

LITTLE PICKLE.

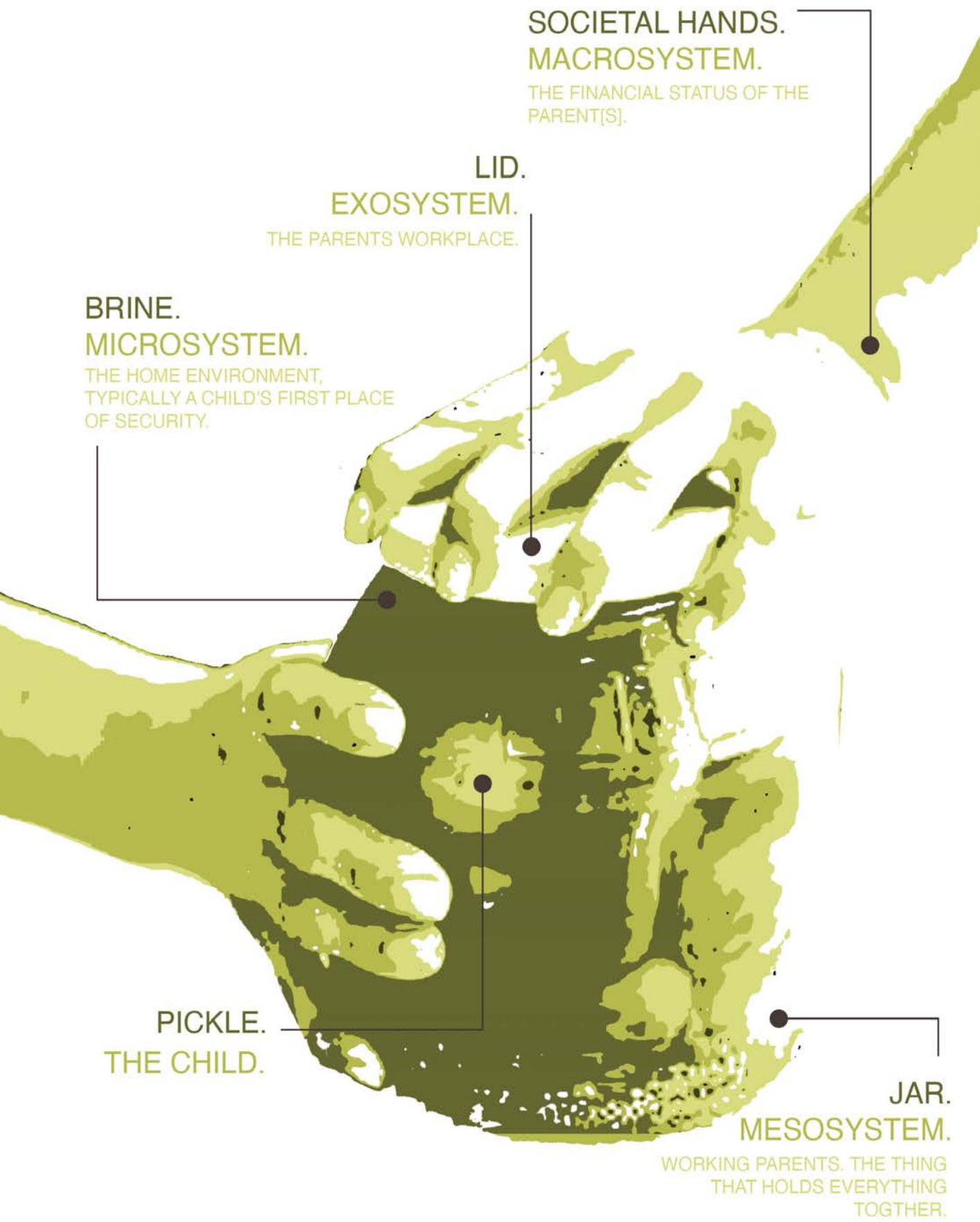
WHAT IF PICKLING OUR FOOD COULD PRESERVE OUR FUTURE?

Little Pickle is a regenerative space that uses food preservation as both a practice and a metaphor for climate resilience. Located in Hulme, the project addresses climate change, energy use, and resource depletion by transforming an existing building into a self-sustaining, circular system. Hydroponic farming, pickling, and shared meals reduce food miles and waste, while solar and bio gas energy power the operations efficiently. The design helps support social issues like food scarcity through local food systems and minimises environmental impact through building reuse and eco-conscious material choices. Educational spaces teach children and families how to live within the Earth's natural limits promoting a lifestyle shift toward sustainability. From growing and preparing food to reflective learning, every layer of the space is designed to nurture connection, resilience, and community wellbeing. Little Pickle empowers people to act locally while thinking globally, preserving not only food but the possibility of a more sustainable future.

INITIAL RESEARCH:

To frame the project's social and environmental impact, a psychological framework known as the Bronfenbrenner ecological systems model has been re imagined into 'The Pickle Jar of Development'. Which encompasses the theories ideologies of preservation, layers of influence, and interconnection. When applied through a sustainable lens, emphasis is placed on how climate conscious choices such as growing, preserving, and educating locally are not isolated acts, but part of a broader system of mutual influence. The jar preserves not just food, but future resilience.

A Visual Analogy of a Child's Interconnected Systems Inspired by Bronfenbrenner's Ecological Model:



AS OF 2023, 74% OF COUPLE FAMILIES WITH DEPENDENT CHILDREN, WERE DUAL - INCOME HOUSEHOLDS.

[Office for National Statistics, 2023]

WHAT DOES THIS MEAN ...

DESPITE THE INCREASE IN DUAL INCOME FAMILIES, THE EVER GROWING COST OF LIVING OFTEN OUTGROWS ANY FINANCIAL GAINS MADE FROM ADDITIONAL SALARIES IN MANY LOW INCOME HOUSEHOLDS.

48% OF CHILDREN IN HULME WERE FOUND TO BE LIVING BELOW THE POVERTY LINE IN 2021.

THESE ECONOMIC STRAINS ARE ESPECIALLY PRONOUNCED IN AREAS SUCH AS HULME.

26% OF THE NORTH WEST WORRIEDABOUT NOT BEING ABLE TO AFFORD FOOD IN 2024.

MEANING THE ANXIETY ASSOCIATED WITH BASIC LIVING COSTS STILL REMAINS A HUGE CONCERN IN 2024.

17% OF CHILDREN IN THE UK WERE SHOWN TO BE LIVING IN FOOD INSECURE HOUSEHOLDS IN 2023.

THIS SHOWS THAT SUCH DEPRIVATION HAS LASTING IMPACTS ON CHILD DEVELOPMENT, WITH A NOTABLE 29% GAP IN GCSE MATHS AND ENGLISH PASS RATES BETWEEN FOOD SECURE AND FOOD INSECURE STUDENTS.

... WE ARE SIMPLY IN A PICKLE.

THE PROBLEM:

As the cost of living rises and natural resources become strained, food insecurity is growing particularly in Hulme, where nearly half of children live below the poverty line and food scarcity now threatens health, education, and the ability to thrive within the planet's natural limits.

EXISTING SITE: 71 CAVENDISH STREET, M15 6BN.

Lauren Bond



LOCAL PRIMARY SCHOOLS:

Both to help reduce one of the Parent's daily stresses and reduce carbon emissions a walking bus is provided. By cutting emissions, encouraging active travel, and reducing reliance on cars, a walking bus supports sustainable urban living. Whilst also foster connections, resilience, and shared responsibility between the children. Providing a sense of independence.

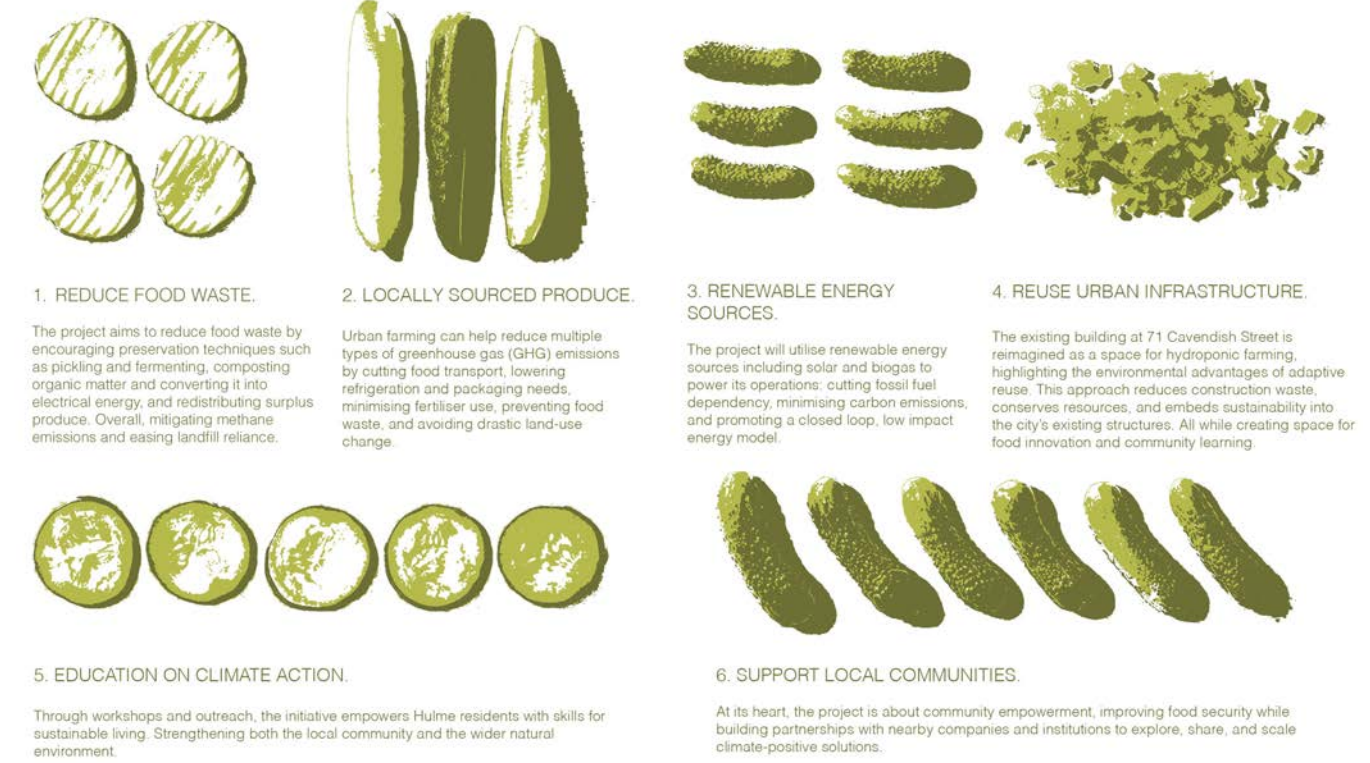
PUBLIC TRANSPORT LINKS:

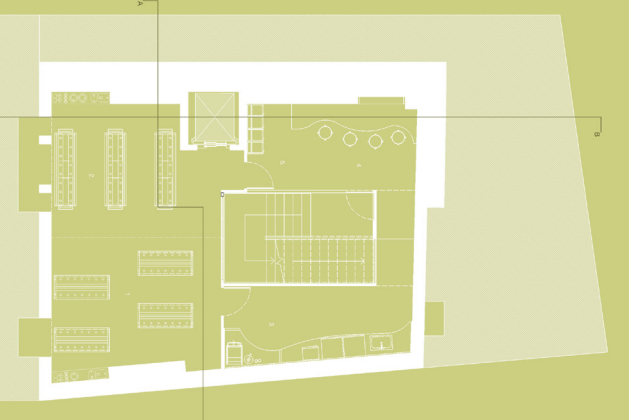
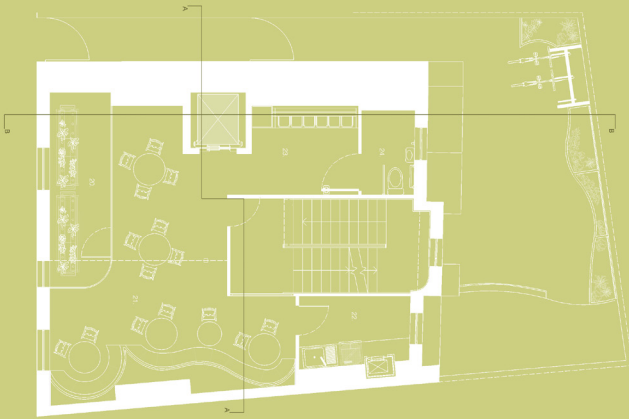
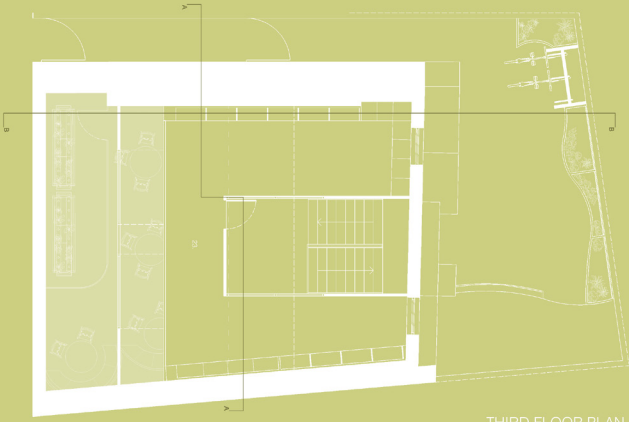
Little Pickle is easily accessible for working parents commuting from the city. Just minutes from key bus, tram, and cycle routes. Public transport reduces carbon emissions, air pollution, and congestion while helping parents integrate sustainable choices into their daily routines without any major disruption to their lives.

PROXIMITY TO MANCHESTER METROPOLITAN UNIVERSITY:

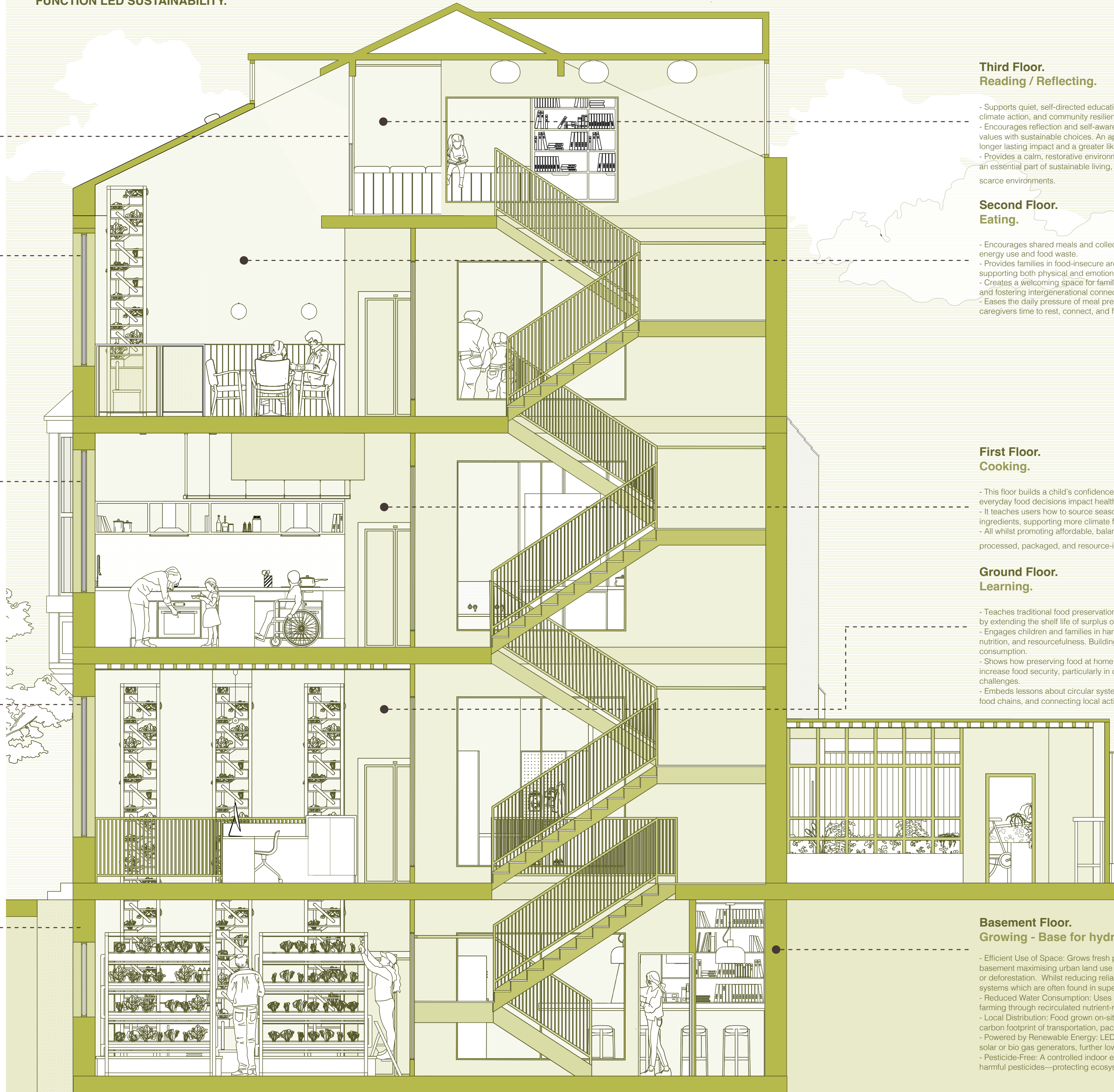
Located in close proximity to Manchester Metropolitan University, Little Pickle benefits from a strategic partnership with the university's MSc in Food Science and Innovation. This postgraduate program focuses on advancing food science, sustainable practices, and innovative approaches to food production. Allowing students to tackle global challenges within the food industry. The collaboration creates a unique opportunity to bridge academic research with community based action, making the site an ideal space for real-world experimentation, knowledge exchange, and impactful urban food innovation.

PROJECT AIMS:





Floor Plans: Basement - Third.



Section.

Third Floor.
Reading / Reflecting.

- Supports quiet, self-directed education on sustainability, food systems, climate action, and community resilience.
- Encourages reflection and self-awareness, helping users align personal values with sustainable choices. An approach shown to foster deeper, longer lasting impact and a greater likelihood of behavioural change.
- Provides a calm, restorative environment that supports emotional health an essential part of sustainable living, especially in high stress or resource scarce environments.

Second Floor.
Eating.

- Encourages shared meals and collective food preparation, which reduces energy use and food waste.
- Provides families in food-insecure areas with access to healthy meals supporting both physical and emotional well-being.
- Creates a welcoming space for families to share meals, reducing isolation and fostering intergenerational connection.
- Eases the daily pressure of meal preparation and food insecurity, giving caregivers time to rest, connect, and focus on quality time.

First Floor.
Cooking.

- This floor builds a child's confidence in the kitchen and awareness of how everyday food decisions impact health, budgets, and the planet.
- It teaches users how to source seasonal, local, and low-impact ingredients, supporting more climate friendly food systems.
- All whilst promoting affordable, balanced meals and reducing reliance on processed, packaged, and resource-intensive foods.

Ground Floor.
Learning.

- Teaches traditional food preservation techniques that reduce food waste by extending the shelf life of surplus or seasonal produce.
- Engages children and families in hands-on learning about sustainability, nutrition, and resourcefulness. Building lifelong habits around conscious consumption.
- Shows how preserving food at home can reduce grocery bills and increase food security, particularly in communities facing economic challenges.
- Embeds lessons about circular systems, reducing reliance on industrial food chains, and connecting local action to global environmental goals.

Basement Floor.
Growing - Base for hydroponic systems.

- Efficient Use of Space: Grows fresh produce vertically in an unused basement maximising urban land use without requiring additional land or deforestation. Whilst reducing reliance on traditional food production systems which are often found in supermarkets.
- Reduced Water Consumption: Uses up to 90% less water than traditional farming through recirculated nutrient-rich systems.
- Local Distribution: Food grown on-site and used locally, reducing the carbon footprint of transportation, packaging, and storage.
- Powered by Renewable Energy: LED grow lights and pumps powered by solar or bio gas generators, further lowering emissions.
- Pesticide-Free: A controlled indoor environment eliminates the need for harmful pesticides—protecting ecosystems and health.



PROTAGONIST PROFILES.

THE PARENT.

Before:
A working parent juggling multiple responsibilities, with a partner on shifting schedules. Life is a constant negotiation between childcare, work, and daily logistics leaving them frequently overwhelmed and unsure where to seek support.

Experience at Little Pickle:
Upon entering the space, the parent is greeted at the reception where they receive a rare moment of calm. The display of their child's pickling project offers both reassurance and pride. They feel an immediate sense of mental ease, knowing their child has been learning and cared for in a meaningful way. Drawn in by the atmosphere, the parent finds themselves engaging with the surrounding information and discovering the value of sustainable food practices. Over a healthy meal, they reconnect with their families. The experience nourishes both their body and their minds.

Life After:
The positive experience transforms how the parent views sustainability. No longer as something abstract and unfamiliar to them, but as something achievable in their everyday life. This emotional connection inspires them to share the experience within their local community, contributing to a shift in mindset and behaviour. What begins as a personal goal becomes a repeated action, growing into a local movement and aligning with broader global objectives.

THE PICKLE.

Before:
A local primary school student who often struggles to engage with traditional classroom learning. They require additional support to keep up with their peers, and can sometimes feel left behind or disconnected from formal education.

Experience at Little Pickle:
Through hands on, sensory rich experiences such as planting, pickling, and cooking the child learns. This practical approach builds confidence and unlocks a new way of understanding the world. They take pride in what they've grown and prepared, and this pride deepens as they share the meal with their family. For the first time, learning feels achievable and impactful to their lives.

Life After:
Sustainability becomes second nature, not a lesson to be learnt later, but the foundation of how they see and engage with the world. With no need to undo harmful habits, they grow up with values surrounding climate protection, resourcefulness, and energy alternatives. In this way, the child becomes part of a generation that doesn't just adapt to change but encourages a positive future generation.

THE PUPIL.

Before:
A Master's student in Food Science and Innovation at Manchester Metropolitan University, passionate about sustainable food systems and eager to apply their academic knowledge in a real world context. Little Pickle offers the opportunity to translate research into practice, connecting innovation directly with people, and demonstrating how sustainable solutions can impact their everyday.

Experience at Little Pickle:
Through their involvement, they support children in discovering where their food comes from while encouraging creative thinking about the future of food and sustainability. The role also enhances their own academic and professional development, offering access to hands on technology and a live educational setting.

Life After:
Armed with real world insight and experience, they begin exploring innovative methods of growing food sustainably in urban environments but with a deeper understanding of its implications. Their work bridges research and community practice, contributing to scalable solutions that impact both local initiatives and global food systems.

DESIGN CONCEPT:

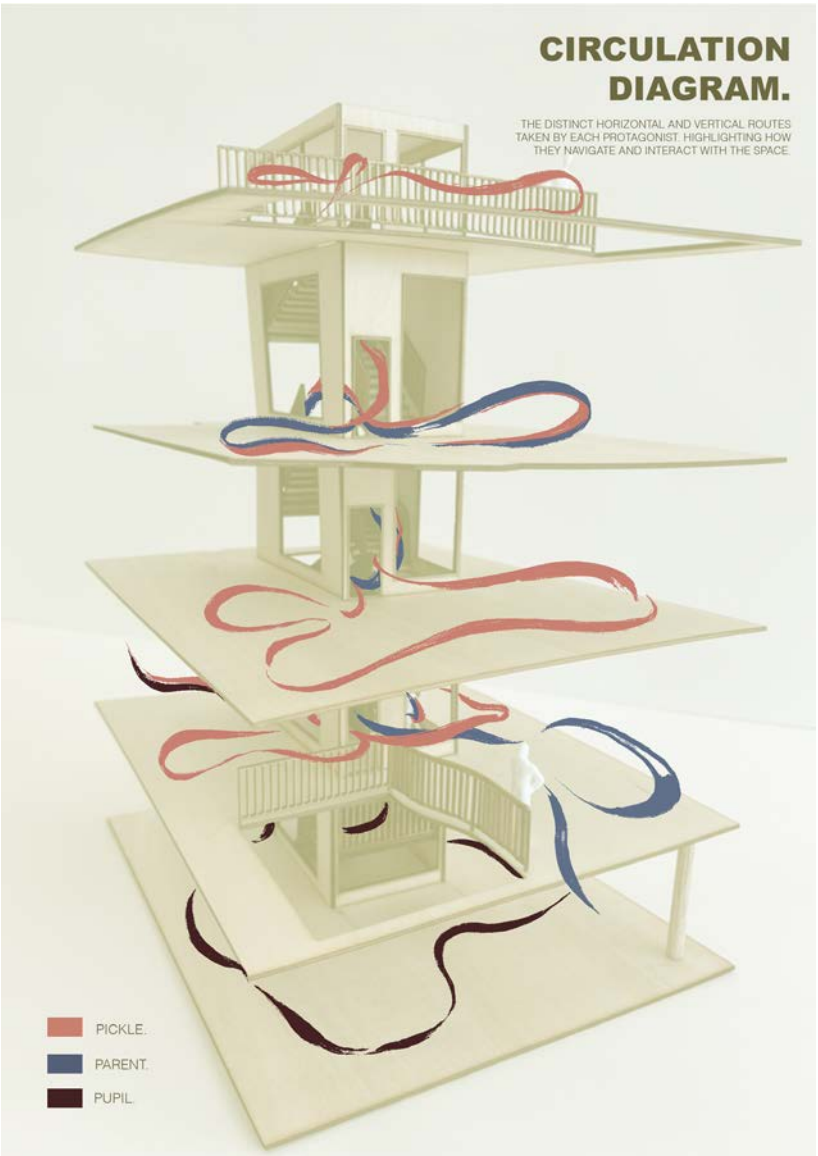
Fractal geometries are used throughout the space as a unifying design language, drawing connections between the patterns found in nature, the human body, and the urban landscape. These repeating, self-similar forms reflect the Earth's natural limits. Demonstrating how scalable systems can reduce design waste, adapt over time, and operate with efficiency.

By mimicking nature's fractal system, the design showcases how we can achieve more with less; optimising existing resources such as food waste and solar energy. Just as ecosystems have evolved to minimise input and maximise output, this approach emphasises streamlined pathways toward sustainable outcomes. It highlights how local, efficient interventions can contribute meaningfully to global environmental goals.

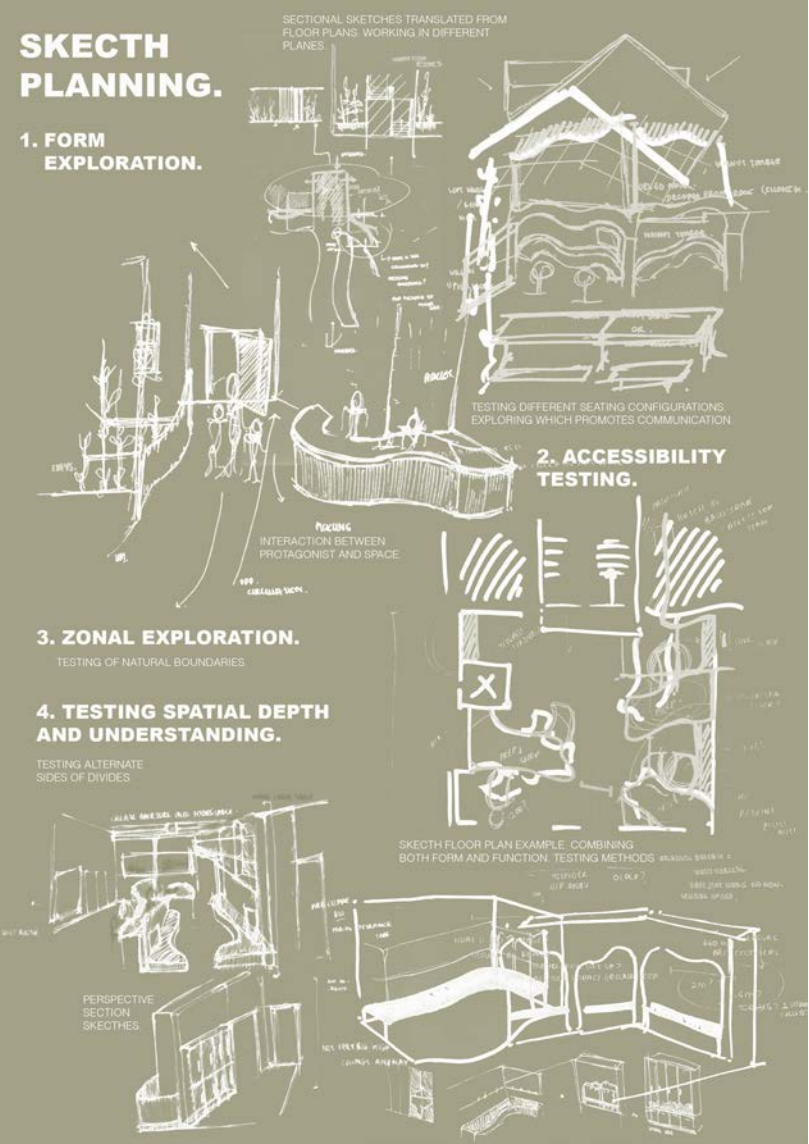
THE CITY.

THE NATURAL WORLD.

The staircase represents the key connection between spaces. The flow of the space works through the process they follow. The staircase tangibly represents this connection. The staircase represents the growth in which the children go through when using the space. The repeating system creates steady progression and stability reflecting what already happens in nature and what is needing to be adopted in society.

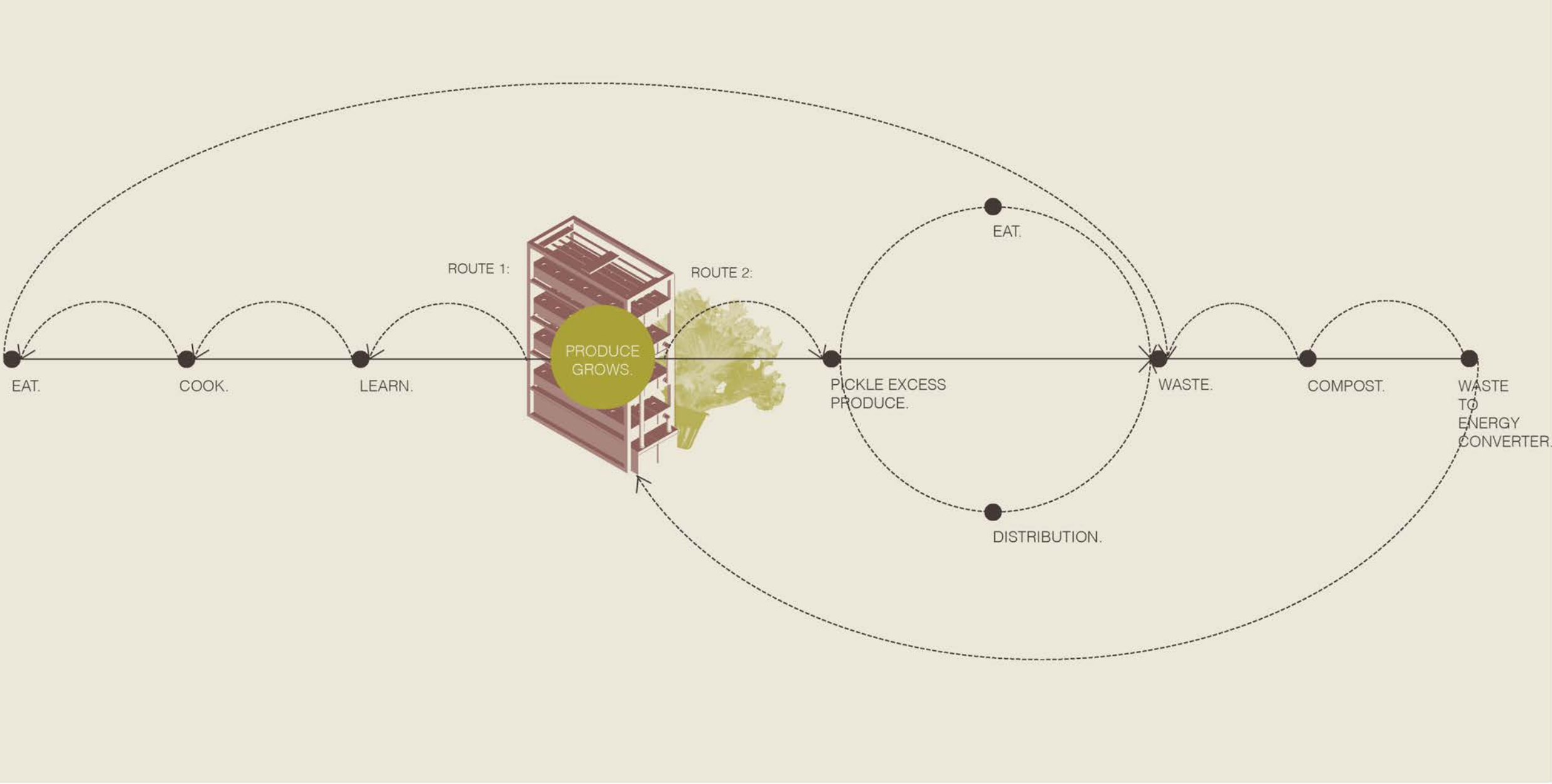


Examples of Fractal Forms Being Used in the Design.



DESIGN CONCEPT BEING APPLIED TO THE BUILDINGS OPERATIONS:

This diagram illustrates how the project responds to the rising cost of living, increased pressures on working parents, and escalating levels of food scarcity all of which directly affect child development. The design introduces a closed-loop, regenerative system that sustains itself through food growing, pickling, and the sharing of knowledge. This circular model reduces operating costs by utilising renewable technologies: a bio gas generator powered by food waste and solar panels to offset energy demand. These systems are essential, as hydroponics, while efficient in saving water, space and transportation can consume up to four times more energy than traditional farming if not powered by renewable energy sources . By producing food on-site, the project significantly shortens food miles, bringing fresh, local produce into the urban environment. In addition, it functions as an educational space, equipping the local community with skills and understanding around sustainable food systems. Through this integrated model, the building not only supports the families engaged with Little Pickle but also contributes to the wider Hulme community sharing surplus produce, sustainable practices, and a vision for a more resilient, community led future.



A Diagram Representing the Circular Process Little Pickle Uses.

HEALTHY AND SUSTAINABLE MATERIALS BOARD.

Lauren Bond

This material palette has been carefully selected to prioritise both environmental responsibility and social wellbeing. It features low-impact, recycled, and locally sourced materials that not only reduce the project’s ecological footprint but also create healthy, inclusive spaces for the community.

1. SUSTAINABILITY.

Prioritising a strong focus on circular principles. This includes specifying materials that follow Cradle to Cradle frameworks, are 100% recyclable, and are designed to minimise environmental impact throughout their life cycle. Embracing these processes ensures that materials can be reused, re-purposed, or returned safely to the environment, reducing waste and promoting long-term resource efficiency. This approach is not only ethically and environmentally responsible but also aligns with growing industry standards and expectations. Little Pickle incorporates materials from companies such as Kvadrat, Smile Plastics, and Baux, all of which are leaders in sustainable innovation producing high-performance surfaces and finishes from recycled or fully recyclable content.

3. LOCALLY SOURCED.

The use of locally sourced materials forms an important part of the material strategy, helping to reduce the environmental impact associated with transportation and supply chains. By selecting materials that are produced closer to the site, the project lowers its carbon footprint while supporting regional economies and crafts. This project includes timber supplied by Fallen & Felled, a London-based company re-purposing urban trees, and Camira Fabrics, a UK-based textile manufacturer. These choices align with the project’s broader sustainability goals while reinforcing a sense of place and home.

5. USER EXPERIENCE.

The material strategy considers how the users sense engage with the space. Tactile variation is introduced through surfaces that invite touch, such as the natural grain of hardwood, the softness of upholstered textiles, and the smoothness of polished metal. These contrasts enhance the user’s sensory awareness and foster a deeper connection to the environment. Acoustically, materials are selected to manage sound and support the intended atmosphere of each area. Softer surfaces such as textiles and acoustic panels help reduce reverberation, working along side the colours of each space the acoustics further enhance the users emotions. This careful attention to material performance ensures that each space not only looks but also feels and sounds appropriate to its purpose.



2. LONGEVITY.

Prioritising materials with long life spans reduces the need for frequent replacement, thereby lowering environmental impact and overall maintenance costs. This approach supports both sustainability and practicality, ensuring that the built environment remains functional and visually coherent in the future. Materials such as hardwood and stainless steel are key to this project, chosen for their inherent strength, resistance to wear, and ability to retain their character with age rather than degrading with use.

4. COLOUR STRATEGY.

Colour plays a central role in reinforcing the design intent, with each colour and tone carefully selected to support the function and emotional response of specific areas within the building. The material palette includes a combination of bold, muted, and rich hues, each contributing to a distinct spatial identity. A bright, energising pickle green is used in the main communal areas to stimulate activity and create a lively, engaging environment. In contrast, a soft, muted blue defines quieter zones, chosen for its calming and relaxing qualities to support rest and reflection. Deep burgundy tones are applied in thinking and communication spaces, providing a sense of focus, depth, and warmth. Together, these colours create a layered sensory experience that subtly guides user behaviour and enhances spatial navigation.

6. SUITABILITY.

Guided by performance and practicality, each surface meets the specific functional demands of its environment. In areas such as the kitchen and basement, anti-slip finishes have been prioritised to enhance safety, while heat-resistant surfaces are used in high-temperature zones to ensure durability under daily use. Stainless steel is incorporated in areas requiring high standards of hygiene due to its non-porous, easy to clean nature. Additionally, materials with low reflectivity have been selected to minimise glare and visual strain, particularly in well lit areas. This layer of consideration ensures that the aesthetic qualities of the material palette are matched by their long term performance and appropriateness to use.

"You cannot simply put something new into a place. You have to absorb what you see around you, what exists on the land, and then use that knowledge..."

THE SOLUTION.

Lauren Bond

From its spatial layout and user flow to its operations, material choices, and regenerative systems, Little Pickle has been intentionally designed to minimise environmental impact, support community wellbeing, and promote long term sustainability. Little Pickle has the ability to provide for the community of Hulme, adapt with the future, and support a more resilient, inclusive, and climate-conscious urban environment.



HYDROPONIC SYSTEMS - BASEMENT.



PICKLE STATION.



COOKING DEMONSTRATION AREA.



WHEELCHAIR ACCESSIBLE COUNTERS.



LEARNING TO COOK AT ALL AGES.



MINIMAL KITCHEN STORAGE - DUE TO THE FRESH CIRCULAR SYSTEM.



COMMUNAL EATING SPACE.