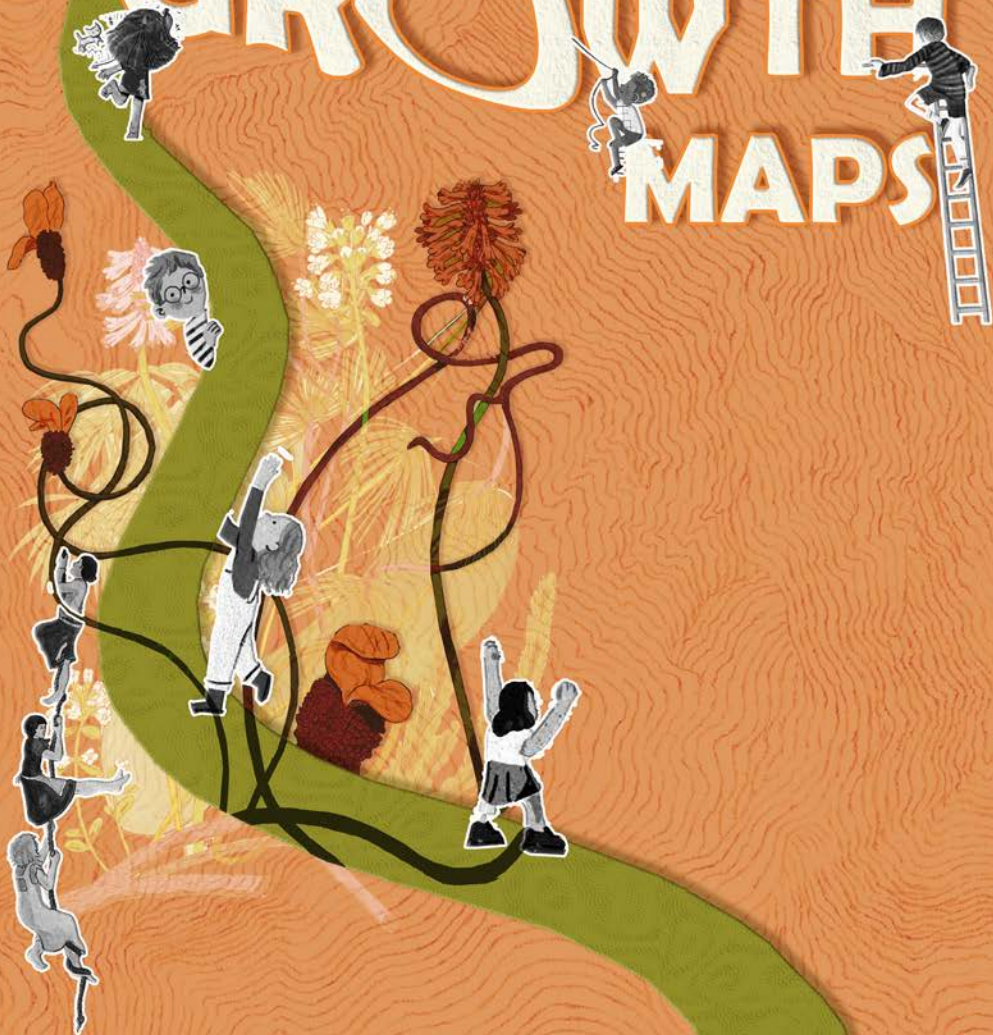


**MANCHESTER SCHOOL  
OF ARCHITECTURE**

# GROWTH MAPS



Visit [msa.ac.uk](http://msa.ac.uk) for more information



**MSA  
LIVE 26**

## Team

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## Collaborators

Our client, Moor Allerton Preparatory School, is an independent co-educational primary school located in South Manchester. Welcoming children from 4 months to eleven years from a variety of backgrounds, the school's identity is strongly rooted in community, diversity and inclusivity.

Our project aims to support the school's nurturing ethos by transforming its outdoor spaces into environments that can support learning and wellbeing beyond the classroom. Currently, the site has less landscape features to make this possible - we aim to change this by increasing biodiversity and creating accessible, hands-on opportunities for environmental and educational play, in order to further reflect the values of the school.

# Introduction

## Growth Maps

Growth Maps is a group project that aims to aid the relationships of biodiversity, community and learning. Our wonderful collaborators at Moor Allerton preparatory school sought to improve certain areas of the exterior of their school grounds to create a more accessible and nature appreciating space. Throughout this project we have aimed to achieve both of these main factors of increasing greenery and accessibility as well as designing an engaging area for the students of the school to utilise.

Through the project we kept in close communication with our collaborators. This helped us fabricate a design that caters to as many of the students and staff needs as possible. We planned out an engagement activity as one of the ways to get a read on the students' wants and needs within their space. The spaces we were allocated to create a design for were limited meaning we had to take great care in making sure our design utilises these spaces to the best of our ability while also avoiding a crowded look and overall feel. Throughout the process of creating our design, we explored, questioned and experimented with many details to craft an idea that transforms the space accounting for the wishes of those who will be making use of the space daily.

One of the aspects we aimed to successfully deliver within the design was providing mobility-friendly features. This was crucial to the regenerated design as our collaborators like to invite the residents of the local care home onto their grounds. The site is a space of community for various age groups and we aimed to provide a space for these relationships to blossom within a space. Providing a relaxing yet simultaneously playful area where the boundaries between human and green life grow soft allowing our design to reach its goals of catering to all visitors.

From mind maps to analytical drawings, within this booklet you can find the collection of our process and outcomes. We hope you enjoy reading and observing our journey as a group throughout this project as much as we enjoyed working on it.

# SITE CONTEXT

Following our amazing meeting with the collaborator and a quick site visit, the team was ready to dig in and further analyze the site. Our research revolves mainly around functionalities, noise, and traffic of the site. With this exercise, the team identified some key characteristics of the site.

- Houses
- Hard paving
- Green space
- ➔ Access
- - - Site boundary



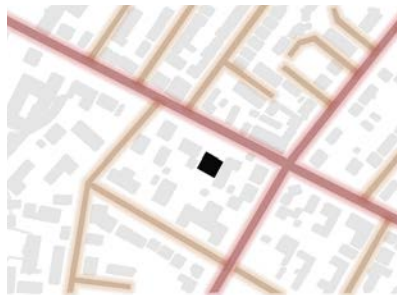
The area is a well-developed and community centered on family life along with children's education. As a result, the area has heightened demands for pedestrian safety, access to nature, and high quality extracurricular spaces. Therefore, when designing, special attention must be given to boundary treatment and sightline control, which can be achieved through a transition zone at the site's edges.



The main noise source is the intersection of two main roads: Barlow Moor Road and Palatine Road. However, noise levels decrease significantly when moving inward toward the site. The maximum record noise level is 64.9dB, roughly equivalent to normal conversation. Furthermore, according to students, traffic peaks occur mainly on weekends, with the exception of pick-up and drop-off periods on school days. This timing further minimizes



The surrounding traffic network provides easy accessibility to the site, making the school more versatile for community use beyond school hours. The active student zone intentionally avoids the most traffic-congested intersection. Along vehicle adjacent boundaries, a transition zone combining plant barriers can be considered, creating a safe, guided buffer that supports a calm emotional shift from noisy streets to quiet inner spaces for the kids.



# SITE VISIT



Football Pitch



Bird House

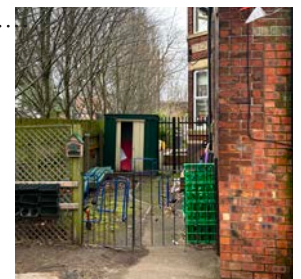


Nursery

Play Area



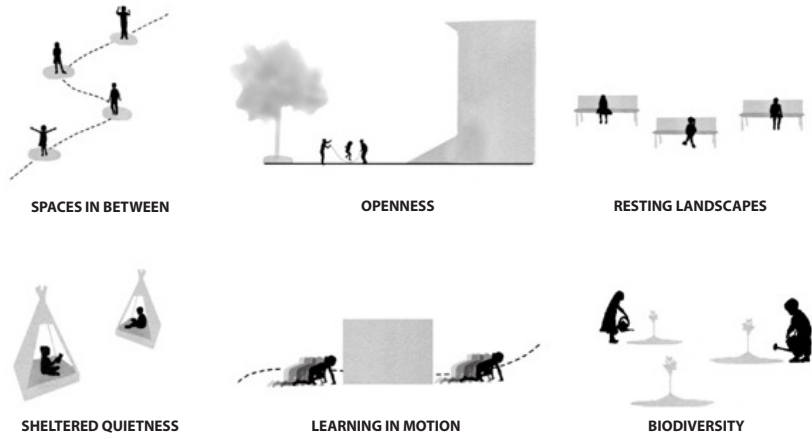
Front Yard



Woodland Area

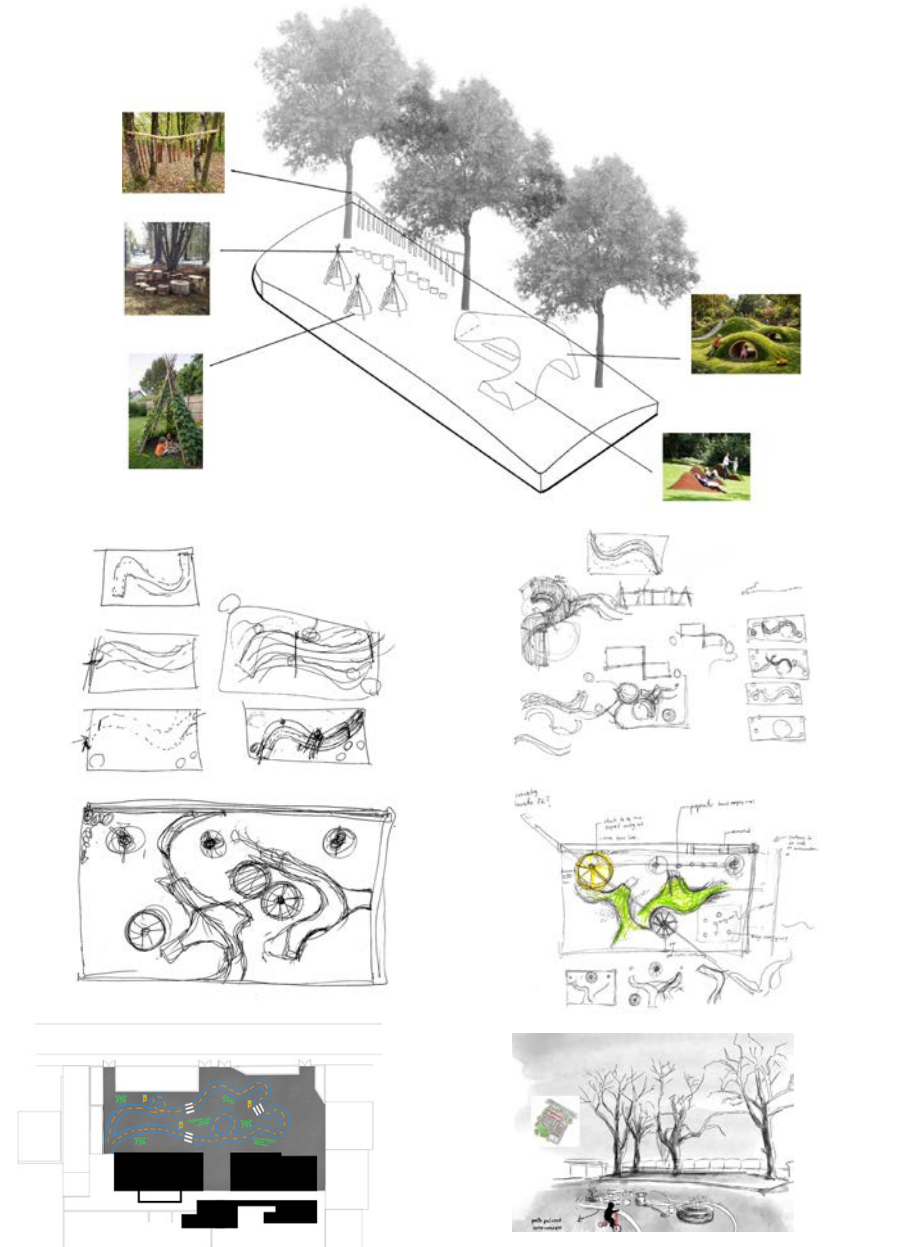


# DEVELOPMENT I



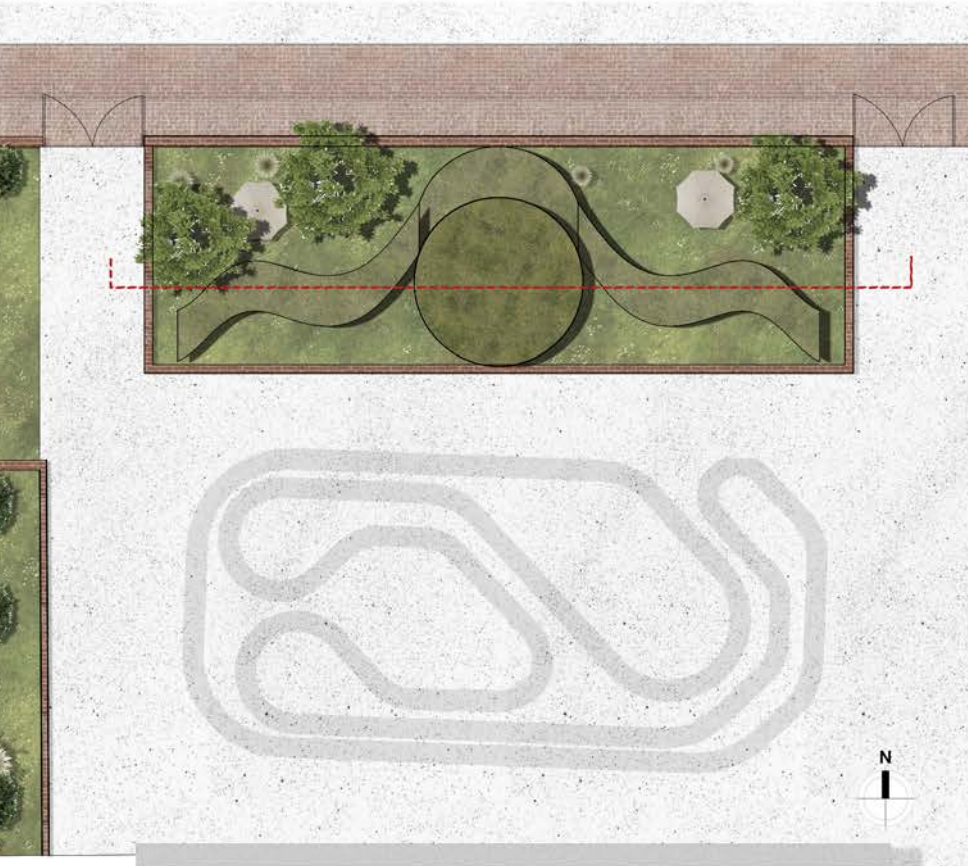
Surrounding the theme of sustainability, we began to communicate various design ideas through collages and sketches, focusing specifically on the front area of grass near the car park. In response to the engagement activity and site visit, ideas for seating, tricycles and reading were brought up in our designs. Since all the proposals allow indoor learning to extend outdoors during breaks and lessons, ideas are synthesised for further development.

# DEVELOPMENT II



Following our initial designs, we started to merge them together in the form of an axonometric drawing and sketch plans to have a clear conceptual idea of our final output.

# PLAN & SECTION



Plan, 1:150 @A3



Section AA, 1:150 @A3

# ELEVATIONS



Front Elevation, 1:150 @A3



Right Elevation, 1:150 @A3

Left Elevation, 1:150 @A3



Back Elevation, 1:150 @A3

# FINAL DESIGN VISUALISATION



I. Grass Hideout



II. Reading Pavilion

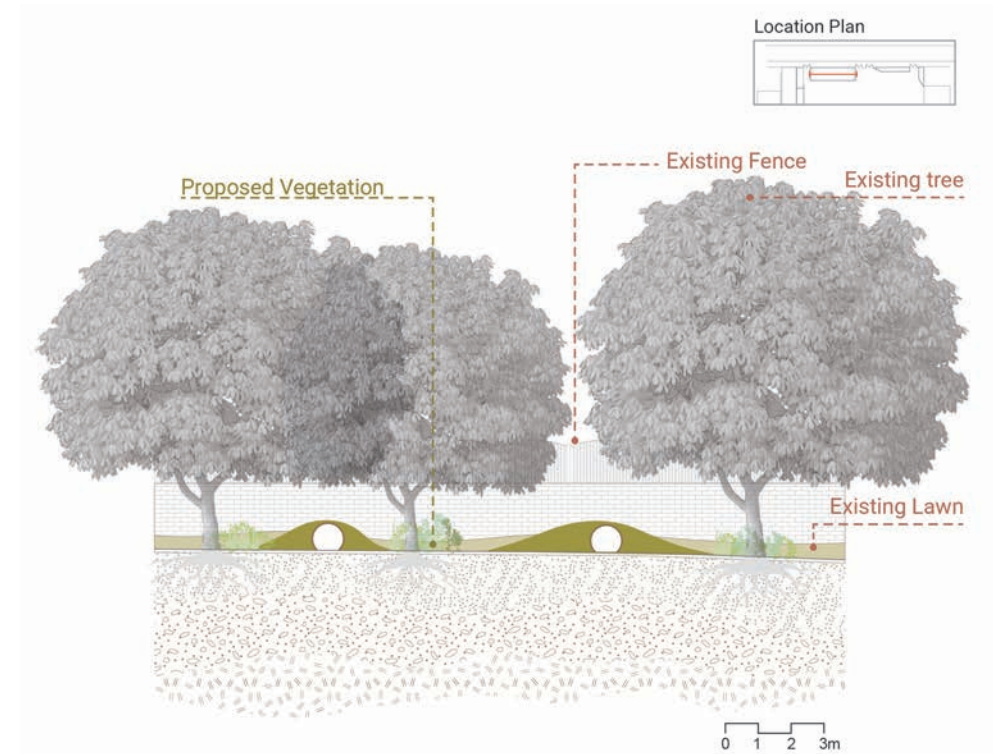


III. Discovery Corner



IV. Reading Hut

# LANDSCAPE



## Existing Tree



*Aesculus hippocastanum*  
European horse-chestnut

Height: >12m Spread: >8m  
Position: Full sun&Partial shade  
Humans/Pets (dogs)- harmful if eaten.

## Proposed Vegetation (Plant selection was informed by the RHS School Sensory Garden)



*Stipa tenuissima*  
Mexican feather grass



*Briza maxima*  
greater quaking grass



*Phlomis fruticosa*  
Jerusalem sage



*Salvia argentea*  
silver sage



# CONSTRUCTION SEQUENCE

**Phase 2**



**Green Roof**

- Vegetation Layer
- Engineered soil (substrate)
- Filter Fleece (to keep soil from clogging the drainage)
- Drainage Board: Often a "egg-crate" shaped plastic layer that holds some water but lets the rest run off.
- Root Barrier & Waterproofin (to protect the structural deck below)



**Timber Slat & Pavilion Structure**

- Structural Posts: Internal timber
- Horizontal Girts: Members that the vertical slats screw into



**Seatings**

**Phase 1**



**Timber Railings**



**External Landscape Build-Up**

- Native topsoil layer
- Grass / planting layer
- Compacted engineered fill
- Drainage gravel layer
- Waterproof membrane around tunnel shell
- Structural concrete tunnel



**Existing Lawn**




Final Output

# REFLECTION



During our project we learned the value of creating an outdoor educational environment and how this contributes to the nurturing of school children. Through engaging with the school children themselves we learned how to optimise our design to enhance the interaction between the children and their surrounding environment. Our design focused on creating interactive opportunities for the children to learn and play outdoors.

## ABOUT

Each year the MSA LIVE programme unites Masters Architecture year 1, Masters of Architecture & Adaptive Resuse students, BA foundation and year 1 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 are for community benefit or 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 students take the lead in the project conception, brief development, delivery and co-ordination of a small project. The projects are celebrated in presentations at the end of the academic year. .

## KNOWLEDGE

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 400 students from 5 cohorts in MSA have worked on 34 projects with partners.

## QUESTIONS

For questions about MSA LIVE please contact the MSA LIVE team, Emily & Julie:

**[e.crompton@mmu.ac.uk](mailto:e.crompton@mmu.ac.uk) and [j.fitzpatrick@mmu.ac.uk](mailto:j.fitzpatrick@mmu.ac.uk)**

## BLOG

**[live.msa.ac.uk/2026](http://live.msa.ac.uk/2026)**

## SOCIAL

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## WEBSITE

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