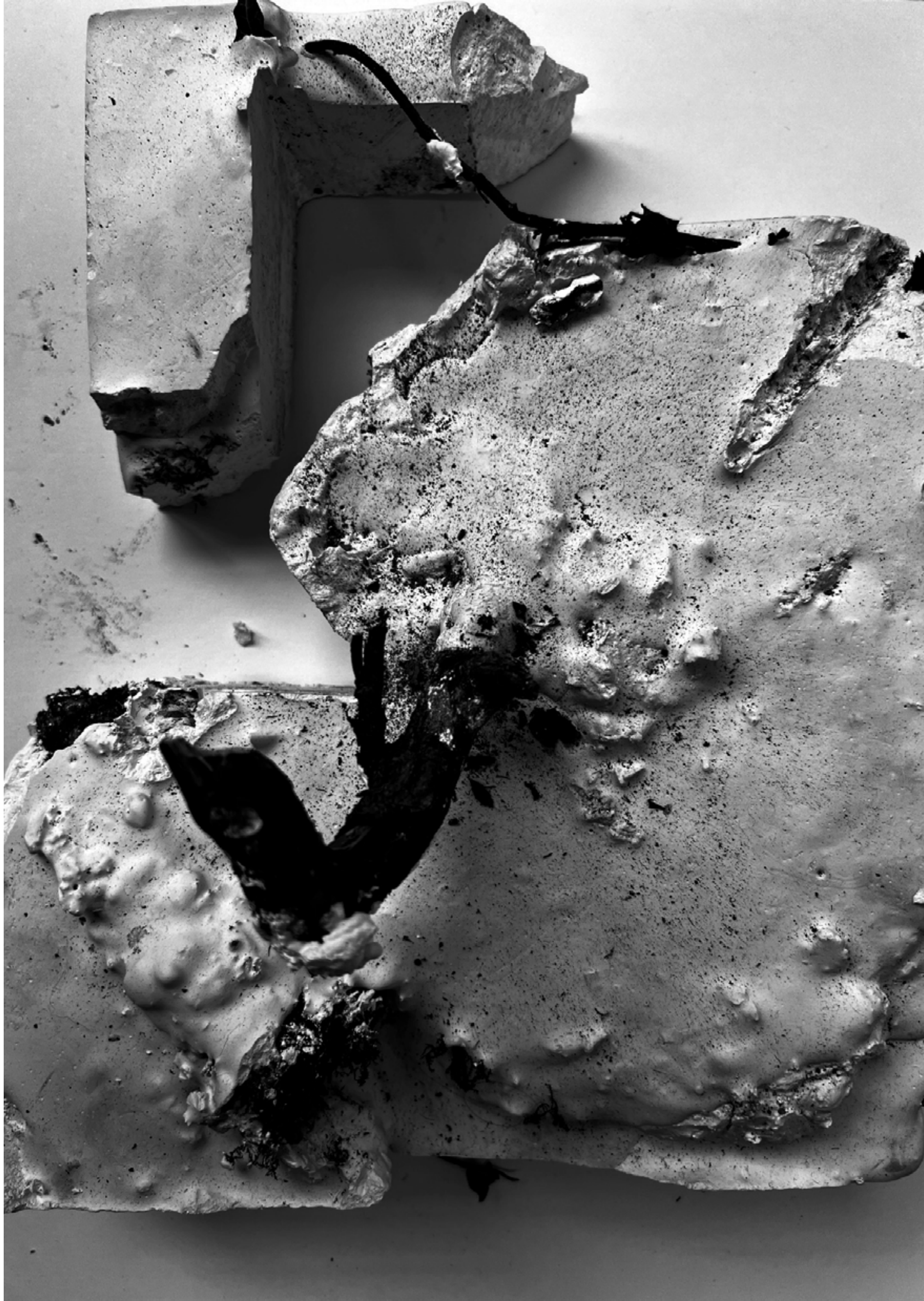
Charlie Oxley
CV + Portfolio



My design philosophy is centred around sustainable and energy efficient design, which challenges people's perceptions of sustainability. This is encapsulated throughout my projects, with the approach being to encourage communal spaces within the urban environment as we face increasingly separated community of people.

As an undergraduate student I have learned and evolved my beliefs in what is "modern and sustainable architecture" through out my degree. I believe that sustainable architecture has multiple meanings and that it is the role of architects to act as vector for these spaces allowing and encouraging their creation and collaboration between people.

My dissertation was written on the invasiveness of surveillance with the urban environment, and how these measures fracture spaces, forcing people, the city or place deems undesirable out. I believe that everyone deserves a right to access unencumbered in their city, writing this has had a massive impact on how I design my projects, causing me to make more open spaces and engaging of public interaction.

Charlie Oxley

Contact

Phone: 07501317965
Email: charliesb.oxley@gmail.com
LinkedIn: https://www.linkedin.com/in/charlie oxley b3102531
Website: https://www.oxleyportfolio.co.uk/

Skills

Design Software

- Autocad, Autocad Inventor, Rhino 7 and Grasshopper
- Vray, Rhino 7, Enscape and Blender
- Creative software including Illustrator, Photoshop, Indesign, Premier Pro and Lightroom

Other Skills

- Hand drawing
- Model making
- Time management
- Work autonomously
- Presentation skills being able to confidently explain and describe a concept and present to an audience or team
- Successful team player
- Lateral thinking
- Working knowledge of building systems, regulations and construction types
- Full clean driving lisence

References

Alex Smith
Architect
Third Year tutor,
University of the Creative Arts
Email: Alexsmith@ynstudio.eu

Alex Coterill
Architect
Third Year Convener,
University of the Creative Arts
Email: alex@groupwork.uk.com

Profile

Architecture Graduate (Part 1) – First Class Honors

- Strong foundation in design principles with a keen eye for detail.
- Creative, innovative, and technically skilled, with a focus on delivering unique and inventive architectural solutions.
- Passionate about creating functional, sustainable, and aesthetically pleasing spaces.
- Eager to apply my skills in a professional setting and contribute to innovative architectural projects.
- Committed to continuous learning and skill development.

Education

Bachelor of Arts, Architecture, 09/2021 to 06/2024 First class
University of the Creative Arts - Canterbury, Kent

Final Year Project

The Food Waste Factory I Milan, Italy
Duration 01/2024-06/2024

- Designed a sustainable building to address Milan's food waste issue, integrating community and commercial spaces.
- Utilized Rhino 7 and V-Ray for effective model making, enhancing both the technical execution and aesthetic appeal of the design proposal
- Awarded First-class classification.

Final Year Dissertation

Title: How invasive is the surveillance conduced within the urban enviroment

- Explored surveillance methods in urban environments and their effects on residents, concluding its role in shaping behavior and controlling the populace.

Design Project

The Green Houses
Duration 09/2023-12/2023

- Designed a live-work community of 12 houses with rooftop allotments for growing and selling produce.
- Employed physical model making, 3D rendering, and advanced modeling techniques

A-Levels,

Winterbourne Academy - Bristol
Duration 09/2017 to 06/2019
Math's, Engineering, Product Design

Work History

Renwell Team Member I Marks and spencer I 10/2024-04/01/2025

- Efficiently complete tasks while maintaining high standards of service.
- Prioritize customer care and ensure proper handling of products.

Sainsbury's Staff Member I Sainsbury's - Bristol I 06/2022 - 09/2022 & 06/2023 - 01/2024 (part time whilst studying

- Managed transactions accurately and with attention to detail.
- Developed strong interpersonal and teamwork skills while interacting with a diverse customer base.
- Quickly acquired new skills and demonstrated proficiency in various roles.

Hospital Porter I Spire Healthcare – Bristol I 06/2018 - 07/2020
(part time whilst studying)

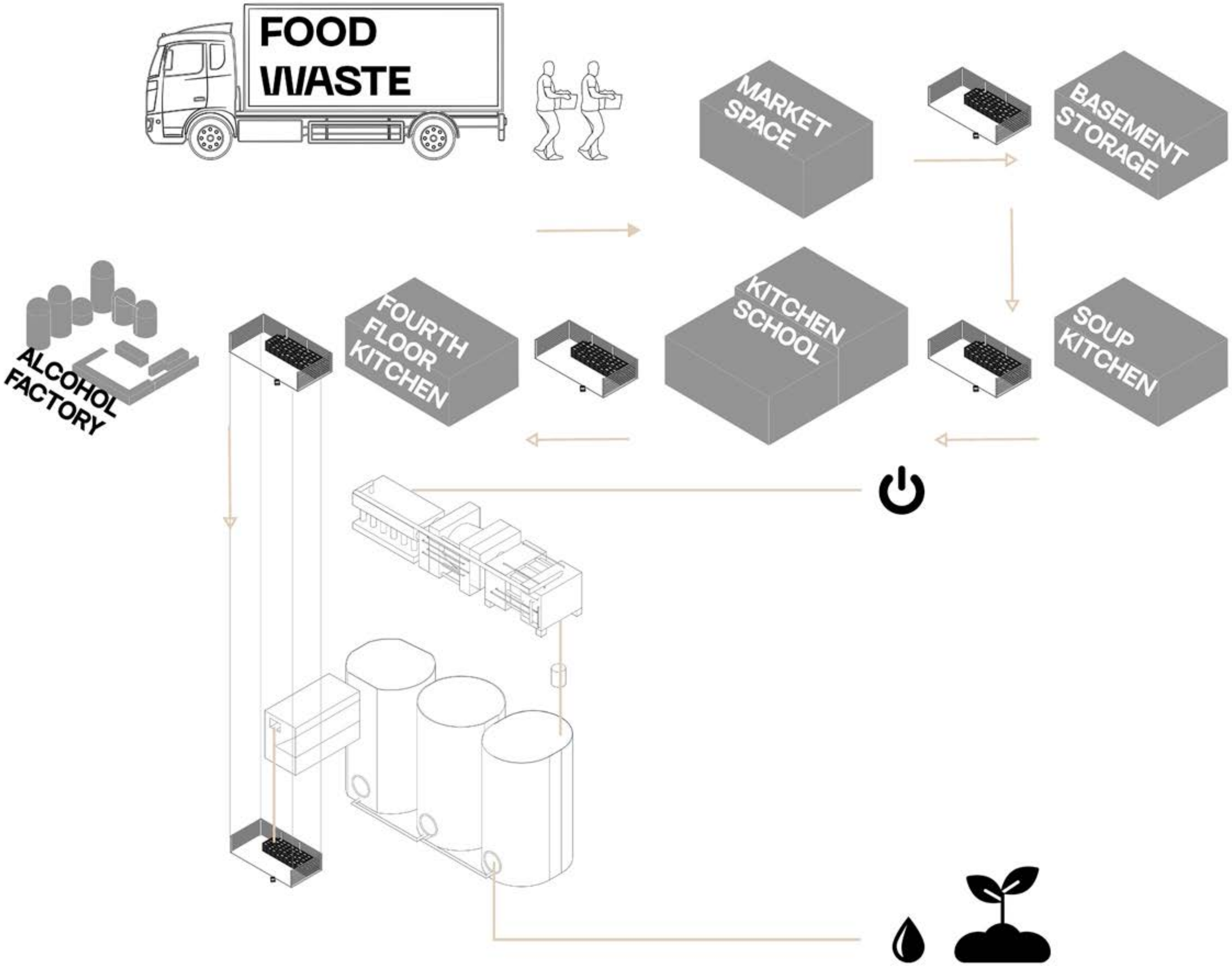
- Adhered to risk assessments and health & safety regulations.
- Demonstrated flexibility and adaptability to meet the needs of patients and clinicians.

Find more about me at:

Website: https://www.oxleyportfolio.co.uk/

FOOD WASTE FACTORY

Degree Proejct : Project 06
Year : 2024
University for the Creative Arts



REUSE

Food waste disgarded from local food production facilities and delivered to the facility, where it is determained if the disgarded and waste food collected is still able to be used within the facility. If the facility determains that the food is un endible it is immidiatly deposilited in the shredder where the process starts to turn it to food.

DIGEST

The food waste takes on a new life where it is now turned in to eddible food suitible for consumption or experimented on in the kitchen school.

The alcohol factory is able to turn any potential food in to alcohol that can be used through out the fasility in the many bars.

INGEST

The food waste not consumed by the facility is now due to be recycled, it is now shredded, and deposited in to containers where in which anarobic digestion takes place preducing methane gass, water and fertaliser.

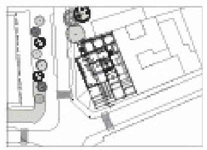
The water and gas is syhpned off and truned in to energy, with the excess water and fertaliser being sold to farmers in the south of milan.

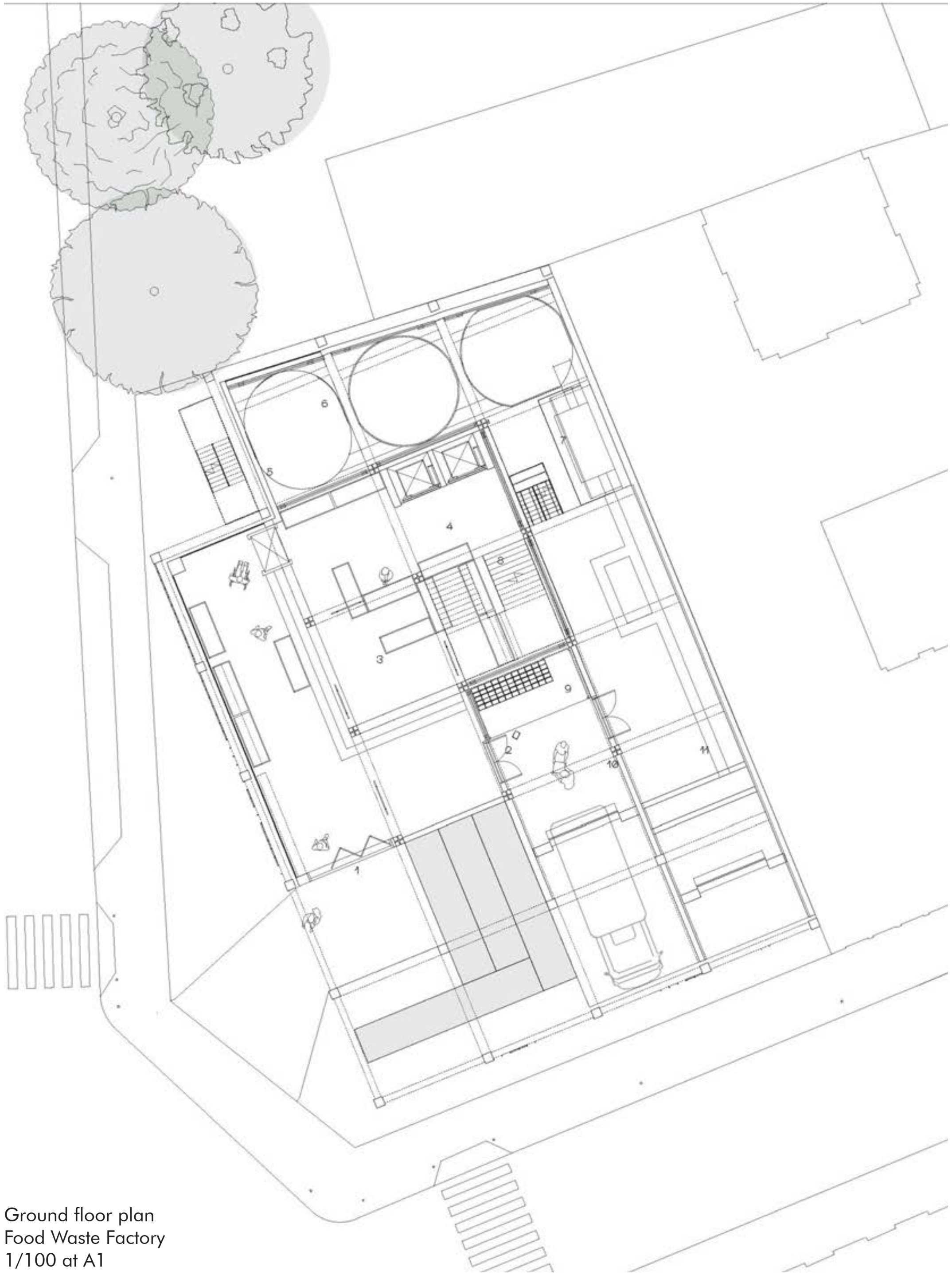
A design to meet the needs of Milan's ever-increasing food waste problem. Focused on repurposing food waste in a sustainable building that also provided community and commercial spaces including, soup kitchens, cooking schools, market spaces and resteraunts all to be housed within its timber framed design.

longitudinal section
Food Waste Factory
1/50 at A0

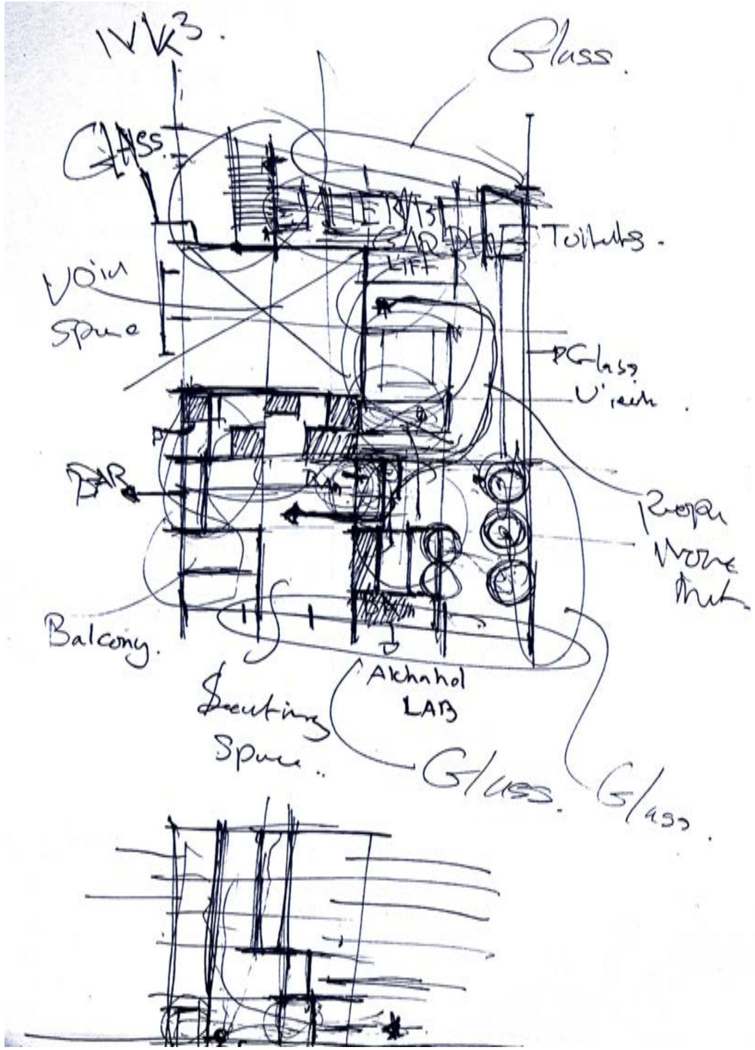
Longditudenal Section
West to East
Scale 1 : 50 @ A0

1 Entrance
2 Entrance to Sorting Facility
3 Stairs
4 Lift
5 Food Waste Containers
6 Dumb Waiter
7 Storage Container
8 Control Room
9 Recycling Process
10 Soup Kitchen
11 Kitchen School Kitchens
12 Kitchen School Seating and presentation room
13 Sorting Facility Viewing Platform
14 Communal Bar
15 Viewing Platform with Restaunt Bar space





Ground floor plan
Food Waste Factory
1/100 at A1

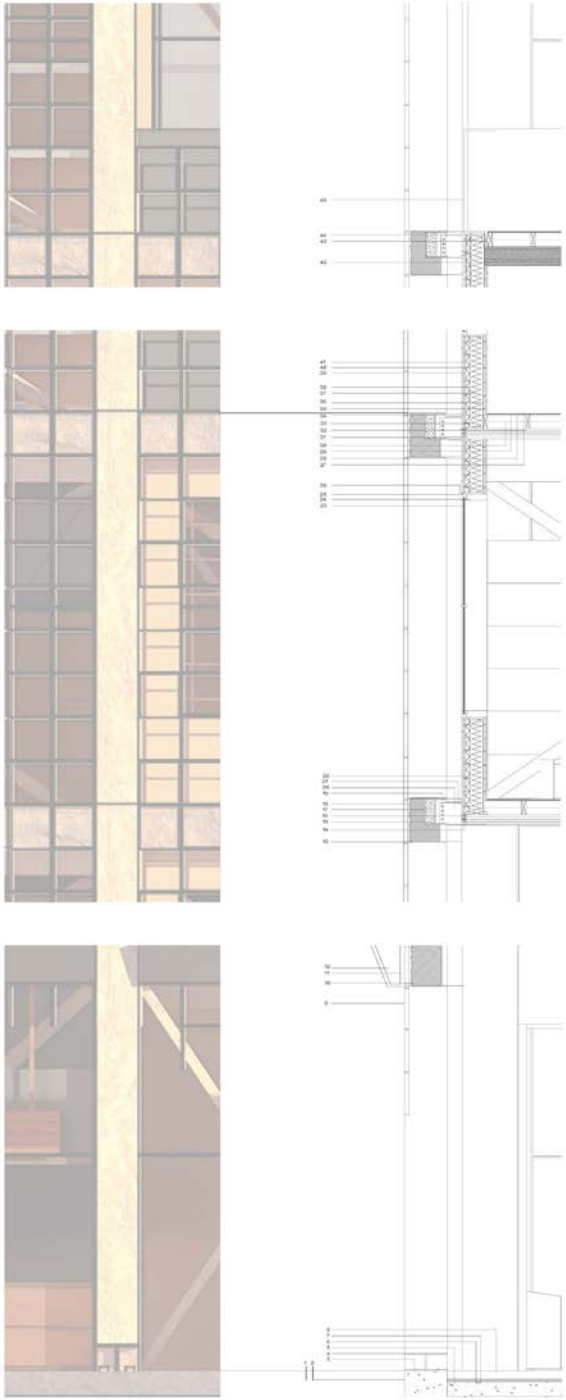


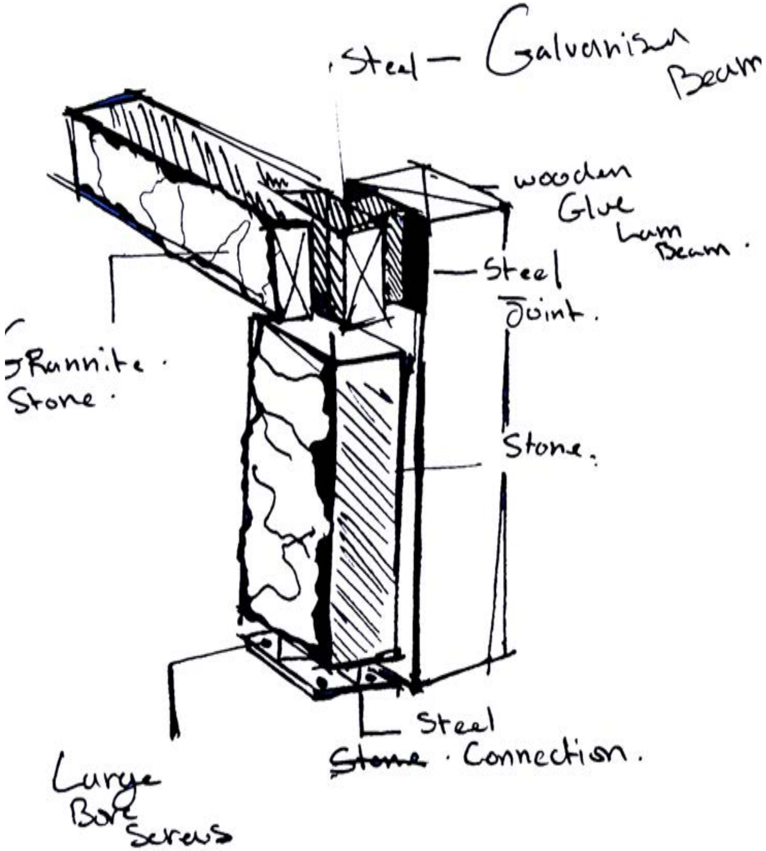
Initail sketches of one of the floors of
the design.

A1 Bay Study 1 : 20

250cm 500cm 1m 2m

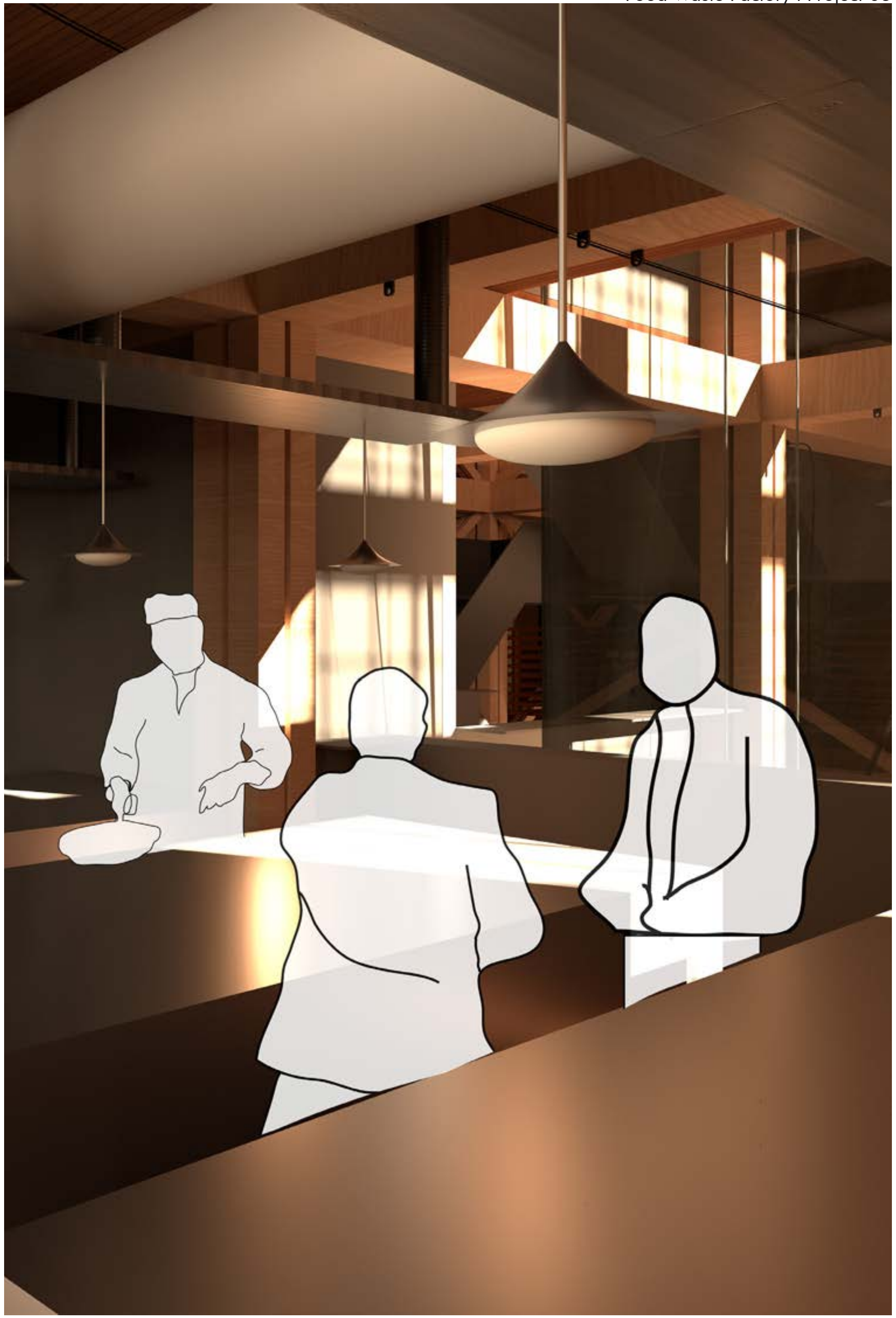
1 Rought Stone Exterior Flooring
2 Renforced Concrete
3 Steel Bolts
4 Steel Connection Ground to Stone
5 Concrete Skreed
6 Waterproof Membrane
7 Thermal Membrane
8 Grannite Stone Paving Exterior
9 Lattice Structure
10 Steel Connection Screw
11 Steel Suspended Garden Box
12 Soil
13 Steel Stone Connection
14 Glavanised Steel Beam Connection
15 Galvanised Steel I Beam
16 Steel Fixing Bolts to Clt Flooring
16 Securing Motar
17 Steel Bolts secring Stone to Steel
18 Steel Plate Connection
19 Thermal Seperation Barrier
20 CP Board
21 Tripple Glased Window
22 Steel Window Frame
23 Steel Curtain Wall Framing
24 Compressed Innsulation Fire Barrier
25 Oak Wooden Flooring
26 Sound Softening Membrane
27 Breathable Membrane
28 Innsulation
29 CLT
30 Wooden Beams
31 Steel Framing System
32 Wooden Fire Barrier Beam
33 Interior Oak Wooden Pannels
34 CP Board
35 Hard Innsulation
36 CP Board
37 CP Board
38 CP Board
39 Exterior Accustic Innsulation
40 Wooden Connections Facade to Steel Frame
41 Exterior Oak Wooden Pannel Facade
42 CLT Flooring
43 Wooden Beam Fire Barrier
44 Steel Barrier Connection
45 Steel Barrier



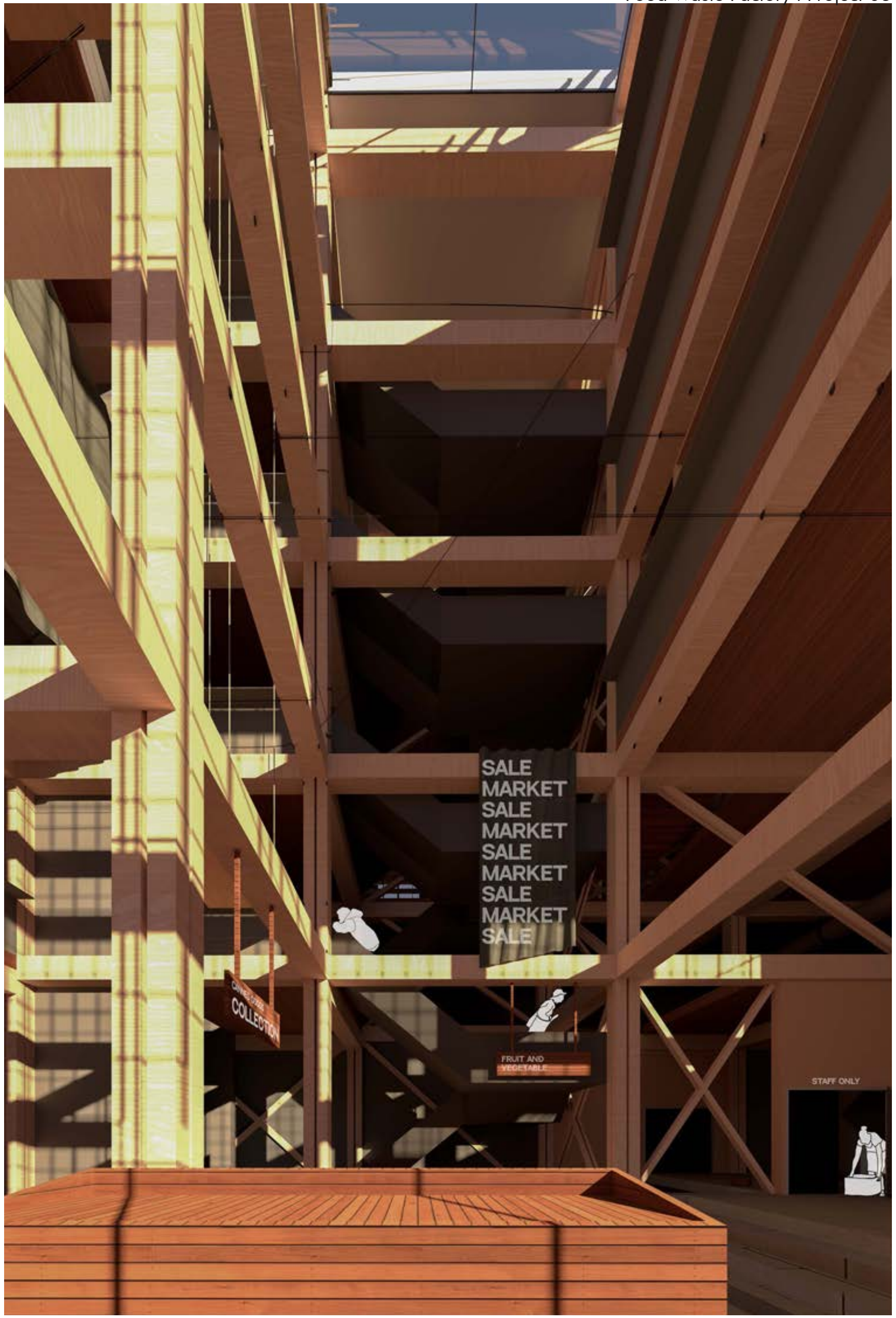


Initail sketches of a bay study

Areial view



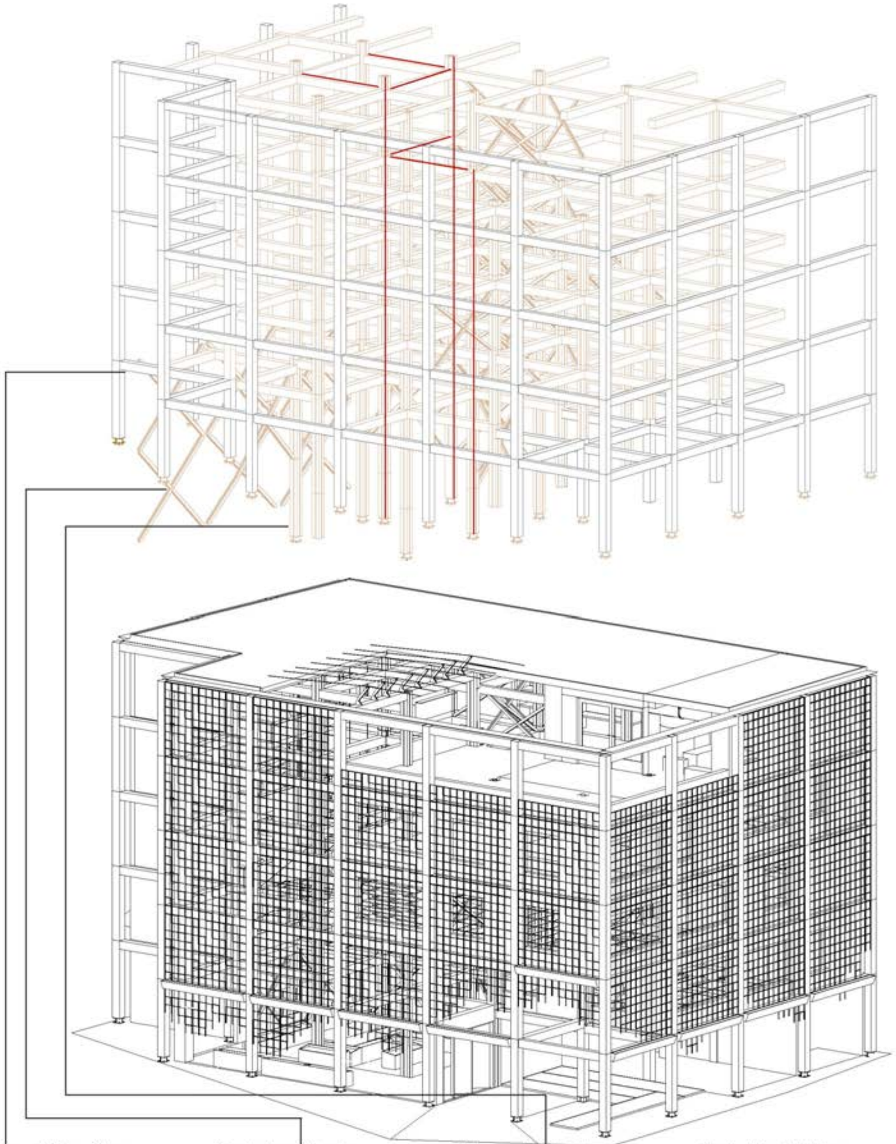
Transverse section
1/200 at A3



1/200 scale model of the food waste factory

Transverse section
1/200 at A3

Structural Stratergy Diagram



Stone exo skeleton allows for additional support of the building with all col- lums connecting with the ground floor allowing for dispursment of weight eas- iliy

Wooden Super Structure within the building allows for the load of the build- ing to be transfered to the ground easily where it is then dispursed

X beams within the struc- ture allow for the building to have increased strength in places where, weight and moving is an issue. The X Beams have been prioritised arround the atrium space for increased support and strength in this area

The Red Line indicates a load path applied to the building, and how the weight is dispursed though- out the interior supper- structure

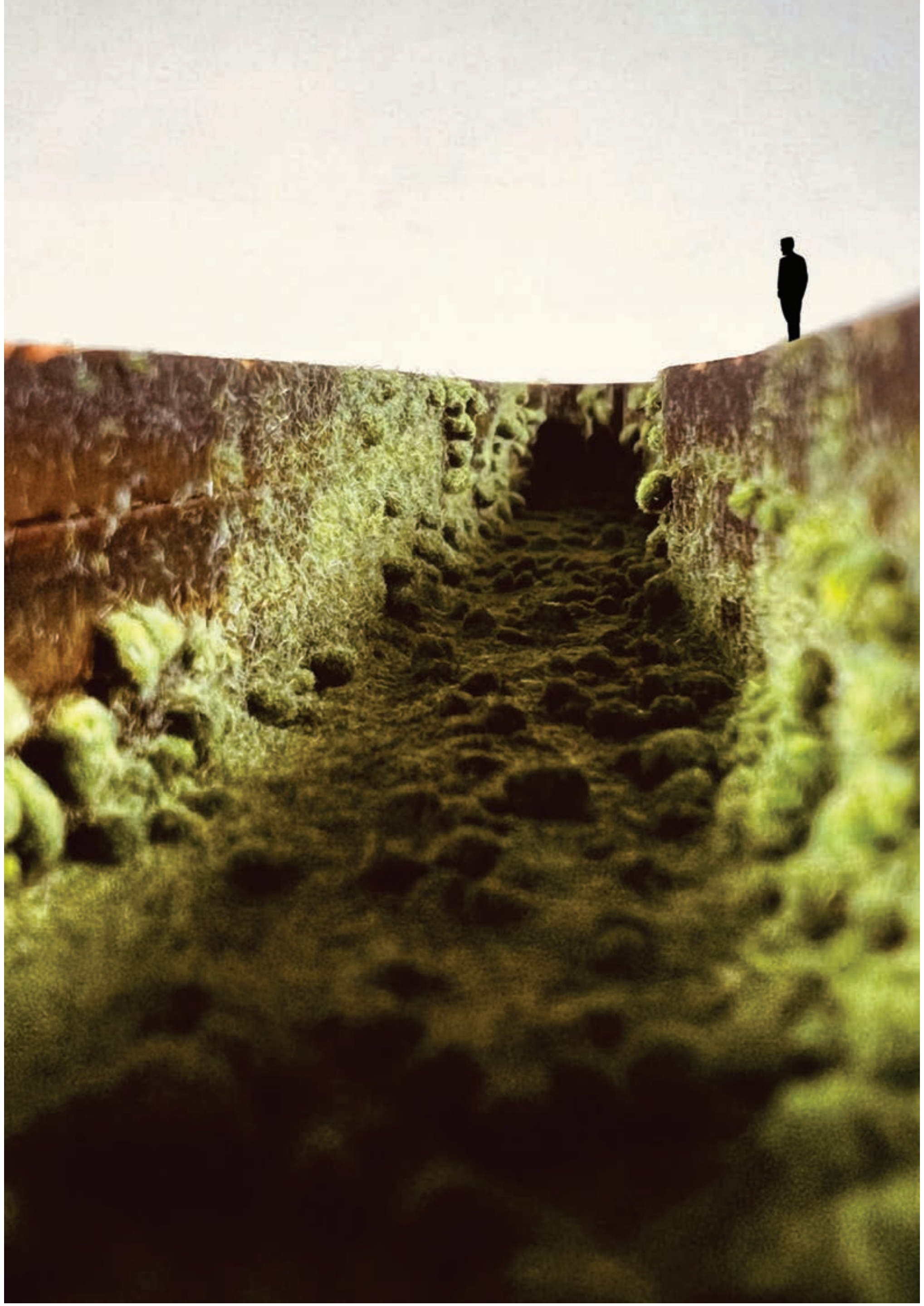
Structural strategy diagram

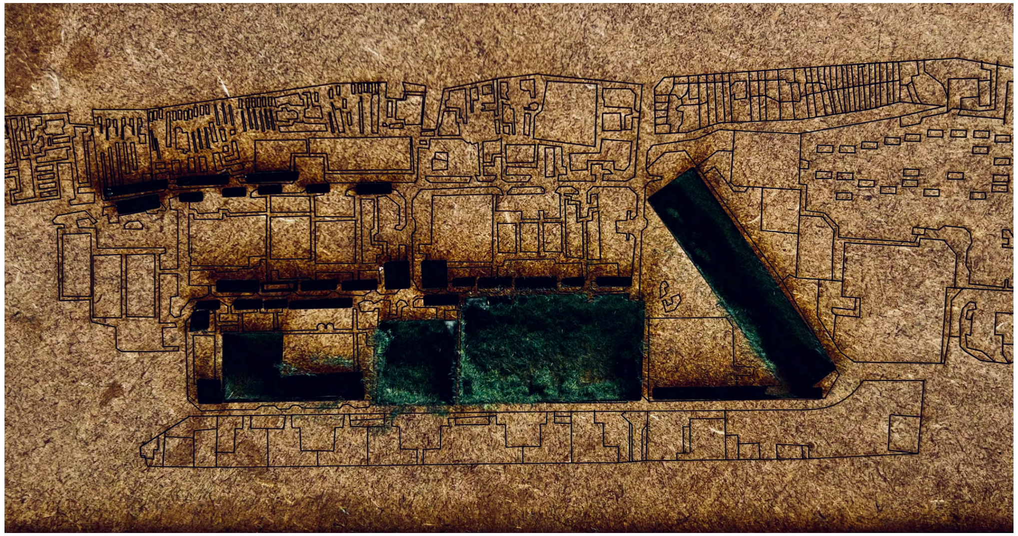
Embodied Carbon Calculation (Global Standard EN15978) (Stages A1-A5)

Material description	Density	Embodied carbon A+C KgCO2e/m3	Volume of material Used m3	TOTAL Embodied Carbon Materials
Aluminium (polyester powder coated)	2700	38484		0
Aluminium (virgin)	2700	31540	0	0
Aluminium (general)	2700	22814	0	0
Brass	8700	22306	0	0
Glavinised structural steel	7850	17276	199.8435176	3452584
Aluminium (bar and rod)	2700	16636		0
Glass fibre Reinforced plastic (GFRP)	1500	14315	0	0
Glass fibre	2500	13327	0	0
Hot rolled structural steel	7850	11176	0	0
Intumescent paint for steel	50	5653	0	0
PVC	1380	2814	0	0
Flat glass	2500	2823	37.1930298	104999
Clay Bricks	2400	1271	0	0
Viroc® Cement Bonded Particle Board	1350	948	0	0
Granite/Basalt/Marble	2600	541	0	0
Concrete 40 Mpa (unreinforced)	2400	495	0	0
Concrete Blocks 7.3MPa	2050	372	0	0
Bitumen Elastomer	1000	343	0	0
Light concrete (autoclaved aerated)	1000	338	0	0
Plasterboard	720	298	0	0
Limestone	2500	176		
Natural Stone	2500	176	478.001276	83945
Sandstone	2400	171	0	0
Icyene (polyurethane)	30	142	0	0
Vapour barrier (polyethylene)	900	128	0	0
Fiber Felt	25	118	0	0
Rockwool	45	35	0	0
Thermacork Insulation	115	-133	0	0
Sustainably sourced MDF	700	-299	0	0
Laminated Bamboo	750	-349	0	0
Sustainably sourced plywood	620	-377	0	0
Sustainably sourced CLT (spruce)	470	-484	0	0
Sustainably sourced pine	420	-489	929.436905	-454638
Sustainably sourced Douglas Fir	530	-549		0
Sustainably sourced Oak	770	-782	1600.62913	-1251791

kgCO2e TOTAL	TOTAL m2	kgCO2e/m2 TOTAL
1,935,100	3,245	596

Embodied carbon calculation of the food waste factory. Showing how much carbon has been sequestered during the construction of the building.





My designs developed throughout my undergrad studies and beyond, all incorporate sustainability as a focus for the project. The model images represent ways of showing a regenerative archive for a second-year project, and the projects on this page are a closed-circuit live work allotments with the projects goal for it to be almost entirely self-sustaining.

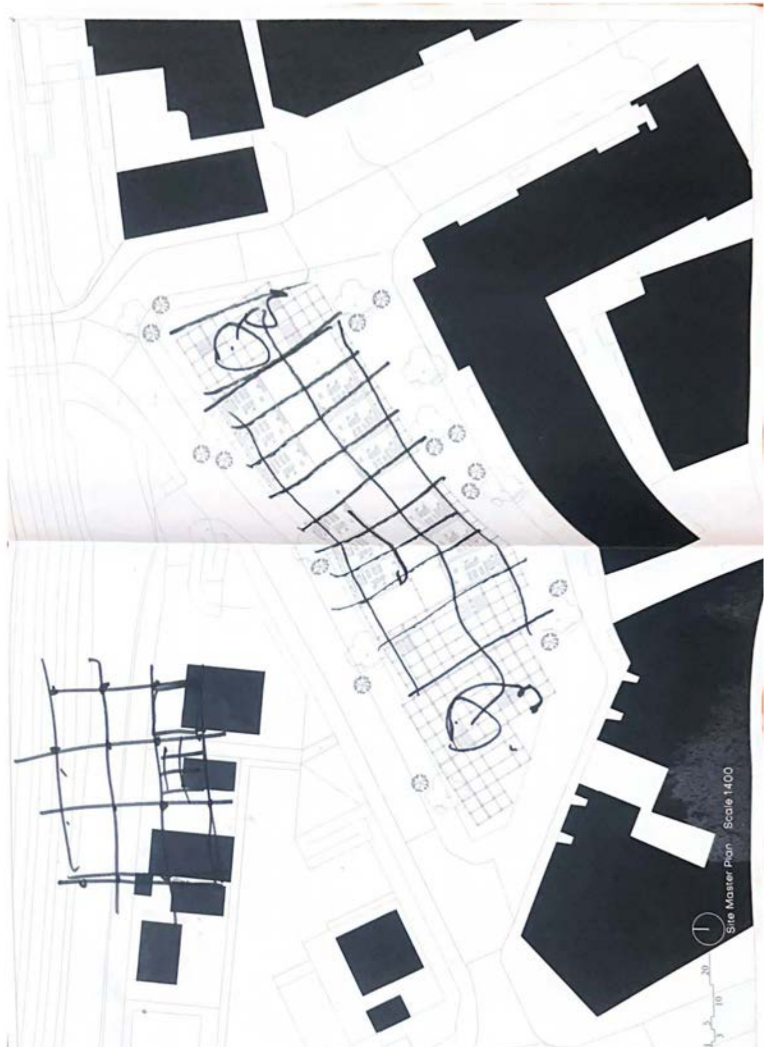
The Green Houses

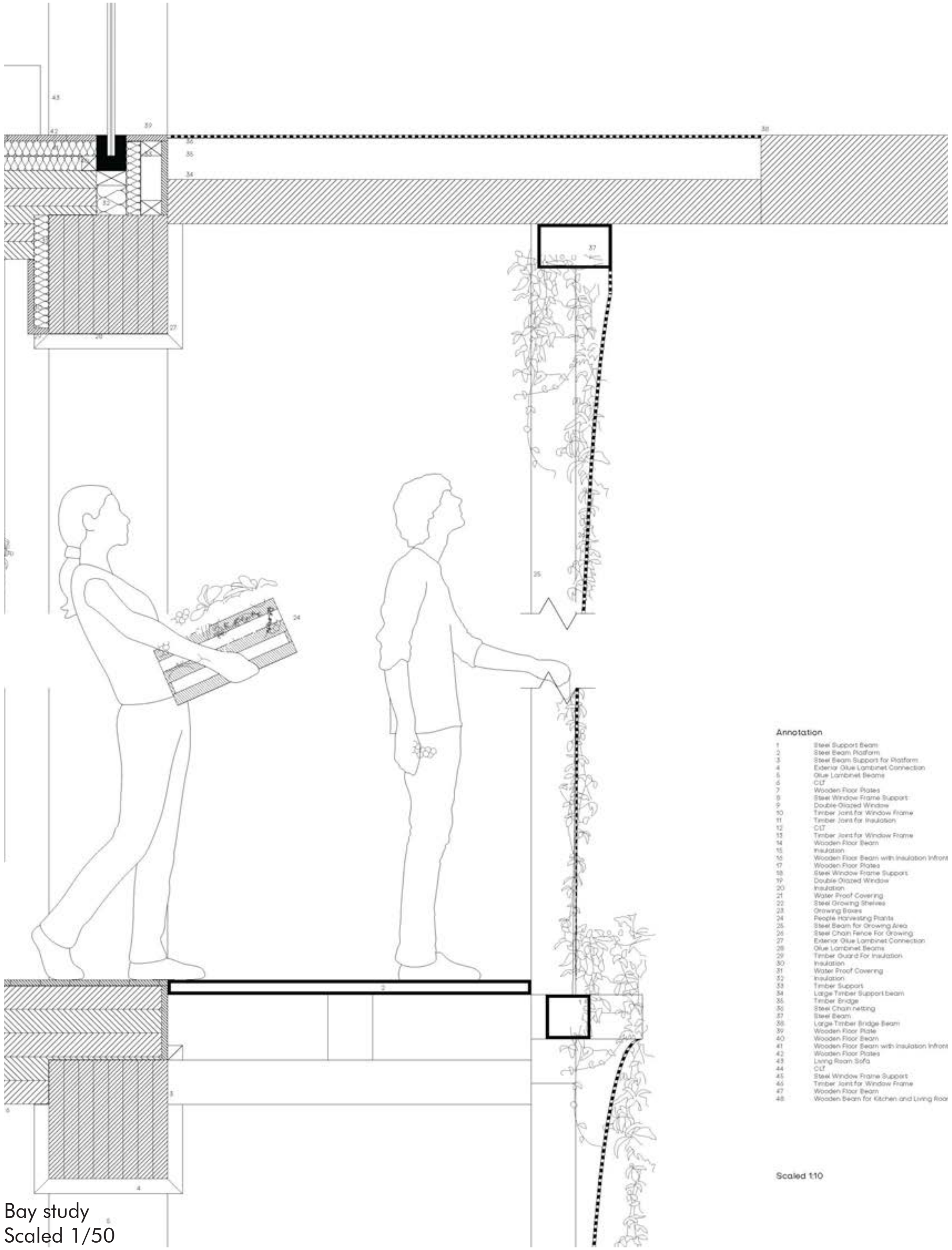
Degree Proejct : Project 05

Year : 2023

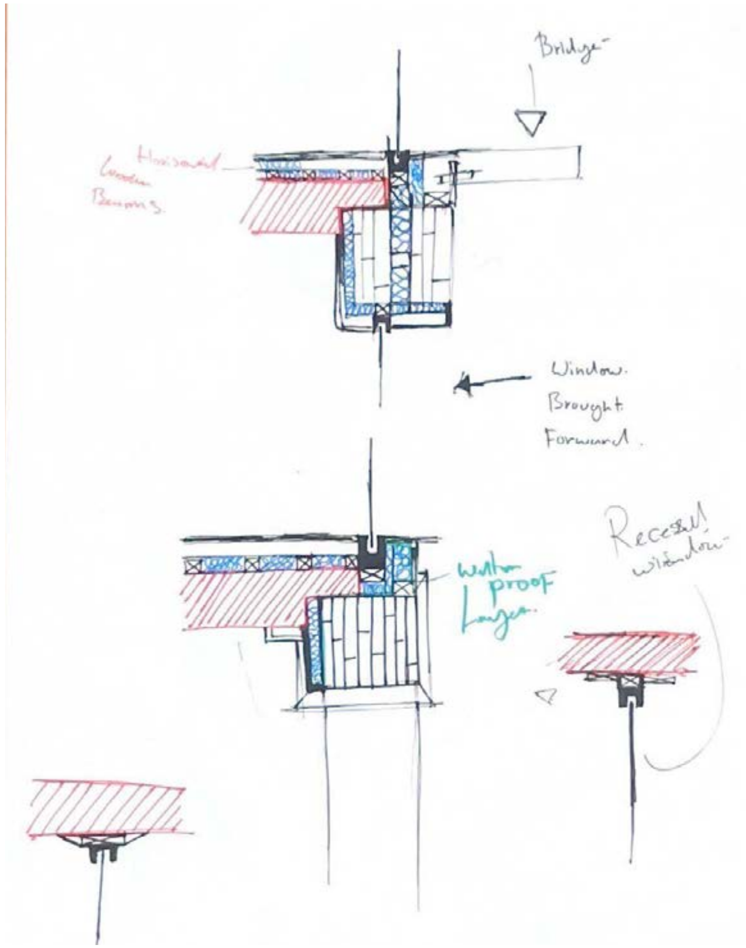
University for the Creative Arts

A design of twelve houses for a live work community where residents grow and sell produce collected and grown from allotments situated on the rooves.

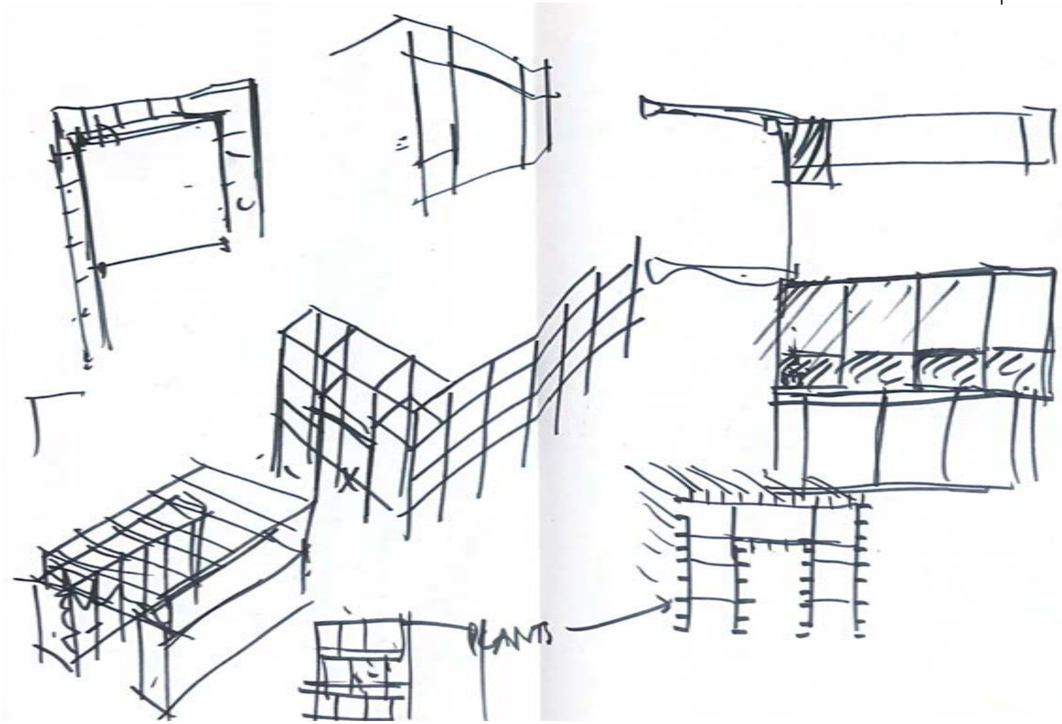




Bay study
Scaled 1/50



Initail sketches of a bay study



Construction Diagram

Phase One

1 Base Plate
2 Super Strucutre is assbmbled

Phase Two

1 CLT Flooring are assembled
2 CLT Walls are assembled

Phase Three

1 Remaininf floor layers are assembled
2 Remaining wall layers are assembled
3 Stairs are assembled
4 Kitchen wooden beams are installed
5 Window Frame are constructed
6 Double galazing is installed in to the frames
7 Large Windows are the front of the building are installed
8 Door frames are installed
9 Doors are installed though out the house
10 Large bay doors at the front of the house are installed
11 Soil is deposited in the roof top garden

Phase Four

1 Steel Frame work is installed arount the exterior of the building
2 Steel Flooring along the frame work is installed
3 Steel Chain fencing is installed around the buidling
4 Comunity Bridges are installed
5 Steel Fence Bridges are installed
6 Steel Steps to upper gardens are installed
7 Steel banisters are installed arround the exteior gardens
8 Vines are encouraged to grow allong the exterior frame work arround the site

On A Desert Road

Personal Blender Project
Year : 2025

This is one of my personal blender projects to develop my rendering style and learn new ways to render designs.

On a desert road is a pole that has been ravaged by a sand storm.