EMAN ADAM

ARCHITECTURE / BIM / SELECTED WORKS

Public website edition - five selected projects

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SELECTED WORKS

01 The House of Music

02 The 3B Tower

03 Cinifabrique

04 Desert Studies Research Center

05 Mixed-Use Mid-Rise Building

Selected for public sharing.

01

THE HOUSE OF MUSIC

NAPLES, ITALY

ARCHITECTURAL DESIGN STUDIO FOR
COMPLEX CONSTRUCTIONS.2,MSc

Theme: House of Music
Design Date: September-2024 to December-2025
Master Graduation Project
MSc Thesis Special mention: Recognized by the Board of the AUIC, Politecnico di Milano

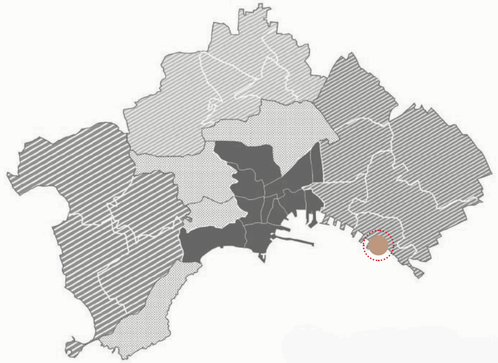
Proposed Location: Napoli, Italy
Project Vision: A cultural powerhouse and connective landscape where sound becomes structure, and public performance becomes shared space. By translating Naples' rich musical heritage into architectural expression, the project demonstrates how design can amplify collective identity, foster social inclusion, and transform a forgotten waterfront into a living interface between memory and contemporary life.
Design Approach: Sited within Naples' abandoned industrial port, the House of Music anchors a broader urban regeneration strategy , one that revives the waterfront without erasing its history. The master plan prioritises adaptive reuse, preserving the character of existing structures while introducing new civic and educational programs, including a dedicated School of Music.
The design process began with deep historical research into the port's industrial legacy, evolving through iterative urban design studies into a cohesive vision for the waterfront landscape, one that negotiates between infrastructure, culture, and the sea.

My contributiont to Group work: Led historical and contextual research,establishing the conceptual framework for the master plan, Developed the initial design concept and spatial strategy , Built and managed the full 3D Revit model, coordinating geometry across disciplines , Conducted structural analysis and engineering calculations, Produced final architectural plans, elevations, and mechanical design documentation

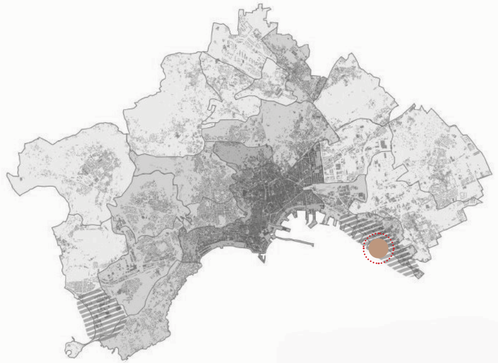
Softwares used: Revit I Lumion I Grasshopper I Activehouse (energy model) I Synchro I Photoshop I Illustrator I Indesign I Google Earth I Ubakus I MidasGen



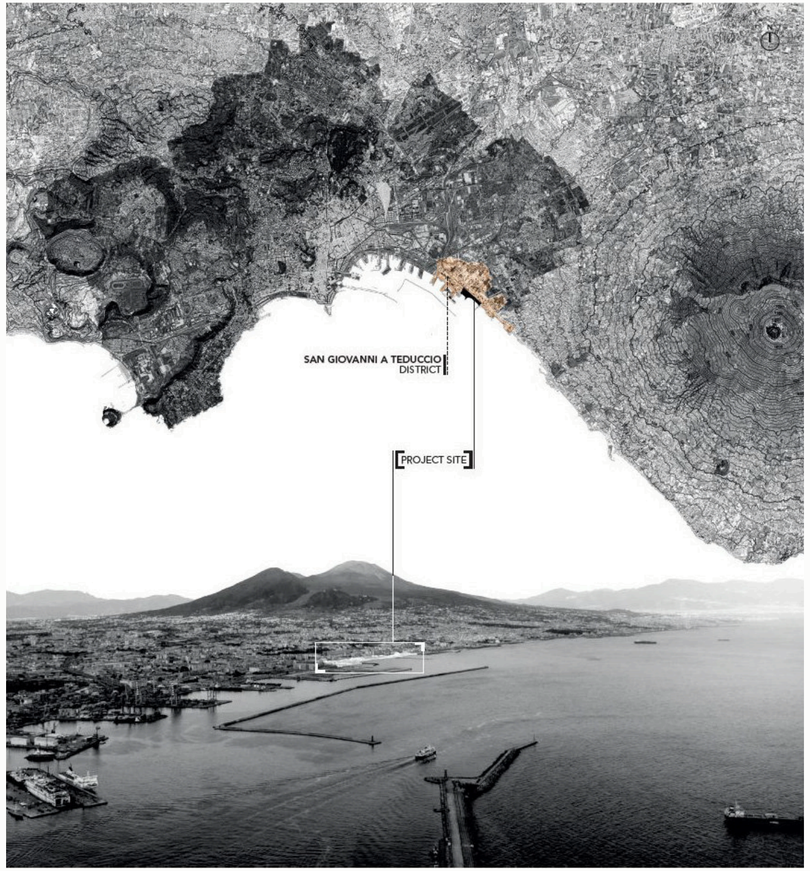
The House of Music is envisioned as a civic and cultural landmark along the San Giovanni a Teduccio waterfront, a catalyst for urban regeneration that weaves together heritage conservation and ecological awareness into a single architectural gesture. Strategically positioned to harness panoramic views across the Gulf of Naples and its surrounding islands, the project restores a long-severed connection between a historically isolated residential district and the sea.



The eastern zone of Naples, encompassing San Giovanni a Teduccio, Barra, and Ponticelli , bears the visible scars of deindustrialisation and urban erosion. Once a dense corridor of factories and power plants, the area has been hollowed out over decades, leaving a landscape of abandoned industrial infrastructure, fragmented low-quality housing, and degraded public space radiating outward from the central station.



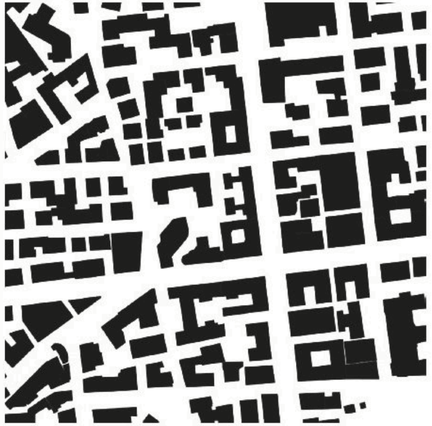
The maps Illustrating Naples municipality in southern Italy.









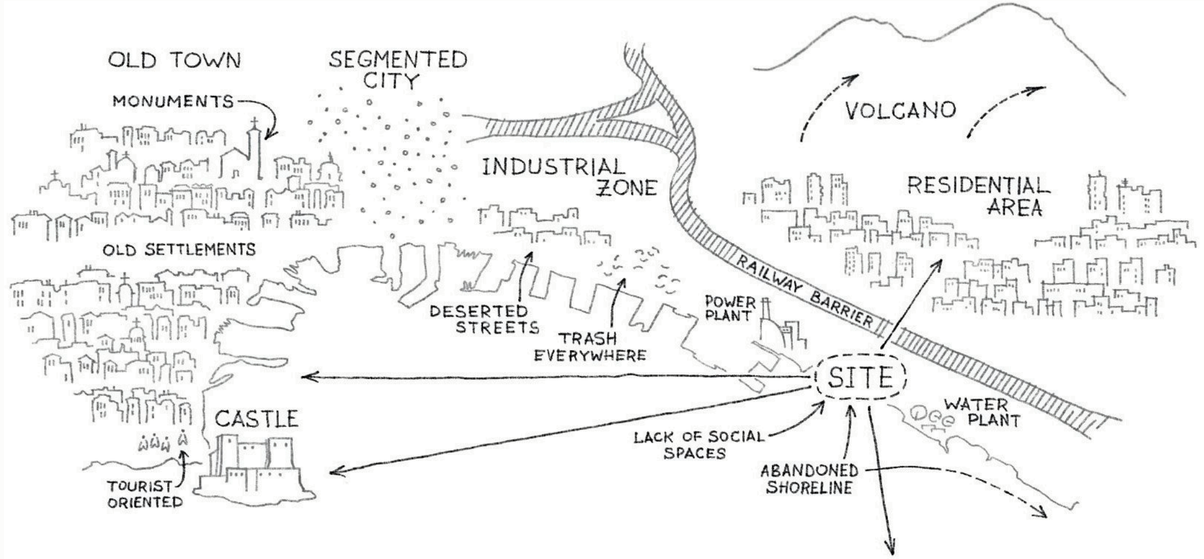


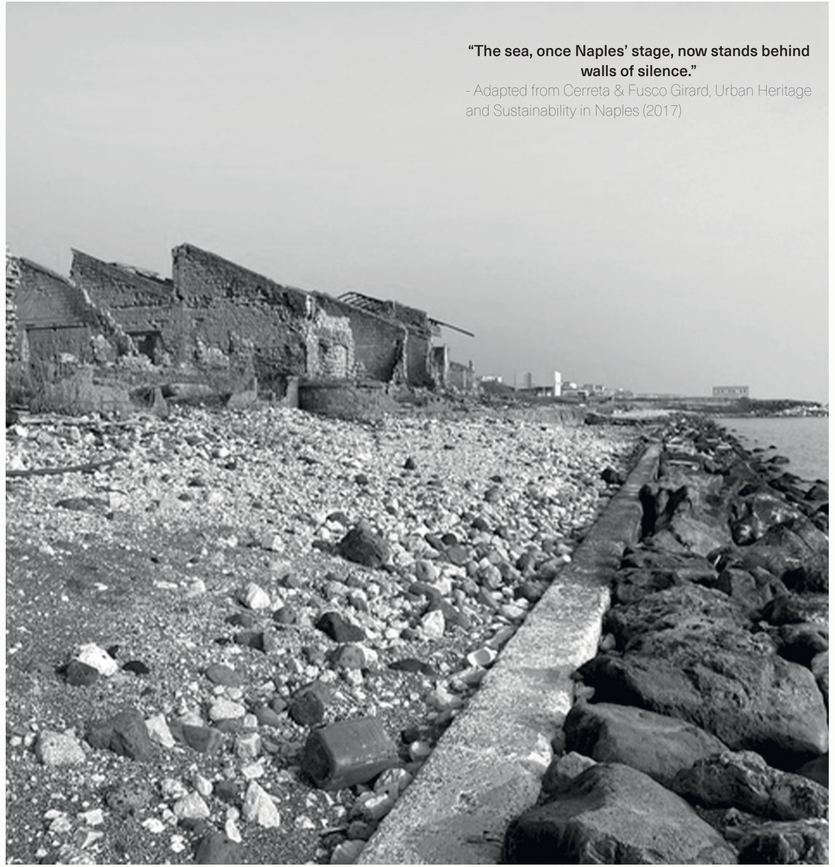

2


3


4

From an urban analysis perspective, San Giovanni a Teduccio presents a series of compounding challenges alongside considerable latent potential. The district is severed from the city centre by the sheer mass of railway infrastructure and Napoli Centrale, a physical barrier that restricts accessibility and fragments urban continuity. The waterfront, which should function as the neighbourhood's primary public asset, remains largely inaccessible to residents. Green space is scarce, and a neglected pedestrian network further erodes both mobility and the quality of everyday public life.

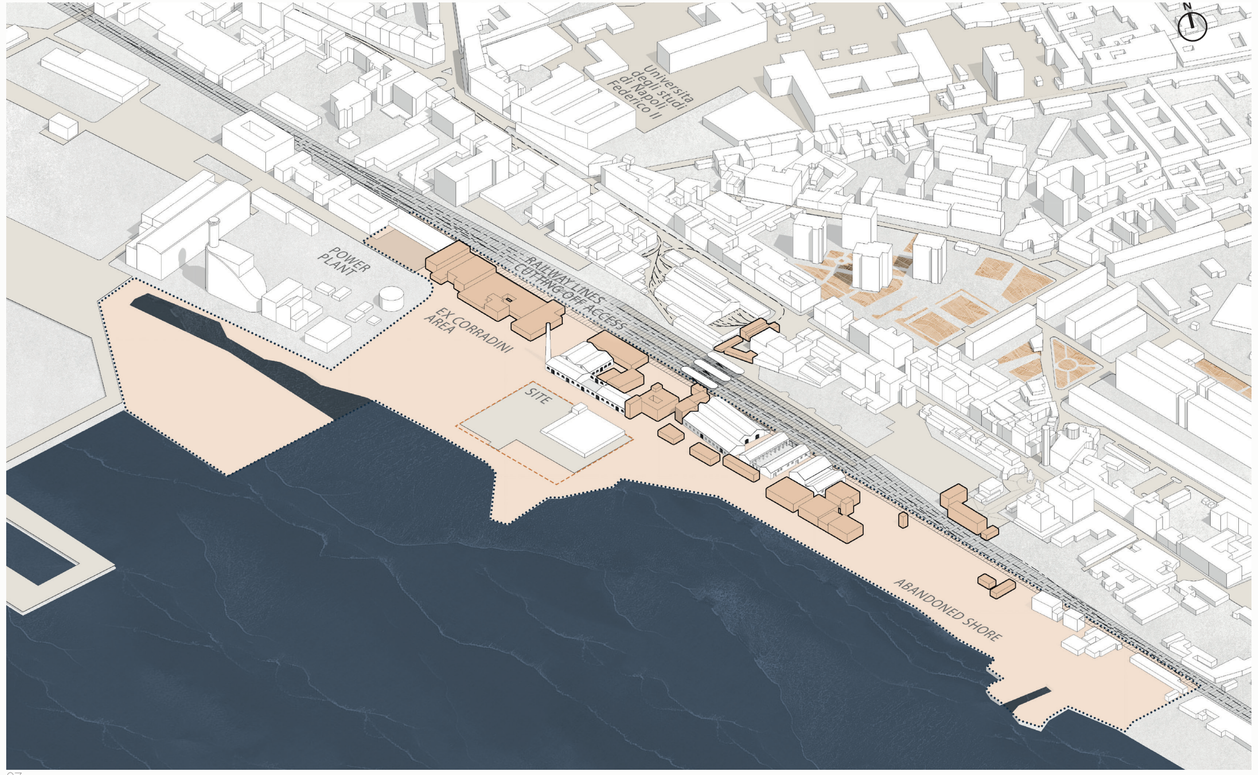


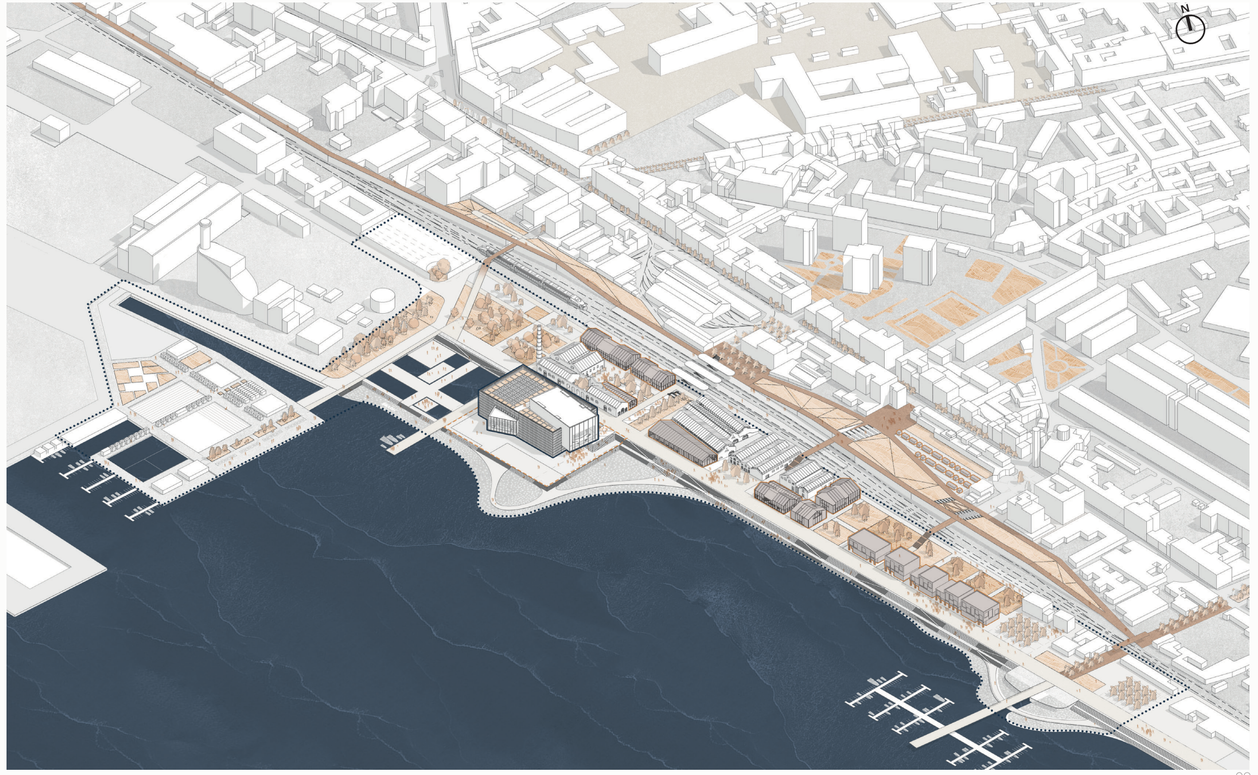


"The sea, once Naples' stage, now stands behind walls of silence."
- Adapted from Cerreta & Fusco Girard, Urban Heritage and Sustainability in Naples (2017)

URBAN DEVELOPMENT STRATEGY

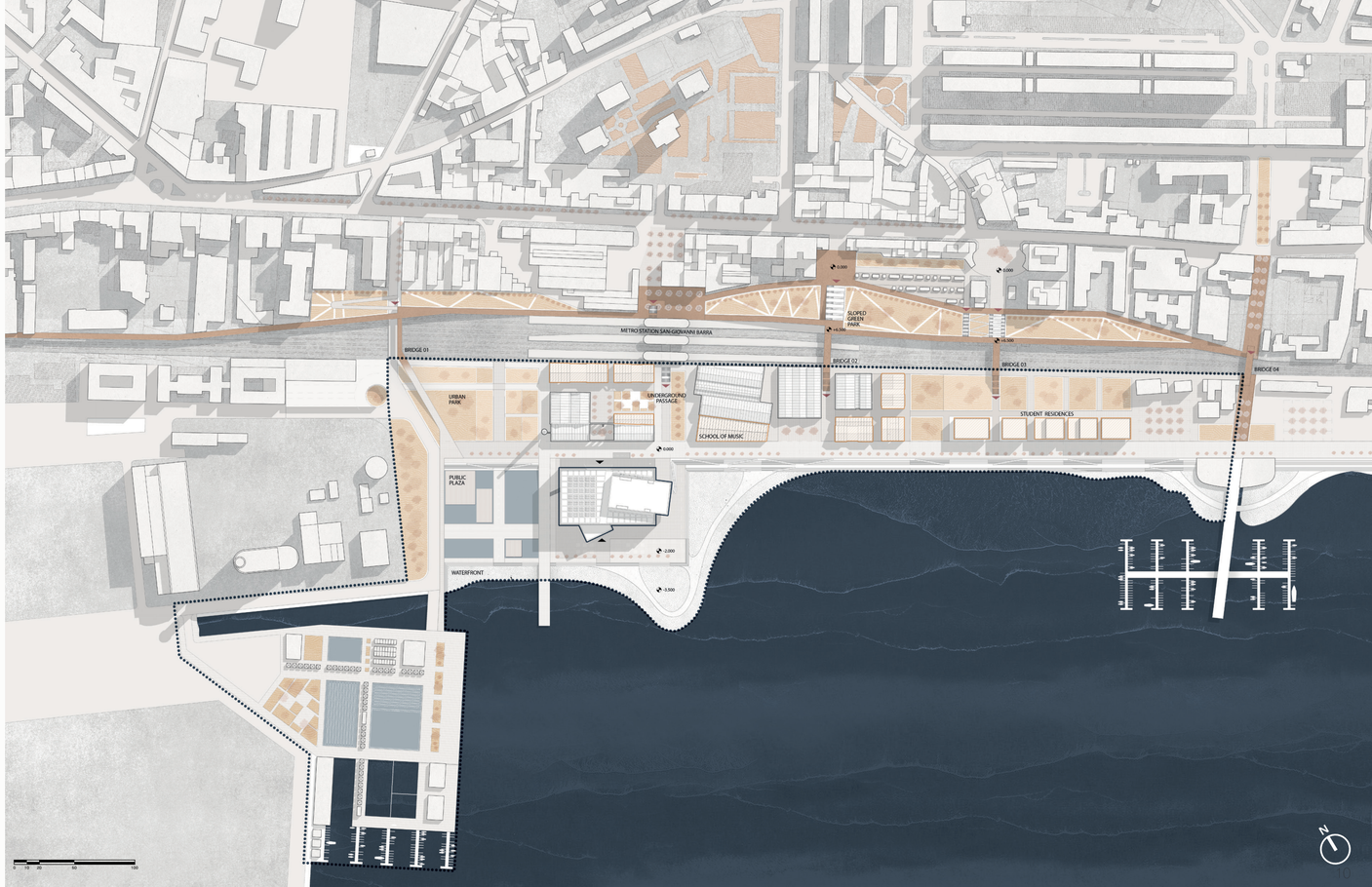
Before After

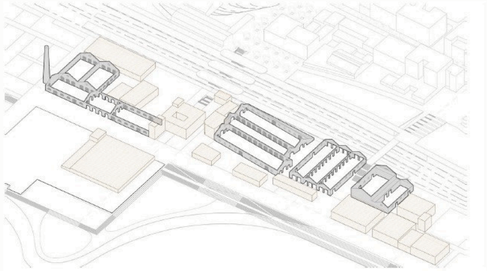




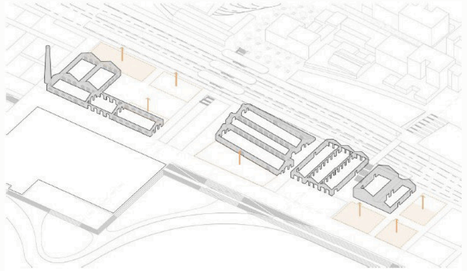


The regeneration framework reimagines the San Giovanni a Teduccio waterfront as a continuous, accessible urban landscape, reclaiming abandoned industrial land and restitching the city to the sea through a layered network of pedestrian, ecological, and cultural infrastructures.

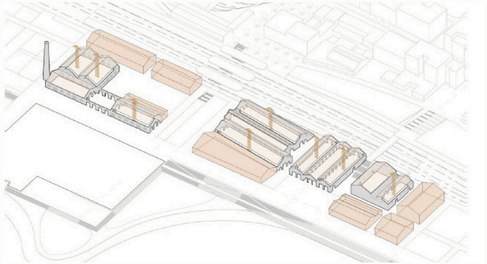




Preservation of existing buildings:
Keep existing buildings in good condition, protecting those with architectural or historical value. Demolish structures that are too damaged to repair.



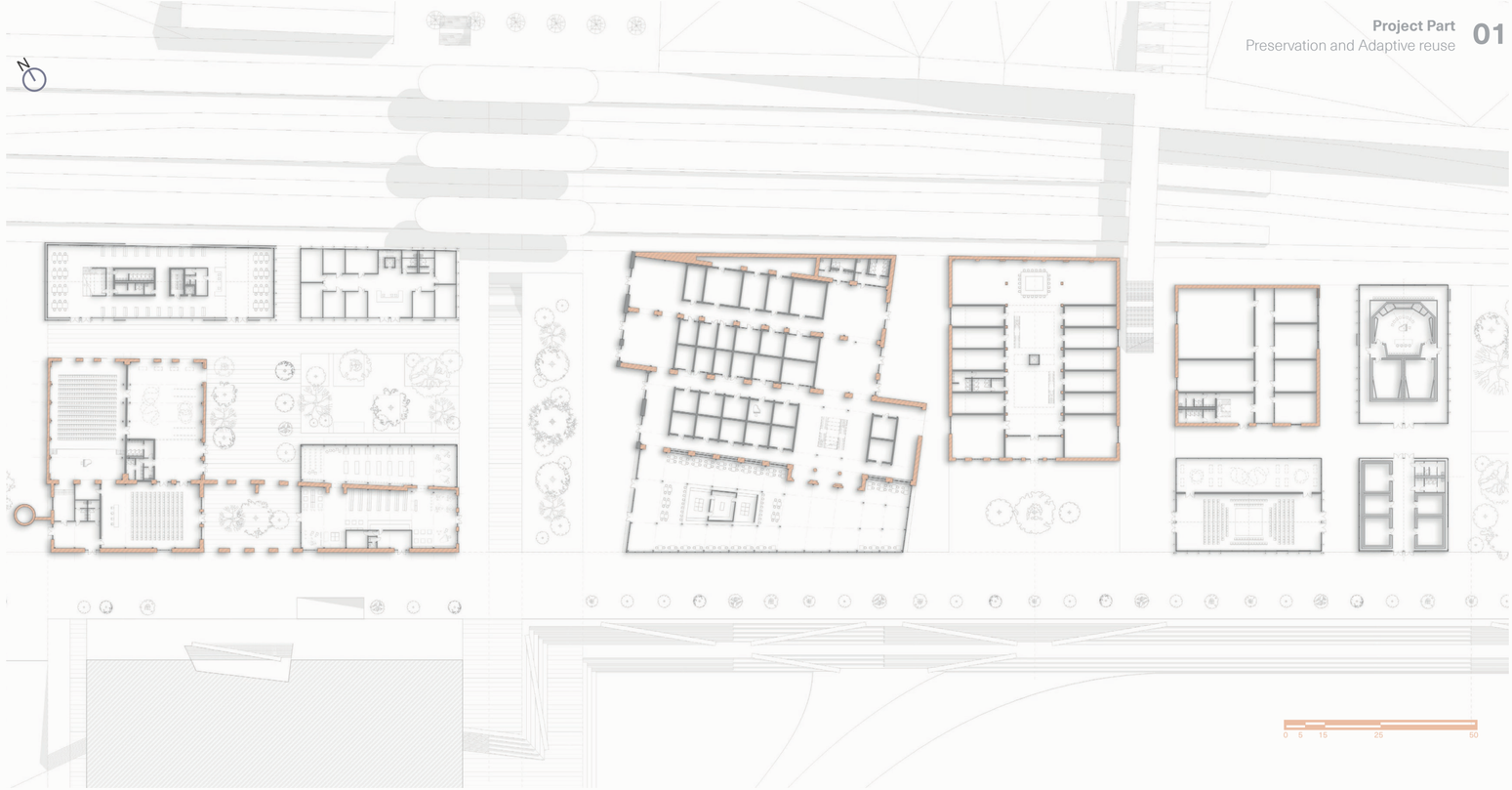
Using historical layouts:
Use the locations and outlines of old buldings as a guide for the design and placement of new ones.



Matching architectural style:
Build new blocks for the school of music in a style thaat fits with the existing buildings to maintain a unified look.



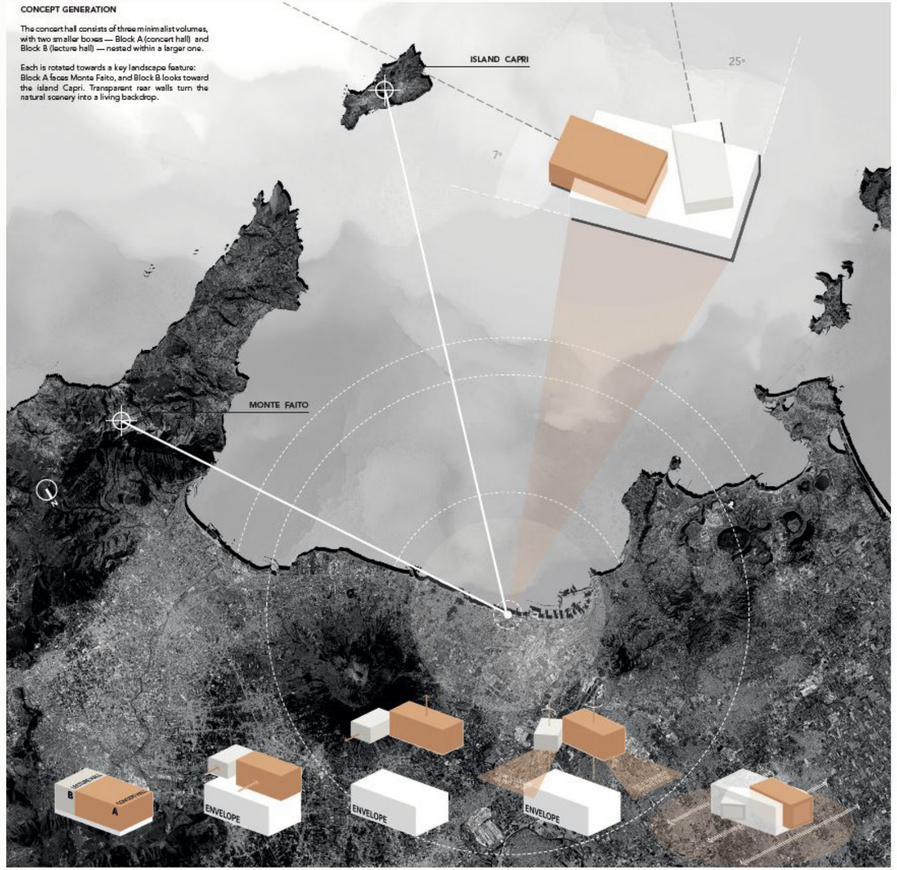
Polycarbonate and glass are used as the main materials for the new construction to clearly show the difference between old and new, while adding transparency to the design.

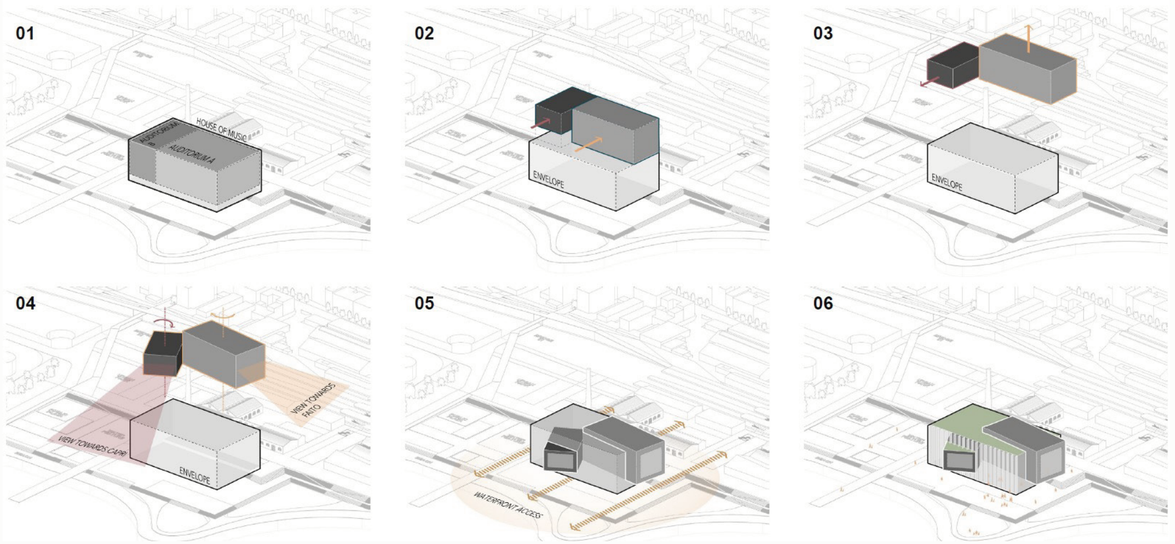


CONCEPT GENERATION

The concert hall consists of three minimalist volumes, with two smaller boxes — Block A (concert hall) and Block B (lecture hall) — nested within a larger one.

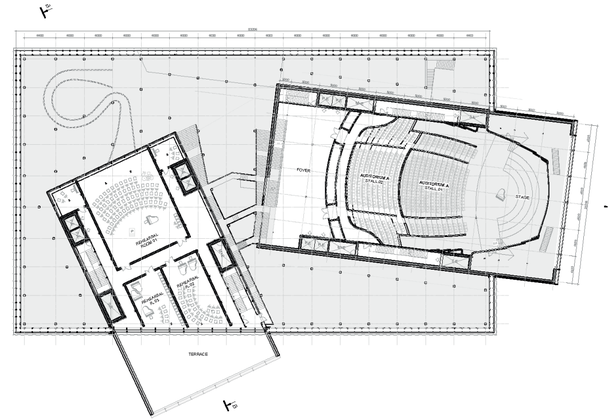
Each is rotated towards a key landscape feature: Block A faces Monte Faito, and Block B looks toward the island Capri. Transparent rear walls turn the natural scenery into a living backdrop.

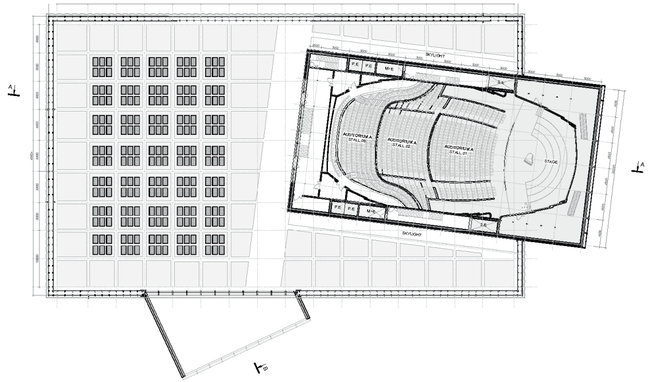






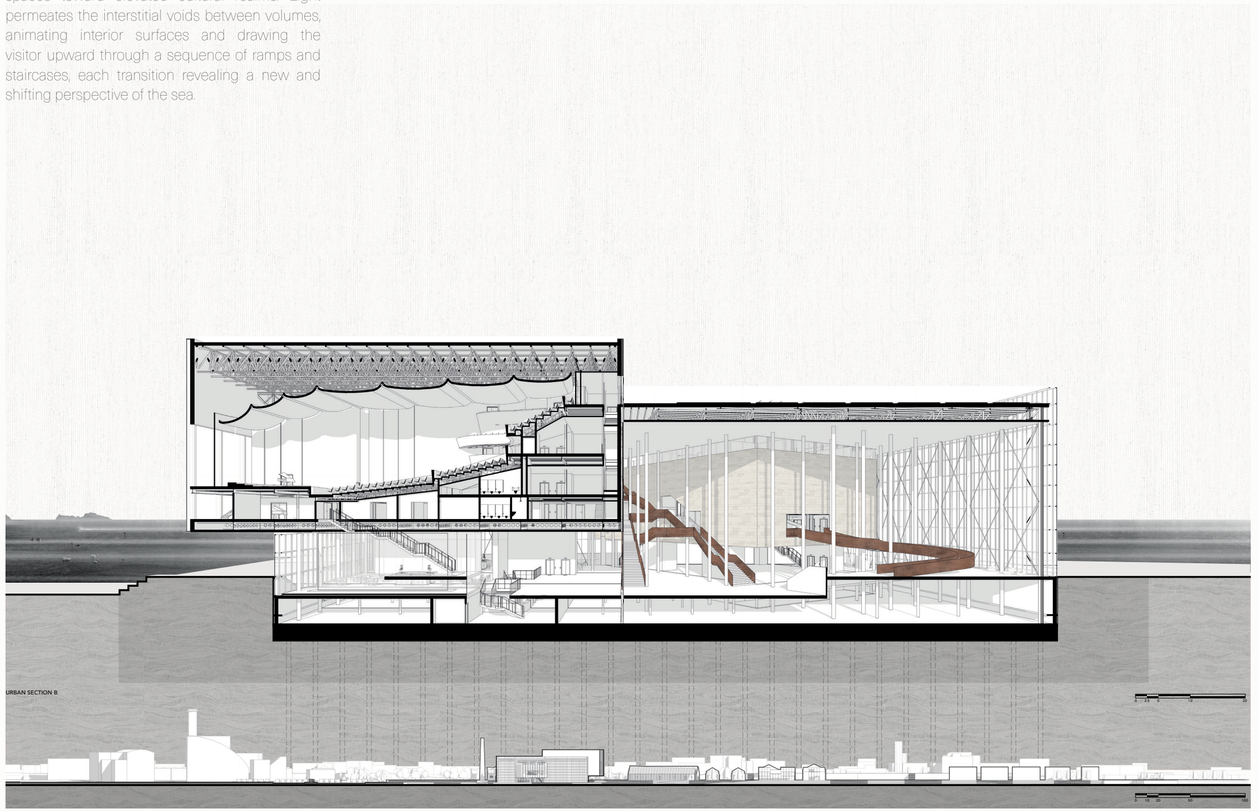

ENTRANCE
+2.000
+0.000
MULTI-FUNCTIONAL FLEXIBLE HALL
LOBBY
FLEXIBLE EXHIBITION HALL
OPEN MUSIC SPACE
MANAGEMENT
RECORDING STUDIO 1
RECORDING STUDIO 2
RECORDING STUDIO 3
CONTROL
TICKET OFFICE
PERFORMERS LOBBY
GRADING THEATER CINEMA
PERFORMERS STAIRCASE
CAFE
CAFE BAR
GREEN WALL
RESTAURANT
EXIT
0
5
10
25


FOYER
AUDITORIUM A HALL 1
AUDITORIUM A HALL 2
STAGE
RESTAURANT HALL
TERRACE


SKYLIGHT
AUDITORIUM A HALL 1
AUDITORIUM A HALL 2
STAGE

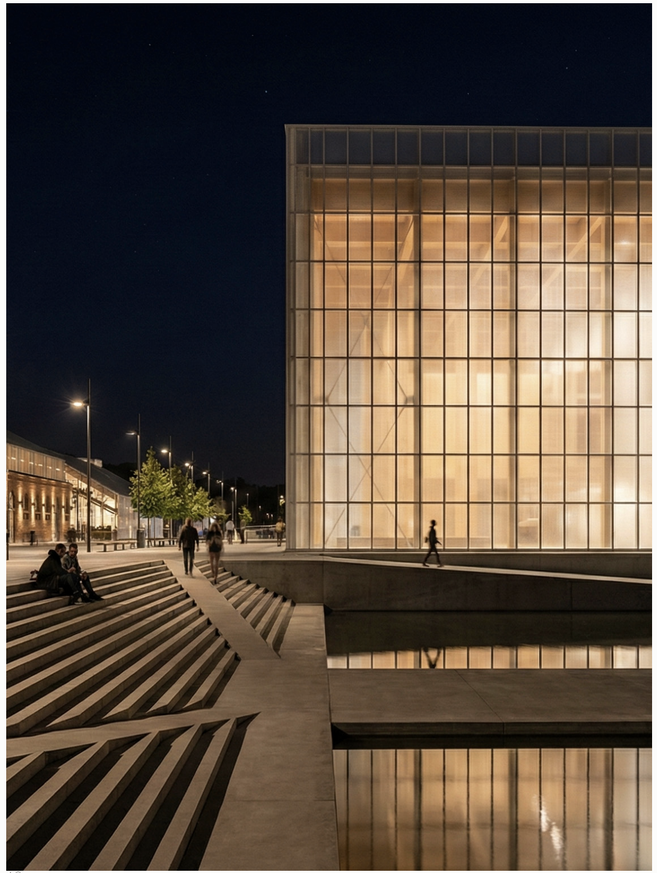


The interior volumes are organised as a continuous promenade, ascending from grounded public spaces toward elevated cultural realms. Light permeates the interstitial voids between volumes, animating interior surfaces and drawing the visitor upward through a sequence of ramps and staircases, each transition revealing a new and shifting perspective of the sea.

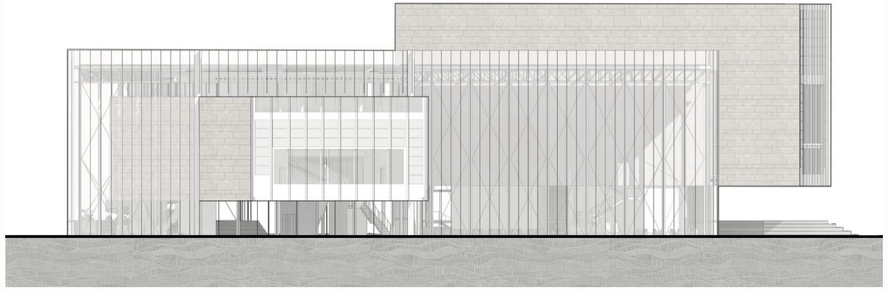




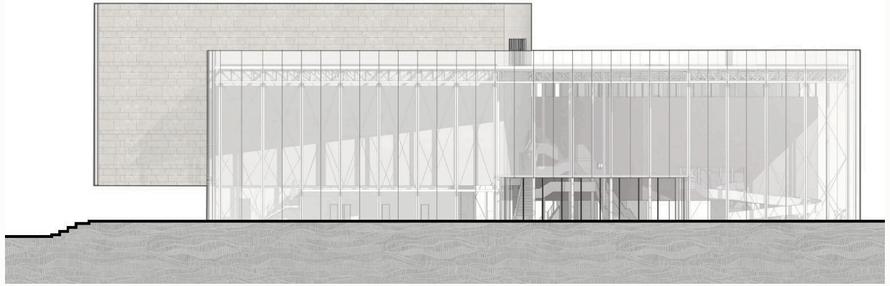




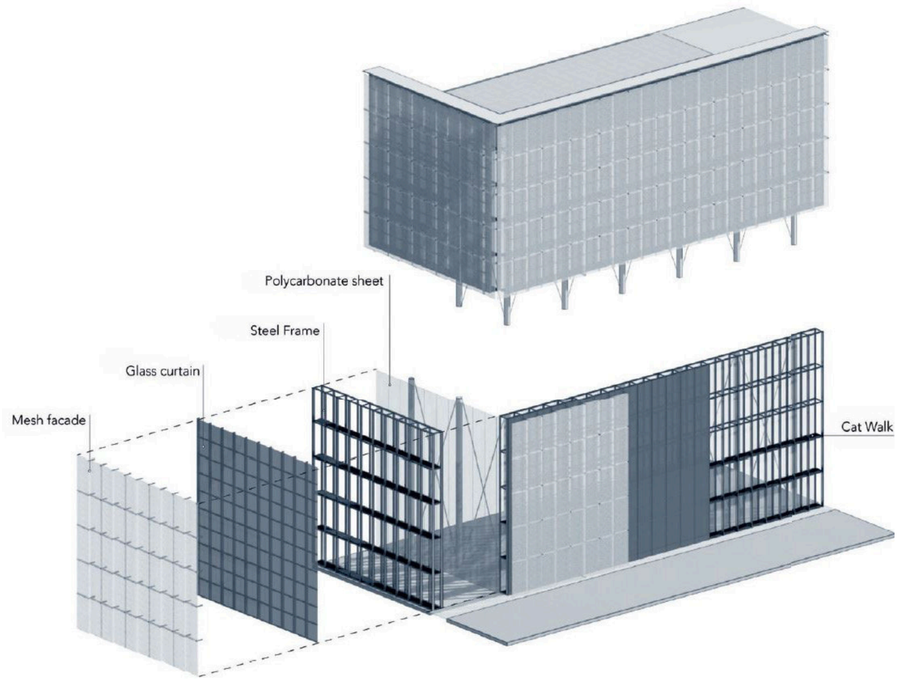
The material strategy of the HOM emerges from an understanding of Naples as a city shaped by the continuous layering of matter, memory, and myth.



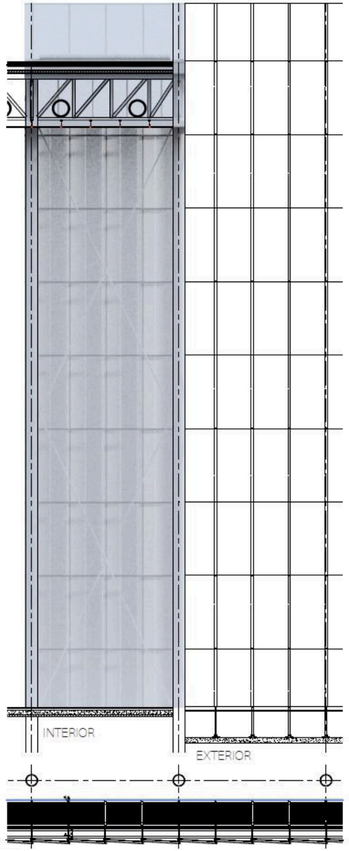
Over centuries, its architecture has absorbed the traces of eruption, erosion, and renewal, creating a built environment where the old and the new coexist within the same physical and emotional landscape.



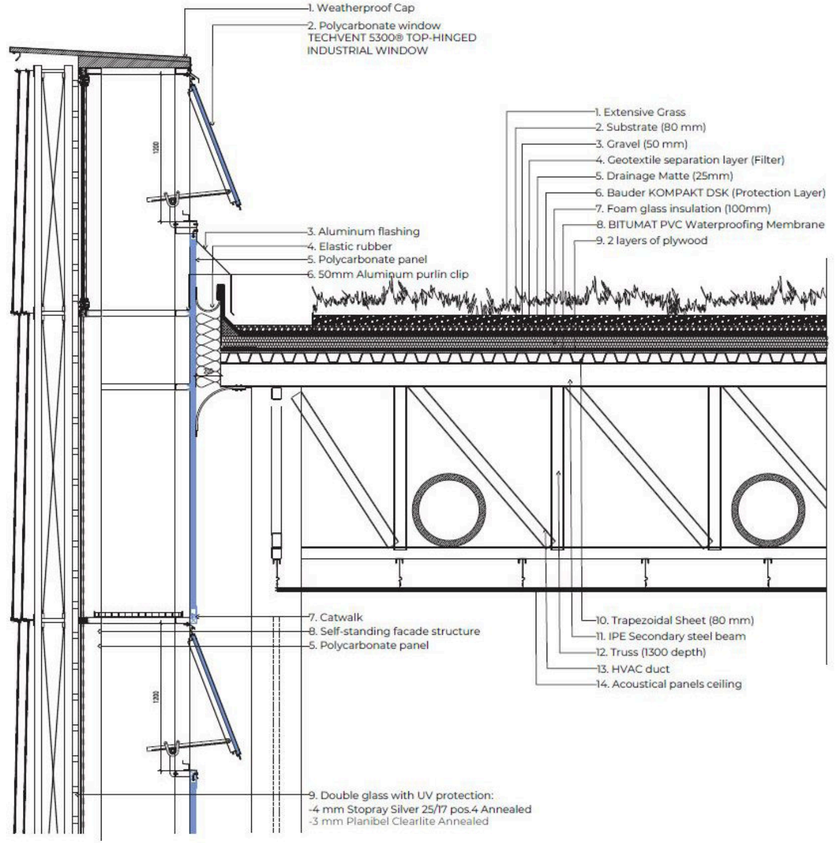


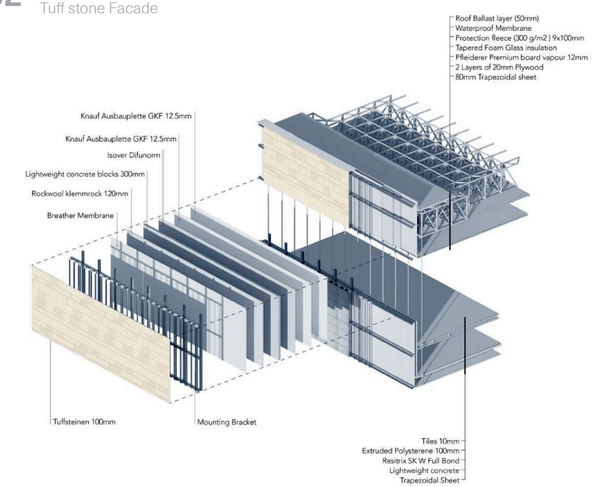


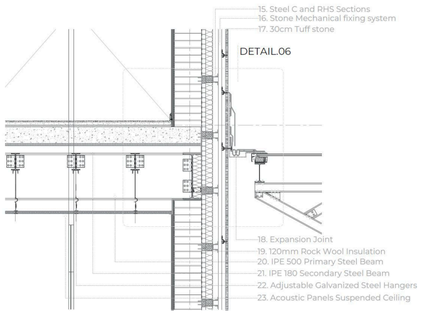
The play between shadow and illumination recalls the atmosphere of Naples' underground spaces, evoking the layered and introspective spirit of the city's mythic underworld.







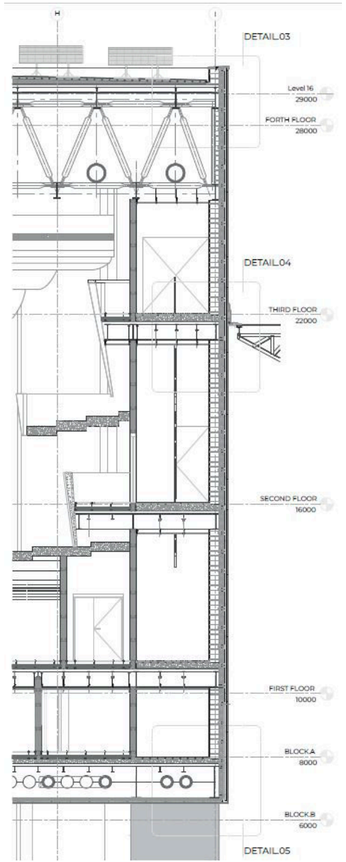


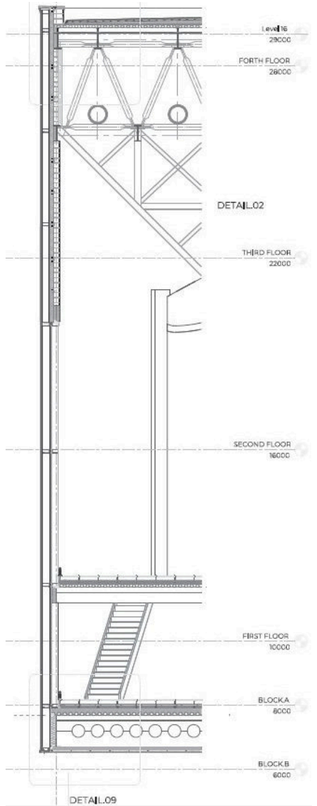


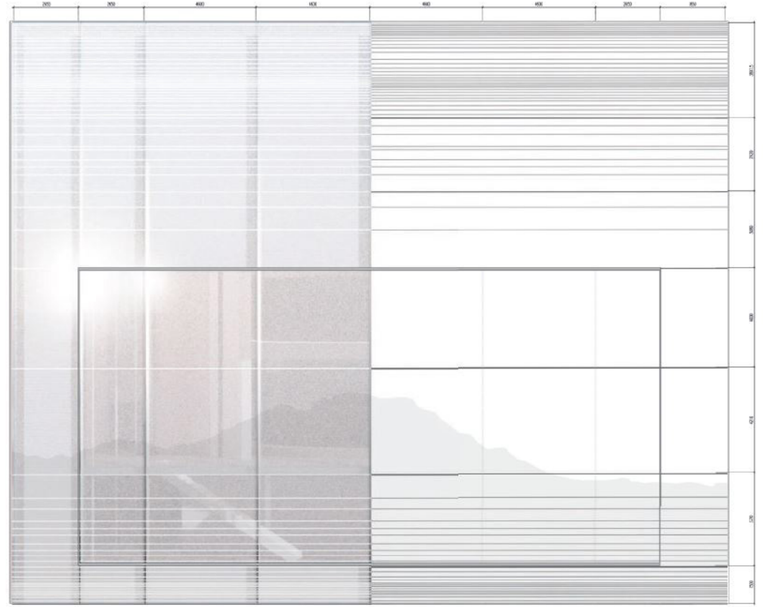


PLAN 1:50



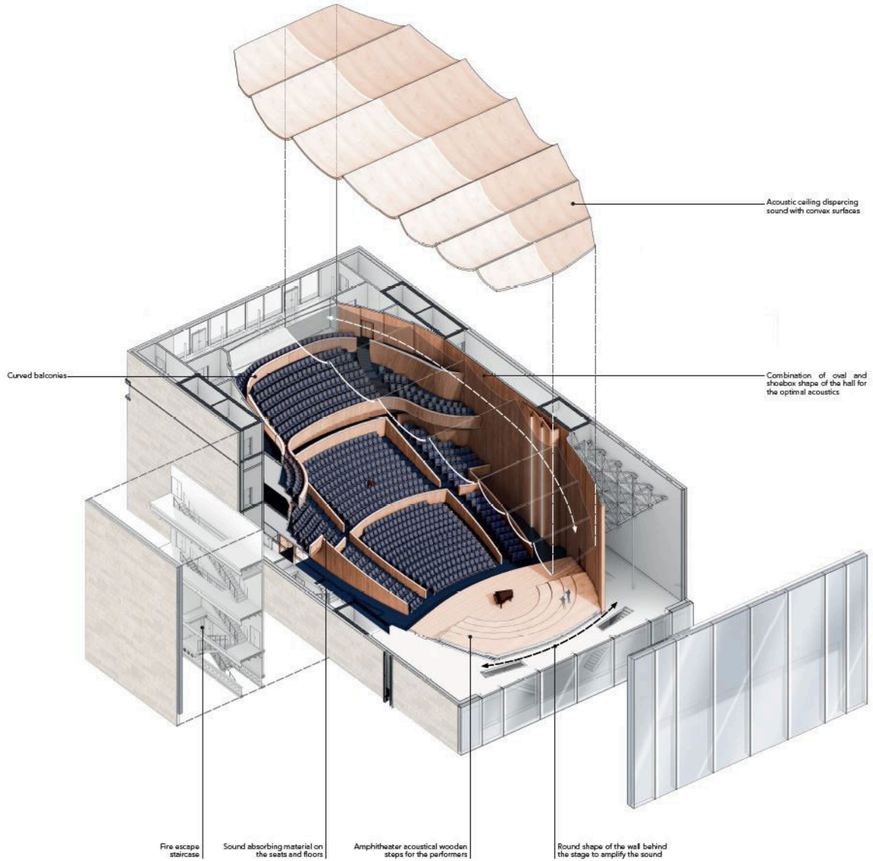




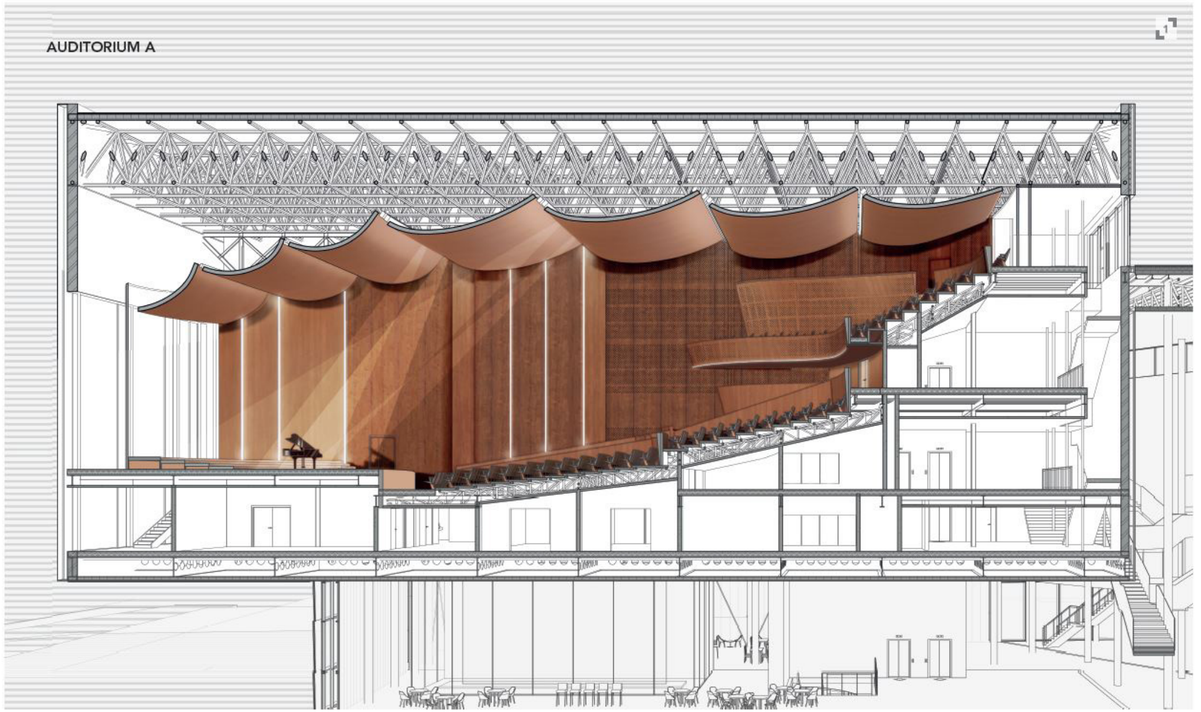


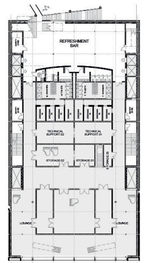
PLAN 1:50



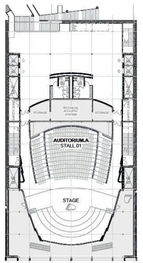


AUDITORIUM A

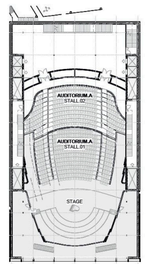




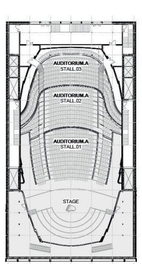
TECHNICAL FLOOR PLAN
1:300



FIRST FLOOR PLAN
1:300



SECOND FLOOR PLAN
1:300



THIRD FLOOR PLAN
1:300

02

THE 3B TOWER

TALL BUILDING, MADRID, SPAIN

ARCHITECTURAL DESIGN STUDIO FOR COMPLEX CONSTRUCTIONS.1,MSc

Theme: Tall Building- Skyscraper
Design Date: February-2024 to June-2024 (2nd Semester)
Proposed Location: Chamartin, North Madrid, Spain

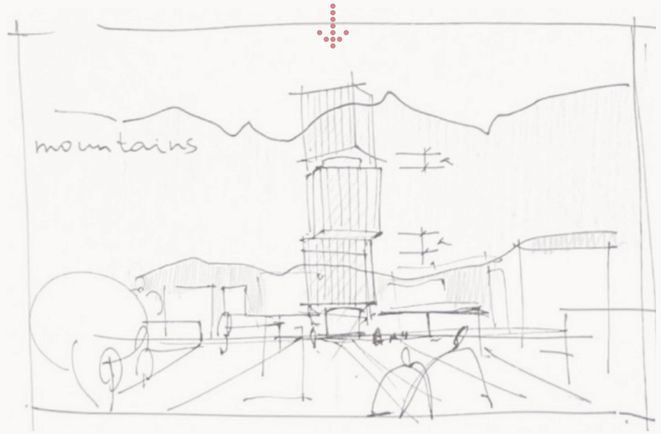
Project Vision: A mixed-use tower that does not impose itself upon the city but orients itself within it, anchoring offices, residences, and entertainment facilities into a single vertical landmark that reads as both compass and catalyst within Madrid's northern urban fabric.

Design Approach: The concept emerges from the site's relationship to the surrounding green axes. Three volumes, each tilted in response to a distinct urban orientation, compose a tower that simultaneously faces the city's major green corridors, functioning as an architectural compass rooted in its context. The podium mediates between the tower's verticality and the surrounding urban grain, ensuring the building engages the street as confidently as it marks the skyline. al rigour remained inseparable throughout the process.

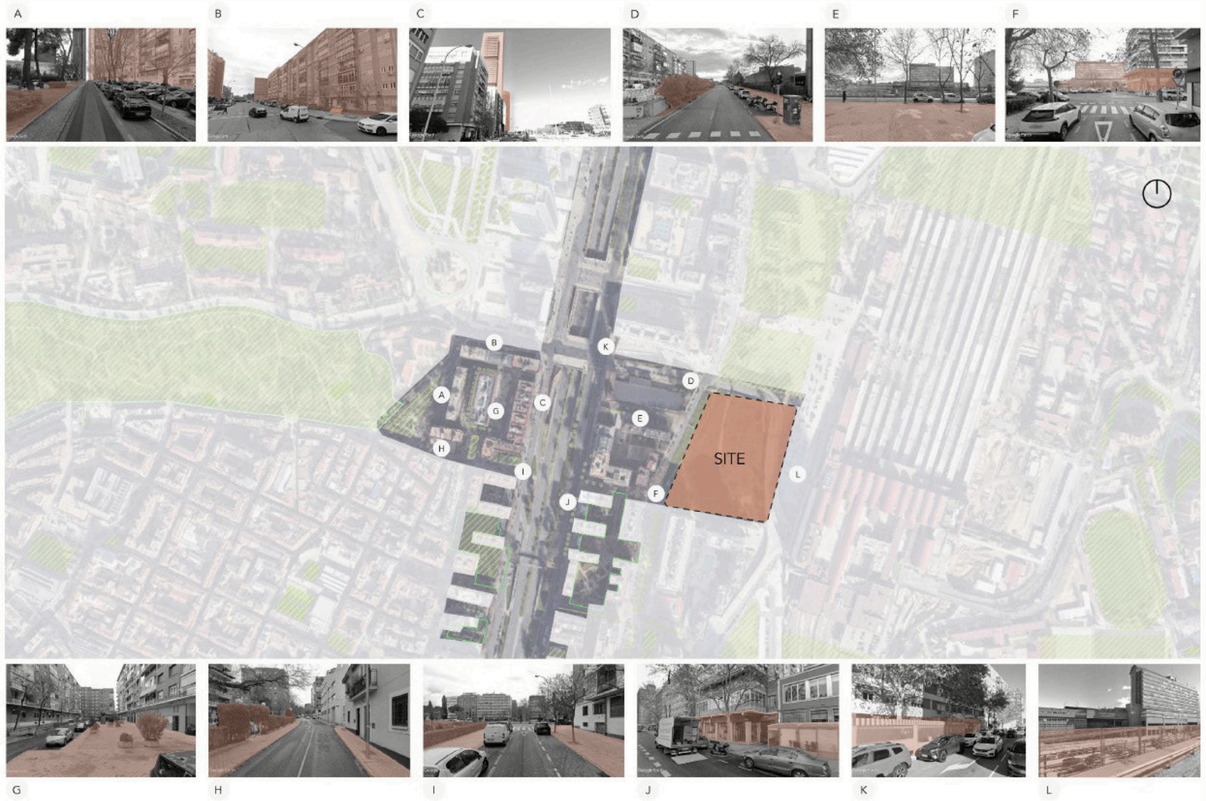
My contributiont to Group work: My primary contributions included researching the site's historical context, creating contour lines, and conceptualizing the design using three tilted blocks. In addition, I modeled the project in Revit, performed structural analysis and calculations, and contributed to developing the final plans and elevation drawings.

Softwares used: Qgis + Google Earth (Site contour lines) I Revit I Archicad I Lumion I Activehouse (energy model) I Synchro I I Photoshop I Illustrator I Indesign



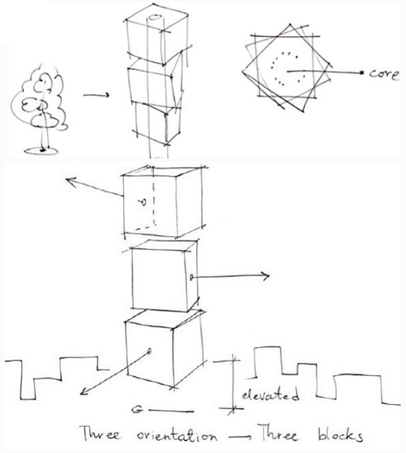


Nestled near Chamartin Train Station in Madrid, a new tower is set to redefine the city's skyline. With a unique concept of stacking blocks, this upcoming structure offers diverse views from each level. Designed as a mixed-use compound, it strategically bridges the gap between Madrid's old green corridor and its emerging counterpart, promising to become a dynamic hub in the green heart of the city.

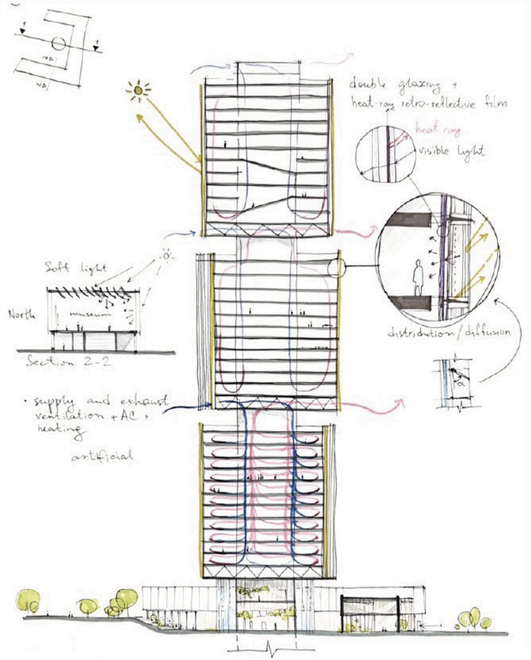

A
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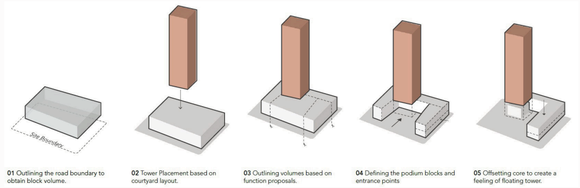

MASTER PLAN

SHAPE FORMATION:



The façade is governed by a 1:2 proportional system drawn from Madrid's architectural vernacular, bridging traditional and contemporary expression. Active solar panels are integrated into the façade, generating renewable energy while providing dynamic shading. At podium level, timber brings warmth and tactility to the street edge, creating a human-scaled atmosphere at ground level.





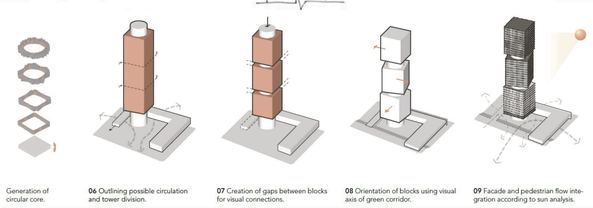
01 Outlining the road boundary to obtain block volume.

02 Tower Placement based on courtyard layout.

03 Outlining volumes based on function proposals.

04 Defining the podium blocks and entrance points

05 Offsetting core to create a feeling of floating tower.



Generation of circular core.

06 Outlining possible circulation and tower division.

07 Creation of gaps between blocks for visual connections.

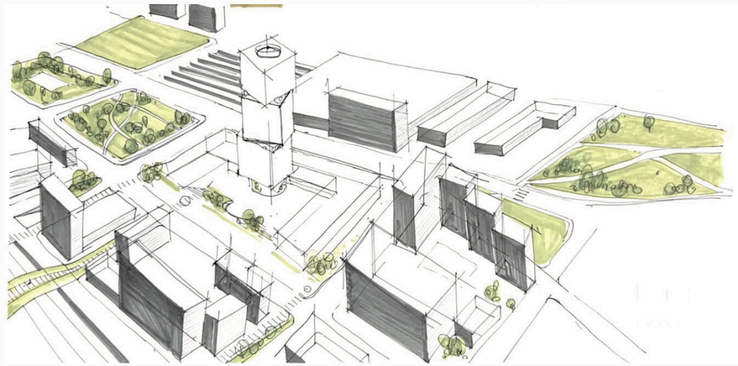
08 Orientation of blocks using visual axis of green corridor.

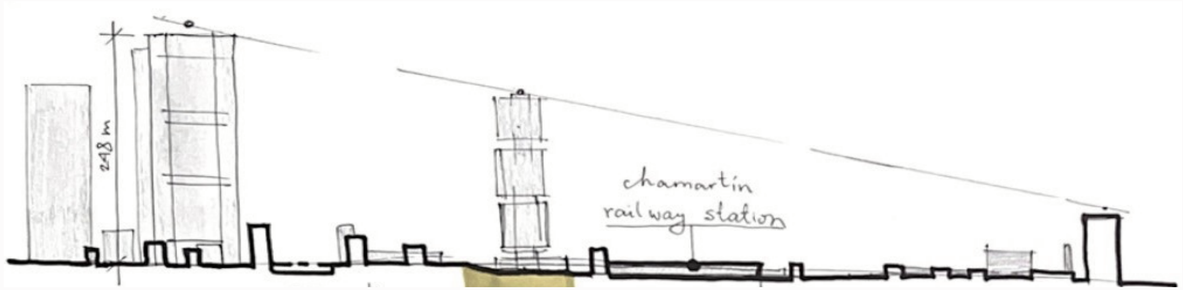
09 Facade and pedestrian flow integration according to sun analysis.

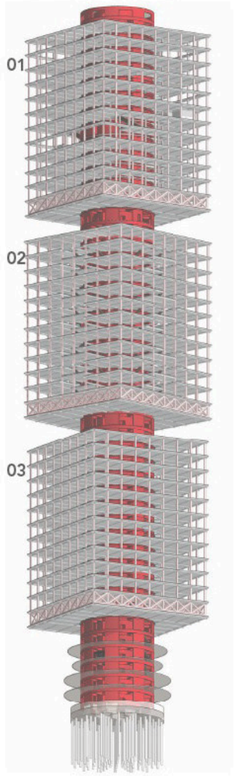
URBAN STUDIES:

The tower height was determined through careful analysis of Chamartín's urban section and existing skyline, ensuring the building integrates into the urban fabric as a considered contribution rather than an imposition.

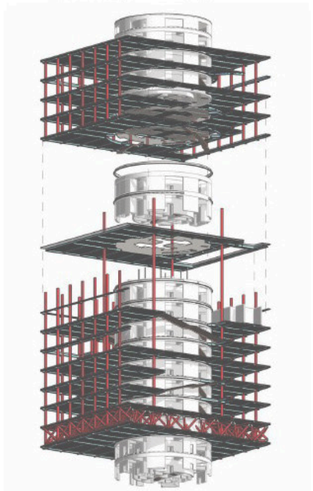
At approximately 205 metres, the tower aligns with the established heights of Chamartín's skyline, complementing surrounding structures, maintaining visual balance, and reinforcing the aesthetic continuity that defines Madrid's northern gateway.



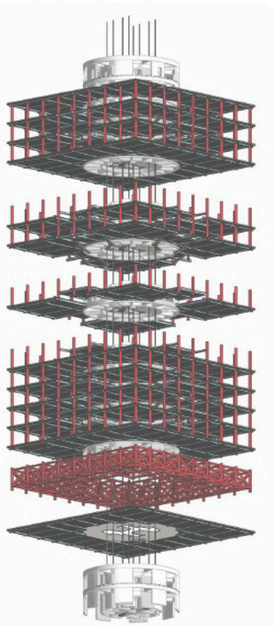




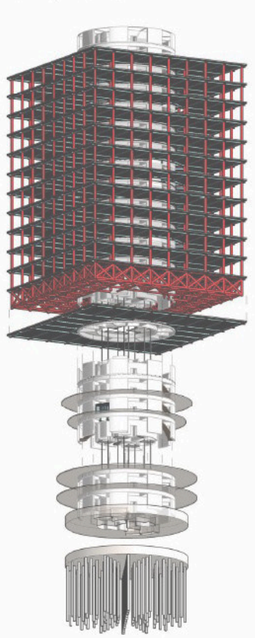
01 Entertainment Block



02 Residential Block



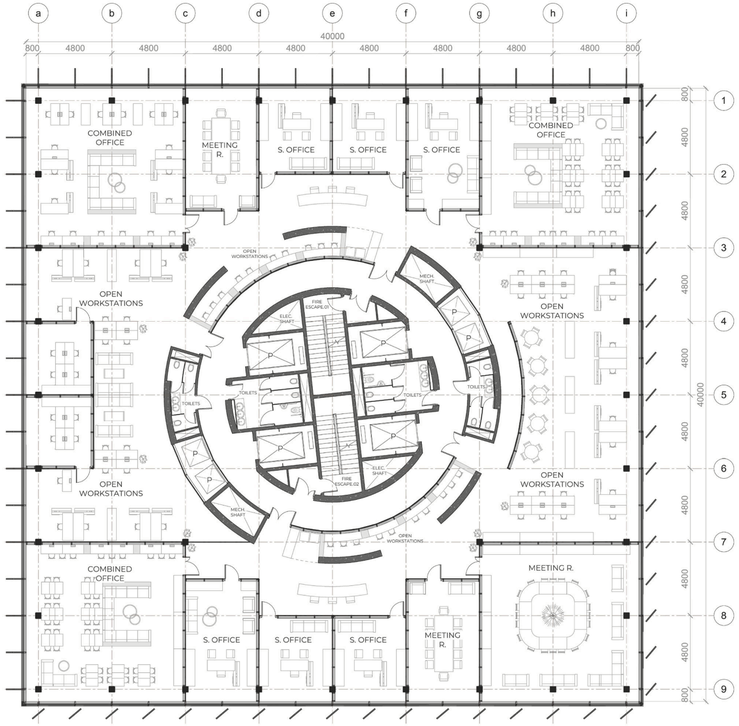
03 Office Block



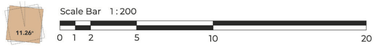
Structural Concept:

A central cylindrical concrete core anchors the structural system, around which three independently tilted volumes are organised, each supported by a dedicated substructure calibrated to its specific orientation and load distribution. The result is a system that achieves structural stability without compromising the formal dynamism of the composition.

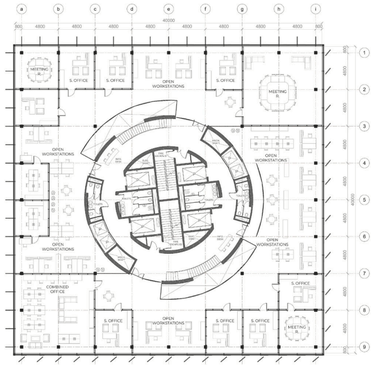
FLOOR PLANS | OFFICE 5TH FLOOR 1:200



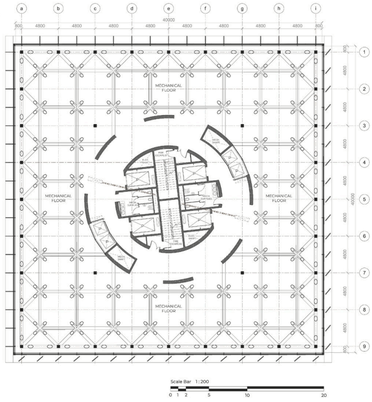
OFFICES TYPICAL PLAN

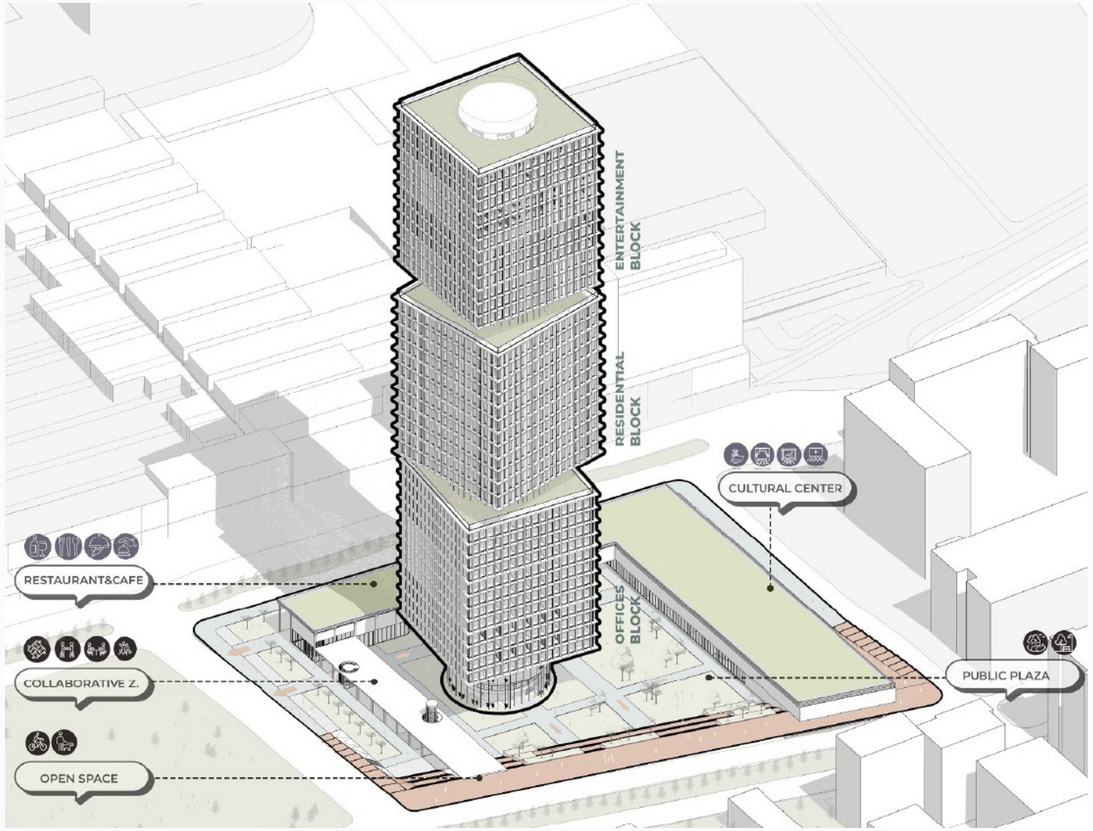


FLOOR PLANS |
OFFICE 7TH FLOOR
1:400



FLOOR PLANS |
OFFICE TRUSS FRAME
4TH FLOOR
1:400

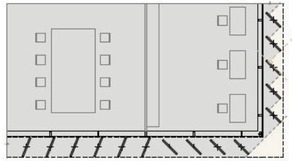




The genesis of the new tower near Chamartin Train Station stems from a visionary concept that seeks to harmonize nature, culture, and innovation.

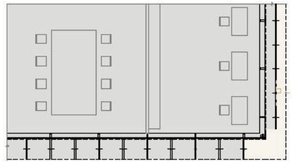
PARAMETRIC FACADE DESIGN:

1º Position



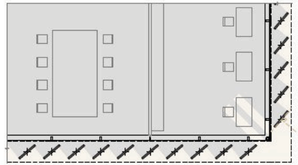
The panels are rotated perpendicular to the east facing sun to maximize energy collection.

2º Position



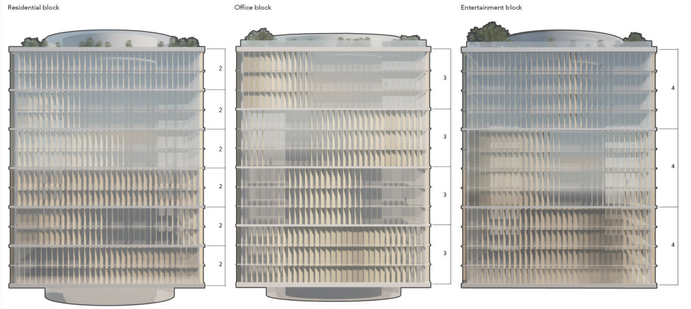
The panels are roated perpendicular to the south facing sun to maximize energy collection.

3º Position



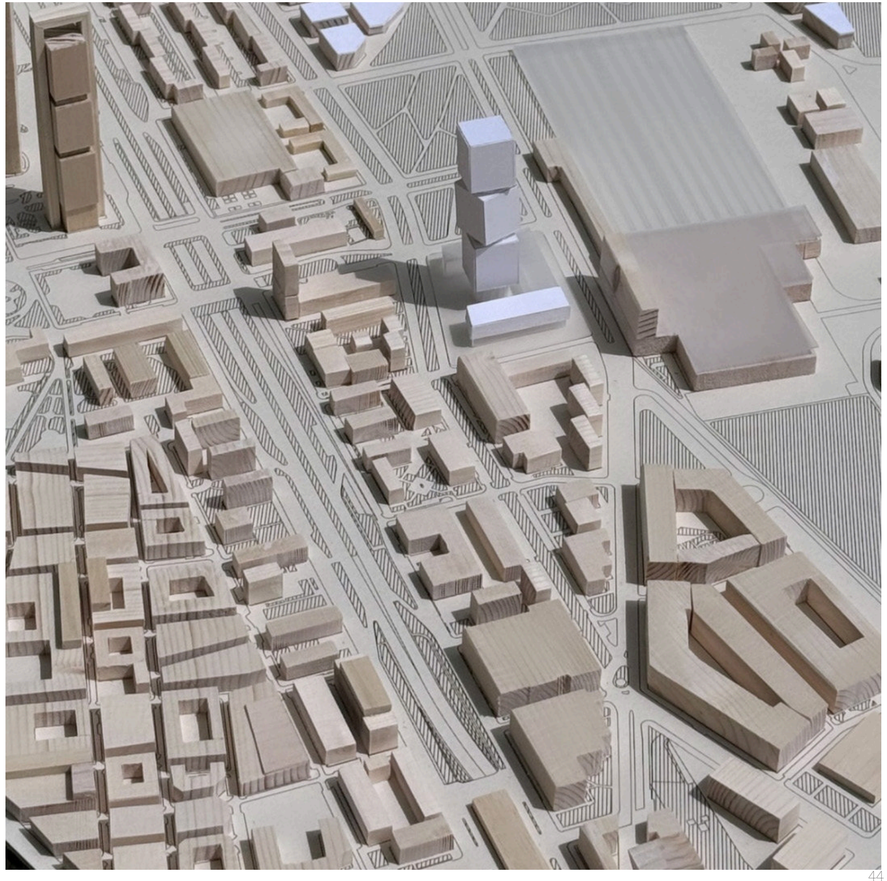
The panels are roated perpendicular to the west facing sun to maximize energy collection.







Physical Urban Model



03

CINIFABRIQUE

Cinsello Balsamo, MILANO

Sustainable Architecture Construction Studio, MSc

Theme: Extension of an existing training center
Design Date: September-2023 to January-2024 (1st Semester)
Proposed Location: Cinsello Balsamo, Milano, Italy

Project Vision: An extension that grows from its context rather than imposing upon it, low-cost, sustainably driven, and rooted in the idea that working and learning environments should be as connected to nature as they are to function.

Design concept: The proposal introduces a new building adjacent to the existing structure, organised around a central courtyard animated by a versatile pergola system. The courtyard becomes the social and spatial heart of the complex, fostering collaboration, drawing in natural light, and maintaining a continuous visual connection to the outdoors. The structural system, based on a robust S-275 galvanised steel grid, provides both durability and the flexibility required to accommodate diverse laboratory programs.

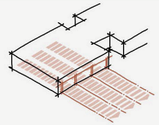
My contributiont to Group work: Developed technical detailing for the double façade system and its structural connections, Conducted structural calculations for the steel framework, Created 3D visualisations for the final submission

Softwares used: Qgis I Revit I Lumion I Photoshop I Illustrator I Indesign

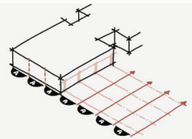


GENESIS OF THE BUILDING:

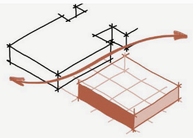
The extension is organised around a central courtyard animated by a versatile pergola system, the social and spatial heart of the complex, fostering collaboration and maintaining a continuous visual connection to the outdoors. Functionality and nature are treated not as competing priorities but as a single integrated intention. The structural system, built on a robust S-275 galvanised steel grid, provides the durability and spatial flexibility demanded by diverse laboratory programs.



01 Grid Analysis from existing building

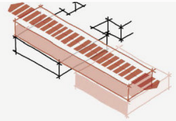


02 Grid development (new and old)

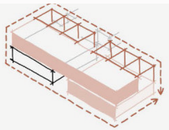


03 Main flow in relation to new volume

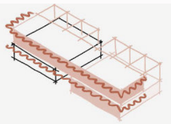




04 Connection between old and new volumes



05 Additional grid structure



06 Shading device joining both volumes

DEVELOPMENT & INNOVATION:

A double-skin perforated façade moderates solar exposure and promotes natural ventilation, reducing the building's energy demand passively. The structural system's inherent flexibility accommodates the diverse and evolving needs of laboratory programs, while rooftop green spaces extend the project's ecological footprint beyond the building envelope. Together, these strategies compose an architecture where scientific rigor and natural systems are not in tension, but in dialogue.

TECHNICAL AND
CONSTRUCTION DETAILS:

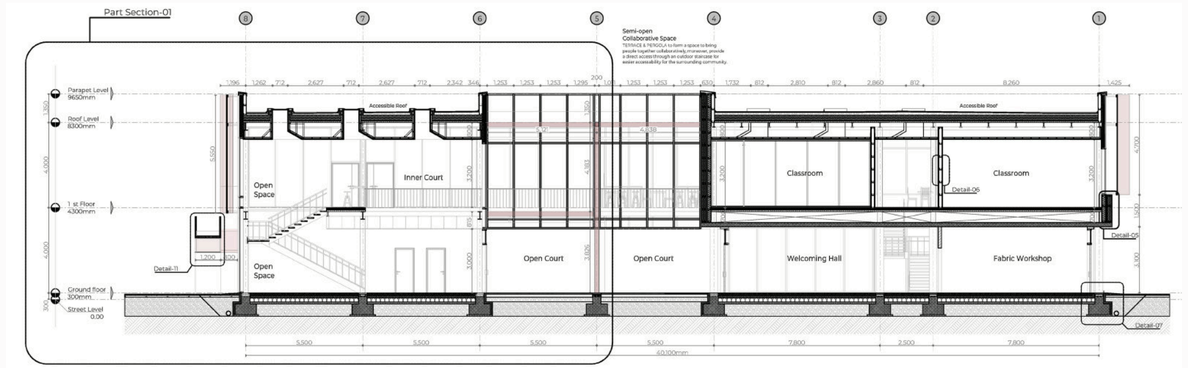
BUILDING FEATURES:

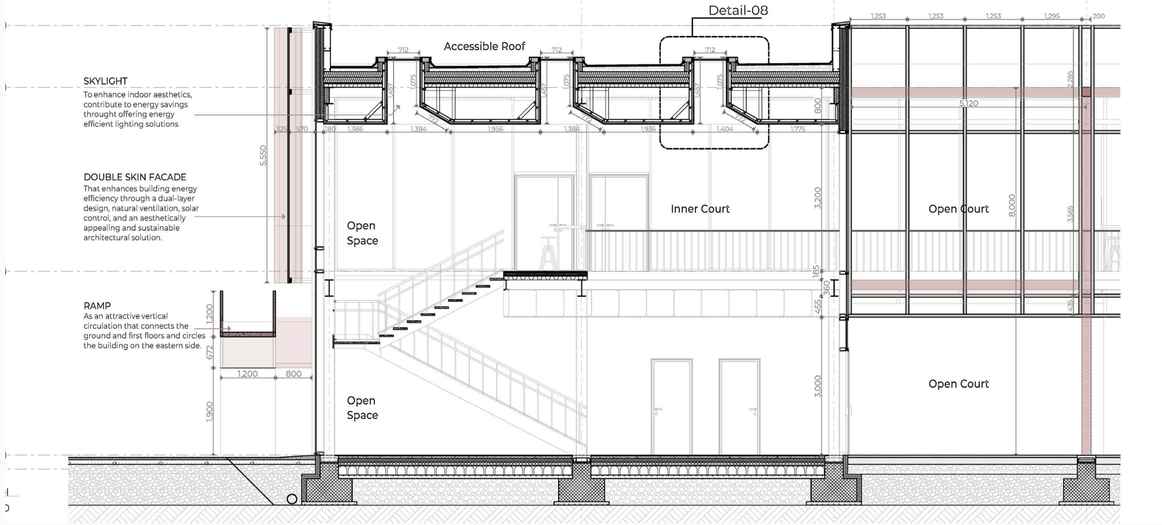
SKYLIGHT
To enhance indoor aesthetics, contribute to energy savings throught offering energy efficient lighting solutions.

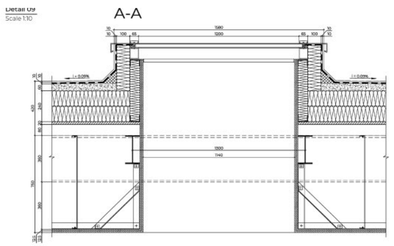
DOUBLE SKIN FACADE
That enhances building energy efficiency through a dual-layer design, natural ventilation, solar control, and an aesthetically apealing and sustainable architectural solution.

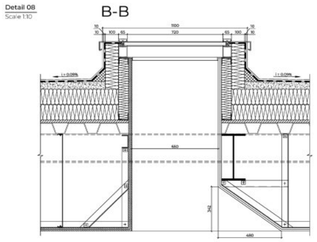
EXTERNAL RAMP
As an attractive vertical circulation that connects the ground and first floors and circles the building on the eastern side.

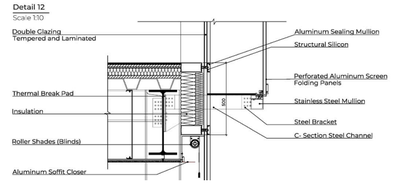












04

DESERT STUDIES RESEARCH CENTER

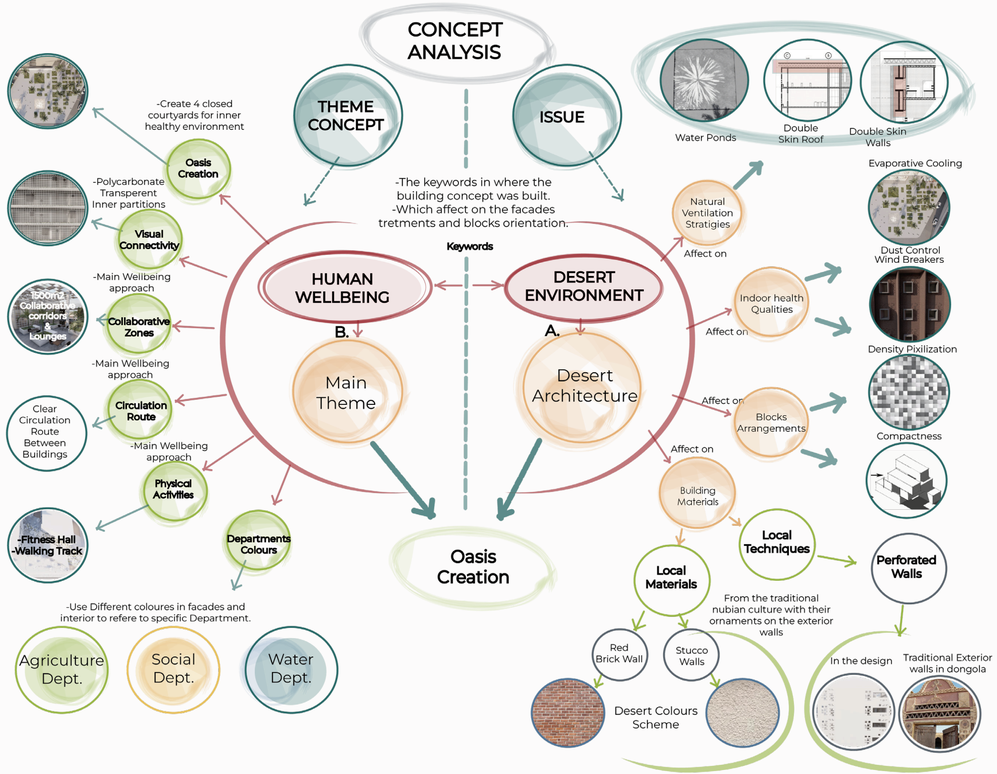
DONGOLA, SUDAN

Graduation Thesis Project- University of Khartoum, Faculty of Architecture

Type: Individual Work
Theme: Thinking of Employee Wellbeing
Design Date: June-2021 to October-2021 (10th Semester)
Proposed Location: Dongola, Northern state, Sudan
Project Aim: Design a healthy and attractive environment for researches to be held, with wide collaborative areas to bring together students and researchers.
Design Approach: A thesis report was created as a result of scientific research into desertification, its consequences, and desert architecture approaches. I worked to create, develop, and refine the concept that was oriented toward serving the environment, besides demonstrate the drawings, schemes, renders.

Softwares used: Archicad I Lumion I Photoshop I Illustrator I Indesign





Design concept diagram

1- Long, Slim three strips for the three departments to decrease sun radiation from the east and west sides.

2- Circulation Route Creation between the three strips for the connectivity and collaboration chances.

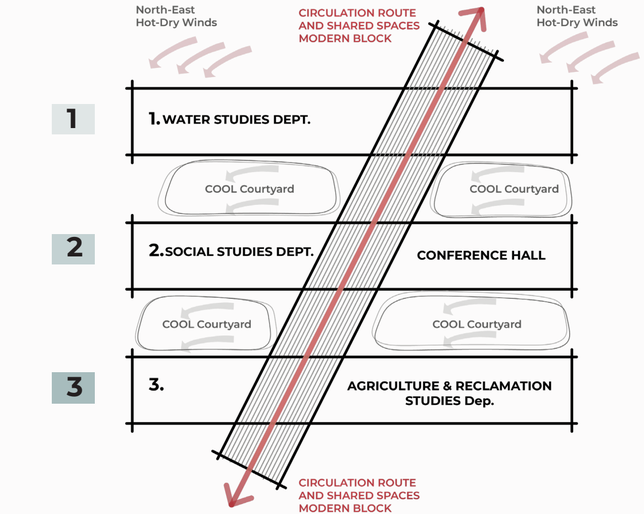
3- Tilting Circulation Route for better Nile view and ventilation benefits (Stack ventilation) as needed in the desert environments.

4- Design Modern block for researchers workstations and benefiting from the circulation route in connecting the departments.

5- Wide range of collaborative lounges, Atriums and courtyards in the interse tion of each two blocks for healthy indoor environment.

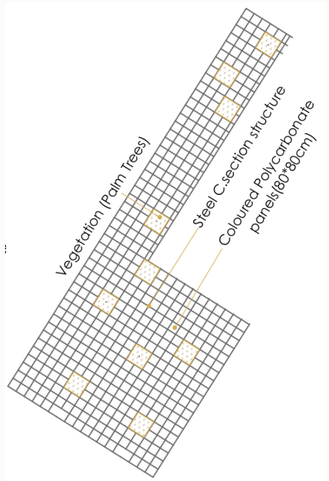
The centre houses three research departments, Agricultural Reclamation, Groundwater Studies, and Social Sciences, each selected to activate the desert's latent resources, strengthen scientific research capacity in Sudan's Northern State, and contribute to both economic development and social stability in the region.

Building users, spatial components, and programmatic areas were defined through rigorous analysis of local and international precedents. The site, embedded within the University of Dongola campus, was chosen deliberately, positioning the centre at the heart of the academic community it is designed to serve.

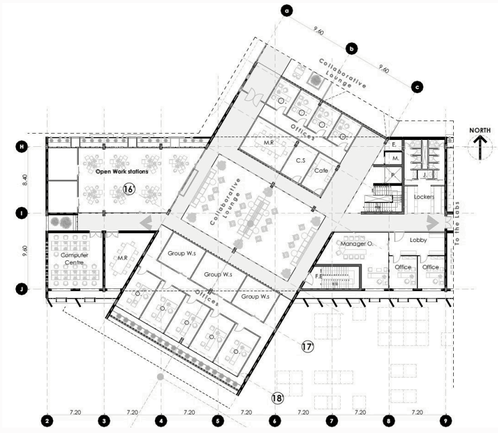


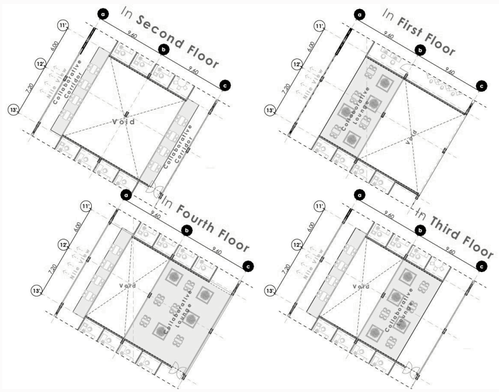
SHADING CANOPY DESIGN

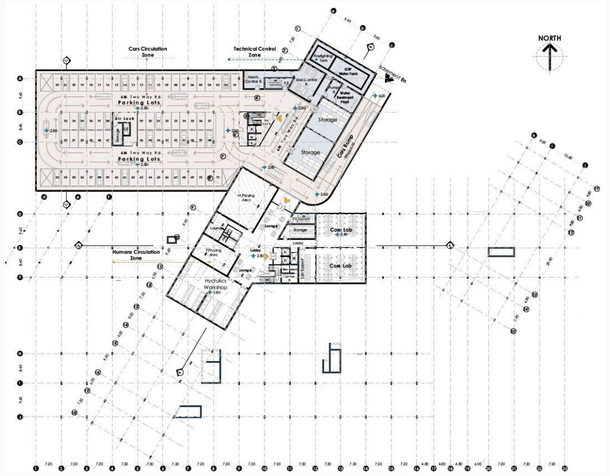
In response to the demands of a hot arid climate, the shading strategy deploys a modular system of 80×80cm structural cubes with 1.6×1.6m openings, each calibrated to frame and shelter desert palm vegetation. The result is a shaded circulation network where movement through the building becomes an experience of passing through living canopy.

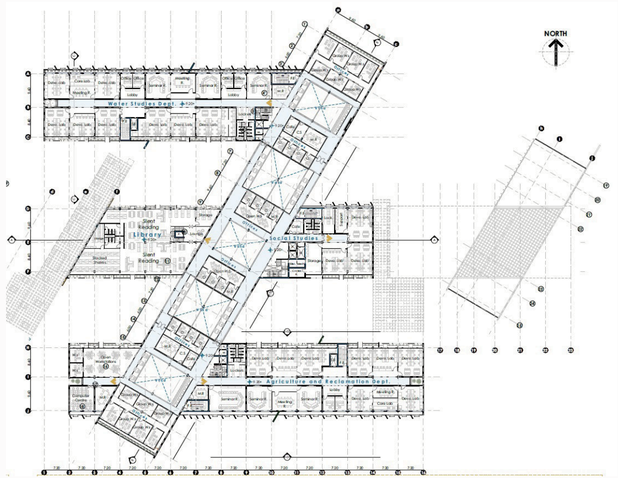


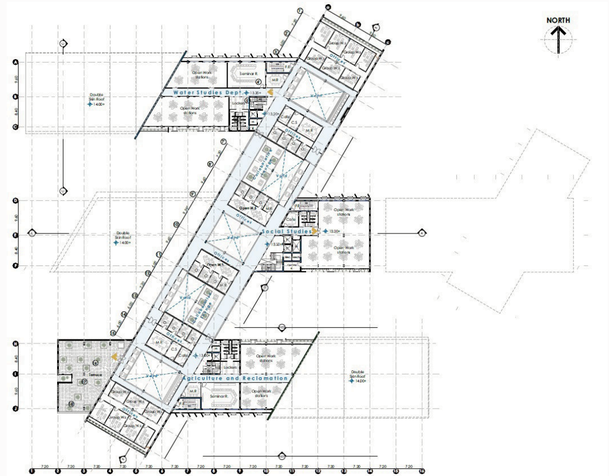


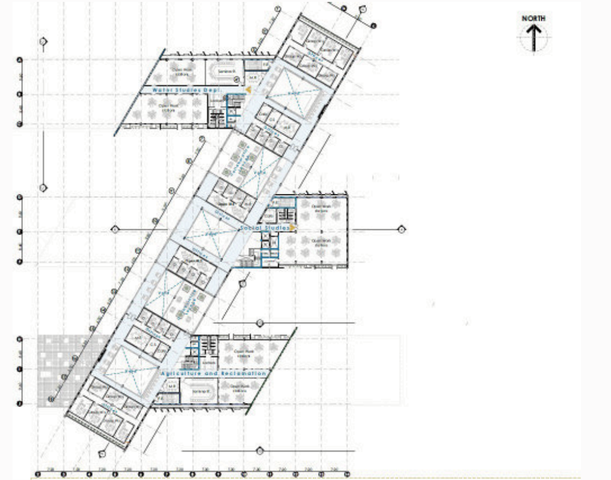


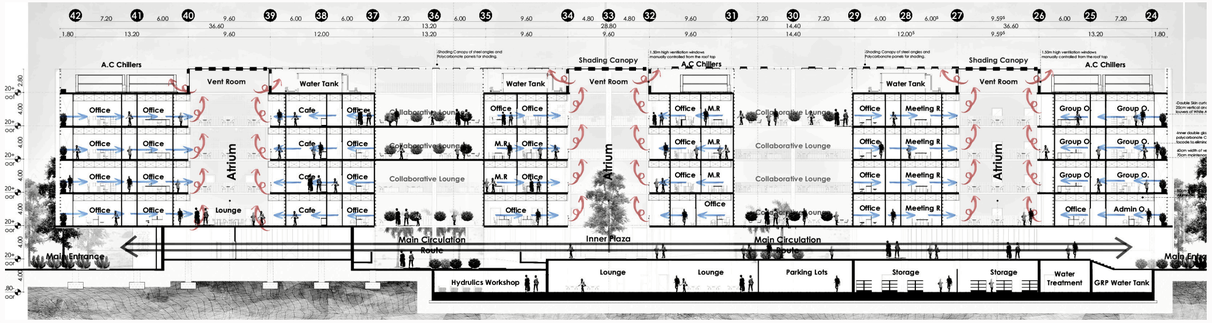


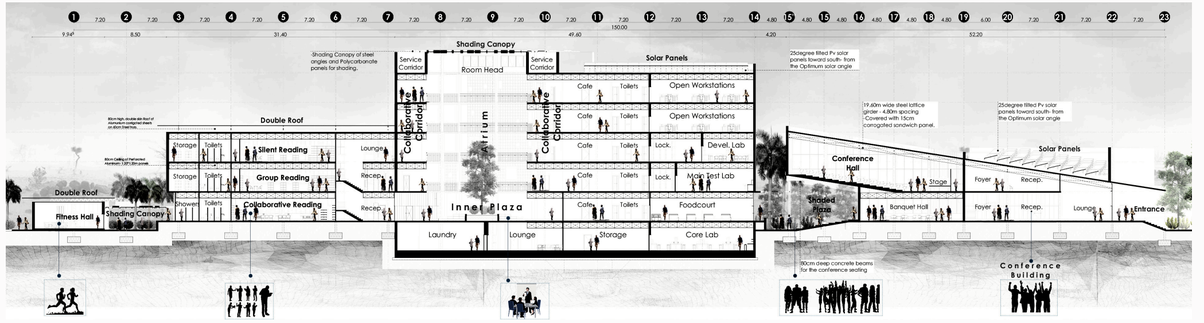

Cars Circulation Zone
Technical Control Zone
4th Two Way Rd
Parking Lots
Storage
Car Park
Humans Circulation Zone
Hydraulics Workshop
Civil Lab
Geology Lab
Chem Lab
NORTH


Water Studies Dept
Silent Reading
Library
Agriculture and Reclamation Dept
NORTH


Water Studies Dept
Agriculture and Reclamation
NORTH


Water Studies Dept
Agriculture and Reclamation
NORTH


A.C Chillers
Vent Room
Water Tank
Shading Canopy
Office
Cafe
Collaborative Lounge
Atrium
Inner Plaza
Main Circulation Route
Main Entrance
Hydrulics Workshop
Lounge
Parking Lots
Storage
Water Treatment
GRP Water Tank


Shading Canopy
Service Corridor
Room Head
Solar Panels
Double Roof
Collaborative Corridor
Atrium
Inner Plaza
Silent Reading
Group Reading
Collaborative Reading
Fitness Hall
Shading Canopy
Cafe
Toilets
Open Workstations
Devel. Lab
Main Test Lab
Foodcourt
Core Lab
Laundry
Lounge
Storage
Conference Hall
Stage
Foyer
Recep.
Banquet Hall
Skydeck Area
Entrance
Conference Building

05

MIXED USE, MID-RISE BUILDING

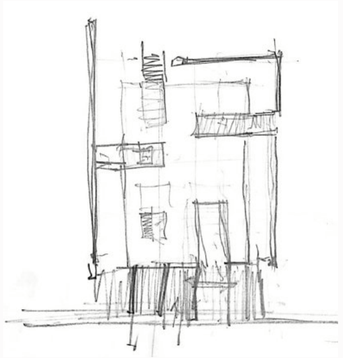
KHARTOUM, SUDAN

Type: **MIXED USE MID-RISE (Commercial and Residential)**
: PROFESSIONAL WORK
Design Ofice: OTAS Design and Consultants
Design Date: February-2023
Project Location: Khartoum, Sudan.
Project Aim: Designing a resilient and Sustainable building with pleasent facade because it locates in a vibrant neighbourhood.
Design Approach: The design starts with site visit and drawing the analysing the context, Furthermore, working on the apartments layouts, create, develop, and refine the plans and the 3D model.

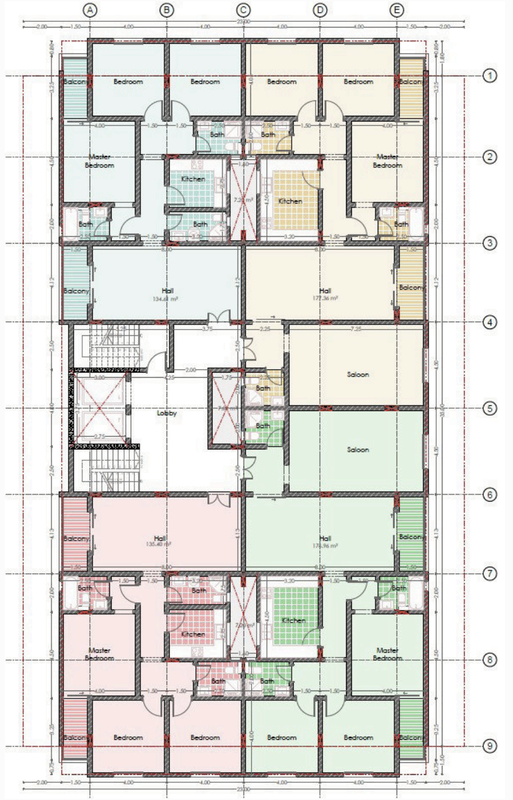
ABOUT THE PROJECT

The building consists of 7 floors, Ground, Basement and Mezzanine floor with two modules, one with 4 apartments at each floor and the other contains 5 apartments per floor. Both the Ground and mezzanine floors are designed to be used as shops and other commercial spaces. The entire Basement floor is used to provide the residents with parking lots.

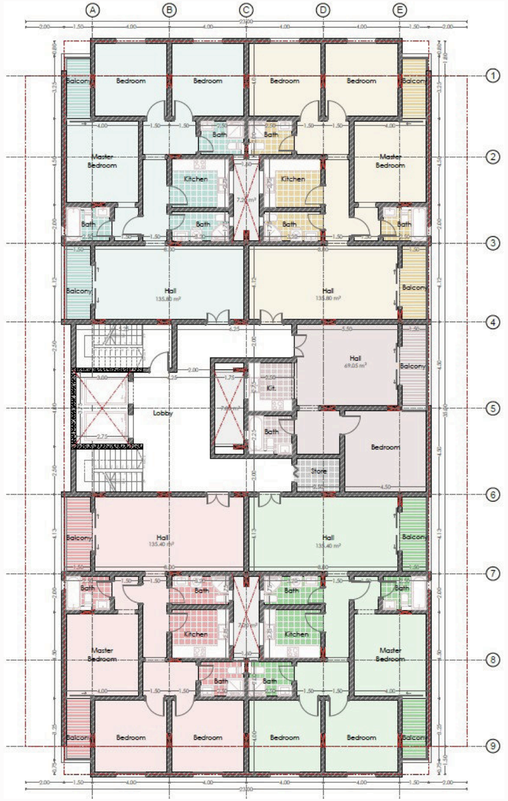
The challange:
The challenge was to provide wide spaces with natural ventilation and day light.







Typical-01 Floor Plan



Typical-02 Floor Plan