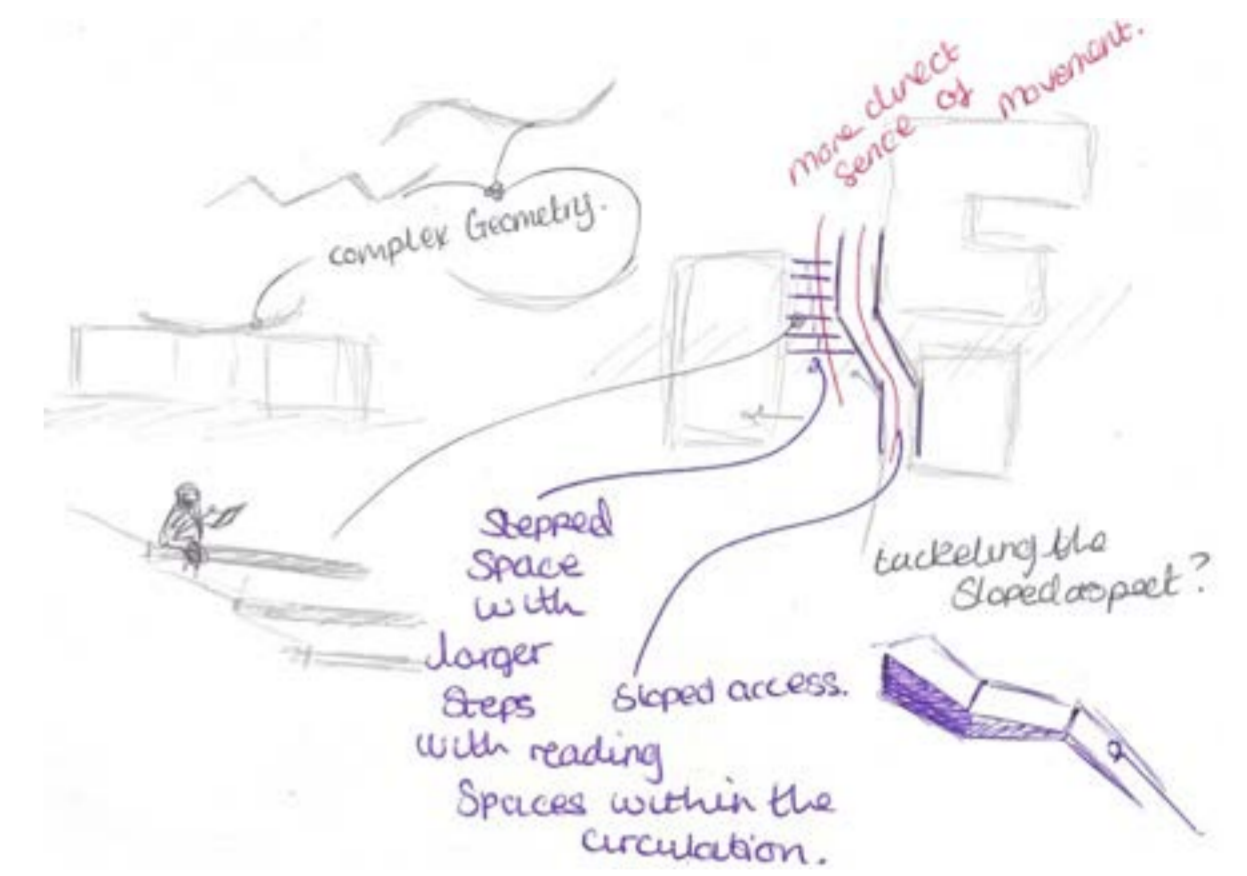
- Fluent circulation
- Flowing

CONCEPT (1)

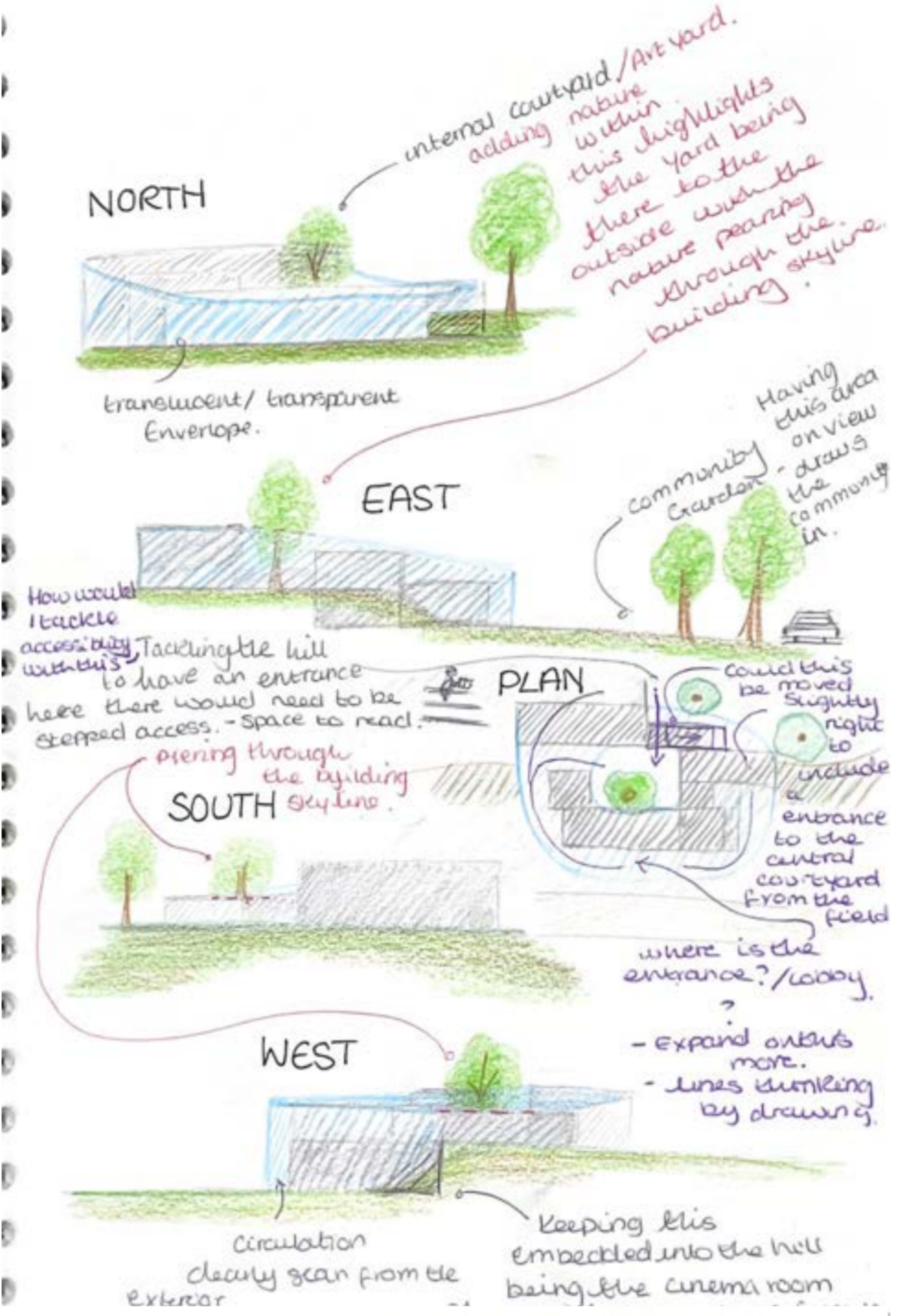
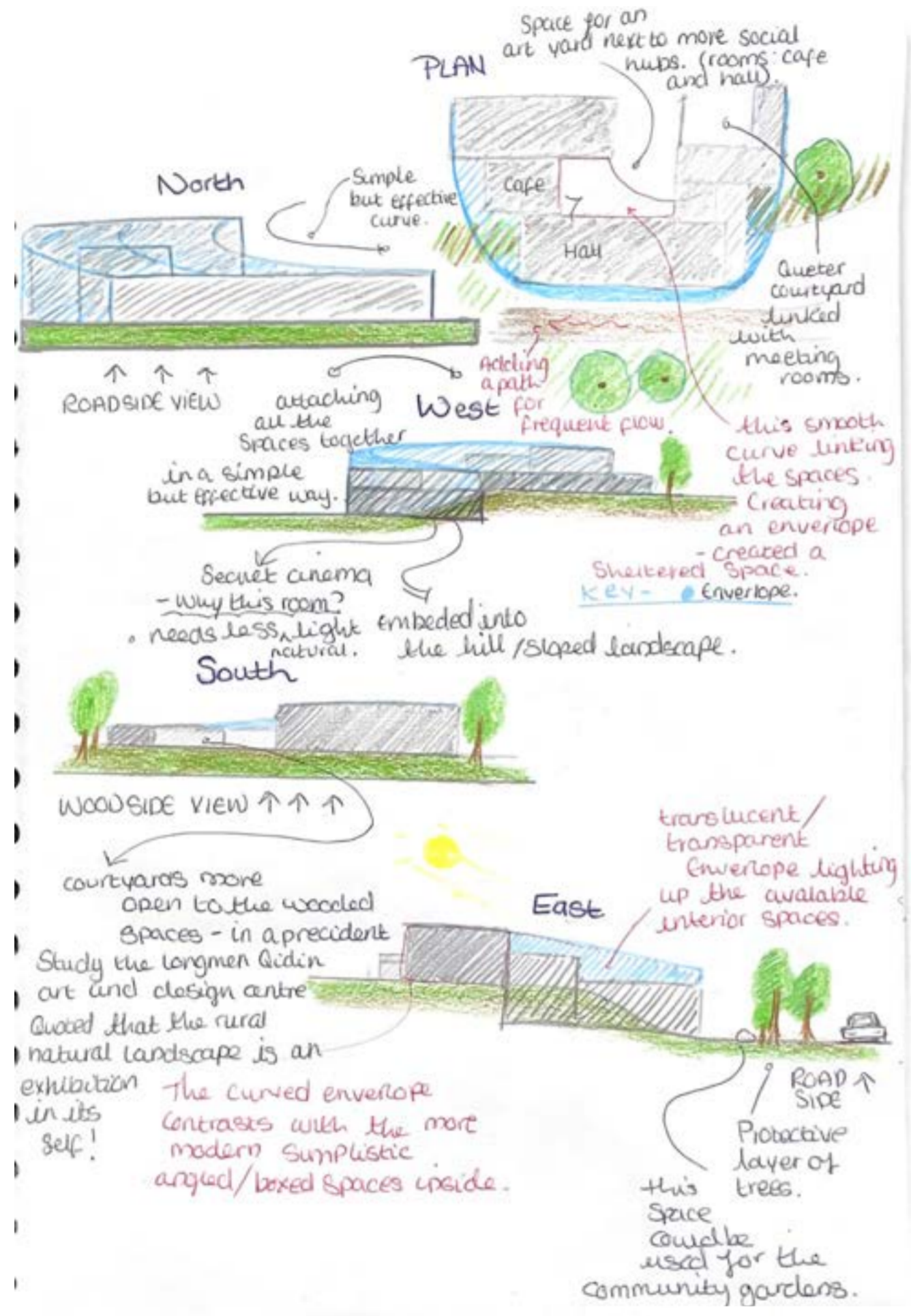
- Pushed by complex geometry



DESIGN IDEA (2)



DESIGN IDEA (3)



CONCEPT (2)

Letting the outside see in

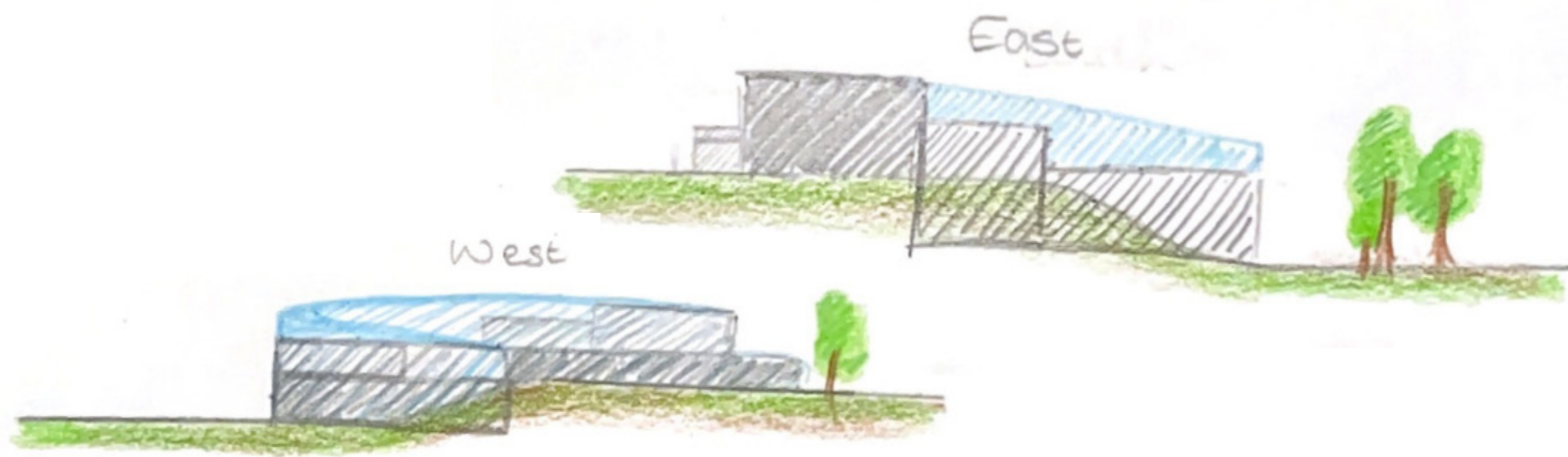
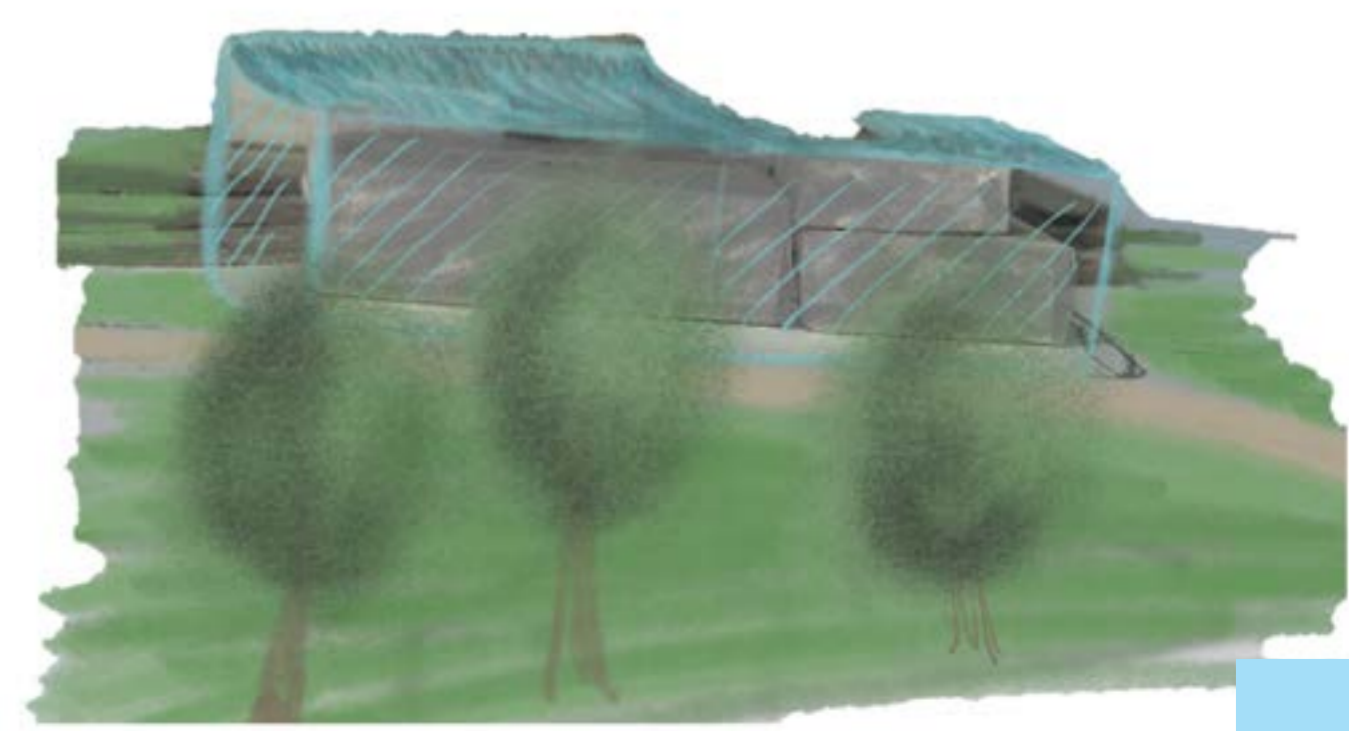
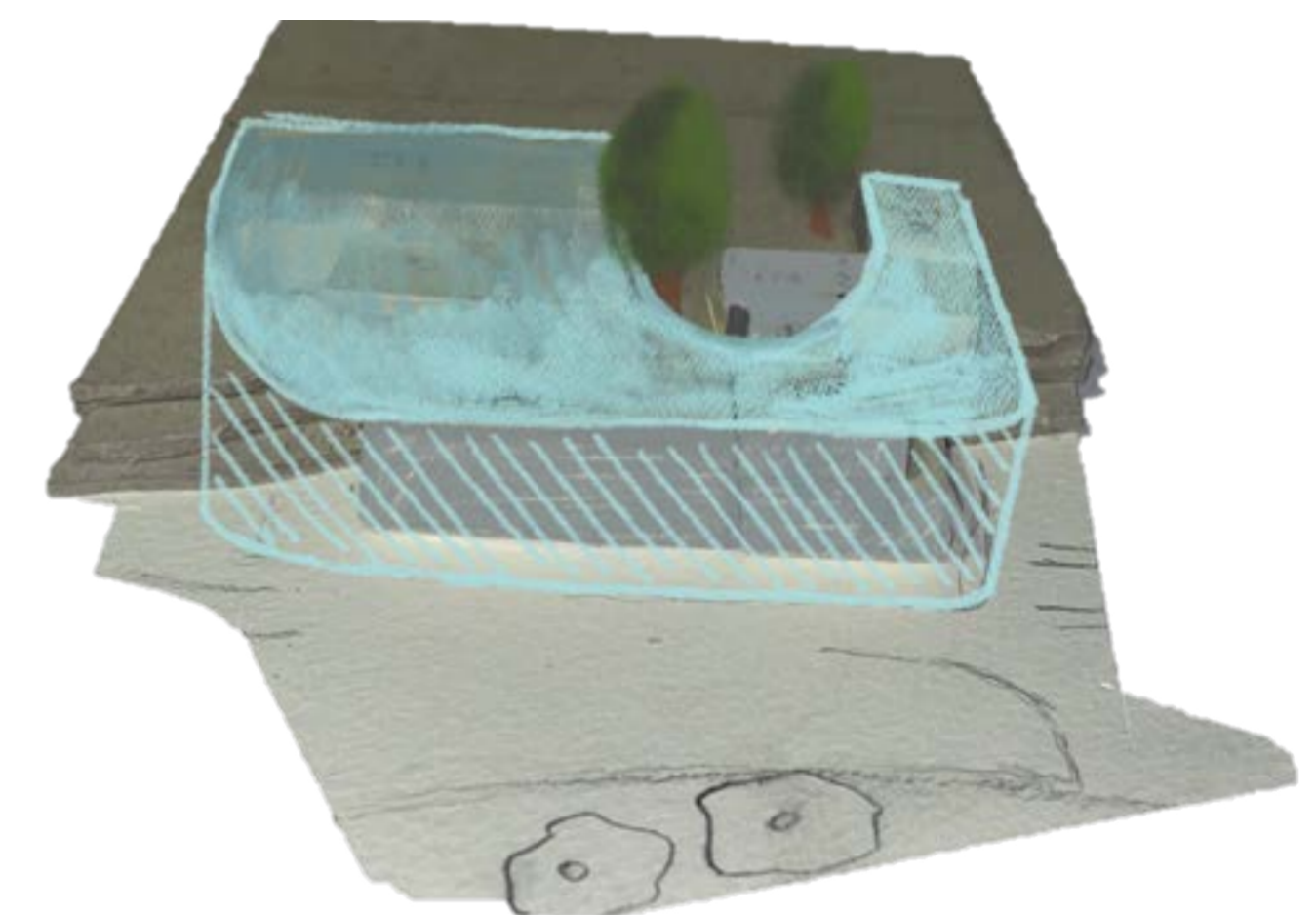
This design focuses on showing the community the rooms and facilities available, with this design I am planning to use a transparent/translucent envelope so the building can show off the interior rooms.

Connectivity to nature and people

This idea/ conception is all about connecting the community with the interior spaces and the natural landscape around the site.

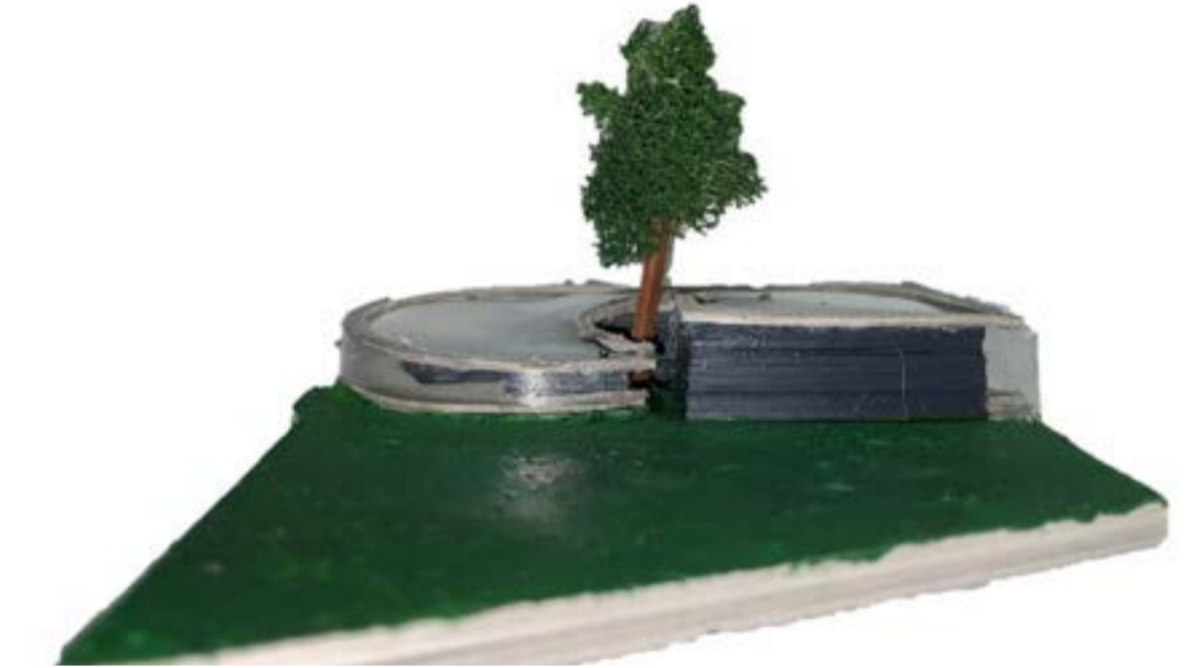
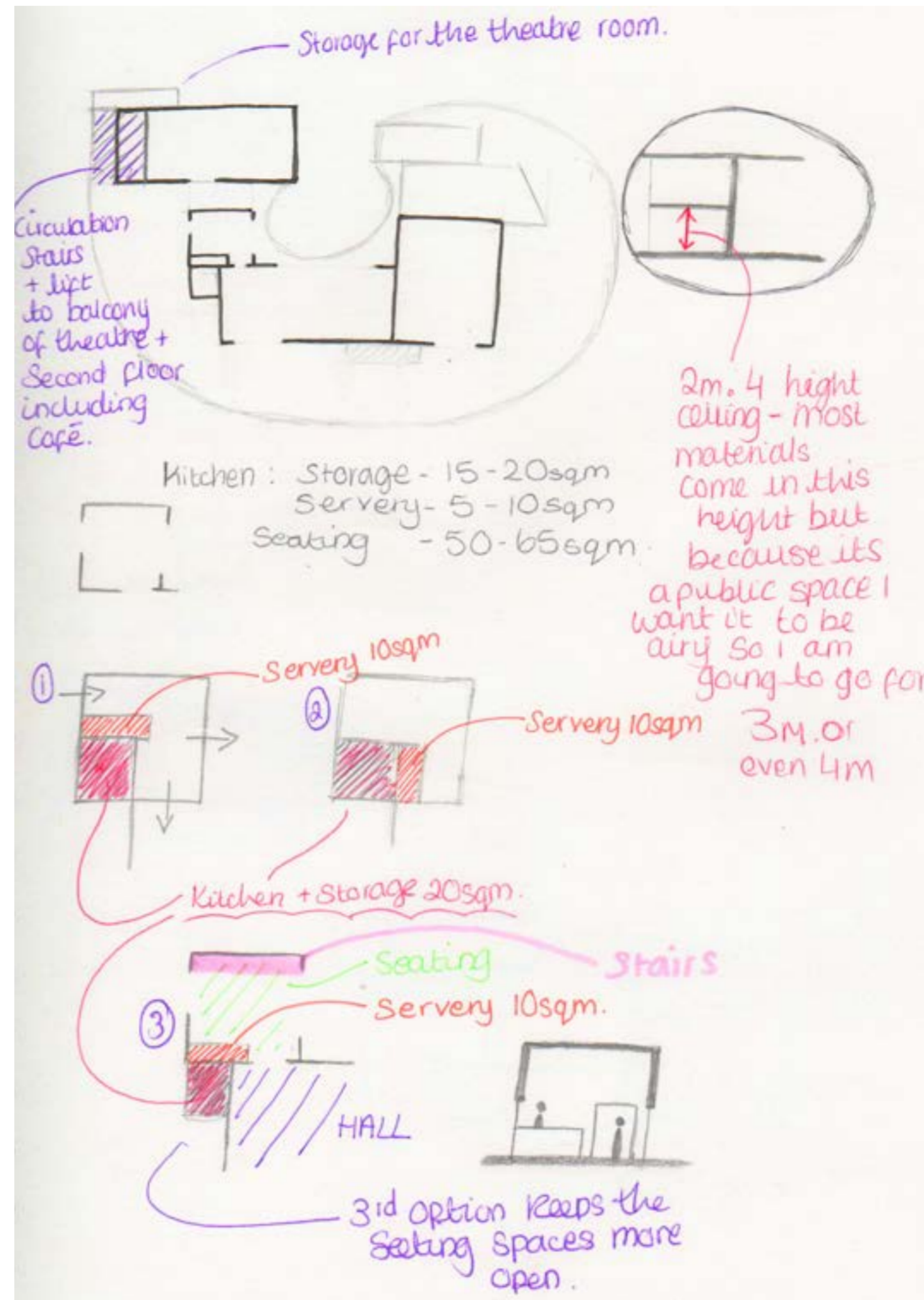
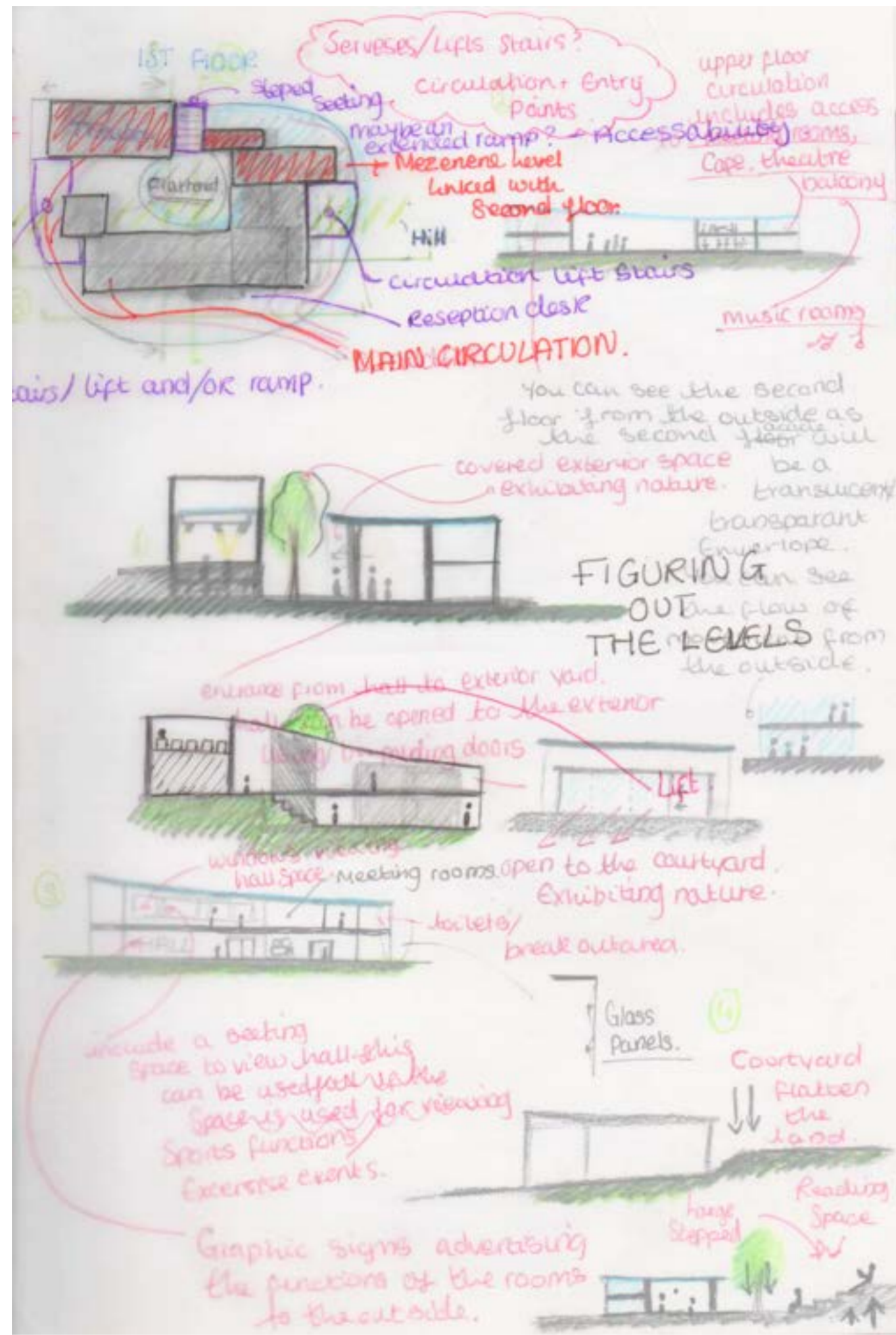
Enveloping transparent/translucent façade.

For this design, I focused on arranging my chosen spaces in a sort of circular way. Then used the blue pencil to draw the added envelope on the building, creating circulation/ adding the circulation in a curved way.

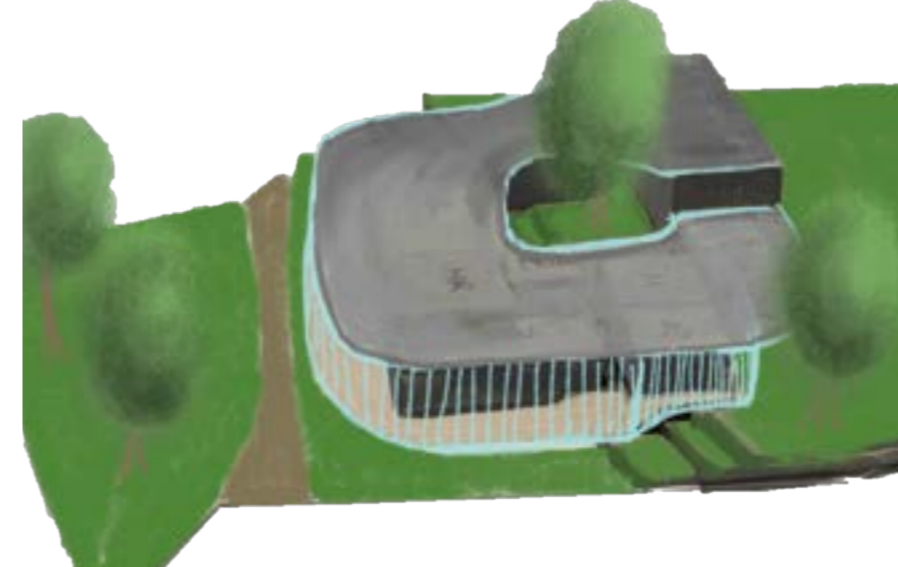
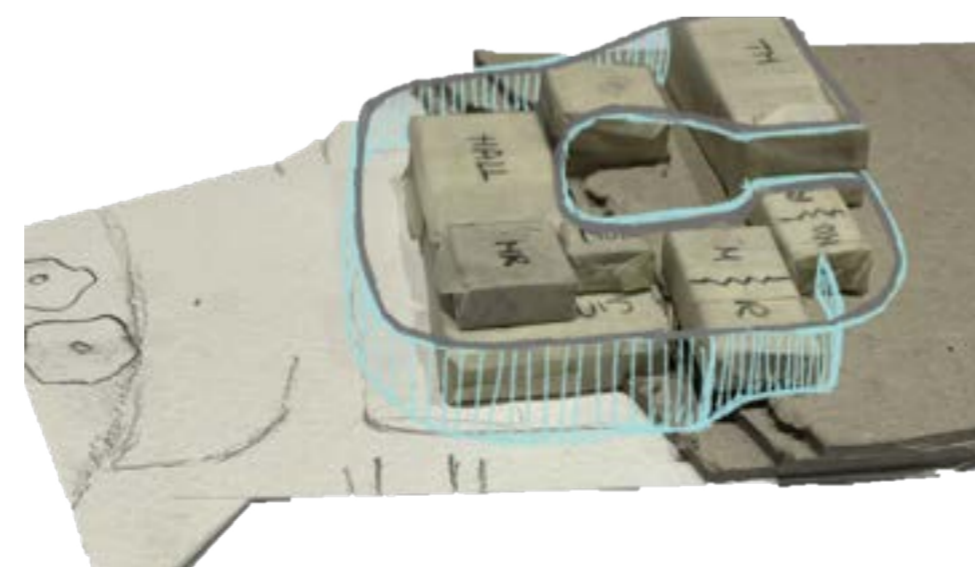
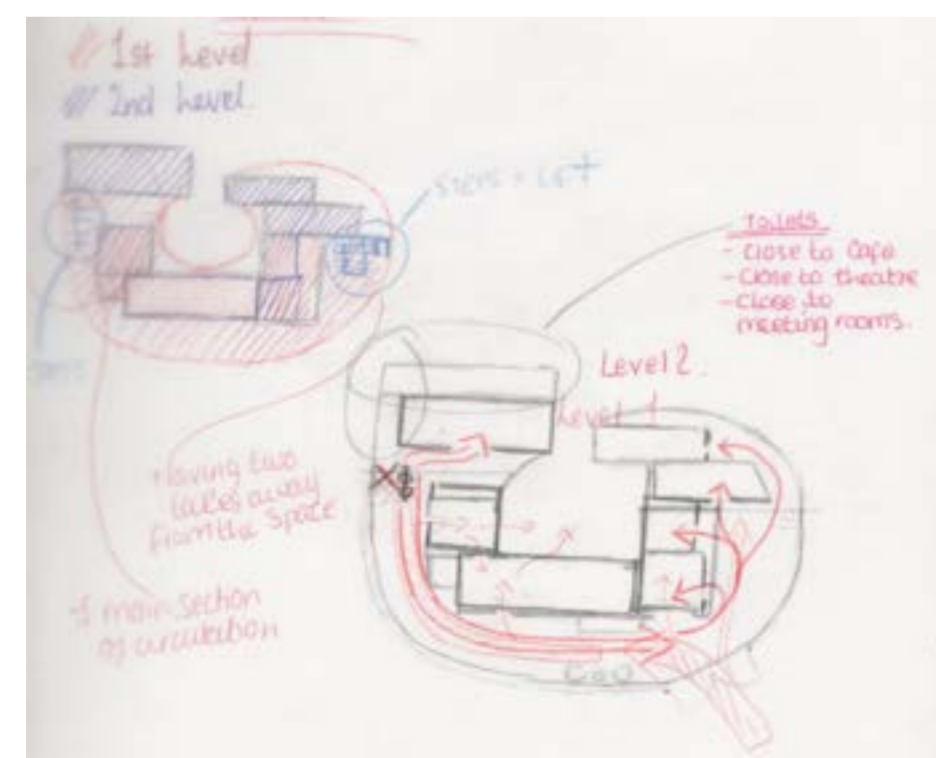


DESIGN IDEA (3) DESIGN DEVELOPMENT

CONCEPT PHYSICAL MODEL

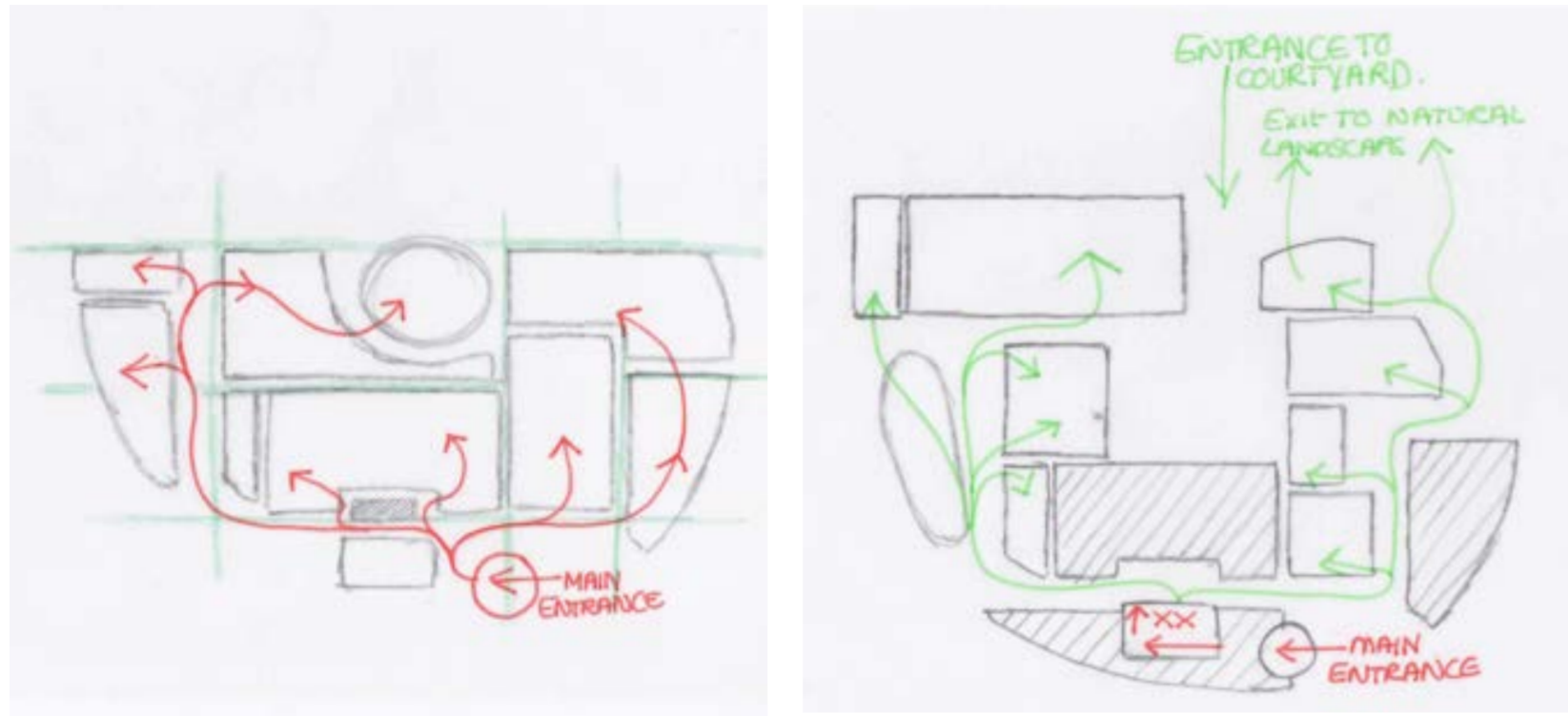


SKETCHES OVER AN EARLY PHYSICAL MODEL

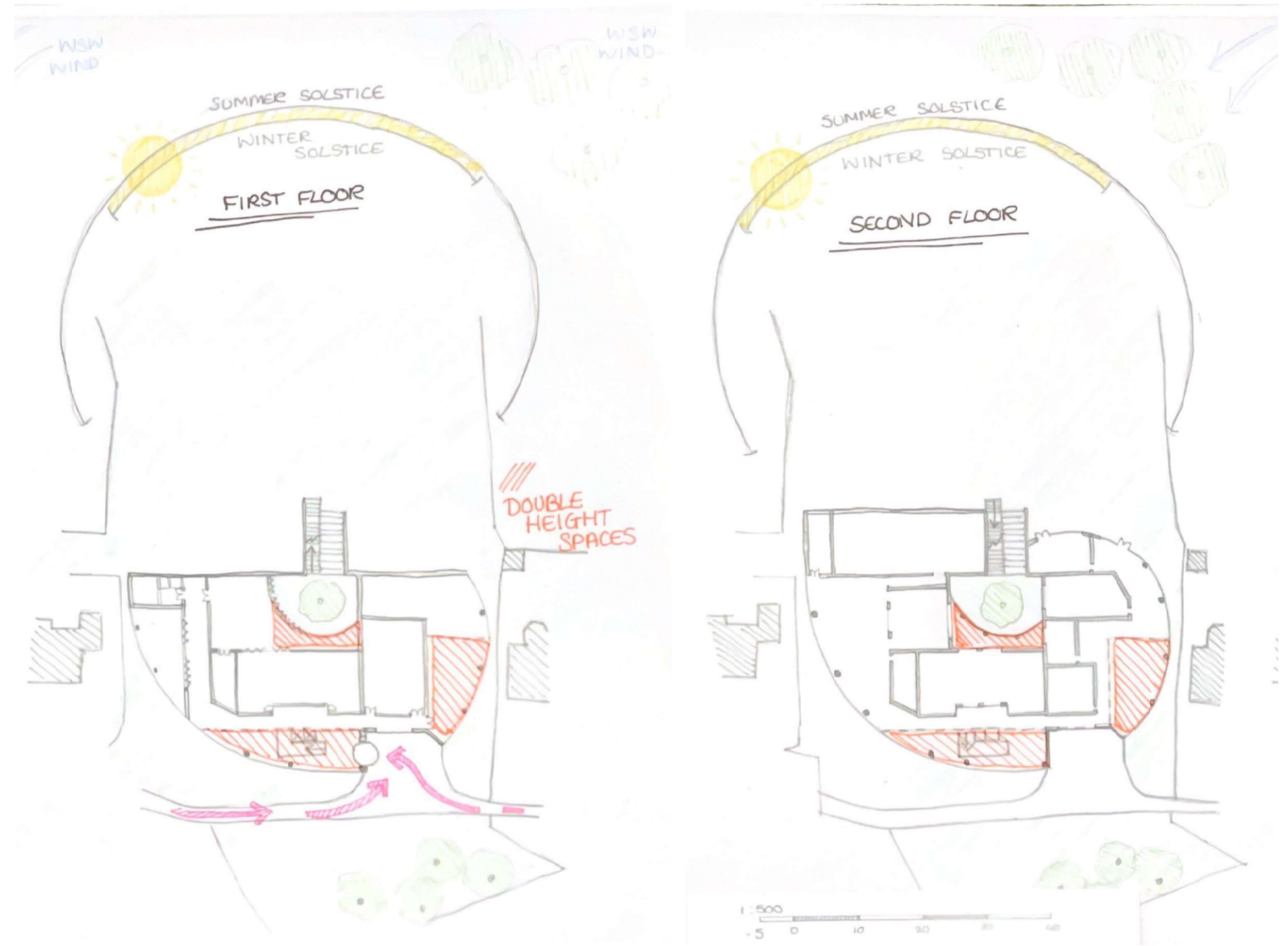


SKETCHY PLANS

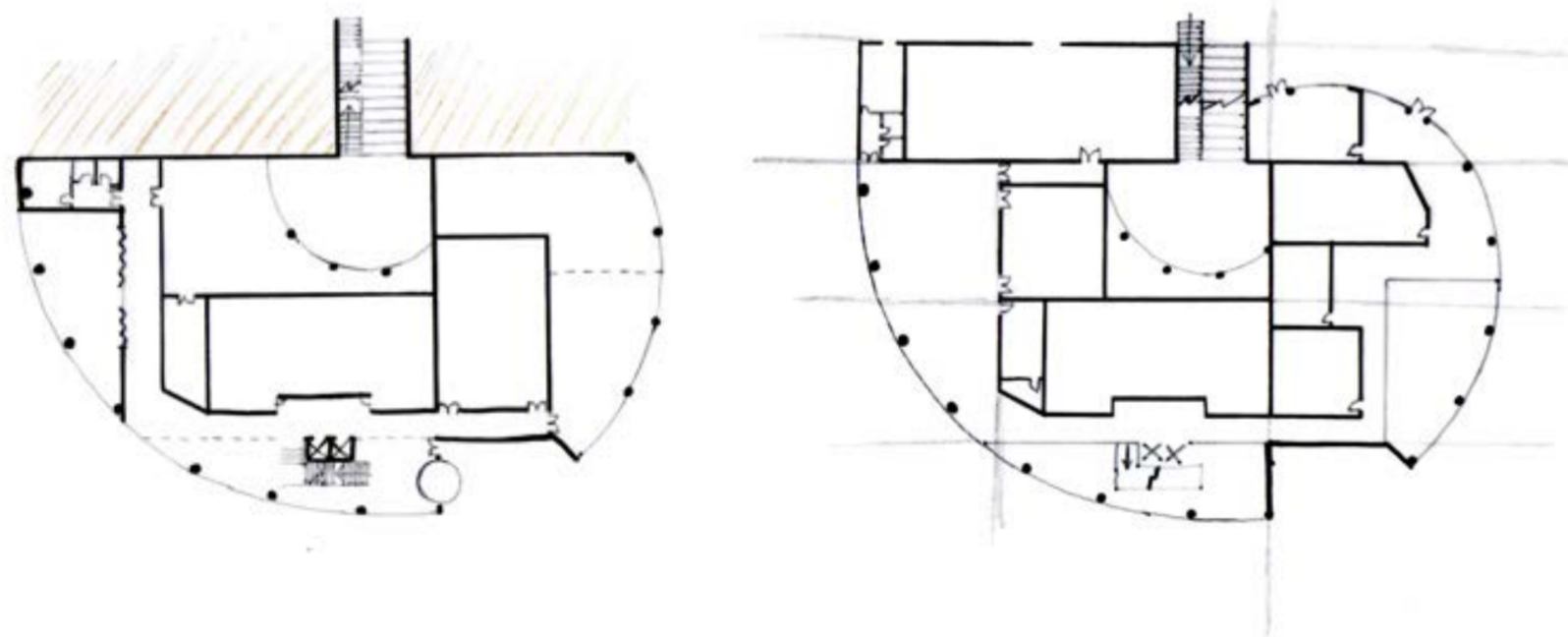
CIRCULATION DIAGRAMS



ANNOTATED PLAN DIAGRAMS

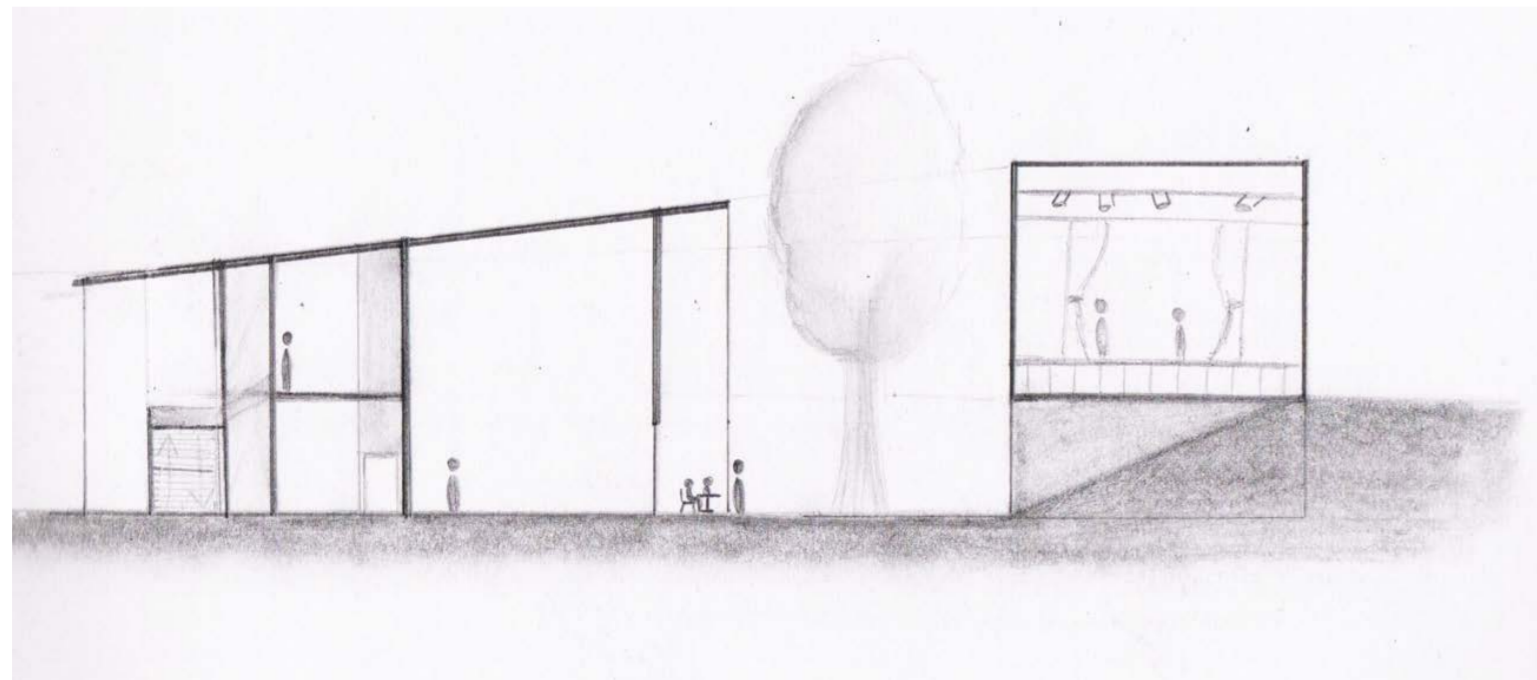


CONSTRUCTION DIAGRAMS

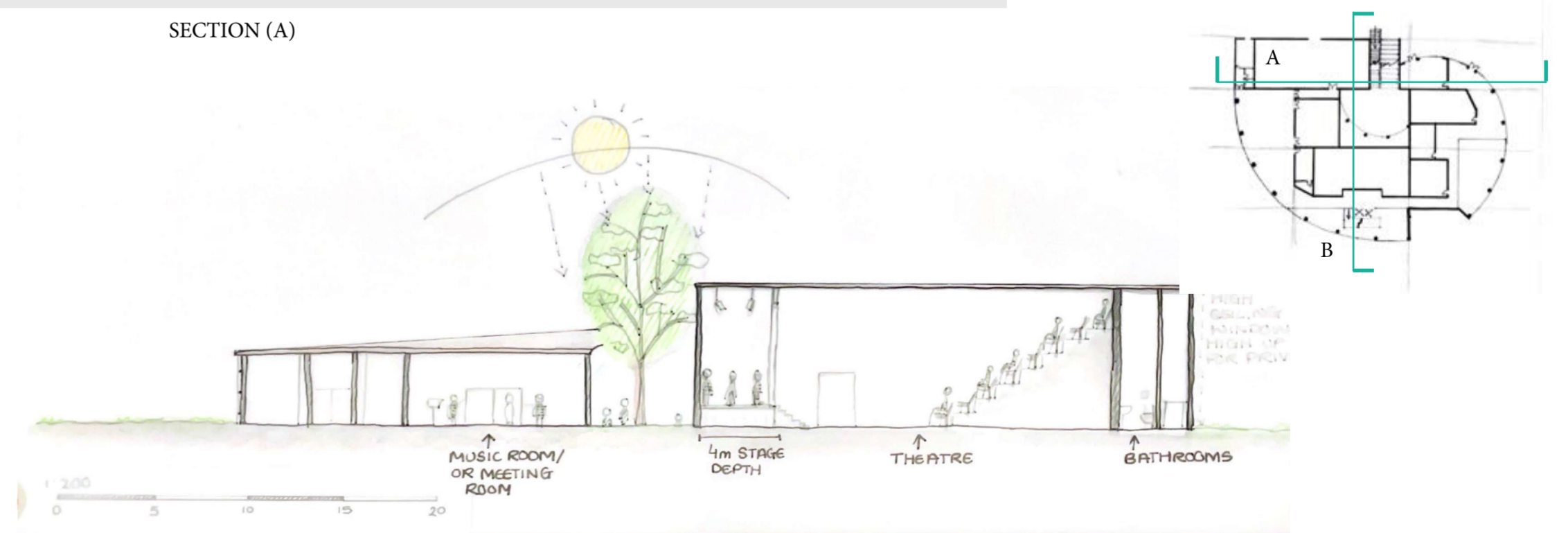


SKETCHY SECTION

SECTION (B)



SECTION (A)



DEVELOPING SKETCHY PLANS

LEVEL (1) BEFORE CHANGES

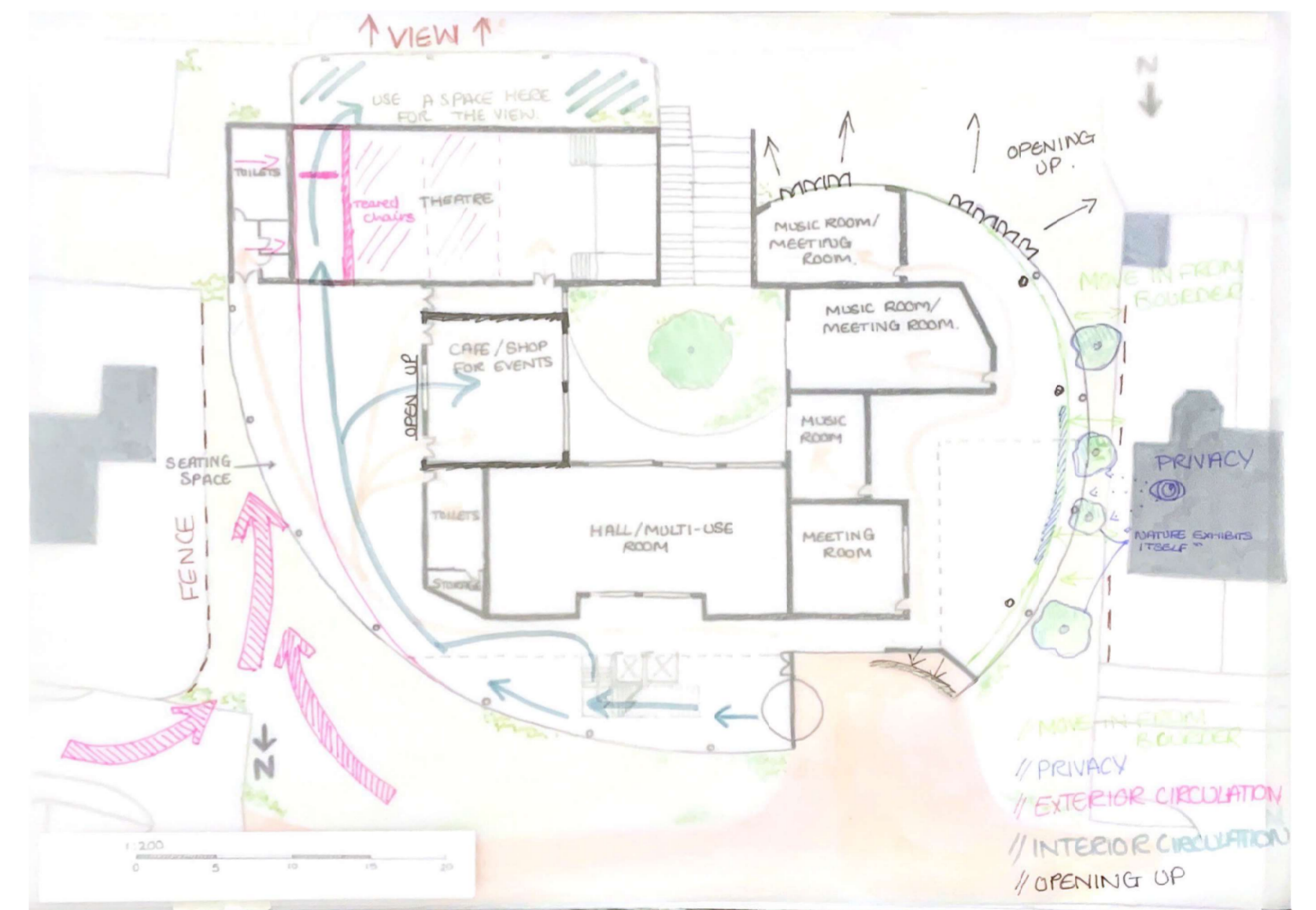


LEVEL (1) AFTER CHANGES



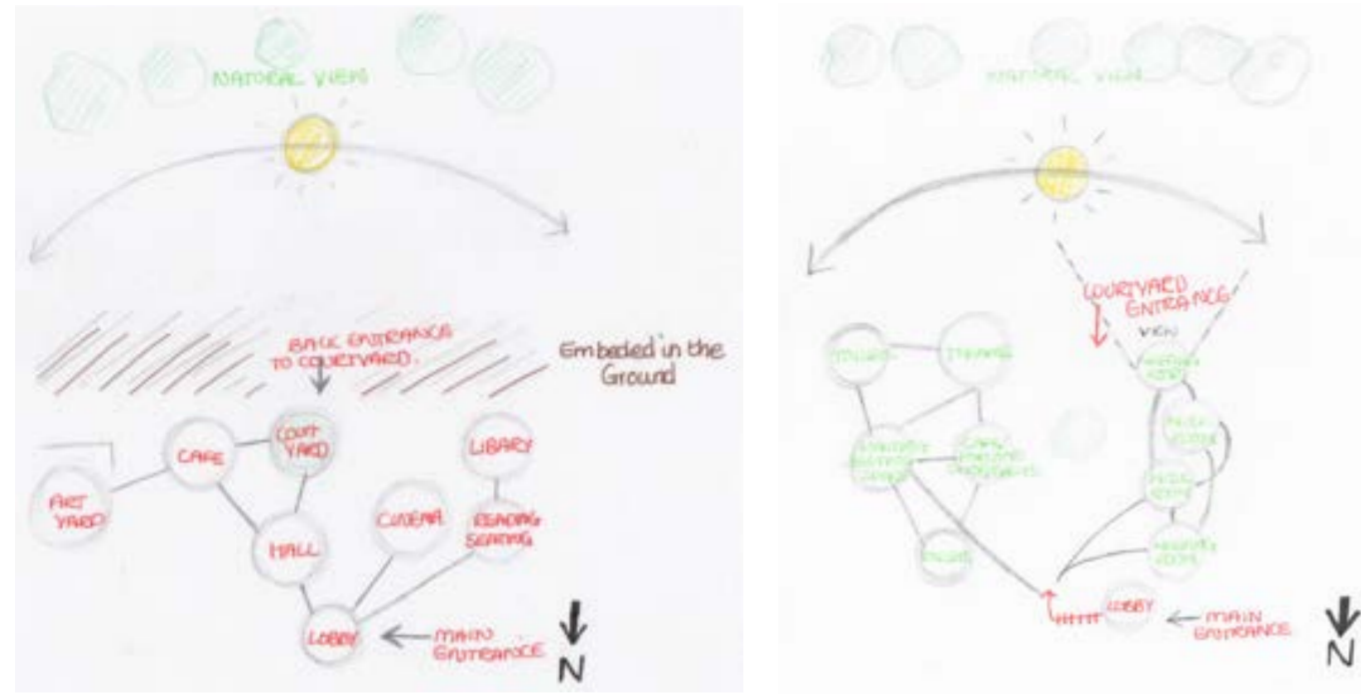
KEY CHANGES :

1. EXTERIOR CIRCULATION
2. NATURAL VIEW ON THE SOUTH SIDE
3. PRIVACY
4. INTERIOR CIRCULATION
5. INTERIOR CONNECTIVITY

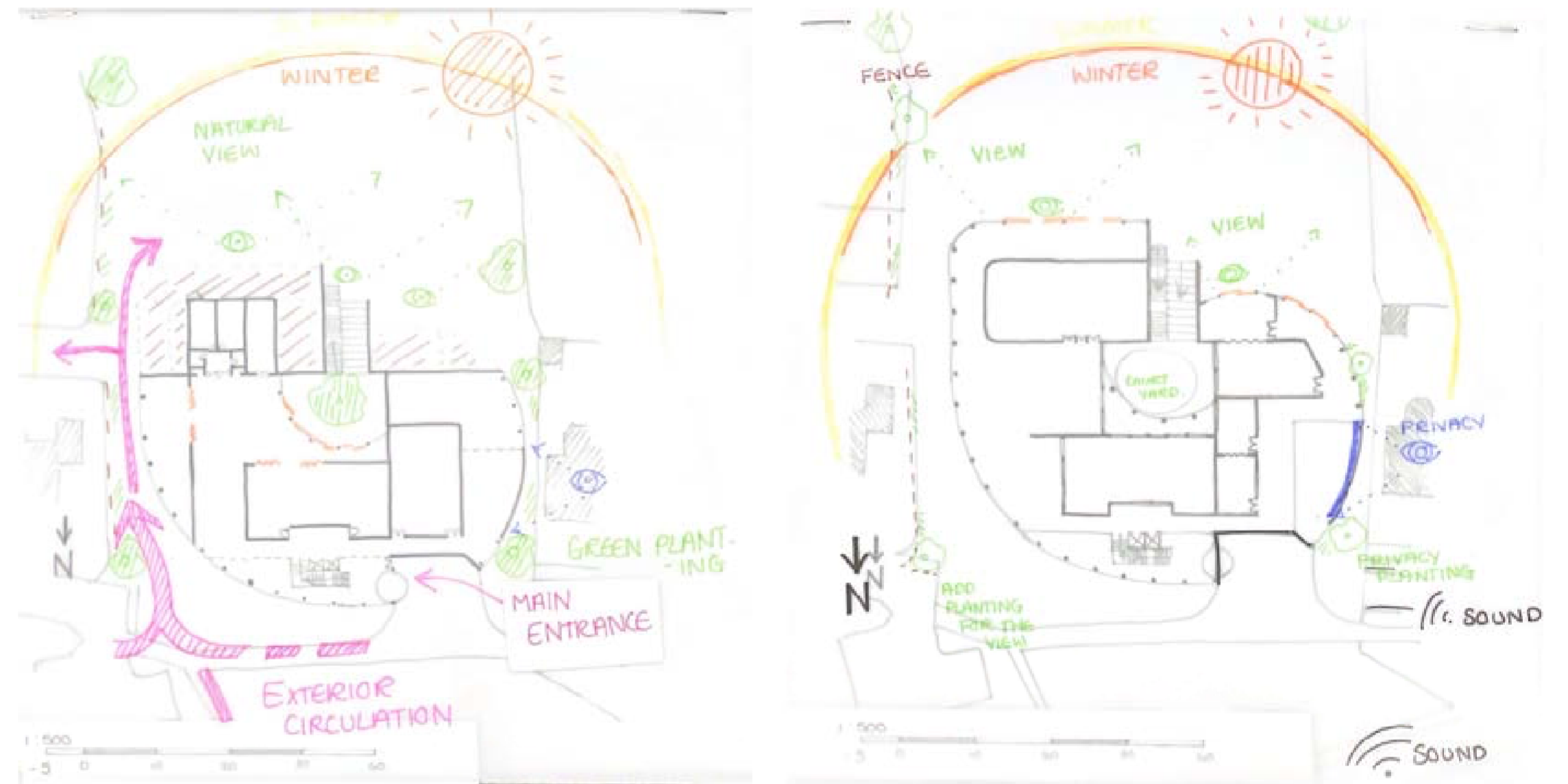


IMPROVED SKETCHY PLANS

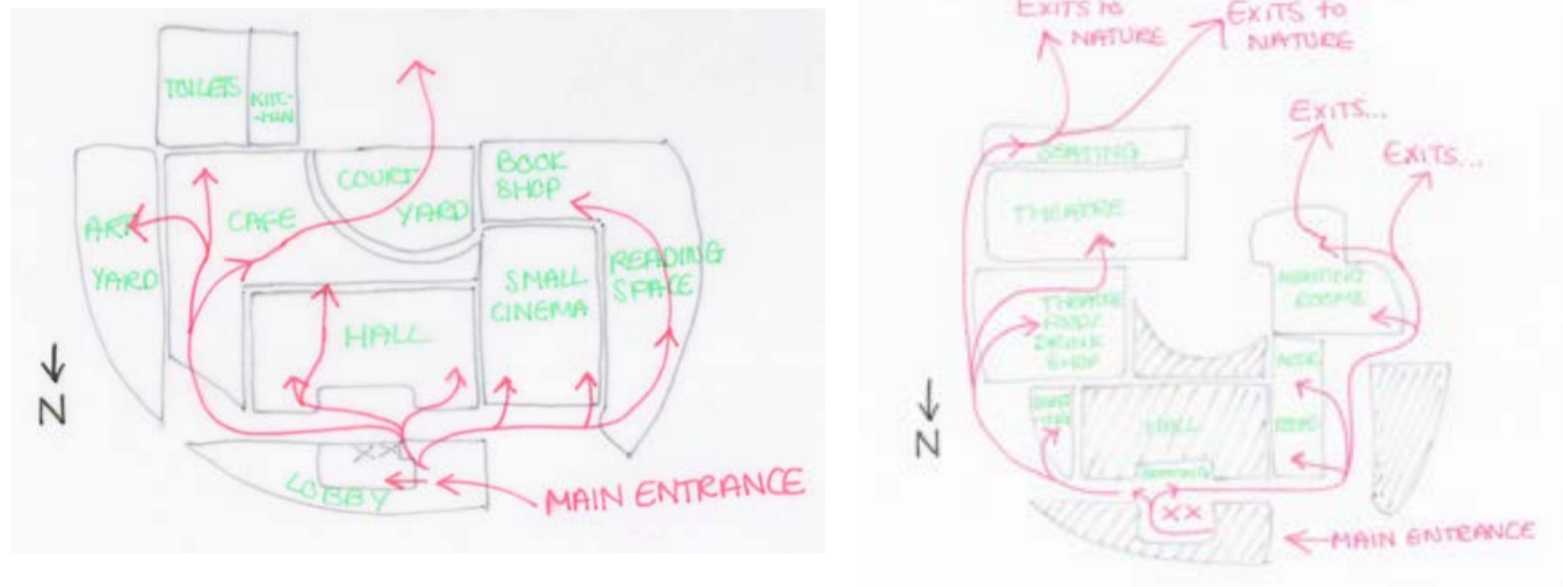
ORGANISATION DIAGRAMS



ANNOTATED PLAN DIAGRAMS

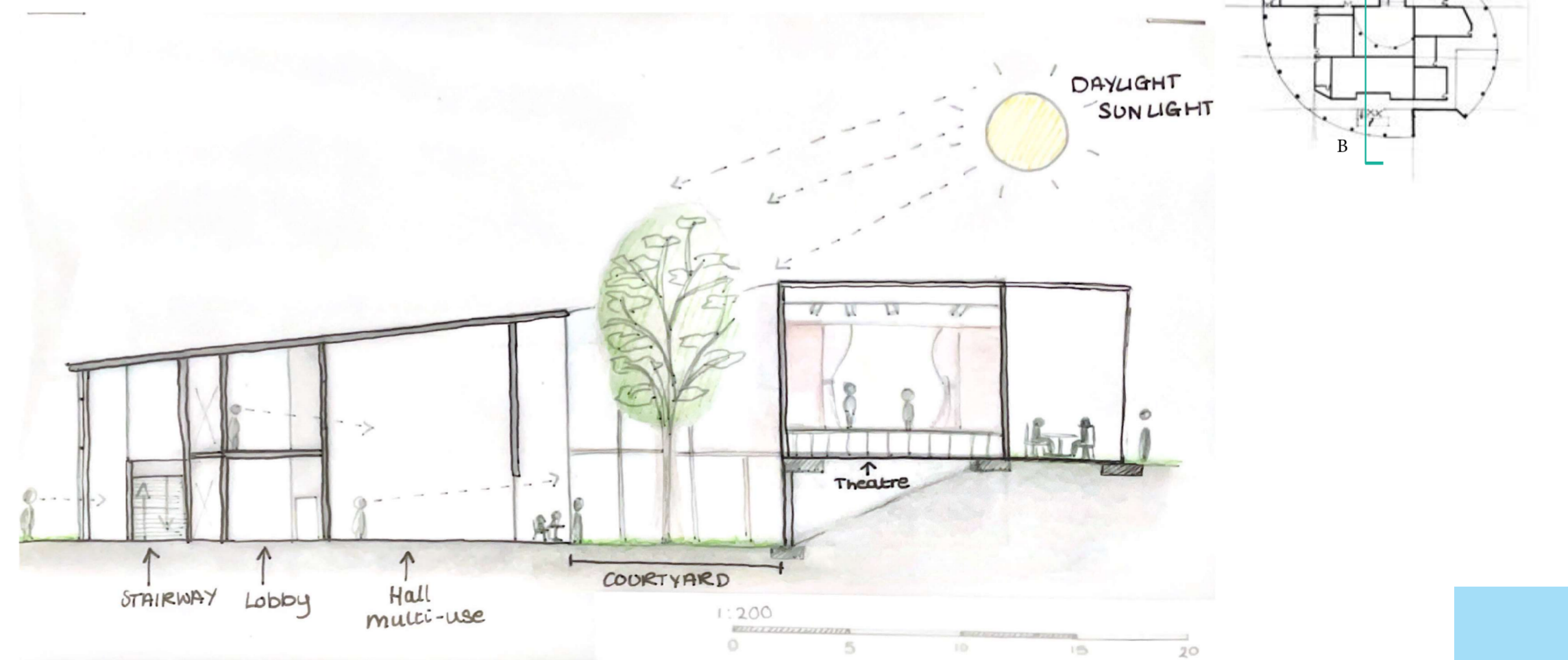


CIRCULATION DIAGRAMS

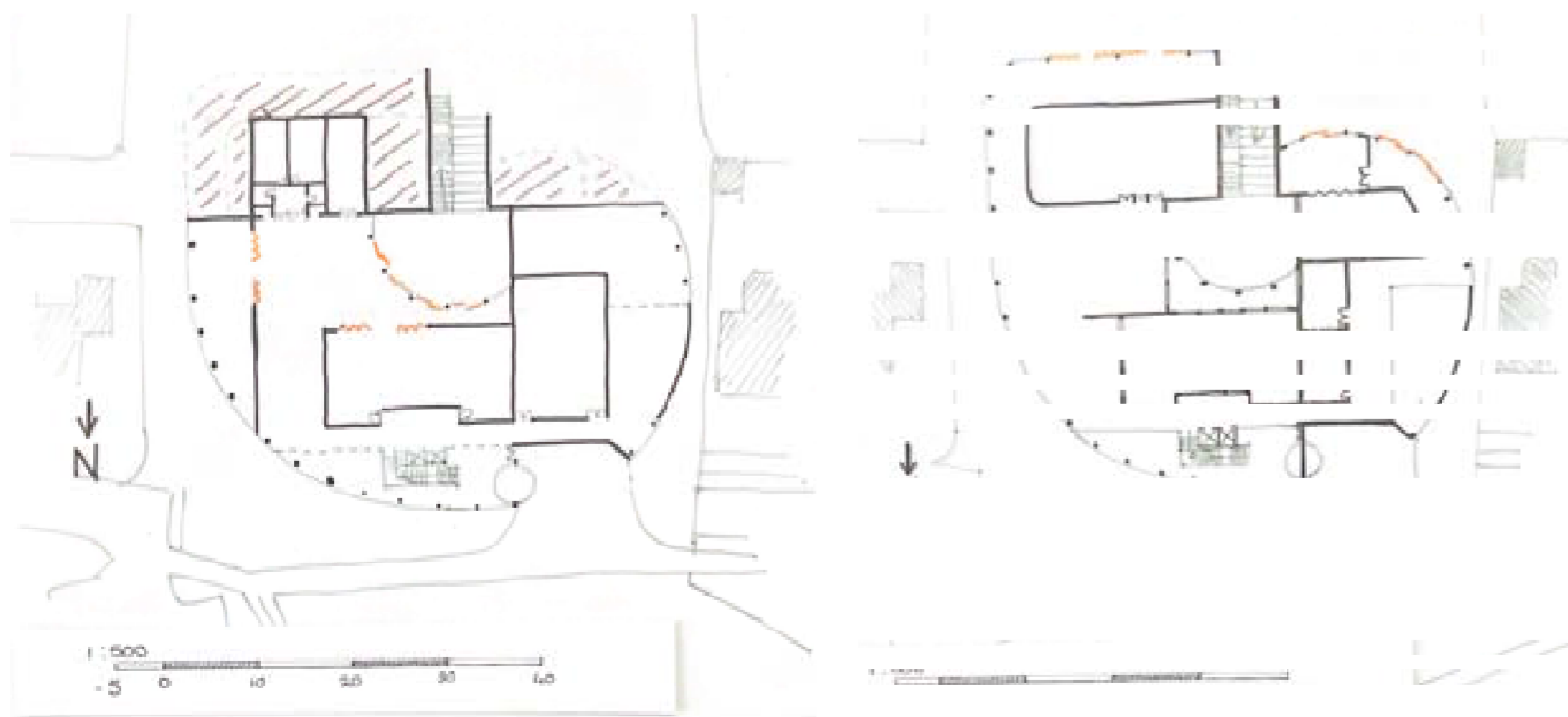


SKETCHY UPDATED SECTION

SECTION (B) UPDATED

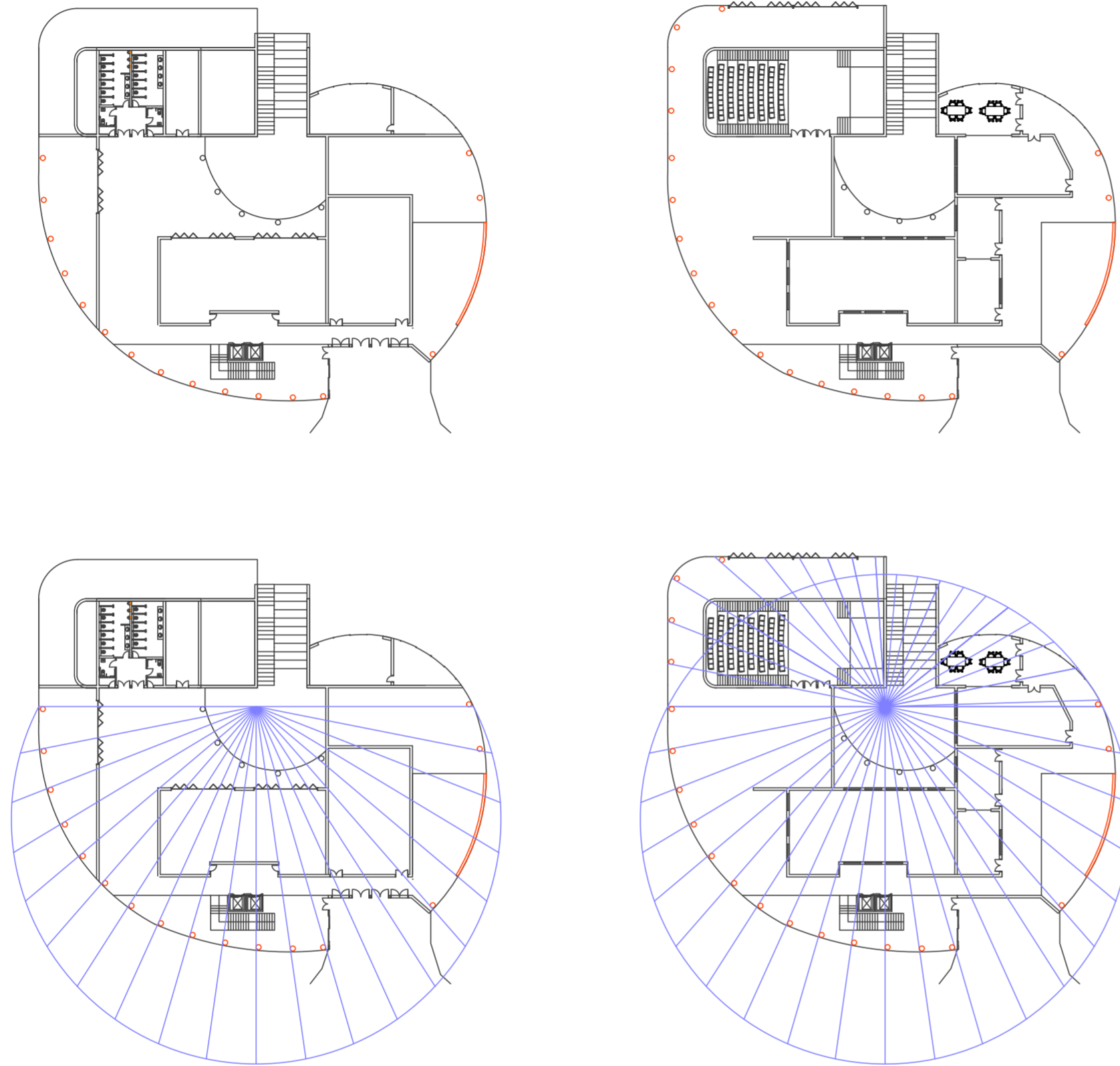


CONSTRUCTION DIAGRAMS

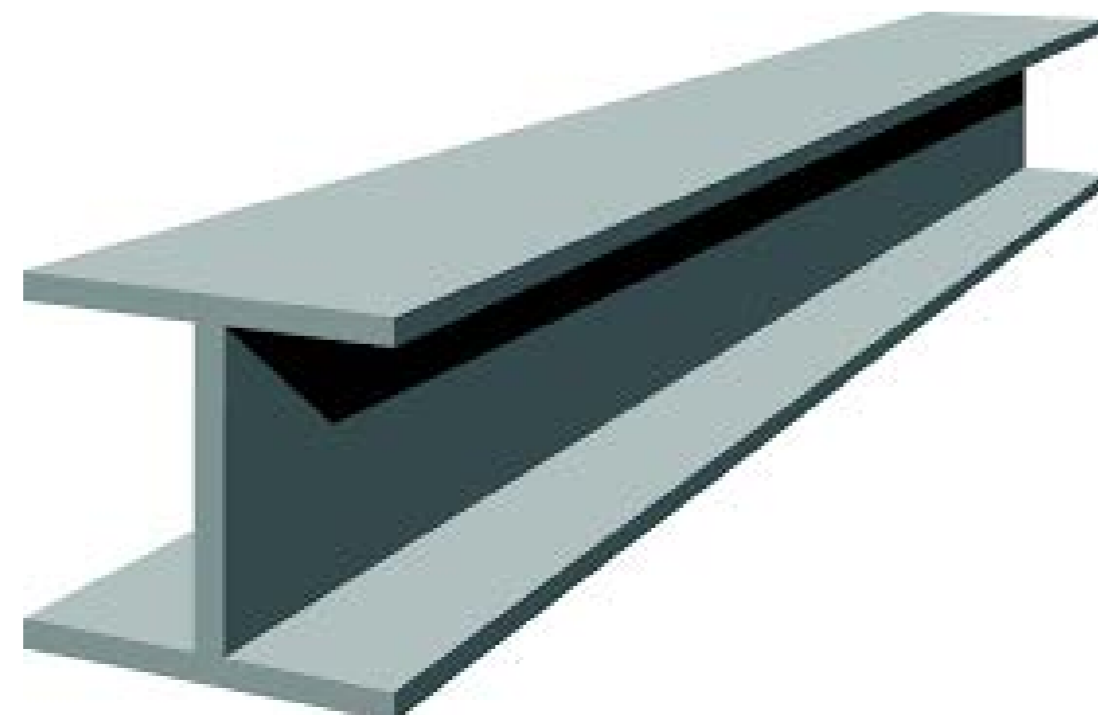


TECHNOLOGY ELEMENTS

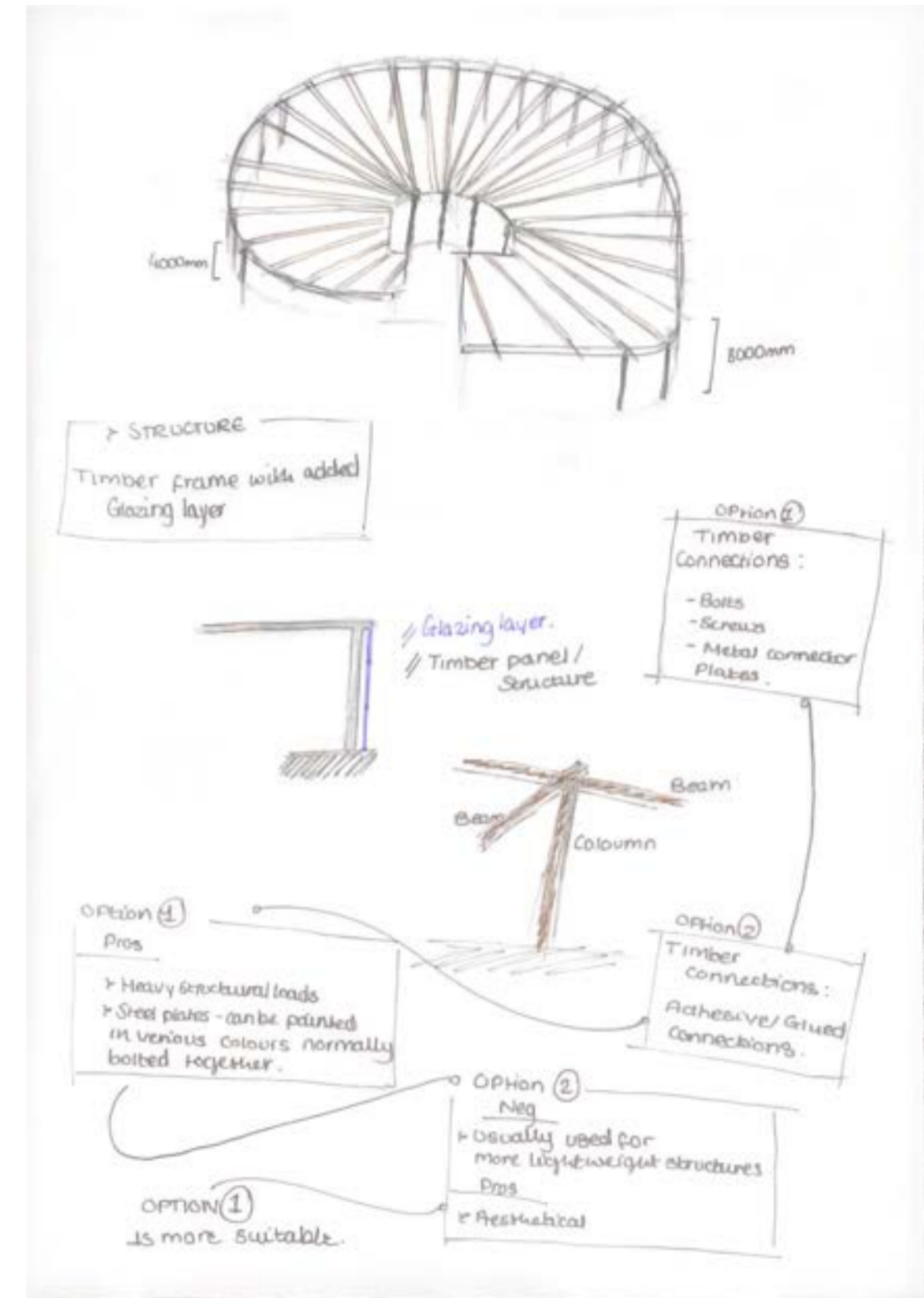
SKETCHES AND CAD DIAGRAMS



TIMBER CLADDED STEEL I COLUMNS



TIMBER COLUMNS AND LARGE GLAZING

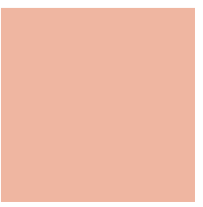
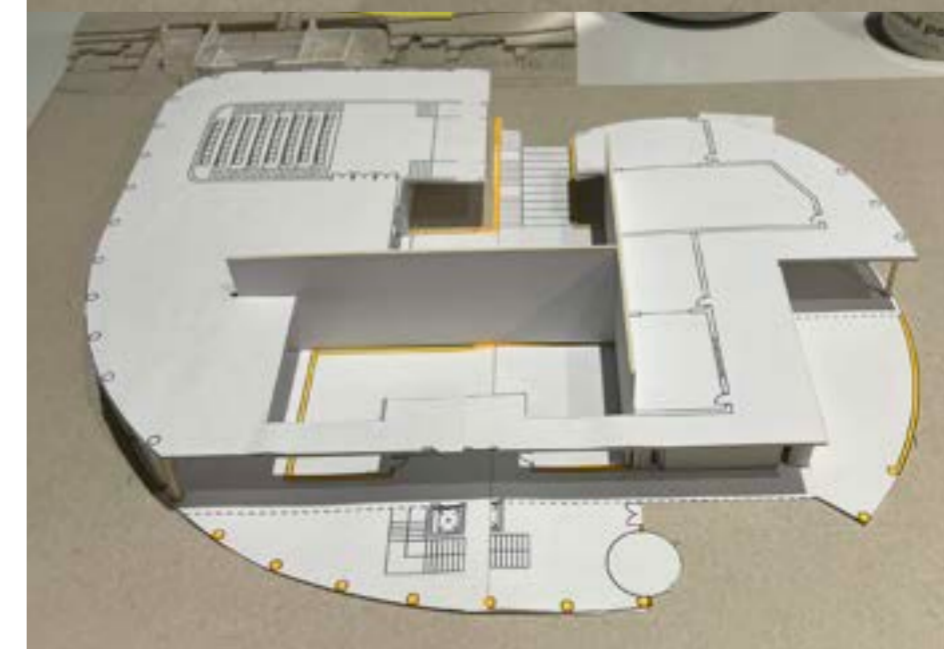
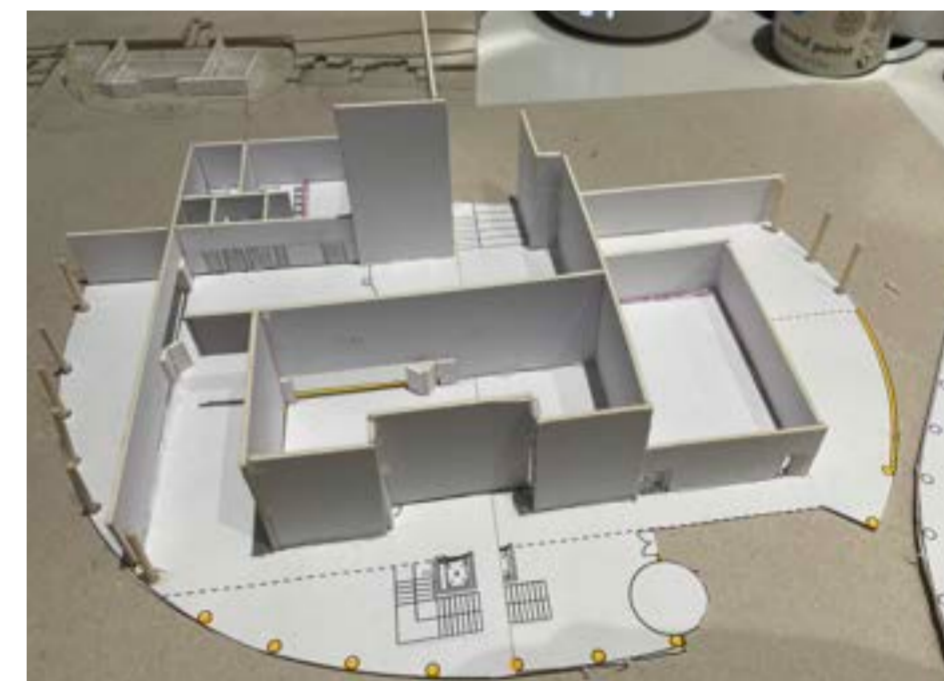


CONCRETE WALLS

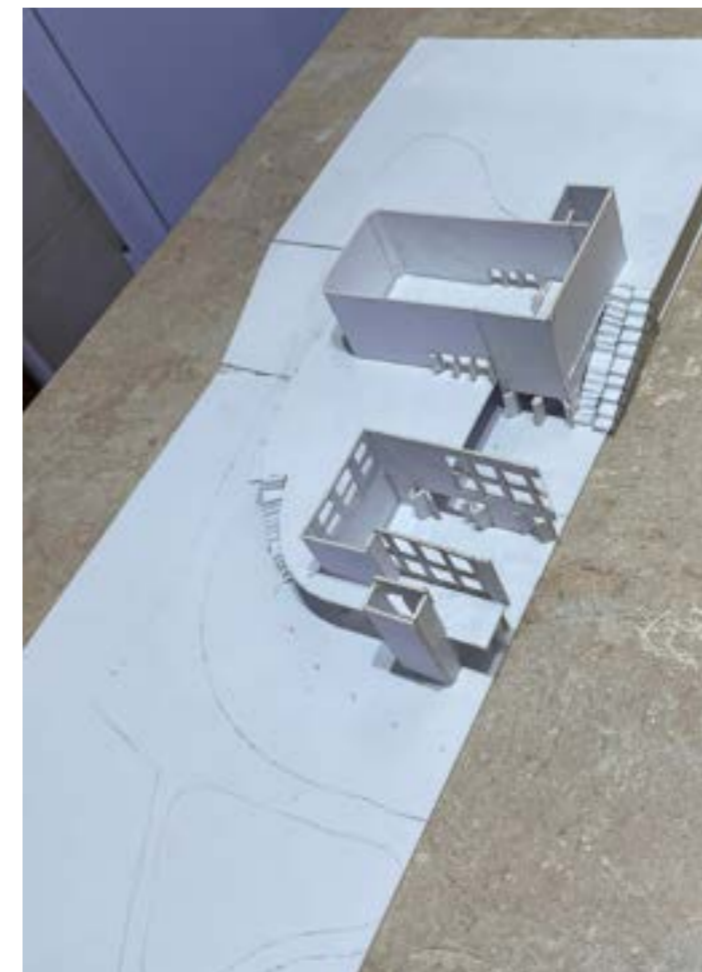
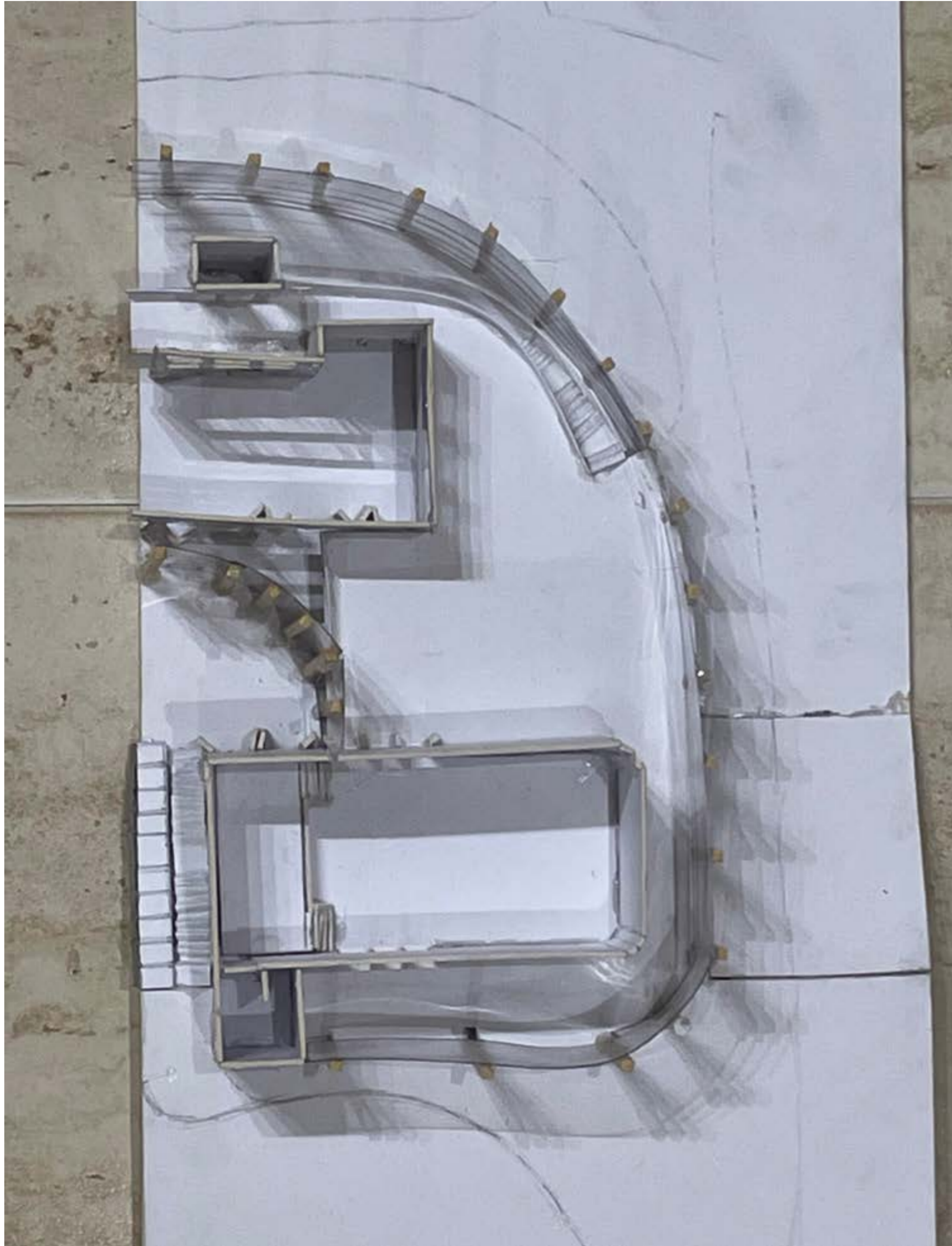


TECHNOLOGY ELEMENTS

MORE DETAILED CONCEPT MODEL 1:200



CONSTRUCTING NEW PHYSICAL MODEL



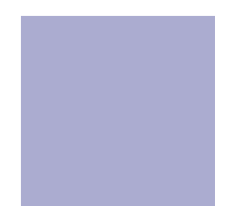
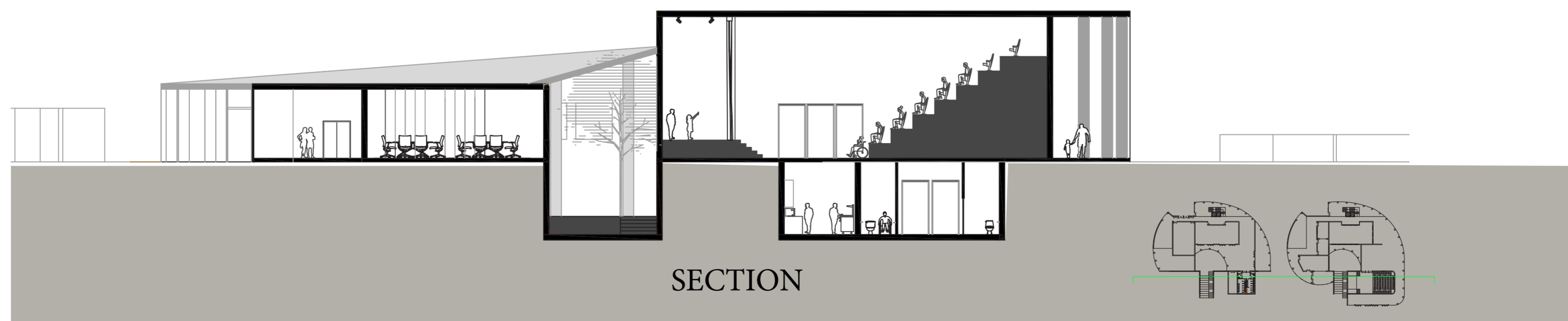
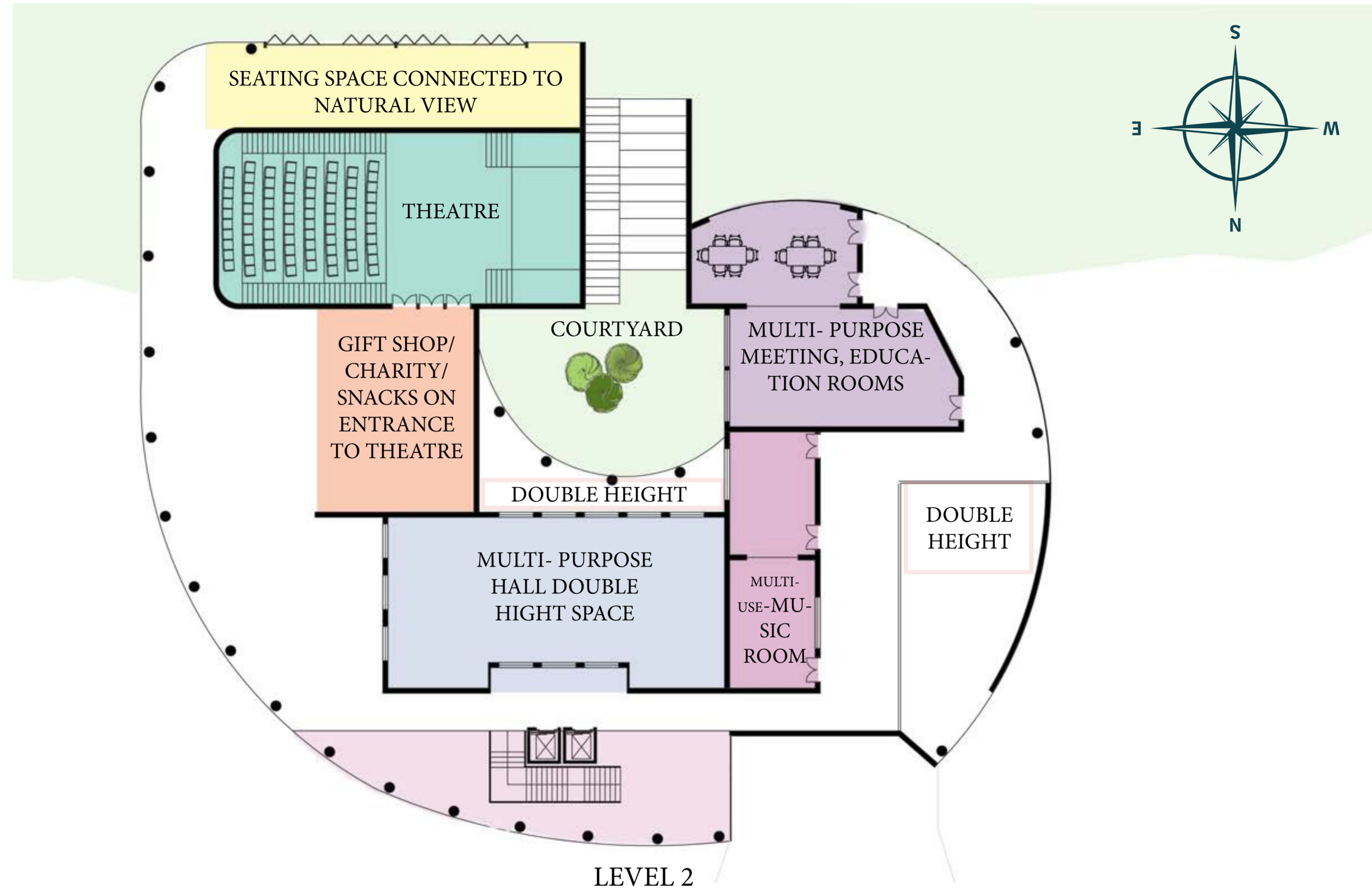
FIRST SET OF DRAWING

PLANS



FIRST SET OF DRAWING

PLANS AND SECTIONS



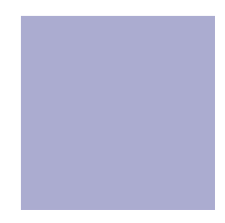
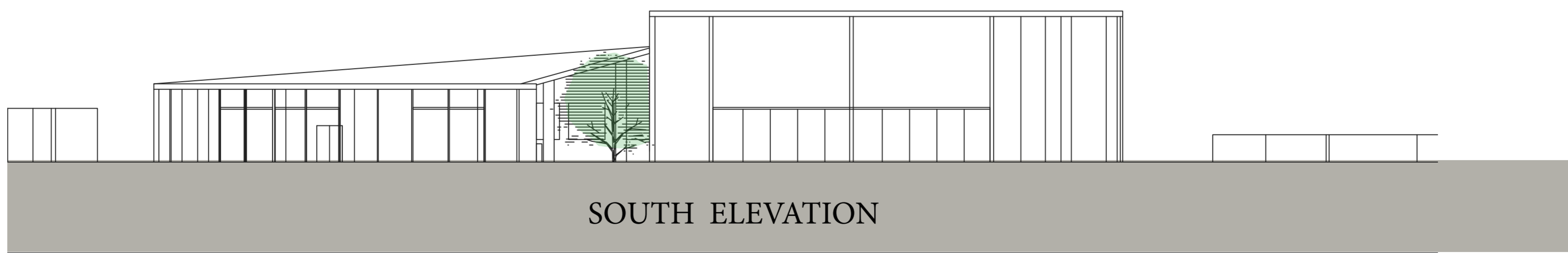
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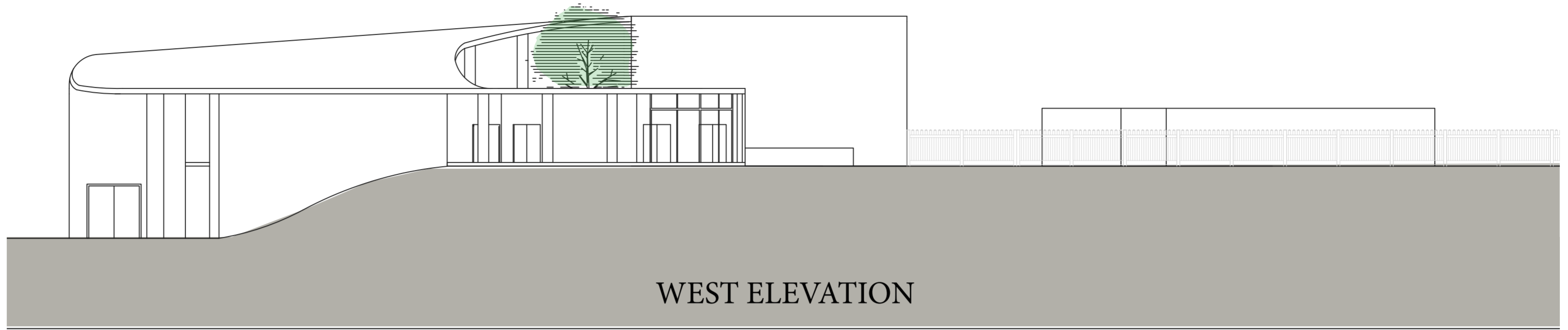
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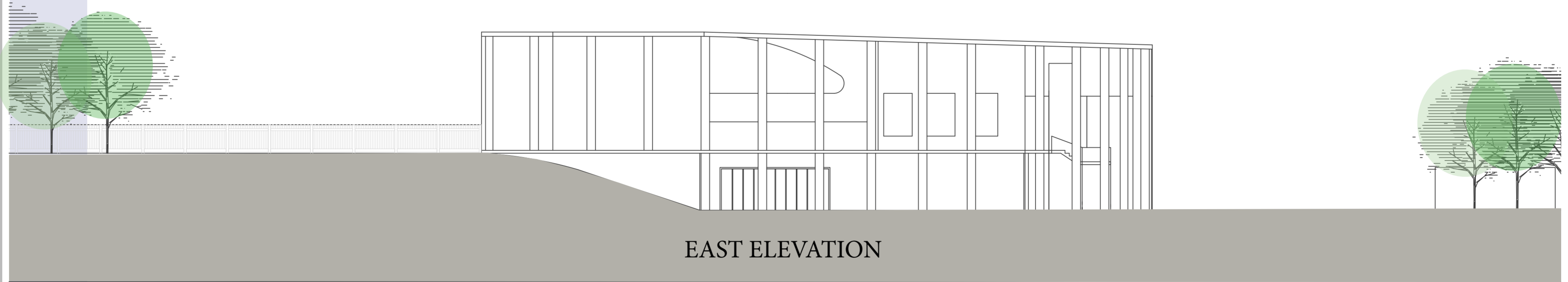
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WEST ELEVATION



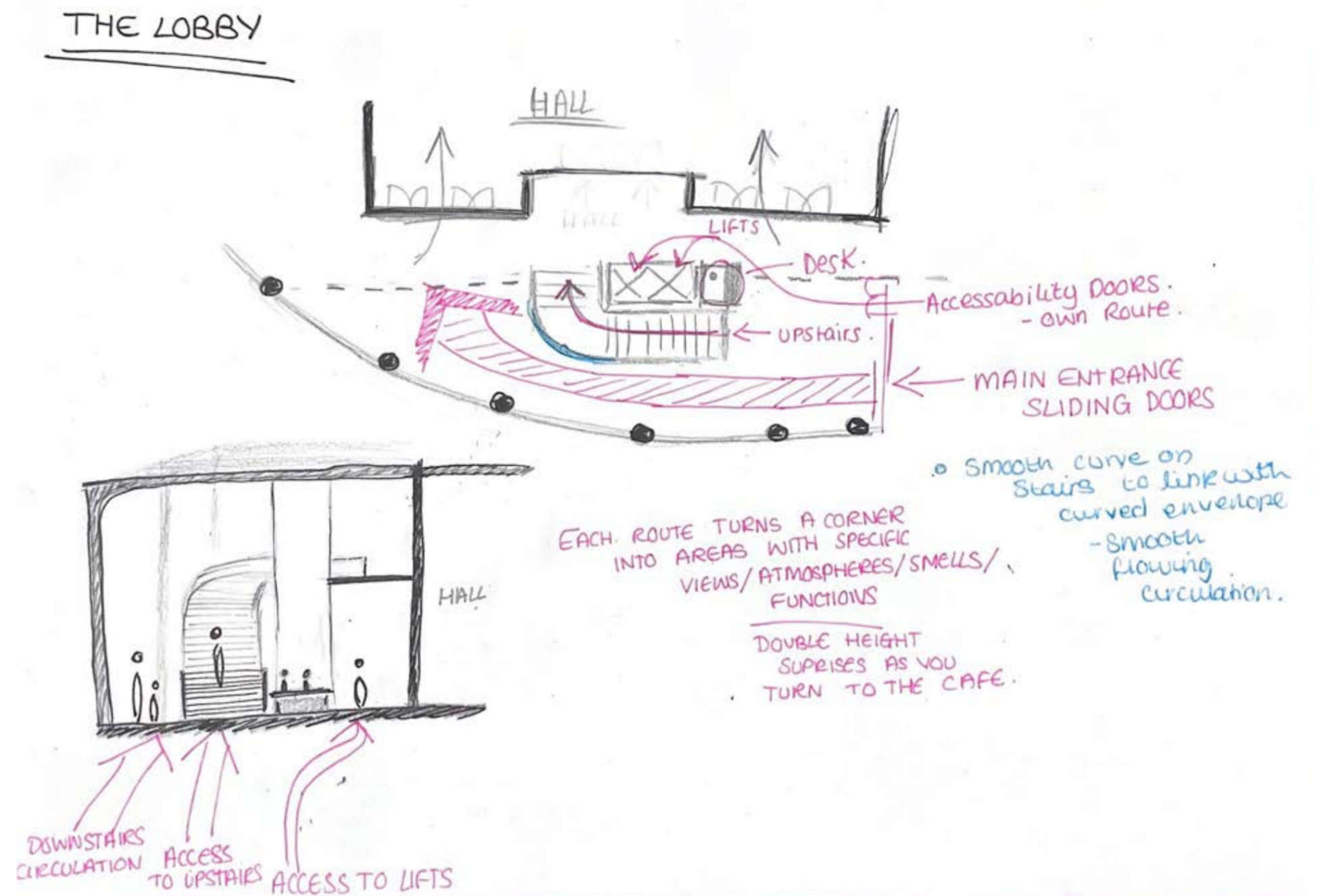
EAST ELEVATION



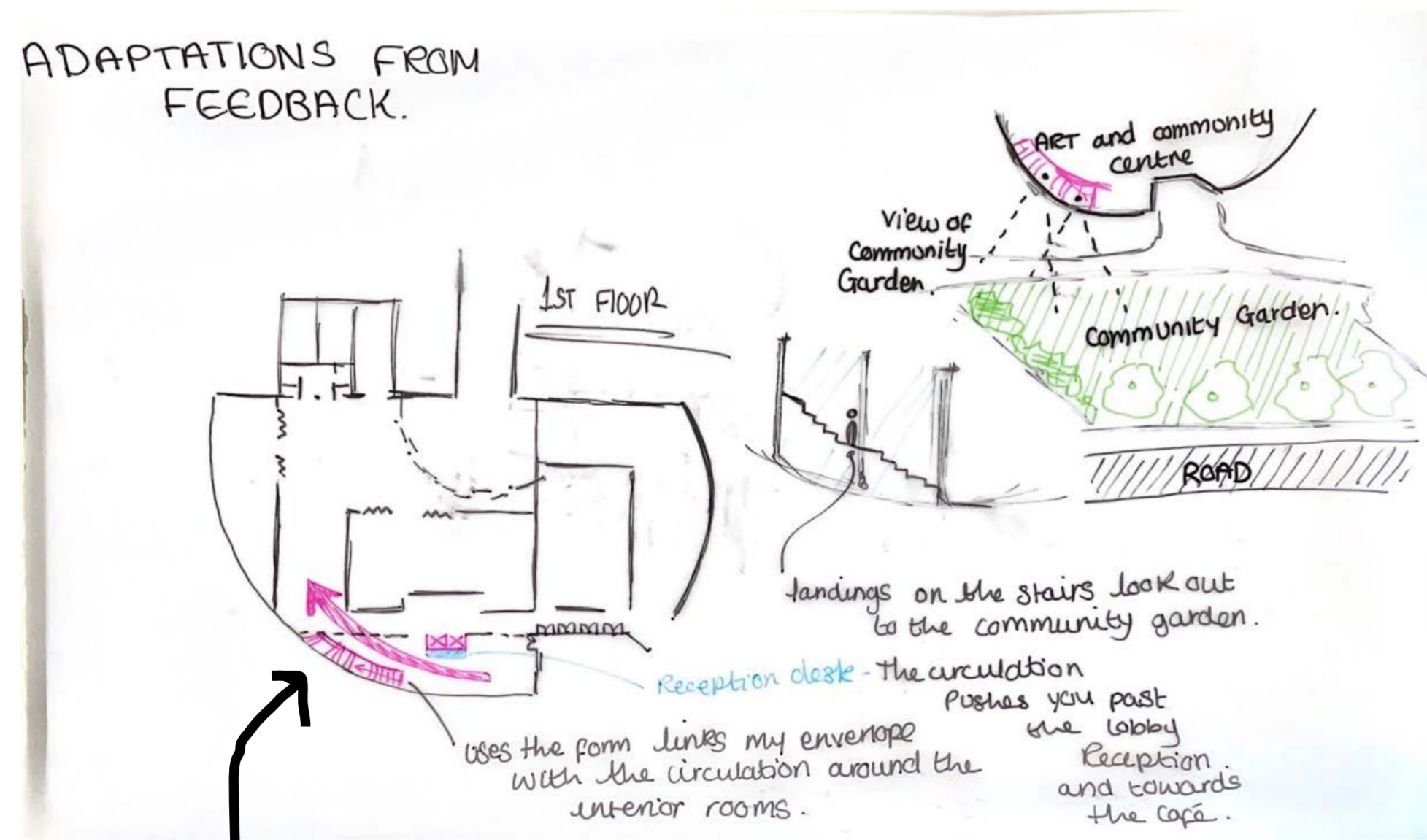
WORKING ON PRESENTATION FEEDBACK

FEEDBACK POINTS:

- Experiment with the interior, include sketchy visualisations.
- Include/ adapt the stairs to link with the enveloping architectural language.
 - Focus on my interior circulation from the circulation

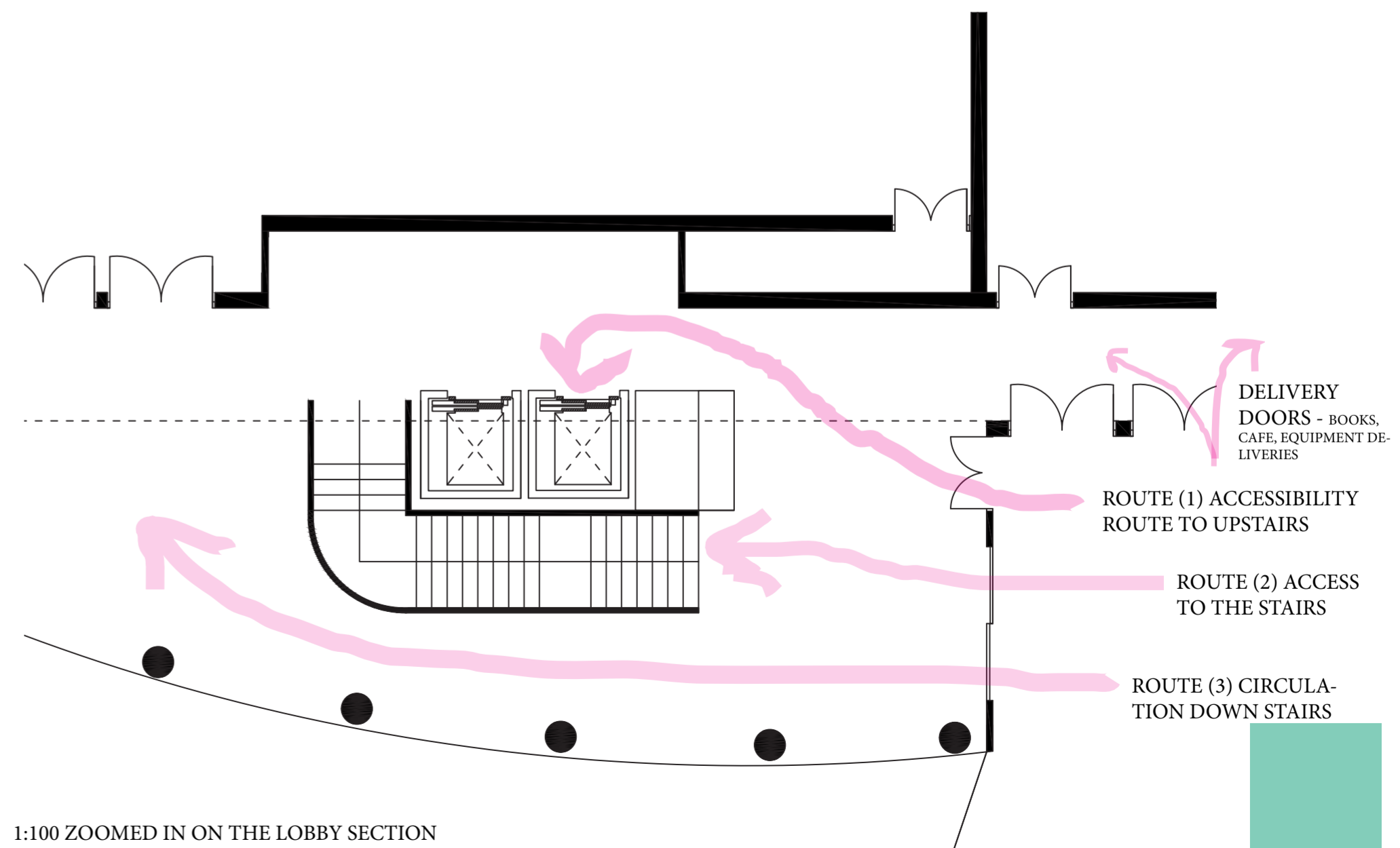


ADAPTATIONS FROM FEEDBACK.



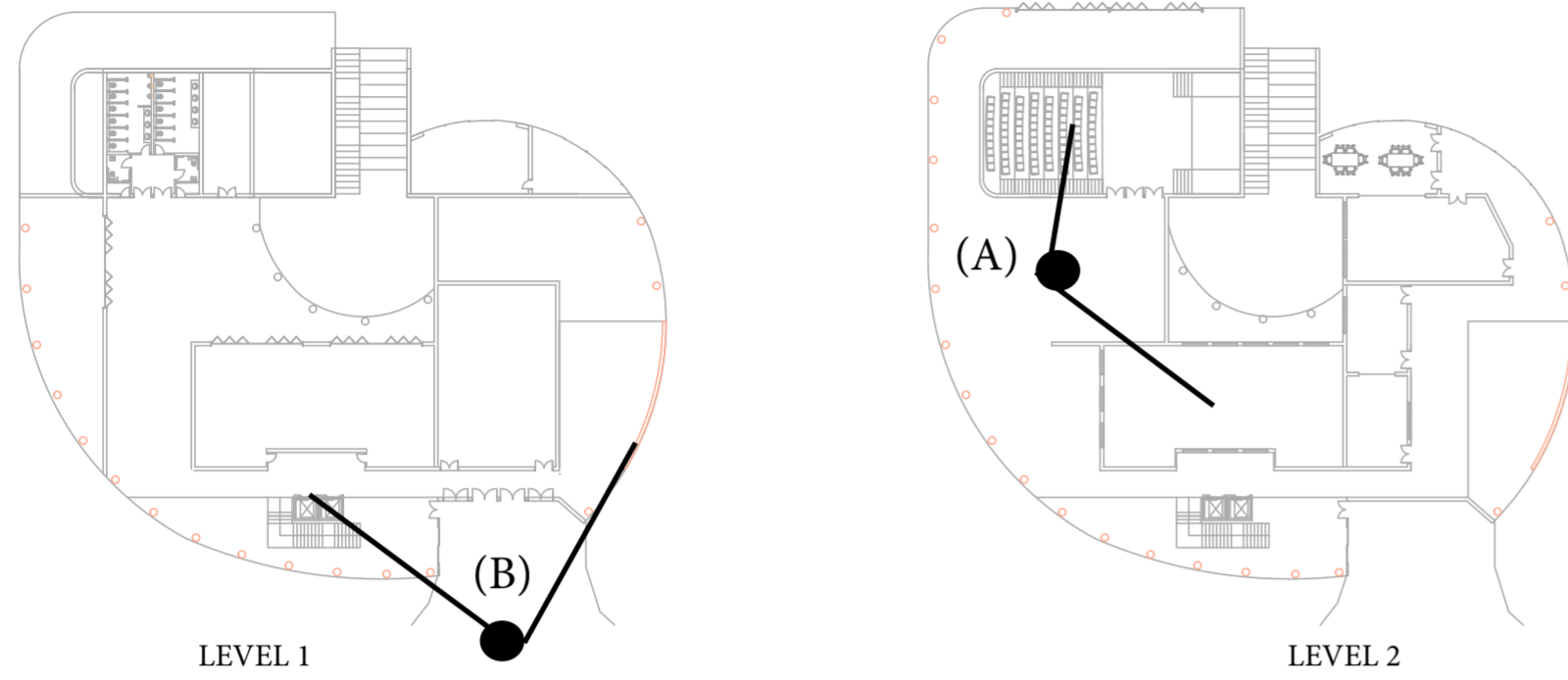
I explored this idea however when I added it to auto-cad this created other issues in terms of circulation.

ADAPTING ALONGSIDE MY CAD PLAN

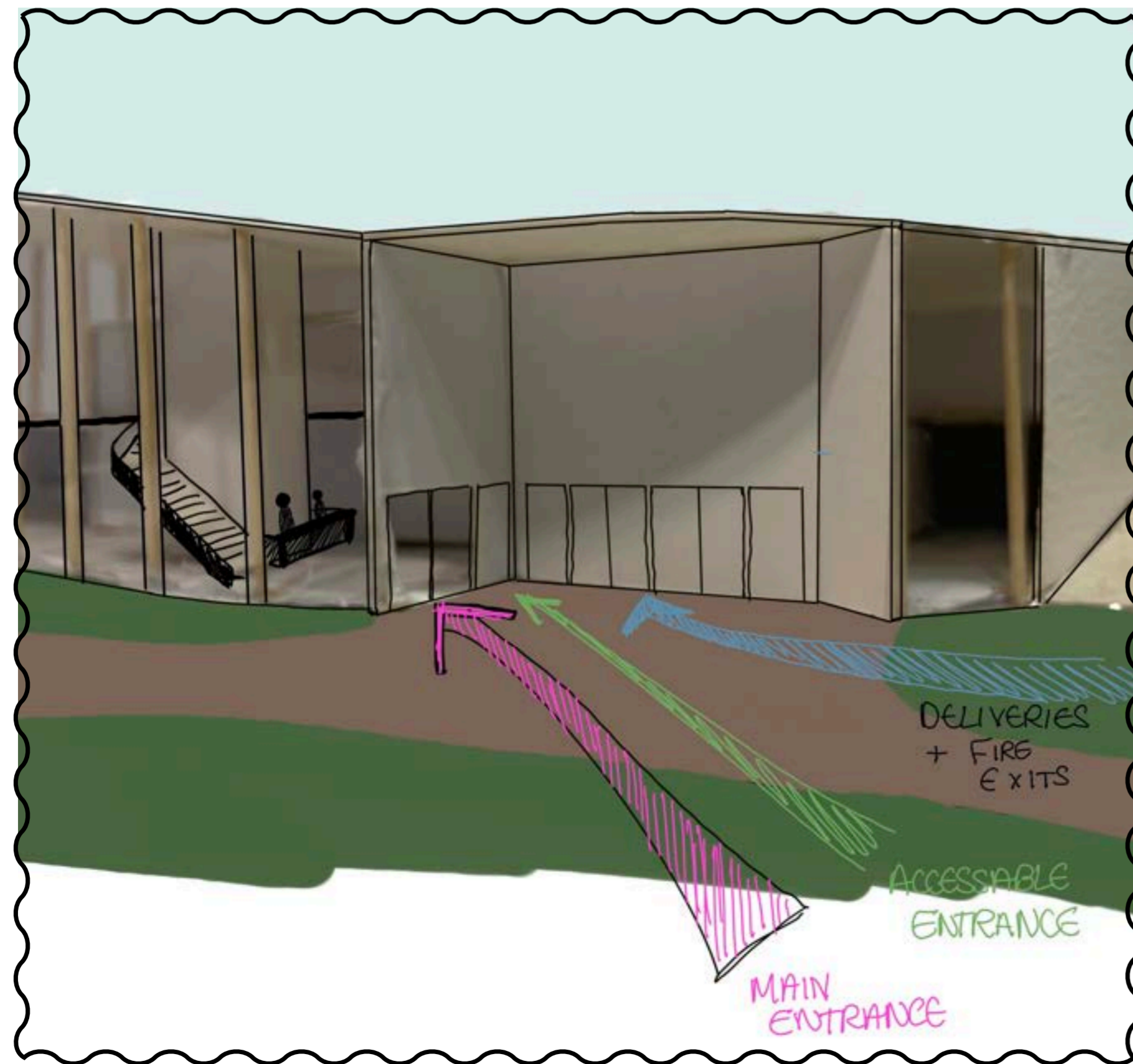


1:100 ZOOMED IN ON THE LOBBY SECTION

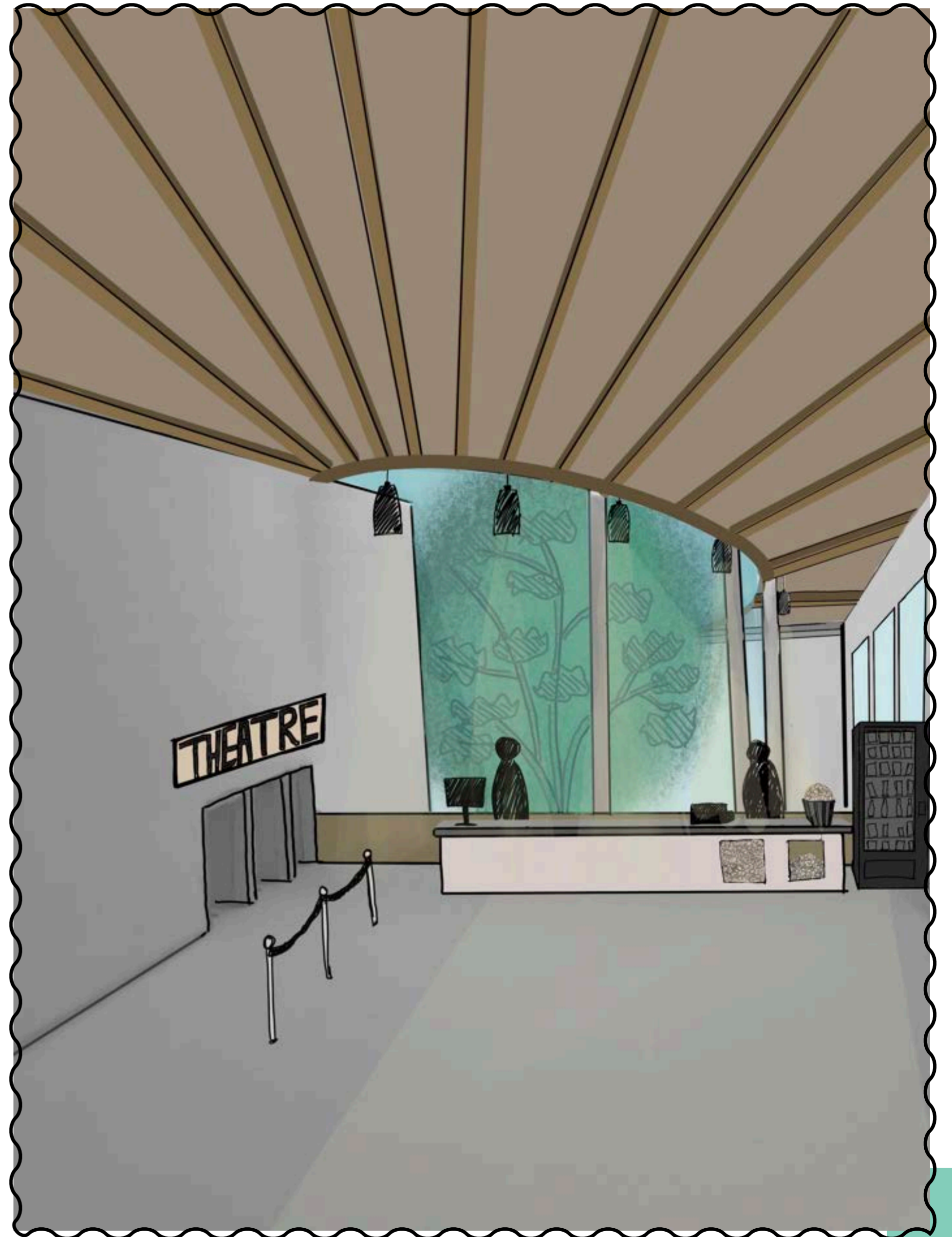
CREATING SKETCHY INTERIOR VISUALS



(B) MAIN ENTRANCE



(A) INTERESTING DOUBLE HEIGHT SPACES



A R C H I T E C T U R E

PORTFOLIO

ART AND COMMUNITY CENTRE-
FINAL PROJECT

AMY GALEA

T1A1840-2223 DESIGN STUDIO 3:
PLACE AND ARCHITECTURE
JAN 2023



ARTS AND COMMUNITY CENTRE – FINAL PROJECT



LOCATION PLAN

01. Location plan 1:2000 and other site maps
02. Site section 1:200

DESIGN STRATEGY PLAN

03. Ground floor plan in context 1:500

CONTEXT PLAN

04. Roof plan in context 1:500

PLANS

05. Ground floor 1:200
06. First floor 1:200

SECTIONS

07. Sections

ELEVATIONS

08. North and South Elevations 1:200
09. East and West Elevations 1:200
10. Photo-shopped N&S Elevation 1:200
11. Photo-shopped E&W Elevation 1:200

PHYSICAL MODEL

12. Physical model
13. Birds eye view visual
14. Courtyard visual
15. Interior visuals from physical model and hand sketching

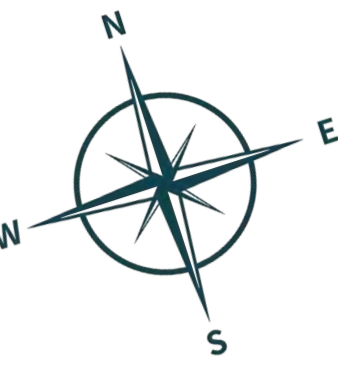
POST DESIGN ANALYSIS

16. Concept overview (connectivity)
17. Response to context
18. Connection
19. Exterior circulation
20. Double height spaces
21. Interior organisation
22. Interior circulation
23. Accessibility, fire routes

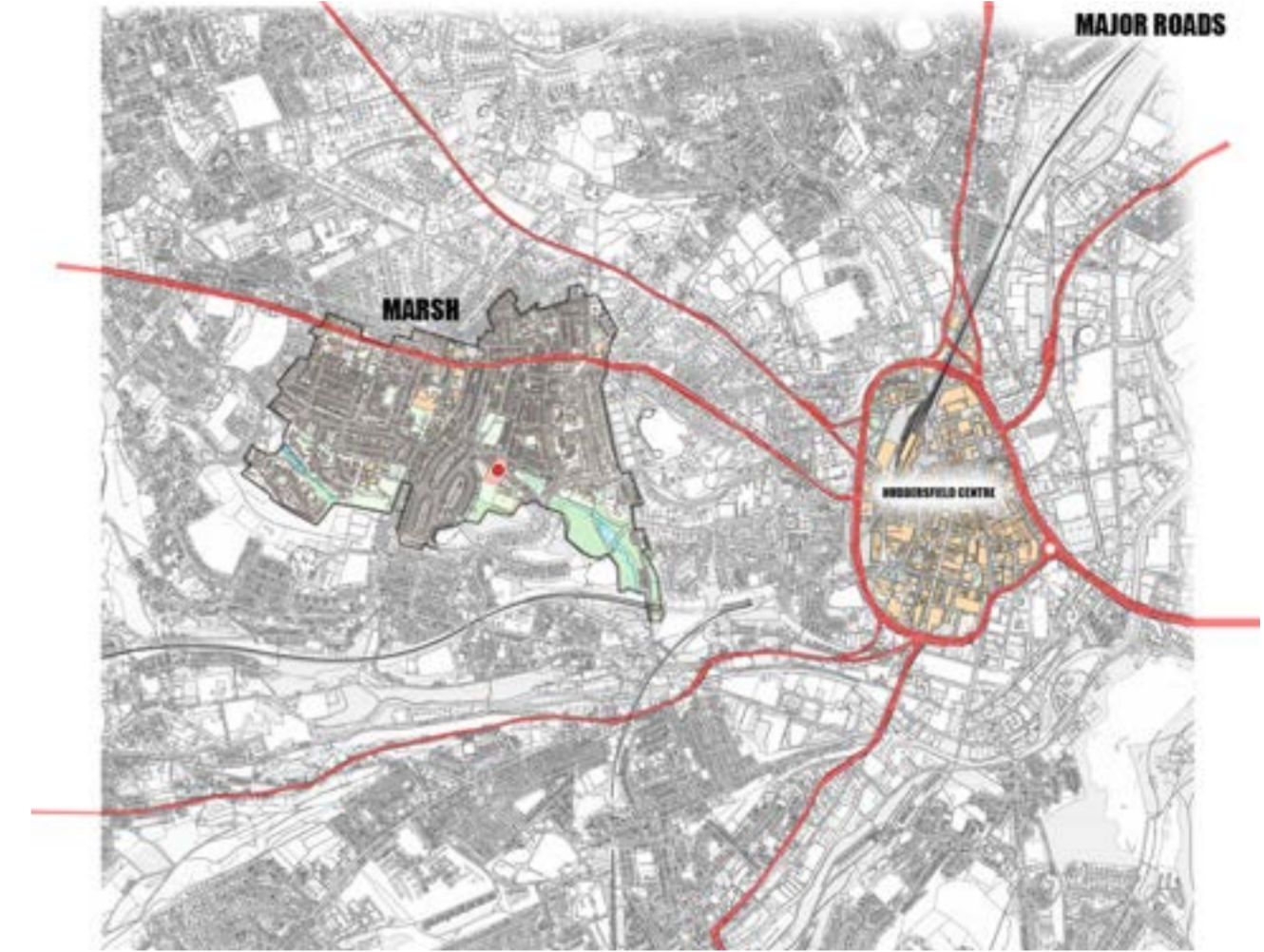
TECHNOLOGY ASPECT

24. Material choices
- 25-27: Technology analysis including 1:20 details

SITE LOCATION 1:200



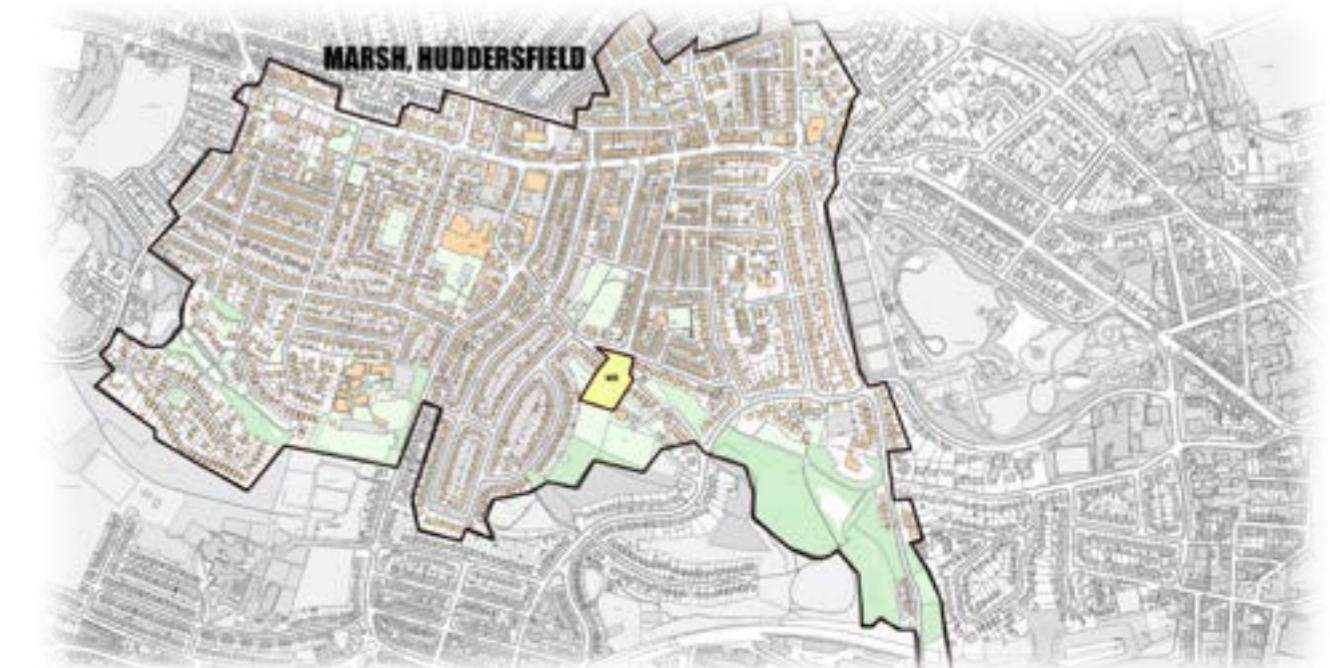
MAJOR ROADS AROUND MARSH



VEGETATION AROUND THE SITE

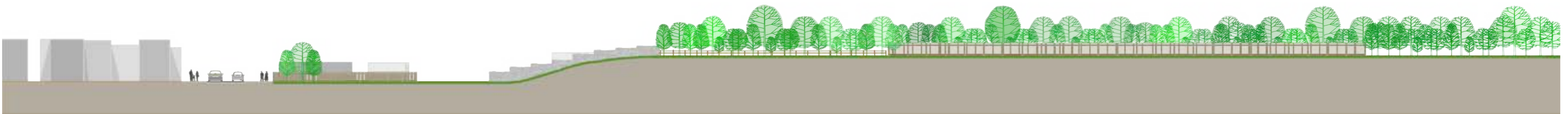
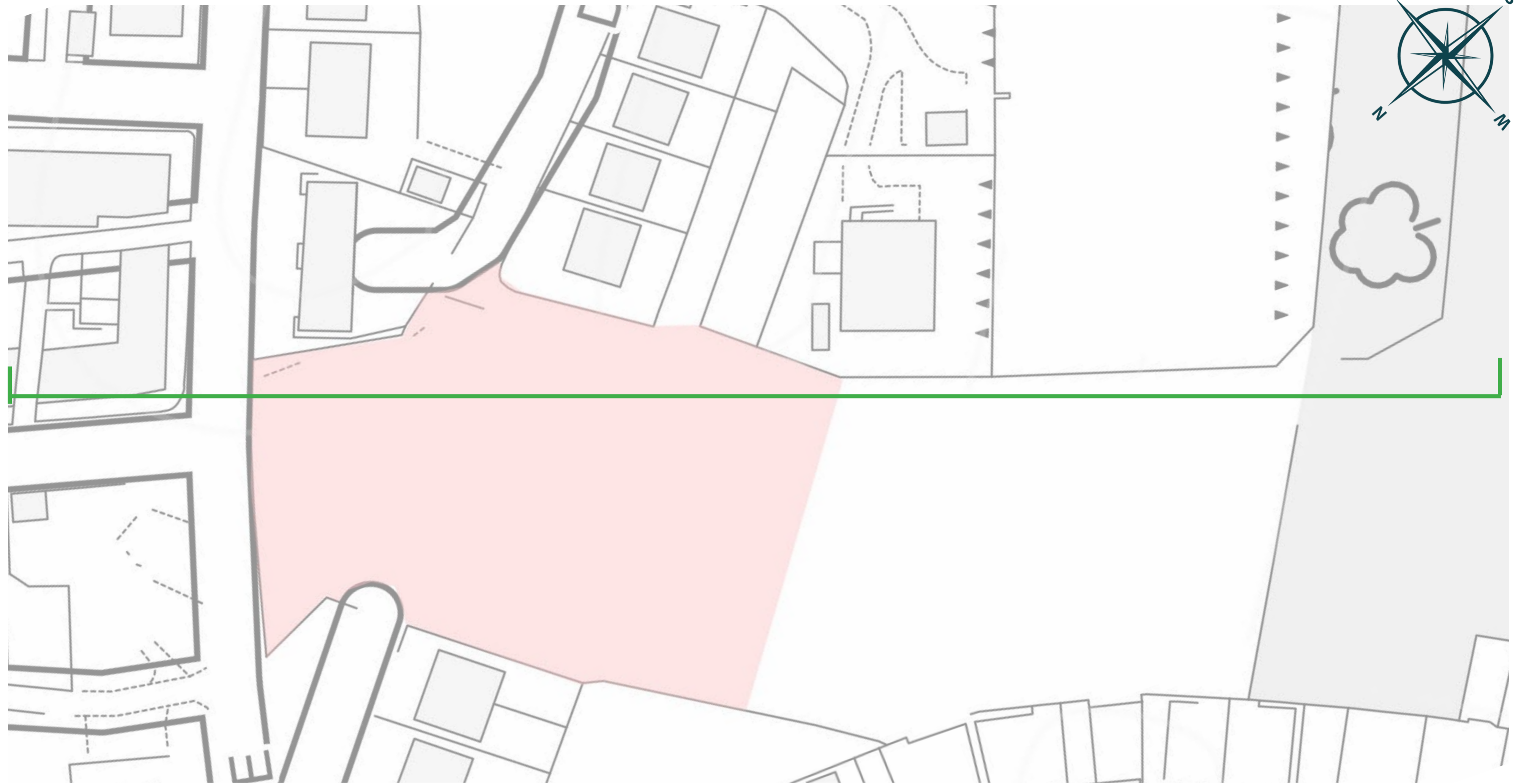


BOUNDARY OF MARSH



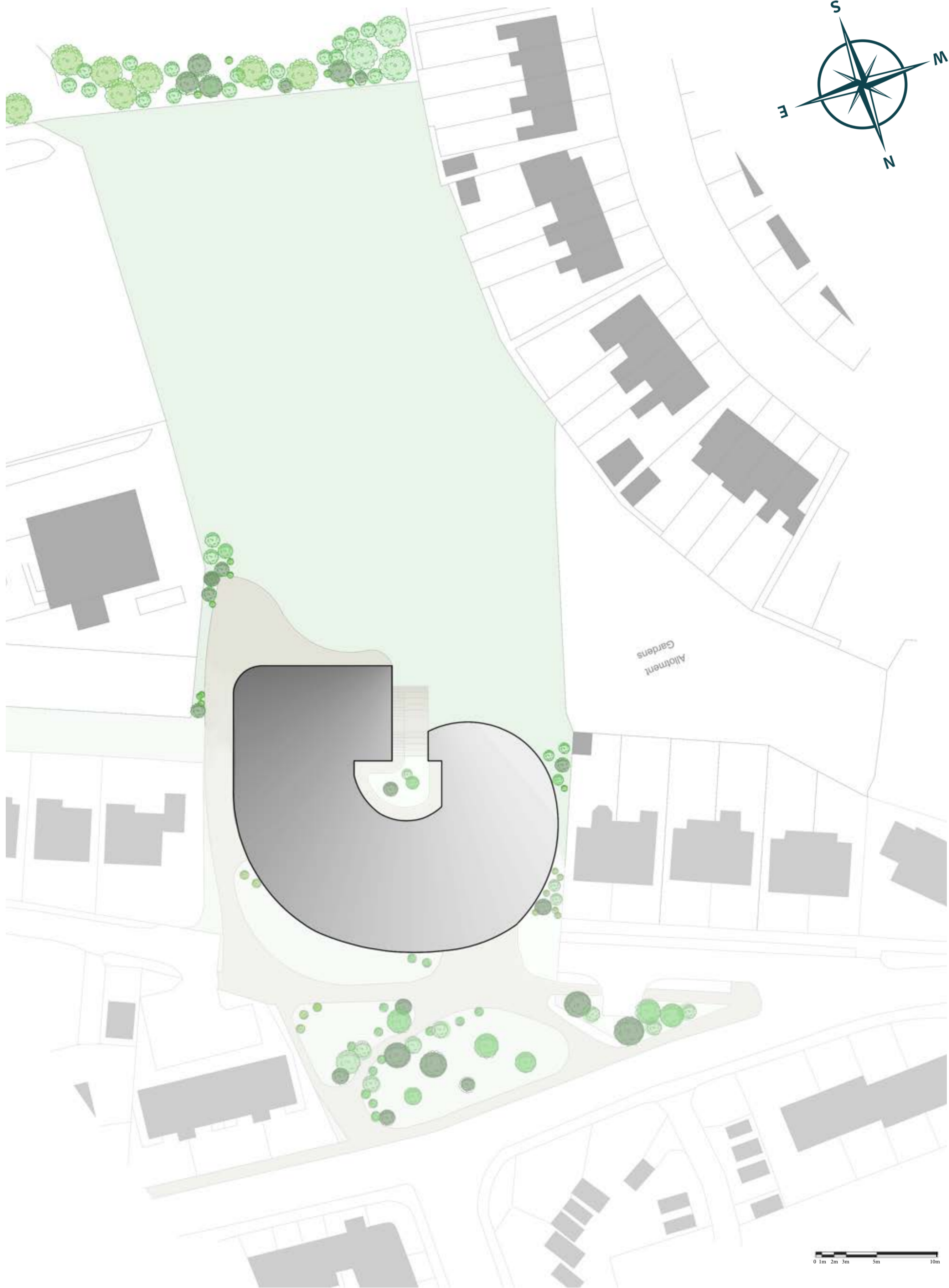
SITE SECTION 1:200

LOCATION
PLAN



S I T E & C O N T E X T P L A N

R O O F P L A N I N C O N T E X T



0 1m 2m 3m 5m 10m



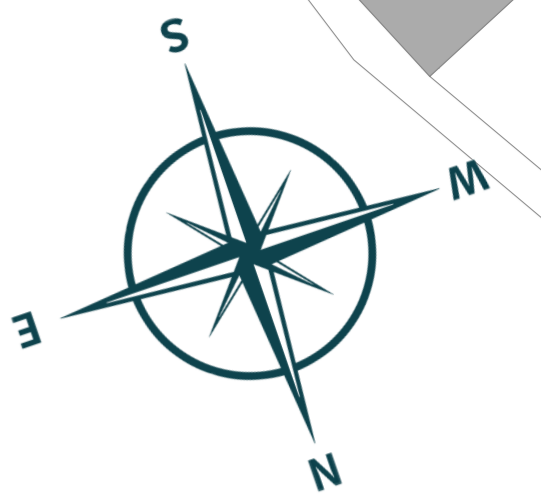
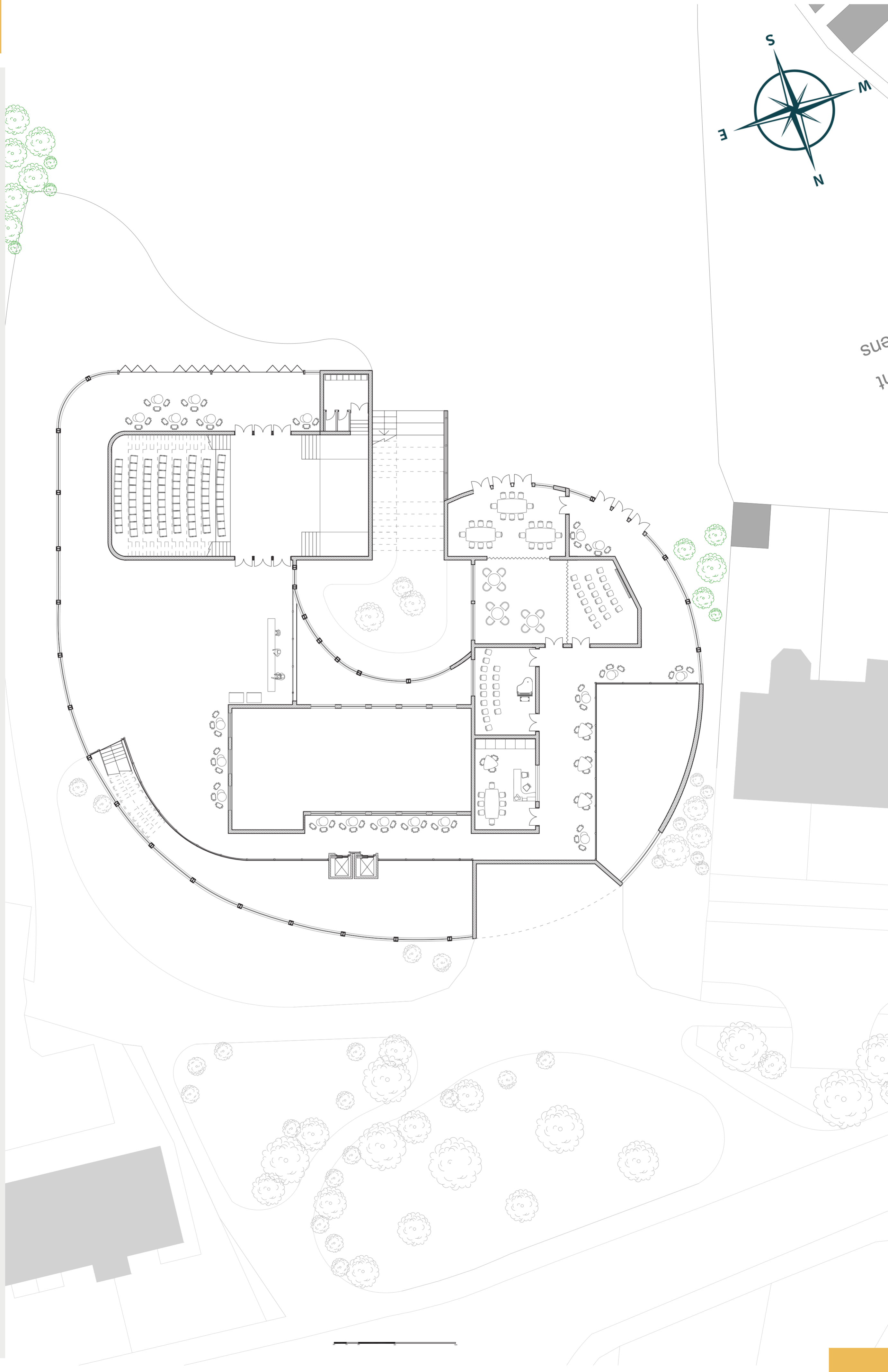
PLANS

GROUND FLOOR : 2000



PLANS

FIRST FLOOR : 2000

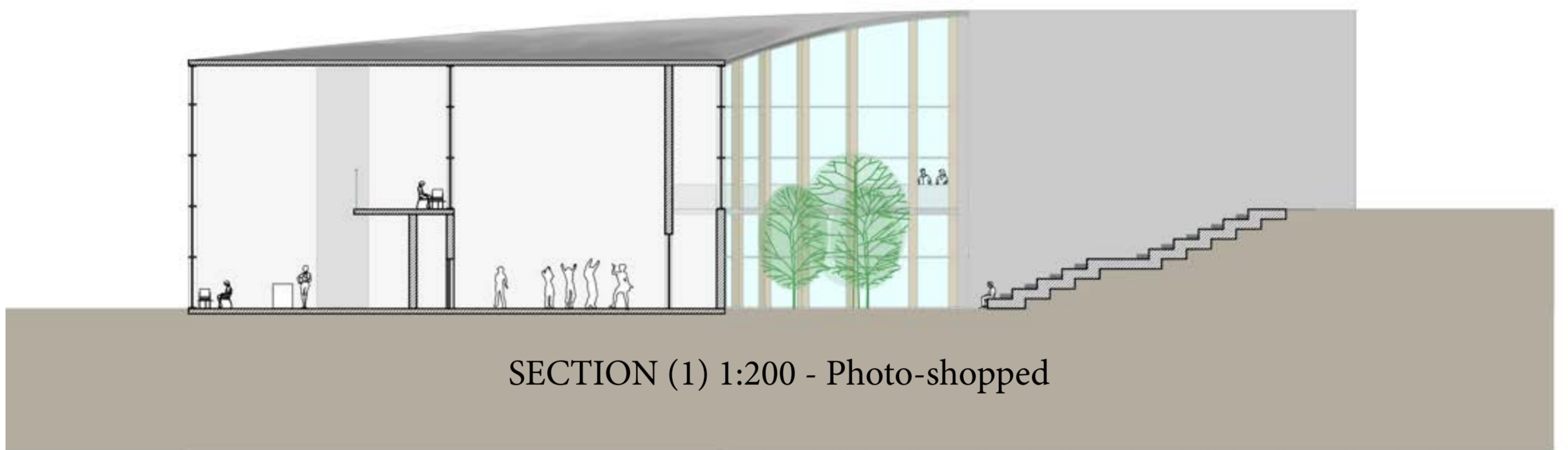


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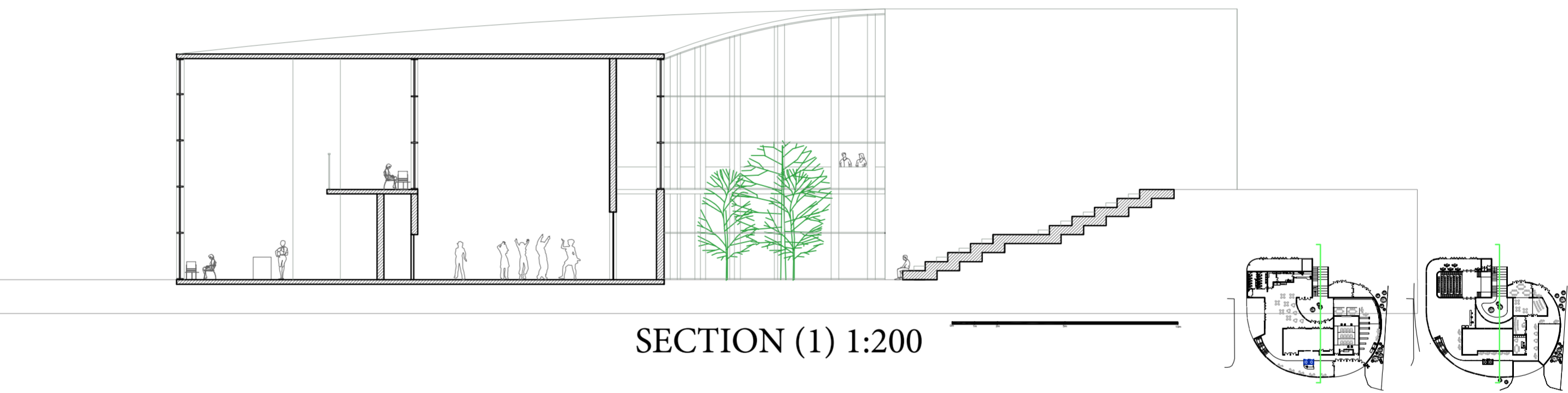




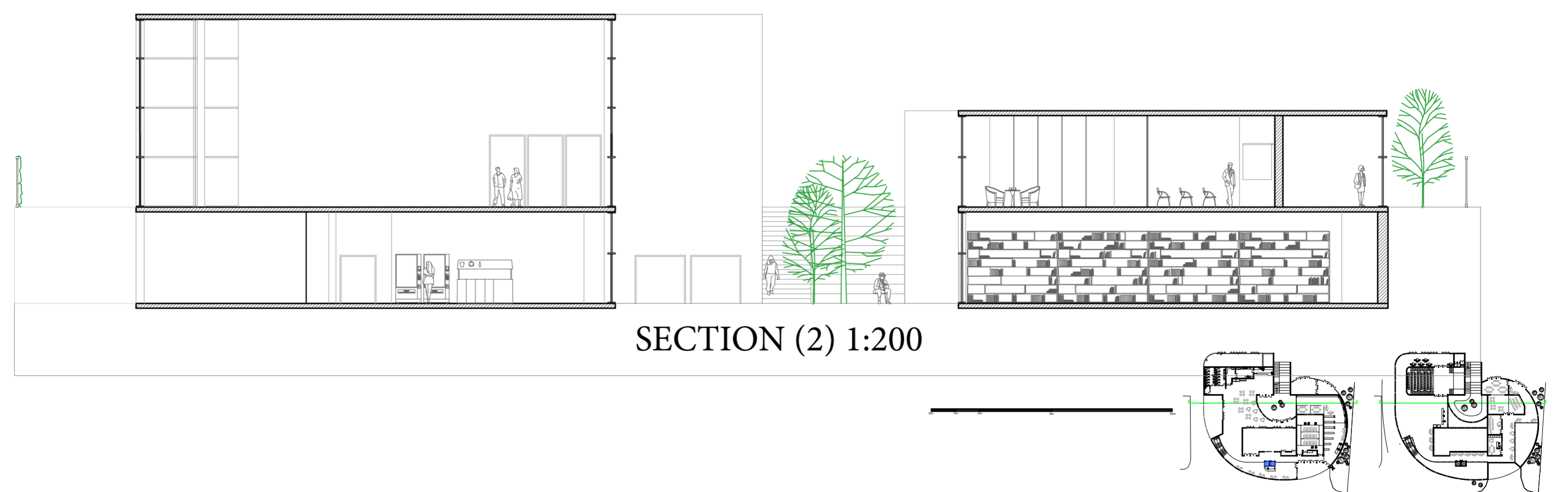
SECTION (1) 1:200 - Physical Model



SECTION (1) 1:200 - Photo-shopped



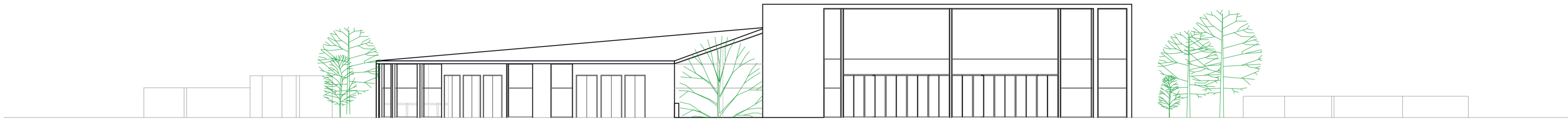
SECTION (1) 1:200



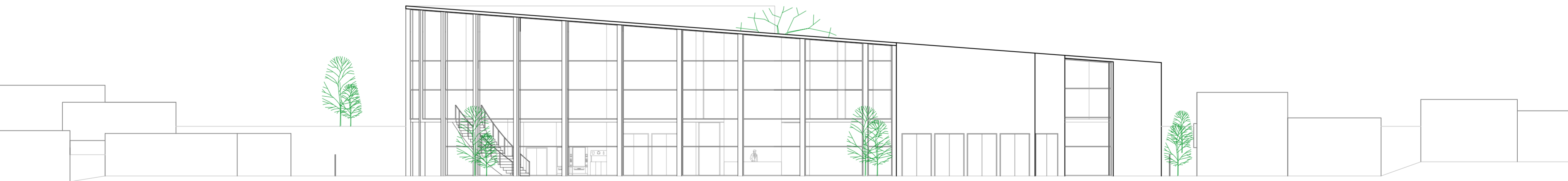
SECTION (2) 1:200



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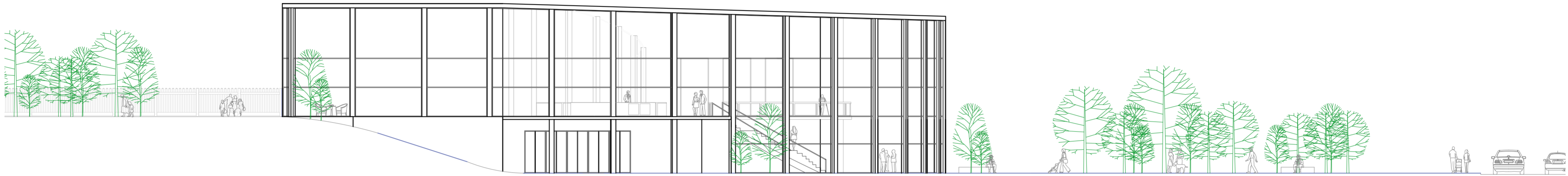
SOUTH ELEVATION



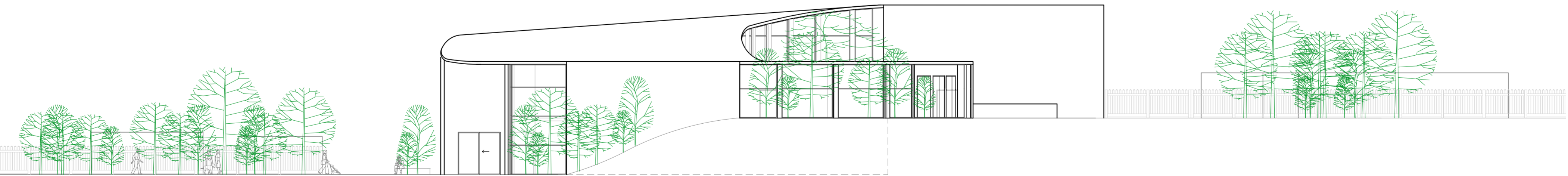
NORTH ELEVATION



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EAST ELEVATION



WEST ELEVATION



1:200

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NORTH ELEVATION



SOUTH ELEVATION

0 1m 2m 5m 10m



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WEST ELEVATION



EAST ELEVATION

PHYSICAL MODEL 1:200

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HALF MODEL/ HALF DRAWN

I created half of a physical model to show a section in 3D, which demonstrates the different ceiling heights. Then I took a birds eye photo of the model which I put into procreate. Then I drew the other half using my roof context plan making it look as realistic as possible.



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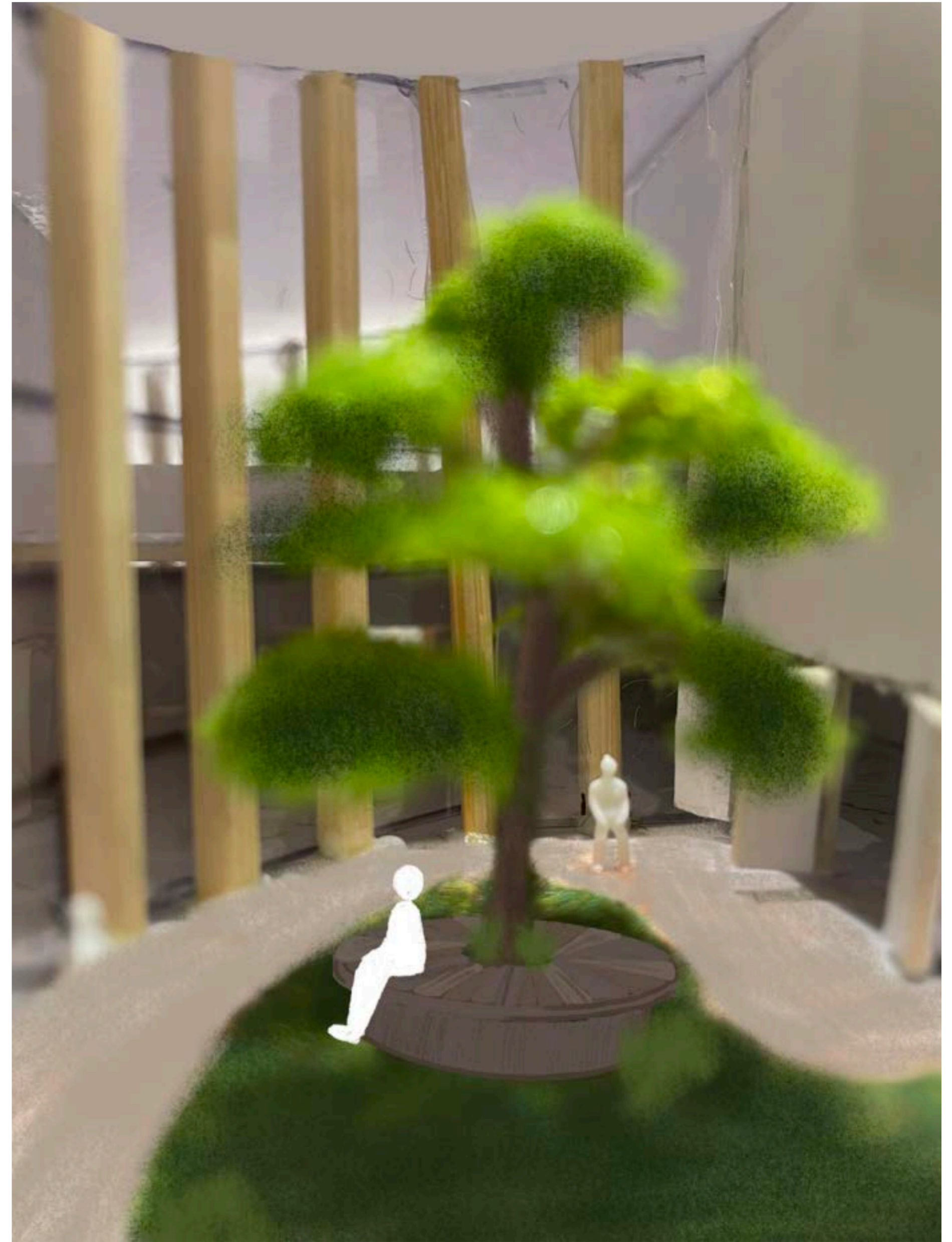
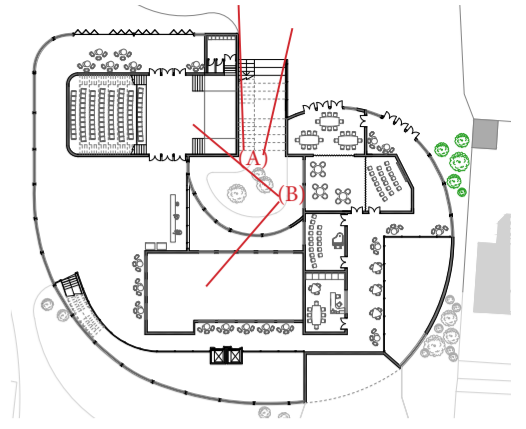
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COURTYARD VISUALS

I used different methods to create visuals including; modelling and sketching. By using the photos of the physical model I could then sketch over them adding more context to the images. I created some visuals by sketching by hand on my ipad using the plans and elevations. Visual A demonstrates the framed view of nature, 'nature exhibiting itself' from the courtyard. The framed view is created by the steps and opening within the building form/shape. The way the building slopes round creates the perfect opening for the sun to highlight this feature. The courtyard visual shows how I have incorporated nature throughout the site.



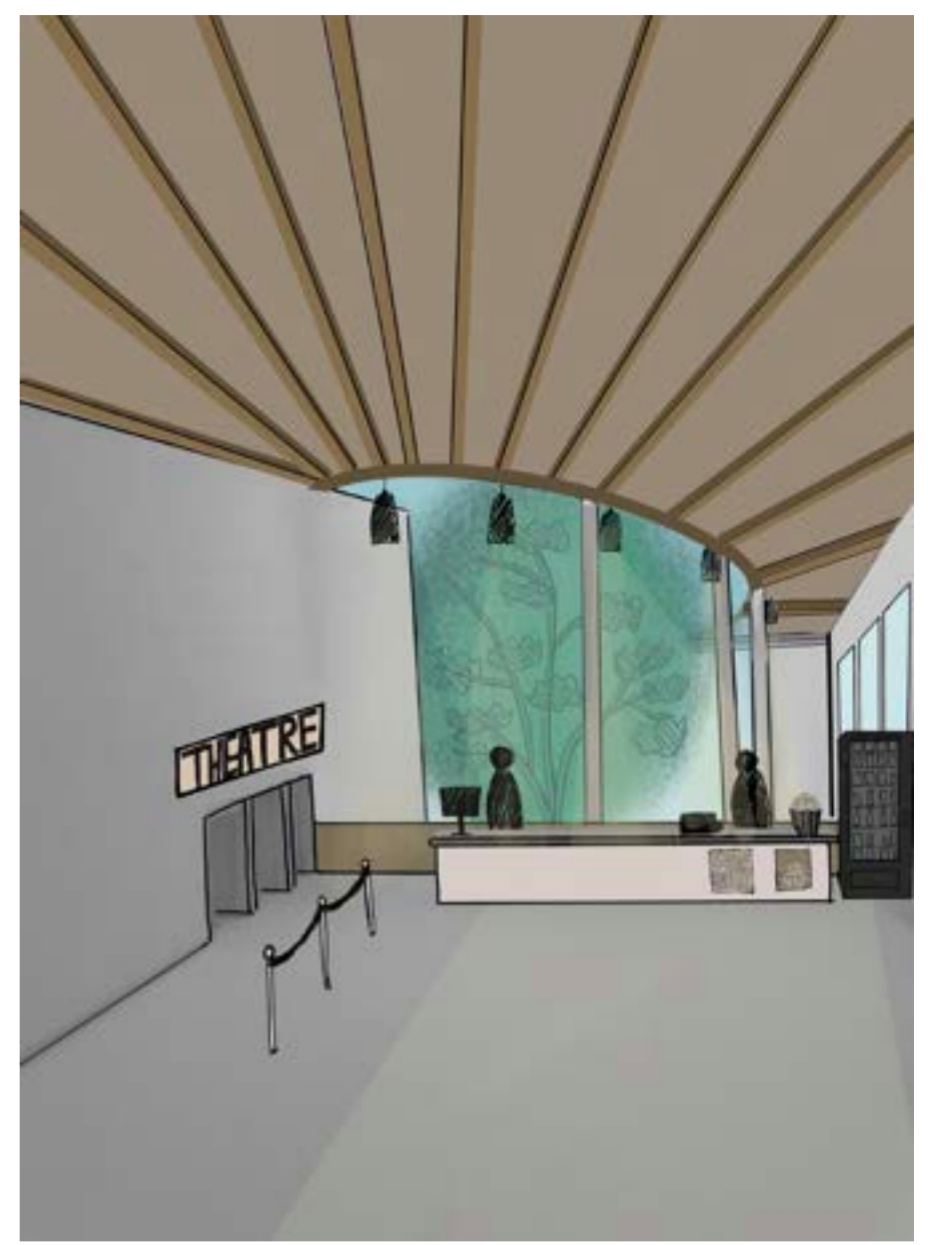
(3) VIEW INTO HALL



(1) HALL



(4) OUTSIDE THEATRE



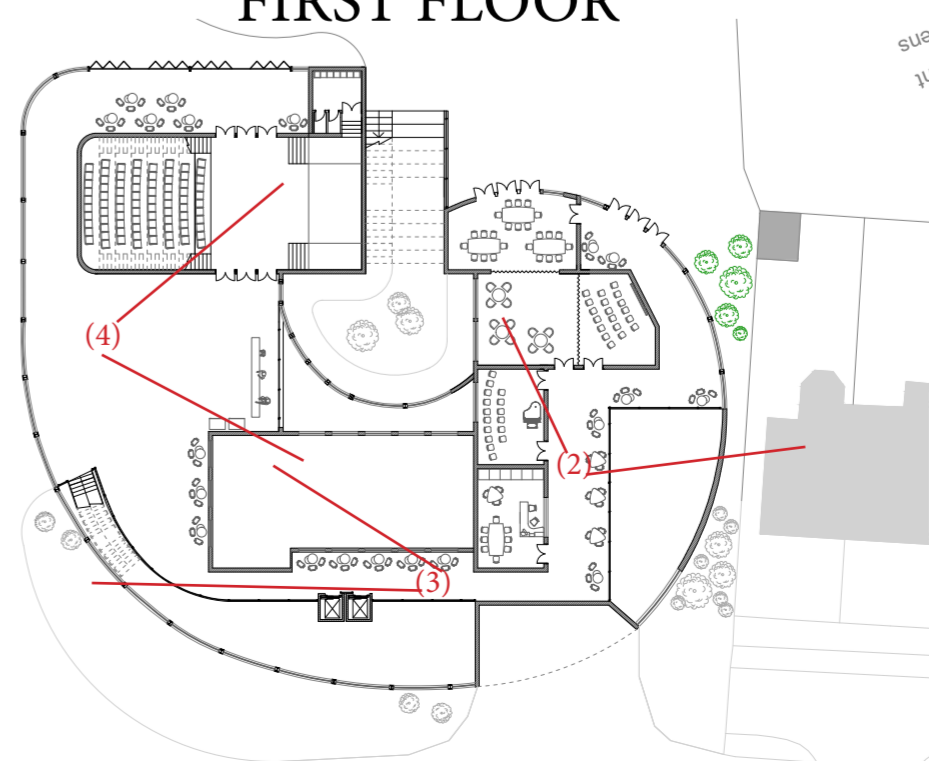
(2) INTERESTING DOUBLE HEIGHT SPACES



GROUND FLOOR



FIRST FLOOR



POST DESIGN ANALYSIS

KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY, SWOOPING



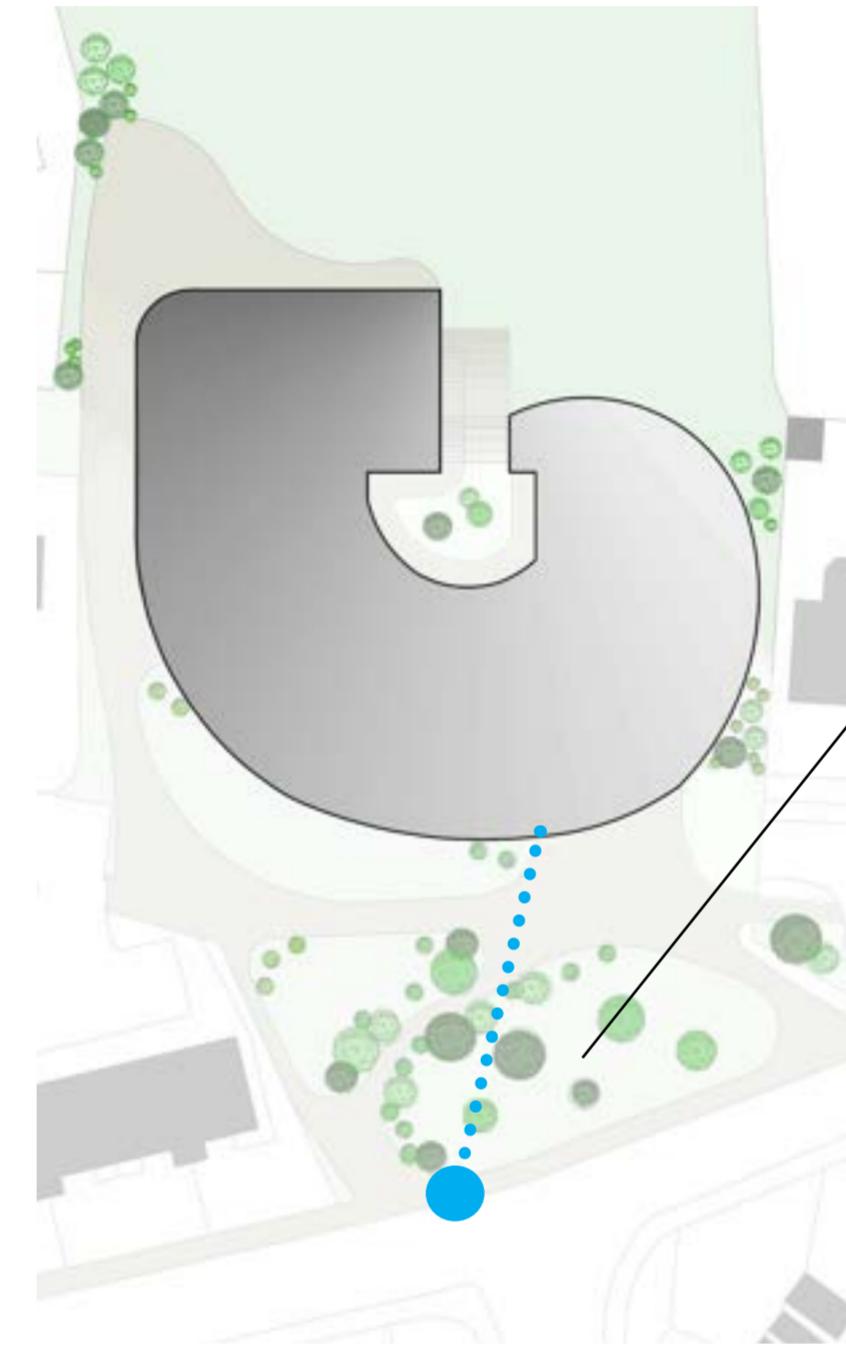
CONCEPT PARAGRAPH

The main concept of my design is 'connection'. A building that works with the topography of the site, its views, and natural surroundings. A key aim of the design is to draw people in and create connectivity between the outside and interior spaces, to enable this open and airy connection throughout.

To create this transparent envelope of connectivity it was important to think about the material choices. Creating a steel frame coated in timber, with floor-to-ceiling glazing wrapped around the building, doesn't just link with connectivity between the interior and exterior, but also with the surrounding trees and nature.

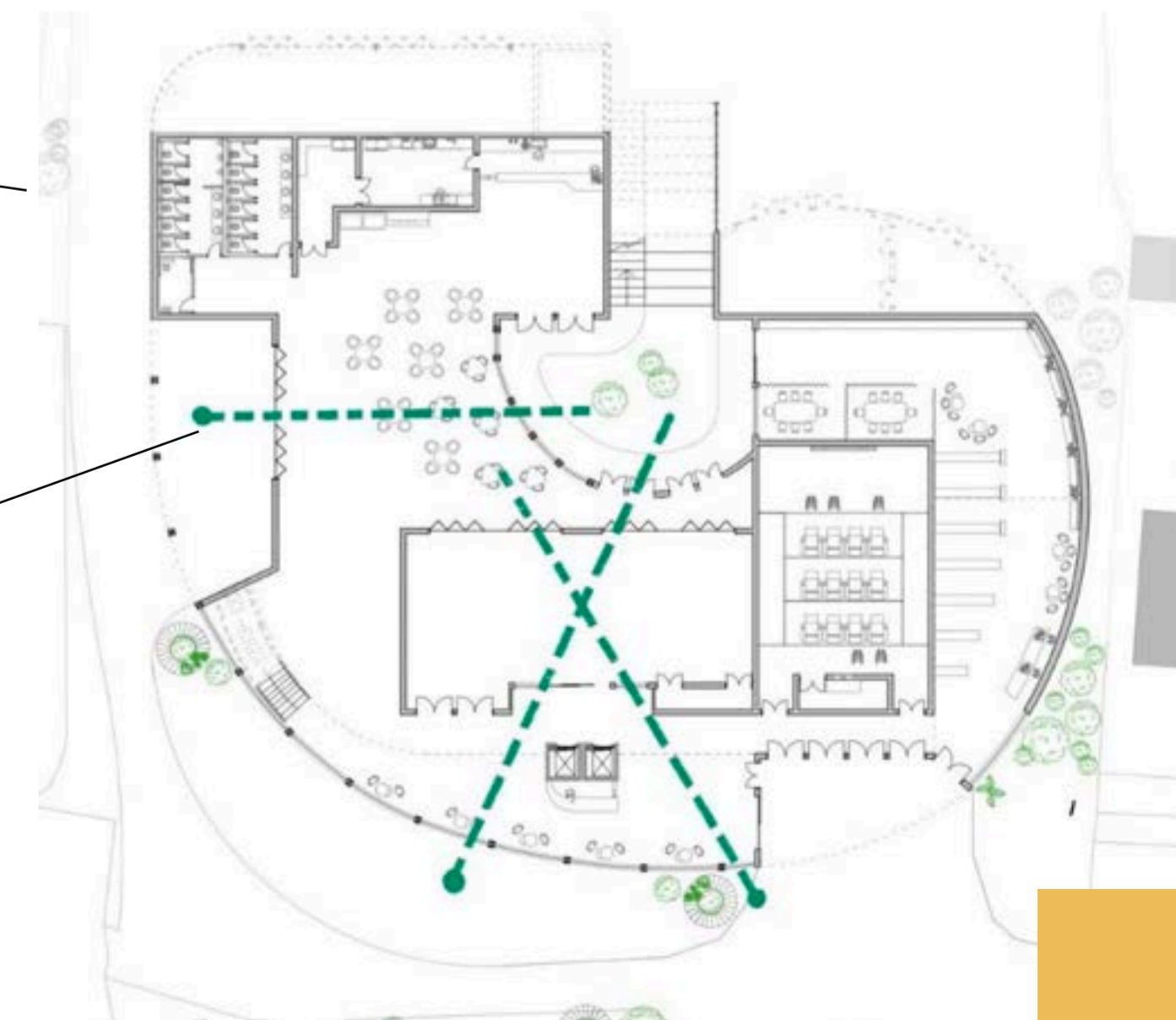
In connectivity, it's also important to think about the journey and how the people flow through and experience the building. The use of light-coloured concrete aims to push the interior circulation through the building and defines the different spaces.

CONNECTION THROUGH VIEWS



The blue dotted line shows that this photo was taken on my physical model and shows how the floor to ceiling glazing, which wraps the building.

The green dotted lines symbolise the views through the building. The aim was to have multiple views that pierce through, showing snip-its of the courtyard and cafe social spaces from outside.



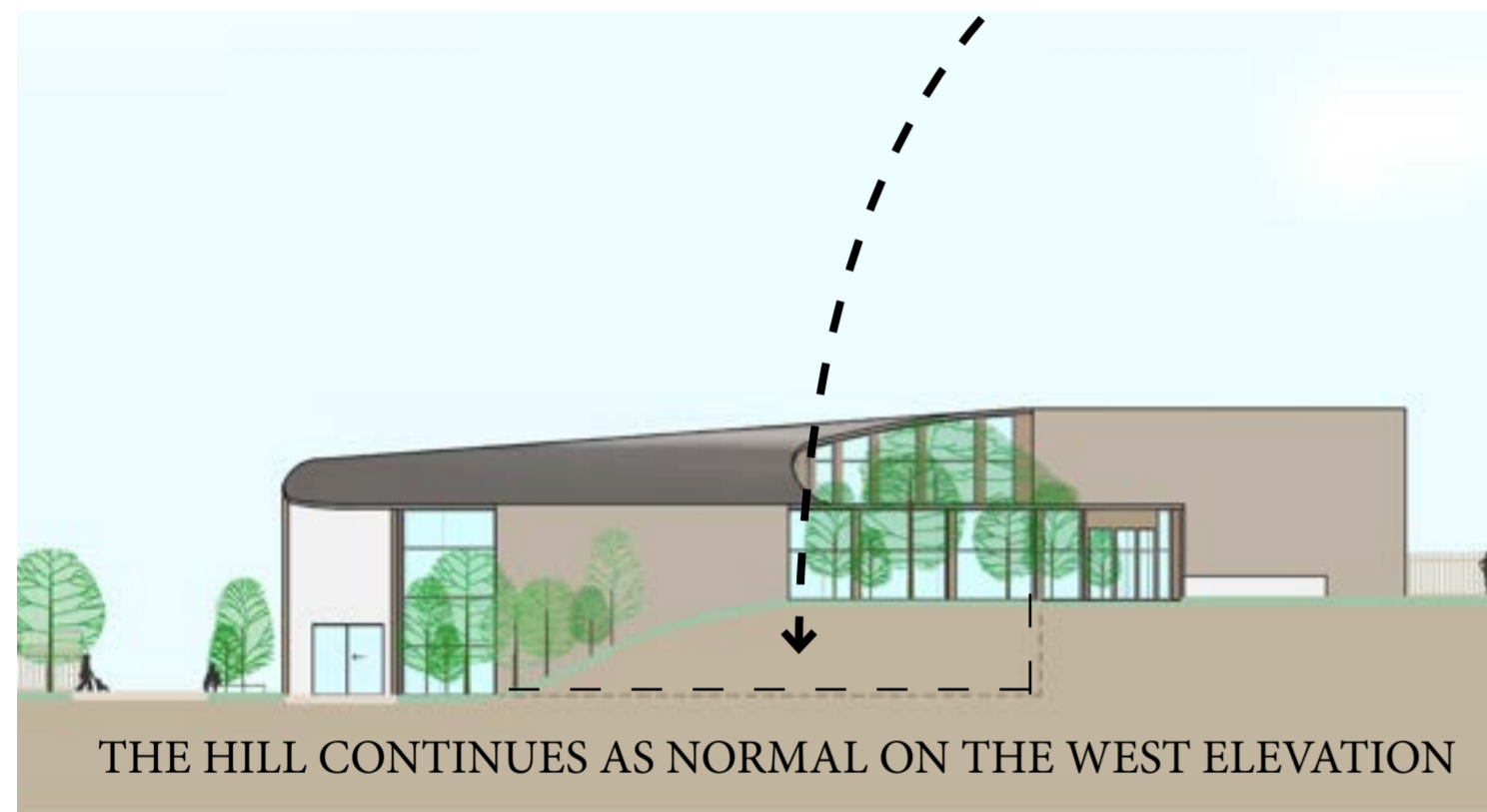
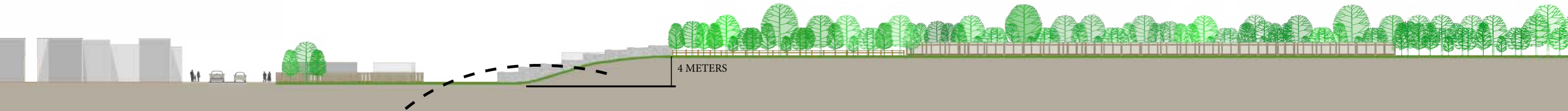
This view is my favourite as it connects the art yard, cafe seating and courtyard together through the glazing by-fold doors.

KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY, SWOOPING

POST DESIGN ANALYSIS

RESPONSE TO THE SITE

SITE SECTION



THE HILL CONTINUES AS NORMAL ON THE WEST ELEVATION

APPROACH TO THE HILL

The site includes a hill of 4 meters placed at the centre. This challenging topography created a great opportunity to use the slope in to create an interesting solution, avoiding the easy option of flattening the site. By embedding the building into the slope it provided me with an opportunity to use the 4 meters to define the two levels of my design.

CHANGES TO THE SITE

CHANGE (1)

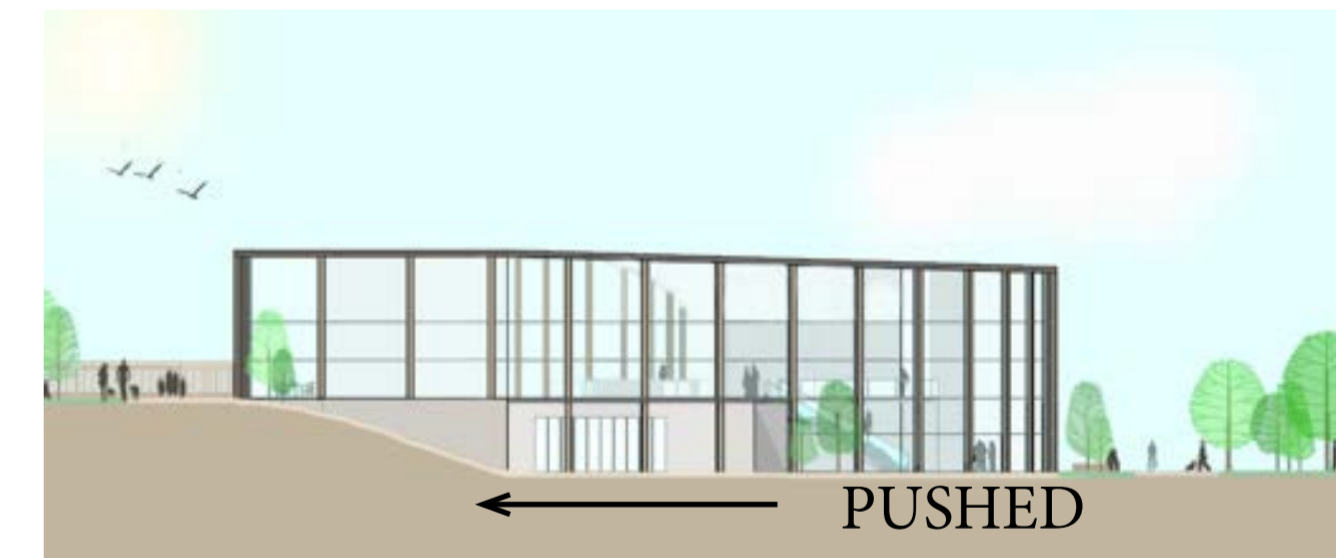


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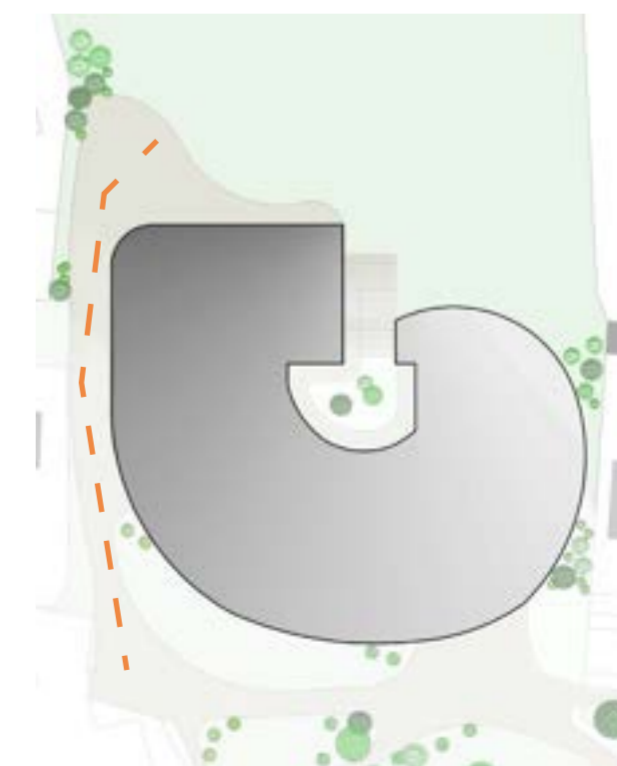
STEPS, AND READING STEPS

To create an calming and relaxing, courtyard space, I flattened part of the hill that sits central within my design and introduce steps and reading steps to connect with the south of the site.

CHANGE (2)



PUSHED



To create room for the art yard to be flat, I pushed the hill slightly back and added a path which runs along the east side of the building. This path created circulation to the back field, but also brings attention to the art yard.

POST DESIGN ANALYSIS

KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY, SWOOPING

CONNECTION THROUGH THE SITE AND NATURE

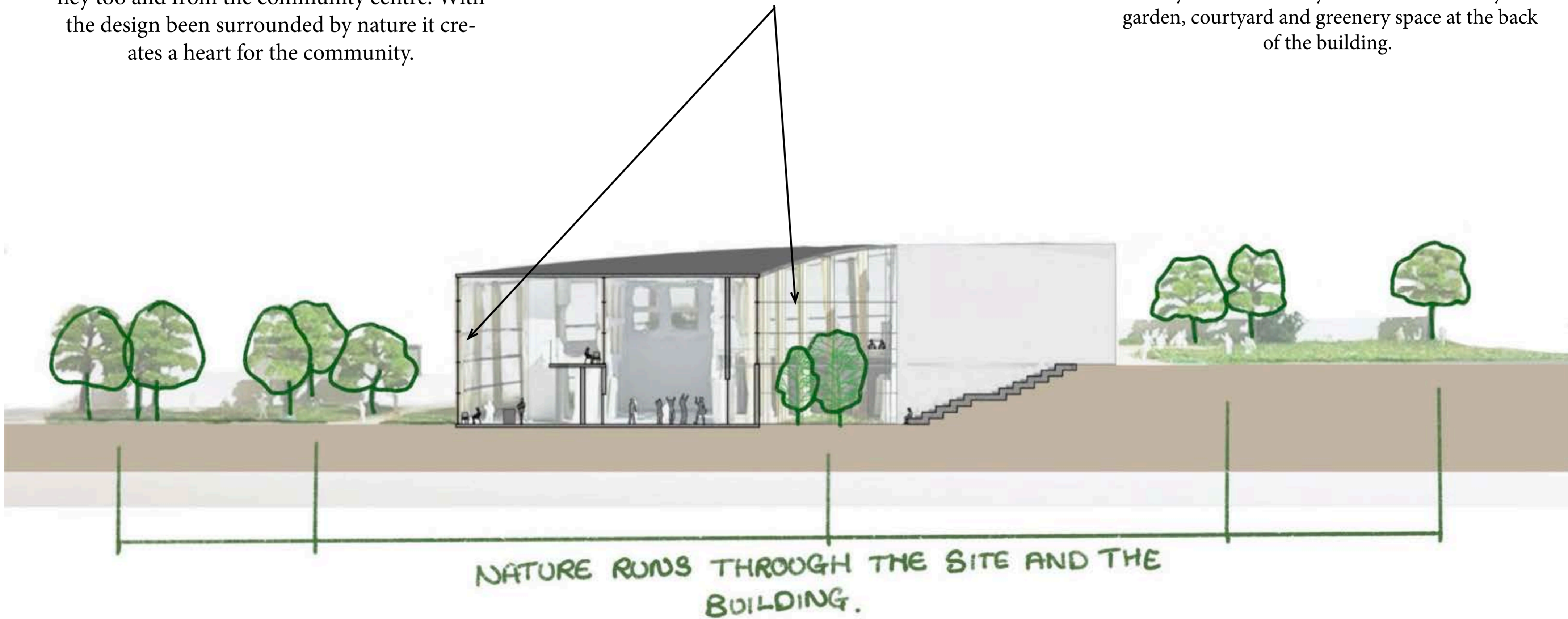
From the beginning the site was a place of nature and greenery, where the community would go to enjoy a walk with a peaceful atmosphere. I wanted to maintain this by including trees and natural planting to surround the building, making a peaceful, welcoming journey too and from the community centre. With the design been surrounded by nature it creates a heart for the community.

TIMBER COLUMNS

The use of timber as columns represents the surrounding nature and mirrors how the trees are placed through the site and the building.

METAPHORICAL CONNECTIONS AND LITERAL CONNECTIONS

This path of nature can be perceived in both a metaphorical and literal way, with the use of the columns connecting with nature in a metaphorical way but also literally with the community garden, courtyard and greenery space at the back of the building.

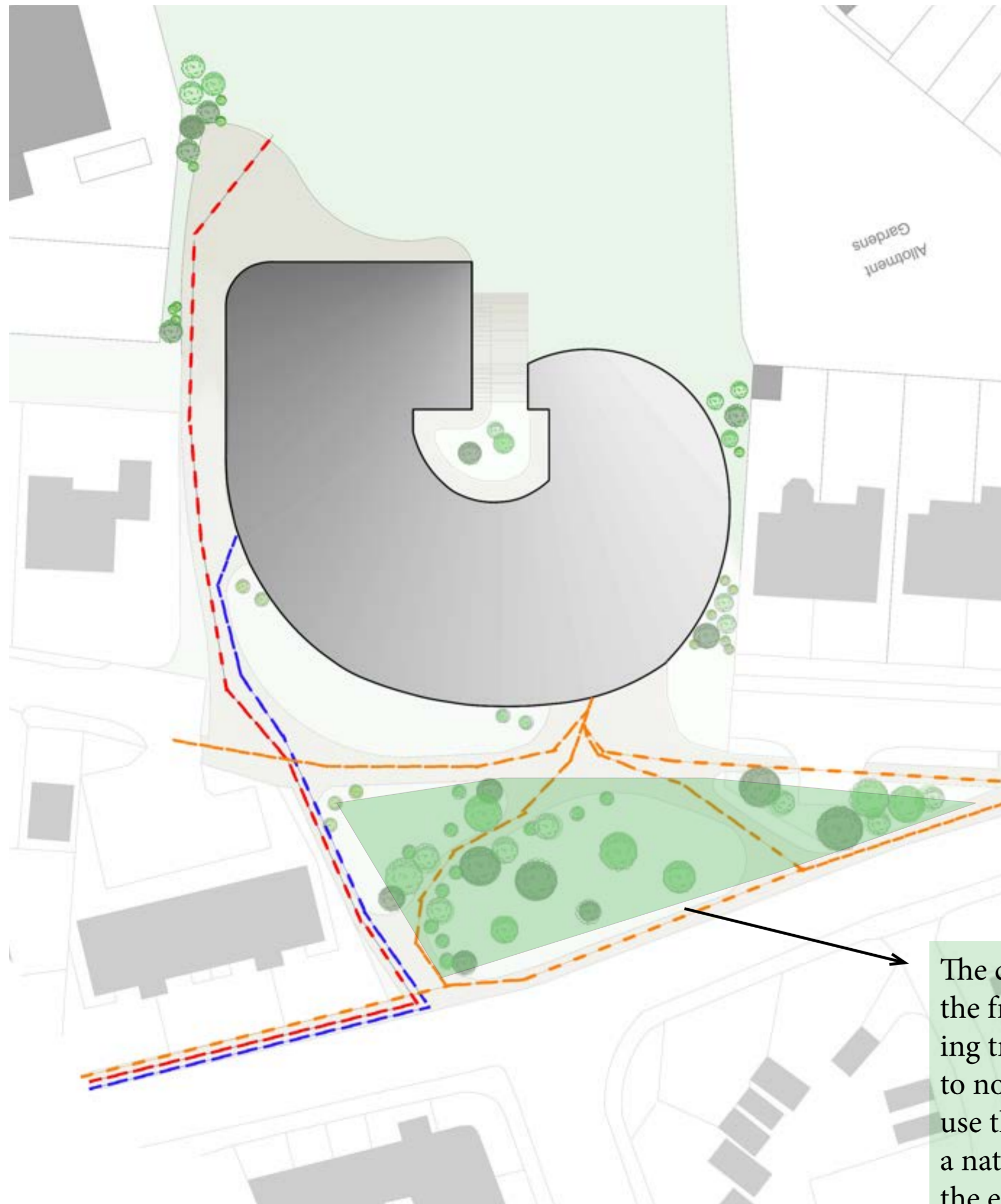





POST DESIGN ANALYSIS

KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY, SWOOPING

EXTERIOR JOURNEY

EXTERIOR CIRCULATION

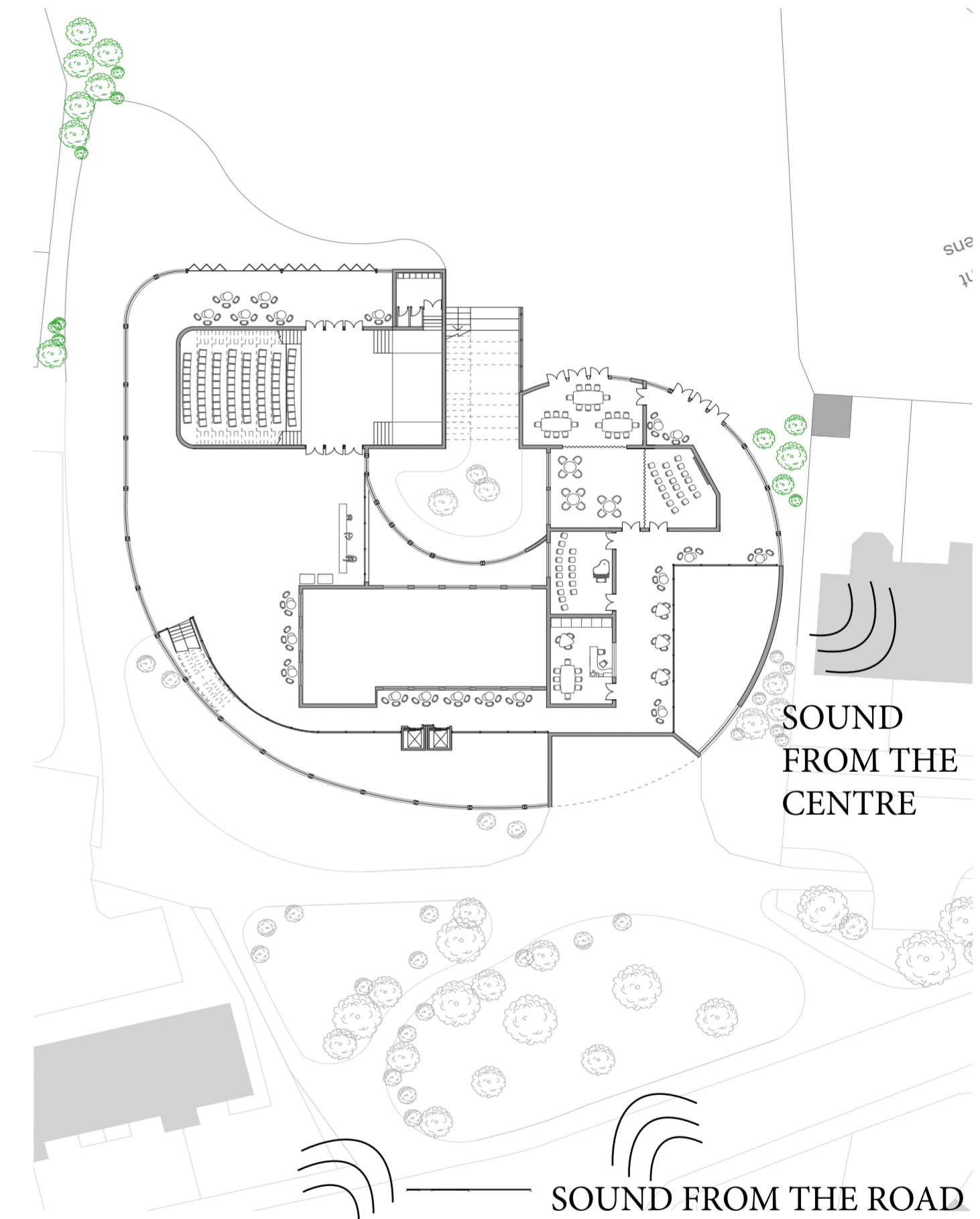


-  CIRCULATION TO ART YARD
-  JOURNEYS TO MAIN ENTRANCE
-  CIRCULATION TO BACK OF THE SITE PAST ART YARD

The orange dotted lines represents the walk throughout the community garden to the main entrance of the building. The Garden is made up of a walkway of trees, planting done by the local community and interesting outdoor benches wrapped around some of the trees and greenery. This makes the entrance to the building a experience.

The community Garden placed at the front of the site with the existing trees, This was an opportunity to not just keep the trees but also use them and plant more to create a natural welcoming journey to the entrance. Making the walk to the building its own experience.

SOUND



I also placed the trees in places for a reason to create a sound barrier from the road to the art and community centre but also from the centre to the close neighbouring house.



KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY, SWOOPING

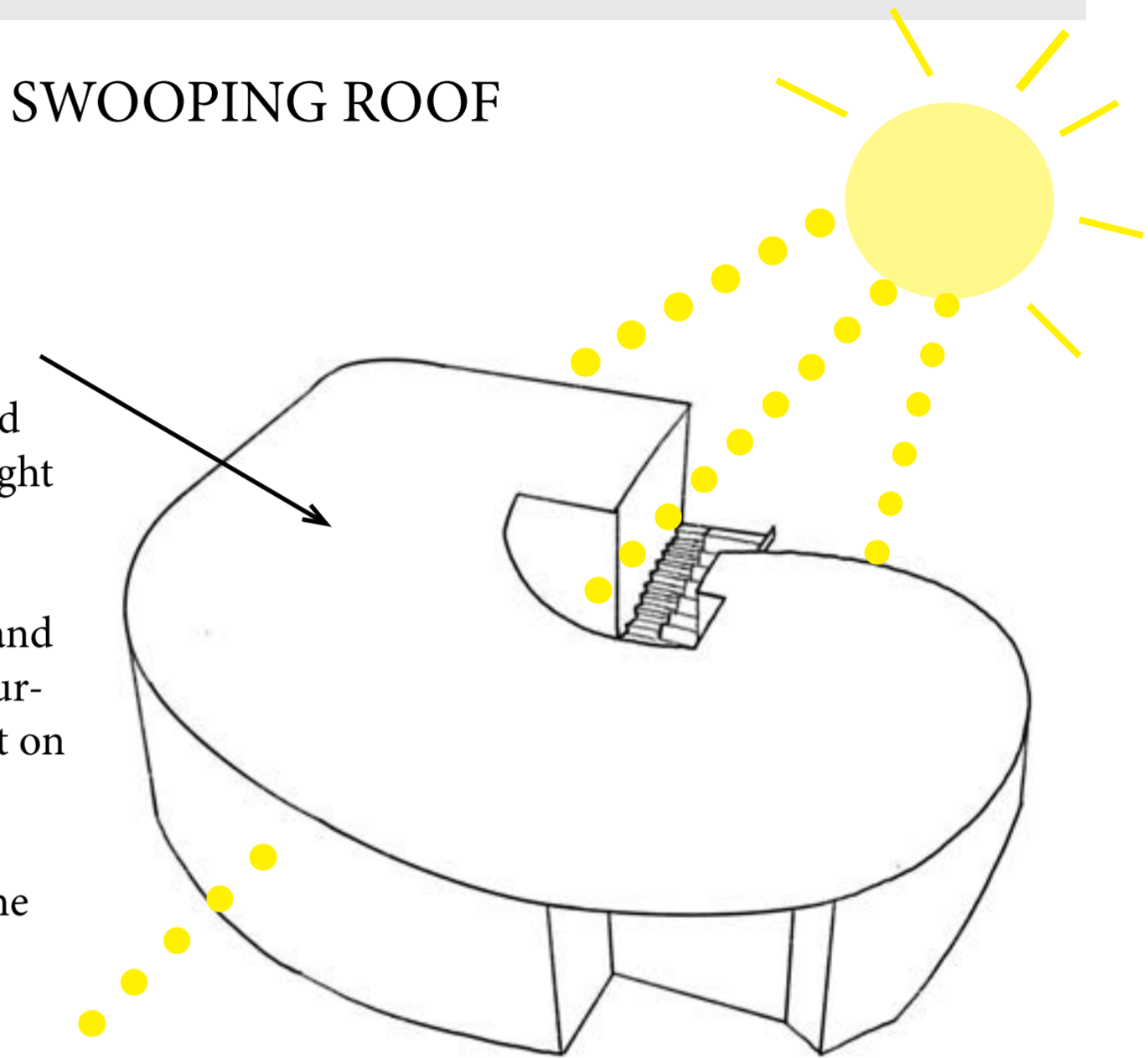
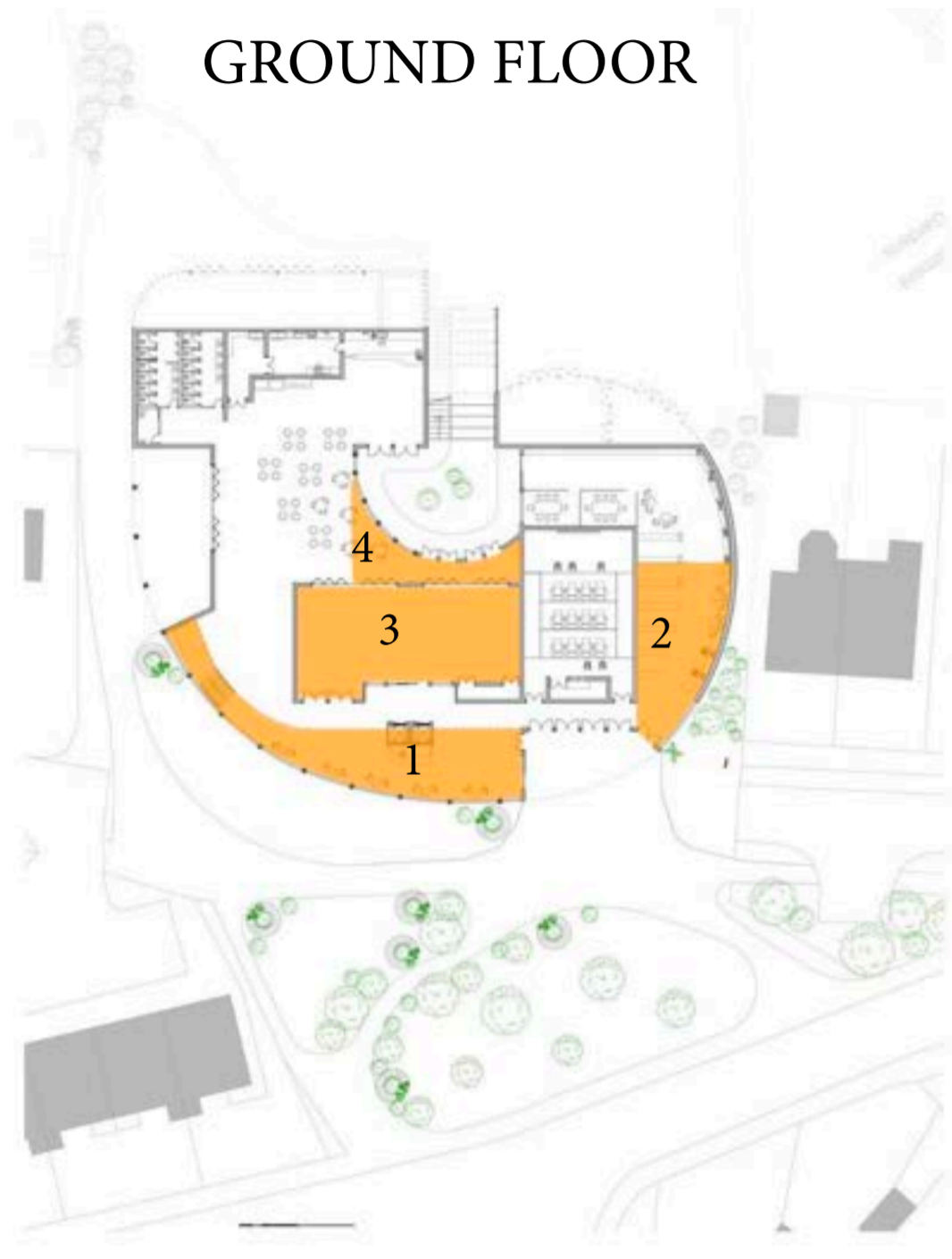
POST DESIGN ANALYSIS

DIFFERENT HEIGHT SPACES

GROUND FLOOR

FIRST FLOOR

SWOOPING ROOF



The swooping roof was created by the arrangement of rooms and which rooms needed double height spaces.

The shape is simple but elegant and is also respectful of the neighbouring house by been a lower height on that side.

The swooping roof also allows the sun to piece the building.

GROUND FLOOR

- 1. LOBBY
- 2. READING SPACE, BOOKSTORE
- 3. MULTI-PURPOSE HALL
- 4. CAFE SEATING AND HALL TO THE COURTYARD

FIST FLOOR

- 5. BREAKOUT SPACE FOR THEATRE, FOOD AND SNACK STAND.
- 6. THEATRE

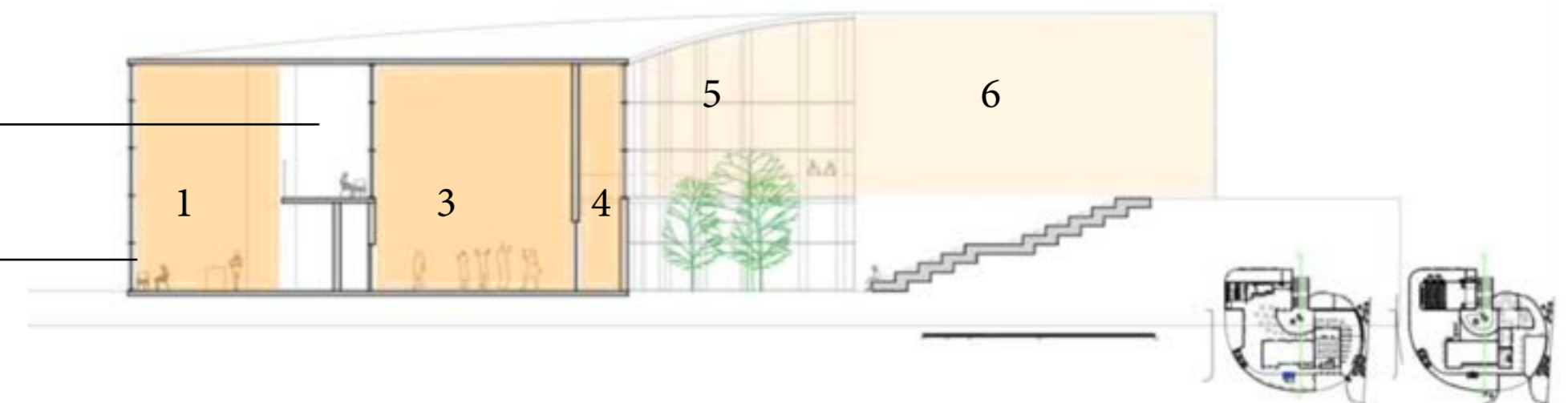
FIRST FLOOR

GROUND FLOOR



FIRST FLOOR

GROUND FLOOR



POST DESIGN ANALYSIS

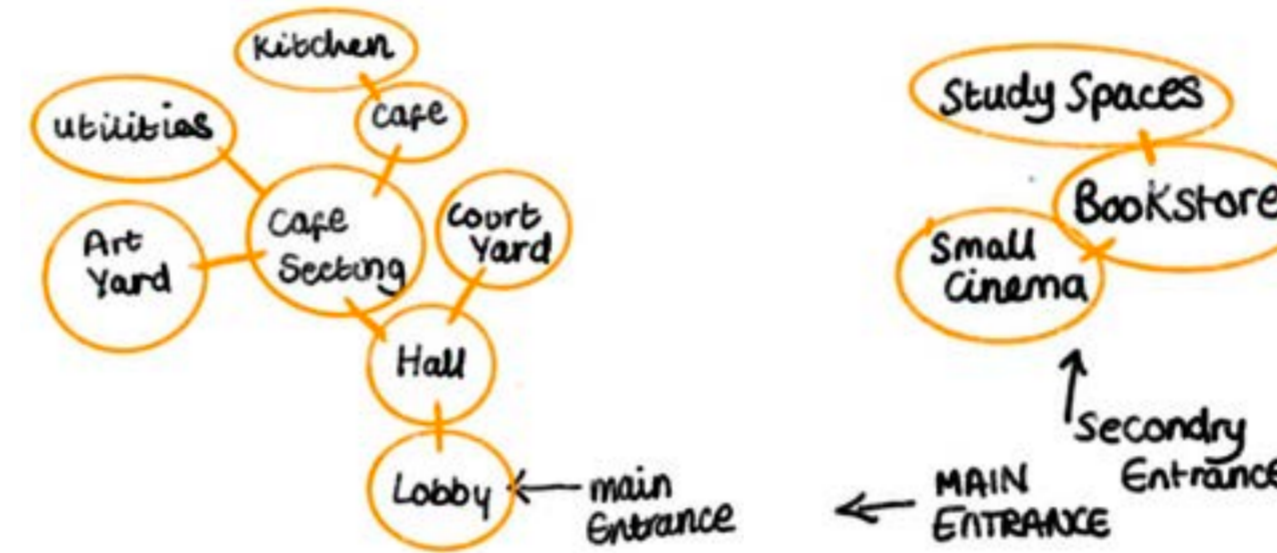
KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY. SWOOPING

INTERIOR CONNECTIONS, GROUPING



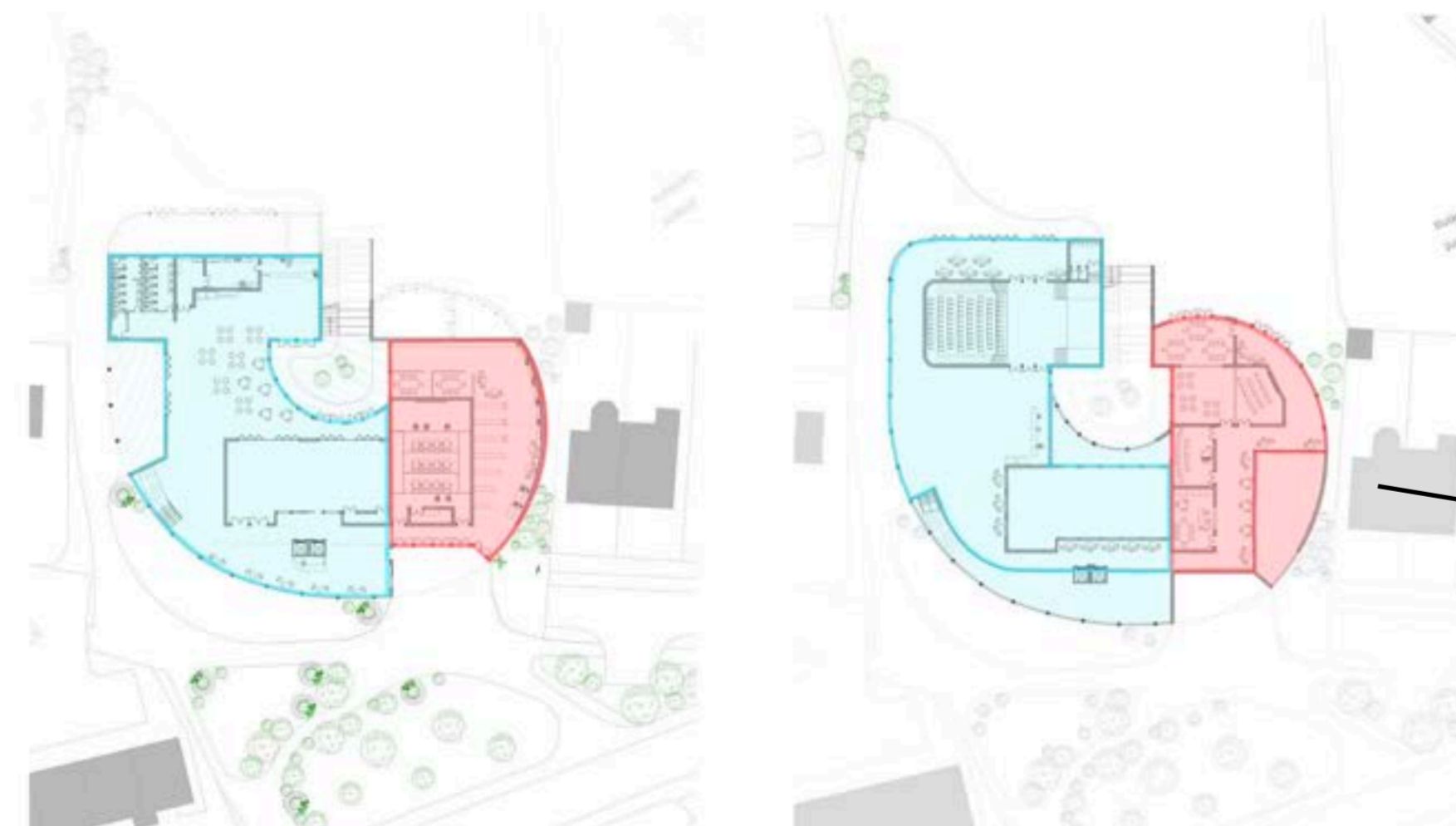
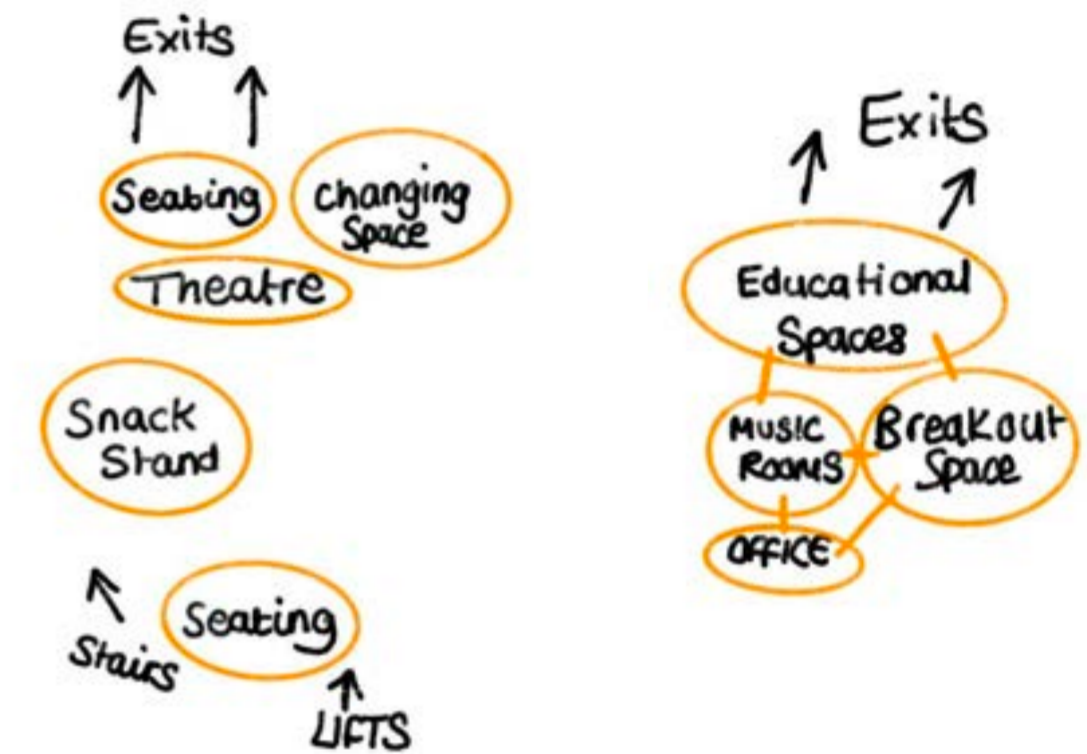
GROUND FLOOR

■ OPENLY CONNECTED
 ■ MORE PRIVATE SPACES



FIRST FLOOR

■ OPENLY CONNECTED
 ■ MORE PRIVATE SPACES



WHY? ORGANISED LIKE THIS ?

I put the quieter, more private educational rooms grouped together on the right hand side of the building as it was next to the close neighbouring house.

I also placed them on the right hand side because these spaces didn't need the high ceilings which created the swooping roof.

OPEN AND AIRY SPACES

One of the requirements was to have an open and airy hall, and to do this I organised all the social spaces that would be benefit if they were close together and connected.

I added lots of glazing and connecting large by-folding doors which can be left open.

■ OPENLY CONNECTED, AND SPACIOUS SPACES

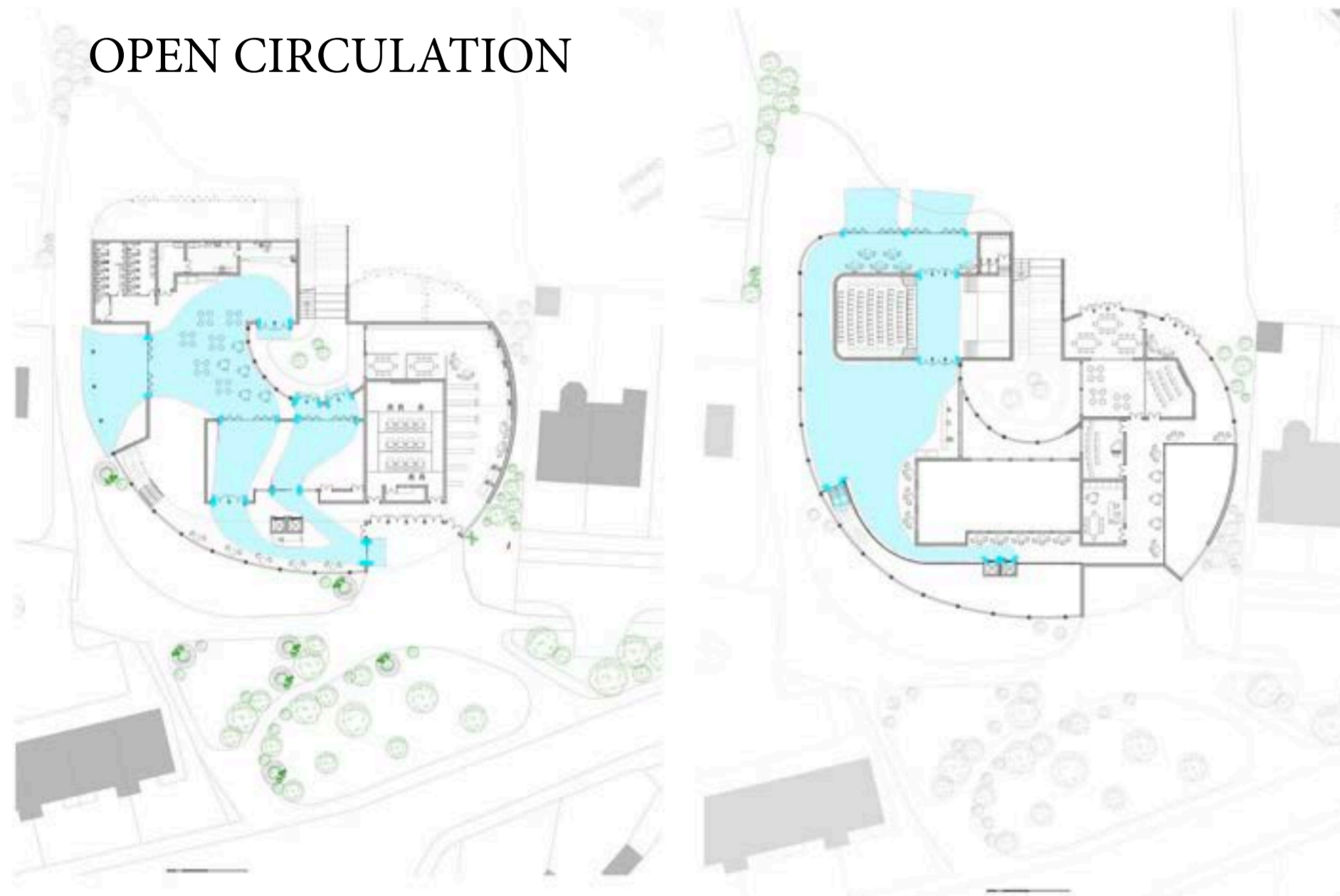
■ MORE PRIVATE/ EDUCATIONAL AND QUIET SPACES

POST DESIGN ANALYSIS

KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY. SWOOPING

INTERIOR JOURNEY

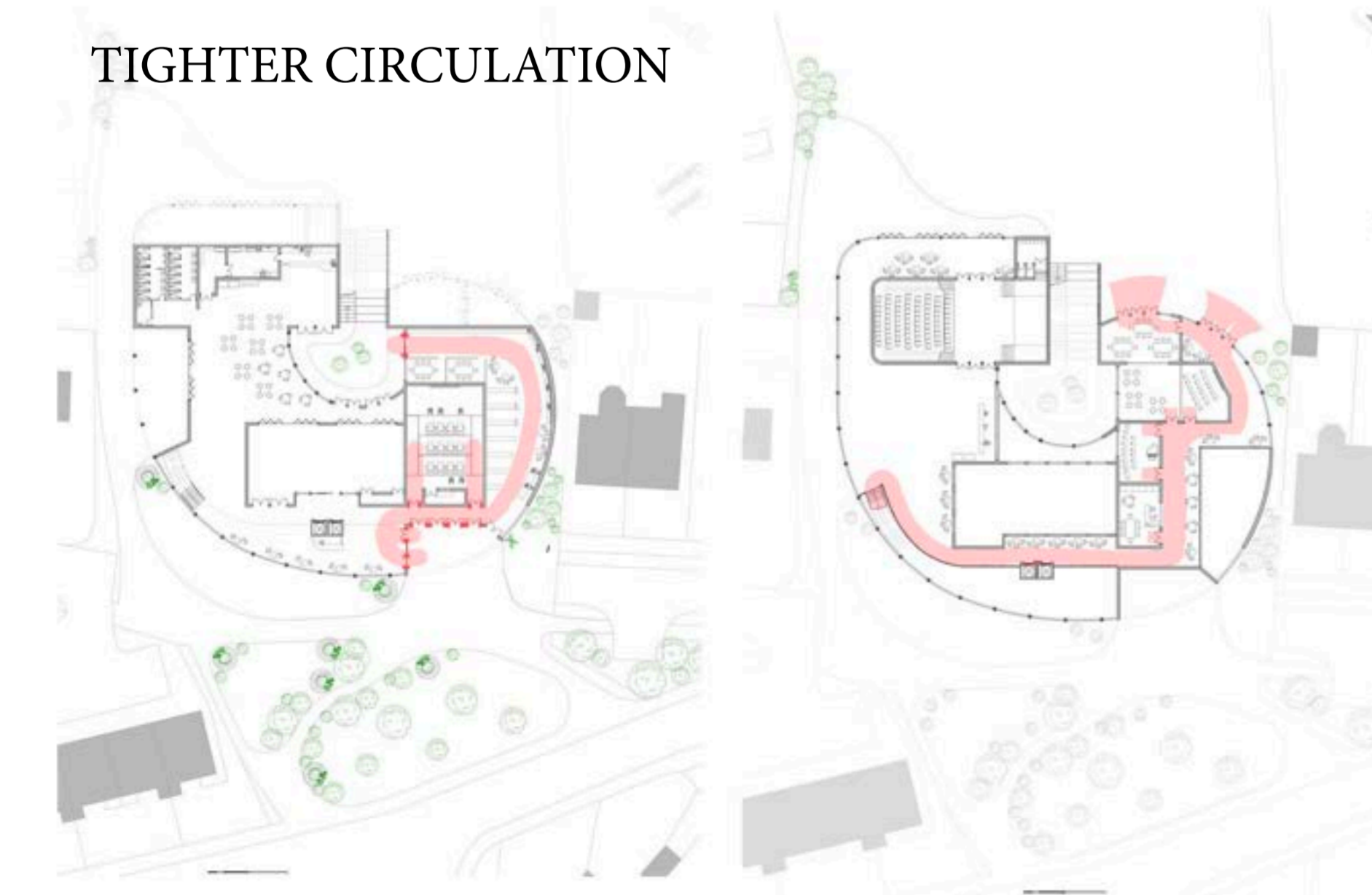
OPEN CIRCULATION



OPEN CIRCULATION

The circulation around the open airy spaces, was larger and more had more space to wonder around with lots of connectivity through all the different rooms and space, on the interior and the exterior including the courtyard and art yard.

TIGHTER CIRCULATION



TIGHTER CIRCULATION

On the bottom floor the circulation is direct and pushed.

On the first floor the circulation is also pushed and direct but also an experience as you get to walk past the double height space of the bookstore below.

ART YARD

THE ART YARD CONCEPT

The concept of the Art Yard was to be a sheltered outdoor space, which has connectivity to the cafe, and social spaces.

The space can be used by local schools and company's to hold competitions, or exhibit art work.

The idea is that the art-yard will be an experience and the local schools can hold competitions to create its own atmosphere, and image.

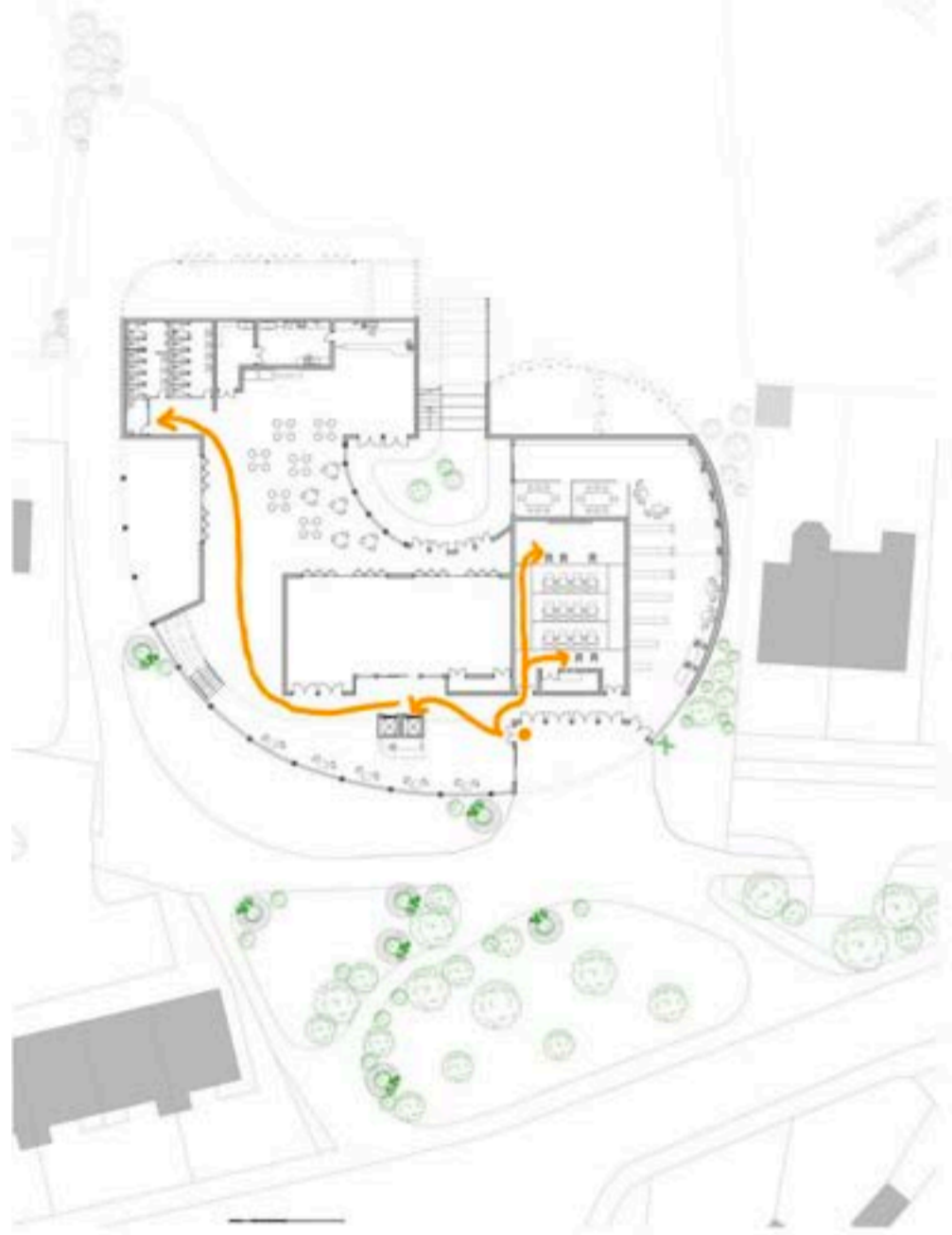


POST DESIGN ANALYSIS

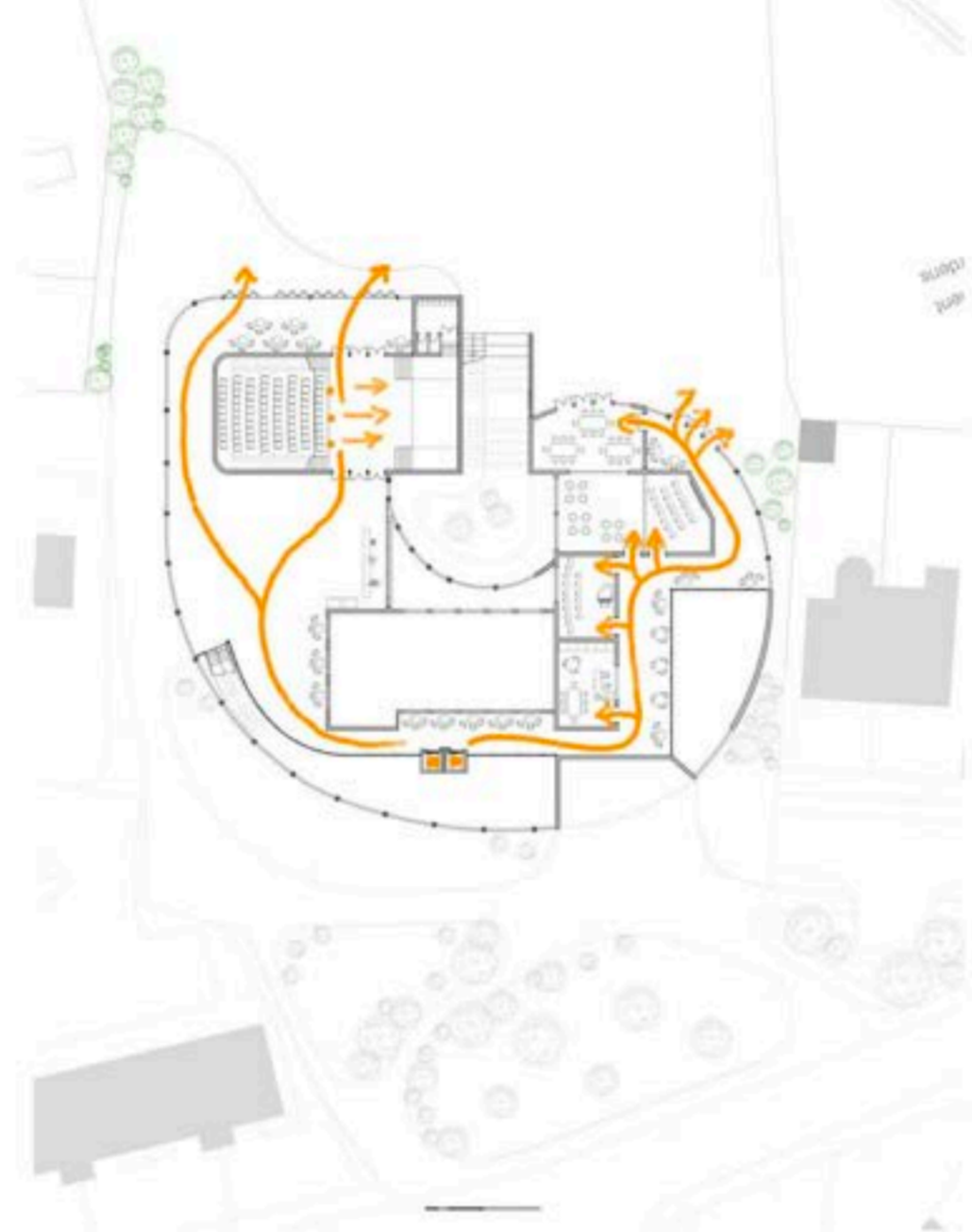
KEY WORDS: CONNECTION, EXTERIOR JOURNEY, INTERIOR JOURNEY. SWOOPING

ACCESSIBILITY AND FIRE SAFETY

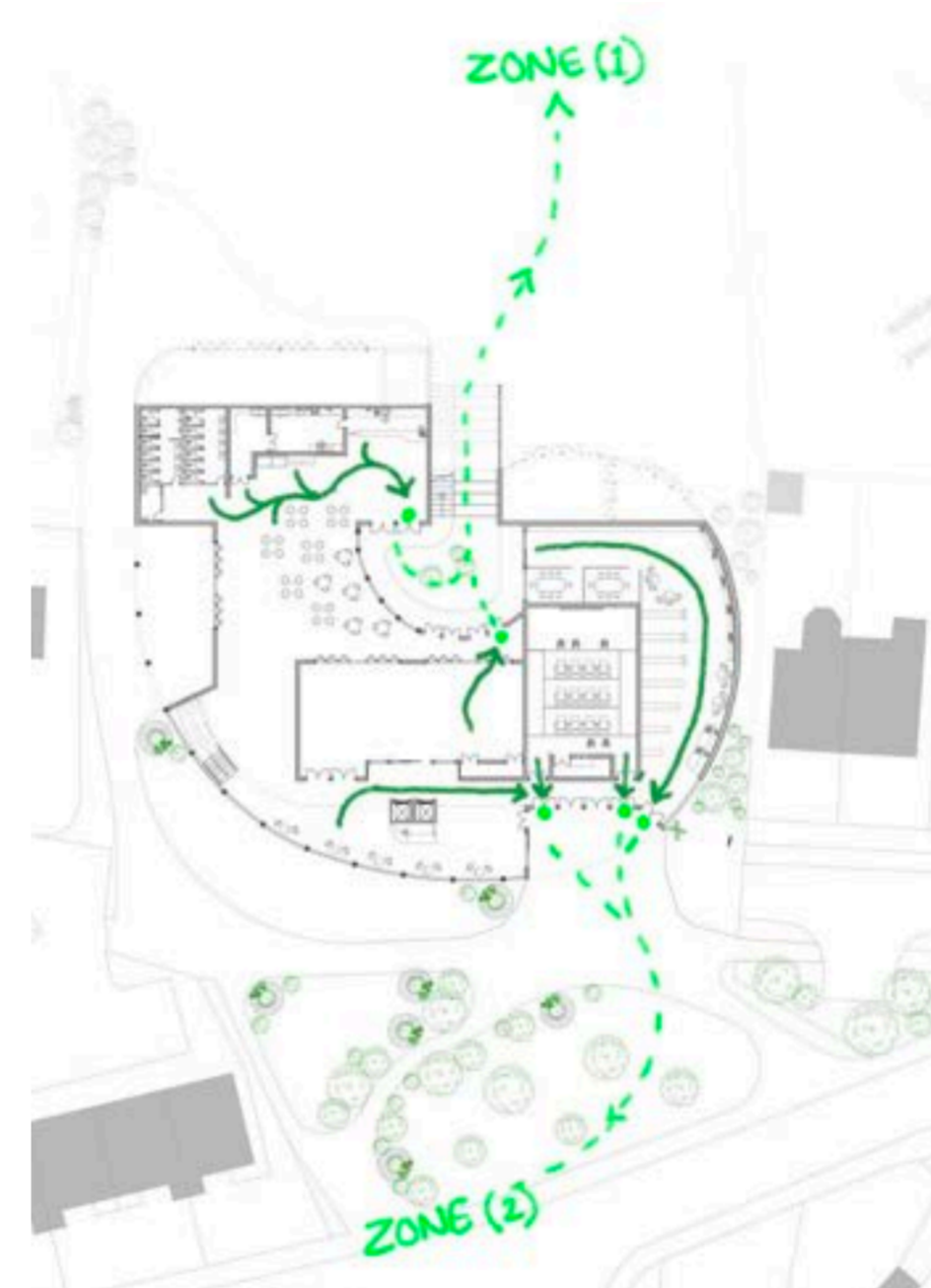
GROUND FLOOR



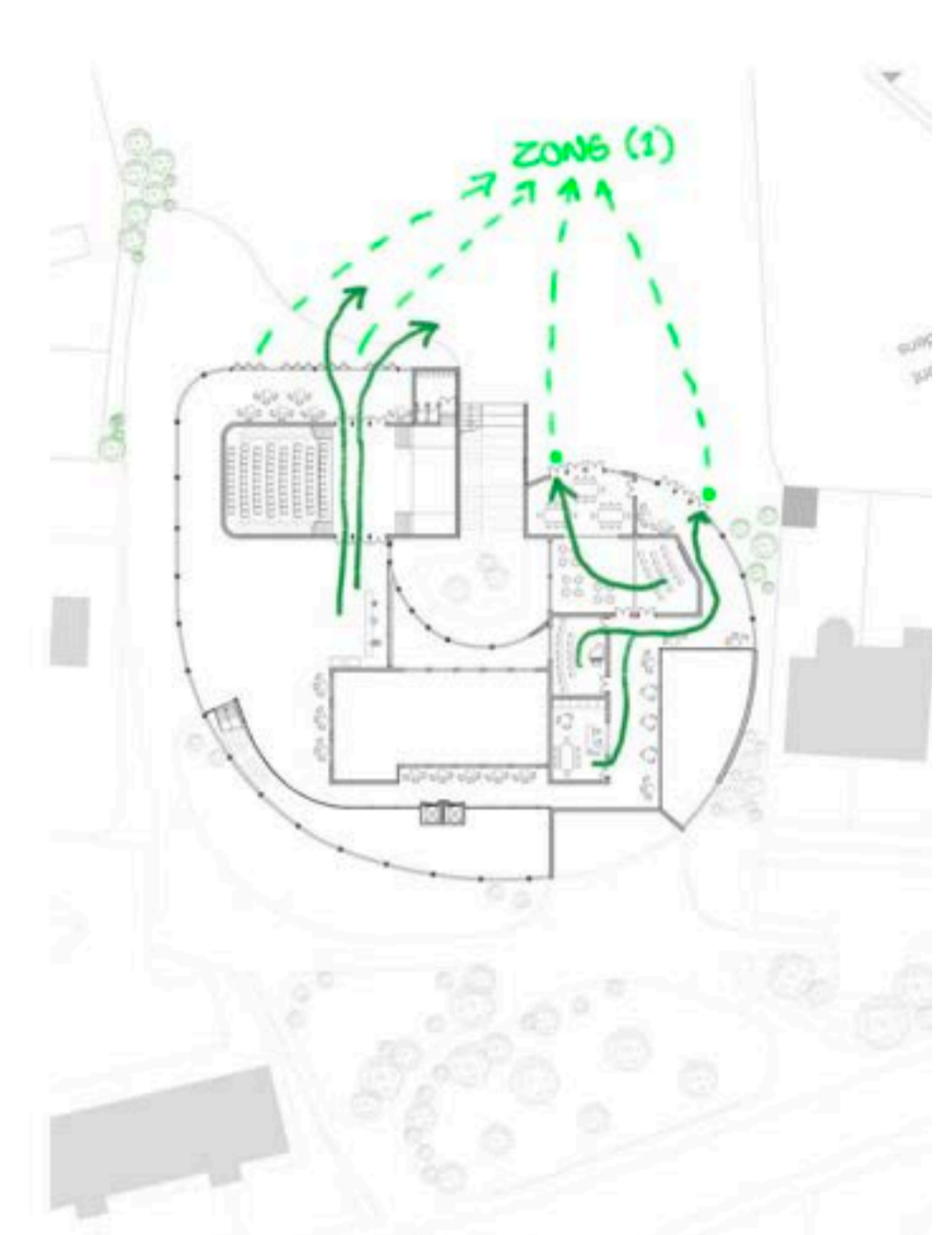
FIRST FLOOR



GROUND FLOOR



FIRST FLOOR

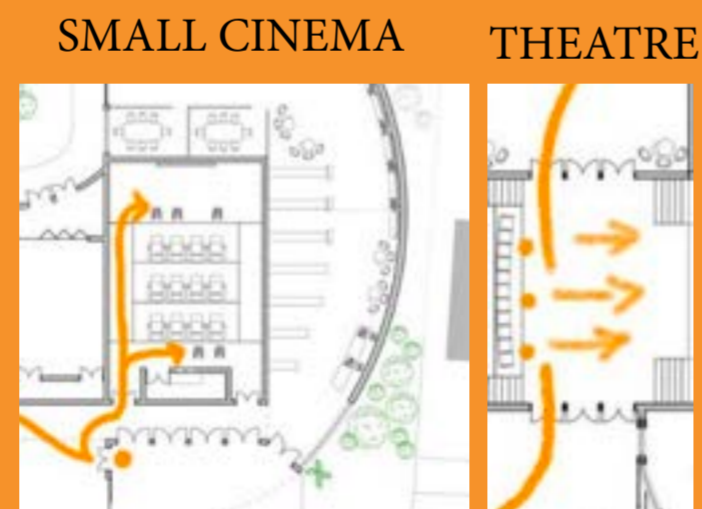


ACCESSIBILITY

Accessibility is a big aspect of the design, and how I created my circulation. I added an automatic door especially for an accessible route to the lifts to the second floor.



SMALL CINEMA AND THEATRE



Accessibility in the small cinema was created by adding a slope instead of steps to the slightly tiered cinema seating. There was also extra doors added to the theatre to allow more access to the theatre. Double doors throughout the building were used for accessibility.

FIRE EXITS

You will find Fire exits spaced around the building with two zones one at the back and one at the front.

The ground floor has many fire exits and the right hand side of the first floor whereas for the theatre side some reflection would be to add some separate fire exits to the by-folding door.



MATERIALS

Lots of thought went into the materials. My concept focused on both the organisation and circulation of the interior and also though enveloping exterior connecting facade.

TIBER ENVELOPE

The enveloping facade is made out of both timber coated steel I beams and triple glazed Glass. This has a metaphorical connection with the surrounding nature through the site, and also is the main concept of connection with the exterior and interior.

CONNECTION

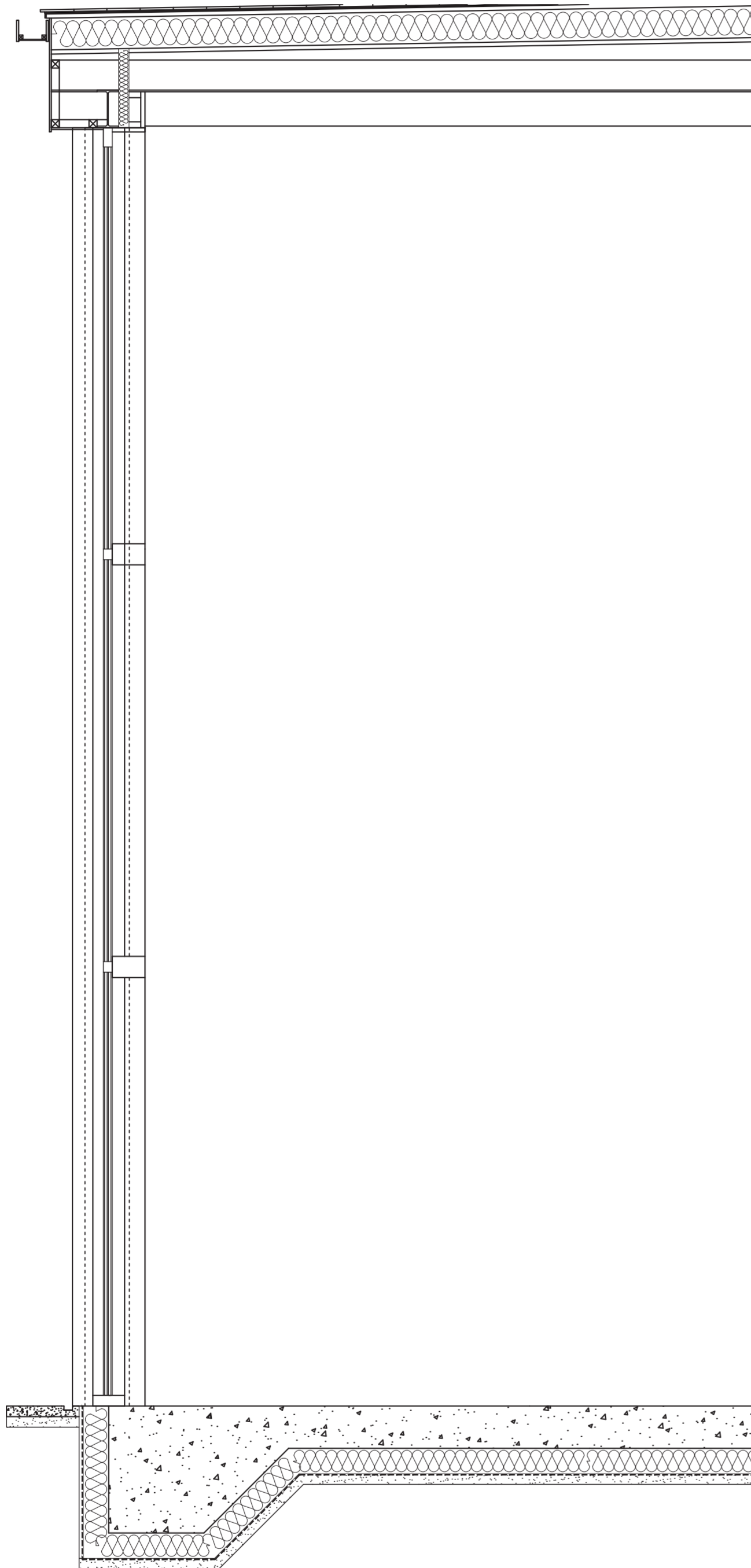
The building is wrapped with floor to ceiling glazing, the glazing is also placed through the building. Creating flamed views and creating the spaces open and airy.

INTERIOR

The interior spaces and circulation is all with a light coloured concrete. The light grey is so the spaces keep as airy and spacious as possible. I also wanted the interior to stand out linking with the connection concept and advertising itself.

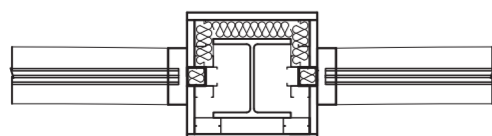


1:20 SECTION



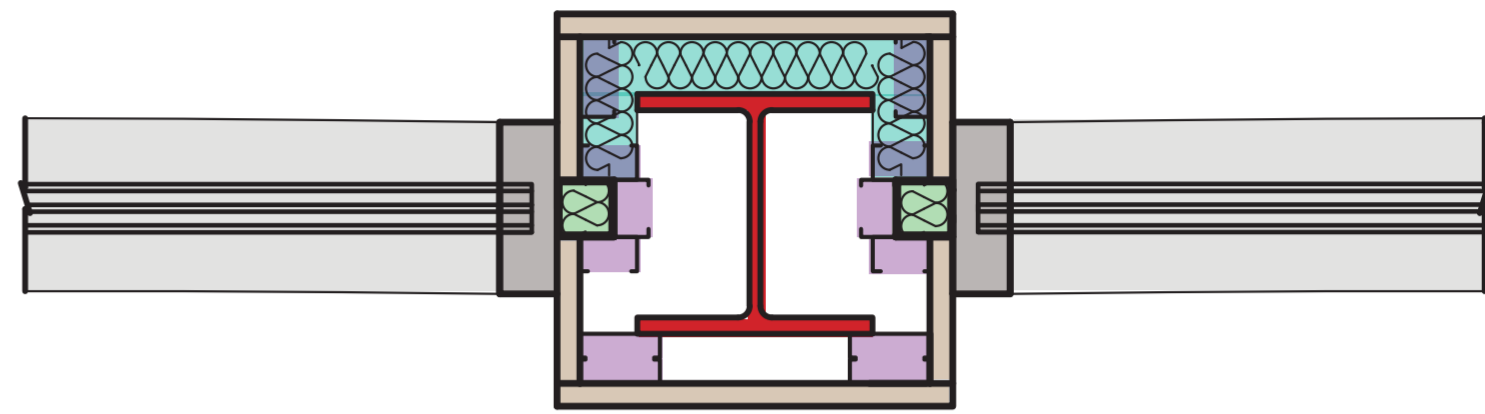
1:20
400mm 0 400mm 800mm 1200mm 1600mm 2000mm

1:20 PLAN DETAIL



DRAWING ANALYSIS

TECHNOLOGY MATERIAL CHOICES

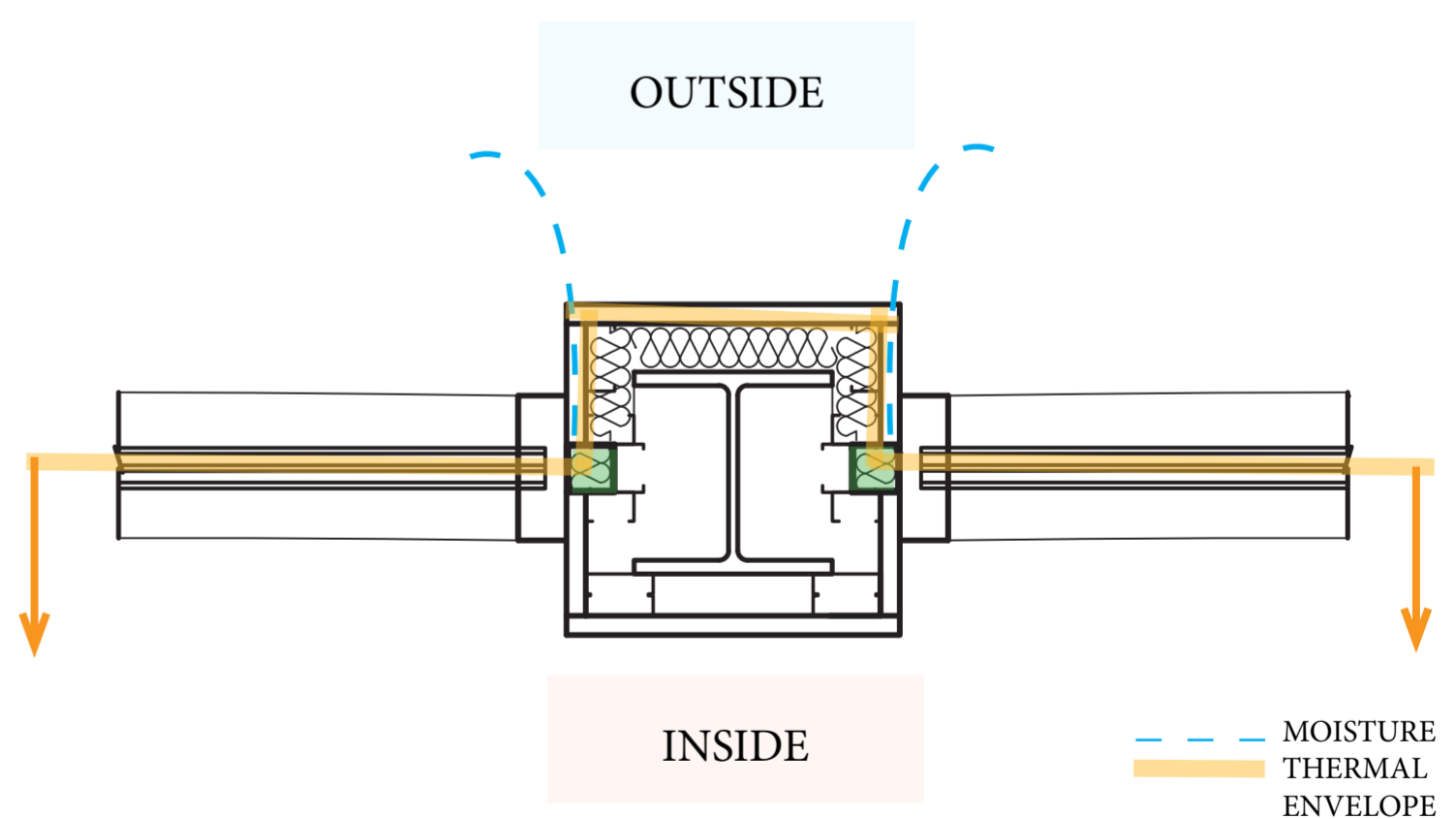


- Horizontal ground window frame
- Vertical window frame
- Timber framing
- Steel I Universal column 203 x 203 x 60
- Connections
- Insulation 50mm thick
- Thermal Cavity closer filled with insulation

ANALYSIS

EXTERIOR ENVIRONMENT

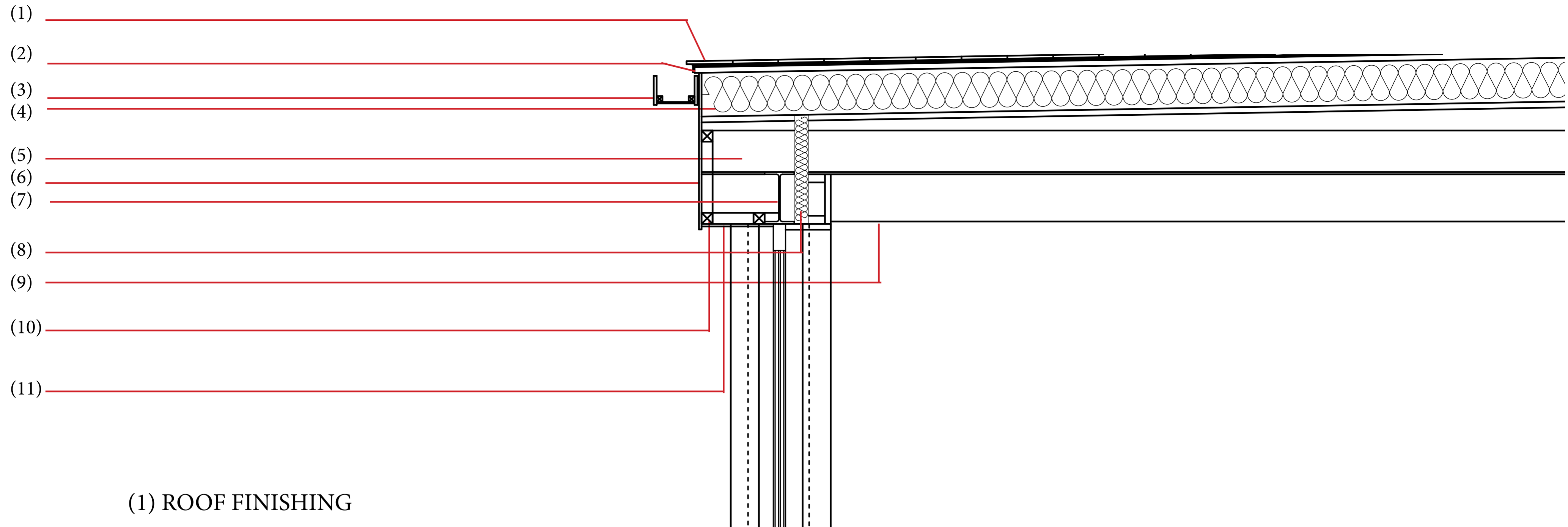
The cavity closer is made of an outer layer of plastic and filled with insulation. The purpose of the cavity closer is to break up the timber framing around the steel column, this is to stop damp and water from traveling through the timber and into the interior of the building.



INTERIOR ENVIRONMENT

The insulation working with the triple glazing envelope helps to lower the U Value and keep as much heat within the building as possible. Temperature comfort is important.

ROOF ANALYSIS



(1) ROOF FINISHING

Taken by inspiration from a precedent study on Longmen Qicun Art and Design Centre, China, the black and white detailed tiled roof creates an aesthetically smooth effect and draws emphasis to the swooping geometry of the roof.

(2) SINGLE PLY MEMBRANE

This layer is used for weather proofing the roof.

(3) GUTTER

The roof is on a slight slope but visual will look flat and swooping, the rain water will run down the slight slope into the small gutter.

(4) ROOF INSULATION

Thick roof insulation.

(5) SECONDARY ROOF BEAM

Under the secondary beams its covered up by board so you cant aesthetically see it on the interior.

(6) FASCIA & (11) SOFFIT

The Fascia and soffit is to close of the roof to the outside, Using timber which will visually link with the rest of the external envelope which wraps the building.

(7) STEEL I BEAM

The steel I beam transfers the load from the roof and sends it down the I universal column.

(8) INSULATION

This insulation connects the columns with the roof insulations closing the thermal envelope.

(9) TIMBER BEAM

The timber beams which run through the building where both an aesthetic and structural choice, This was inspired by the Longmen Qicun Art and Design Centre precedent study.

(10) SECONDARY STRUCTURE

The secondary structure is hidden by a lining of timber so you can only see the main

COLUMN SECTION ANALYSIS

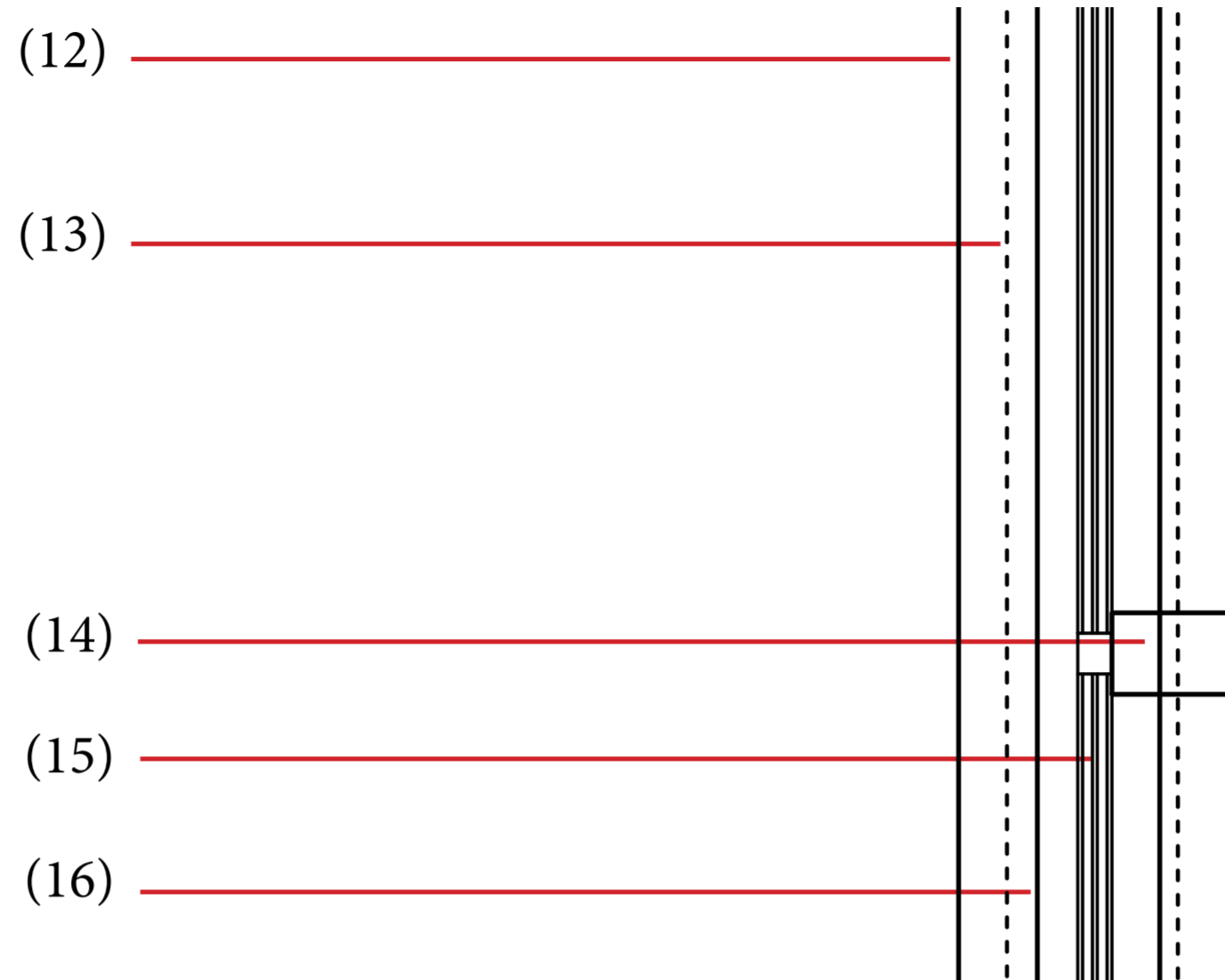
(12) COLUMN & (13) STEEL I COLUMN

This is the column wrapped in its timber frame, The dotted line represents the steel structural I column that runs through the inside of the structure.

(14) SECONDARY BEAM

The secondary beam is hidden behind the window frame to make it as discrete as possible and leave as much of the glazing as clear as possible.

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(15) TRIPLE GLAZING

The triple glazing is both for structural integrally with the span of glazing been quite large but also to keep the lowest U value and stop heat escaping through the glazed facade.

(16) VERTICAL WINDOW FRAME

GROUND ANALYSIS

(17) WINDOW FRAME

(18) OUTSIDE CONCRETE

(19) SAND

To stop the DPM from getting broken or ripped

(20) DPM

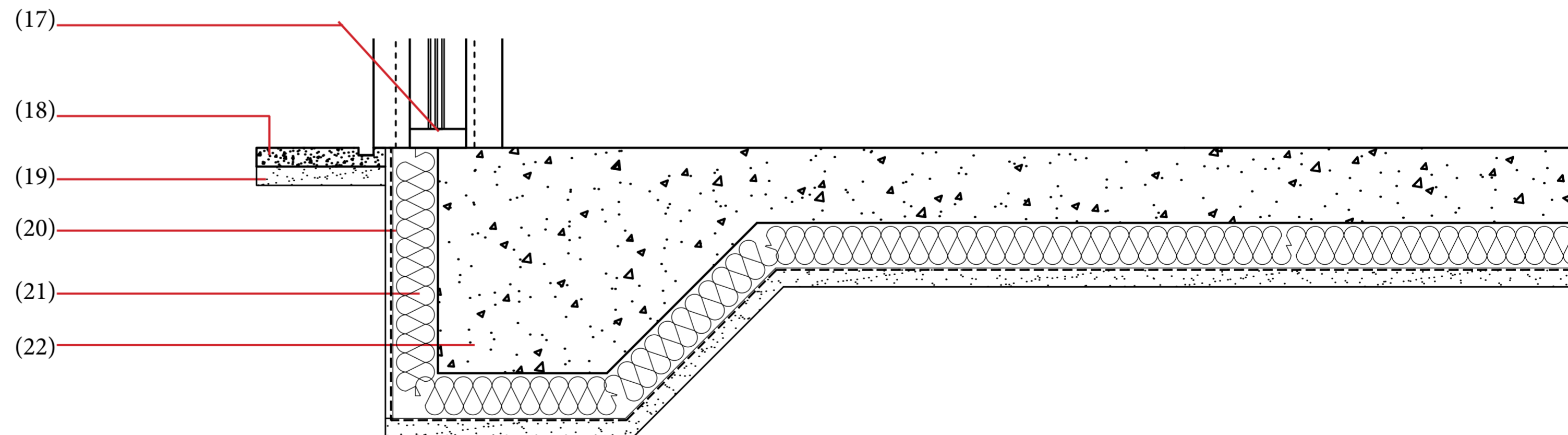
To stop moisture from coming up from the ground

(21) INSULATION

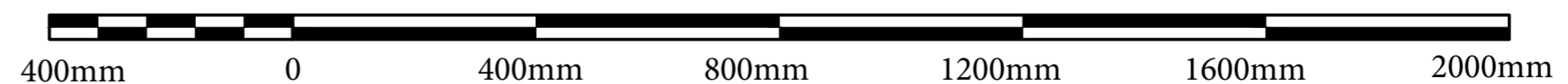
To prevent losing heat through the ground

(22) Concrete Slab

I wanted pure concrete finish with a gloss finish for my floor linking with the concept that the interior is made up of pushed circulation which is highlighted by the change in material.



1:20



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