

FREDERICA BRITO E CUNHA
PORTFOLIO 2022

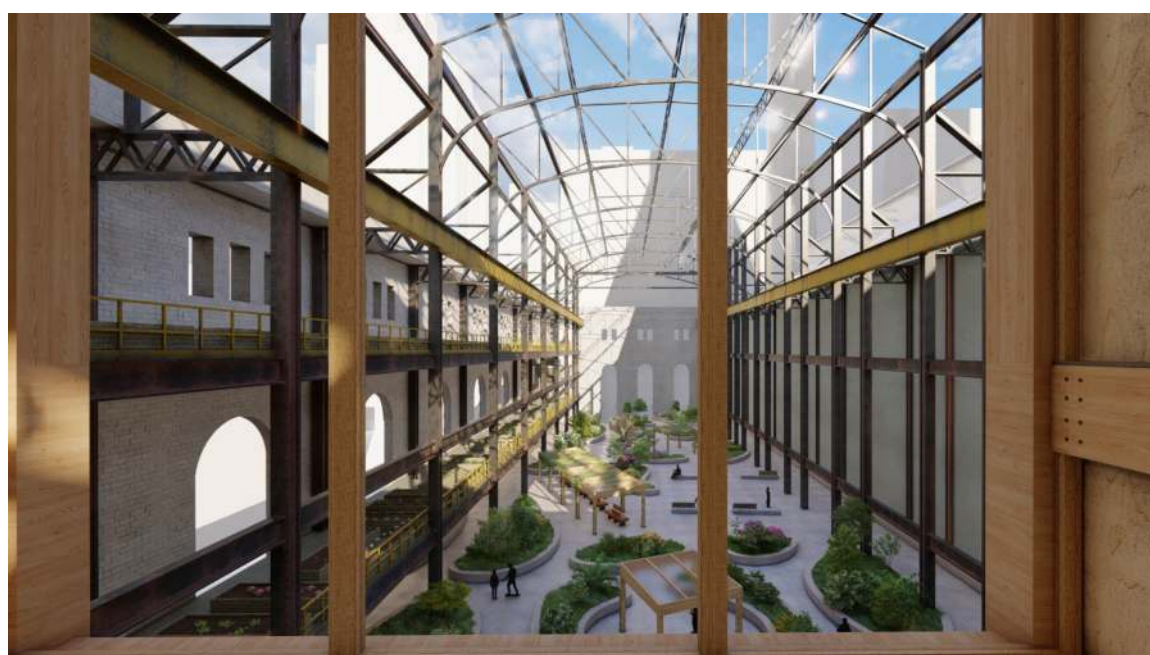
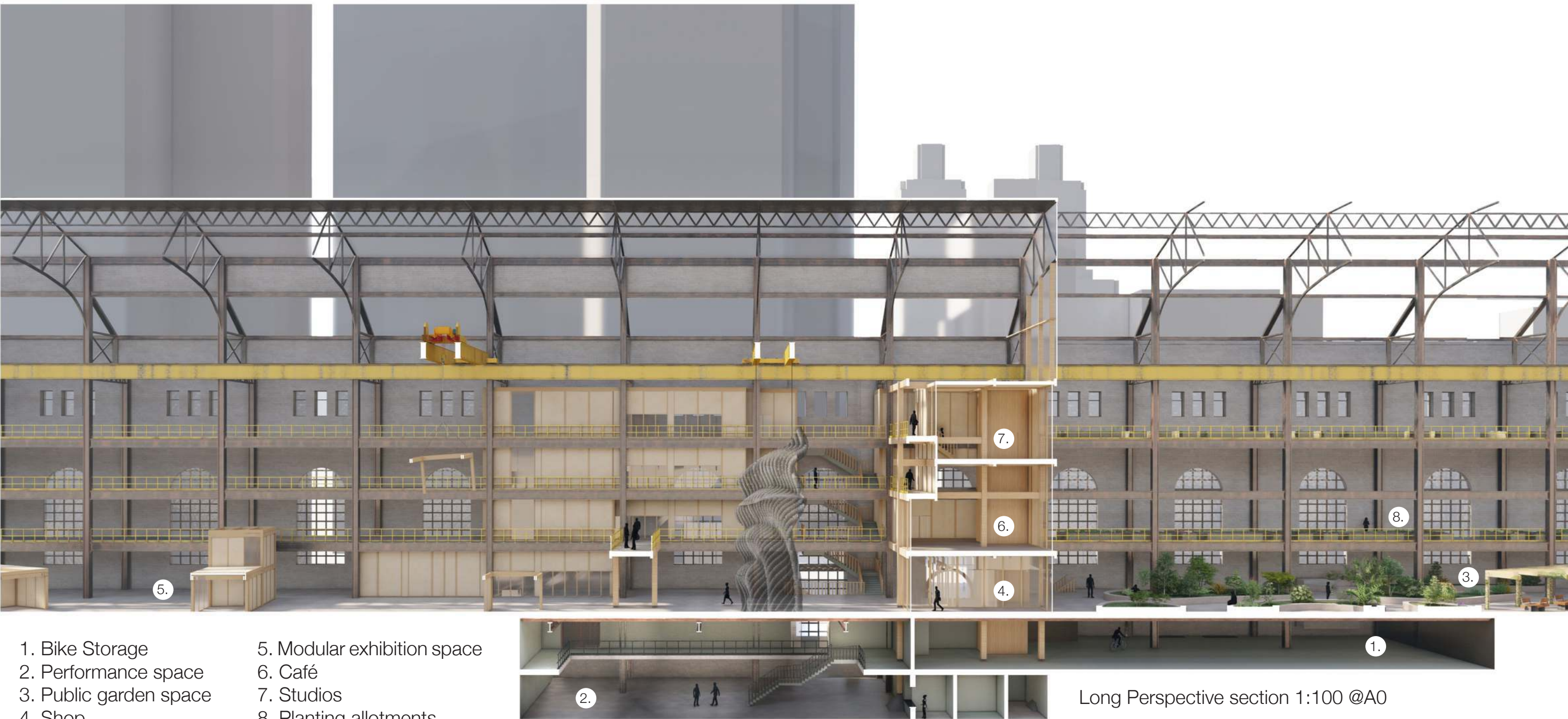


IRT POWERHOUSE NY

UNIVERSITY OF BATH Y3

Y3 - Adaptive re-use IRT Powerhouse NY
Cultural Space - Group Project

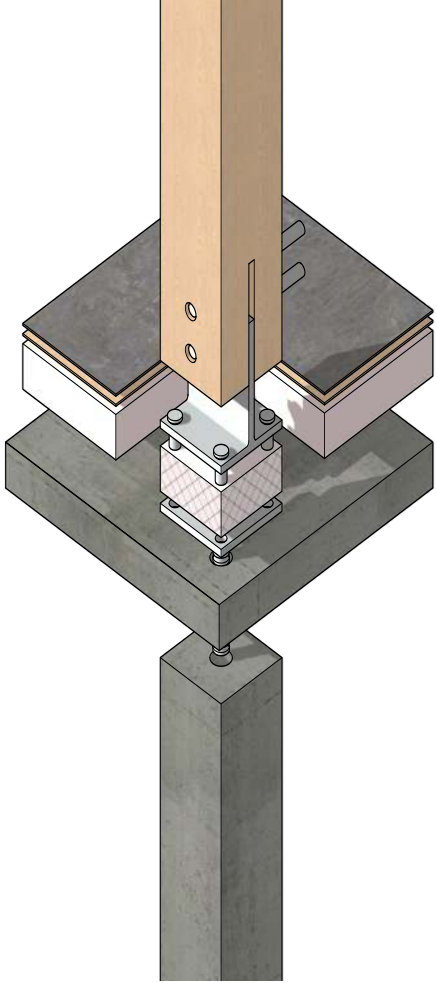
This group project was intended to provide a flexible use of this large space. The east end was converted to a garden, and the west to an open gallery space. Modular boxes were designed to be arranged to each artist's needs for exhibition of work. The separation between interior and exterior conditions was a living wall, populated with offices, a café, and studios. Studios were mainly placed along the facades, benefiting from solar gains and views to main space. Allotments for public planting were also provided.



BELGROVE HOUSE LONDON

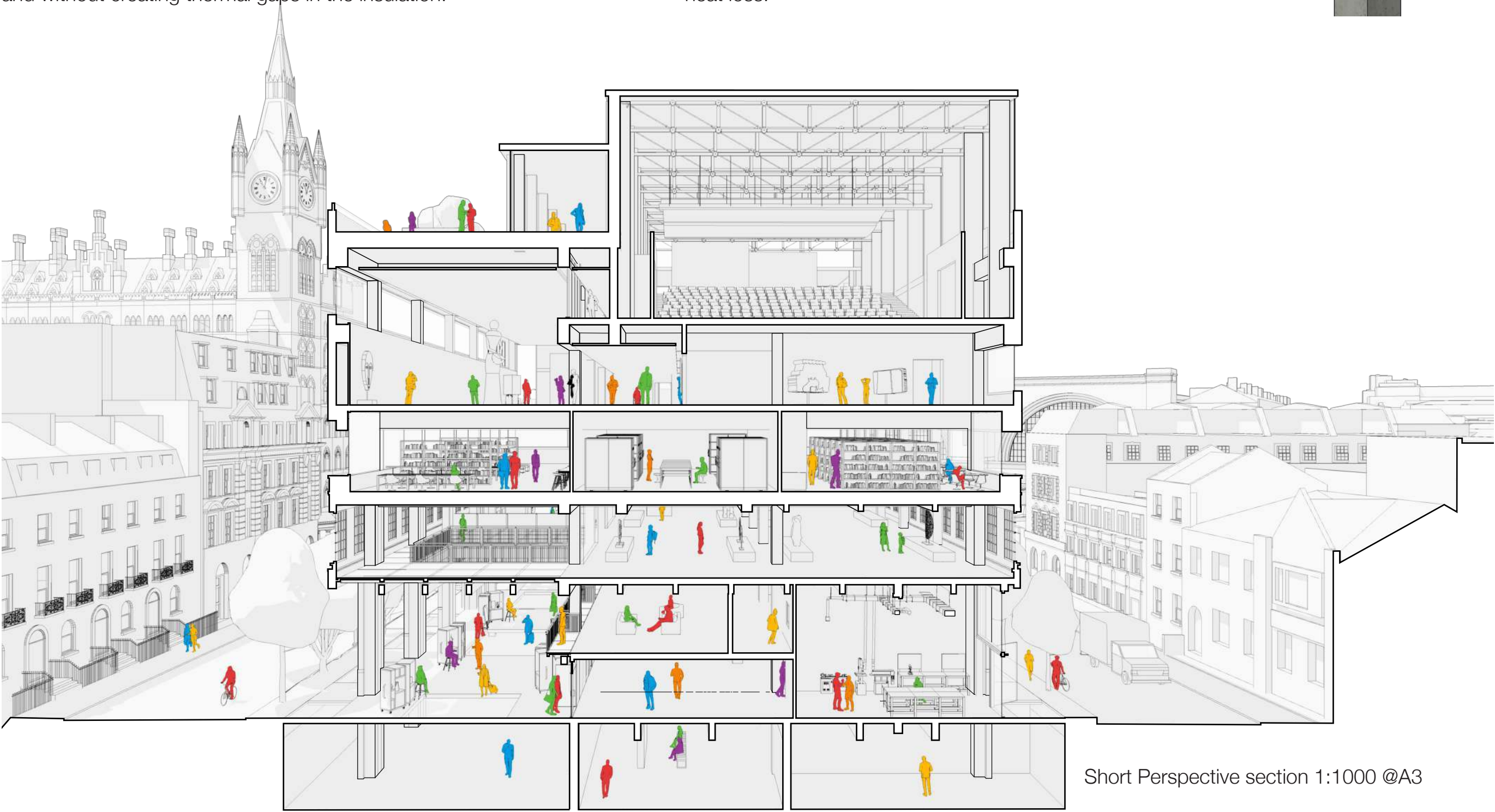
UNIVERSITY OF BATH Y4

Y4 - Adaptive re-use Belgrove House London
Migration Museum - Group Project



As we were working with an existing building, the project base were a set of boundaries created by the existing structure and fabric. This was my first time designing an adaptive reuse, and I got an real insight to the importance of this type of architecture in our modern world. The most challenging part of the project was adding new floors without damaging the existing foundations, and without creating thermal gaps in the insulation.

The sustainability strategy involved using a GSHP to extract heat from the underground tube system, and an ASHP to exchange cool air in summer. We implemented underfloor heating to ensure maximum efficiency in heating the building in winter, and reduced window opening to reduce heat loss.



Short Perspective section 1:1000 @A3

ADAPTIVE RE-USE PROJECT

ARCHITECTURAL PRACTICE

saraiva+associados
ARCHITECTURE + URBAN PLANNING



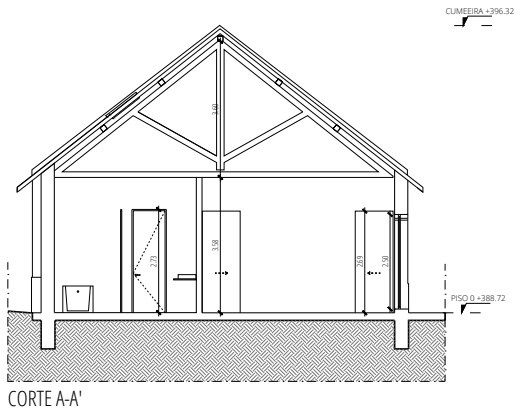
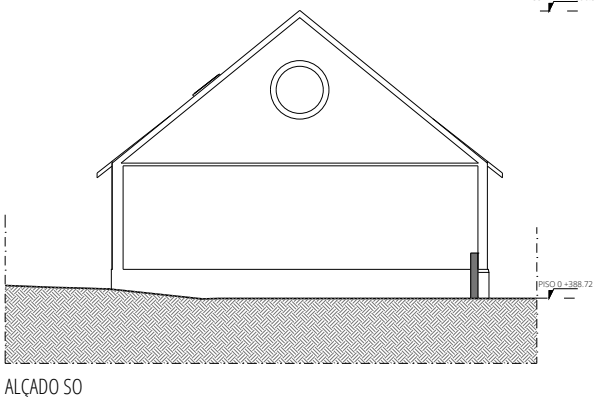
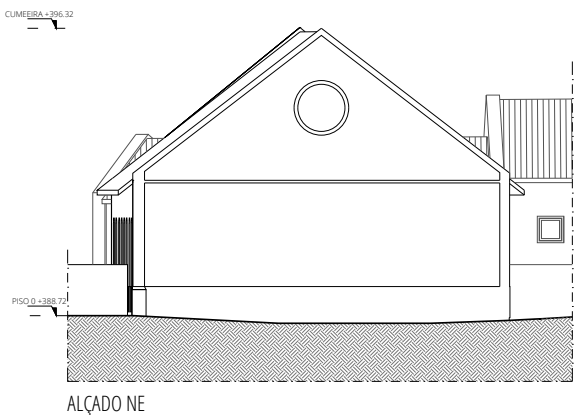
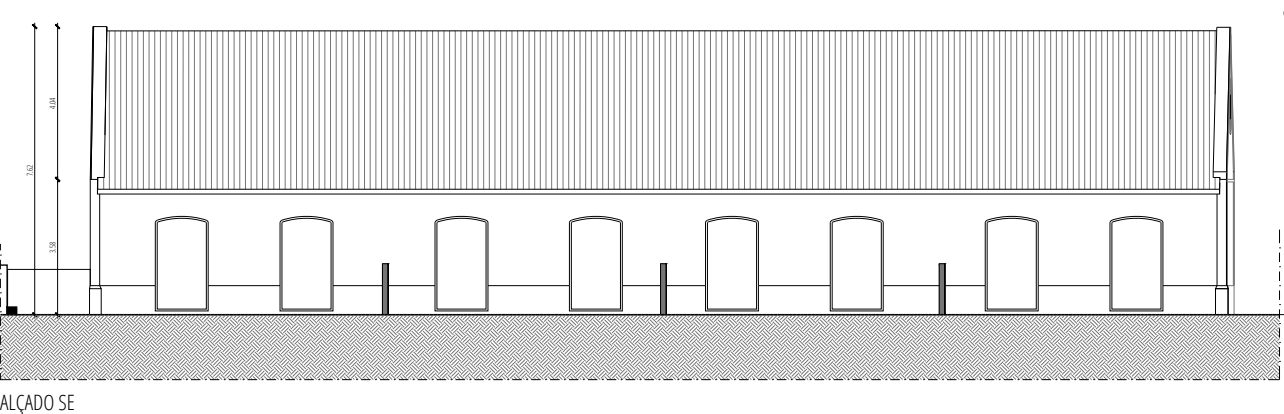
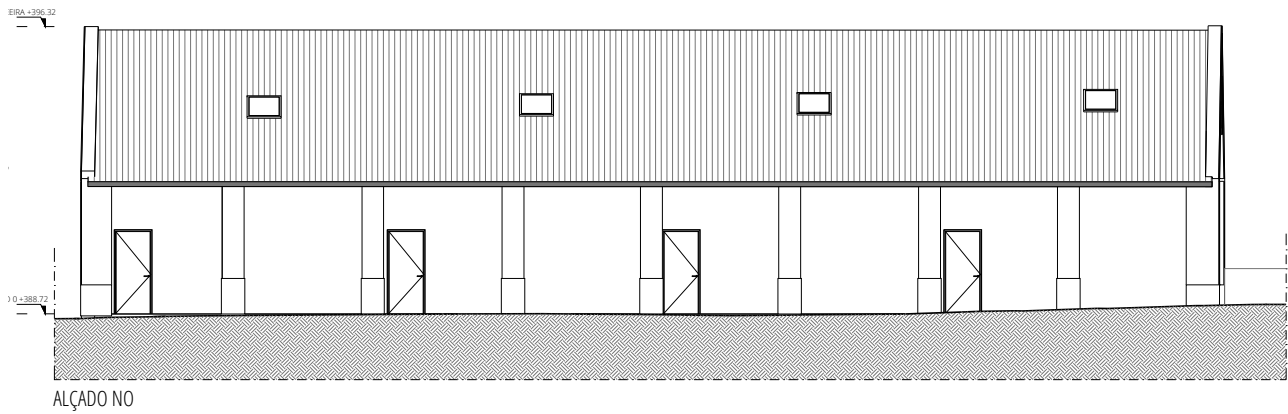
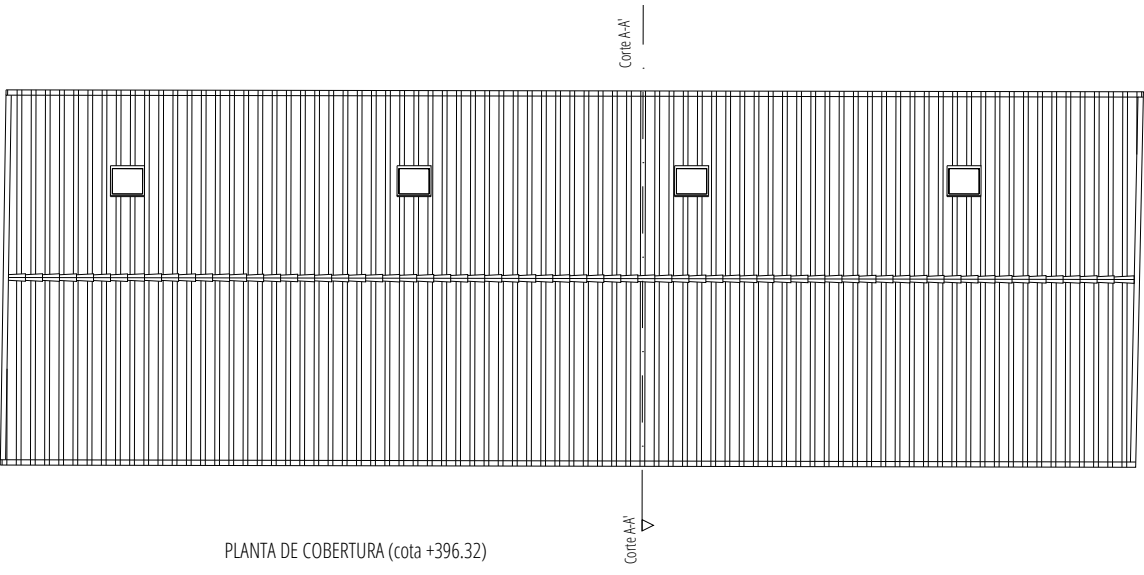
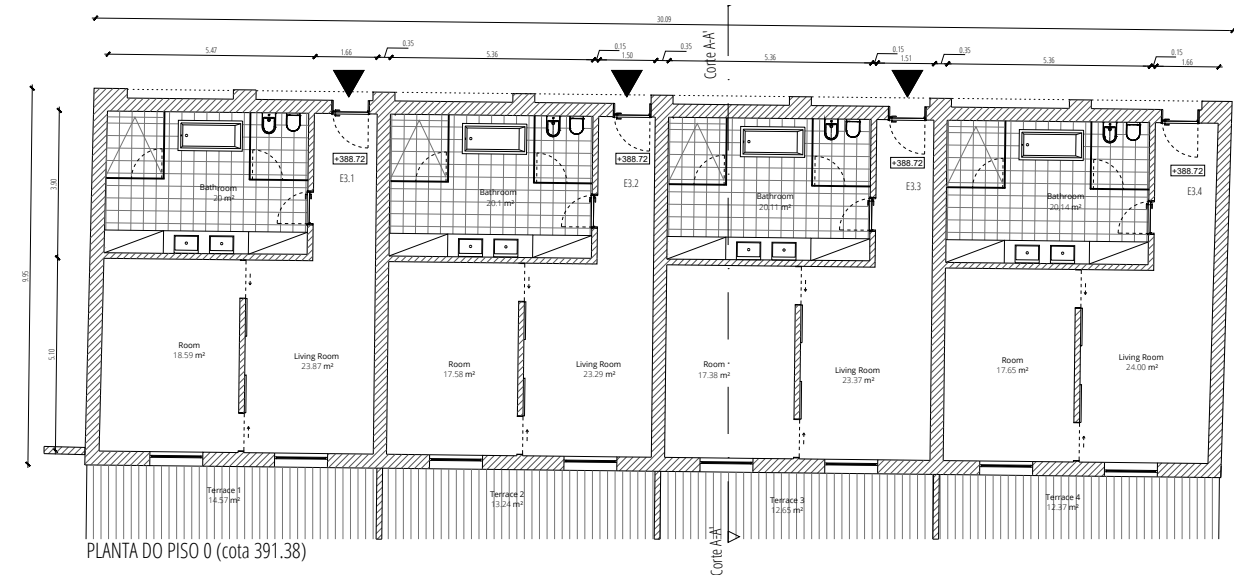
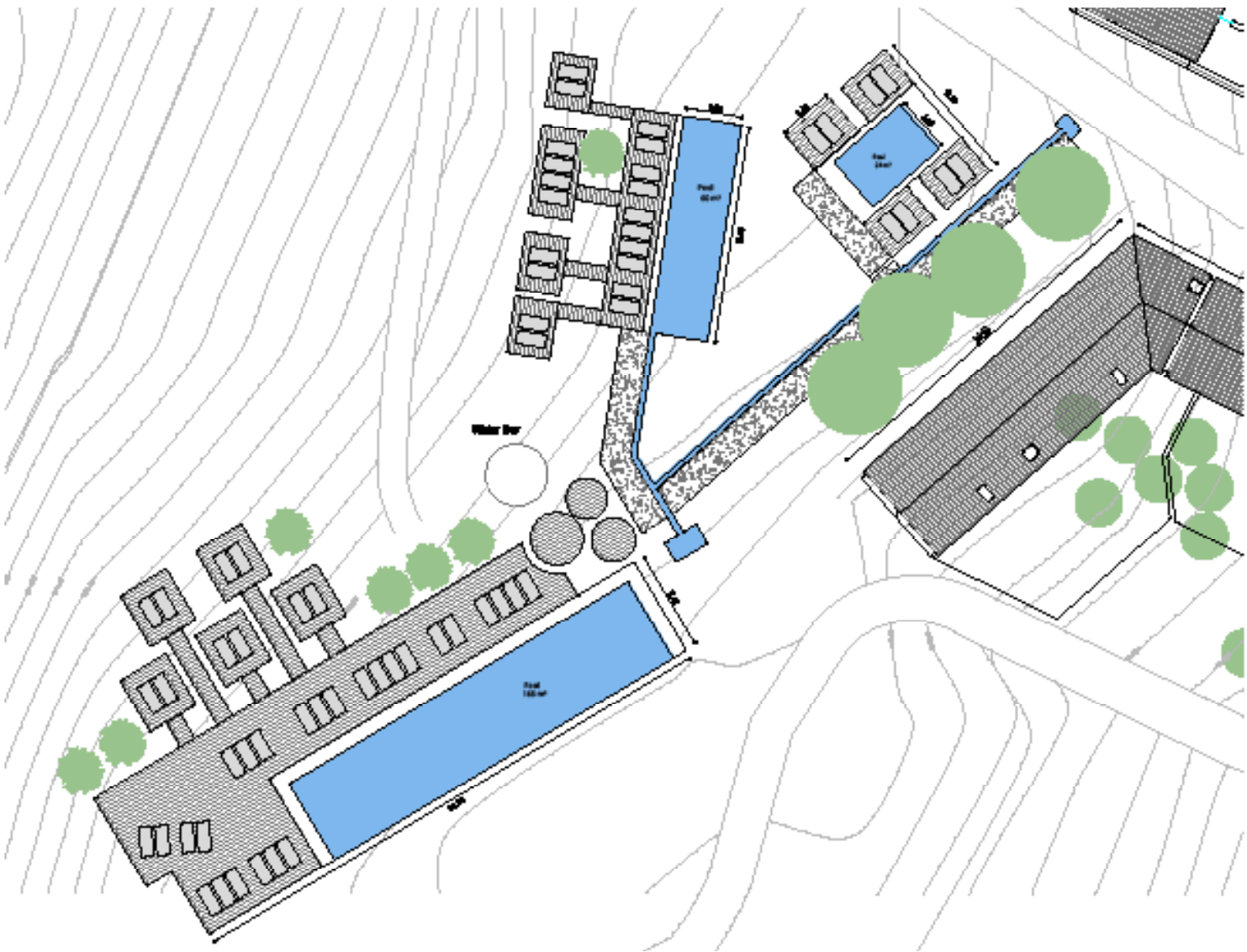
Mood Board Images



First placement, during second semester first year. The offer was extended to continue during 3rd.

I mostly worked on adaptive re-uses of old estates. In this case, our client was redesigning existing ruins for rural tourism. I was asked to design the pool (to the left), with views to the vineyards. My priority was to integrate the design organically with the environment, causing as little damage as possible. The design was approved.

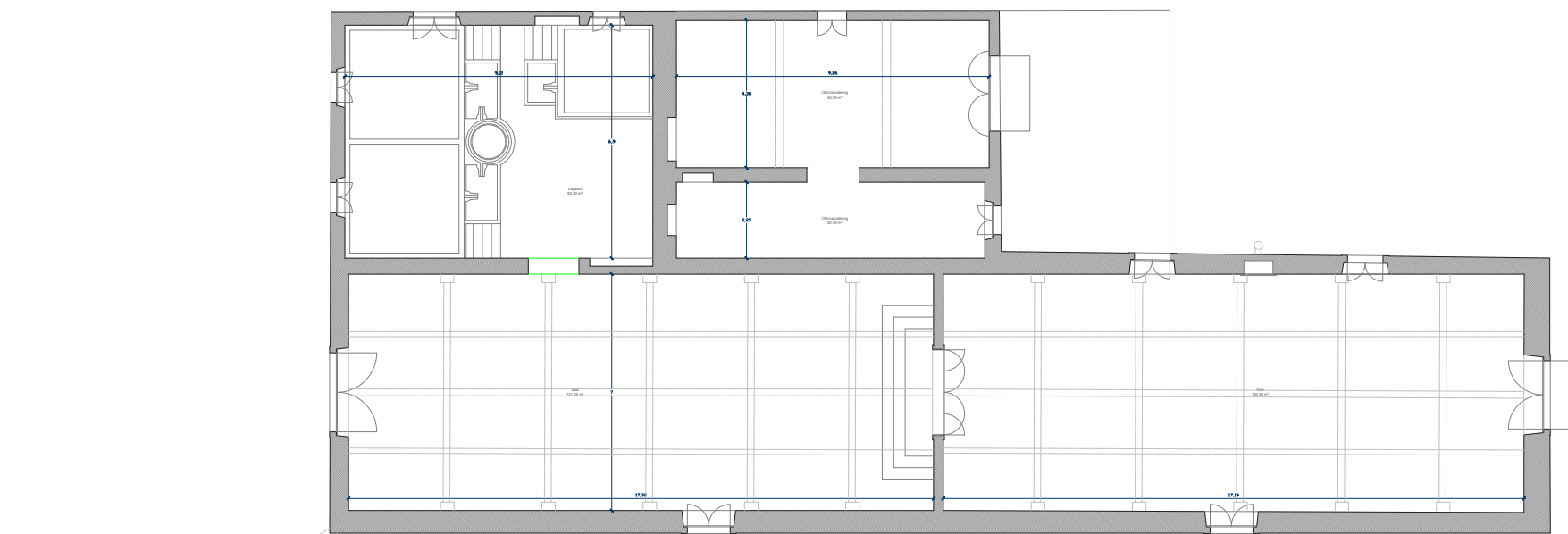
The drawings below show my work on the adaptive re-use of one of the existing ruins for hotel rooms.



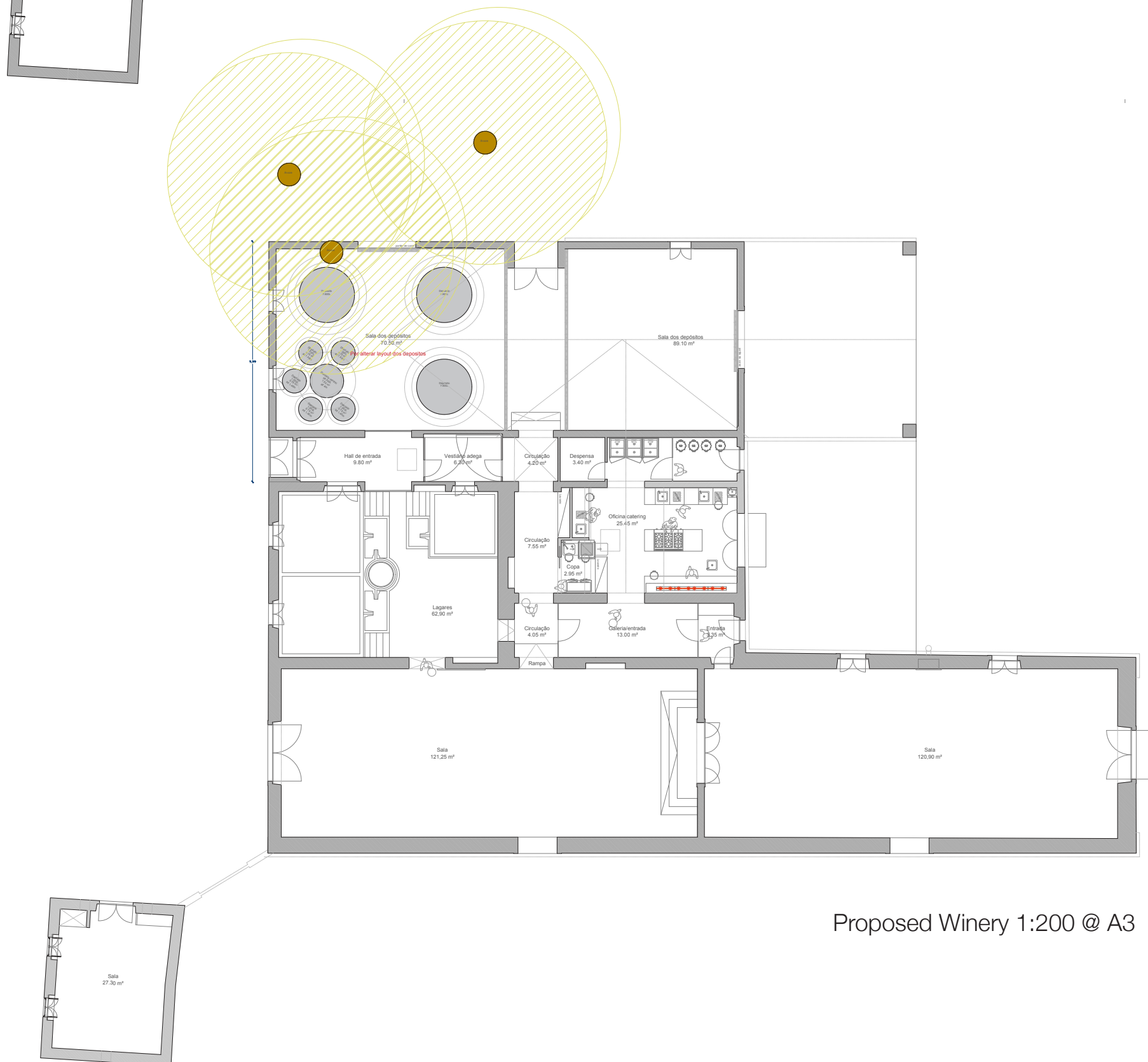
Plans , Elevations & Section 1:200 @ A3

WINERY EXPANSION

ARCHITECTURAL PRACTICE



Existing Winery 1:200 @ A3



Proposed Winery 1:200 @ A3



This project is still ongoing. The plans presented are the latest proposal.

As part of the 18th Century Palace revival, one of the elements of the project was to increase the area of the winery building, whilst maintaining the heritage of the original construction. In order to do this, various factors had to be considered: circulation, topography, trees and context. Various meetings with the client and site visits took place to discuss different possibilities.

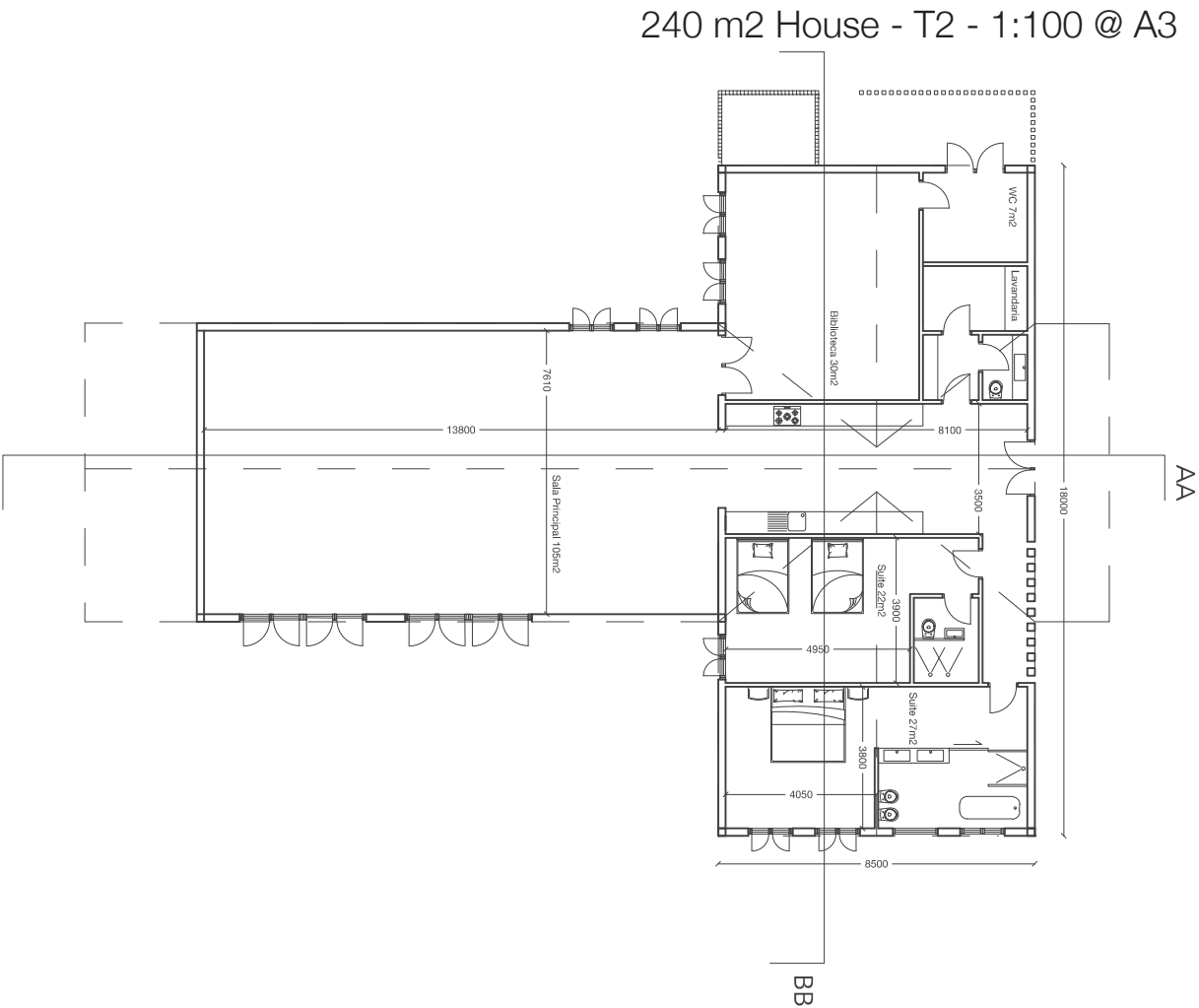
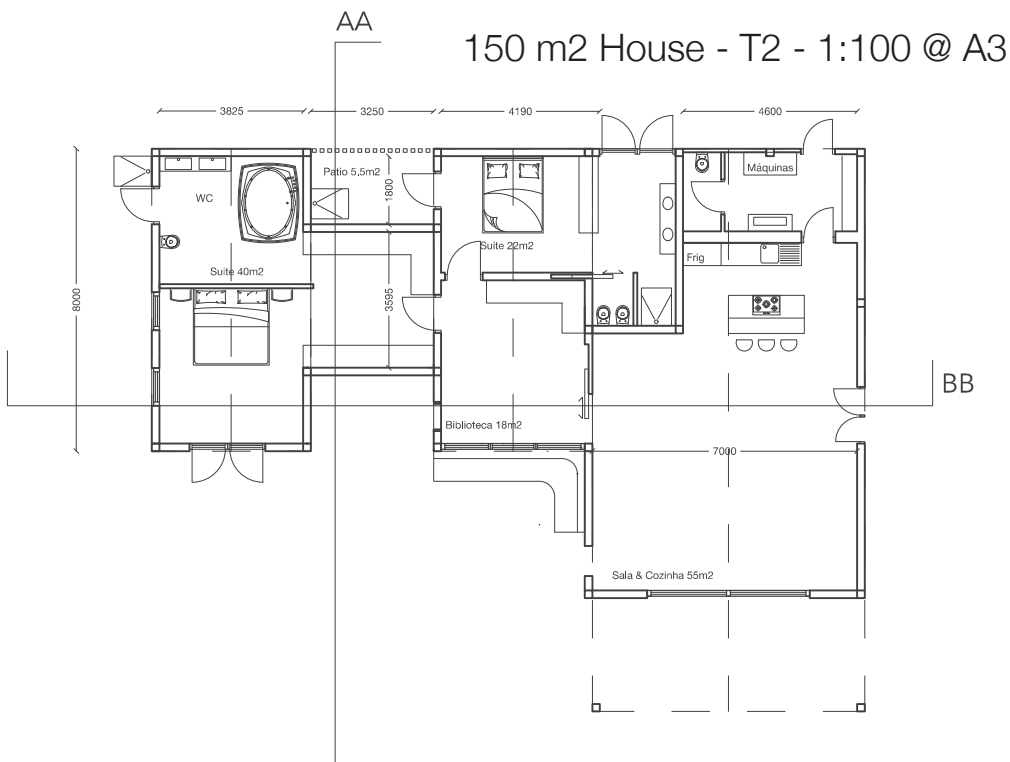
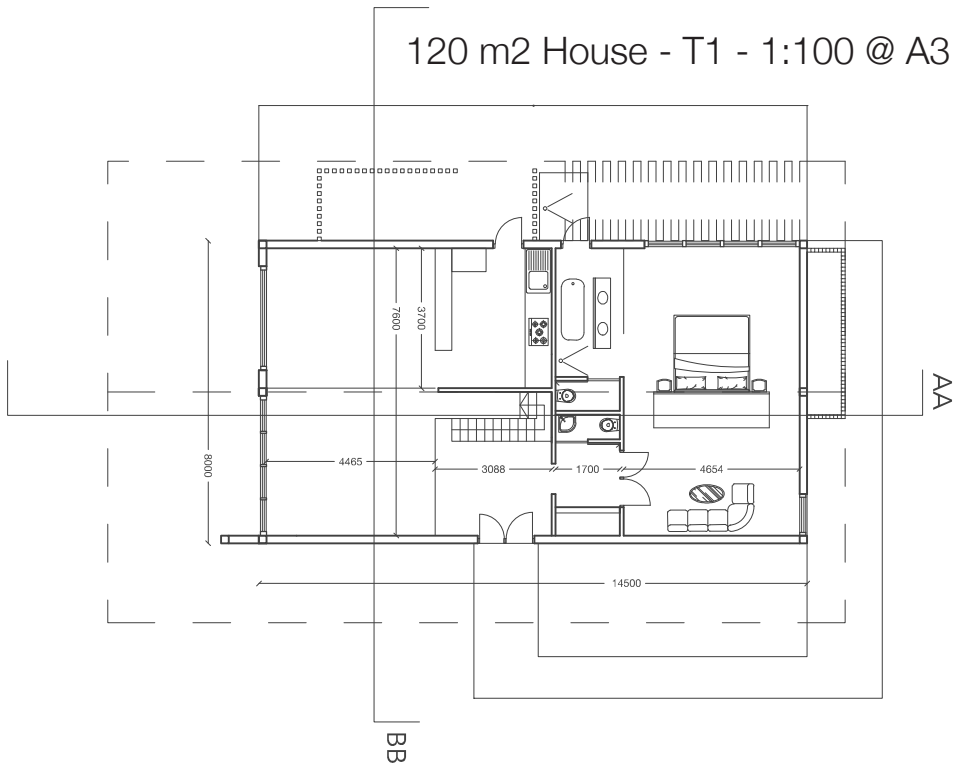


1:100 Model of Proposed Winery

This ongoing project focuses on planning an allotment project in a 17.7 hectare plot. I am in charge of designing the 120m2, 150m2 and 240m2 houses, as well as the hotel rooms and general buildings (restaurant, pool bar, pool, spa and multi-purpose hall for meetings and events). This project brings together all of the tools I have developed over the years, bringing all different types of design together. the project is being presented to potential clients and or investors.

ALLOTMENT PROJECT

ARCHITECTURAL PRACTICE



HOPE FOR A BETTER CITY

A utopian calling

A manifesto which explores different ways in which to morph our cities, and how these shifts might benefit the health and wellbeing of humanity.

“We live in a time of global emergency, so these steps to improve city health are not only beneficial but necessary. Educated by activists like Greta Thunberg and David Attenborough, we are all gaining awareness of this crisis, and must now start to implement it in our routine. Hopefully, with time, this knowledge will be transferred to all areas of expertise and integrated to practice. If nature is truly implemented in urban planning and architecture, it will change the way people experience the world, and it will only be with this reconnection with nature that one will gain respect. As architect Anthony Fieldman describes it, “The future is green and zen, and it all unfolds within 100 meters of your home.””

FINAL PROJECT - NETWORK

For my final project at university, I am designing a mycellium lab production in Camden, London. This project involves developing a deep understanding of a material that I believe to be the future of design and sustainability, a material that facilitates our cooperation with nature and technology in one.

SECTION 2

“Contractors are the Architects of the Future”

An essay that discusses the ideas provided by the RIBA document The Way Ahead, alongside the topics discussed in the 2021 Venice Biennale of Architecture. I believe it would be beneficial for the practice to be less rigid and more open minded, and for architects to have a more interdisciplinary approach to design.

To conclude, we must use the questions brought up in the 2021 Venice Biennale of Architecture to deepen our understanding of the issues of today. These will, in turn, bring forward new approaches to design with technology and the natural environment as the main tools. We must also develop the proposals suggested by The Way Ahead, and even integrate these new requirements early on in the education of architects. The suggested cross-disciplinary approach to design should be introduced in University, not only with the department of Civil Engineering, but with all others mentioned in this essay. Students should be challenged to come up with new approaches to design, with the climate emergency as priority.

BAMBOO U

In order to develop a deeper understanding of construction systems and sustainable design, I have enrolled to undertake a course at IBUK over the summer. I will have a chance to be involved with professionals in the field from design to model making, construction and finishing.