

CHARITY

## SALVAGE COMMUNITY CENTRE

by Daryna Chobitko

Project based on finding a sustainable waste solution

FOOD & MATERIALS

## SALVAGE COMMUNITY CENTRE

## WASTE - SALVAGE COMMUNITY CENTRE

*sustainable waste solution by the community*

Imagine a future where we synchronise with the nature. We build and eat without harm to mother nature. Long time ago when technology was less developed, when we had wooden baskets instead of plastic bags, long term designs in the houses no phones or cars the world was better, cleaner.

Nowadays the more we create to have a better life, the closer we come to our extinction. There is no synchronised teamwork between people and environment. We're often being selfish and need to have a reason to do a good thing.

Money is the biggest motivation, but no one pays for a step back in the evolution. We need more places and people who will help for free, who are willing to reuse and salvage potential waste to live on a clean and green planet. The project I propose is an idea of what the place might look like and what practice it can run.

## PROJECT AGENDA

*manifesto*

The agenda of this project is to build a community who cares or foundation of the new vision of the future. Place which works hard to clean the environment, our home. To feed people with who struggle nowadays to save some food instead of letting it rot. This place will teach people to see the bigger picture. It is charity practice as we do not have to be paid to do the right thing otherwise it does not even count. The space will be full of positive and kind vibes. It will have place to connect with the nature, to socialise with people and make new friends outside of internet. Place to learn how to work and cook, feel yourself being part of something that makes a difference in society and give an incredible example of what the future should look like and what we all must aim for.

## RETHINK THE WAY WE BUILD

*writing portfolio "why waste"*

Waste is a known global problem. It is an issue at its current state which only worsens as the years go on, increasing at a constant rate. Each year a massive "2.12 billion tons of trash is dumped by the human population"<sup>1</sup> (Fig 1). This waste includes materials of all kinds including plastic, food, construction leftovers as well as technological unneeded items. Such recklessness only brings us closer to forming chaos around the world and also consequential environmental changes. We hear almost daily how recycling could help solve this problem. Recycling could be described as 'world saving' ... however, people forget that this act hands out false promises and unrealistic outcomes the system provides when advertising. Recycling does not demolish waste pollution; it merely slows it down. This gives people the impression that "it's okay to use plastic, because I recycle it"<sup>2</sup>. This simply keeps the waste problem cycle intact. "Yes, imperfect action is better than no action, but refusing and 2 reusing plastic is infinitely better."<sup>3</sup>

In this essay I want to explore other ways which can help earth fight it's waste problem. I will investigate ways in which materials can be salvaged from already existing structures/ buildings which are no longer in use. I found individuals such as Rotor DC: who made their sole basis of work to salvage construction material and reuse them into their own projects, therefore not using any new raw materials leading to not having anything being sent to a landfill in the end. I also look into construction methods which allow materials to be salvaged from the very beginning and are therefore able to be kept in 'good' condition to be later reused for other projects. When looking at these themes I explored the information given through books, essays, academic articles, diagrams, and construction companies' websites.

After thorough exploration of the content, I stated above, I found case studies of adaptive reuse: which look into repurposed spaces built by their own existing materials, projects completely made of salvaged goods as well as structures constructed in highly sustainable way which would allow it to be taken apart without causing any damage to the materials used to build it in the first place. These are believed to be the main examples of practical solutions to making architecture as sustainable as possible.

The first step towards a better future is to change the mindset of many in the human population. This can begin with informing people of the real issues with these thoughtless actions and therefore hope that an understanding can be found. Humans should know by now that there are other options and ways to create a fighting chance for a better future. Everyone should want a world where we are not considered as parasites which slowly but surely poison our own home, earth.

Many ask the question of: "What can we do" and question what architecture can do to help? We should aim to change the way we see things; the way we live every day and the way we build the environment around us. We as a population need to be open minded to any ideas which could benefit our planet.

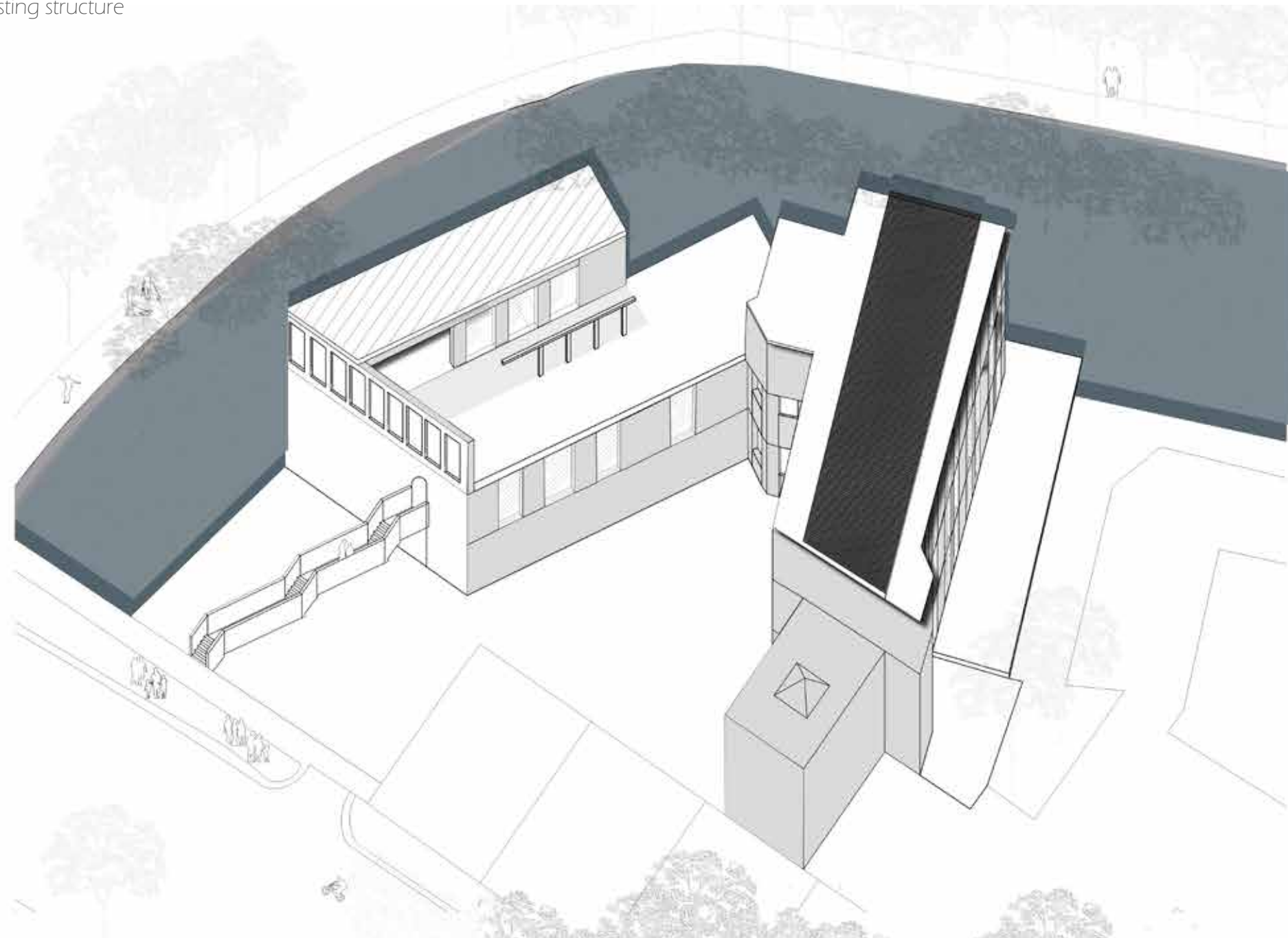
by Daryna Chobitko

<sup>1</sup> A world of waste, published: The world counts. <https://www.theworldcounts.com/challenges/planet-earth/state-of-the-planet/world-waste-facts/story/> (Accessed on 20/10/21)  
<sup>2</sup> JULIE, Why Recycling Plastic Doesn't Solve Plastic Pollution, published: JUNE 25, 2019. Available at: <https://darkbluejournal.com/why-recycling-plastic-doesnt-solve-plastic-pollution/> (Accessed on 20/10/21)  
<sup>3</sup> JULIE, Why Recycling Plastic Doesn't Solve Plastic Pollution, published: JUNE 25, 2019. Available at: <https://darkbluejournal.com/why-recycling-plastic-doesnt-solve-plastic-pollution/> (Accessed on 20/10/21)



Existing structure

00



Design proposal

01



## SALVAGE COMMUNITY CENTER

### *adaptive reuse project*

The story of my design:

The brief was focused on waste, to be exact "WHY WASTE". Which rises the problem or why is it a problem in general. It is not a secret that daily humanity creates tons of different kinds of waste; food, construction, plastic etc. We are literally pushing ourselves off the world every time we cut off a raw material to replace a used one. Besides the waste pollution we are also not being organized enough with the food supplies by wasting a big part of it when expires. It's a fact that we eat more than we grow nowadays but still did not learn how to appreciate it enough. But what can we do about it? Can humans change the upcoming terrifying future and do sustainable architecture or avoid food waste and feed the hungry ones? The answer is YES.

The project I propose is called "Salvage Community Centre". This is all we need to change our destiny of extinction in a smaller scale. The space I designed does it all; it salvages construction materials and reuses them instead of using raw ones. It salvages the food which is close to be wasted and creates beautiful meals to feed the ones who cannot afford it. This place is a charity building which teaches to do the good for the best. The centre offers places for socialisation and communications beside online ones.

This project brings the history, nature, and people together to become something more than what we are today.

#### STRATEGY:

To achieve the final result of the design I had to go through few different stages. It started from bringing the past of the site back by making it a wharf. The wharf is going through the space itself, letting the boat bring the salvage goods straight to the site. I've chosen to use boat transportation as it is the most sustainable and fast way to do so and straight links with the original building purpose.

The canal became a big part of the design it became everything in it. Every space is communicating with the canal water and using it for practice which runs in the building. I created a big water treatment system from the canal, which runs in pipes through multiple water tanks around the whole building. To make it work I had do used 3 main strategies:

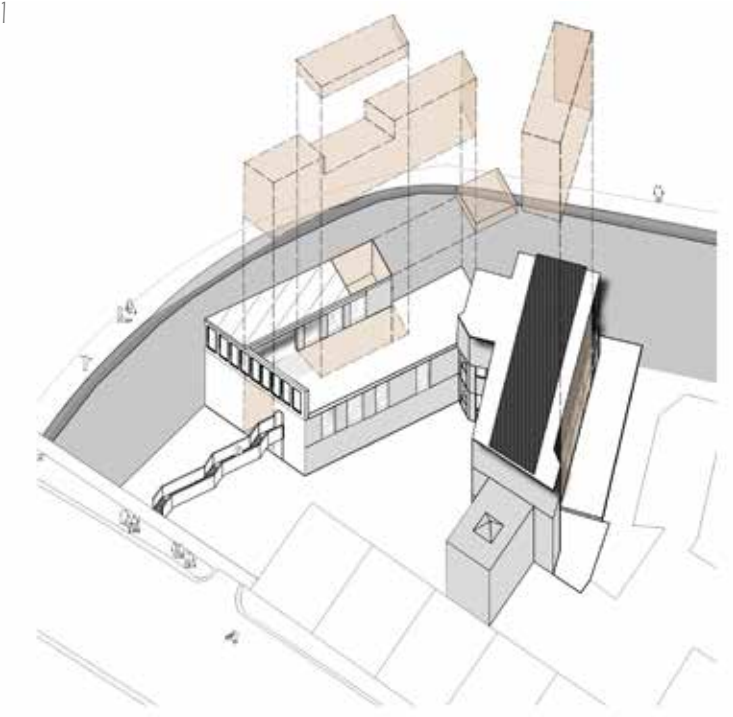
Stage 1: Cut walls and blocks on the site. It was needed to bring the boat in, it also helped with opening views on specific areas and combining the rooms together when it was necessary.

Stage 2: Flooding specific areas. When cuts were made it needed flooding the tanks and wharf itself so the boat can enter and rotate. The tanks were important so the water can get the right treatment in proper order.

Stage 3: Rams and terraces. Those are the connections between inside and outside areas. Ramps are short cuts to enter different spaces. 2 terraces are used for socialisation purposes. The one which lays on the canal is for relaxation and communication with the canal and its inhabitants. The front one is inserted in water tank I'm down, this space is used as an eatery / cafe. helps to invite people from outside.

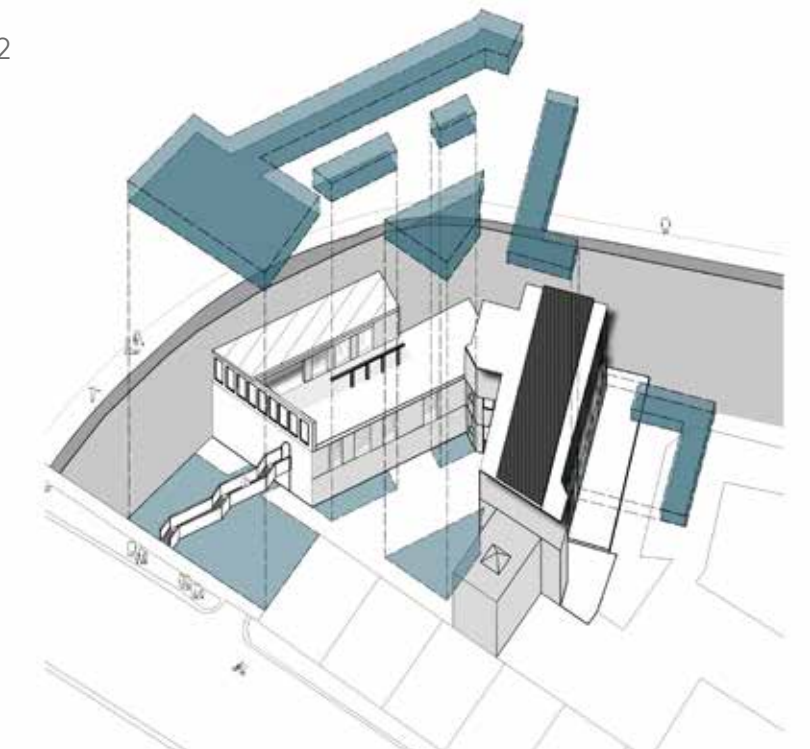
Design strategies used:

01



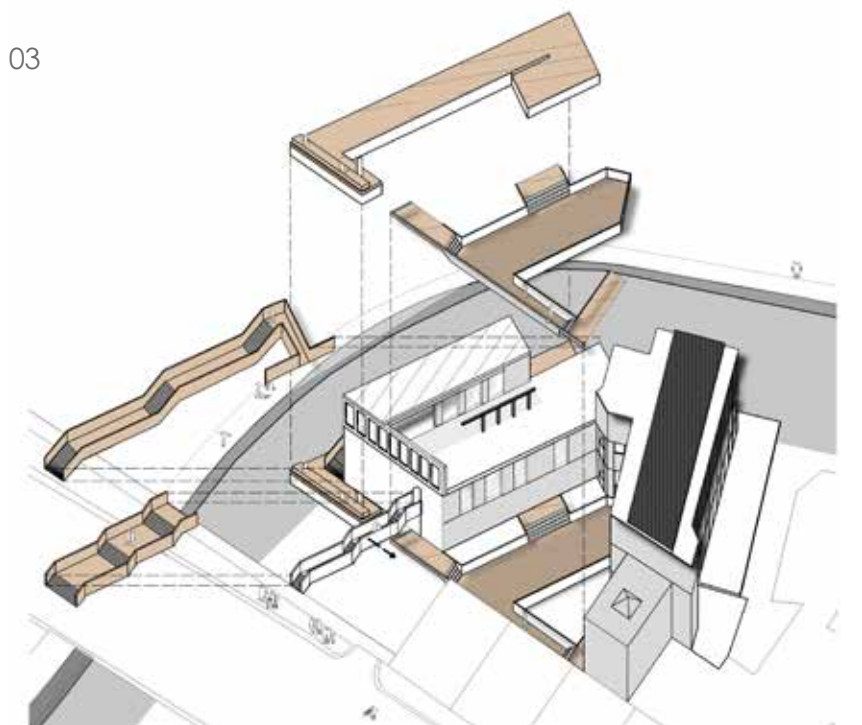
Cut the walls & create the wharf

02



Flood outside front and create water tanks for water treatment

03



Connect by: ramps & terraces



## AXONOMETRIC DRAWING

### salvage community centre

Not in scale

2nd floor

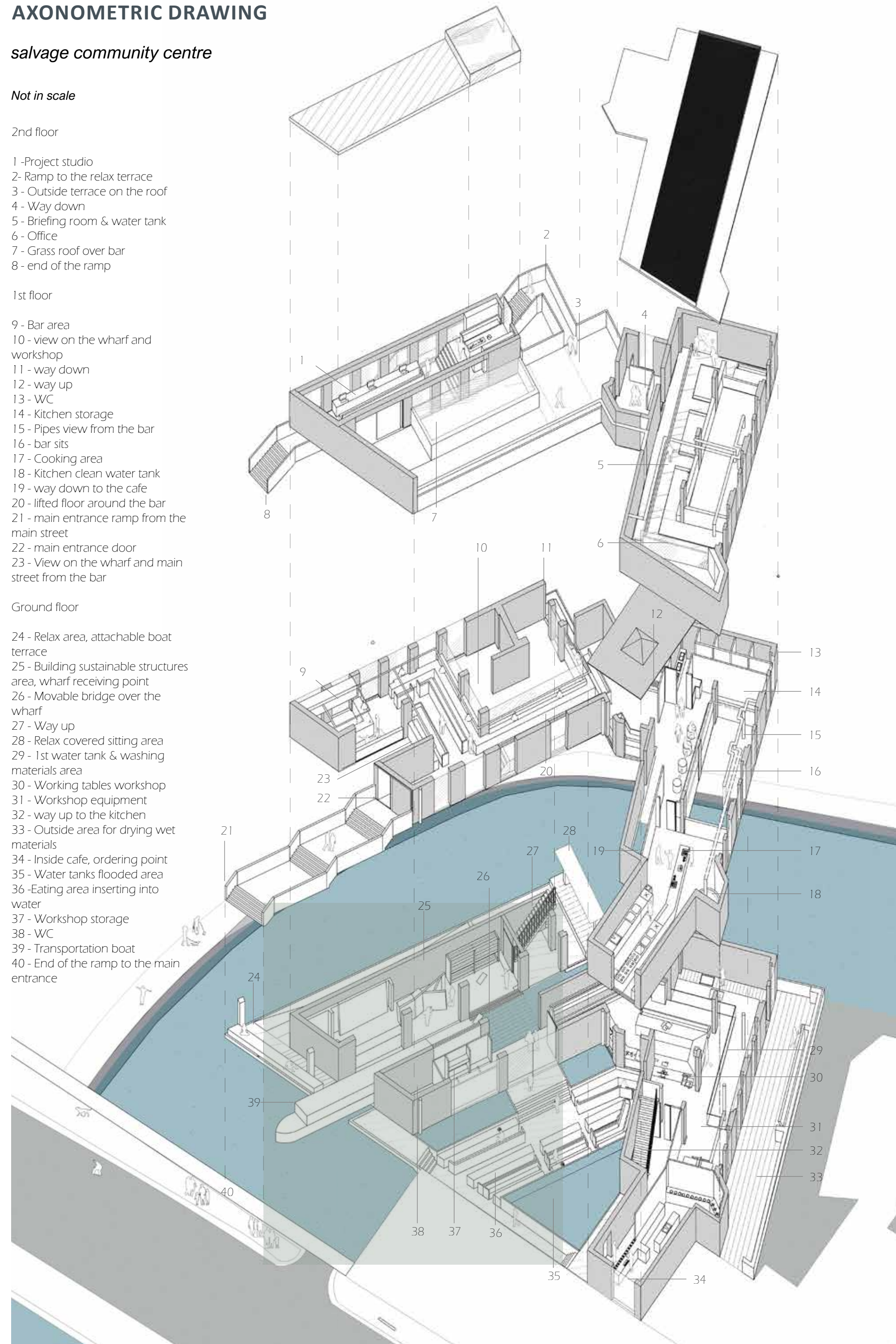
- 1 - Project studio
- 2 - Ramp to the relax terrace
- 3 - Outside terrace on the roof
- 4 - Way down
- 5 - Briefing room & water tank
- 6 - Office
- 7 - Grass roof over bar
- 8 - end of the ramp

1st floor

- 9 - Bar area
- 10 - view on the wharf and workshop
- 11 - way down
- 12 - way up
- 13 - WC
- 14 - Kitchen storage
- 15 - Pipes view from the bar
- 16 - bar sits
- 17 - Cooking area
- 18 - Kitchen clean water tank
- 19 - way down to the cafe
- 20 - lifted floor around the bar
- 21 - main entrance ramp from the main street
- 22 - main entrance door
- 23 - View on the wharf and main street from the bar

Ground floor

- 24 - Relax area, attachable boat terrace
- 25 - Building sustainable structures area, wharf receiving point
- 26 - Movable bridge over the wharf
- 27 - Way up
- 28 - Relax covered sitting area
- 29 - 1st water tank & washing materials area
- 30 - Working tables workshop
- 31 - Workshop equipment
- 32 - way up to the kitchen
- 33 - Outside area for drying wet materials
- 34 - Inside cafe, ordering point
- 35 - Water tanks flooded area
- 36 - Eating area inserting into water
- 37 - Workshop storage
- 38 - WC
- 39 - Transportation boat
- 40 - End of the ramp to the main entrance



## PLUMBING DIAGRAM

### pipes and water treatment

A sustainable solution of reusing the canal as energy and clean water source. I created the whole system of water treatment to achieve that goal.

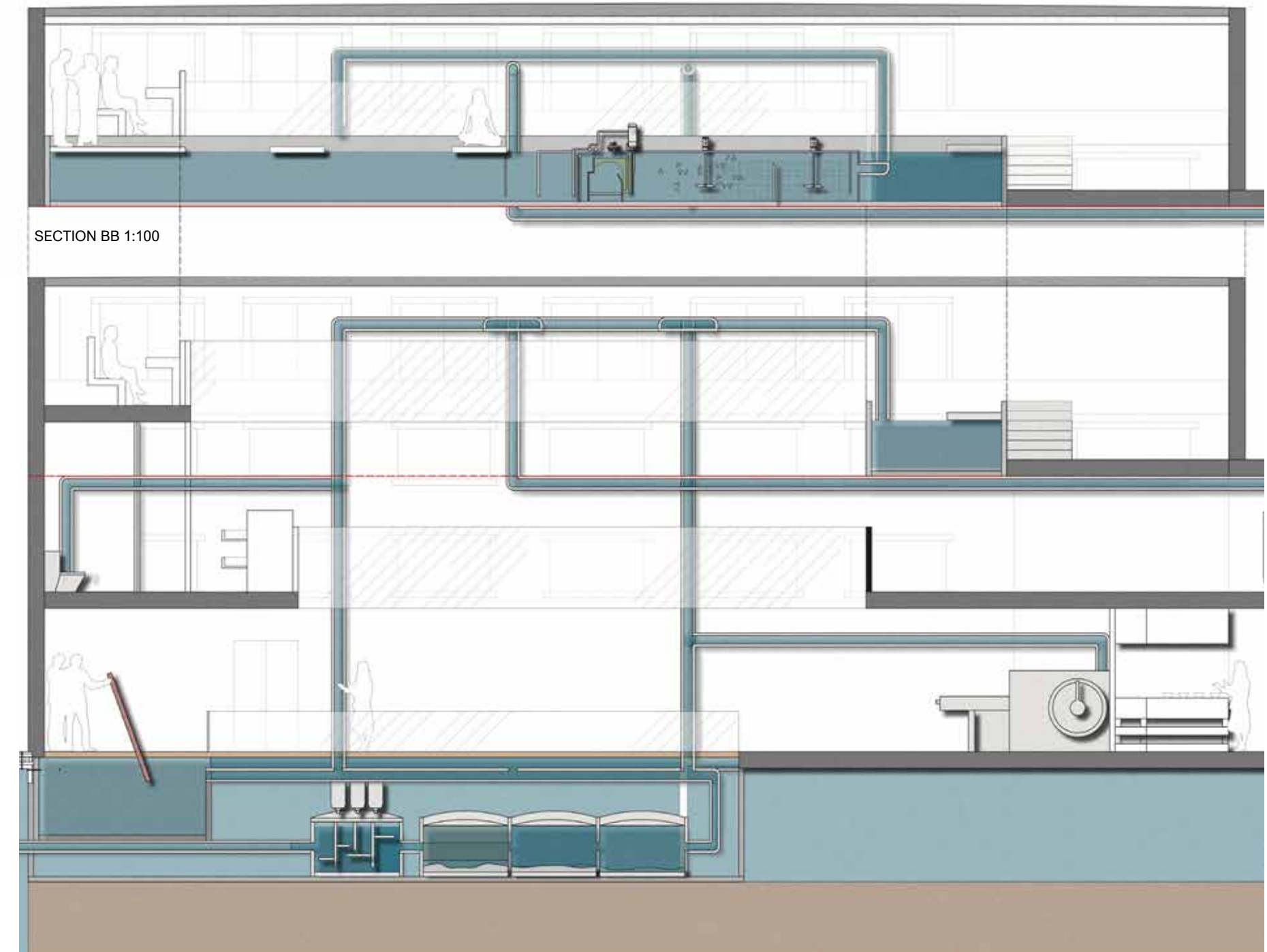
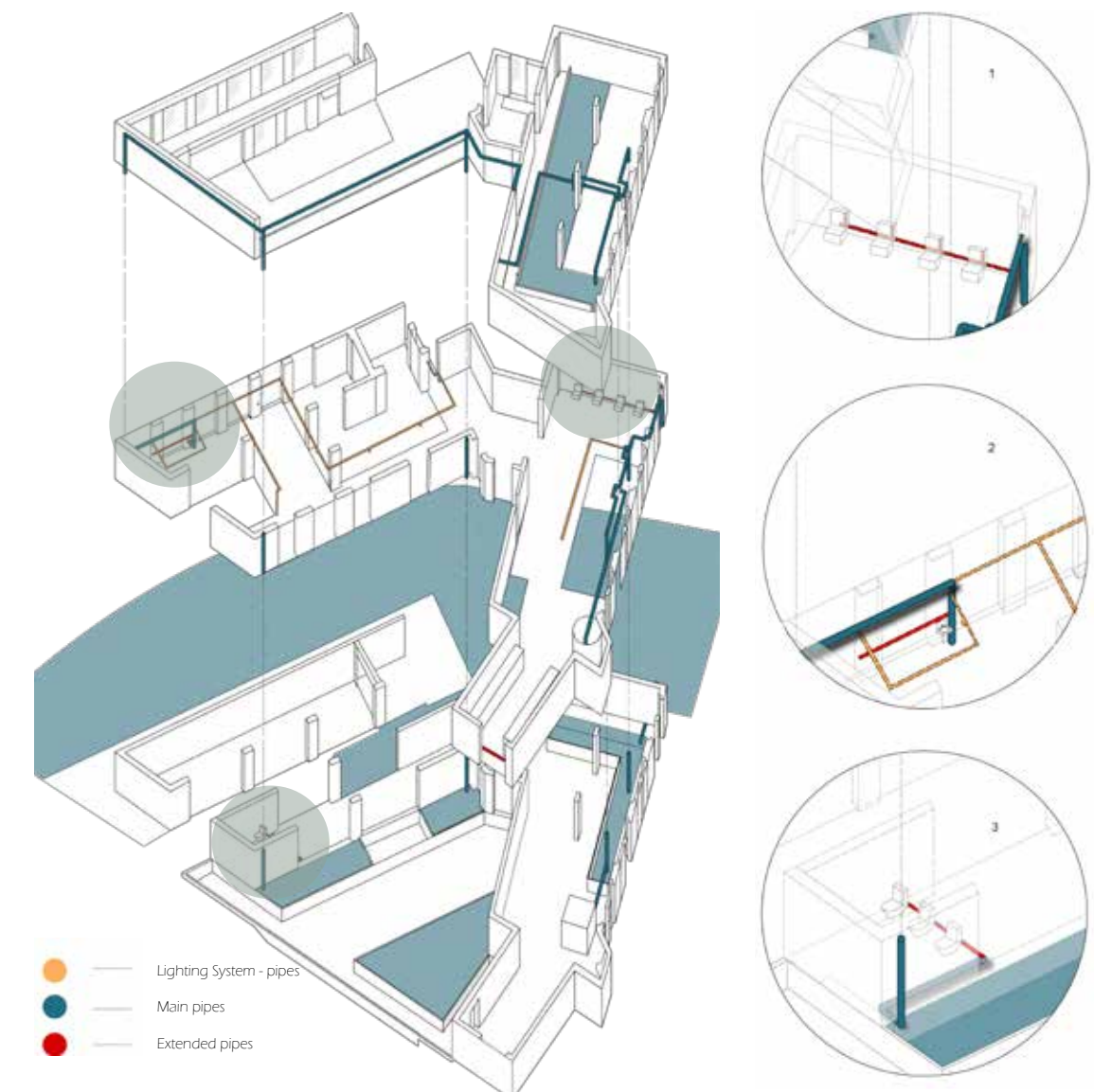
Flocculation bacteria removal system:

Flocculation is a process by which a chemical coagulant added to the water acts to facilitate bonding between particles, creating larger aggregates which are easier to separate. The method is widely used in water treatment plants and can also be applied to sample processing for monitoring applications.

Filtration - dissolved air flotation - disinfection:

Ozone - Ozone water treatment begins with the creation of ozone in an ozone generator. Then, ozone is injected into water, and immediately starts oxidizing and eliminating contaminants, such as bacteria, viruses, and metals. Ozone oxidizes organic material in the membranes of bacteria, viruses, and parasites.

Chlorine - Our compact residential chlorination system needs no electricity. The simple chlorine pump operates on water pressure, and it needs no expensive metering devices because the rate of flow through the water pipe determines the rate of chlorine injection. No over-sized retention tank is required because the system uses an advanced design compact tank that outperforms much larger conventional retention tanks.



SECTION CC 1:100



# STORYBOARD

## inhabitant's interaction with the space

### Public interaction.

1 - The key space to invite volunteers is the Wharf Bar where public can come and interact with the beautiful view on the wharf, enjoy a drink and get to know the practice.

2 - The terrace in an extension above the canal to support the interaction with the water by floating above it. This is an outside relaxation area to get in touch with the nature, feed ducks, lay on the sitting structure, walk down on the level with the water or get to the second floor by the ramp.

3 - Cafe is another extension constructed inside the canal in water tank. The water level lines up with the customer head when sitting. This space used to eat the salvaged food. This space is visible from the main street and inviting new people.

### Construction community / volunteers and leaders' interaction.

4 - When leaders and volunteers are ready to begin the practice would start in the heart of the space "Community wharf". The narrowboat would bring salvaged material from all around regent canal. When materials arrive, they get cleaned, stored and later reused.

5 - When materials received, they need to be sorted and used, so leader and volunteers work on the next pop-up project in the studio on the second floor. It has computers, working space and new glass roof extension for better natural light and atmosphere.

6 - When all done, they move to the workshop and building area where the sustainable pop-up structure being built and then sent back to the boat to be delivered to its new owner.

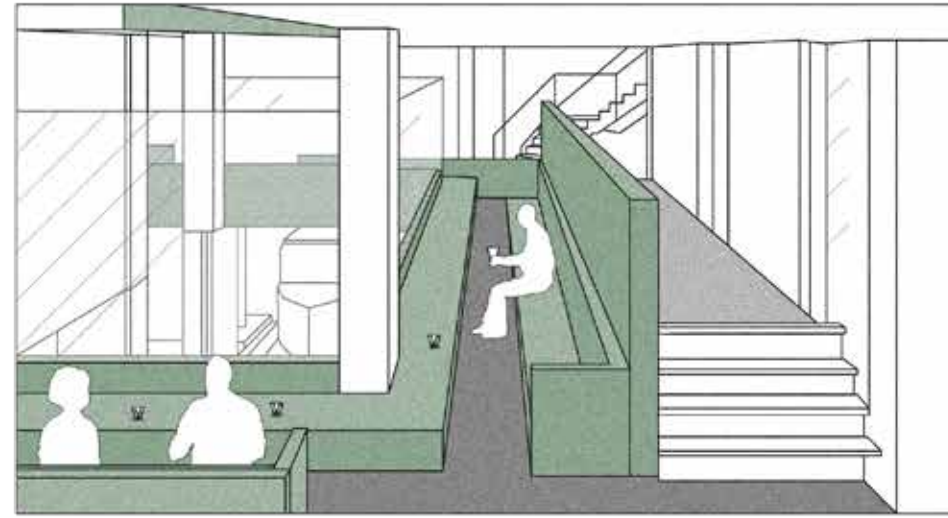
### Food salvaging community / volunteers and leaders' interaction.

7 - The cooking practice would usually start at the briefing area. This space also works for introducing the practice to new volunteers, presentations, etc. In the office next to it is space where people would get officially the space in the practice. The briefing area has few functions: introducing the past and new work to volunteers and it also serves as the main water treatment filter in the building. It is an inserted water tank with all needed filters and systems which makes the canal water useable in the kitchen and through the building. Food salvaging department uses the space to plan the daily menu and teach the theoretical cooking process.

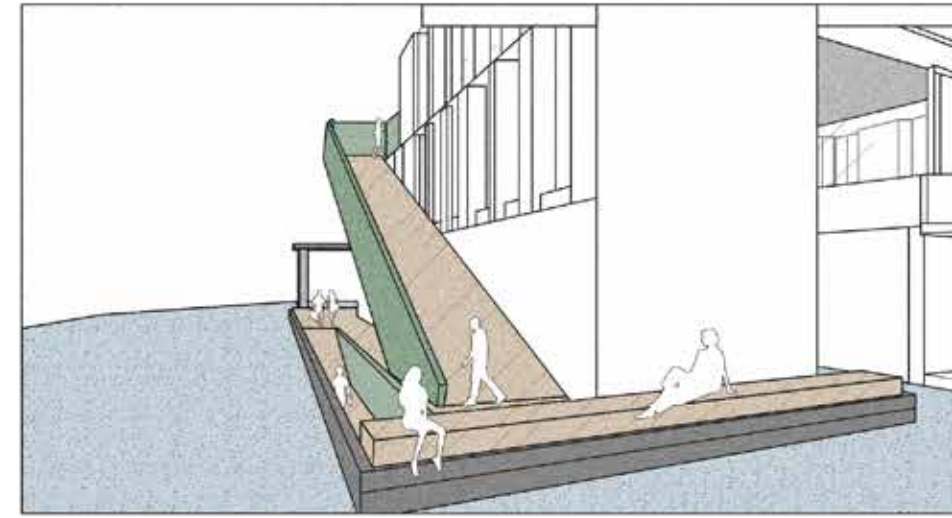
8 - Same as which the material the salvaged food arrives in the wharf on the narrow boat. The wharf has an adaptable bridge between the platforms. When food delivered it goes to the kitchen storage or gets cooked.

9 - In the community kitchen the volunteers learn to cook and adapt to the new arrived products. The chef (Cooking leader) creates the menu and controls the process of food reuse. Later the food goes in few directions. Outside of the building back to the boat. Which takes it to the Camden market in a charity pop-up. And to the outside cafe on the site where people can come and try it. People who can afford it would be offered to donate towards charity. This place is fighting with hunger and poverty around the area by helping its people with free salvaged food.

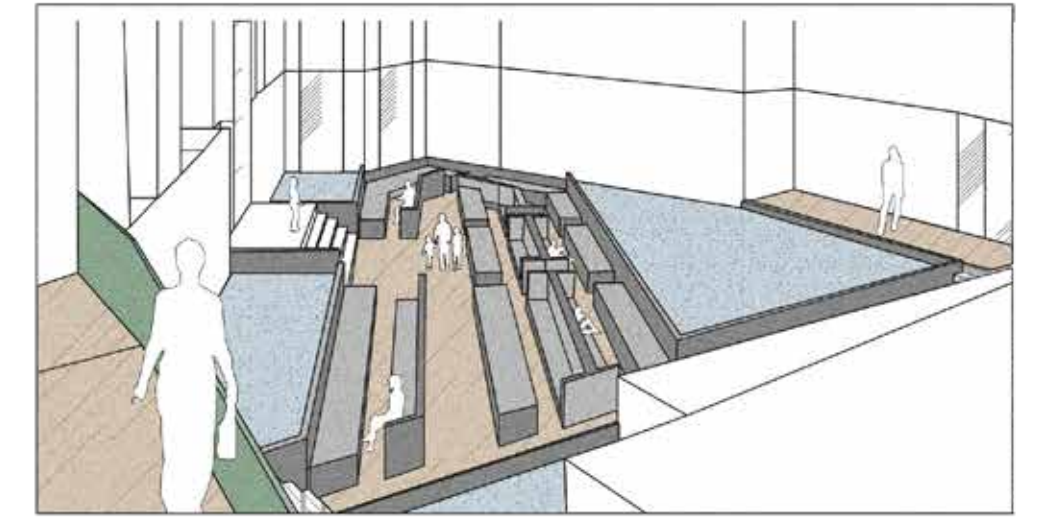
### PUBLIC



1 Bar

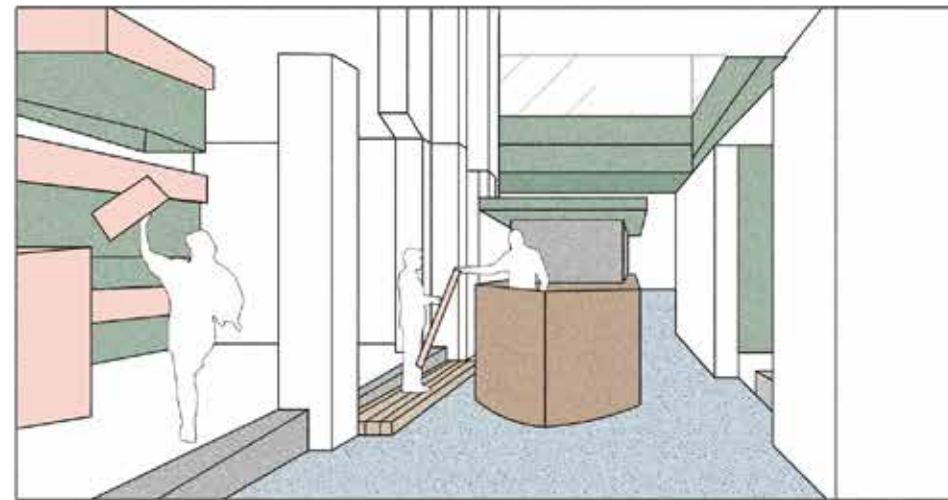


2 Terrace / canal

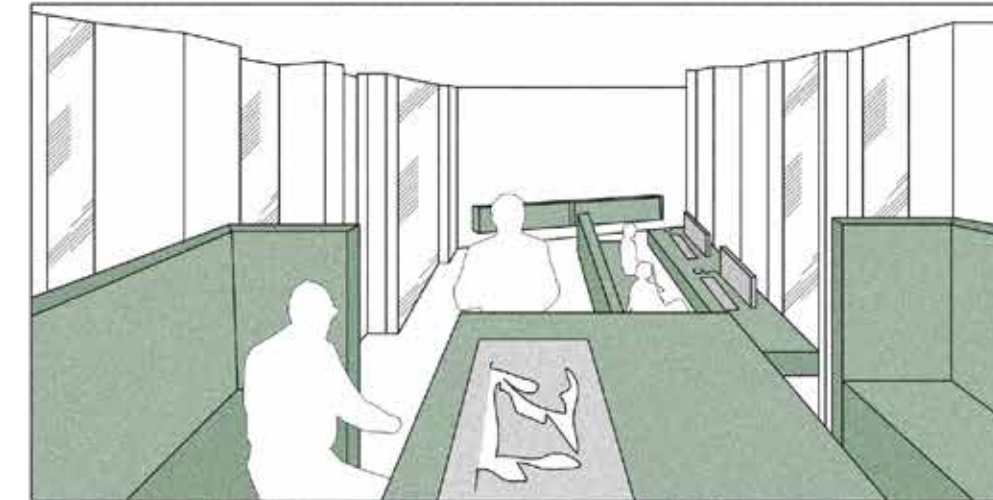


3 Cafe - Eating

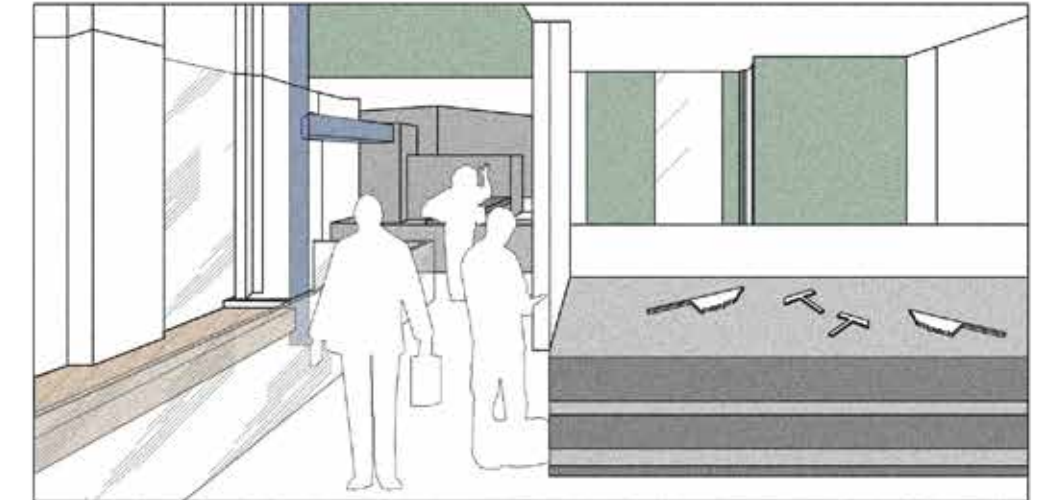
### WORKERS OF CONSTRUCTING DEPARTMENT



4 Wharf - Materials

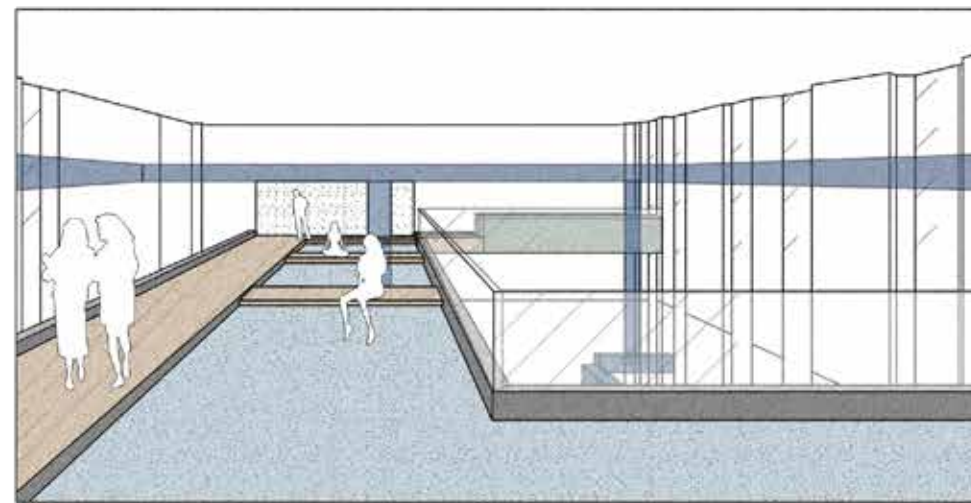


5 Project studio

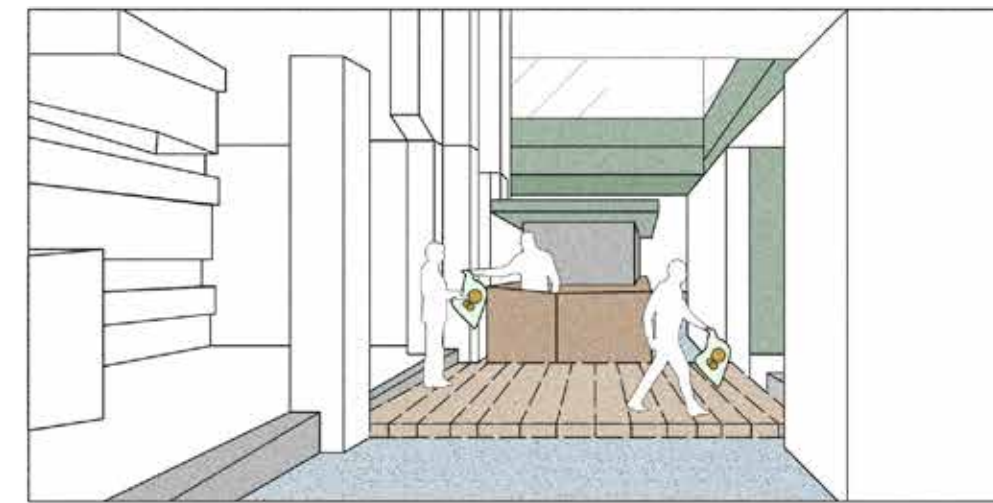


6 Workshop

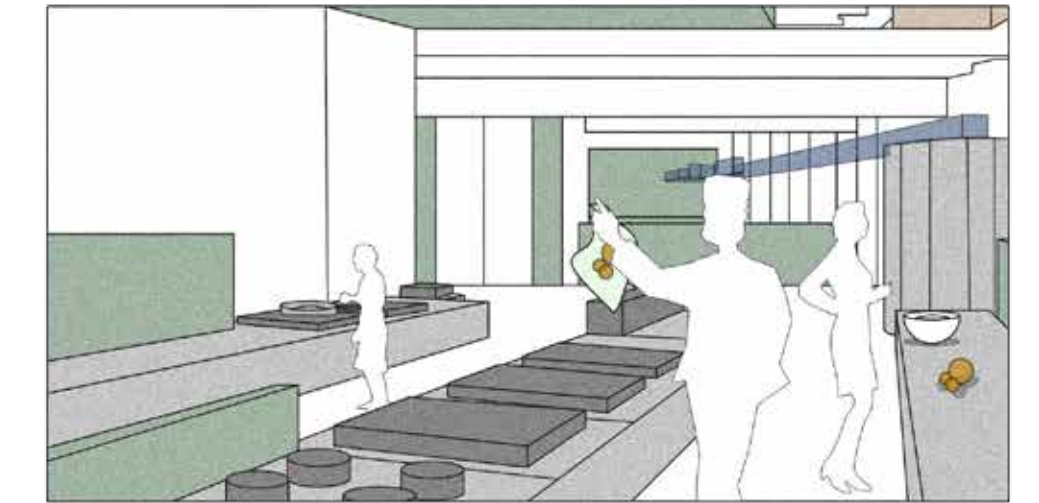
### WORKERS OF FOOD DEPARTMENT



7 Briefing area



8 Wharf - food



9 Cooking space

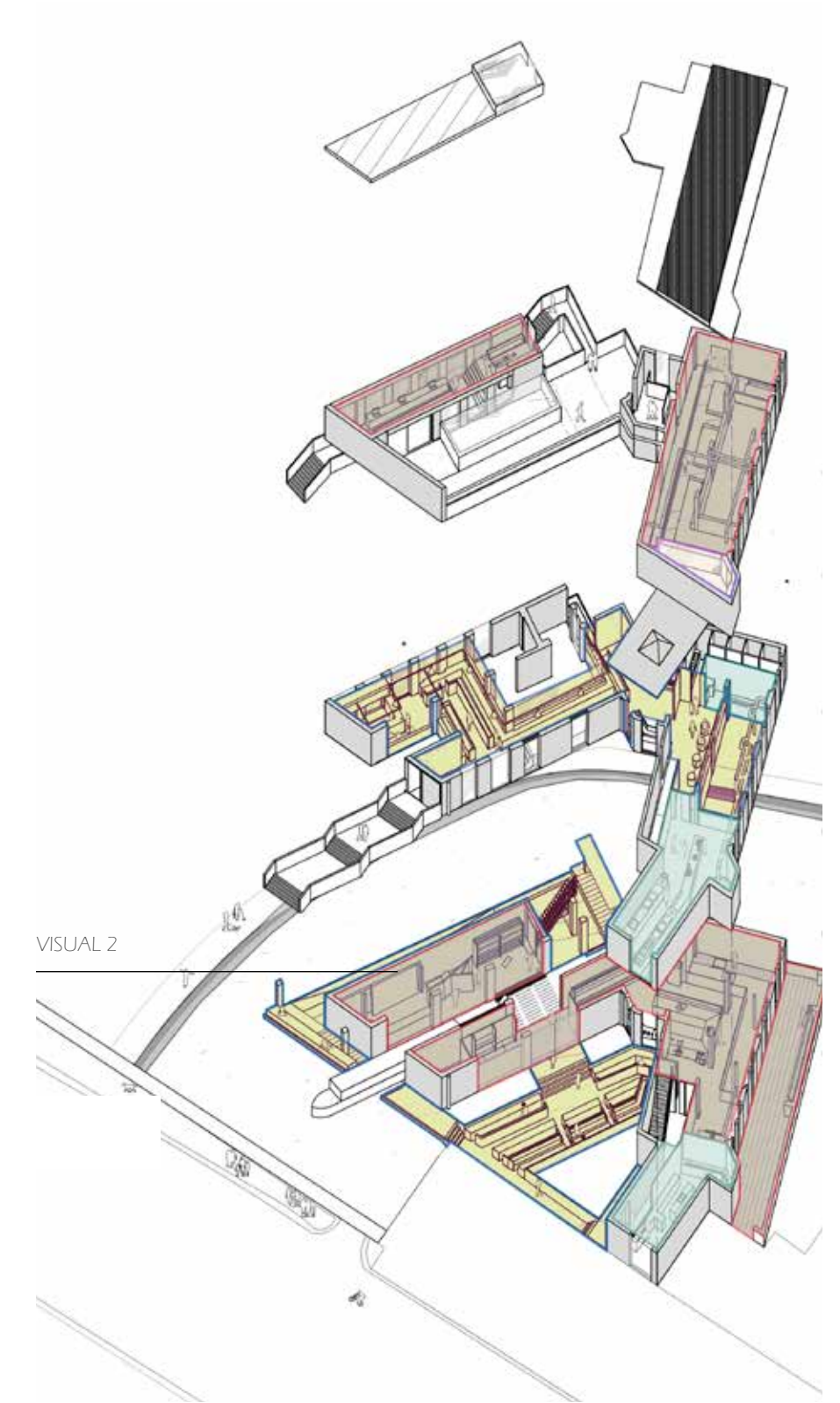


## VIEW ON THE WHARF

key space



VISUAL 2 - WHARF



## WHARF VISUALISATION

salvage community centre

Wharf is the heart of the building. It is the place which receives all salvaged good and has exiting design and being viewed from each part of the building. It was the biggest change in the existing building a big cut all along block A to reinstate the original purpose of the building when it was still an Eagle Wharf. Exciting idea of cutting existing walls by following the structural grid and considering the rotation of the narrow boat. It led into extending the canal in specific areas. It is a cool space as you do not see on a daily base a building with a canal going through it.