

Art Sensorium

Inspired by the senses – a space that explores your senses through an immersive art experience.



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01

Designer Statement

As a designer, I have always been most passionate about projects which are meaningful to me as this provides my motivation. I first became interested in Interior Design and the human senses because I was doing work experience at Hazelwood School for the dual sensory impaired. This school was designed by Alan Dunlop Architect Limited to adhere to the special conditions that would be needed like tactile walls and a sensory room.

My dissertation involved research into women's place in art history, looking into whether they have been neglected or represented. This helped inspire me to look into all aspects of art in terms of the way it is experienced, and how the method of exhibiting art affects how people enjoy it. This process really helped me to think about how we experience art through all of our senses.

I wanted to experiment with my ideas in this project by being creative and confidently using new materials to help expand my creativity.

This project is an adaptive reuse design which really influences me to think outside the box on how I can adapt and develop my new ideas into the existing architecture. I really enjoyed looking into the history of the site and investigating how I can be mindful to the narrative of this historic building.



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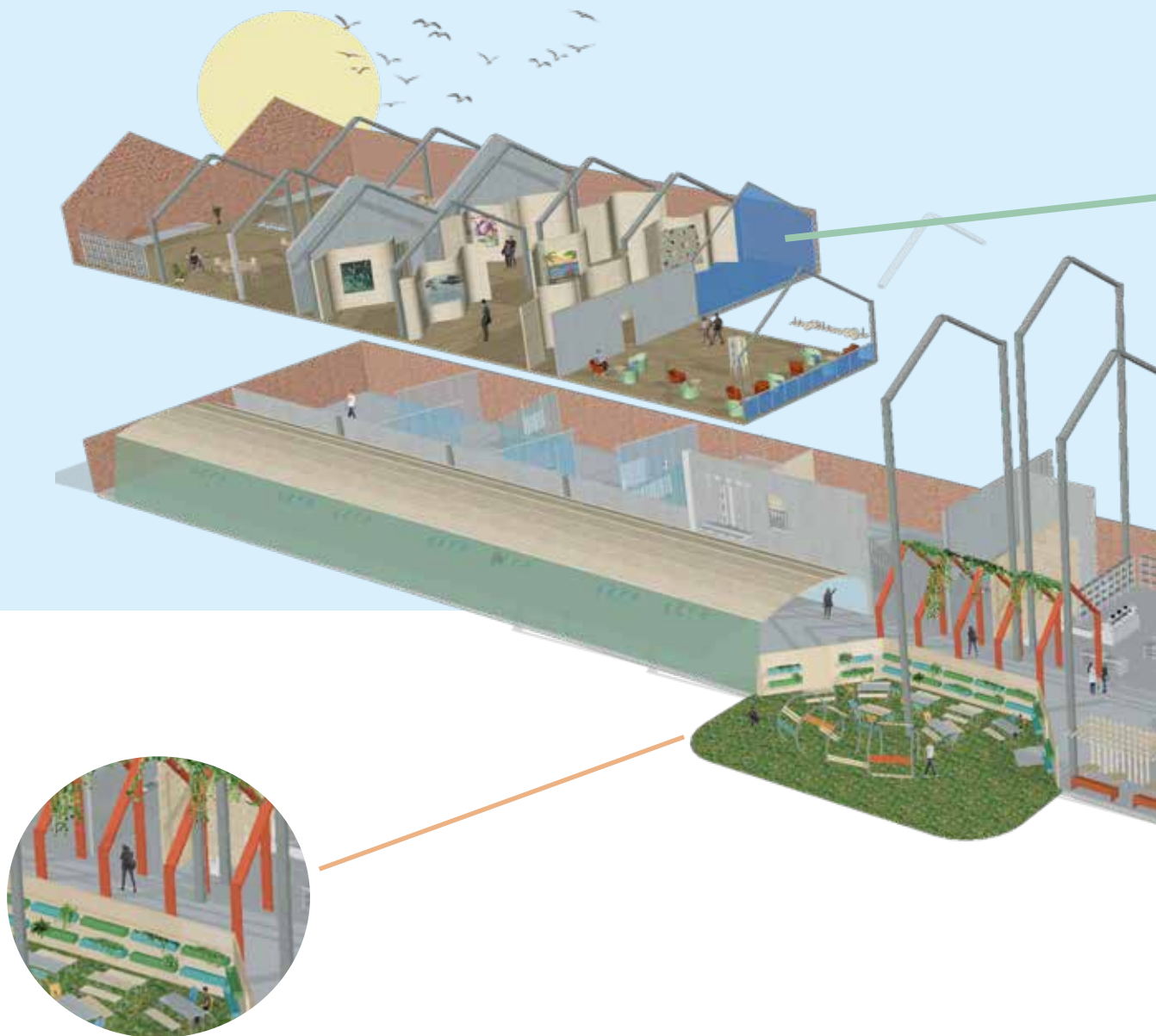
02 The Brief

Art Sensorium

Engage your **senses**,
ignite your **creativity**.

A space where art speaks to all your senses.

Art Sensorium is a multi-sensory design. It is an innovative art experience designed to make people and especially younger people become inspired and motivated. Although it is for everyone, one of its aims will be to encourage younger people to become inspired as my research shows that being creative is good for your emotional,



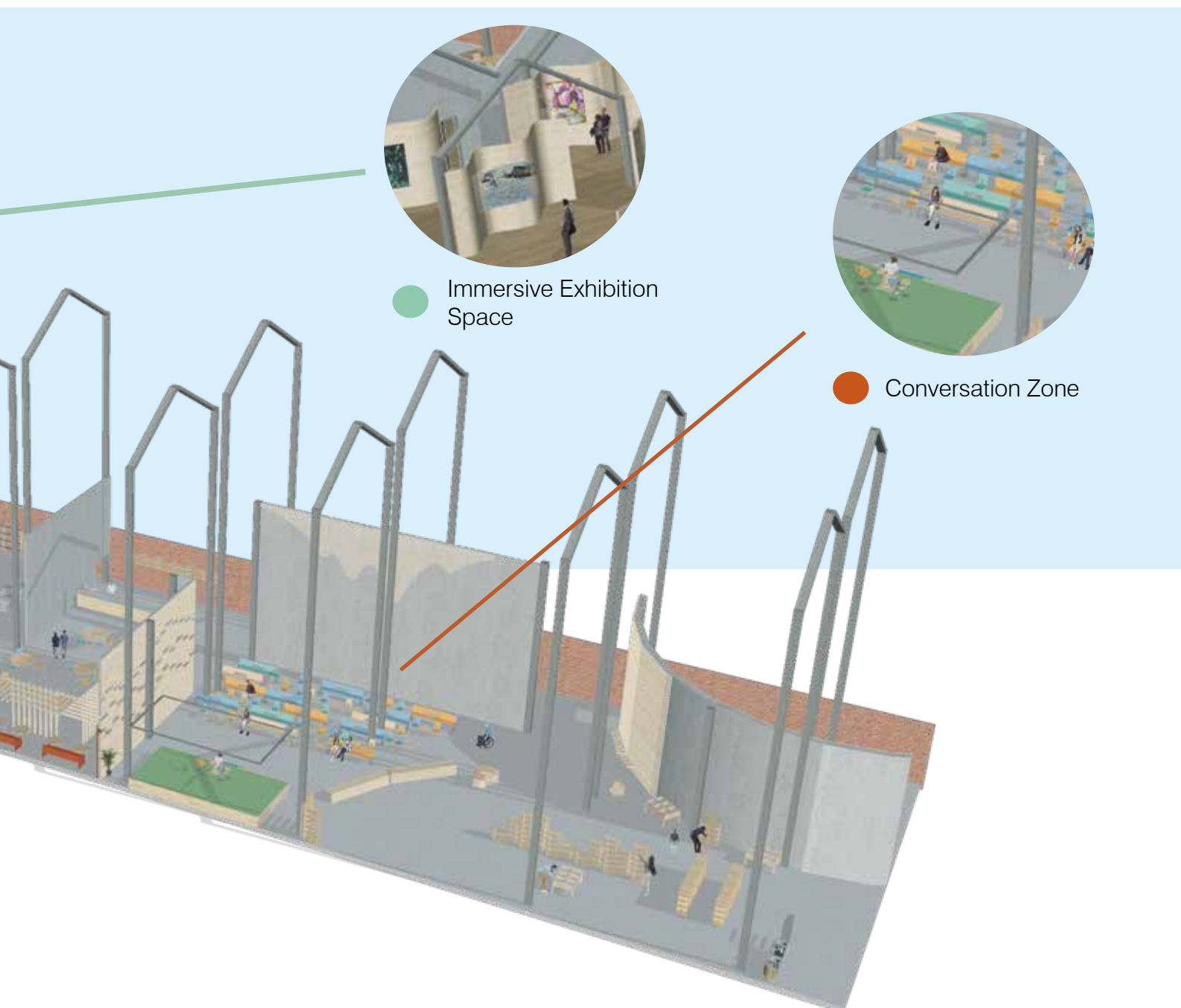
Outdoor Seating

psychological, and physical wellbeing, therefore, it is an exhibition space that's attractive to young people.

This project is an adaptive reuse using the Maryfield Tram Depot, which is in Dundee, it has a gorgeous exterior with classic red brick and so I am planning on continuing the original colours throughout my design for the interior. It is a long rectangular building with a large open indoor space, which means that I have a large and blank

open canvas to work with, opening up space for creativity.

Places like the V&A which we have in Dundee and immersive art experiences like the Van Gogh experience show that these are highly sought after and can help people to take an interest in art, which as mentioned before has multiple benefits.



03 Site Analysis

03 Site Analysis

Exterior Details



Classic Redbrick





My thesis project is an adaptive reuse of the Maryfield Tram Depot, which is in the Stobswell area to the north-east of Dundee. The building has a gorgeous traditional redbrick exterior with muted greens and blues coming through in small details which is mirrored throughout my interior design.



Site History



The tram depot was previously used to house 70 trams from 1920 to 1956 and is a long rectangular building measuring roughly 120 metres in length and 21 metres in width, with a large open indoor space, which means that I have a blank unrestricted canvas to work with. This gave me the opportunity to keep the existing architecture while workshopping adding new floors and walls to fit my design ideas, while also changing the original roof by adding in windows in many of the sections to provide natural light.





Built on Forfar Road, Dundee, and opened by Dundee Corporation in 1901, the tram shed was originally built to hold 12 trams and was then extended to hold 70 in 1920. In 1956 the last tram departed at 12:01am on 21st October, with a witness stating,

'I have never seen anything like it',

as thousands of people came out to watch the spectacle. People cheered and sang songs and fireworks were set off. In the 1970s the building was passed into the hands of Scottish Water and in 1993 the building was B-listed. Most of the building has survived the years unaffected until the south-eastern quarter of the building was damaged in a fire which caused that area to be left unroofed in 2002. It has remained untouched until more recently when the building was bought in 2015 by Dundee's Museum of Transport and is currently under construction.



Site Visits



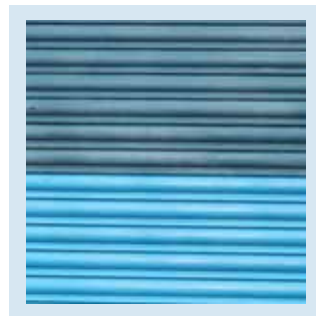
Sneak peak at the interior

BLANK CA



Going on site visits, I sketched the exterior materials and colours coming through and got sneak peaks at the vast open interior.

It was through these visits I decided to use some of the exterior materials and textures on the interior to achieve the result of a cohesive design.

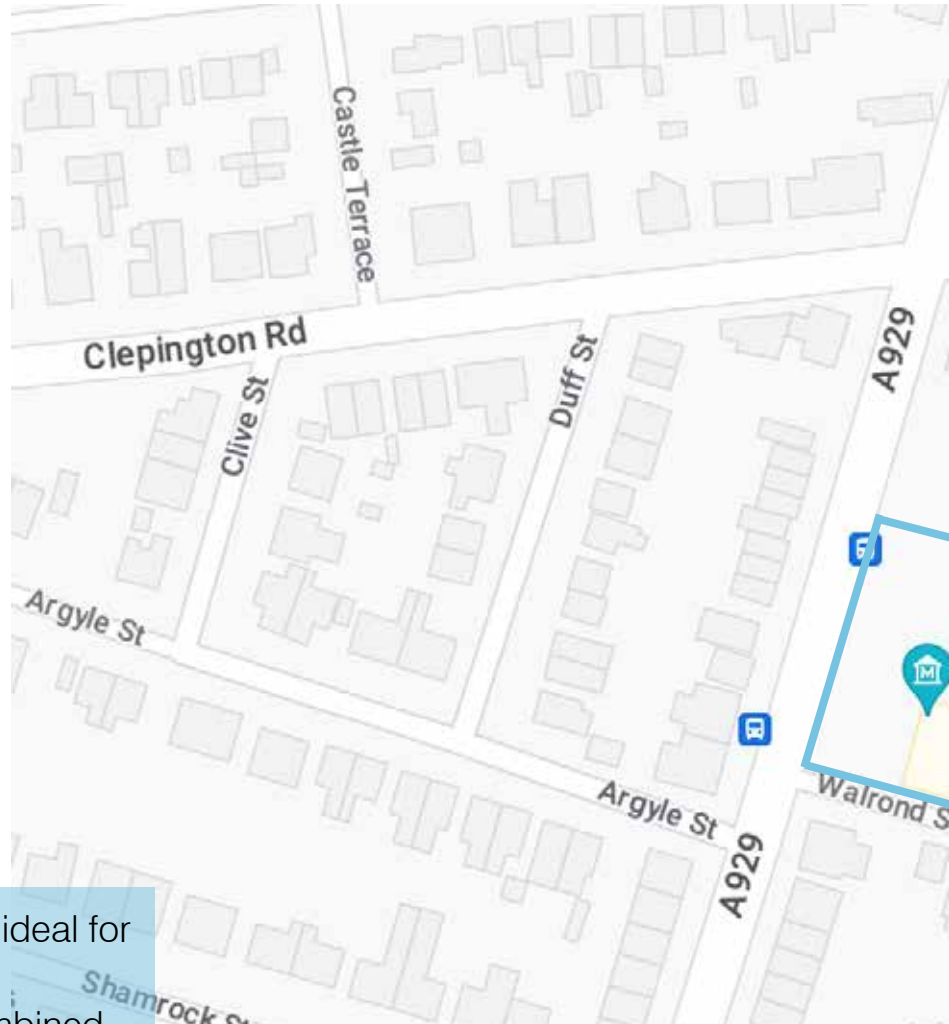


EXISTING MATERIALS

ANVAS

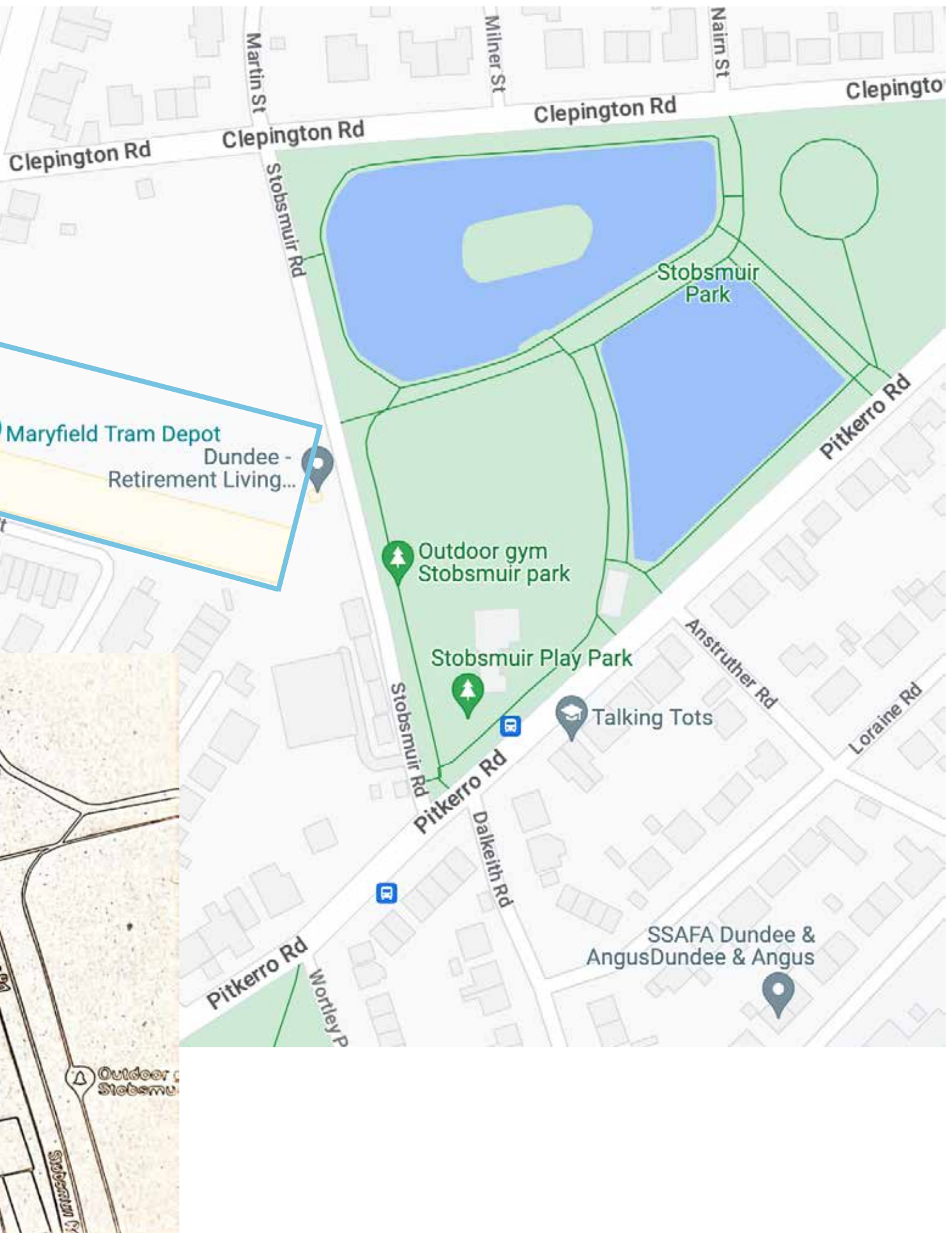


Site Location



The location is ideal for creativity and practicality combined.





Site Surroundings

I have been on multiple site visits, and this has been important as it has helped me to grasp the scale of my chosen building and examine the surroundings to see how I could utilise these in my design too.



Main view



View from front entrance



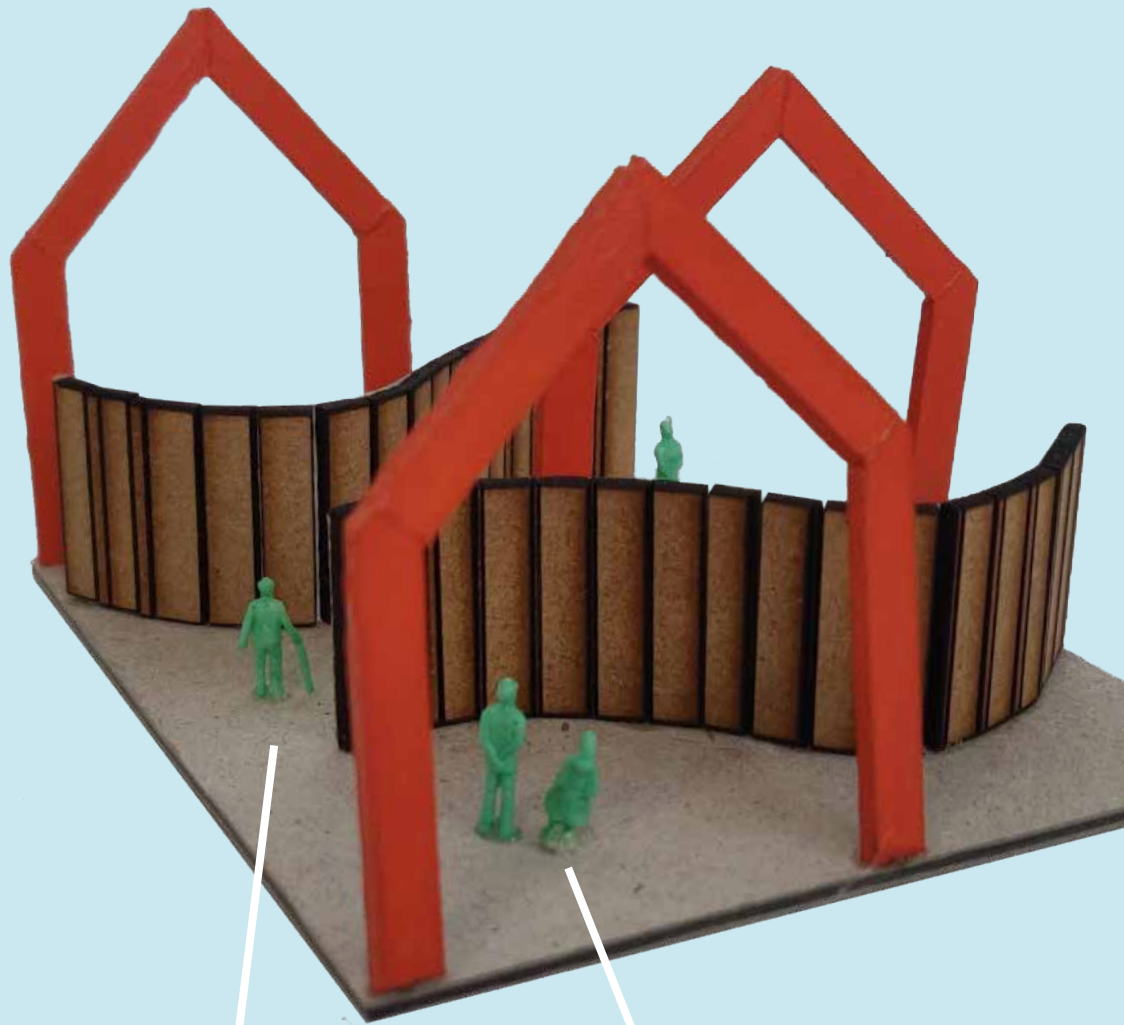
View from right side

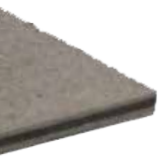


On one side of the building is a road with traditional terraced houses with front gardens and on the other is vacant land. I can utilise this land in my design through a car park for visitors who have travelled to the site and a grassy area that I am using for my seating outside.

04 Development

04 Development



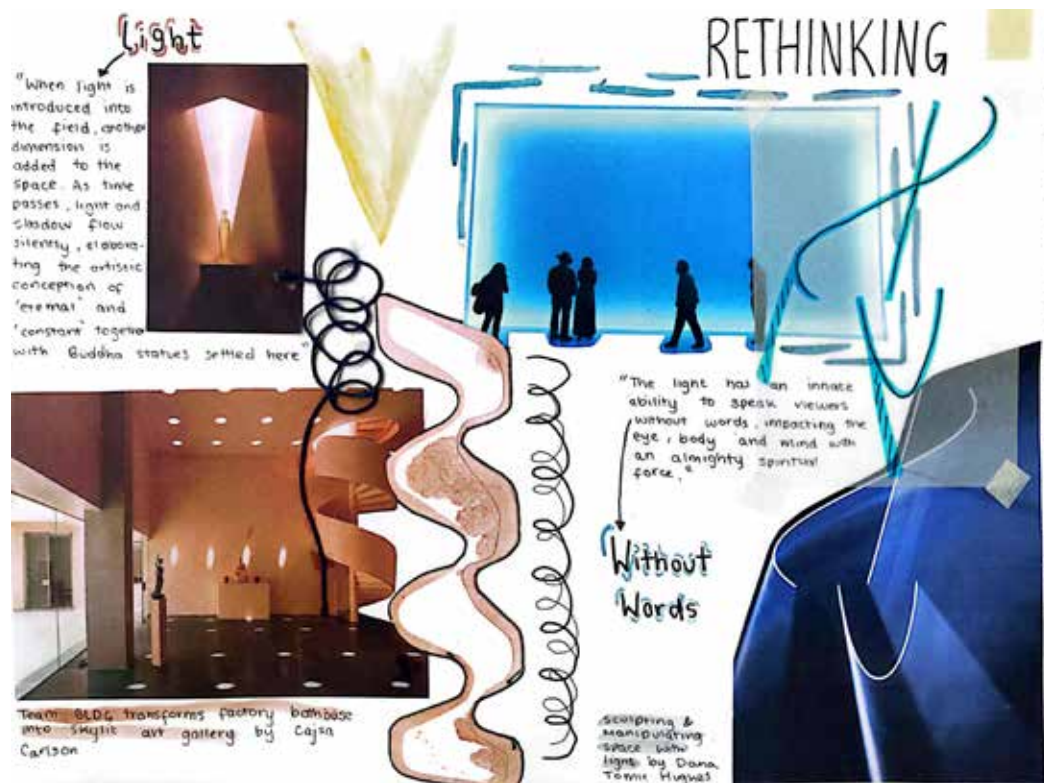


‘There are no rules... That is how **art is born**, how breakthroughs happen. Go against the rules or ignore the rules. That is what invention is about.’

Helen Frankenthaler (1928–2011)

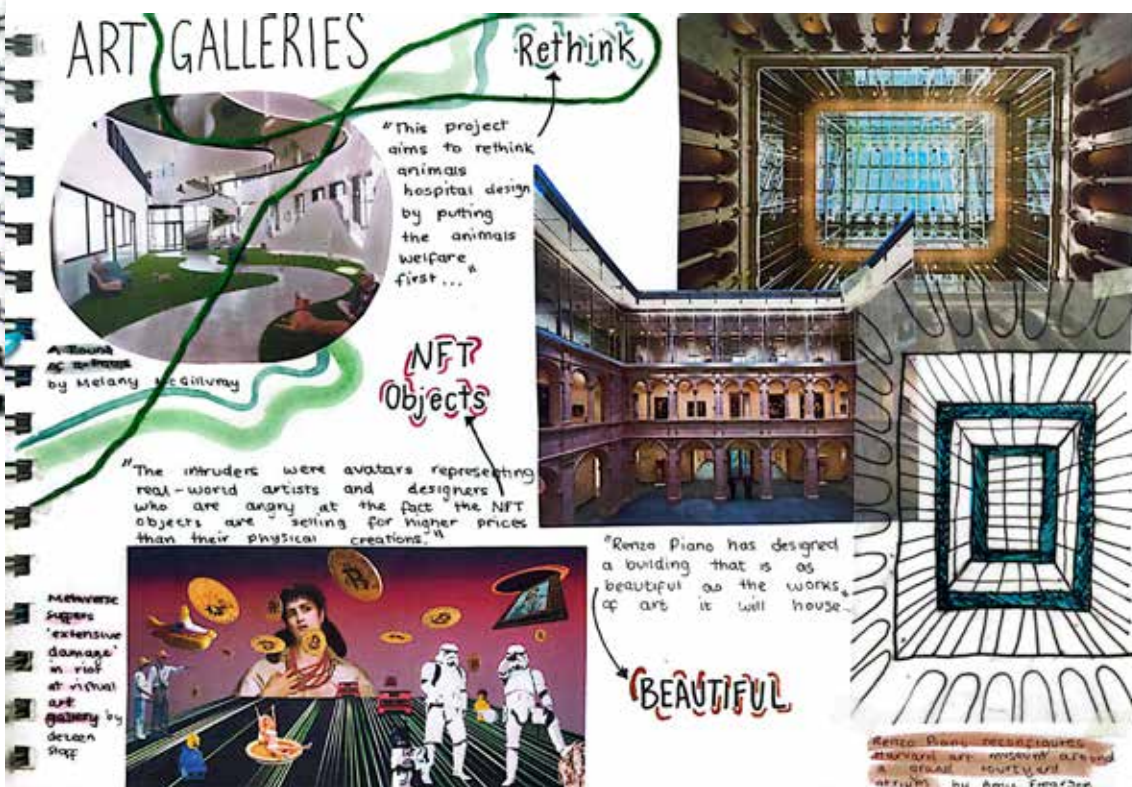
Initial Research

I started the research for this project by investigating different art galleries and exhibition spaces which had moved the concept of an art exhibition away from the tradition of artwork on plain walls to more of an experience through the whole building.



One of the art galleries that has done things a little differently and is more unique is Skylit art gallery by Caisa. They use natural light to illuminate their artworks.

This plus others really helped me to try and think out of the box and look at my building as more of an experience than a gallery.



Research

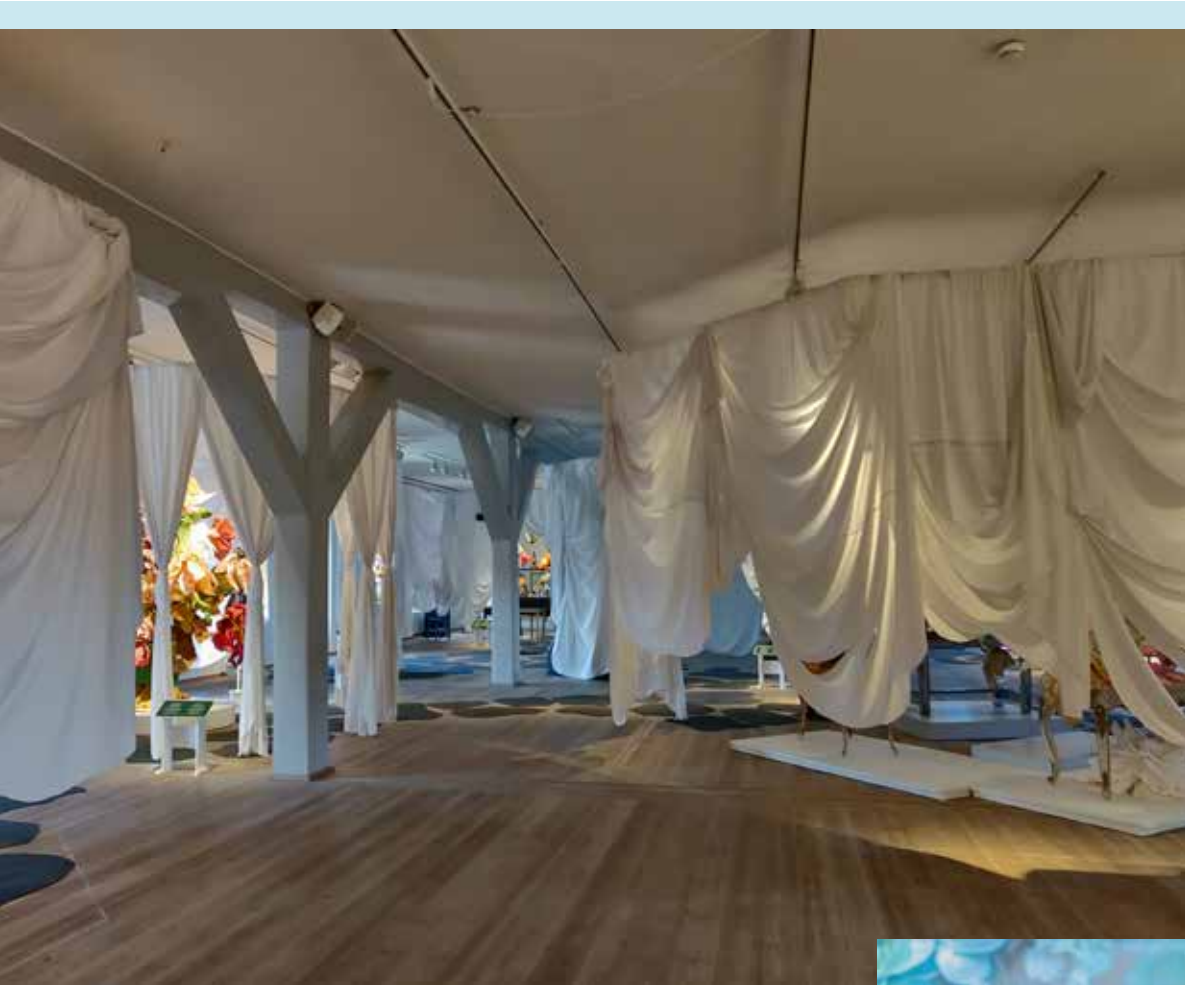
I think places like the V&A which we have in Dundee, and immersive art experiences like the Van Gogh experience, show that these can help people to take an interest in art.



Van Gogh Experience



The
Ench



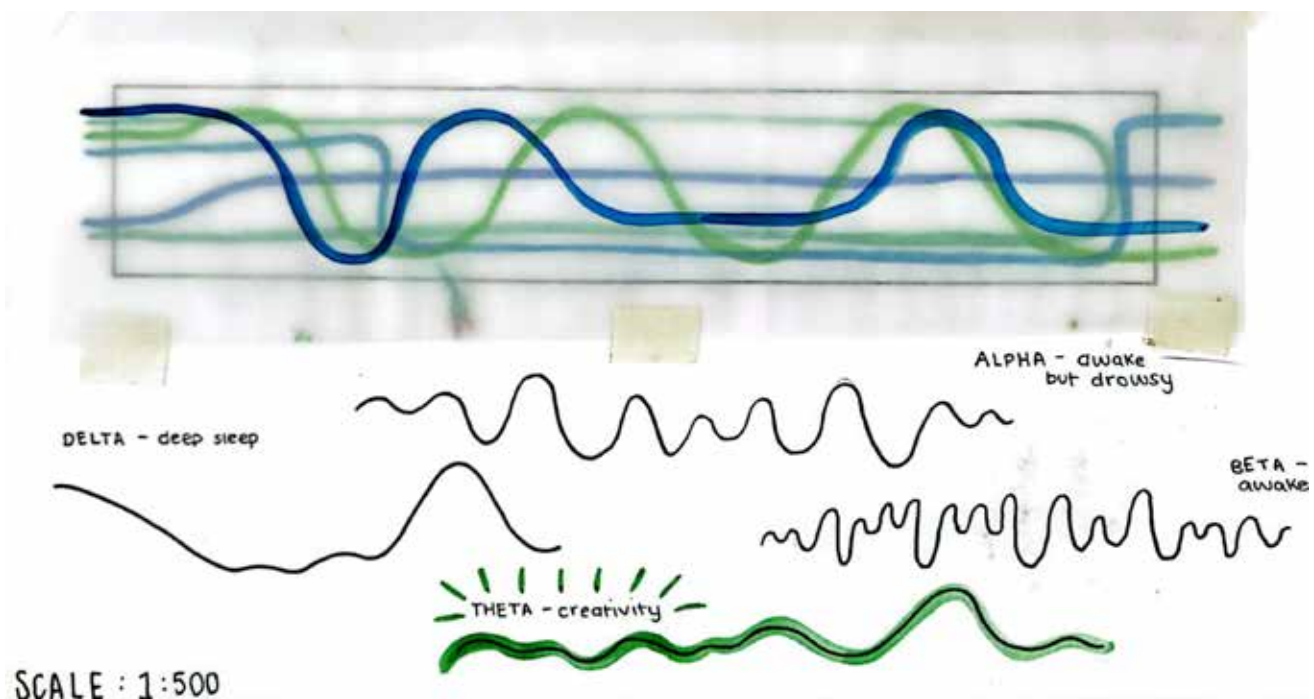
Rose Cannon - the Kings
haunted Garden, Copenhagen

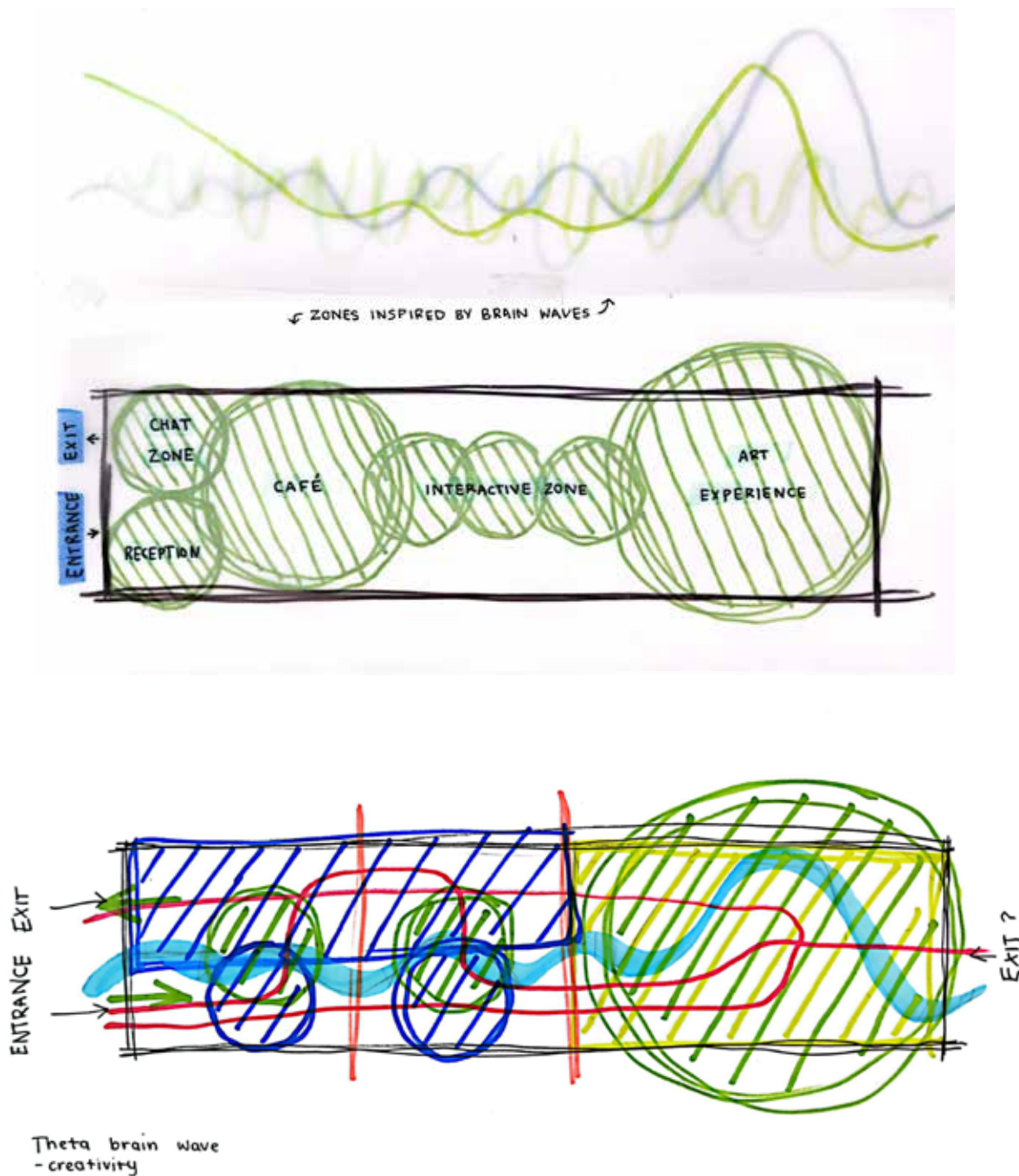


So, although the Art Sensorium is for everyone, one of its aims will be to encourage younger people to become inspired by art, as my research shows that being creative is good for your emotional, psychological, and physical wellbeing, therefore it is an exhibition space which is attractive to young people. Many young people don't take art as a subject in school, and they may leave school feeling art is not for them, but the type of space I want to create will be all-inclusive and appealing and will therefore bring these wellbeing benefits to a wider group of people.

Theme

My theme is the 'senses' therefore one of the things I have been exploring is research into the brain and how that interprets and translates our senses. I used different brain wave patterns to help illustrate and plan the layout of my space in abstract and creative ways.



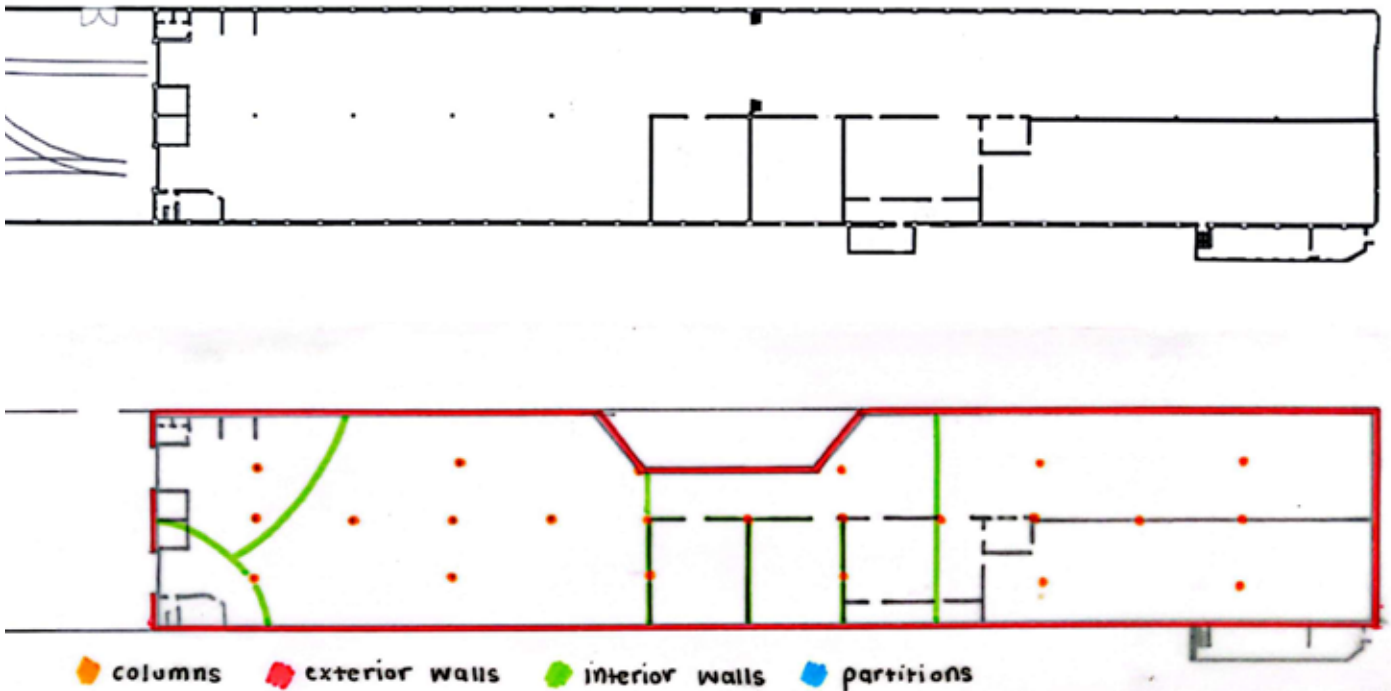
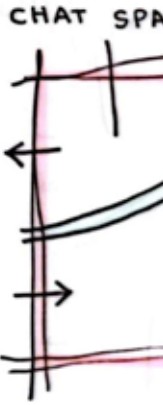


The two brain wave patterns that influenced my design the most were the theta brain wave, which oversees creativity in the brain, and layering the delta, alpha, gamma, beta and theta brain waves on top of each other to see how my design can come together and develop my ideas. These are some of my zoning diagrams from my sketchbook which have helped me pinpoint the journey of the space and how someone would move through each area.

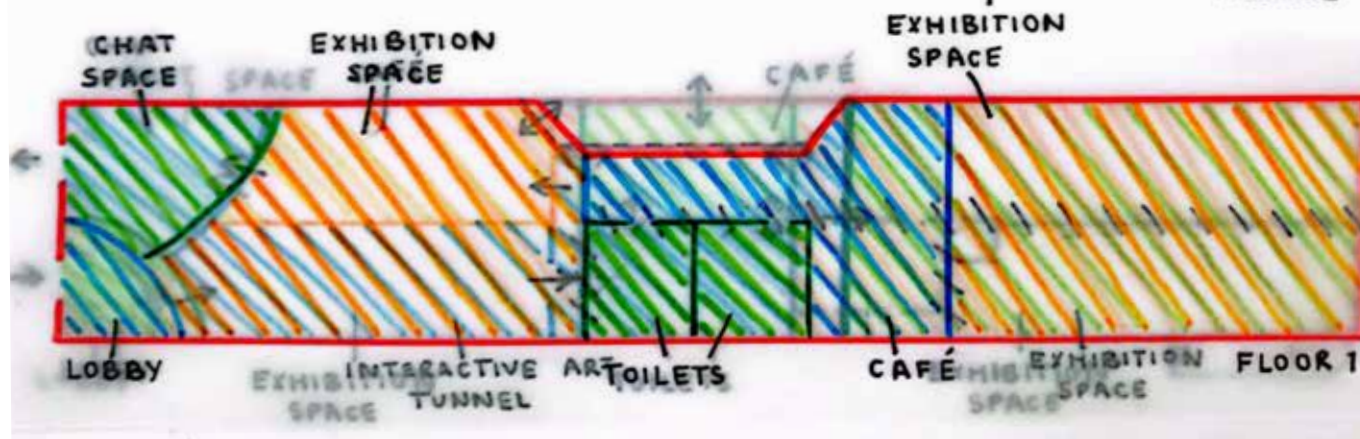
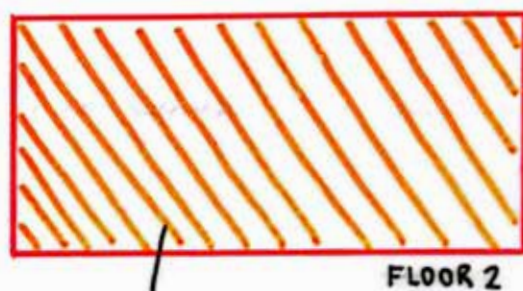
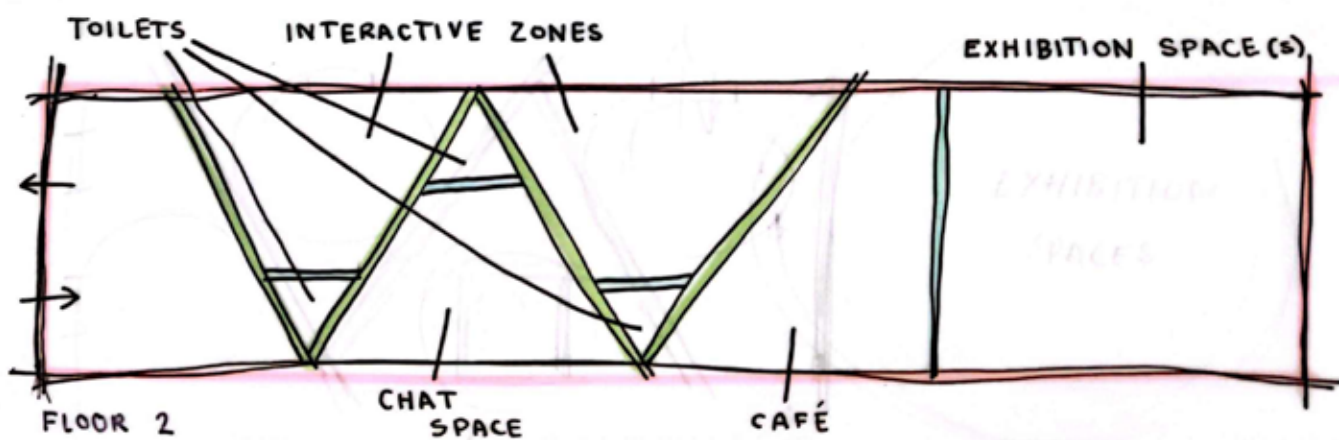
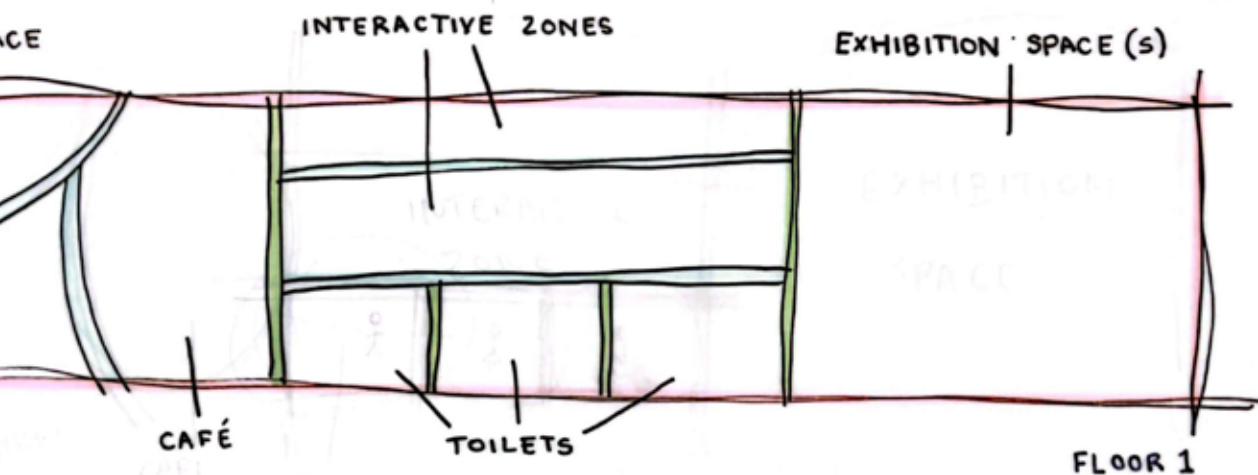
INSPIRATION

Development

I was able to push forward with the more detailed aspects of my design looking at the materials, functional aspects, and aesthetic flow of the space as a whole. This was the most enjoyable part of my project as I was able to visualise my design and therefore was able to experiment with the creative process.



CREATIVITY



Engagement

Engagement

I asked each person 4 questions which included :

1. Have you ever created adaptable exhibition spaces?
2. Do you think it is important for a buildings experience to start the minute you walk in?
3. Do you think the interior design of an exhibition can help to enhance the artwork it holds and add to the experience?
4. What has been your favourite exhibition to oversee and why?

These helped me to grasp an understanding of the challenges someone creating an adaptable exhibition space could face.

"A recent visit to a museum in Amsterdam had an

area with books

for children and adults (related to the exhibition theme) to flick through at the cafe tables"

"For me personally I think it can be really effective to provide a gradual sense of what you're coming to, to

create anticipation

and help prepare the senses rather than coming in cold."

"Pushing back on standard readings of colour, the decorative and gendered racial identities was embedded within her work, and thus it was really important to her that

she intervened in the white walls

of the gallery space."

"...there was an artist John Latham whose quote

'the context is half the work'

is often repeated."



Joanne Carmichael
Masters Student



Irene McCaffrey
Team Leader



Tiffany Boyle
Head of Exhibitions, DCA

“Interior design can provide places to dwell and rest and

soak up an exhibition

as well as places to respond to and interact with an exhibition.”

“the design of the building and design of the exhibition areas really do contribute and

enhance the artwork.”

“As part of the exhibition, she did a botanical printing workshop and the paper weaver also did a

workshop, which enhanced the experience

and understanding of her work.”

“When we have an event they are always a source of

great interest

to people who have never been to the building.”

“Welcoming, attractive with

promise of more to come,

light, colour, warmth, smell, sound, all play a part.”

“We are humans with

senses that work together

and all at once, each giving us instant feedback which makes decisions as to what happens next.”



erty
Museums, EDC



Drena O'Malley MBE
Resources Manager,
Deafblind Scotland

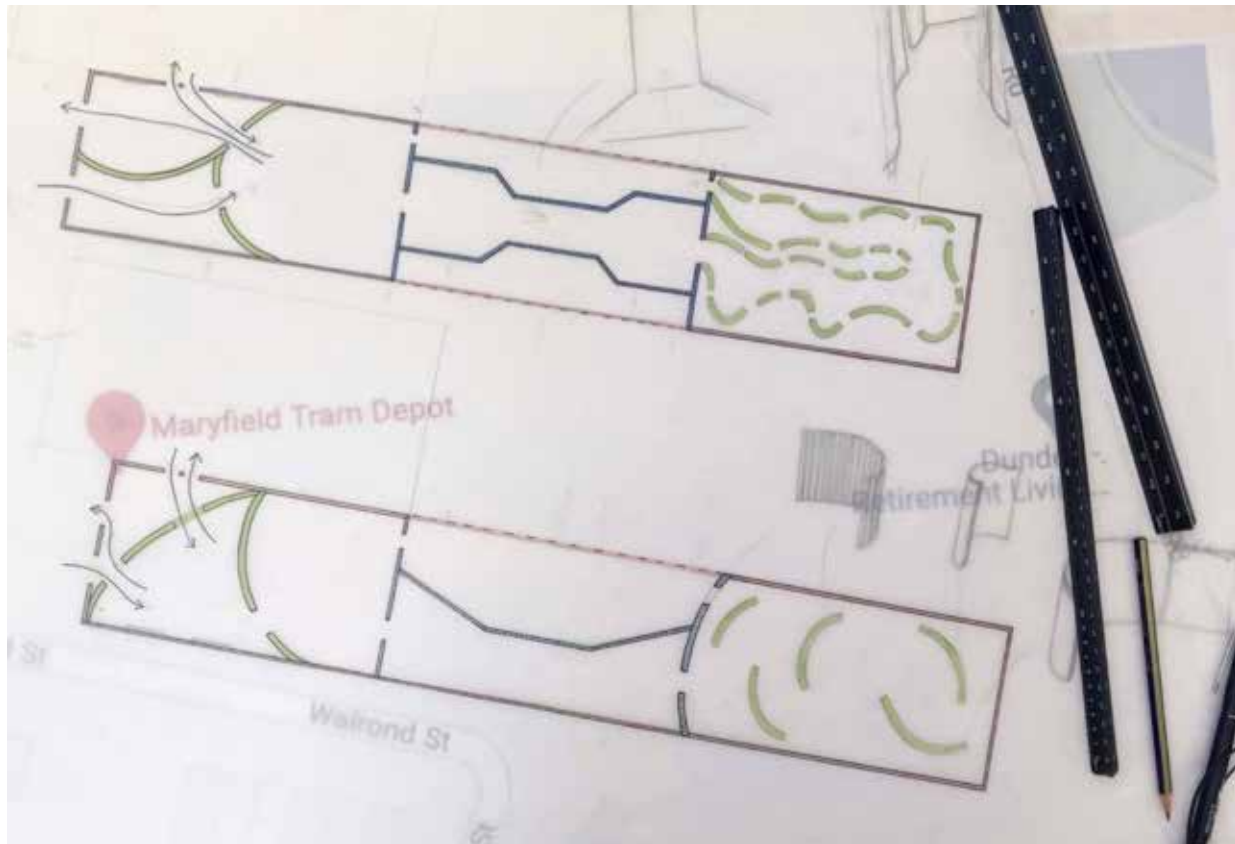


Jean Duncan
Chair of Pittenweem
Arts Festival

Development

My development process started with experimental models and sketches to test out how my ideas could look. At this stage these were very conceptual and were strictly to kick off my creative progression.





After developing these through research and sketches, I used my brain wave inspiration which came from my theme of senses, by creating abstract zoning which highlighted how each section of design would evolve. At this stage the areas included: a café, an exhibition space, an interactive art zone, a lobby, and a chat space. I then went on to do two larger drawings to be more specific about how certain areas can become zones by adding walls which mimic my previous zoning diagrams.

Spatial Case Studies

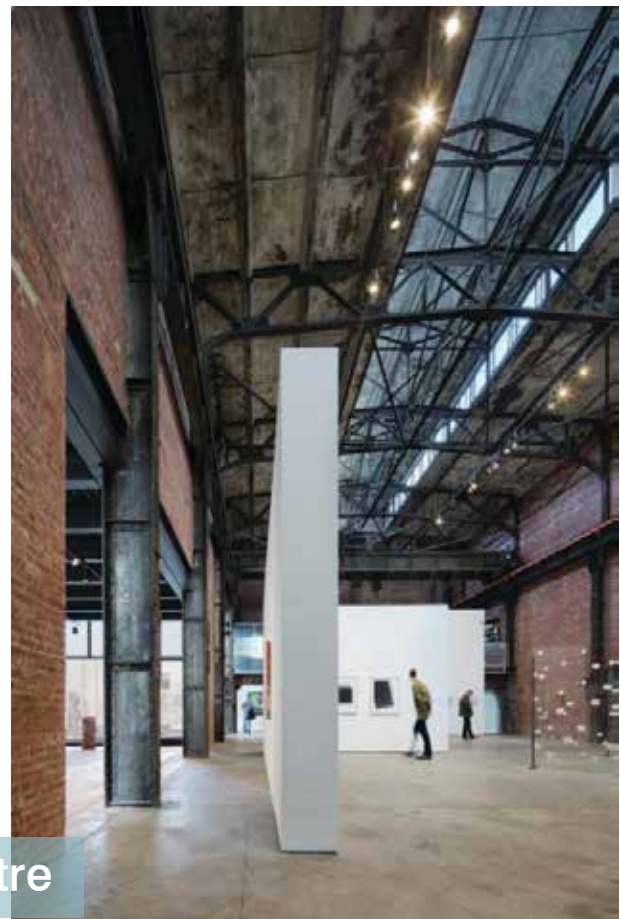


50% Cloud Artists Lounge

A restaurant and exhibition space that lives within a vast deep interior of a brick art installation. I used this spatial case study to help me in my research of a way to navigate an exhibition space.

“Guests can experience the change of light in every minute”
- Cheng Chung Design

This design also implements curved simple furniture and streamlined exploration of the exhibition areas.



The Sculpture Centre



The Atelier des Lumiere by Culture Space features work by Gustav Klimt and Egon Schiele through colourful projections onto 10 metre high walls across a large area to create an immersive experience.

"The marriage of art and digital technology is, in my opinion, the future of the dissemination of art among future generations."

- Bruno Monnier



Atelier des Lumiere



The Sculpture Centre by Andrew Berman Architect was a repair facility for cars in the past and now acts as a gallery experience.

Leaving the space open with large areas allows for the natural materials and industrial environment of the existing building.

Spatial Case Studies



It has 11 galleries which create a living immersive experience. It has films projecting against curved walls which makes the physical walls dissolve into 'moving spectacles of light, sound and image.'



Qatar National Museum

“All the senses are engaged through a creative combination of sights sounds and even evocative aromas.”



The Planetarium

“it’s a truly out of this world experience.”

The planetarium at Glasgow Science Centre is a sight to behold using digital technology and design to create an experience for everyone. As they said ‘we’ll take you on fantastic journeys through the solar system, into the Milky Way Galaxy and beyond...’

The view surrounds the audience to fully immerse them in this experience and create memories for them to remember.

PROJECTIONS



Initial Zoning

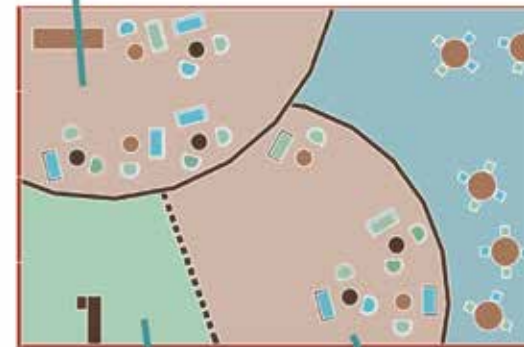
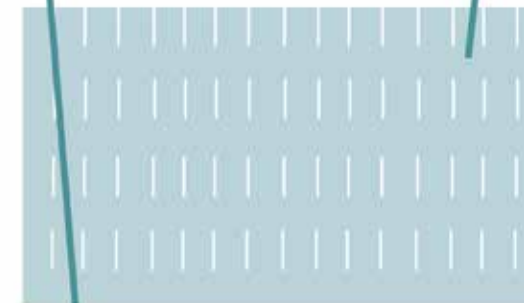
Starting to work digitally gave me more accurate outcomes. I worked up a simple initial proposed idea for changing the shape of the building and finally working up how my space could fit my design.

Chat space -

To encourage conversation before you leave to stimulate inspiration

Car Park -

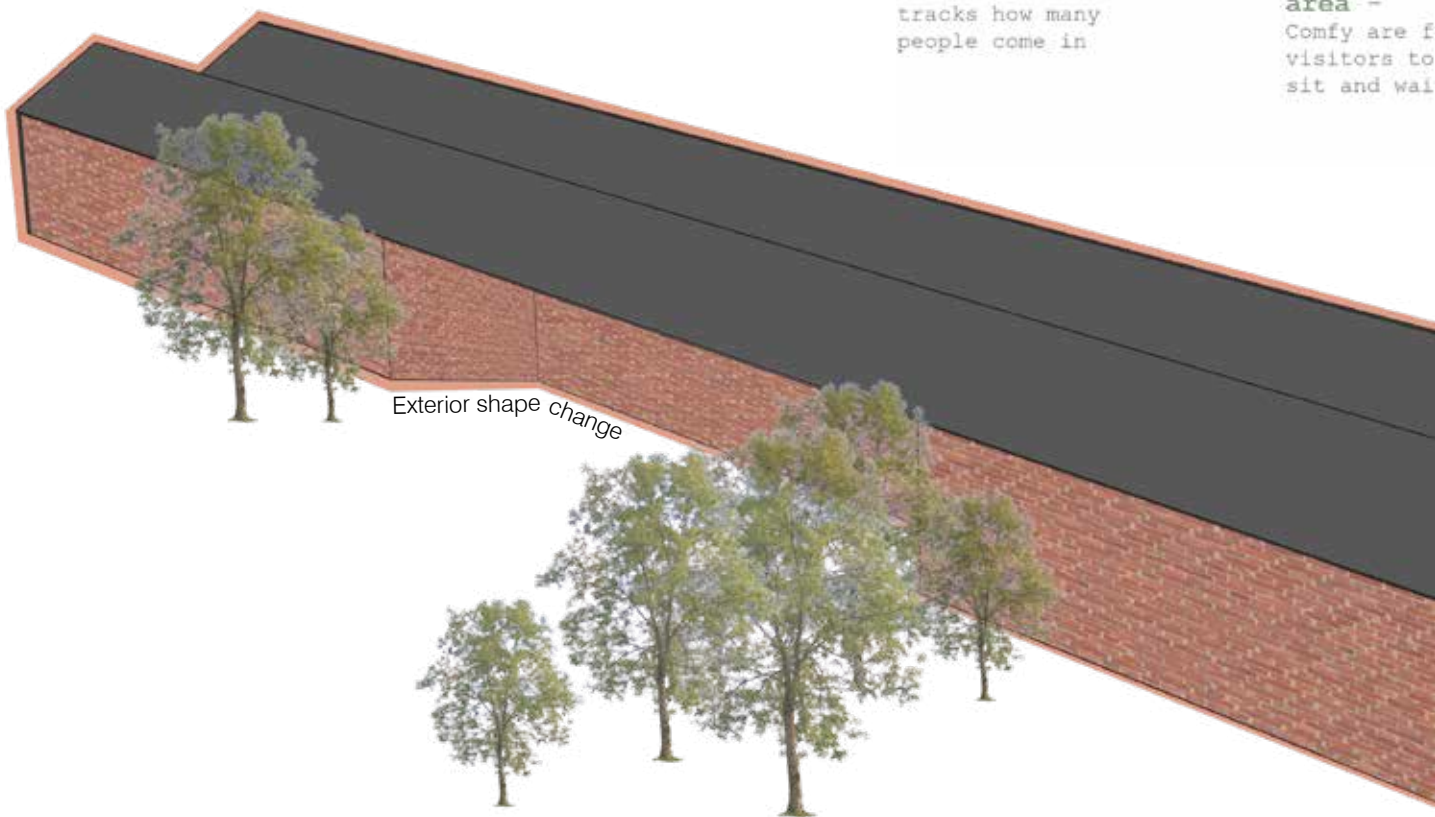
Easy access for visitors travel



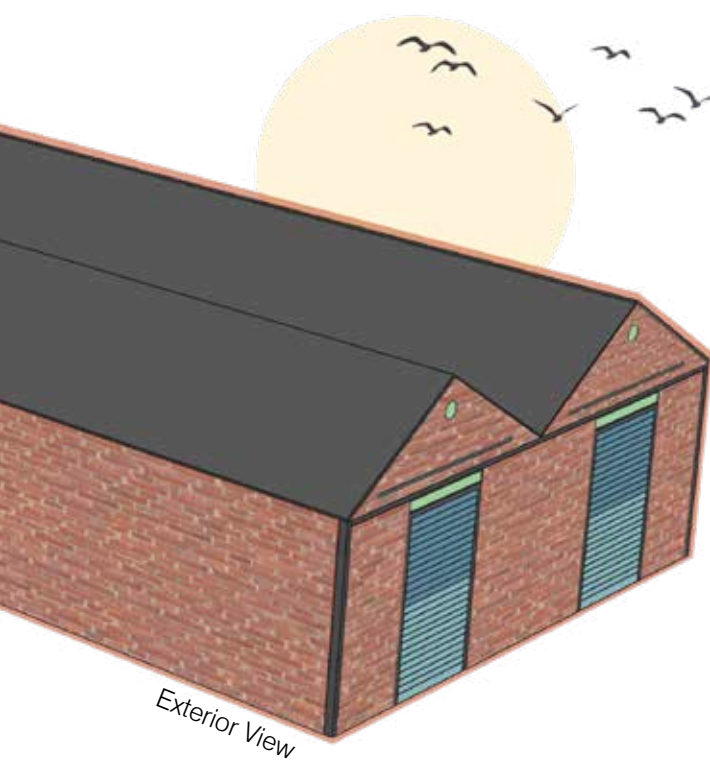
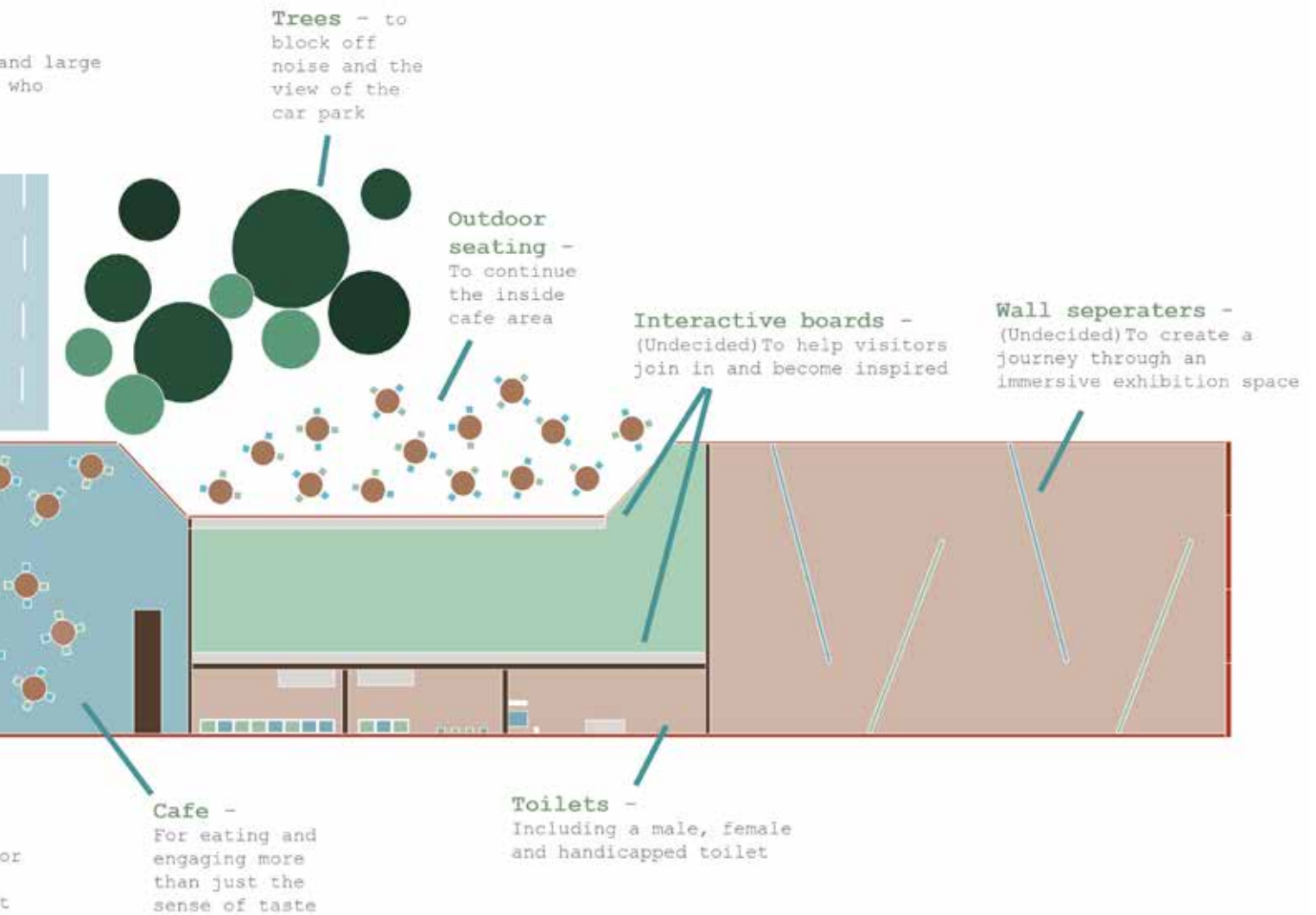
Reception area - Greet visitors and tracks how many people come in

Waiting area -

Comfy area for visitors to sit and wait



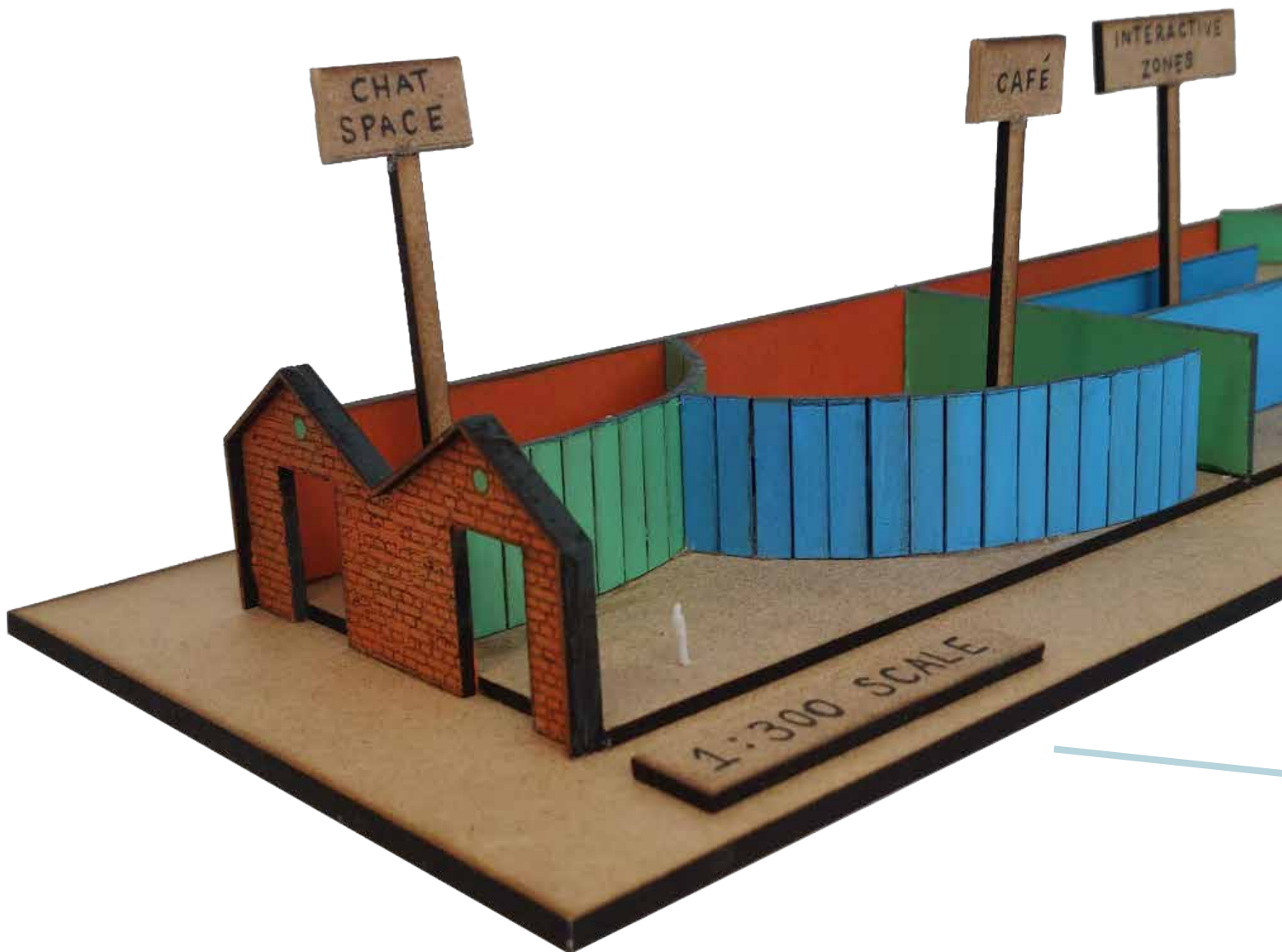
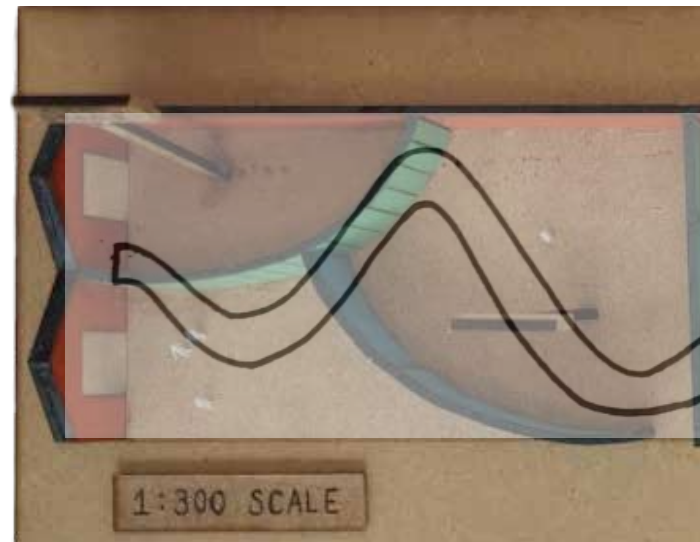
Exterior shape change

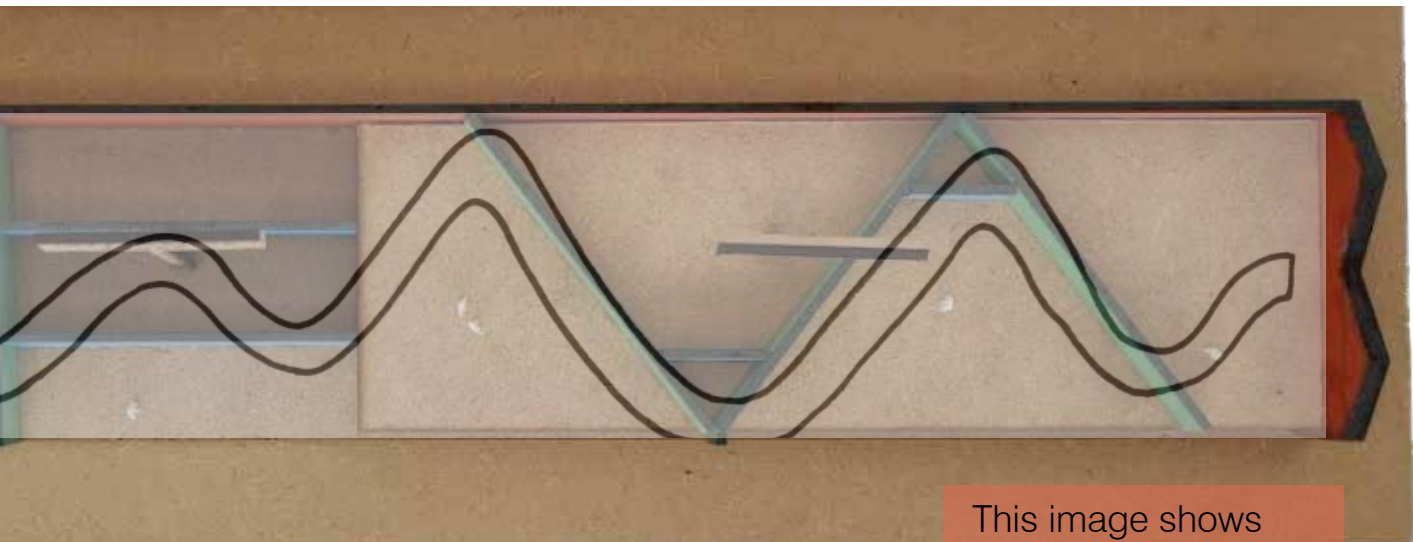


This helped to show each area and what could be placed in it, also starting to look at furniture layout and where doors are which would create blank space for movement therefore creating a journey and flow through the building. This also indicated what each zone would be, including a reception and waiting area at the front entrance and toilets too, in addition to the previously mentioned zones for the café, exhibition spaces, interactive art zone and chat space.

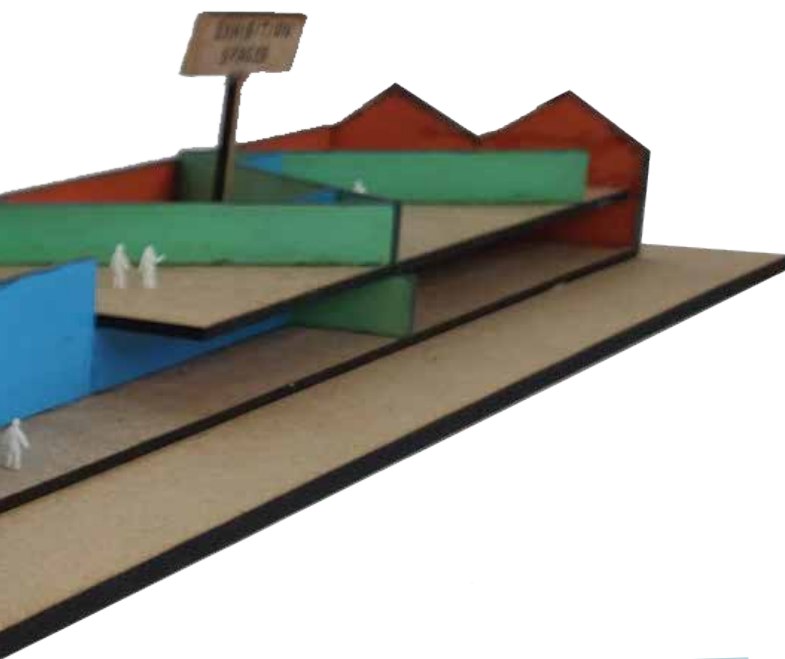
Zoning Model

This led me onto working in 3D to help illustrate my ideas at this stage which also emphasised the scale I was working at: this model is 1:300. This zoning model allowed me to work out how my space would look using the abstract brain wave patterns and initial ideas for what can bring my area together.





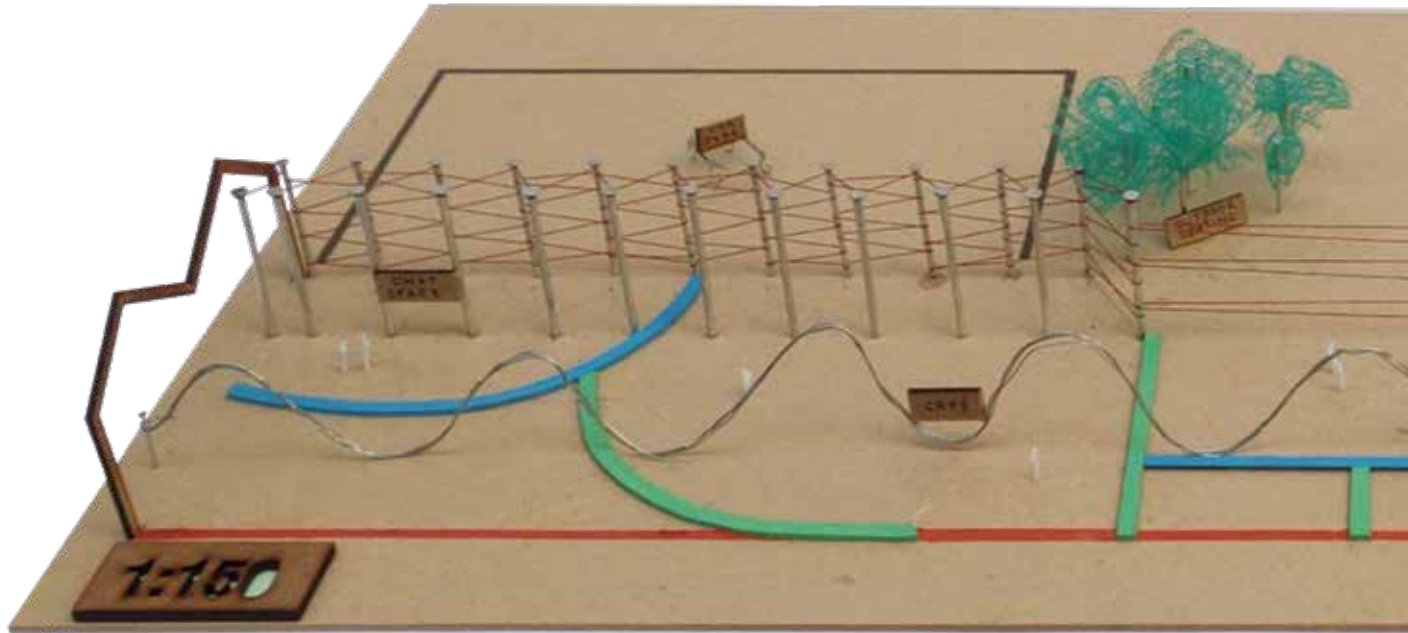
This image shows how my design has subtly been inspired by a brain wave form.



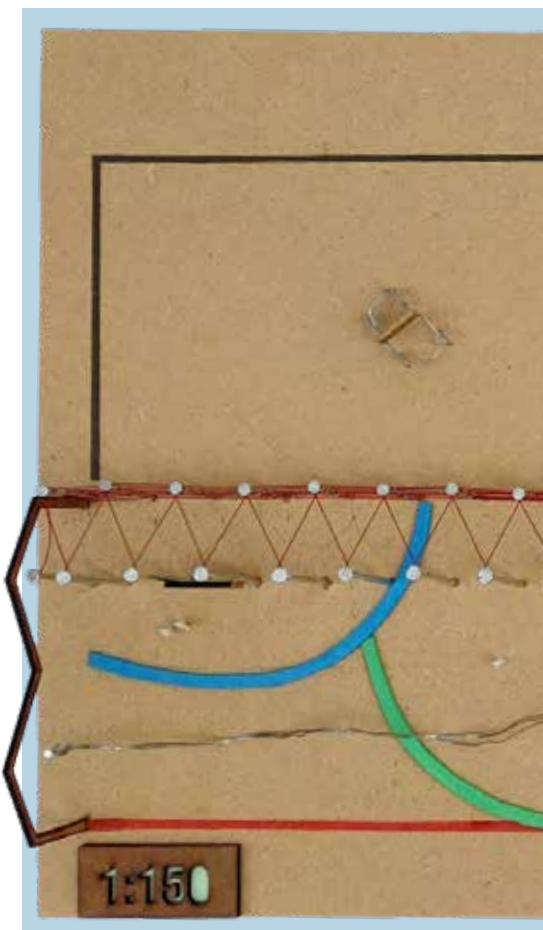
DETAIL



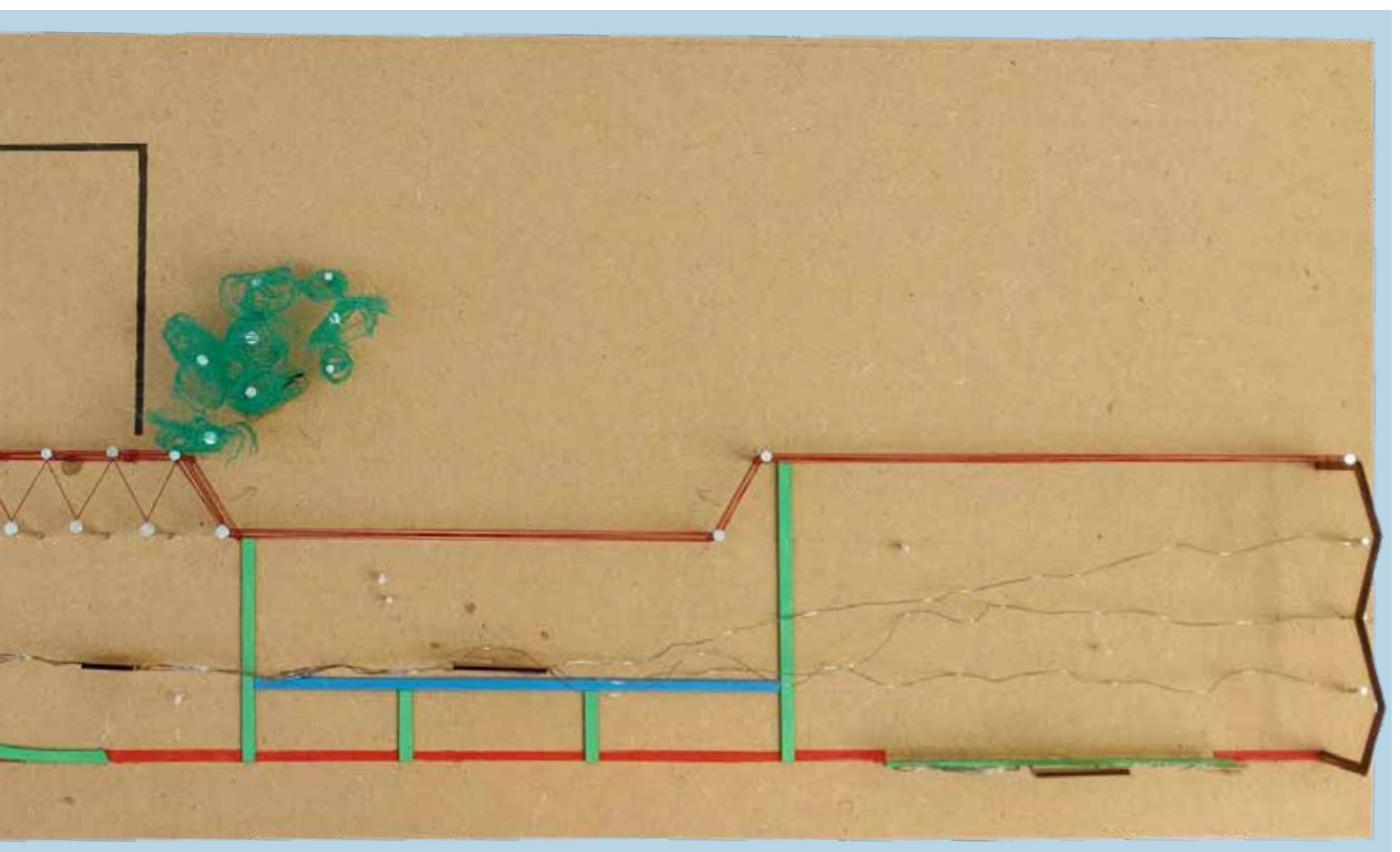
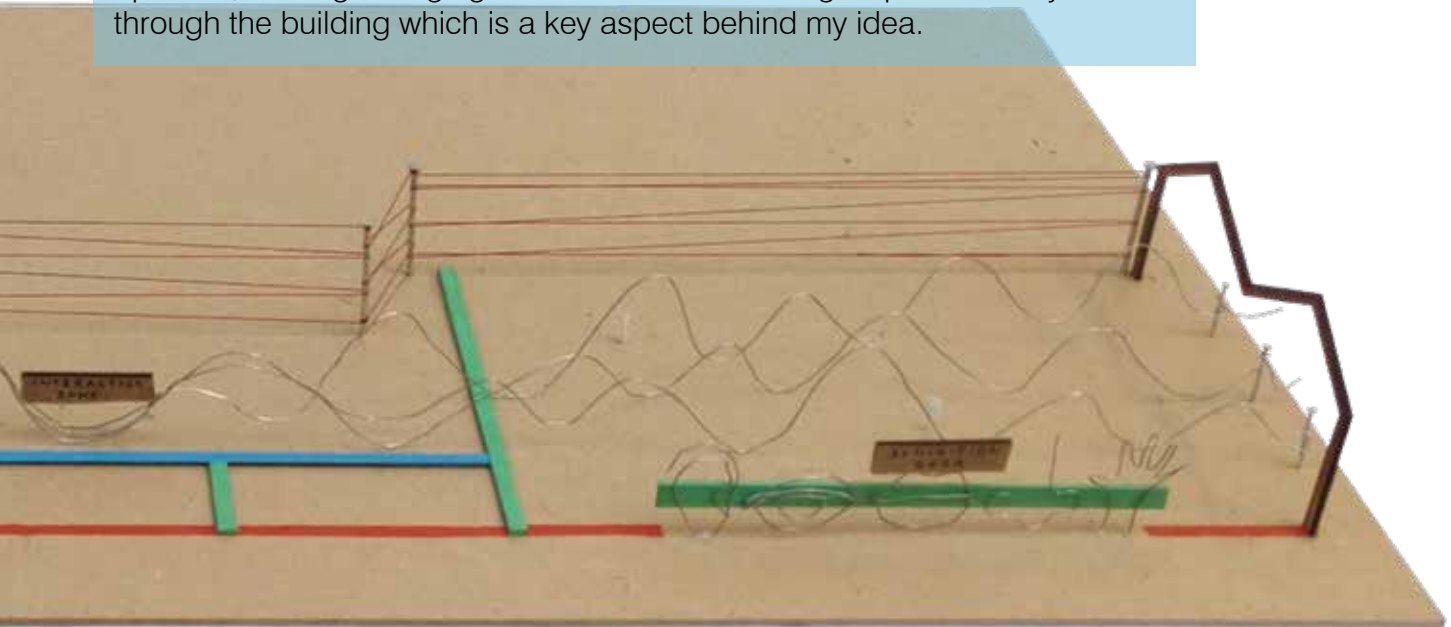
Conceptual Model



The sign with indications of the 5 senses highlights that the exhibition space will be engaging with more than just the sense of sight. The string and nails used in the model is to give the impression of the building without blocking it in with something solid while also incorporating the material of metal which links to the real-life industrial materials which would be used in the existing building.

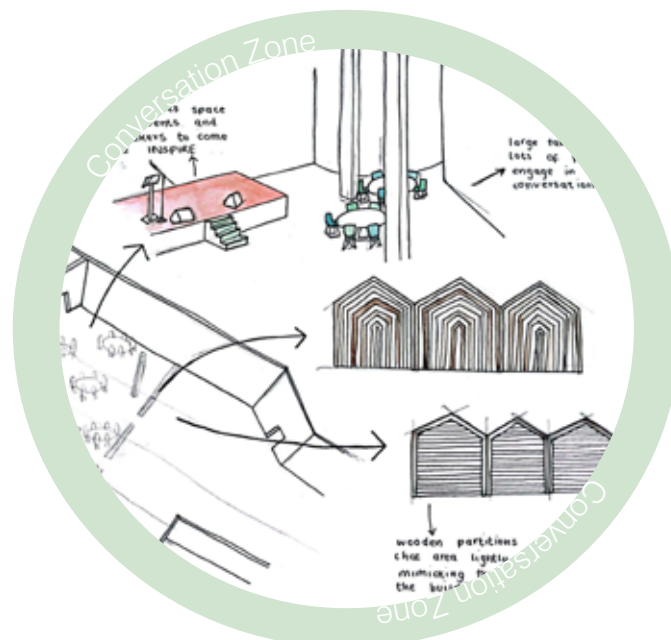
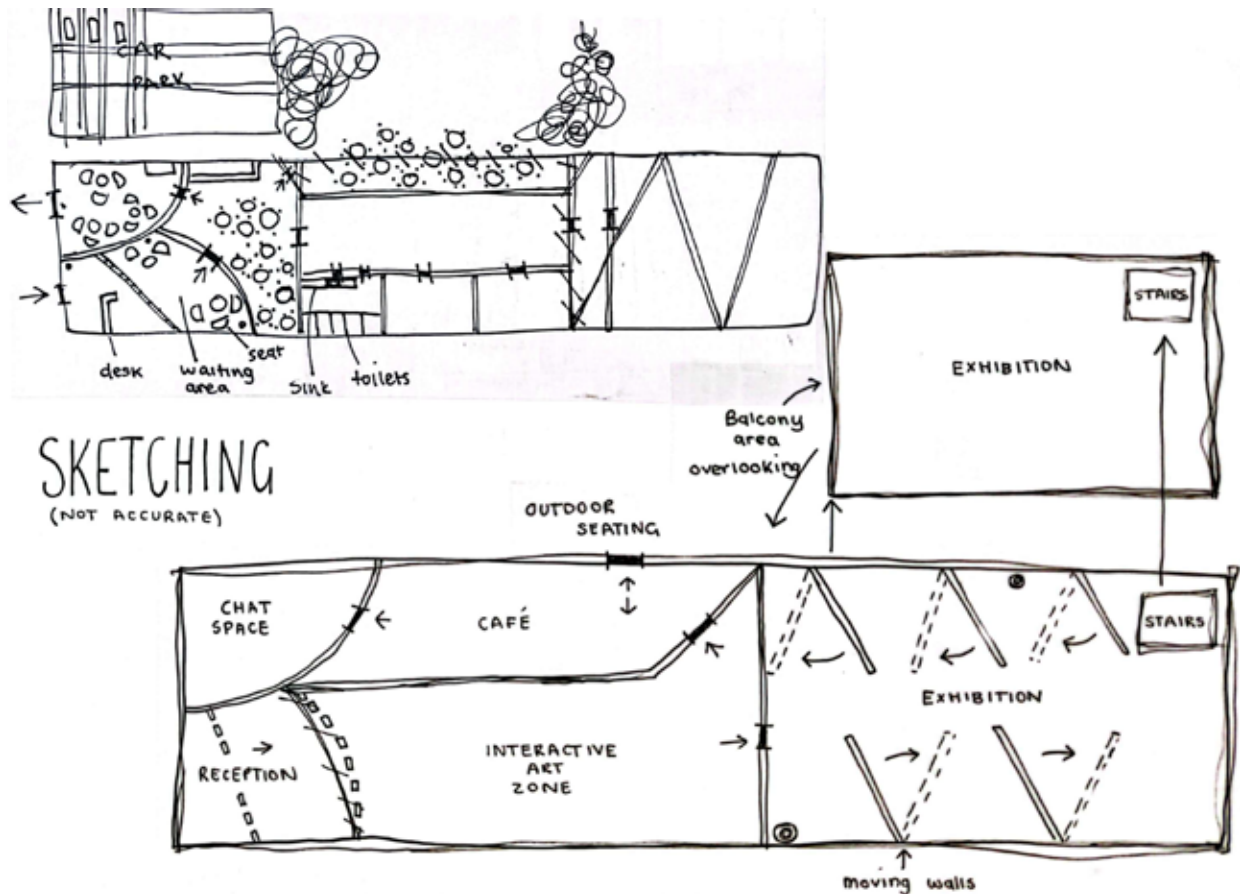


The next part of my development process was creating a larger scaled conceptual model, 1:150. The large brain wave through the whole model splitting off into multiple waves indicates the idea of people having differing opinions, making diverging decisions and becoming inspired as they move through the building which is a key aspect behind my idea.



Designing

Sketching was an important part of my process as it helps me to grasp the atmosphere of my space and helped me to visualise this before implementing it into my SketchUp design.



Building up my SketchUp, changing it rapidly while using old and new research to guide me.



Exhibition Space



Cafe

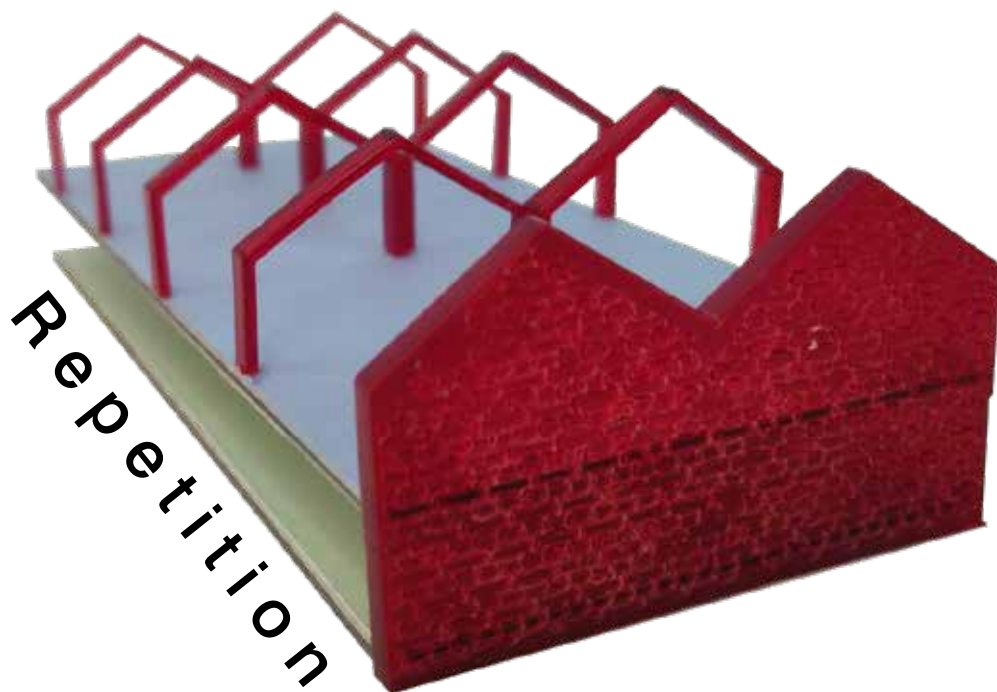
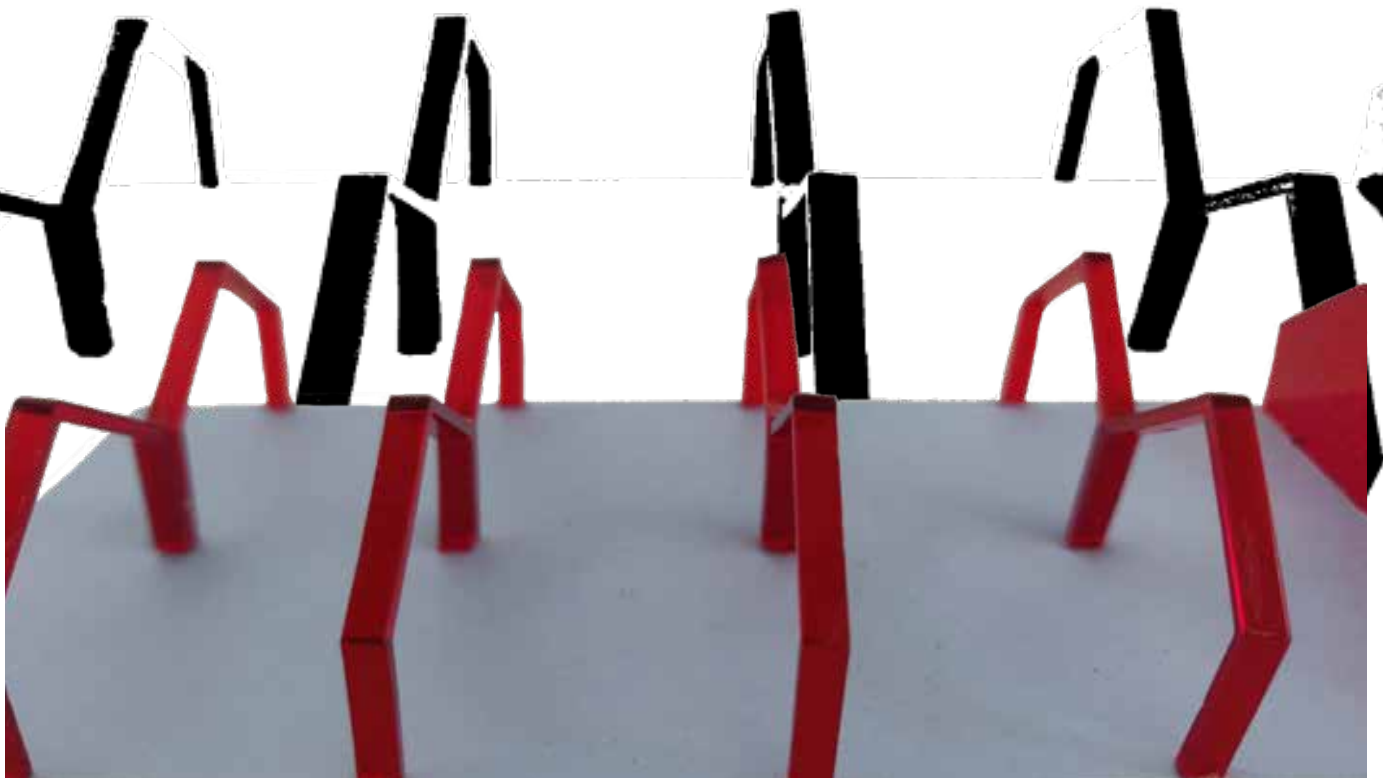
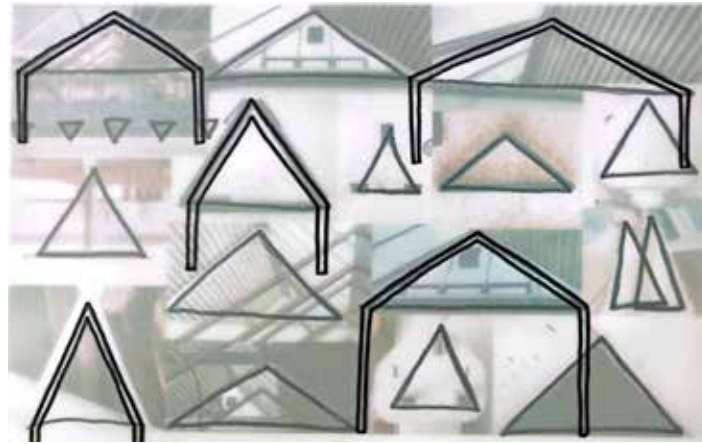
SketchUp was important in helping me to grasp the scale of my site and realise that each zone could have its own section while still being fluent with the whole design.



Sketch Models

Looking at patterns and repetition within my design. This allowed me to use the natural reinforces of the building as a feature and design around these trusses.





Material Exploration

My material development process started with using the original red brick exterior walls and dark metal trusses which give this building an industrial aesthetic. I then enhanced this by adding solid light concrete and wooden panelling. Using natural materials was also important for other reasons than just aesthetic purposes, as my research showed that the use of natural materials in a venue can connect the visitors to the place and point them to the unique location of the exhibition space.

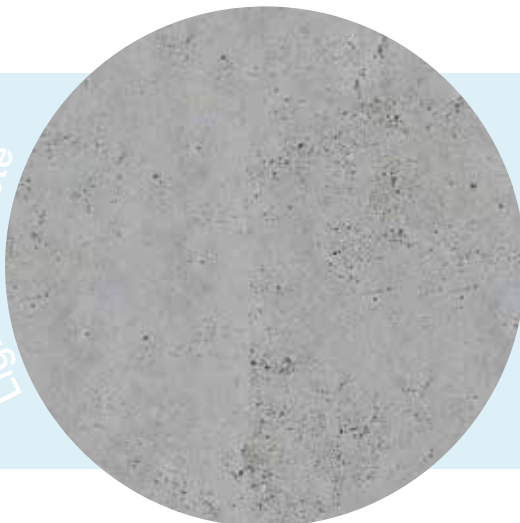
MATERIAL DETAILS

ORIGINAL MATERIALS:

- red brick
- metal
- stone

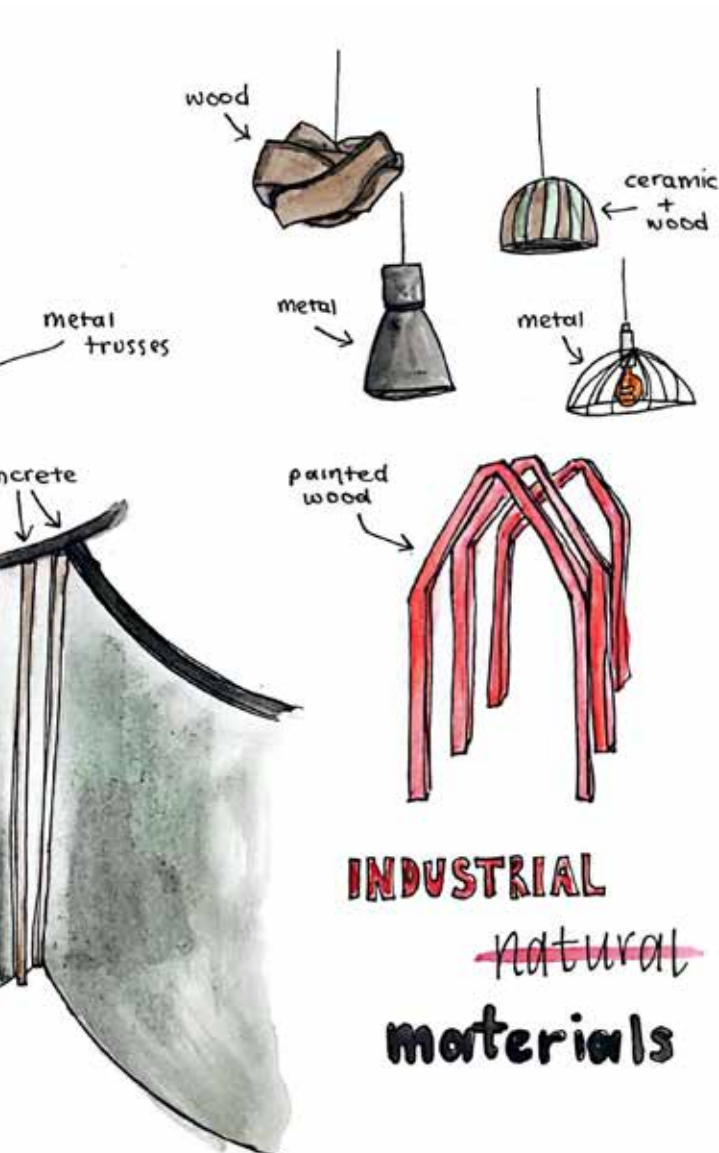


Light Concrete

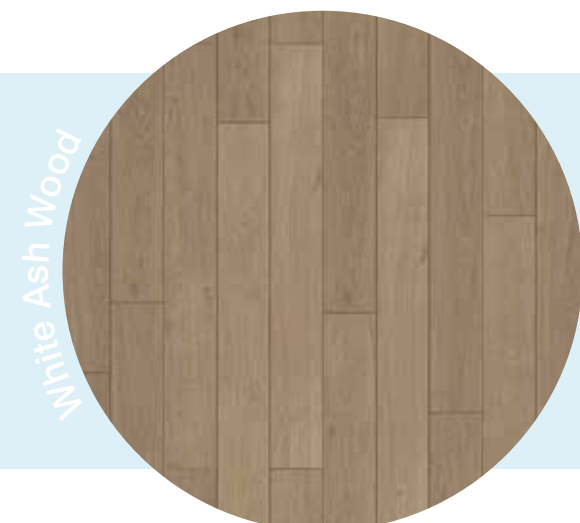


Hard Maple Wood

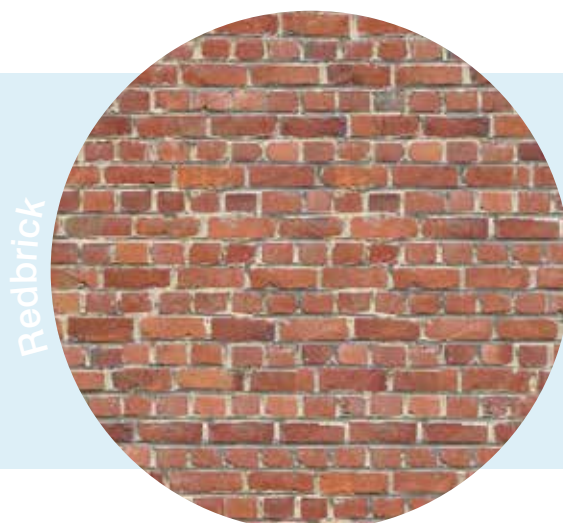




Further, I learned that natural materials enhance a person's mental and physical wellbeing, as the harmony and balance they bring to a design can make the space feel tranquil and relaxing. This benefits the exhibition experience for the visitor. Natural materials are highly durable and sustainable and therefore better for the environment than highly processed materials. Ecological benefits come from creating a design that endures through time and natural materials provide a long-lasting result.



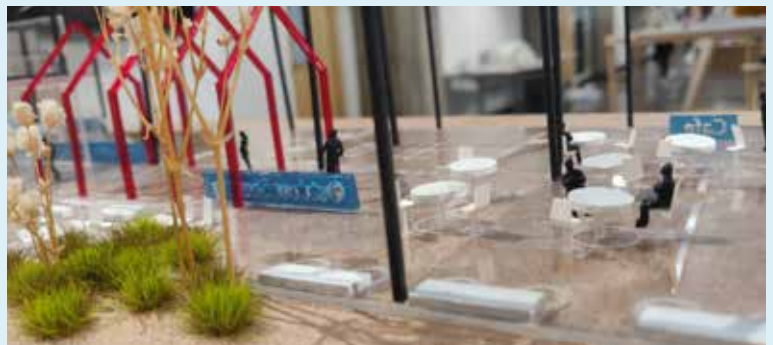
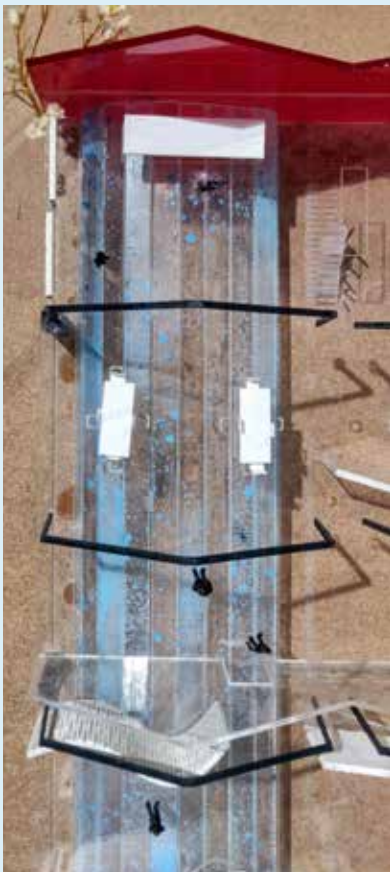
White Ash Wood



Redbrick



The development process of creating my final 1:100 scale model was enjoyable as I used different materials and machinery to help me achieve my desired outcome, this expanded my skills and engaged my imaginative side. During this process I wanted to emphasise the pattern and repetition in my design shown through the trusses and industrial colour palette which incorporated the original exterior.





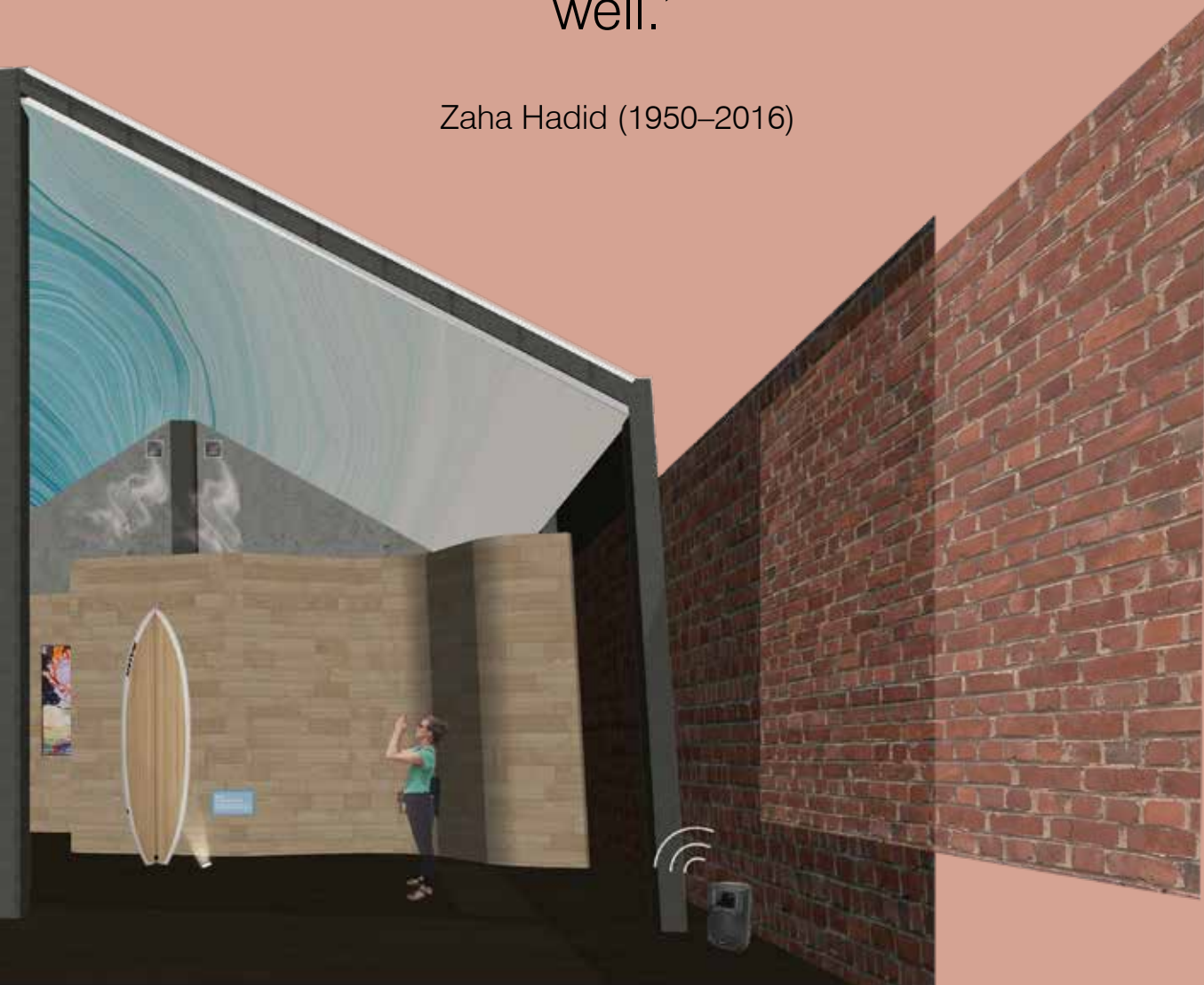
05 Design Proposal

05 Design Proposal

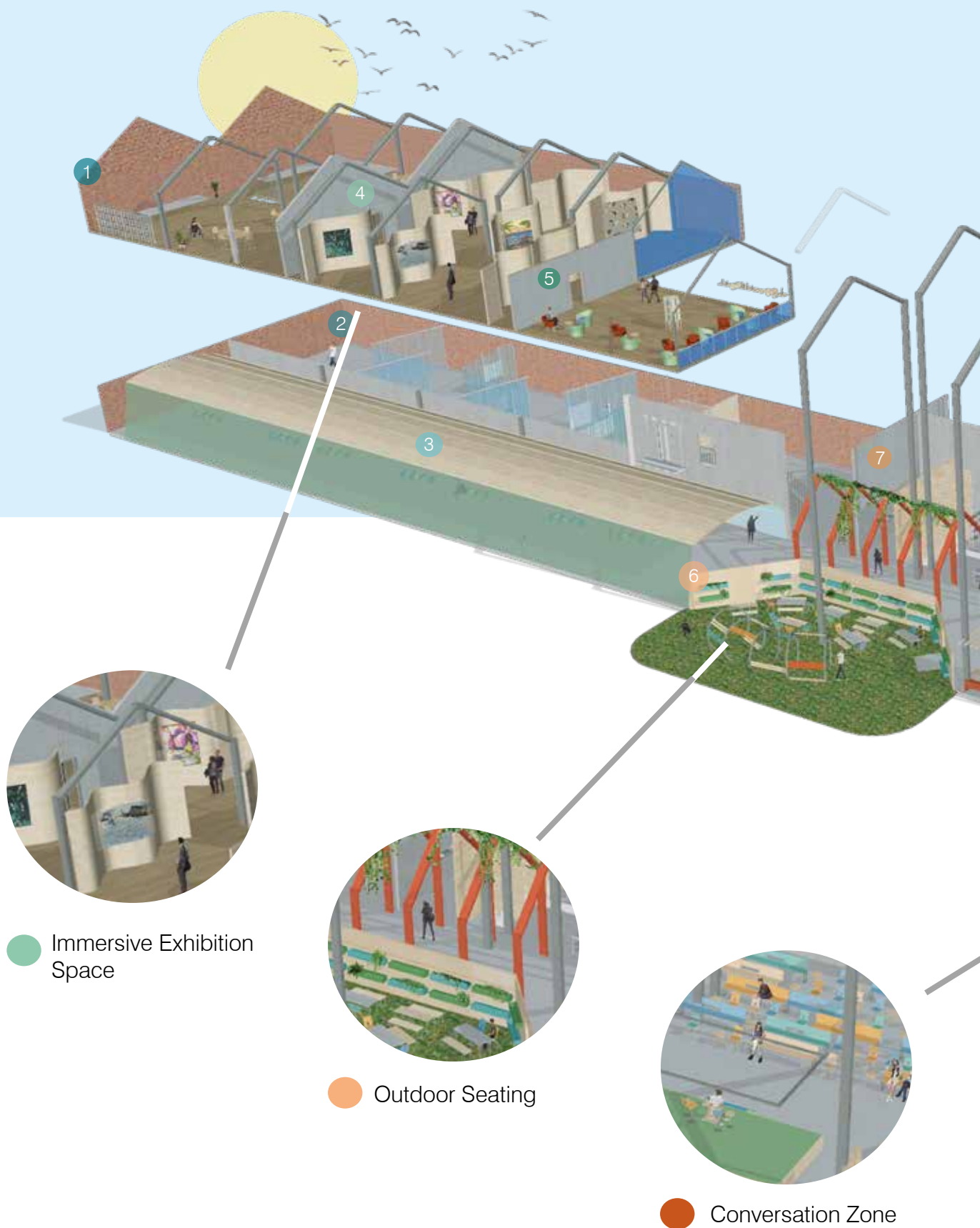


‘You don't always have to show art
in what's called a white box; you can
have a kind of
complexity within an exhibit
which actually respects the art as
well.’

Zaha Hadid (1950–2016)



Overview



- | | |
|-------------------------------|----------------------|
| 1 Workshop | 7 Bathrooms |
| 2 Immersive Exhibition Tunnel | 8 Kitchen |
| 3 Interactive Tunnel | 9 Cafe |
| 4 Immersive Exhibition Space | 10 Conversation Zone |
| 5 Balcony Reading Area | 11 Shop |
| 6 Outdoor Seating | 12 Reception |

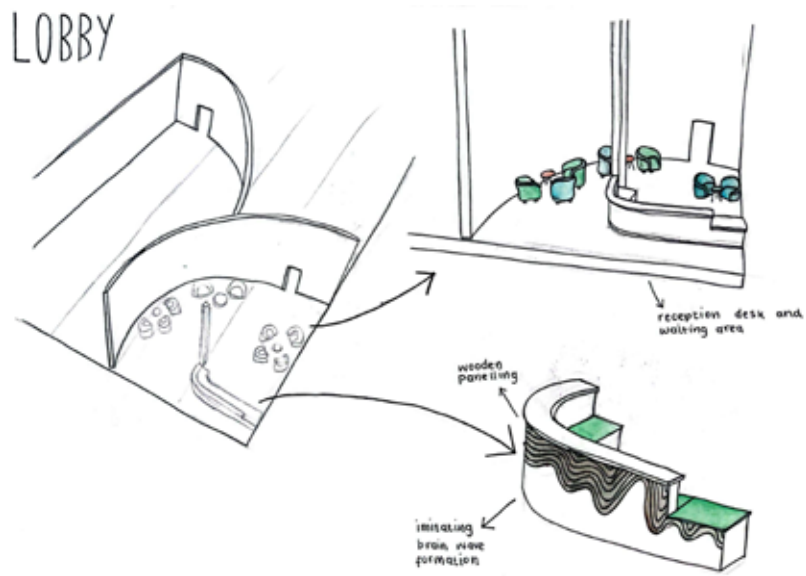




Reception

This is the first area experienced by visitors as they enter, therefore it is critical that it is welcoming and gradually starts to bring in the theme of senses. It immediately engages your sense of sight through the wooden panelling imitating a brain wave and also introduces the concept of the senses with the theme printed on the wall emphasising senses and creativity.







Balcony



The balcony overlooks the feature tunnel and cafe and provides a view through the window to the outside. The area holds books and magazines which are connected to different exhibitions that have taken place at the venue, and allows for some relaxation time as well as inspiration for the visitor.



The comfortable chairs facilitate space for rest. From my engagement task, Joanne (an interviewee) said that this can be important to allow visitors to think about what they've seen and what they are about to experience.

EVENING

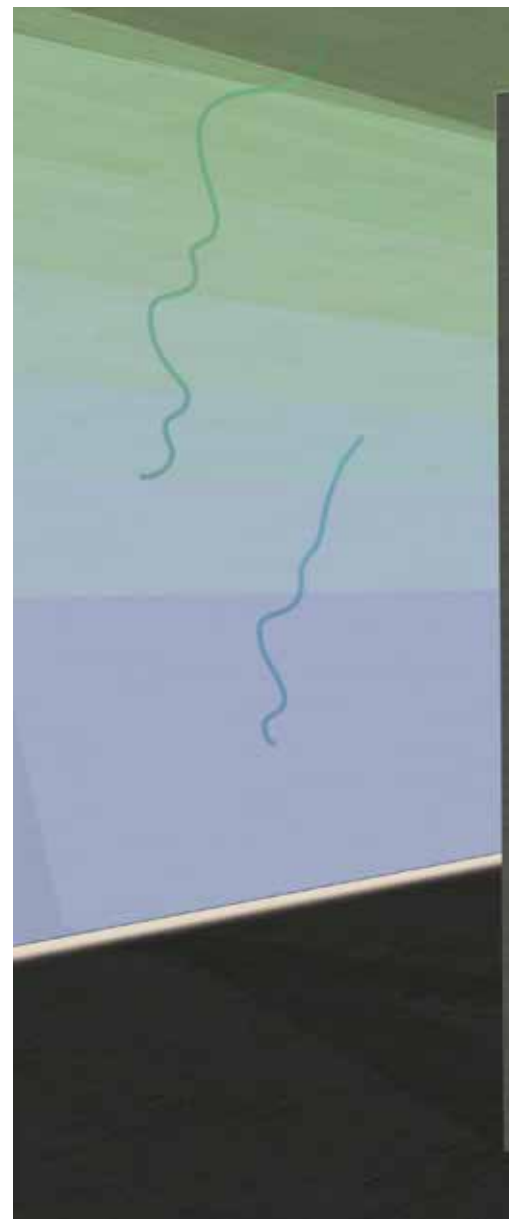
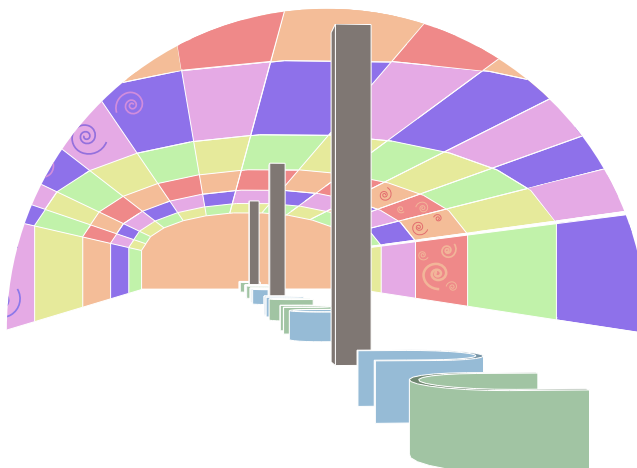
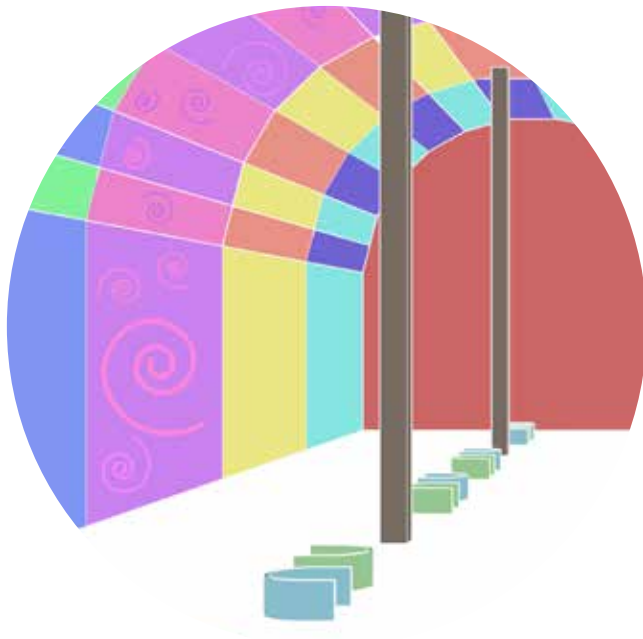


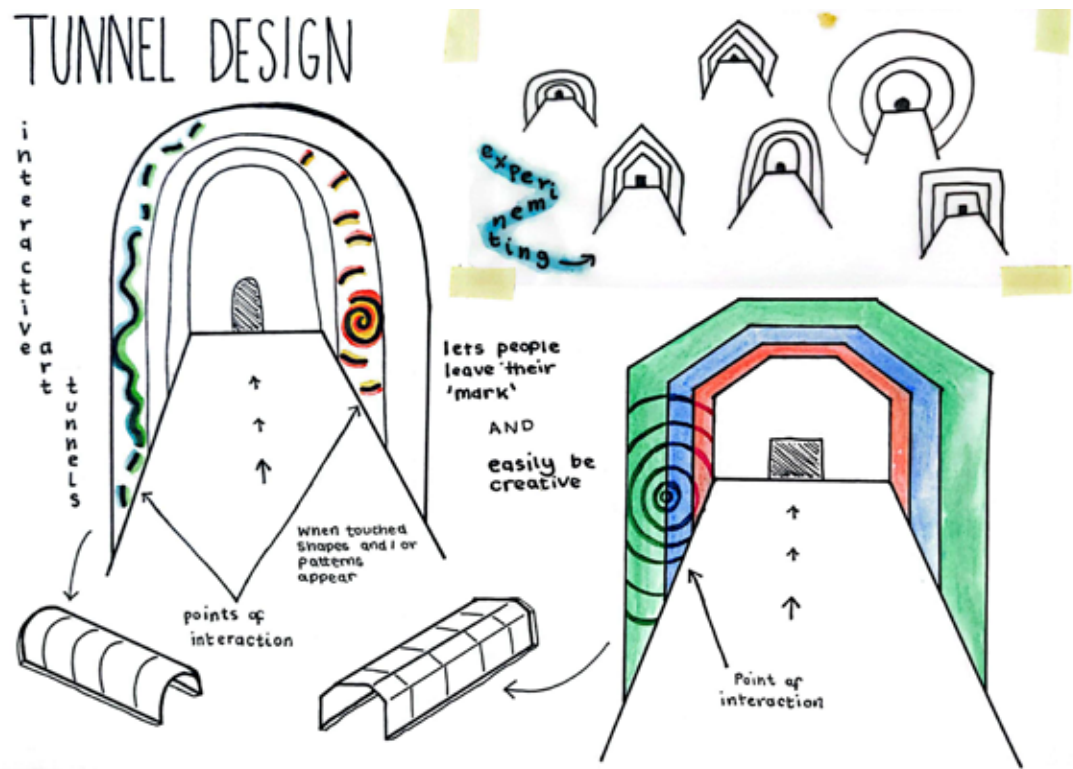
Allows for a more calm relaxing area of respite.



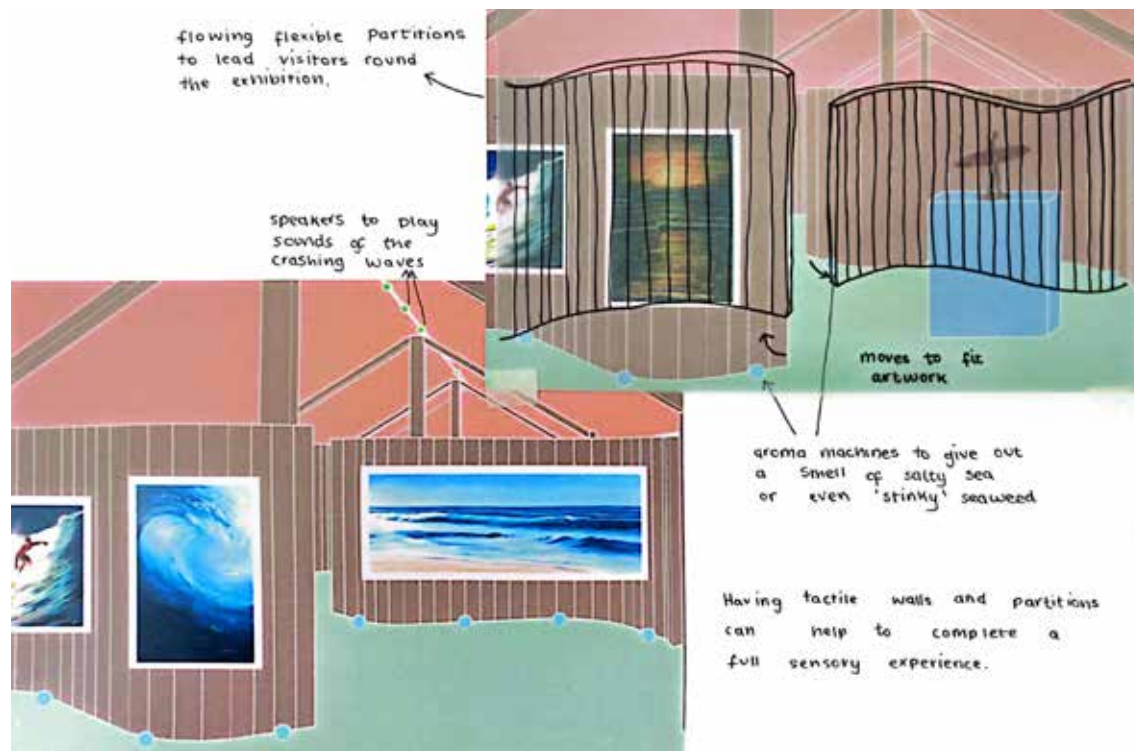
Interactive Art Tunnel

When first coming up with my design concept I knew I wanted an interactive art space which would assist visitors in getting in touch with their creative sides whether they consider themselves artistic or not. This visual illustrates people using their sense of touch and sight to tap the screens and add a shape (brain wave inspired) to a large tunnel; consequently 'leaving their mark'. This tunnel could also be utilised for playing films of art work to create an adjustable exhibition.

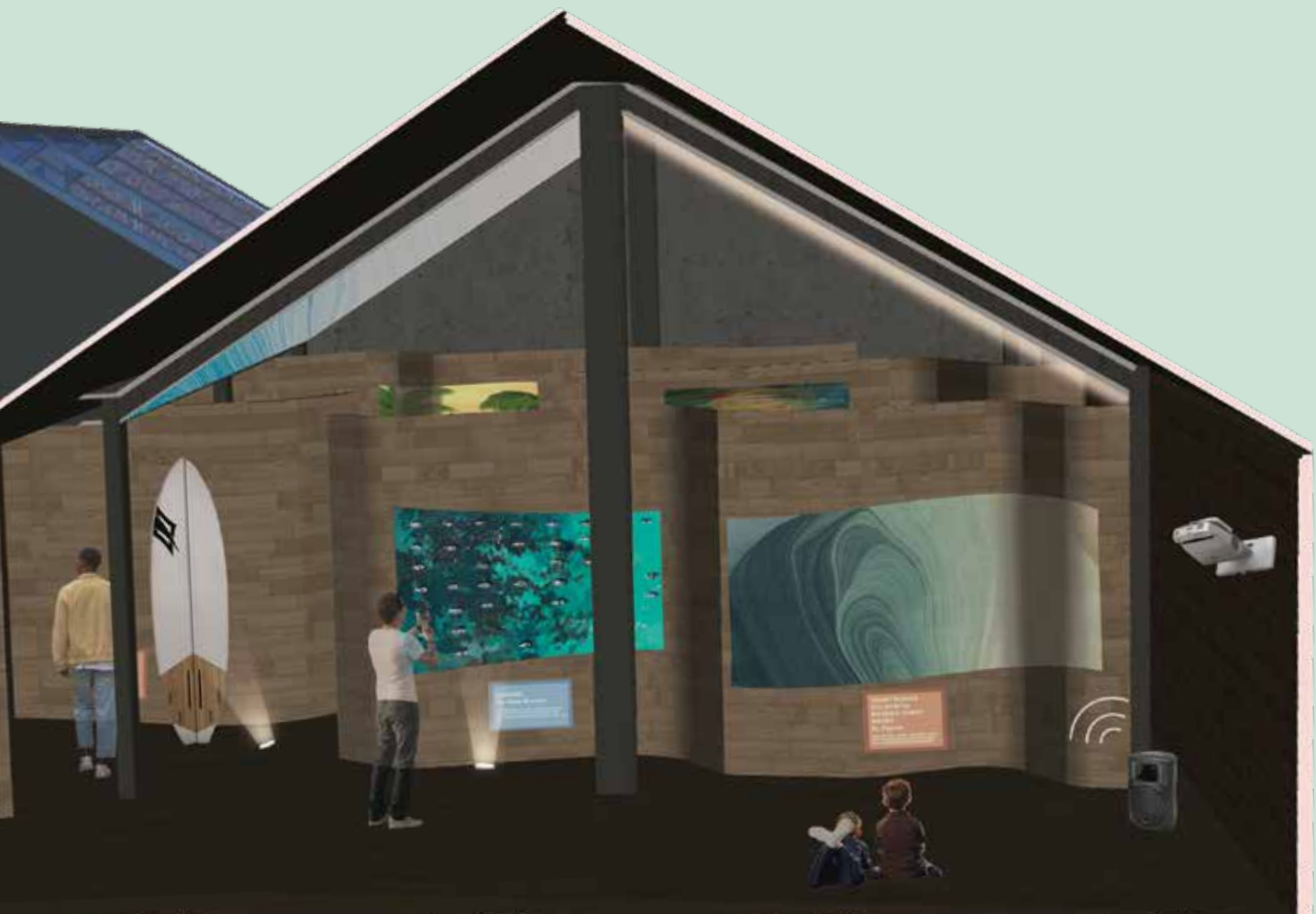




Immersive Exhibition Space



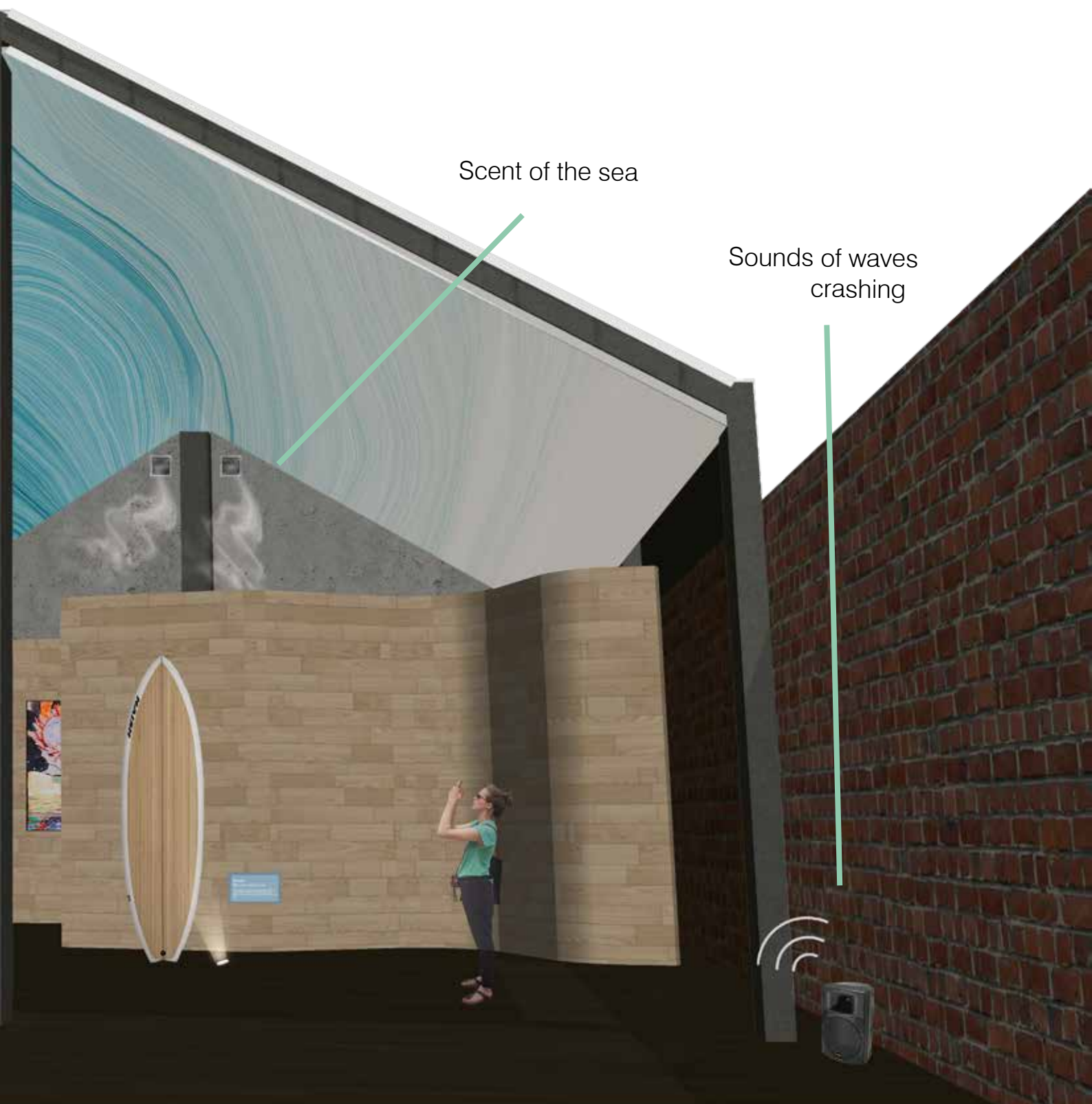
During my development process I decided to choose an exhibition to display, which was a surf-related exhibition. This helped me to visualise the space, especially when it came to the immersive sensory experience that I wanted to portray. Therefore, when designing the main exhibition area on the second floor, I envisioned the smell of the salty sea and the booming sound of crashing waves while being enveloped by flowing, moving artwork that stimulates multiple senses at once.



Immersive Exhibition Space

Screens with artwork
surrounding exhibition







Workshop

After receiving a response from my engagement task from Irene McCafferty, the team leader for East Dunbartonshire Council's museums I decided to implement a workshop space to encourage visitors to get involved in a creative process relating to the current exhibition. This will help to enrich their experience as they are now a part of it.





Key:



Sense of Touch

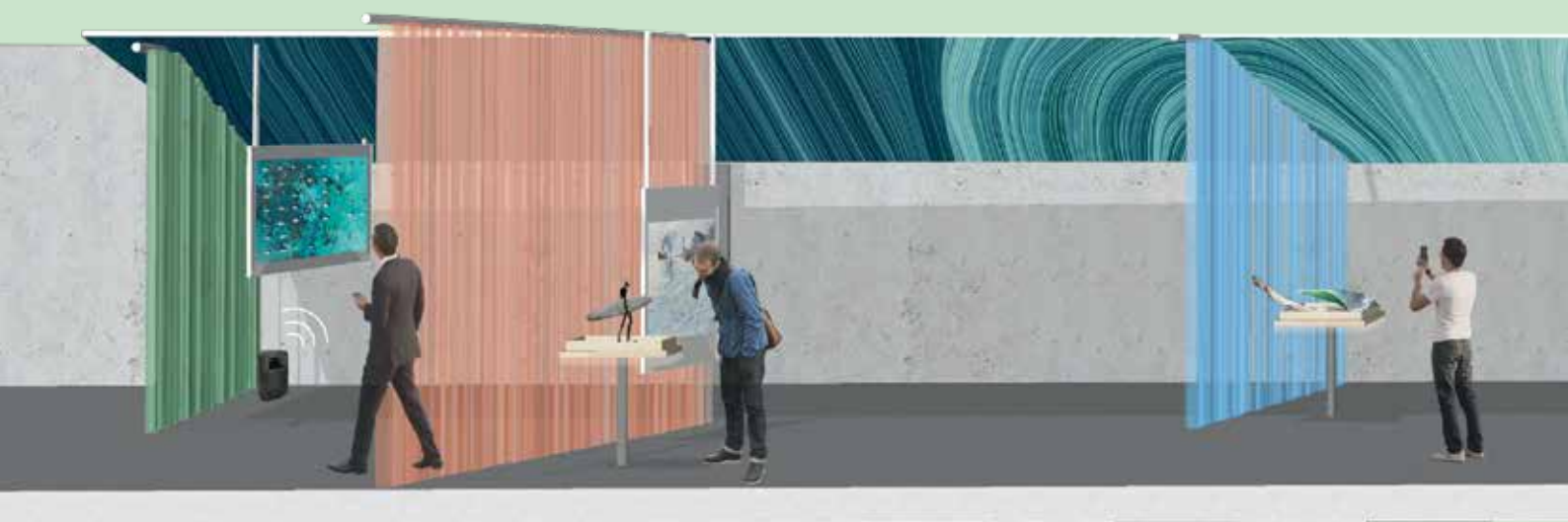


Sense of Smell

For my example exhibition, visitors would have the opportunity to learn the details behind making a surfboard and get involved with designs on surfboards, working in groups to unleash their creativity. Therefore, through this process, visitors' senses of touch, smell, and sight will all be activated as indicated in the visual top right. The surrounding plants let off strong floral odours and the sense of touch is activated in the 'get hands on' approach to help inspire and captivate each visitor.



Immersive Exhibition Tunnel



Jour

The drapes allow for a very mobile design to mould to the art exhibited and accentuate the differences between the various artworks shown.

This also creates a flowing movement through the long, narrow space which leads people from start to finish. This space has the opportunity to either carry work from the same exhibitor as the first exhibition space or can allow for a separate exhibition to unfold.



ney



Cafe with outdoor seating

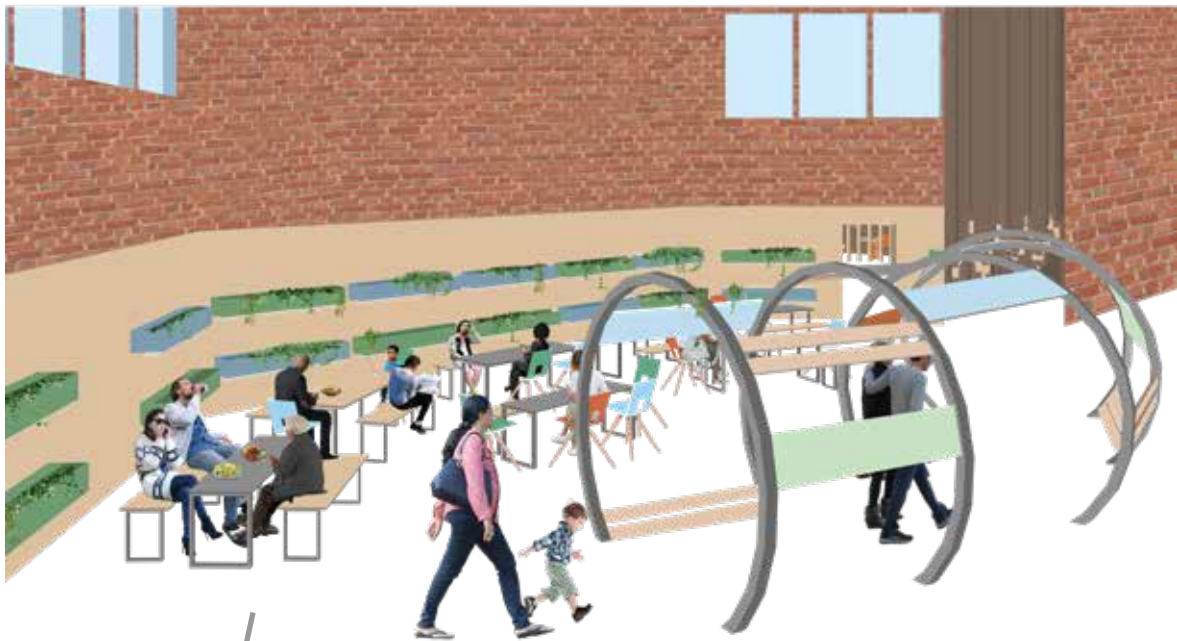


The cafe is a space to wind down and take in the effect of the exhibitions/ experience.

The cafe includes an outdoor seating area to encourage people to get in touch with nature: feeling the wind, seeing the trees, and smelling the plants and other scents of the natural world. The site is not close to many dining places and so having a cafe on site will allow for day trips to the venue and enhance practicality for the visitor.



Outdoor Seating



Conversation Zone

The conversation zone is a place for inspiration and ambition. It is to provide an area to chat and start a conversation about art, design and the exhibition on at that time. It has a stage area providing the opportunity for guest speakers to enlighten the audience on their experiences and knowledge in a more intimate setting. People can flow through and around the space, choosing how long they wish to stay for and having the chance to ask questions.





EVENING

Allows low lighting to create atmosphere



DAYTIME

Creating a space for open conversation allows visitors to become stimulated and encourage people to chat.

Shop



I M P R E S S I O



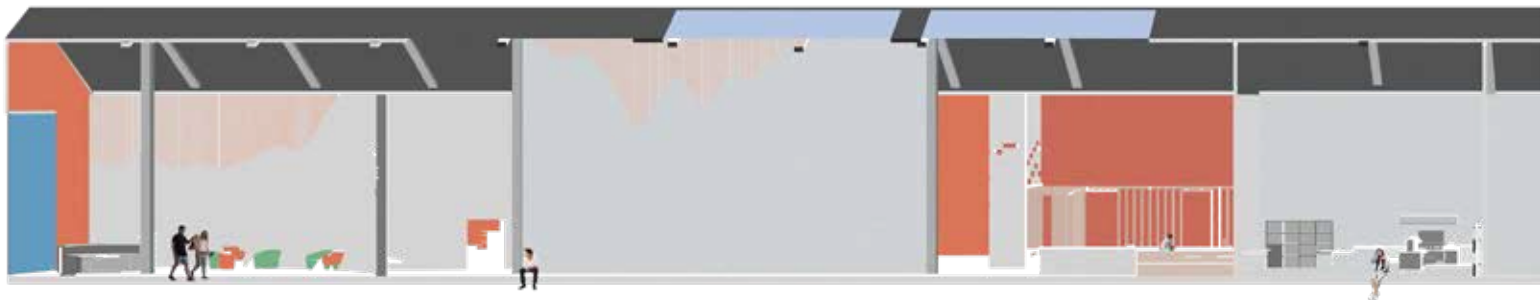
At the end of the visit visitors will pass through the shop which sells prints and merchandise associated with the current exhibition as well as previous exhibitions. This allows for people to take away physical memories. As this is the final space that visitors enter before leaving the venue, audio speakers will be playing sounds related to the current exhibition to provide a last reminder of the experience and stimulate the senses one last time.

Front Section





Right Elevation



“An exhibition is in many ways a series of conversations. Between the artist and viewer, curator and viewer, and between the works of art themselves. It clicks when an exhibition feels like it has answered some questions, and raised even more.”

Thelma Golden (1965–)

“When you see something special, something inspired, you realise the debt we owe great curators and their unforgettable shows - literally unforgettable because you remember every picture, every wall and every juxtaposition.”

Charles Saatchi (1943–)



06 Acknowledgments

I would like to thank everyone who has helped me during the past 4 years, including my family and friends who have supported me. Thank you to my lecturers who have inspired me and helped to shape me as a designer, and to the IED staff who taught me the processes of the workshops and how to operate the laser cutters. I also want to thank the museum curators and exhibition designers for their time in responding to my engagement task.