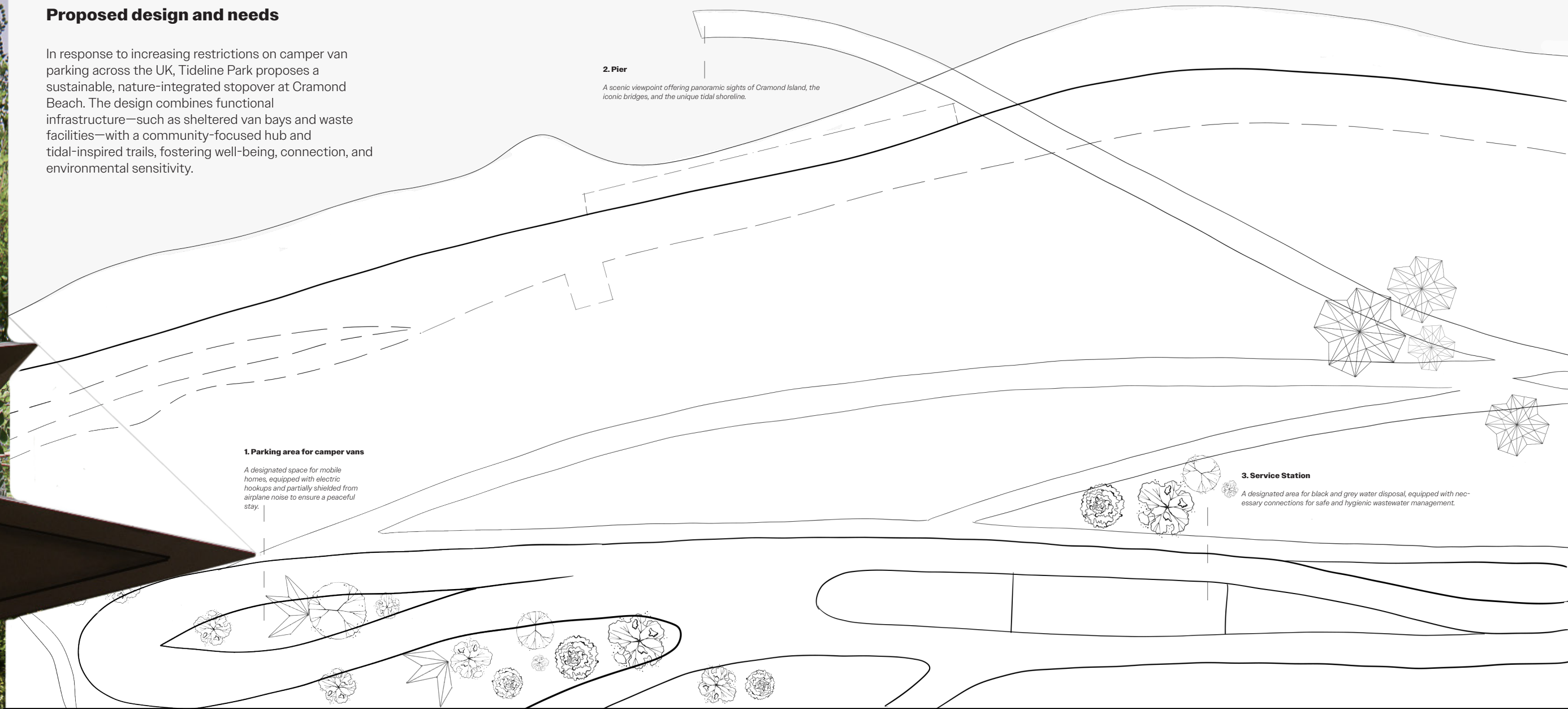




Proposed design and needs

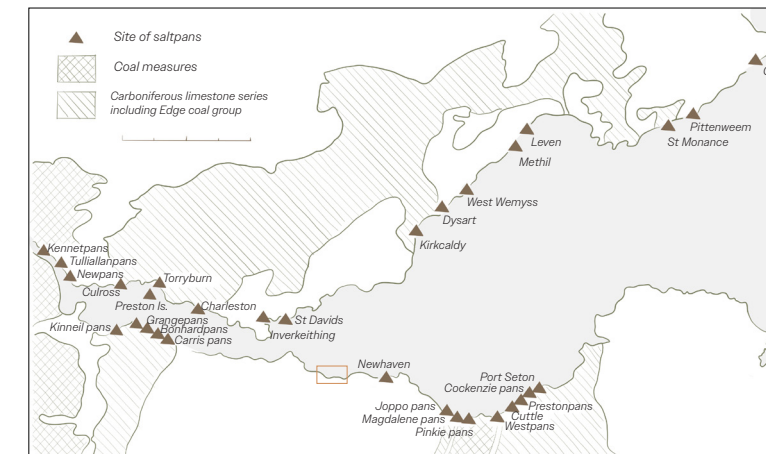
In response to increasing restrictions on camper van parking across the UK, Tideline Park proposes a sustainable, nature-integrated stopover at Cramond Beach. The design combines functional infrastructure—such as sheltered van bays and waste facilities—with a community-focused hub and tidal-inspired trails, fostering well-being, connection, and environmental sensitivity.



Site Analysis of Cramond Beach

Cramond Beach in Edinburgh is a scenic spot popular with locals and tourists, offering access to Cramond Island at low tide and a nearby accessible café. It's easy to reach by car or Lothian Bus 29.

The beach's physical character is shaped by a combination of landscape features, including the River Almond, the sea, and the surrounding greenery. These natural elements contribute to a dynamic environment, influenced by **tidal movements** and weather conditions. Wind conditions at the site have a direct impact on building performance, increasing convective heat loss, influencing infiltration rates, and accelerating material wear through saltwater corrosion and sand abrasion.

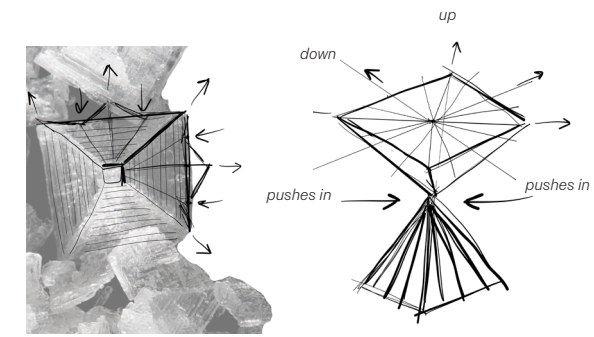


Location overview map and Salt pans along the Firth of Forth Coast

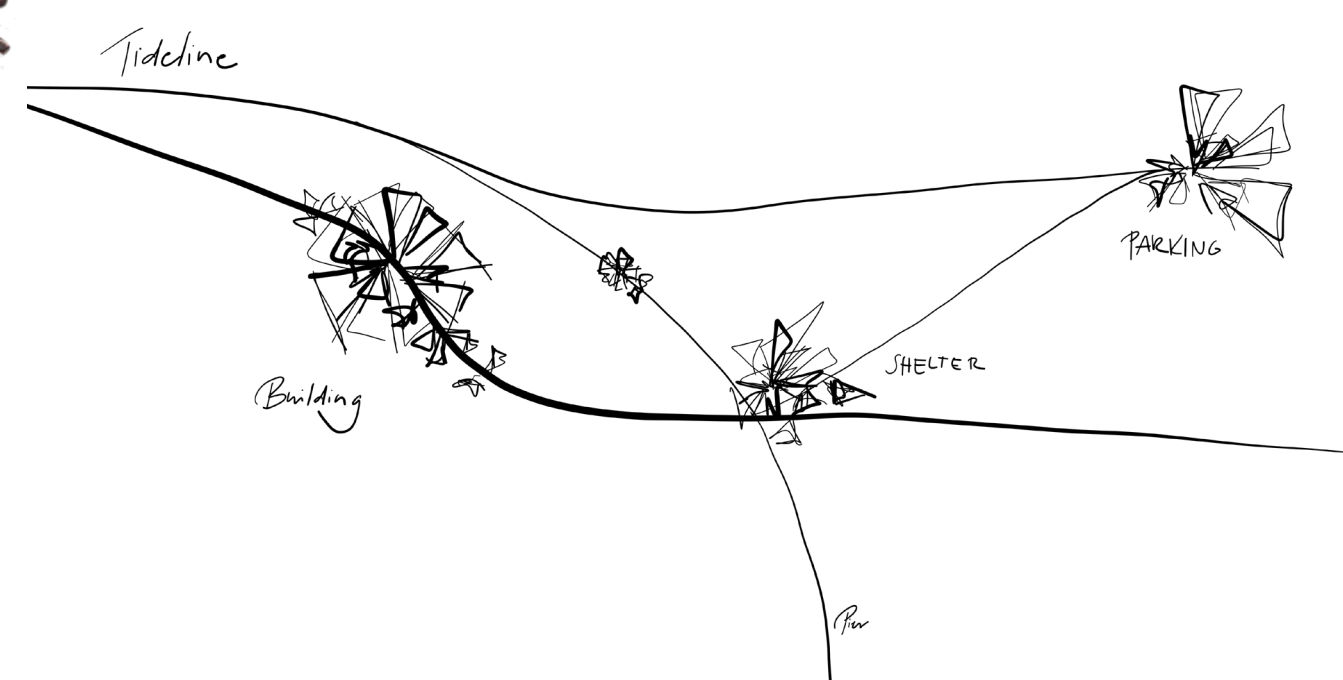
Salt's Historical Role in Travel and Nomadic Life

Salt has been essential for survival and trade, preserving food for long journeys before refrigeration. In Scotland, coastal villages like Culross and Prestonpans became key salt producers. Prestonpans, granted the first Royal Warrant in the twelfth century, thrived for centuries, producing hundreds of bushels weekly. This trade supported local economies and led to the rise of salt wives who sold salt in Edinburgh.

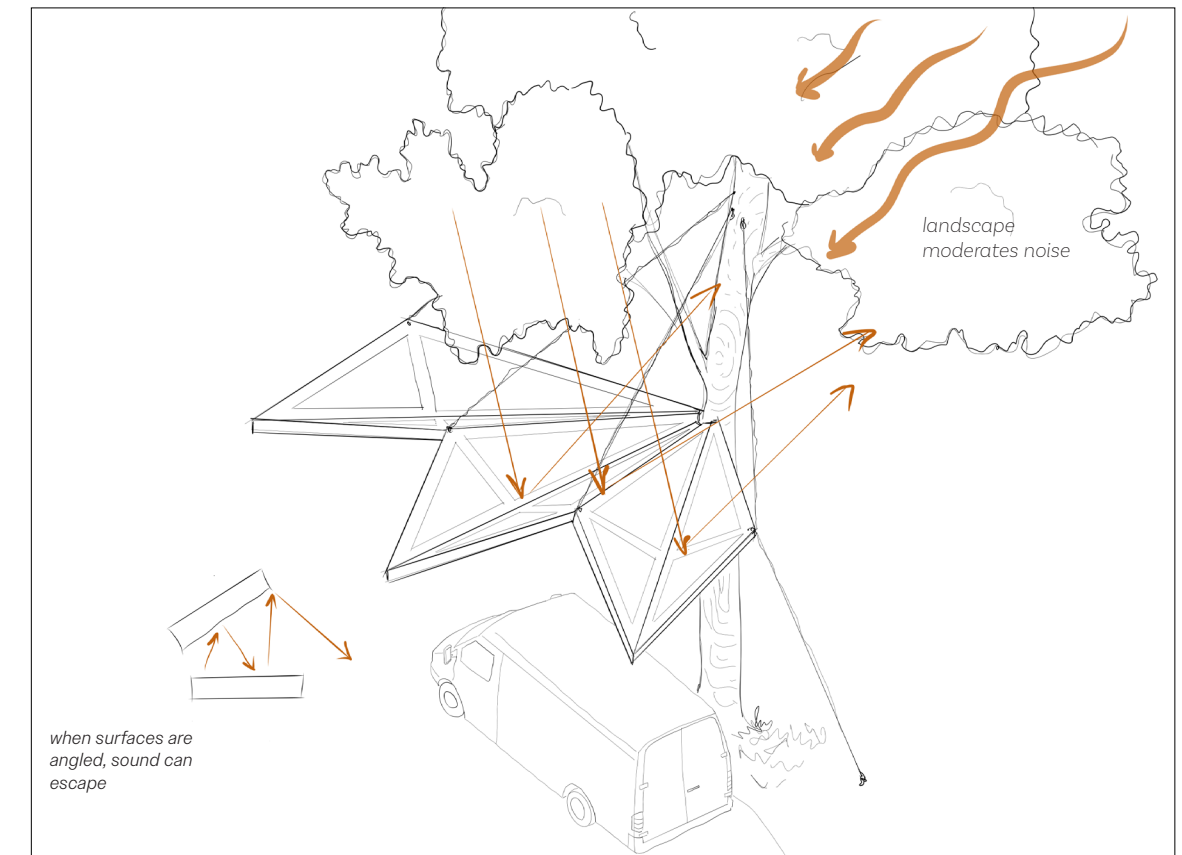
Salt also ranked among Scotland's **top exports**, alongside coal and fish, connecting the region to wider trade



salt picture that inspired the crushed crystal form by Marc Damage



Footpath flow sketch inspired by the tideline and salt pans where stopping becomes the moment you start to crystallise



acoustic deflection through structural angling in the parking area (1)

Noise reduction strategy

To create a restful sleep environment in camper vans, noise reduction is essential. While airplane noise can reach 70 to 85 dB, ideal sleep conditions require levels below 40 dB.

Angled triangular panels help deflect and diffuse sound, and surrounding trees absorb mid-to-high frequency noise. Panels can be tilted to target airplane, rain and wind noise, enhancing overall quietness. Effective insulation is crucial, aiming to cut noise by 40 to 50 dB.

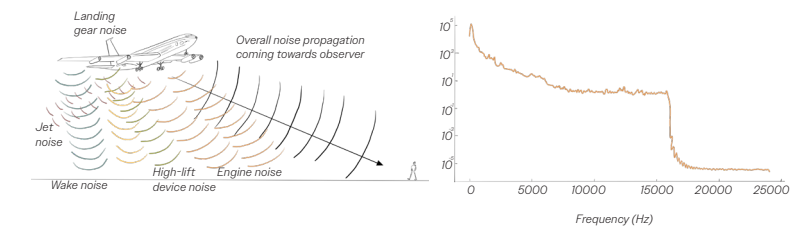
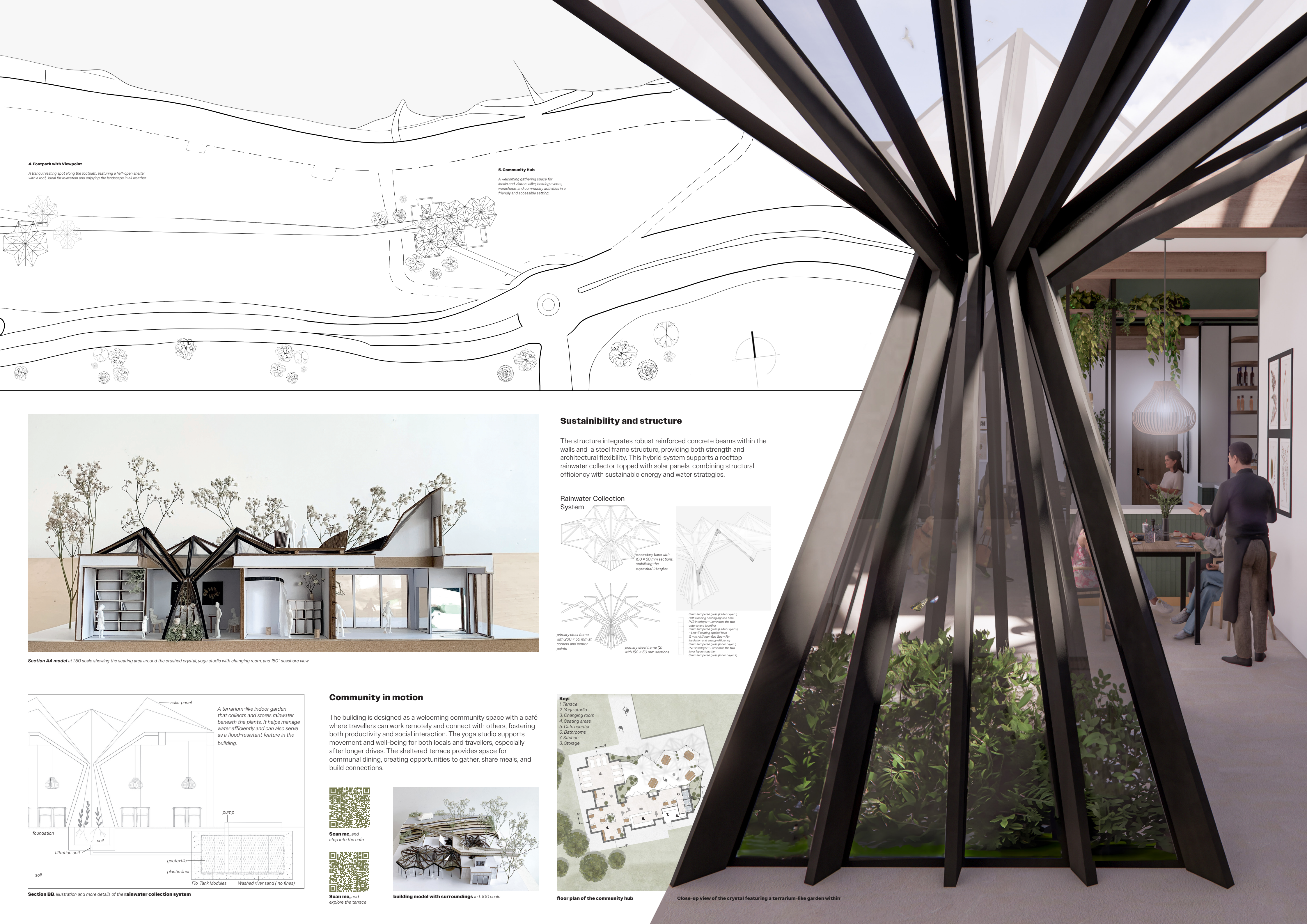


Diagram showing aircraft noise sources during approach and landing (Embry-Riddle Aeronautical University)

Recorded noise frequency distribution in the area (February 23, 2 PM) with a south wind direction





4. Footpath with Viewpoint

A tranquil resting spot along the footpath, featuring a half-open shelter with a roof, ideal for relaxation and enjoying the landscape in all weather.

5. Community Hub

A welcoming gathering space for locals and visitors alike, hosting events, workshops, and community activities in a friendly and accessible setting.

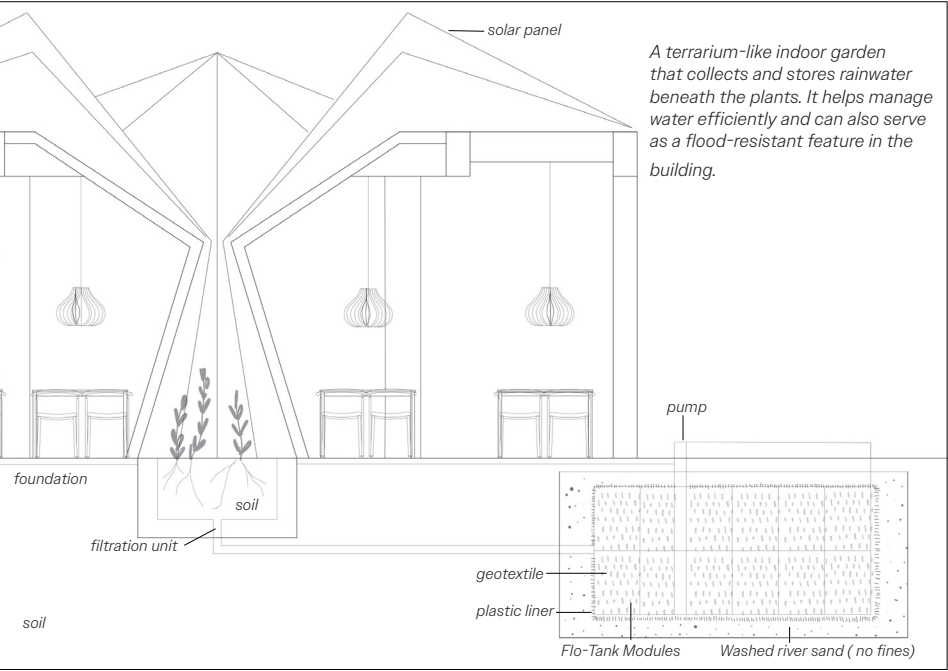
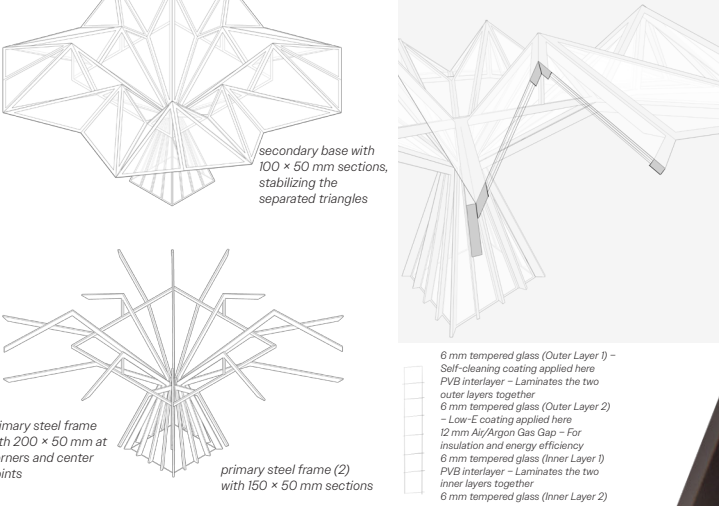


Section AA model at 1:50 scale showing the seating area around the crushed crystal, yoga studio with changing room, and 180° seashore view

Sustainability and structure

The structure integrates robust reinforced concrete beams within the walls and a steel frame structure, providing both strength and architectural flexibility. This hybrid system supports a rooftop rainwater collector topped with solar panels, combining structural efficiency with sustainable energy and water strategies.

Rainwater Collection System



Section BB, illustration and more details of the rainwater collection system

Community in motion

The building is designed as a welcoming community space with a café where travellers can work remotely and connect with others, fostering both productivity and social interaction. The yoga studio supports movement and well-being for both locals and travellers, especially after longer drives. The sheltered terrace provides space for communal dining, creating opportunities to gather, share meals, and build connections.



Scan me, and step into the café



Scan me, and explore the terrace



building model with surroundings in 1:100 scale



floor plan of the community hub

Close-up view of the crystal featuring a terrarium-like garden within