

JULIO VIEJO



Architecture Portfolio 2026

Studio IV: Co-Living

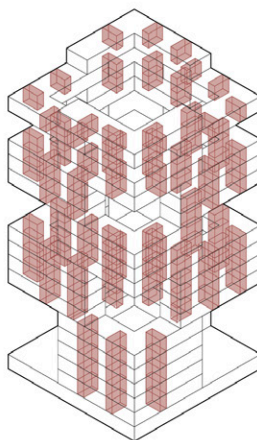
A New Grammar for Collective Housing

Columbia University - GSAPP

Selected for Summer '25 Summit

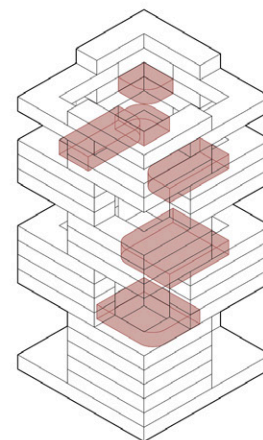
This high-rise residential concept is initially inspired by Steven Holl's Alphabet City. Here, the 'O' typology is used to extrude a block in Manhattan, allowing for maximum efficiency of surface area within the form. A series of sheared 'L' shapes are then introduced within this 'O', each rotated around the building's central axis. This process creates dynamic shared spaces designed to foster interaction among the communities inhabiting this new typology.

Scales of Sharing



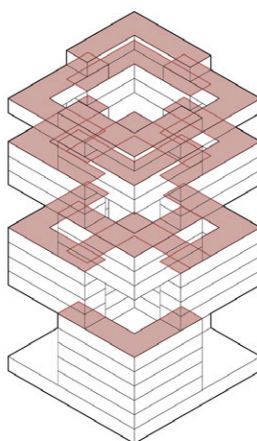
bathrooms

one bathroom / two units



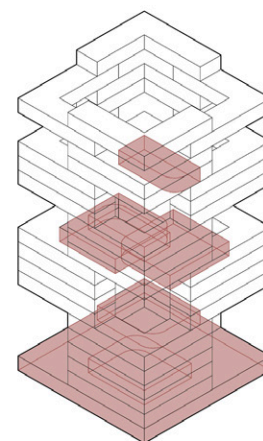
kitchens dining rooms

one kitchen / one cluster



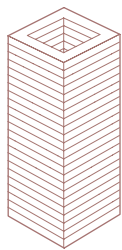
lounges terraces gardens

two terraces / one cluster

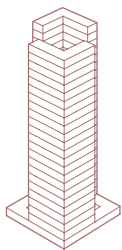


library co-working makerspace
retail laundry storage cafe sports playroom

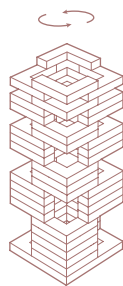
nine luxuries / whole building



'O' Typology



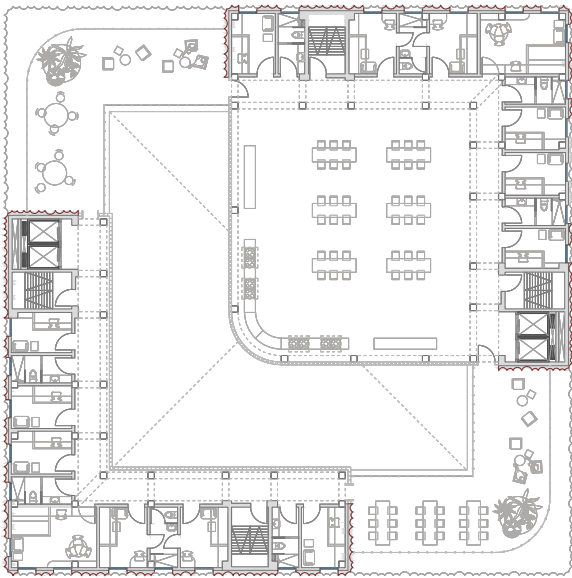
'L' Typology



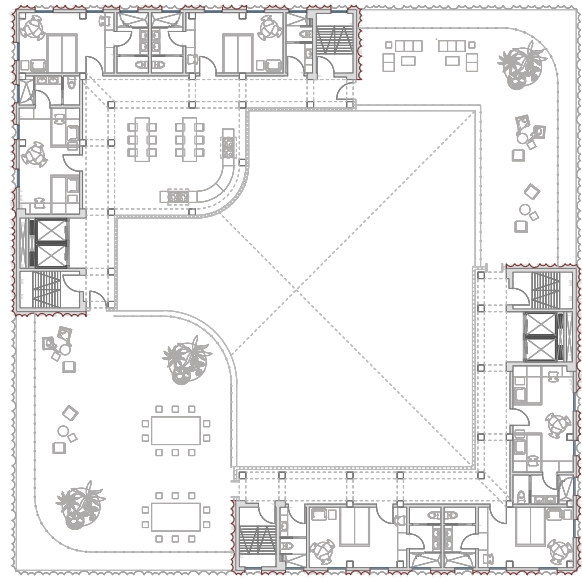
'L' + 'O'

EAST HARLEM - NEW YORK

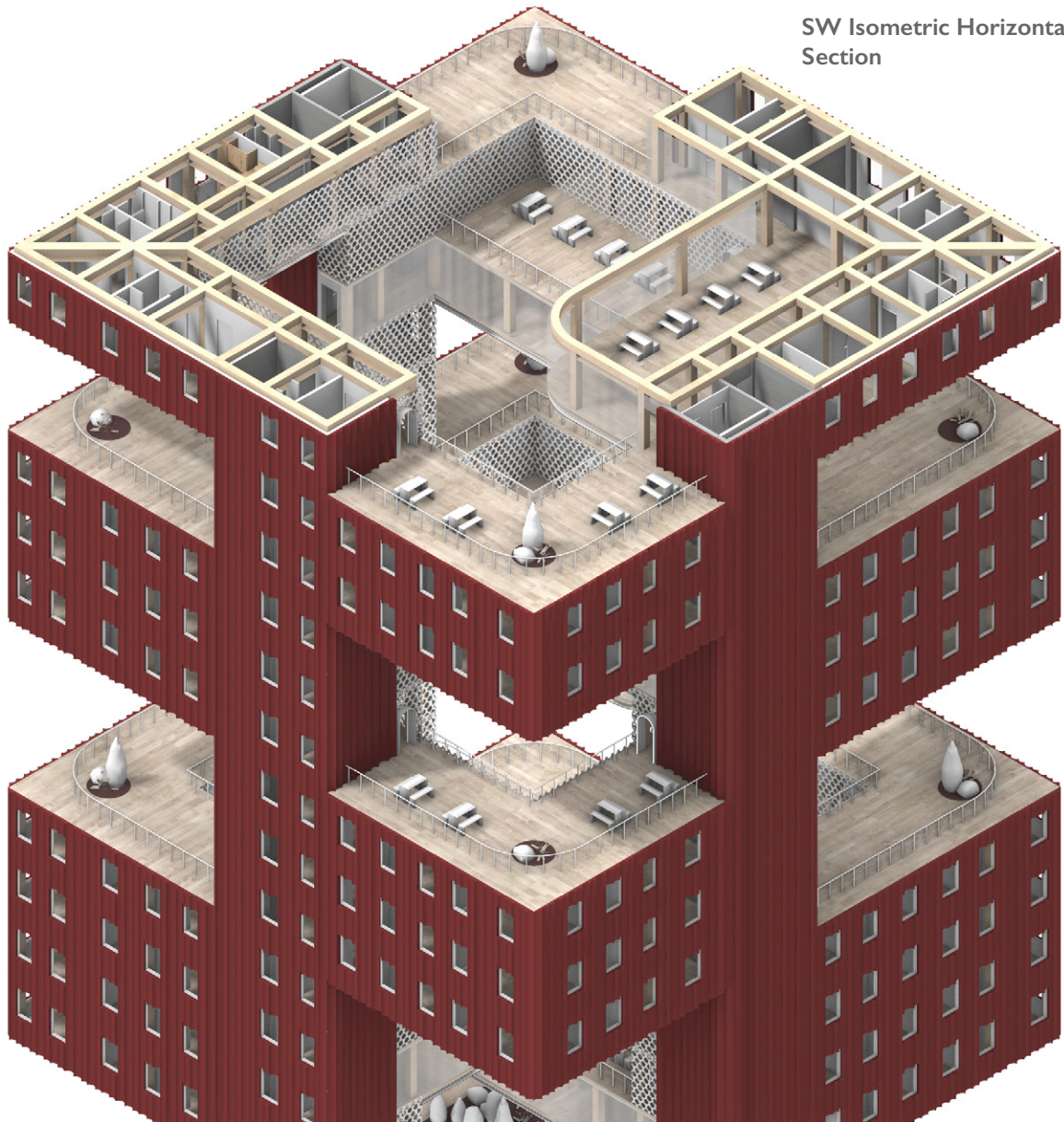




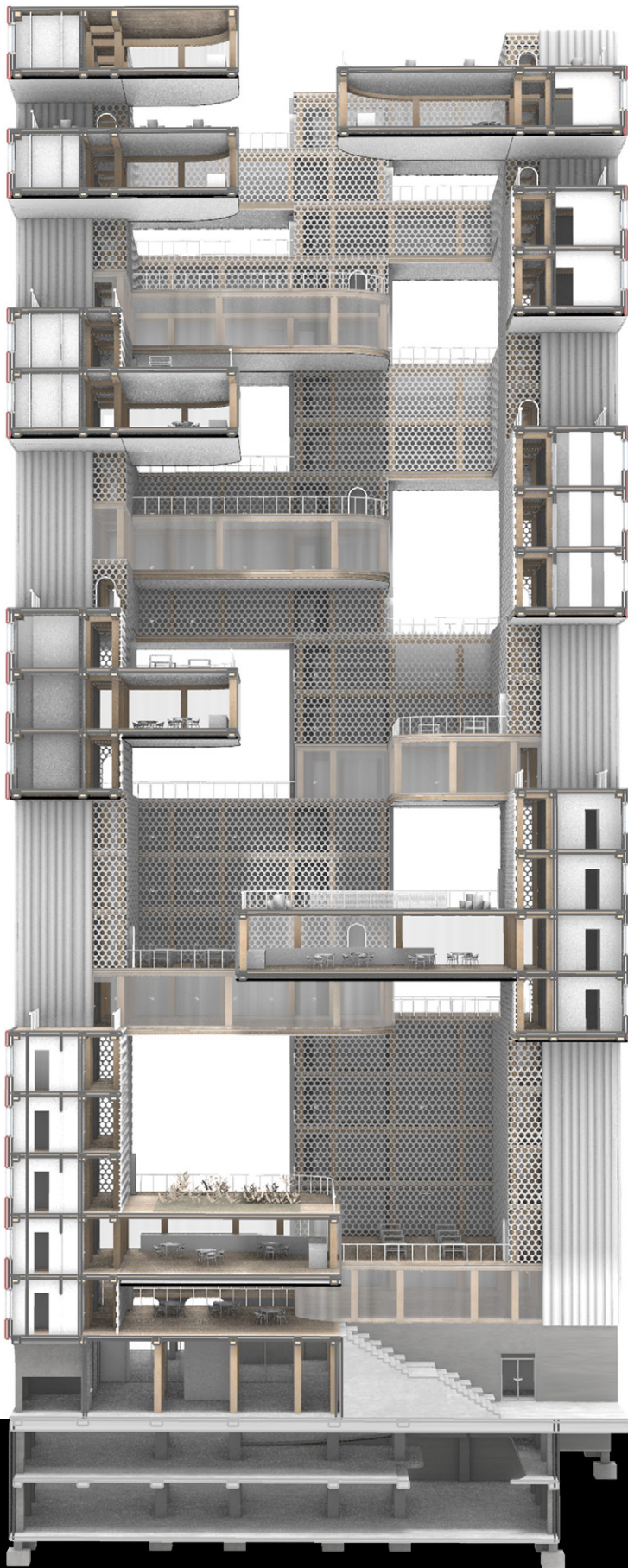
7th Floor - 14 units



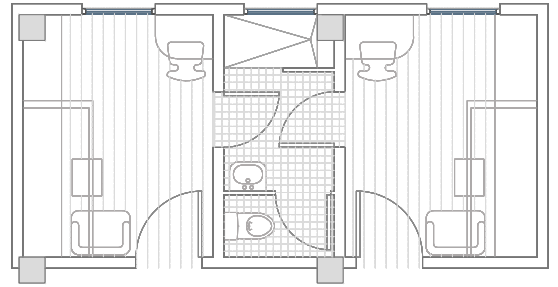
23rd Floor - 6 units



SW Isometric Horizontal Section



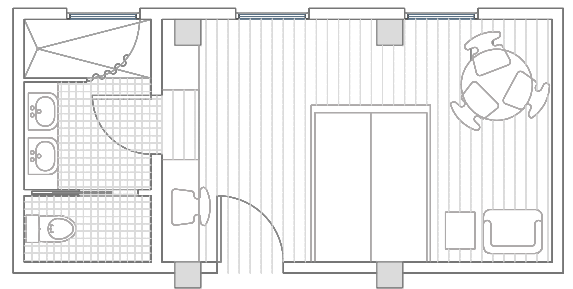
A series of distinct room typologies are distributed vertically throughout the tower, with shared programs concentrated near the base to accommodate individuals seeking single rooms. As the floors ascend, the level of privacy increases—bathrooms become private, and the living spaces expand slightly to house families and individuals who wish to live together.



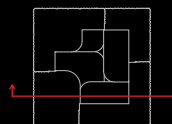
Room Type 1



View Inside Room



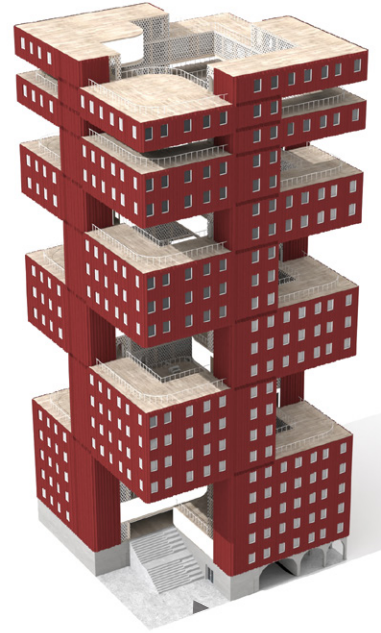
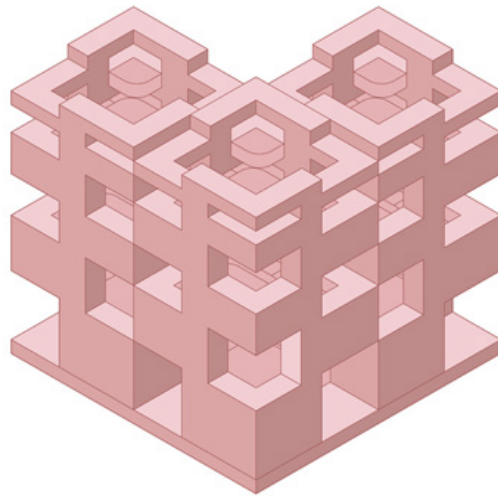
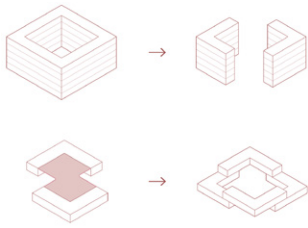
Room Type 2



West Side Section



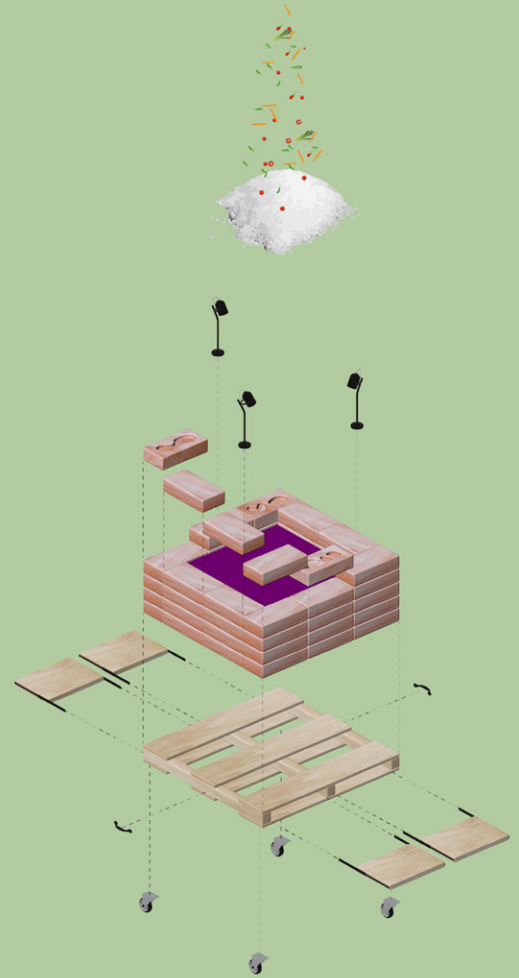
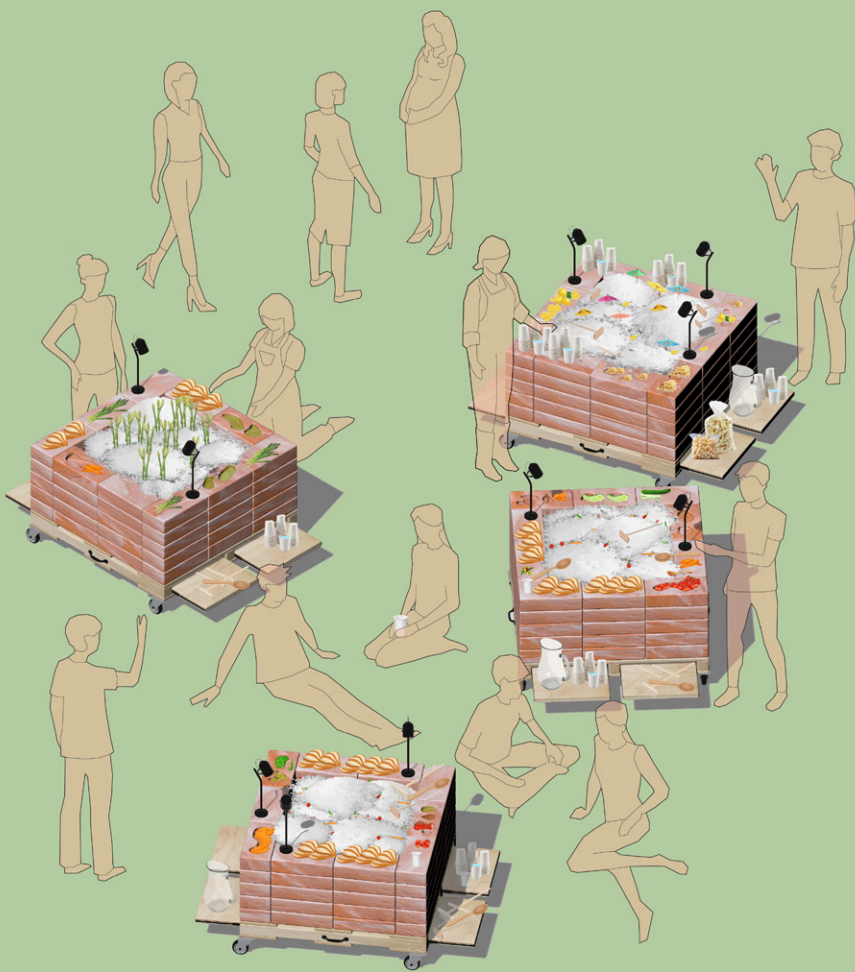
RECIPROCITY



The system functions best when reciprocated. For this reason, the design enables congruent models to adjoin, causing interior spatial structures to expand, thereby forming a more cohesive urban grid.

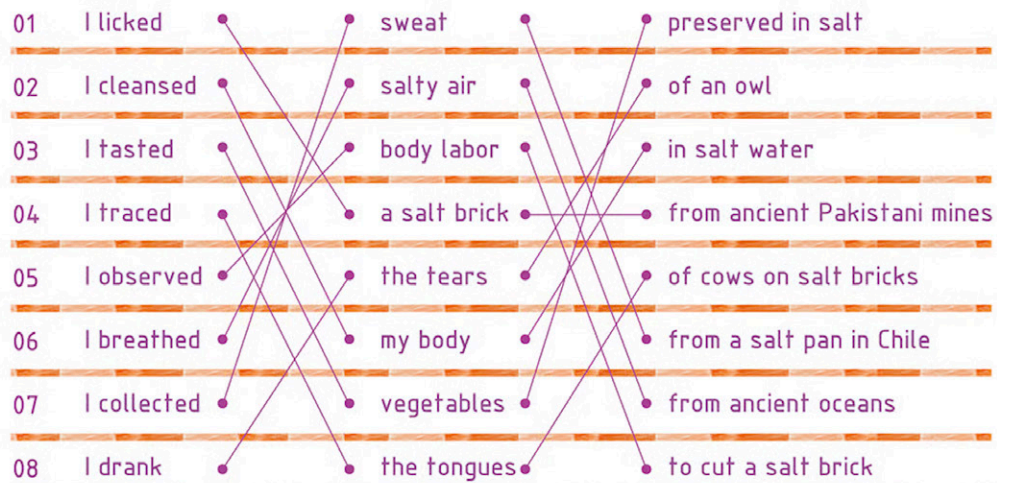
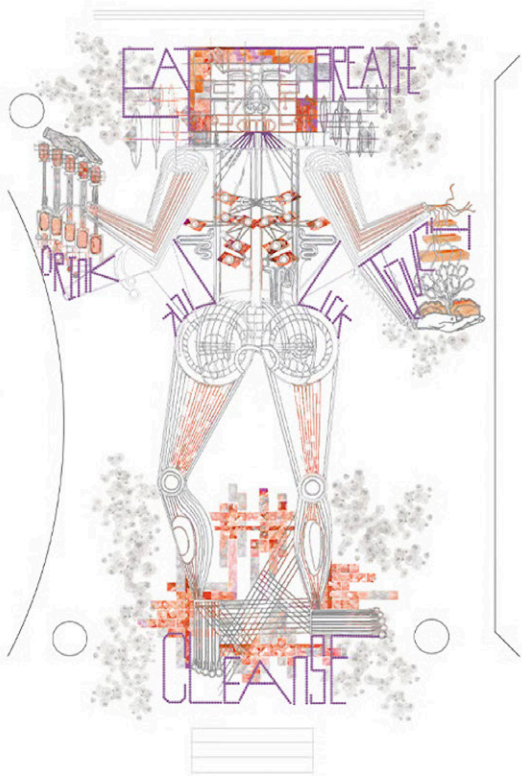
6 foot 5 inches tall model





COLUMBIA GSAPP - EDIBLE EXHIBITION

1st Place School Competition - November 13, 2026





EXHIBITION SPACE
AVERY 100 - GSAPP

Salt Archaeologies stages a near future where architecture and cuisine collapse into the same mineral substrate. Salt, once the basis of economies, preservation, and survival, is treated as infinite, like the power that cools our fridges. As seas rise, soils salt, and ecological stress mounts, that illusion fractures. What if the future got saltier?





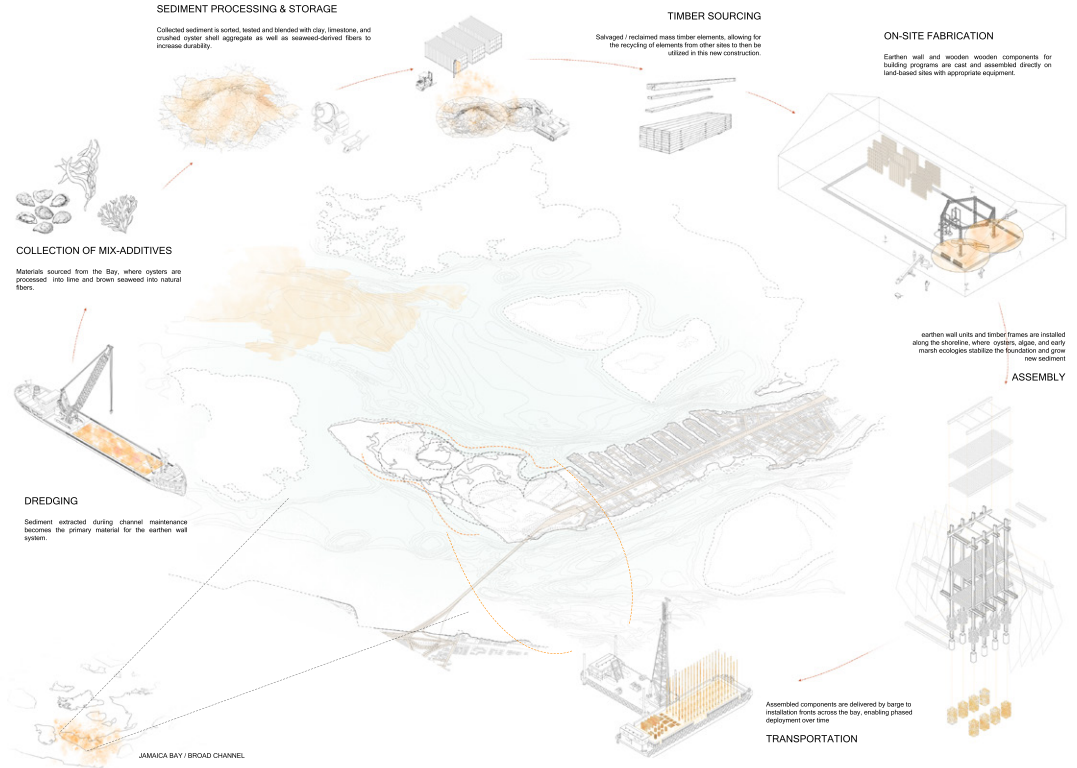
Studio V: Impermanent Matter

The Living Shoreline

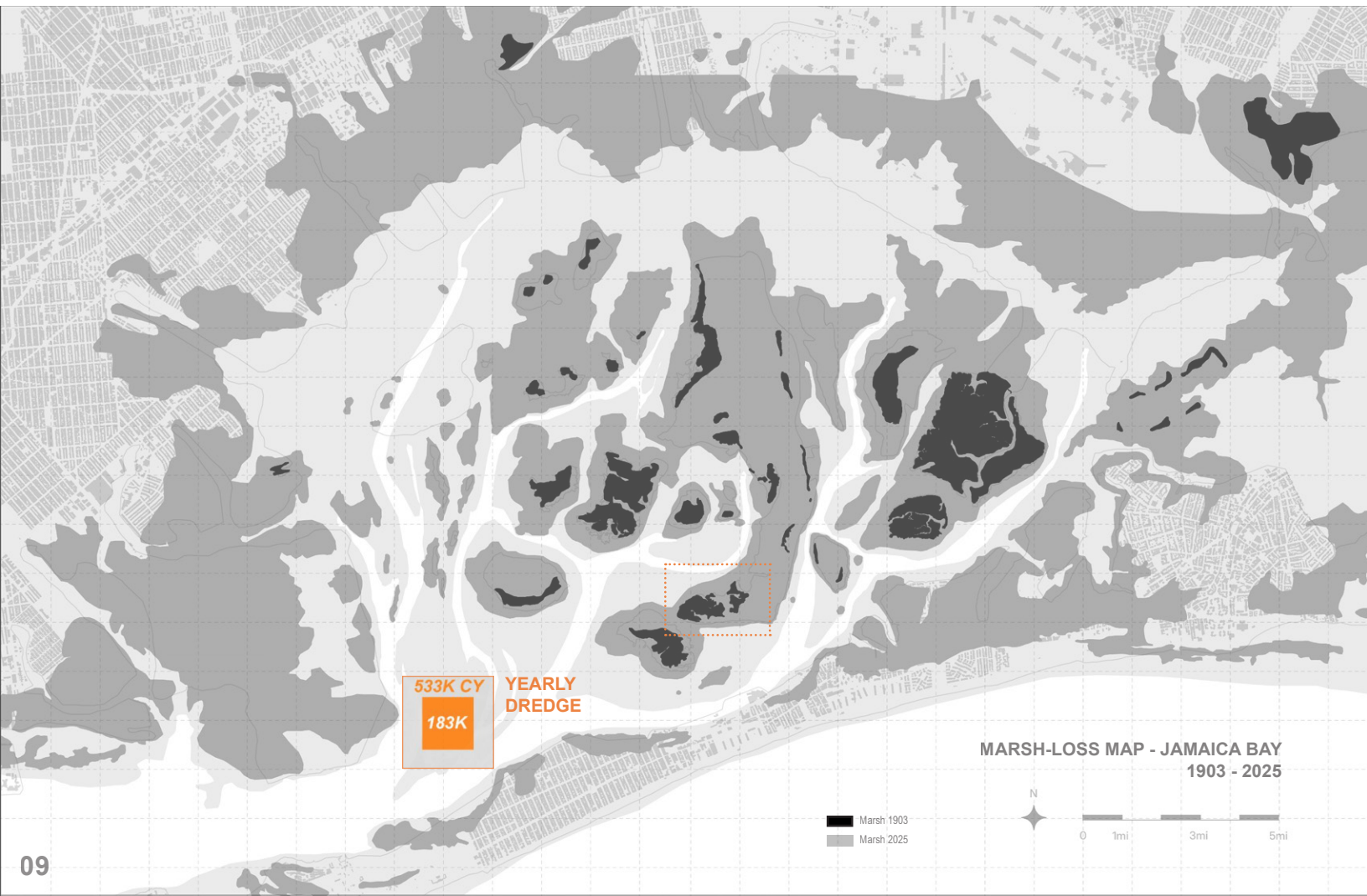
Columbia University - GSAPP
Selected for Fall '25 Summit

The project comprises a comprehensive analysis of Jamaica Bay, an area whose ecosystem has continually been degrading for over 100 years. Most notably, salt marsh extents have been reduced to 10% of their original footprint, no longer being able to sustain the wildlife and the ecosystem that the once harbored.

The project aims to revitalize the ecosystem through a series of impermanent structures and materials that enhance and protect salt marshes.

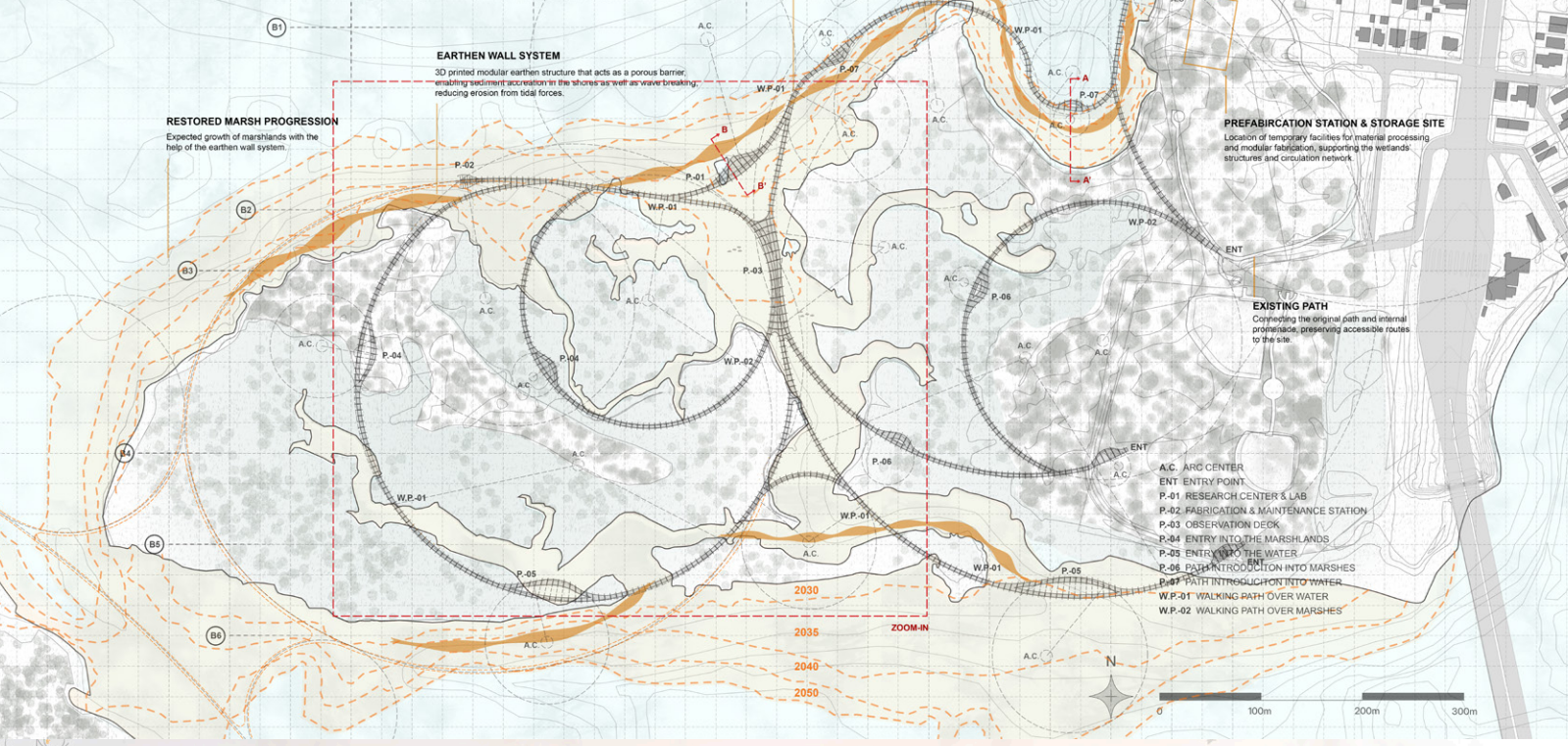


System Sequence Scheme





TRAIL SEGMENTS- LENGTH / TIME



LOOPED PATH NETWORK
Flexible circulation system around the natural reserve, allowing visitors and the surrounding communities to introduce themselves into the marshes.

EARTHEN WALL SYSTEM
3D printed modular earthen structure that acts as a porous barrier, enabling sediment accretion in the storm as well as wave breaking, reducing erosion from tidal forces.

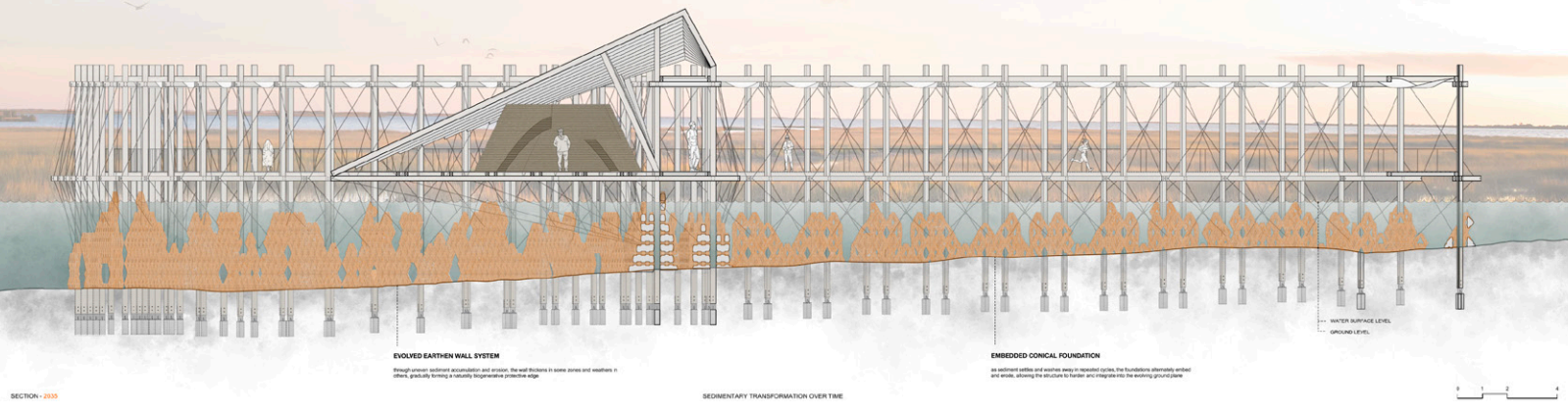
RESTORED MARSH PROGRESSION
Expected growth of marshlands with the help of the earthen wall system.

PREFABRICATION STATION & STORAGE SITE
Location of temporary facilities for material processing and modular fabrication, supporting the wetlands structures and circulation network.

EXISTING PATH
Consolidating the original path and internal promenade, preserving accessible routes to the site.

- A.C. ARG CENTER
- ENT ENTRY POINT
- P-01 RESEARCH CENTER & LAB
- P-02 FABRICATION & MAINTENANCE STATION
- P-03 OBSERVATION DECK
- P-04 ENTRY INTO THE MARSHLANDS
- P-05 ENTRY INTO THE WATER
- P-06 PATH INTRODUCTION INTO MARSHES
- P-07 PATH INTRODUCTION INTO WATER
- W.P-01 WALKING PATH OVER WATER
- W.P-02 WALKING PATH OVER MARSHES

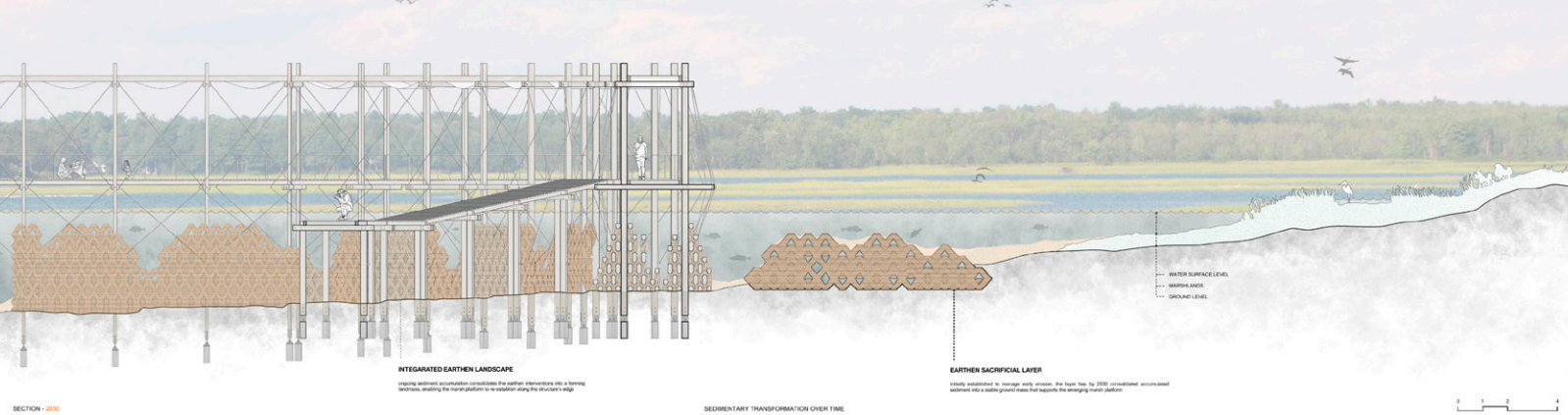
Section A - A'



EVOLVED EARTHEN WALL SYSTEM
Through lateral sediment accumulation and erosion, the wall thickness in some areas and weakens in others, gradually forming a naturally vegetative porous edge.

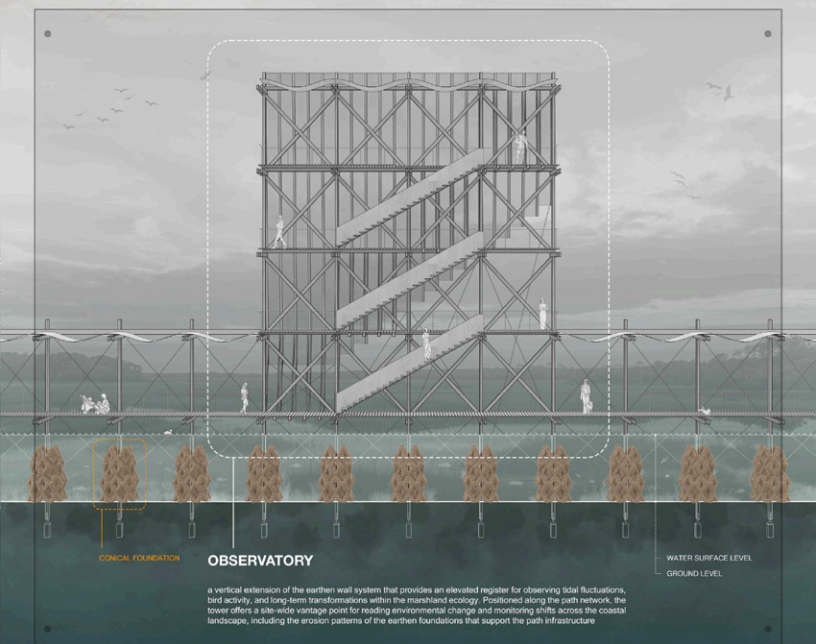
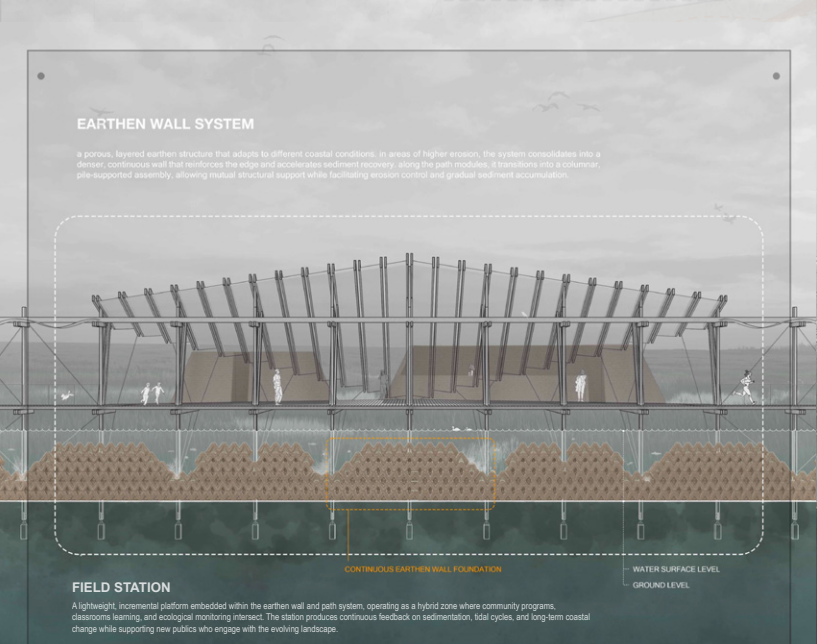
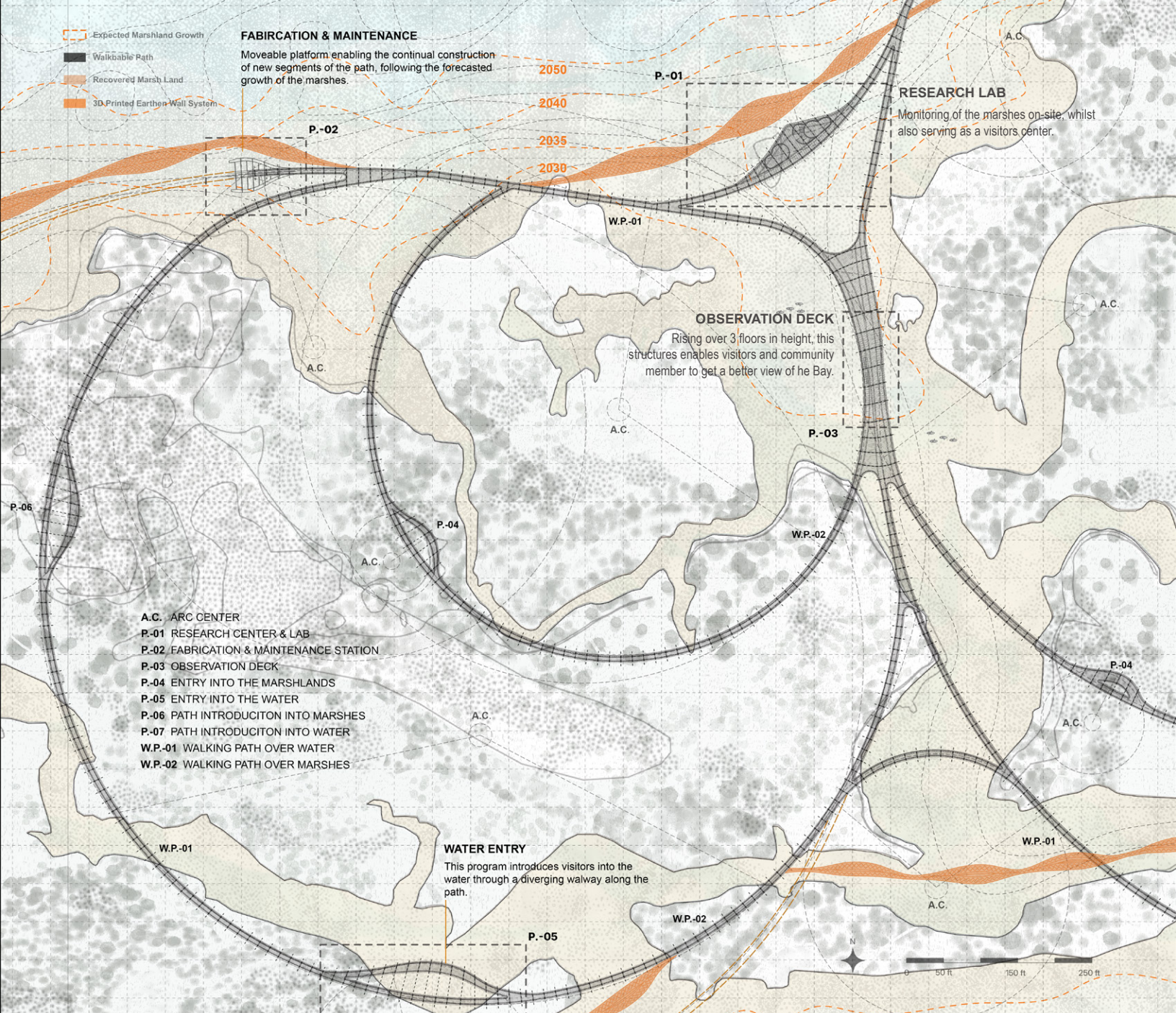
EMBEDDED CONICAL FOUNDATION
As sediment settles and erodes away in localized areas, the foundations alternately embed and erode, allowing the structure to better anchor into the existing ground plane.

Section B - B'

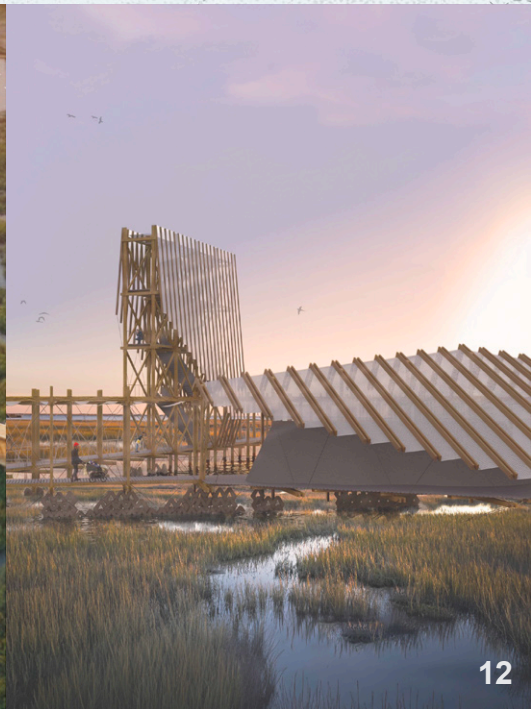
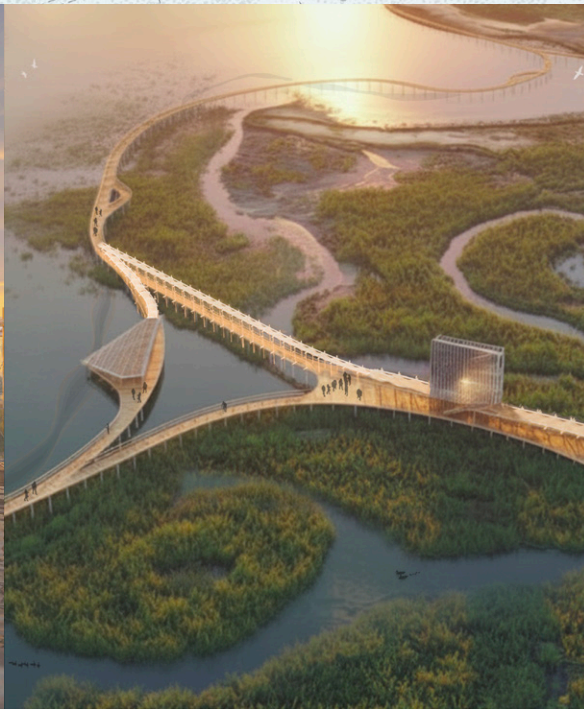
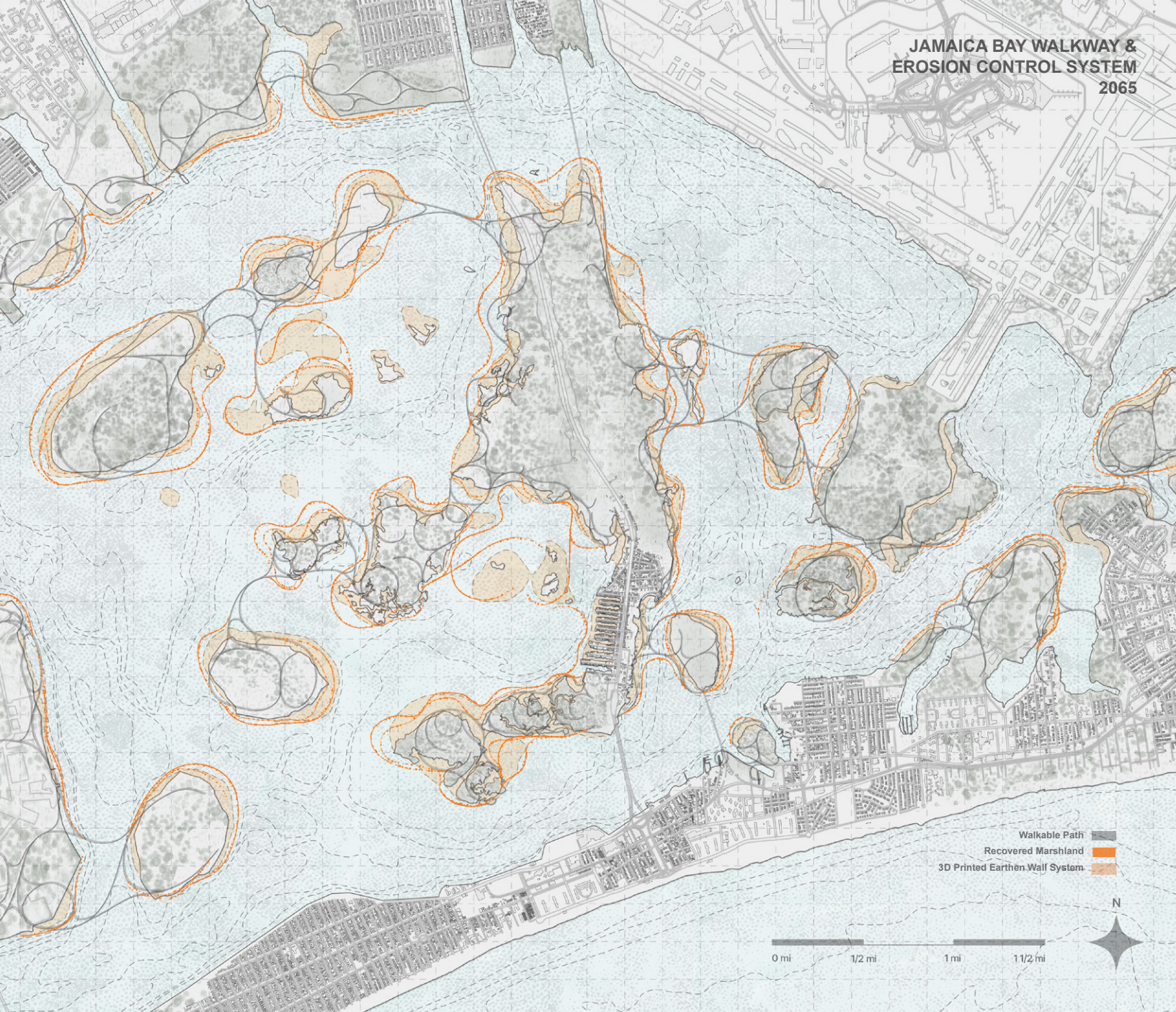


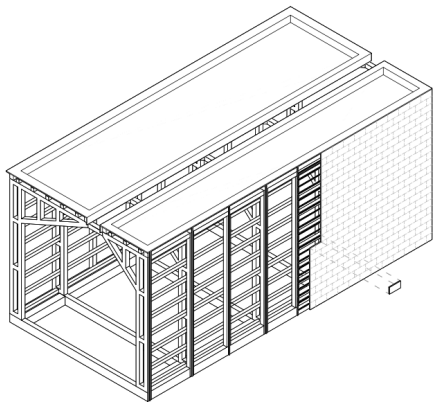
INTEGRATED EARTHEN LANDSCAPE
The integration of the earthen structures into a terraced landscape, enabling the marshland to co-evolve along the structure's edge.

EARTHEN SACRIFICIAL LAYER
The sacrificial layer erodes away around the base, but the 3D-printed modular structure is embedded into a stable ground mass that supports the emerging marsh platform.

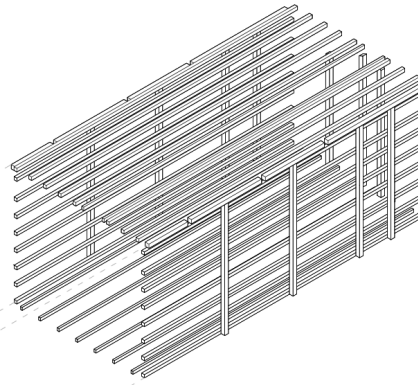


JAMAICA BAY WALKWAY & EROSION CONTROL SYSTEM 2065

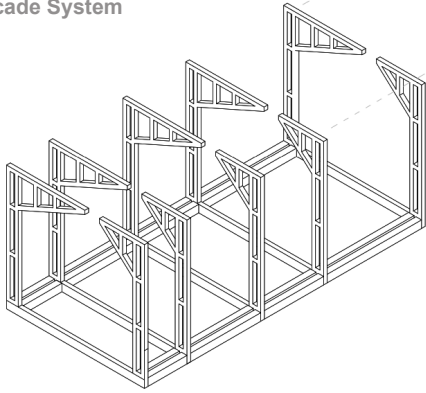




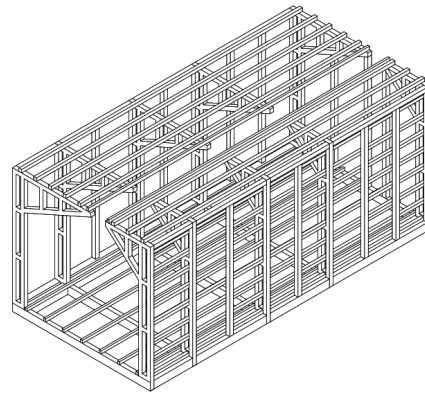
Structure - Facade System



Total Structure Design

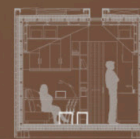
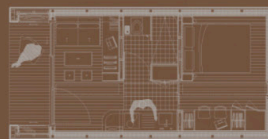
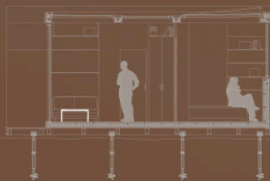
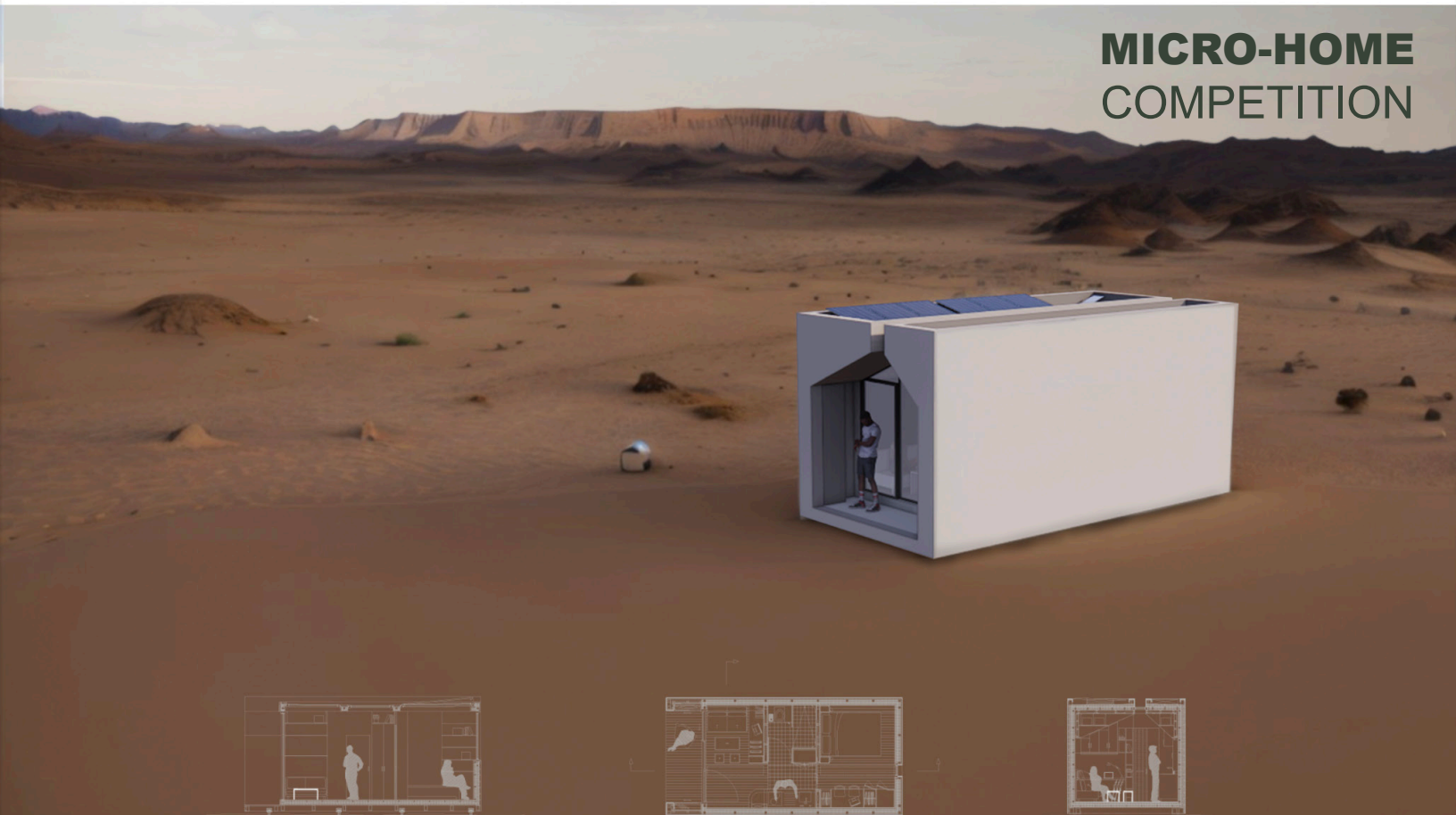


Main Structure-Frames



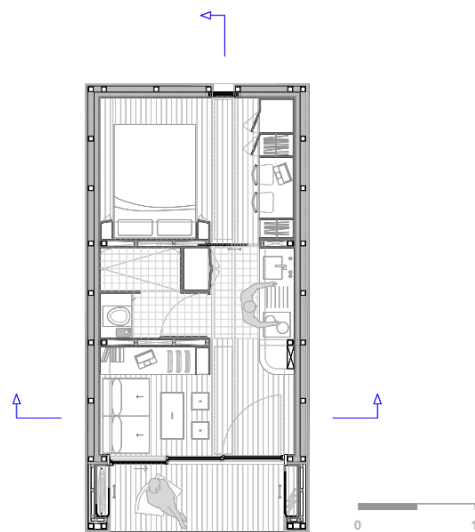
Render/Photo-montage: Self-sufficient module in arid desert, with occupant about to go for a run

MICRO-HOME COMPETITION





Render/Photo-montage: Community concept of modules gathered around a point in an arid and desolate place

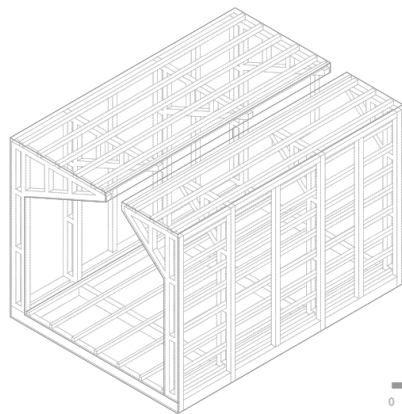


Floor Plan

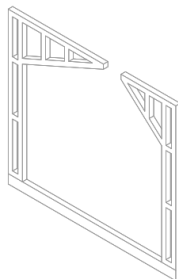
Open Competition.

Main task was to develop a 25sqm modular home which could be placed in an arid place for an extended period of time, requiring it to practice self-sufficient systems which would allow the design to stay off-grid for that long.

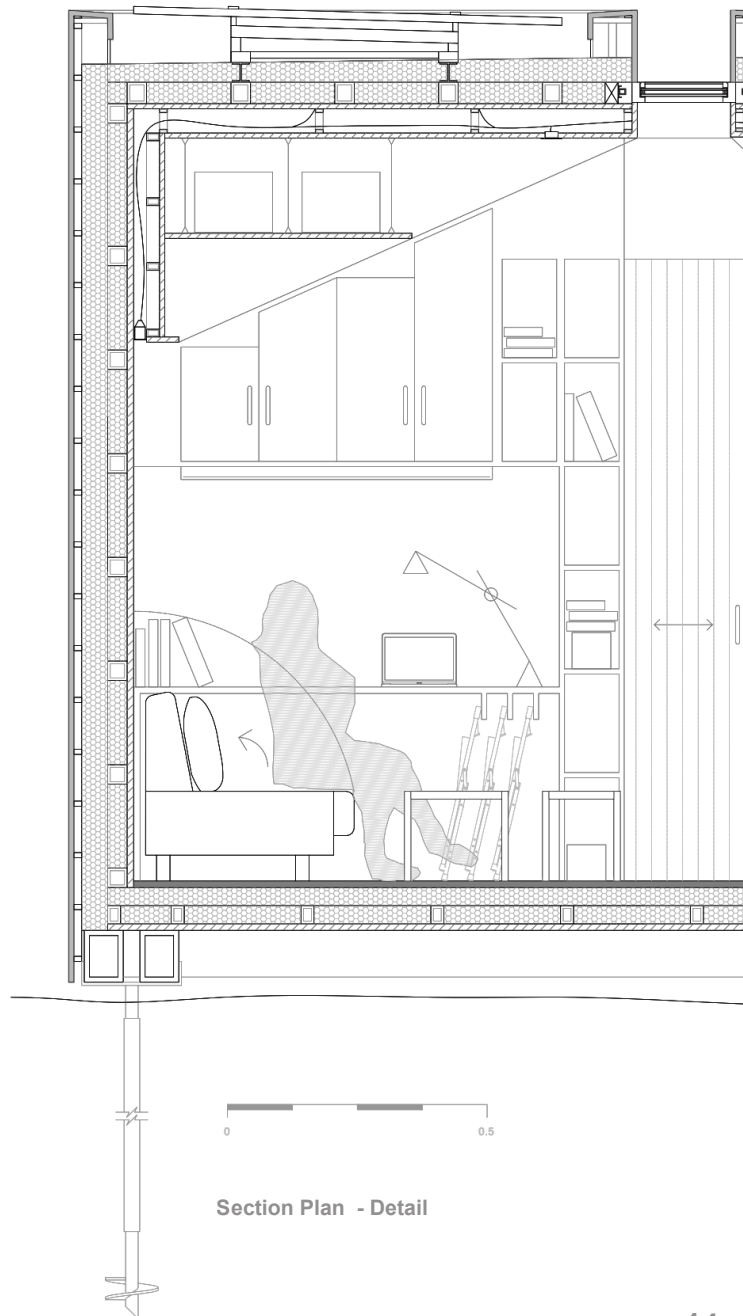
In this case, the light structure is covered by slick ceramic panels. Energy is stored in batteries on the roof, right next to the solar panels. A rain-water collector allows it to extend its resources beyond what the integrated water tank may provide.



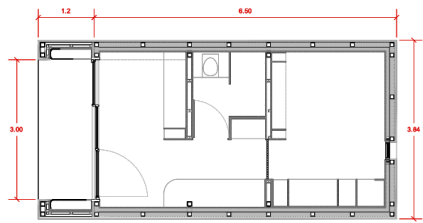
Axonometric - Empty Module



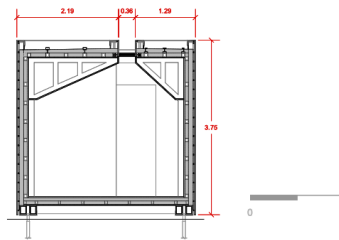
Frame Module



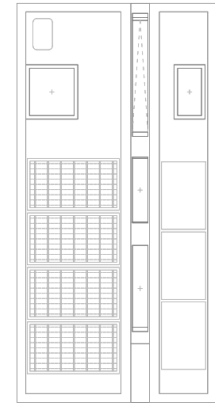
Section Plan - Detail



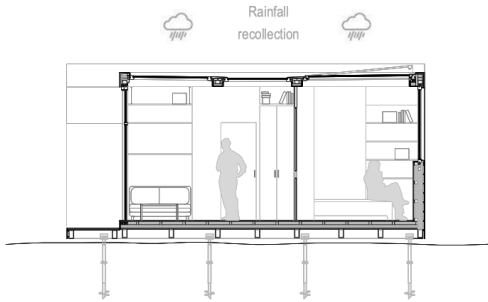
Empty Plan



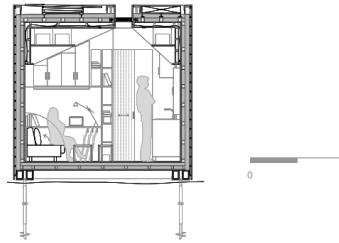
Empty Section



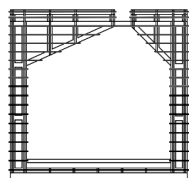
Ceiling Plan



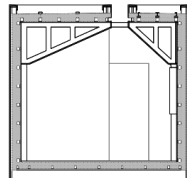
Empty Plan



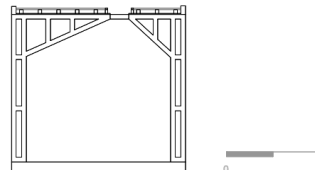
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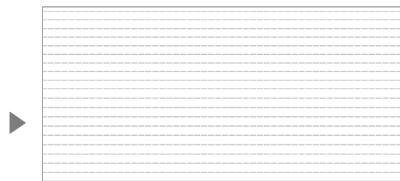
Facade Structure



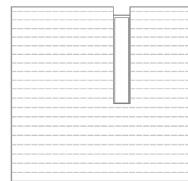
Construction Detail



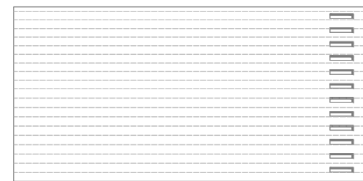
Structure



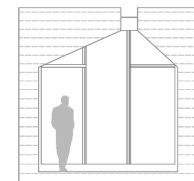
East Elevation



North Elevation



West Elevation



South Elevation

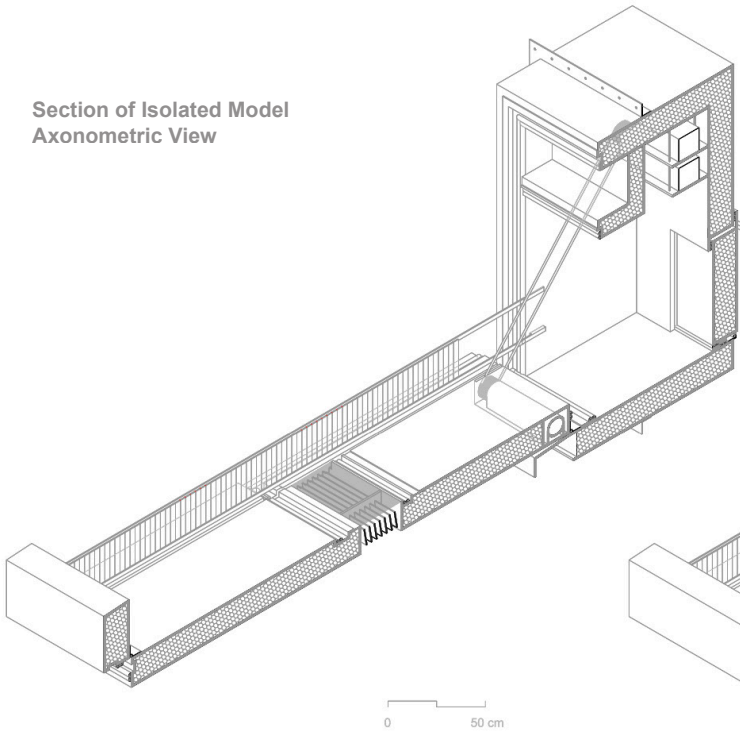
Render/Photo-montage: Placement of module in an urban community, showcasing the versatility of the design



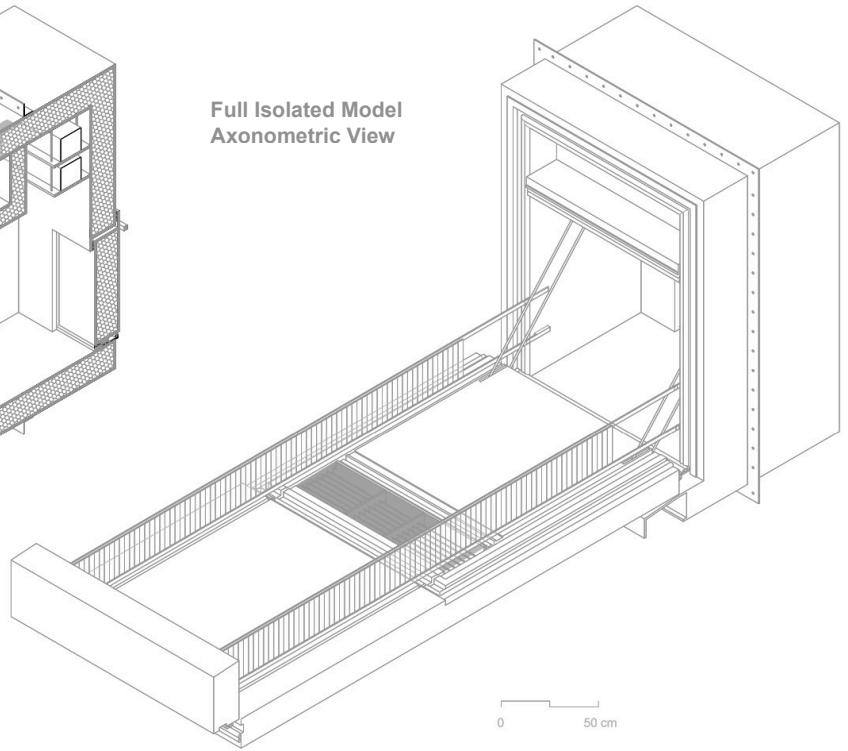
UAV FACADE DELIVERY SYSTEM B.ARCH PROJECT

Project completed during my B.Arch's last year.
Later published with faculty in a research paper on UAV Delivery Systems within dense urban areas, where delivery systems can be enhanced through the logistics medium provided by technological developments in drone architecture as well as the availability of unused vertical space in cities.

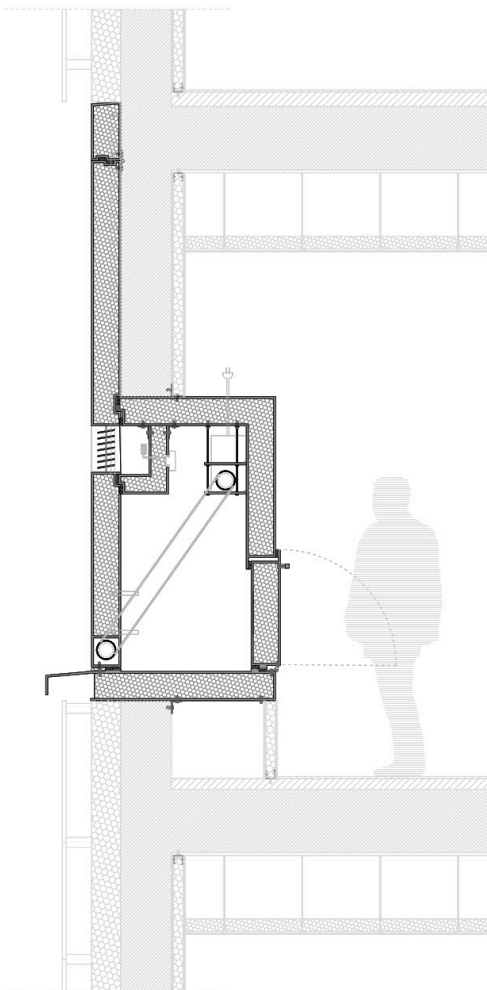
Section of Isolated Model
Axonometric View



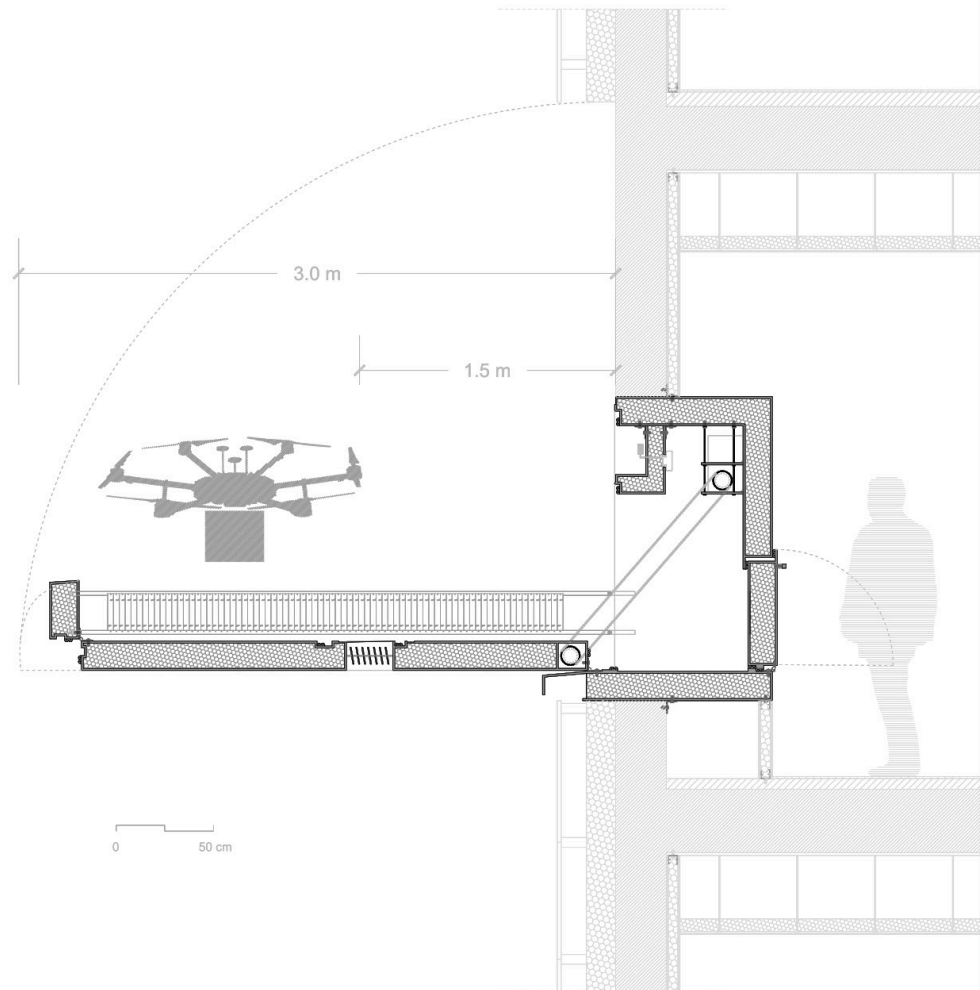
Full Isolated Model
Axonometric View



Section of Placed Model - Closed

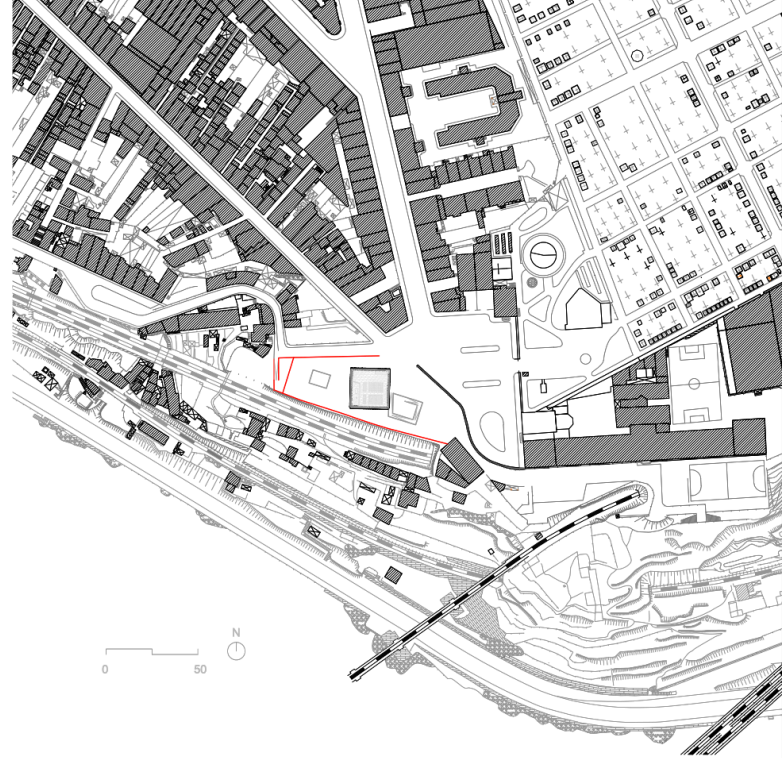


Section of Placed Model - Open

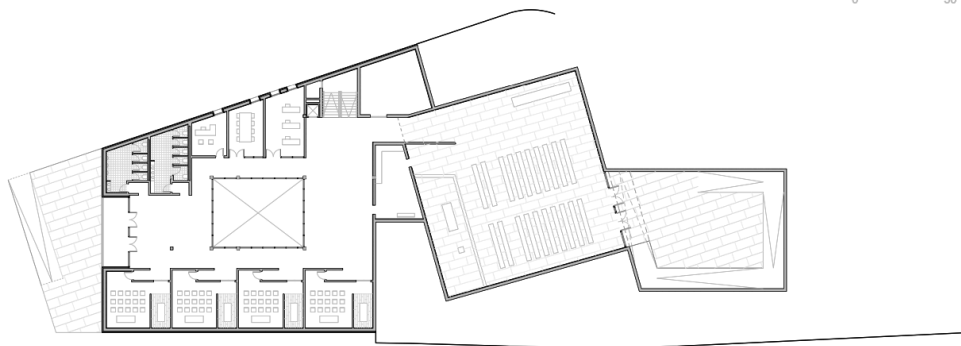


CHURCH IN PORTO

B.ARCH DESIGN STUDIO



Location Plan

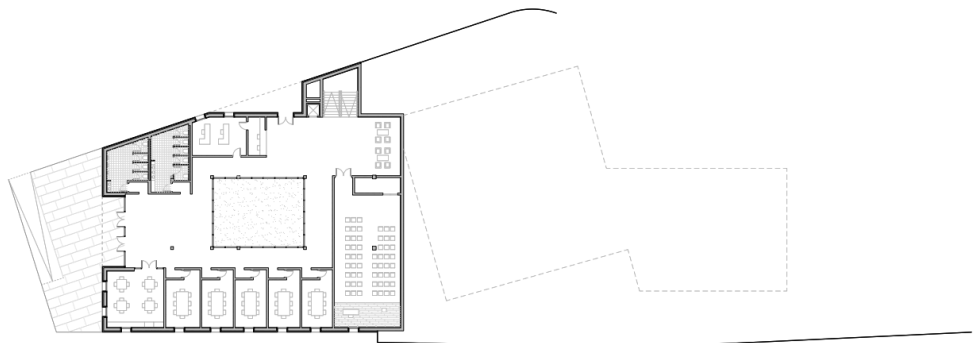


Under Ground Floor Plan

Project for the last year of my B.Arch.

Church and Parish complex, in the outskirts of Porto, overlooking the Douro River.

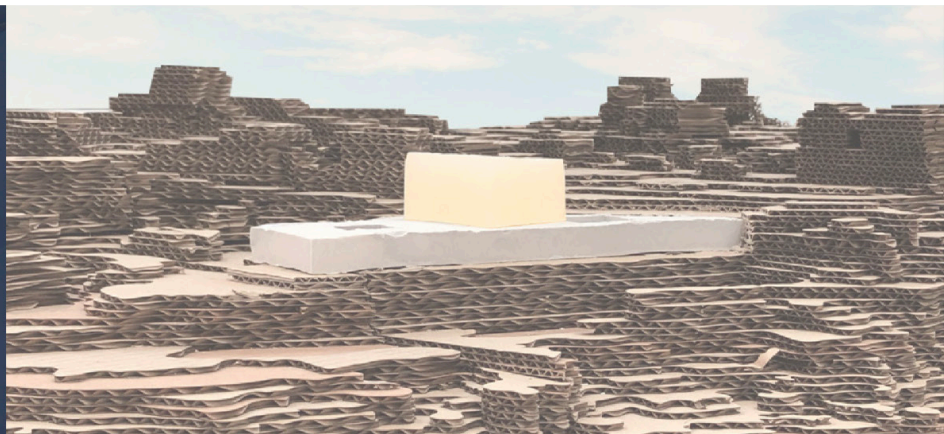
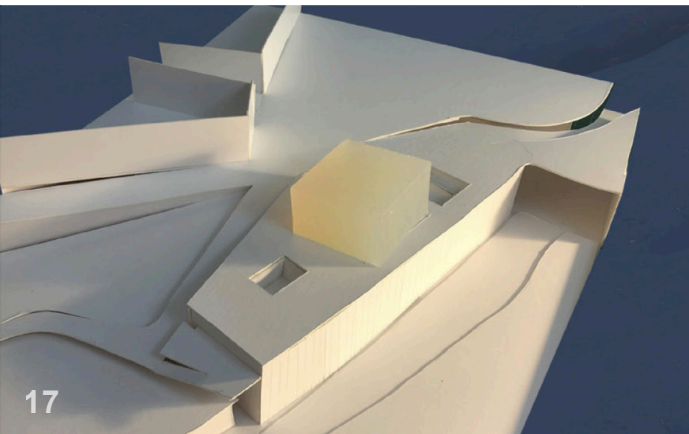
Structurally based design, with a solid base that creates a solid ground at a steep ledge where the rest of the program is placed, mainly in the inside, with the Church itself protruding out vertically, in a symbolic religious gesture.

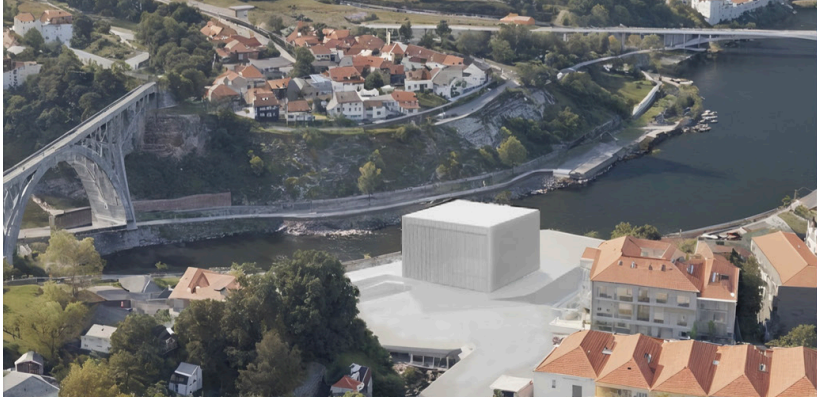


Ground Floor Plan

Aerial View of White Model with Glycerin Church Element

Concrete + Glycerin Model Placed on Cardboard Site Model

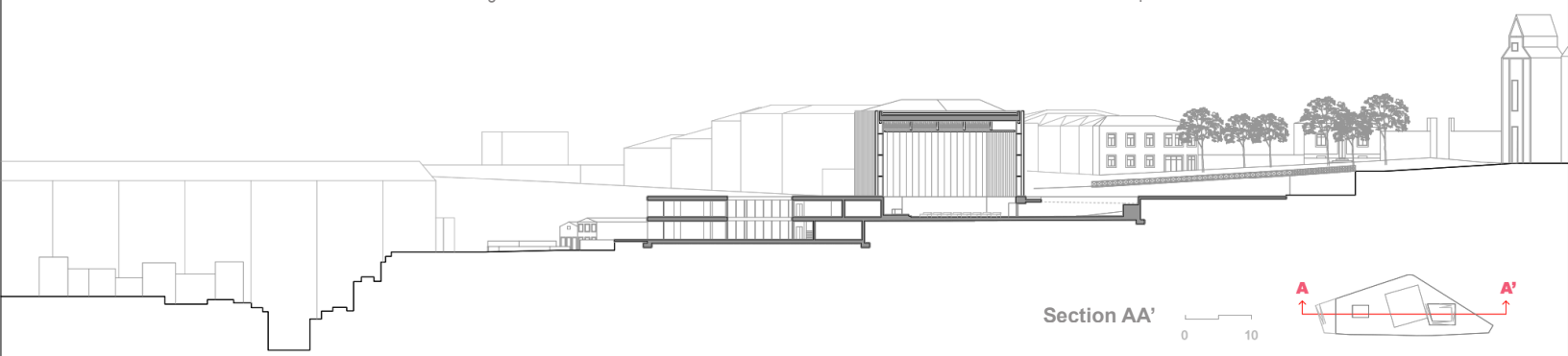




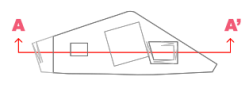
Render: Aerial view of the Model overlooking the Duoro River



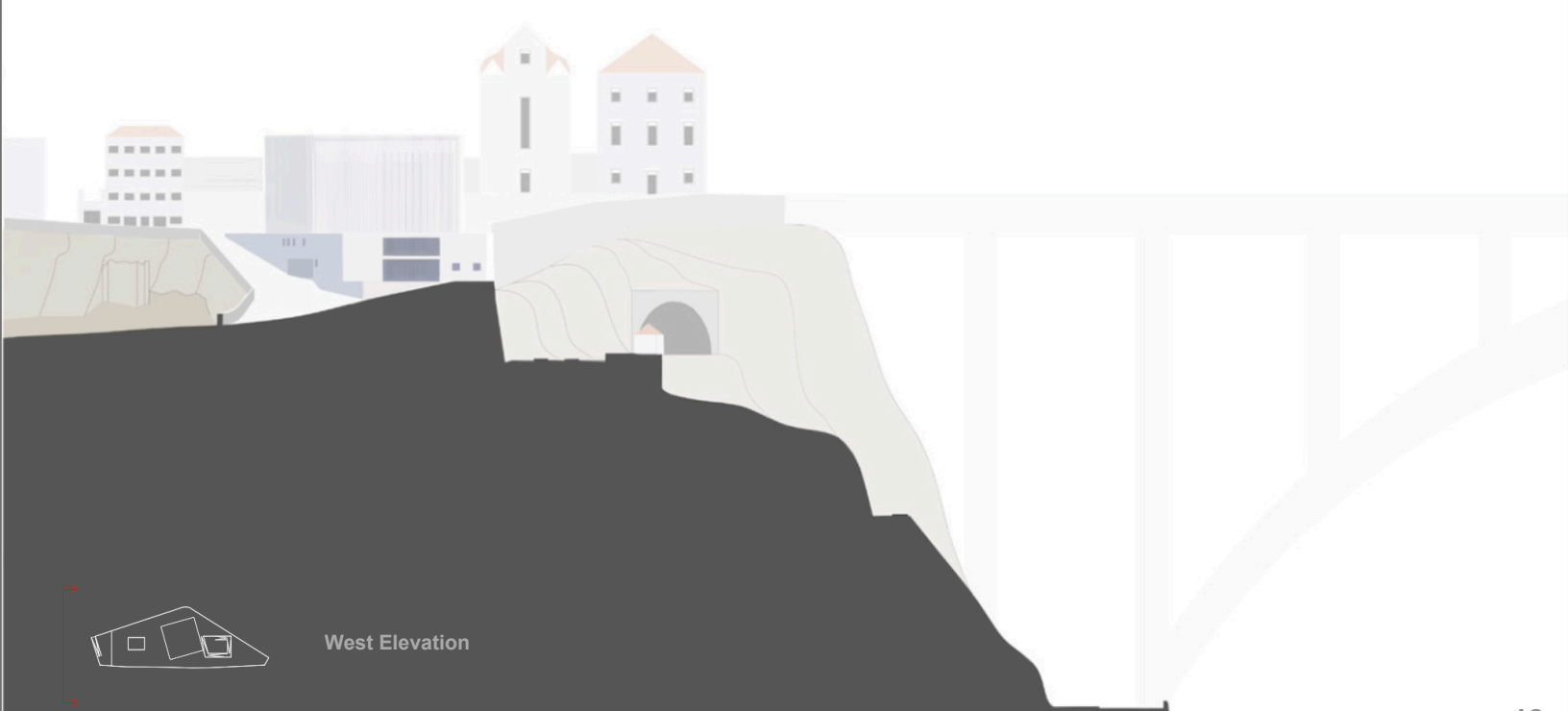
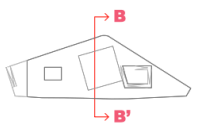
Interior Space of the Church



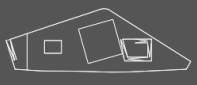
Section AA'

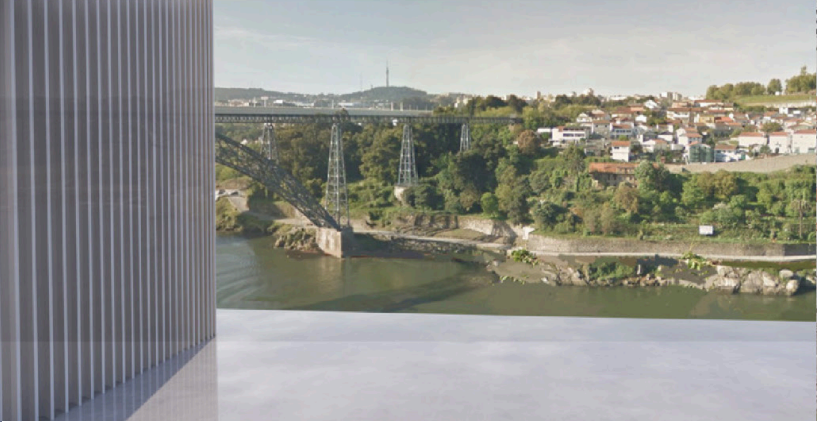


Section BB'

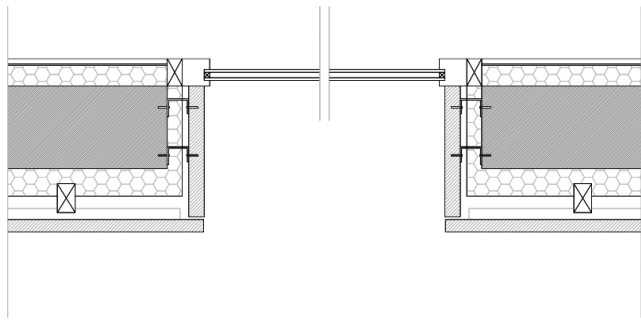


West Elevation

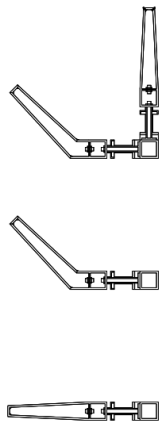




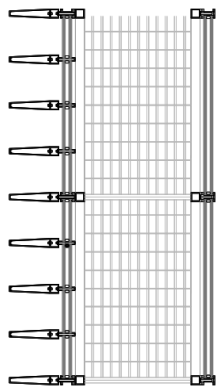
(Left) Eye-sight view from the Generated Plaza Space on Top (Right) Aerial View of Design on Ledge



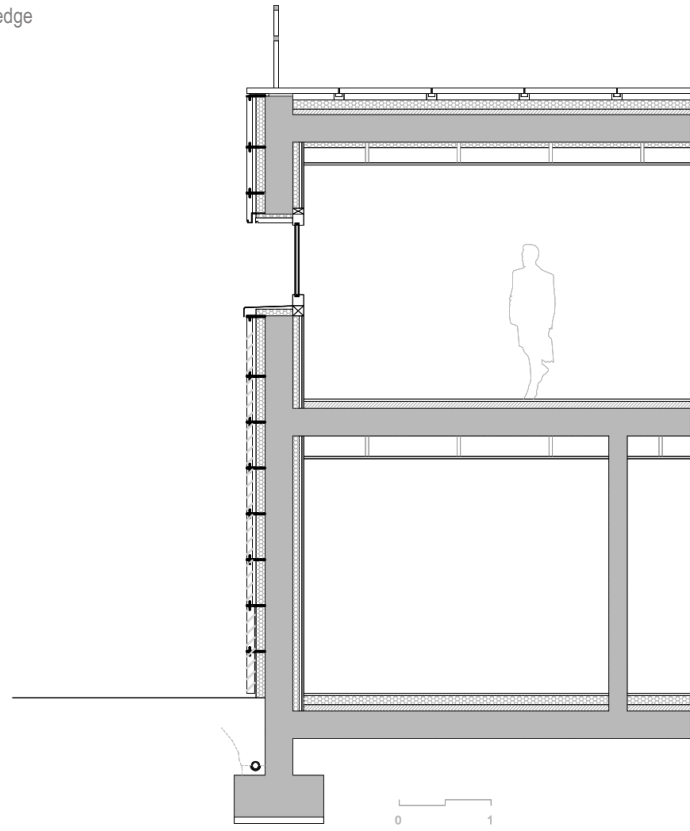
0 0.25 Window Detail



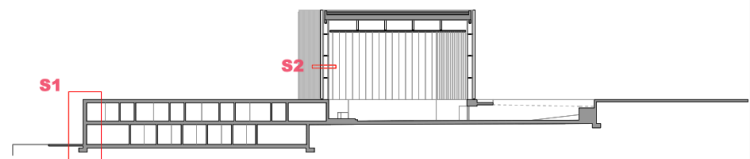
0 0.10 Vertical Facade Elements



0 0.25 Facade Detail S2



0 1 Facade Section S1



HOTEL BOUTIQUE

B.ARCH DESIGN STUDIO

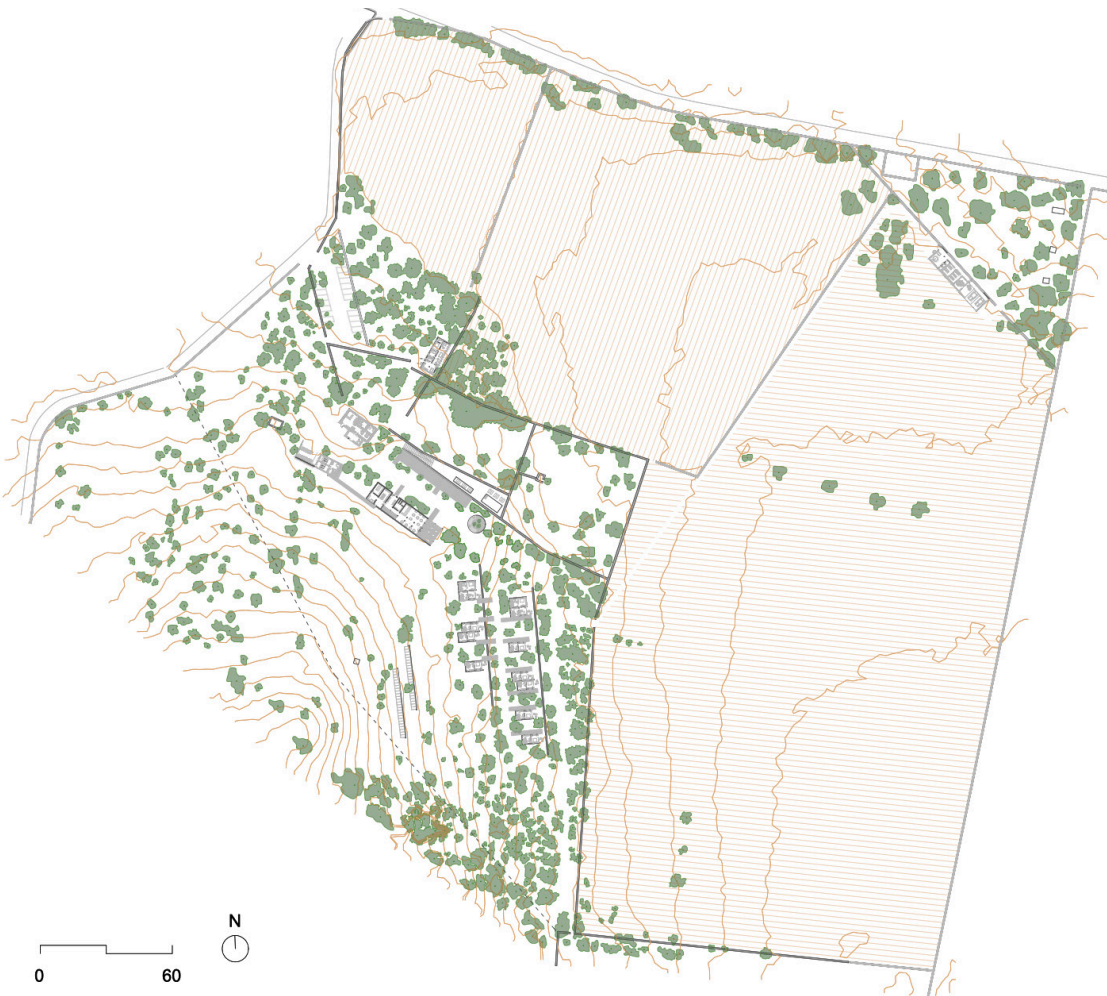
Last project for my B.Arch. Design for an Hotel Boutique in the island of Formentera, Spain. The hotel complex is designed around the rising agricultural tourism in the island, where tourists can visit different plantations and even engage in produce or product tasting.



0 60 N
Project Plan



0 60 N
Location Plan



0 60 N

Plot Plan

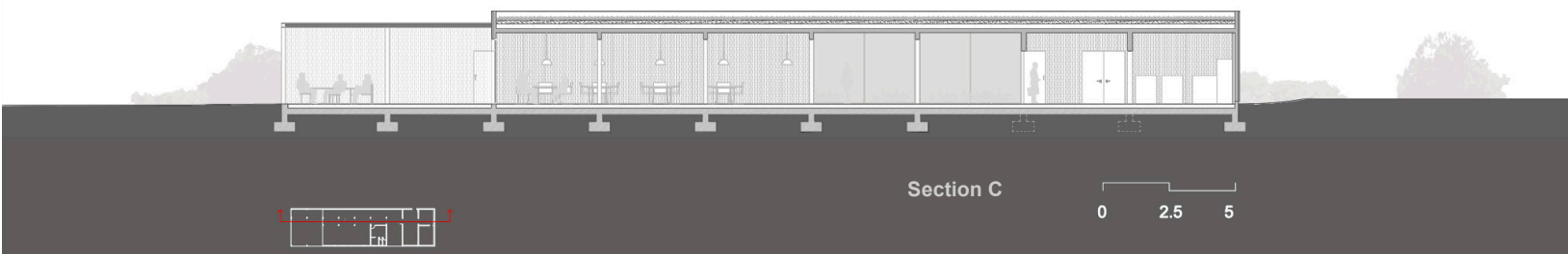
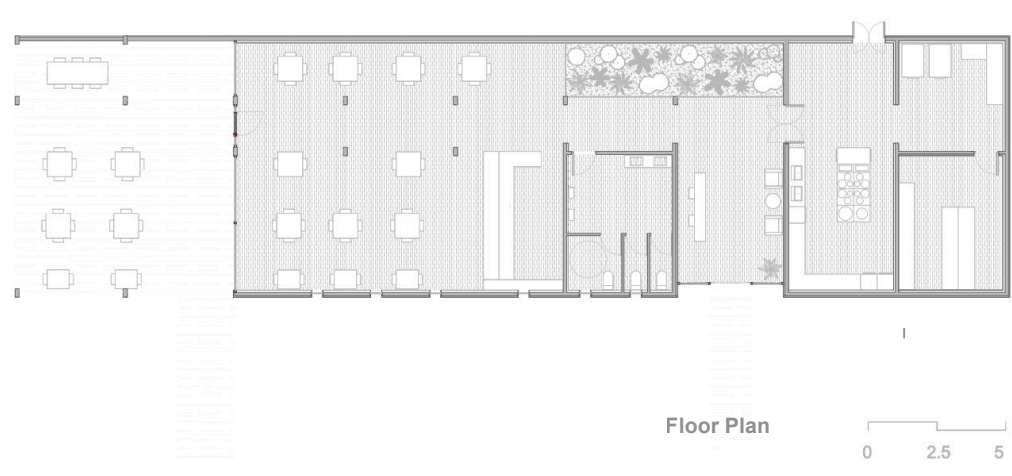
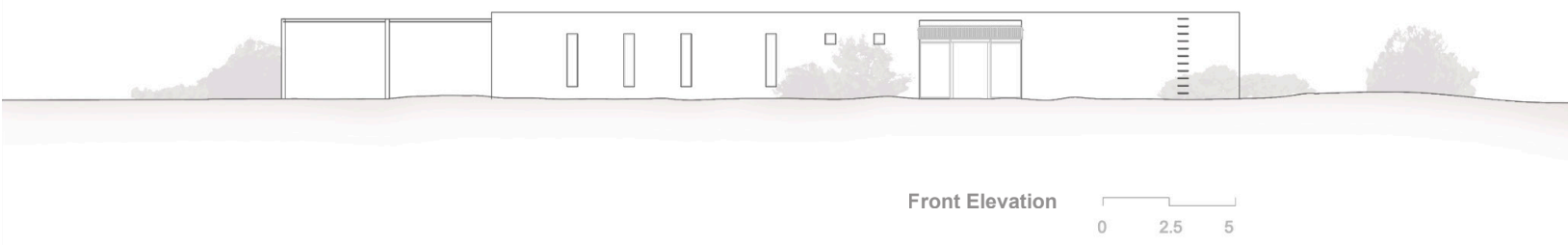
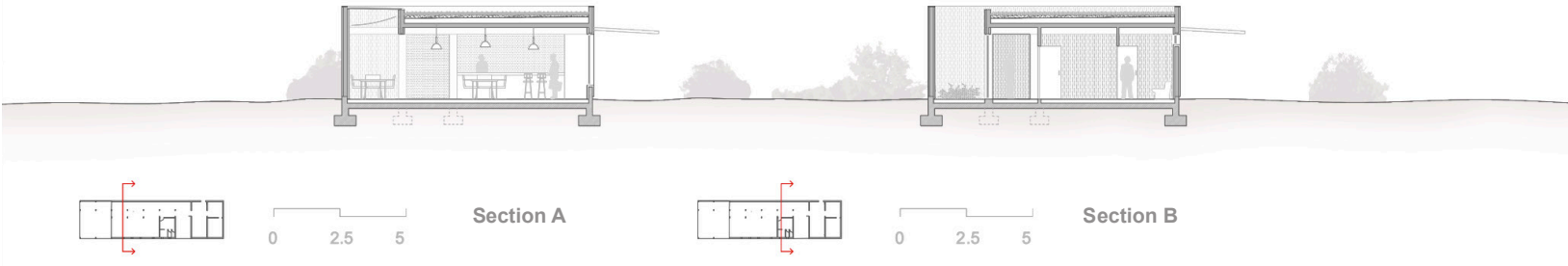
A total of 10 rooms, 2 suites, and 8 small bedrooms are placed along the tree fronts within the site. The preexisting building is refurbished to house the lounge as well as the lobby.

An underground spa and restaurant further enhance the Hotel, creating comfortable spaces where guests can rest after a long sunny day at the beach.

Formentera Island



0 10 km N

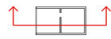




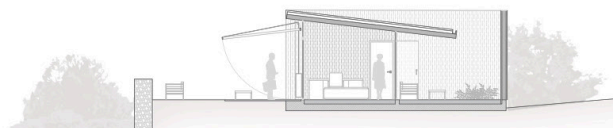
0 2.5 5 **Small Rooms Elevation**



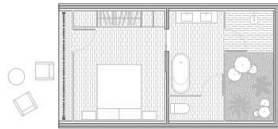
0 2.5 5 **Suite Elevation**



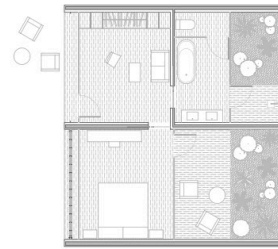
0 2.5 5 **Small Rooms Section**



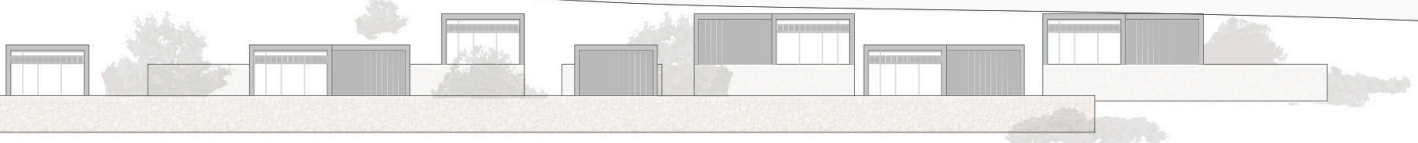
0 2.5 5 **Suite Section**



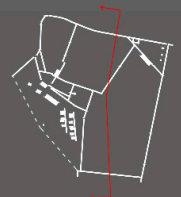
0 2.5 5 **Small Rooms Floor Plan**



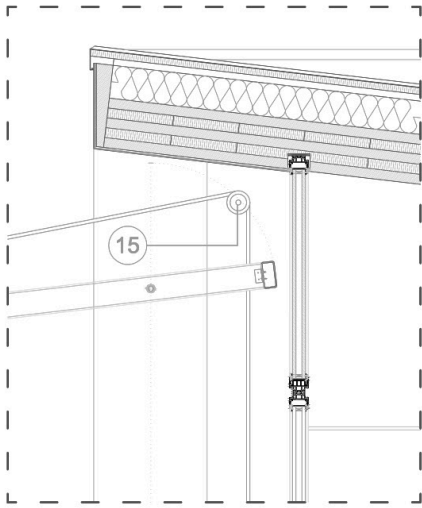
0 2.5 5 **Suite Floor Plan**



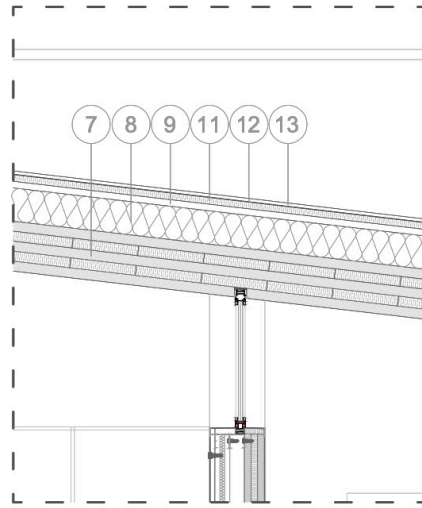
0 5 **East Elevation**



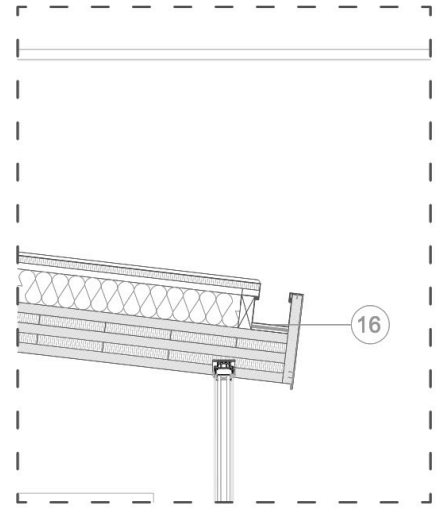
D01



D02



D03

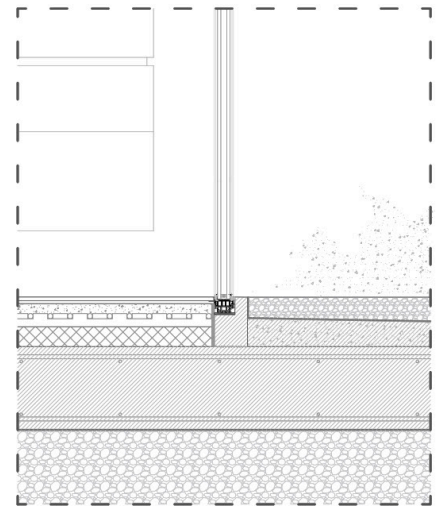
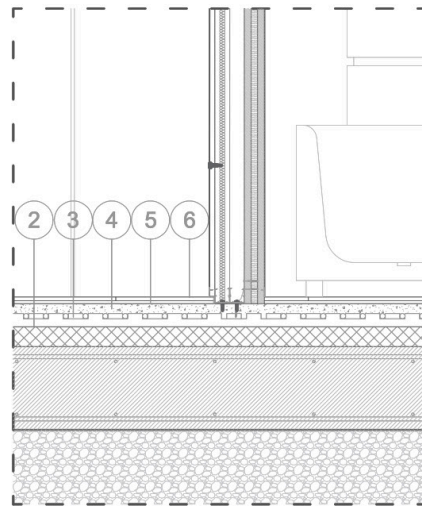
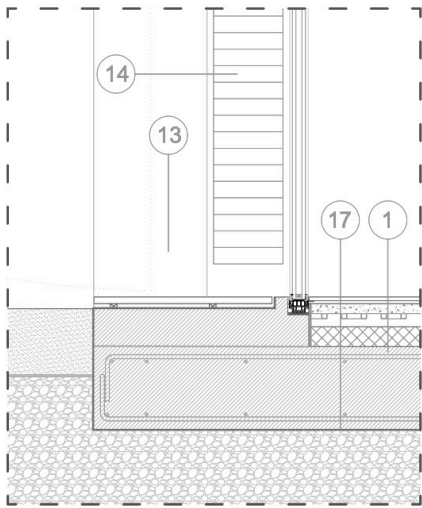


14

13

17

1



D06

D05

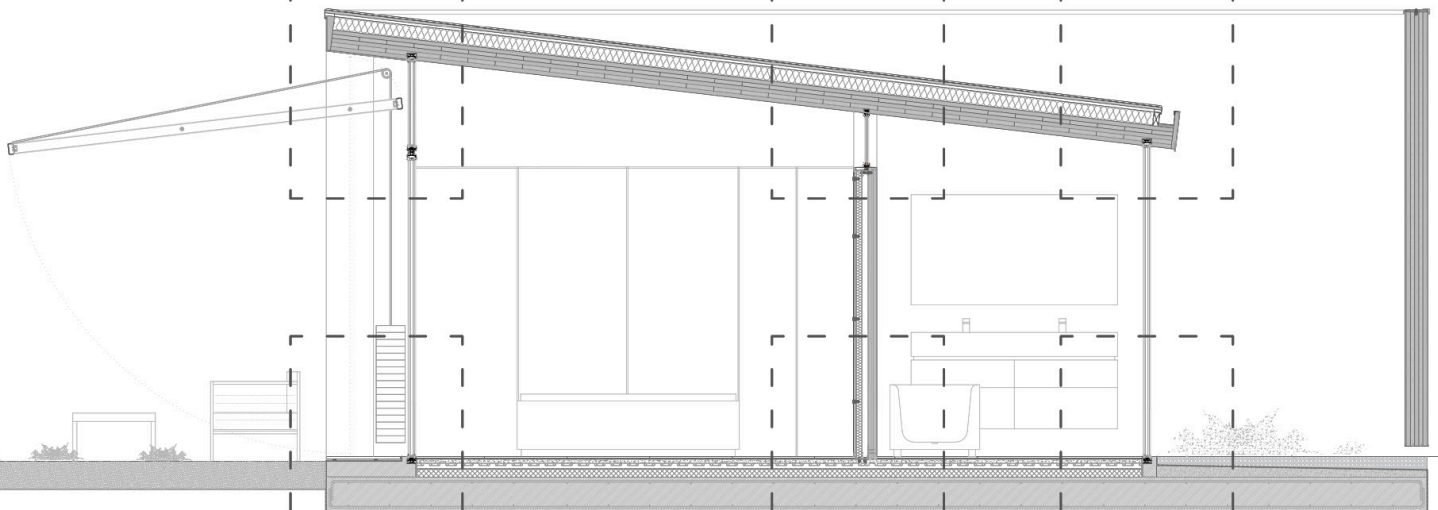
D04



D01

D02

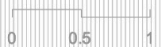
D03



D06

D05

D04



Room Section Details



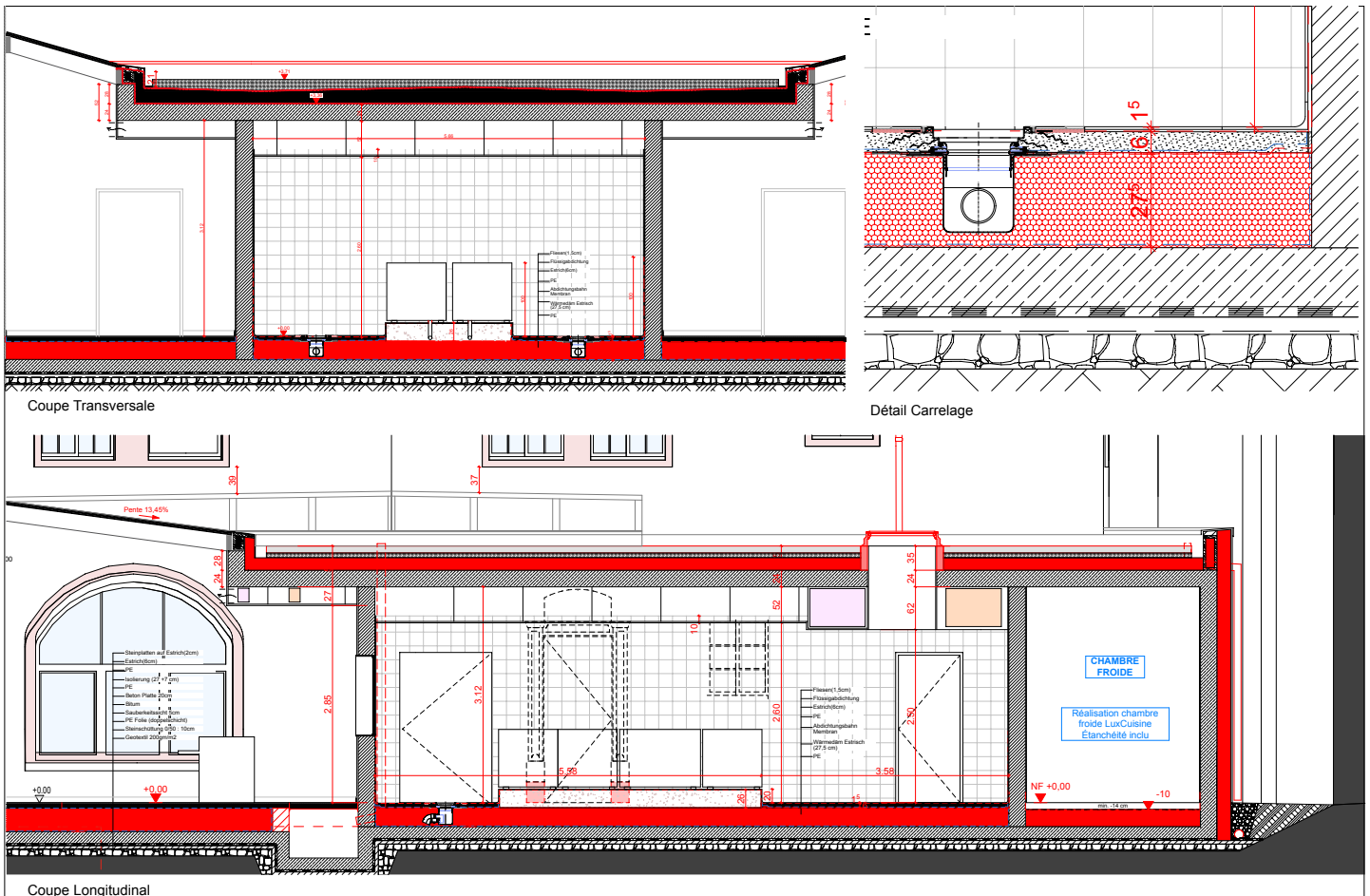
PROFESSIONAL WORK


Youth Hostel in Vianden, Luxembourg

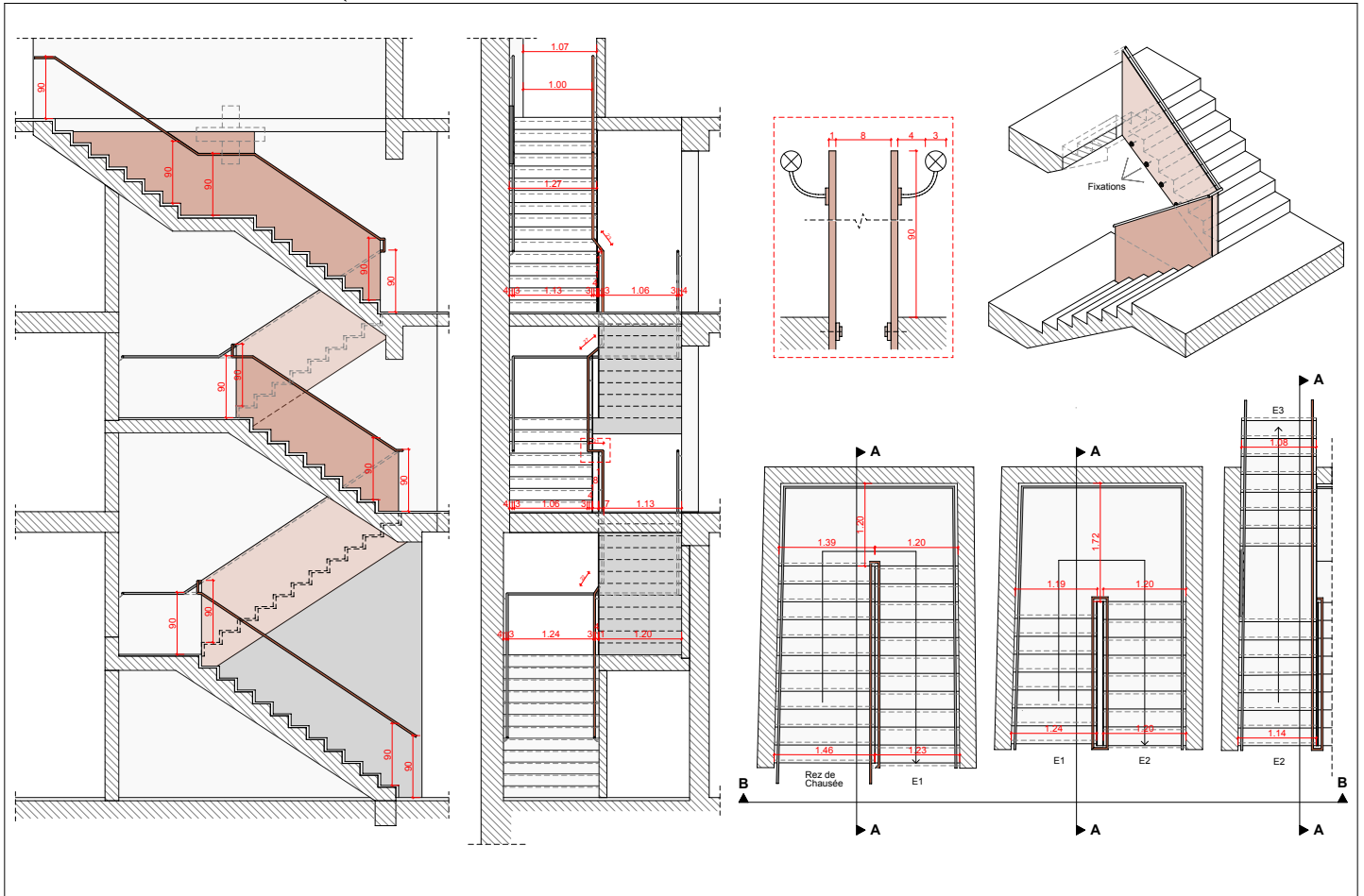
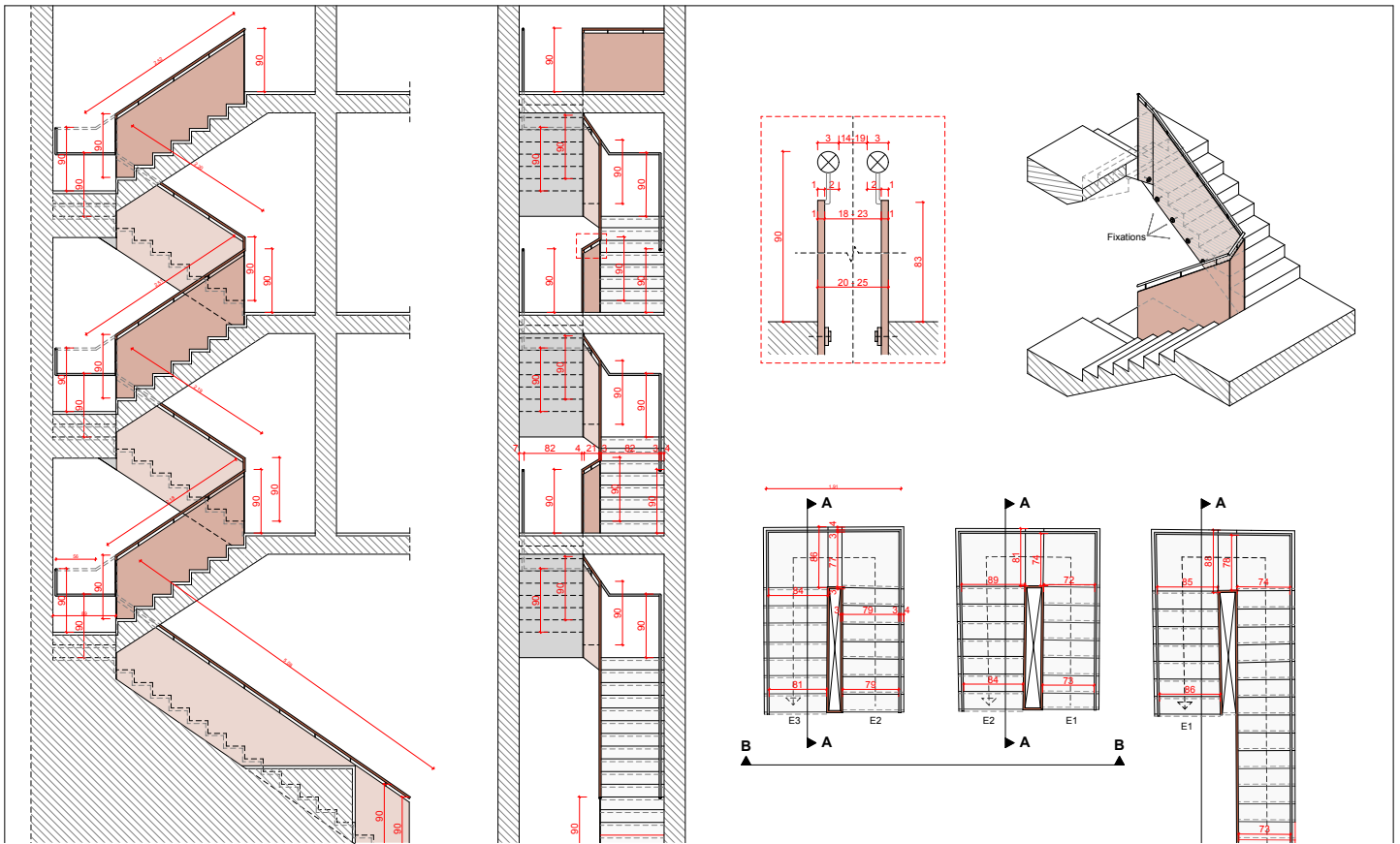
Previously a retirement firm, and originally a Monastery founded in the early 1600's, this restoration project was one that had been going on since 2018. During my full time in the company BECKER BAU I was directly assisting both design and construction management, with a special focus on design engineering as the plans showcase.


My different responsibilities in the project included:

- Direct coordination with my team in construction management
- Coordinating with contractors for all stages
- Coordinating with Engineering teams (HVAC, Electrical, & Structural)
- Coordinating product procurement and negotiating with suppliers
- Coordinating with government (owner)



| | | | |
|---------------------------|---------------------------------|--|--|
| OBJET: PCoupe A - Cuisine | PLAN N°: AAJV-16001-EXE-CU-02-A | PROJET: Réhabilitation du Cloître des Trinitaires en auberge de jeunesse à Vianden |  BECKER ARCHITECTURE & URBANISME S.A.R.L. 32, avenue Victor Hugo - L-1760 Luxembourg (Limpertsberg) tel 45 95 47 - fax 45 95 48 - info@becker-bau.lu - www.becker-bau.lu |
| DATE: 11/12.07.2024 | ECHELLE: 1:20 | | |



| | | | |
|-----------------------|--------------------------------|--|--|
| OBJET: Porte d'entrée | PLAN N°: AJV-16001-EXE-MI-04MB | PROJET: Réhabilitation du Cloître des Trinitaires en auberge de jeunesse à Vianden |  BECKER ARCHITECTURE & URBANISME S.A.R.L. 32, avenue Victor Hugo - L-1790 Luxembourg (Limpertsberg) tél 45 95 47 - fax 45 95 48 - info@becker-bau.lu - www.becker-bau.lu |
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