

**MANCHESTER SCHOOL  
OF ARCHITECTURE**

# DEEP ROOTS



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**MSA  
LIVE 23**

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## Partners

We would like to express our gratitude to our collaborators for providing us with the opportunity to work on an exceptional community project, the Burnside Centre.

The Burnside Centre, situated in Langley, has been serving the local community for more than 53 years. The centre provides a range of services to support the community, including crisis support, preventative support, progressive support, and early years child-care, with the goal of reducing poverty and enhancing the quality of life for individuals in the local area. The centre supports people from diverse backgrounds, such as young parents, those experiencing long-term unemployment, and individuals facing physical and mental health challenges, among other vulnerabilities, to create a positive impact. This proposal aims to incorporate the centre's values and beliefs, creating a space that can be enjoyed by the entire community.

## Agenda

### Deep Roots

This project focuses on the design of a socially and cultivation oriented space for the Burnside Centre, emphasising both biodiversity and community participation. The site's narrow footprint, located adjacent to the Burnside Centre building, presents challenges that have been addressed through the implementation of vertical design strategies, allowing for optimal space utilisation. The acquisition of funding for the project signifies the potential realisation of our designs and their subsequent positive impact on the Middleton community.

To commence this project, a series of workshops were conducted in the first week to engage the students in various activities, including Urban Acupuncture, Diagramming, Collaging, Precedent Studies, and a Big Draw Design Workshop. These aimed to generate ideas that could be presented at a stakeholder meeting held on May 12th, 2023, at the Burnside Centre, where feedback was solicited to help inform the final design of the space.

In the following week, the workshop outputs and feedback from the stakeholder meeting were synthesised to create a final design for the site. This week involved the creation of final drawings for the proposal using computational modelling software, which culminated in the development of visuals demonstrating how the intervention would revitalise the space and reflect the collaborative nature of the project, involving both the community and biodiversity.



# Context

# Design Process



The proposed site is situated at the Burnside Centre in Langley, Middleton. The site itself comprises a narrow piece of land located to the south of the Burnside Centre. Presently, this area remains unused, but the client envisions its transformation into a vibrant space dedicated to cultivating fruits, vegetables, and herbs. The produce grown here will serve the Burnside Centre's food bank and be accessible for community use. Although the space is relatively small, the site boasts extensive wall surfaces that can be intelligently designed to maximize biodiversity within the area and add as much greenery into the urban residential space.

Burnside Centre have secured funding from Asda's Investing In Places and Spaces grant and the Greater Manchester Environment Fund (GMCA) to make this possible.

Image Top:  
Site plan

Image Bottom-Left:  
Site elevation

Image Bottom-Centre:  
Walkway to site

Image Bottom-Right:  
The site

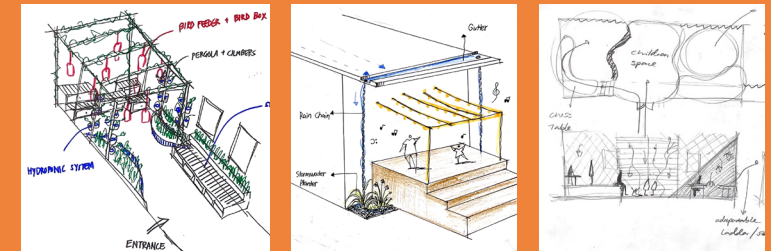
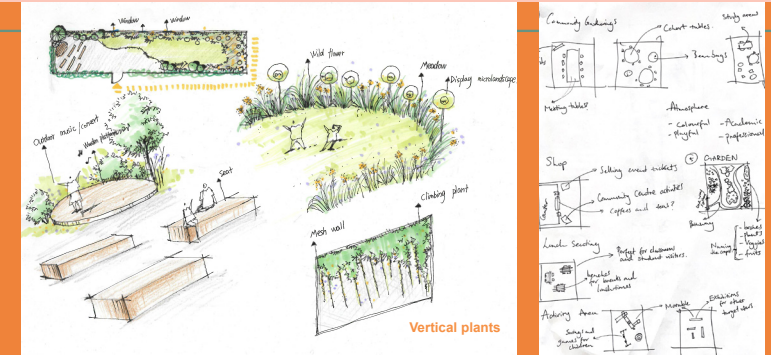


Image Top:  
Design development sketch

Image Bottom-Left:  
Design development sketch

Image Bottom-Centre:  
Design development sketch

Image Bottom-Right:  
Design development sketch

The design process commenced with a comprehensive understanding of the client's brief and the community's specific requirements. Our design approach was guided by the Burnside Centre's community ethos and commitment to sustainability, envisioning a space that fosters engagement with both the community and the natural environment. Sketching played a pivotal role in the early stages of the design, facilitating the exploration of multiple design options and the identification of successful ideas. This iterative process allowed for efficient decision-making, separating viable concepts from less favourable ones.

Additionally, research was conducted on key regulations and ergonomics. This research was instrumental in ensuring the creation of a safe and inclusive environment that caters to the needs of the entire community.

# Urban Acupuncture

## Workshop 01



The initial workshop was centred around the concept of urban acupuncture, which serves as a design strategy for promoting localised urban regeneration. This approach challenges the notion that interventions in public spaces must be large-scale and costly to achieve transformative outcomes. Urban acupuncture offers highly focused and targeted initiatives, and this development process was utilised to regenerate the site while addressing the social and environmental needs of the local community.

During the workshop, it was discovered that Langley has a multiple deprivation index of 1, indicating its classification within the top 10% of deprived areas in the UK. The site is surrounded by new build developments that have gradually encroached upon the available green space. Consequently, the creation of additional green space through this project assumes significant importance for the local community, as it serves to mitigate the diminishing availability of such spaces.

Image Top:  
Output from workshop

Image Bottom-Left:  
Workshop discussion

Image Bottom-Right:  
Workshop discussion

# Precedents

## Workshop 02

A rigorous analysis of precedent studies was conducted to examine how design challenges have been effectively resolved in comparable projects and to draw inspiration for the design of the current proposal. The purpose of the precedent studies was to provide guidance and address the following significant project parameters:

- 1. VERTICAL DESIGN**  
Using the space efficiently both horizontally and vertically
- 2. VEGETATION INTEGRATION**  
Incorporating edible planting throughout the scheme
- 3. BIODIVERSITY DESIGN**  
Creating habitats for multiple species
- 4. SUSTAINABLE DESIGN**  
Prioritising natural materials and renewable energy sources

Image Top:  
Horizontal Activates  
the Street with Wooden  
Intervention in the Azores  
Islands

Image Middle:  
Growmore is a modular  
building kit, Husum &  
Lindholm Architects

Image Middle:  
BIG wraps Lapland  
hotel treehouse in 350  
birdhouses

Image Bottom:  
Solar lighting



1.



2.



3.



4.

# Collage

## Workshop 03

After identifying significant precedents that would serve as sources of inspiration for the design, a series of collages were generated to envisage the space. Collaging, as a design process, enabled the integration of visual elements and facilitated an exploration of their compatibility with the site. By assembling various images, the team was able to visualise and articulate their ideas for the space.

The collages not only served as a creative tool but also proved to be powerful conversation starters during the stakeholder meeting. These visual representations effectively communicated the team's concepts and provoked meaningful discussions with the community. Through the collages, stakeholders were able to provide valuable insights and contribute to the decision-making process, offering perspectives on the feasibility and desirability of various design elements within the space.



Image Top:  
Conceptual collage

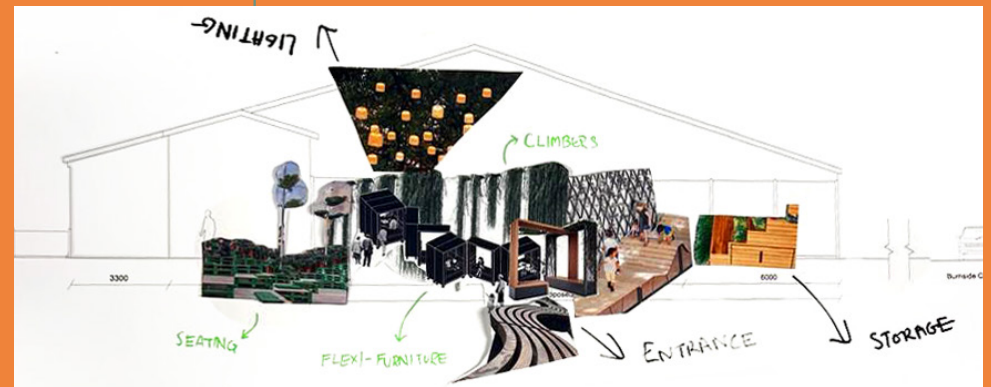
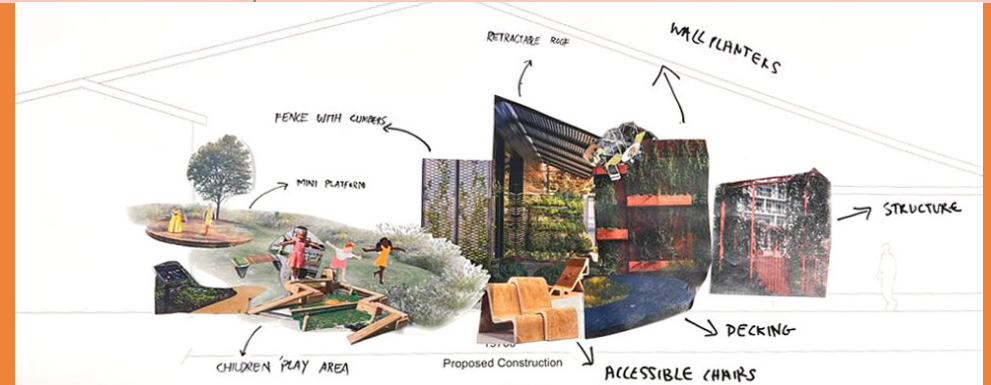
Image Centre:  
Conceptual collage

Image Bottom:  
Conceptual collage



# Big Draw

## Workshop 04



Following the collage workshop, the team collectively synthesized the ideas through the application of the Big Draw workshop. This collaborative session involved the integration of ideas onto the existing elevations, enabling the visualisation of how precedent concepts could be applied to the site. This process facilitated the team's collective visualisation of the spatial composition and materiality, while also serving as a powerful narrative tool for the stakeholder meeting presentation. Collages, in this context, serve multiple purposes, including idea generation, project representation, and as an integral part of the design method and process. The central concept of these collages involved the combination of materials and precedent to create a representation of our concepts. By integrating visual and physical elements, this approach offered an efficient and iterative means to explore a multitude of ideas for the project's site.

Image Top:  
On-site collage 01

Image Bottom:  
On-site collage 02

# Community Workshop

## Workshop 05



A community workshop was conducted at the Burnside Centre, providing a valuable platform to gather insights and perspectives from the future users of the site. The workshop involved a presentation on the benefits of green spaces, the progress of the design and questions directed towards community representatives to elicit their vision for the site. This inclusive approach aimed to engage the community and involve them in the proposal as well as identify the key user groups and the community needs.

### User Groups:



Children



Elderly



Physically impaired



Biodiversity

Image Top-Left: Deep Roots presentation to Burnside Centre stakeholders

Image Top-Right: Community collage and visualisation workshop

Image Bottom-Left: Community collage and visualisation workshop

Image Bottom-Right: Community collage and visualisation workshop

# Community Needs

## Workshop 06



In order to comprehensively assess the needs of the community, the following questions were asked:

### What activities or design elements would you like in the space?

- Flexible space that allows for multitude of activities throughout the day
- Space should follow organic and sustainable practices
- Integration with biodiversity; wormeries, beehives, bat boxes, bird boxes, wild flower sedum, edible planting
- Shelter from the sun and rain
- Water feature that could also act as irrigation
- Composting and area for children to learn about this process

### What is needed to achieve these activities?

- Roof or wall garden
- Hives on roof
- Attachments to roof to act as growing spaces
- Irrigation systems utilising rainwater - have piping feature on facade or water butt for water collection
- Solar powered lights
- Include visual and tactile elements into the design for children to engage with
- Creation of educational mural on extension facade to educate local community on local ecology

### Who should benefit from the space and what issues could the space tackle?

- The whole community should benefit
- Loneliness
- Isolation
- Environmental awareness
- Health and wellbeing
- Education on greening small spaces - project can act as an exemplar of how community can create green spaces themselves
- Detachment from growing seasonal food
- Detachment from cooking food
- Fundraisers to gain investments for the community

### Do you have any worries about the project?

- Tackle climate crisis - would like the project to be as sustainable as possible, using primarily natural and recycled materials
- Have drought tolerant planting to reduce water requirements
- Permeable, non-slip ground surfaces to mitigate flooding and risk of injury
- Inclusive design - have raised beds at different levels, some at low level for children to engage with and others at high level so that elderly/physically impaired members do not have to physically exert themselves

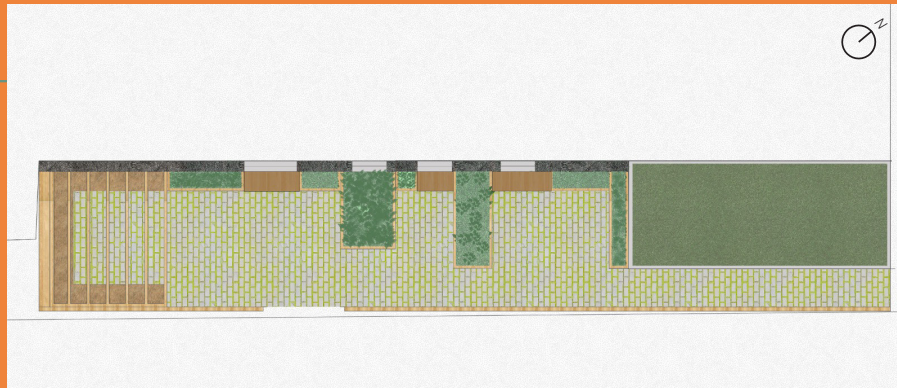
# Proposal

Our final design consists of wooden modular units that can be assembled and detached easily, allowing for various configurations such as benches, shelves, planting beds, compost bins, and homes for birds and other non-human species. The units are interconnected using tenon and mortise joinery, providing adaptability to accommodate future changes.

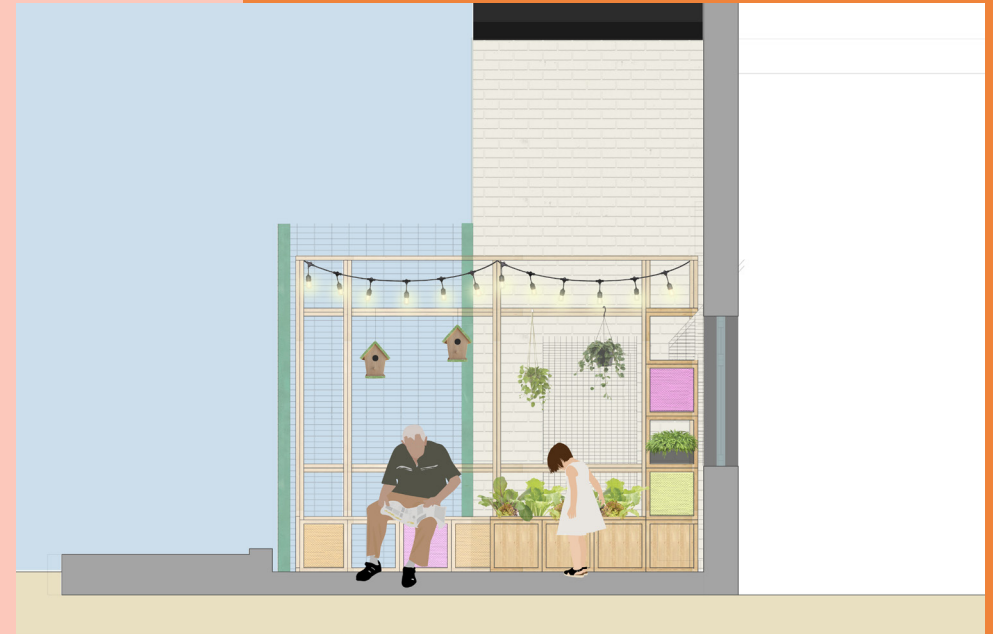
The space is divided into distinct areas, starting with a seating gathering area where trellises adorned with climbing plants offer natural shading. Rain chains are incorporated to guide rainwater into the planting beds. The central planting beds are designed at different heights to facilitate accessibility for individuals of all abilities, including disabled individuals, children, and adults who can actively participate in gardening and cultivation. Additionally, some of the shelves serve as storage for children's toys, providing a playful element within the outdoor space.

Adjacent to the seating and planting areas is the compost bin, dedicated to the decomposition of organic materials into nutrient-rich compost. This compost can subsequently be used to enhance soil fertility and support plant growth. Finally, the narrow section of the space is designated as a habitat for non-human species, such as birds, bats, and worms, contributing to the promotion of biodiversity.

The wooden design, complemented by vibrant paint colours, creates a welcoming and visually appealing environment for both Burnside Centre users and the wider Middleton community.



Proposed site plan



Proposed section



Proposed elevation



Proposed modular structure



Proposed raised bed



Proposed canopy



Proposed modular structure



Proposed habitat space



## ABOUT

Each year the MSA LIVE programme unites Masters Architecture year 1 students with those in BA year 1 and year 2 and Masters Landscape Architecture 1 in mixed-year teams to undertake live projects with external partners to create social impact.

## LIVE PROJECTS

All MSA LIVE projects are live. A live project is where an educational organisation and an external partner develop a brief, timescale, and outcome for their mutual benefit.

## SOCIAL IMPACT

All MSA LIVE projects have social impact. Social impact is the effect an organization's actions have on the well-being of a community. Our agendas are set by our external collaborators.

## EXTERNAL PARTNERS

MSA LIVE projects work with many organisations: charities, community groups, social enterprises, community interest companies, researchers, practitioners and educators.

## STUDENT-LED

Our MSA masters students take the lead in the project conception, brief development, delivery and co-ordination of a small project. Other cohorts joined for an eventful 2 weeks of activities at the end of the academic year.

## KNOWLEDGE TRANSFER

Working in teams within and across year groups and courses; MSA students participate in peer to peer learning. In addition, collaborators, participants and students engage in the transfer of tangible and intellectual property, expertise, learning and skills.

## LARGE SCALE

This year approximately 650 students from 4 cohorts in MSA have worked on 42 projects with partners.

## QUESTIONS

For questions about MSA LIVE please contact the MSA LIVE team:

[msalive@mmu.ac.uk](mailto:msalive@mmu.ac.uk)

## BLOG

[live.msa.ac.uk/2023](http://live.msa.ac.uk/2023)

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