CLIMATE EMERGENCY AND SUSTAINABILITY

PROJECT 1: THE NEW NORMAL

THE BRIEF

'NEARLY EVERY PIECE OF PLASTIC EVER MANUFACTURED STILL EXISTS TODAY. WHEN IT ENTERS THE OCEAN, ITS EFFECTS CAN BE FELT FOR CENTURIES.'

- EMMA BRYCE, MARY FLORA HART

We're in an age where the ephemeral nature of how we design buildings generates the need to create spaces considered to be the first of their kind, best and most exciting. Therefore, creating sustainable spaces becomes secondary. The throwaway culture exists in many different aspects of our lives and has managed to seep its way into Architecture. However, the climate crisis has caused an awakening which has forced the design community to put forward more sustainable strategies that are less detrimental to the environment.

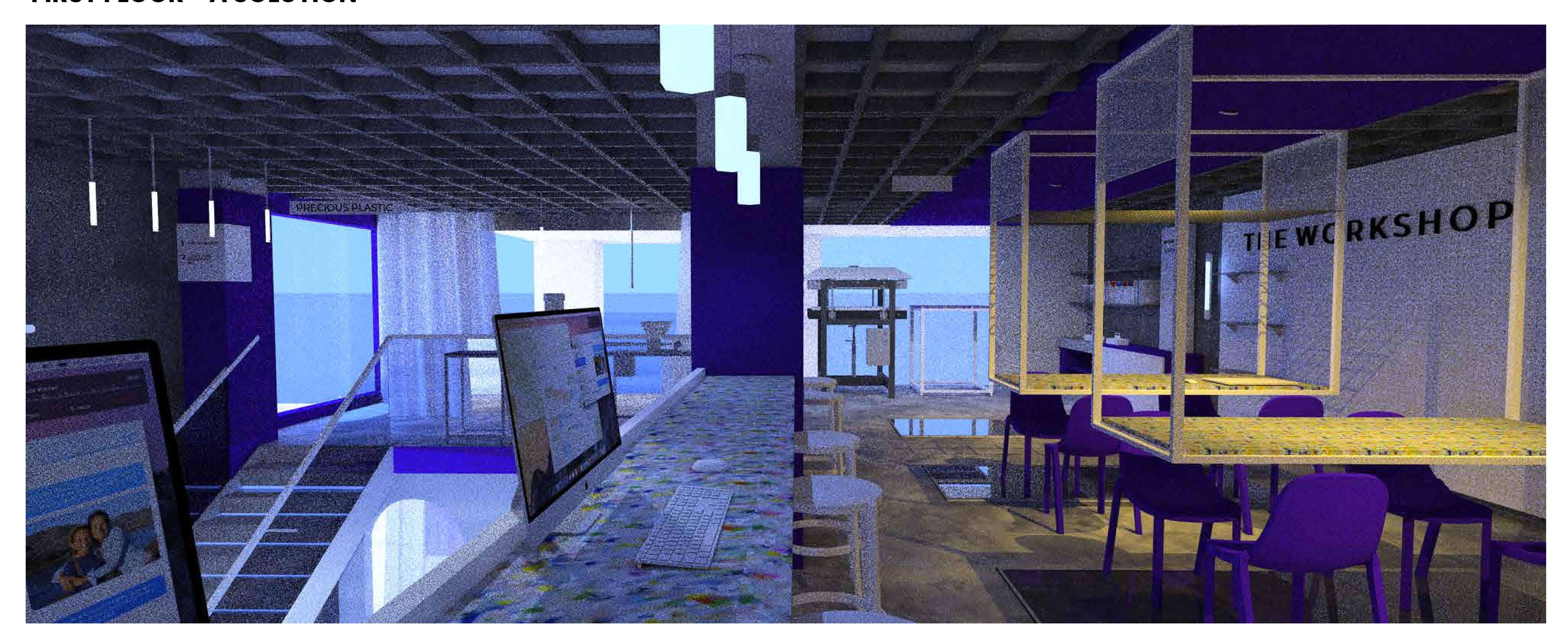
By 2050 it is estimated there will be more plastic than fish. 79 per cent of the plastic produced over the last 70 years has been thrown away. Just 9% is recycled with the rest incinerated. I chose this pathway due to the severity of the plastic crisis. Precious Plastic is a brand that sets out to encourage us to be more mindful with the way we interact with plastic. They created machines to turn plastic waste into functional objects, they're transparent with how they do this. They share how to make their machines with the world to broadcast the importance of saving the planet and to get everyone interested in recycling. When it comes to dire problems like this, you need to convey the message in a way that it will resonate with the users.

DESIGN PROPOSAL

My proposal sets out to educate/evoke emotional responses and to ultimately get the public wanting to live in a more sustainable manor. The site will be split in two. The ground floor will house a educational exhibition. The message will be spread by storytelling though text and videos and interactive elements. Simultaneously, the narrative will be subtly hinting at the bigger message... That plastic is no longer the way forward. The exhibition will educate them on what plastic is, its origins and the affect it's had and will continue to have on our environment if we don't change. Precious Plastic merchandise will be introduced on this level in order to open the users eyes to the possibilities of recycled plastic.

The first floor will be the main working area for the Precious plastic staff. Here the uses can engage in demonstrations, talks and get involved in making various products.

FIRST FLOOR - A SOLUTION



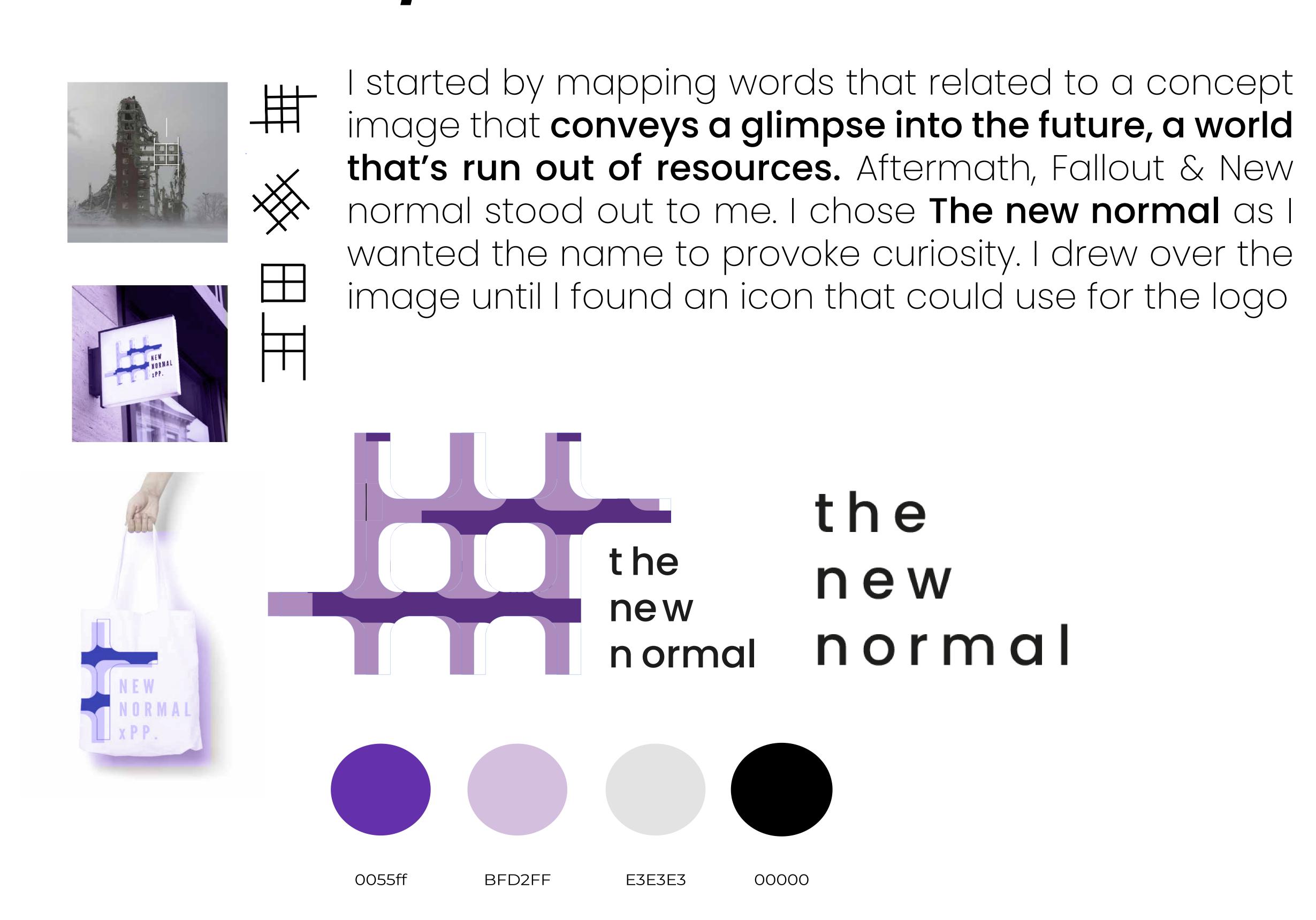


GROUND FLOOR - A MORAL STORY

AWAKEN

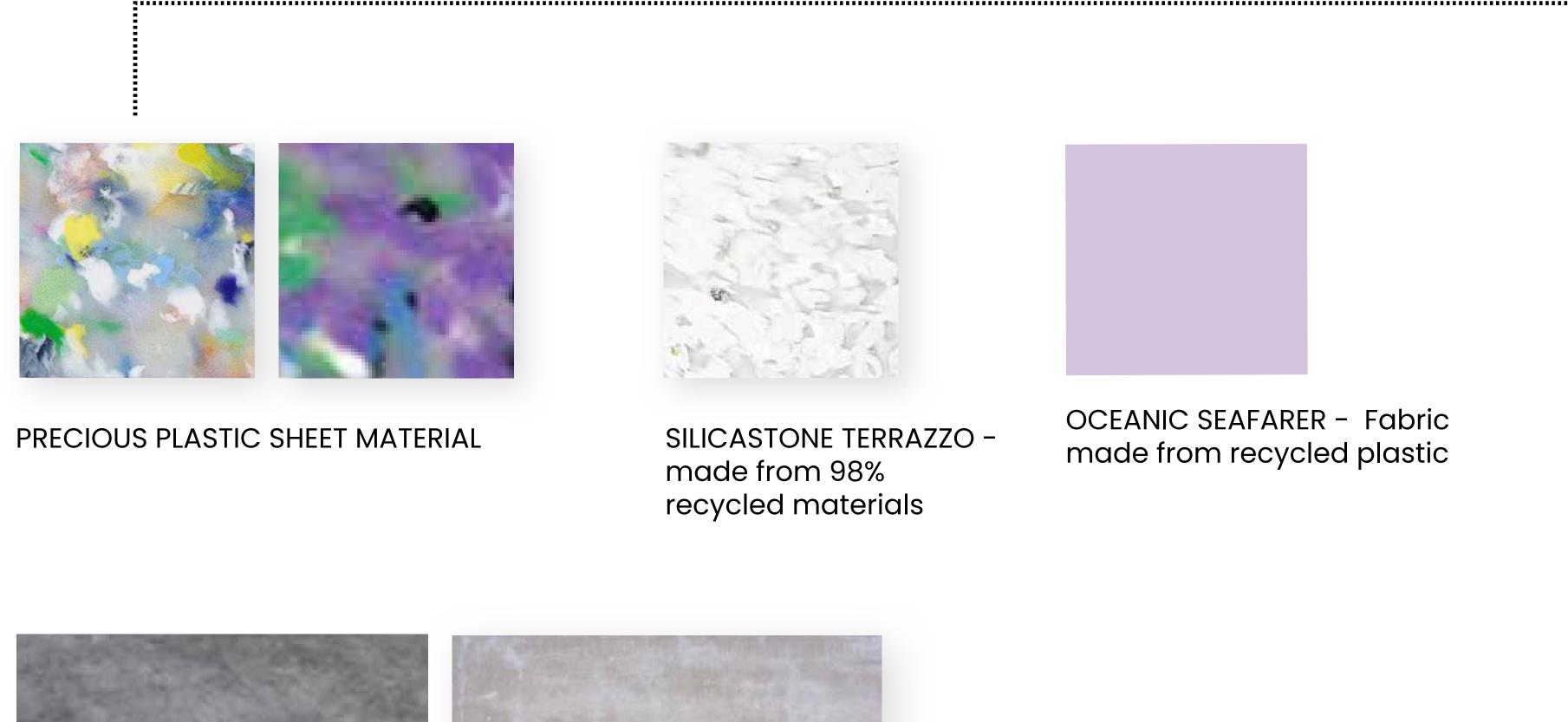
I aim to use the idea of pollution as a design strategy to obscure and reveal significant areas and objects within my site. My chosen words are obscure, reveal and awaken. These words directly relate to how the users will experience the exhibition on the first floor. Materials like thin translucent sheets for curtains, gradient glass film and polycarbonate will be used the convey the aesthetics of pollution. Spaces will be **obscured** by these materials. This forces the user to pass through the pollution in order to **reveal** what lies hidden behind. The user will then be educated which leads to the awakening that will provoke an emotional and personal response to want to change.

BRANDING / COLOUR CONCEPT

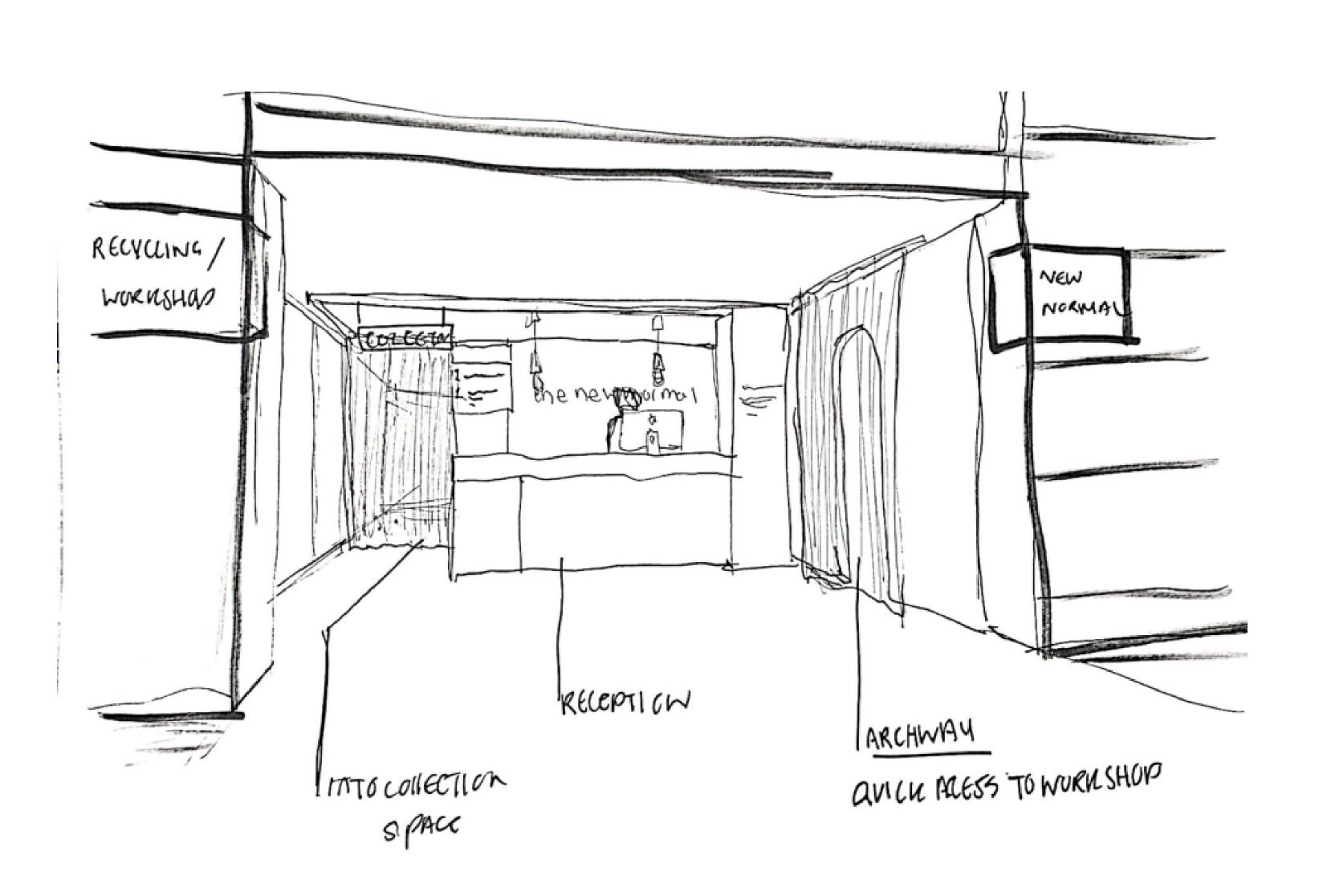


MATERIAL CONCEPT

In order to use as little materials as possible I decided to use Precious Plastics method of pressing broken down plastic waste into a sheet material. Their sheet material is versatile and can be used as surfaces and wall cladding. Not only does this save money, its good for the environment. A pollution aesthetic consists of dull tones of grey and white. These colours aren't engaging or inspiring so I injected purple into the scheme. Purple has connotations of royalty which when gives the sheet material a sense of worth.

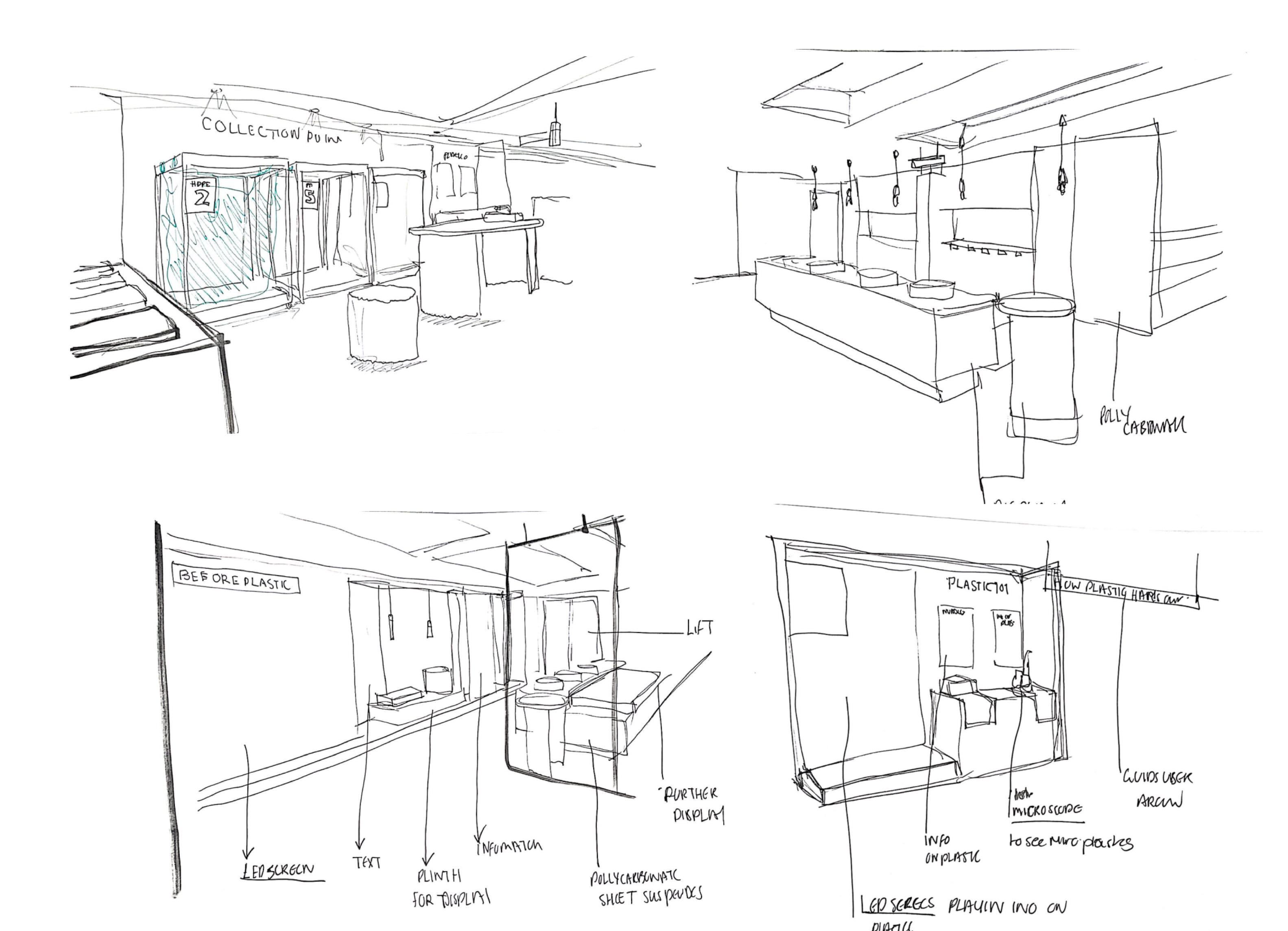






GROUND FLOOR DEVELOPMENT

Spaces feel connected. On the plans the journey goes from reception - collection point. Its important that these two areas are close together so that people in a rush or people revisiting only to drop their recycling can access it fast and with ease.

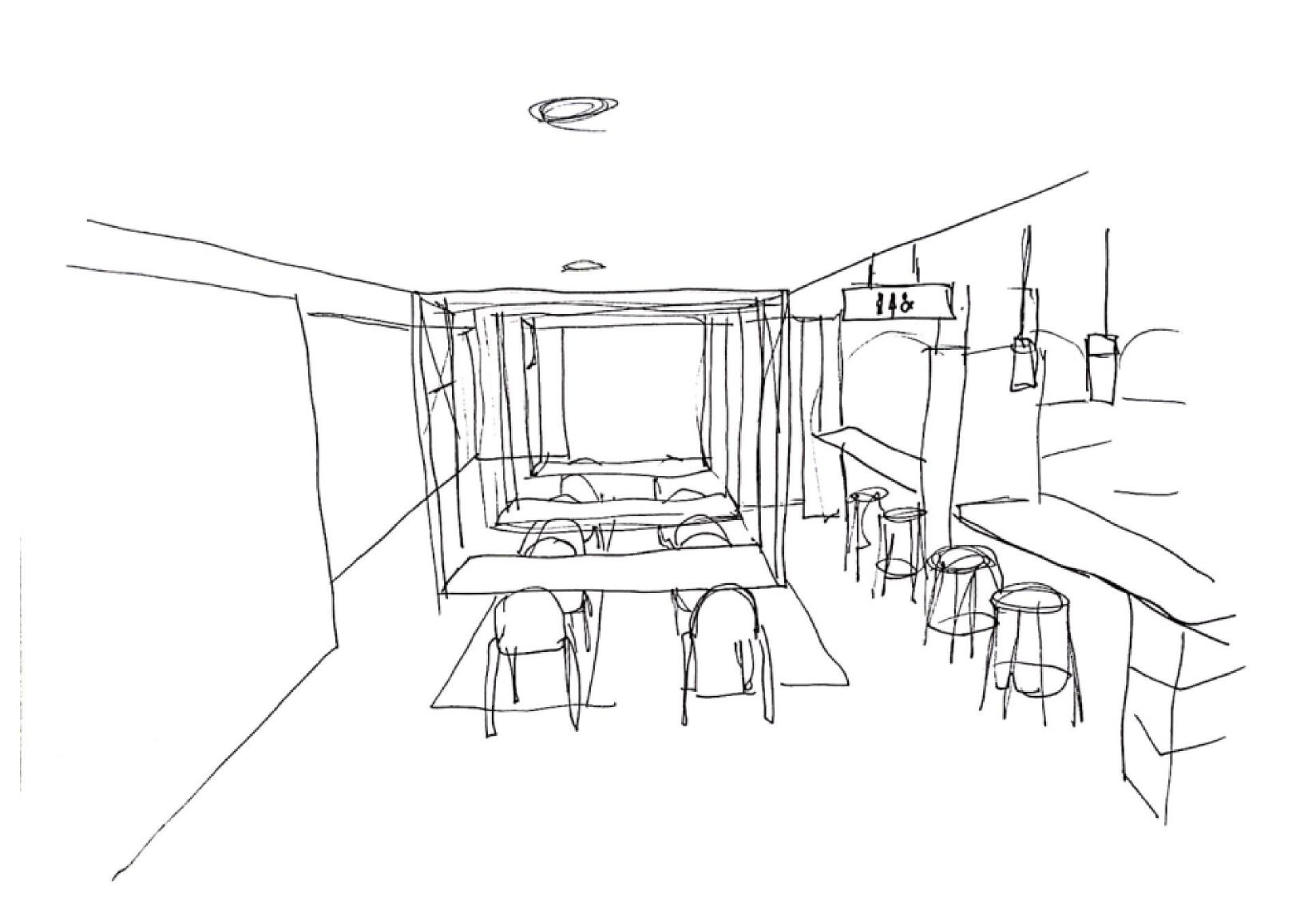


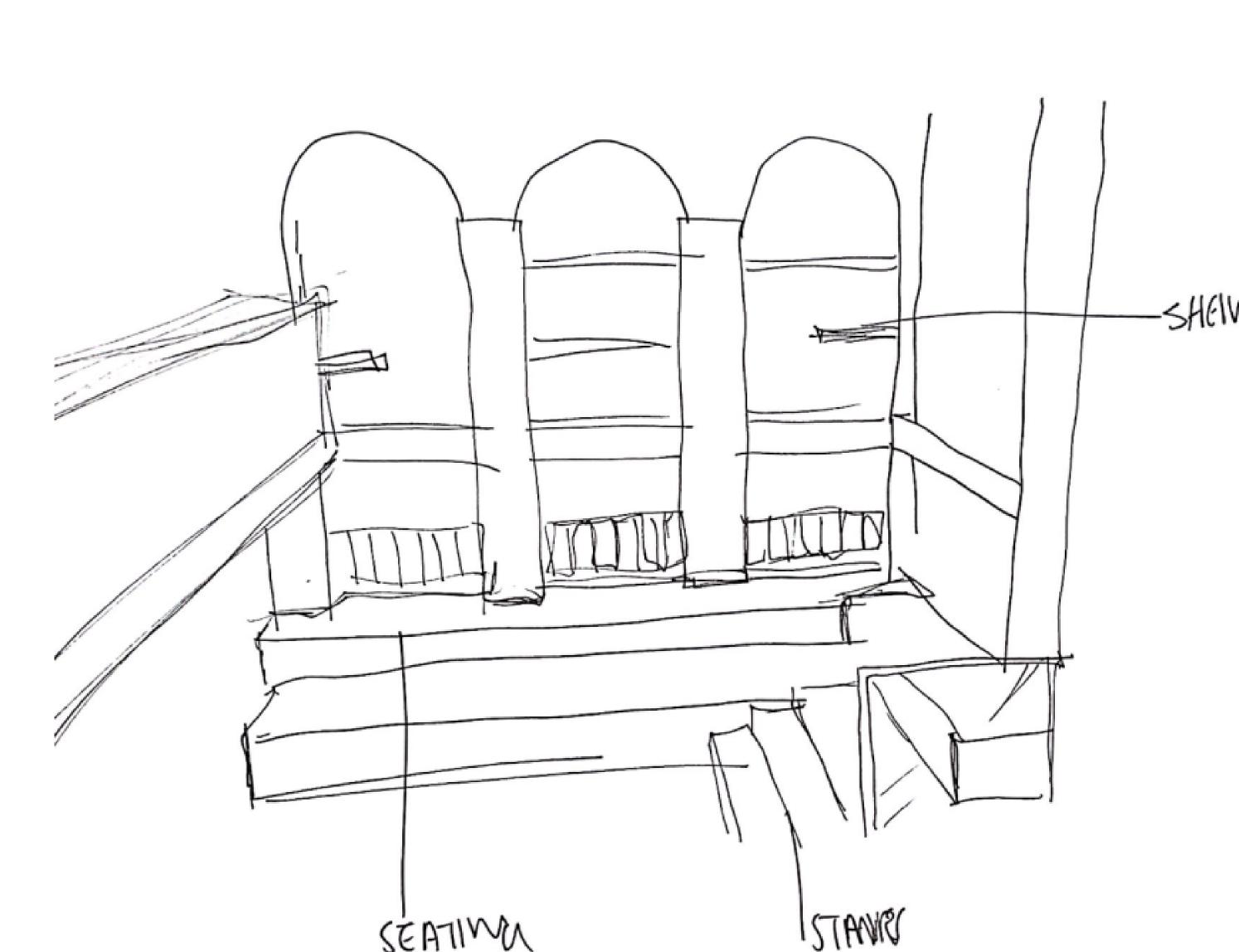
VOID WC -+ ACCESSIBLE TOILET WORKING -WORKING -SPEAKERS STAIRS FLEXIBLY WORKING SPACE BALCONDY

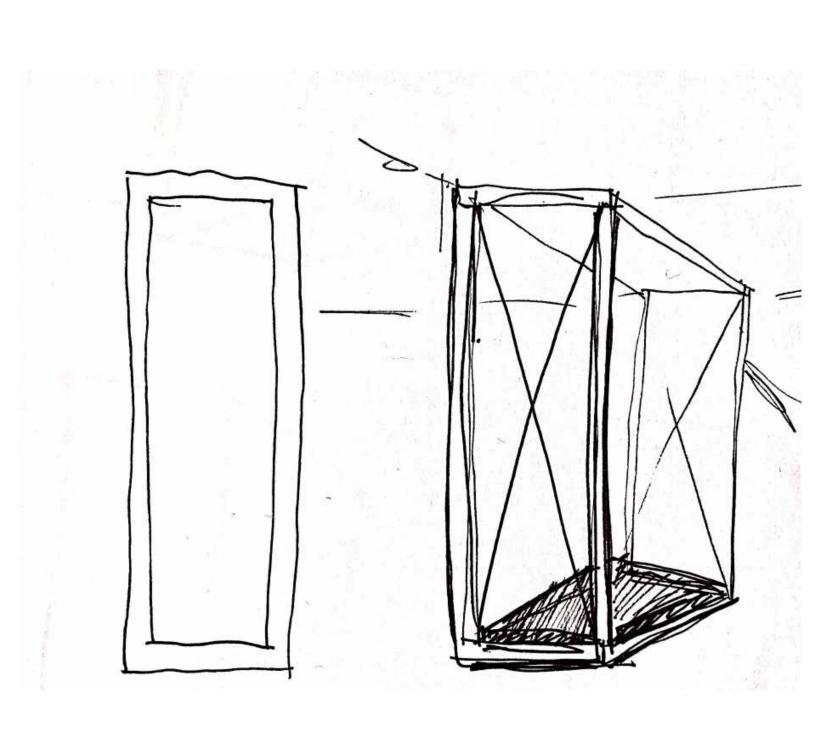
FIRST FLOOR DEVELOPMENT

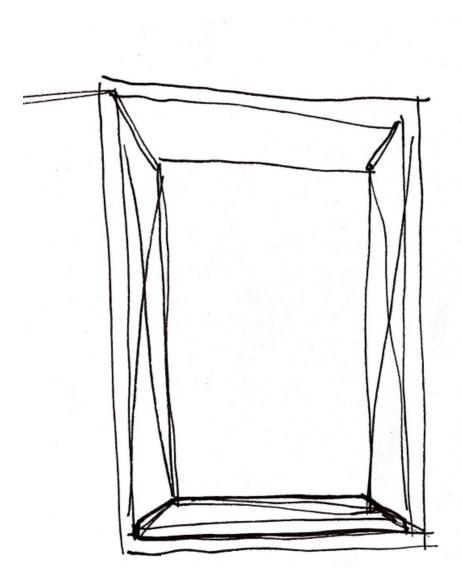
Educational exhibition / workshop. I decided to add further exhibition space on the second floor of the atrium.

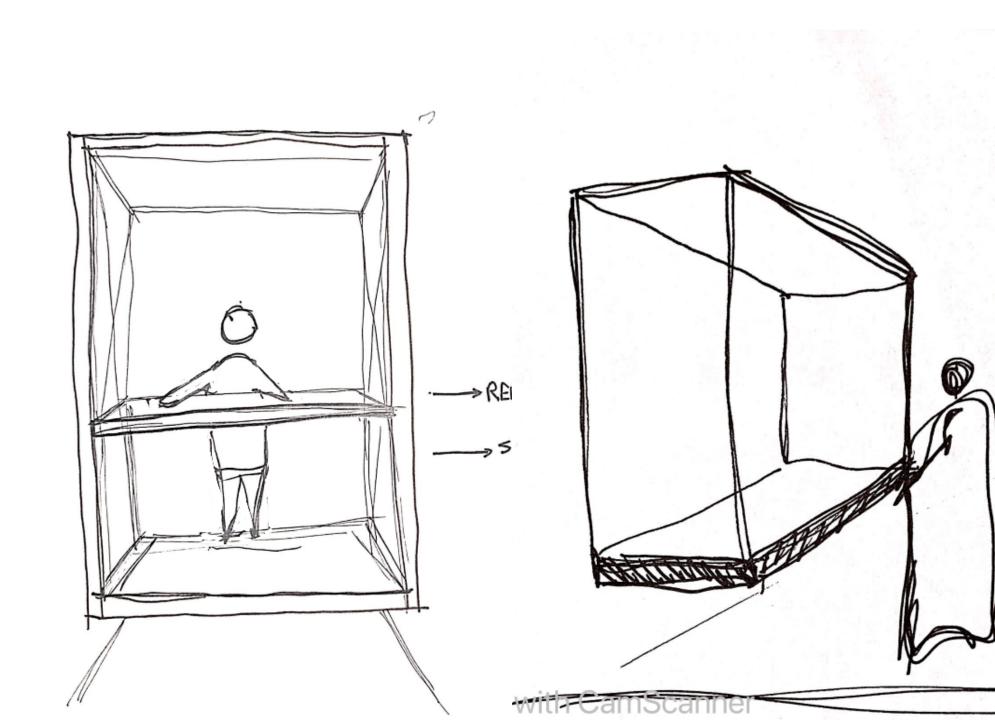
Flexible working space - Tables designed on a sliding ceiling track. Tables can be moved back to create space if the staff are working big jobs or for large demonstrations. Casual office/working space





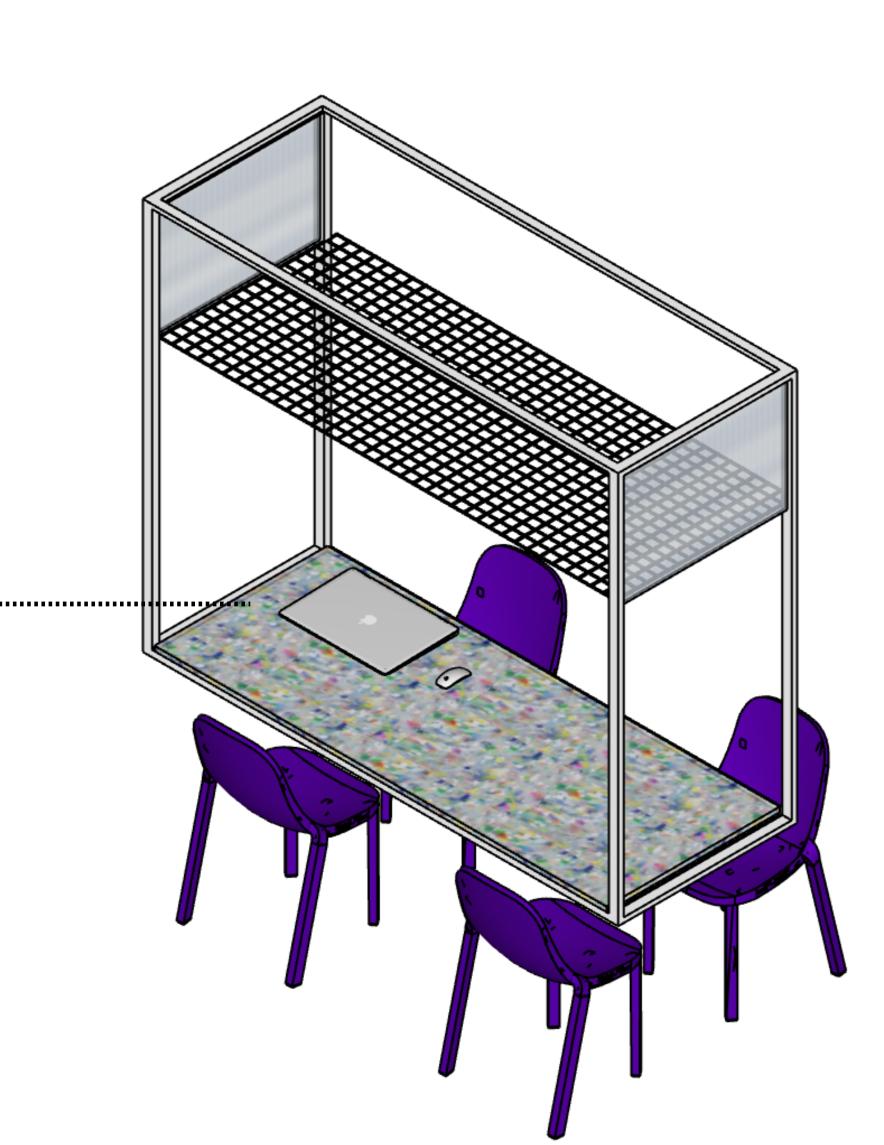


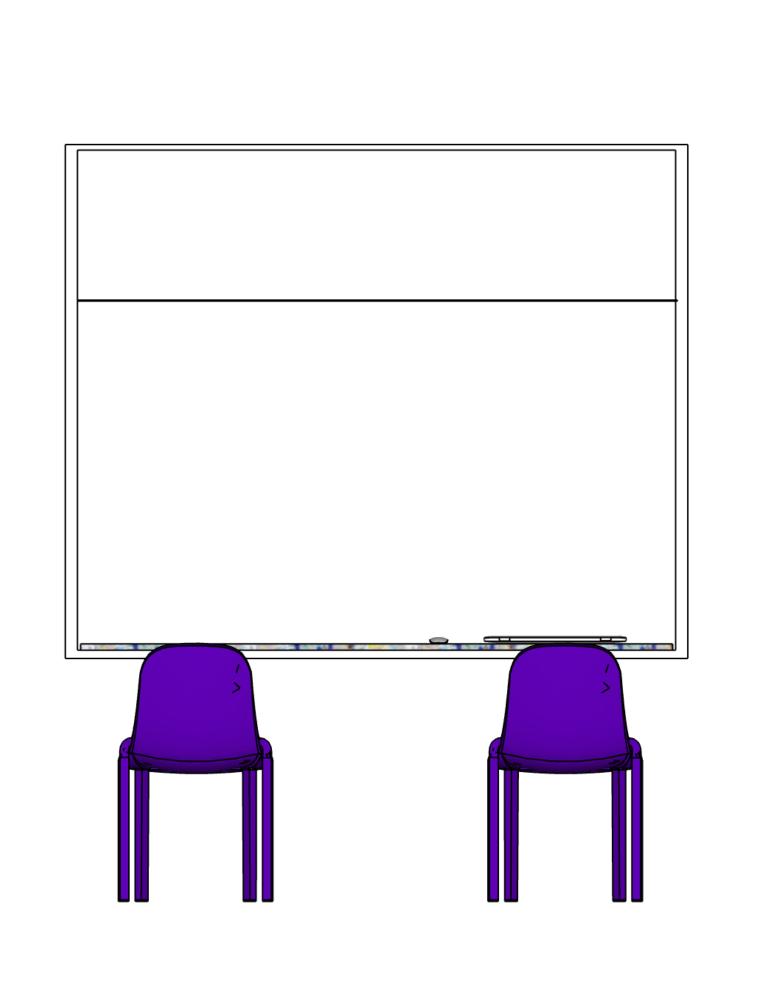


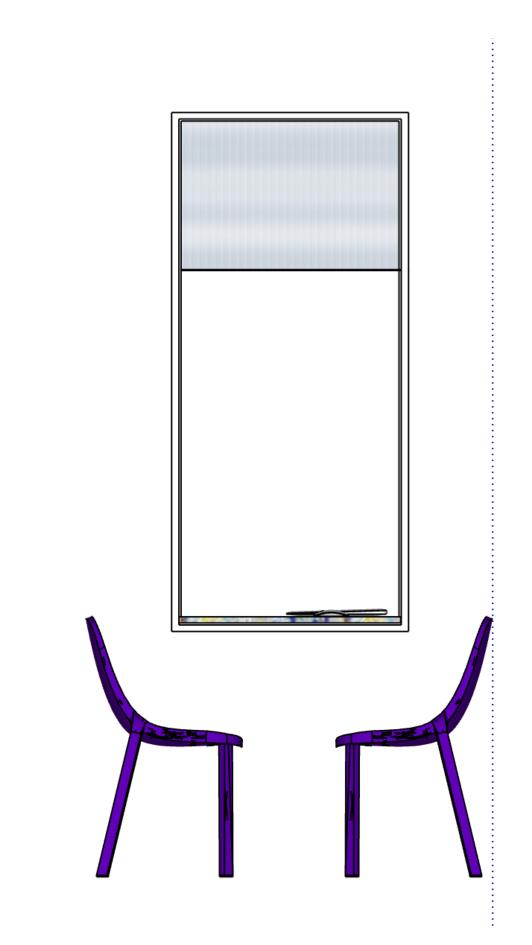


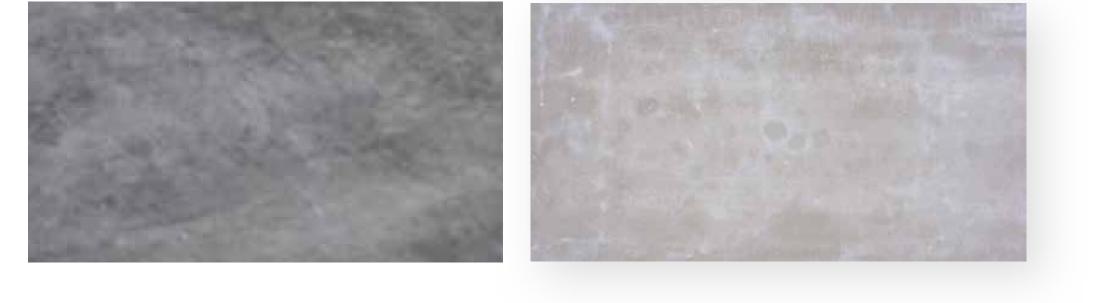


I decided to half the box structure and design it to move along a sliding track similar to a sliding floor track but on the ceiling. However, this needs to be reinforced to keep it structurally safe. The pod from my case study used diagonal steel rods to brace the frame. As my table is smaller it wouldn't allow users to work from the smaller edges. Therefore, I decided to place a rectangular sheet at the top of the structure with half of the bracing built within this. This will be made out of polycarbonate material







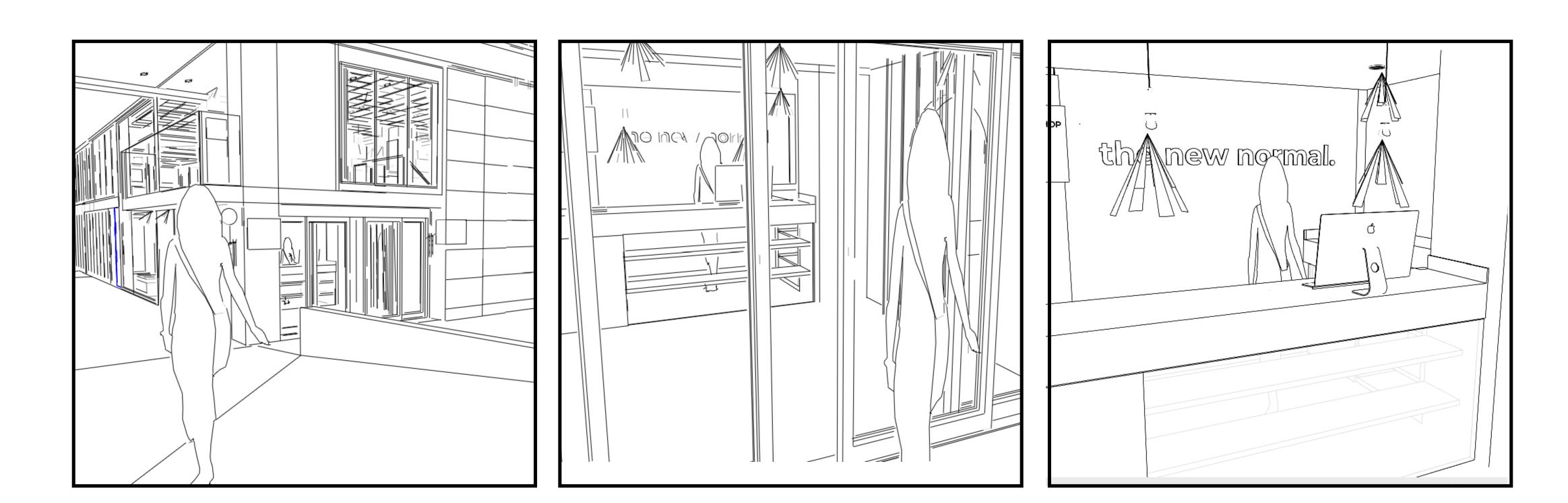


VIROC BOARDS -non-toxic and eco-friendly material.

GROUND FLOOR - A MORAL STORY

STORY BOARD

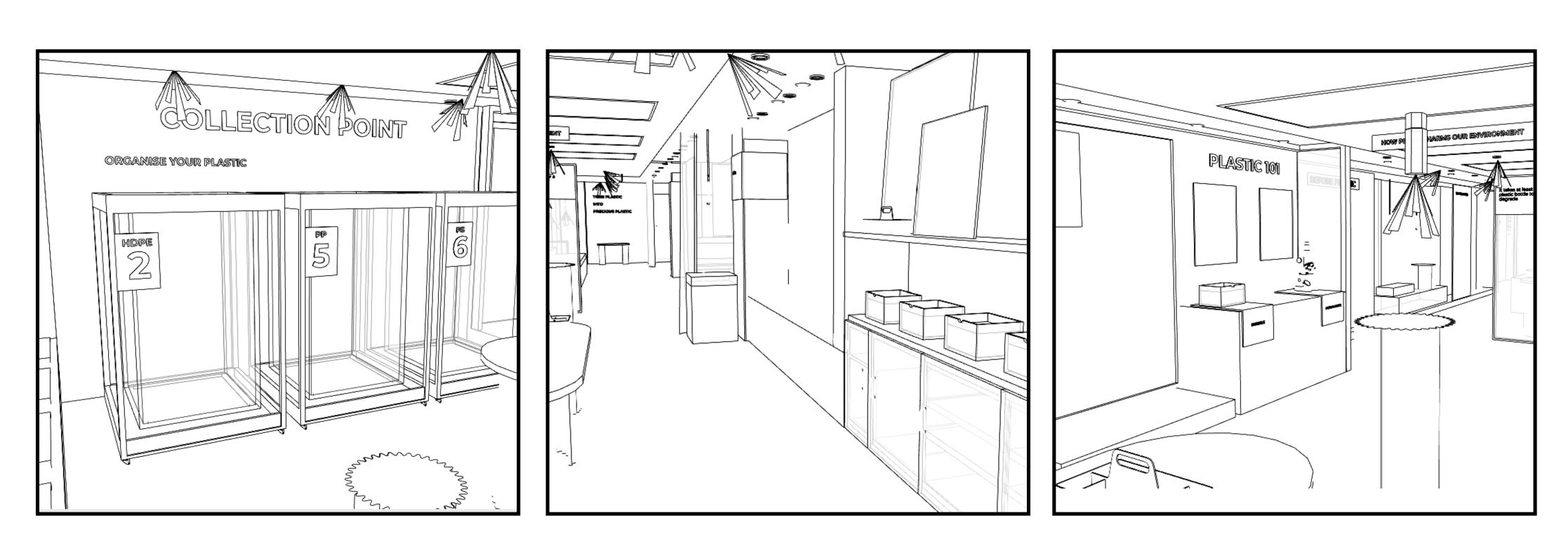
The exhibition will be set up to take the users on a journey, at each stage causing reactions and provoking inner emotional responses to climate change. The exhibition will be populated with text, video and imagery



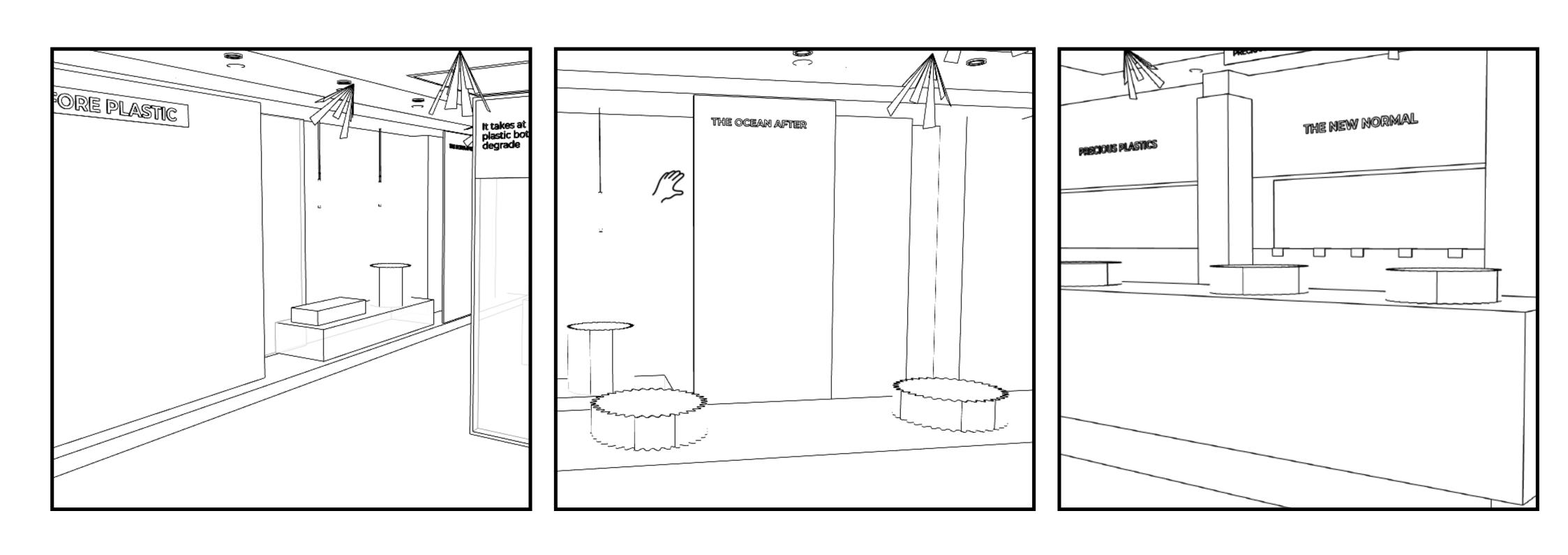
Showing the users approch and entry to the reception space. Greeted by the receptionist and directed where to go.



Quick access to atrium/ first floor via door concealed by translucent sheets on the entry to the collection point/ start of the exhibition.

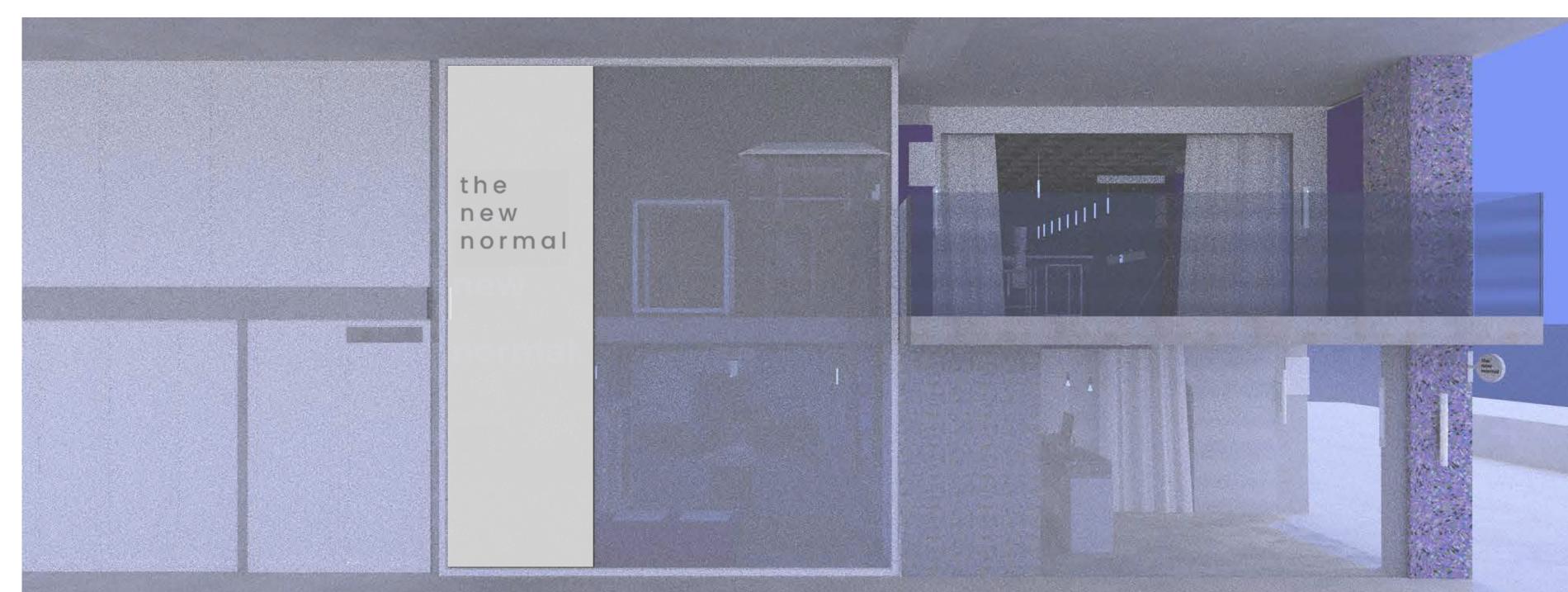


Various recyling bins for the types of plastic. Start of the exhibiton educating users on what plastic is.



Journeying into an exhibition set up to show users the affects of plastic pollution on our environment. Also Precious Plastic merchandise





COLLECTION SPACE



Collection space - transportable metal frame plastic recycling bins. Each collects a different type of plastic. Users waiting or intrested in the process can sit and obseve on the seating provided. Sheer cutains are drawn back to show the length of the space.

EDUCATIONAL EXHIBITION SPACE



Exhibition - Start of the users jounery. Plastic 101 showing elements that the users can interact with. Microscope and a box full of plastic nurdles. Leading onto the space educating the users on how plastic harms the environment. Polycarbonate has been used to obscure areas.

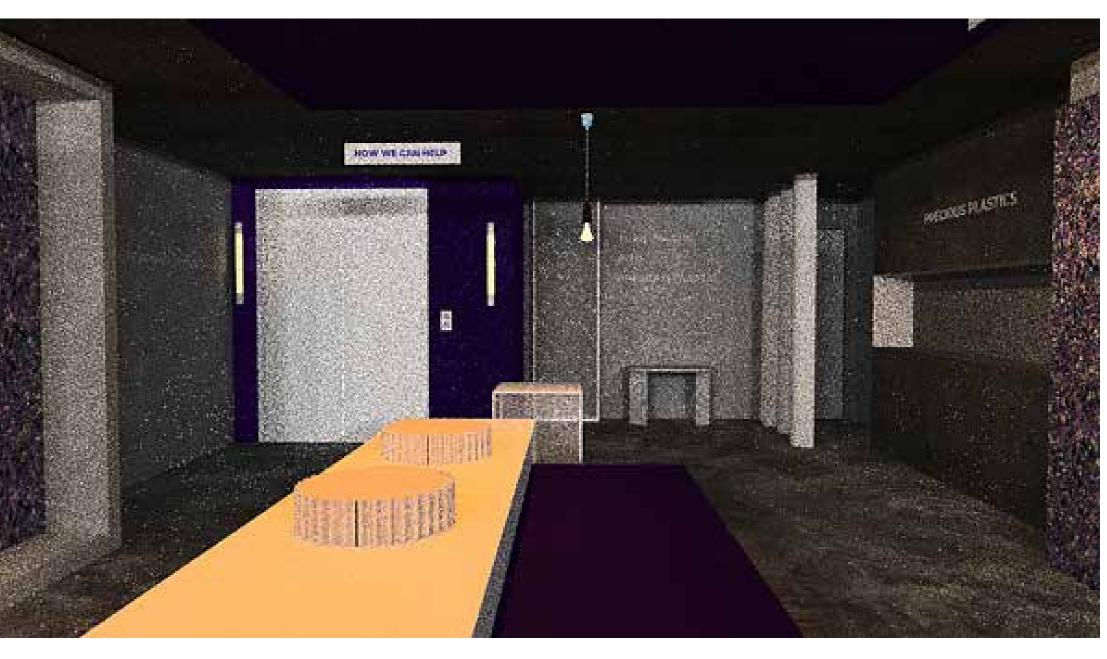
INTERACTIVE LEARNING



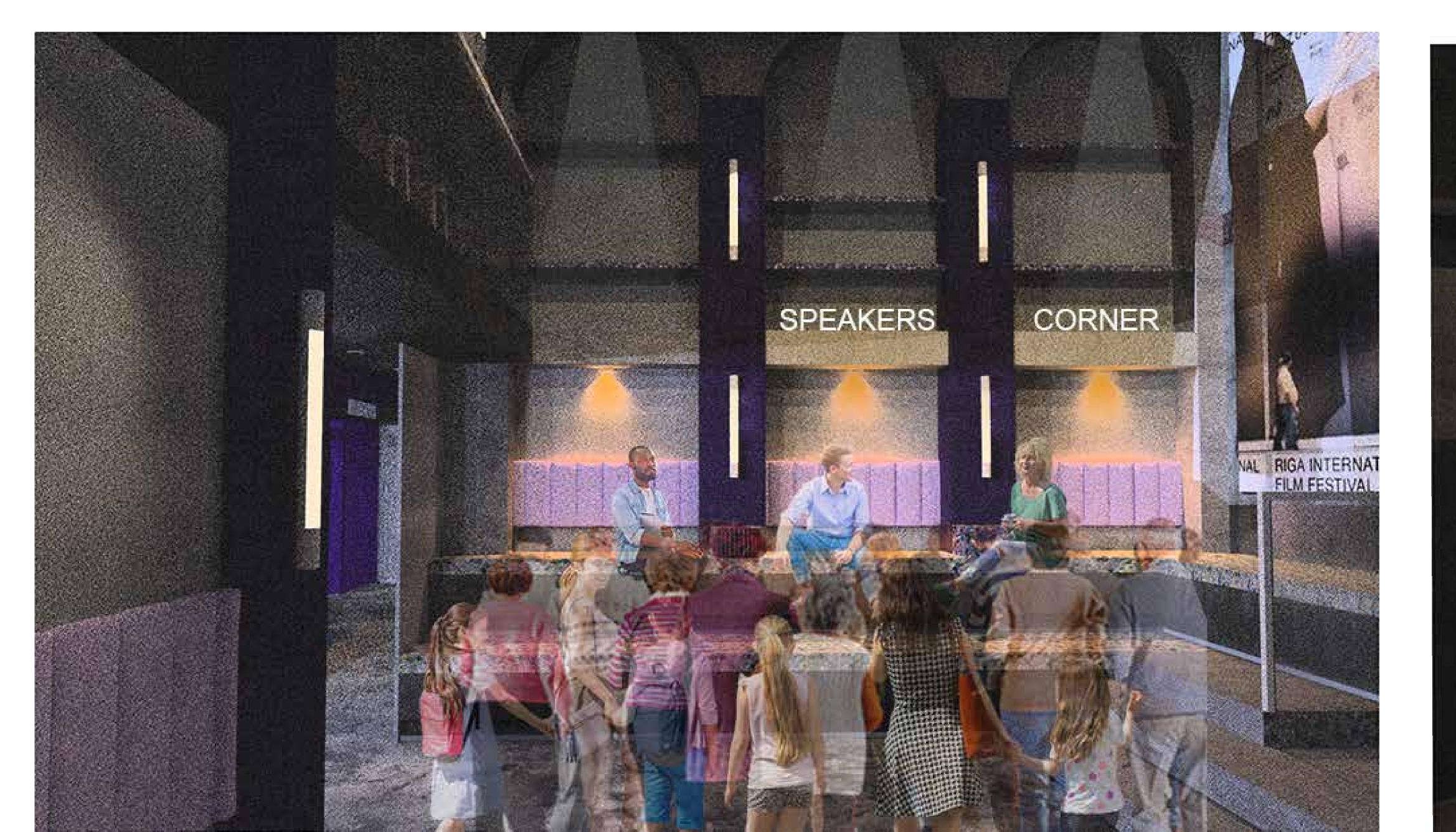
Interactive screens - allows users to engage with short quizzes on their knowledge of Exhibition tables and plinths - spotlighting Stairs to the workshop. Quick access via an plastic pollution. when not in use short educational videos play in the background. highlighting the more valuable items archway hidden by sheer curtains Headphones provided. Headphones provided.

EXHIBITION

end of the exhibition

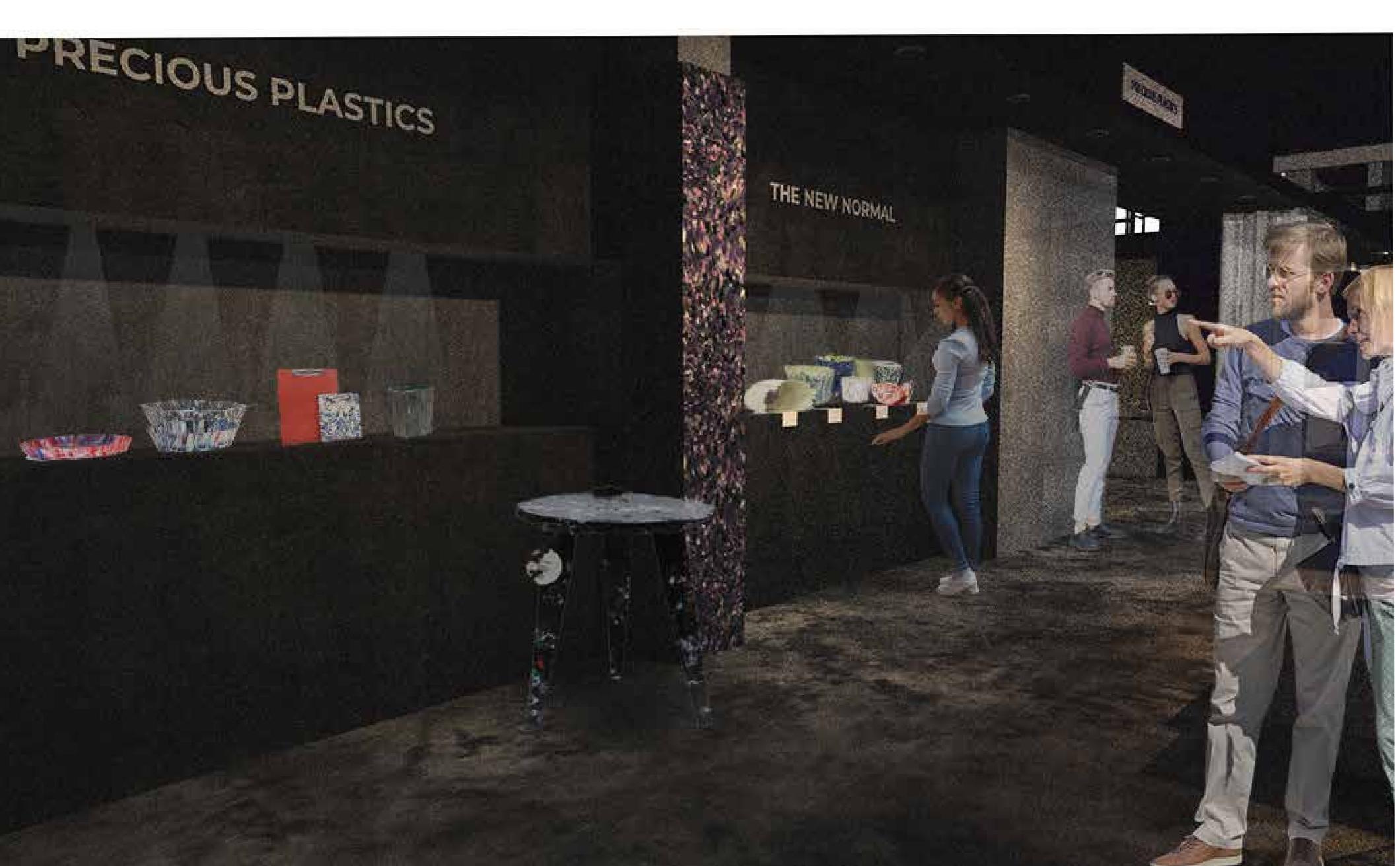


ATRIUM - ACCESS TO WORKSHOP ATRIUM - ACCESS TO WORKSHOP



Atrium - multifuctional space that can cater to casual staff work, social events such Precious Plastic merchandise - various furniture and recycled objects on display as public speakers and educational lectures. Shelving provides extra exhibiton with information about how they were created. space to remind users of Precious Plastic merchandise

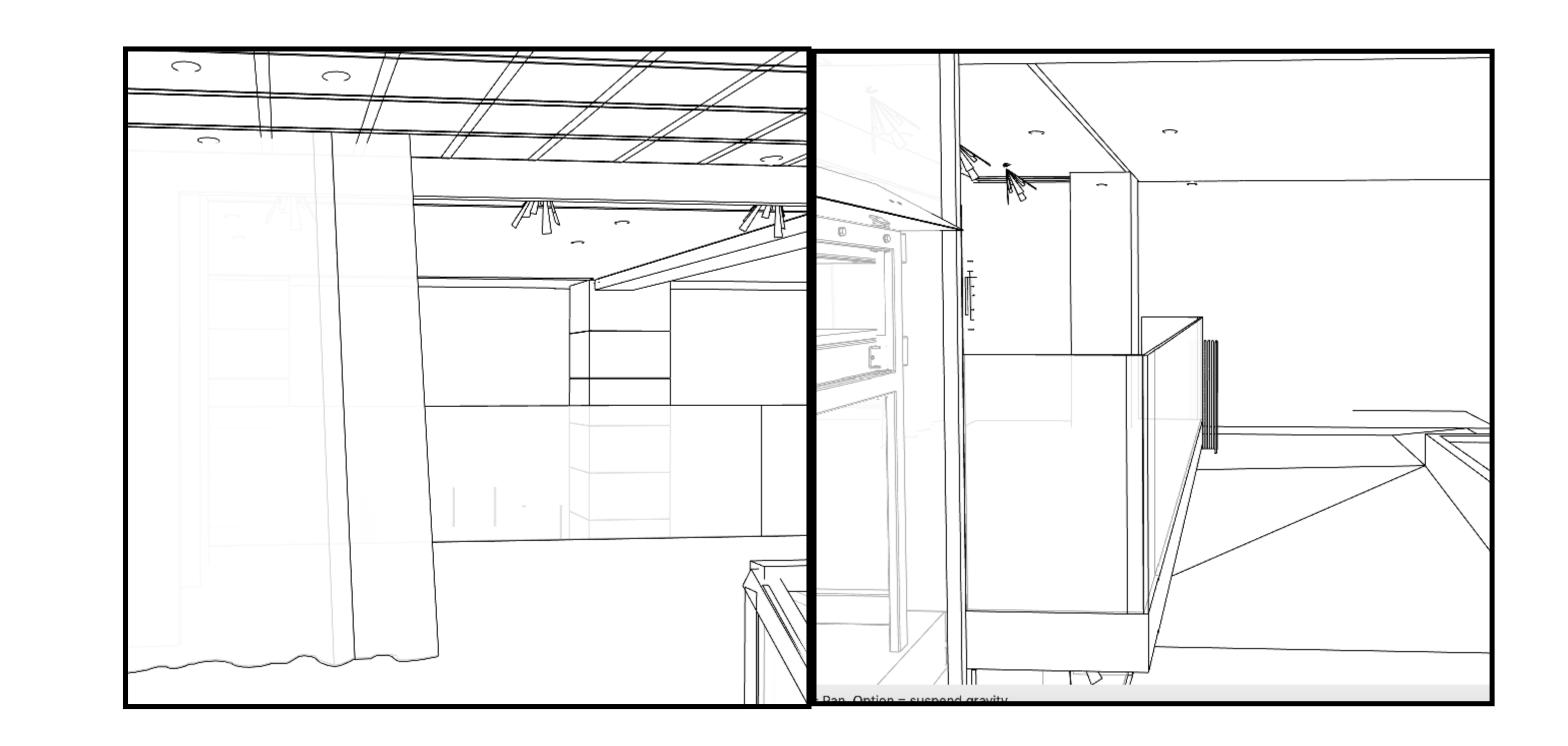
EXHIBITION



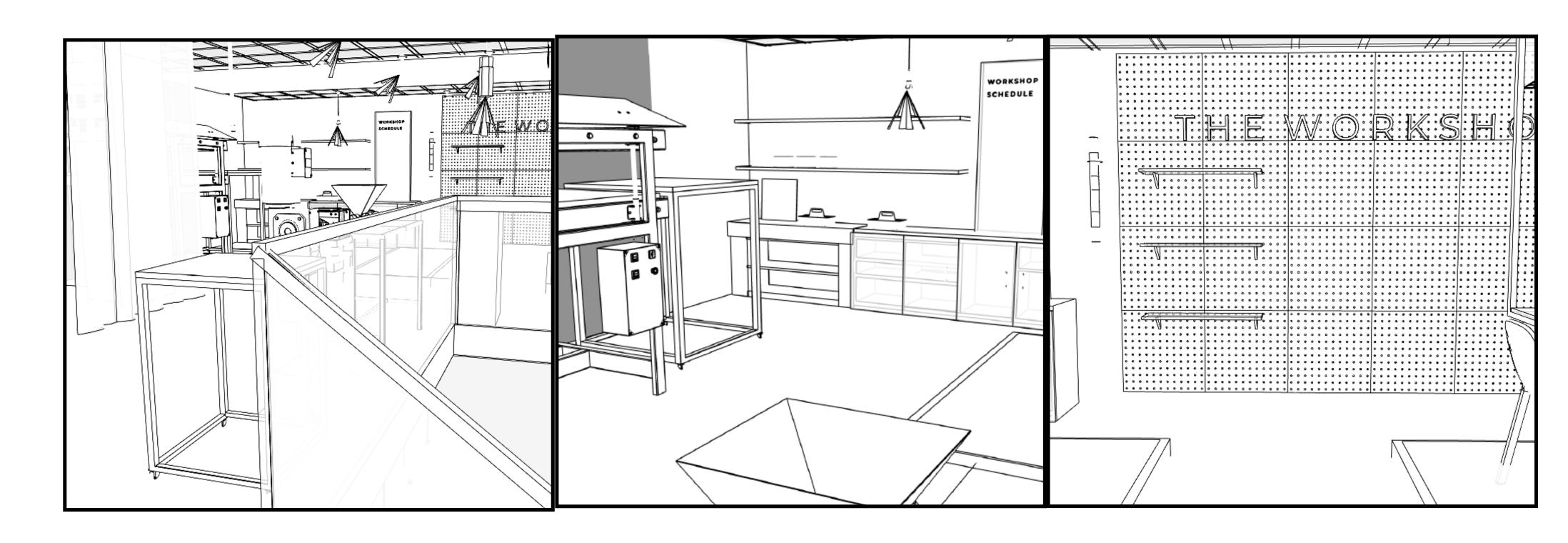
FIRST FLOOR – WORKING & DEMONSTRATION

STORY BOARD

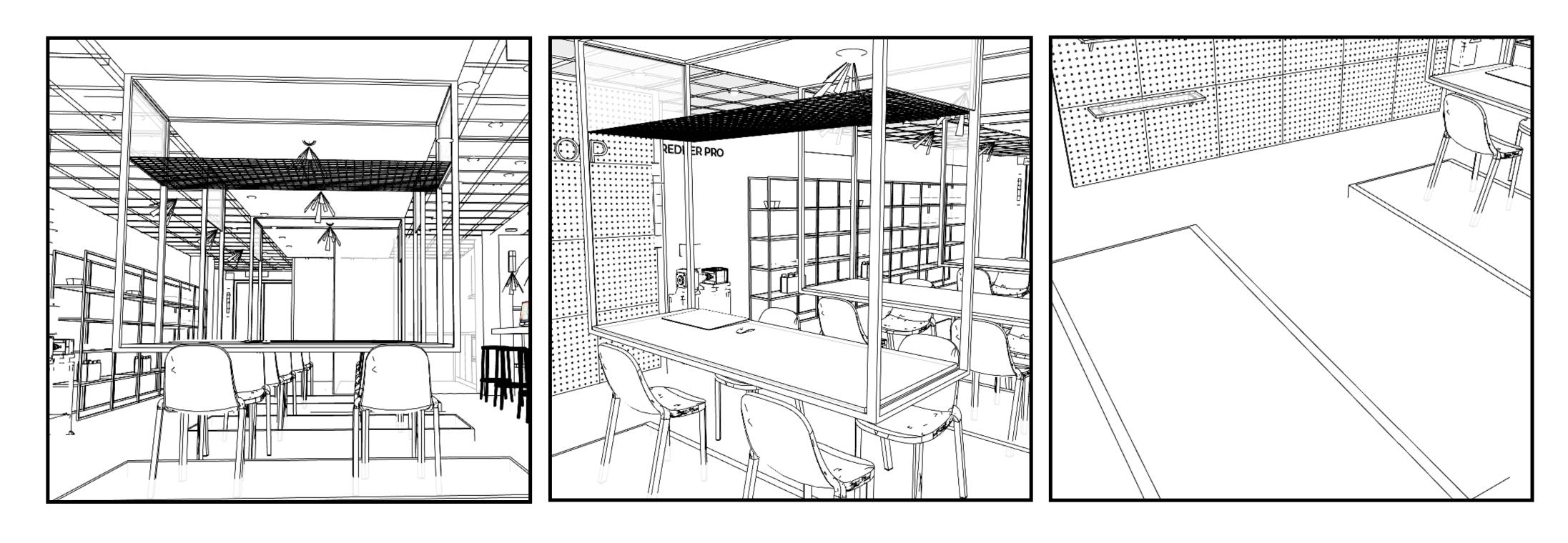
Users will be introduced to Precious Plastics merchandise on the ground floor. This narrative follows up the first floor where users get to learn all about how they make these products



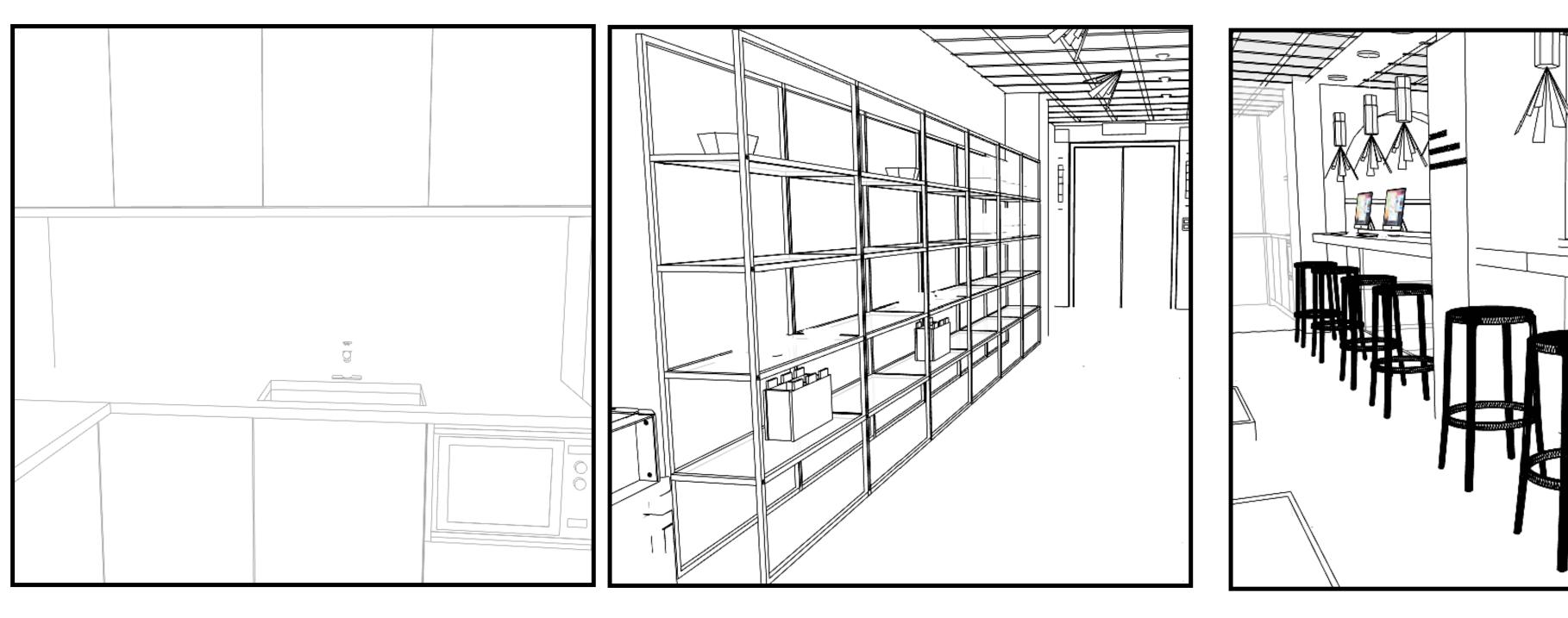
Showing the users approach and entry to the reception space. Greeted by the receptionist and directed where to go.



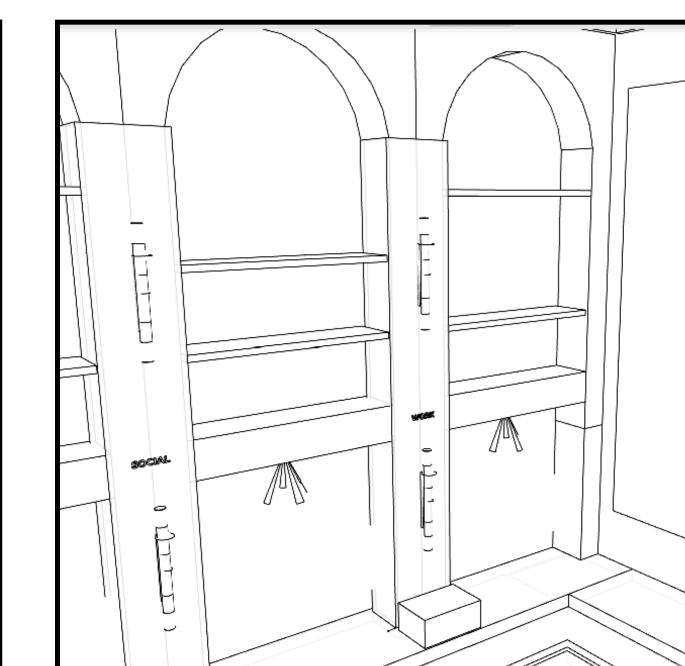
Users contine to the first floor to discover the workshop where the staff makes all the products.



Showing the constrcture of the tables along the ceiling track





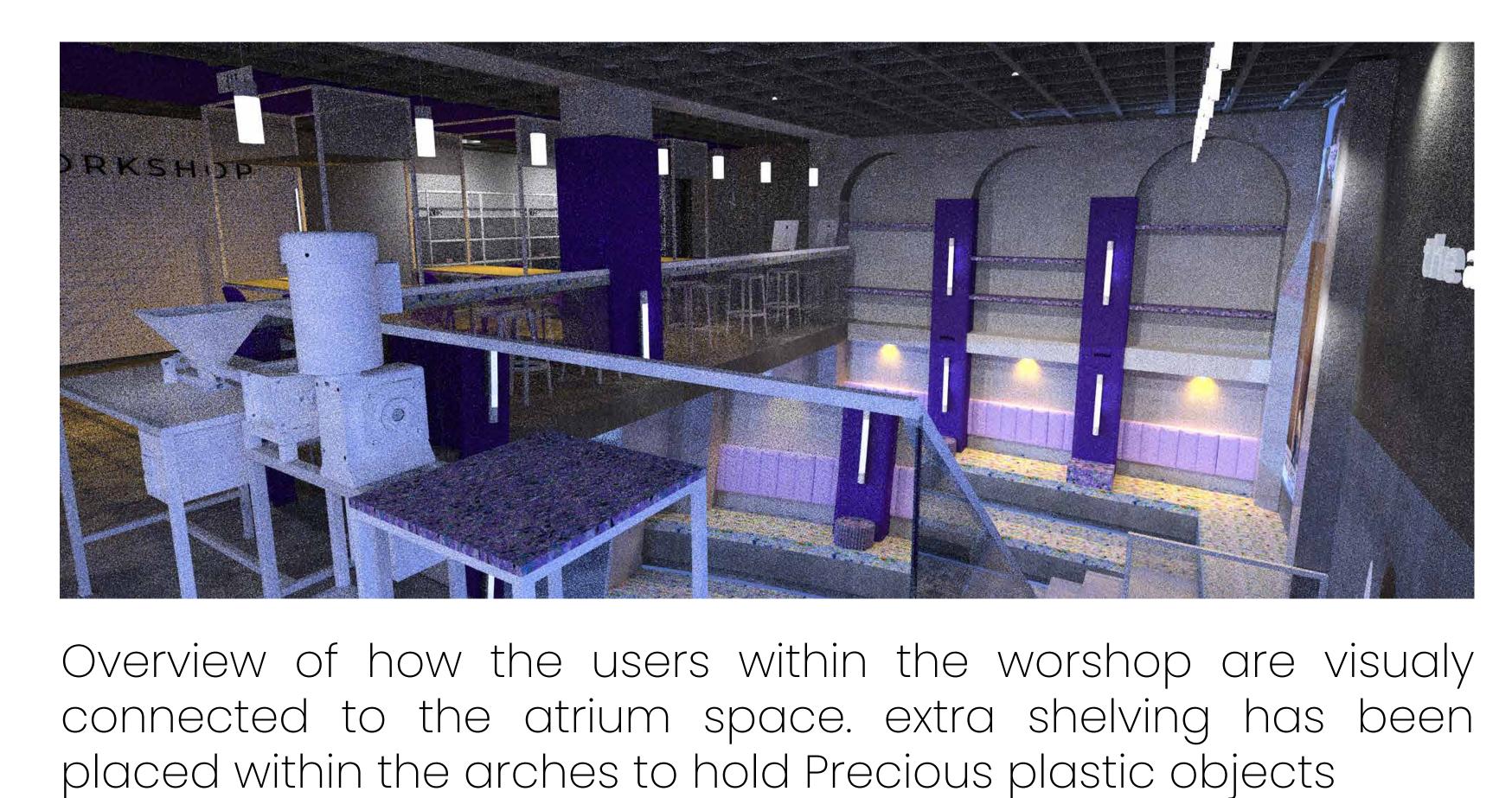


Kitchen, storage, lifts and the public toilets are also located on the first floor

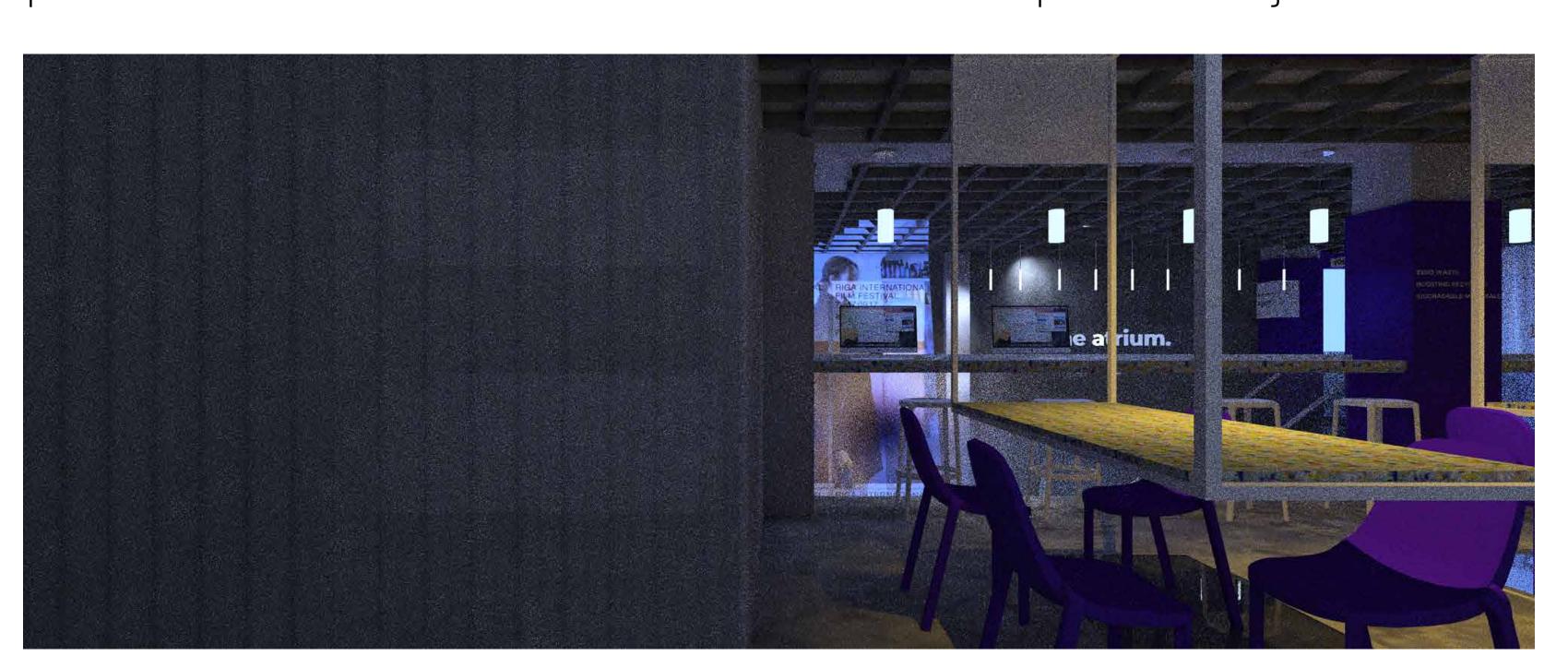
ADAPTABILITY A multifunctional space

After exploring the exhibition space the users will ascend up to the working floor, a space where uses can find out a solution to the plastic crisis, Weekdays, demonstrations and teaching will be live to the public and on weekends the machines will be displayed as part of the exhibition too. Given the nature of precious plastics transparency I will be creating a space conveys this same idea. staff will occupy this space and be on stand by for any of the users that are interested in learning about this method of recycling.

If staff is working a big job, machines and work-surfaces can be moved to an area that sectioned off, giving them the privacy and the focus to do their work in peace.



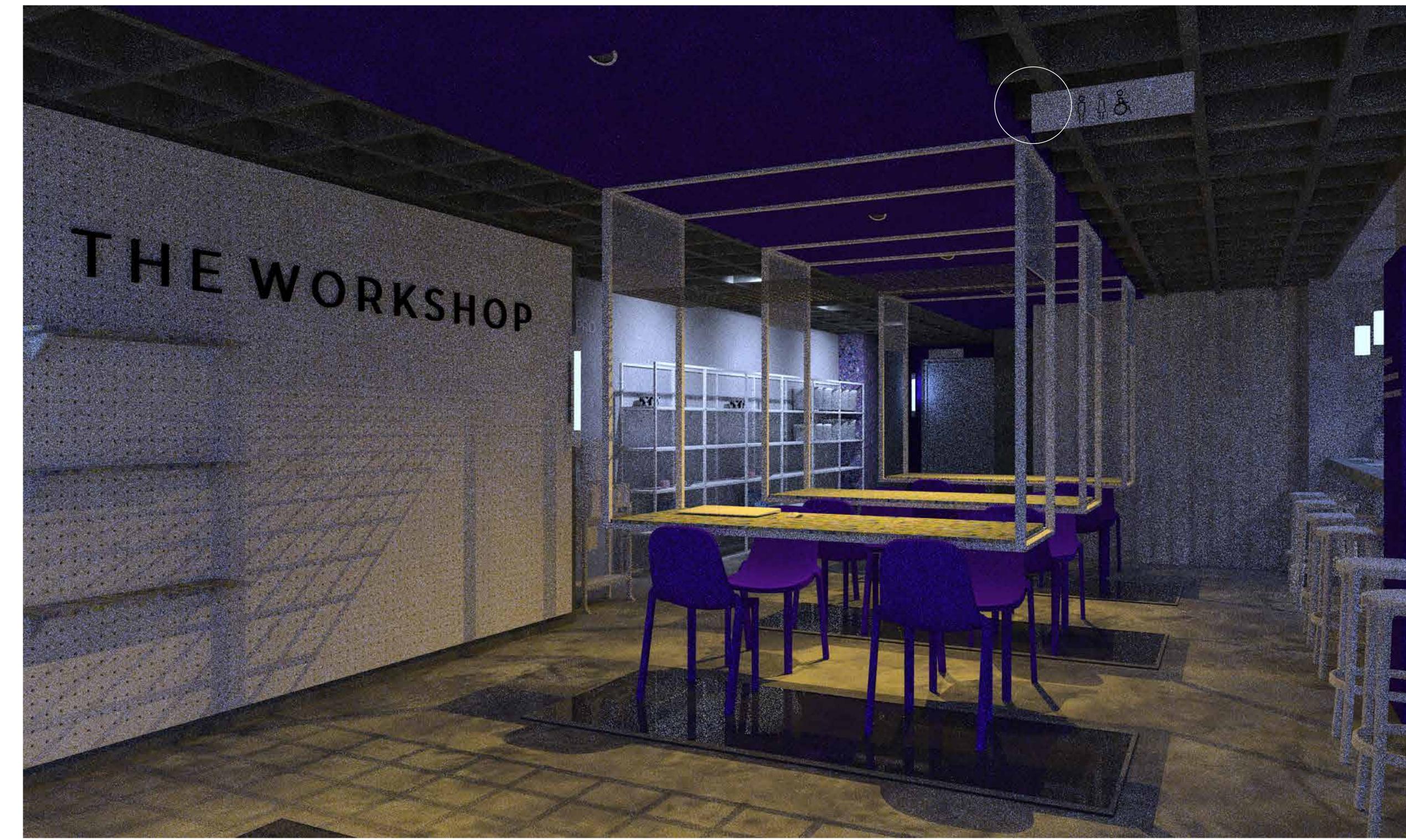
FIRST FLOOR - THE WORKSHOP / DEMONSTRATION



Sheer curtain with less transparency to give the staff in the kitchn privacy

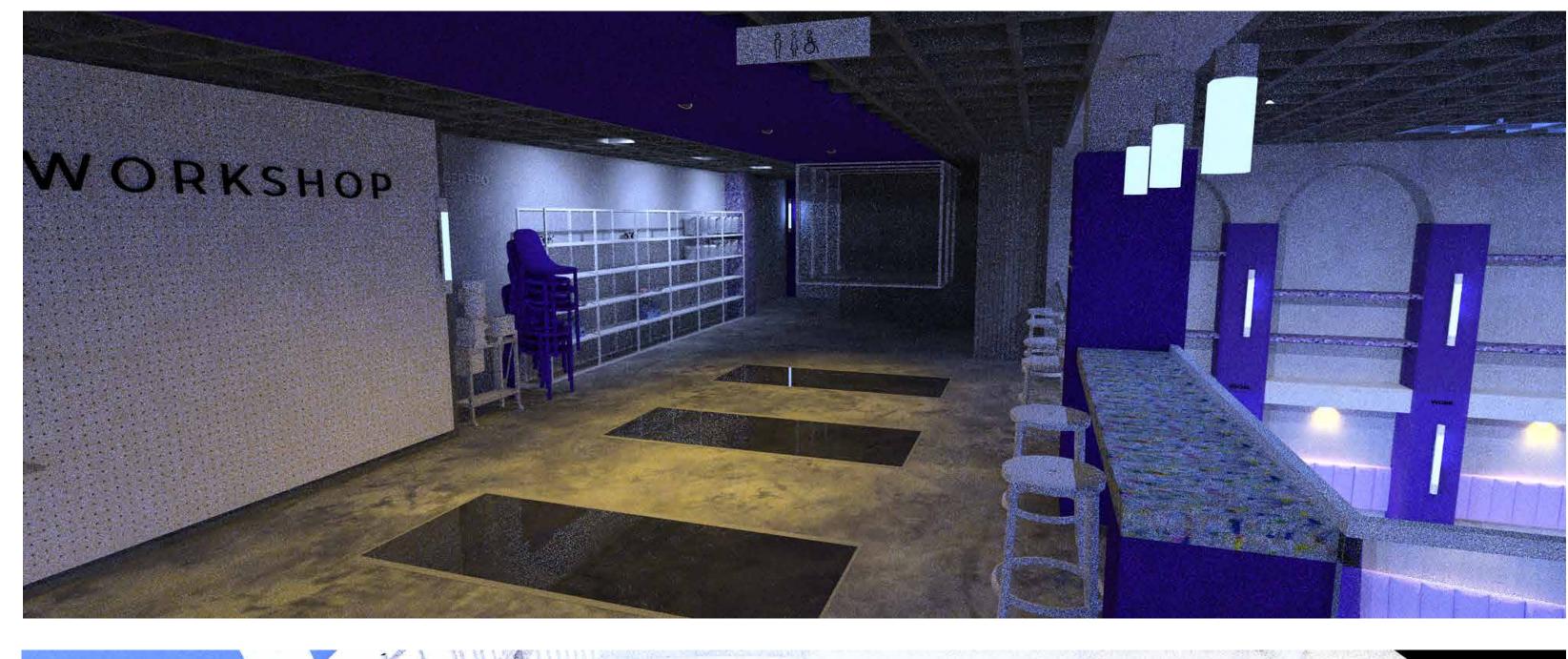
COLLECTION EXHIBITION ATRIUM 2 WORKSHOP TERRACE

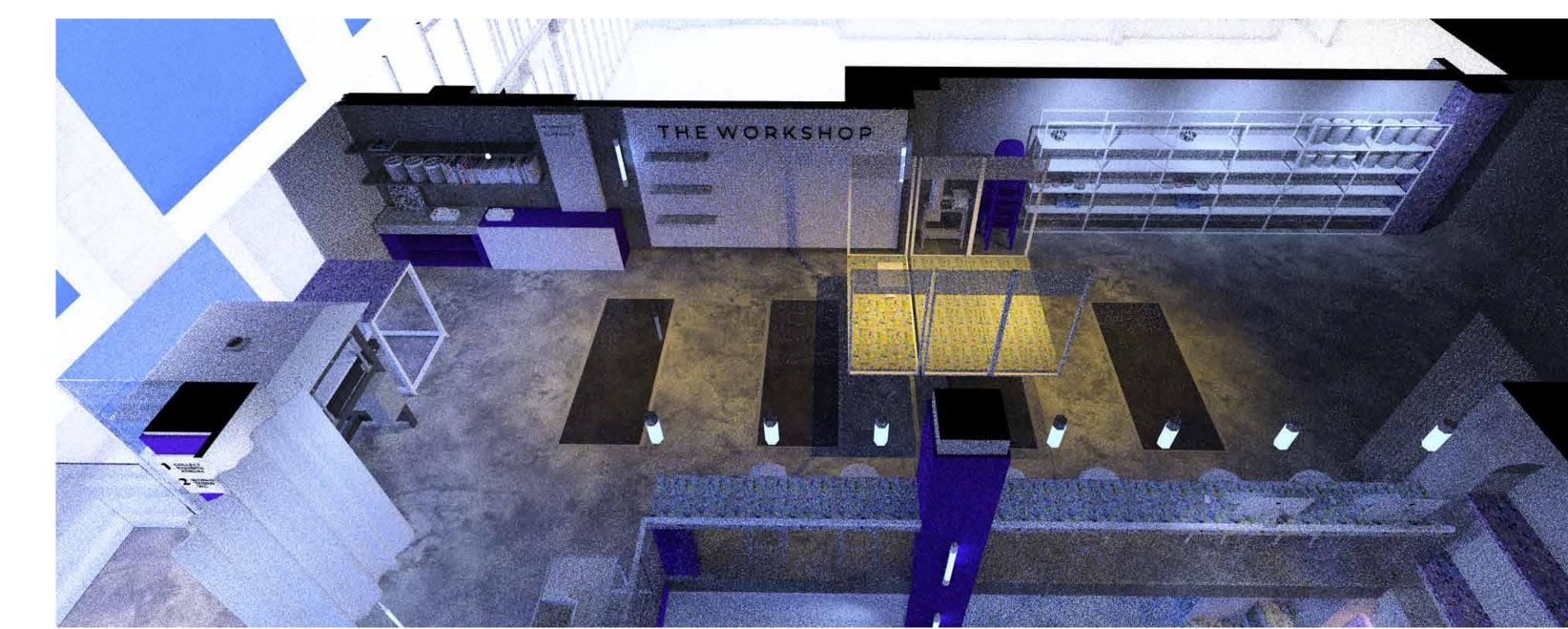
become part of the exhibition.



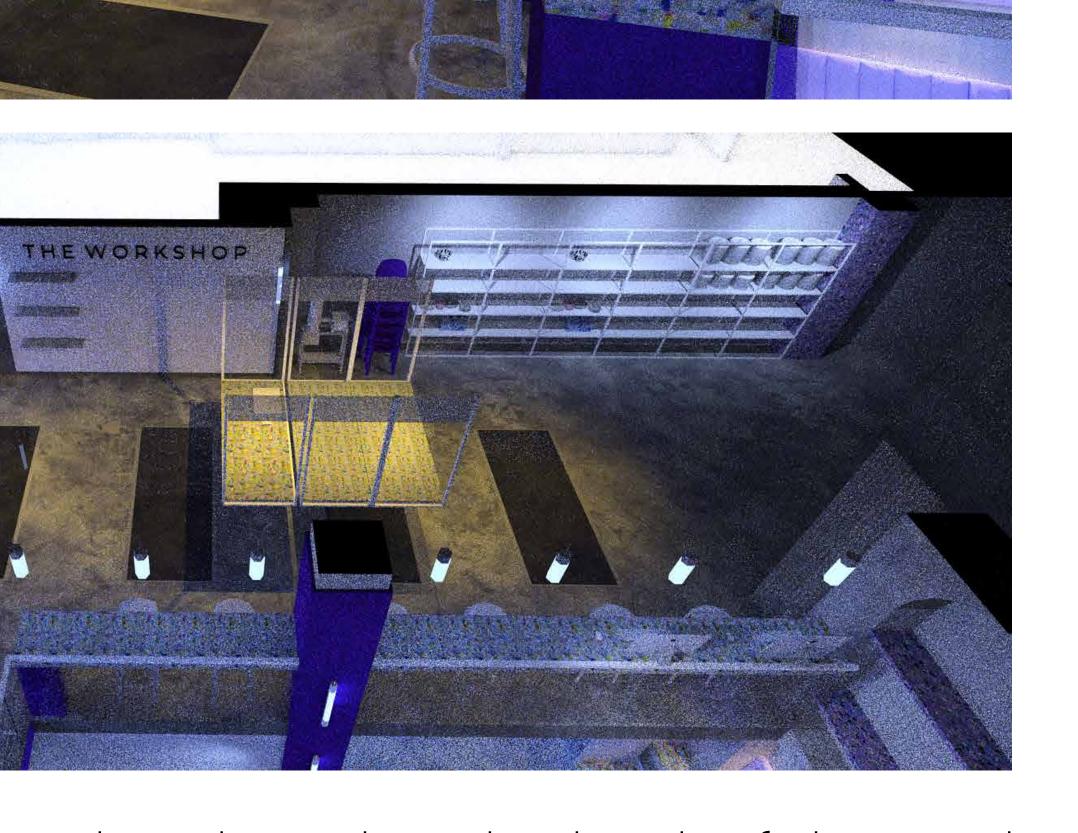
The first floor features a balcony access through bifolding doors, The workshop - Showing the plasterboard strip that hides the mechanisms for the sliding track main working space for staff. Staff regualy hold demoonstrations to teach the users to construct attachment. Intentional Spotliting to highlight the main spaces the tables stay throughout the their machines and to make objects from them.. Machines can be moved when not in use to day. Timber joists run horizontally and vertically throughout the space creating a feature for the ceiling . Adaptibilty is key for this area, A peg board clads the wall. staff can customise shelving and storage depending on the activies being held on this floor

ADAPTABILITY OF TABLES





Tables can be moved and gathered at the back of the track within the kitchen space. This could act as one large table to host staff dinner events. This opens the middle section up to allow users to gather and socials with ease at events.. The tables can also be gathered within the middle of the workspace making one large table to cater for larger demonstartions.



FIRST FLOOR - VIEW FROM THE **BACK OF THE STORE**

The first floor is designed to allow natural light to flow throughout the space to reduce the need for atrifcial

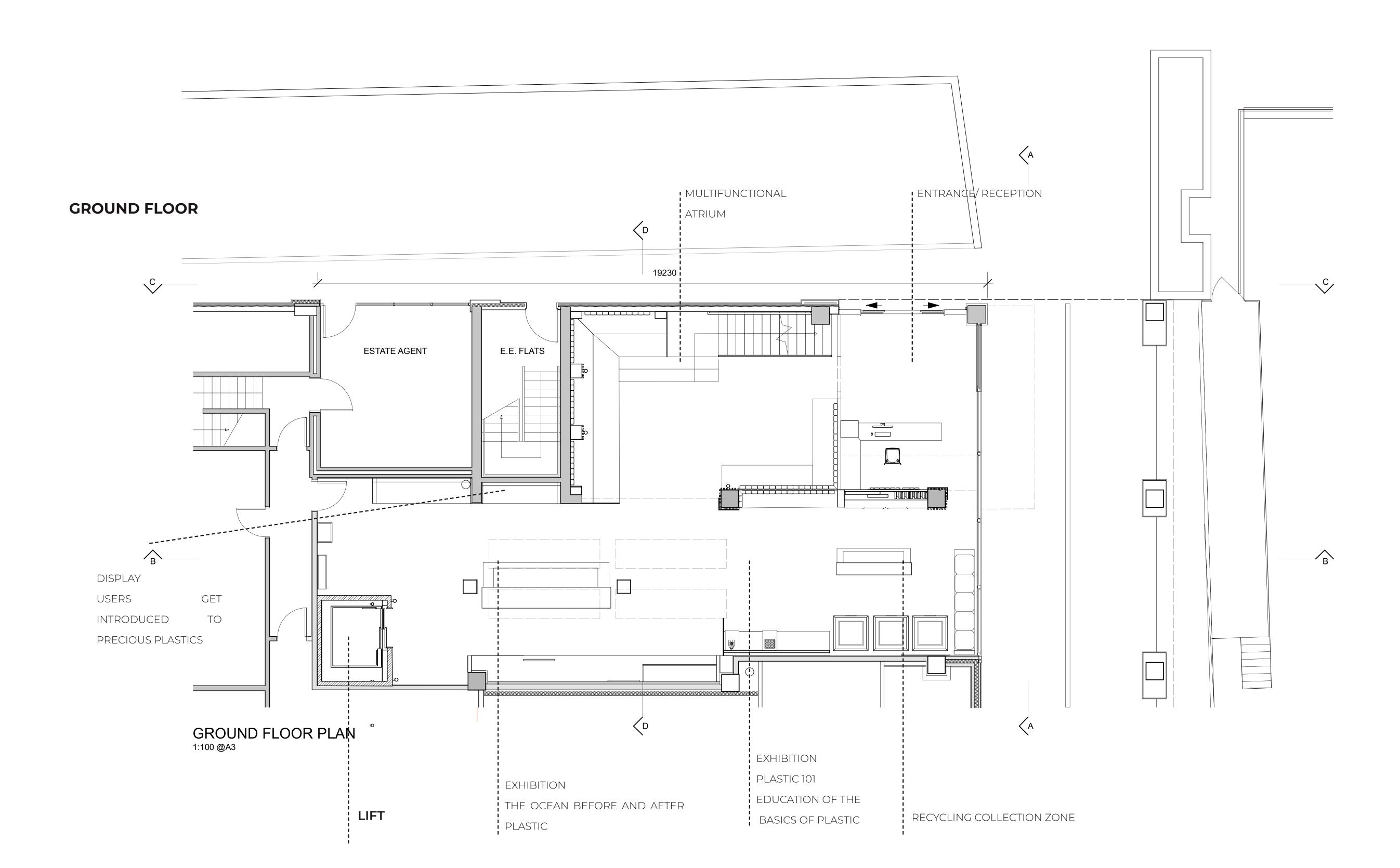
WORK-SURFACES

In this area surfaces will made in a simple yet functional manor to reflect the machines characteristics. Due to being made of the same recycled material precious plastics recycles on site, the tables will become part of the exhibition. They, themselves will be a demonstration of how well they can replace our everyday tables.

FINAL DESIGN SCHEME

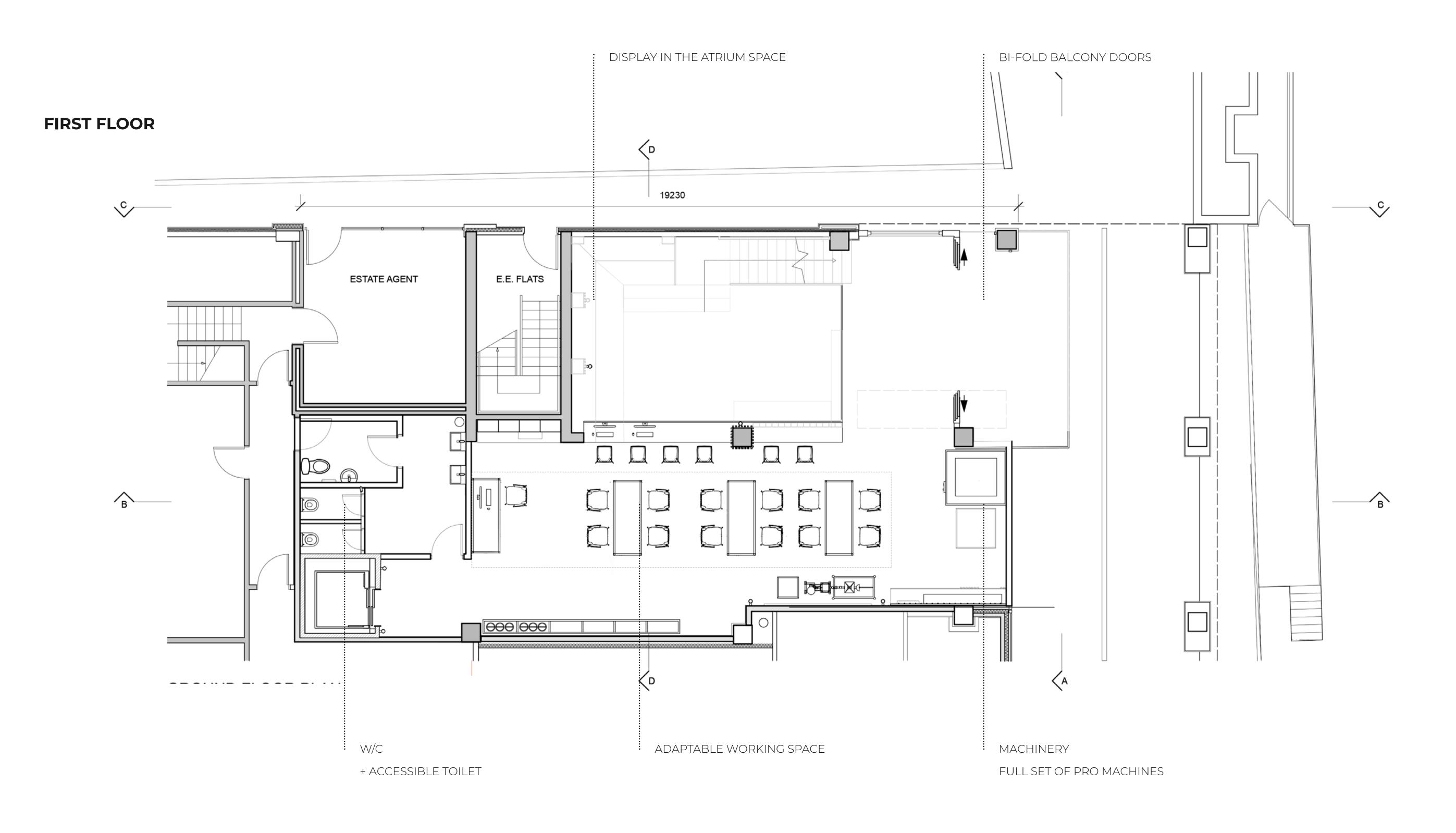
FLOOR PLAN - GROUND FLOOR

Showing how natural lighting despite no direct sunlight can light the front of the site.



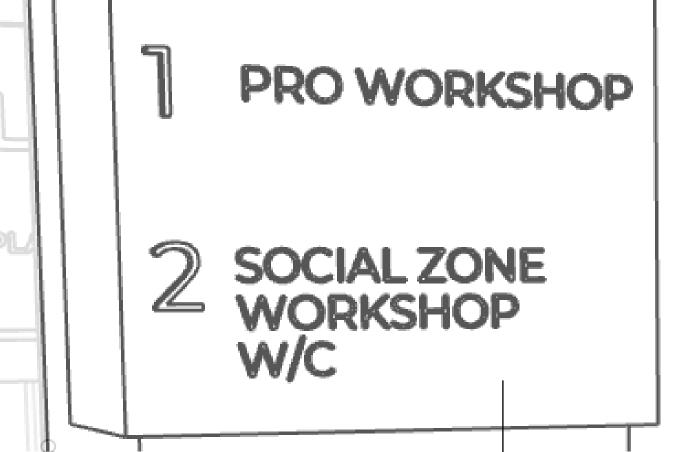
FLOOR PLAN - FIRST FLOOR

Lift access and public toilets are located at the rear of the store on the first floor to allow the staff quick access.



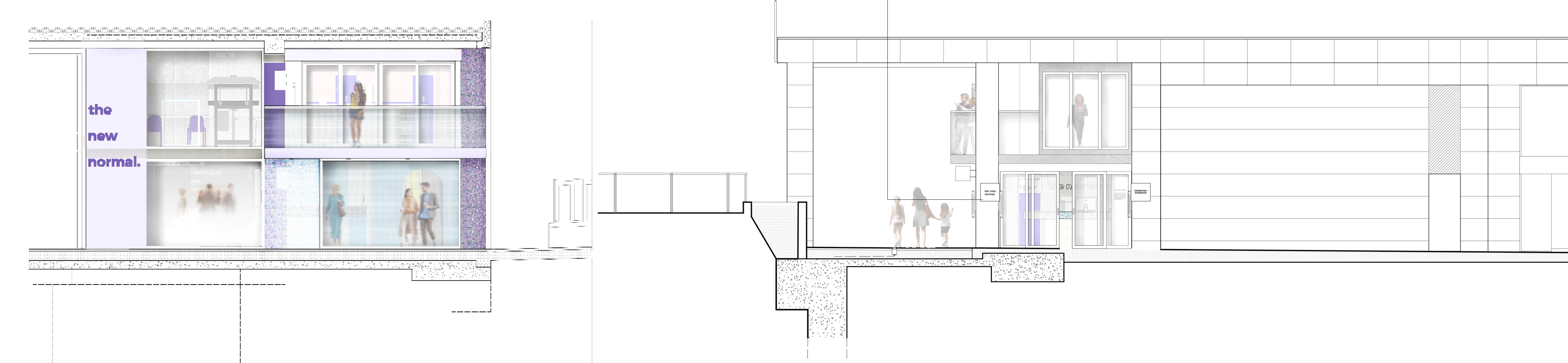
FACADE - FRONT ELEVATION

The new design of the facade works well with my Concept words. The use of polycarbonate obscures the interior, And the gradient glass film gradually reveals the first floor of the space so immediately, the users are drawn to what they can see clearly into. The facade blocks out everything but the workshop



SECTION CC

Branding located at both elevations of the site helps the public identify the



SECTION BB

Showing how the design has made use of all the spaces by creating built in shelving/storage, kitchen and tables within it.



SECTION DD - CROSS SECTION

Users from the first floor have a visual connection to the 'hub' of the space. Built in seating allows users to view public speaking events with ease

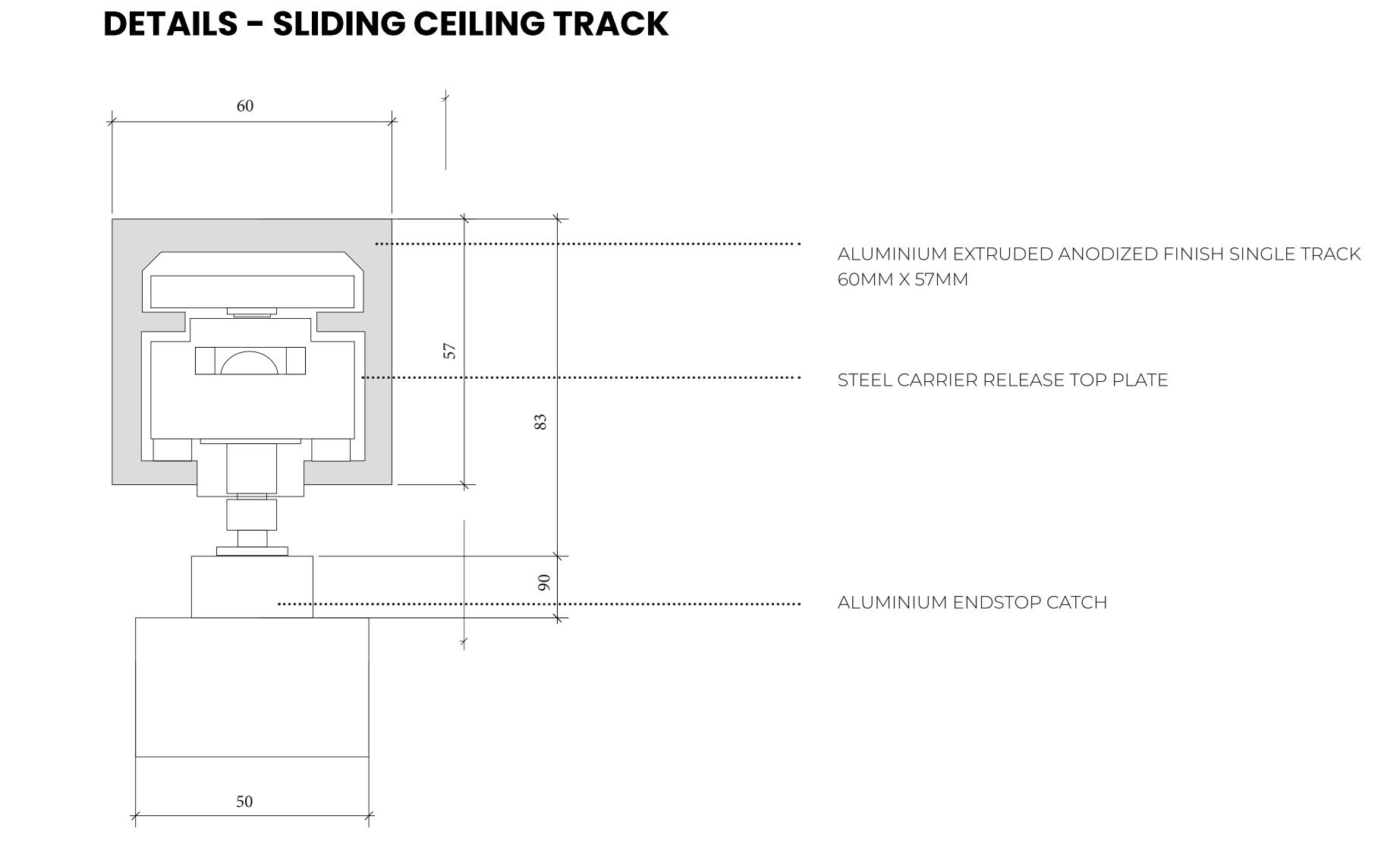


TECHNICAL CROSS SECTION

TWEET CASTS

TWEET

DESIGN DETAILS



DETAILS - TRACK EMBEDDED WITHIN PLASTERBOARD FRAME TO CONCEAL MECHANISMS

TRACK MECHANISM FOR THE FRAME EMBEDDED INTO A TIMBER FRAME STRUCTURE WITH A PLASTERBOARD FINISH