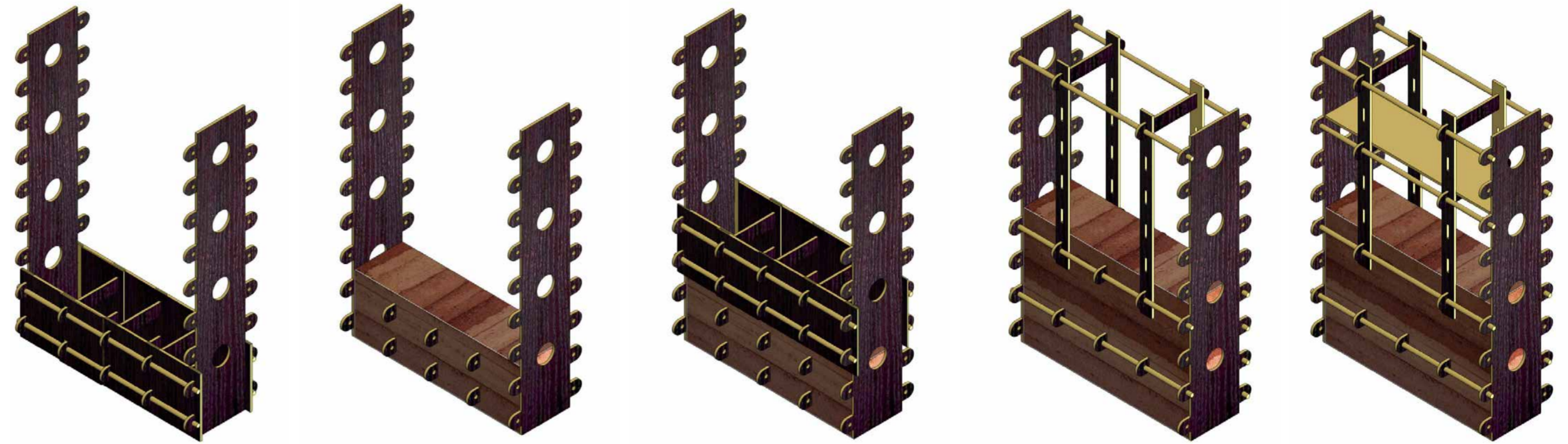


REWILDING

with Rammed Earth and CNC Structures



5-Step Construction Process



1:2 prototype with rammed earth collage

Our rewilding project explores how digital and hands-on making can work together to create a new community centred space. Developed in response to a brief from Community Brain and Citizen Zoo, the project combines

CNC fabrication with rammed earth construction to create a structure inspired by natural habitats - the kingfisher. Rather than designing only for an outcome, we focused on how people experience, learn from, and engage with the space as a community.

This approach extended to the making process itself, with structural panels designed to be reused as seating and other project elements, reducing waste while creating a more adaptable and resourceful design.



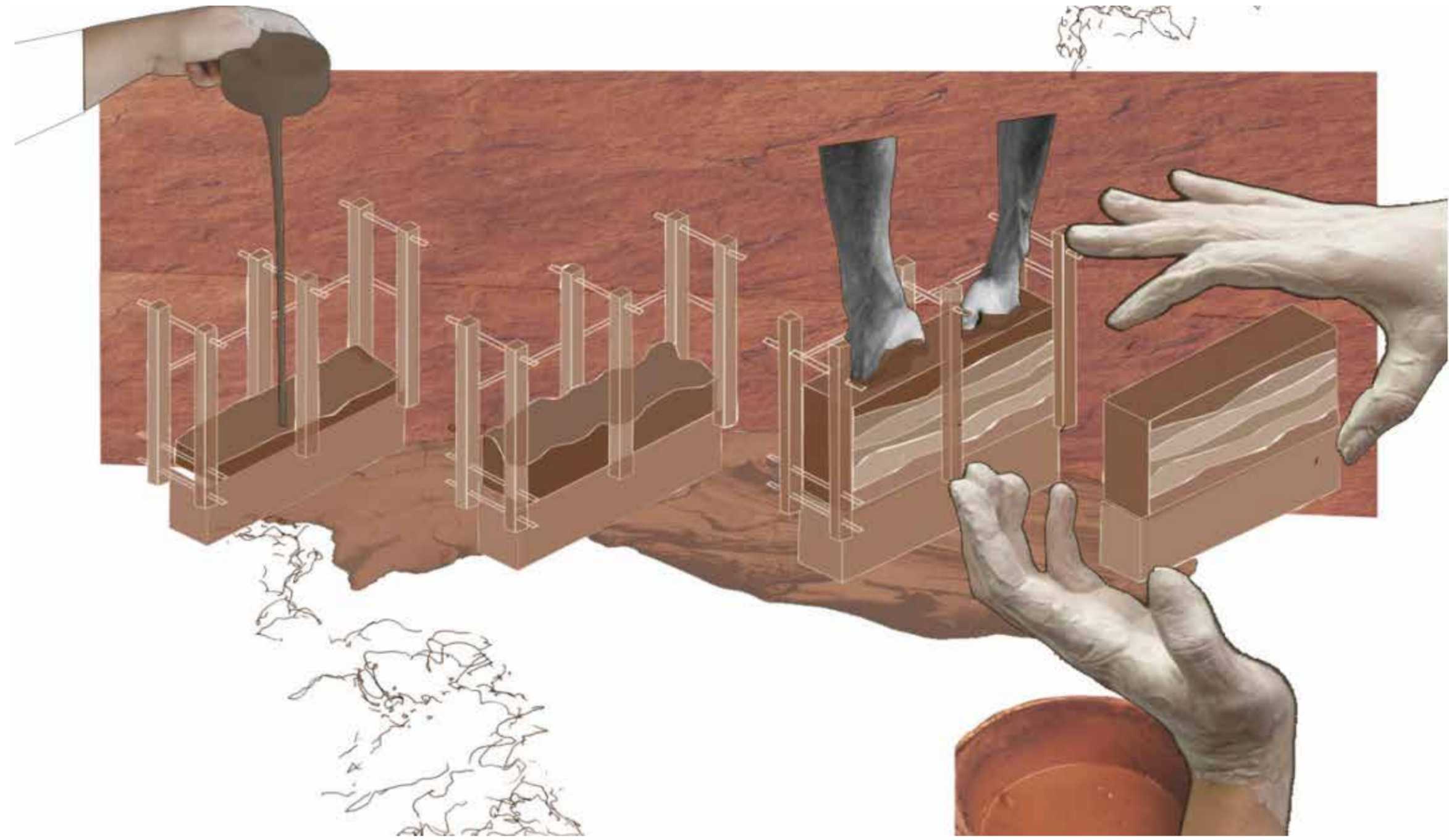
Structure

The structure uses wooden dowels to keep the structure together as they slide in and out easily. Side holes to allow the rammed earth to dry quicker, and various levels for shelves to be embedded into the structure, allowing different heights. 8 panels are needed per level to create rammed earth and can be easily removed and reused for each structure.

Rammed earth process

The rammed earth construction process begins with the assembly of the CNC formwork. The panels create a temporary mould for the earth mixture. Layers of damp earth mixture is placed into the formwork and compacted, this increases density and strength.

The earth is left to dry and cure until it becomes self-supporting. The panels are then be removed without damaging the structure. Due to the design of the formwork, you are able create taller structures out of rammed earth, from the dismantled lower section and reassembled above, allowing the rammed earth to be built efficiently in layers.



1:1 Rammed Earth Sample



Recycling and Reuse



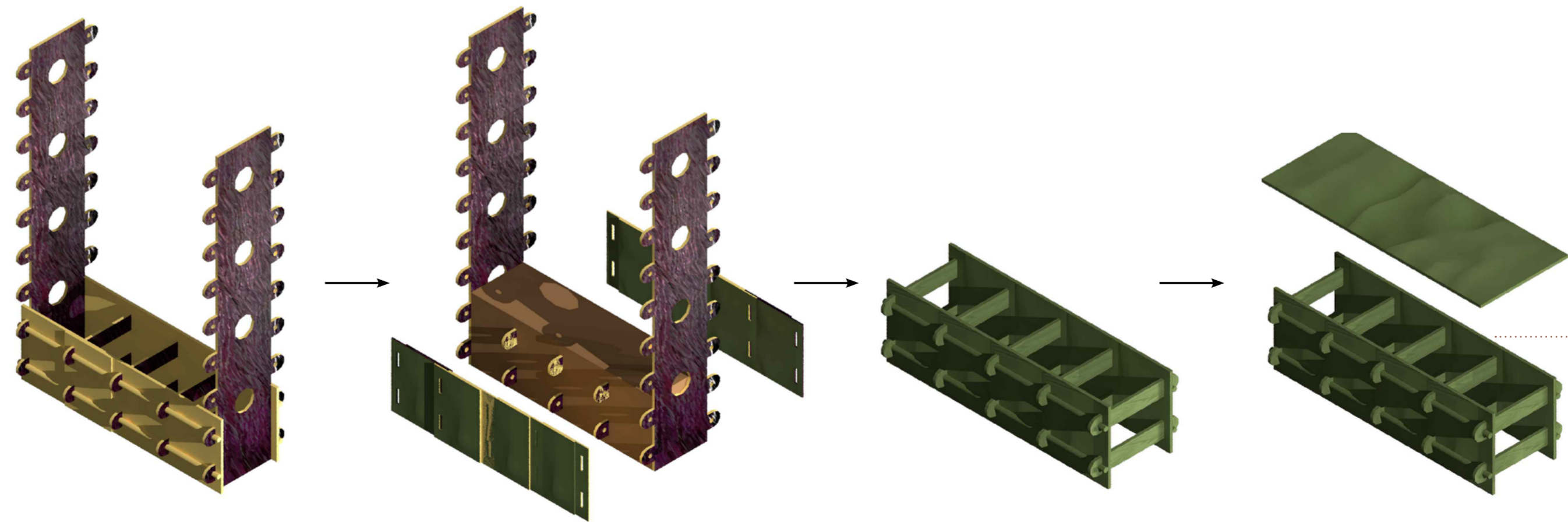
Overall view of seating



Detail view of seating

Reuse is embedded into the construction process of the project. The rammed earth structure is formed using CNC-fabricated panels connected with simple rod and dowel joinery. Once the earth has dried and become self-supporting, the panels can be removed without damage and repurposed elsewhere on site.

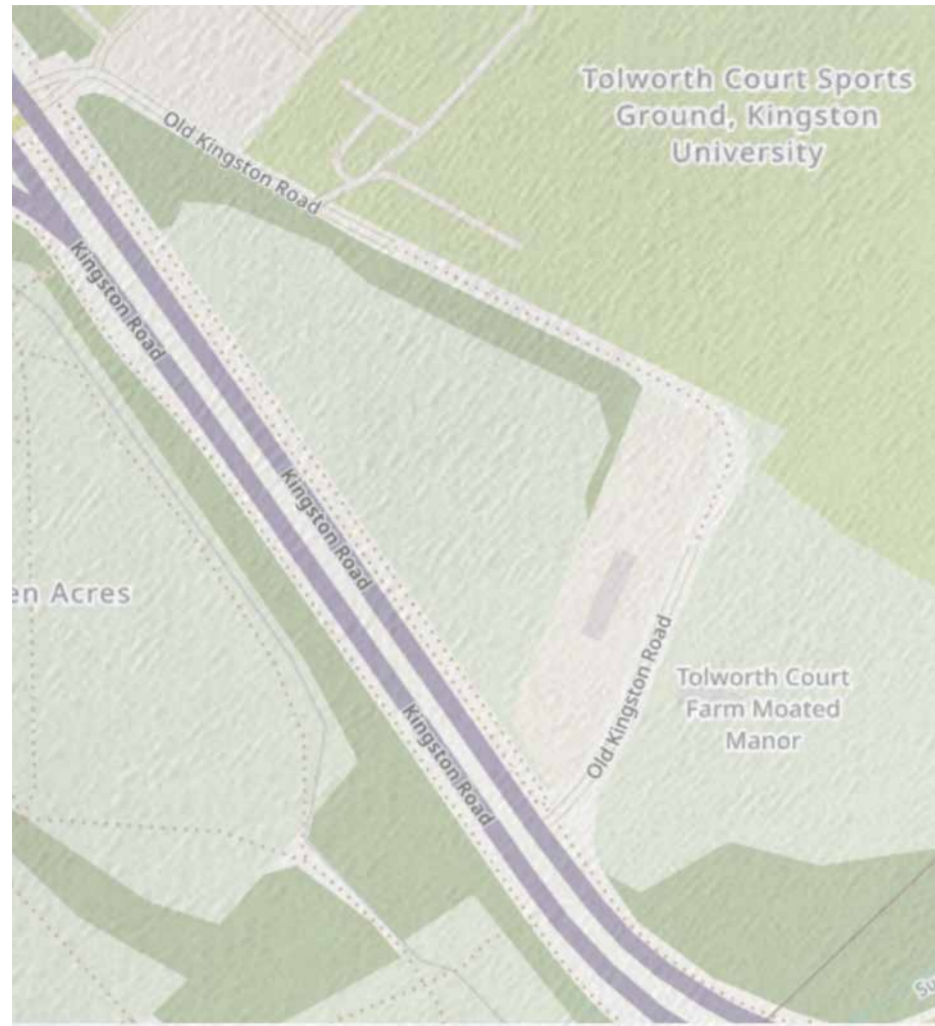
Using the same joinery system, the panels are reassembled into seating, tables, and other. These components also incorporate internal storage, extending their functionality while reducing material waste. This approach allows a single set of components to serve multiple purposes, demonstrating a flexible and circular approach to design and making.



Structure unit to seating



Insertion in Tolworth



The floor plan is organised into a series of interconnected zones that support education, observation, making, and community engagement. At the centre of the site, a workshop space provides an area for hands on learning and activities and allocated hanging areas for displaying finished art works or educational posters.

While adjacent, the presentation and birdwatching spaces encourage environmental education and engagement with local wildlife. A bird-listening zone creates a quieter area for observation, helping visitors connect with the surrounding habitat. The integrated storage and a cow pen strengthens the projects connection to the sites existing ecology and agricultural context.

