

CRYO

Ancient Greek (krýos)
/involving or producing cold, especially extreme cold./

- This design proposal seeks to establish an alternative training and coaching facility for all branches of GB Rowing Team. The design intervention will be structured around how the adaptive reuse of a bath house can contribute physical and psychological development of the team through the process of activating their body and mind.
- To tackle the lack of physical and psychological growth, the design will be structured around the Wim Hof Method, which harnesses the power of breathing, cold therapy and mindfulness. Highlighting the need for a innovating, new space for GB athletes to reach their full potential.
- These interior strategies when combined with the science behind the carefully formulated Wim Hof Method will create a simple, effective way to stimulate these deep physiological processes.



REDGRAVE PINSENT LAKE

The Redgrave Pinsent lake and boat house is the central hub of Team GB Rowing, used for all their official training and coaching. The 2k stretch of the river hosts many international regattas.



AIR QUALITY



Research shows the air quality to be excellent in Reading. Ventilation will be circulated around the building with air from the opening skylights, dispersing moisture from the pools.

SUN PATH



South facing, the natural culmination of the sun's path will not be blocked by any additional structures. The skylights will provide maximum natural light, allowed to pass down through the indented floors.



WIND SPEED



14 mph, South Westerly average wind speed on the lake. A head or tail wind is a key factor in the physical aspect of rowing.

USER- Team GB Rowing

- COACH** GOALS: To optimise the technique and speed of a rower over 2k.
 - BLUE 40-45 years
 - ORANGE 35-40 years
- GB SEN-IOR** GOALS: International races such as World Championships.
 - BLUE 20-25 years
 - ORANGE 25-30 years
- GB U23** GOALS: Often juggling university studies and training.
 - BLUE 14-18 years
 - ORANGE 18-22 years
- GB START** GOALS: Many hours of focused coaching to improve technique.
 - BLUE 18-23 years

CLIENT- Sport UK

- There are 54 rowers in Team GB, 32 men and 22 women.
- The average height of a rower is 6ft 4in, with an arm span of 6ft 5in.
- Rowing is the 2nd most funded UK Sport with £25 million spent on the Tokyo Olympic team.

CONCEPTUAL APPROACH

Such as the human race has disconnected with nature due to modern day comforts, so has the built environment around us. Architecture and our physical bodies are stagnating at the same point. The metaphorical and physical tools laid out can be successfully implemented through the means of biophilic alteration.

The mental approach to the Wim Hoff Method is directly mirrored within the circulation of the building. With the central spiral ramp mimicking the core process of practising the three pillars of the method. These pillars have manifested into three zones. Reflecting entering a cold pool, the top floor is flooded with natural light, gradually descending into the colder, most mentally challenging area of the facility in the basement.



1. BREATHING



“You can change your own chemistry just by **BREATHING**, cold exposure, and mindset”

2. CRYOTHERAPY



“Cold is a **STRESSOR**, if you are able to get into the cold and control your body’s response to it, you will be able to **CONTROL** stress”

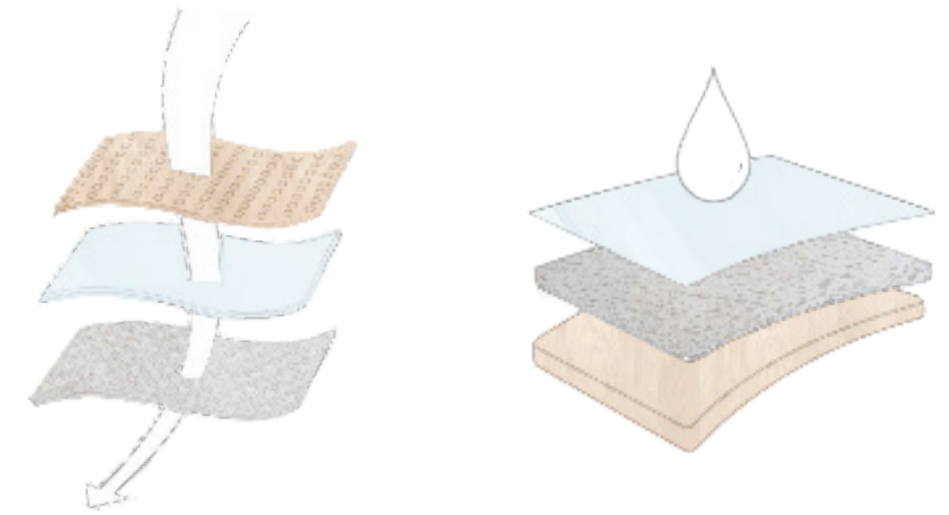
3. COMMITMENT



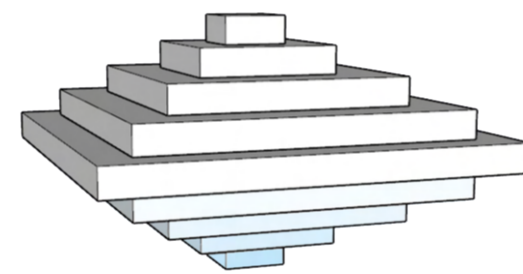
“Your fitness is 100% **MENTAL**. Your body won’t go where your mind doesn’t push it”

MATERIALS

- Cherry Wood- Closed porous hardwood, high resistance to shrinking and warping in the face of moisture, shock resistant.
- Impermeable Concrete- Treated with a Polyurethane sealant, forms a waterproof membrane.
- Tempered glass- Floods light throughout the building, designed for safety.

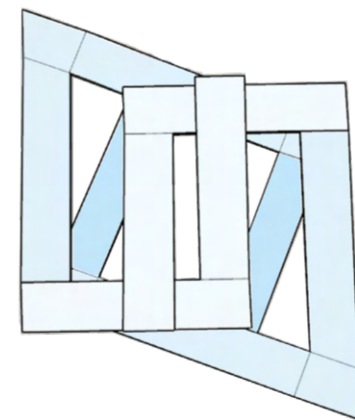


CONCEPT



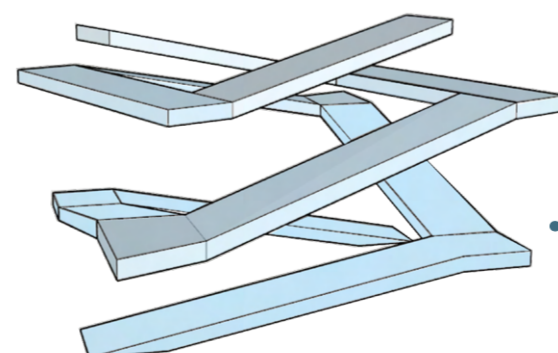
Reflection of an athlete’s mental state

1



Descending through the Wim Hof Method

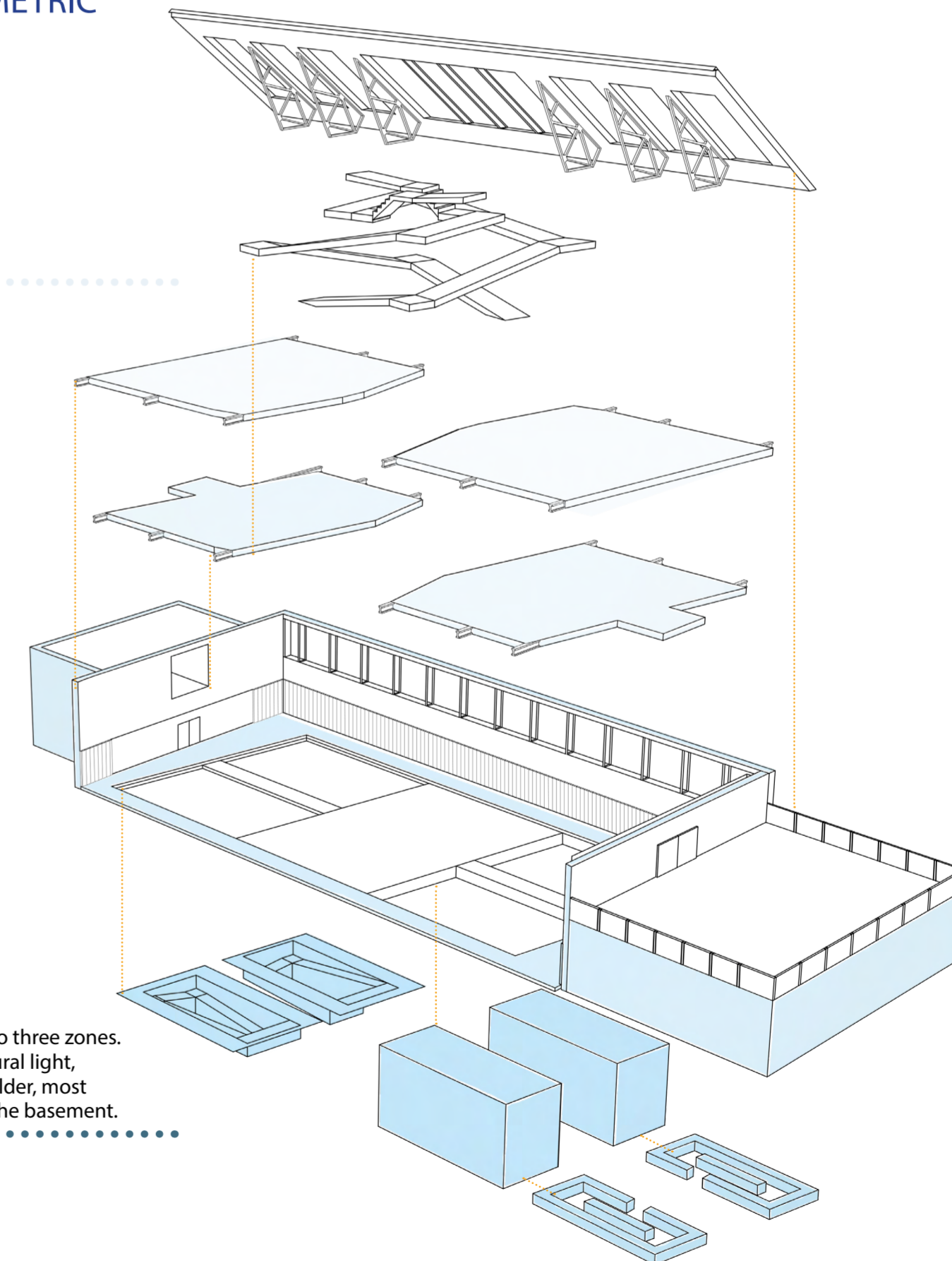
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Physical reflection of entering a cold pool

3

AXONOMETRIC



Meditation ZONE 1 The mental approach to the Wim Hoff Method is directly mirrored within the circulation of the building.

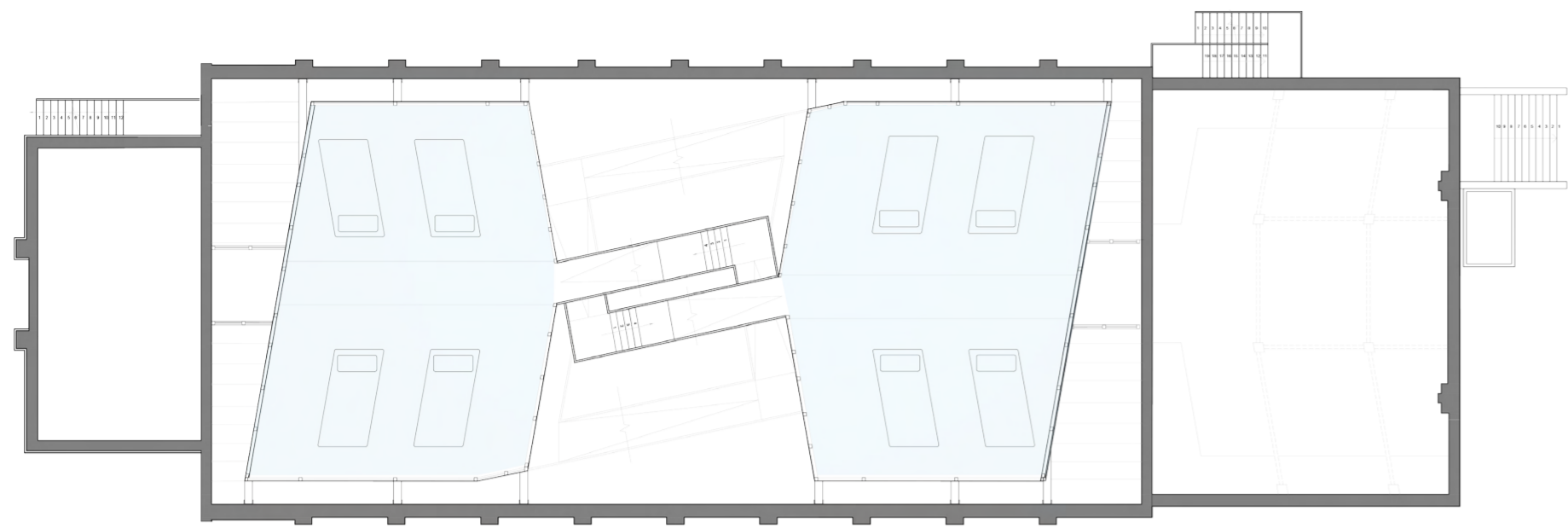
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Breathing ZONE 2 With the central spiral ramp mimicking the core process of practising the three pillars of the method.

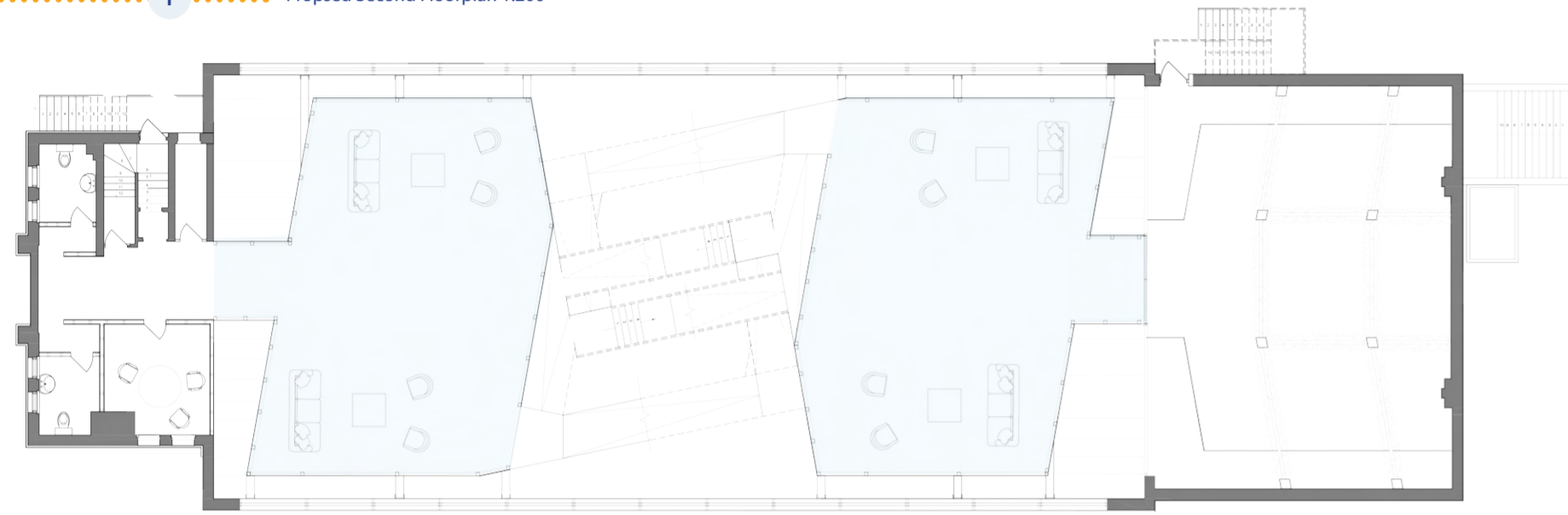
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Cold Pools ZONE 3 These pillars have manifested into three zones. The top floor is flooded with natural light, gradually descending into the colder, most mentally challenging area of in the basement.

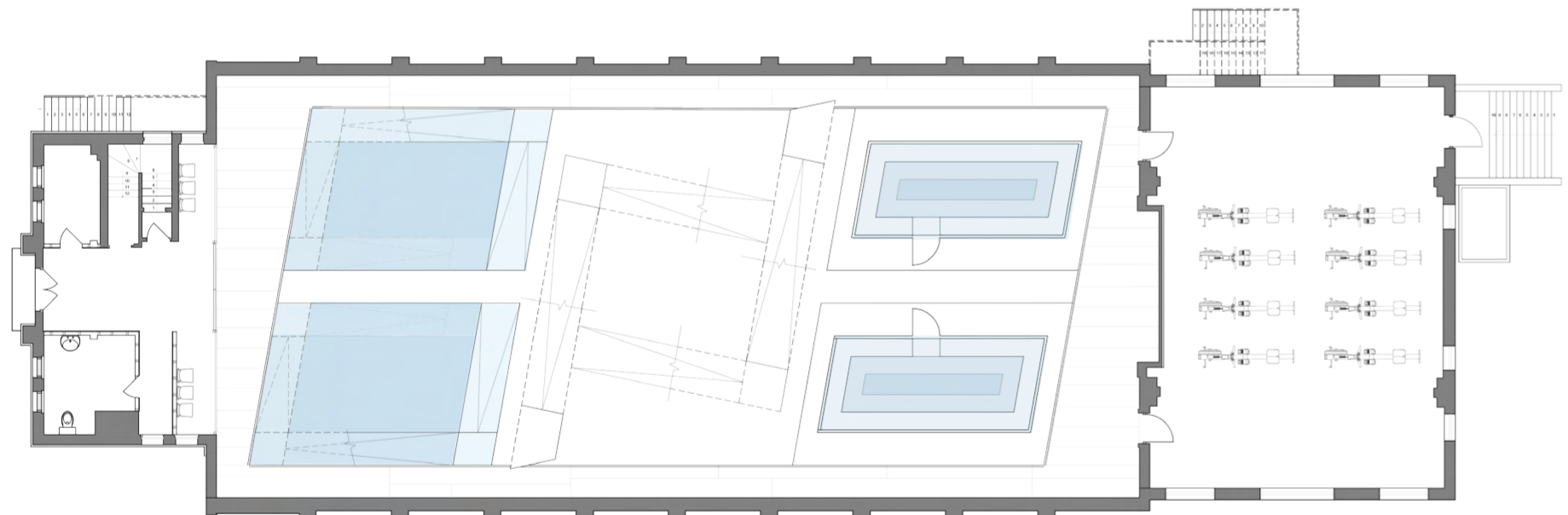
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1 Proposed Second Floorplan 1:200



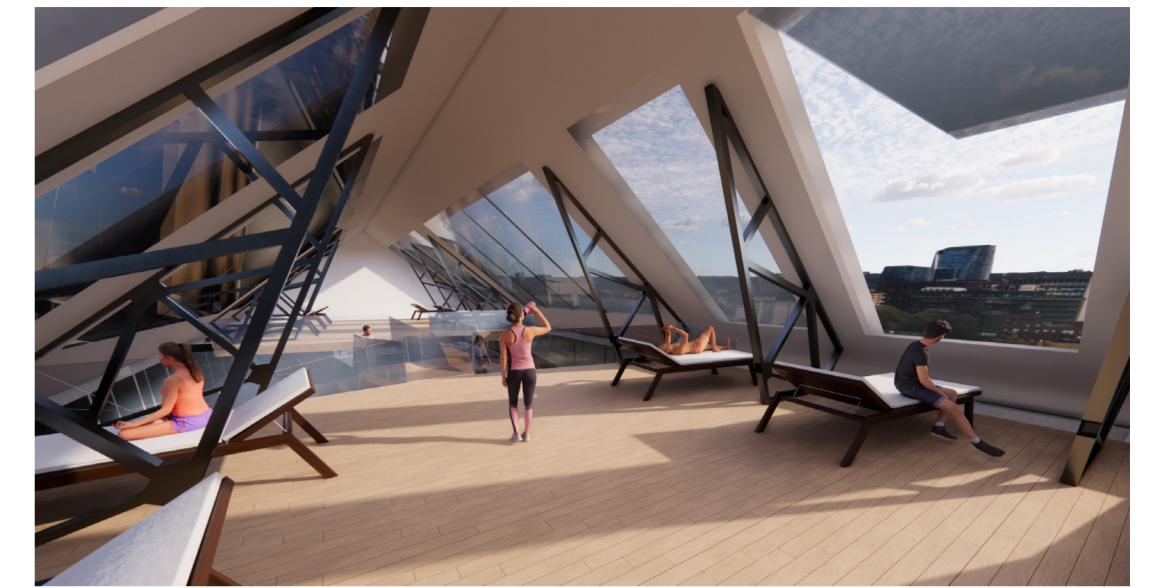
2 Proposed First Floorplan 1:200



3 Proposed Ground Floorplan 1:200



1 Connecting, central staircase



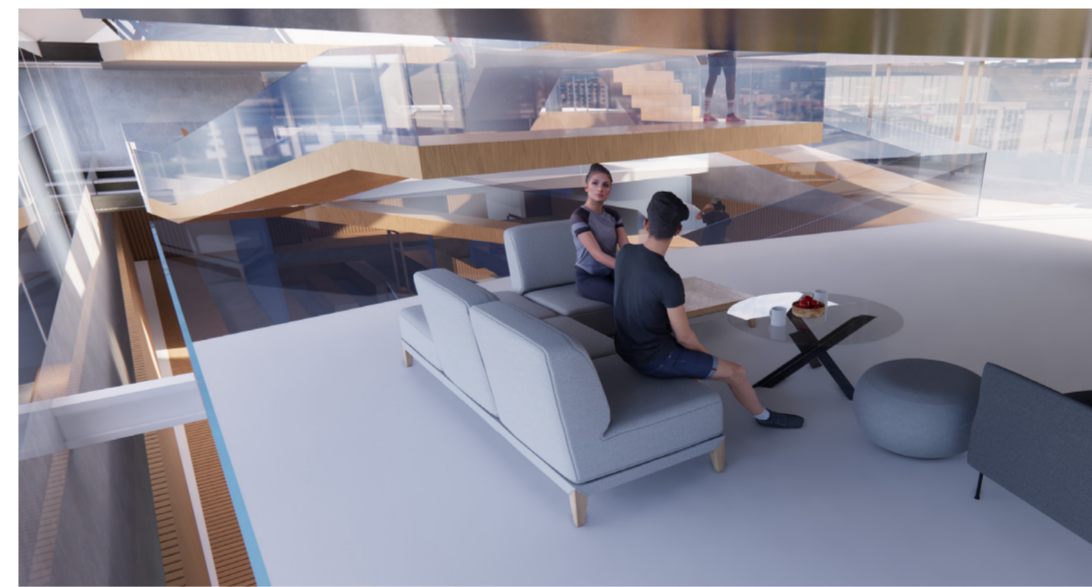
2 Meditation ZONE 1



3 Cryo Pools ZONE 2



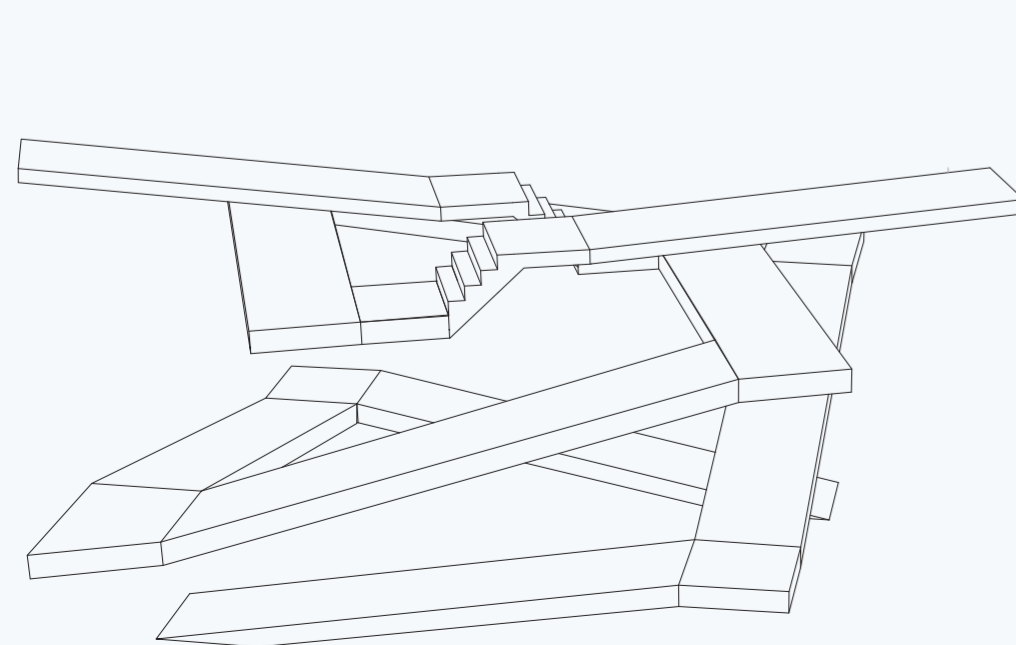
4 Breathing ZONE 3



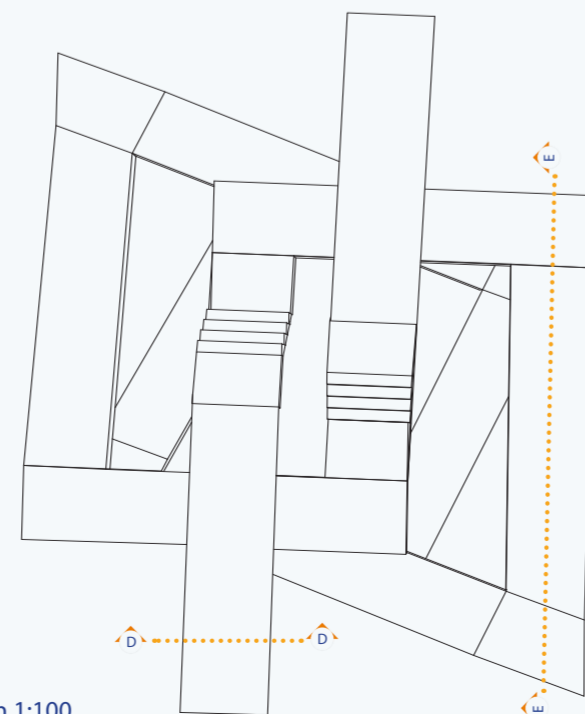
5 Common Room



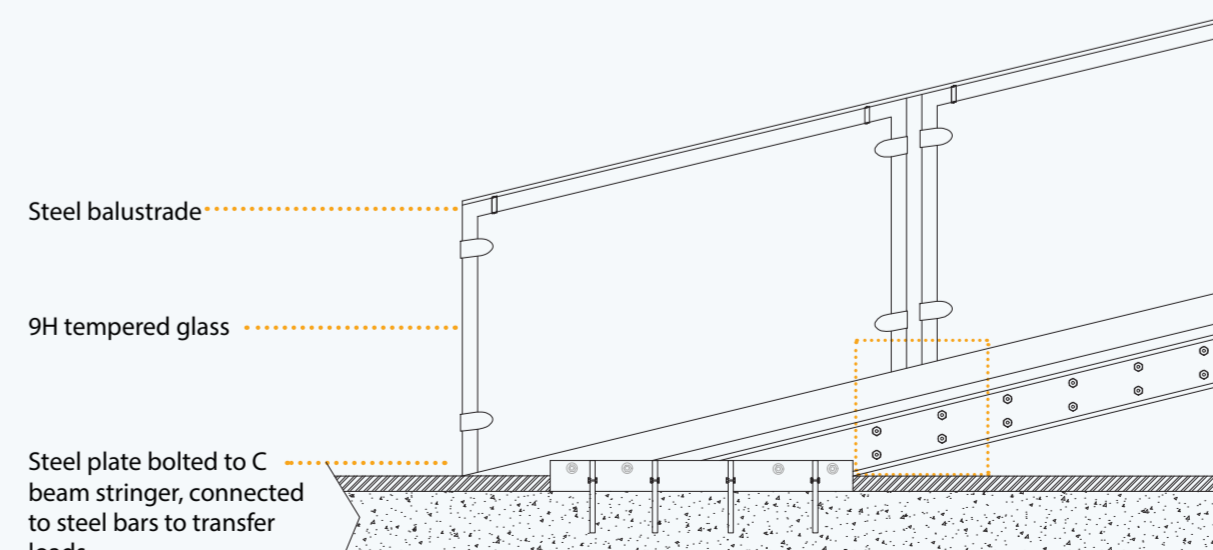
6 Roof Garden



3D ramp detail



Detail in plan 1:100

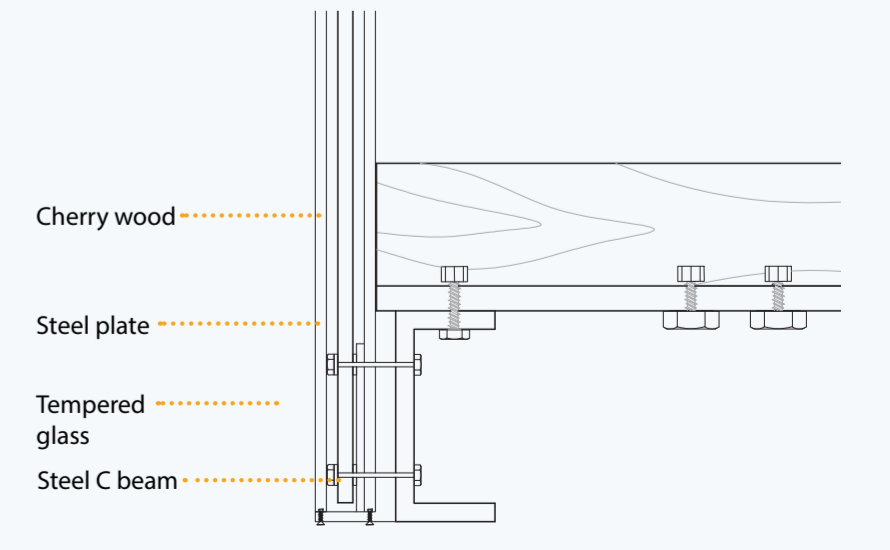


Steel balustrade

9H tempered glass

Steel plate bolted to C beam stringer, connected to steel bars to transfer loads

Detail Section D-D 1:20



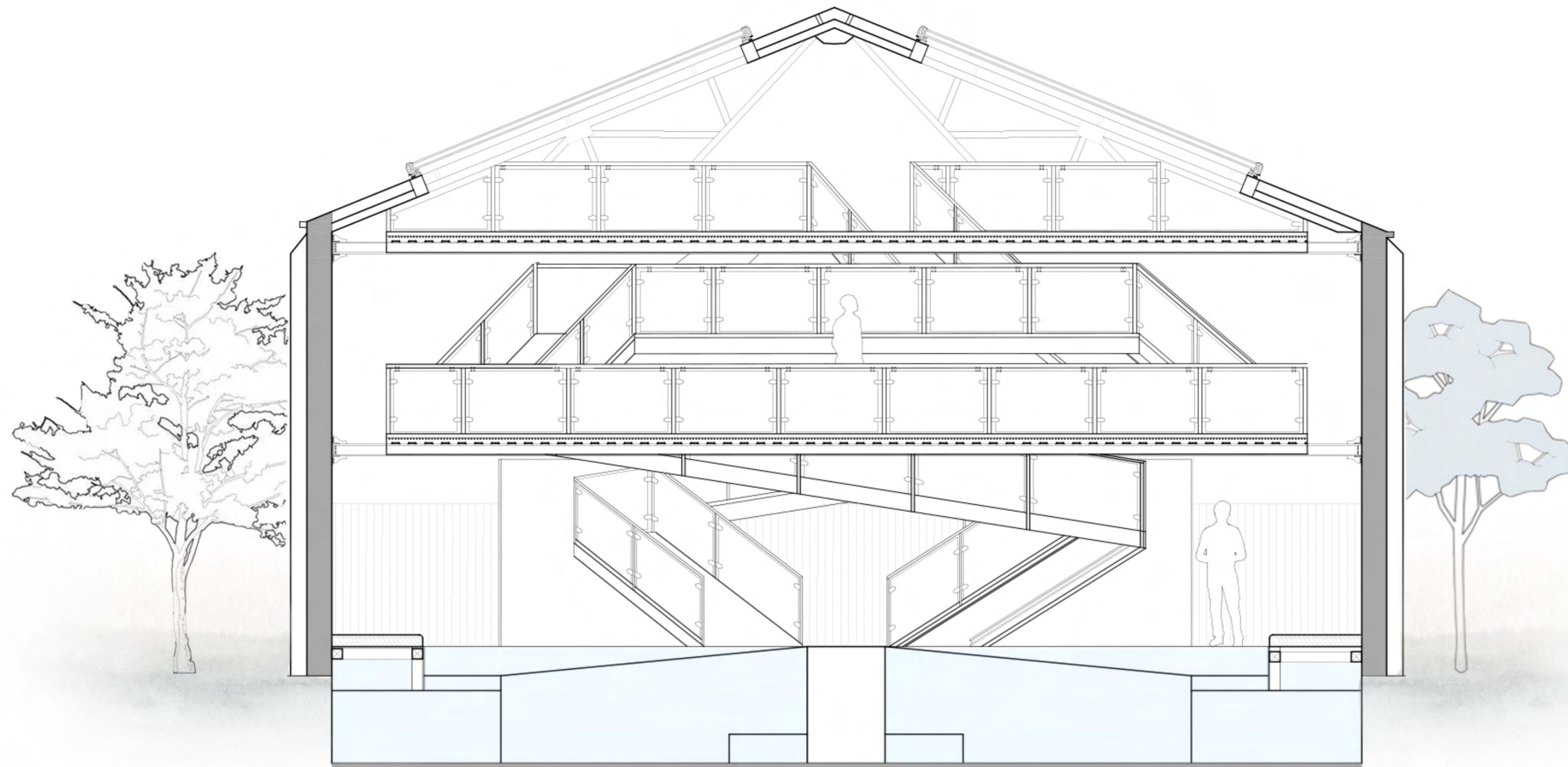
Cherry wood

Steel plate

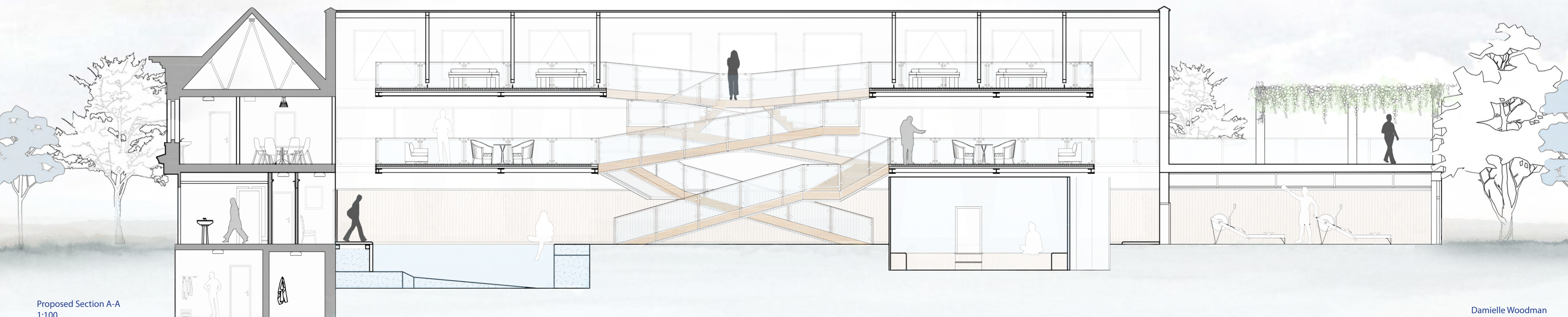
Tempered glass

Steel C beam

Detail Section E-E 1:5



Proposed Section C-C
1:50



Proposed Section A-A
1:100