

Rebirth in mycelium.

Olivia Culley • 19037495 • Interior Architecture and Design • 6CTA1101-0905-2022



(Dykes, 2021)

design report.

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schedule of work

Project: Rebirth in Mycelium

Address: The Forge, Ironworks, 58 Dace Road, London, E3 2NX

Designer: Olivia Culley

Date: 16th January 2023

Task	Month	OCT	10	17	24	31	NOV	7	14	21	28	DEC	5	12	19	26	JAN	2	9	16	23	30	FEB	6	13	20	27	MAR	6	13	20	27	APR	3	10	17	24	MAY	1	8												
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Research - Site Information			█	█	█																																															
Research - Site Demographics					█	█																																														
Research - Site Environmental Analysis							█	█																																												
Research - Site Structural Building Analysis									█	█																																										
Research - Functional Aspects											█	█																																								
Research - Legal Framework													█	█																																						
Research - Existing materials																																																				
Research - Issues and potentials																																																				
Project Brief - Program																																																				
Project Brief - Justification																																																				
Project Brief - Target Users																																																				
Project Brief - Zoning																																																				
Project Brief - List of Accommodation																																																				
Project Brief - Stakeholders																																																				
Design - Concept																																																				
Design - Concept Model																																																				
Design - Moodboard																																																				
Design - Material Board																																																				
Proposal - Design Statement																																																				
Proposal - Floor Plan																																																				
Proposal - Elevations and Sections																																																				
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Submission - Feasibility Report																																																				
Proposal - Revised Floor Plan																																																				
Proposal - Revised Elevations and Sections																																																				
Proposal - Visuals																																																				
Technical Drawing Pack																																																				
Technical - Site Plan																																																				
Technical - Floor Plans																																																				
Technical - Close up of relevant areas																																																				
Technical - Ground floor and surrounding area																																																				
Technical - Proposed Layout Plan																																																				
Technical - Demolition Plan																																																				
Technical - Exterior Elevation																																																				
Technical - Sections																																																				
Technical - Interior Elevations																																																				
Technical - 4 Axonometric of interior																																																				
Technical - Visuals, perspective renderings																																																				
Technical - Details of feature wall																																																				
Technical - Construction Details																																																				
Technical - Floor Finishes Plan																																																				
Technical - Close ups of relevant floors																																																				
Technical - Furniture Plan																																																				
Technical - Ceiling Plan																																																				
Technical - Door Schedule																																																				
Technical - Window Schedule																																																				
Technical - Lighting Schedule																																																				



project brief

Project Brief

Client Brief

Justification

Design Statement

01

the mycologist.

project brief.

- mycelium furniture showroom
- mycelium production facility
- mycelium product design
- mushroom restaurant

The **Mycologist** will house a fully circular mycelium production facility. From start to finish, the building will facilitate the growth of mushrooms, the production of mycelium, the design and manufacture of mycelium furniture and building materials, always considering the reuse of offset materials.

These materials may be heat left over from the mycelium drying process, that will be reused to heat the building as well as an on site glasshouse, where mushrooms will be grown.

They may be mushroom cups left over from the mycology process, that will be served in **Portobello's**, the on site restaurant who's purpose is to prevent waste and make the most of the mushrooms that are grown in the glasshouse.

The strategy is to provide the local community and building companies with sustainable mycelium products through a sustainable mycelium facility.

Vitra is a Swiss family-owned furniture manufacturing company, operating since 1950, who work with designers and architects to produce outstanding original furniture.

They are dedicated to improving the quality of homes, offices and public spaces through the power of design. Vitra believes in the longevity of its products, and that their designs should "forgo stylistic trends and eliminate superfluous details" (Vitra, 2022)

Vitra is looking for a new innovative furniture and building materials showroom and production facility focussed on mycelium. By gently renovating the existing building and enhancing historic details whilst adding modern interventions, a link is created between old and new. Emphasis will be put on the sustainability of both the product and the building, **The Mycologist**.



justification.

- 1990** — The launch of BREEAM, the worlds longest established method of assessing, rating and certifying the sustainability of a buildings construction
- 2006** — Gordon Brown announces new policy for all new homes to be zero carbon by 2016. The code for sustainable homes is introduced, and so standards were raised for the performance of new homes across the nine areas of sustainability.
- 2008** — The Climate Change Act is introduced, the first requirement to cut emissions to 80% of 1990 levels by 2050. English and Welsh councils are required to follow the Merton rule: a planning policy that requires new developments to generate at least 10% of their energy on site.
- 2010** — The renewables feed-in tariff was introduced by the new coalition government, so landlords can fund the installation of solar panels on tenants roofs.
- 2019** — The UK must bring emissions down to net zero by 2050
The Future Homes Standard is introduced. New homes by 2025 will produce 75-80% lower carbon emissions. Existing homes are to be made highly energy efficient by 2025, and must meet a list of requirements.
- 2021** — UKGBC, UK Green Building Council, launches a Net Zero Whole Life Carbon Roadmap, a common goal and agreed actions for achieving net zero carbon in the construction, operation and demolition of buildings and infrastructure in the UK.

why build a mycelium production facility and showroom?

- More and more laws and regulations are being implemented into the UK's government relating to sustainable building. Recently, the COP26 took place hosted by the UK, for the UN to discuss tackling climate change.
- The building industry accounts for 25% of CO2 emissions in the UK, as well as creating 137.8 million tonnes of C&D waste in 2018.
- Therefore, construction and design companies and their clients are increasingly interested in making their designs as environmentally friendly as possible, helping achieve standards, protect the environment and save on running costs.
- By creating an accessible and affordable way to meet these standards and implement sustainable materials into both residential and commercial buildings, the UK's construction industry will have an easy way to make their buildings more environmentally friendly.

design statement.

Our goal is to provide a one-stop-shop for individuals and businesses to purchase and implement fully circular sustainable materials into their properties easily and affordably.

By fostering a culture of sustainability in the building industry, we can work towards a more sustainable future. One key element of this design is the incorporation of mycelium as a base material. Mycelium, the vegetative part of a fungus, is a highly sustainable and renewable resource that can be used to create a wide range of building materials, furniture and finishes.

By utilizing mycelium, we aim to create a fully circular product, meaning that the materials used can be easily recycled and re-purposed at the end of their life cycle.

This project aims to not only create a visually appealing design that showcases the benefits of using mycelium as a building material, its application in the interior and the reduction of waste products but also to promote and encourage sustainable practices in the building industry.



site analysis.

Site Information

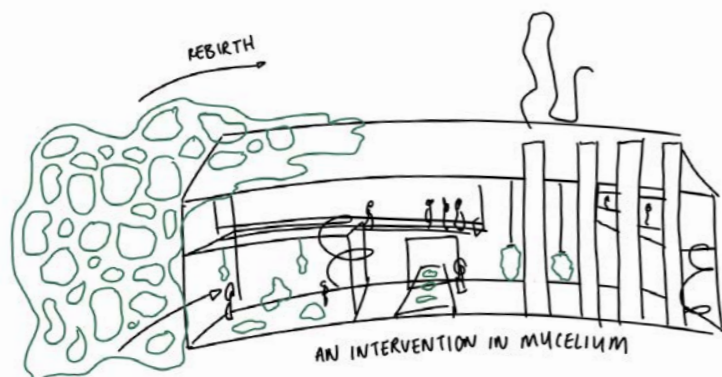
Site Location

Environmental Analysis

Existing Building

“waste isn’t waste until you waste it”

-unknown



02

site information.

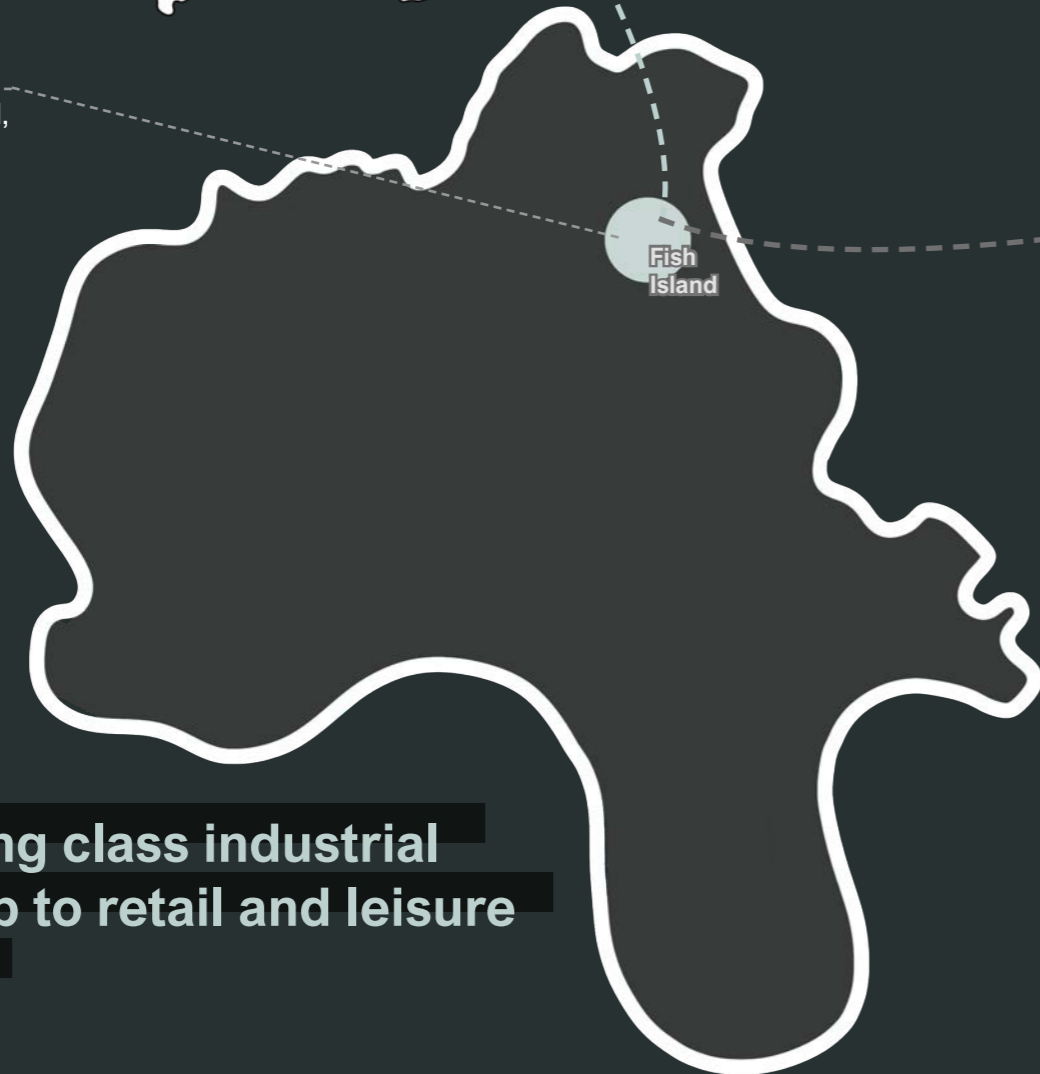


Tower Hamlets

The Forge is situated in the north east region of Tower Hamlets. It sits between Victoria Park and the Olympic park, making it a central and easily accessible location.

Fish Island

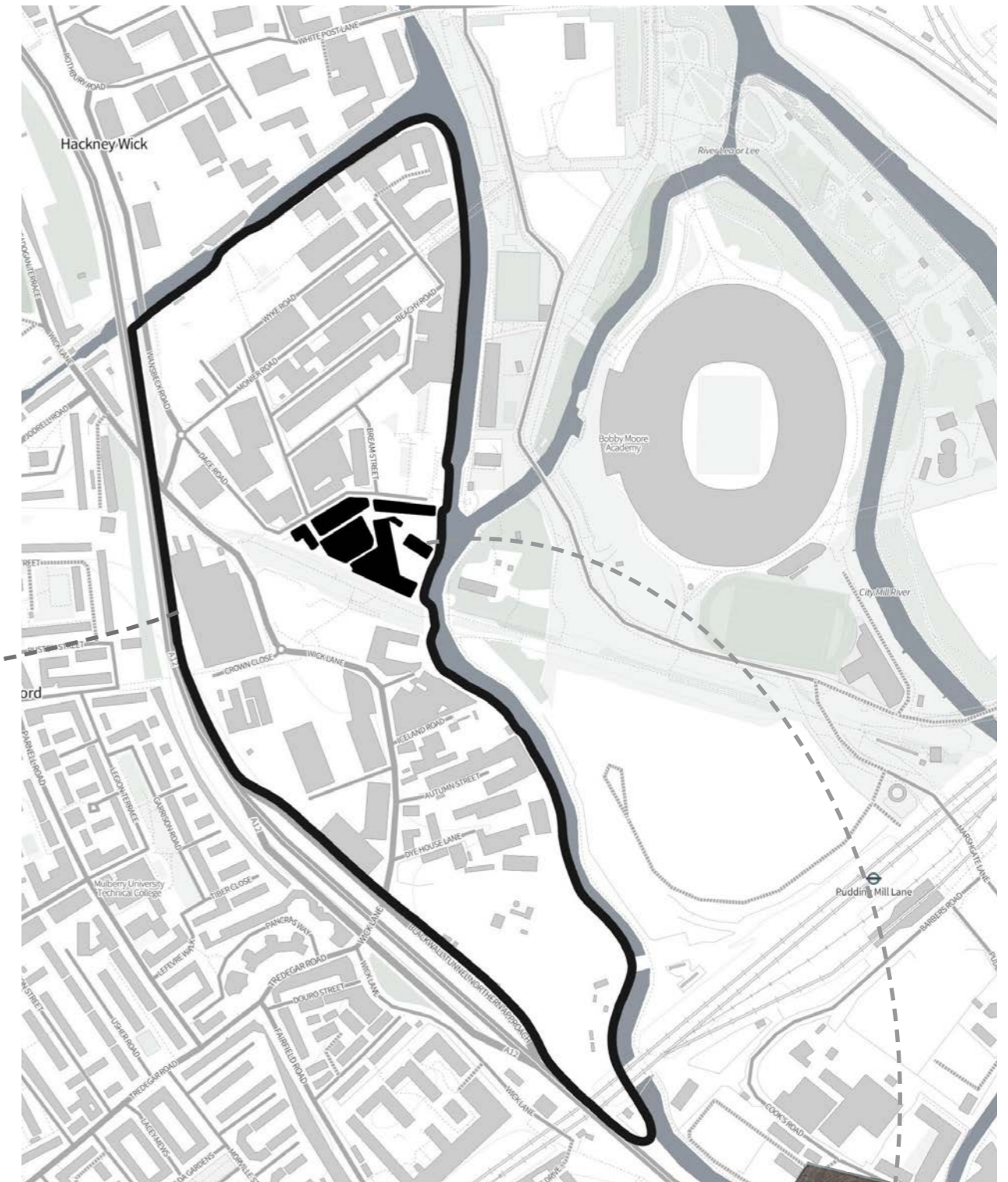
The Forge is in Fish Island, Bow East, an area known for its strong industrial buildings and commercial past. Stratford is just a mile away, attracting over 100,000 visitors a year for shopping and retail.



“From working class industrial transport hub to retail and leisure destination”

about the area.

Fish Island is located in the London Borough of Tower Hamlets. It is situated on the Lea River, east of Hackney Wick and south of the River Lea. The area has a strong history as a centre for industrial production, in the manufacturing of textiles and clothing. In recent years, Fish Island has undergone significant redevelopment, with a focus on creating a vibrant community of artists, designers, and small businesses. The area now features a mix of warehouses, factories, and other industrial buildings that have been converted into studios, galleries, and live-work spaces. The area is known for its proximity to the Olympic Park and its cultural heritage, as well as a number of green spaces and river walks in the area.



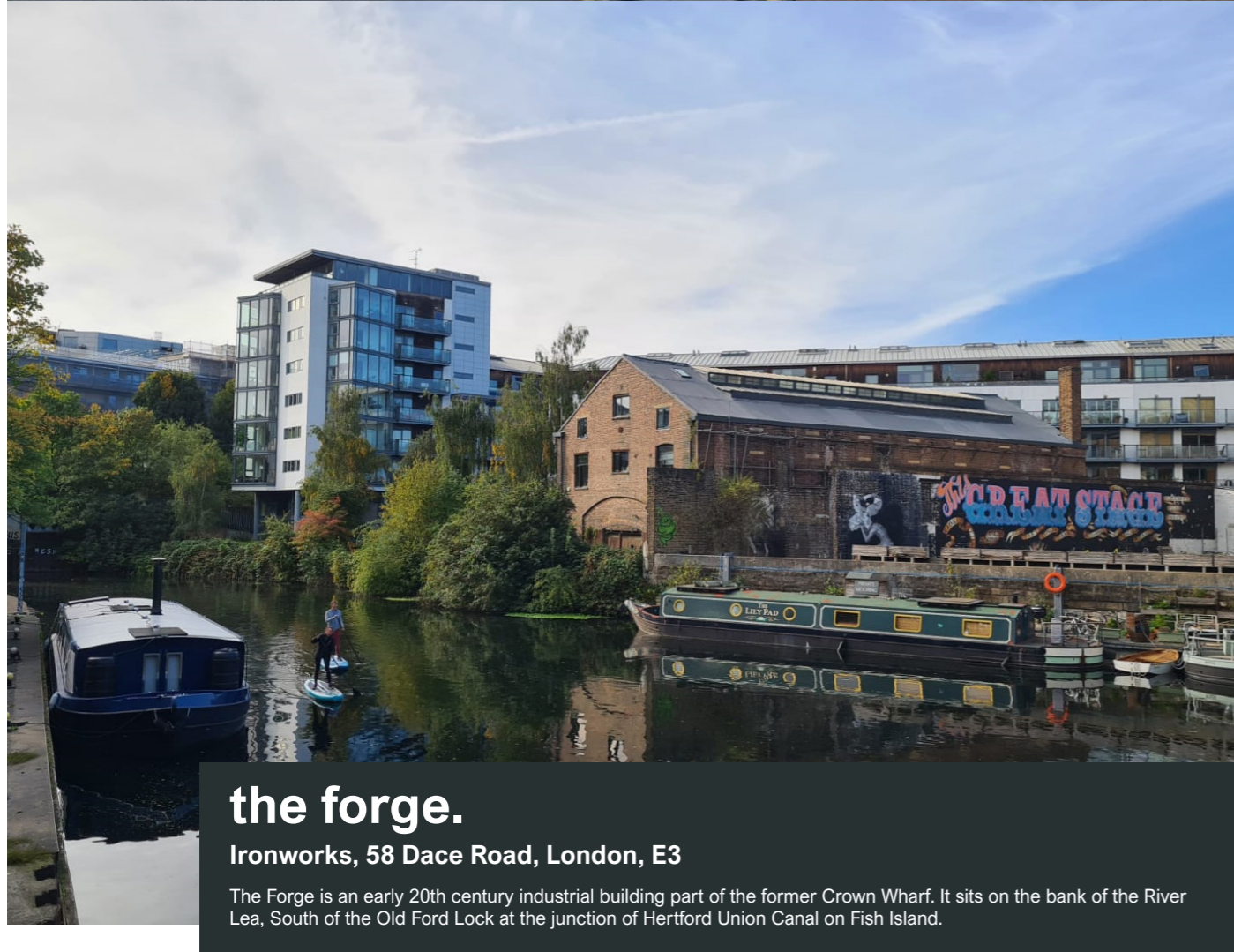
fish island.



site location.



(Zoopla, 2022)



the forge.

Ironworks, 58 Dace Road, London, E3

The Forge is an early 20th century industrial building part of the former Crown Wharf. It sits on the bank of the River Lea, South of the Old Ford Lock at the junction of Hertford Union Canal on Fish Island.

Area: 955 sqm

4 storeys

environmental analysis.



Building use and facilities.

- Education and sport buildings
- Restaurants, bars and cafés
- Residential
- Businesses
- Industrial buildings and warehouses

This map shows that the area surrounding The Forge is mainly of residential and commercial use, with a high density of apartment buildings and businesses. There are also a fair amount of industrial buildings and warehouses, of which the area is known for.

To the east of The Forge there is an increasing amount of sports facilities in the Olympic Park.

It was important to analyse the buildings surrounding The Forge, as the type of housing determines what product would appeal to each housing type. 19% of housing is owned so a mycelium extension appeals. 81% is rented so mycelium furniture is more appealing.

Analysis of businesses nearby can indicate how popular The Mycologist would be and what competition it may face.

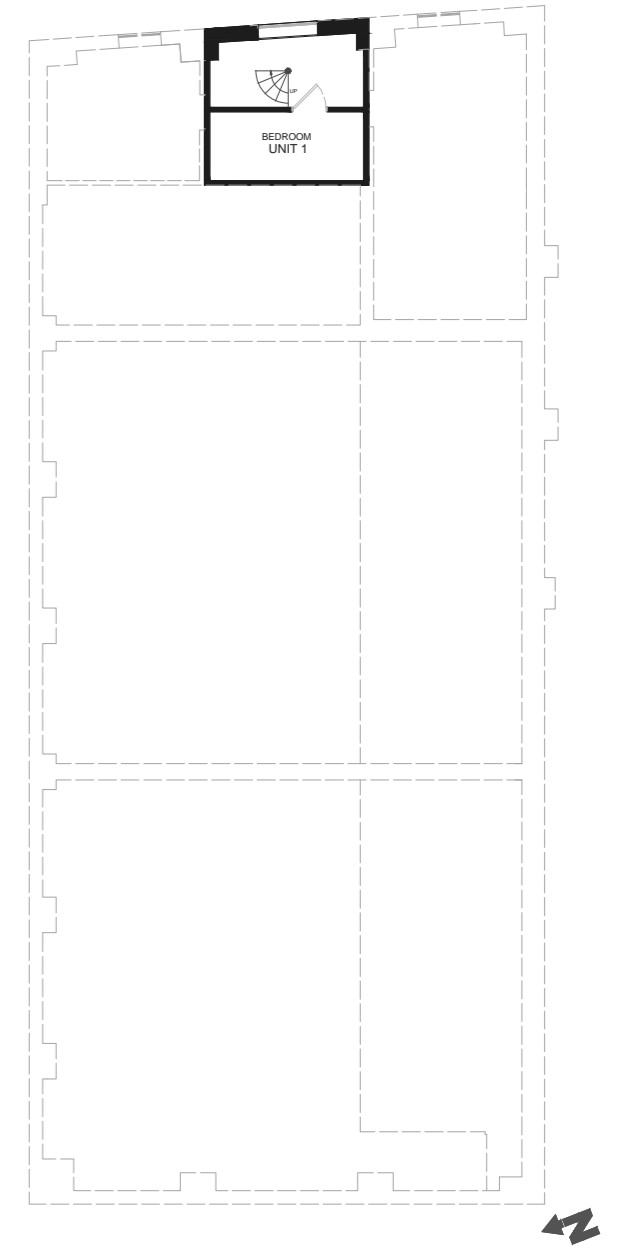
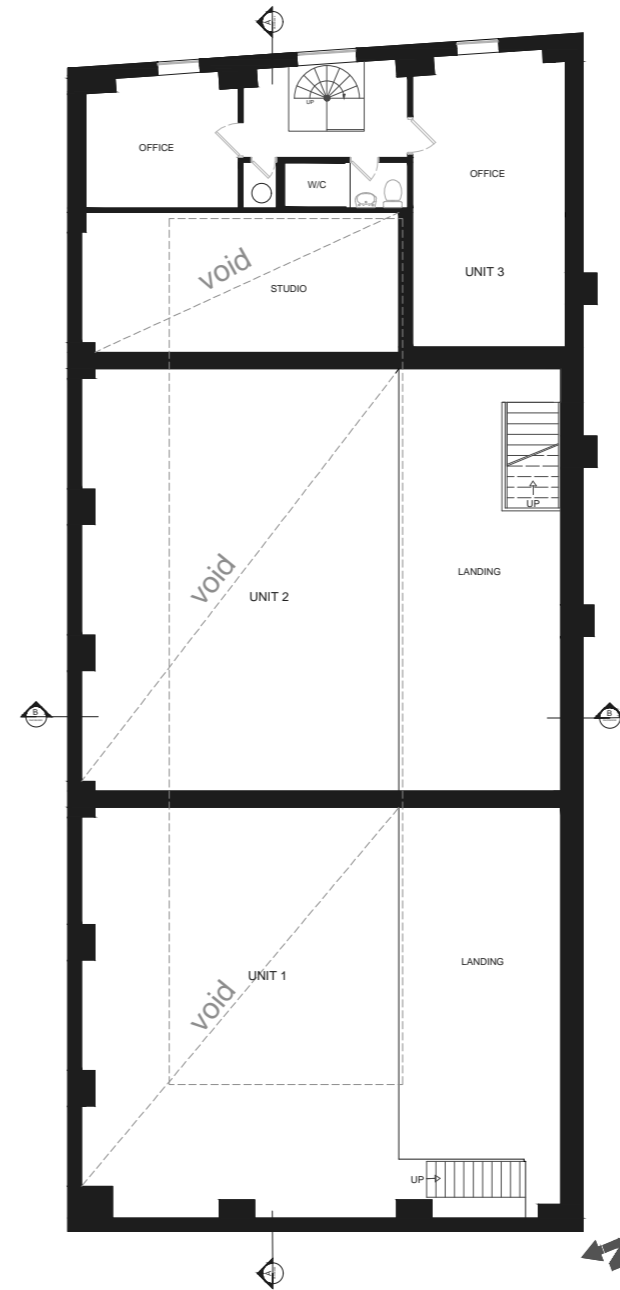
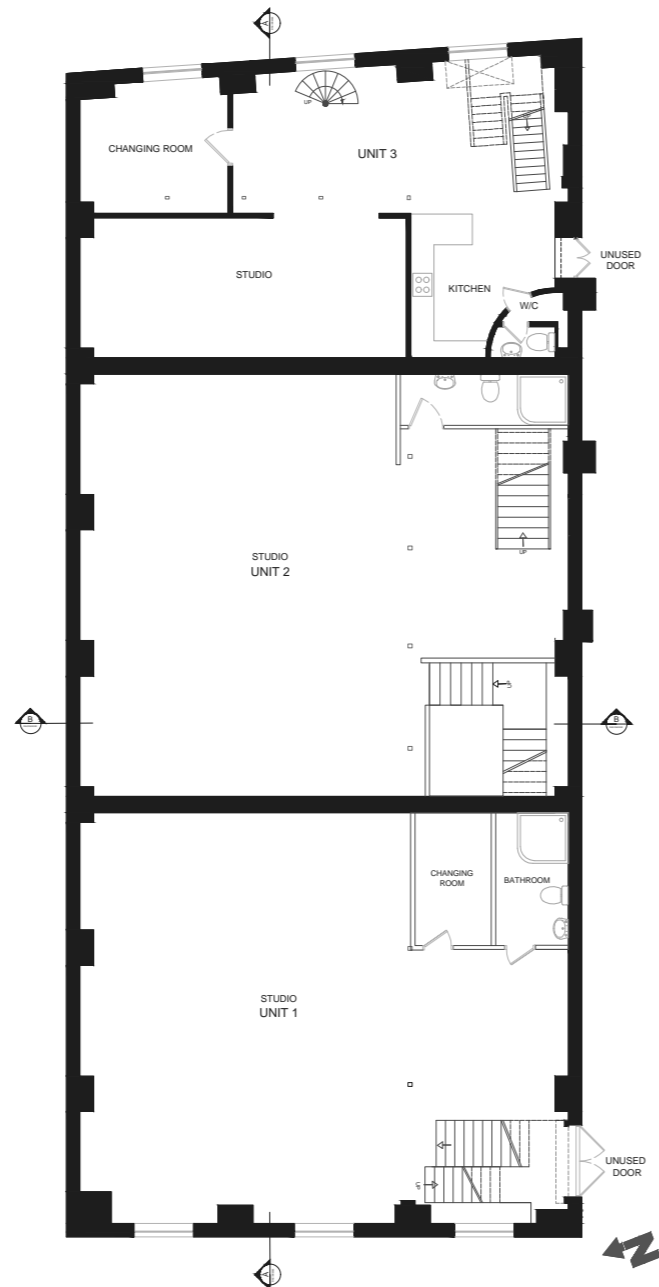
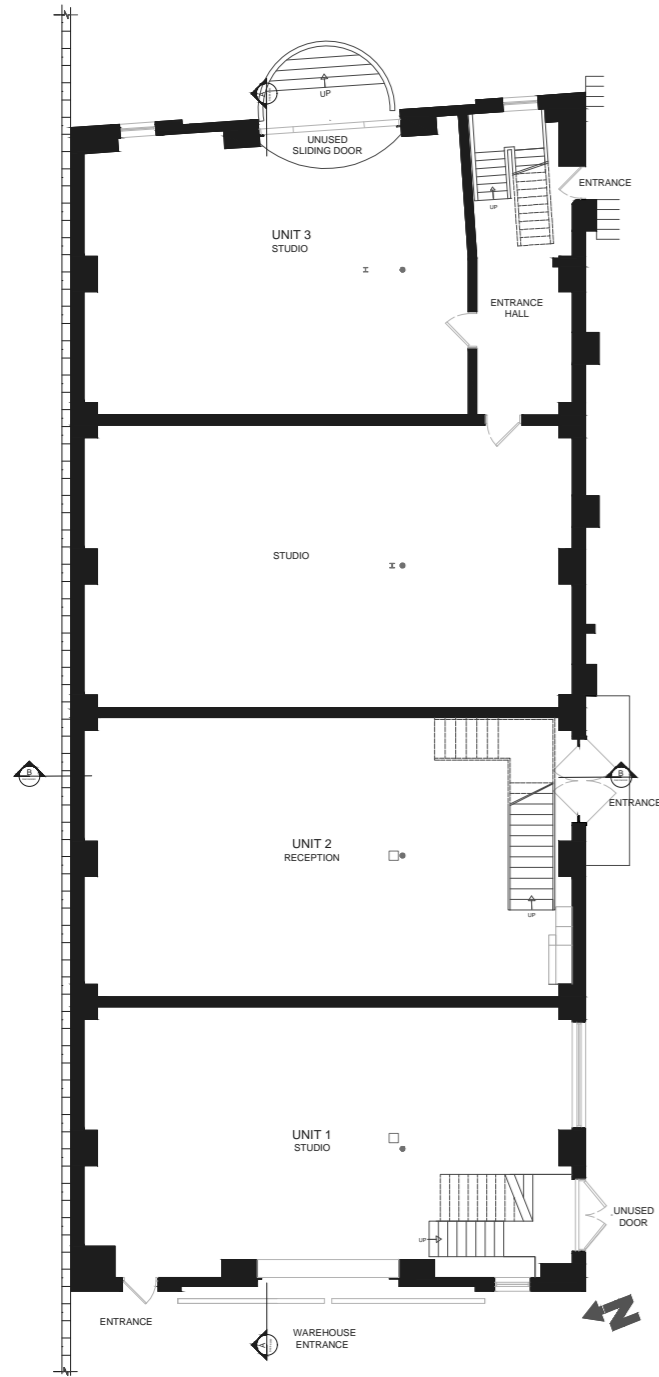


Orientation.

- Orientation
 - The Forge
 - Roads
 - Water
 - Buildings
- The Forge faces north west with its outdoor space facing south allowing good sunlight during the day to the south west facing facade.

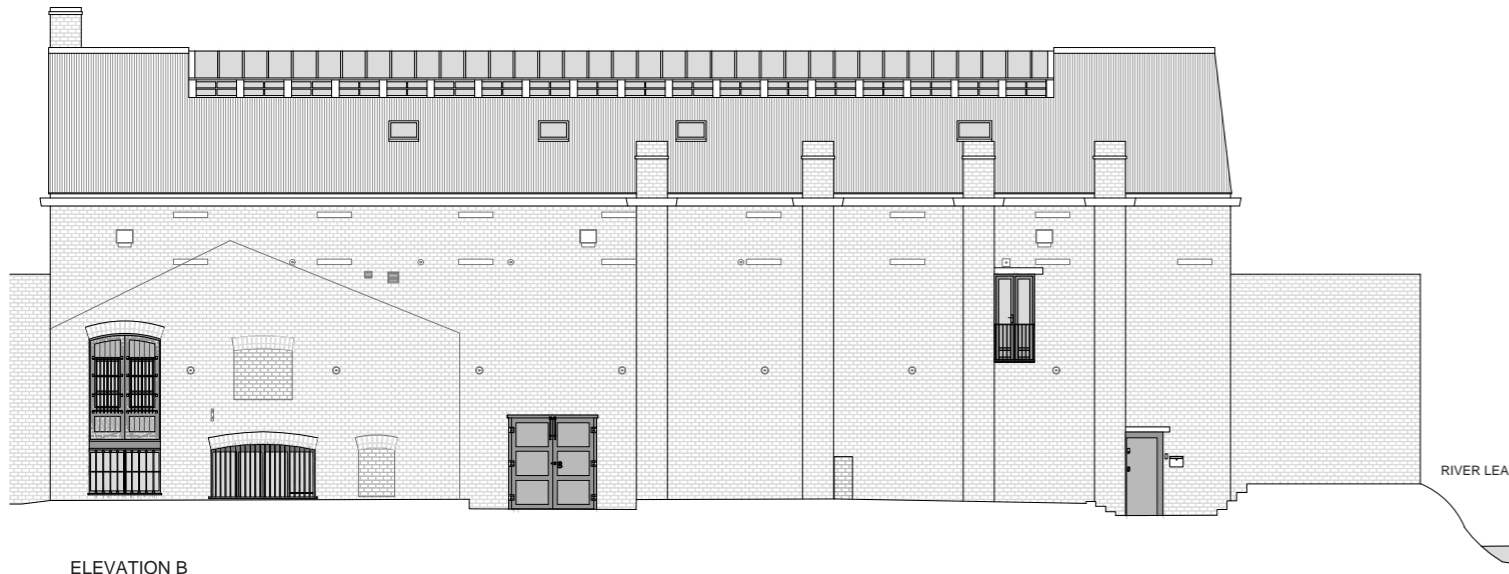
The orientation of the building proved important in the feasibility study, because of the south facing outdoor area, this was an ideal place for the glasshouse as it gets optimal sunlight.

existing layout plans.



DATE	NOTES	REV.
GROUND AND FIRST FLOOR EXISTING PLANS		
58 DACE ROAD, LONDON, E3 2NX		
1:200 @ A4	NOV 2022	OC
DAC/02/2022	-	-

DATE	NOTES	REV.
SECOND AND THIRD FLOOR EXISTING PLANS		
58 DACE ROAD, LONDON, E3 2NX		
1:200 @ A4	NOV 2022	OC
DAC/03/2022	-	-

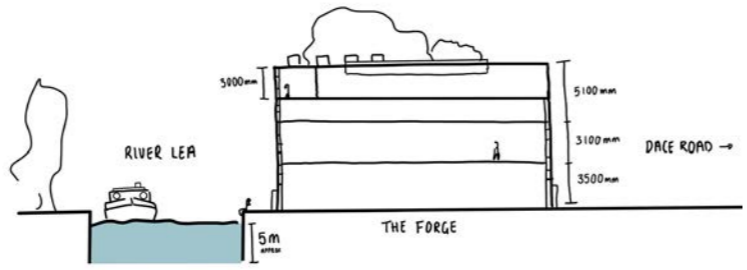


ELEVATION B
 0 2 4m
 1:200

*existing
 elevations.*

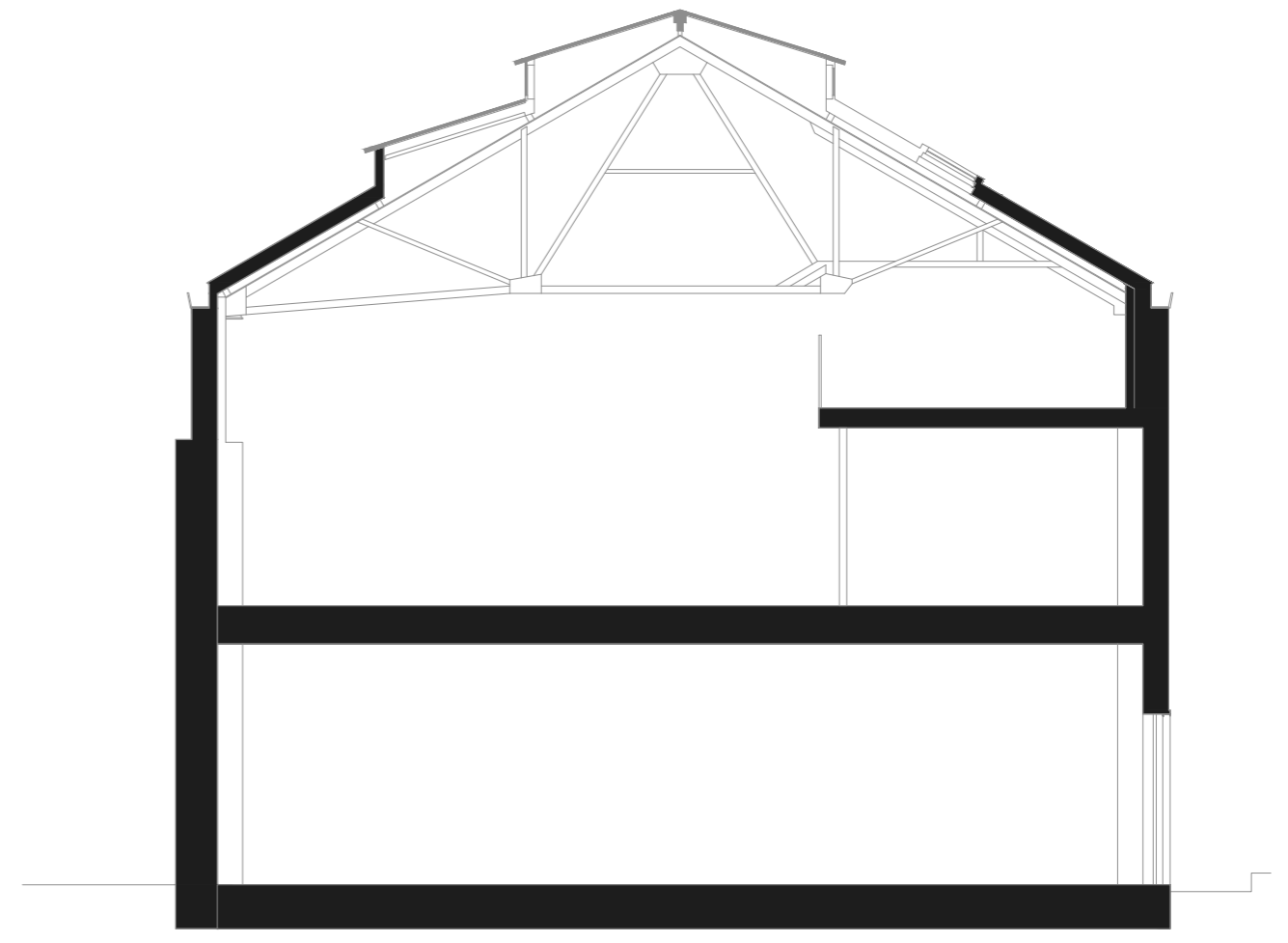


ELEVATION A
 0 2 4m
 1:200

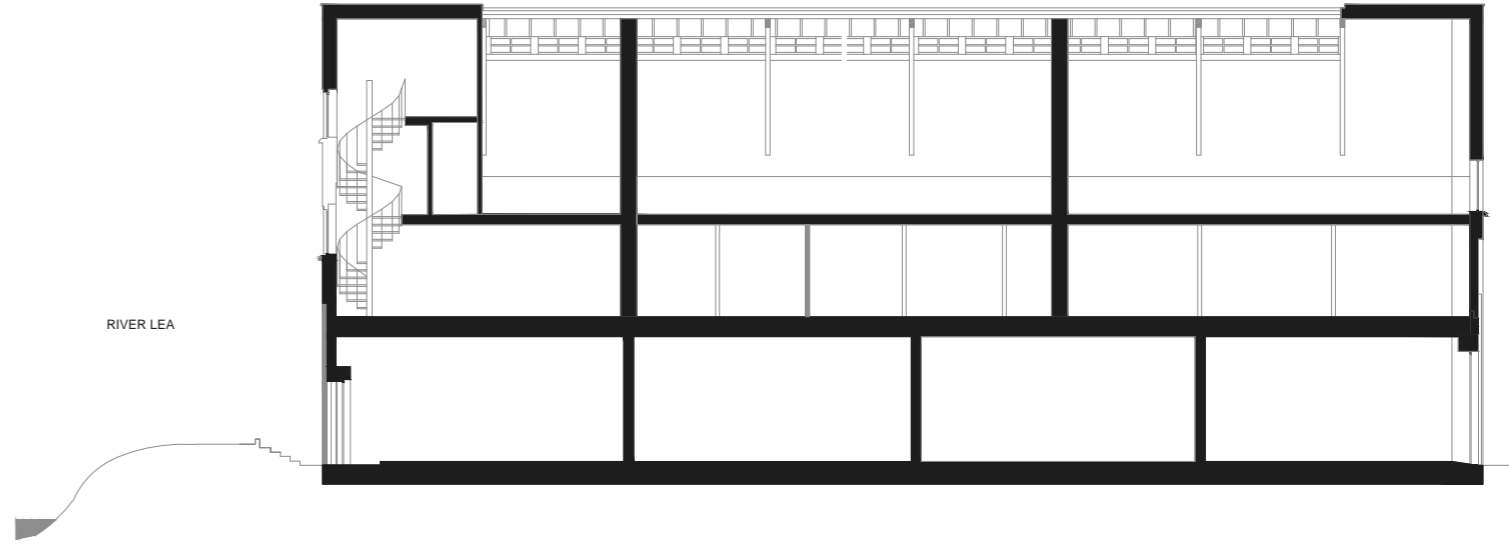


ELEVATION C
 0 2 4m
 1:200

DATE	NOTES	REV
EXISTING ELEVATIONS A, B AND C		
58 DACE ROAD, LONDON, E3 2NX		
1:200 @ A4	NOV 2022 OC	
DAC/04/2022	-	



SECTION B-B
 0 1 2m
 1:100



SECTION A-A
 0 2 4m
 1:200

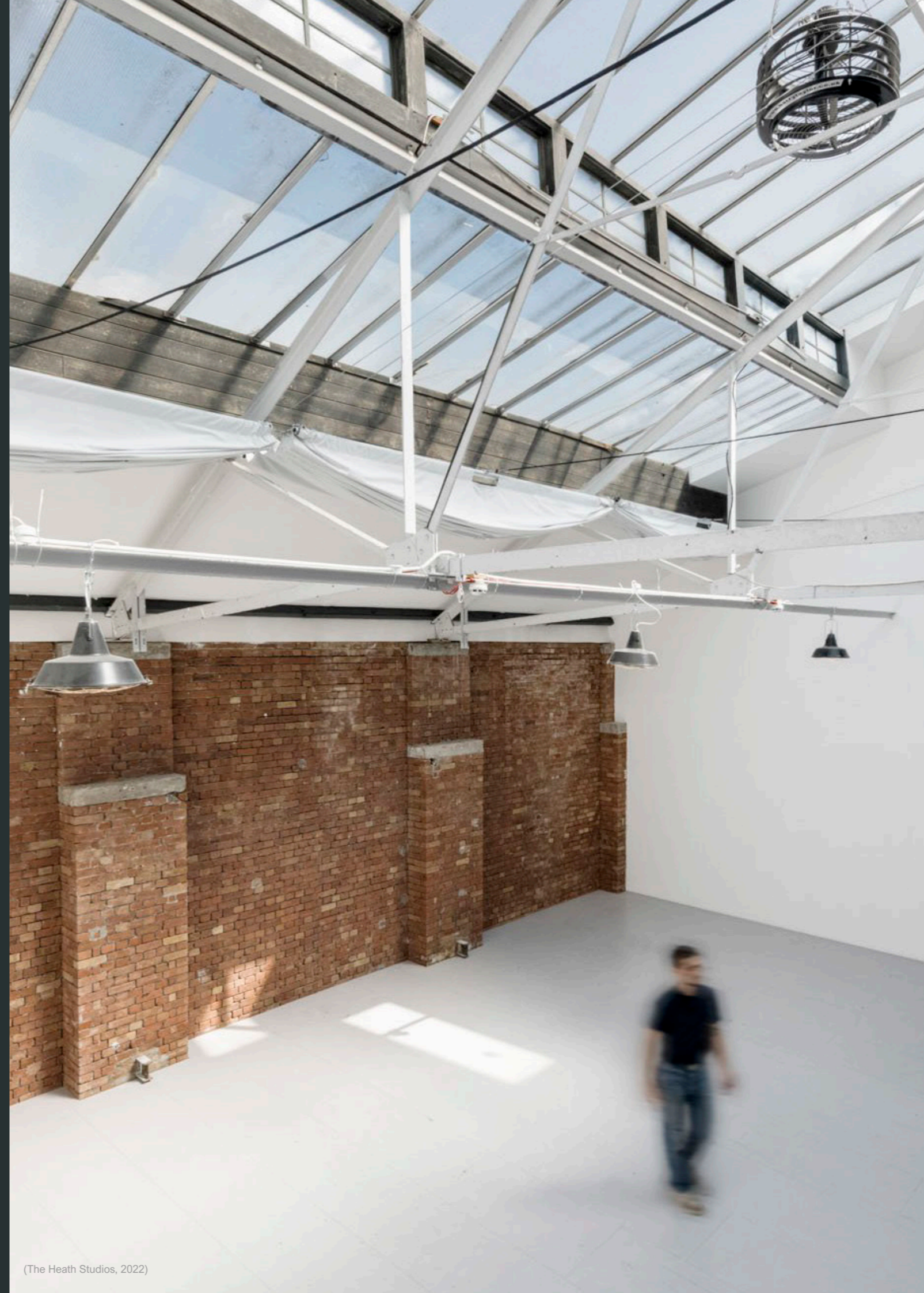
DATE	NOTES	REV
EXISTING SECTION A-A & B-B		
58 DACE ROAD, LONDON, E3 2NX		
1:100 @ A4	NOV 2022 OC	
DAC/05/2022	-	

proposal.

Programme

Branding

03



THE STUDY OF MUSHROOMS, FUNGI + YEASTS

mycology

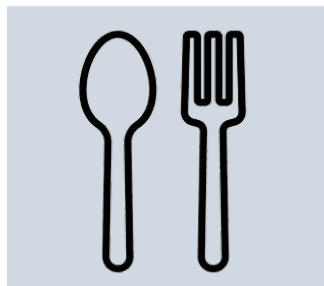
+

the forge

OUR SITE IN FISH ISLAND

=

the mycologist.



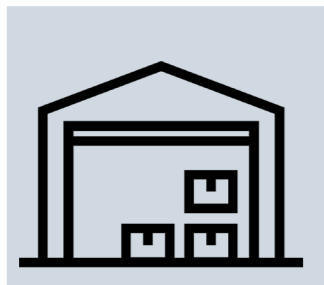
restaurant

Portobello's, an on site restaurant that uses the left over mushrooms from the mycelium growing process in dishes designed to reduce waste.



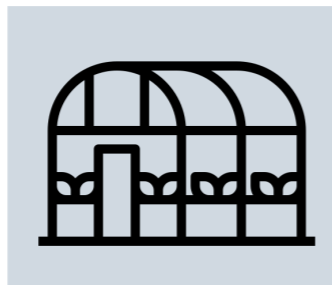
showroom

An area dedicated to showcasing the various products designed in-house for clients and customers to experience.



production + design

A warehouse and design facility focussed on producing sustainable mycelium based furniture, materials and architectural products.



botany

A glasshouse with the purpose of growing various types of mushroom and plant, to be used firstly in the production of mycelium, the bi-product of this process, the top of the mushroom, will be used in the on-site restaurant.

proposed programme.

what

A place for individuals and businesses to purchase and implement fully circular sustainable materials into their properties easily and afford-ably.

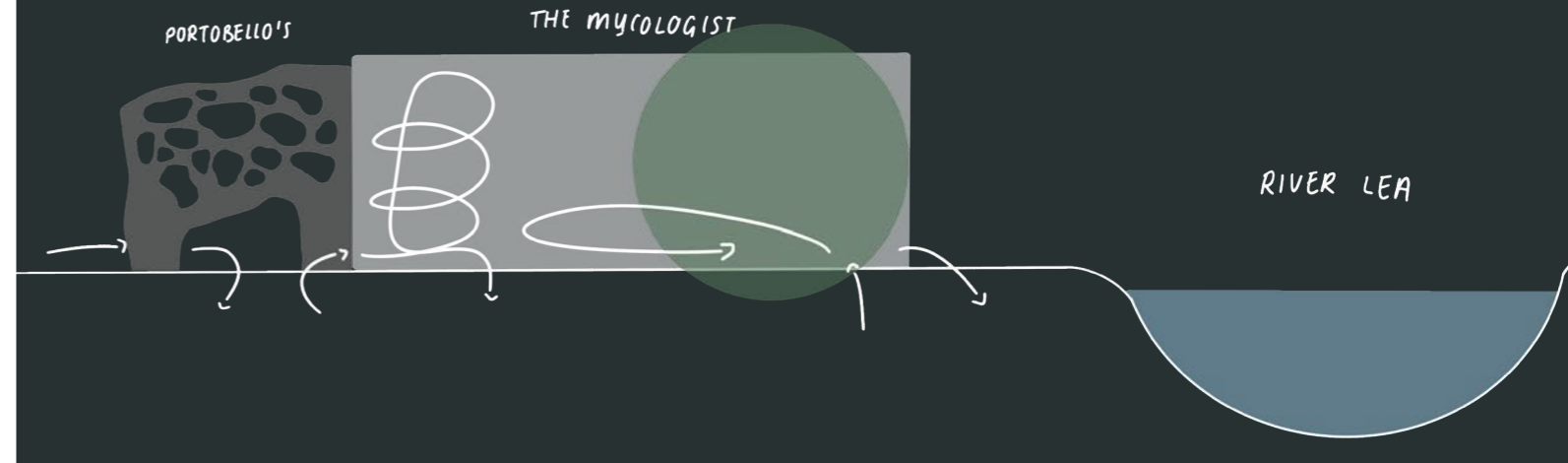
how

The mycologist offers a fully comprehensive mycelium growing facility that clients and customers can learn about the process and benefits of the material.

benefit

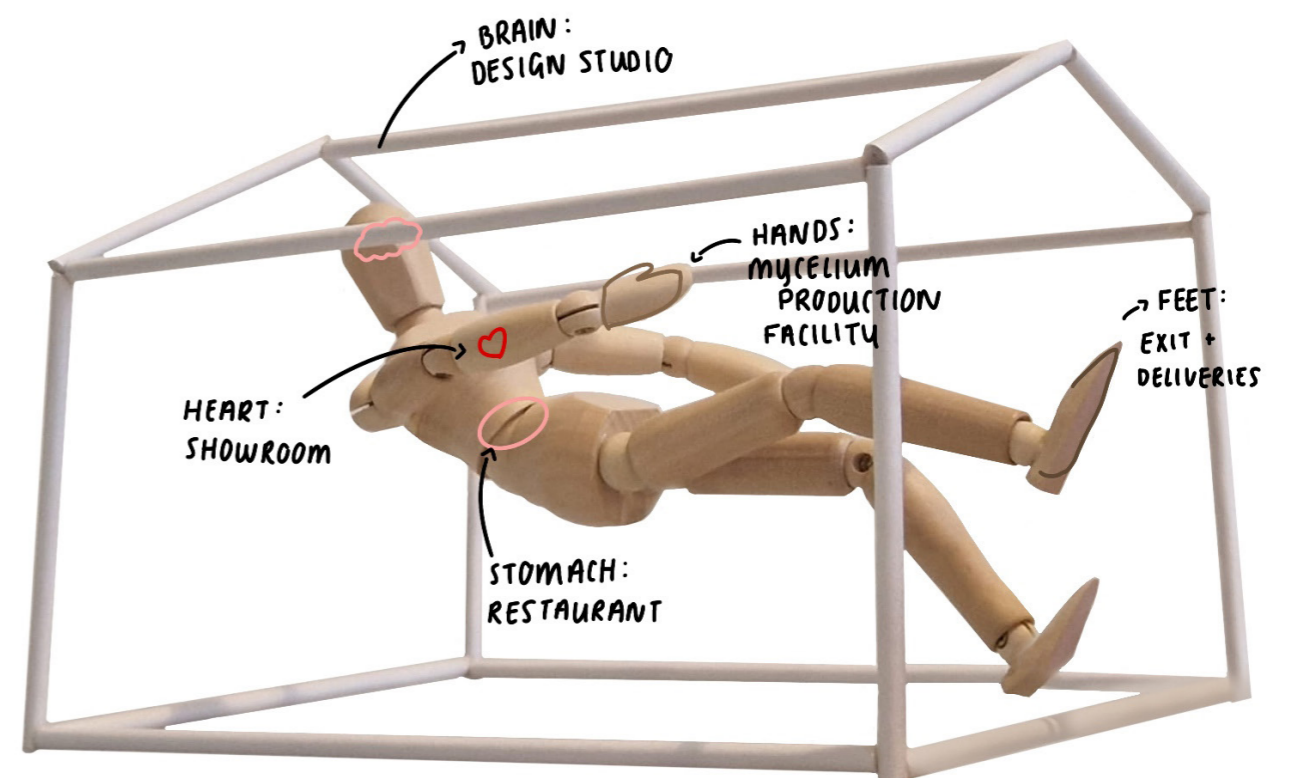
The local and wider community is provided with a place to purchase and experience the manufacturing process of sustainable mycelium products.

objective diagram



storyline

"a mycologist's brain, heart, stomach, hands and feet crafting mycelium"



branding



THE MYCOLOGIST

logo

A simplistic white mushroom design has been designed for the logo of The Mycologist, it clearly represents the function and purpose of the building and is memorable as a logo. The logo will be applied around the building in the form of signs, as well as on the main southern facade as a white neon sign.



factory

Two neon mushroom signs will be located in customer view in the mycelium production factory to promote the brand alongside the products.

staff areas

Additional neon signs will be placed in staff areas and tea points to enhance overall atmosphere and boost company pride. Acting as a visual representation of the companies values, vision and mission.



facade

The logo and name of the building, The Mycologist, will be present on the south facing facade in a prime location clearly visible from anyone approaching from the car park or opposite bank of the River Lea. This facilitates easy recognition of the building and will generate interest from potential customers.

application

design concept.

Initial Concept

Concept Development

Final Concept



keywords

- Emerging
- Birth
- Creation
- Juxtaposition
- Statement
- Growth
- Old to new
- Movement
- Takeover
- Path

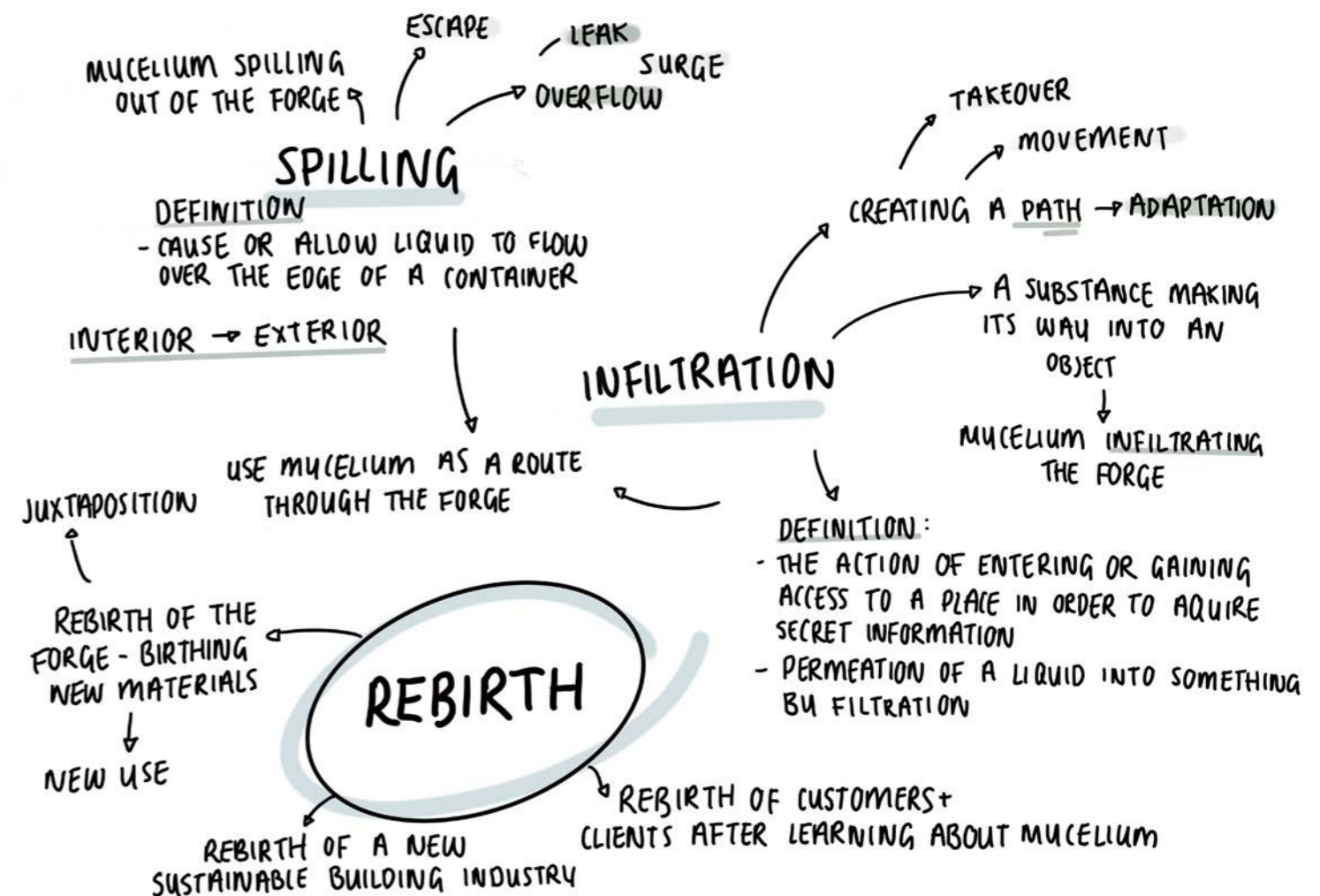


concept.

Rebirth is a term that can be applied to multiple areas of the project; a birth of new materials, of customer and client thinking after experiencing these materials and of the building itself. Mycelium will be birthed from The Forge, both internally through the creation of products, and by a contemporary intervention of mycelium spilling from the fabric of the building. Juxtaposing 19th century industrial architecture with bio-architecture and natural forms.

definition

04



concept

This diagram represents the journey of mycelium seeping out of The Forge in relation to the concept, rebirth. This represents The Forge going through a period of renewal, a phoenix rising from the ashes. This means that it will keep in touch with its original character whilst embracing a new beginning.

The orange colour on this diagram seeping out of the windows represents new technology and materials being used inside The Forge that are spreading to the outside.

This metaphorical seeping of new material can manifest as a new mycelium extension or alteration to the exterior of the building.

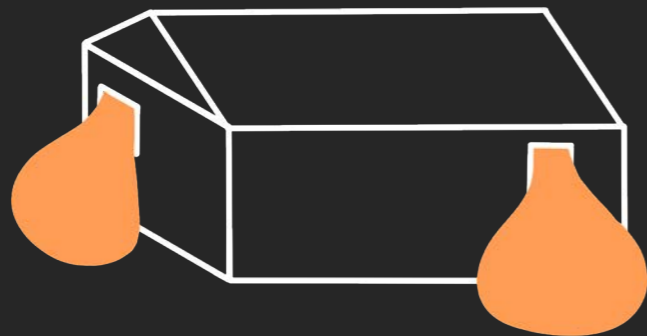
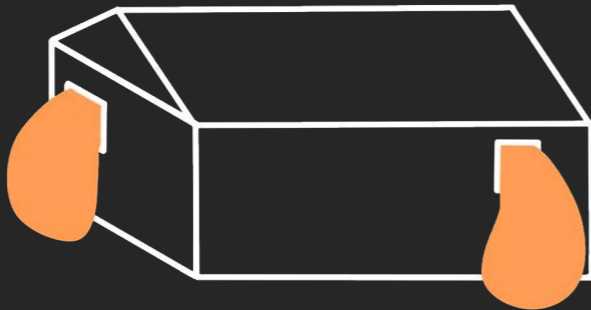
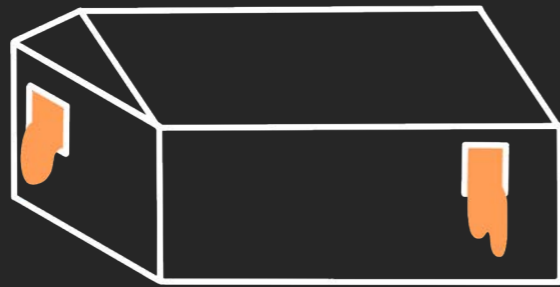
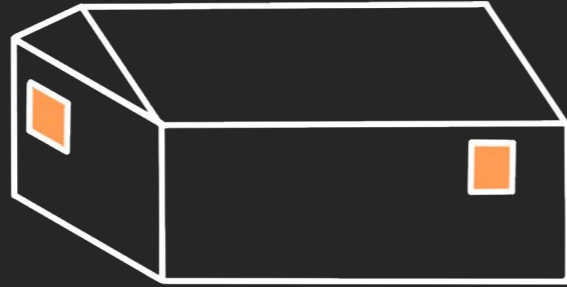
narrative

“represent rebirth through movement and create a clear journey of growth”

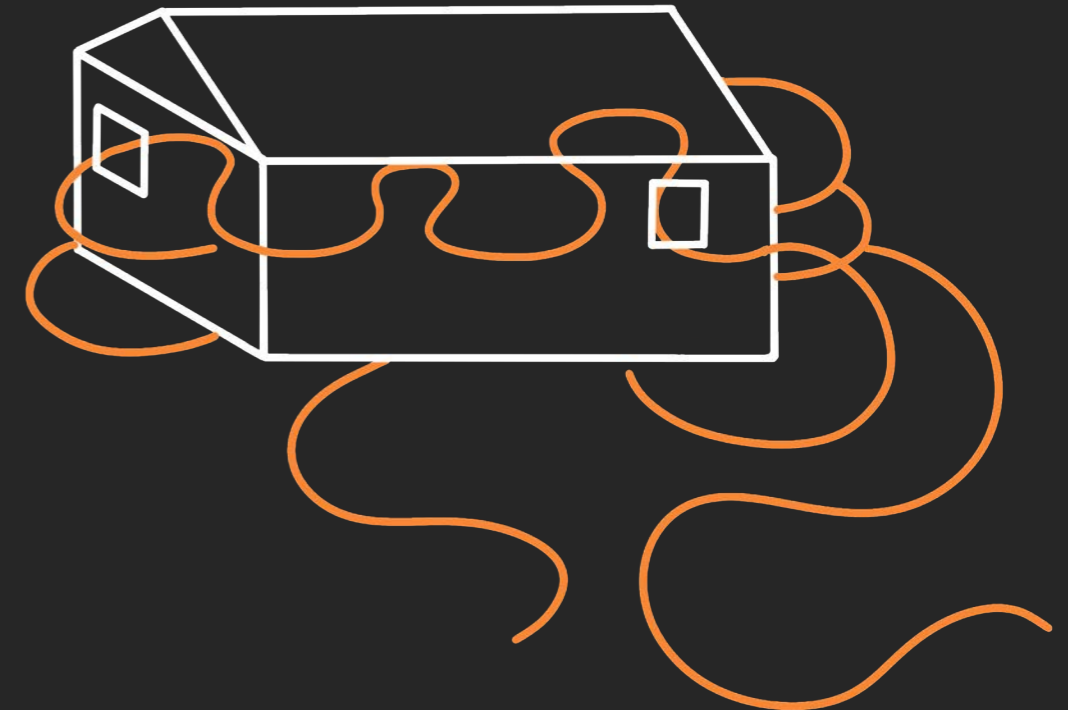
ideation

The development and formation of the concept using the seeping out of material to represent the concept, rebirth. The Forge, the mycelium and the journey of rebirth.

initial concept diagram



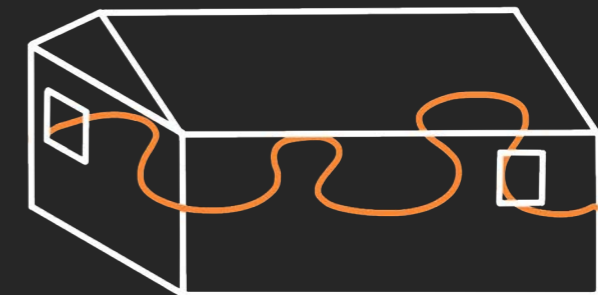
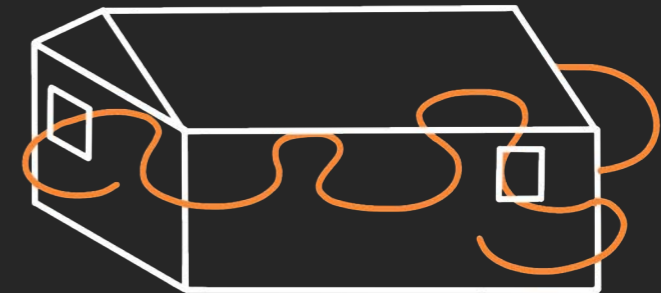
rebirth.



progression

The idea of rebirth and infiltration go hand in hand with this new concept idea. In the previous concept diagram, the idea of mycelium spilling out of the building was the focus. However, this idea has since progressed to mycelium growing both into and out of The Mycologist.

The structure has been invaded by mycelium, evident in the undulating garden and curved mezzanine floors. The balconies and glasshouses resemble plate mushrooms growing on the building. Inside, paper ceiling details and timber walls undulate like the underside of a mushroom cap.



developed concept diagram

precedent study: oase no. 7

about the project

Parasite architecture is a unique approach to architecture which involves adding new structures to existing buildings without altering the 'host' building significantly. The new concept includes both infiltration and parasite interventions under the umbrella **rebirth**.

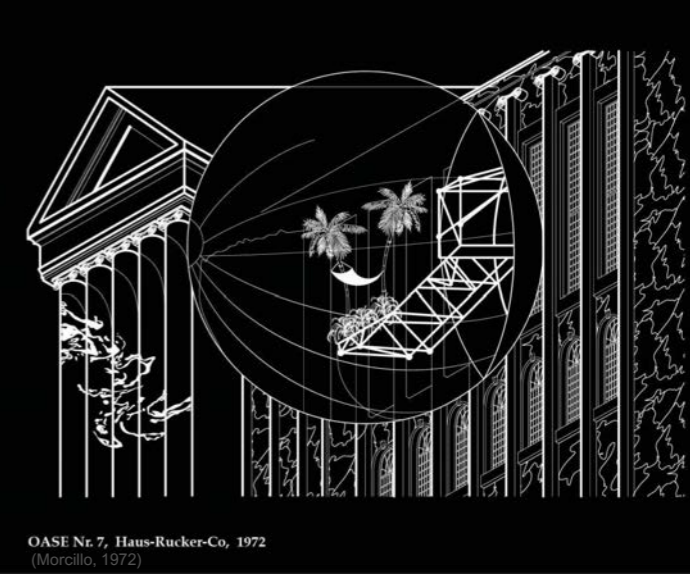
The Oase No.7 was a temporary installation designed by architect Haus-Rucker-Co between 1970 and 1972. It was comprised of a transparent sphere reaching 8m in diameter situated on the main facade of the Friedericianum Museum in Germany. It was conceived as "an emergency exit leading people into another realm" consisting of a metal frame structure and inflatable orb protruding from the building. It was to be an artificial oasis, containing a hammock, plastic palm trees and a flag, with the purpose of "questioning the artificial demarcation between natural and human-made environments".

This striking installation juxtaposes the traditional architecture of the Friedricianum Museum and creates an eye-catching spectacle. Progression was made from the original Oase no.7 through other exhibitions, such as the one pictured below of "FAR" exhibition held during Milan design week. **As this idea has progressed from the external spilling out to the internal infiltration as too will the concept in this Design Report.**

specs

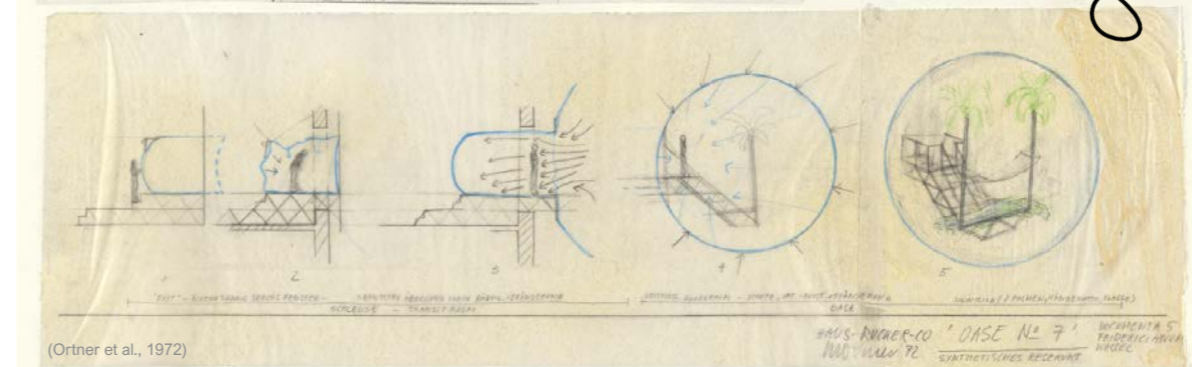
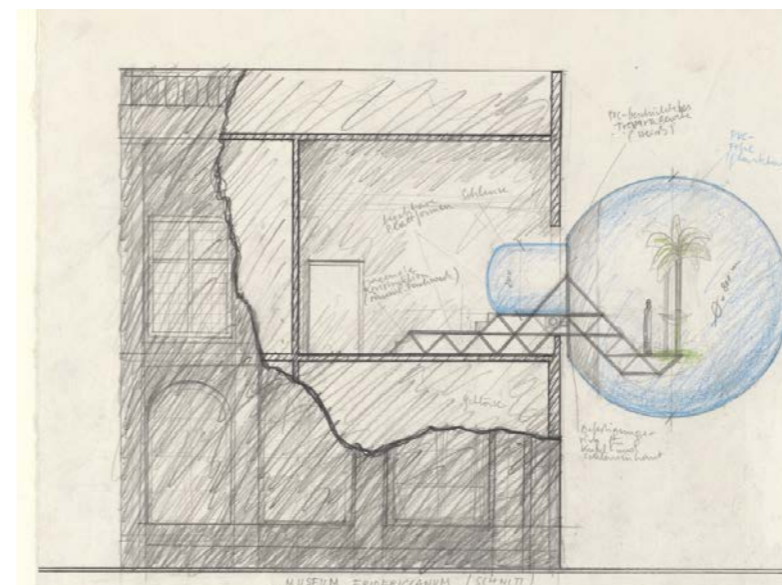
Size: **8m diameter**
 Client: **Friedericianum**
 Location: **Kassel, Germany**
 Architect: **Haus-Rucker-Co**
 Completion: **1972**

concept progression through infiltration



concept:

- The concept aims to represent the word rebirth through using parasitic architecture.
- The idea of mycelium infiltrating the building as well as spreading outwards will influence design choices.
- The theme of mushrooms will be present in both internal and external design.

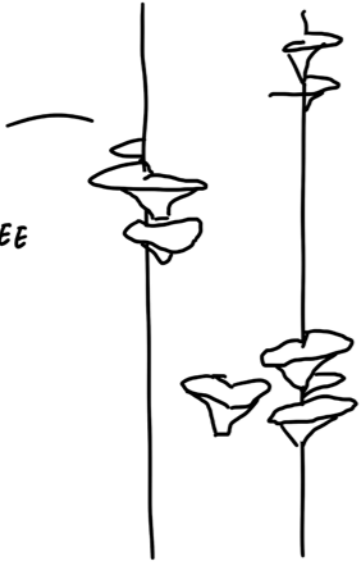


original concept of spilling out

application

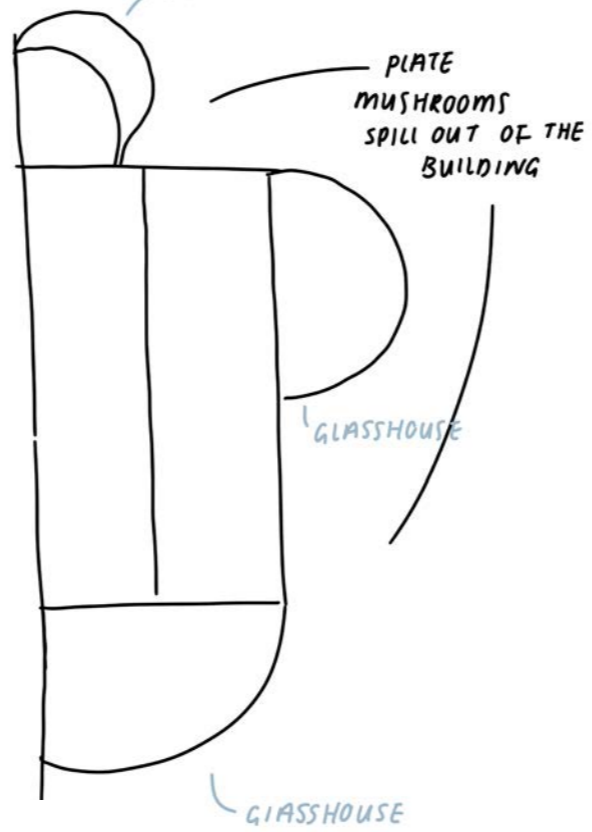
ideation

PLATE MUSHROOMS ATTATCH TO TREE



BALCONIES

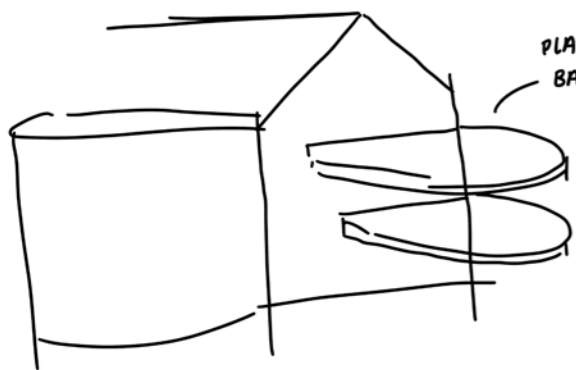
PLATE MUSHROOMS SPILL OUT OF THE BUILDING



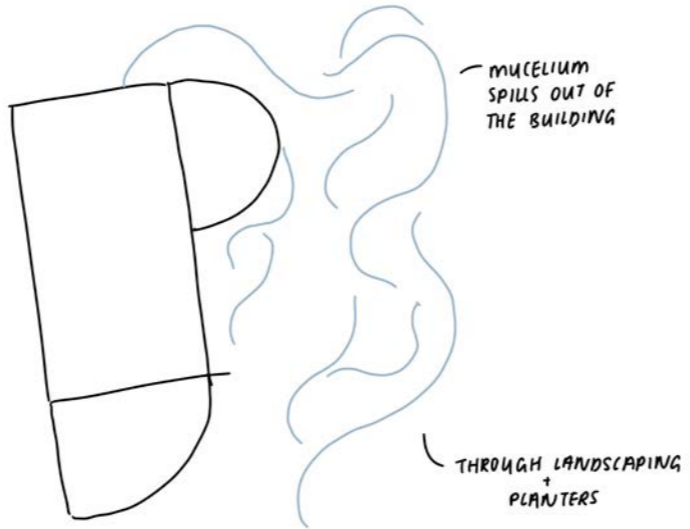
GLASSHOUSE

GLASSHOUSE

PLATE MUSHROOM BALCONIES



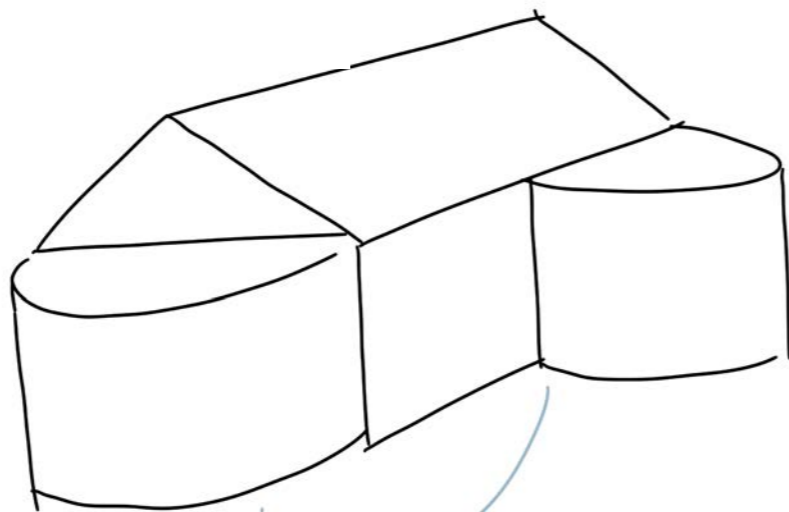
MUCELIUM SPILLS OUT OF THE BUILDING



THROUGH LANDSCAPING PLANTERS

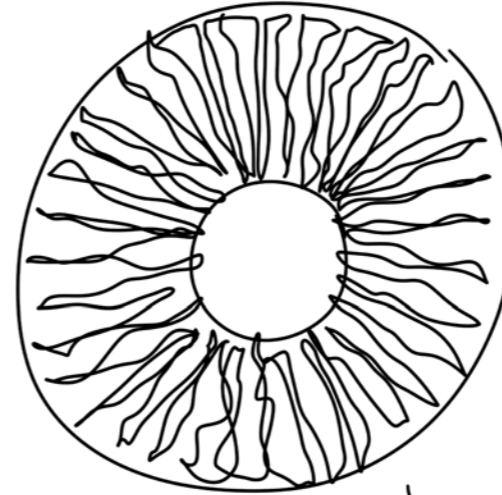
The idea of plate mushrooms and mycelium spilling out of the building, affecting both the structure through glasshouse extensions and balconies and the landscape.

exterior



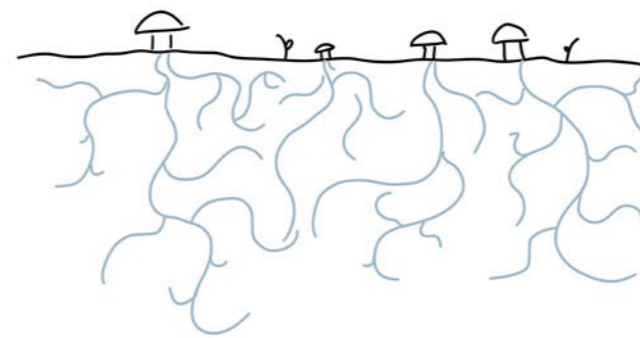
GLASSHOUSES INSPIRED BY PLATE MUSHROOMS

interior



UNDERSIDE OF MUSHROOM

MUCELIUM INFILTRATES THE SUBSTRATE



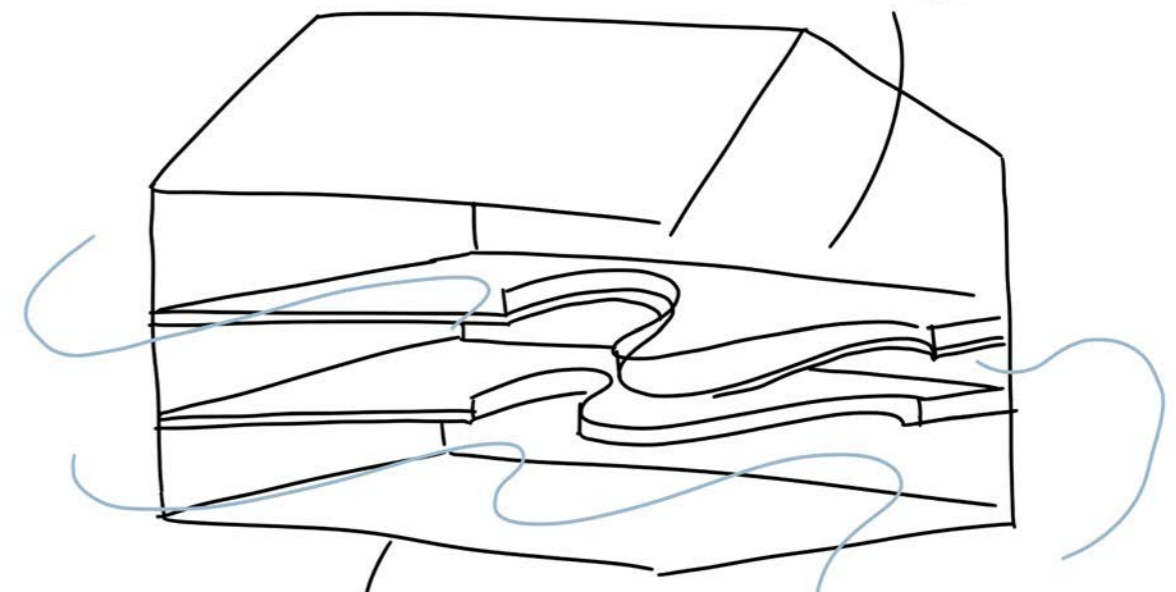
UNDULATING CEILING COVERING MIMICS THE UNDERSIDE OF A MUSHROOM CAP

ideation

MUCELIUM INFILTRATES THE SUBSTRATE

The idea of undulating mycelium infiltrating the interior of the building through interior structure and design elements

MUCELIUM INFILTRATES



THROUGH UNDULATING MEZZANINE FLOORS

design strategies.

Initial Strategy

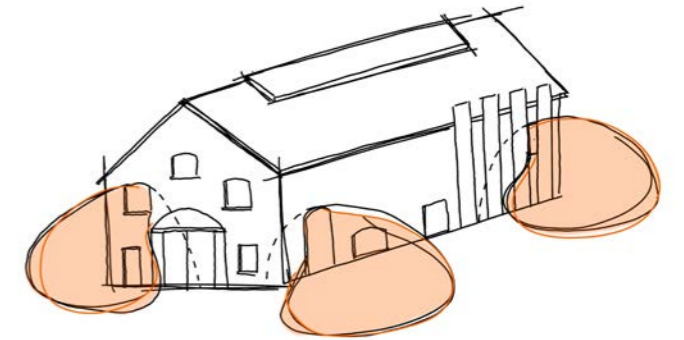
Development

Final Strategy

05

mycelium intervention

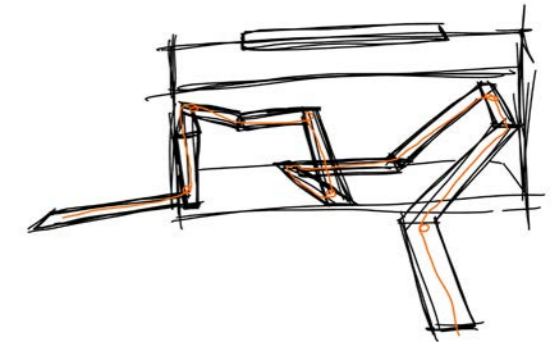
A parasitic entity that is overflowing from The Forge that will translate into a physical structure, creating multiple mycelium interventions.



journey

A clear route through the building with access to different levels is an effective way to showcase various products and create a path through The Forge.

This will link external interventions, entrance, showroom, production facility, offices and exit.



juxtaposition

Juxtaposing the robust Victorian brick of The Forge with a new bio-material creates interest and questions of past and present and the fusing of new and old.



materials

To convey a clear sense of the concept, lighting, materials, colour and architectural features will be carefully considered to emphasise the concept.

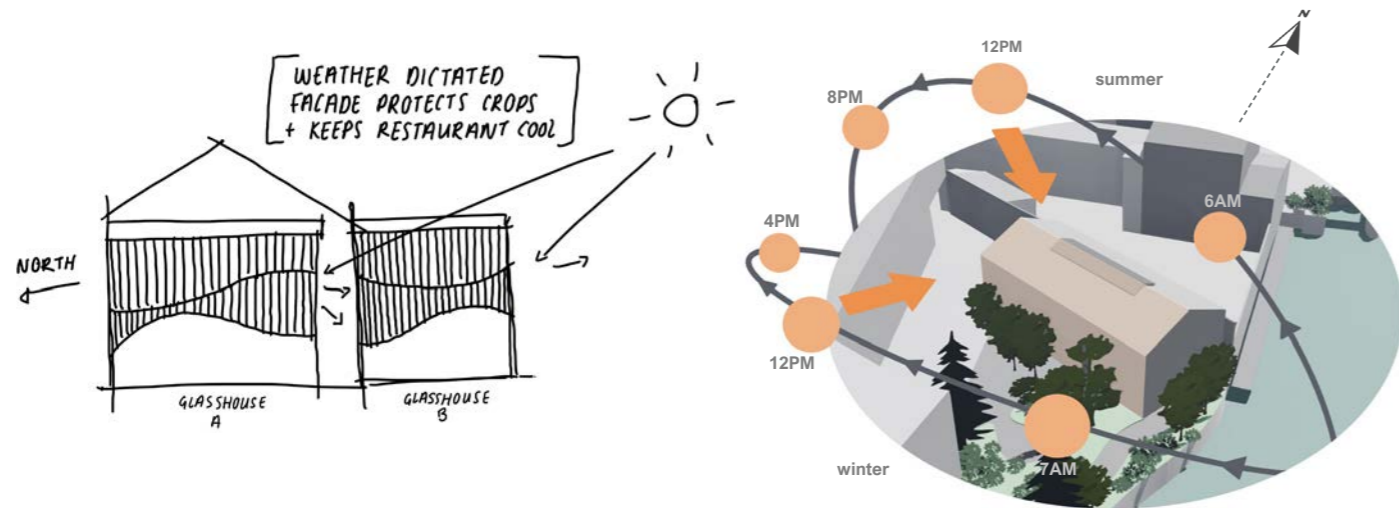


initial strategies

developed strategies

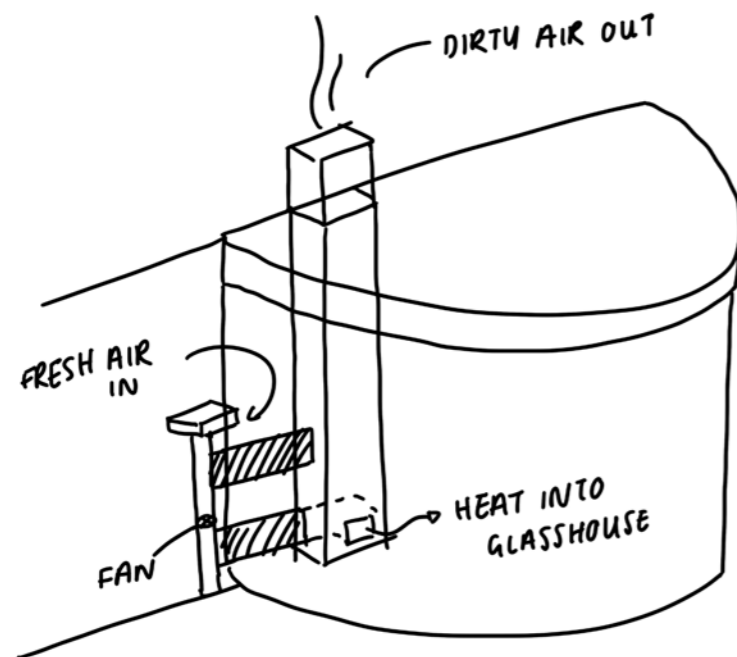
natural light

Harness natural light and utilise it in the glasshouses to be able to grow crops and mushrooms to be used in the on site restaurant Portobello's and as a way to produce more mycelium. A protective facade will be designed to prevent the scorching of these crops and to keep those in the restaurant glasshouse cool.



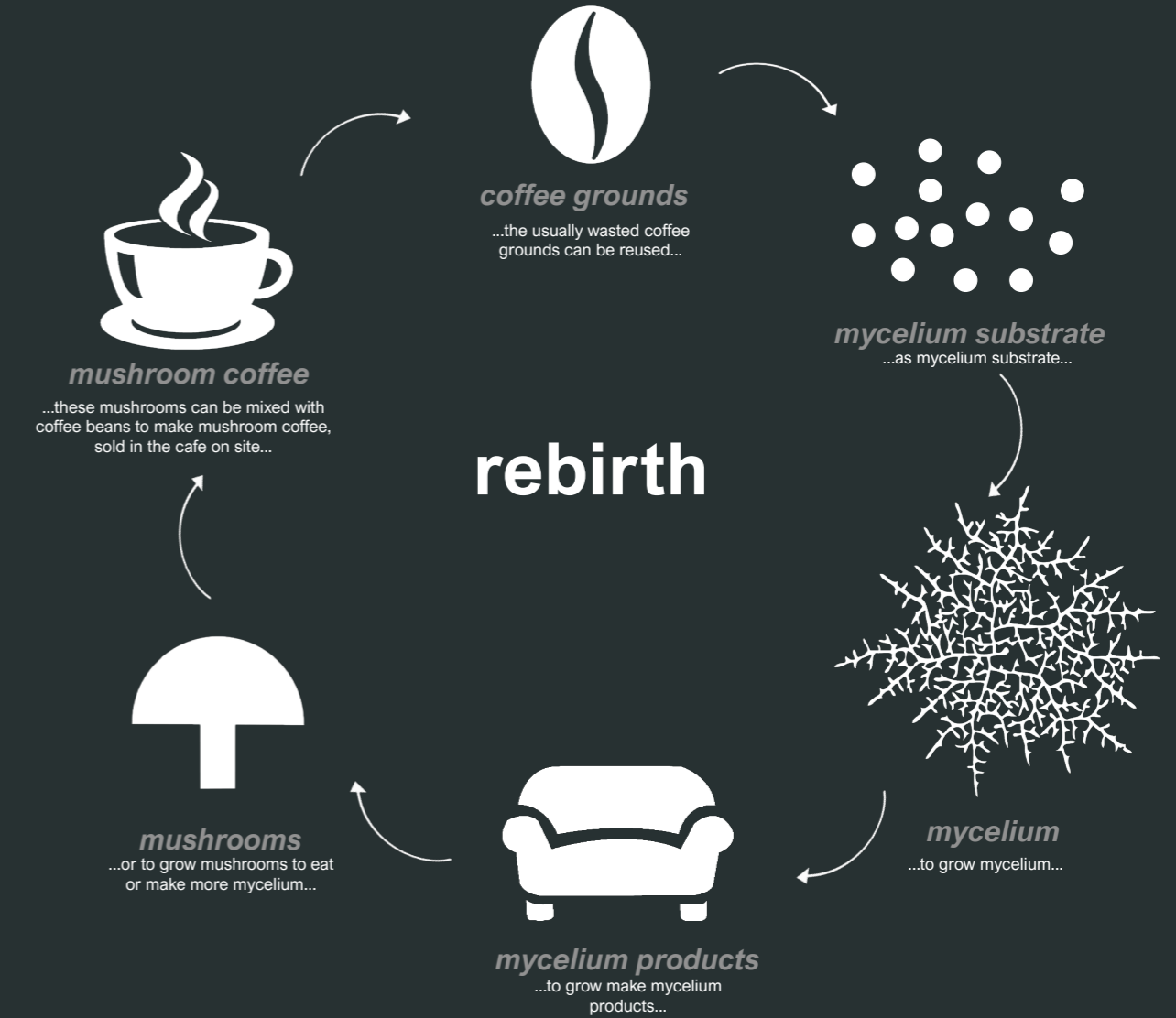
heat

Utilise wasted heat from the kilns, that are used to fire mycelium products, to heat the building and the glasshouses through use of heat exchangers.



fully circular

Utilise waste products in the building to create a fully circular production line.



education

Educate businesses and the public on the benefits of using mycelium as a renewable fully sustainable building product and its applications within the industry.



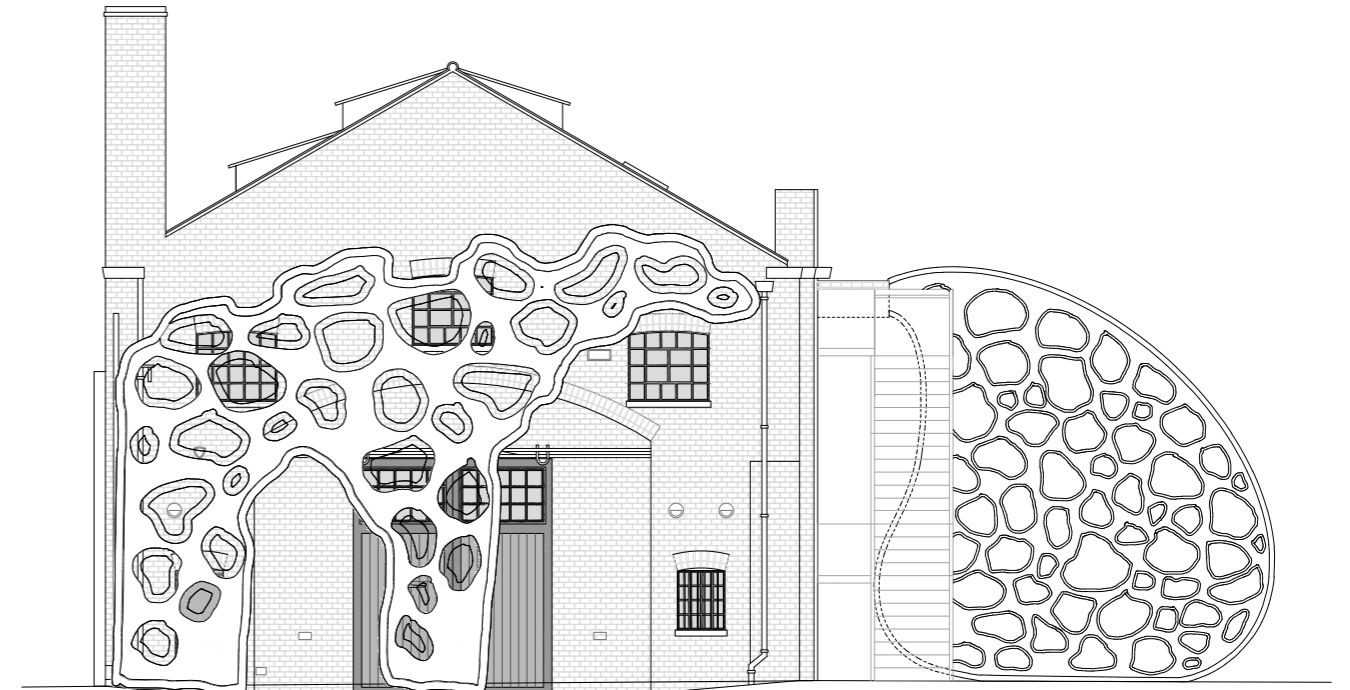
MYCELIUM BRICK

design development.

- Initial Design
- Precedent Study
- Progressed Design
- Materials Progression
- Space Planning
- Look and Feel
- Visitor Journey

006

initial design

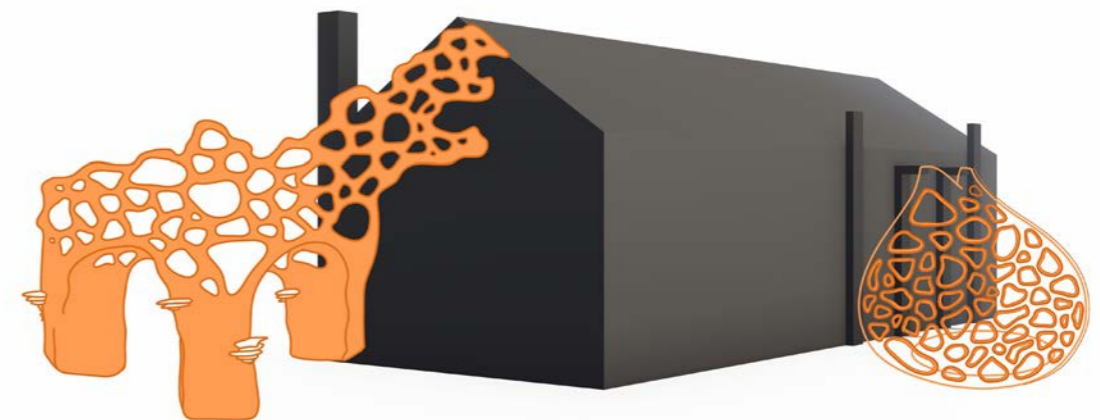


NOT TO SCALE

issues and potential

Issue: The fluidity of the mycelium extensions is limiting both structurally and functionally. Physically creating the shape out of extruded mycelium is possible, however applying mycelium in a different way would be more feasible.

Potential: Create mycelium extensions in a more structured way, incorporating the concept of rebirth through the infiltration of mycelium into and out of the building.



precedent study:

the fosun foundation

about the project

Designed by Foster + Partners along with Heatherwick Studios, The Fosun Foundation, located in Shanghai China is a cultural institution established by the Fosun Group. The building acts as a multinational conglomerate that operates in various industries such as finance, real estate and healthcare. It houses multiple exhibition spaces, a theatre, a rooftop terrace and a public plaza, though the unique and striking kinetic facade is the most distinctive feature of the building .

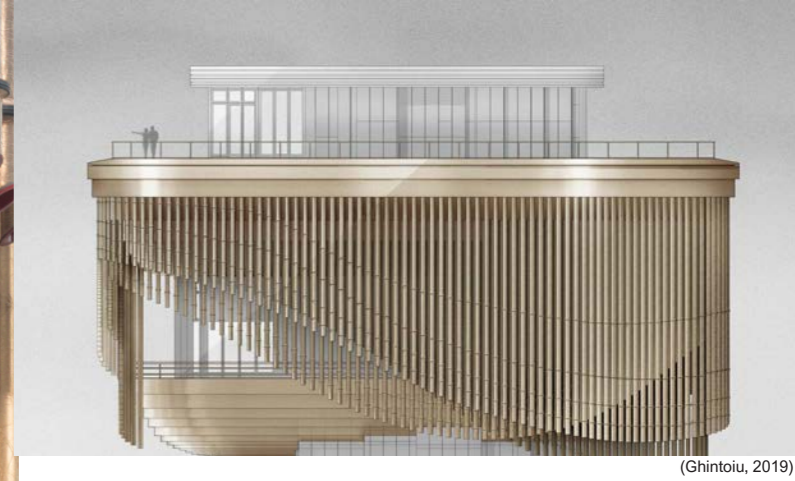
The facade is made up of curved, golden panels that were inspired by the shape of a bronze vessel from the Shang Dynasty, and the undulating shape is said to be inspired by draping fabric. The panels are made from perforated aluminium sheets that are moulded into shape, while the perforations in the panels are designed to control the amount of heat and light that enters the building.

The design of the columns themselves have been designed to resemble bamboo stalks, another way traditional Chinese motifs have been materialised into a contemporary architecture style through this design.

(Astbury, 2017)

specs

Size:	420,000 sqm
Client:	HNA Group
Location:	Shanghai, China
Architect:	Foster + Partners, Heatherwick Studio
Completion:	2017



(Ghintoiu, 2019)

the fosun foundation

structure

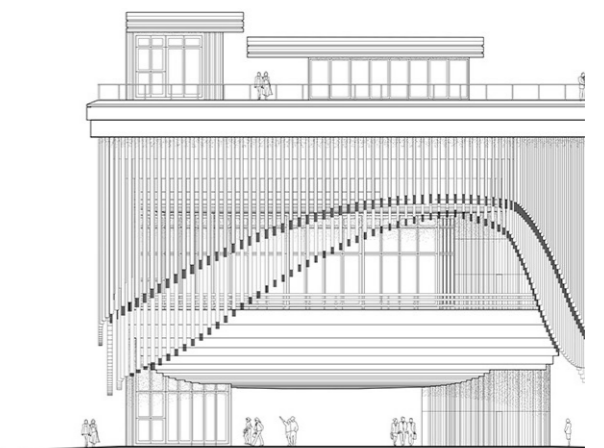
1. Protects from the elements, has applications in ventilation and the control of sunlight
2. Juxtaposes the surrounding architecture with its golden facade
3. Kinetic, moves to create a captivating undulating effect and reveals different parts of the building at different times
4. A steel frame structure and track system have been used to hold the facade to the building and have it move slowly around the perimeter of the space.



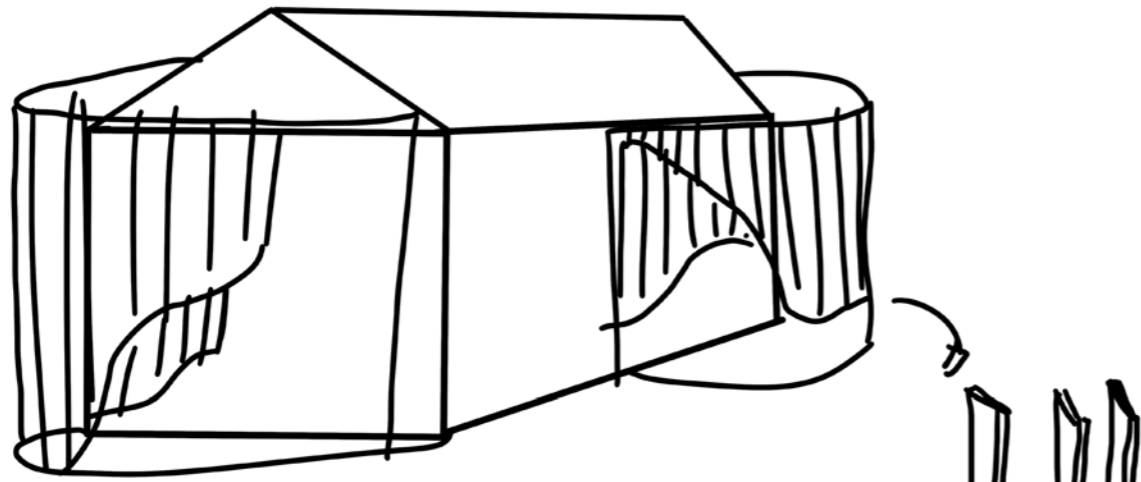
(Ghintoiu, 2017)



West Elevation - without veil



West Elevation - with veil



MUCELIUM COLUMNS
SURROUND THE FACADE

INSPIRED BY "TREE COLUMN"



BALCONY

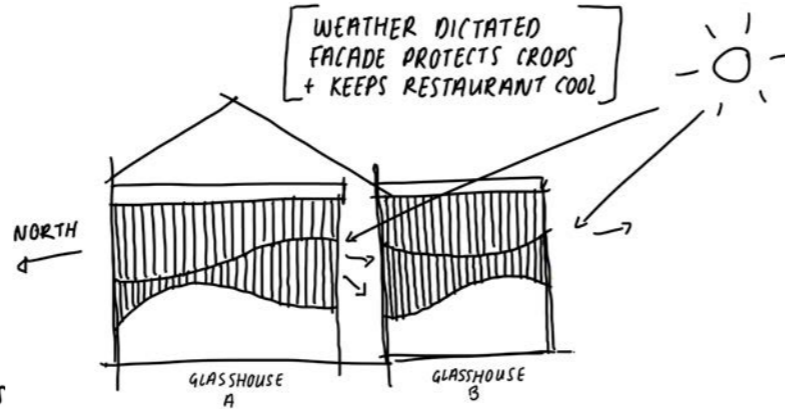
GLASSHOUSE
B

CONTAINING
MUSHROOM +
CROP BEDS,
SOUTH FACING FOR
OPTIMUM GROWTH

exterior

Using the Fosun Foundations Bund Finance Centre and my concept as a base, progression sketches have been produced to determine the design of two external glasshouses.

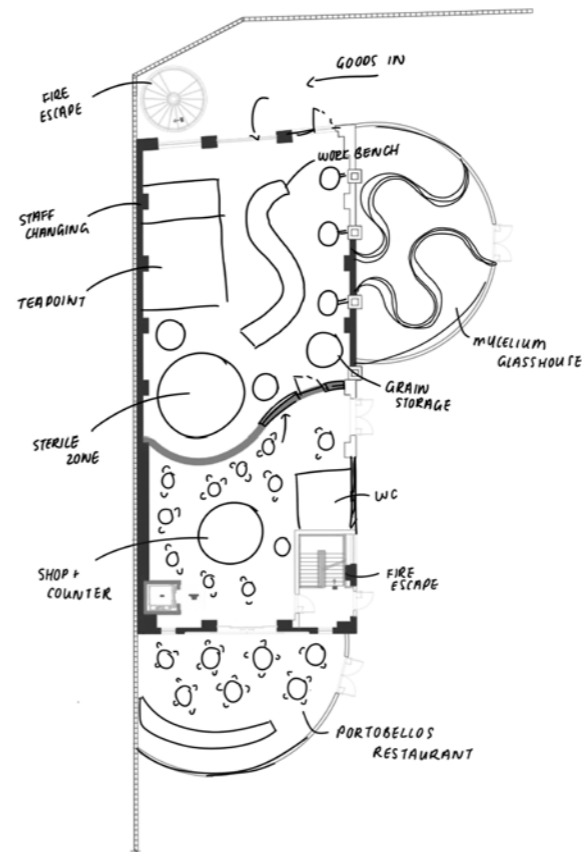
WEATHER DICTATED
FACADE PROTECTS CROPS
+ KEEPS RESTAURANT COOL



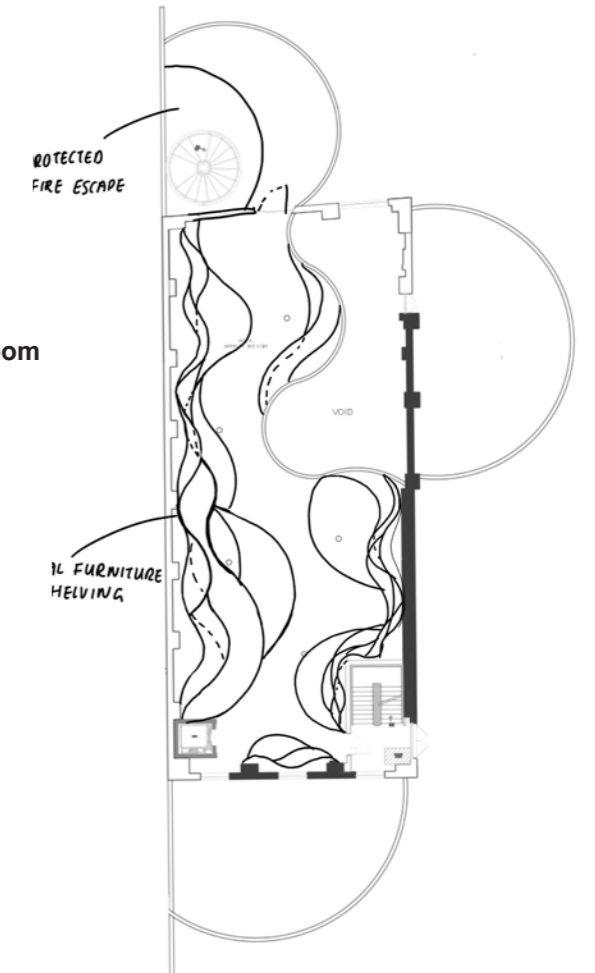
GLASSHOUSE A

CONTAINING PORTOBELLO'S
RESTAURANT

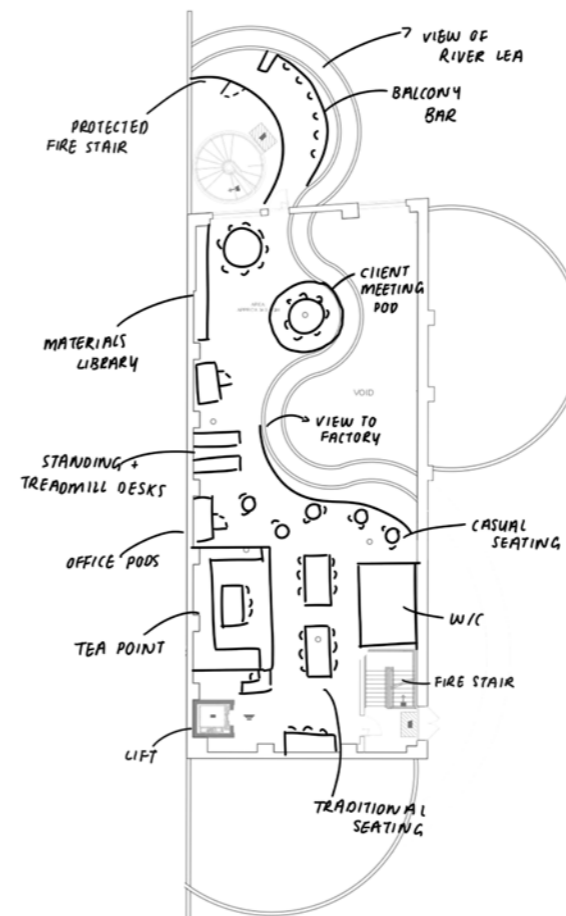
progression sketches



ground floor: restaurant, cafe, mushroom glasshouse and factory



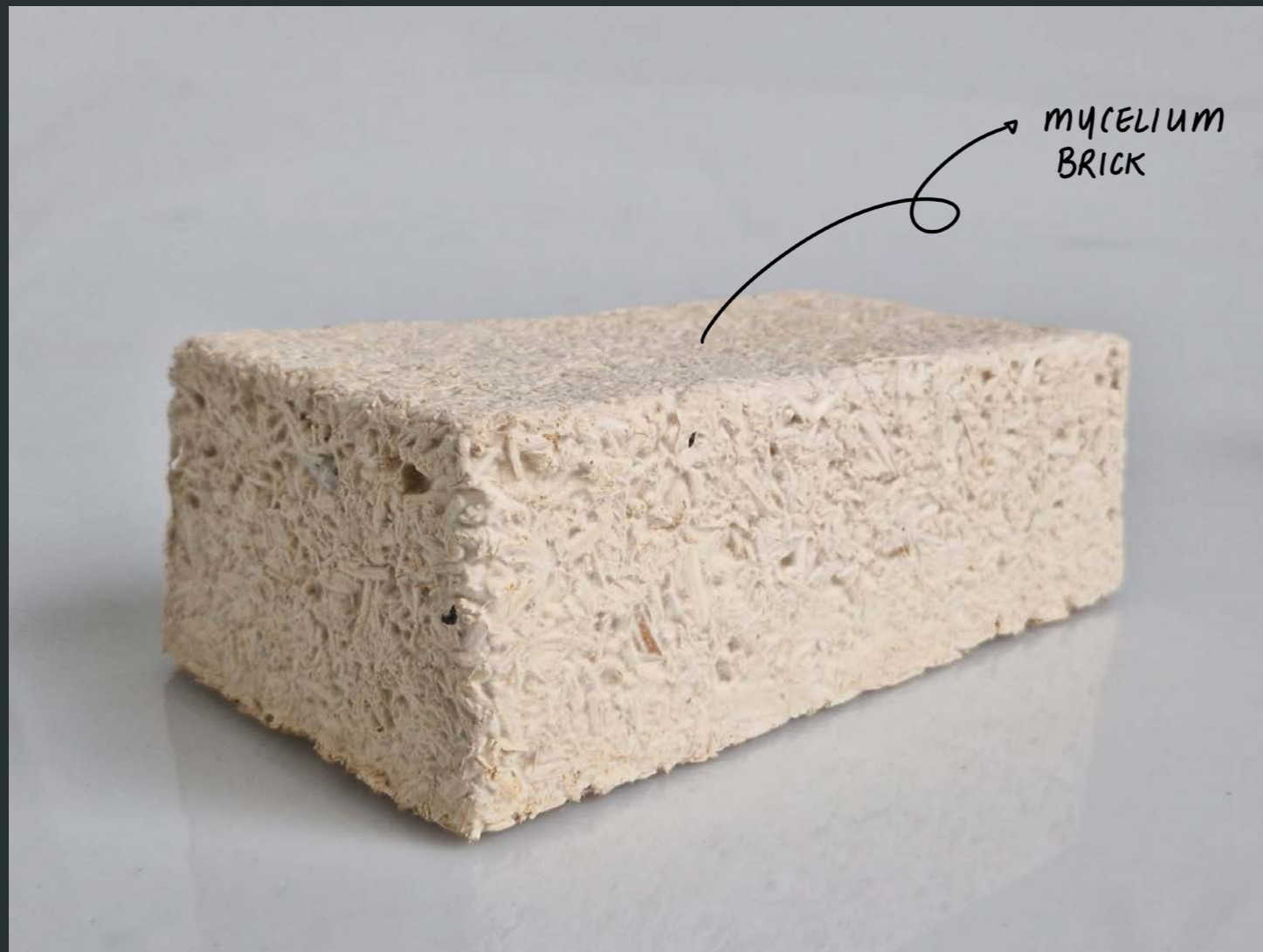
first floor: mycelium furniture showroom



second floor: office and design area

interior

Initial ideas for the interior incorporating the undulating mushroom theme explored in the concept.



In the feasibility study, an attempt was made at creating a mycelium block in order to test the durability, strength and ease of production of the material. However, unfortunately it grew mouldy. To progress this project, another successful attempt at growing mycelium was completed and a sample was grown to produce a brick using a kit from Urban Farm-it.

As explored through precedent studies in the feasibility and facade projects, the company Blast Studio creates Tree Columns from mycelium that are able to optimise mycelium growth through 3D printing an undulating substrate.

As illustrated in the drawings above, a weather dictated moving mycelium facade will be constructed from mycelium columns inspired by the Tree Column project. These columns will move around the glasshouse facade and protect the crops inside from scorching, and prevent customers in Portobello's glasshouse from getting too hot.

The end product of this experiment was a strong but lightweight, sustainable, weatherproof and biodegradable brick, whose strength can be adapted by compacting more substrate.

materials progression

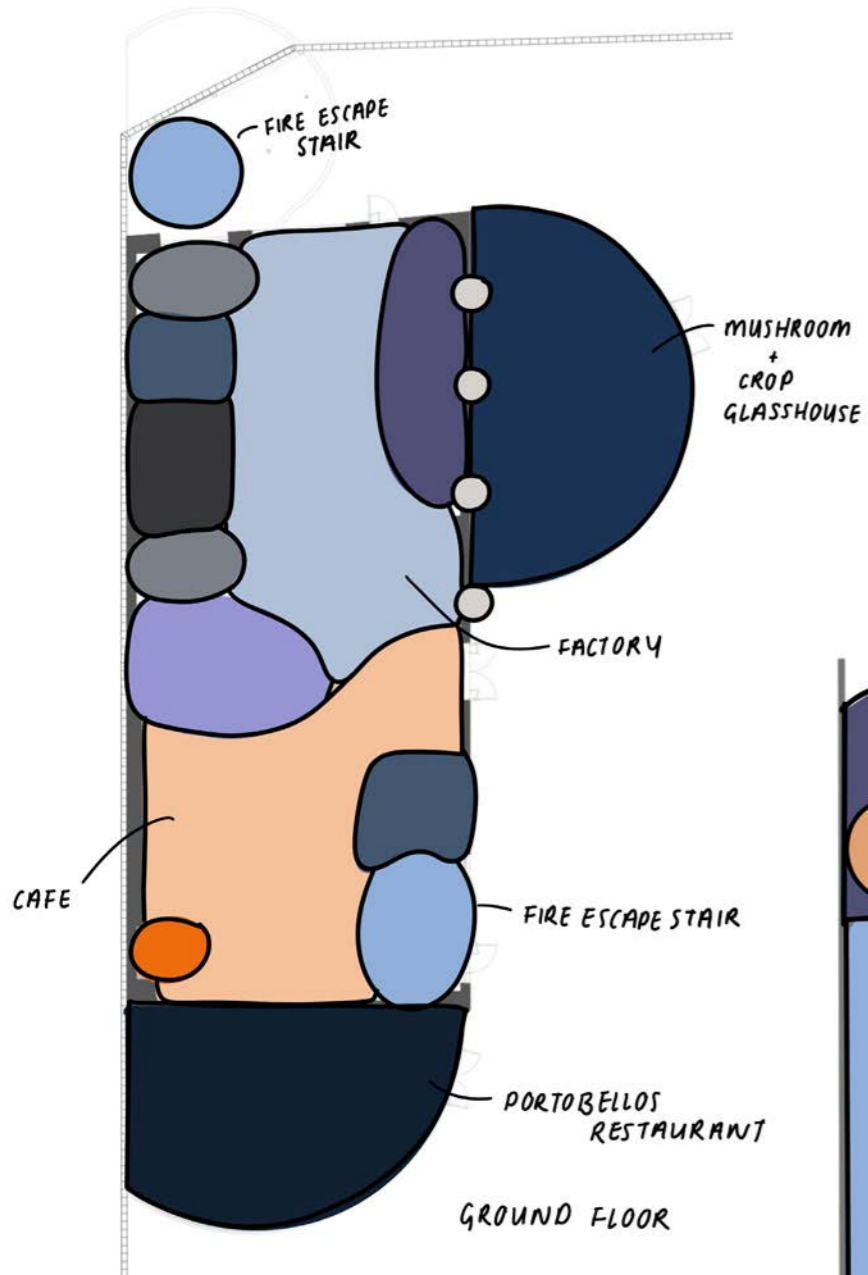


scan this QR code



to see the full process

space planning

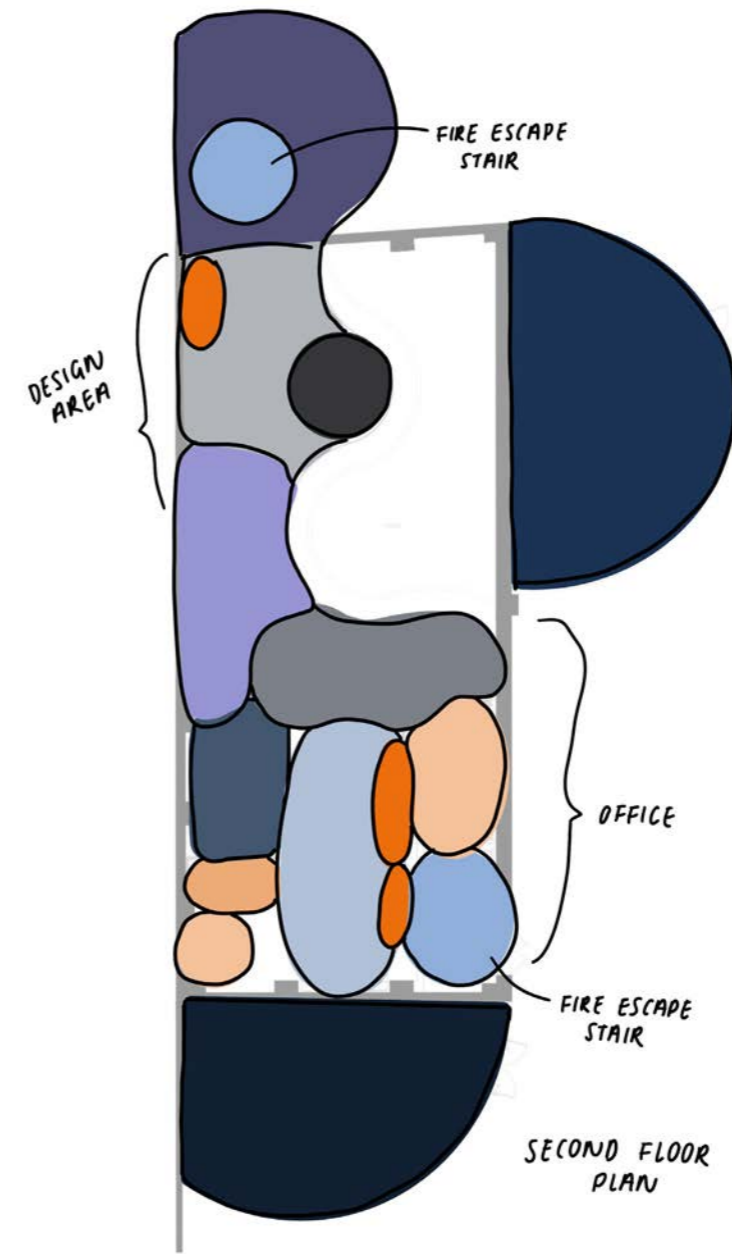
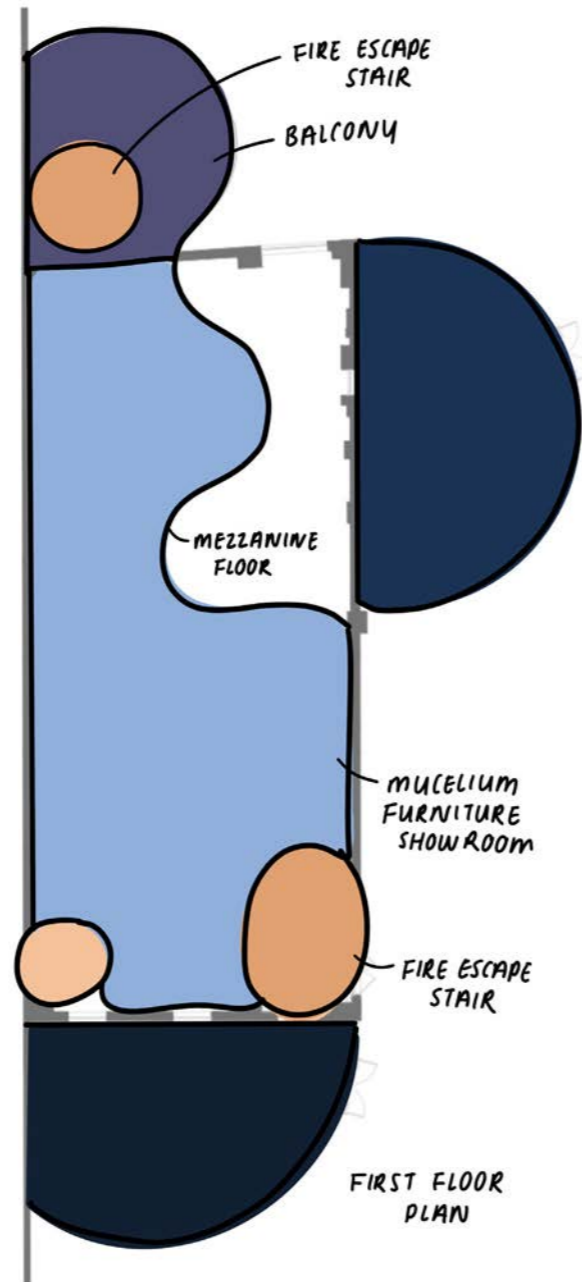


list of accommodation ground floor

- Fire escape stair
- Storage
- Toilets and staff changing room
- Staff room and kitchen
- Mycelium inoculation area
- Factory production area
- Cafe
- Elevator
- Mushroom and crop glasshouse
- Portobello's restaurant

list of accommodation first floor

- Mycelium furniture showroom
- Fire escape stair
- Lift
- Portobello's restaurant
- Mushroom and crop glasshouse
- Balcony



list of accommodation second floor

- Fire escape stair
- Casual seating
- Staff room and kitchen
- Private client meeting area
- Treadmill desk and phone pods
- Traditional office seating
- Toilets
- Storage
- Mushroom and crop glasshouse
- Portobello's restaurant
- Reception
- Lift

office and design space

mycelium furniture showroom

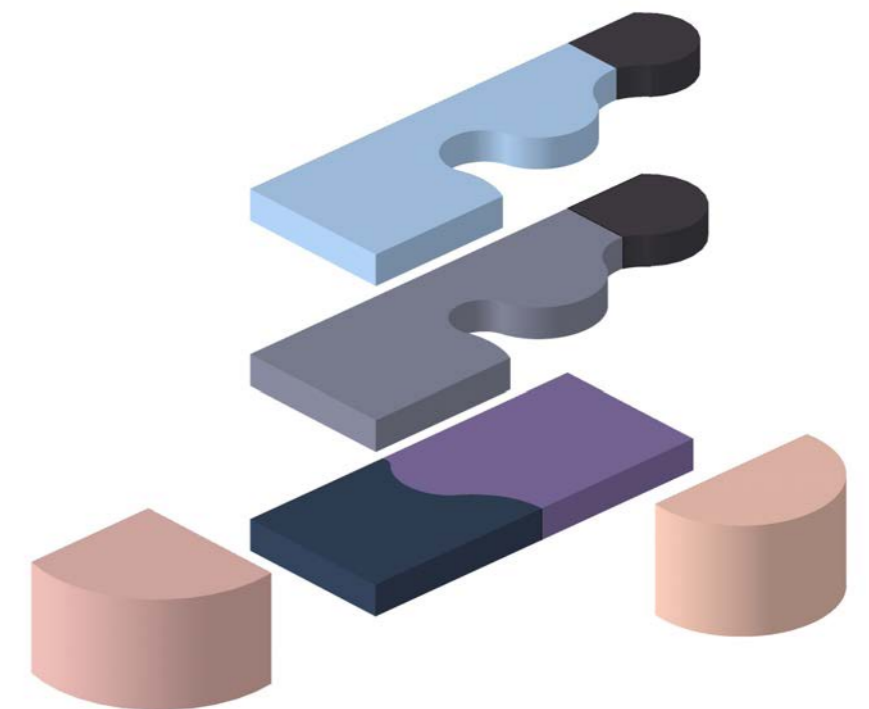
balcony bars

mycelium production facility

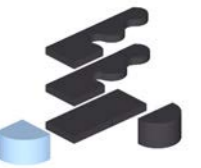
mushroom glasshouse

cafe

portobello's restaurant



exterior
look and feel



portobello's restaurant
look and feel

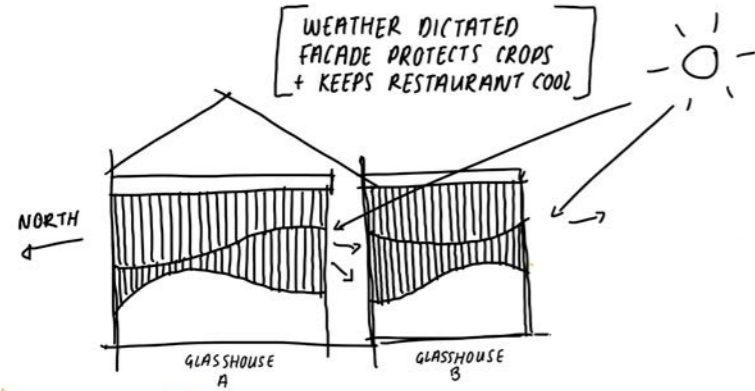
Portobello's restaurant is located in the west facing glasshouse, and aims to make use of mushrooms that ordinarily would be wasted during the mycelium production process. Only the stem of the mushroom is used to produce mycelium spores to begin the process, so any remaining mushroom will be used in dishes in Portobello's. Featured will be a bar area, open kitchen and seating with views of the moving facade and newly landscaped outdoor area.



(Ghinou, 2017)



(Blast Studios, 2022)



(Grey, 2014)

Inspiration from The Bund Finance Centre by Foster + Partners and Heatherwick Studios has been taken to design a moving facade providing shade to the interior of the glasshouses. Inspiration was also taken from the Tree Column project wherein columns of 3D printed substrate are designed in a way to optimise mycelium growth. These two ideas were combined to create a weather dictated moving mycelium facade that provides human benefits of shade whilst being fully circular and sustainable. This brass and mycelium facade juxtaposes the original industrial brick facade of the building to create a striking design.

cafe
look and feel



(Viramonte, 2021)



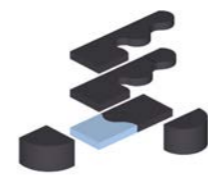
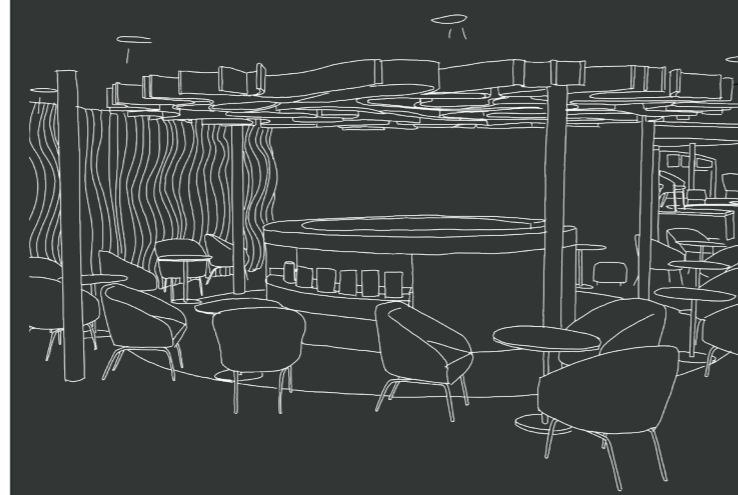
(Matrix, 2021)



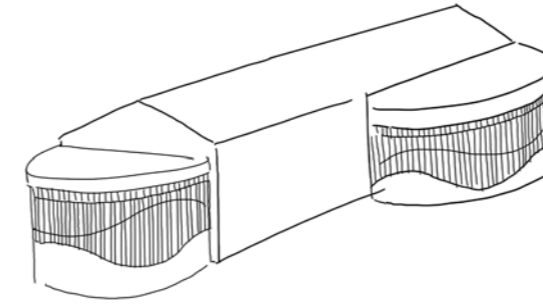
(Enjoydesign, 2022)

The cafe following on from Portobello's will serve mushroom based tea and coffee. The left over grounds from this coffee making process can be used as a substrate to grow mycelium, giving the building a way to offset its level of waste in house.

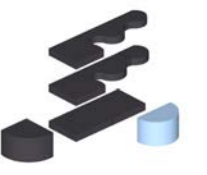
The design of the space incorporates the undulating feel of the underside of a mushroom, the walls will be clad with a timber facade to this effect, and part of the ceiling above the service area will be made up of free flowing paper structure to imitate a mushroom further.



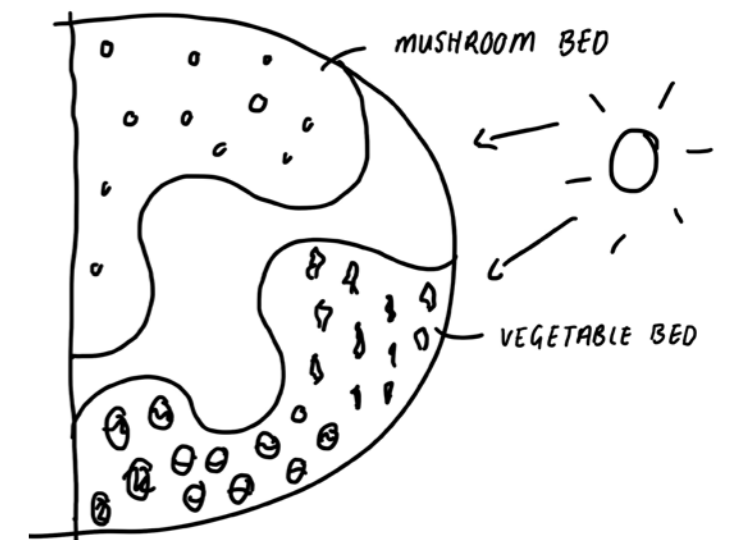
mushroom glasshouse
look and feel



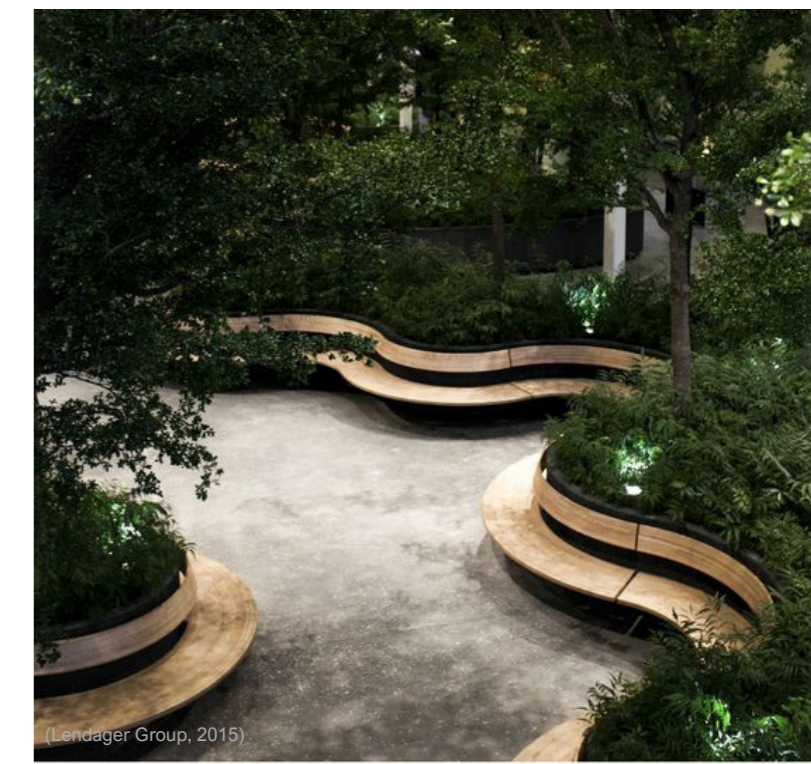
The mushroom glasshouse is where mushrooms will be grown to both enable the production of mycelium and provide food for Portobello's and the cafe. Other fruits and vegetables will be grown here to make the most of the space to supplement the menu at Portobello's. To prevent the scorching of crops, the weather dictated facade will protect the light sensitive mushrooms whilst remaining open to light dependent fruit and vegetables. The design of the space will follow the same curved pattern, beds follow a curved shape, dropping to another level of seating.



(Ghinitoiu, 2017)



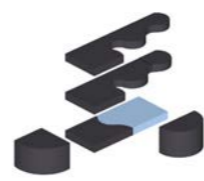
(Airhart, 2019)



(Lendager Group, 2015)

mycelium production facility

look and feel




(Riche, 2013)



(Delius, 2013)

The mycelium production facility will feature an industrial aesthetic, paying homage to its origins as a former industrial building. An area to produce furniture, kiln dry mycelium and grow the mycelium itself, a sterilized pod will feature to keep the mycelium spores free from any contaminants.



(Duke & Sons, 2013)

mycelium furniture showroom

look and feel



(Berarducci, 2016)

Much of the mycelium furniture showroom takes inspiration from the mushroom itself, featuring mushroom inspired columns and undulating shelves to display mycelium furniture. The image to the left is what inspired the undulating mezzanine floors.



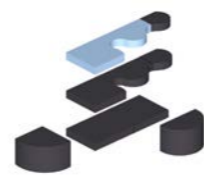
(Kwan, 2021)



(HDP Photography, 2022)

mycelium design area

look and feel



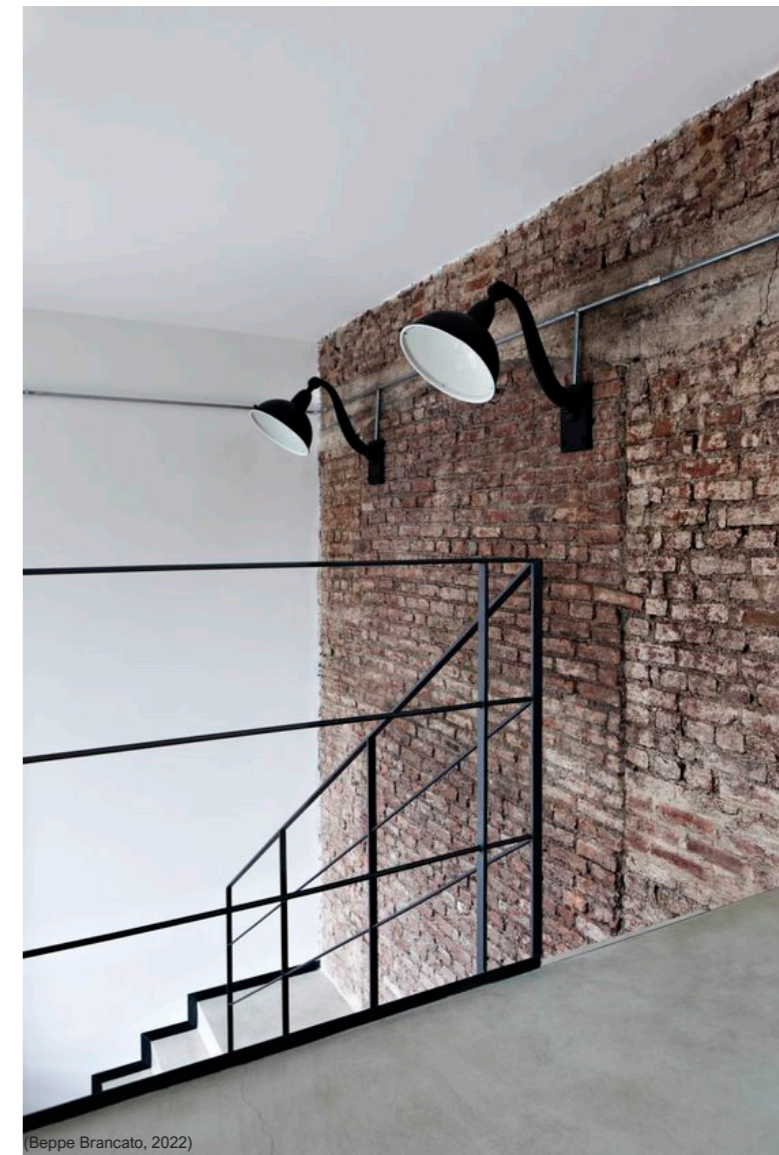
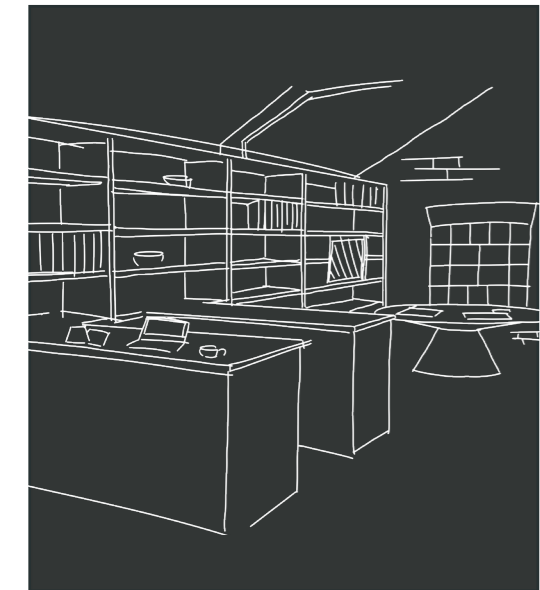
Clients are able to have their own mycelium facade, furniture, extension or building designed by in house architects and designers. This area will feature storage for mycelium samples and product examples and have space for client meetings and presentations. The overall feel of this space is light and airy and spark creativity, aided by the overhead skylight and view over the mezzanine floor to the production area below

office

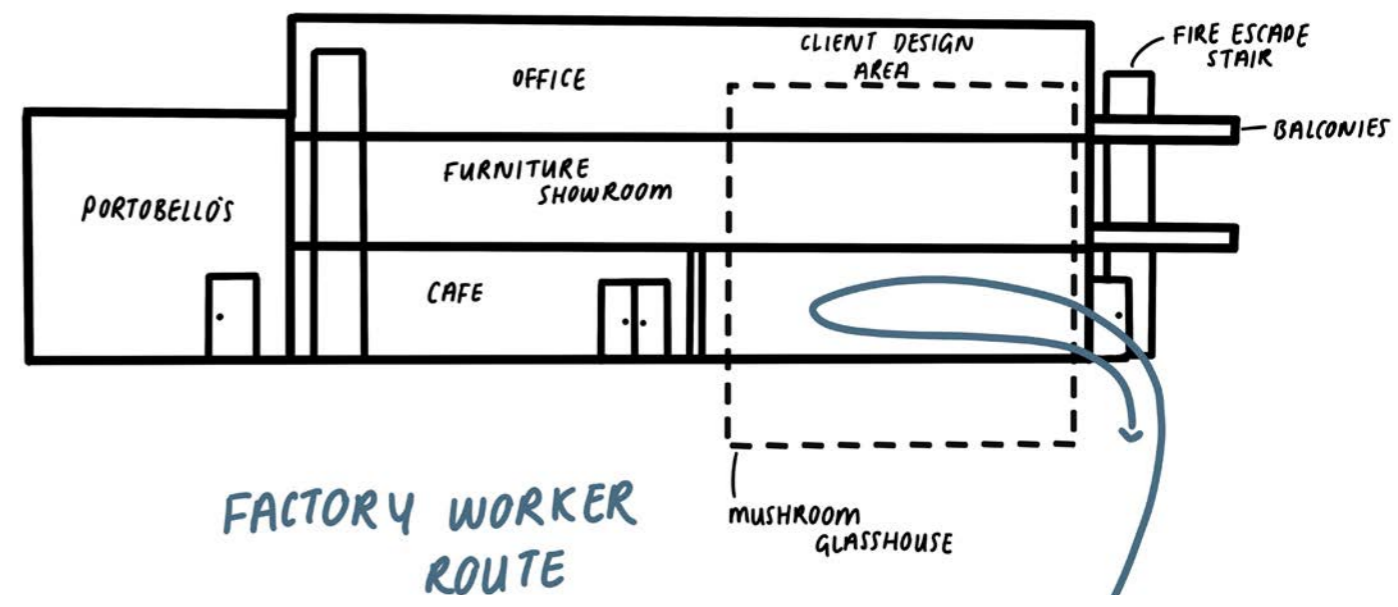
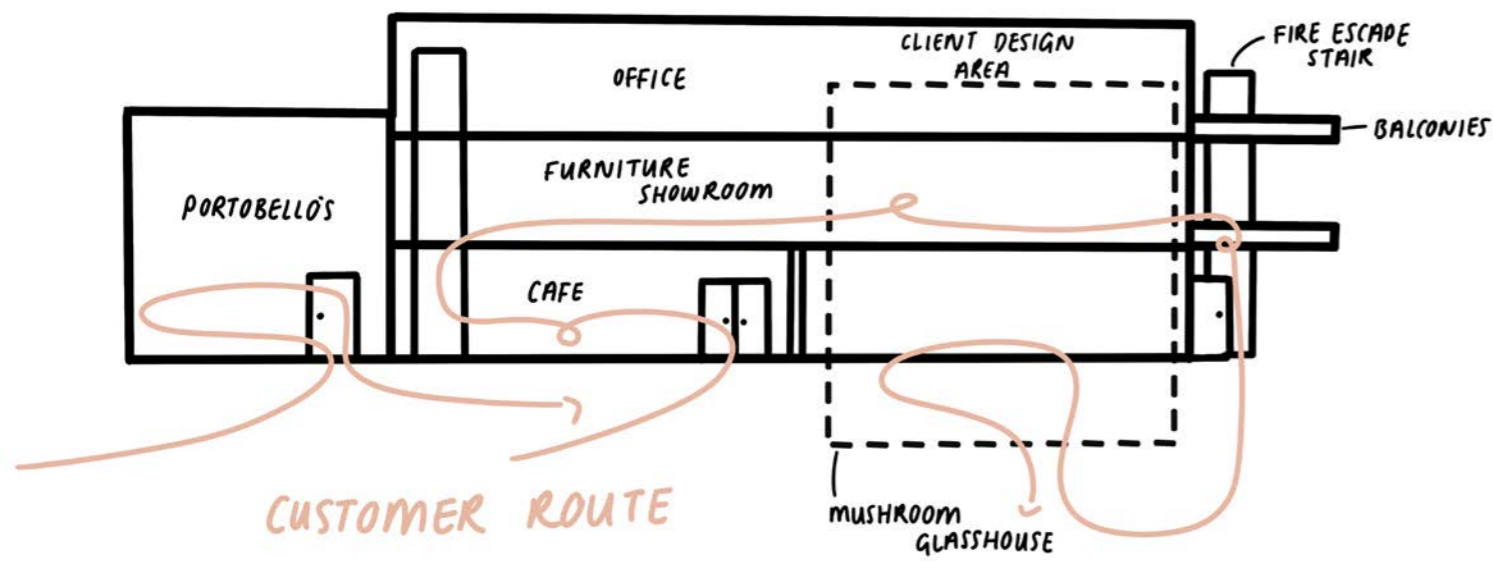
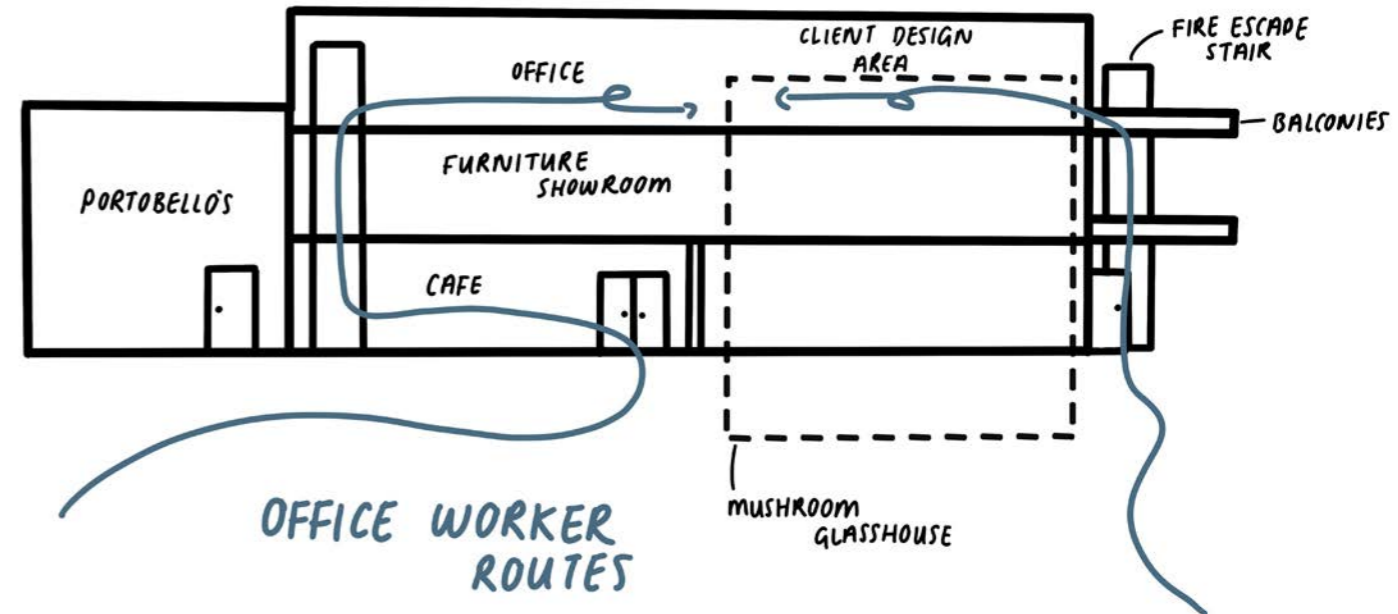
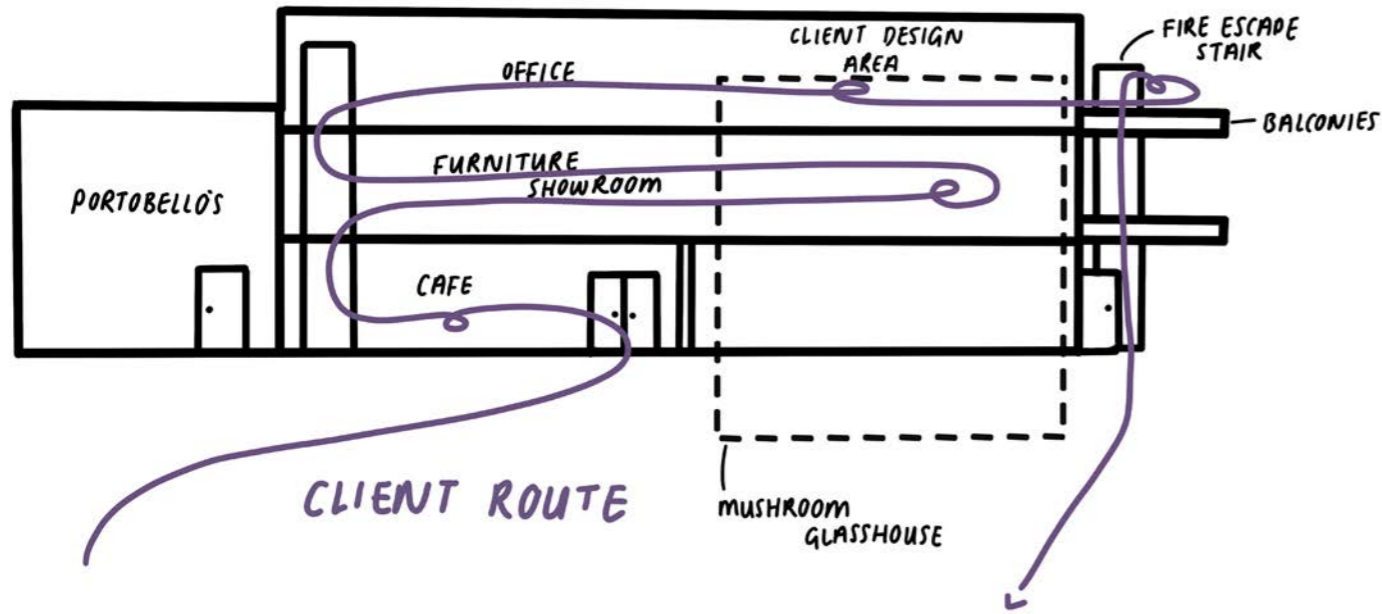
look and feel



The office is located on the top floor of The Mycologist and has views down to the furniture showroom and production area below. The exposed brick will incorporate the buildings industrial feel, while brass additions will give the office an aesthetic appeal. Featured will be a variety of working areas to everyone's preference, casual seating, standing and treadmill desks, private pods, group working areas and traditional desks, as well as a private and public client meeting area.



visitor journey



design outcome.

Proposed Plans, Elevations and Sections

Proposed Detail Elevations

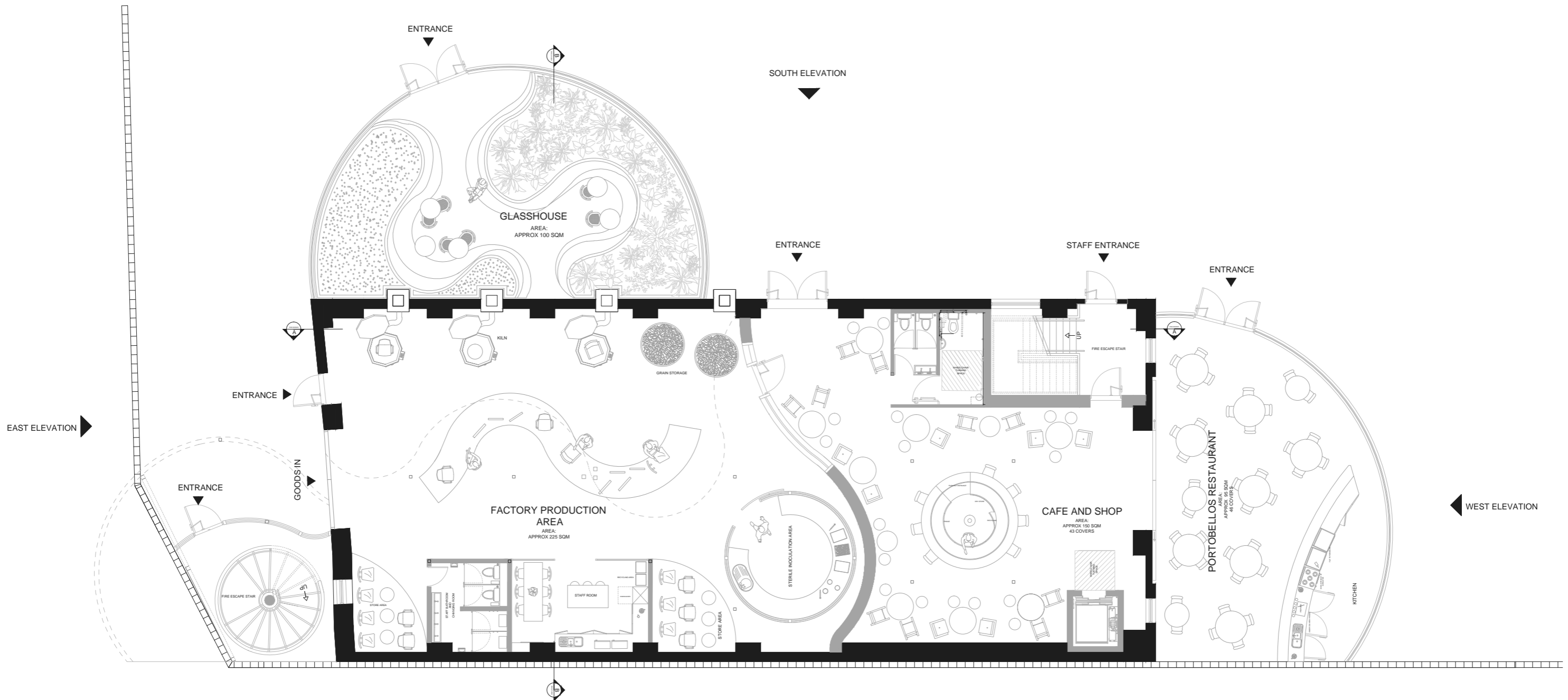
Axonometrics


Model


07

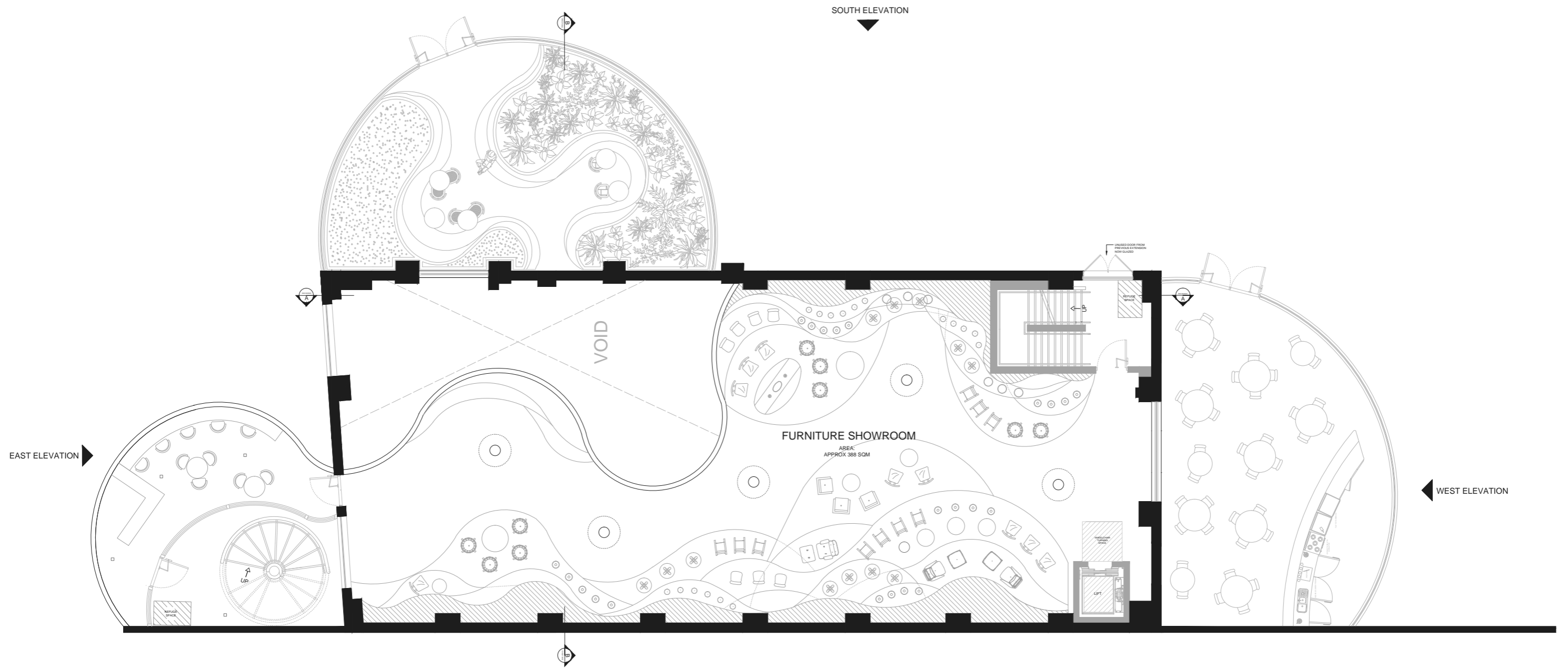
*proposed
drawings*

The image displays a detailed architectural site plan. A central building footprint is outlined in black, containing various interior spaces such as rooms, corridors, and a circular area. The building is surrounded by a landscaped area featuring numerous trees of different sizes and shapes, winding paths, and open spaces. The site is bounded by a grey area representing existing or adjacent structures and a blue area representing a body of water or a road. The drawing is presented in a clean, technical style with fine lines and shading.



PROPOSED GROUND FLOOR PLAN 
 0 1.5 3M
 1:150

DATE:	NOTES:	REV.
PROPOSED GROUND FLOOR PLAN		
58 DACE ROAD, LONDON, E3 2NX		1:150 @ A3 MAR 2023 OC
		DAC/14/2023 -



PROPOSED FIRST FLOOR PLAN

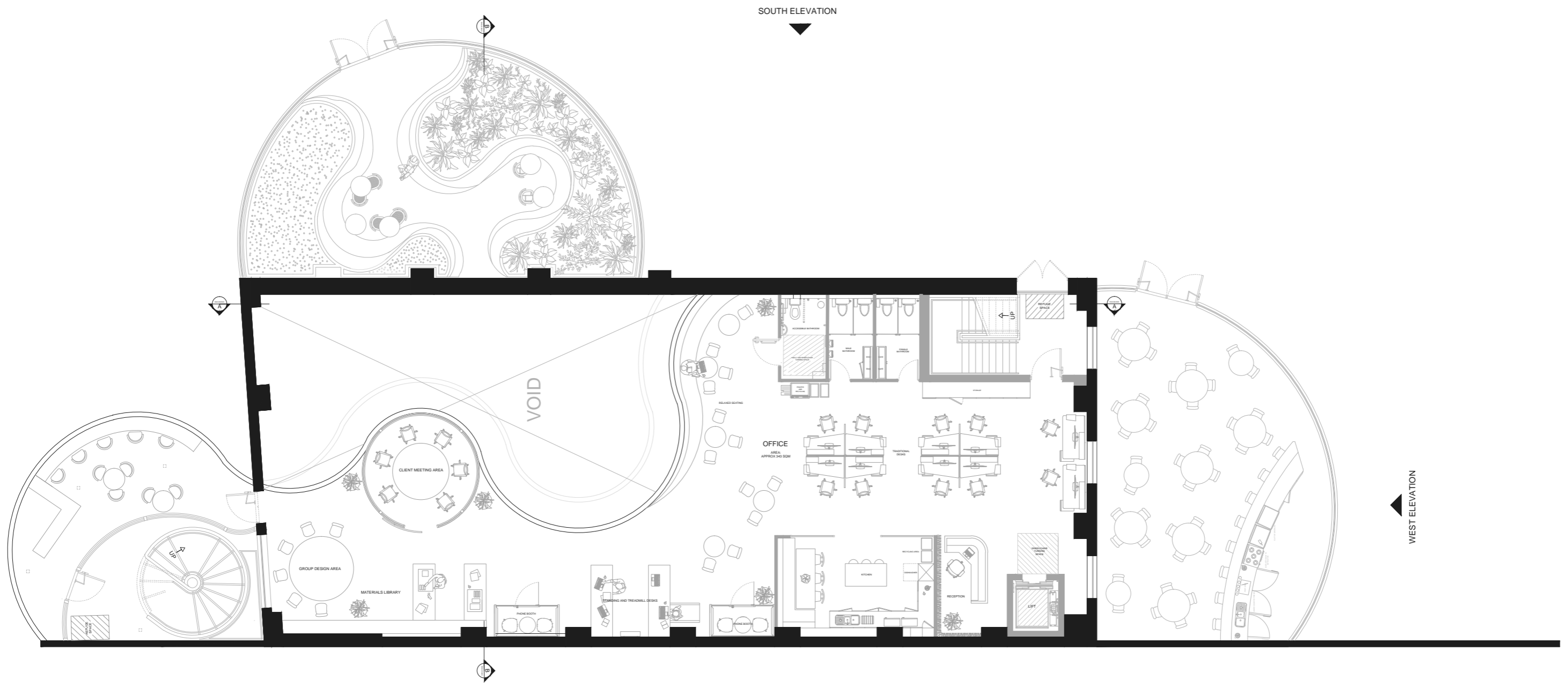
0 1.5 3M
1:150




DATE	NOTES	REV.
PROPOSED FIRST FLOOR PLAN		
58 DACE ROAD, LONDON, E3 2NX		
1:150 @ A3	MAR 2023	OC
DAC/16/2023		-




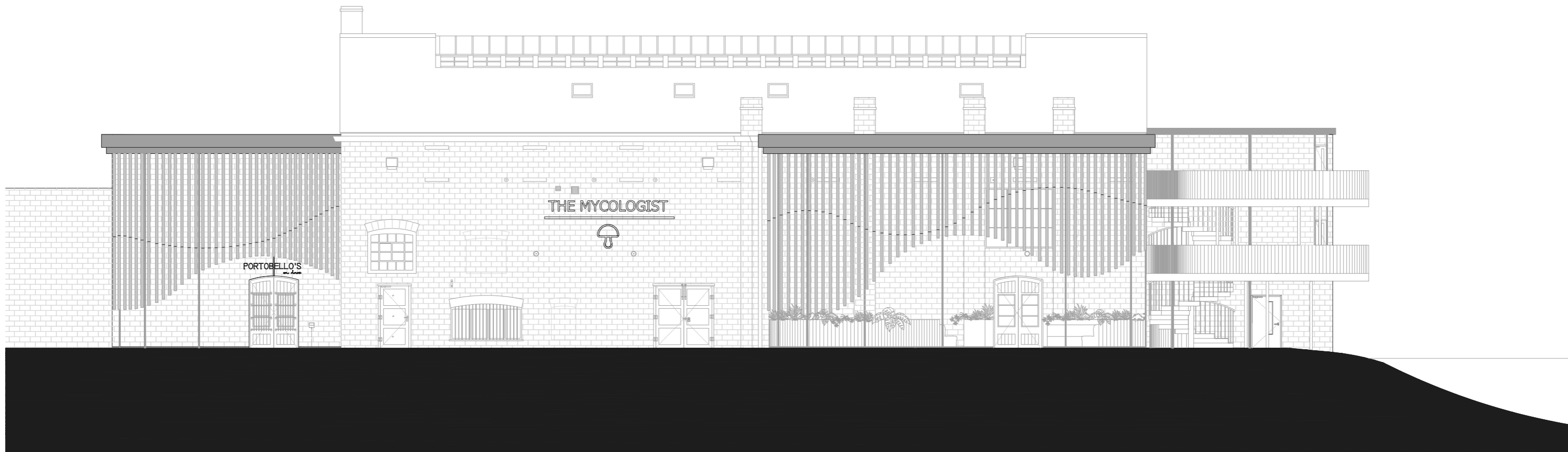
OC STUDIOS



PROPOSED SECOND FLOOR PLAN 


0 1.5 3M
1:150

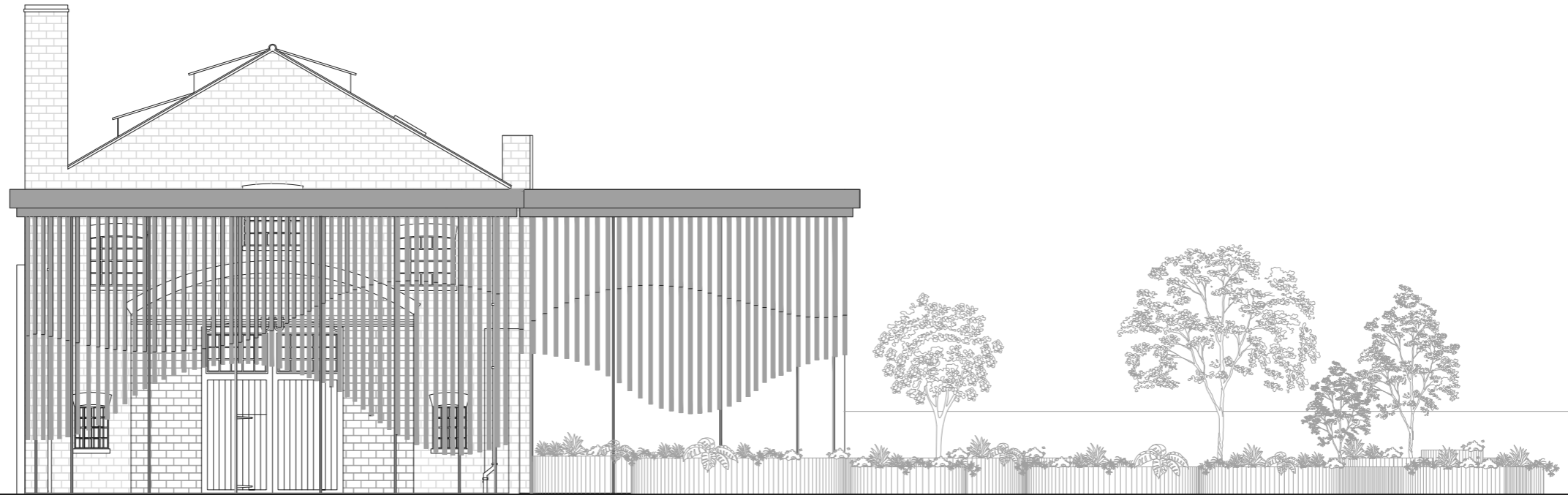
DATE:	NOTES:	REV.
PROPOSED SECOND FLOOR PLAN		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		1:150 @ A3 MAR 2023 OC
DAC/17/2023		-



PROPOSED SOUTH ELEVATION

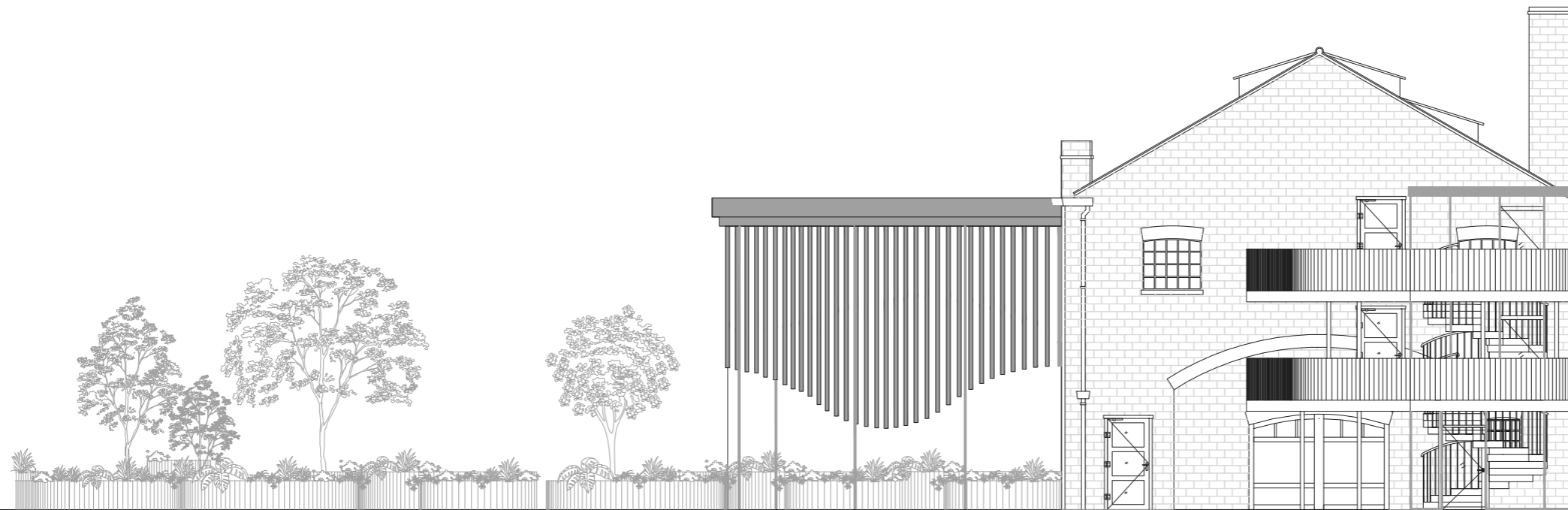
0 1.5 3M
1:150

DATE:	NOTES:	REV.
PROPOSED SOUTH ELEVATION		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:150 @ A3	MAR 2023	OC
DAC/18/2023		-



PROPOSED WEST ELEVATION

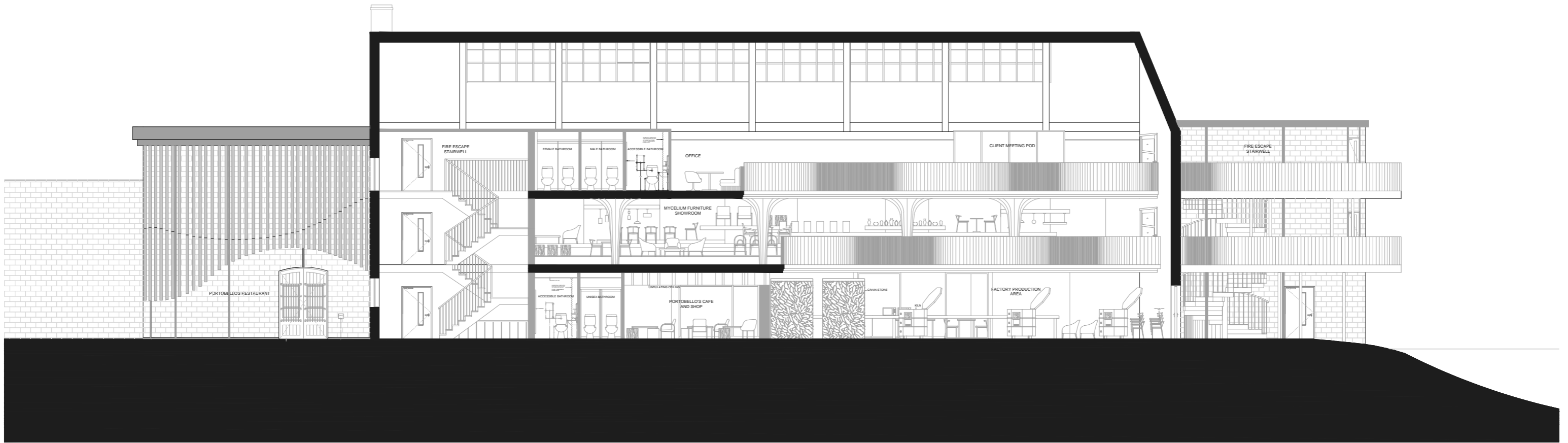
0 1.5 3M
1:150



PROPOSED EAST ELEVATION


0 1.5 3M
1:150

DATE:	NOTES:	REV.
PROPOSED EAST AND WEST ELEVATION		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:150 @ A3	MAR 2023	OC
DAC/19/2023	-	-



PROPOSED SECTIONAL ELEVATION A-A


0 1.5 3M
1:150

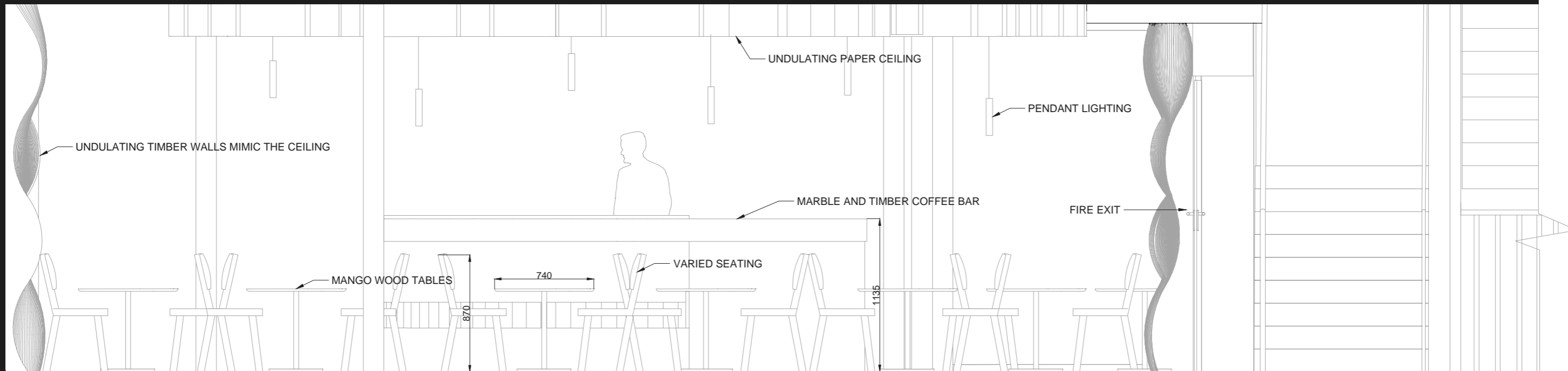
DATE	NOTES	REV.
PROPOSED SECTIONAL ELEVATION A-A		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:150 @ A3	MAR 2023	OC
DAC/20/2023	-	-



PROPOSED SECTIONAL ELEVATION B-B

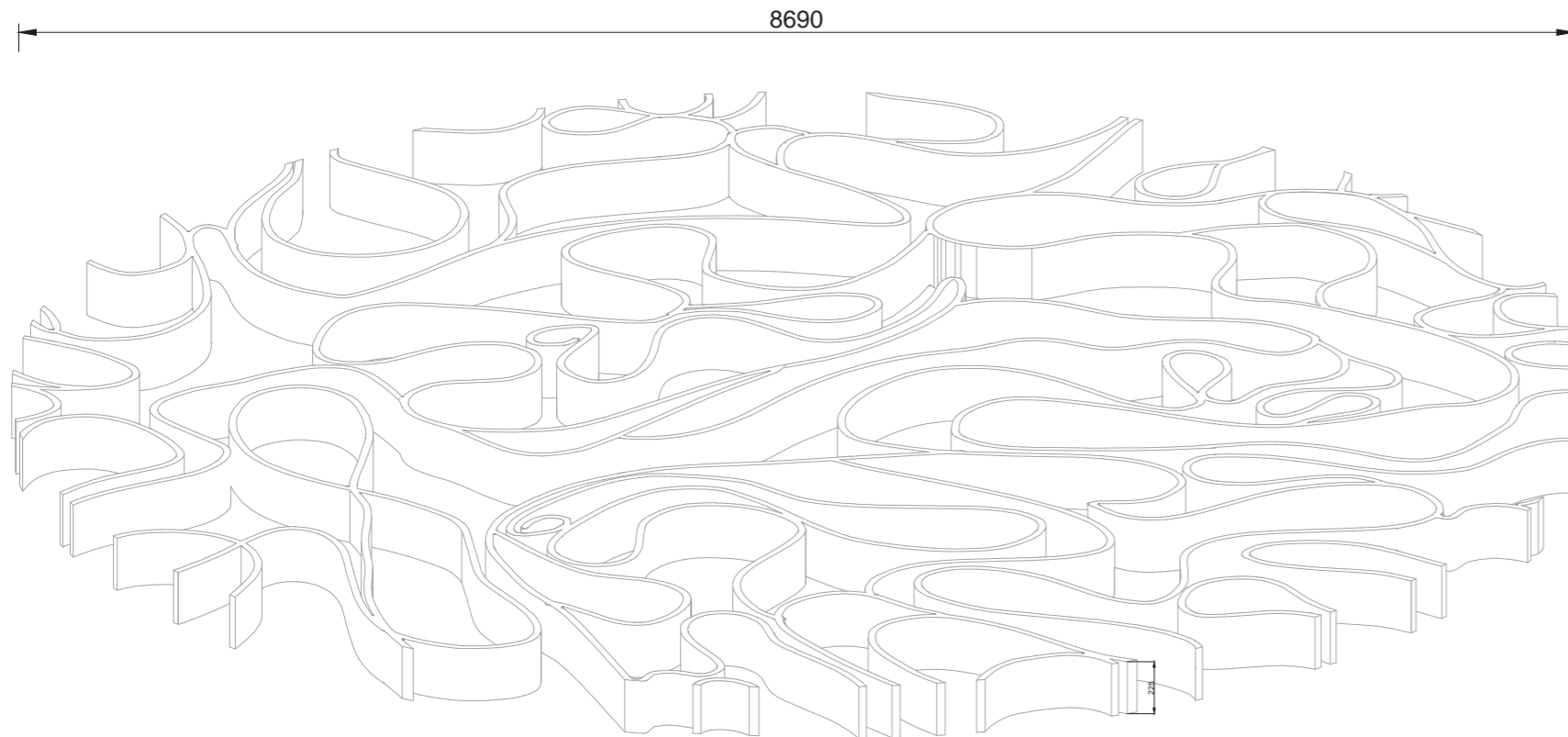
0 1 2M
1:100

DATE:	NOTES:	REV.
PROPOSED SECTIONAL ELEVATION B-B		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:100 @ A3	APR 2022	OC
DAC/21/2023	-	-

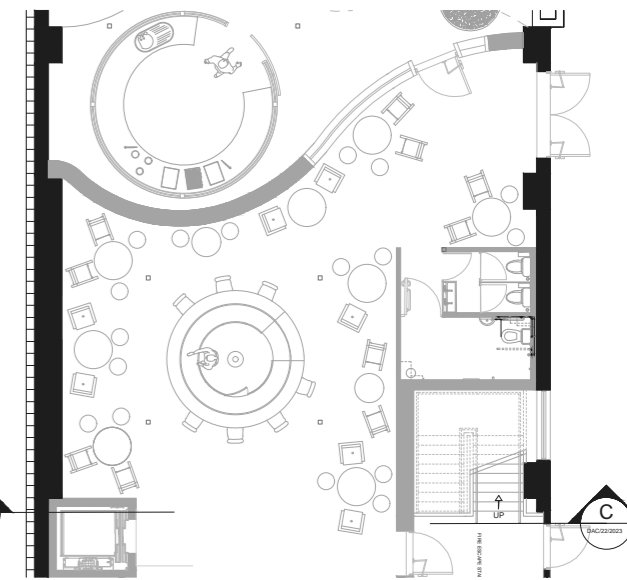


DETAILED SECTIONAL ELEVATION C-C

0 0.3 0.6
1:30



UNDULATING PAPER CEILING DETAIL FIXED ABOVE THE BAR VIA WIRE FIXINGS ATTACHED TO A DROPPED METAL MESH CEILING.




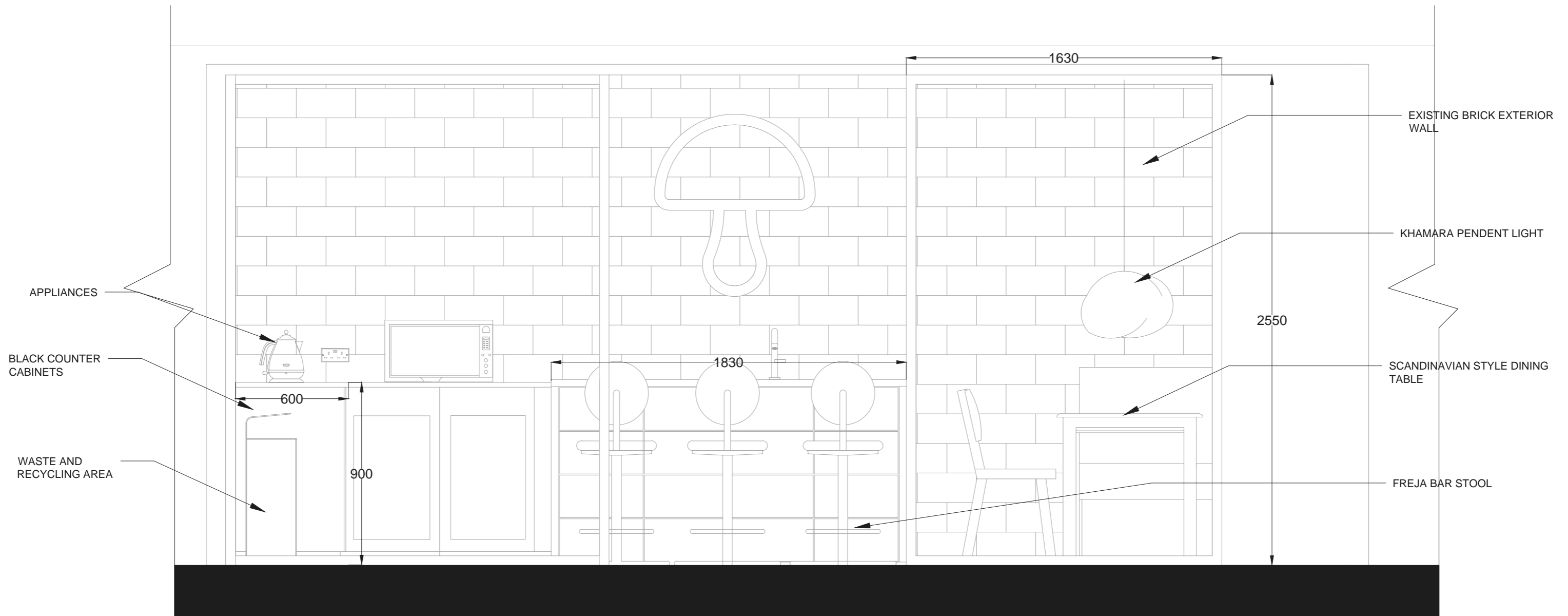
CAFE PLAN

0 2 4
1:200

CEILING DETAIL

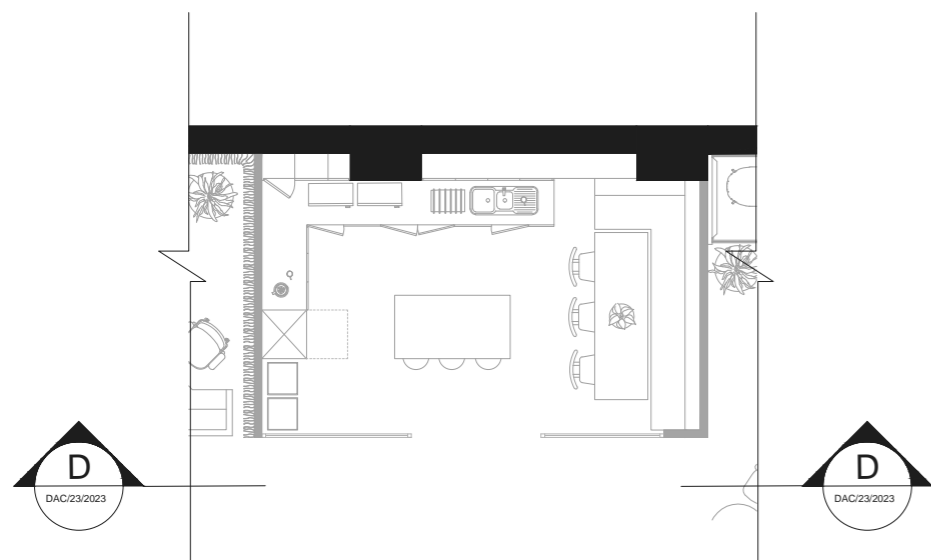
0 0.3 0.6
1:30

DATE:	NOTES:	REV.
DETAILED ELEVATION C-C		 OC STUDIOS 1:30 & 1:200 @ A3 APR 2023 OC DAC/22/2023 -
58 DACE ROAD, LONDON, E3 2NX		



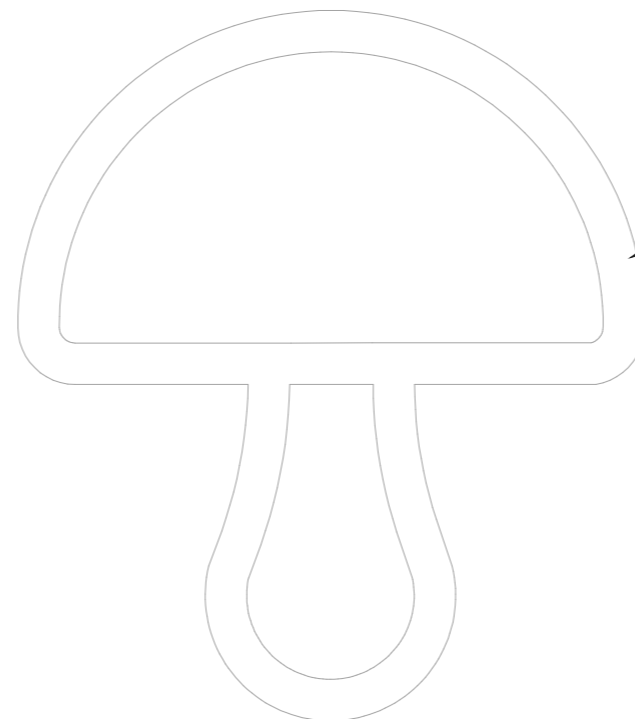
DETAILED TEAPOINT ELEVATION D-D

0 0.2 0.4M
1:20



TEAPOINT PLAN

0 1 2M
1:100



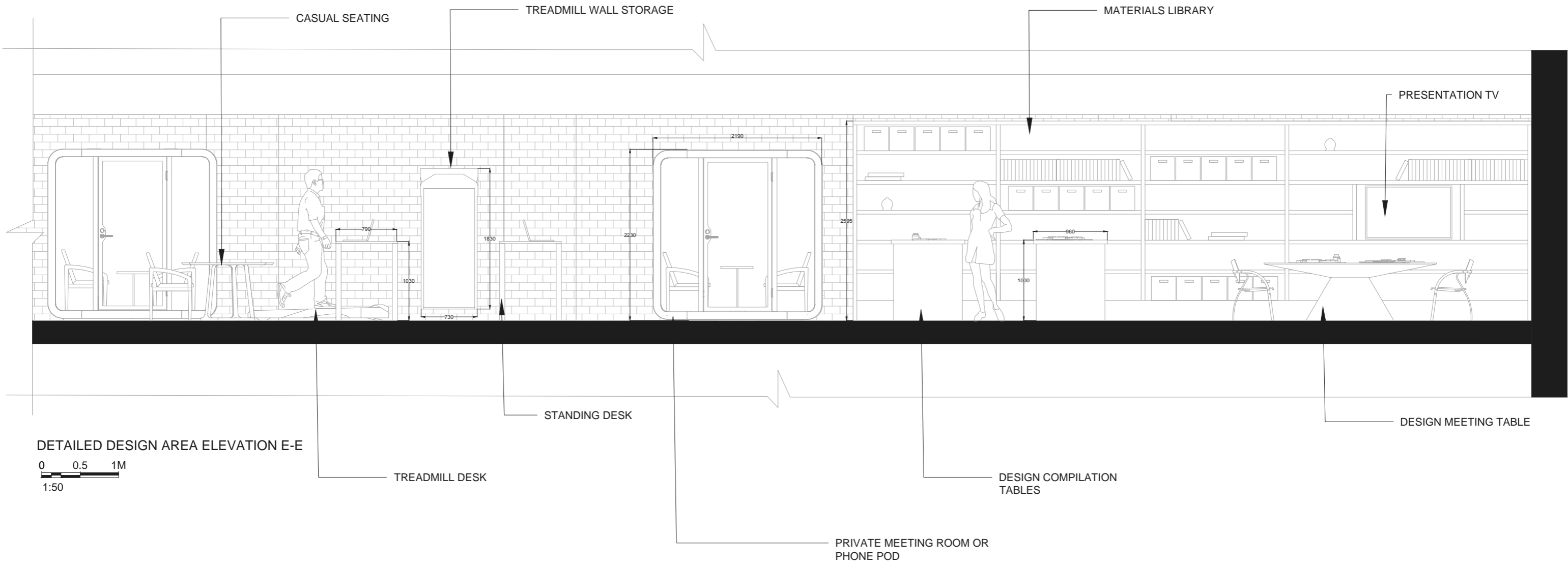
BRANDING LOCATED IN TEAPOINTS, ON THE FRONT OF THE BUILDING AND IN THE FACTORY AREA

CONSISTS OF NEON WHITE SIGN MOUNTED TO BRICK WALL WITH SCREWS, WALL PLUGS AND SPACERS

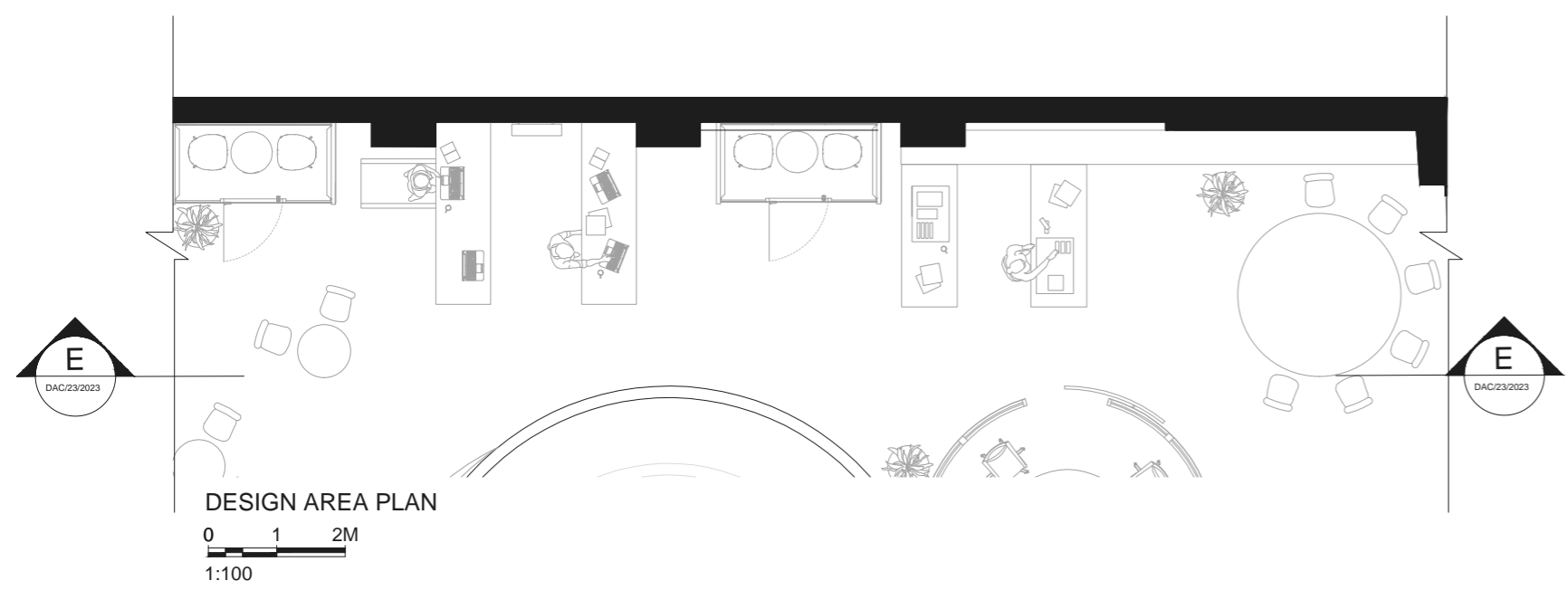
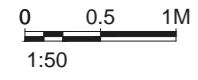
MUSHROOM BRANDING

0 0.1 0.2M
1:10

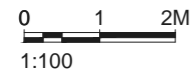
DATE:	NOTES:	REV.
DETAILED ELEVATION D-D		
58 DACE ROAD, LONDON, E3 2NX		 1:10, 1:20, 1:100 @ A3 APR 2023 OC DAC/22.5/2023 -



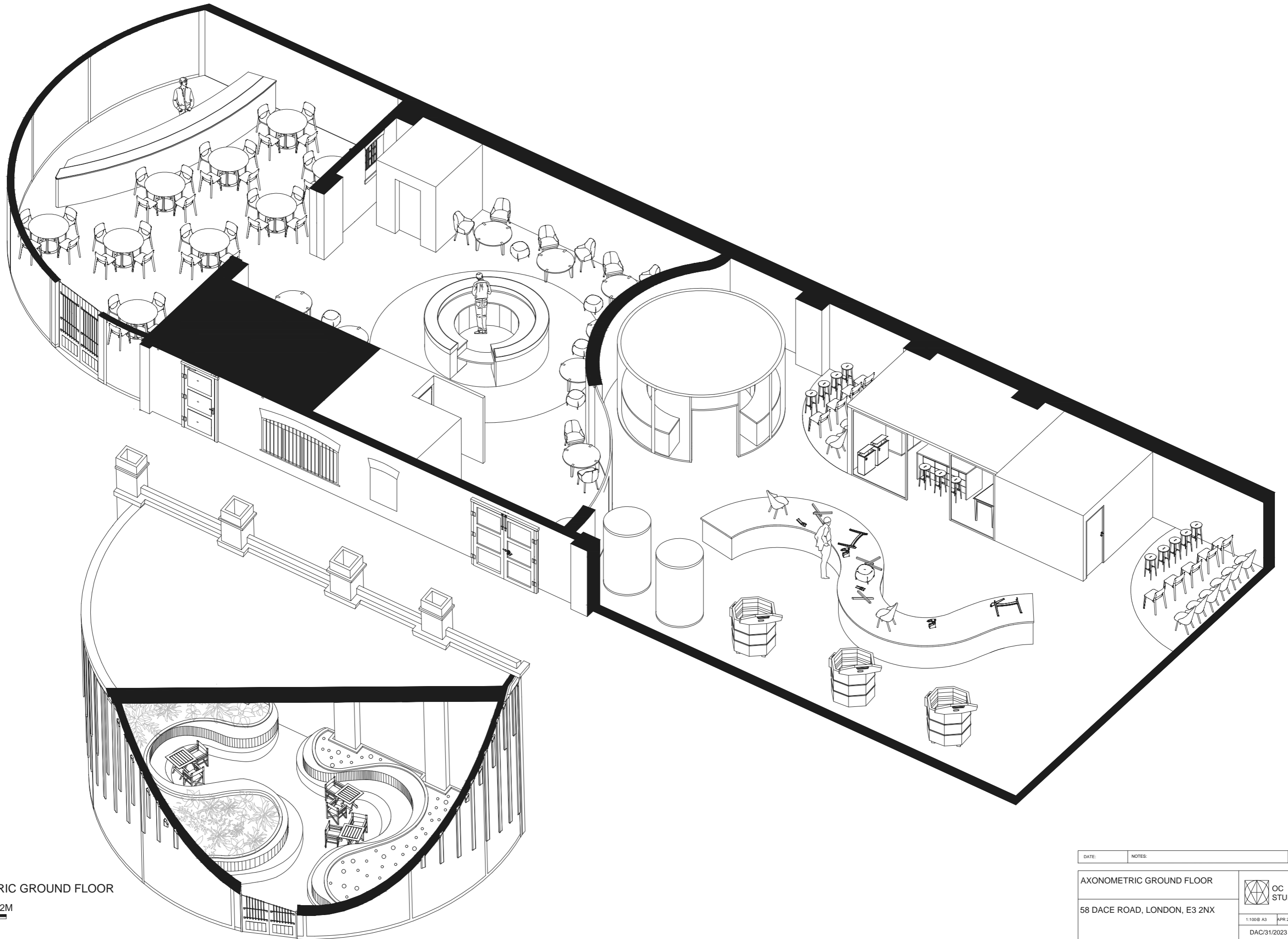
DETAILED DESIGN AREA ELEVATION E-E



DESIGN AREA PLAN



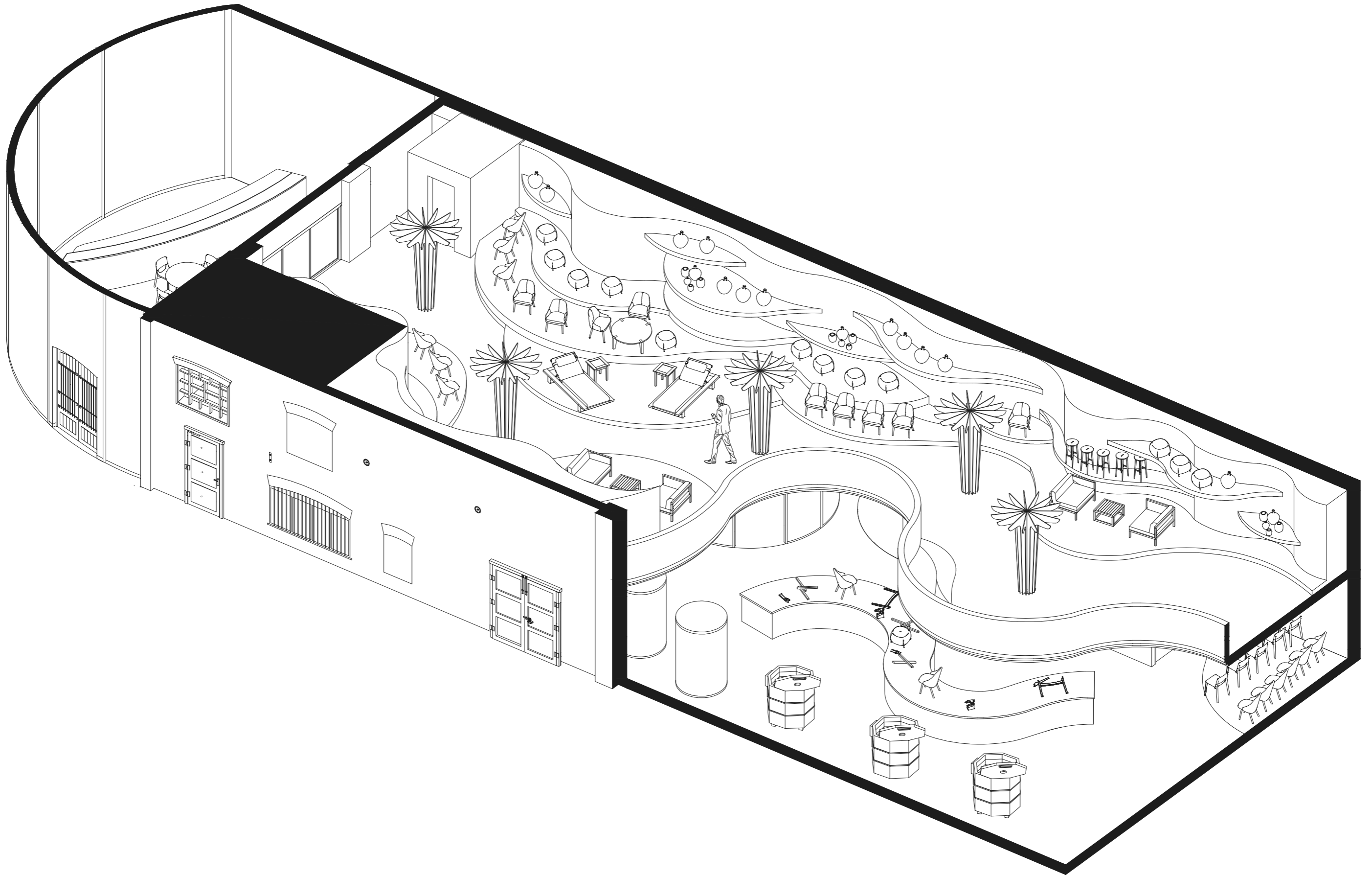
DATE:	NOTES:	REV.
MYCELIUM DESIGN AREA DETAILED ELEVATION E-E		
58 DACE ROAD, LONDON, E3 2NX		
1:100 & 1:50 @ A3 APR 2023 OC		DAC/23/2023 -



AXONOMETRIC GROUND FLOOR

0 1 2M
1:100

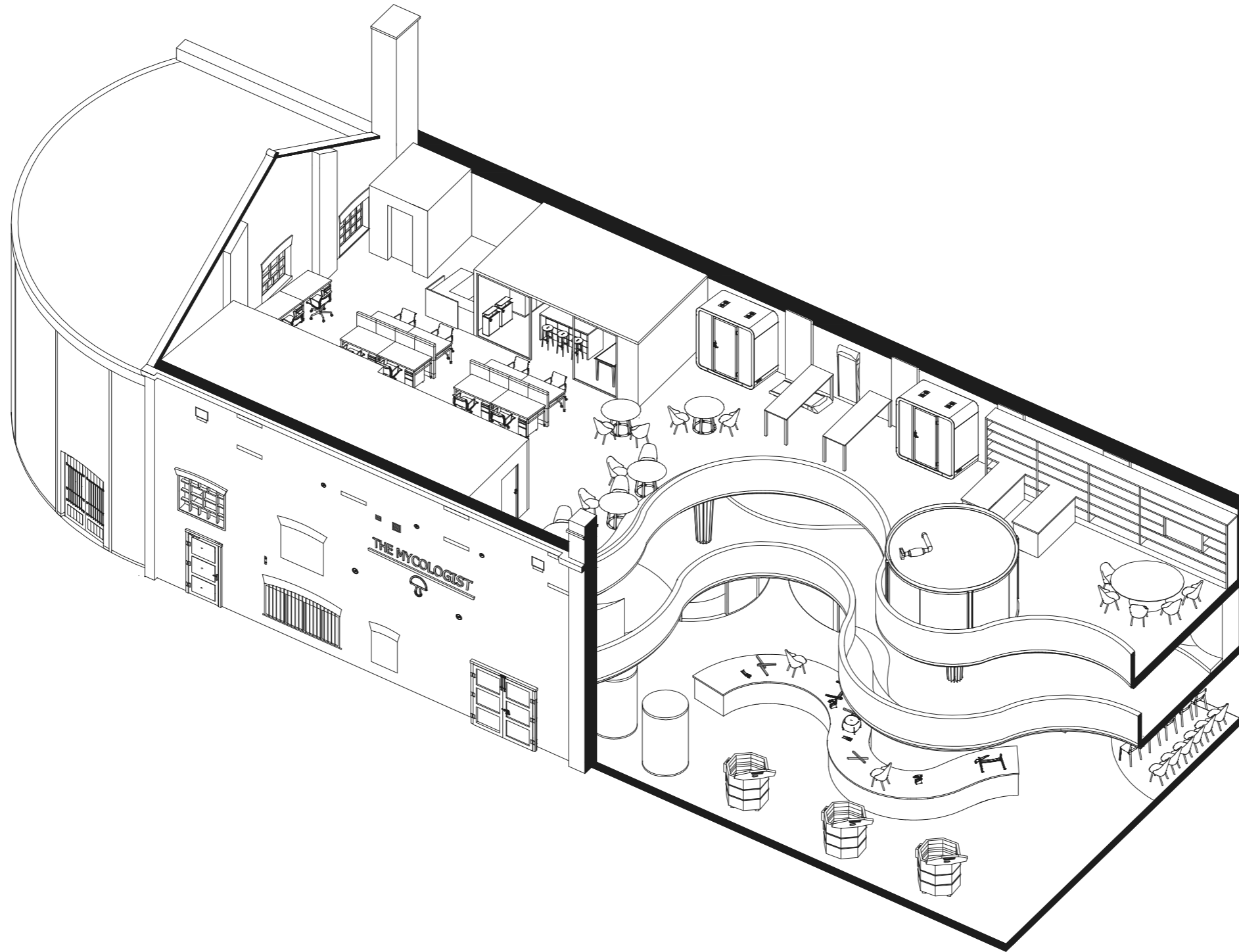
DATE:	NOTES:	REV:
AXONOMETRIC GROUND FLOOR		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:100@ A3	APR 2023	OC
DAC/31/2023		-



AXONOMETRIC FIRST FLOOR

0 1 2M
1:100

DATE:	NOTES:	REV.
AXONOMETRIC FIRST FLOOR		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:100 @ A3	APR 2023	OC
DAC/32/2023		-



AXONOMETRIC SECOND FLOOR

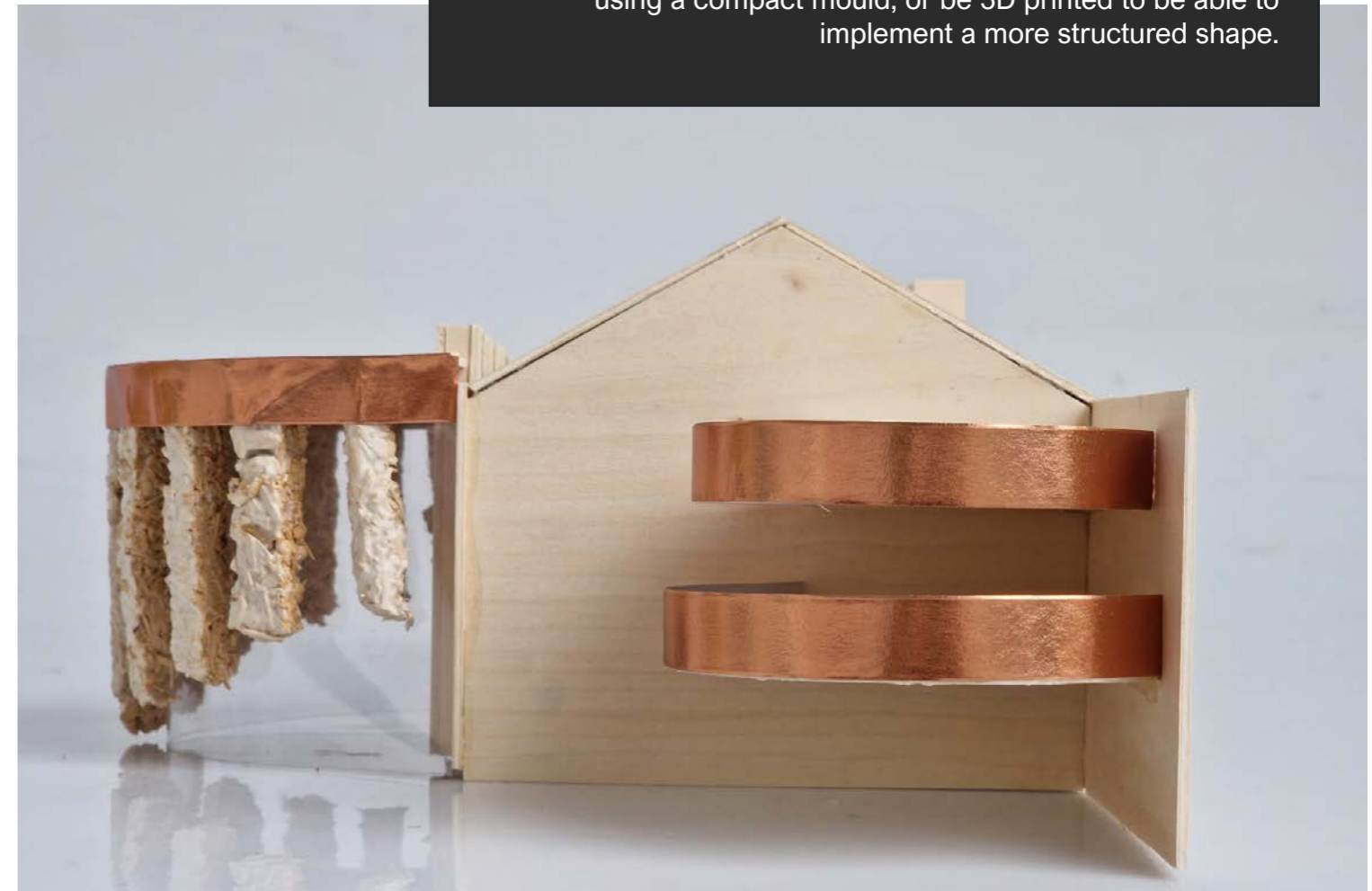
0 1.5 3M
1:150

DATE:	NOTES:	REV.
AXONOMETRIC SECOND FLOOR		 OC STUDIOS
58 DACE ROAD, LONDON, E3 2NX		
1:150 @ A3	APR 2023	OC
DAC/33/2023	-	-

model.



This 1:100 balsa wood and acetate sheet model shows the two glasshouses. Pieces of mycelium brick have been used to illustrate the columns, though in practice would be constructed using a compact mould, or be 3D printed to be able to implement a more structured shape.

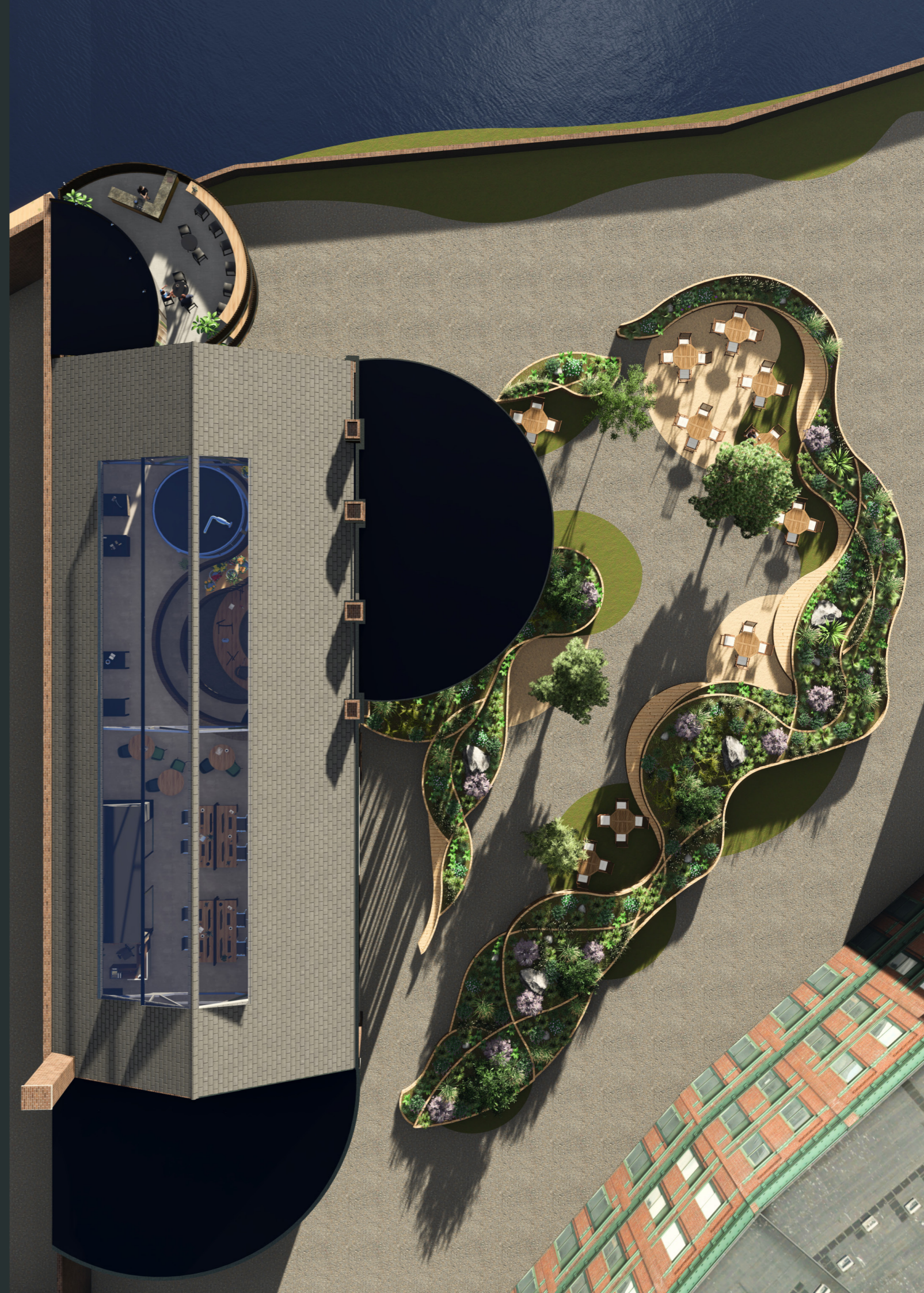


renders.

Perspective Renders

Rendered Floor Plans

08



exterior



These renders show the exterior of The Mycologist, and demonstrate the function of the weather dictated mycelium facade. The columns will open to expose light dependent crops to sunlight whilst shading the light sensitive mushrooms, or shade the diners in the restaurant in the west facing glasshouse.



The view of The Mycologist, the garden and balconies from the opposite bank of the River Lea is eye-catching and aims to generate interest from potential customers passing by. This footpath is busy as it is a direct route to the Olympic Park and Stratford Westfield Shopping centre so has a large amount of foot traffic.



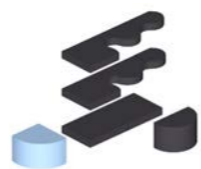
restaurant



Portobello's restaurant located in the west facing glasshouse serves mushrooms left over from the mycelium growing process as to reduce the overall waste produced in the building. Mushrooms and other produce are grown in the south facing glasshouse, and an example menu has been provided.



If the glasshouse begins to become uncomfortable due to sunlight and heat, the mycelium facade can be moved to provide shade.



MENU

Main.

Mushroom Risotto	15
Mushroom Omelette	12
Vegan Mushroom Ragu	14
Vegan Bolognese with Mushrooms	13

PORTO BELLO'S

Sides.

French Fries	3
Loaded Parmesan Mushroom fries	5
Broccoli	3
Green Beans	3

Appetiser.

Cream of Mushroom Soup	6
Garlic Mushrooms on Toast	5
Stuffed Mushrooms	6
Shaved Truffle Scallops	10

Chef's specials.

Shaved Truffle and Mushroom Ravioli	20
Beef and Mushroom Stroganoff	20
Mushroom Dhansak	18
Gnocci with Mushrooms and Paprika	17

Drinks.

Mushroom Tea or Coffee	3
Soda	2
Wine Selection	POA

Dessert.

Mushroom Brownies	6
Mushroom Panna Cotta	6
Mushroom Cookies	4
Mushroom Flour Strawberry Crepes	6



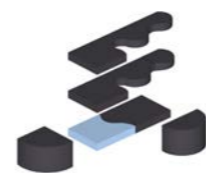
Portobello's, 58 Dace Road, London, E3 2NX

portobellosondace.com
+44 7700 900985

cafe



Ground floor cafe selling mushroom based tea and coffee. The grounds of which will be reused as a substrate for mycelium to grow, contributing to lowering the overall waste produced by the building. The spiralling ceiling is a reference to the underside of a mushroom, and the undulating walls relating to the form of mycelium.



factory



These renders show the factory located on the ground floor of The Mycologist, where mycelium substrate is stored, mycelium is inoculated and grown, bricks are fired in the kilns and mycelium furniture assembled.



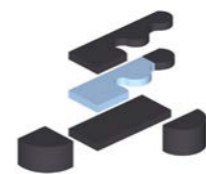
Located in this area is a tea point as well as staff bathrooms and changing rooms.



furniture showroom



The first floor contains the mycelium furniture showroom where products made in the factory are displayed for customers and clients to purchase. Columns are inspired by the stalk of a mushroom, and the undulating walls a reference to the free flowing form of mycelium itself, while each having a functional purpose.



office



Second floor office area containing traditional desks, casual seating, treadmill and standing desks, phone booths and public and private meeting spaces with the aim of catering to everyone's preference of work environment.



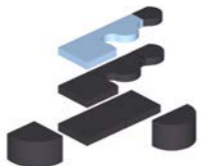
mycelium product design area



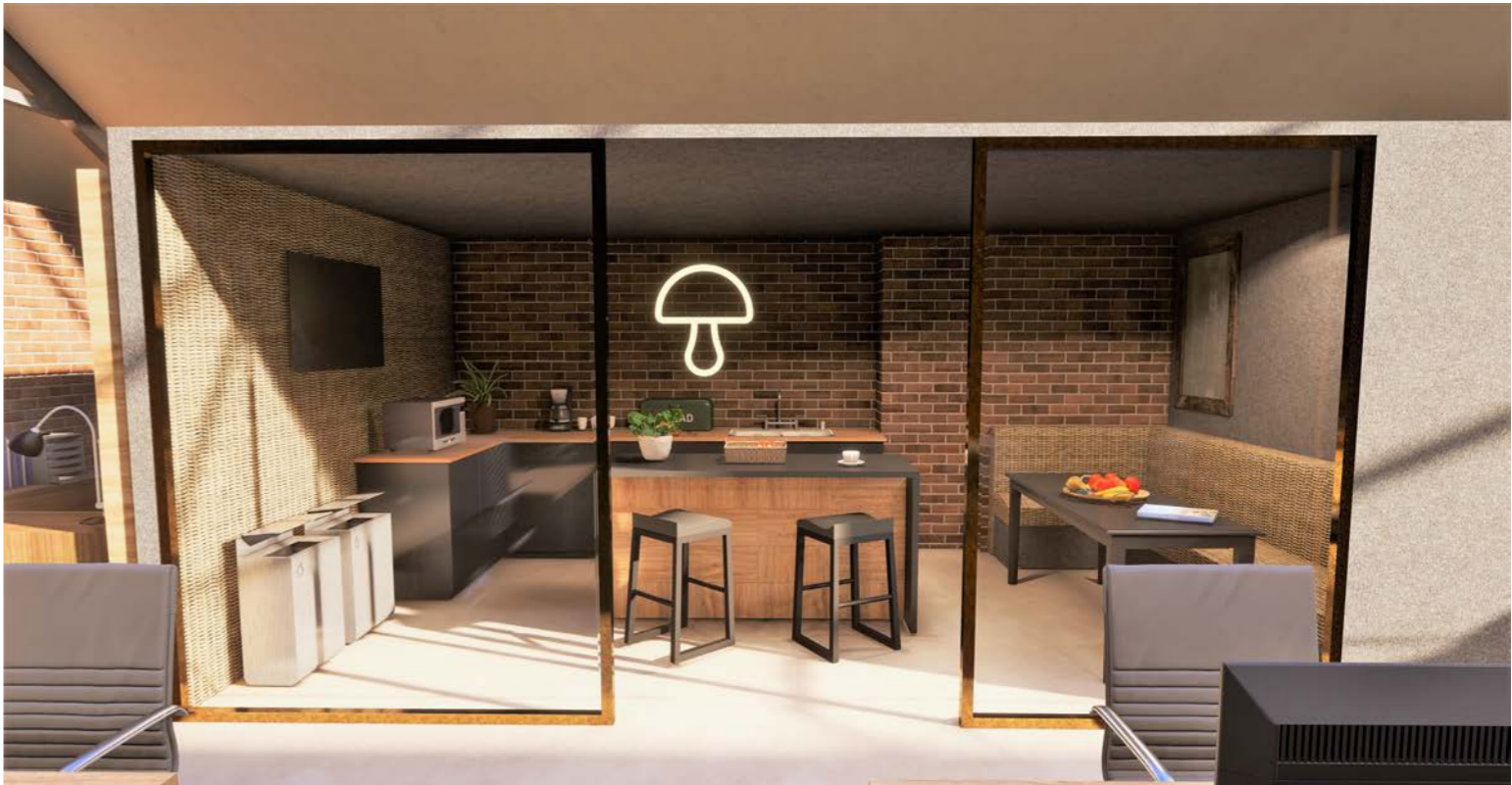
Here mycelium furniture, finishes such as fabrics and flooring and building materials will be designed for clients and to be sold in the mycelium furniture showroom below. This space is equip with a materials library, design compilation tables, a public presentation area with a screen and a private client meeting room.



View from above the mezzanine floors showing the free flowing nature of the building.



tea points



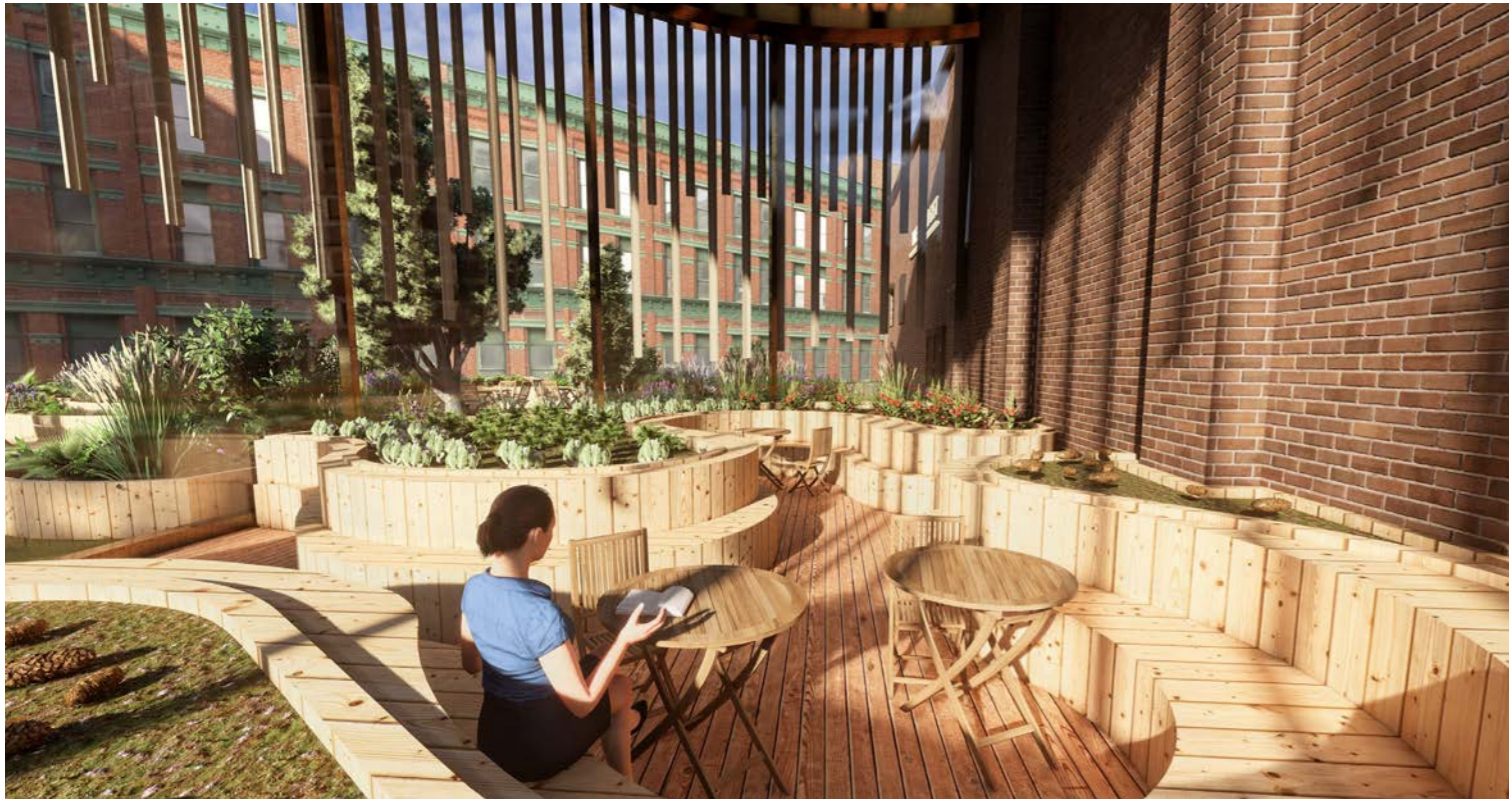
The office on the second floor and factory area have a tea point for staff use with bar and booth seating, appliances such as a microwave, coffee maker and dishwasher, as well as a television.



balconies Here clients and customers can meet to discuss projects or relax with a drink and a view of the River Lea



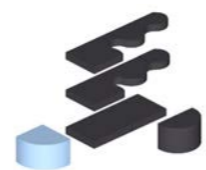
glasshouses



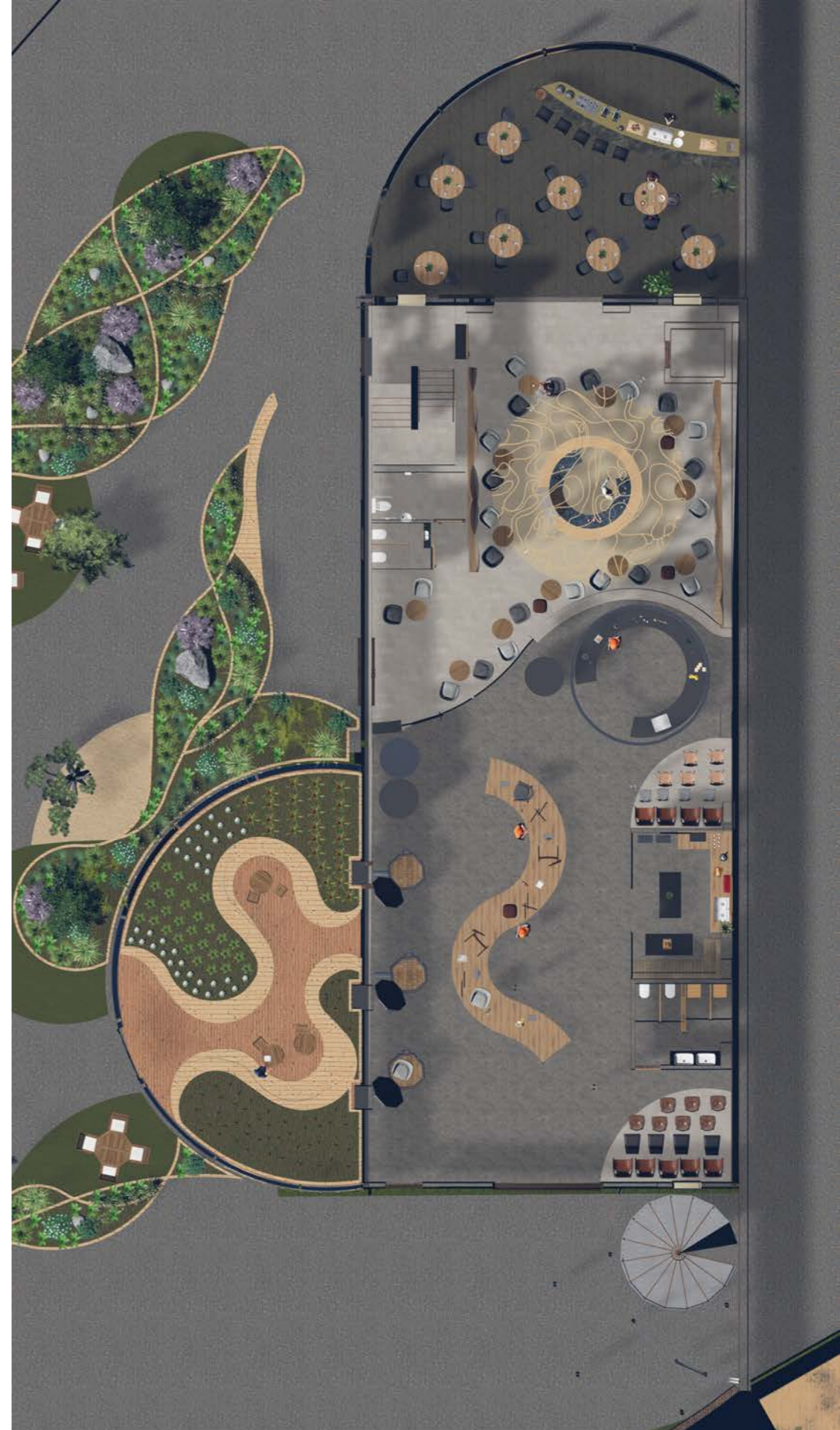
This glasshouse contains undulating beds that drop down to provide bench seating. These beds contain the mushrooms used to grow mycelium and produce used in the on-site restaurant Portobello's. Any left over mushrooms from the mycelium growing process are used in the restaurant to prevent any food waste.



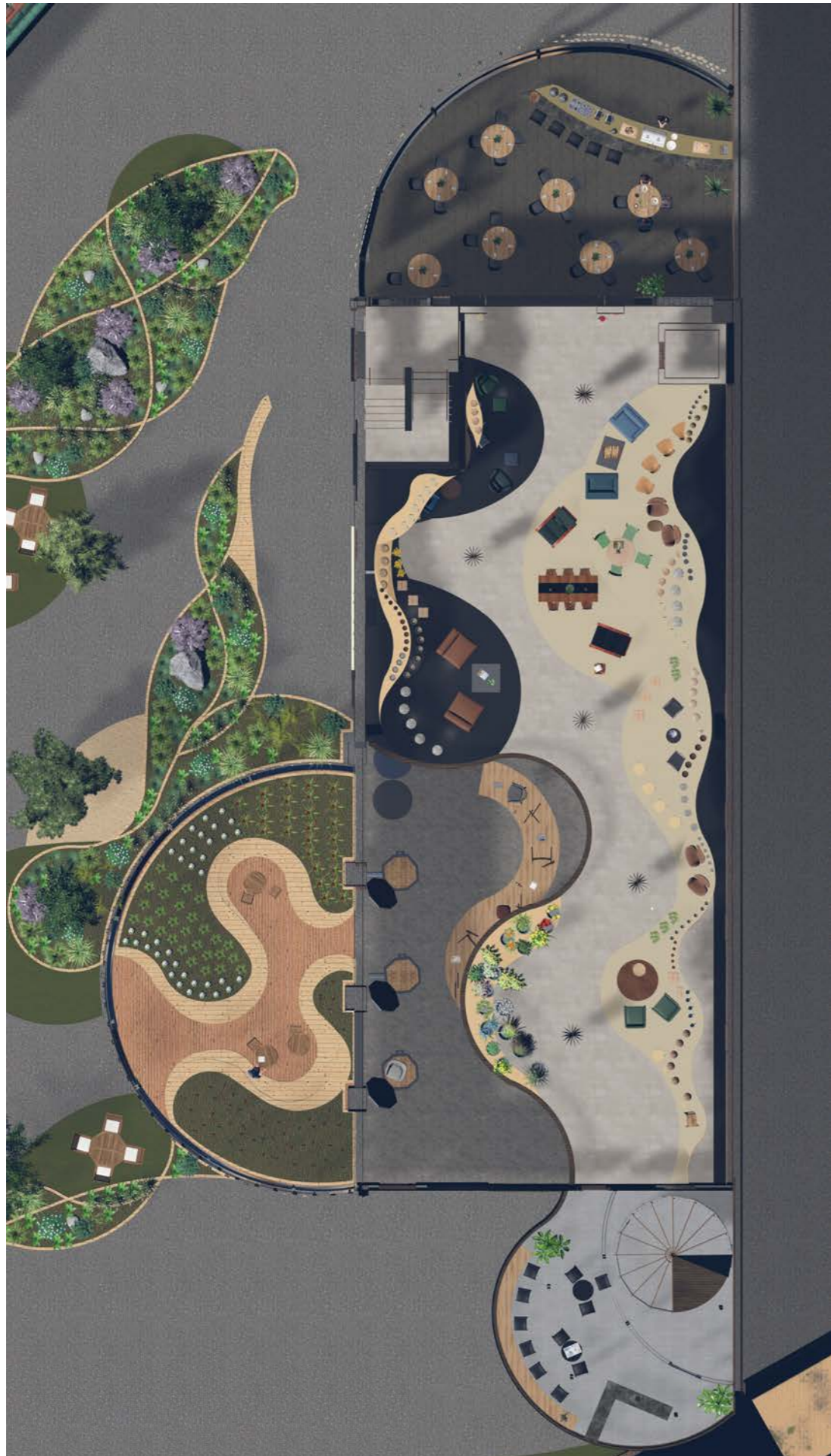
Render showing Portobello's on Dace branding hanging above the front entrance to the west facing glasshouse.



rendered plans



ground floor plan



first floor plan



second floor plan

costing.

FF&E

Lighting Schedule

Cost Estimation


















09






















The Mycologist
58 Dace Road E3, London
30/03/2023
Culley Interiors

FF&E Schedule F100

Image	Name	Company	Link	Dimensions	Room	Code	Notes	Quantity	Cost per Item	Total Cost
	ID Mesh Chair	Vitra	Vitra ID Mesh Official Vitra® Online Shop	H: 970 W: 500 D: 565	Office	F1	Colour: 67 Asphalt	22	£706.00	£15,532.00
	Framery Q Office Pod	Herman Miller	Framery Q Office Pod - 3D Product Models - Herman Miller	H: 2200 W: 2200 D: 1000	Office	F2	Colour: black Pinnacle	4	£676.00	£2,704.00
	Sussex Slatted Office Cabinet	Spaceist	Sussex Slatted Office Cabinet (spaceist.co.uk)	H: 1190 W: 2350 D: 1775	Office	F3	Colour/material: wood v 2	2	£506.00	£1,012.00
	Sense Desk	Herman Miller	Sense - Desk - Herman Miller	L: 610 to 1250	Office	F4	Colour/material pine	10	£1,012.00	£10,120.00
	Round Oak Dining Table	S10 Home	Round Oak Dining Table, 4-10 Seater, Black - Solid Oak Dining Table (s10home.com)	H: 750 W: 1800	Office	F5	10 seater Oak table	2	£1,630.00	£3,260.00
	AAC 123 Chairs	Haus	AAC 123 by Haus - haus* (hauslondon.com)	W: 590 D: 520 H: 790	Office	F6	X5 grey x5 green	10 (5 grey, 5 green)	£629.00	£6,290.00
	Curved American Oak Reception Desk Bundle	nationalofficefurniture	Curved American Oak Reception Desk Bundle (nationalofficefurniture-supplies.co.uk)	H: 730 W: 2400 D: 1600	Office	F7		1	£639.00	£639.00
	Maru Round Oak Pedestal Dining Table	Maru	Maru Round Oak Pedestal Dining Table, Oak daals	Dia: 1200 H: 750	Office	F8		5	£399.99	£1,999.95
	HP DesignJet T630 Printer	HP	HP DesignJet T630 Large Format up to A0 Plotter Printer - 36", with Mobile Printing (5HB11A) - HP Store UK	H: 420 W: 390 D: 323	Office	F9		1	£1,568.64	£1,568.64
	JTX MoveLight Walking Treadmill	JTX Fitness	JTX MoveLight: Walking Treadmill JTX Fitness	L: 1400 W: 700 H: 1200	Office	F10		2	£499.00	£998.00
	Electrically Height Adjustable Desk	Savv-e	Electrically Height Adjustable Desk Sit Stand Desk The Masta - Savv-e Work Store	H 625-1285 W: 1400 D: 700	Office	F11	Colour black pinnacle	2	£676.00	£1,352.00
	Standing Desk	Oakywood	Wooden Standing Desk Oakywood.shop	H: 625 to 1285	Office	F12		2	£975.00	£1,950.00
	Oakley Set of 2 Cognac Colour Vegan Leather Upholstered Dining Chairs with Piping	Daals	Oakley Set of 2 Cognac Colour Vegan Leather Upholstered Dining Chairs daals	W 550 x D 600 x H 810	Café	F13	Cognac	5 sets of 2	£219.99	£1,099.95
	Fyne Beige Fabric Natural Frame Rattan Armchair	Daals	Fyne Beige Fabric Natural Frame Rattan Armchair daals	W 680 x D 780 x H 770	Café	F14	White	7	£189.99	£1,329.93
	Steelite Craft White Low Cups 340ml	Steelite	Steelite Craft White Low Cups 340ml (Pack of 36) - V534 - Buy Online at Nisbets		Café	F15	White	1 set of 36	£443.98	£443.98
	Spry Black Fairbanks Ceramic Top Large Round Coffee Table	Choice Furniture Super	Spry Black Fairbanks Ceramic Top Large Round Coffee Table - CFS Furniture UK (choicefurnituresuper.com)	W 857 x D 857 x H 400	Café	F16	Black	10	£484.00	£4,840.00
	Little Cheese Footstool	Loaf	Little Cheese Footstool Small Round Footstool Loaf	W: 400 D: 400 C: 320	Café	F17	Egg box	17	£195.00	£3,315.00
	Grigia Green Compact 2 Group Espresso Coffee Machine	Nisbets	Grigia Green Compact 2 Group Espresso Coffee Machine - DL257 - Buy Online at Nisbets	H: 560 x D: 530 W: 580	Café	F18		1	£2,711.98	£2,711.98
	Special Offer Olympia Harley Cutlery Set	Olympia	Special Offer Olympia Harley Cutlery Set (Pack of 48) - S613 - Buy Online at Nisbets		Café	F19		Pack of 48	£25.08	£25.08

	Midas Plate 19cm/7.5"	Midas	Utopia Midas Plate 19cm/7.5" (Pack of 6) (buzzcateringsupplies.com)	H: 18 W: 190	Café	F20	4 sets		£36.65	£146.60
	Freestanding Under Counter Refrigerator	AEG	AEG RTB515E1AU 3000 Series 84.5 cm Freestanding Under Counter Refrigerator (appliancepeople.co.uk)	H: 845 W: 604 D: 576	Café	F21	1		£419.00	£419.00
	Miele G5210SCCS Freestanding Dishwasher	Miele	Miele G5210SCCS Freestanding Dishwasher ** LIMITED PROMOTIONAL OFFER (appliancepeople.co.uk)	H: 845 W: 598 D: 600	Café	F22	1		£1,049.00	£1,049.00
	Tower Renaissance 1.7L Kettle	Tower	Tower Renaissance 1.7L Kettle in Black (ligo.co.uk)	H: 264 W: 195 D: 181	Café	F23	Black	2	£59.99	£119.98
	Fellow Corvo EKG 0.9l	Fellow Corvo EKG	Kofio.co	H: 292 x W: 171 x D: 203	Staff Room	F24	Black	2	£189.00	£378.00
	Olympia Fusion Cup 250ml	Olympia Fusion Cup	Olympia Fusion Cup 250ml (Pack of 6) - DR098 - Buy Online at Nisbets		Staff Room	F25		5 sets of 6	£34.78	£173.90
	COPENHAGEN Matte 24 pcs	Georg Jensen	Copenhagen stainless steel 24 piece cutlery set Georg Jensen		Staff Room	F26		2	£292.00	£584.00
	Churchill Stonecast Round Plate Peppercorn Grey 210mm	Churchill Stonecast	Churchill Stonecast Round Plate Peppercorn Grey 210mm (Pack of 12) - DM458 - Buy Online at Nisbets		Staff Room	F27	Peppercorn Grey	3 sets of 12	£161.98	£485.94
	Miele M6012SC Freestanding Microwave Oven	Miele	Miele M6012SC Freestanding Microwave Oven with Auto Programmes Grill & Knob Control (appliancepeople.co.uk)	H: 305 W: 520 D: 422	Staff Room	F28		4	£670.00	£2,680.00
	Joseph Joseph Bread Bin with Cutting Board Lid	Joseph Joseph	Joseph Joseph Bread Bin with Cutting Board Lid, London, UK - Season (seasoncookshop.co.uk)	H: 180 W: 370 D: 220	Staff Room	F29	Black	2	£49.99	£99.98
	Fellow Corvo EKG 0.9l	Fellow Corvo EKG	Kofio.co	H: 292 x W: 171 x D: 203	Staff Room	F30	Corvo	2	£189.00	£378.00
	Freestanding Under Counter Refrigerator	AEG Fridge	AEG RTB515E1AU 3000 Series 84.5 cm Freestanding Under Counter Refrigerator (appliancepeople.co.uk)	H: 845 W: 604 D: 576	Staff Room	F31		2	£419.00	£838.00
	Miele G5210SCCS Freestanding Dishwasher	Miele	Miele G5210SCCS Freestanding Dishwasher ** LIMITED PROMOTIONAL OFFER (appliancepeople.co.uk)	H: 845 W: 598 D: 600	Staff Room	F32	Clean Steel	2	£1,049.00	£2,098.00
	Stainless Steel Step On Multi-Compartments Rubbish and Recycling Bin	Songmics	Songmics Stainless Steel Step On Multi-Compartments Rubbish and Recycling Bin Wayfair.co.uk	H: 652 W: 590 D: 325	Staff Room	F33	Stainless Steel	2	£139.99	£279.98
	Custom Light Scandinavian Dining Table	Grain and Frame	Custom Light Scandinavian Tables - Use Our Online Table Builder Grain & Frame (erainandframe.com)	H: 760 W: 150 D: 850	Staff Room	F34	Light Scandinavian	2	£549.00	£1,098.00
	Solid Oak Curved Dining Chair with Grey Woven Seat	Anders	Solid Oak Curved Dining Chair with Grey Woven Seat - Anders - Furniture123	W: 550 D: 521 H: 754	Staff Room	F35	Grey	3	£159.97	£479.91
	Bespoke Bar	Commercial Kitchen a	Home - (commercialkitchenandbar.com)	H:1000 L:1500 W:850	Restaurant	F74	Timber and Marble	2	£500.00	£1,000.00

	Freja Bar Stool	Freja	Freja Bar Stool Kitchen & Dining Furniture by Crea (by-crea.com)	H: 660 W: 760	Staff Room	F37	Black	6	£289.00	£1,734.00
	Nutkins Bowl	Nutkins	Nutkins Bowl Handmade Wooden Bowl Loaf		Staff Room	F38	Walnut Wood	2	£59.00	£118.00
	Round Nutkins Sharing Board	Nutkins	Round Nutkins Sharing Board Handmade Round Wooden Board Loaf		Staff Room	F39		2	£39.00	£78.00
	Stainless Steel Sink S12SR	Lab Central	Stainless Steel Sink S12SR - Labcentral	H: 394 W: 343 D: 160	Factory	F40	Stainless Steel	1	£245.14	£245.14
	Brownall Double Pillar Angle Water Tap	Lab Central	Brownall double U-shape pillar angle water tap - Buy Online now. (labcentral.co.uk)		Factory	F41		1	£107.00	£107.00
	GN 1/1 Stainless Steel Gastronorm	Buzz Catering Supplies	GN 1/1 Stainless Steel Gastronorm 65mm Deep (buzzcateringsupplies.com)	H: 65 W: 530 D: 325	Factory	F42			£9.56	£0.00
	Petri Dishes With Lids	Consortium Education	Petri Dishes With Lids 20pk Classroom Equipment Consortium Education		Factory	F43		10 packs of 20	£5.40	£54.00
	Pipette Filter Tips	Camlab	Pipette Filter Tips 200ul Sterile Racked Pack of 96 - 10 Racks x 96 Tips Camlab		Factory	F44		1 pack of 96	£60.02	£60.02
	Labcold™ 150L Sparkfree Refrigerator	Fisher Scientific	Labcold™ 150L Sparkfree Refrigerator 150L Lab Refrigerators Fisher Scientific	H: 835 W: 600 D: 600	Factory	F45	Spark-free	1	£2,160.00	£2,160.00
	KMT1231 Electric Kiln & WiFi Touchscreen Controller	Cromartie Hobbycraft	KMT1231 Electric Top Loading Ceramic Kiln & WiFi Touchscreen Controller, Ceramic Glass Kilns - Cromartie Hobbycraft Limited		Factory	F46		3	£6,120.00	£18,360.00
	Undercounter Fridge	Aquilo Refrigeration	Undercounter Fridge - Aquilo Refrigeration	H: 840 W: 600 D: 600	Restaurant	F47		2	£534.60	£1,069.20
	Undercounter Freezer	Aquilo Refrigeration	Undercounter Freezer - Aquilo Refrigeration	H: 840 W: 600 D: 600	Restaurant	F48		1	£600.48	£600.48
	Lincat Lynx 400 Electric Double Griddle LGR2	Lincat	Lincat Lynx 400 Electric Double Griddle LGR2 - K160 - Buy Online at Nisbets	H: 163 W: 615 D: 400	Restaurant	F49		1	£587.98	£587.98
	Britannia RC10TGQLS Q Line 100cm Dual Fuel Range Cooker	Britannia	Britannia Q Line RC10TGQLS Stainless Steel 100cm Dual Fuel Range Cooker (theappliancepeople.co.uk)	H: 870 W: 995 D: 600	Restaurant	F50	Stainless Steel	1	£1,799.00	£1,799.00
	T&G Beech Wood Chopping Board Medium	Nisbets	T&G Beech Wood Chopping Board Medium - GJ510 - Buy Online at Nisbets		Restaurant	F51		1	£53.98	£53.98
	Vogue 6 Piece Soft Grip Knife Set	Vogue	Vogue 6 Piece Soft Grip Knife Set - S725 - Buy Online at Nisbets		Restaurant	F52		1	£131.98	£131.98
	Olympia Chia Small Bowls Sand 155mm	Olympia	Olympia Chia Small Bowls Sand 155mm (Pack of 6) - DR810 - Buy Online at Nisbets		Restaurant	F53		10 packs of 12	£39.46	£394.60
	Olympia Chia Plates Sand 270mm	Olympia	Olympia Chia Plates Sand 270mm (Pack of 6) - DR807 - Buy Online at Nisbets		Restaurant	F54		10 packs of 6	£62.38	£623.80
	Olympia Chia Plates Sand 205mm	Olympia	Olympia Chia Plates Sand 205mm (Pack of 6) - DR808 - Buy Online at Nisbets		Restaurant	F55		10 packs of 6	£58.78	£587.80

cost estimation

furniture	£181,943.93
doors and windows	£89,889.49
lighting	£3,488.55
finishes	£43,652.00

Total: £318,973.97

Cost of labour, demolition and construction will be determined by a quantity surveyor.

critical reflection.

Has this project met the brief?

“The Mycologist will house a fully circular mycelium production facility. From start to finish, the building will facilitate the growth of mushrooms, the production of mycelium, the design and manufacture of mycelium furniture and building materials, always considering the reuse of offset materials.” - *brief*

The Mycologist has fulfilled its fully circular sustainable goal by:

- Growing mushrooms and produce on site to be used in the mycelium making process, restaurant and cafe.
- Two glasshouses were proposed on the south and west facing façades, taking advantage of natural features, sunlight and position of the building.
- Re-purposing or reusing offset materials, be it heat from the kilns used to warm the south facing glasshouse in winter months, or the waste grounds from the cafe reused as mycelium substrate

Has this project aligned with the concept?

Rebirth

The concept has been shown through:

- The glasshouse extensions and balconies, the idea of plate mushrooms growing on the side of the building and giving it new life
- The undulating mezzanine floors inspired by mycelium infiltrating its way into the structure of the building
- Interior design features such as swirling ceiling details, wavy slatted timber walls, curved partition walls and rippling display shelving in the mycelium product showroom all mimic the fluid nature of mycelium, and the organic shape of the underside of a mushroom cap.



bibliography.

Front Page

Parenteau, L. (2021) Group of Small White Fuzzy Mushrooms on a Tree, Unsplash. Available at: <https://unsplash.com/photos/TAU-EZrIE1M> (Accessed: January 18, 2023).

Contents

The Heath Studio (2022) History, The Heath Studio. Available at: <https://www.theheath.studio/contacts> (Accessed: December 21, 2022).

Precedent Study Concept:

Eberth, C. (1972) Haus-Rucker-Co, Oase Nr. 7 . Germany.

Morcillo, F. (1972) Oase Nr.7, Arch Daily. Available at: <https://www.archdaily.com/787926/1989-architectural-space-through-illustration/569e86d0e58ebeb15000014-1989-architectural-space-through-illustration-image> (Accessed: 20 March 2023).

Ciuffi, V. (2019) FAR, Nilufar. Available at: <https://nilufar.com/en/exhibition/far-2019> (Accessed: 20 March 2023).

Ortner, M. et al. (1972) Oasis No.7, Museum of Modern Art.

Strategies

Klarenbeek & Dros (2018) Mycelium Chair, Erickklarenbeek. Available at: <https://www.ericklarenbeek.com/> (Accessed: January 16, 2023).

Heatherwick Studios (2014) The Distillery, Heatherwick. Available at: <https://www.heatherwick.com/project/bombay-sapphire-distillery/> (Accessed: December 29, 2022).

The Fosun Foundation Precedent Study:

Ghinitoiu, L. (2017) The Fosun Foundation, Architects Journal. Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/heatherwick-and-foster-unwrap-bund-finance-centre-in-shanghai>.

Ghinitoiu, L. (2019) Digital Representation Fosun Foundation, Parametric Architecture. Available at: <https://parametric-architecture.com/bund-finance-centre-by-foster-partners-and-heatherwick-studio/> (Accessed: April 23, 2023).

Astbury, J. (2017) Architects Journal. Architects Journal. Available at: <https://www.architectsjournal.co.uk/buildings/heatherwick-and-foster-unwrap-bund-finance-centre-in-shanghai> (Accessed: April 23, 2023).

Look and Feel:

Kwan, M. (2021) MARGO Bar, Pinterest. Available at: <https://www.pinterest.co.uk/pin/737464507751030702/> (Accessed: April 30, 2023).

Berarducci, C. (2016) Zen Sushi, Dezeen. Available at: <https://www.dezeen.com/2016/09/14/call-for-entries-a-design-awards-competition-2017/> (Accessed: April 30, 2023).

Delius (2013) Paris Trip, D E L I U S. Available at: <http://delius.egloos.com/4810752> (Accessed: April 30, 2023).

Riche, A. (2013) laboratoire de curiosites. Available at: <https://laboratoiredecuoriosites.tumblr.com/post/42795565630> (Accessed: April 30, 2023).

Duke & Sons, . (2013) Duke & Sons Leather inspiration, dukeandsons. Available at: <https://dukeandsons.tumblr.com/post/66958416368> (Accessed: April 30, 2023).

McLaren, L. (2022) A to Z of Modern Living, The Modern House. Available at: <https://www.themodernhouse.com/journal/architect-studio-mclaren-excell/> (Accessed: April 30, 2023).

Sam, K.& (2019) The Grove Glasshouse Restaurant & Bar, Glass House Restaurant and Bar, Watford. Available at: <https://kateandsam.co.uk/portfolio/glasshouse/> (Accessed: April 30, 2023).

Ashley, . (2013) Back to Nature, Glamour Planner. Available at: <https://glamourplanner.wordpress.com/2013/09/13/back-to-nature/> (Accessed: April 30, 2023).

Viramonte, G. (2021) Familia Ice Cream Shop, Amazing Architecture. Available at: <https://amazingarchitecture.com/restaurant/familia-ice-cream-shop-in-cordoba-argentina-by-set-ideas#> (Accessed: 01 May 2023).

The Heath Studio (2022) The Heath Studio. Available at: <https://www.theheath.studio/> (Accessed: December 21, 2022).

Beppe Brancato (2022) Wall and Lights, Beppe Brancato. Available at: <https://www.beppebrancato.com/archivio> (Accessed: 09 May 2023).

Interior Architects (2022) Advisors Office, Interior Architects. Available at: <https://interiorarchitects.com/projects/01-advisors/> (Accessed: 01 May 2023).

HDP Photography (2022) Langham Beauty Linehouse, Arch Daily. Available at: <https://www.archdaily.com/984471/langham-beauty-linehouse> (Accessed: 01 May 2023).

Matrix (2021) Wuxi CITIC Pacific Jinchen Sales Office and Clubhouse. Available at: <https://www.om.cn/community/datum/detail/13007.html> (Accessed: 01 May 2023).

Ary (2023) XAL. Available at: <https://www.xal.com/en/ary> (Accessed: 01 May 2023).

Lendager Group (2015) Copenhagen Towers, Danish Design Awards. Available at: <https://danishdesignaward.com/en/arkiver/nominee/copenhagen-towers> (Accessed: 01 May 2023).

thestandingdesk (2021a) The Standing Desk, Unsplash. Available at: <https://unsplash.com/photos/frGKNJe4sHY> (Accessed: 01 May 2023).

thestandingdesk (2021b) The Standing Desk, Unsplash. Available at: <https://unsplash.com/photos/frGKNJe4sHY> (Accessed: 01 May 2023).

Airhart, S. (2019) Amazon Spheres, World Landscape Architect. Available at: <https://worldlandscapearchitect.com/the-spheres-exploring-biophilia-in-the-modern-workplace/?v=79cba1185463> (Accessed: 01 May 2023).

Hilton, M. (2023) Dulwich, Case. Available at: https://casefurniture.com/products/dulwich-round-extending-table?variant=43524946886883&gclid=CjwKCjw7iiBhAEEiwAslxQESKf9kXkcOhvJC-vSaaen9qc42nQTJm8JRECzfhcoFO6AyKsM_erRoCTQsQAvD_BwE (Accessed: 01 May 2023).

Shurpenkov, A. (2020) Par Bar 3. Available at: <https://www.archdaily.com/950555/par-bar-3-yodezeen-studio/5f9b6d8a63c01726a80001e5-par-bar-3-yodezeen-studio-photo> (Accessed: 01 May 2023).

La Brea Affordable Housing (2014) Arch Daily. Available at: https://www.archdaily.com/557785/la-brea-affordable-housing-patrick-tighe-john-v-mutlow/543f11c8c07a80762d000304-la-brea-affordable-housing-patrick-tighe-john-v-mutlow-photo?next_project=no (Accessed: 01 May 2023).

Blast Studios (2022) Tree Column, Dezeen. Available at: <https://www.dezeen.com/2022/01/18/blast-studio-tree-column-mycelium-design/> (Accessed: 01 May 2023).

Ghinitoiu, L. (2017) Fosun Foundation, Archilovers. Available at: <https://www.archilovers.com/projects/208820/fosun-foundation-gallery?1916627> (Accessed: 01 May 2023).

Enjoydesign (2022) Gemdale Darbin Upview Sales Centre, SBIB Design Awards. Available at: <https://www.sbidawards.com/finalist/gemdale-harbin-upview-sales-center/> (Accessed: 01 May 2023).