

This assessment is based on a now-expired version of the achievement standard and may not accurately reflect the content and practice of external assessments developed for 2024 onwards. No part of the candidate's evidence in this exemplar material may be presented in an external assessment for the purpose of gaining an NZQA qualification or award.



Level 1 Design and Visual Communication RAS 2023

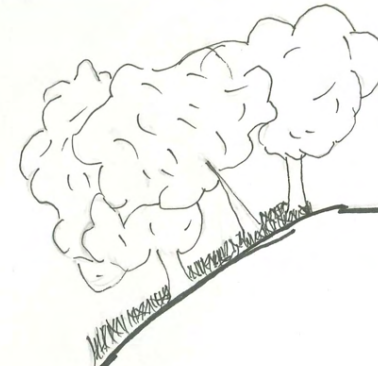
**92002 Develop product or spatial design ideas
informed by the consideration of people**

EXEMPLAR

Excellence

TOTAL 07

Site Analysis



North → South

Before European colonisation the Ohiwa Harbour was a very populated area. This area held a lot of food and was often referred to as 'the food basket of the people'. Ohiwa feed the Mataatua tribes: Te Whakatohea, Ngai Tuhoe, Ngati Awa.



West → East



North

This site has a large flat exposed area ideal for building a bach, constructing the building on piles will allow the baches occupants to take full advantage of the sea views to the left of the site. To the south of the site there is a bank covered in pohutukawa trees. The pohutukawa follows the property around to the east, creating a scenic backdrop for the bach.



South-West



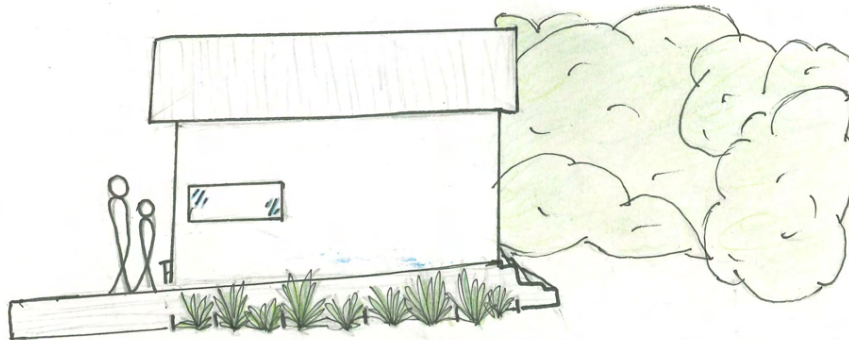
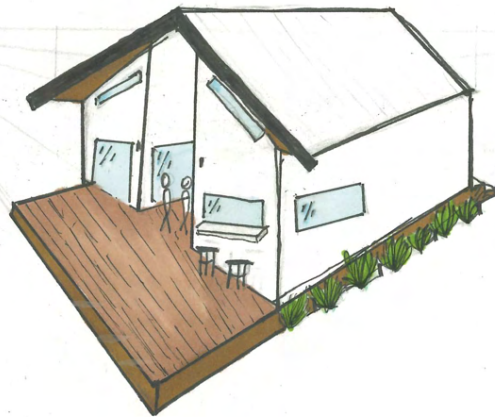
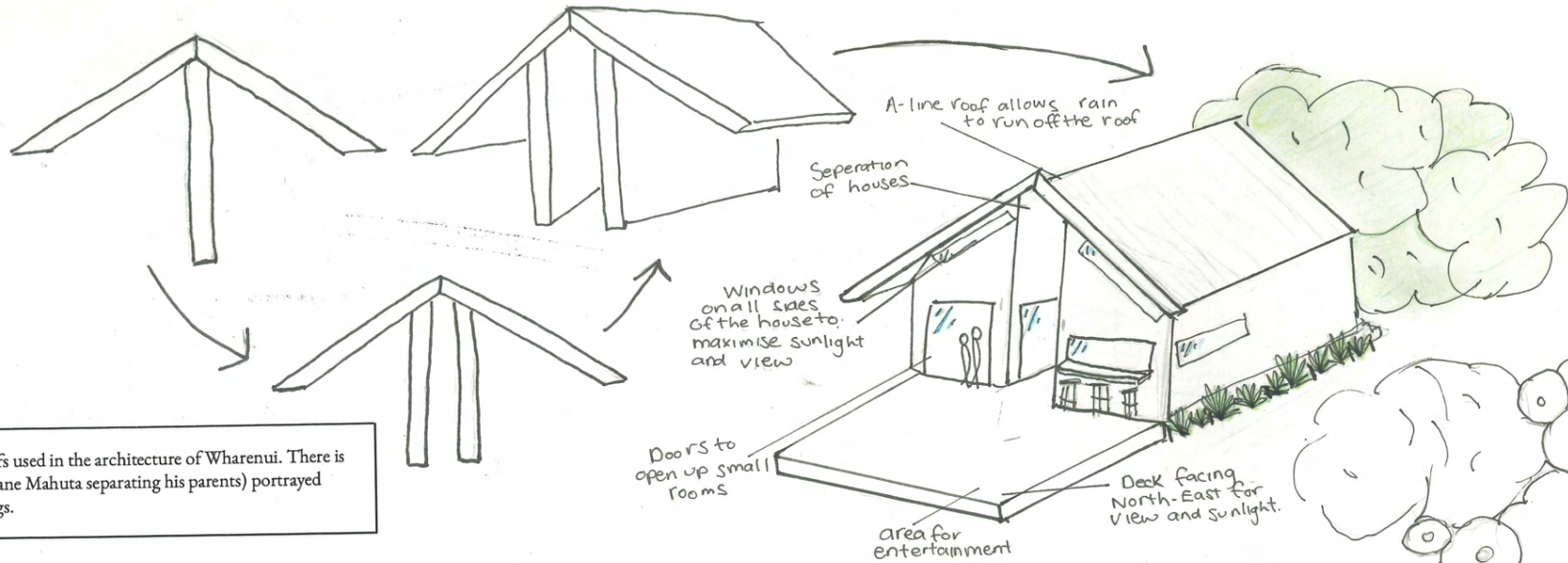
North



East



This design was inspired by the A-line roofs used in the architecture of Wharenui. There is also inspiration from the creation story (Tane Mahuta separating his parents) portrayed through the separation of the two buildings.



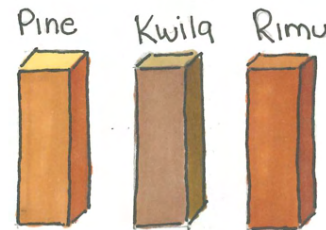
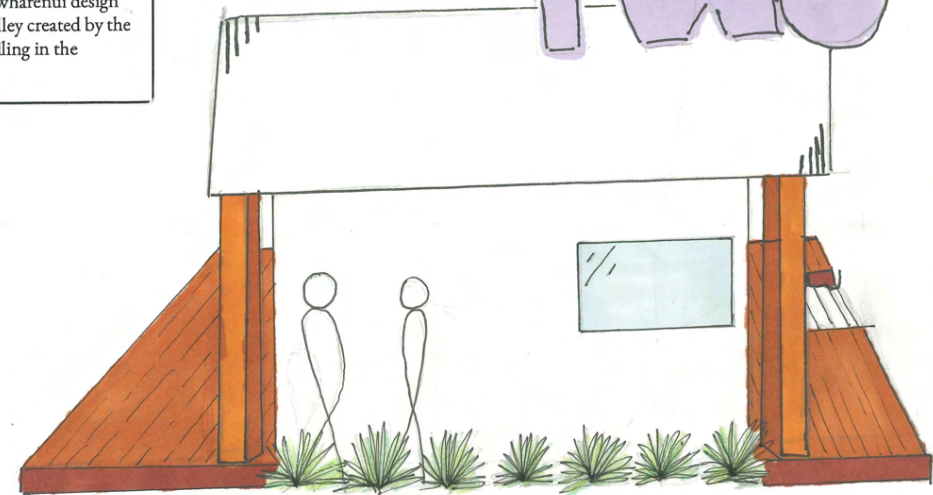
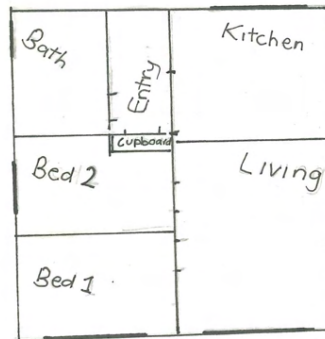
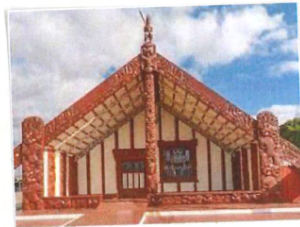
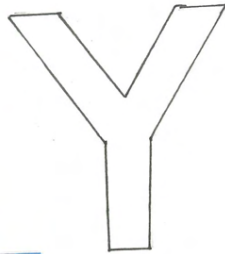
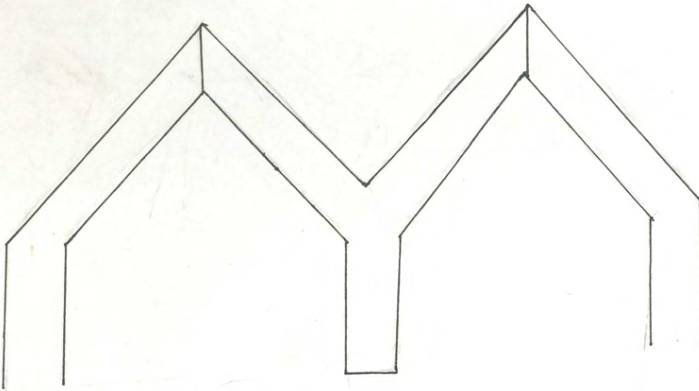
Concept ONE

Concept one is a simple design of two small buildings joint together by a A-line roof. This design consists of a 1 bed, 1 bath house with an open plan kitchen and lounge. The placement of the many windows takes advantage of both the sunlight as well as the sea views. The slanted windows near the roof line, mimic the standard roofline creating more visual movement while also serving the purpose of allowing natural light to shine through. The combination of the windows opens the space making it feel larger for the people to live in and enjoy. The large deck space in the front of the house allows the space to open up letting the people extend their living area.

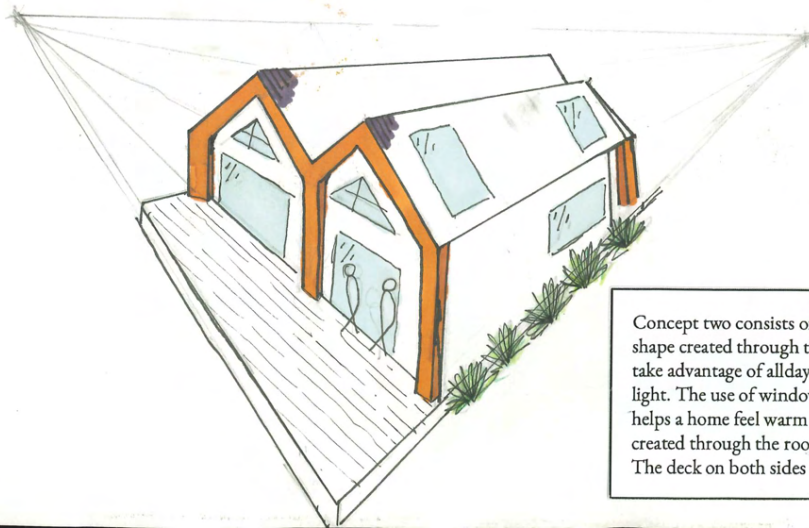
Concept

TWO

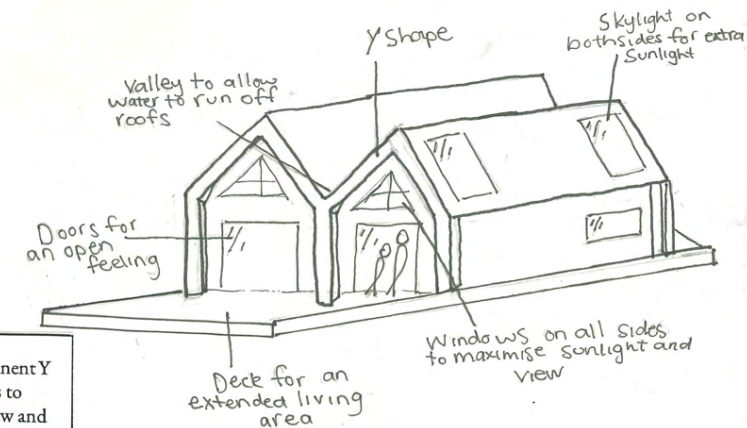
Inspired by A Y shape seen in Belinda George's Pukapuka road design this house shows both modern and visually appealing attributes. Each roofline has the common wharenui design which allows water to run off the roof. The valley created by the two buildings helps the water run instead of piling in the middle.



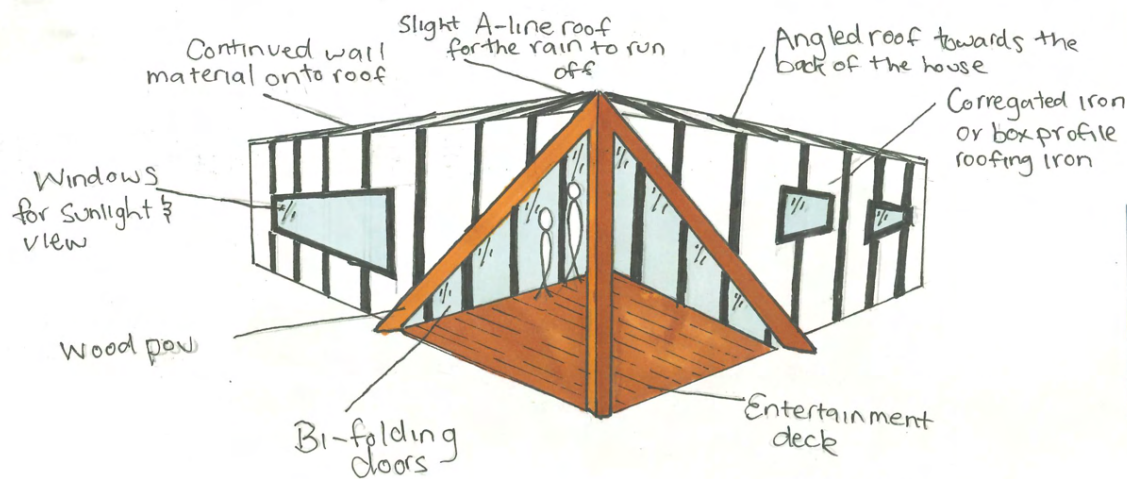
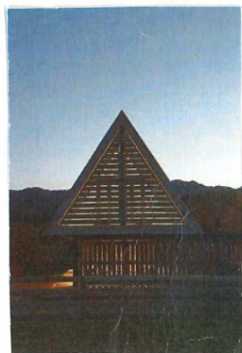
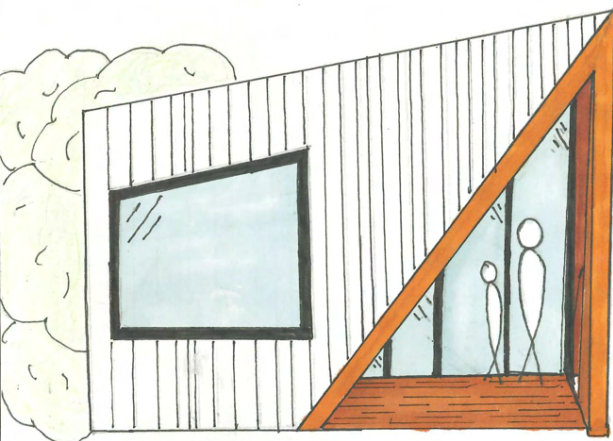
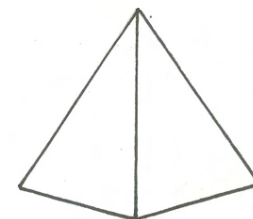
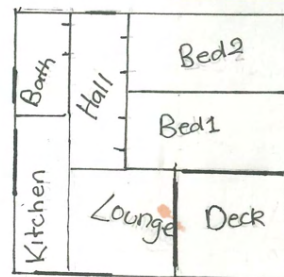
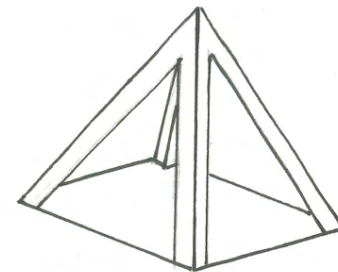
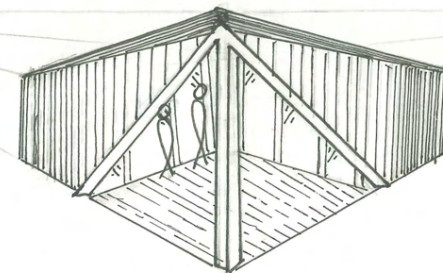
Possible Wood types



Concept two consists of two building merged to create a zig-zag roof line. There is a prominent Y shape created through the roof and a beam or pou. The house has 4 skylights on both sides to take advantage of all day sun. Each side of the house has windows to maximise the given view and light. The use of windows and skylights allows the house to fulfill the homey feeling. This feeling helps a home feel warm and comfortable for the people to enjoy. Each building has a frame created through the roofline this makes the house stand out creates a nice silhouette from afar. The deck on both sides of the building expands the house outwards to open up the house.



Concept Three

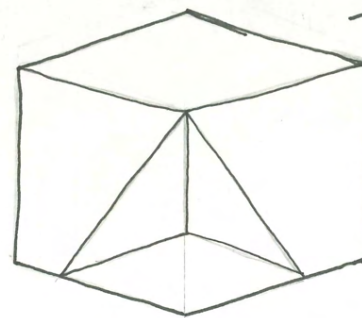
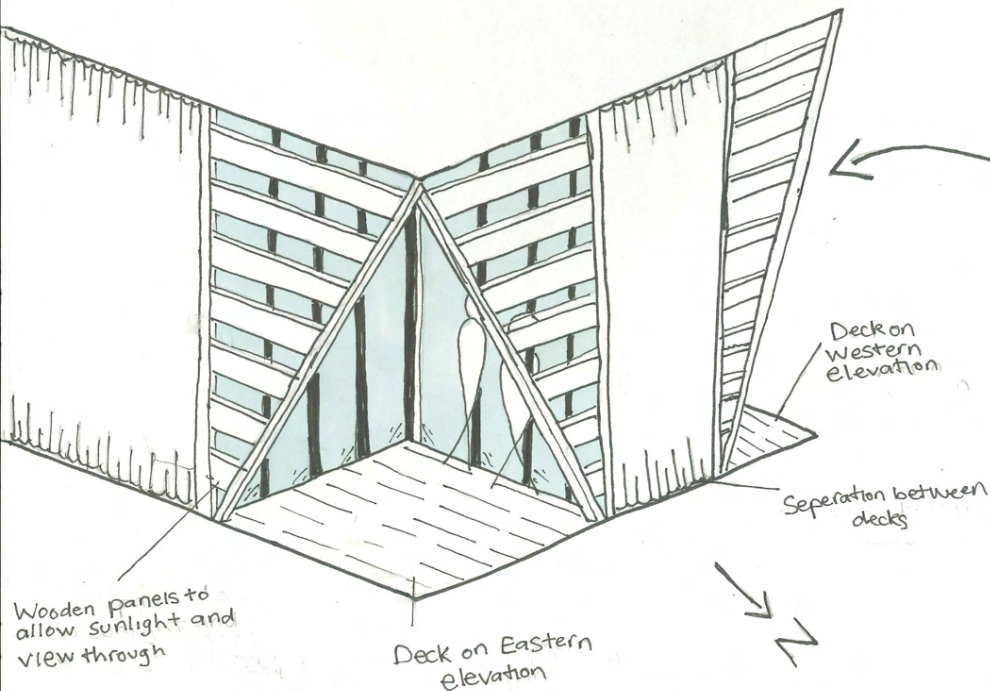


Concept three is large square bach, completed with a parshall enclosed entertainment deck. This extends off Bedroom one and the lounge through bi-folding doors. Convenient for entertaining and extending the lounge for future tenants. There are multiple windows placed on every side of the building, creating an open and bright feeling in every room. This building consists of 2 bed, 1 bath with and open kitchen and lounge. An open plan design allows you to interact with family or guests in the lounge while in the kitchen vise versa. The angled roof and slight A-line roof create and easy and convenient way for water to effectively run off the roof.

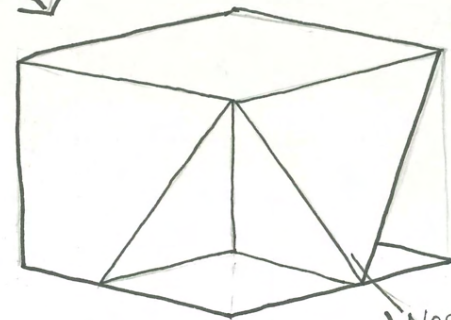
The inspiration for concept three was a modern image developed from Maori architecture. This design has a prominent A-line roof which I then progressed into a pyramid. This created the design of the entertainment deck. An image which had a extensive impact on my design was created from Toa Architects. This design shows the shape idea with wooden pou/beams in front. There is a link to the maori creation story through the separation created by the pou on the northern and western elevation. The pou opens up the deck area to bring the atmosphere around the building into the design.

Exterior Form

Development

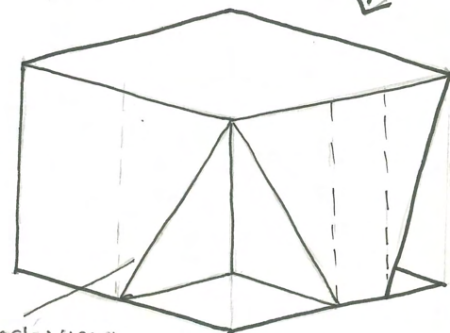


Original Form



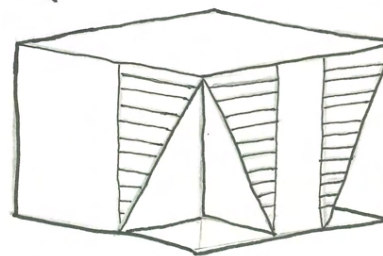
Added deck

No space

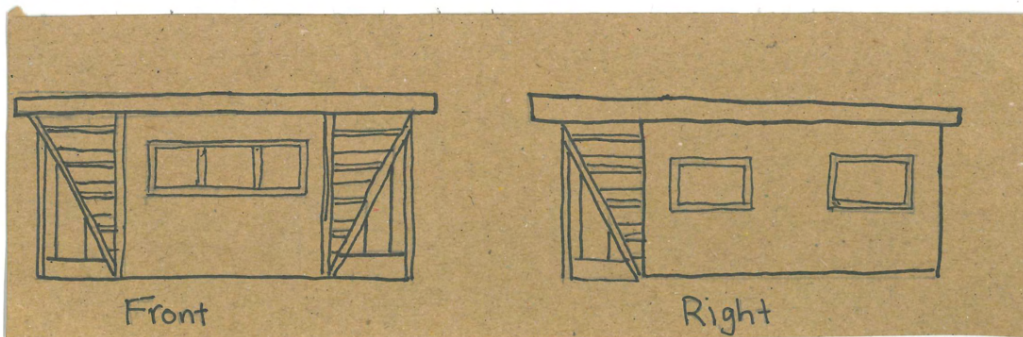
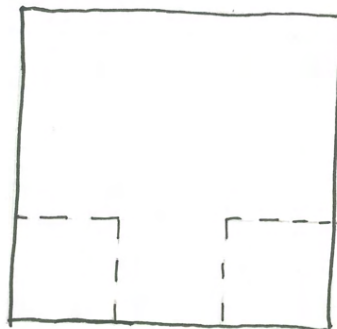


Block view
of
Sunlight

Add space between
deck



Panels to allow view
of
Sunlight through.



Exterior materials

Material representation - Rock to represent Papatuanuku

- Windows to represent Ranginui

- Wood relating back to Maori architecture

- Panels/Poles representing the Ohiwa Kai basket



Slate

Pros

- Durable
- Aesthetically pleasing
- long lasting

Cons

- Cost
- Maintenance
- Weight
- Fragile

Aluminium

Pros

- low maintenance
- Corrosion resistant
- energy efficient
- long-lasting

Cons

- Cost
- Noisy
- Prone to damage



Aluminium

Pros

- low maintenance
- Corrosion resistant
- energy efficient

Cons

- Prone to dents/scratches
- Noisy
- Costly

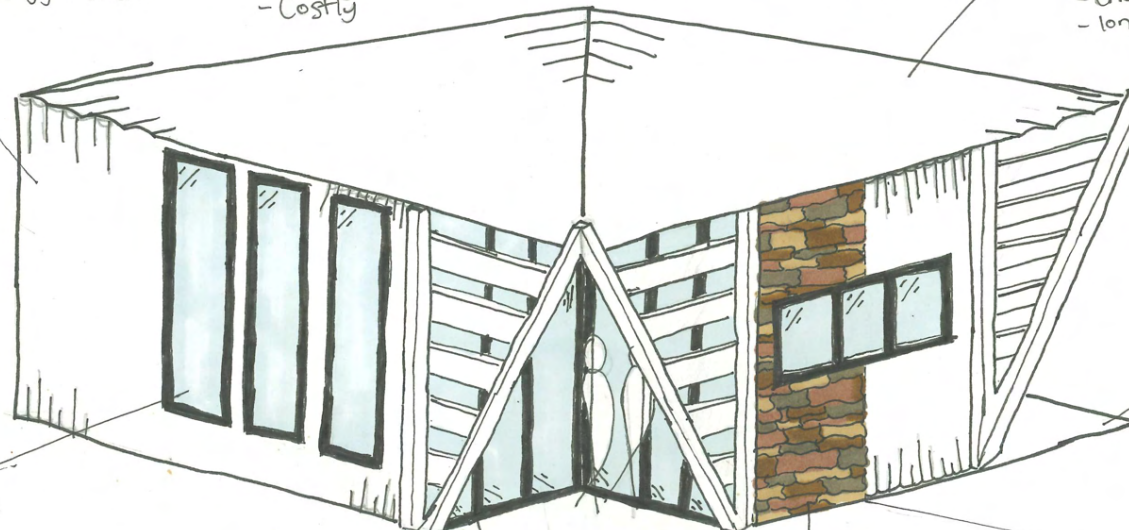
Brick

Pros

- eco-friendly
- low-maintenance
- Durable

Cons

- Expensive
- Structural concerns
- Repairs.



Decks will be same material as poles/panels

Deciding if the area will be too busy. If so the material of other walls will continue

Double Glazed Glass

A very energy efficient material. It keeps heat in or out, keeps sound out and reduces condensation. All important for the area the house will be situated at.

Wood types



Pine



Hickory



Kwila

Black aluminium window frames



River Rock



Prairie Bluff

Stone Designs



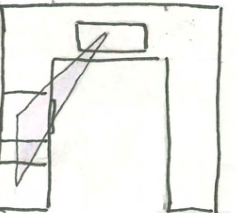
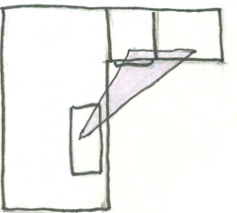
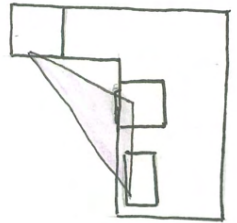
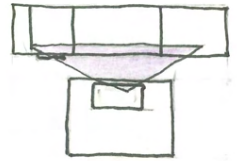
Spitface

Developments

Kitchen Layout

Efficiency Triangle

The placement of the appliances in this kitchen are impacted from the efficiency triangle. The efficiency triangle is created from essential stations of the kitchen; Oven, Fridge, Sink. This creates an efficient space and reduces back and forth walking while cooking and preparing food. This is effective in a small kitchen which means that the kitchen does not require much space to effectively and efficiently work. This is important because the future residents are able to enjoy entertaining, spending less time in the kitchen and more time spending with the guests.



Galley Kitchen

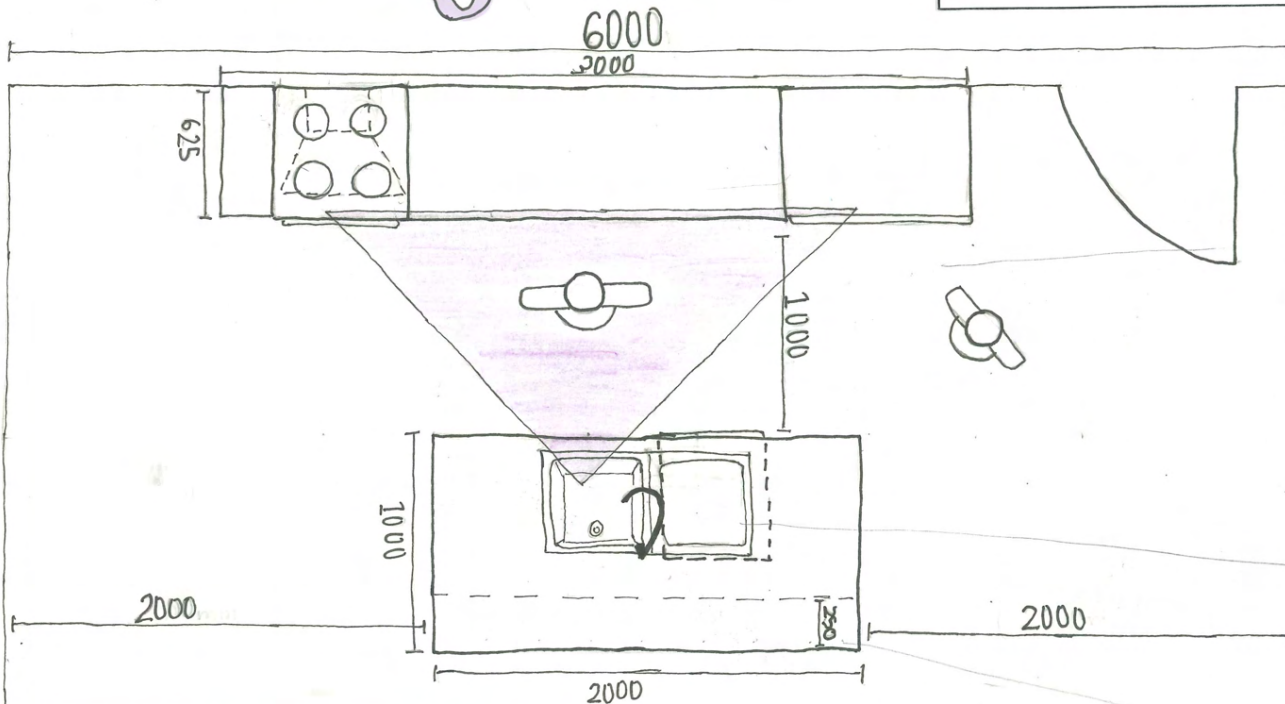
The shape of the Kitchen is designed specifically with people/Future residents in mind. The layout allows maximum space for walking traffic between and around the counters. This design includes a kitchen island.

Sink and Dishwasher

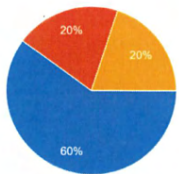
The placement of the sink and dishwasher is efficient because it allows dishes to be quickly rinsed before being placed in the dishwasher. This reduces the amount of water from getting on the ground.

The Kitchen Island allows:

- Seating
 - Extra Storage space
 - Extra bench space
 - An area for the Sink
- and it also creates space for future residents to enjoy using the kitchen.

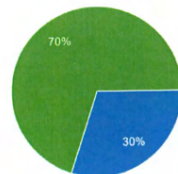


4. Which Kitchen layout will best fit the space?
10 responses



● Galley Kitchen
● Single Wall
● Island Kitchen

2. Which function is the most important in the kitchen?
10 responses



● Maintenance
● Sustainability
● Cost
● Comfort

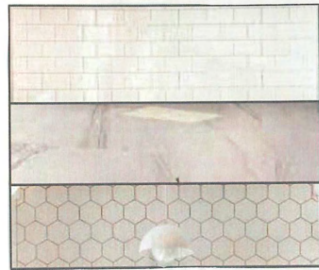
1:25

measurements in millimetres (mm)

Interior material

Development

White painted walls to open up the small area.
Paint is cheaper and is easy application rather than wallpaper



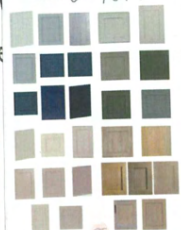
Potential Backsplashes

A Comparison of Popular Kitchen Countertop Materials

MATERIAL	COMPOSITION	Beautiful/Visually Appealing	Scratch/Chip/Resistant	Heat Resistant	Low Maintenance	Naturally Durable	Sustainable/Eco-friendly	Affordability
Butcher Block	Wood	***	**	**	**	**	**	***
Marble	Natural stone	***	*	***	*	***	*	*
Laminate	Particle board & plastic	**	*	*	***	*	*	***

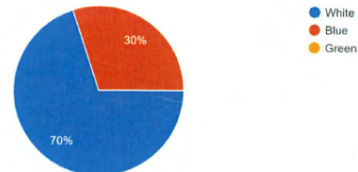


2022 Cabinet Colors



Cabinet Colour Options

1. What is the main colours you feel will elevate a kitchen near the beach?
10 responses



Gold details



Stainless Steel appliances

Rustic wood barn doors to bring character into the house

A lighter stained wood than floor

Flooring

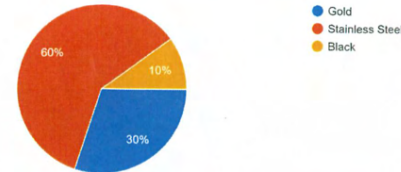
Door

Best Stains for Pine



Counter Stool options

3. What materials will elevate the hardware in a Kitchen?
10 responses

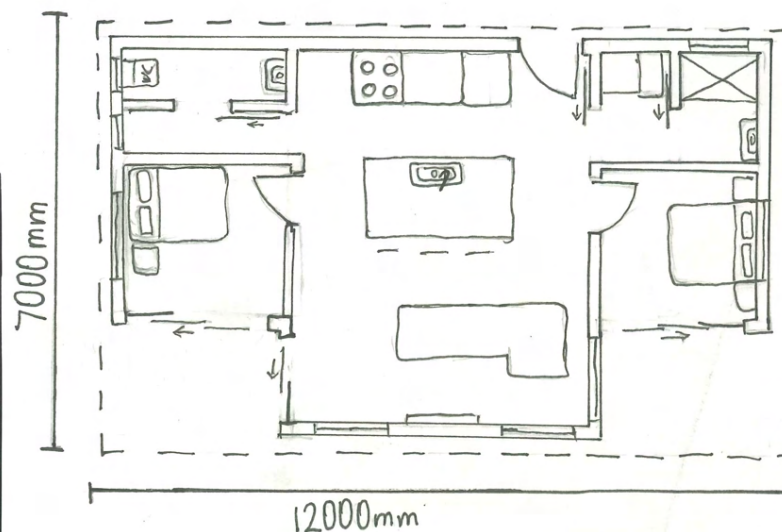
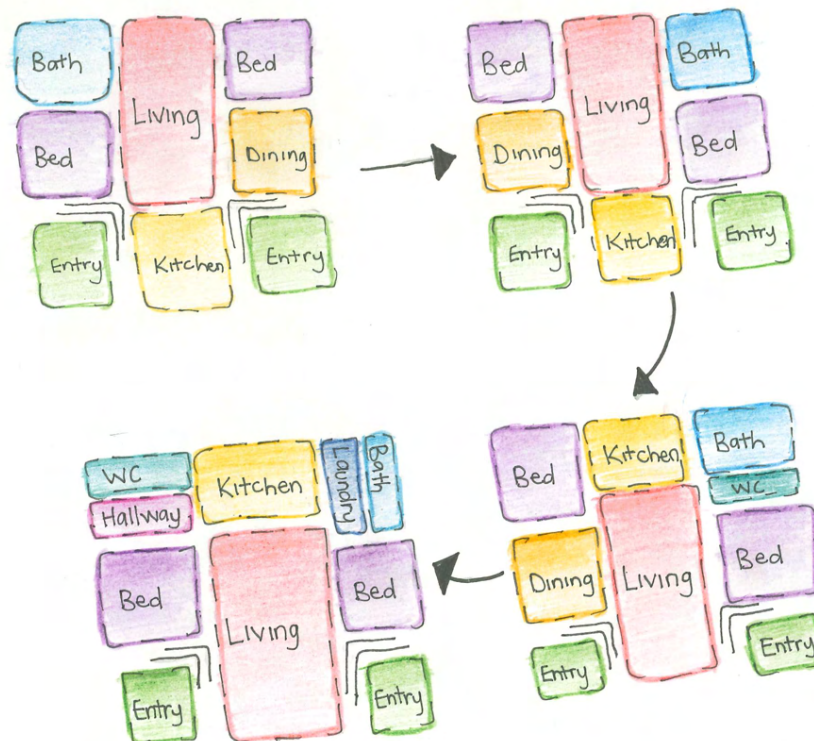
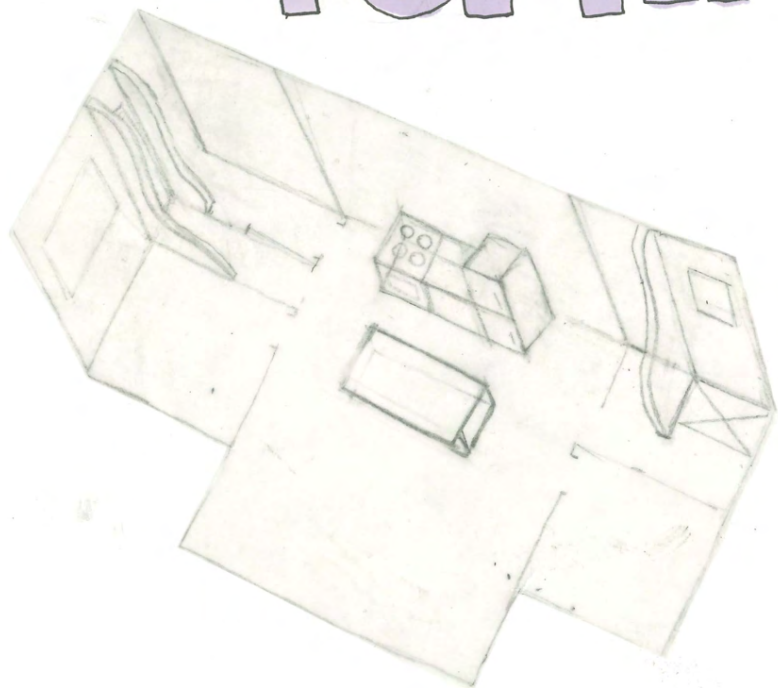


Modern Pendant Lights



Potential lights

Interior Form



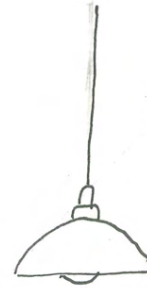
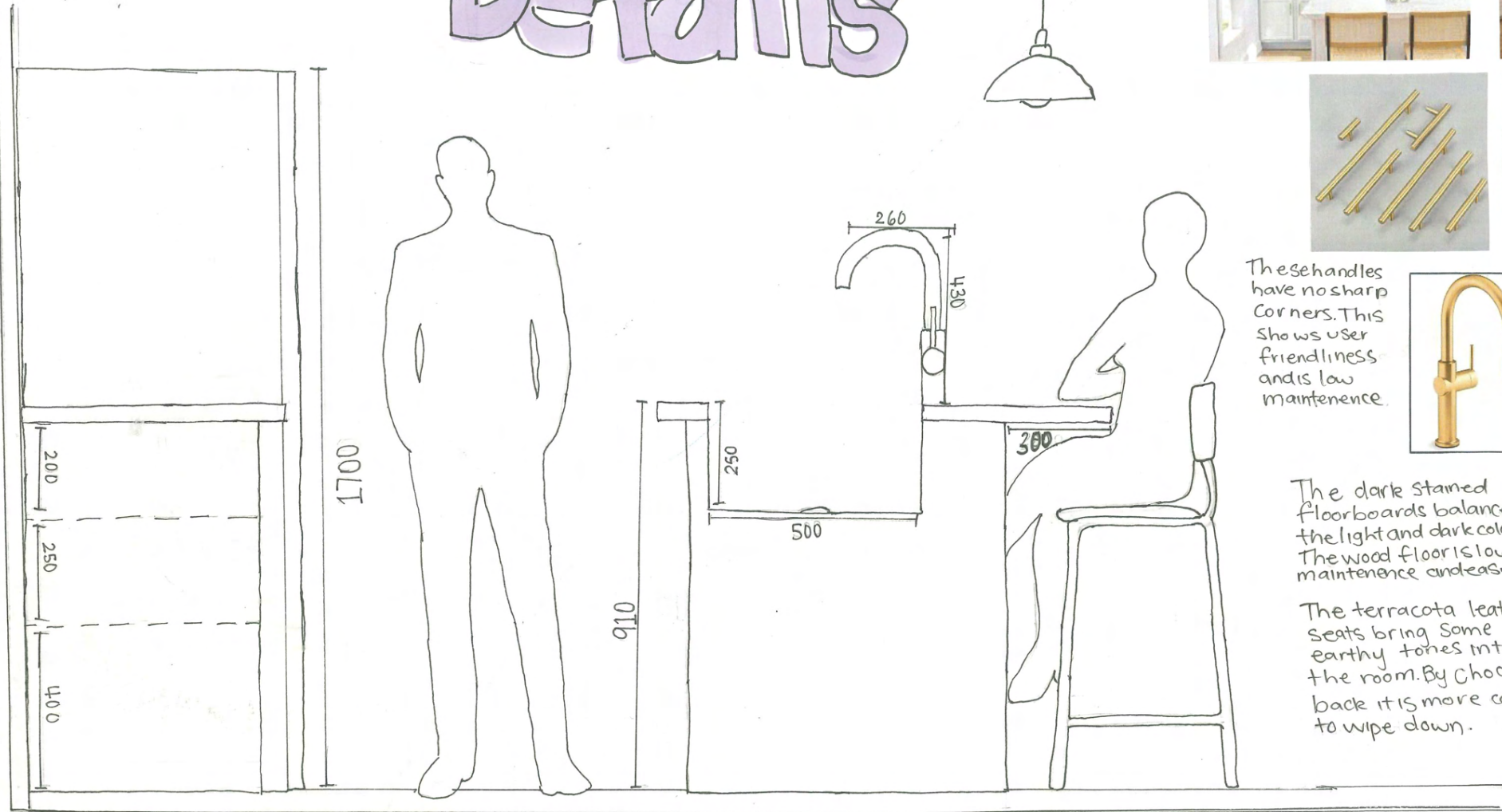
The development of the interior form has been influenced by people, throughout this process I took into account how people would use and enjoy the spaces. The bach has been designed to create a homey an inviting feeling for the future tenants, while also being convenient in different situations. The features used to fulfil this requirement are:

- Sliding doors in Laundry and Bathroom due to limited space.
- Bi-folding doors in bedroom to allow air flow.
- All day natural light in living room.
- Window/doors placements take advantage of view.
- Open plan living to open up the small area.
- Separate Bathroom and Toilet for convenience.
- Storage to keep the house clean and organised.
- Back door for easy access to the rear of the house.
- Kitchen island to take advantage of limited space.
- Hallway to separate the kitchen and the toilet.
- Efficiency triangle.

Development

Kitchen

Details



These handles have no sharp corners. This shows user friendliness and is low maintenance.



The dark stained floorboards balances the light and dark colours. The wood floor is low maintenance and easy to clean.



The terracotta leather seats bring some earthy tones into the room. By choosing a chair with a back it is more comfortable and easier to wipe down.

The simply white cabinetry and countertop gives the house a clean simple aesthetic. The brick like backsplash brings texture and detail into the kitchen. The gold details brings subtle colour to balance the array of white materials.

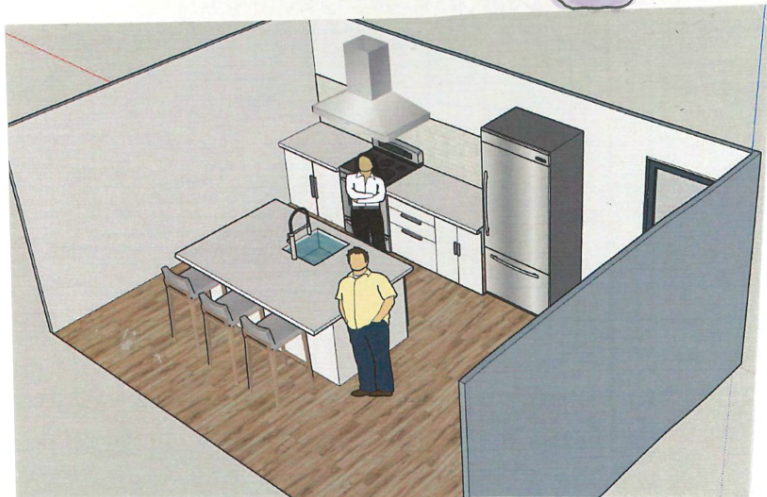
I have researched and compared different measurements to ensure the best fit for future residents. These measurements allow user friendliness, comfort and ergonomics to make the kitchen easy to use.

Scale:

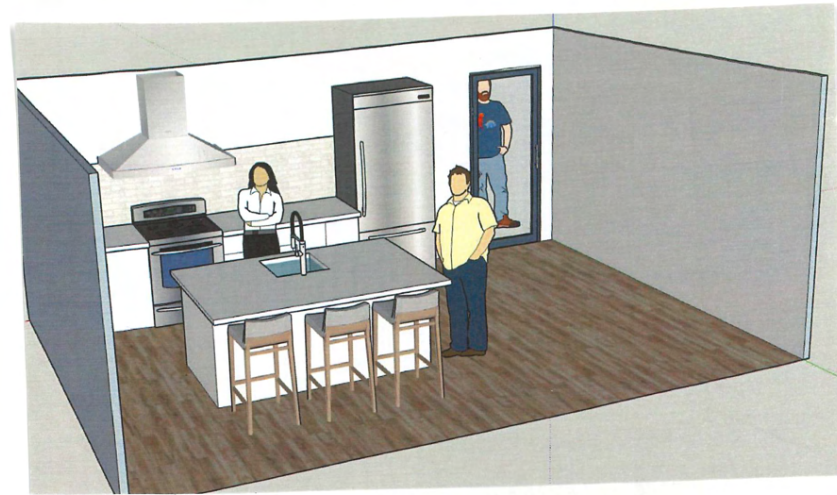
1:10

measurements in millimetres (mm)

Final Kitchen Design



Right Side

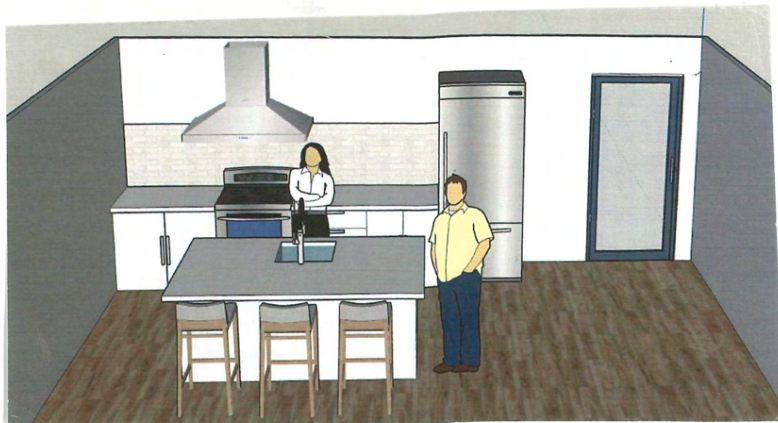


I used the 3D modelling software, Sketchup to help me find a final design with people in mind. This design allows user friendliness, ergonomics while being aesthetically pleasing. These are important for the future residents to enjoy their space.

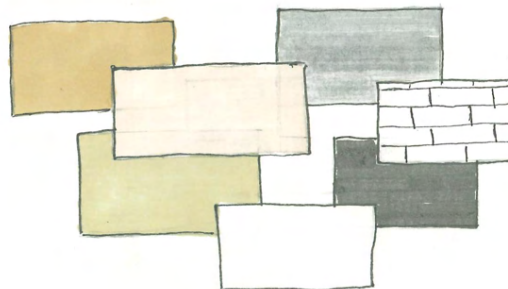
The changes I made after seeing all my design options and measurements together were:

- Colour Scheme
- Back bench length
- Placement of fridge
- Barstool design and colour
- Hardware colour

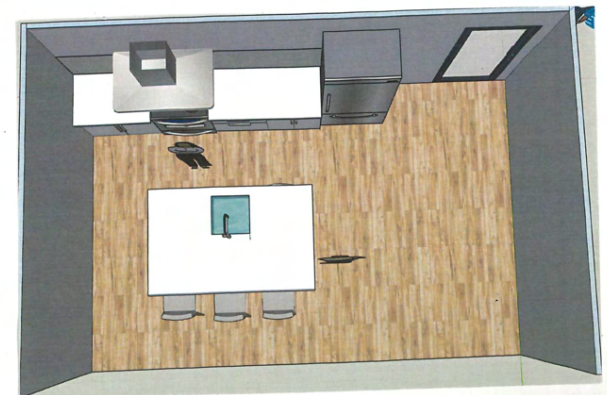
By placing all my colour options together I noticed that the colours clashed. To balance the colours I replaced the gold hardware with stainless steel to match the appliances. I added more storage space and bench space to the left of the back bench, which is important to prevent clutter and allow for things to be stored out of sight. To contrast the colours of the kitchen I changed the colour and design of the bar stool. I decided on changing the chair keeping the back rest aspect as it provides comfort for the future residents, this change contrasts and balances the rest of the colours and aspects of the design creating a visually moving product.



Front

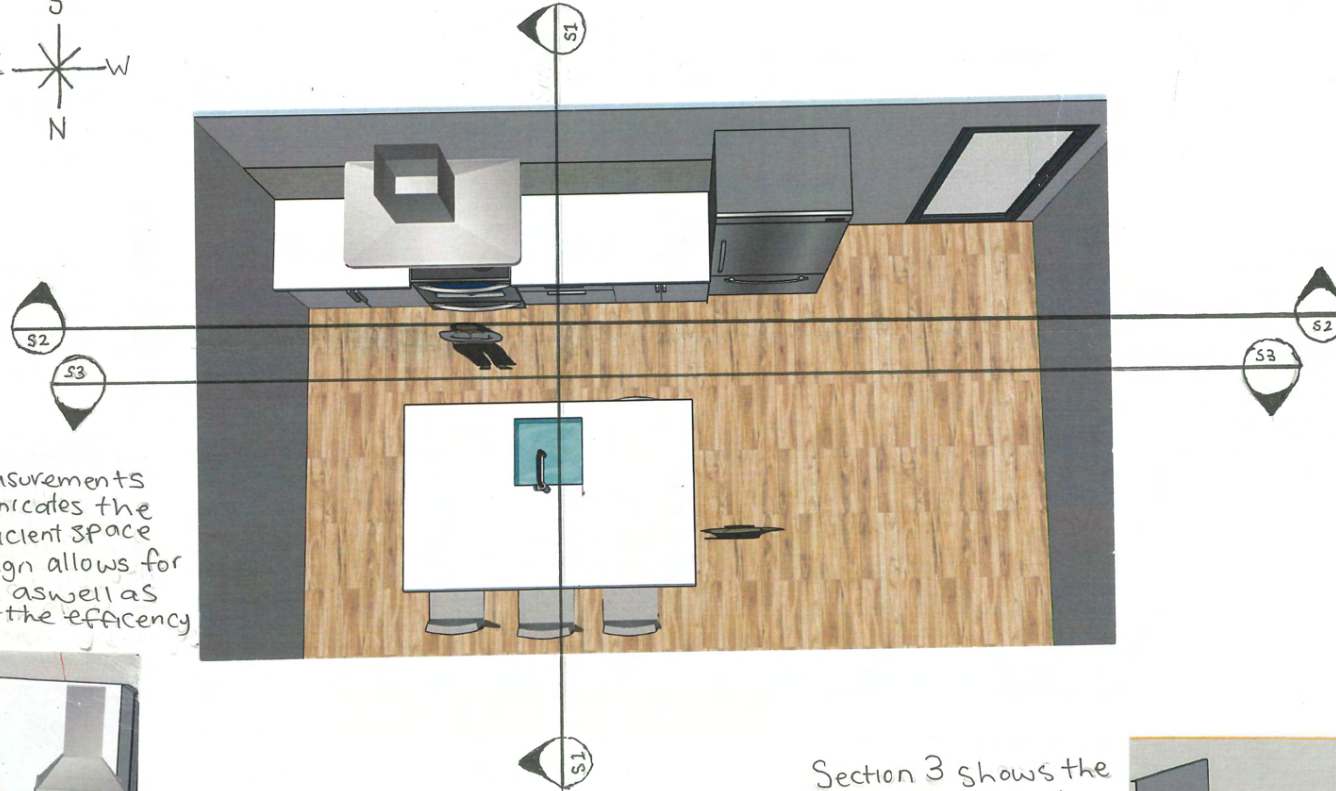
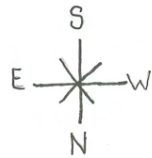
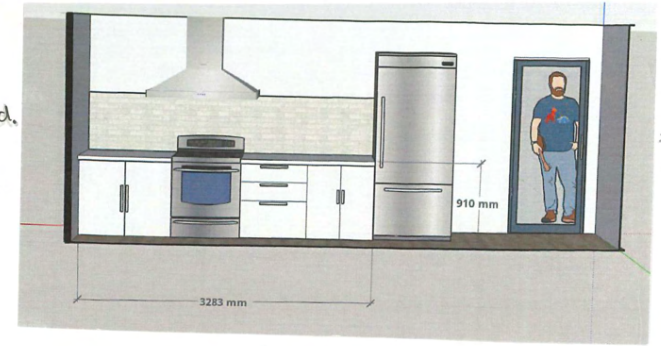


Final Colour Palette

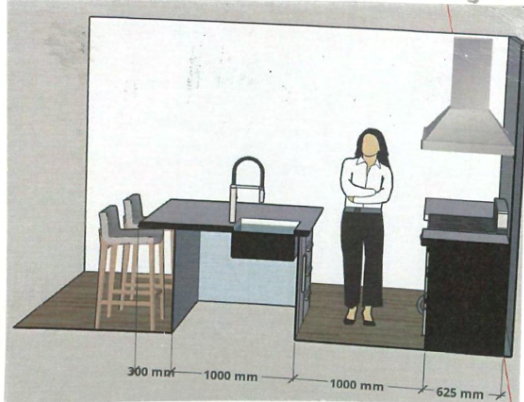


Section Detail

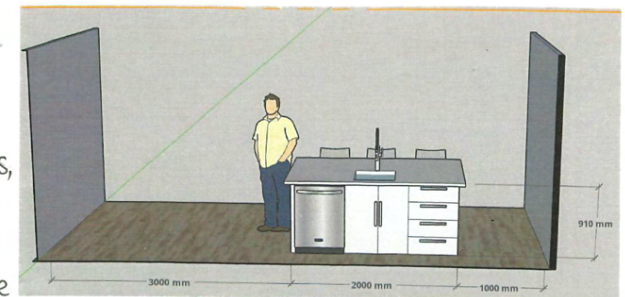
Section 2 provides a comprehensive view of the kitchen highlighting the layout without the island. This allows prospective residents to appreciate the abundance of comfort and storage space.



Section 1 shows the measurements in the kitchen, this communicates the importance of having efficient space between counters. This design allows for comfort and accessibility as well as being compact enough for the efficiency triangle to work.



Section 3 shows the the southern side of the island, displaying the draws and cupboard's designs, as well as the dishwasher. It also communicates the measurements more clearly than the Plan View.





South East Perspective

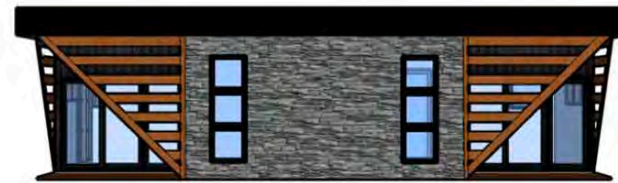
Evaluation

At the beginning of this design project, I researched and developed different concepts and influences to best fit the future residents through functions and aesthetics. I researched Maori Architecture and Maori Creation Story to bring in history and culture into a modern design. I noticed a prominent triangular roofline, patterns and wood. With the knowledge of this research I was able to design three concepts. By researching a more modern architecture I have been able to intertwine both a historical and modern aesthetic. Belinda George's designs helped me understand the importance of the exterior design in relation to people.

To use the environment I have positioned the house to incorporate the sunlight, view and surrounding environment. This is going to strengthen the visual movement, user friendliness and maintenance.

I have researched and compared different materials, gathering an understanding of the pros and cons of using them in this coastal environment. The materials in this design are chosen with influence of the environment's colours and materials to blend in. These materials are also extremely durable to withstand the coastal environment, different seasons and weather.

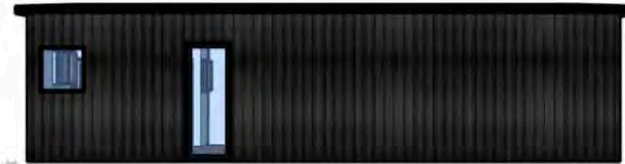
Ohiwa Bach Design



North Elevation



East Elevation



South Elevation



West Elevation



South West Perspective

Excellence

Subject: Design and Visual Communication

Standard: 92002

Total score: 07

Grade score	Marker commentary
E7	<p>This submission involves designing a bach for a specific site near Ohiwa Harbour. Three different ideas are shown at the start that are clearly related to the place both visually and through notes. The notes also relate the ideas to people who will be using the bach. Concept three has been selected to develop further.</p> <p>A sequence of visuals shows some changes to the exterior form that make improvements in relation to site conditions. An increased level of detail can be seen in the sketch of the exterior form. However, showing the exterior form from a variety of viewpoints would be helpful in showing progression more convincingly. Further detail is added to the building by showing how selected materials will be incorporated. The interior layout of the space is considered, and notes explain how this has been improved to create a good experience for people. The visuals show both 2D layouts and a 3D sketch of the whole interior and this helps to convey the experience of the interior. The ergonomic experience of the kitchen space is shown very thoroughly.</p> <p>The final design has been shown very clearly on its site and includes all elevations of the bach. This conveys the experience of the design well, although adding some interior views at the end would improve understanding of how the interior spatial experience of the bach connects to the exterior.</p>

This assessment is based on a now-expired version of the achievement standard and may not accurately reflect the content and practice of external assessments developed for 2024 onwards. No part of the candidate's evidence in this exemplar material may be presented in an external assessment for the purpose of gaining an NZQA qualification or award.



Level 1 Design and Visual Communication RAS 2023

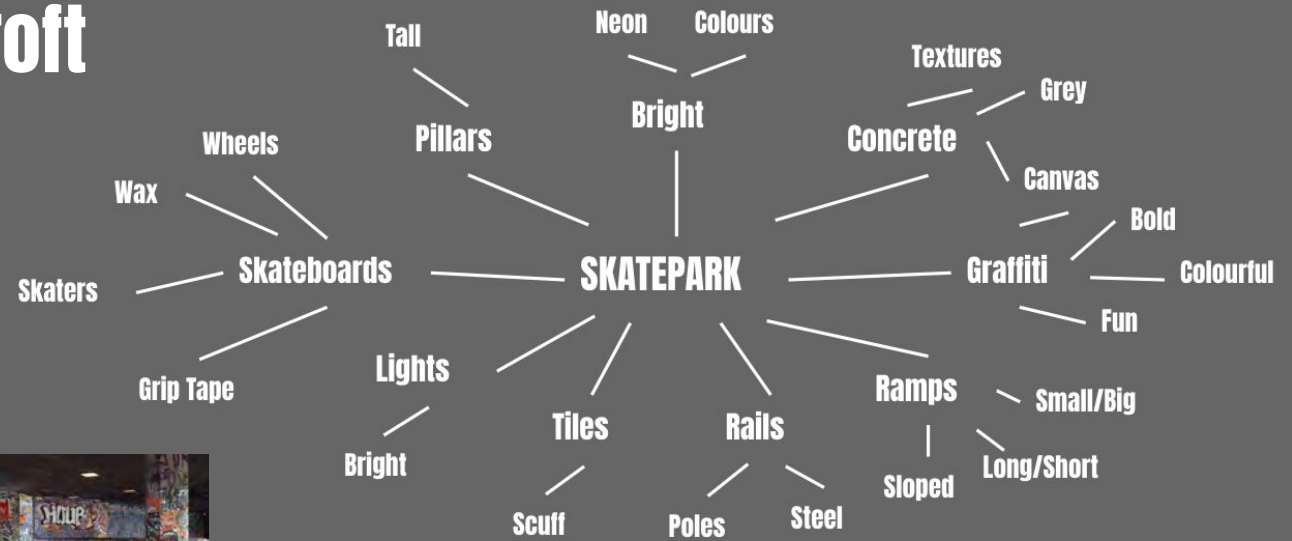
**92002 Develop product or spatial design ideas
informed by the consideration of people**

EXEMPLAR

Excellence

TOTAL 07

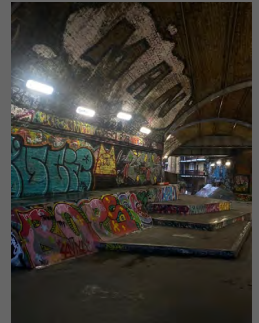
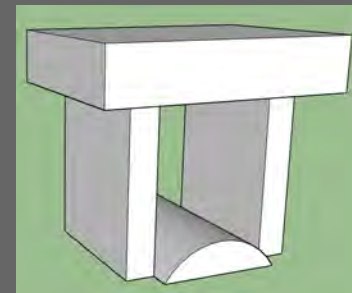
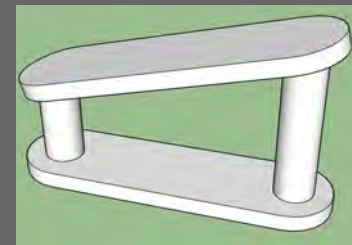
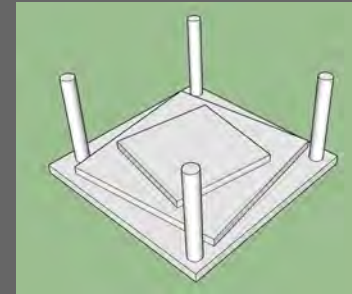
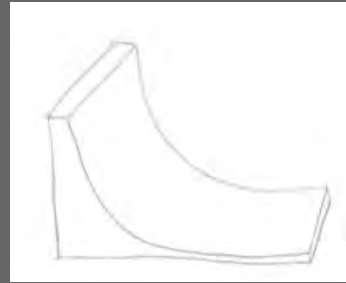
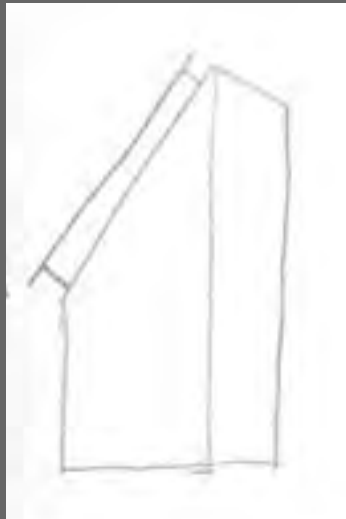
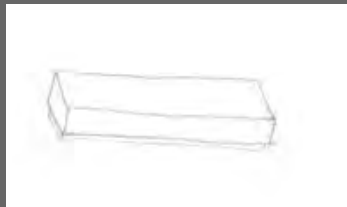
SouthBank Center Undercroft



Inspiration Images

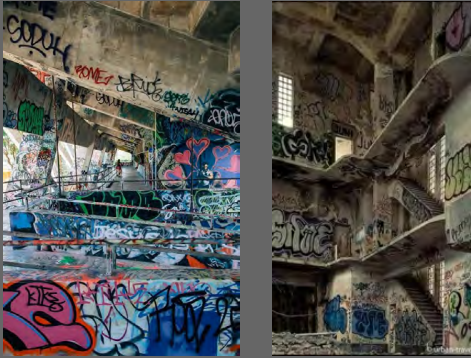


Preliminary Forms

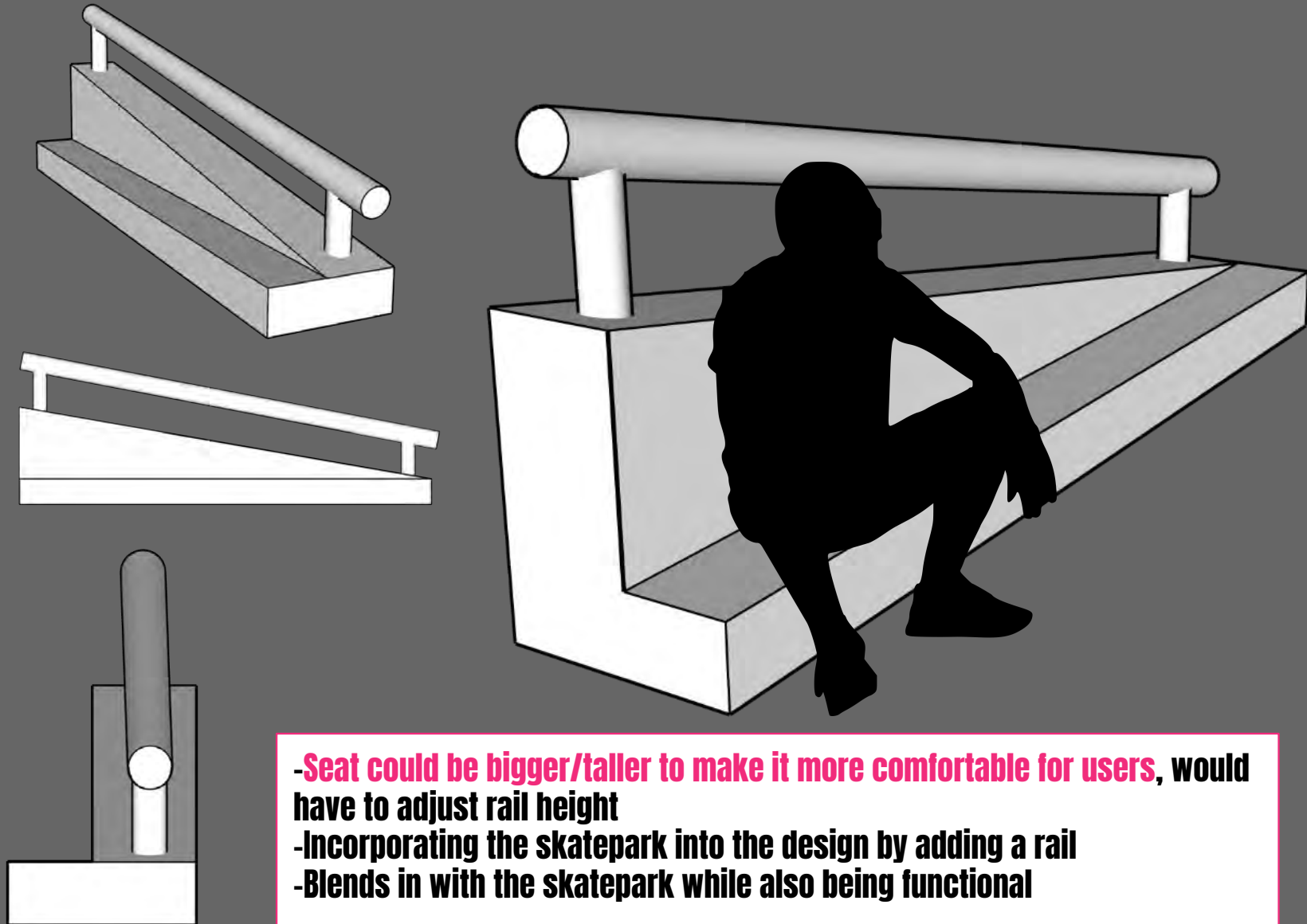


Initial Idea 1

Inspiration Images



Inspiration Drawing



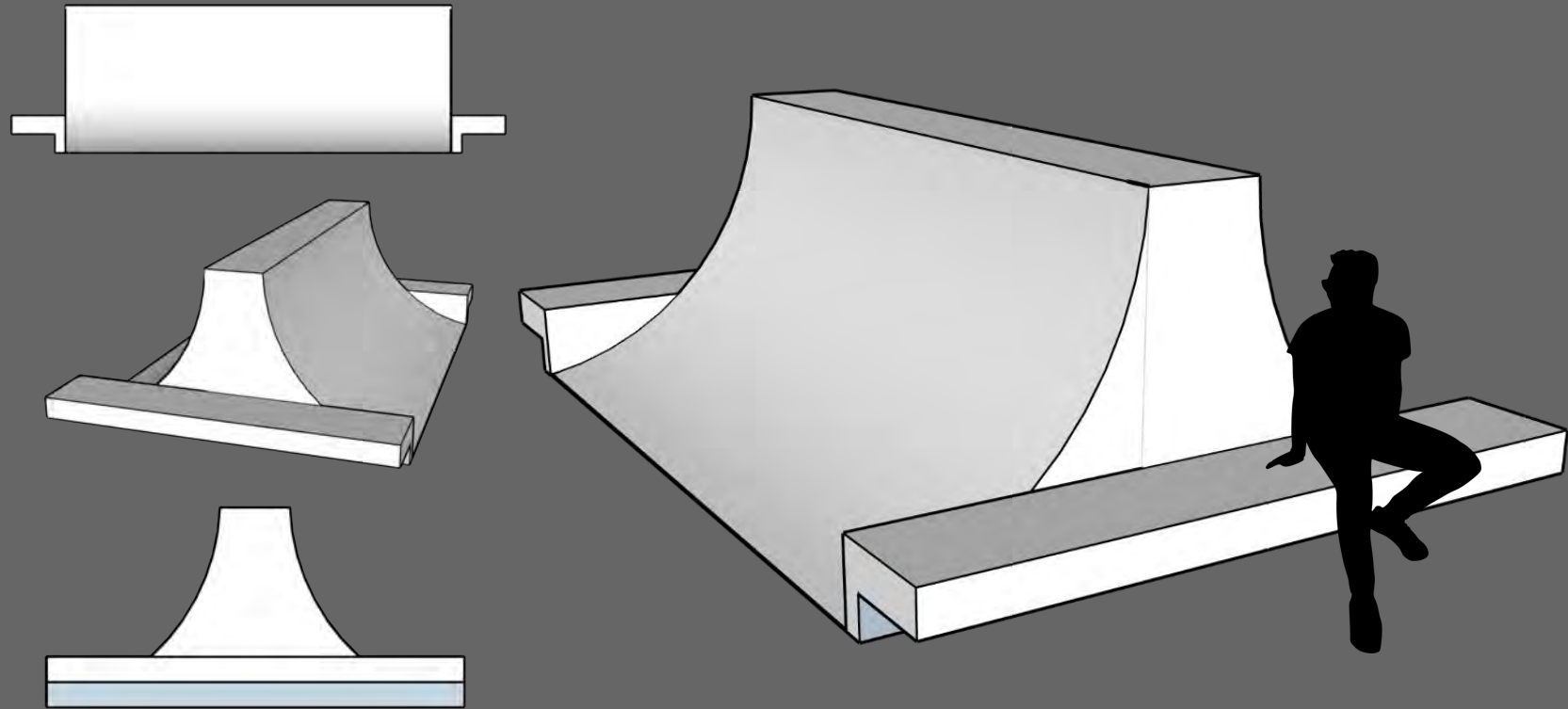
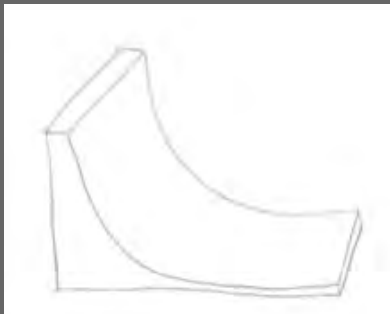
- Seat could be bigger/taller to make it more comfortable for users, would have to adjust rail height
- Incorporating the skatepark into the design by adding a rail
- Blends in with the skatepark while also being functional

Initial Idea 2

Inspiration Images



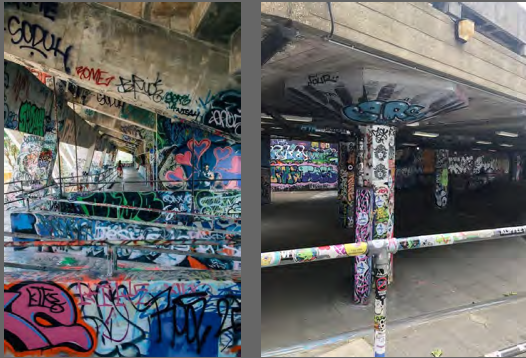
Inspiration Drawing



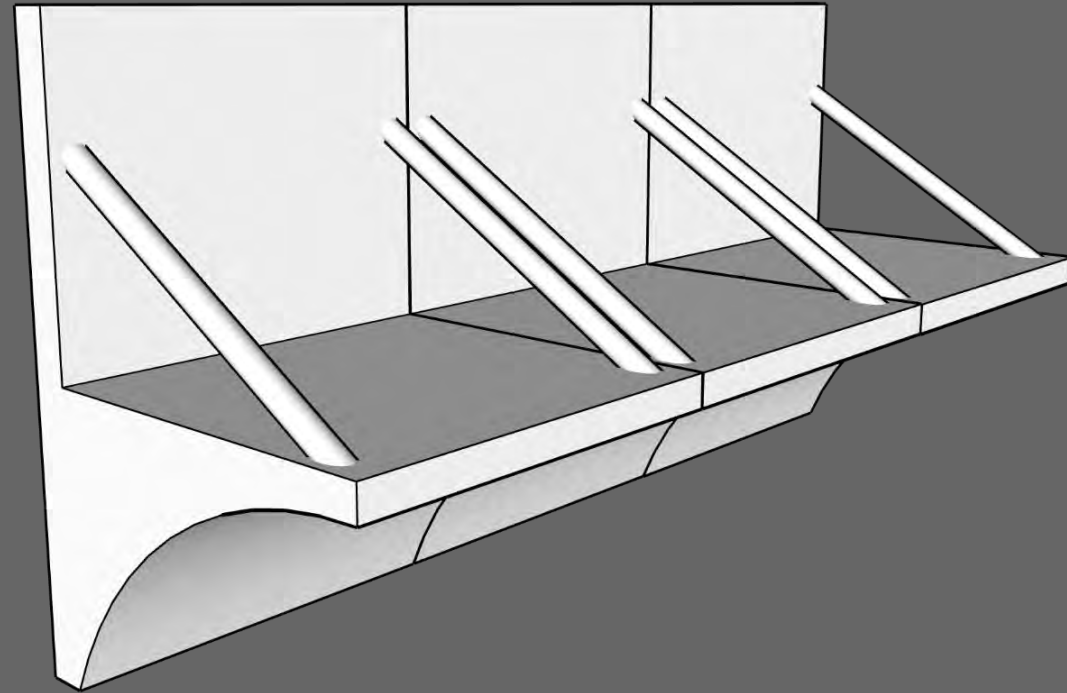
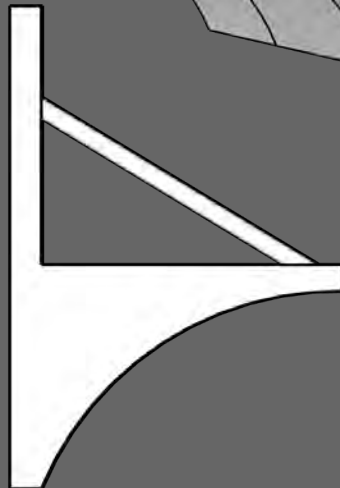
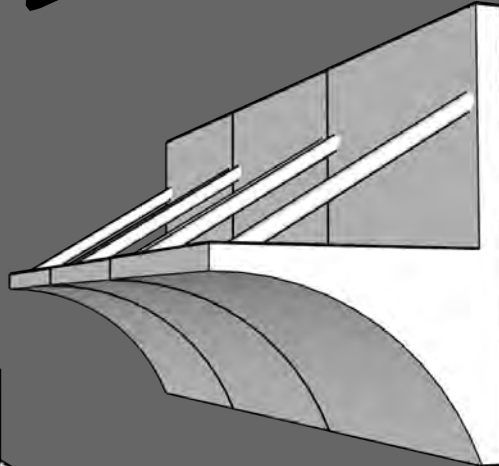
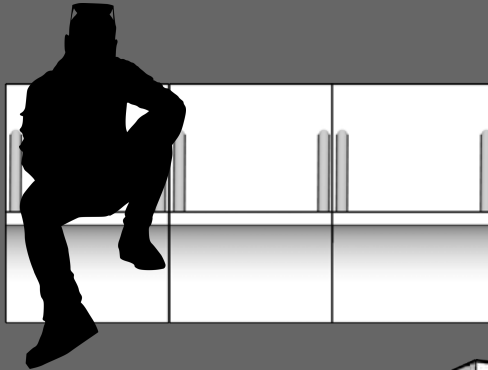
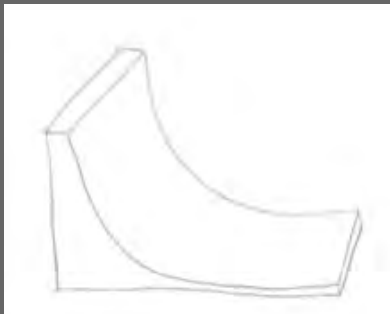
- Incorporating the skatepark into the design by adding a ramp for skaters
- Blends in with the skatepark while also being functional
- Seats could be better guarded from the ramp potentially could add rails

Initial Idea 3

Inspiration Images



Inspiration Drawing

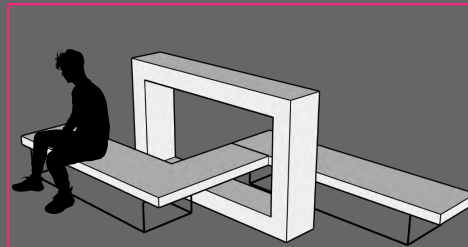
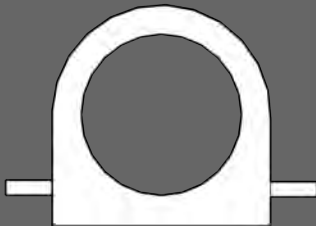


- Against the wall to be out of the way, **could be for parents watching their kids skate**
- Uses skatepark elements as design features (eg. ramp, rails)
- Could be more integrated into the skatepark not off to the side

Idea Development



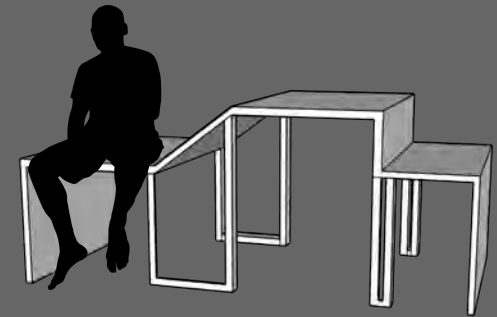
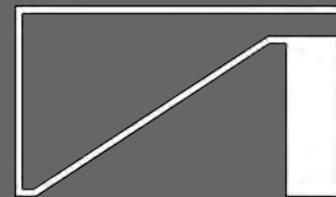
Tunnel for skaters to get through, impractical for location, would be too big and overpower the seating.



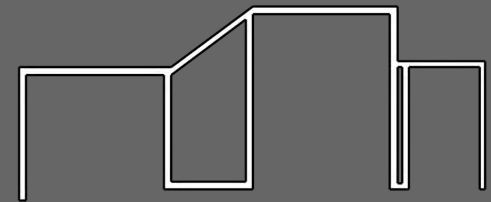
Skateable, square in the middle could be lower as an obstacle for skaters to jump.



Park bench style, could be put anywhere, skateable, doesn't draw enough inspiration from location.

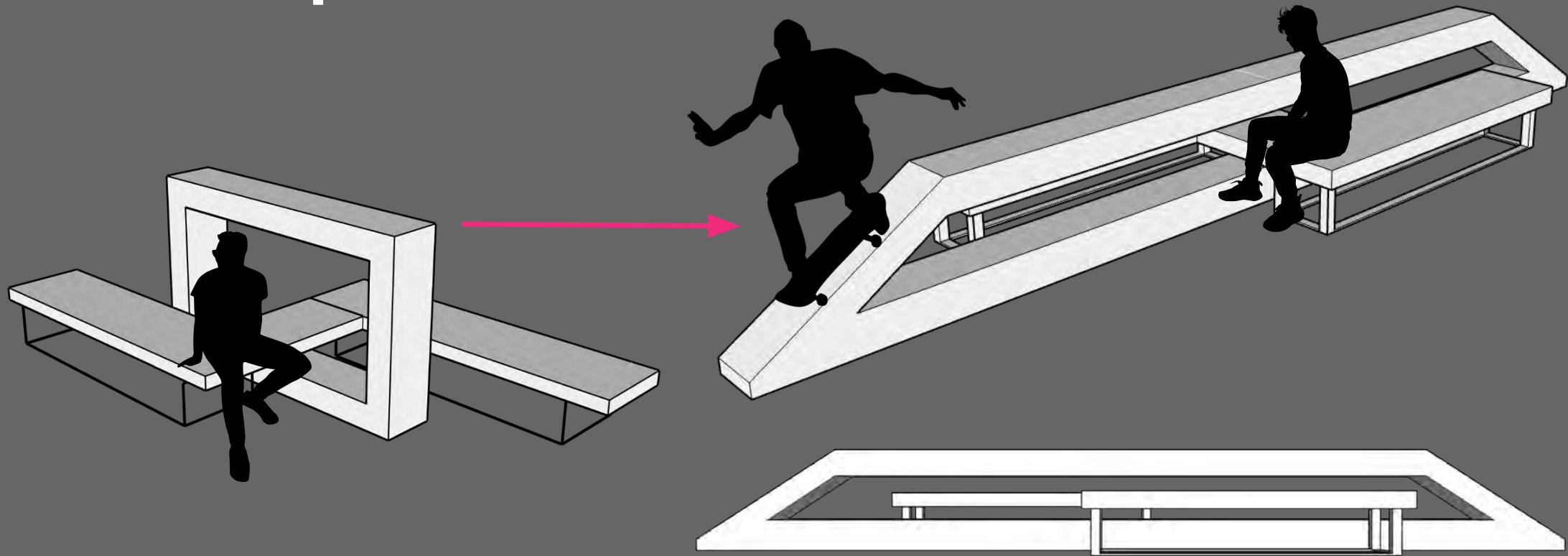


Skateable, allows different seating positions, could be put anywhere, not the style of the location.



Previous ideas either weren't skatable or didn't match the aesthetics of the skatepark, with further research into skateable furniture and more skatepark elements I came up with these concepts.

Idea Development 2

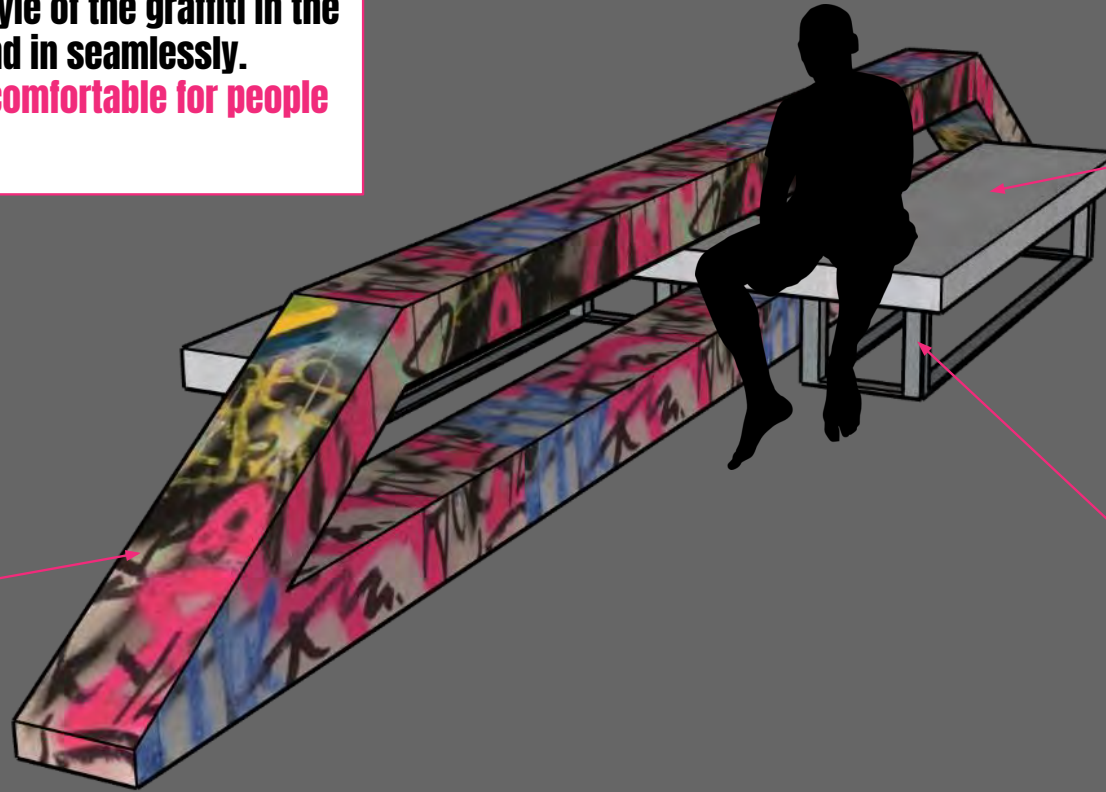


I changed the height of the square in the middle to make it **more easily skateable**, as well as changing the shape to make the ends ramps to **make it easier to skate**, a result of this was the lengthening of the square to be longer and provide **more area to skate without disturbing sitters**. I also made the chair supports thicker to **support the bench and people sitting on it** and the width of the square bigger to **accommodate a skateboard**.

Materials + Colour

Concrete to match the aesthetics of the skatepark and make it easily **skateable**, two different shades of concrete for variation, graffiti to match the style of the graffiti in the skatepark and help the chair blend in seamlessly.
Polished concrete to make it more comfortable for people sitting down.

Graffiti style



Polished concrete
(lighter shade)



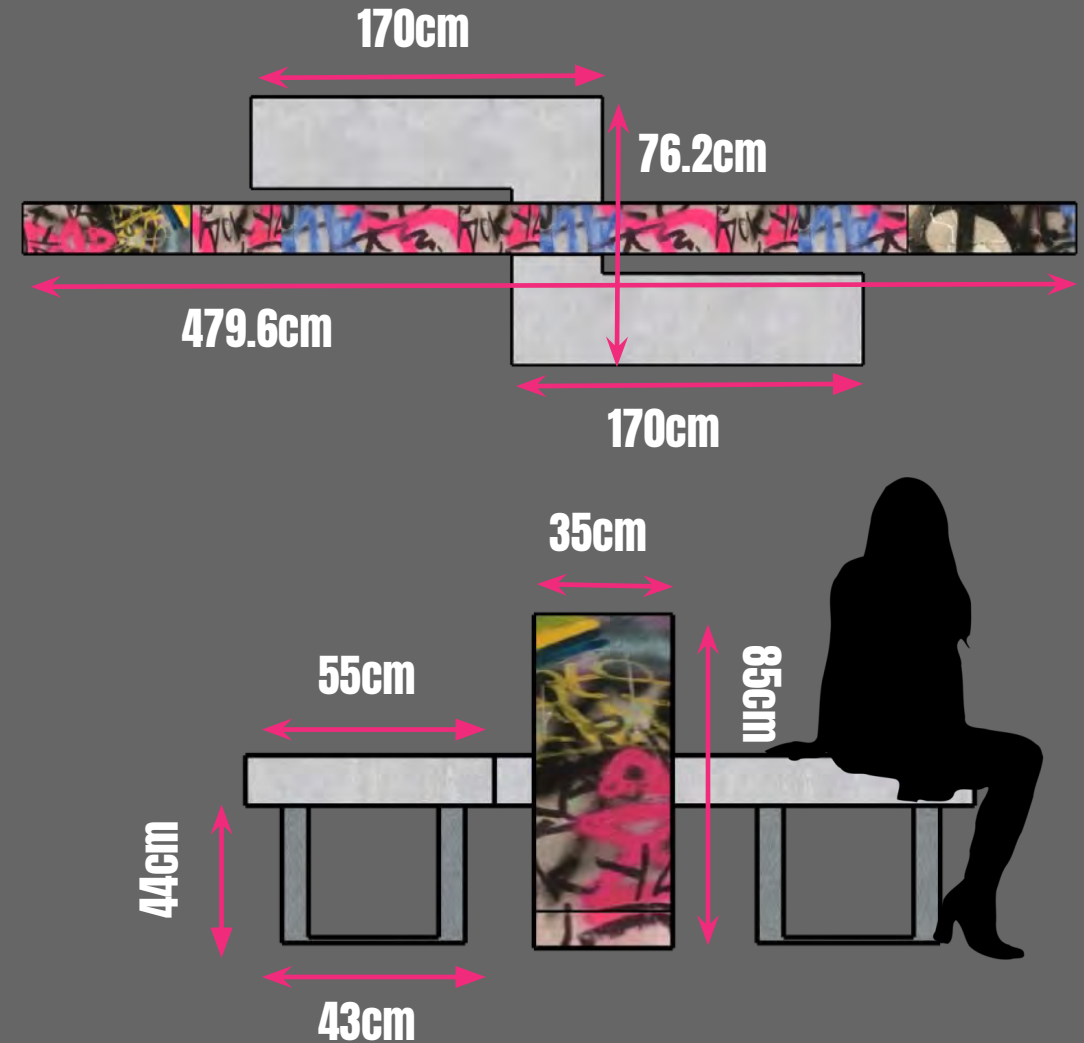
Polished concrete
(darker shade)



Ergonomics and Size



To accommodate both **skaters** and **sitters** my design has a seat with a large concrete structure through the middle, this can be used as an **obstacle** or to **skate across**. It can also be used as a **backrest** for **sitters**. I have made the seat big enough for **3 people** to sit either side, and I have made the concrete structure thick enough to be **skated across comfortably**.



Construction Details

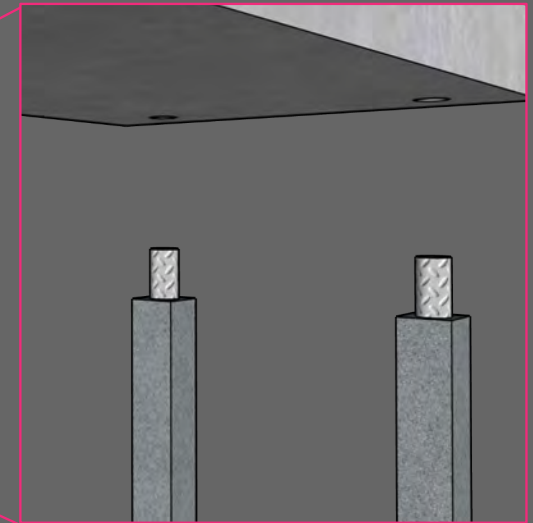
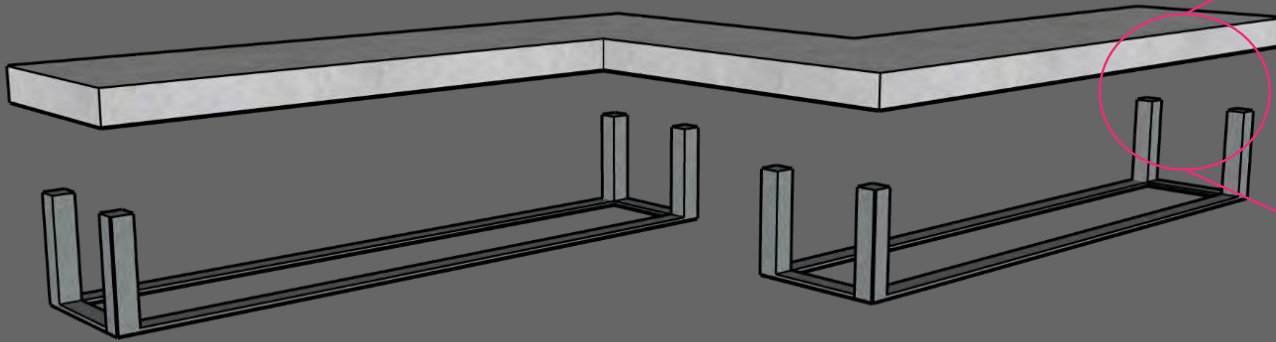
To connect the two different pieces of concrete, I will use rebar dowels as well as concrete epoxy adhesive to ensure a strong bond. The rebar dowels will be attached into the seat stand while the concrete for that is still wet, the concrete seat will have holes drilled into it to match the rebar dowels and then filled with the epoxy adhesive to attach the two pieces together.



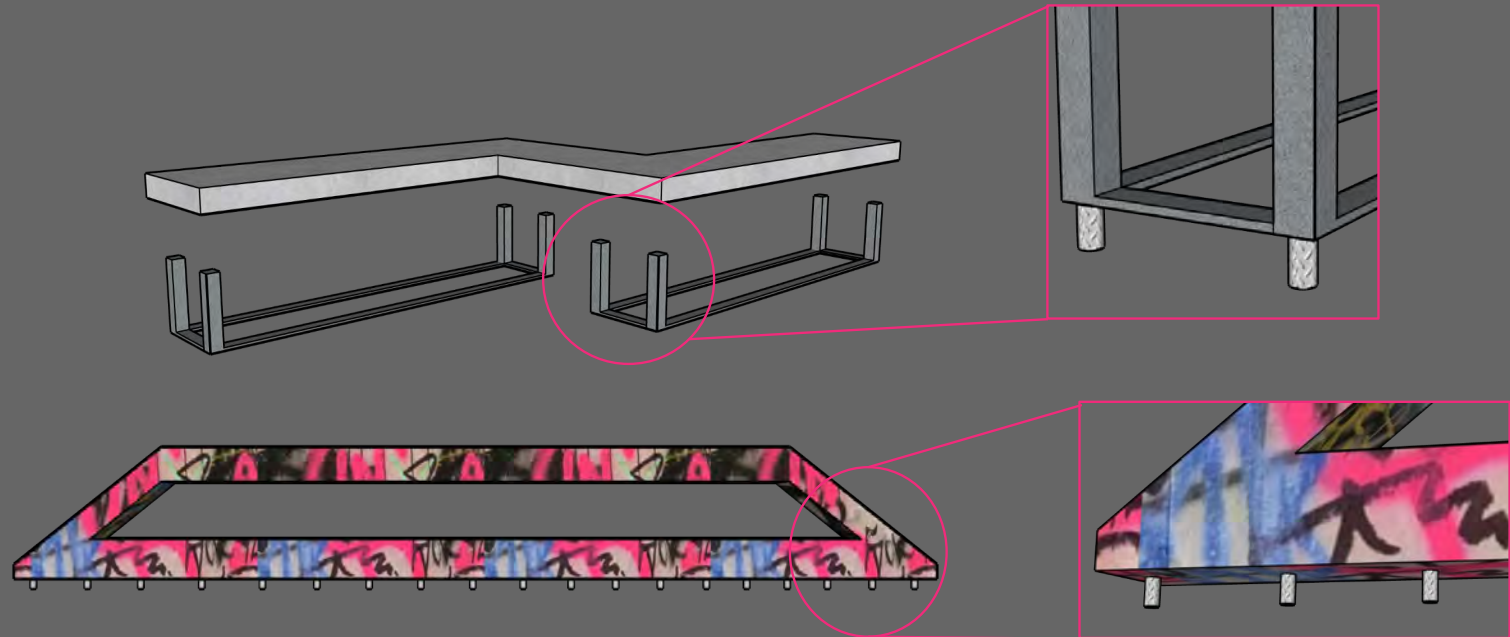
10mm Rebar Dowels



Sika Anchor Fix -3001
(Concrete epoxy adhesive)

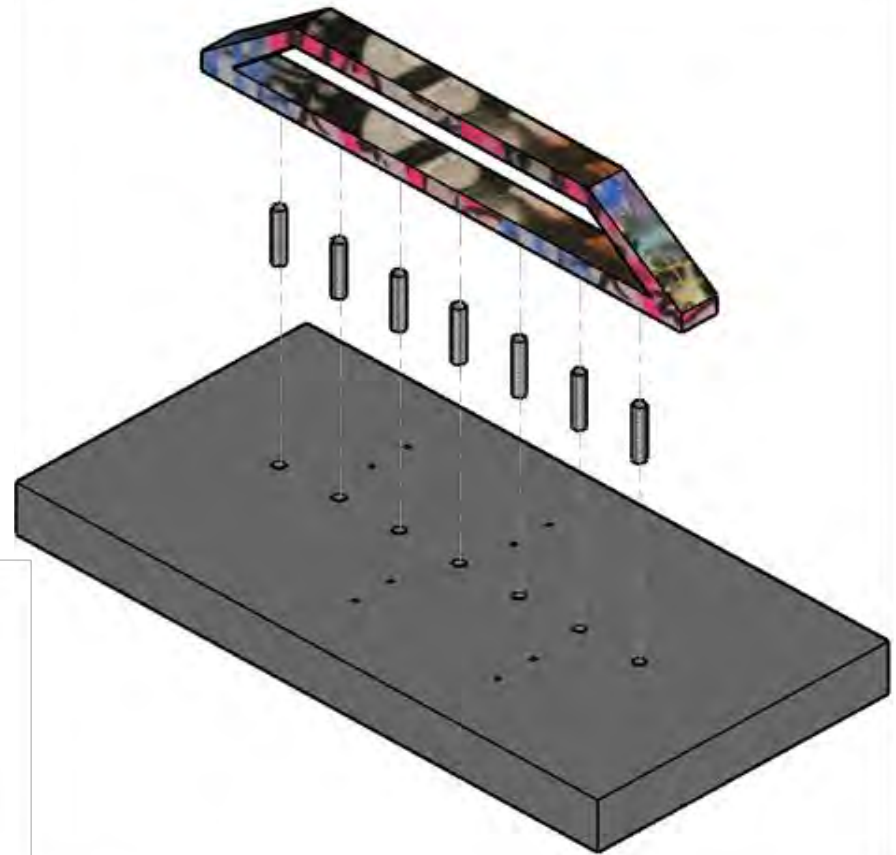
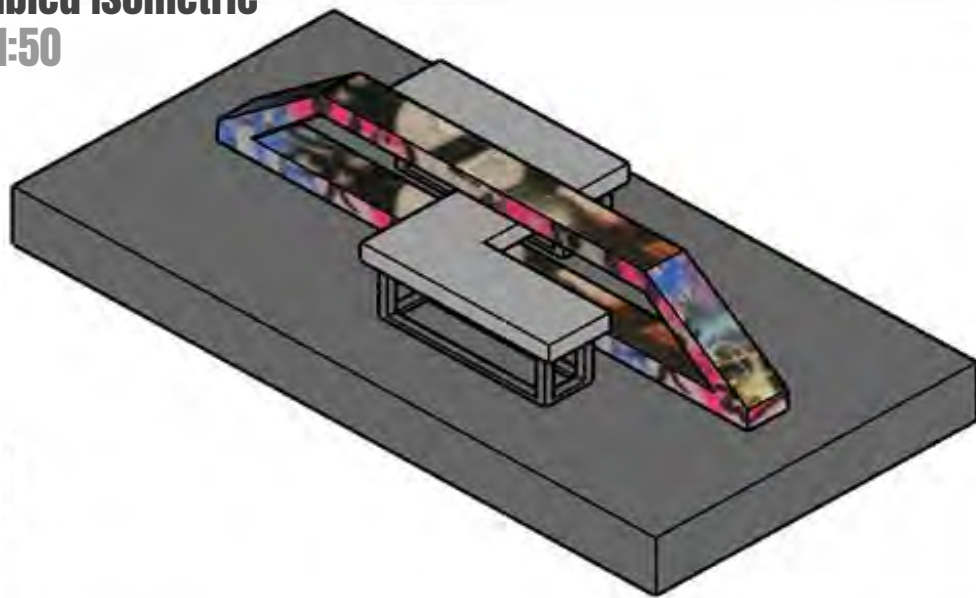


Construction Details



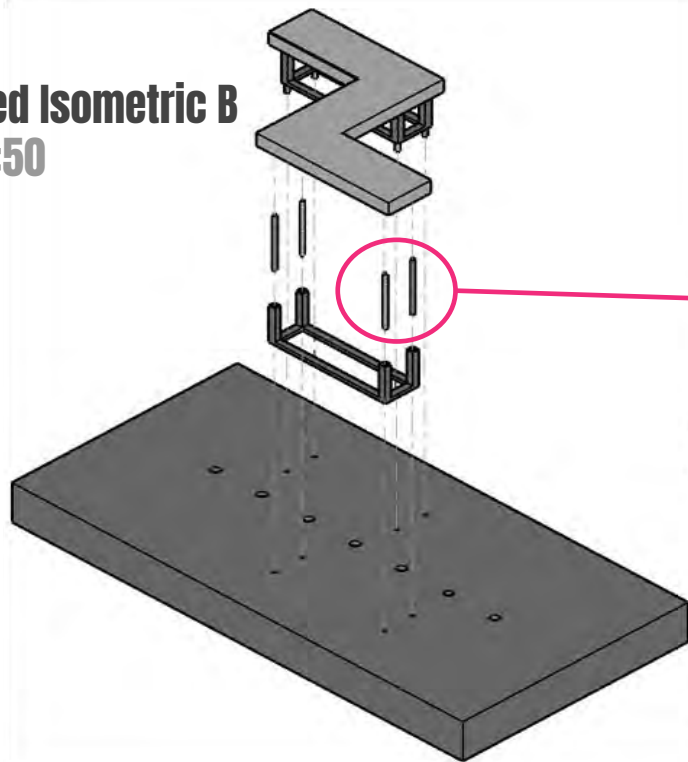
I will use the same combination of rebar dowels and concrete epoxy adhesive to anchor both the bottom of the seat and the concrete obstacle to the ground to make sure it is secure and **won't move around and hurt people sitting on it if skaters decide to use the obstacle.**

Assembled Isometric
Scale 1:50

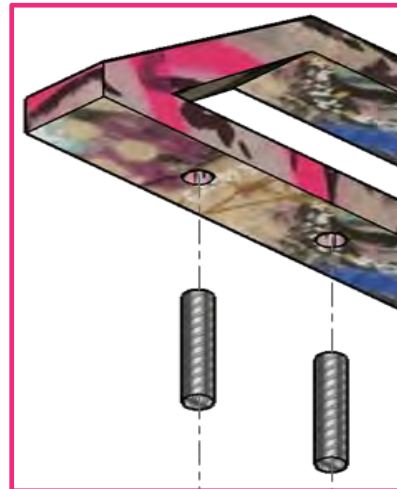


Exploded Isometric A
Scale 1:50

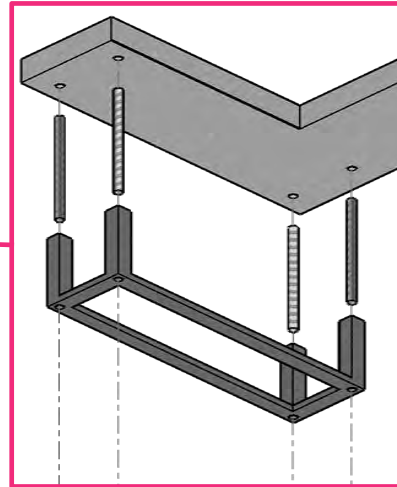
Exploded Isometric B
Scale 1:50



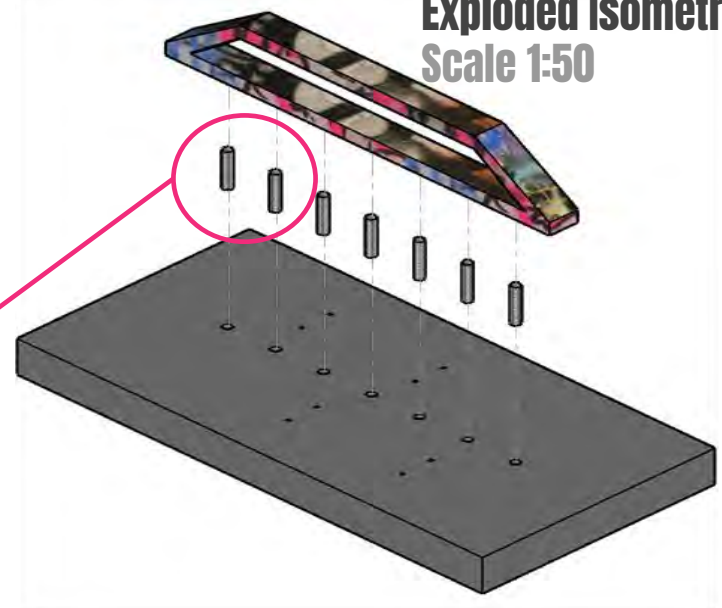
Exploded Isometric Detail A
Scale 1:20



Exploded Isometric Detail B
Scale 1:20

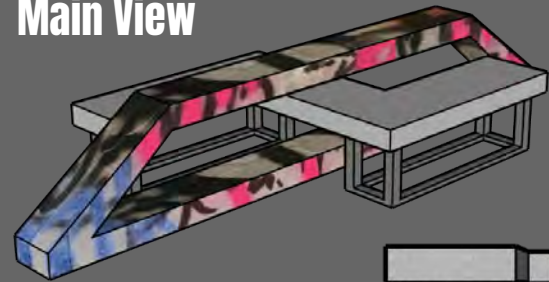


Exploded Isometric A
Scale 1:50



Chair in Location

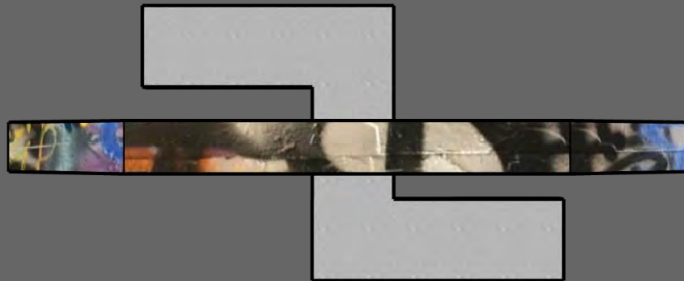
Main View



Side View



Top View



Front View



Excellence

Subject: Design and Visual Communication

Standard: 92002

Total score: 07

Grade score	Marker commentary
E7	<p>The context for this project is a skatepark. The context is clearly shown and understood at the beginning of the project. Three initial ideas for seats are presented with images of people used as well as notes that explain connection to people and context. Further options are explored and an idea has been chosen with a clear reason given for choice. A short sequence of images then shows development that makes changes to improve the experience for skaters and sitters as well as adding aesthetic designs that connect to the location. Detail has been added by showing the parts that make up the design as well as some construction information. Visuals show very clearly how the parts fit together and how the details relate to the whole. The final design is shown clearly from a number of angles and in context. Earlier in the project, it shows how a skater might use the design. It would be helpful to express this again at the end.</p>