

# THE FOOD EDUCATION HUB

## PROJECT CONCEPT

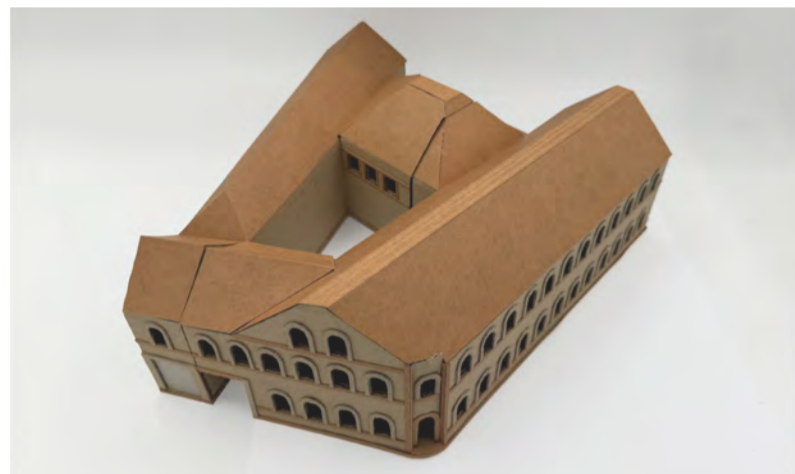
The Food Education Hub is a community-based space that aims to support and adapt to its surroundings. The space is designed to address the issue of insufficient diversity and quality of food places in the area by providing the users with new opportunity, an option, to be in charge of what to eat and cook and how to treat food as well as, the ability to take that knowledge home. At the core, the proposal is directed at establishing a more environmentally aware space, by having green zones and urban farming spaces, by hosting cooking workshops that allow people to learn how to minimise food waste, by partnering with local businesses and Scottish farmers to support a circular economy system and so forth.

## RELEVANCE OF PROPOSAL

What we eat and how we eat depends on a number of factors including preferences, medical conditions, access to specific products, etc. But if we think of the 'modern' city (in this case, Glasgow), we are somewhat limited and guided by the food options available to us. This refers to both, grocery stores and places like restaurants and cafes. Depending on what we see in a supermarket and how much it costs we decide what dinner to cook, by popping into a next door cafe and checking what kind of croissants they have that morning, we settle on a pastry for the day. All those are indeed choices we make and yet, on the whole, we don't know much about where the products come from, how and by who they were made and how they can impact us and the planet.

If we look at food waste and the resulting pollution, one-third of food that is produced globally goes to waste every year. The production process is a multi-stage chain that goes through at least 6 stages between the growth and consumption of food. And in all those stages some product is always wasted which means that the resources utilised to create those products are also needlessly spent. In addition, a substantial part of food pollution comes from food packaging. In the UK 83% of packaging waste comes from the food and drink containers. There have been new environmentally friendly developments recently in that department, however, even if recycled, food packaging waste is tricky as it is contaminated with food. It is therefore not always recycled properly. And that is in some way due, as can be seen in a study done on food habits in Scotland, to people not always knowing how to recycle. The same study also notes that a fair number of people also addressed that they lacked confidence when it comes to food preparation.

Therefore, the food hub aims to provide education in that area in a hands-on approach and through real life observation where people get to explore all the different stages of food production, from growth, in the green spaces of the hub, to preparation in one of the cooking classes, to of course, consumption (and not necessarily in that order).



## THE SITE

93, Houldsworth Street, Cranston Hill, G3 8DZ, Glasgow, former William Cook & Sons Saws.

## THE USERS

Even though the hub is a space that is open to all, the key users demographic would be people living in the area of Finnieston. The goal of the site is to allow the local community to be active participants in the space and in a way, shape the food hub. The space welcomes all ages giving them an opportunity to interact while enjoying the same activity, e.g. a cooking class. At the same time, there is also space for separate activities, e.g. a beginners cooking class for kids.

### VISITORS

Name: Jim

Age: 8

Occupation: Student at the Anderson Primary School in Finnieston

Jim lives close to his school so on weekdays when he has classes his sister takes him there. About once a week on their way to school they stop by the food education hub and Jim gets his free lunch for take away. Ever Sunday Jim also attends a cooking class for kids at the hub with his friends. His school does a few bake sales throughout the year and Jim really wants to participate. Last week they made cupcakes during a workshop and Jim brought them to school.



Name: Eliza and George

Age: 61 and 68

Occupation: Writer and fine artist

Eliza and George live close to Kelvingrove park. They usually dine at one of the nearby cafés or make something quick to eat at home. However, they really wanted to try something new so they began attending some of the cooking classes at the food hub which is only a short walk away from their house. Recently as well, their granddaughter started visiting them more often and they found that attending a workshop at the hub together is a great way to spend the day.



### STAFF

Name: Mariam

Age: 25

Occupation: Agricultural advisor and educator

As her undergraduate course Mariam studied Agriculture at the Nottingham Trent University. Shortly after she completed her degree she moved back to Glasgow where she is originally from. Currently she works at the food education hub and is the main caretaker of the garden/greenhouse. Usually in the beginning of the week she gives agriculture classes in the food hub. She mainly teaches how to grow plants at home as a lot of her usually students showed great interest in the subject.

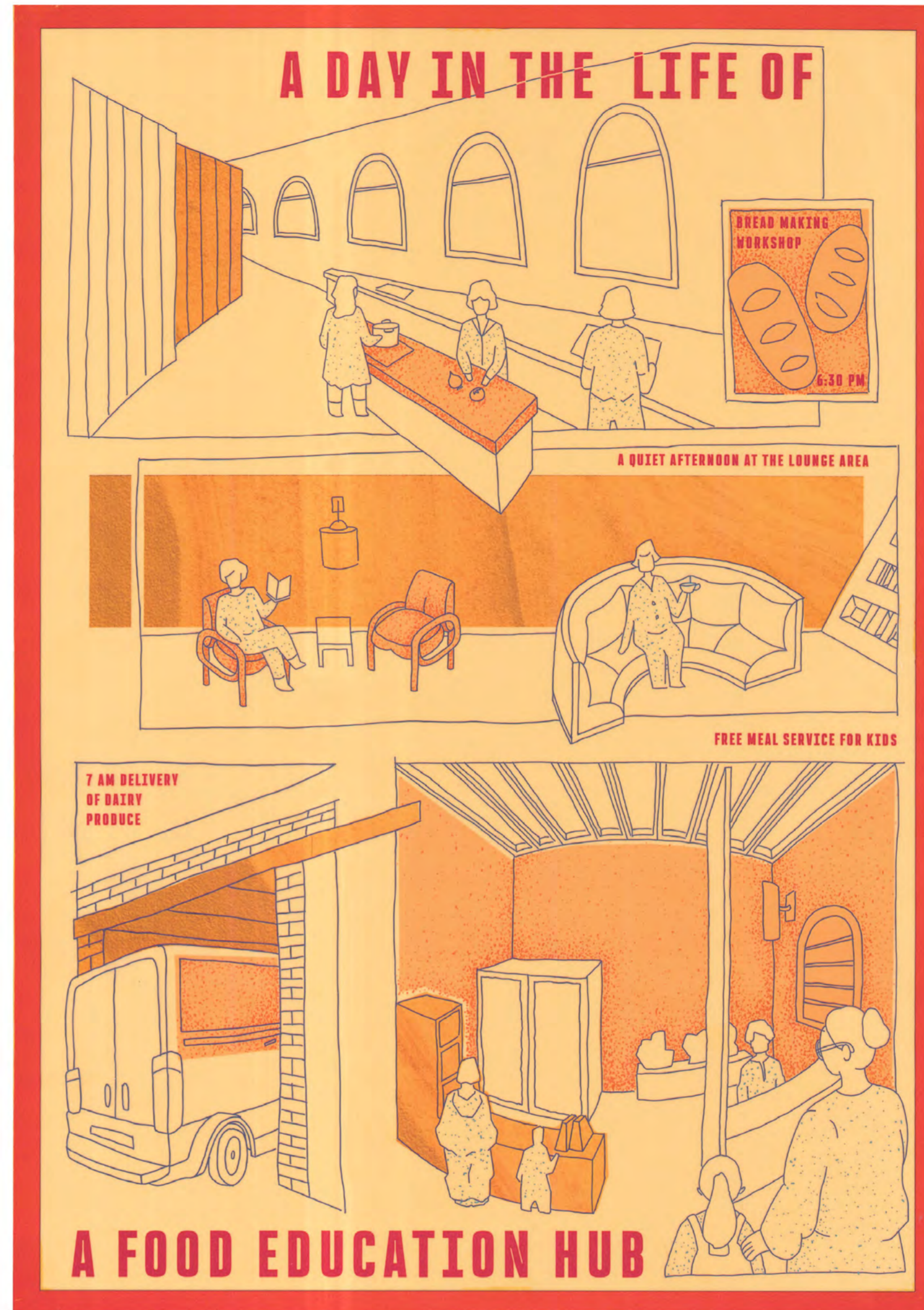


Name: Nick

Age: 43

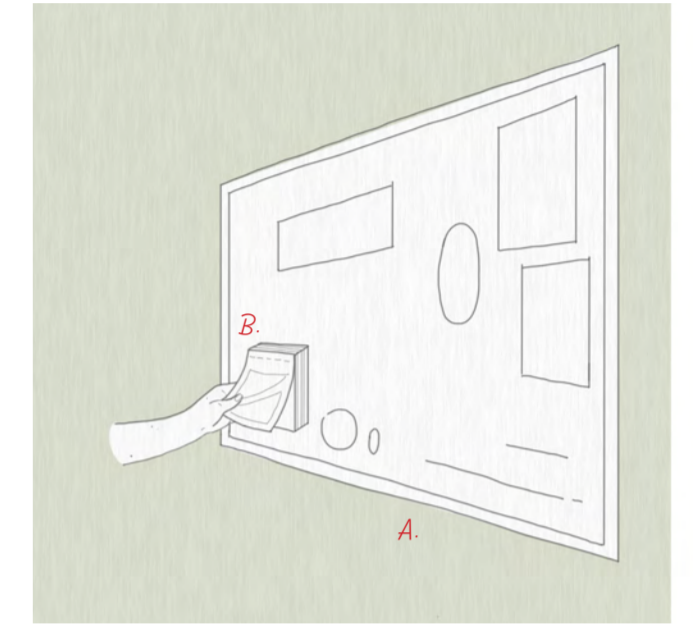
Occupation: Baker

Nick is in charge of the baking section at the hub. On days when he is not working he sometimes attends one of the agricultural workshops at the hub. He realised that he has some space on his balcony to grow tomatoes as the fresh ones would be excellent in the pasta sauces that he makes at home. So now he is learning how to grow and properly care after this crop.



The poster, being a storyboard, is a reflection of the food hub, the activities and in a way, the lively ambiance conveyed through vibrant colours and playful textures. At the same time, when designing the poster, I was considering how its style can be utilized in a real advertisement, let's say, for a cooking class, and how this advertisement can become more interactive and with that, translate the intent of the space - to be actively engaged with the local community even outside its walls.

As an example, I was accounting for an advertisement for a kids' cooking class. As such the poster has somewhat of a colouring book style so that it could be something like a leaflet that can be taken home and coloured.



A. THE NOTICE BOARD AT THE FOOD HUB



B. THE INTERACTIVE LEAFLET

## SERVICES AND ACTIVITIES AT THE HUB



Cooking classes. Classes can be either for adults or kids or joined classes. Their availability can come based on demand.



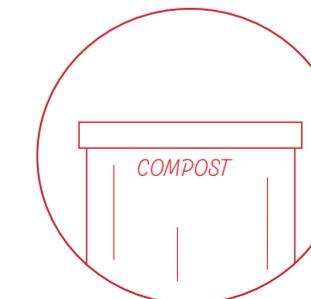
All about food packaging. Workshops on how to store food properly. An exchange service where you can bring an empty container and exchange it for a full one with food.



Meal collection service. Functions based on community's needs. E.g. the hub donates a free meal every week to a local primary school.



After hours meal collection service. A service that would allow people to get leftovers (e.g. in perfect condition, just unsold in the canteen) to avoid waste. The hub would have an app that would show what items are left from the day and what can be collected.

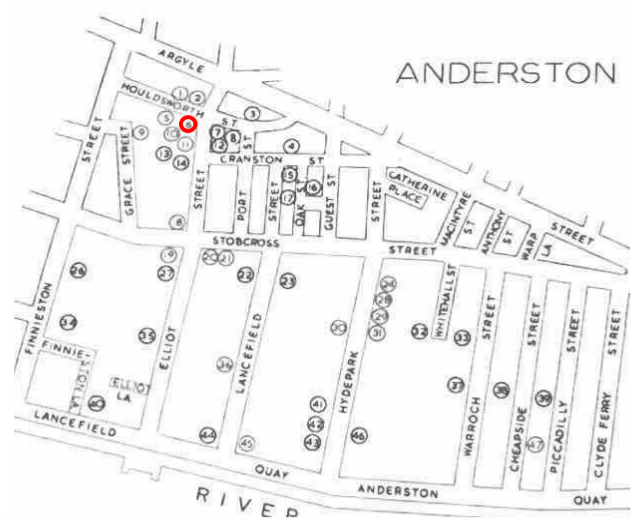


Compost facilities. With the amount of food that the hub will deal with there will inevitably be waste. This waste however can be treated properly and then reused, for example in the green spaces as compost.



The green spaces. Places to relax, but also workshops on growing food/ plants can be held there.

THEN 1895



THE SITE

- SITES ON ANDERSTON MAP (based on 1895 OS map, 10 ft to 1 mile)
- |  |  |
|--|--|
| 1. Brass foundry                         | 25. Victoria Preserve & Confectionery Works        |
| 2. Turning works and saw mills           | 26. Finnieston Steam Ship Works                    |
| 3. Paper staining and cardboard works    | 27. Verreville Pottery                             |
| 4. Cranstonhill Bakeries                 | 28. Chapside Copper & Brass Works                  |
| 5. Lancefield Boiler Works               | 29. Hydepark Bakery                                |
| 6. Glasgow Saw & File Works              | 30. Grain store                                    |
| 7. Victoria Bolt & Rivet Works           | 31. Varnish works                                  |
| 8. Albert Works (wringing machine)       | 32. Whitehall Foundry (engineering works)          |
| 9. Finnieston Brass, Copper & Lead Works | 33. Anderston Foundry (iron)                       |
| 10. Clutha Copper Works                  | 34. General and engineering works                  |
| 11. Brass foundry                        | 35. Rope works                                     |
| 12. Cranstonhill Tool Works              | 36. Lancefield brass foundry                       |
| 13. Etna Brass Works                     | 37. Excise bonded and free warehouses              |
| 14. Neptune Iron, Brass & Copper Works   | 38. Anderston Foundry (iron)                       |
| 15. Lithographic printing works          | 39. Grain stores                                   |
| 16. Albert Smelting Works                | 40. Finnieston Steam Ship Works                    |
| 17. Copper works                         | 41. Iron works                                     |
| 18. Anderston Galvanizing Works          | 42. Rope works                                     |
| 19. Scotia Engine Works                  | 43. Engine works                                   |
| 20. Lime kilns                           | 44. Boiler works                                   |
| 21. Aerated-water manufactory            | 45. Lancefield Engine Works                        |
| 22. Lancefield Galvanizing Works         | 46. Colour works                                   |
| 23. Havelock's Copper Works              | 47. Warehouse (formerly Houldsworth's cotton mill) |
| 24. Coopersage                           |  |

NOW 2024



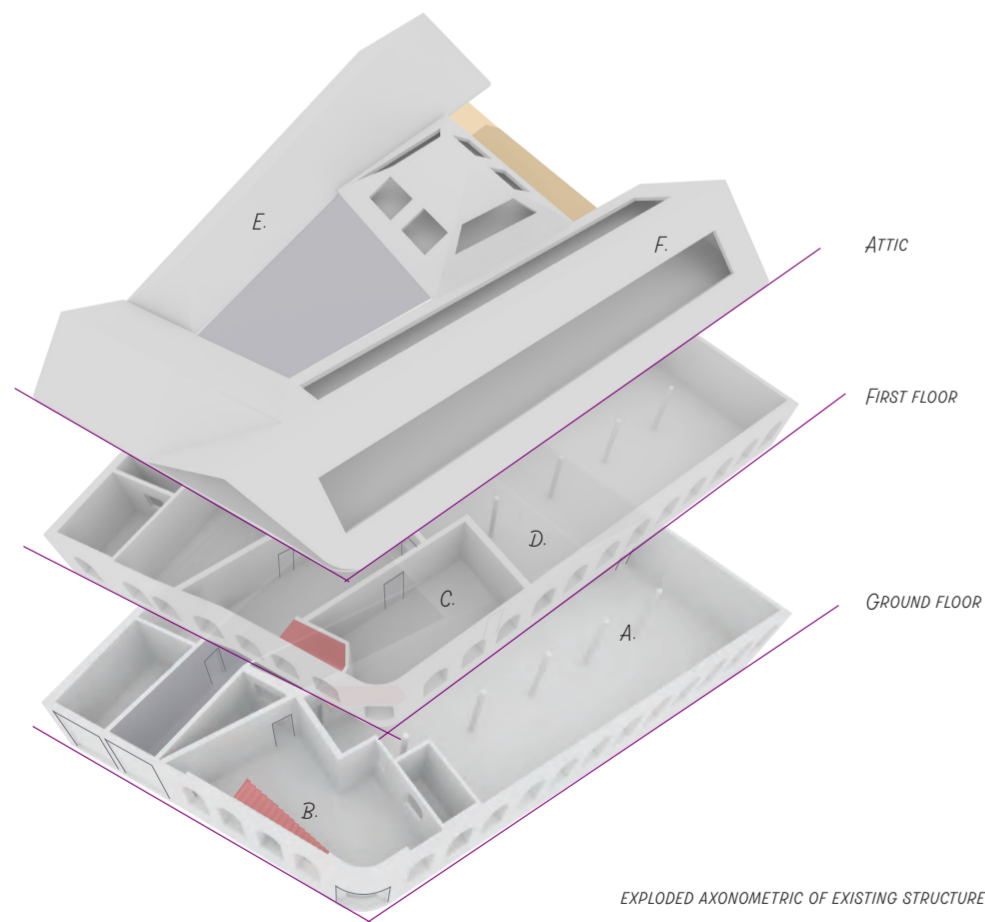
- |   |  |
|---|--|
| 1. Park with a basketball court and a playground      | 13. Equator (consultant)                       |
| 2. Food places  | 14. Ross Promotional products                  |
| 3. Naim & co (accountant)                             | 15. Jerry's open house (event venue) - closed  |
| 4. Bahar salon (Hairdresser)                          | 16. Accountants - closed                       |
| 5. Holland Insurance                                  | 17. Army reserve centre                        |
| 6. Pharmacy   | 18. ALM plumbing                               |
| 7. Glas-go apartments                                 | 19. Anderston Primary school                   |
| 8. Smart things accelerator centre - closed           | 20. Salvation army church                      |
| 9. Charity  | 21. elerslie court (assisted living residence) |
| 10. the site  | 22. The Pyramid at Anderson (community centre) |
| 11. Smith and rodger (manufacturing company) - closed |  |
| 12. Skypark (office units + food places)              |  |

By the end of the 19th century the population of Glasgow grew to 762,000 people and as such it became the largest city in Scotland. Industrialisation spread in the form of textile, chemical, iron, locomotive, sugar and other productions. Factories and mills initially spread in the north-west and south-east of Glasgow and then took over the rest of the city. Those constructions were often organised in clusters of production - factories and mills and manufacture centres all resided side by side in a given area. Such was the area of Finnieston (shown as Anderson on an Ordnance Survey (OS) map of 1895 Glasgow) where the site is located.

The site was a former William Cook and Sons saw factory. William Cook was originally from Harmworth Nottinghamshire, but moved to Glasgow to become a sawmaker and soon established his own factory. The business was moved across buildings and it is unclear when precisely the construction on 93 Houldsworth street fell out of use, but it is assumed it was around 1990s.

The project partially takes inspiration from the industrial structure of the area, where all constructions functioned like an interlinked mechanism. Now, the buildings are stand alone structures, each with their own function. With that, the hub aims to restore the kind of connectivity seen in the old Finnieston, though with a more ethical and meaningful aim.

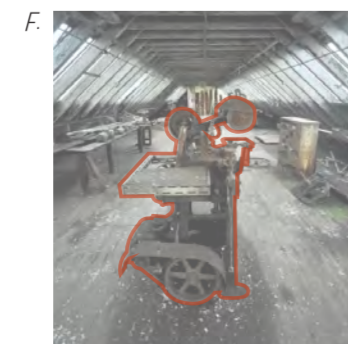
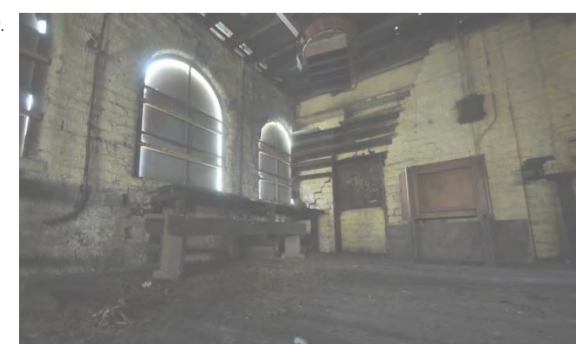
Even though William Cook and Sons Saw factory is no longer operational, much of the materials and tools are left intact on site. So how and can those be repurposed? All images are taken from a Uk Urban Exploring Forum called 28DaysLater.co.uk. It is not fully clear which exact spaces are shown on the photos and what the equipment is, as such I am speculating on their function and location.



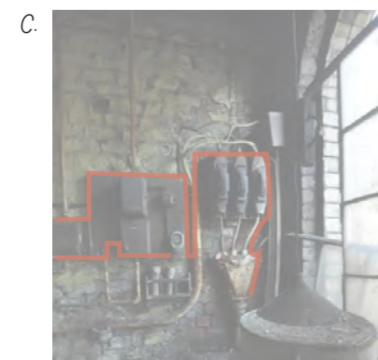
Flywheels? Store kinetic energy. In the Industrial period were usually made with heavy rims made out of cast iron. They were utilised to dampen the pulsation in engines, machinery, etc.



Cast iron railings. Cast iron as a material boomed in popularity in the Victorian era and more so with industrialisation to the point where decorative cast iron railings were mass-produced.



Spindle moulder? (A woodworking machine)  
A printing machine?



Main cut-out

## RE-PURPOSING THE EXISTING

COULD THE EQUIPMENT LEFT FROM THE PREVIOUS OCCUPATION OF THE SITE MERGE WITH THE GREENERY? HOW CAN IT COME INTO THE SPACE?

The equipment becomes part of the foundation for the plant growth that over time, in a way, consume these structures. It becomes a merge of man-made and nature, of the past and the present. What then will be the future of the site and what elements could be utilised?

F.



After some time



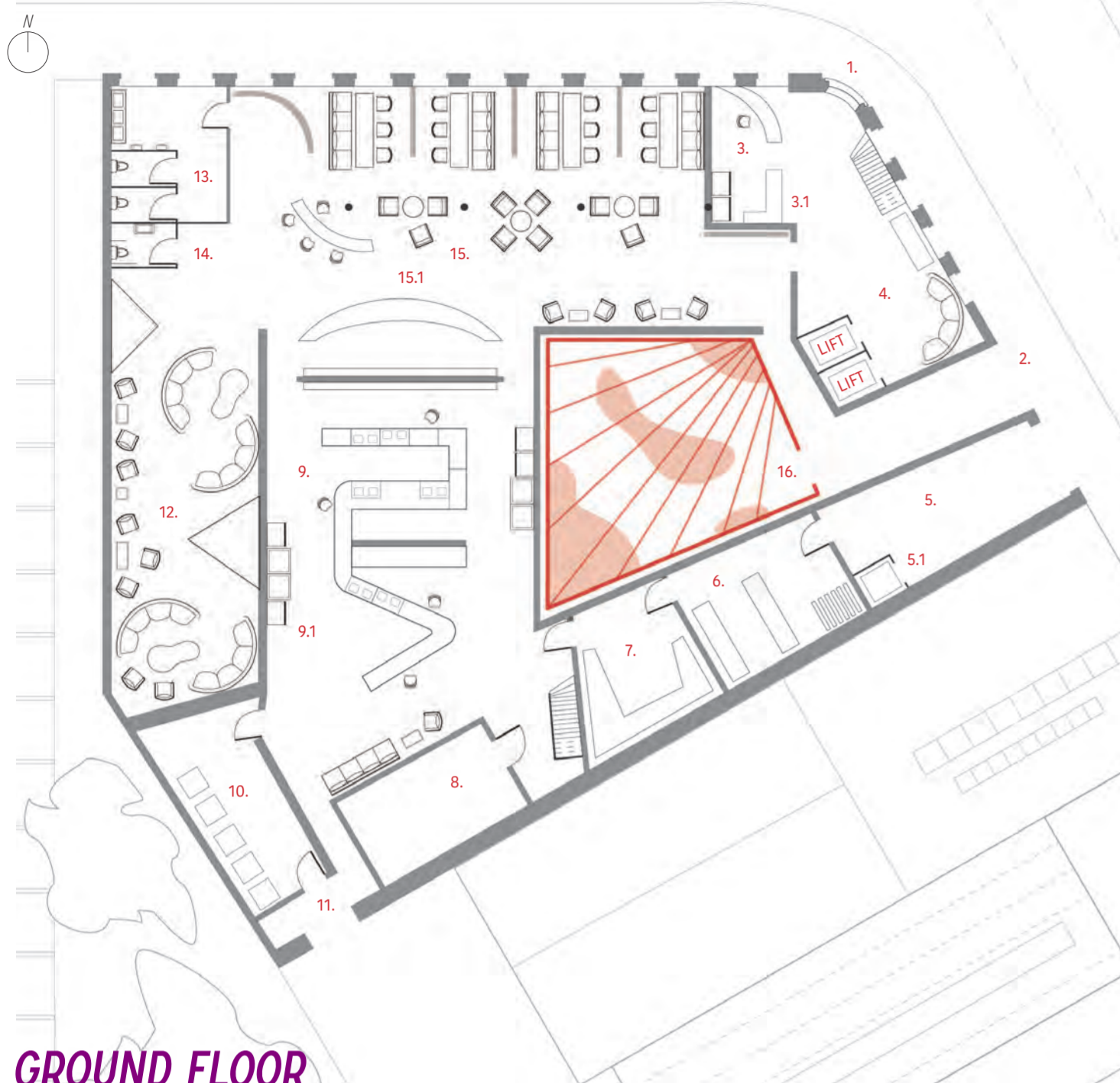
E.



E. Concept visual - canteen area

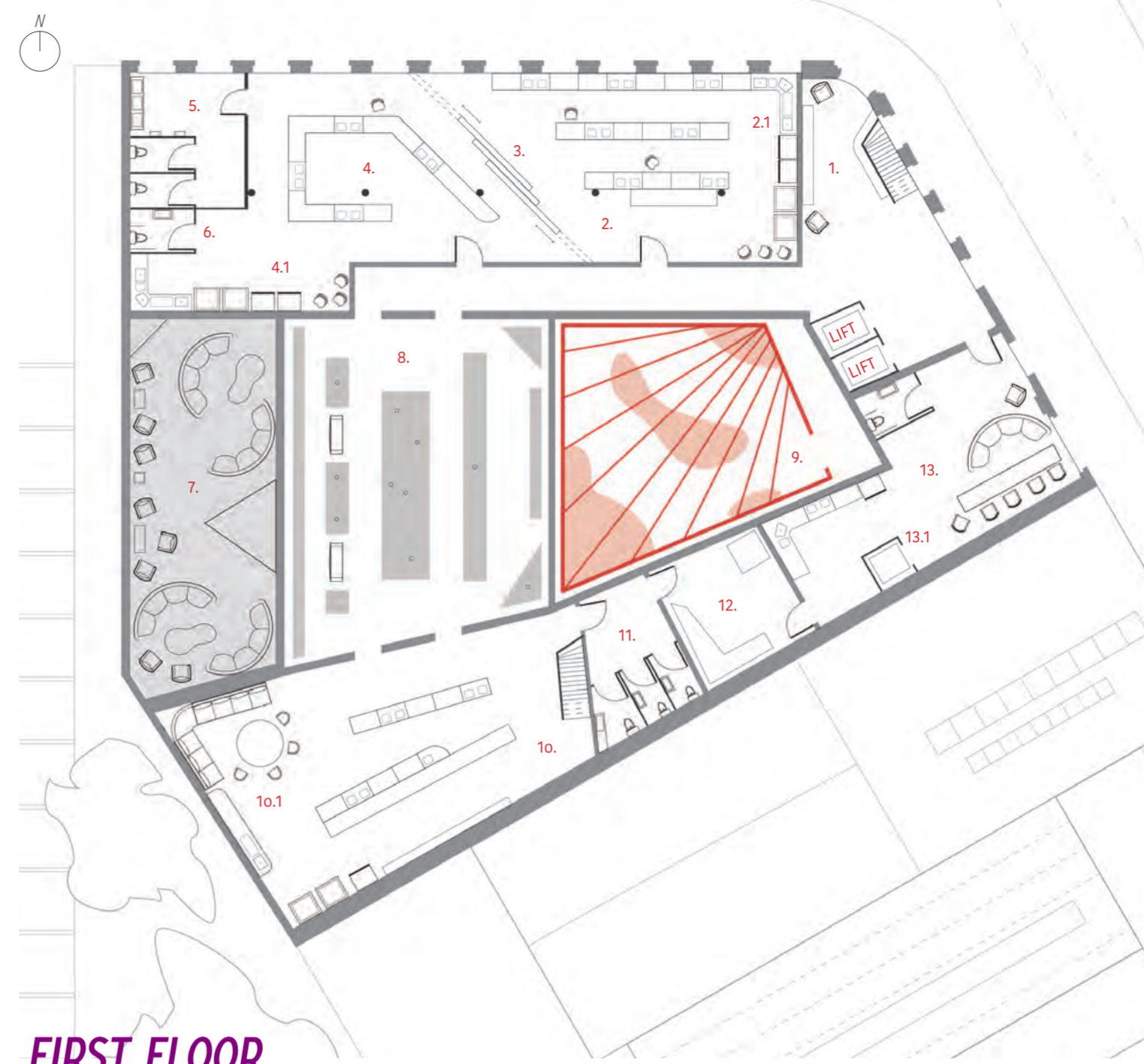
After some time





1. Main entrance - direct entry to welcoming desk, waiting area and a way to the first floor
2. Second entrance - direct entry to inner courtyard greenhouse and cafe/canteen
3. Welcoming desk
- 3.1 Meal collection area
4. Waiting area
5. Garage/ delivery space
- 5.1 Goods lift
6. Storage - tools, materials, bicycle storage
7. Produce storage
8. Freezer room
9. Kitchen - main cooking area
- 9.1 Kitchen - baking area
10. Compost and recycling bins room + storage for gardening material and tools
11. Fire exit/ staff entrance/exit
12. Lounge area that doubles as additional sitting for cafe/canteen
13. Bathroom
14. Accessible bathroom
15. Cafe/ canteen space
- 15.1 Cafe bar
16. Inner courtyard greenhouse

GROUND FLOOR



1. Lockers/storage space
2. Teaching kitchen 1 with full cooking amenities (2.1). Can fit up-to 17 students.
3. Sliding doors. For bigger classes, the space can be opened up and for small closed off.
4. Teaching kitchen 2 with full cooking amenities (4.1). Can fit up-to 10 students.
5. Bathroom
6. Accessible bathroom
7. Lounge area continued from the ground floor
8. Indoor urban farming space/ garden.
9. Inner courtyard greenhouse continued from ground floor
10. Teaching kitchen 3 (more targeted at children) with full cooking amenities and a breakout space (10.1). Can fit up to 10 students (kids).
11. Bathroom, including kids' WC
12. General storage
13. Staff room/ second small kitchen
- 13.1 Goods lift

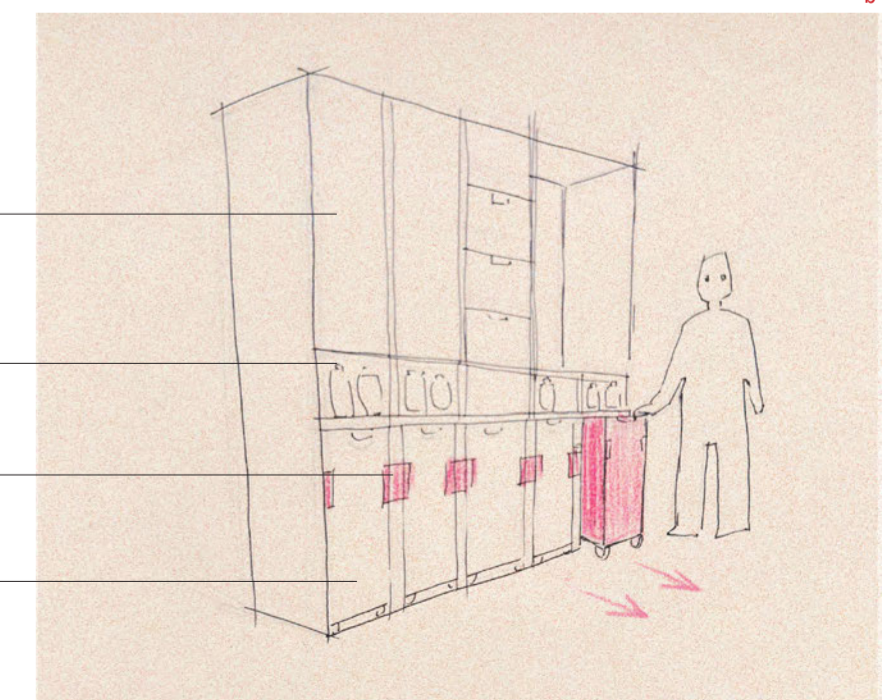
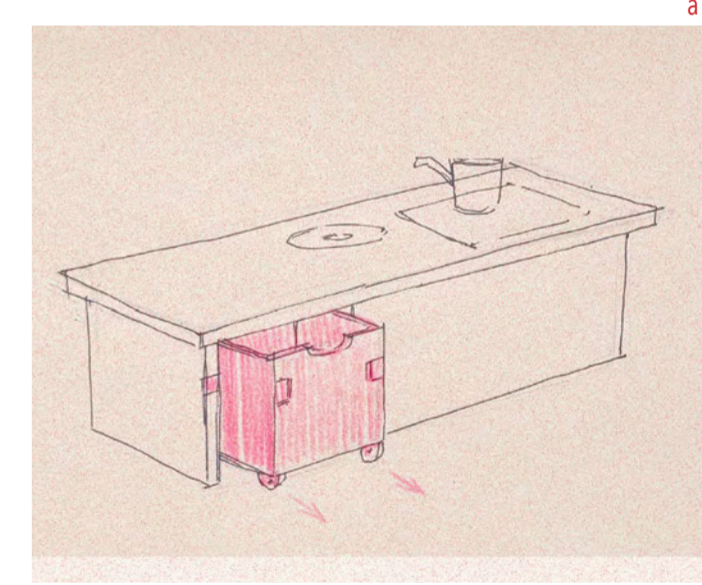
FIRST FLOOR



SECTION A-A'. SCALE 1/100 @ A2

PACKAGING AND STORAGE

When it comes to workshops around food packaging I realised that there would need to be enough space to store all the containers and materials needed. At the same time such storage would need to be somewhat modular so it can be easily transported across the space (e.g. for workshops). With that, all the cooking tables at the teaching kitchens would have under the table rolling carts (a). The same system would be applied in the storage rooms (b).



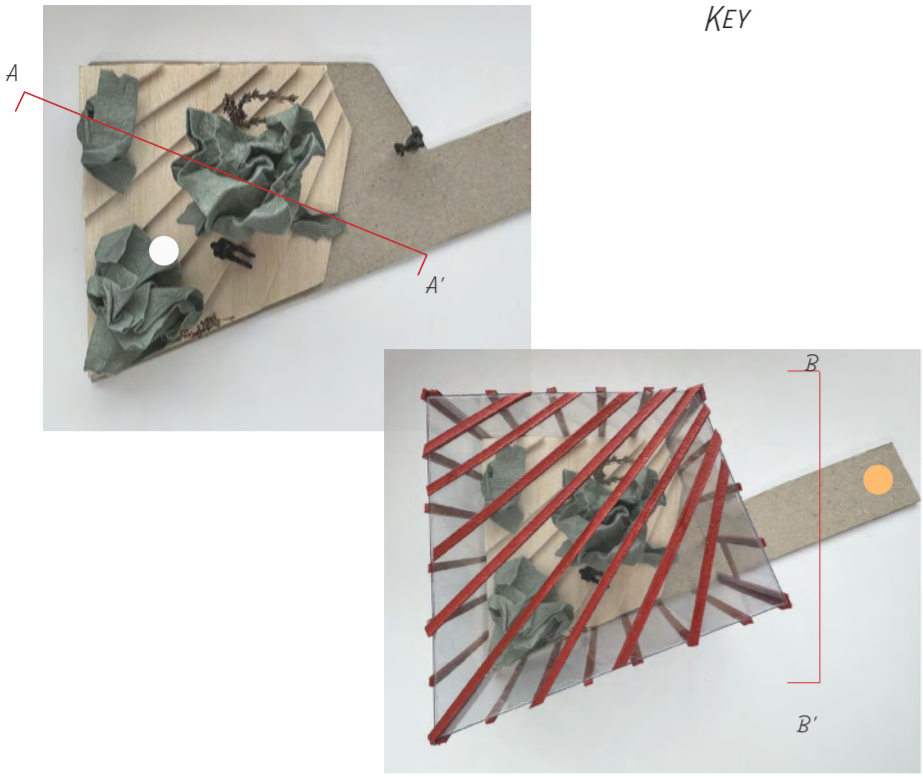
Storage for larger items

Storage for smaller items

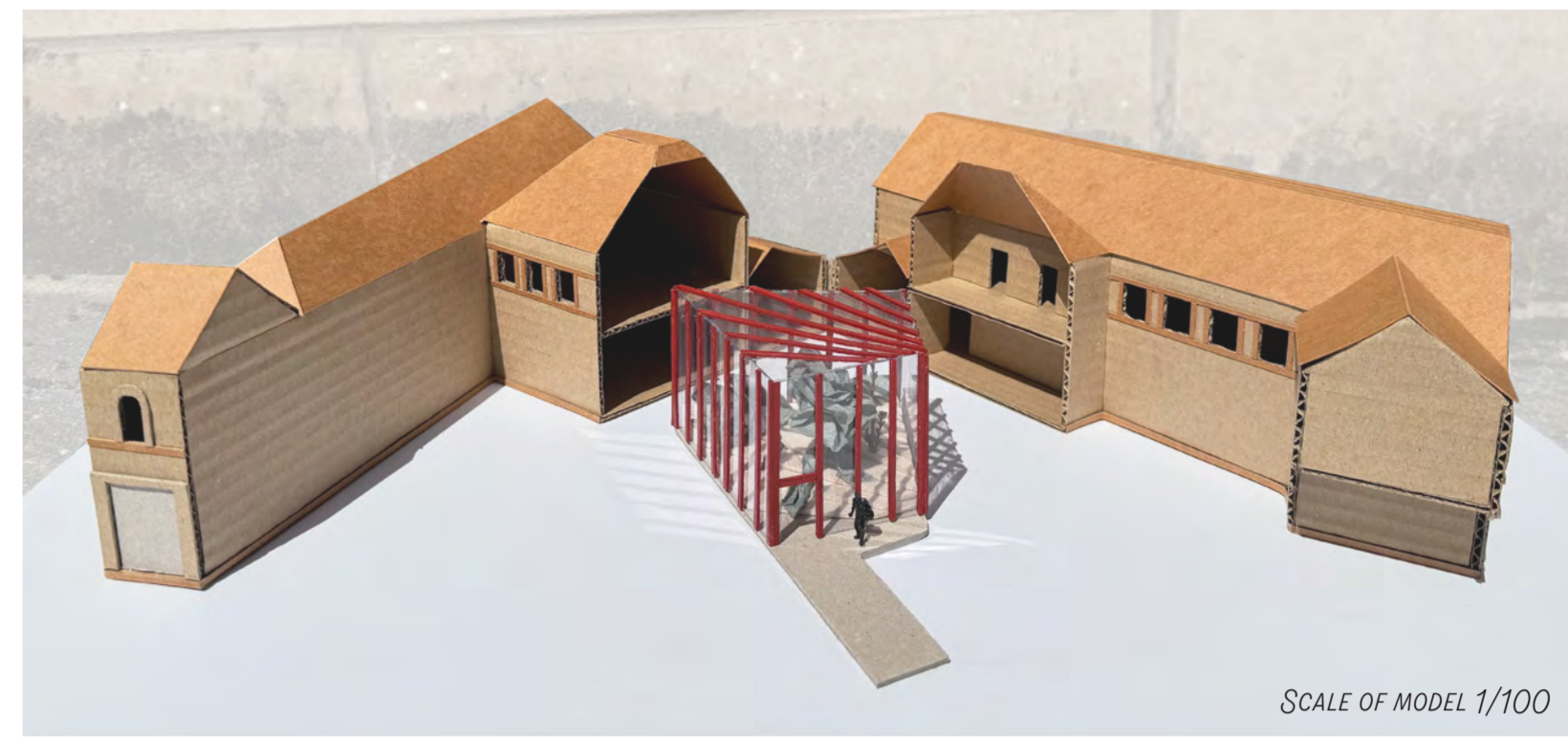
Lock system. To insure the carts don't move when not in use.

Rolling carts. Can be used as storage spaces or to just transporting things.

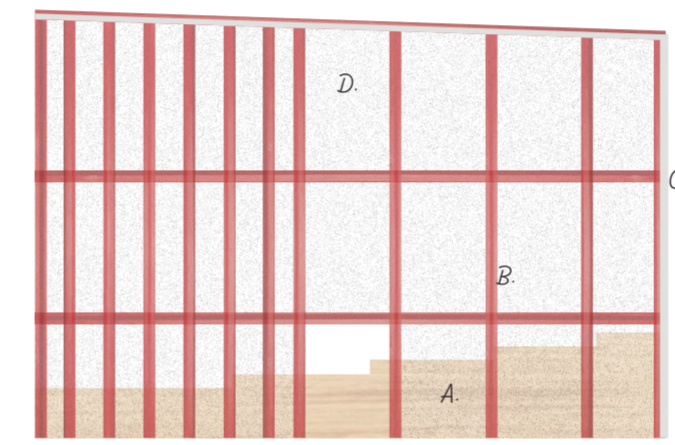
# SPACE DETAIL : INNER COURTYARD GREENHOUSE



1. The greenhouse is 6 meters high which means that there is limited space for a tree to grow upwards. As such, some of potential trees that can be planted in the greenhouse are fruit trees, such as apple, fig, etc. They grow up to 2-3 meters high.
2. Softwood timber frames
3. Reinforced concrete
4. Soil mixture of 50% sand, 30% topsoil and 20% compost. Stretches down to about 2.5 meters to allow for the roots to spread.
5. Crushed limestone aggregate
6. Perforated pipe connecting to catch basin
7. Gravel base



SECTION B-B'. SCALE 1/70 @ A2



A. OAK WOOD PANELLING B. PAINTED GALVANISED STEEL FRAMES  
C. RAINWATER DRAINAGE PIPE CONNECTING TO CATCH BASIN D. TEMPERED GLASS

One of the core structures/ components of the food hub are the green/ urban farming spaces that aim to make the hub more self sustaining and educate people on the growth of food.

As a way to explore how such spaces can function, I decided to focus on one of the areas, namely the inner courtyard greenhouse. The greenhouse is a sort of park with a stair like structure that allows the visitors to relax amidst the greenery all year round regardless of the weather. As the greenhouse stands at the heart of the building, I decided to create a more modular model which allows to observe the greenhouse from multiple points and play with the structure. This space illustrates the concept of the proposal effectively as the greenhouse is part of the building, but at the same time it has its own separate entrance, directly from the street and thus directly accessible. It is a free public space that shows an alternate perspective on what buildings should and can be. The hub becomes a structure that coexist with and welcomes in nature.

WHAT IF THE GREENHOUSE HAD A MEZZANINE FLOOR CONNECTED TO THE HUB?

