ARC1001 Academic Portfolio

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2020-2021

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ARC1001-

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ARC1001
ARC1017
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Reflection & Projection page 1of

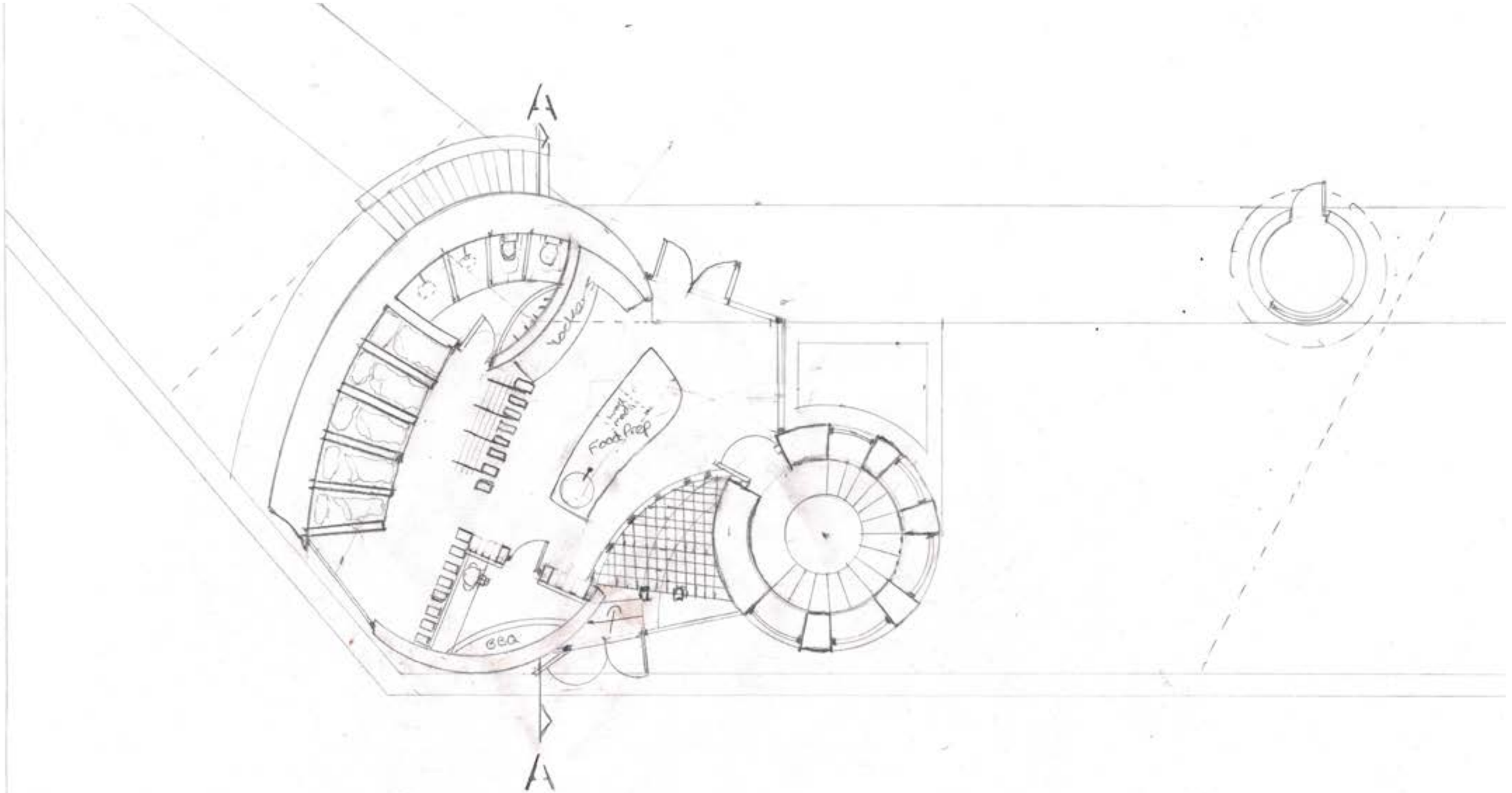
I have thoroughly enjoyed this year and it has cemented my belief that Architecture is the Profession that I want to pursue.

In project 1.1 I explored Soma figures, which I think will be useful in the future when developing smaller buildings, as a result of basic massing. My favourite language for this project was volumetric I think this is partly due to the small size of the models, meaning more abstract models were most prominent. I have used clay throughout year one and I think this is where it all started because I discovered I could mould and carve the figure to be a small building or a huge complex within the same sized model. Open fame has developed and become more prominent towards the end of the year in conjunction with other language styles and I think could become part of my architectural style.

I found it interesting, the variety of skills an architecture student has to learn during there first year and the variation in the modules. One of my favourite skills is orthographical drawing and enjoyed this during ARC1001 &ARC1017. I have learnt how to use stencils and French Curves that have a huge benefit to my design and presentation. A less expected skill was photography, which I have developed, and think is important to set out properly to showcase my work.

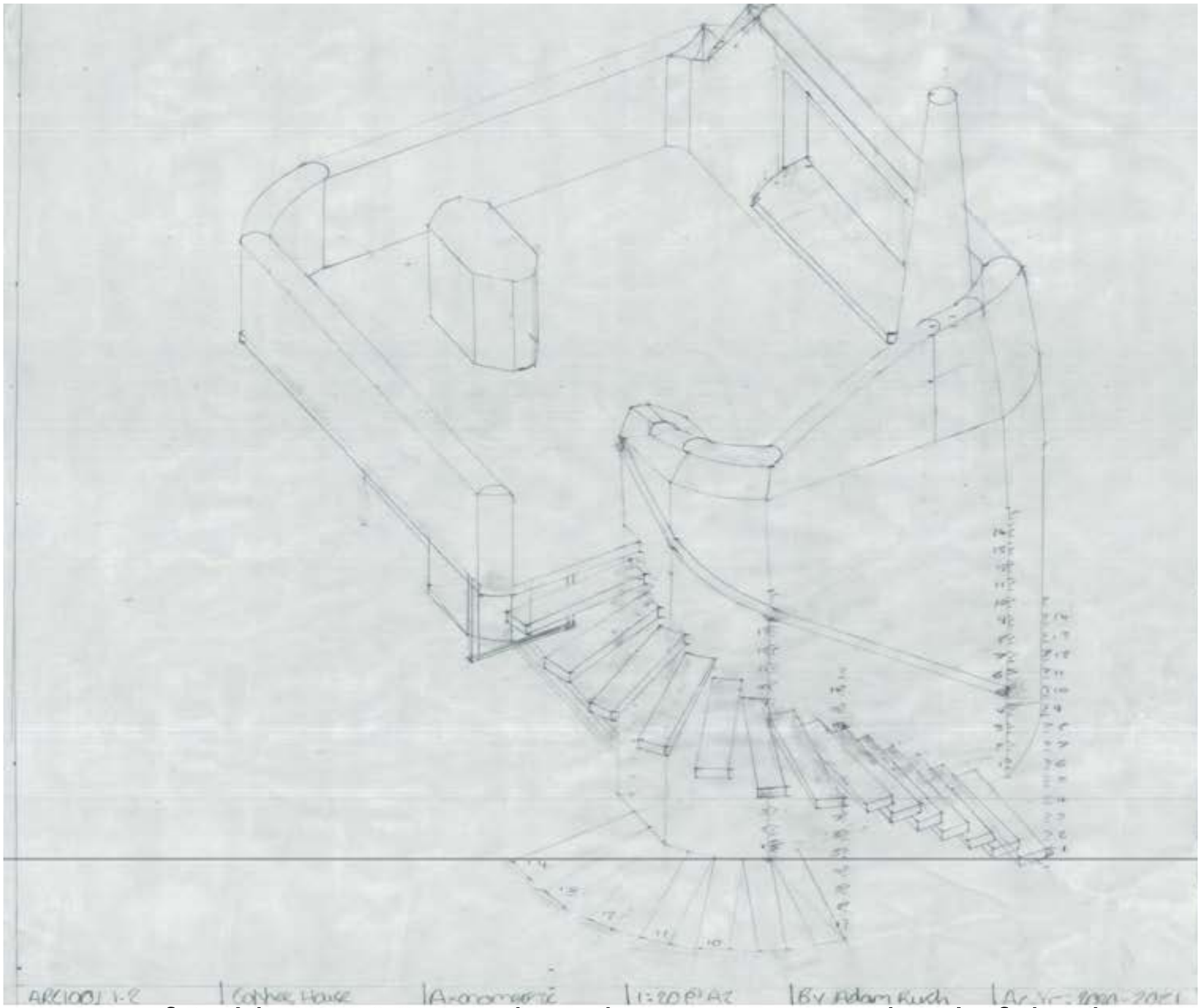
Looking forward to the summer and Year 2 I am excited to take part in a competition to design a tree house hotel. Furthermore, I have promised myself and started setting out how to learn Revit, Rhino, Illustrator and Photoshop to aid my presentation skills for next year. I will be using previous projects and building models and illustrating them retrospectively to learn- I avoided becoming too digital this year; since I have discovered I am a slow learner when I learnt AutoCAD at College taking two projects before my presentation was up to my satisfaction. I also want to keep in mind that I want to create a balance of analogue and digital that best suites my working style.

Showcase Page 1



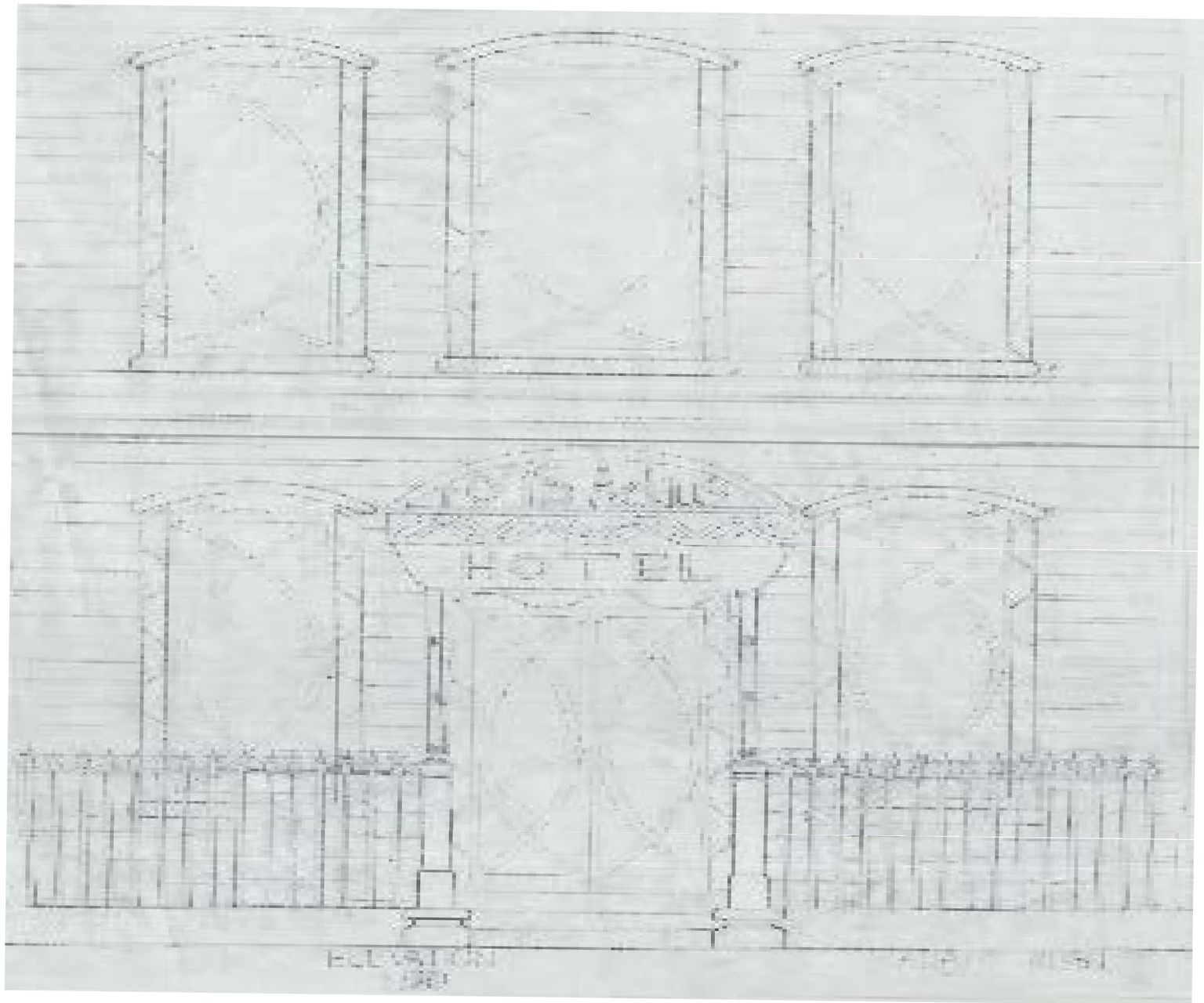
ARC1001 1.3 | Cycle Centre | 1st Floor Plan | 1:100 | Adam Rush | 2020-21

Showcase Page 2



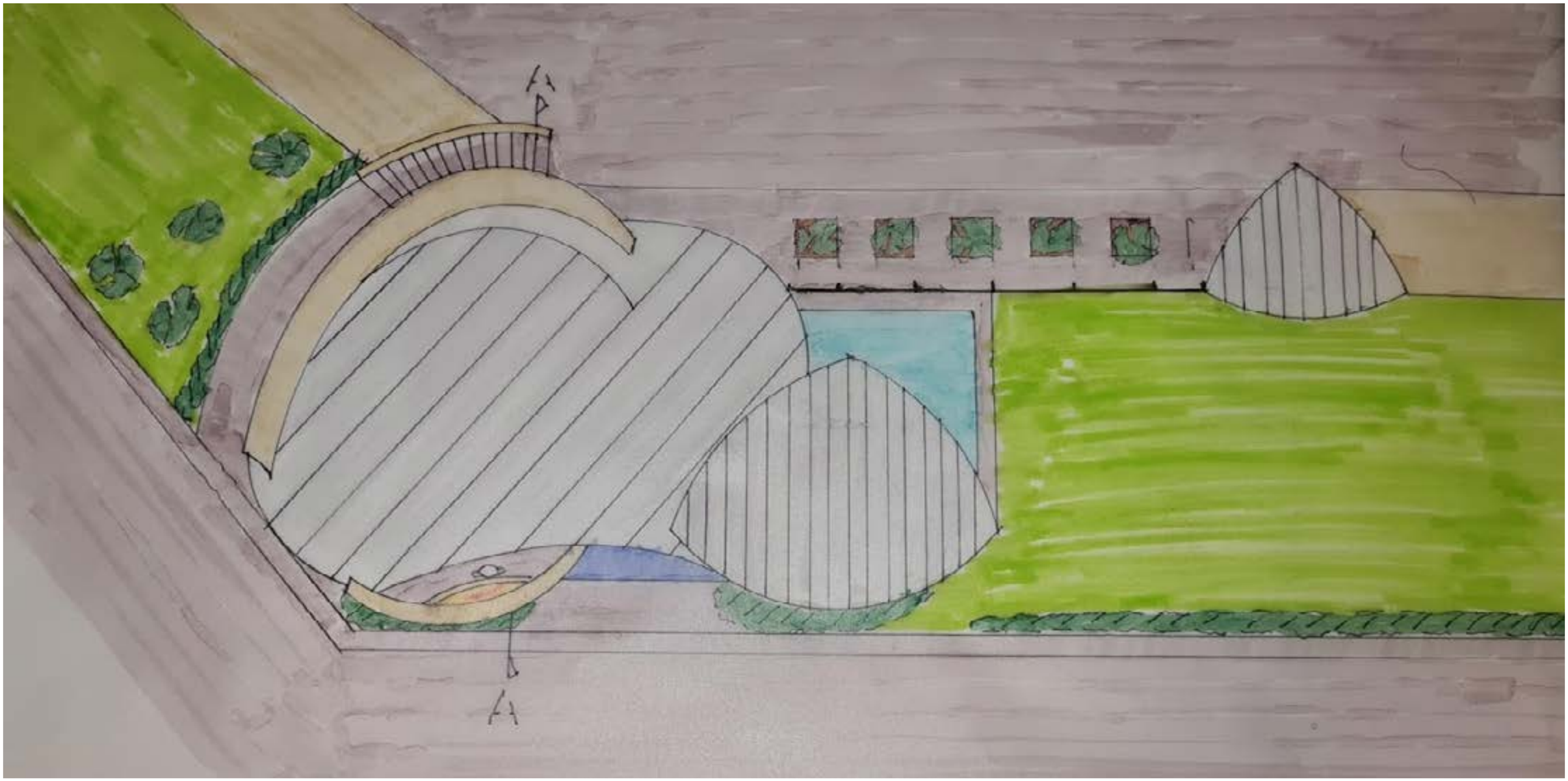
Isometric of Building1:20@A2- I drew this to give more detail of the drawing.

Showcase Page 3



ARC1017 expanded threshold 1:20@A2- this threshold is meant to fit in with an existing threshold elevations from around the time of art nouveau period. This was my favourite part of the smaller assignment. I started using curved stencils, which suit symmetrical design that I wanted.

1.3 Prospects & Refuge



Summary of Design Ideas for 1.3

For this project I was given the task of designing a Cycle Centre in North Shields. Other key aspects of the building that it had to have storage for bikes, a climbing wall, a look out station and overnight accommodations among other elements.

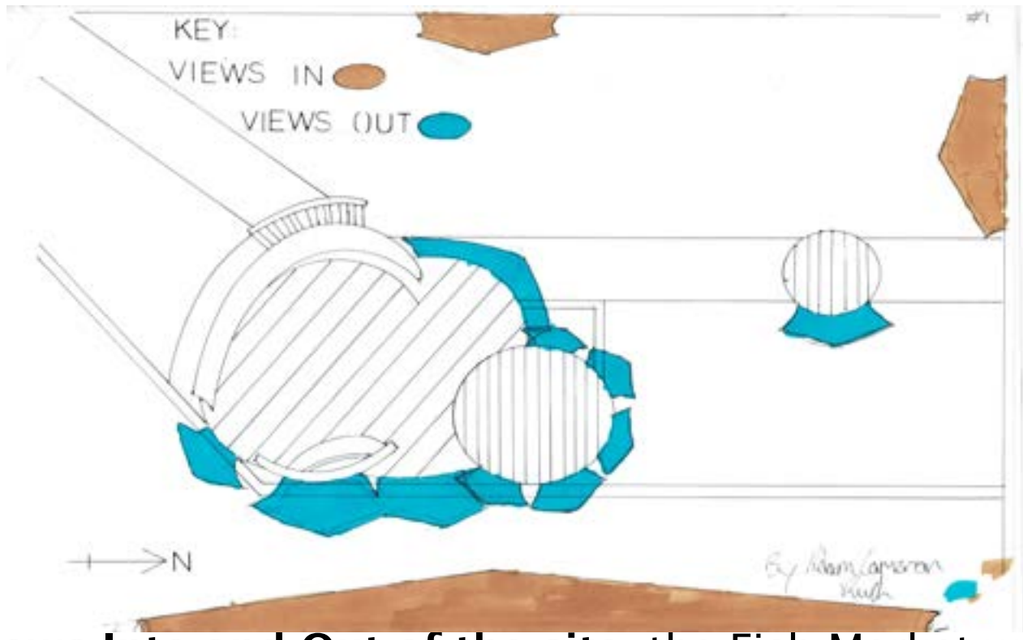
My final idea for the building was to have a planar and open frame language. The planar would be to block bad views of the fish market and act as a heat store helping the buildings energy efficiency; inside would be relatively open plan to allow natural light and to make the space more multifunctional. For instance, the climbing frame is cargo netting that would be partially suspended above the reception and act as seating for when people are being taught.

1.3 Task 2 Process Page 1 of 8

Cycle (green) and Pedestrian Routes (red) around the site.

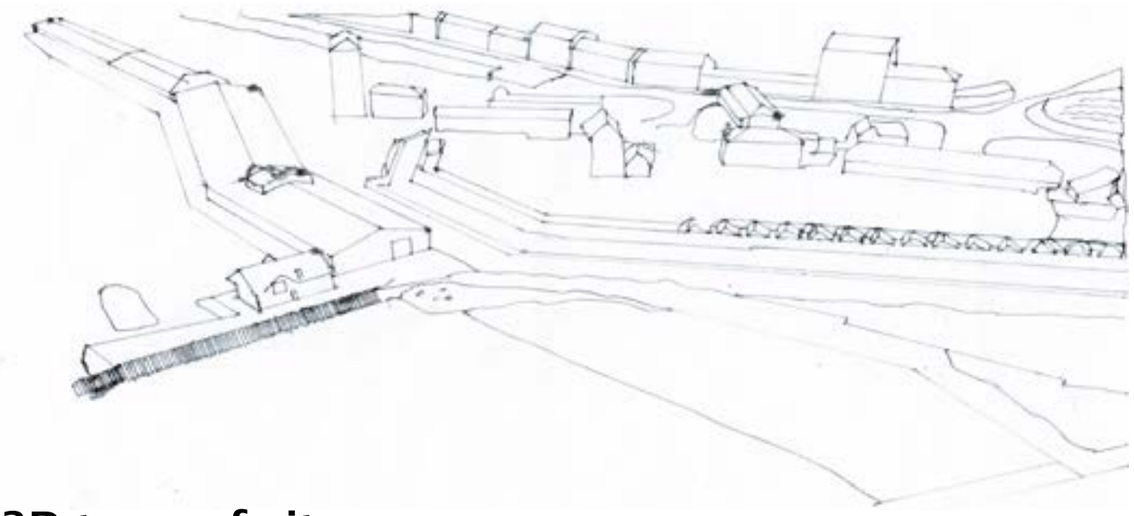
Vehicular access around the site

Sun Path and Prevailing Winds



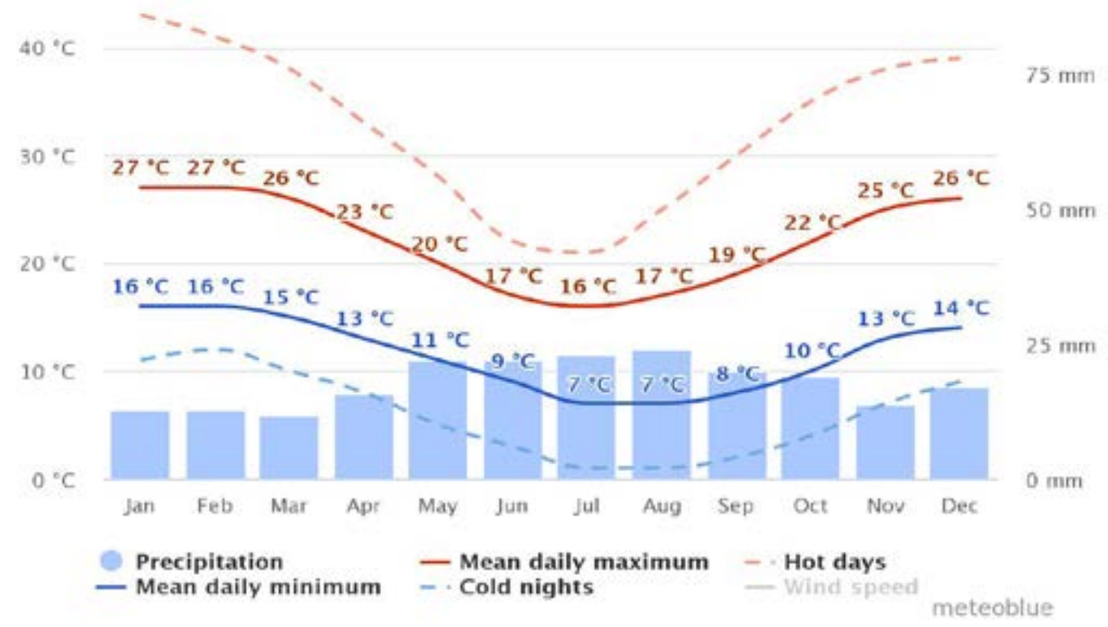
Views Into and Out of the site- the Fish Market was a view that I wanted to block; therefore I placed the buildings spine wall there and flipped the layout from the original massing design so the viewing gallery (window seats) where facing the sea.

1.3 Task 2 Process Page 2 of 8

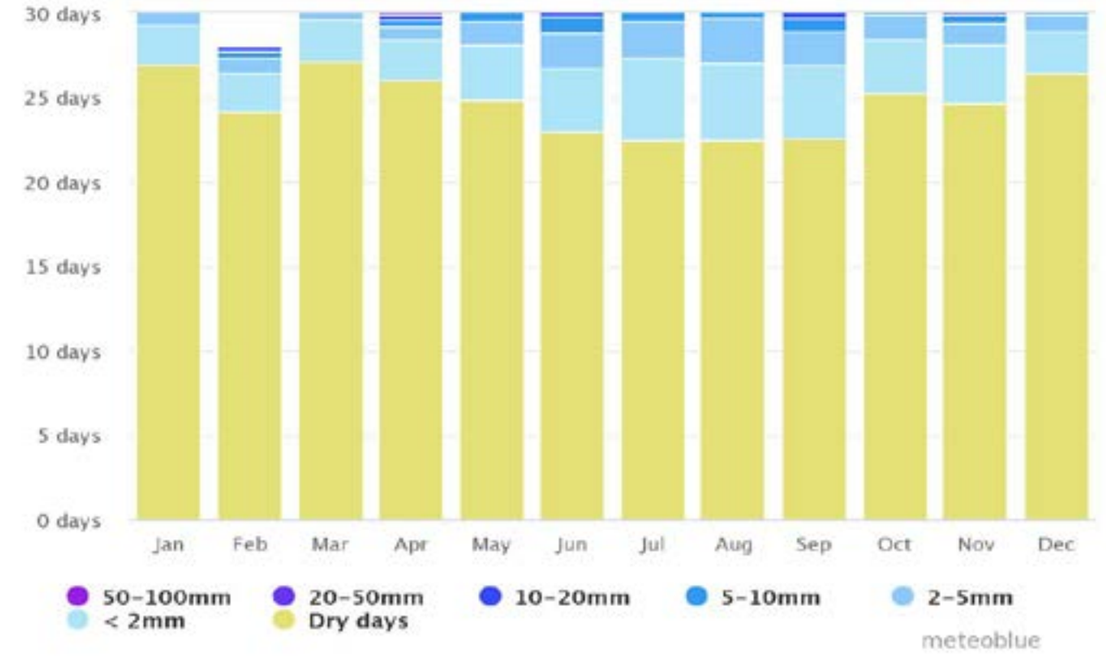


3D trace of site

Render of site in wider context

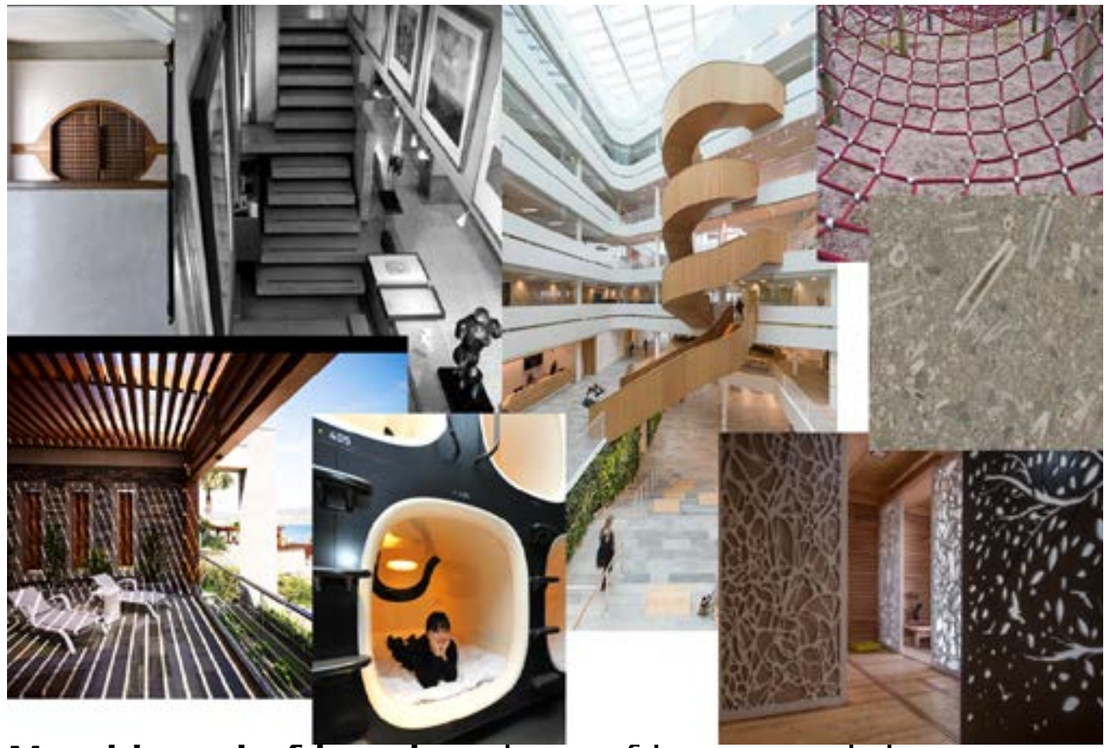


Weather Graph



Rainfall Graph

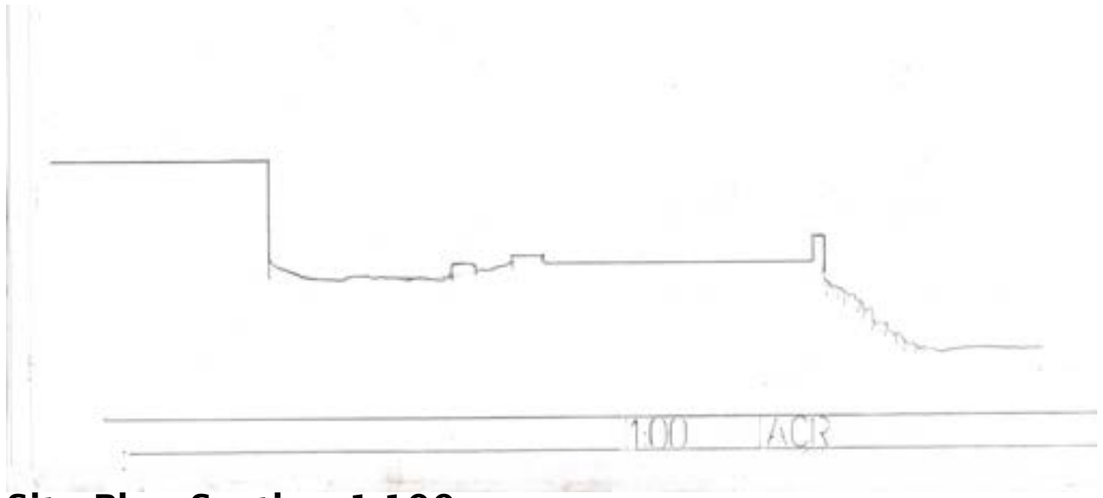
1.3 Process Page 3 of 8



Mood board of interior- the roof beams and the cargo netting I took the most inspiration from, when designing the interior to create an open plan space to contrast to the heavy planar walls.

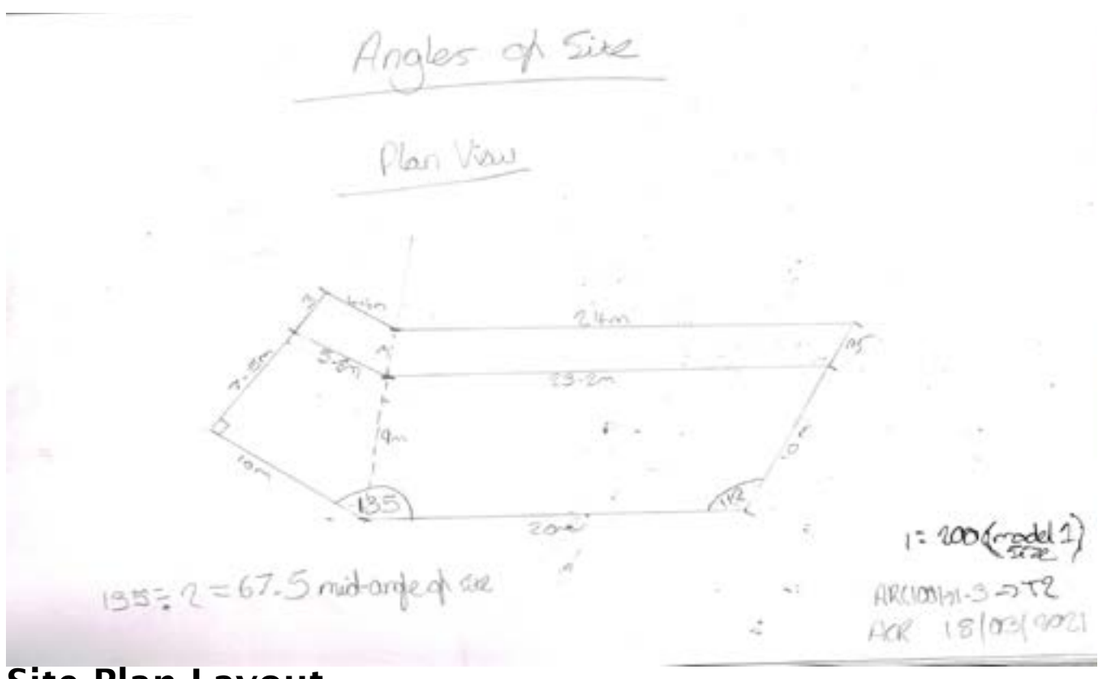
Mood board of user- Cycling is the key aspect then Kayaking and Climbing have to be considered too. The dimensions are useful for designing the layout of the storage and it doors out onto the sea front.

1.3 Process Page 4 of 8



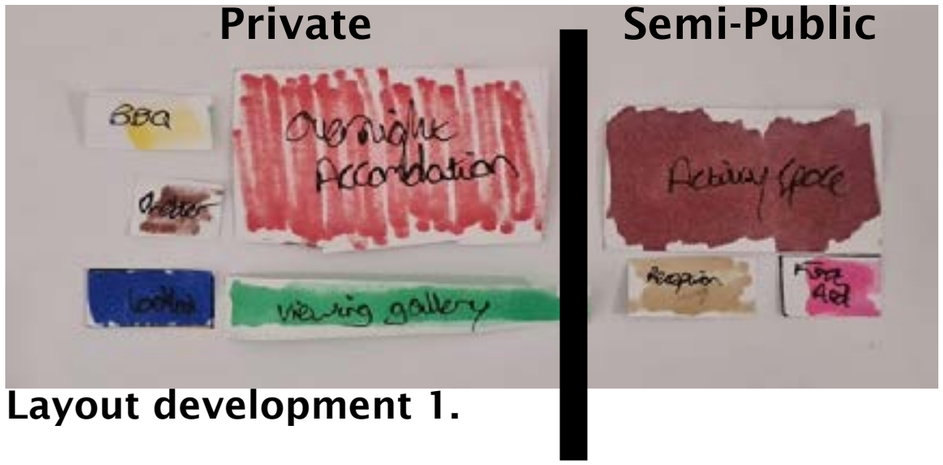
Site Plan Section 1:100

Site Model 1 1:200- I deliberately created a minimal representation of surrounding buildings to focus on my project.



Site Plan Layout

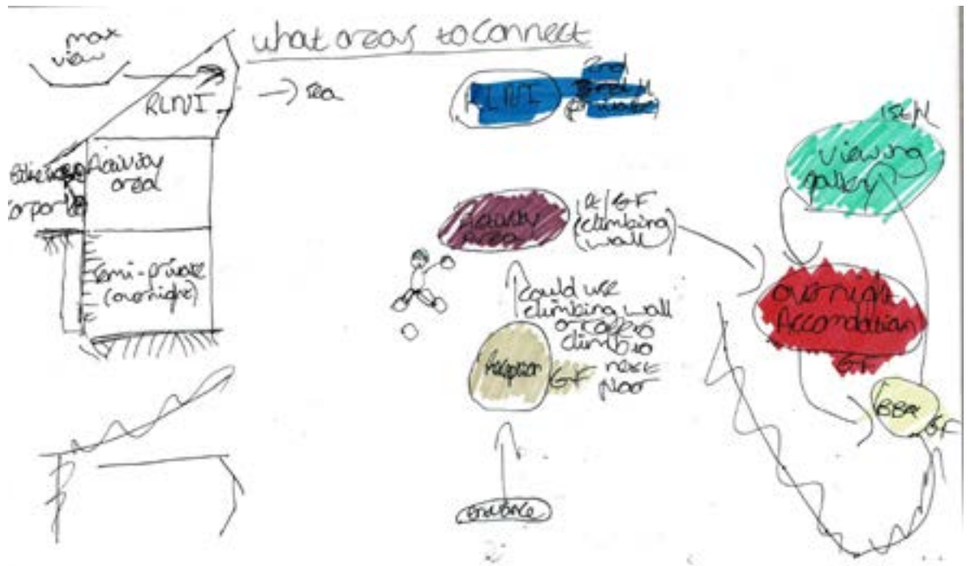
1.3 Process Page 5 of 8



Layout development 1.

Layout development 2.

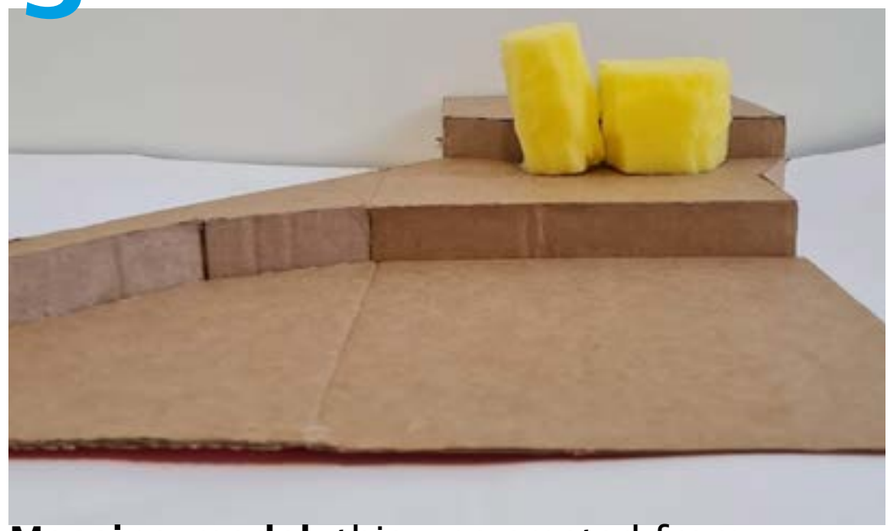
Sizes and notes of spaces- this is a page I referred back too multiple times as it makes sure that I have met the briefs requirements.



Bubble Diagram of Movement through Building- movement through the building is an important aspect of the design. I admit it is a rough sketch but this to help set up floor plans; therefore is note worthy.

1.3 Process Page 6 of 8

3D sketch of building layout- although basic this sketch helped the fundamentals of the layout and what you see hear is just the flipped version of the final design.



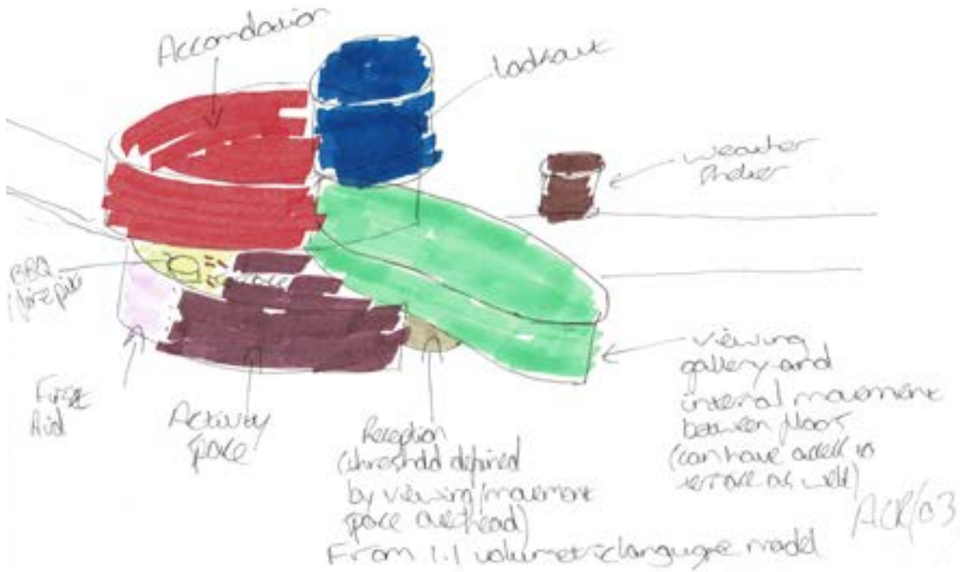
Massing model- this was created from sponge giving an immediate response to the design of the building- confirming that the 1st floor will sit on the retaining wall.

Massing model with standard room sizes- This helped to clarify the sizes of rooms to the design and gave me an idea of how the building sits on the site.

Massing model- influencing the curvature of the final designs walls.

1.3 Process Page 7 of 8

Final Iteration of Massing with accurate room sizes-

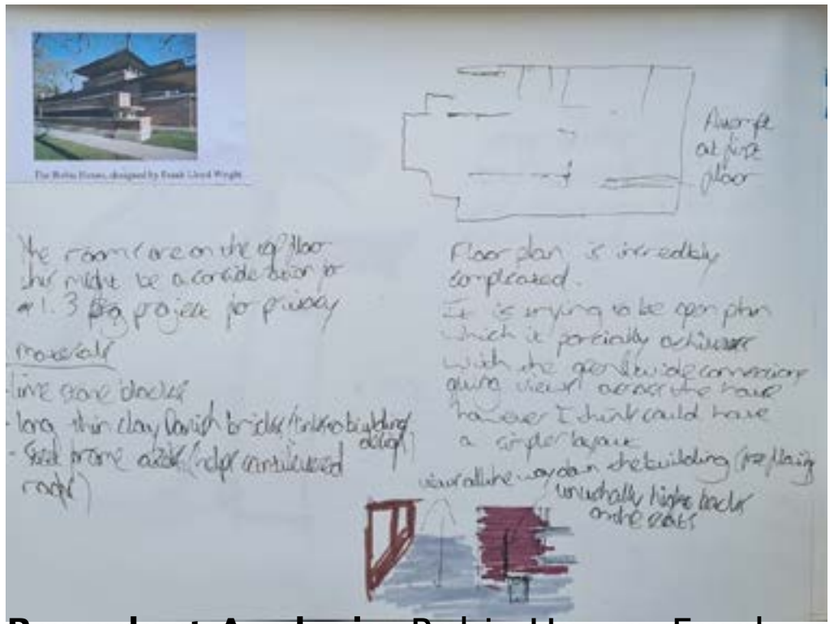


3D massing sketch- moulding boxes to prevent the building being too boxy.

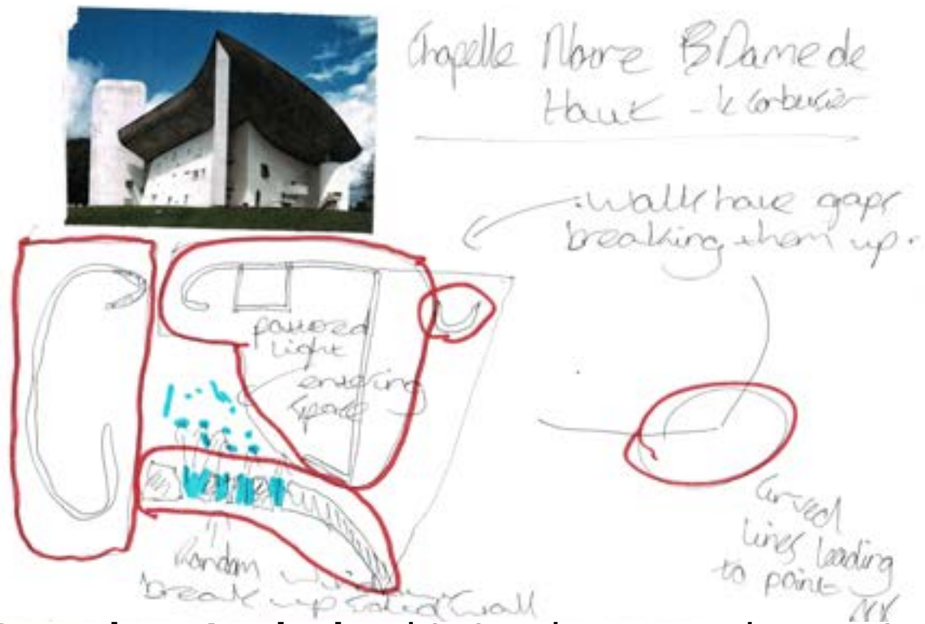
Massing model helping to develop theory for final design

Massing model helping to develop theory for final design

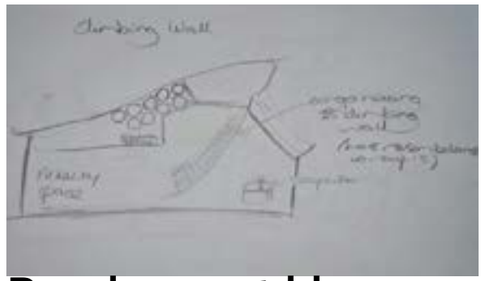
1.3 Process Page 8 of 8



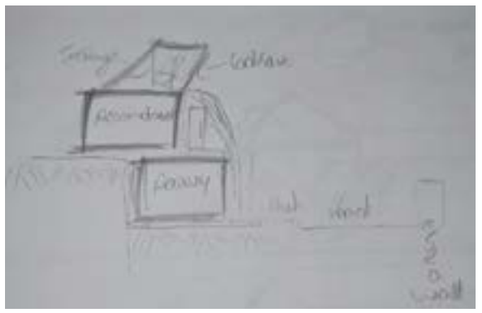
Precedent Analysis- Robie House, Frank Lloyd Wright



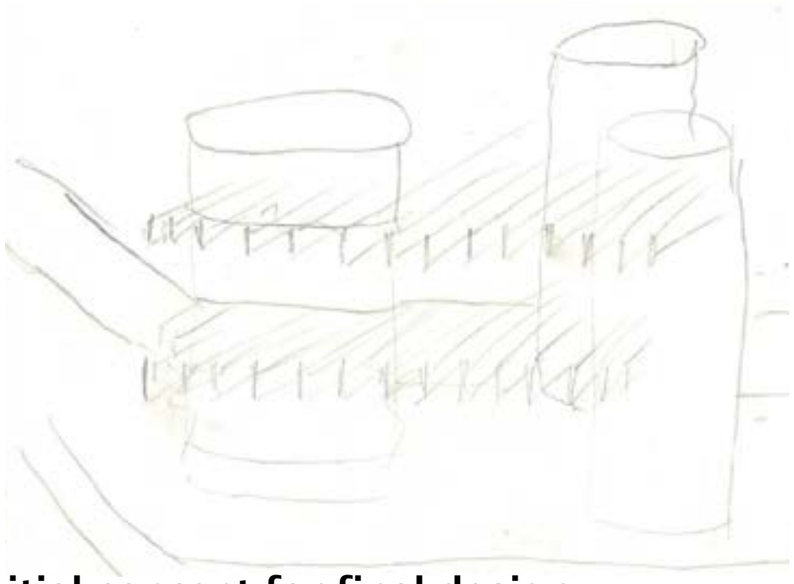
Precedent Analysis- this is a key precedent as it gave me inspiration to develop my drawing with curved walls with sharp edges.



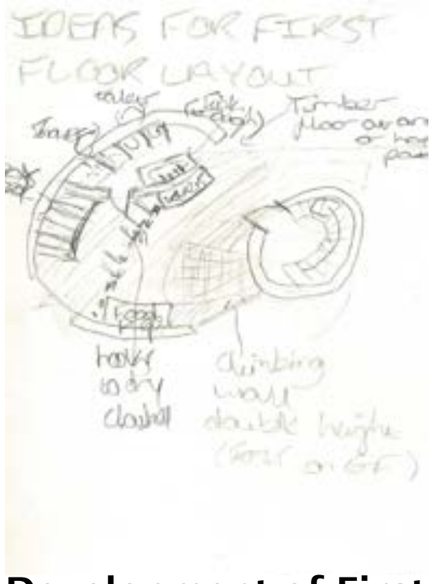
Development idea



Development idea



Initial concept for final design



Development of First Floor

Design ideas and SWOT Analysis- I made the SWOT Analysis and Sketchbook pages relevant to the design. Restaurants and routes to the building are being developed here.

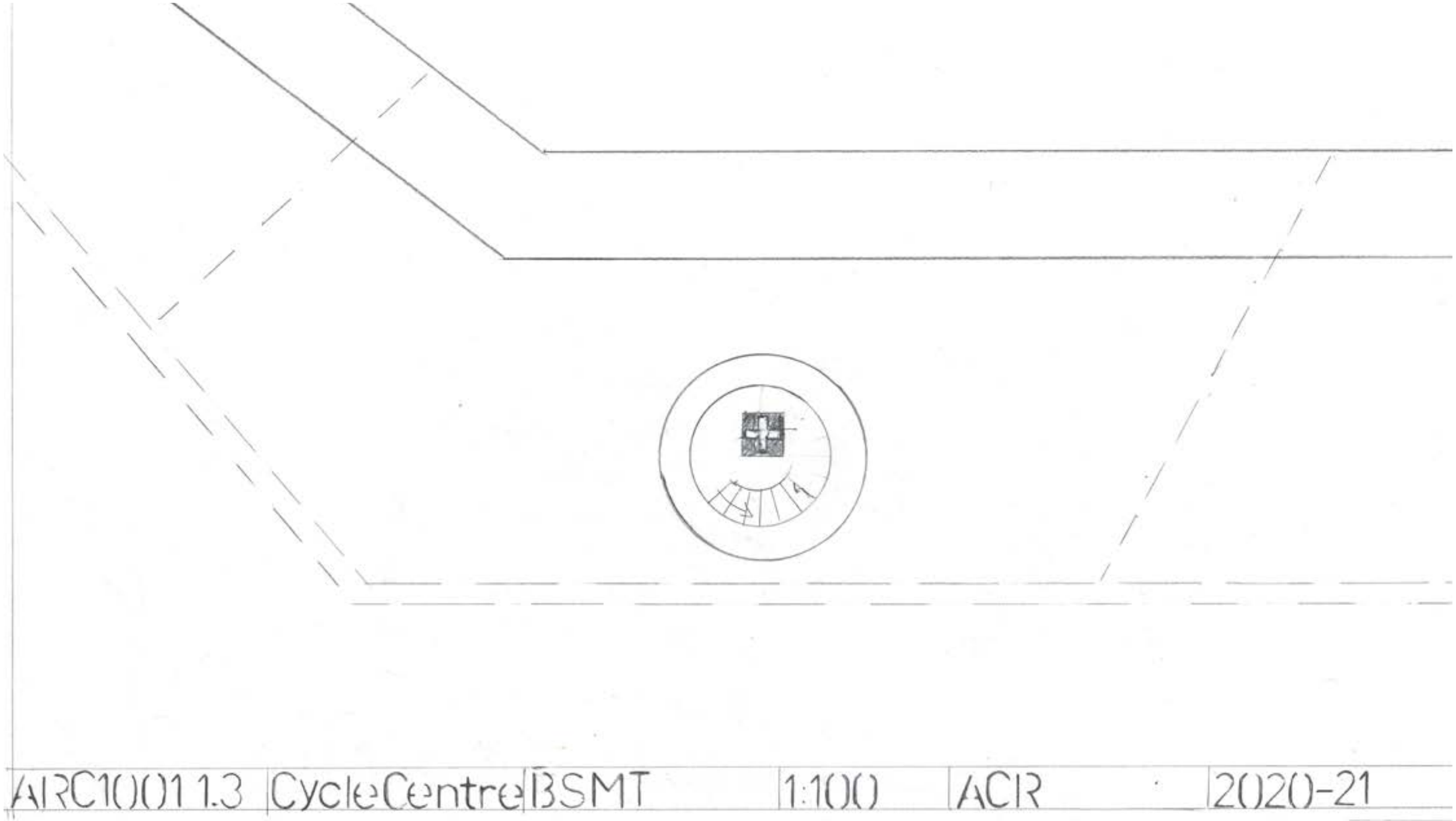
1.3 Presentation Page 1 of 11

1:50 Model- this showcases the tower as it is an integral part of my design holding the viewing gallery and look out. I have took a picture from the side to showcase the roof and the wall flowing in opposite directions- adding character to the building.

1.3 Presentation Page 2 of 11

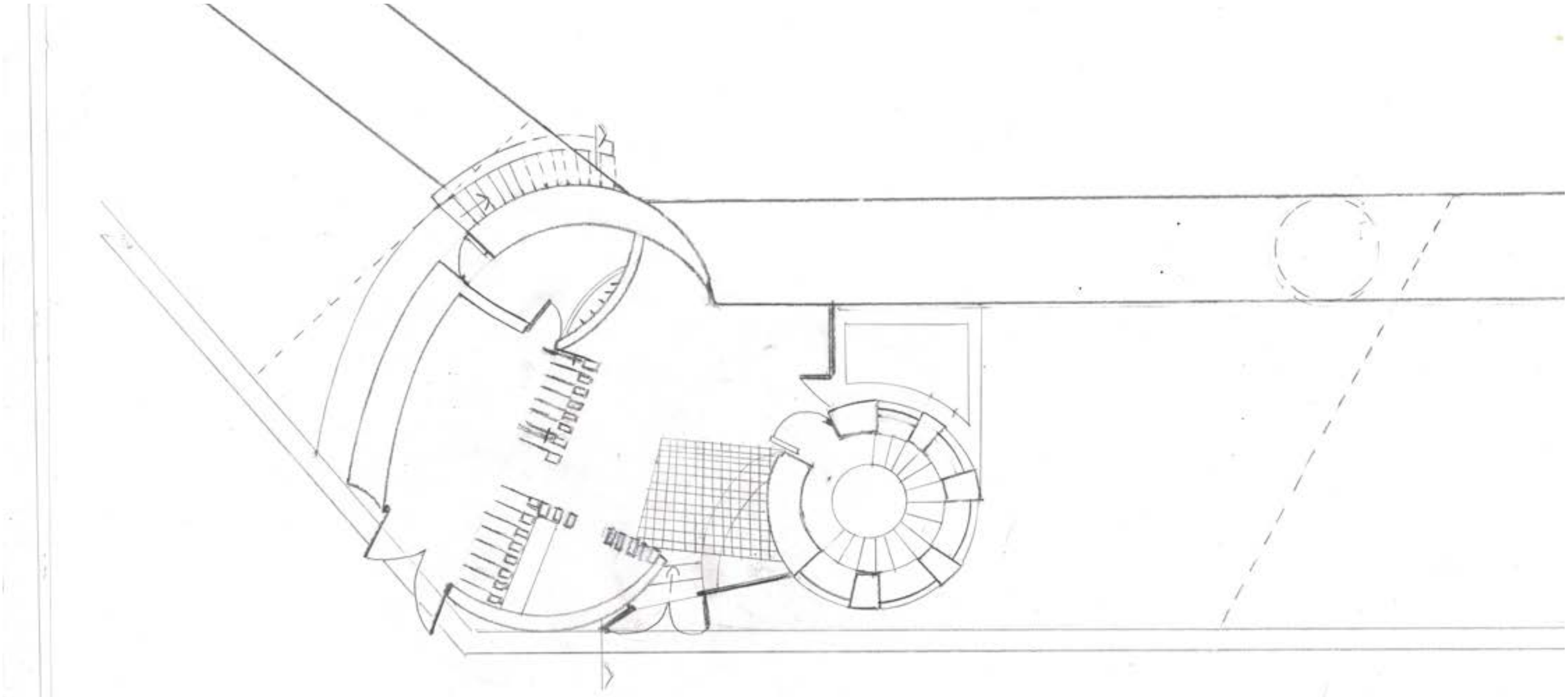
1:50 Section of interior GF is storage and 1st floor is drying room and sleeping.

1.3 Presentation Page 3 of 11



ARC1001 1.3	Cycle Centre	BSMT	1:100	ACR	2020-21

1.3 Presentation Page 4 of 11



ARC1001 1.3	Cycle Centre GF Plan	1:100	ACR	2020-21

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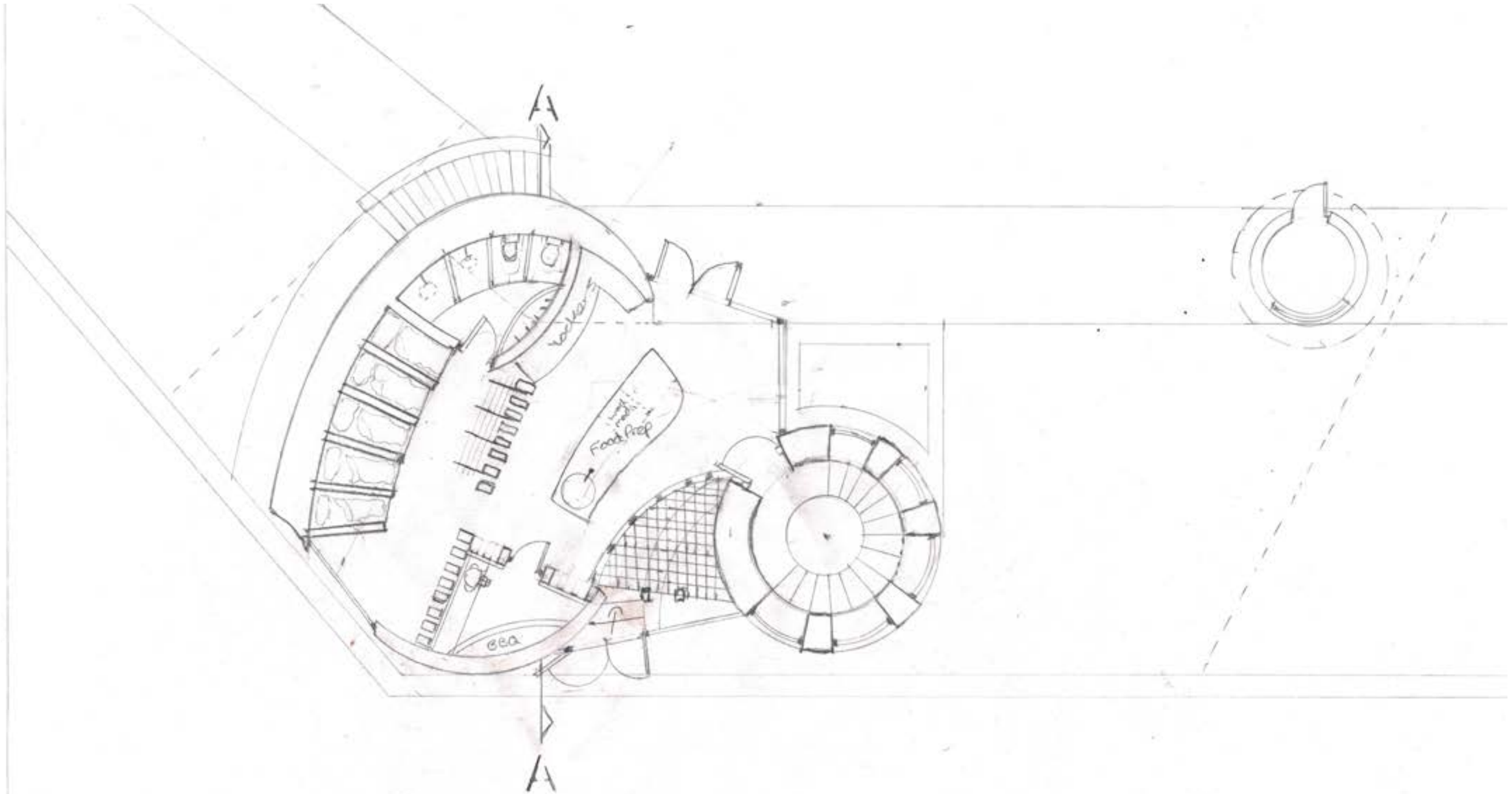

ARC1001 1.3 Cycle Centre 1st Floor Plan 1:100 Adam Rush 2020-21

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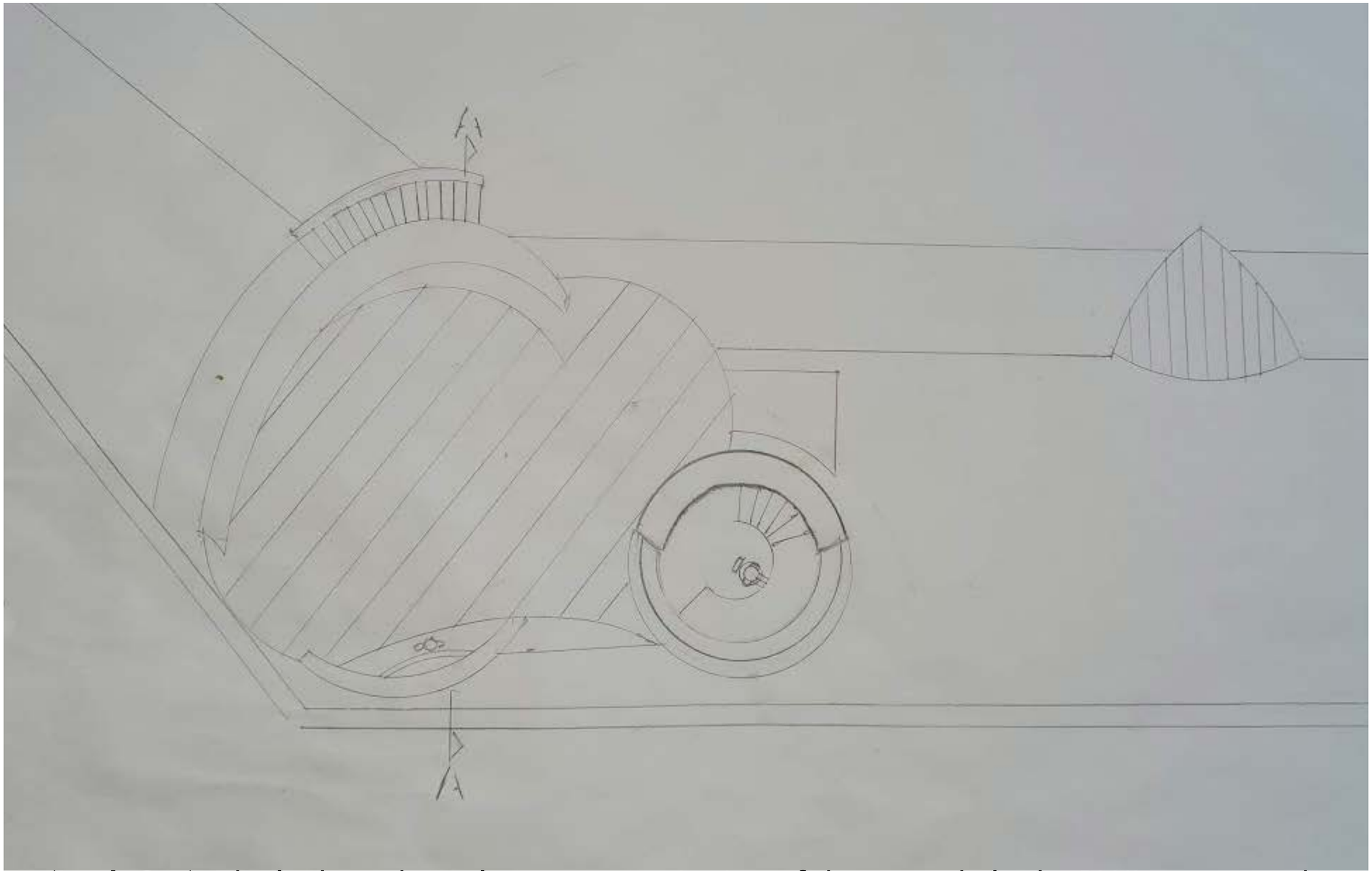

2nd Floor (Look Out)- The look out has a large panoramic view of the sea to help the RLNI coast guard aware of an issues out on the water.

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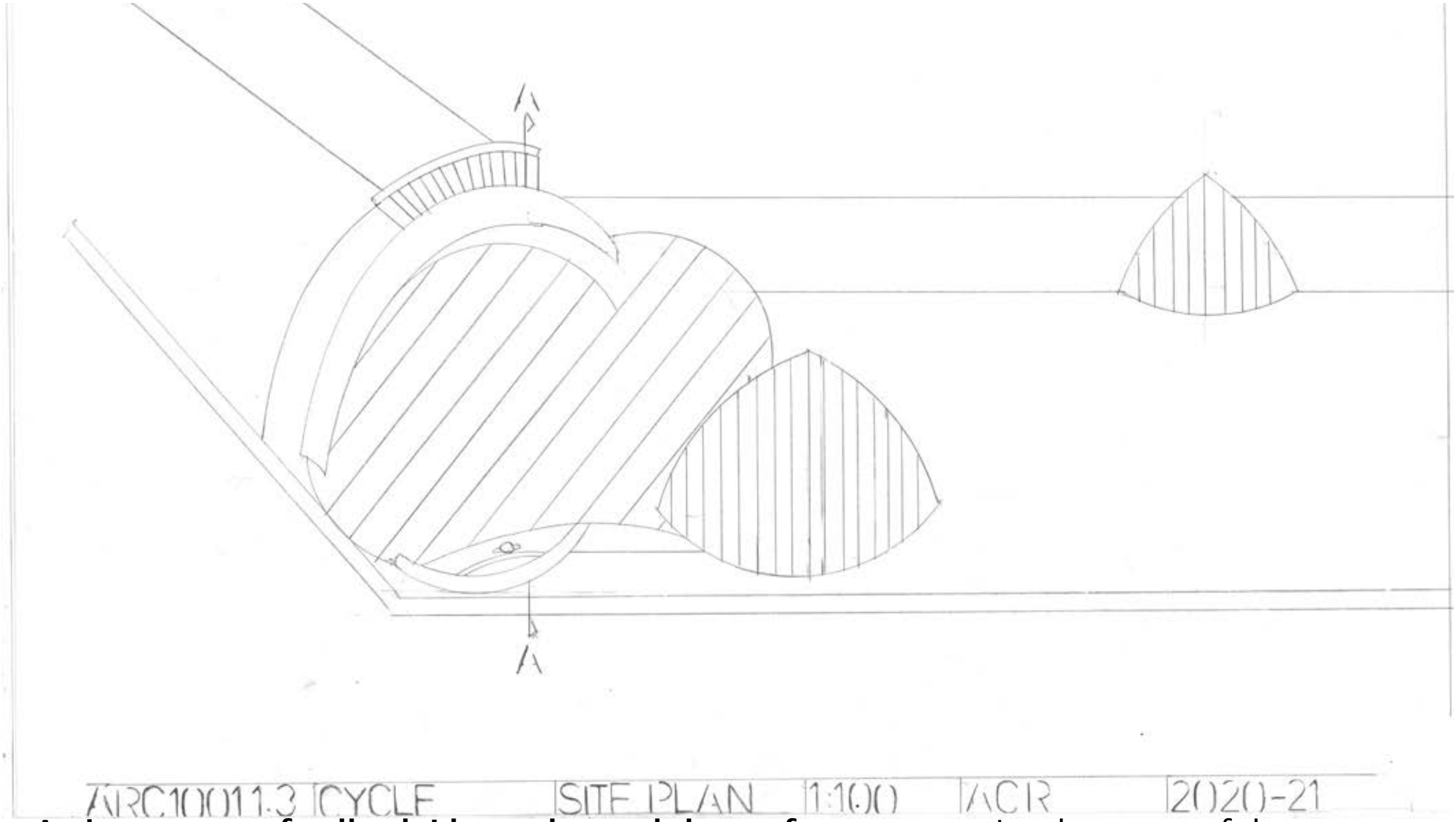
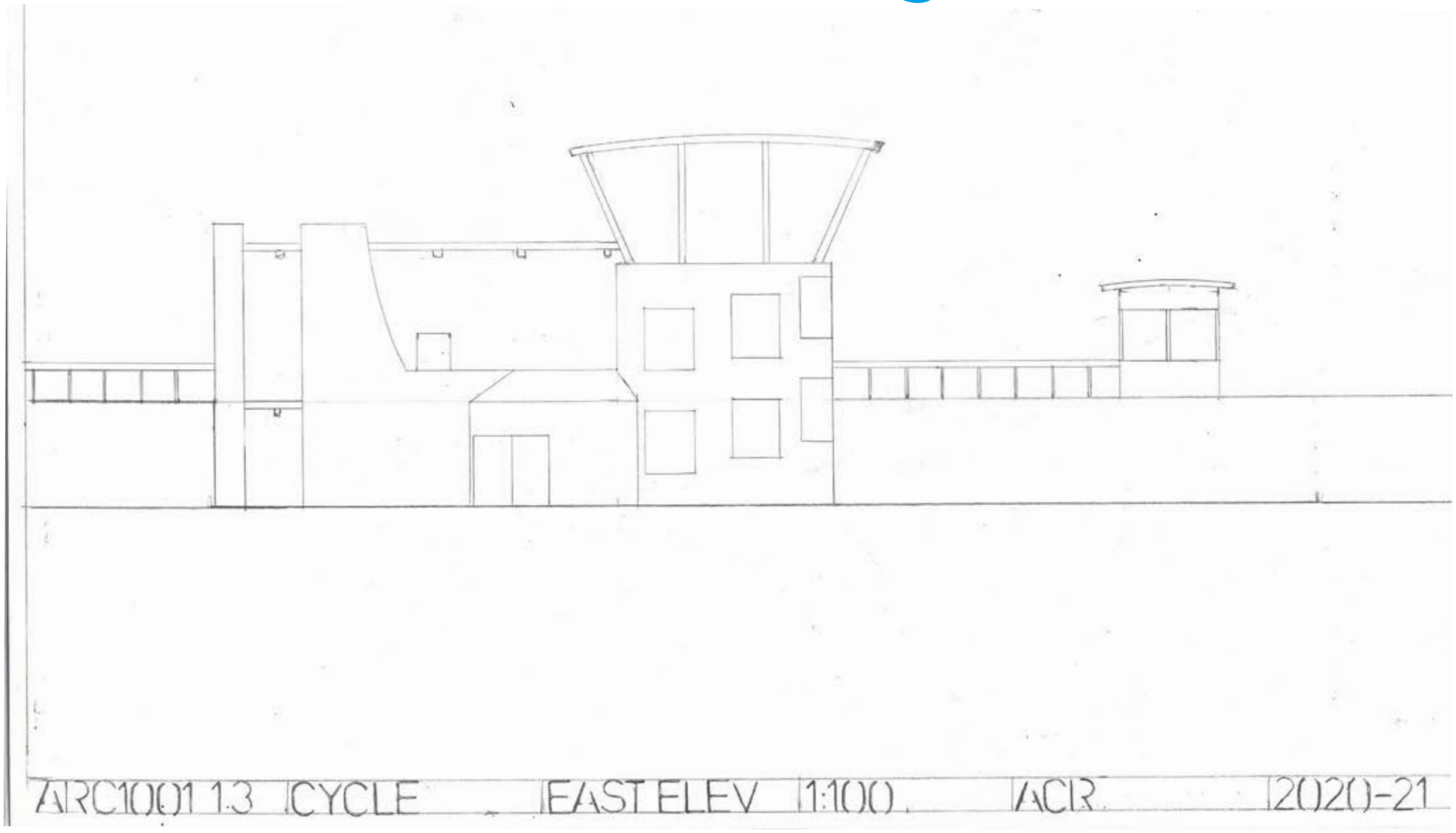
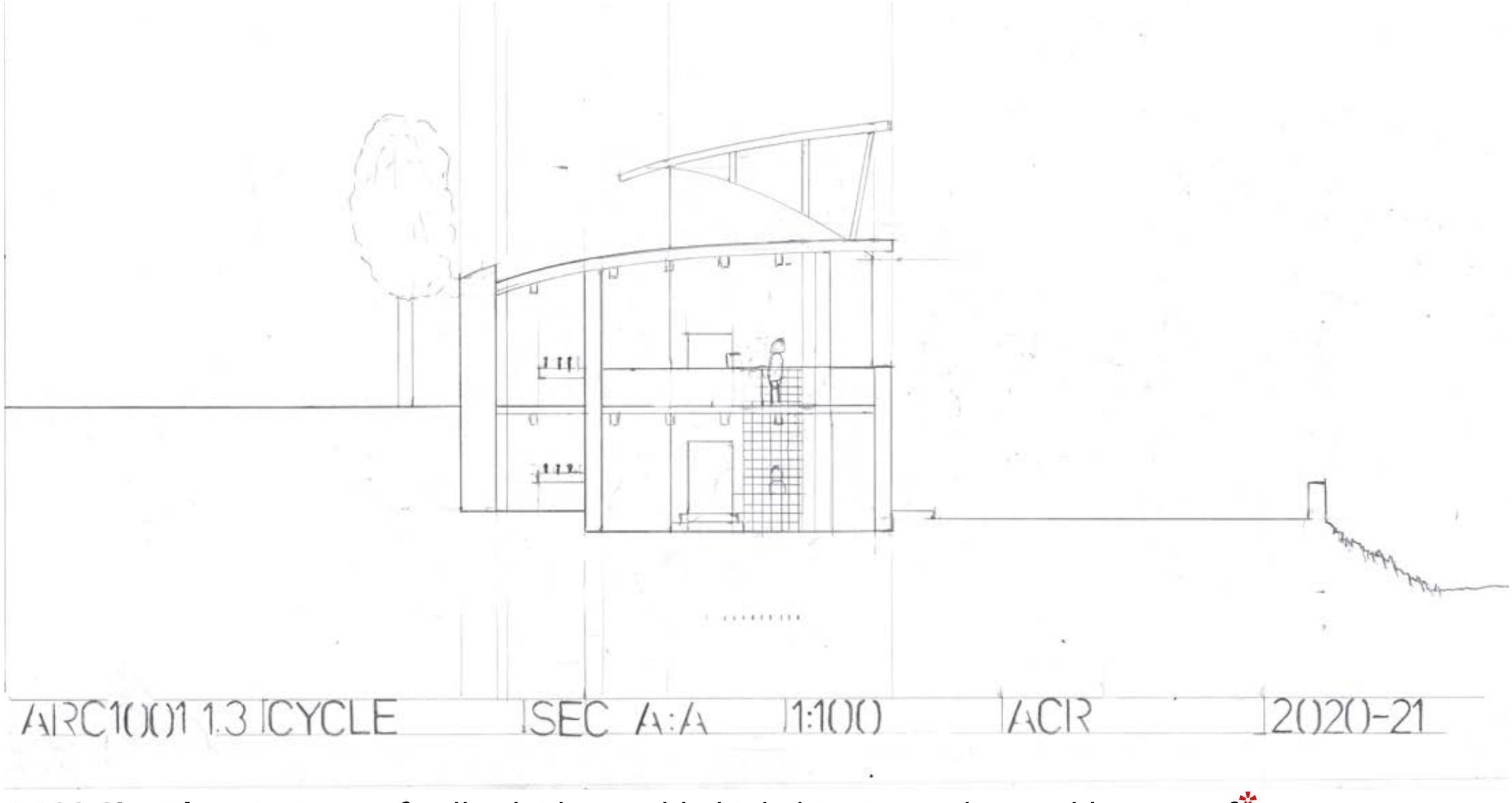


Acting on tutor feedback I have changed the roof- you may notice that some of the drawings are out of date as a result which I will factor in next time*

1.3 Presentation Page 8 of 11

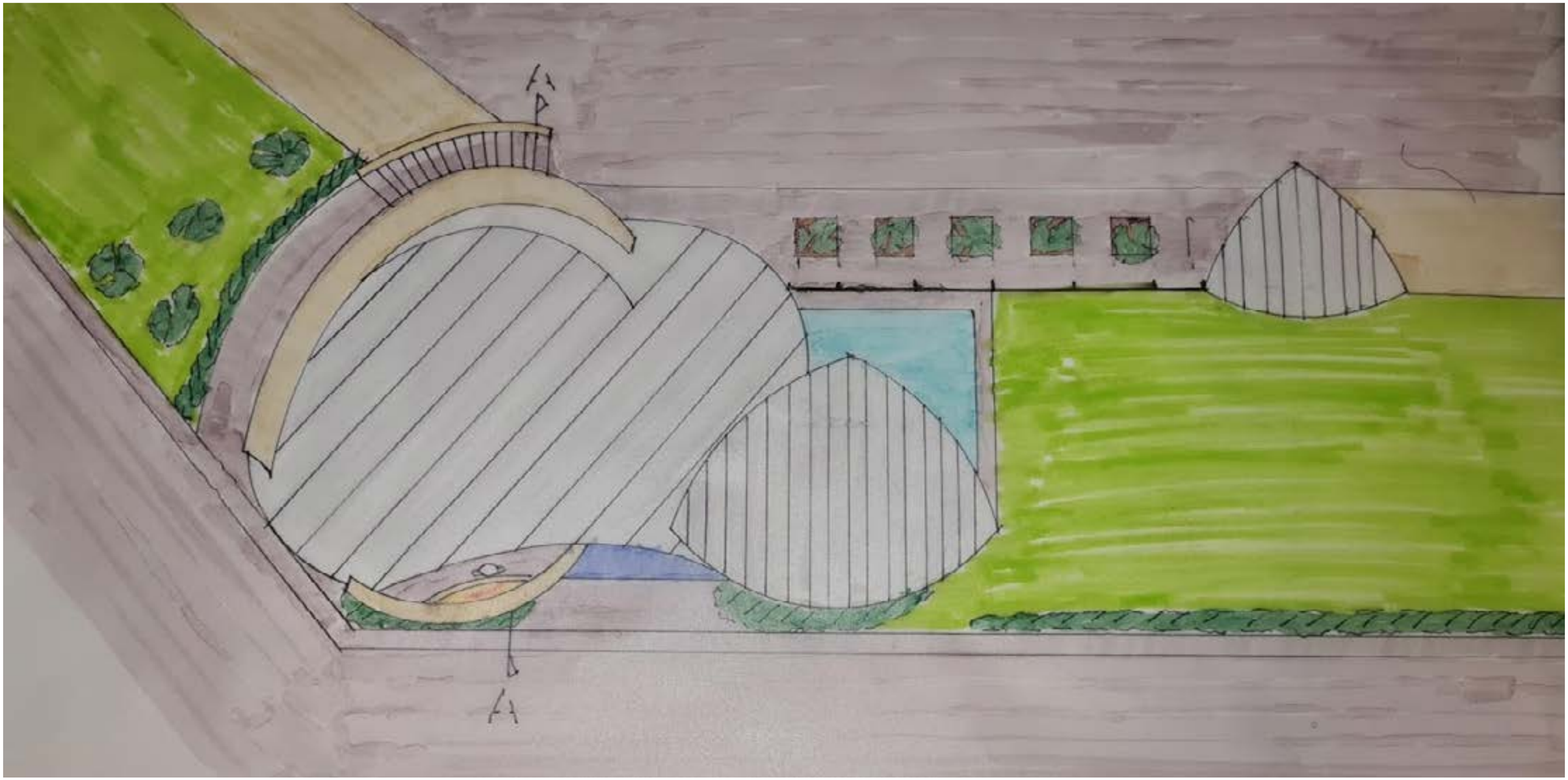


1.3 Presentation Page 9 of 11



1:100 Site Plan- Acting on feedback I have added inhabitation and curved lower roof*

1.3 Presentation Page 10 of 11



1:100 Rendered Site Plan- I have added trees and shrubs to the surrounding area since vegetation is lacking at the site, which I noticed on my site visit.

1.3 Presentation Page 11 of 11

1:100 rendered section- illustrates the difference in architectural language between the timber and the stone walls.

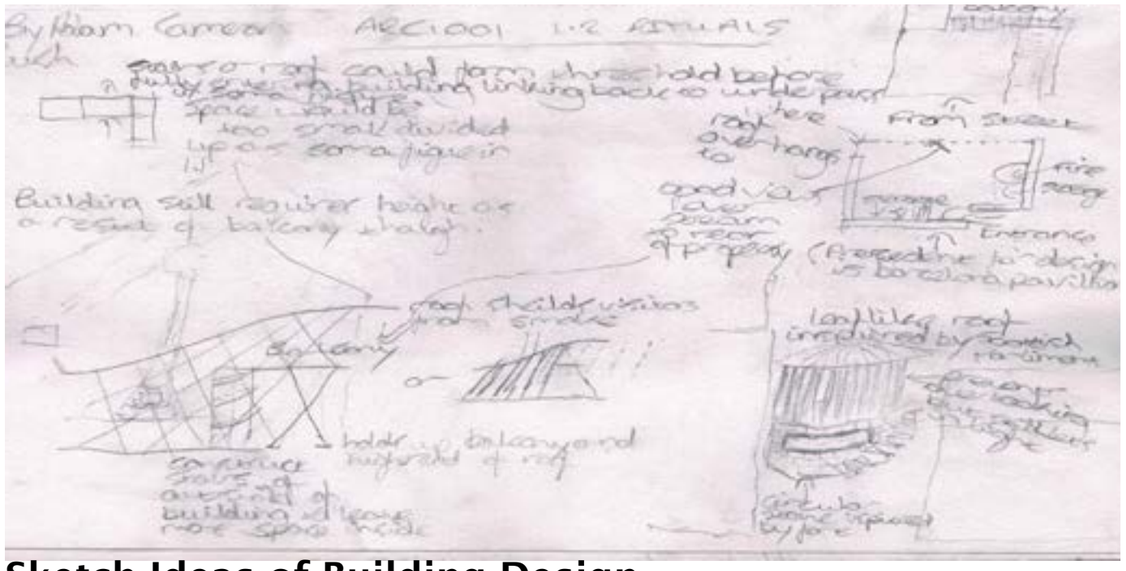
1.2 Rituals in the City

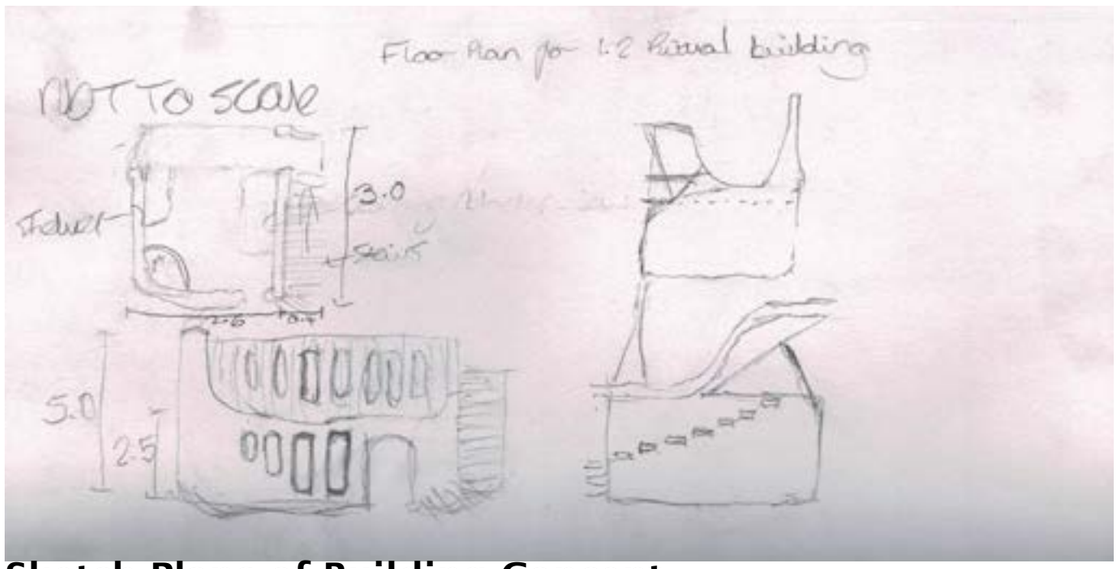
Summary of Design Ideas for 1.2

The Ritual for the building is a Coffee House. During this project I have developed my understanding of architectural design and designed a building. Drawing from the 1.1 project I have completed numerous sketch models, which helped develop the architectural language of the building. A key element you will notice is the stairs making the most of the sites small stream. I have added floating steps to the design up to the 1st floor roof terrace as an architectural feature, which I am proud of and proved extremely difficult to draw in all of my technical drawing but was rewarding.

1.2 Process Page 1 of 2

Collage of Client





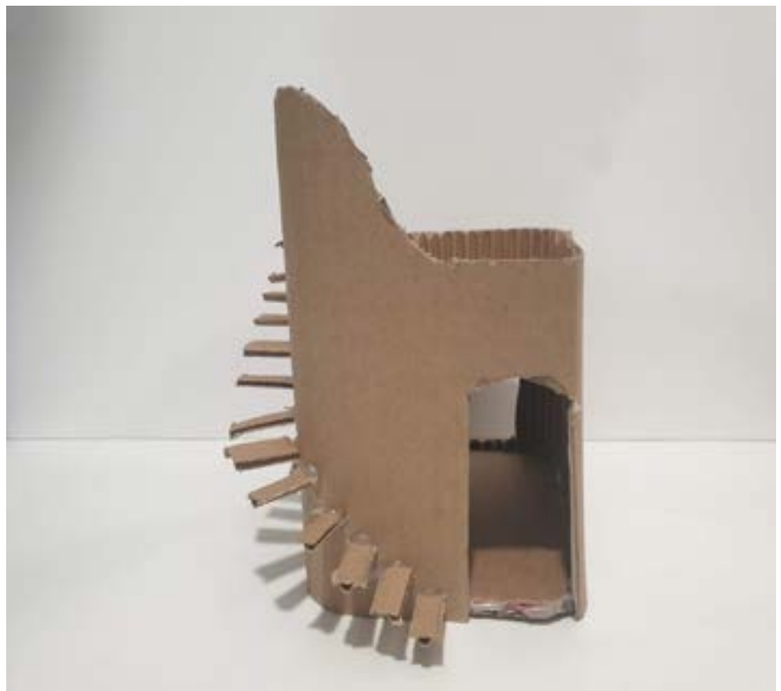
Sketch Plans of Building Concept

I like making more rough sketches, so they do not slip out of my mind. Although, I promised myself that I would try to improve my neatness in the projects after to showcase my work and make it easier to present to an audience. Even so I have developed many ideas in this page that I then made into sketch models.

1.2 Process Page 2 of 2

1:50 Sketch Model

1:50 Sketch Model



1:20 Sketch Model

1:50 Sketch Model

1:50 Sketch Model

1.2 Presentation Page 1 of 12

Street Entrance

River at back of property

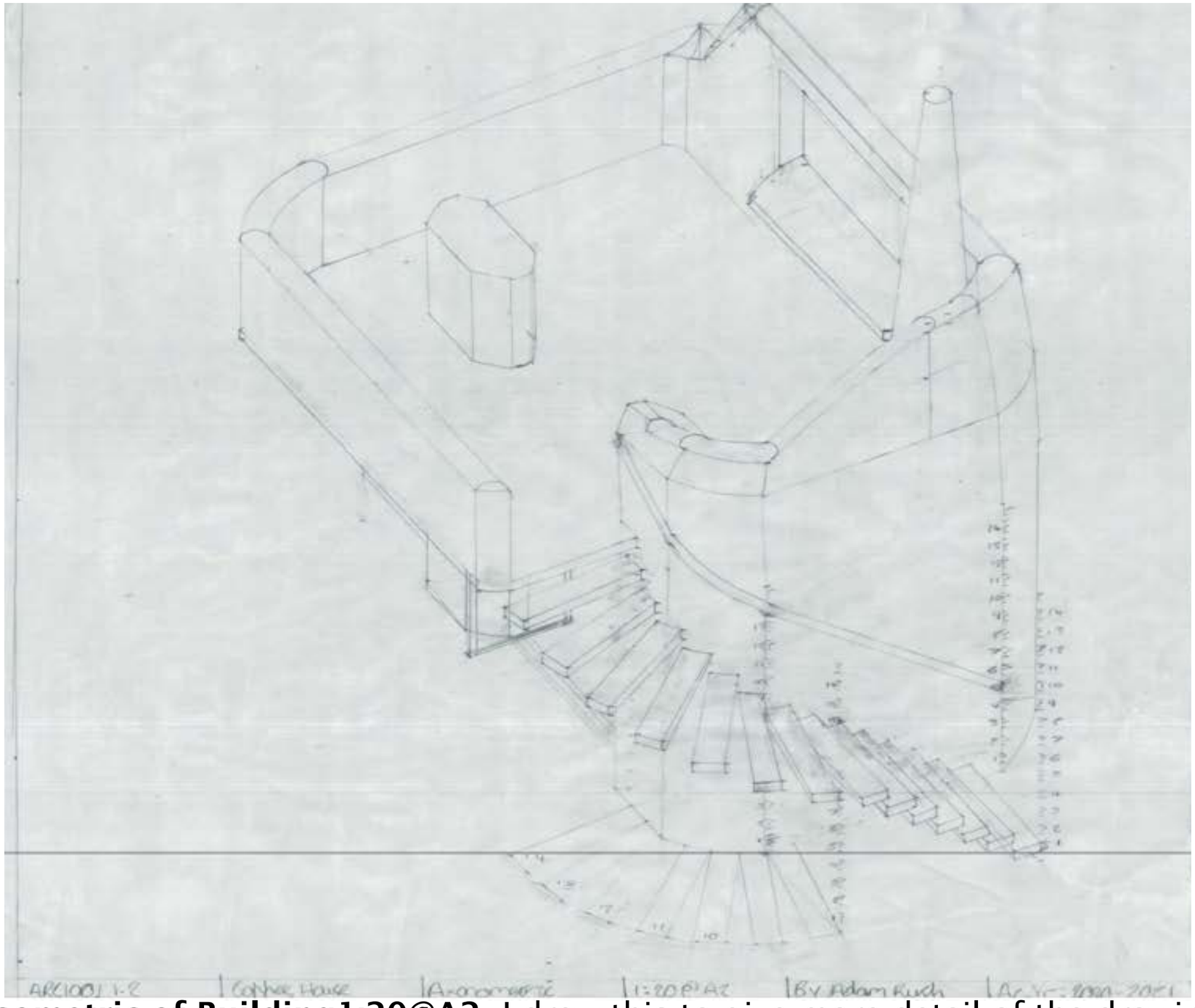
1.2 Presentation Page 2 of 12

1:50 Section Model

1.2 Presentation Page 3 of 12

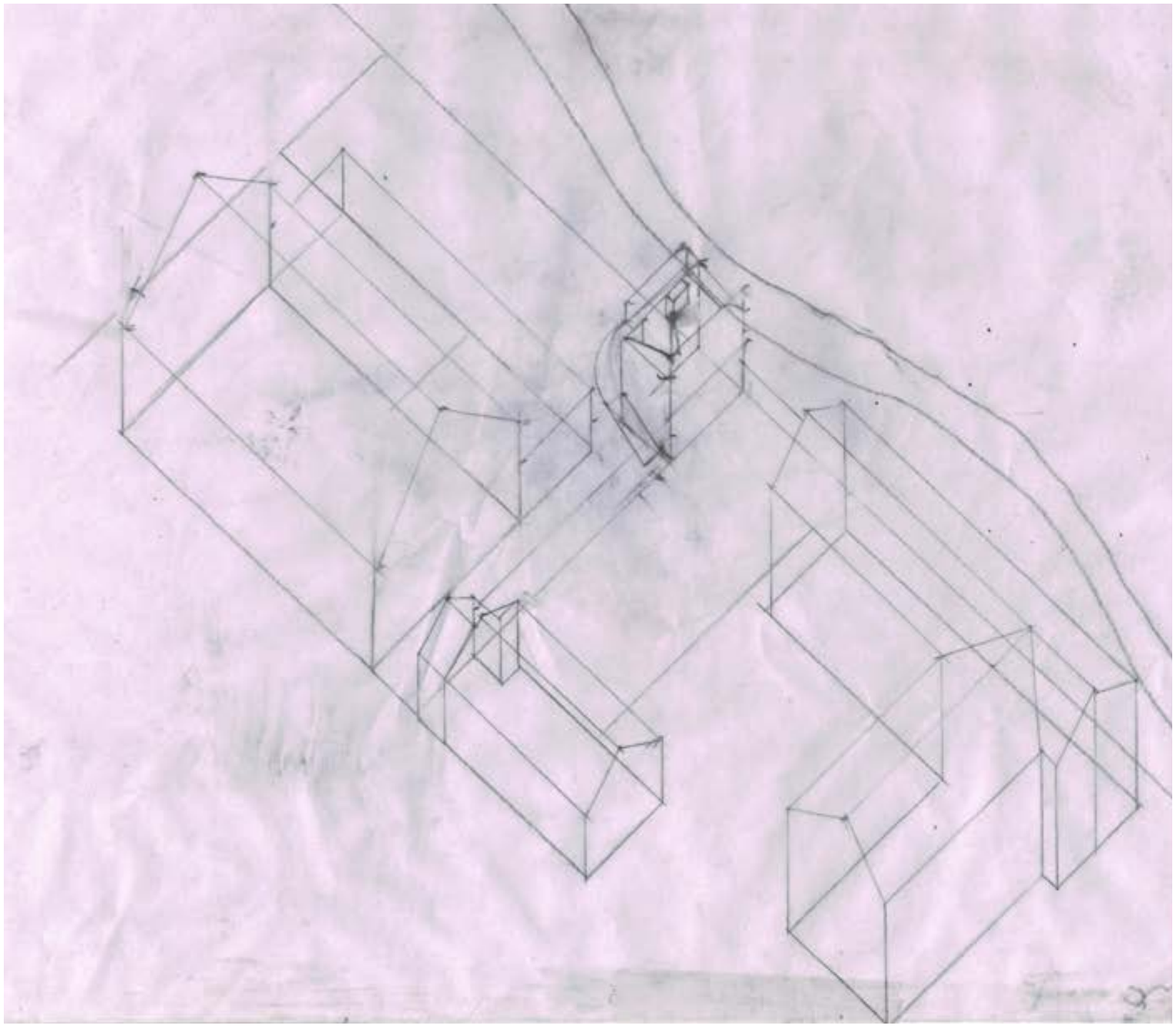
Final Clay Model of Rituals Building

1.2 Presentation Page 4 of 12



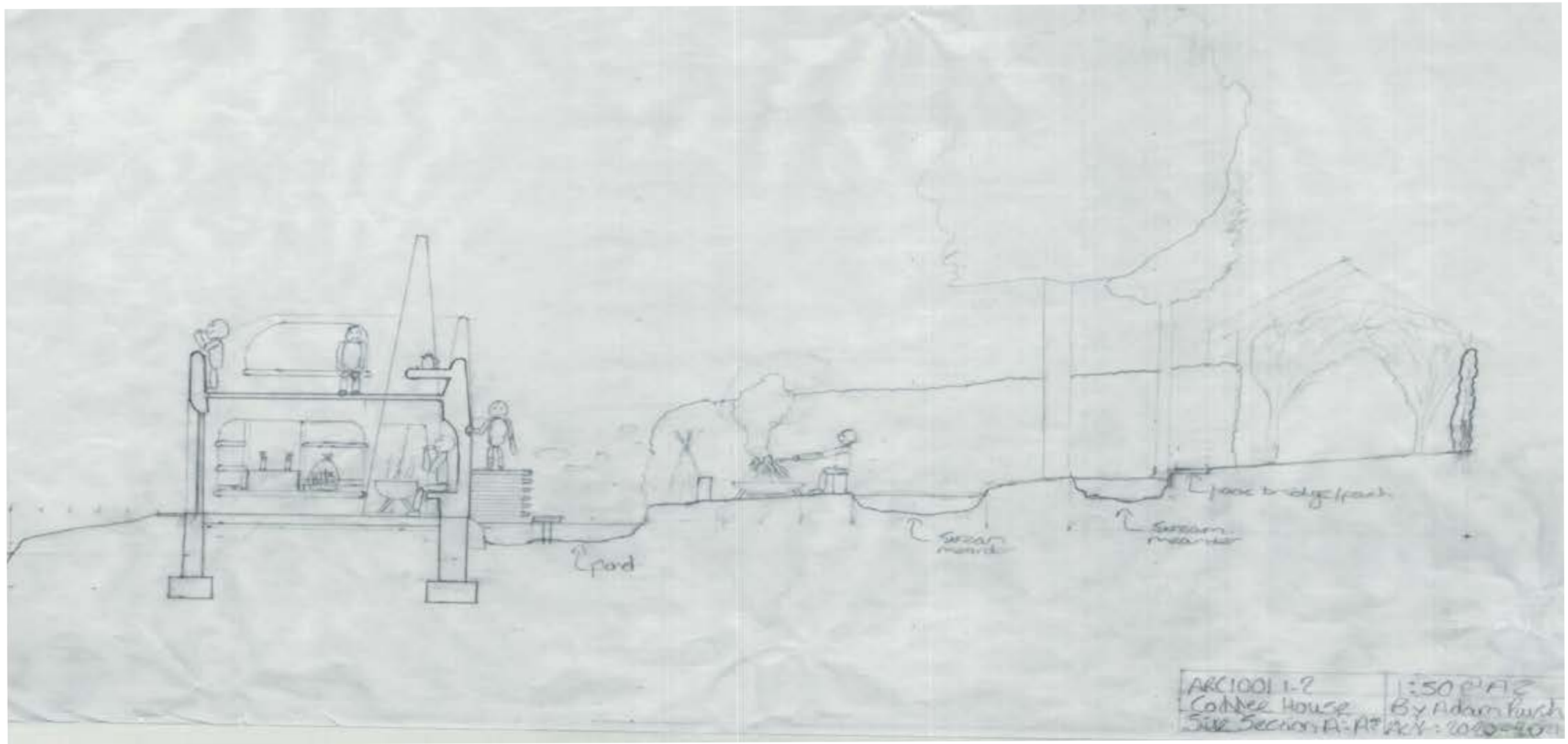
Isometric of Building1:20@A2- I drew this to give more detail of the drawing.

1.2 Presentation Page 5 of 12



Axonometric of site with building 1:200@A3

1.2 Presentation Page 6 of 12

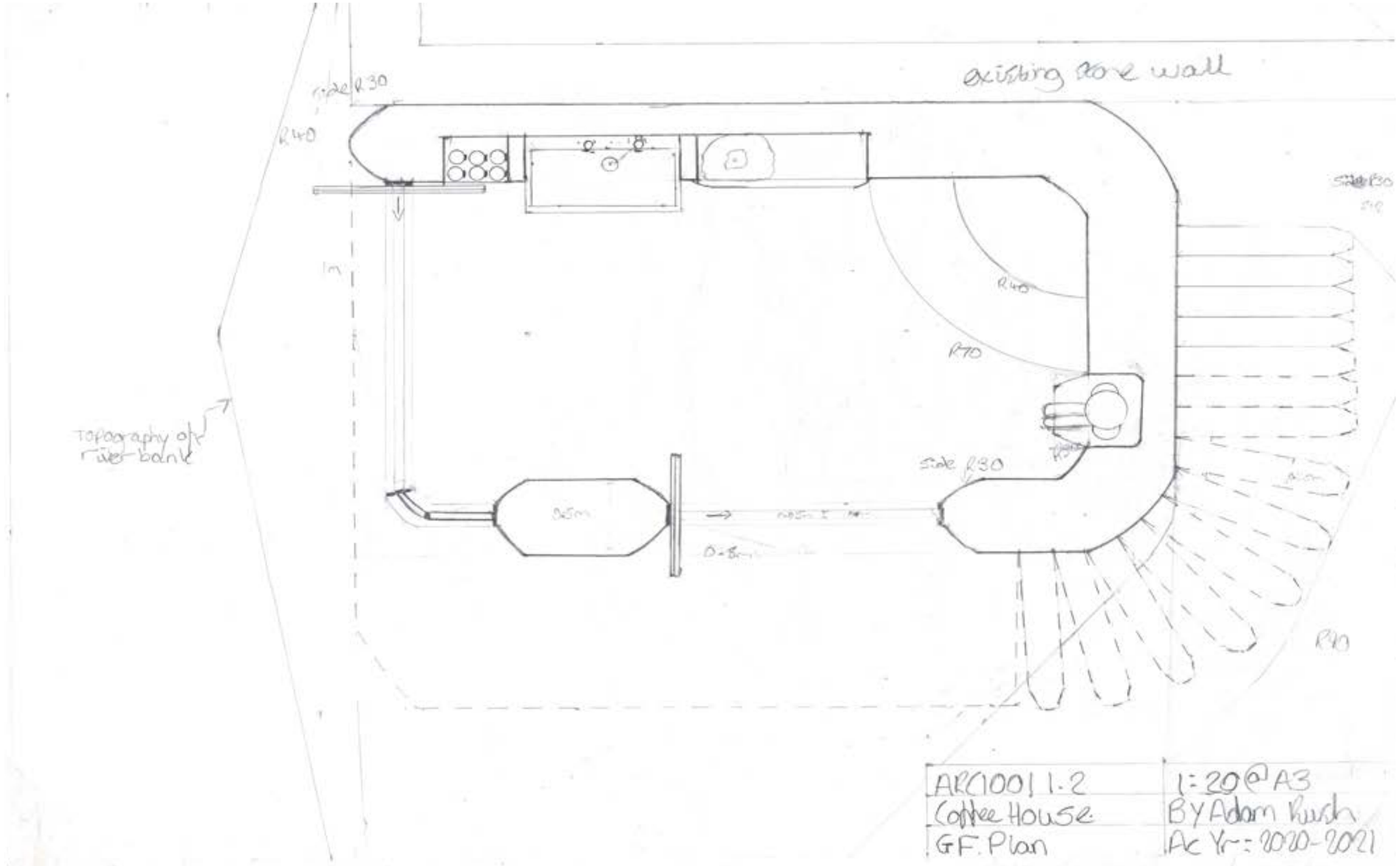


Site Section 1:50@A2

1.2 Presentation Page 7 of 12

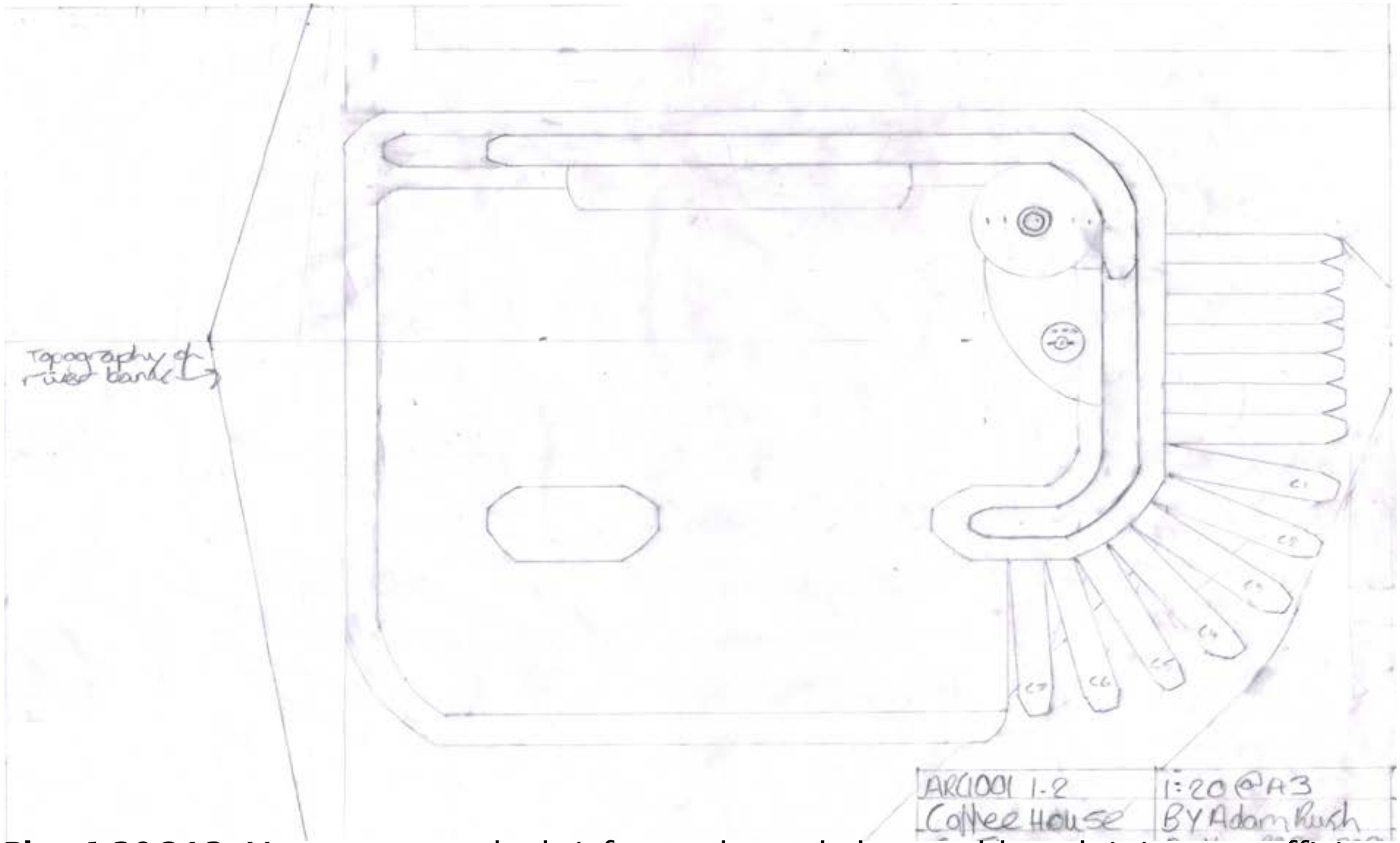
South Elevation 1:20@A2

1.2 Presentation Page 8 of 12



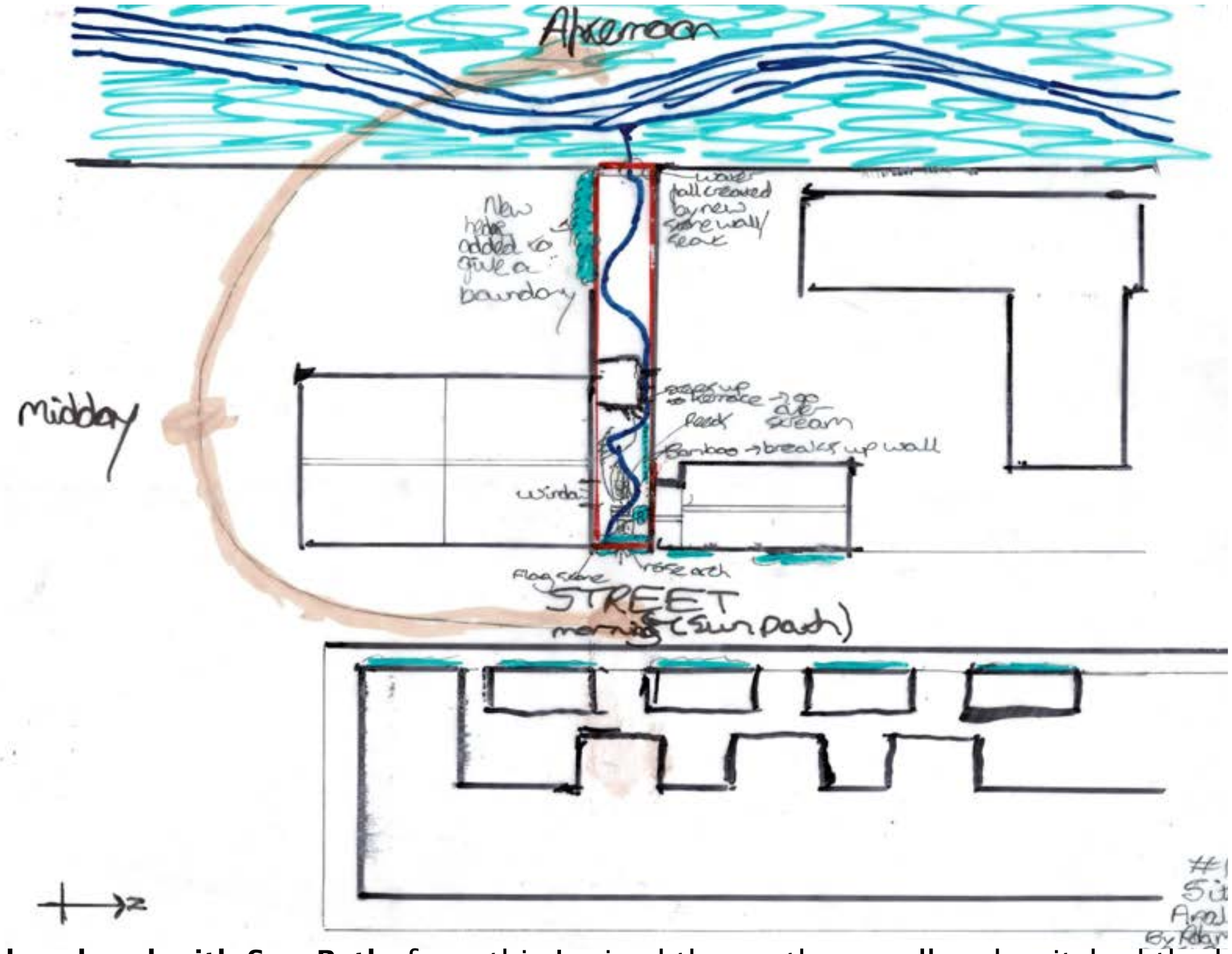
Ground Floor Plan 1:20@A3

1.2 Presentation Page 9 of 12



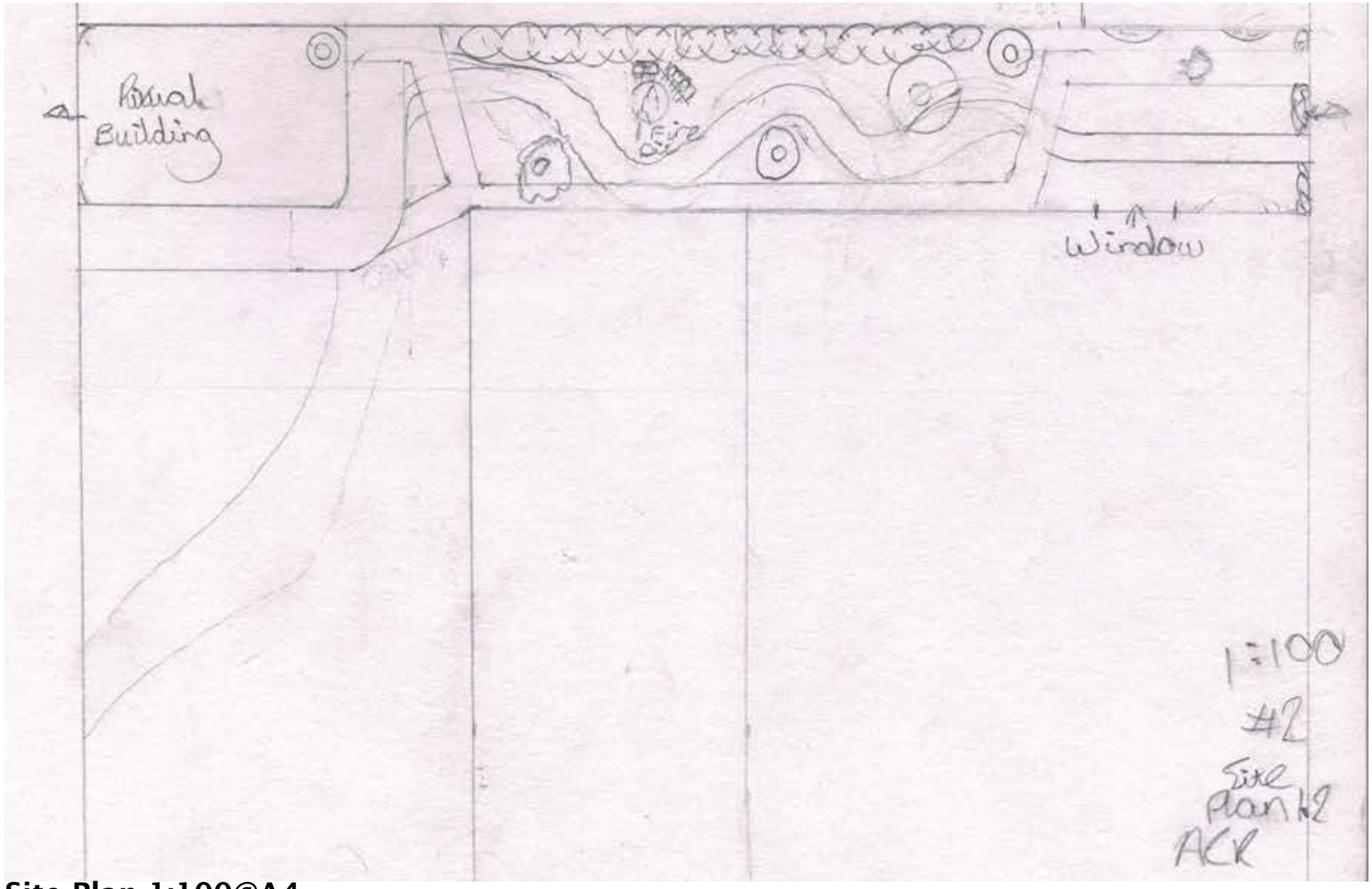
1st Floor Plan 1:20@A3- Meant to meet the briefs mandatory balcony; although it is more efficient to be placed on the roof because you get the full area of the roof and limited obstruction (unless you want them for instance to the north and for neighbouring properties).

1.2 Presentation Page 10 of 12



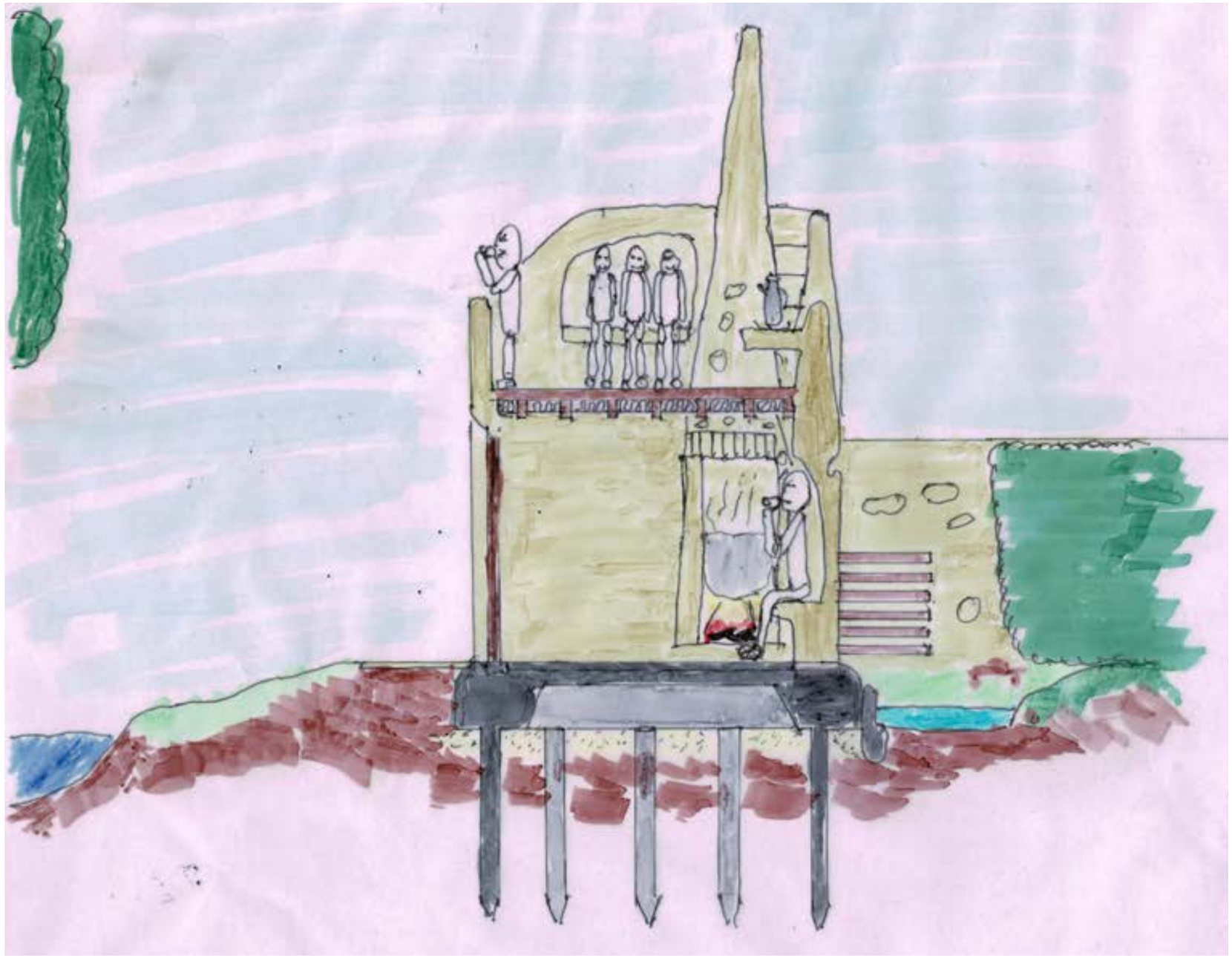
Site Plan Rendered and with Sun Path- from this I raised the northern wall and switched the buildings around to get the most of the southern light

1.2 Presentation Page 11 of 12

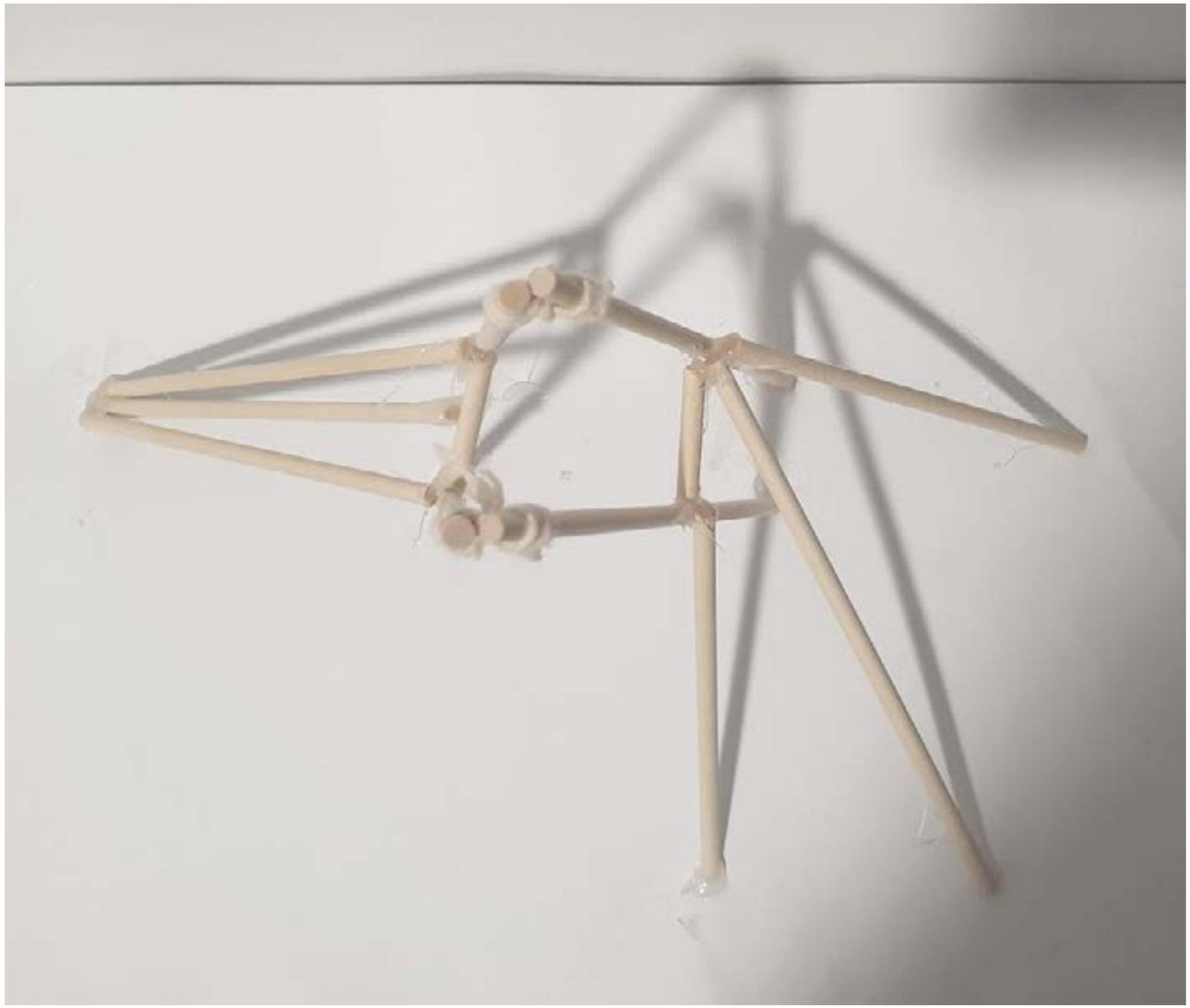


Site Plan 1:100@A4

1.2 Presentation Page 12 of 12



1.1 The Language of Architecture



1.1- Process Page 1 of 3

1.

2.

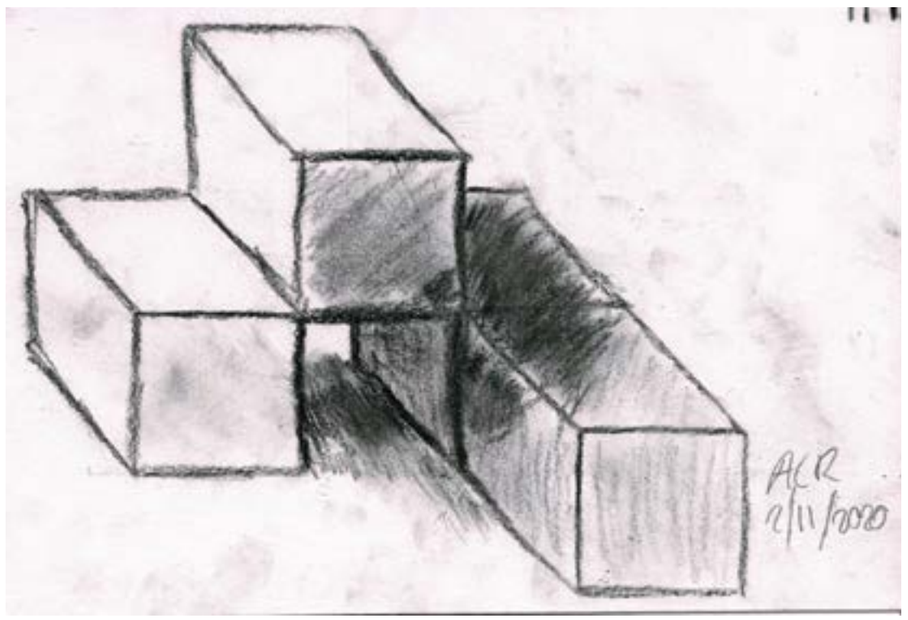
3.

These were the first attempts at soma figures in numerical order. You can see some of my process work that has been developed from this. My initial idea was that as a theoretical building it would be desirable to have a roof terrace. Therefore all of these figures have two stories. The the second attempt developed the design into a more complex shape I specifically liked the passage ways that where created by the configuration. This was lost in the third iteration and then picked up from feedback from my tutor as I specifically mentioned that I liked the passageways previously.

1.1- Process Page 2 of 3

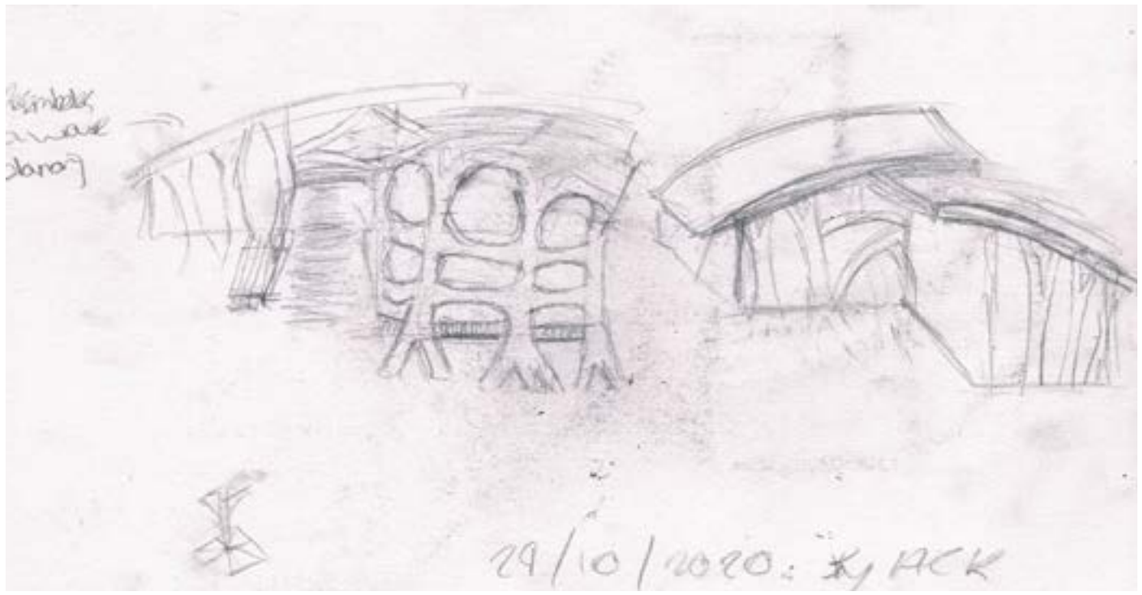
4.

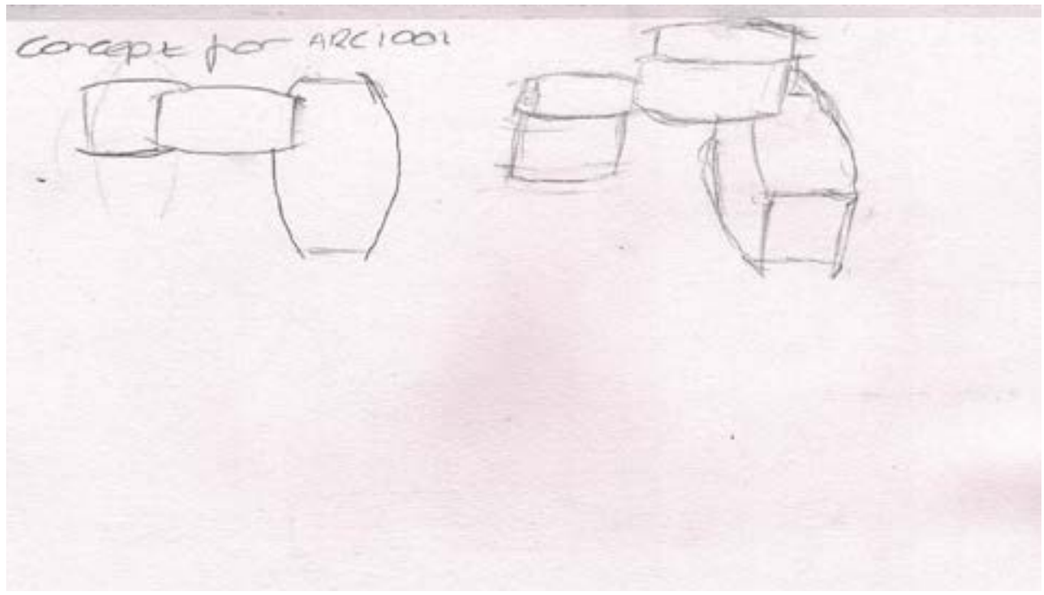
This is my final Soma Figure I have added the passage way back into the building. Although there is only one to make the model more connected as the second iteration.

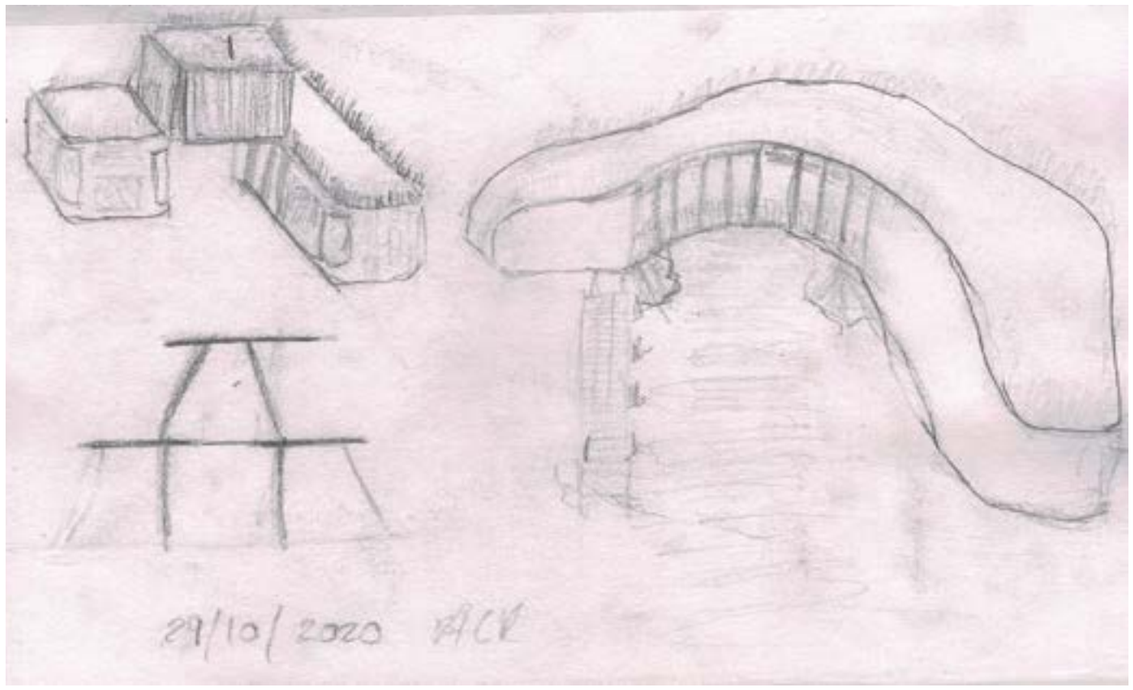


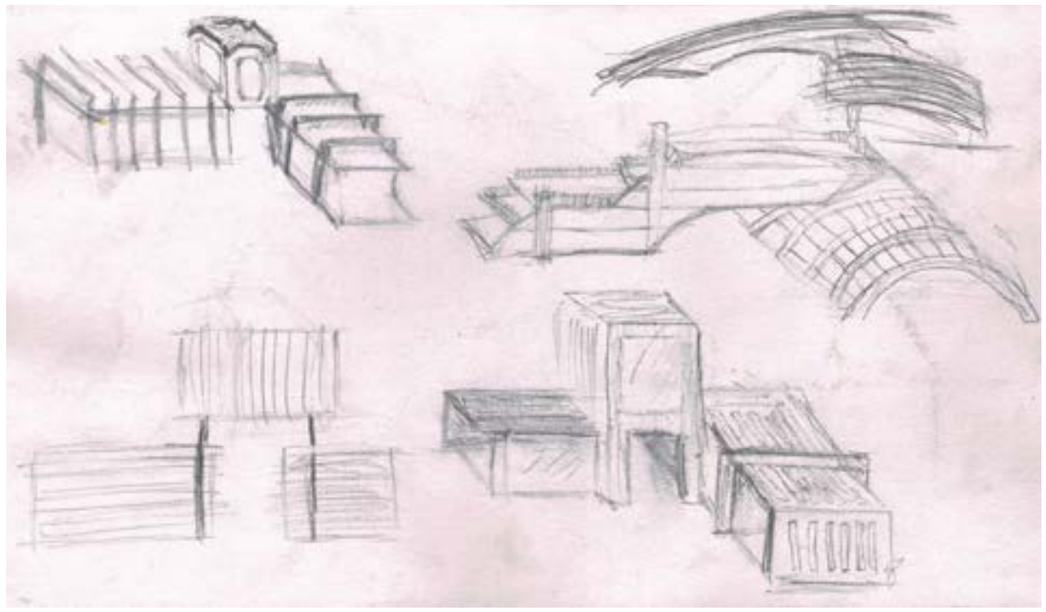
I used charcoal to represent the soma figure. I think this is charcoal is a efficient means of representation in this instance given the abstract nature of the model it is representing. Furthermore, it focuses ones attention to the figure and the theoretical shadows that it creates

1.1- Process Work 3 of 3









1.1- Project Presentation Page 1 of 6

I was unsure how this iteration would turn out so I took a picture beforehand am glad I did as I prefer this to the next volumetric iteration.

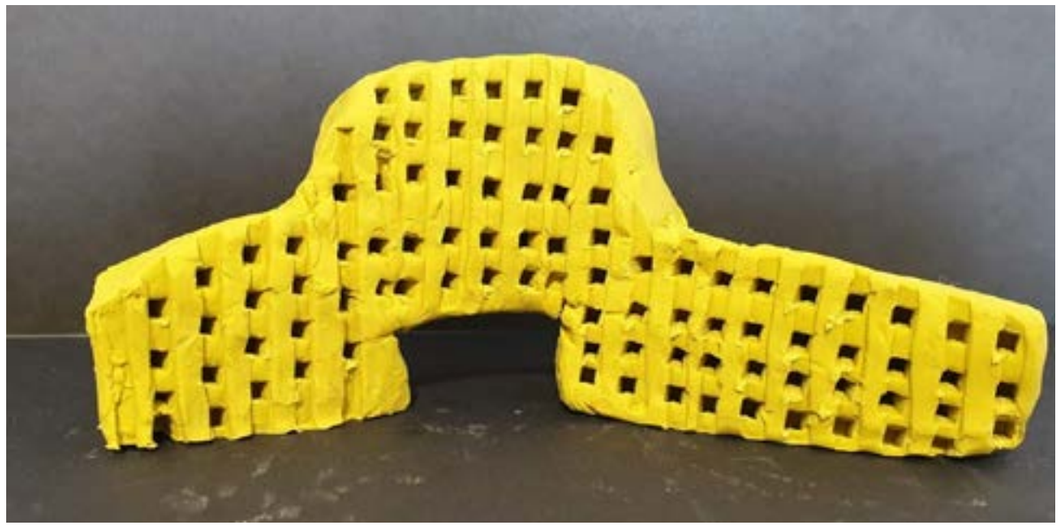
This is second iteration it is based on concrete pillars that have been moulded with a patterned cast. I do not particularly think the making helped the models aesthetic qualities.

1.1- Project Presentation Page 2 of 6

This is one of my favourite models of the whole project. It is simple and still represents the soma figure that it was derived one than other models

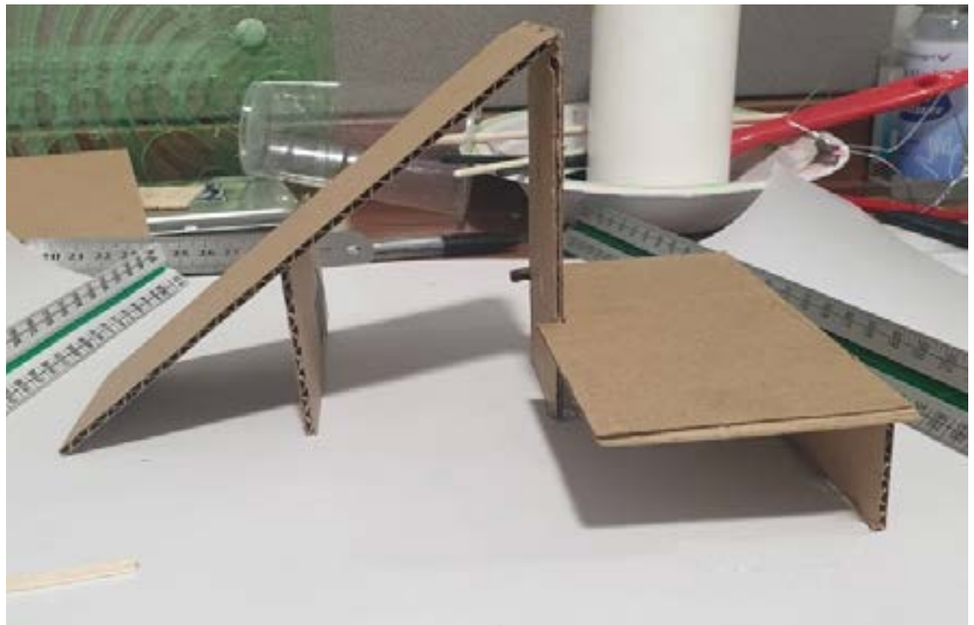
1.1- Project Presentation Page 3 of 6

This is my first iteration of this style of model it is very organic and is designed to show large mass. I have used indentation less boldly on this model, which I prefer.



From feedback from my tutor I have developed the model to be more angular using more tools.

1.1- Project Presentation Page 4 of 6



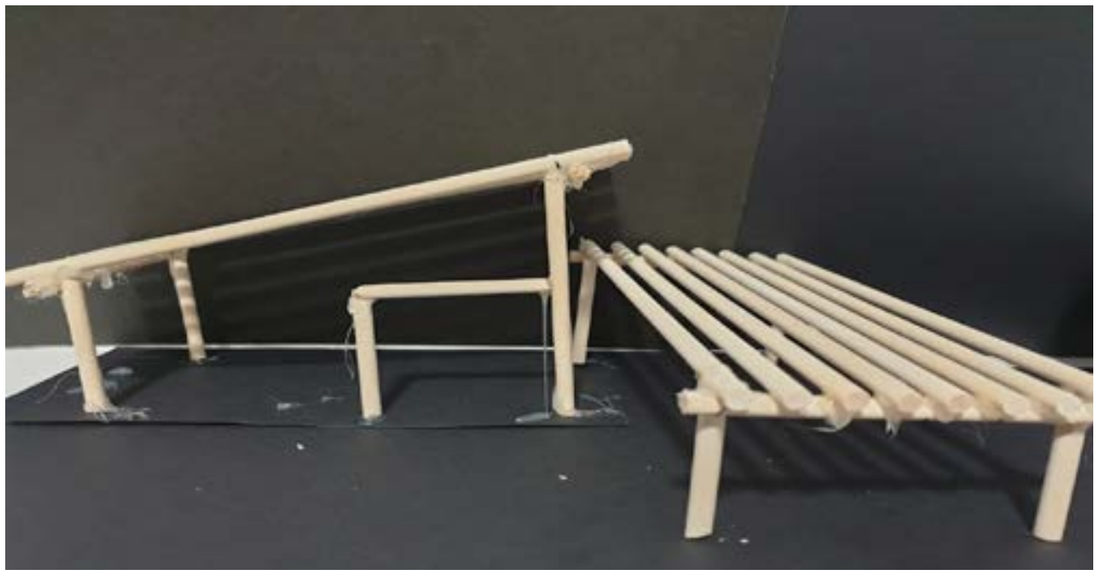
This is a model that I designed in the process of deigning the next I think I prefer this design because it has a more effortless quality to it.

In this model I am looking at cantilevered roofs I think it is more development for future projects rather than a model in itself- how much overhang to give a roof.

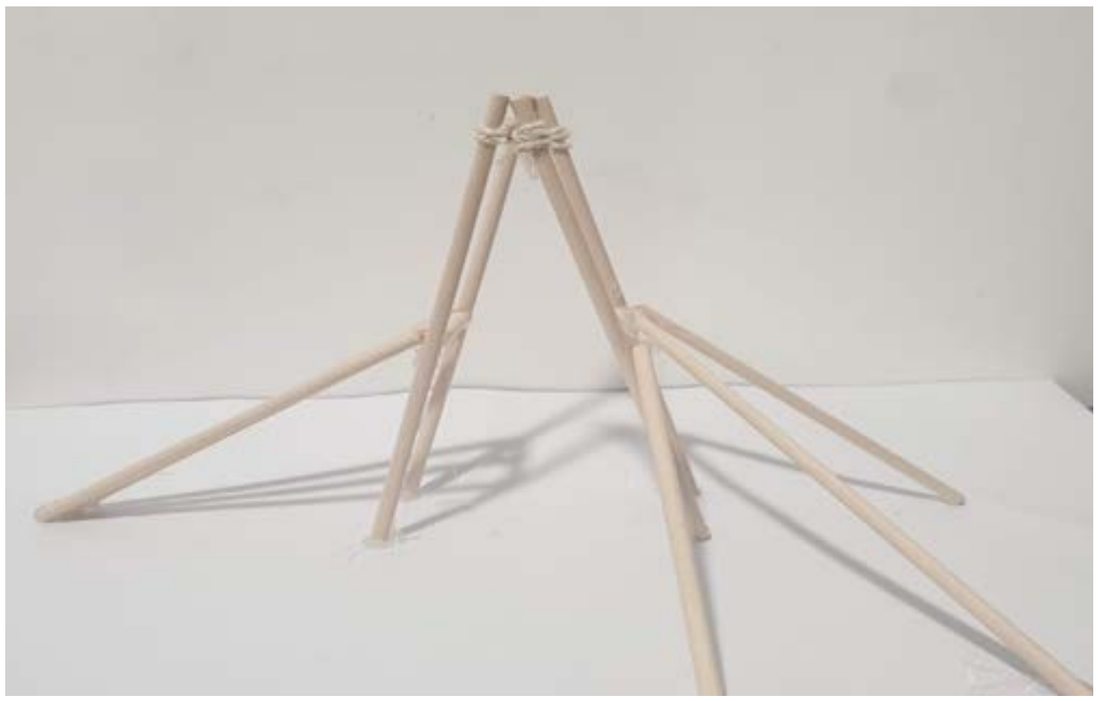
1.1- Project Presentation Page 5 of 6

This is my favourite planar model. It is a derivative of the previous model although using card.

1.1- Project Presentation Page 6 of 6

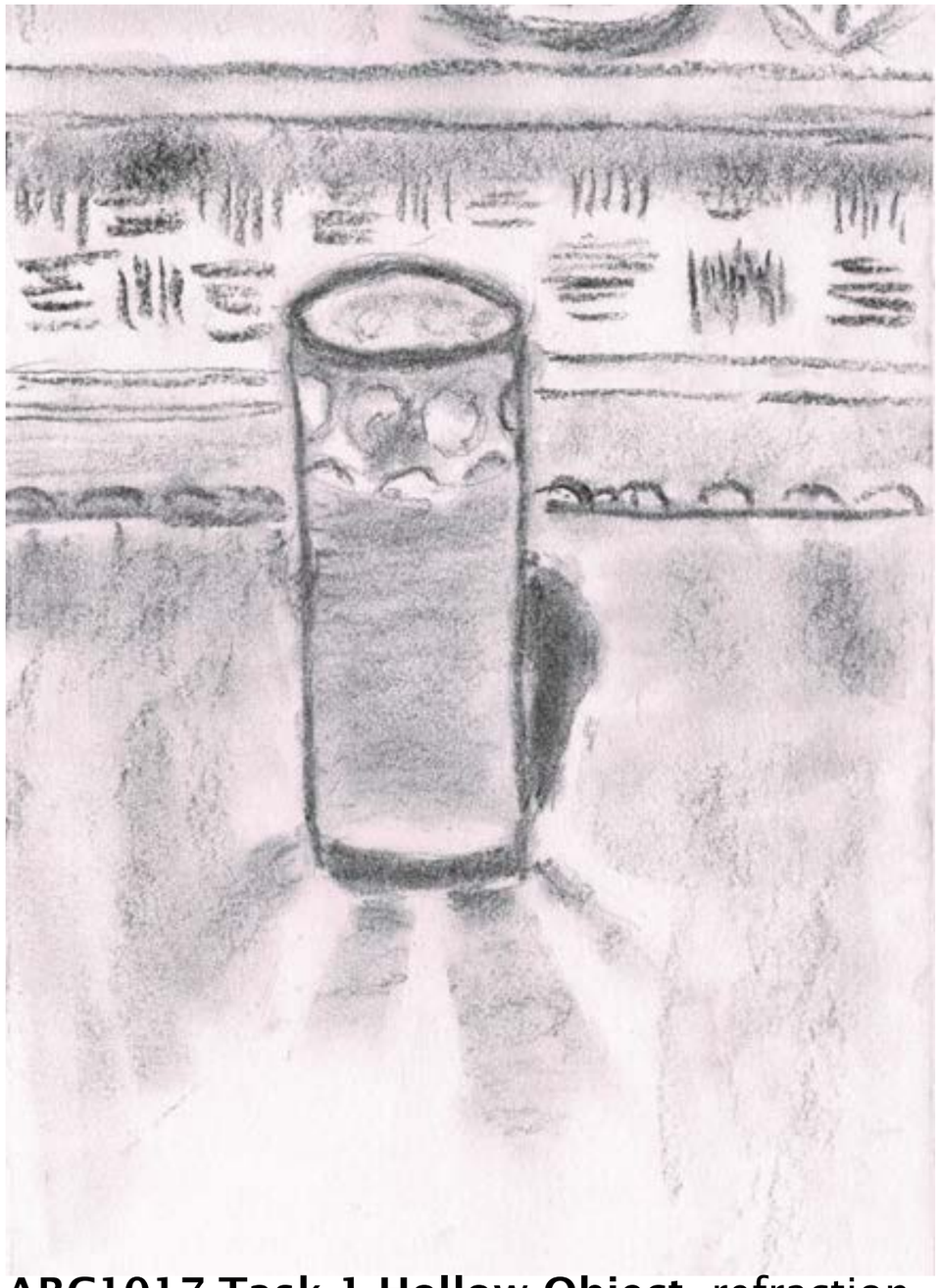


Planar was the most difficult language to perfect. This was based on my idea of the roof being dominated by beams.



Finally this is a model that has become one of my favourites for the project 1.1 I have moved away from the idea of vertical soma figure lines.

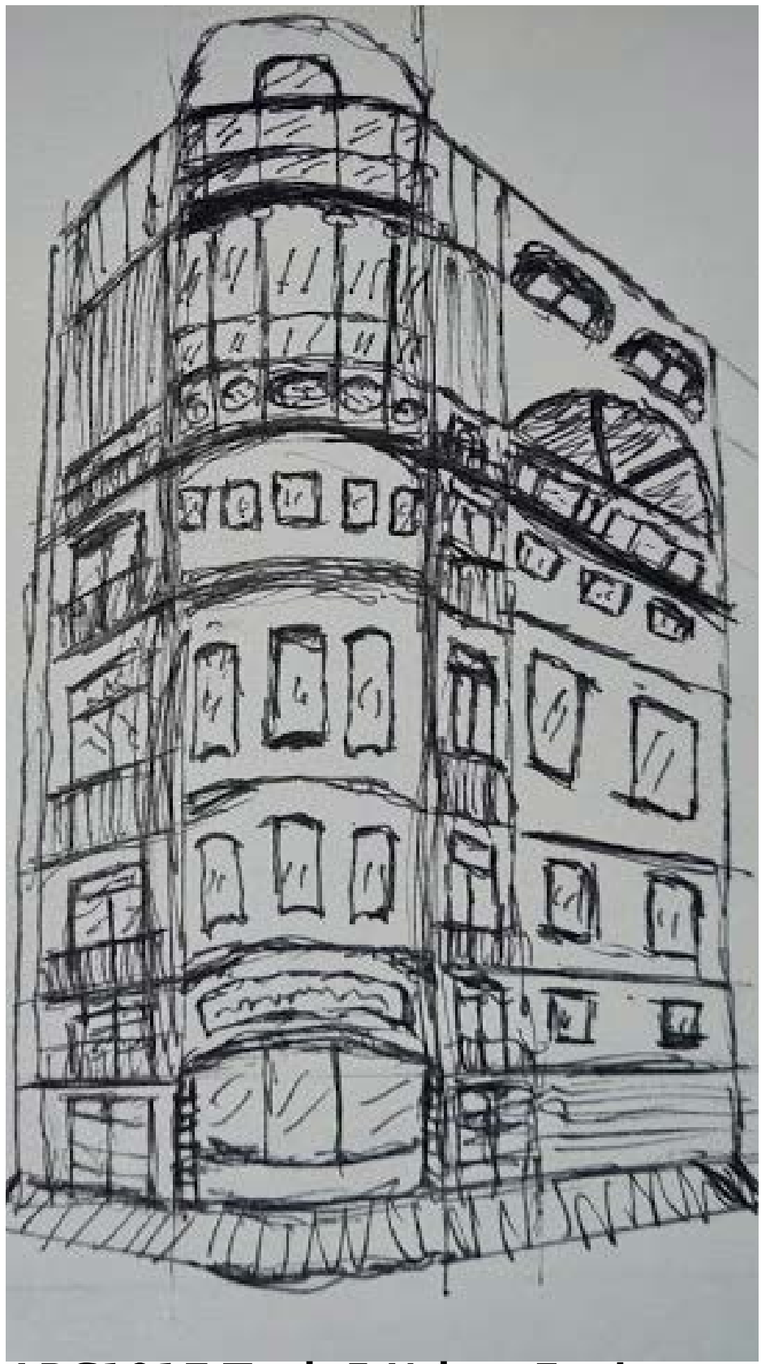
Sketchbook Pages 1 of 1



ARC1017 Task 1 Hollow Object- refraction of light onto table.

ARC1017 Task 4 Inhabitation of Space

Sketchbook Pages 2 of 2



ARC1017 Task 5 Urban Environment- 2 point perspective.