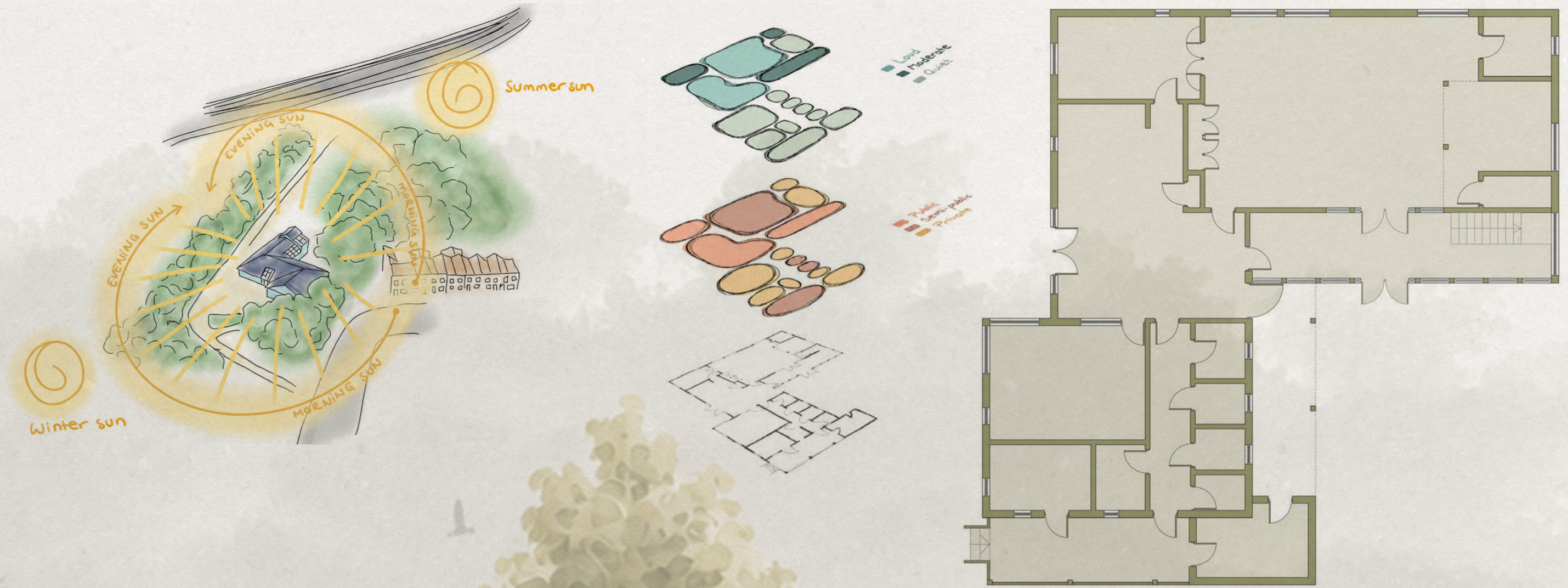


THE RAINFALL HUT: A KINETIC ECOLOGY

We are living in a time where environmental issues, social disconnection and the lack of community spaces are changing the way people interact with the world around them. As spaces for learning and gathering become harder to maintain, it is becoming more important to rethink how design can bring people back together while strengthening relationships with nature.

These projects explore how communities and ecology can work alongside one another through adaptive reuse, participation and sustainable design. From creating vibrant spaces that encourage movement and interaction with the natural environment, to developing a community-built rainfall pavilion that transforms waste into a valuable resource, both projects focus on creating spaces that are shaped by the people who use them. Together, they aim to encourage environmental awareness, social connection and a stronger relationship between people and their surrounding environment.



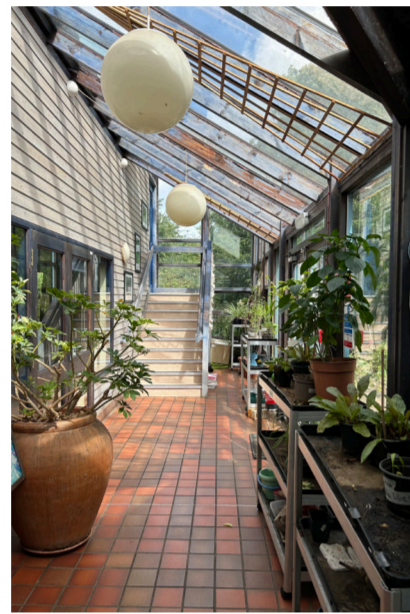
Client: Islington Ecology Centre and Gillespie Park

The Islington Ecology Centre is a unique environmental and community-focused space that promotes engagement with nature, biodiversity, sustainability and wellbeing. Located within a 2.8 hectare nature reserve known as Gillespie Park, the centre provides access to diverse habitats including woodland, meadows and ponds, supporting an impressive range of wildlife with 244 species of plants, 94 species of birds and 24 types of butterflies. Beyond its ecological importance, the centre acts as a hub for education and community connection, hosting school programmes, public events, creative workshops and wellbeing activities that bring together local residents, schools and community groups.

As one of the few spaces in Islington that offers an immersive natural environment, the ecology centre provides experiences that are often inaccessible within an urban setting. Unlike traditional park spaces, the reserve creates opportunities for visitors, specifically children, to explore and interact with nature through direct experiences. This connection is increasingly valuable within densely populated cities, where access to green spaces is limited and opportunities to engage with biodiversity are reduced.

The centre also plays an important role in supporting mental wellbeing and social interaction. As a free and accessible space, it provides a calm and refreshing environment where visitors can disconnect from urban pressures and reconnect with nature. For children especially, engaging with natural environments encourages curiosity, environmental awareness and understanding of wider issues such as sustainability and climate change. By creating strong visual connections between people and nature, the Islington Ecology Centre continues to be a valuable community resource, supporting the mental and physical wellbeing of its people.

Address
191 Drayton Park, London N5 1PH



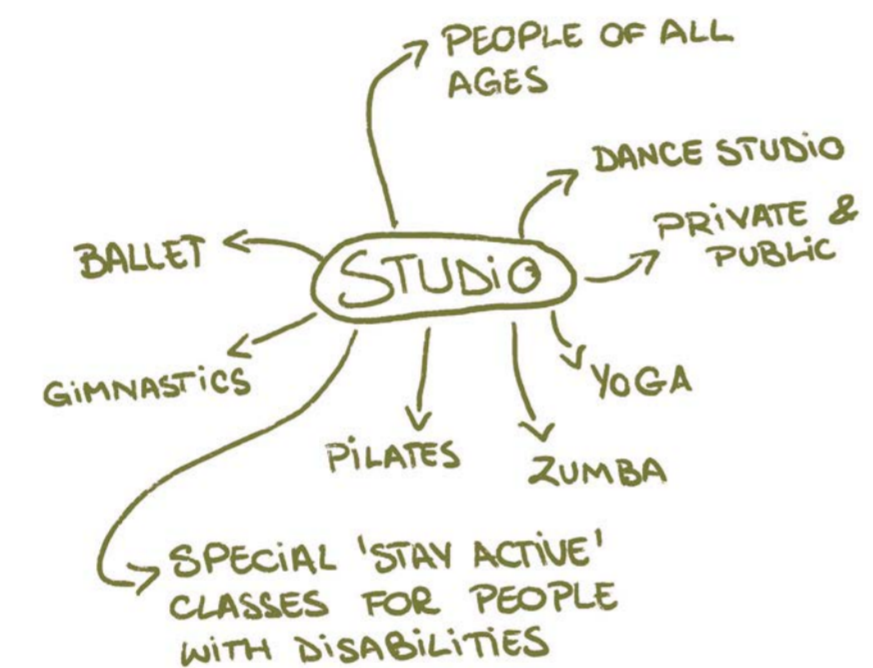
Dance Studio

WHY A DANCE STUDIO?

We live in a world where many people are becoming more and more inactive due to technology, busy lifestyles and a lack of accessible community spaces that encourage movement and social interaction.

Islington is one of the most densely populated boroughs in London and faces significant health issues despite being a vibrant and creative area. According to Islington Council, around 12% of adults in Islington are classified as physically inactive and almost 45% of children and young people do not achieve the recommended 60 minutes of physical activity per day. In addition to this, nearly two in five children leaving primary school in Islington are overweight or obese.

These statistics reinforce the importance of introducing a dance studio within Islington Ecology Centre. This project creates an opportunity for movement and social connections to help address both physical inactivity and social wellbeing across the borough.

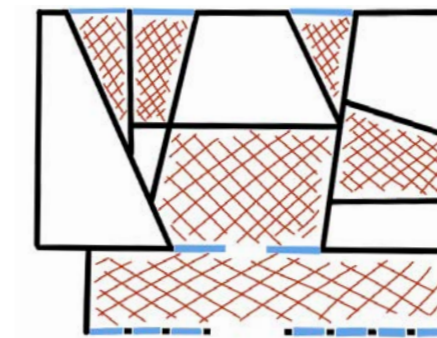
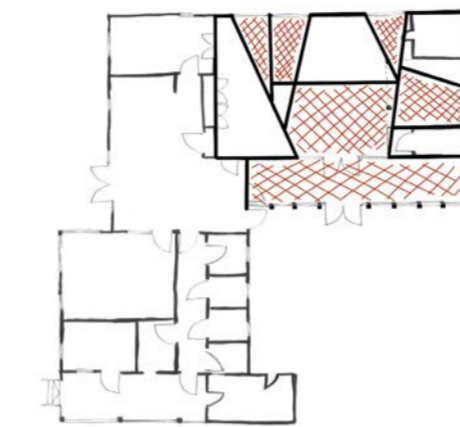


Visual Collage



Light Study

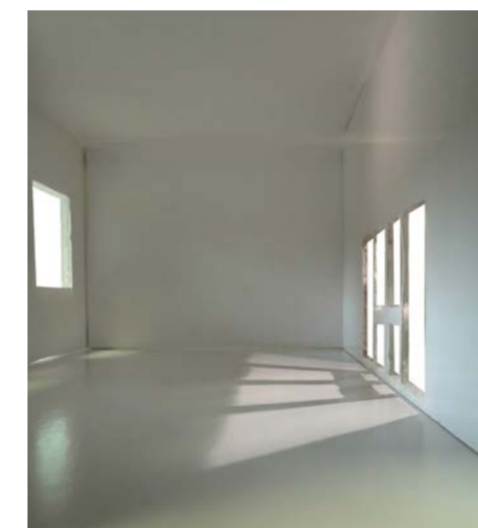
Light Diagrams



I drew lines from each window and joined them together to visualise which spaces get the most natural light in.

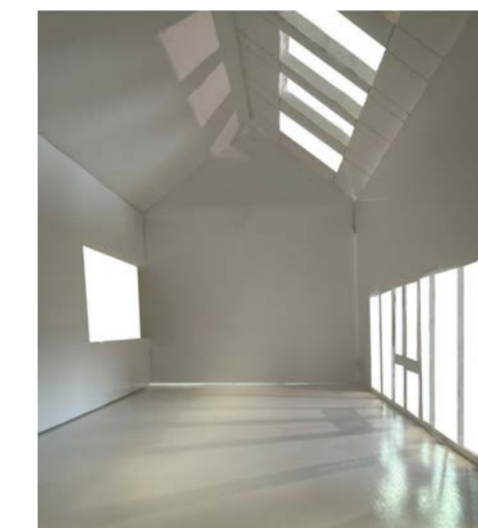
- Most natural light
- Least natural light
- Windows

Sketch 3D Model



Existing

Light going through existing windows



Proposed

Light going through proposed windows

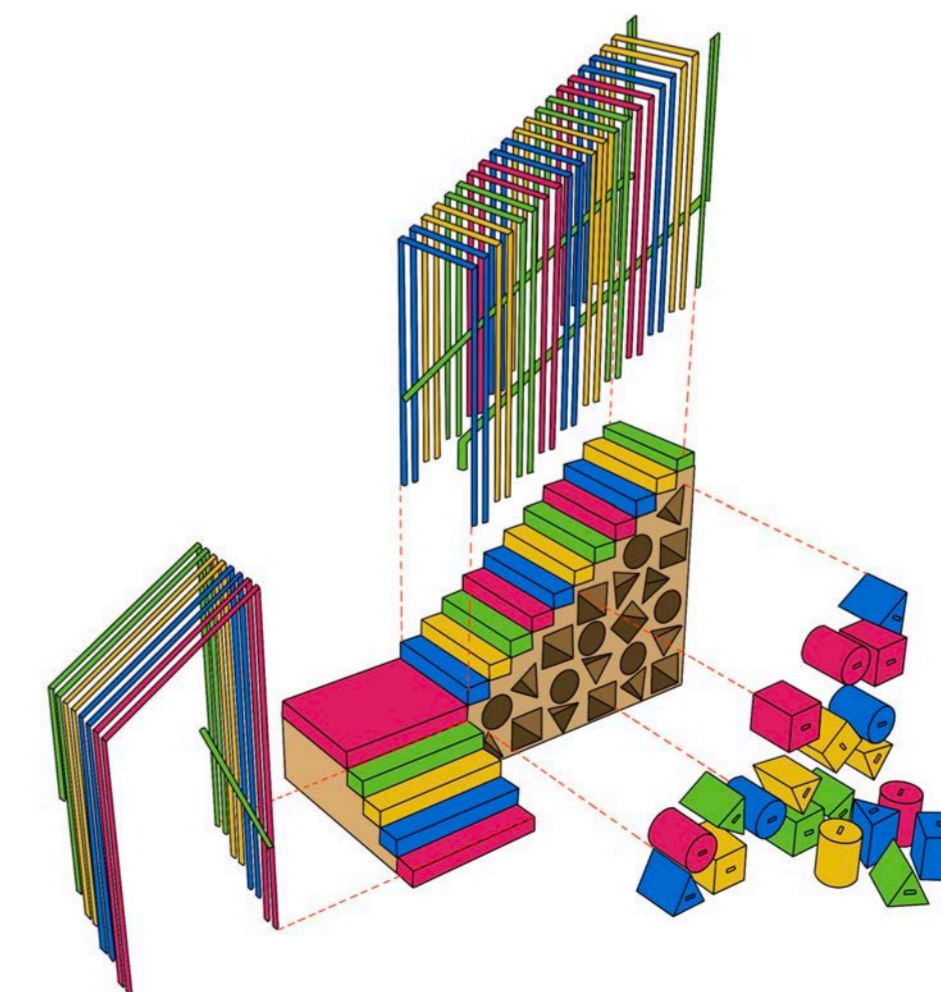
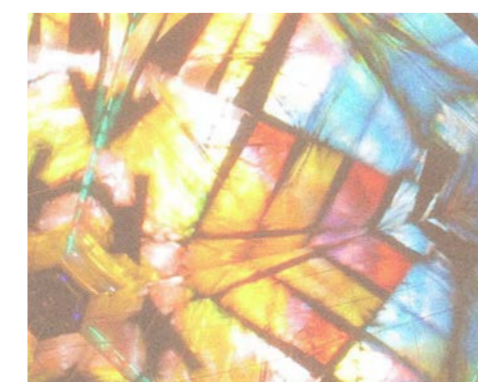


Diagram showing how the sunlight enters through the windows and reflects onto the ceiling mirrors to light up the dance studio.

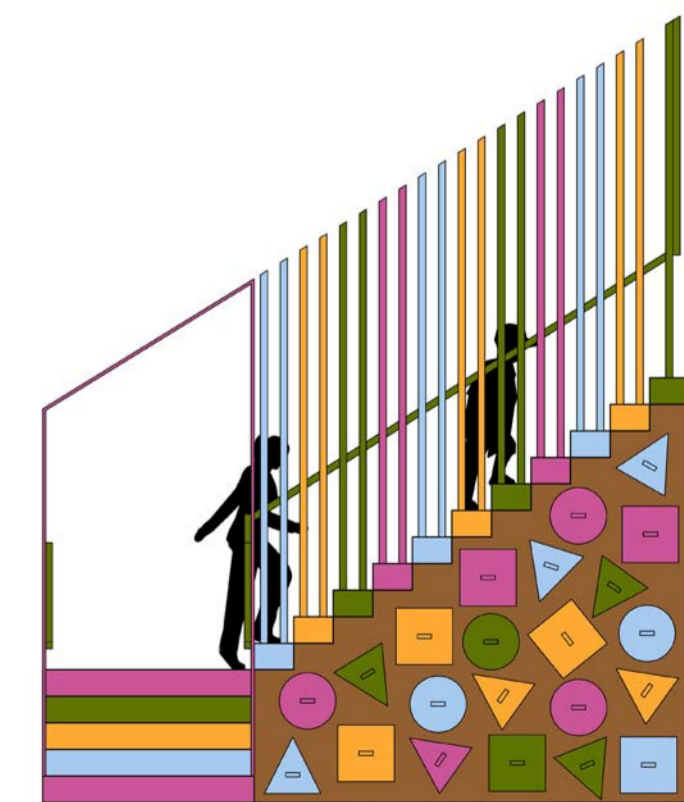


Kaleidosteps

My staircase design was inspired by the colours and patterns of a kaleidoscope. The design explores how colours and patterns can transform a functional structure into an engaging experience for children. I chose to use bold colours and geometric forms to create layered visual arrangements that shift as the people move around the space. The aim is to encourage interaction and exploration, not only allowing children to experience the staircase as a form of circulation, but as a playful and stimulating environment.



Exploded Axonometric



0 1 2 3 4 5m

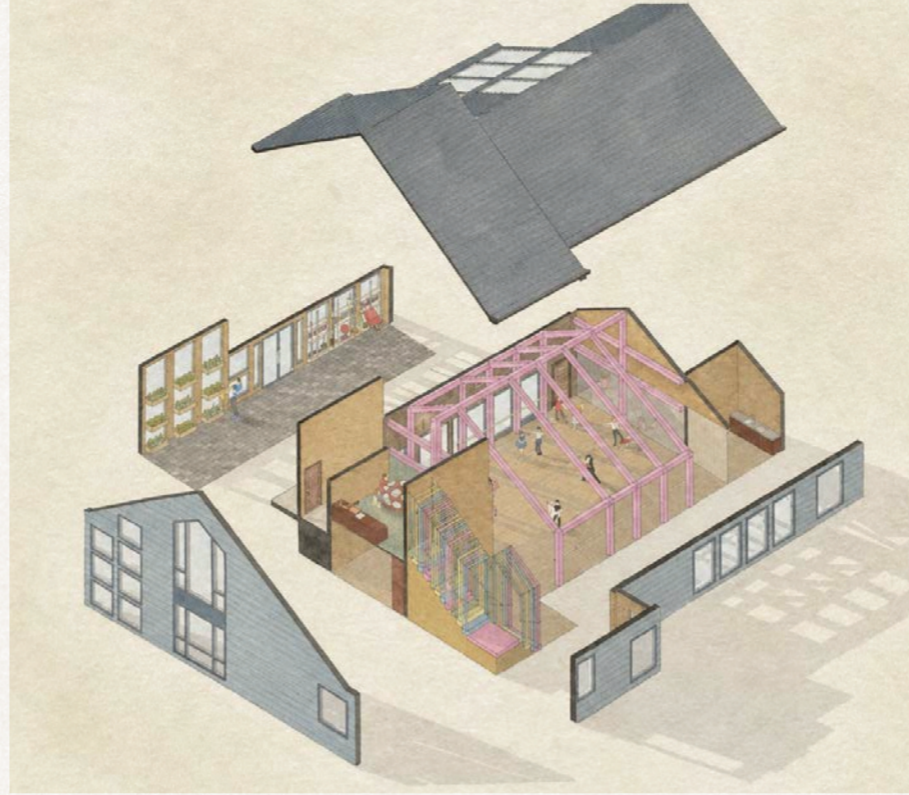
South Elevation
Scale 1:50



Ground Floor Plan



Section



Exploded Axonometric



Kaleidosteps Visual



The Rainfall Hut

This pavilion is designed as a community-built structure that connects people with nature while addressing local environmental concerns. Using recycled plastic bottles and willow rods, the project transforms waste into a valuable building material and encourages recycling through donation points in nearby homes, schools and businesses.

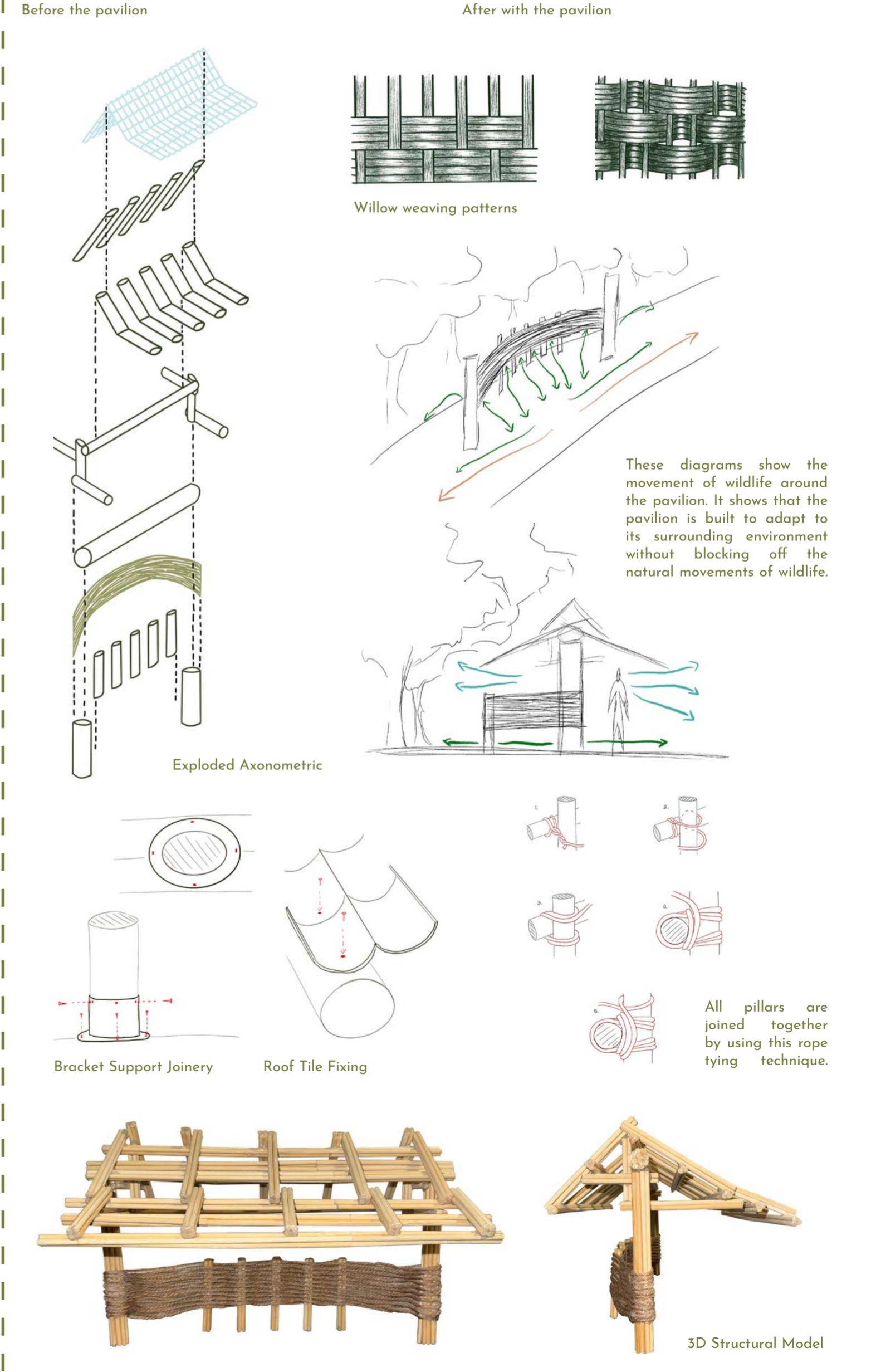
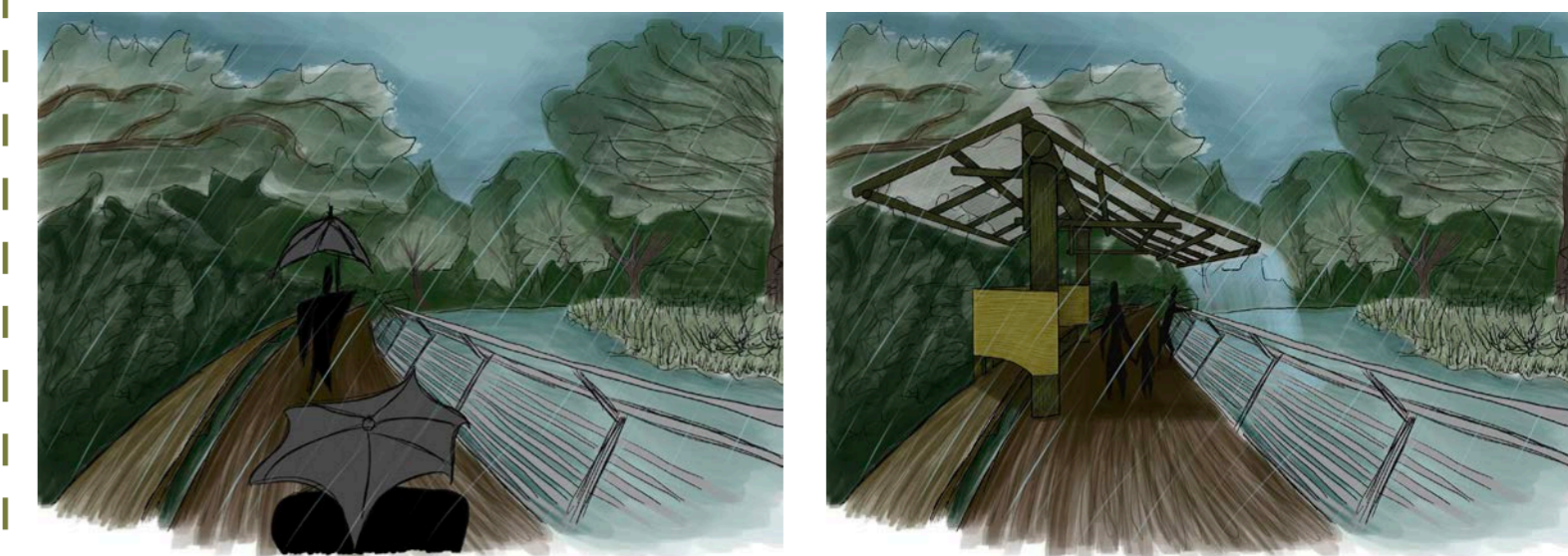
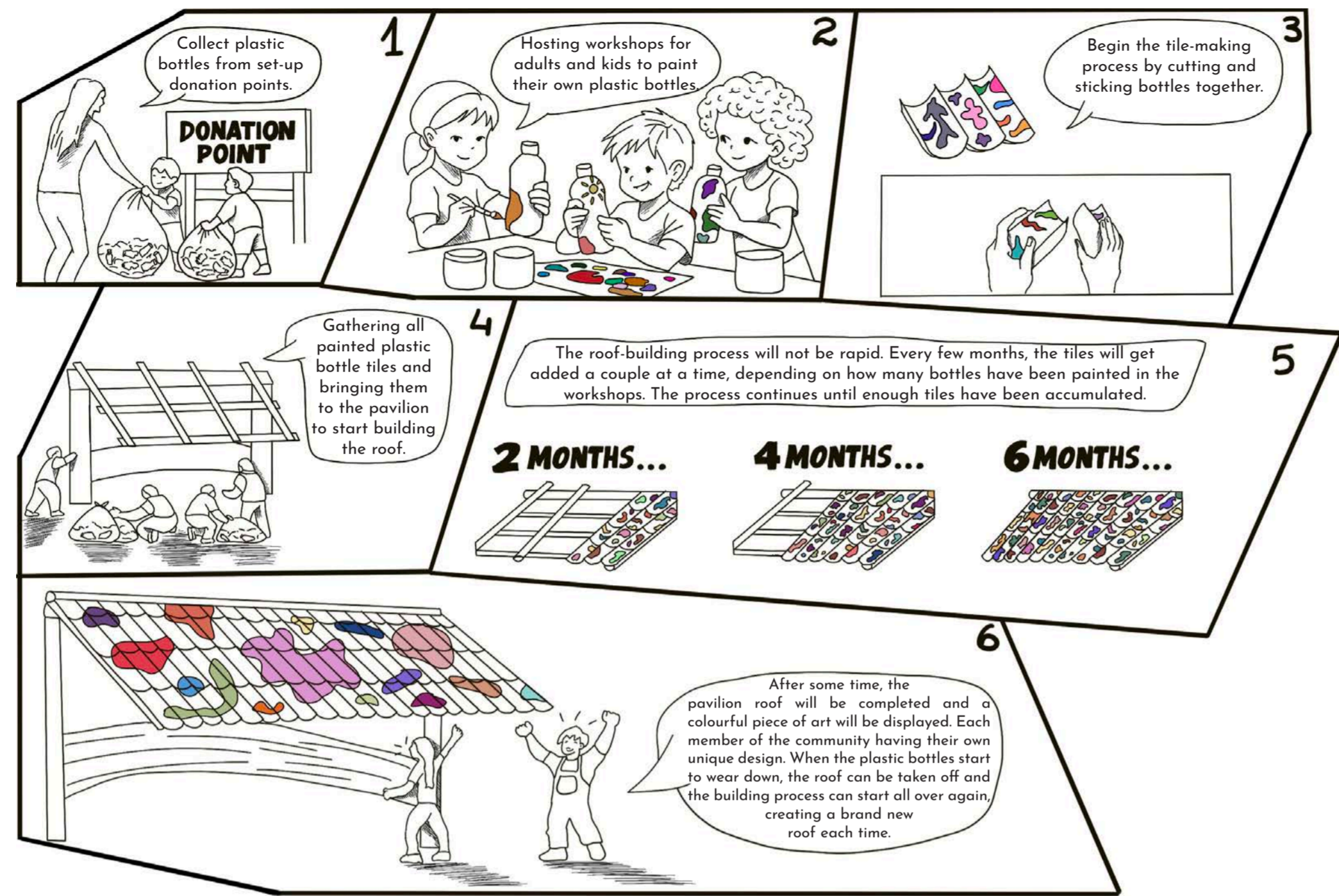
Located on a bridge beside the ecology centre's pond, the pavilion features a roof that harvests rainwater and directs it into the pond, helping to restore its low water levels.

Community workshops invite residents and students of all ages to paint the plastic bottles in their own unique way, which will then be used in the construction, creating a colourful canopy that celebrates creativity and environmental awareness.

Overall, the pavilion becomes both a gathering space and an ecological tool by bringing people together, enriching the landscape and turning sustainability into a shared and vibrant experience.

I chose to locate my pavilion on the bridge next to the pond to support and encourage the outdoor activities offered by the ecology centre. Positioned along an existing route, the pavilion provides a sheltered space that allows activities to continue even in wet weather, making the site more usable throughout the year. The bridge location also creates a direct relationship with the pond, as rainwater collected from the roof is guided back into the pond. This not only offers shelter but also responds to the ecological needs of the site, reinforcing the pavilion's role as both a functional and environmentally sensitive intervention.

Construction Process





Pavilion Plan



West Elevation



North Elevation

