

PORTFOLIO



Selected works.
Berkay Akyuz



Berkay Akyuz

Born April 10, 1998, Ankara, Turkey

Recently graduated with a Master's degree in Architecture-Building Architecture from Politecnico di Milano, where I was actively involved in Complex Construction Studios. Through these studios, I explored advanced architectural approaches in diverse urban contexts across Europe. These large-scale projects have given me a comprehensive understanding of architecture, from urban-scale interventions to detailed technical solutions.

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Email : berkay.akyuz4@gmail.com
Phone : +39 351 624 7735
Milan, Italy

Education

Politecnico di Milano

Master's Degree - Architecture, Building Architecture
Milan, Italy. September, 2022 – April, 2025

Cankaya University

Bachelor's Degree in Architecture. Cumulative GPA: 3.02/4
Ankara, Turkey. September 2017 – June 2021

Cankaya University English Preparatory School

Advanced level student.
Ankara, Turkey. September 2016 – June 2017

Experiences

Studio Minerbi

Intern Architect
Milan, Italy – January 2024 – April 2024

Uludag Architecture and Consultancy

Intern Student
Ankara, Turkey / June 2020 – July 2020

EMAY International Engineering and Consulting Inc.

Intern Student on Mecidiyekoy – Mahmutbey Subway Project
Istanbul, Turkey / June 2019 – July 2019

Alp Construction and HERA Restoration

Intern Student on Piyalepasa Underground Car Parking, Guest Intern
at Restoration Project of Basilica Cistern
Istanbul, Turkey / July 2018 – August 2018

Awards

CEDBIK Sustainability Idea Competition - 2020

Mobius Village - Honorable Mention Prize

Skills

Software

Revit, Rhino + Grasshopper
AutoCad
Unreal Engine, Twinmotion, Lumion
Adobe (Photoshop, Illustrator, Indesign, Lightroom)

Language

Turkish: native
English: fluent
Italian: elementary

PRISMA

Shaping the Future of Rotterdam South

with Marko Gatalica

April, 2025

This thesis examines and enhances the potential development of Rotterdam South, focusing on the Maashaven-Tarwewijk border along the city's southern bank through Prisma – Shaping the Future of Rotterdam South. Prisma, envisioned as a sports and recreation cluster, alongside the masterplan redevelopment and extension over the Maashaven River, aims to bridge socio-economic and urban disparities between North and South Rotterdam, fostering a more integrated, equitable, and dynamic urban environment.

This research provides a broader urban-scale analysis and intervention, followed by a more in-depth exploration of architectural and structural design, incorporating up-to-date technological solutions.

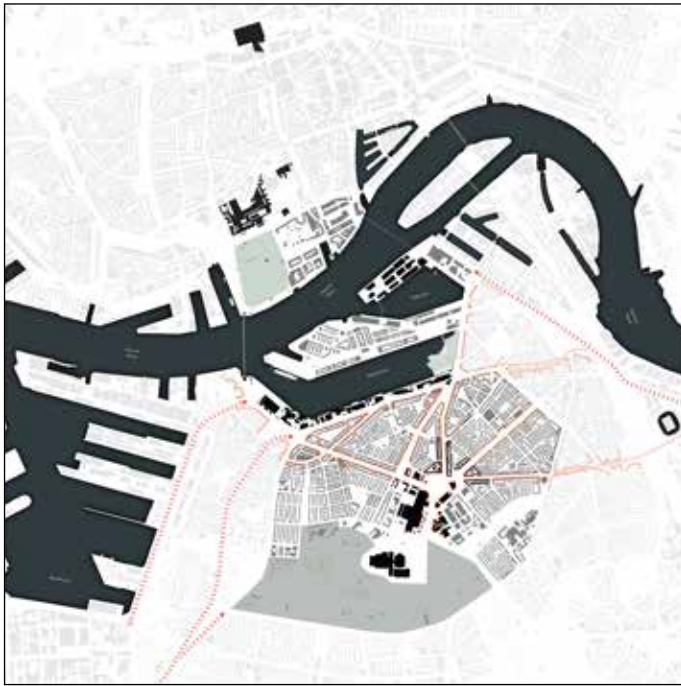
The new masterplan integration seeks to reflect Rotterdam South's urban morphology by treating the Maashaven-Tarwewijk border as a primary axis, mirroring building typologies, alignments, green and public space integration, and overall urban permeability to help activate Hart van Zuid. This transformation is anchored by the development of a new sports and recreation center, complemented by public and residential buildings, ensuring a balanced mix of functions. Additionally, the preservation of historical structures strengthens the continuity between past and future, maintaining the area's architectural identity. This intervention is further enhanced by the development of polders and canals, reinforcing one of Rotterdam's defining urban typologies.

Prisma serves as the anchor for the Maashaven river extension development, with its functional design and massing as a compound building. The structure consists of two distinct components, together establishing a new landmark for Rotterdam South and marking the beginning of high-rise developments in the area. The "podium" combines sports functions and recreational spaces, becoming the primary attraction for both northern and southern parts of the city. The "tower," while reinforcing its role as a landmark, complements the sports and recreation functions with its research and development facilities—libraries, open workspaces, laboratories, and even recreational areas on the highest levels, further enhancing the area's dynamic role.

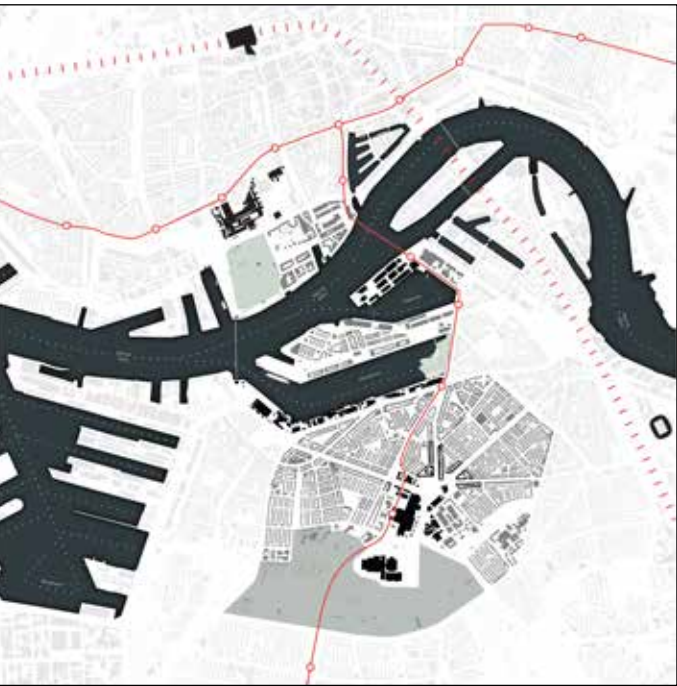




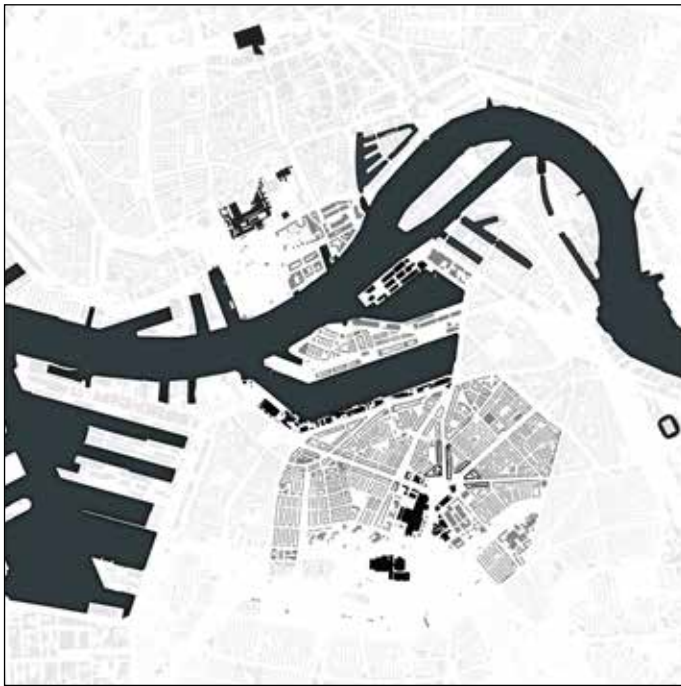
Intersection of the Northern and Southern Circular Paths



Leading Lines Through Building Boundaries

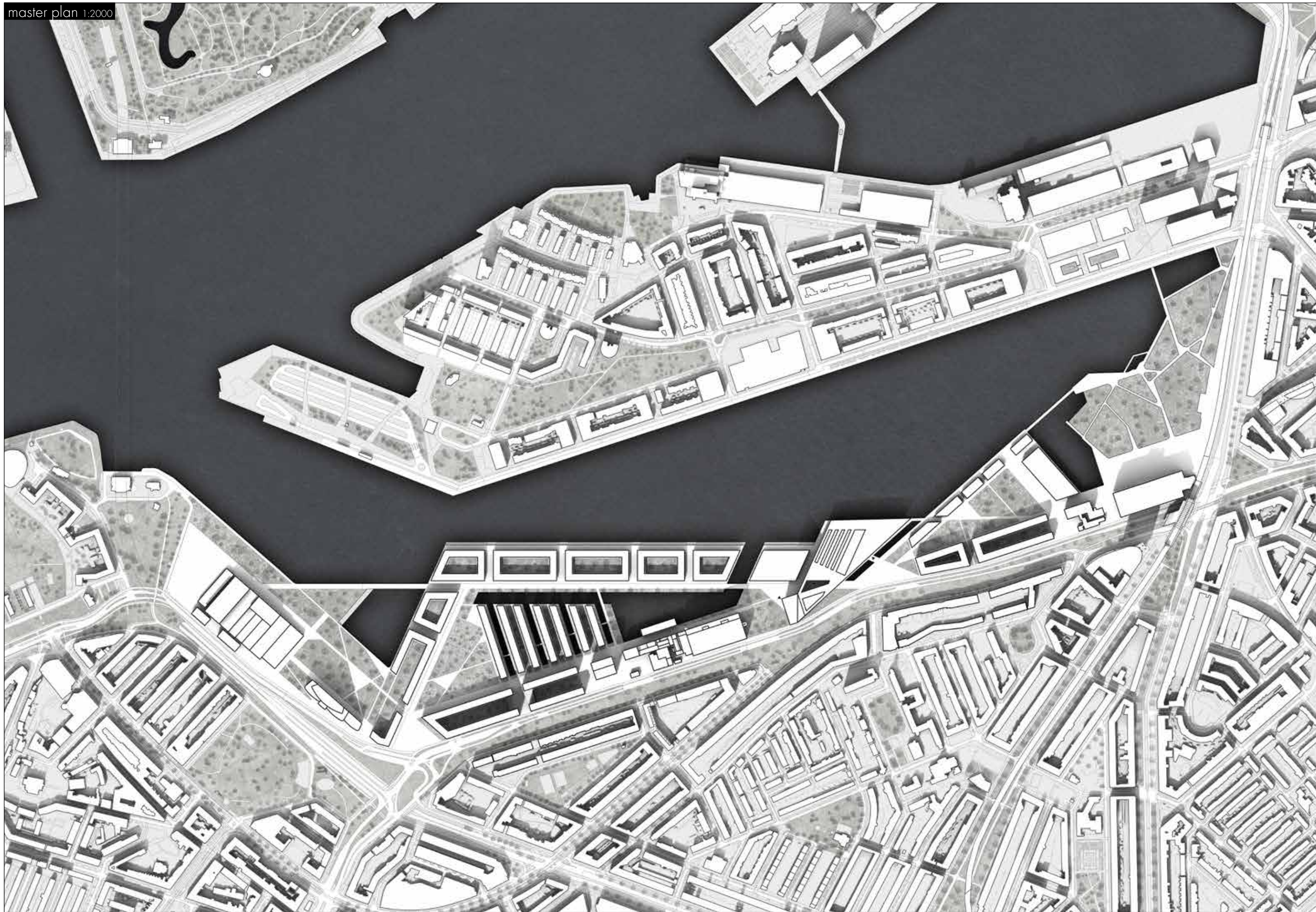


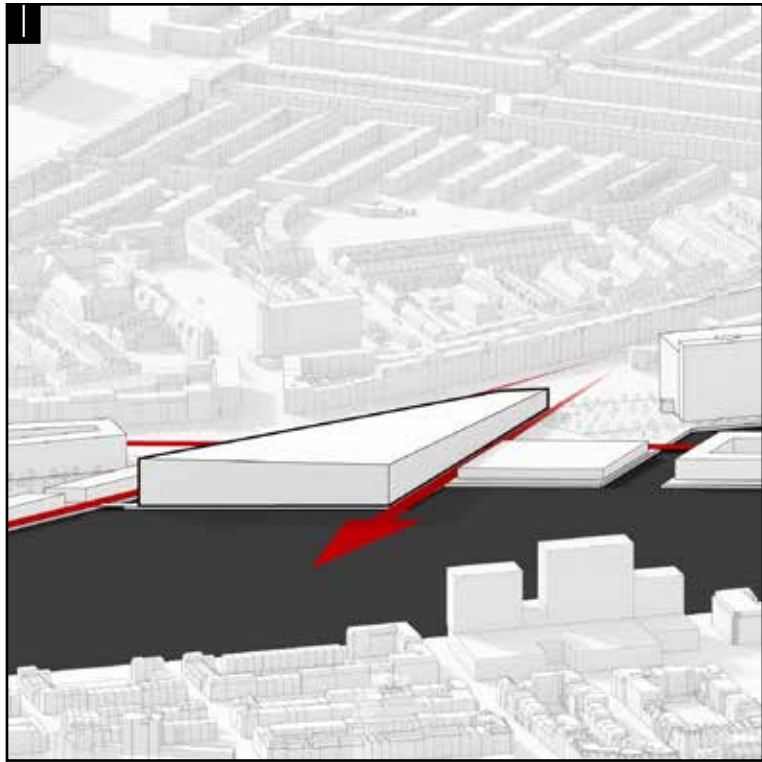
Main Transportation Lines



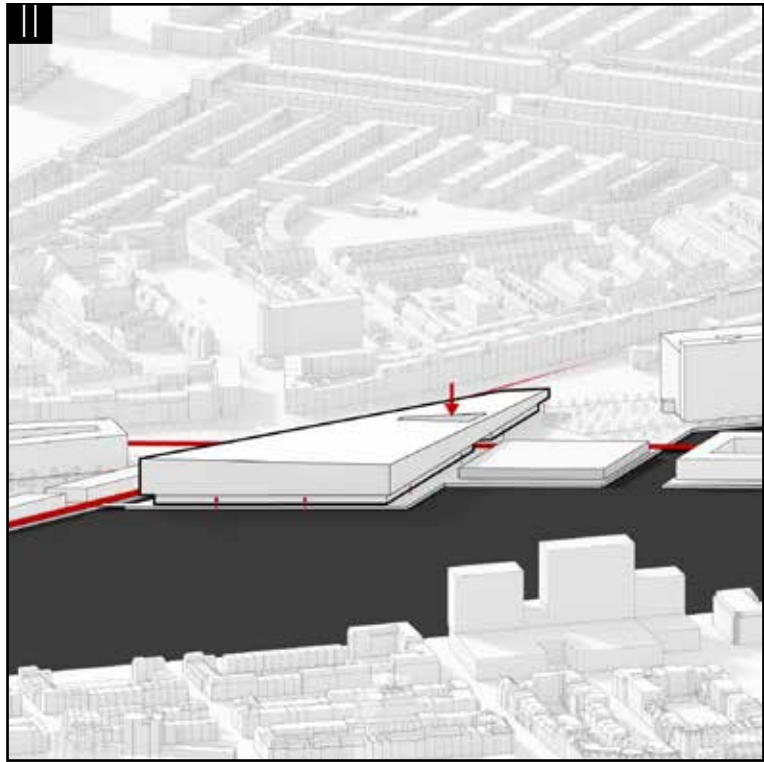
Hierarchy of Urban Blocks



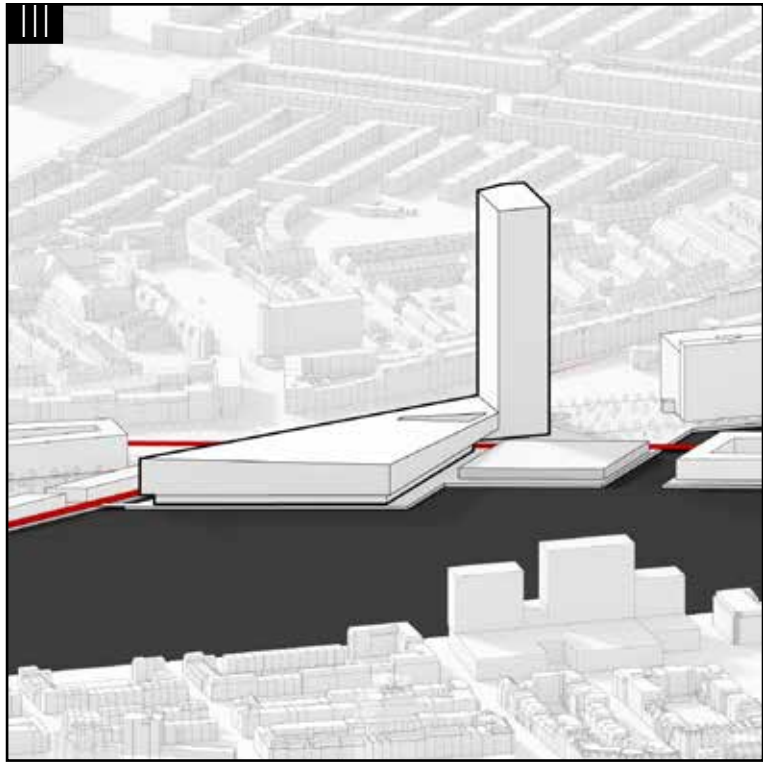




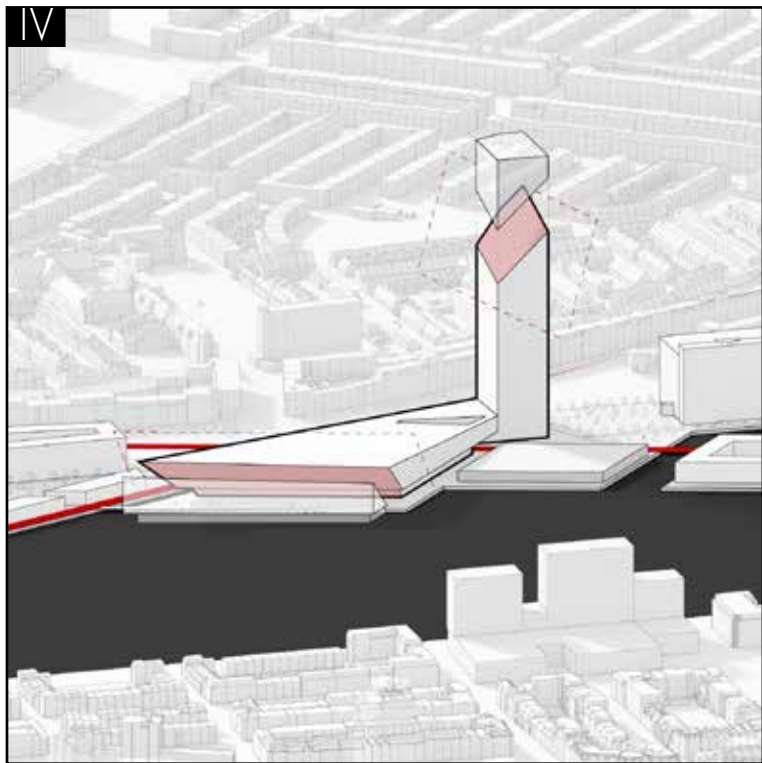
PODIUM mass is shaped at the intersection point, aligned with the main axis, and harmonized with the urban layout.



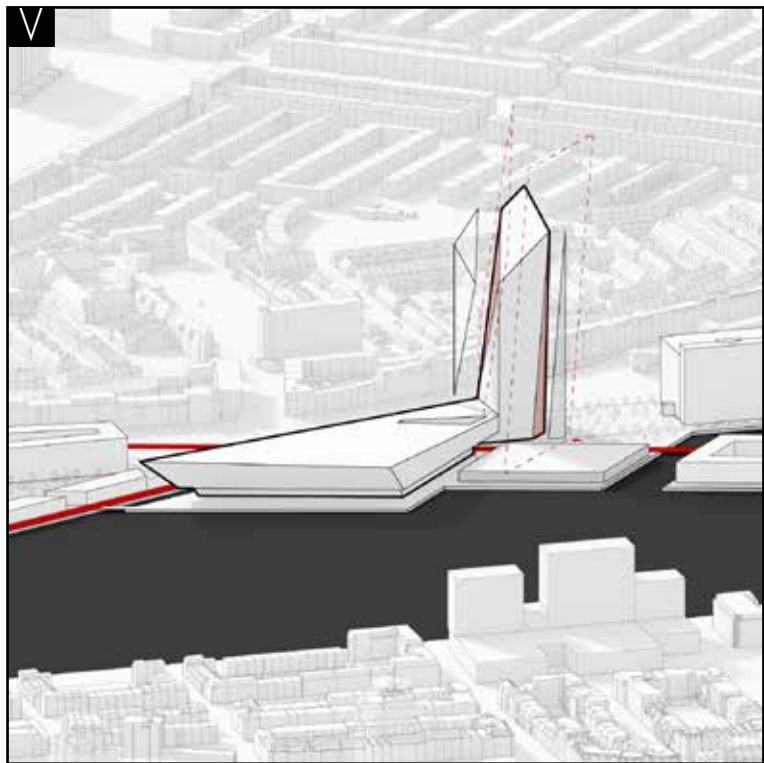
CREATION OF THE 'VOIDS'; and the offsetting of the ground floor help define entrance points while allowing natural light to enhance the public functions at ground level.



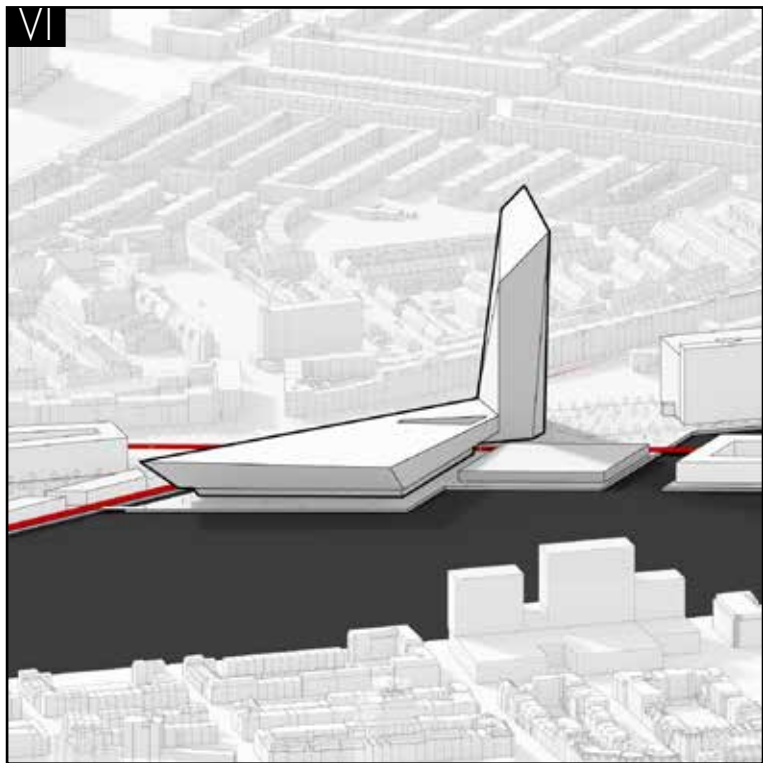
CREATION OF THE TOWER; a vertical impression that brings the high-rise typology from Kop van Zuid and Rotterdam Centrum.



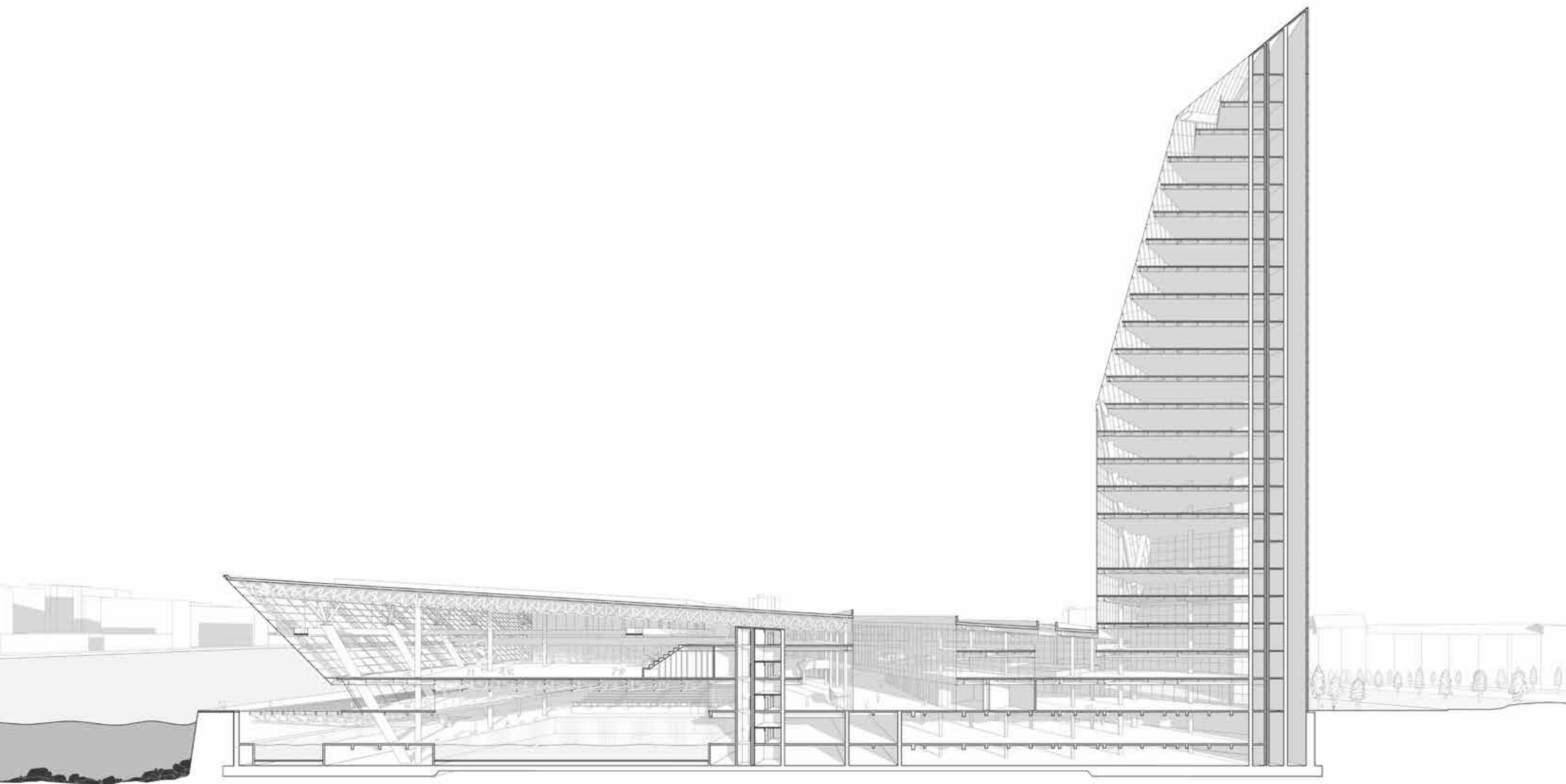
CUTS; It screens Rotterdam Centrum, Kop van Zuid, and the Erasmus Bridge.

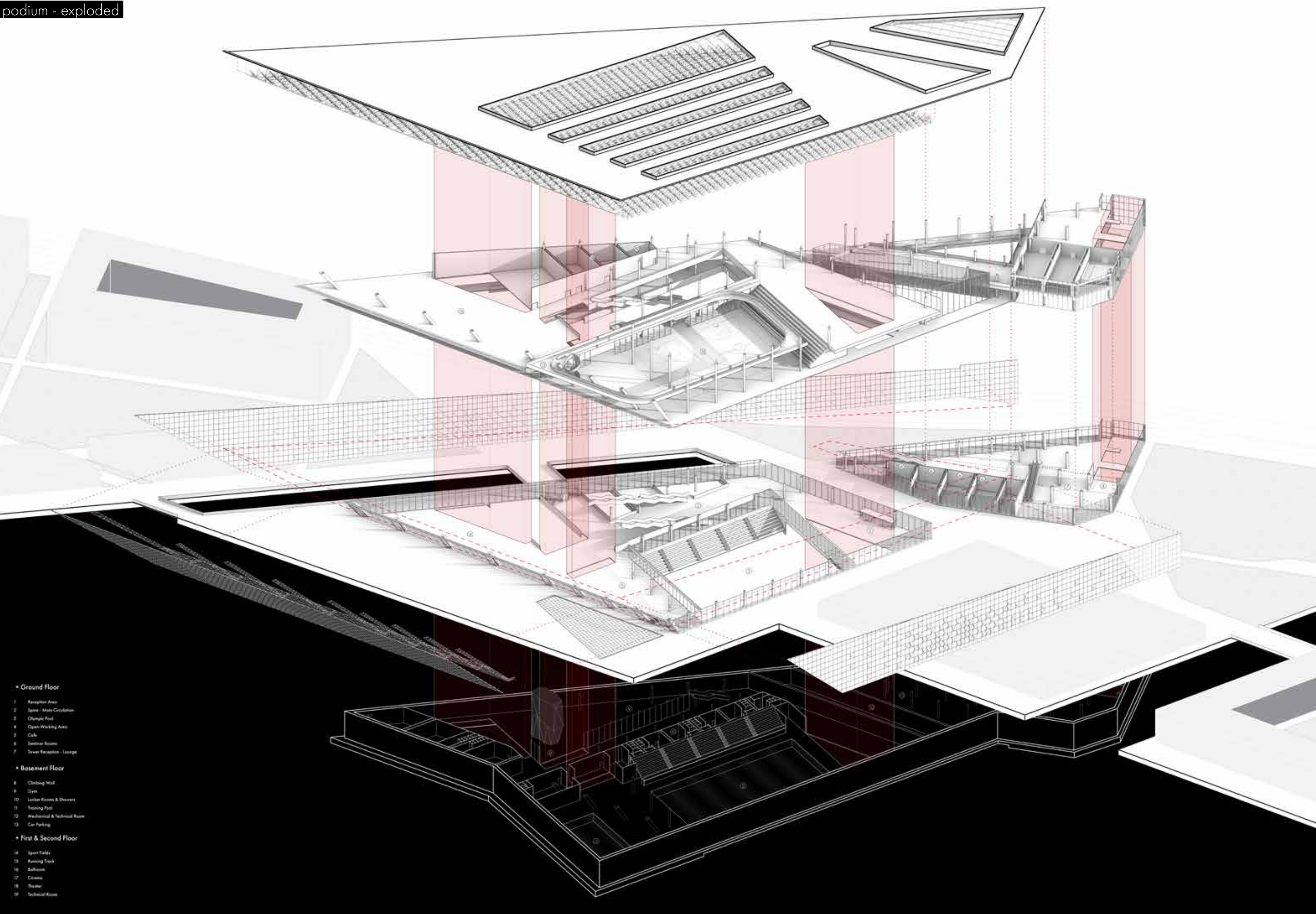


CUTS; define the tower entrance and frame the view of the south on the other side.



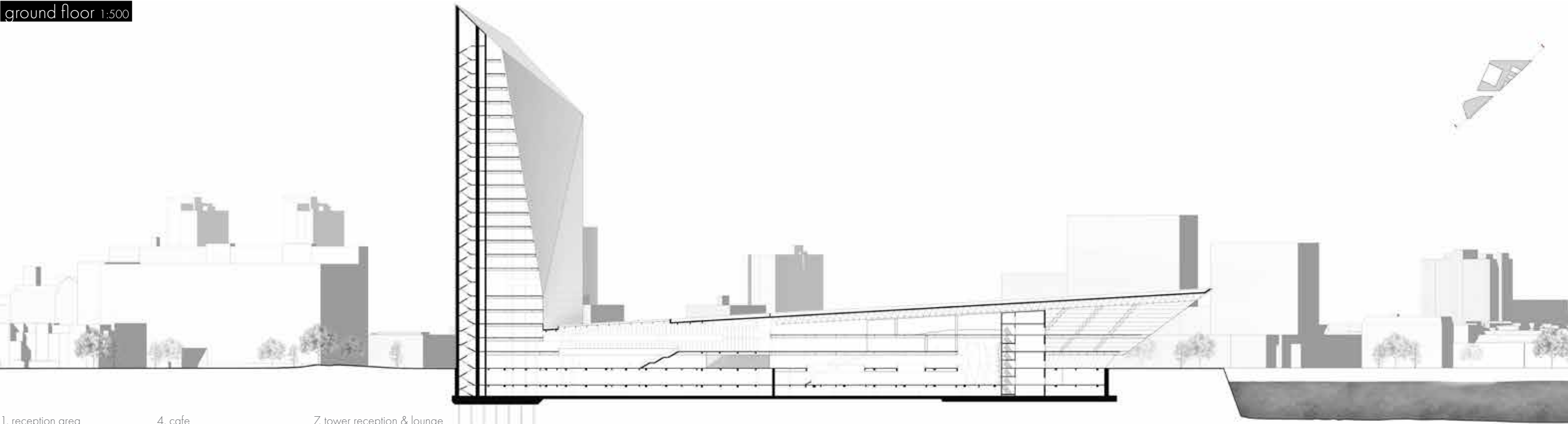
FINAL.



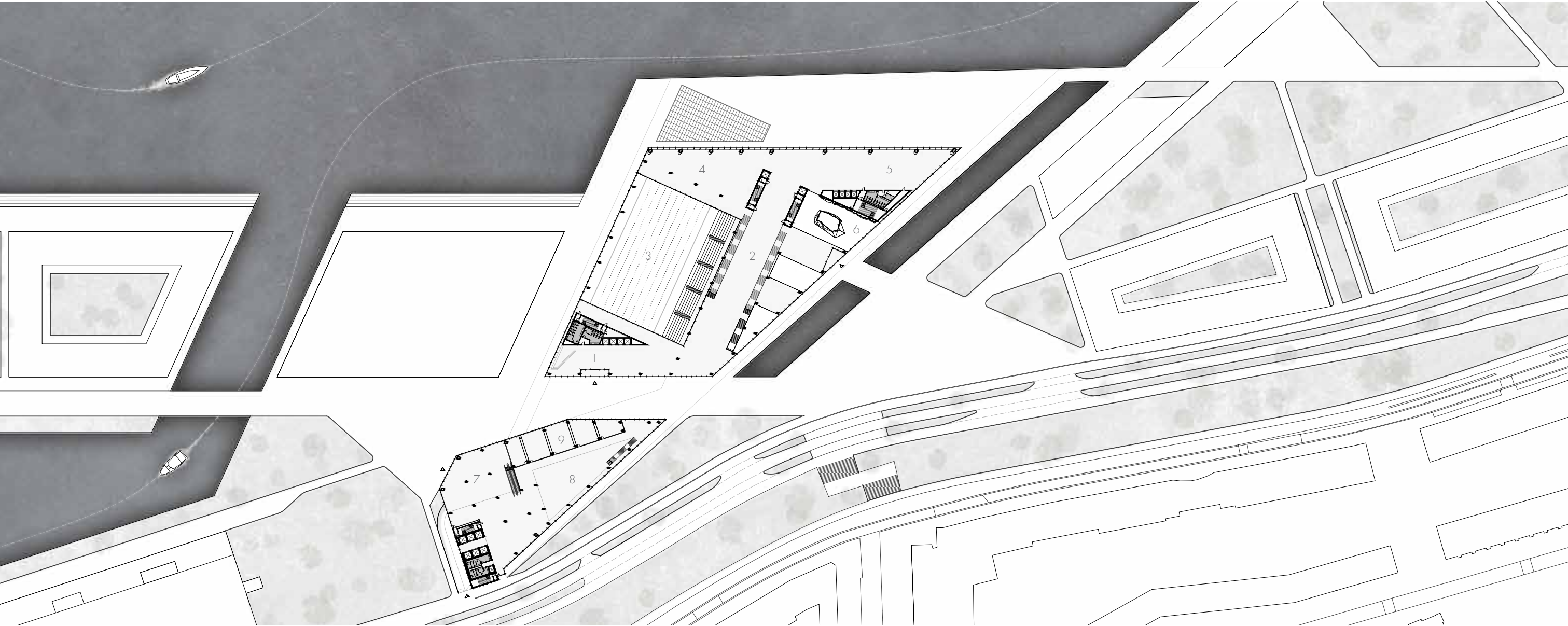


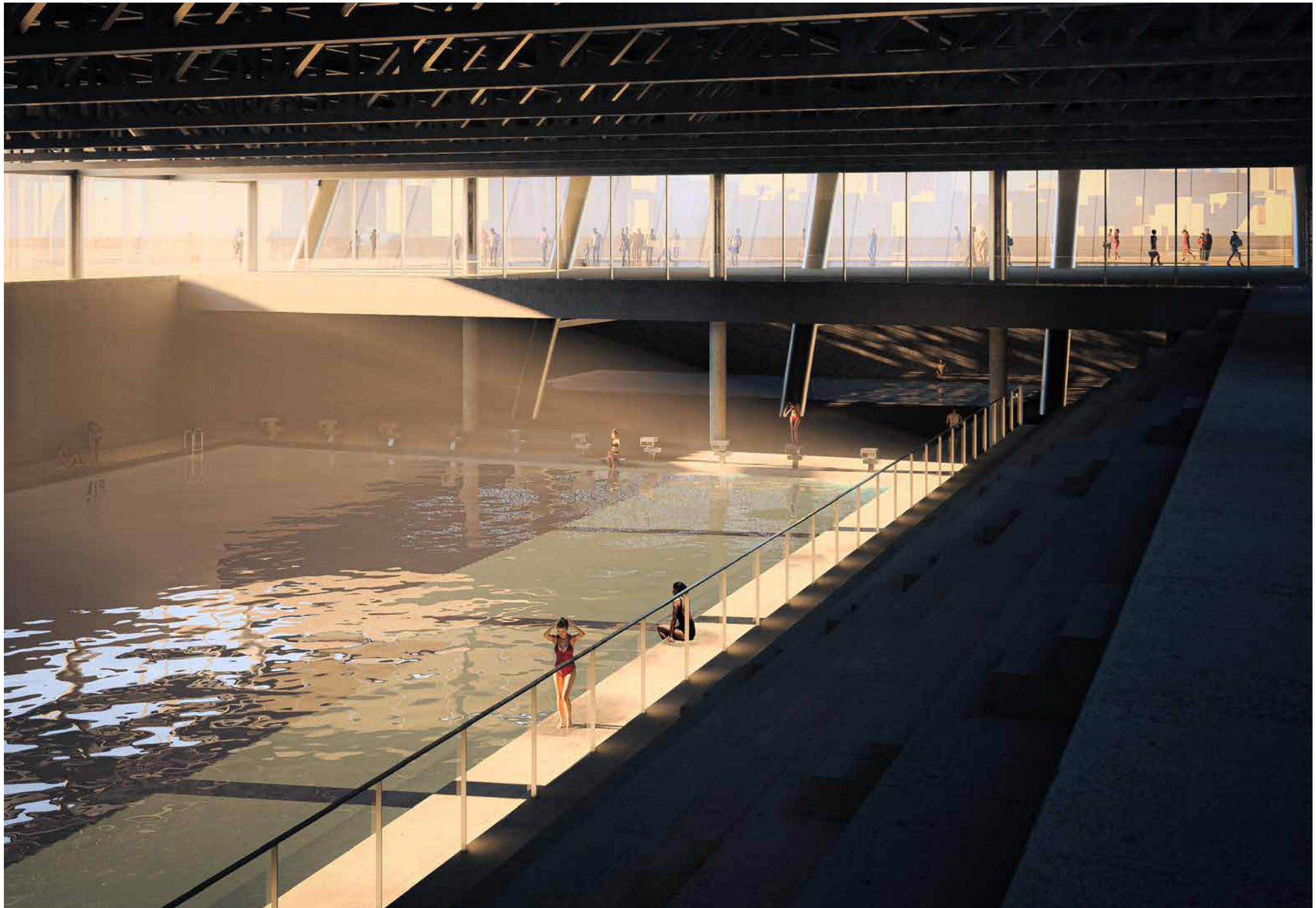
- Ground Floor
- 1 Reception Area
- 2 Space - Main Corridor
- 3 Olympic Pool
- 4 Open-Working Area
- 5 Cafe
- 6 Seminar Rooms
- 7 Tower Reception - Lounge
- Basement Floor
- 8 Changing Wall
- 9 Gym
- 10 Locker Rooms & Showers
- 11 Training Pool
- 12 Mechanical & Technical Room
- 13 Car Parking
- First & Second Floor
- 14 Sport Fields
- 15 Running Track
- 16 Ballroom
- 17 Cinema
- 18 Theater
- 19 Technical Room

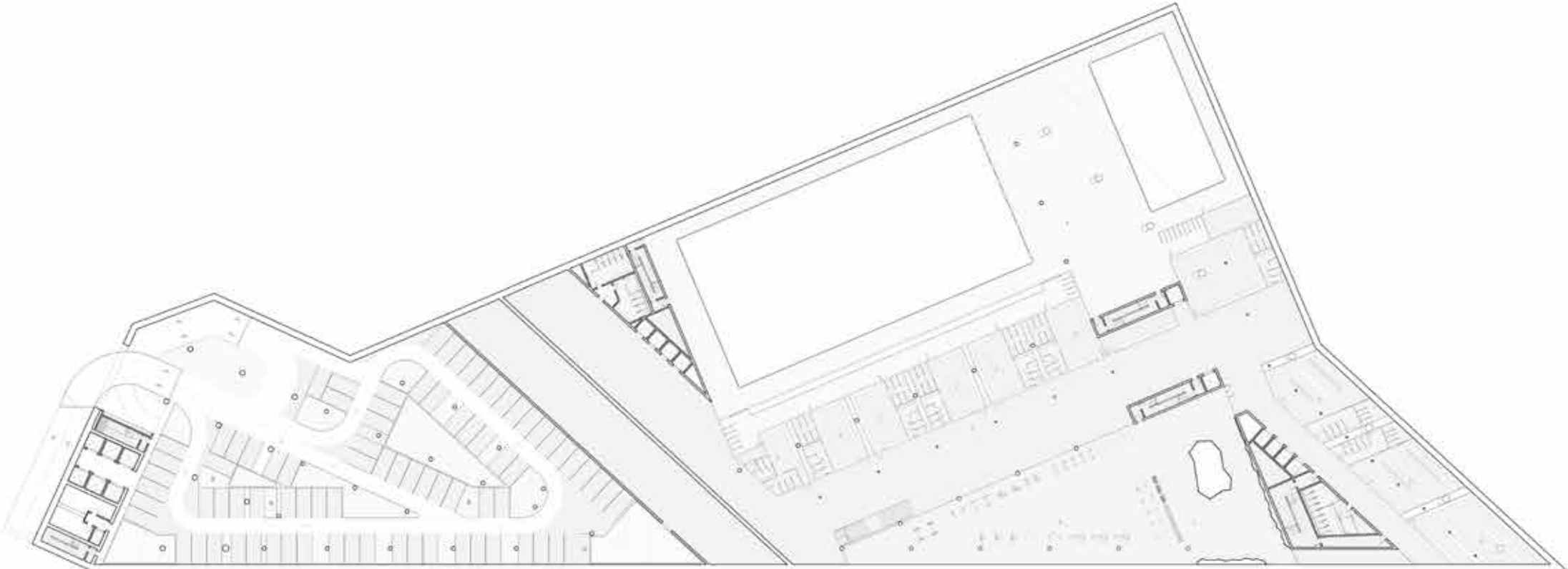
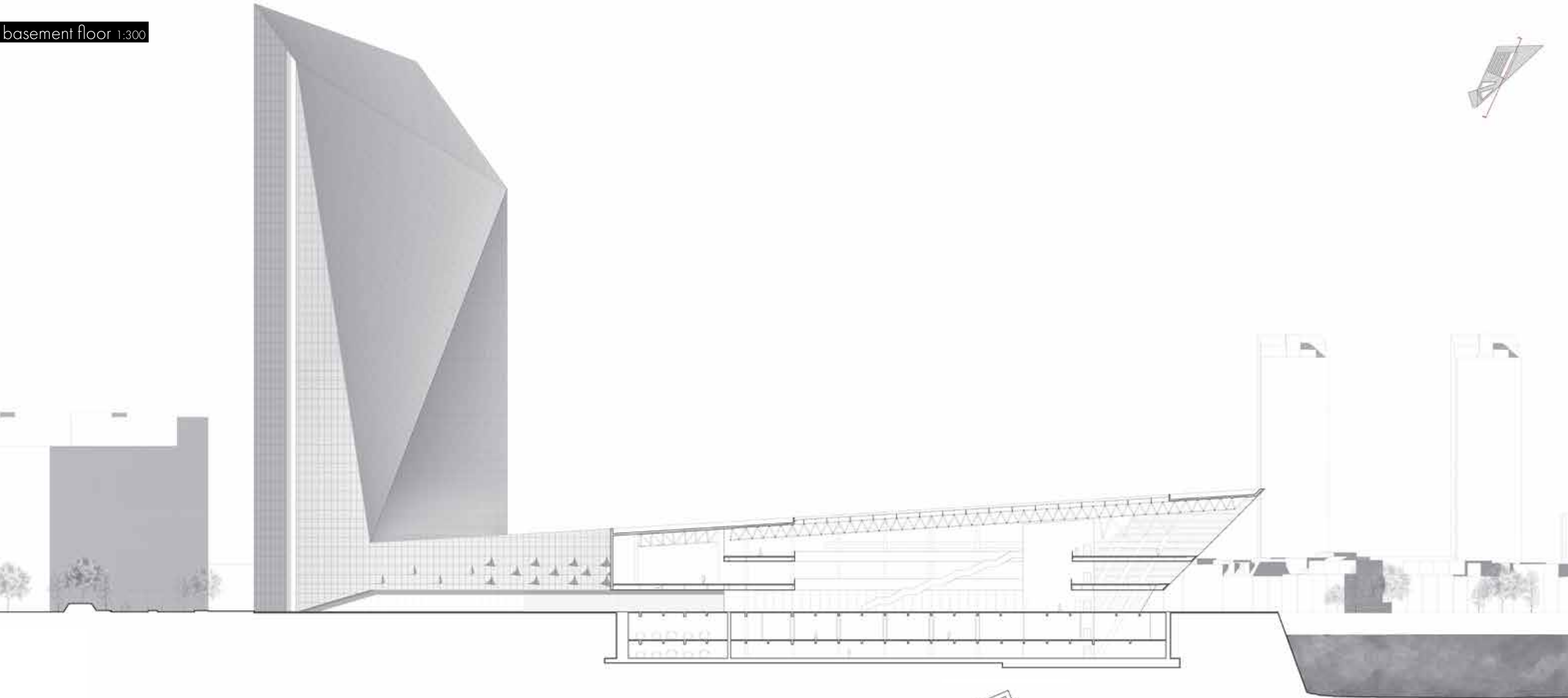


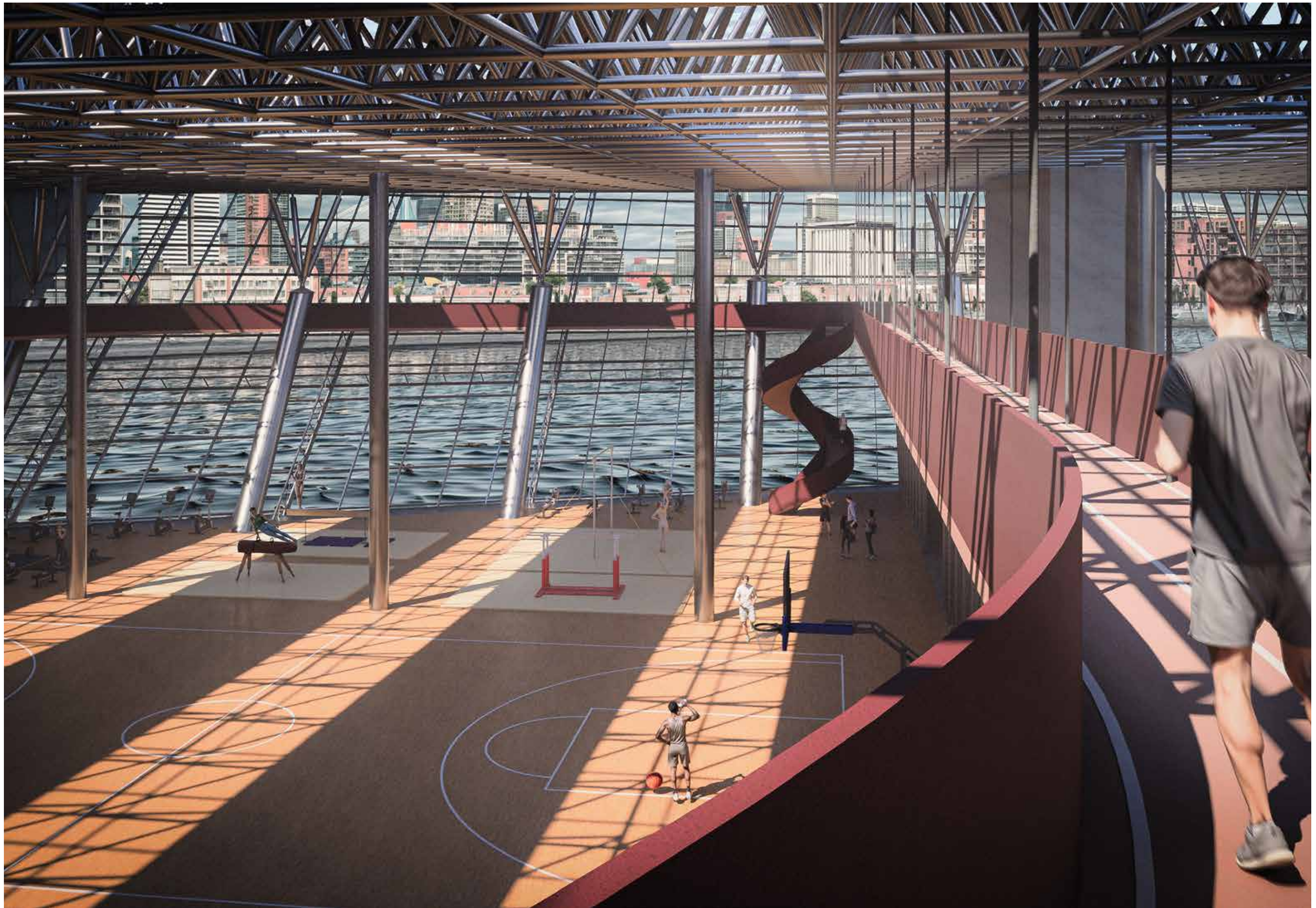


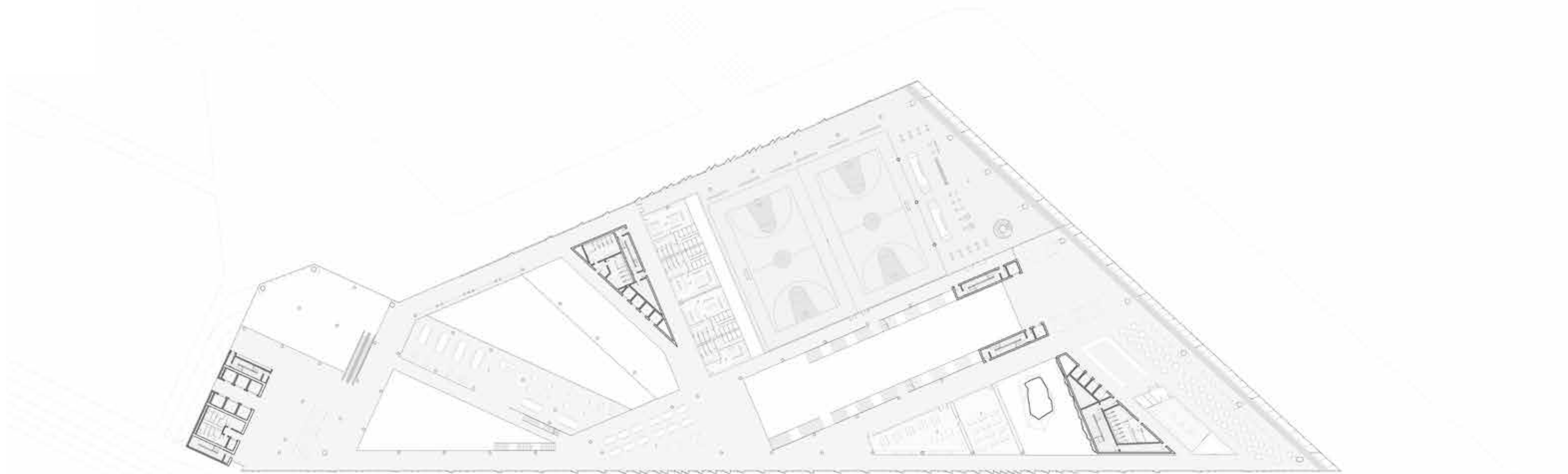
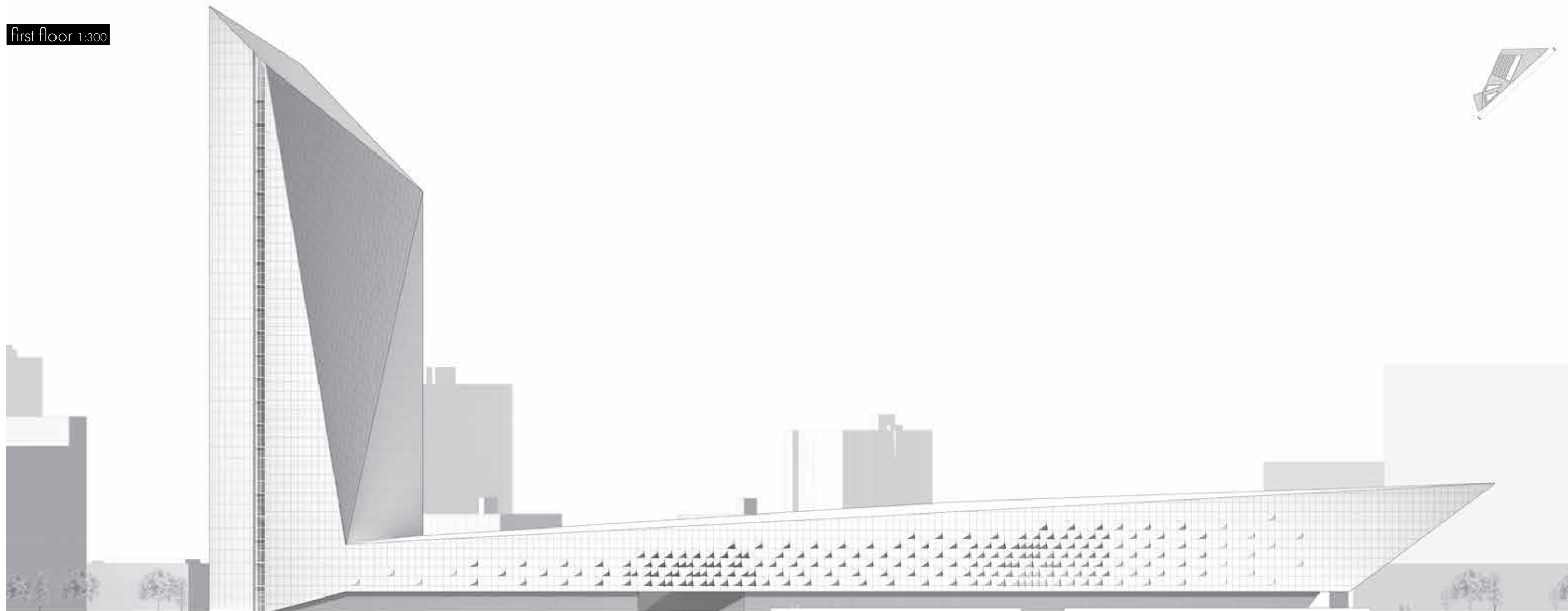
- 1. reception area
- 2. spine-main circulation
- 3. olympic pool
- 4. cafe
- 5. open-working area
- 6. climbing wall
- 7. tower reception & lounge
- 8. foyer
- 9. meeting rooms



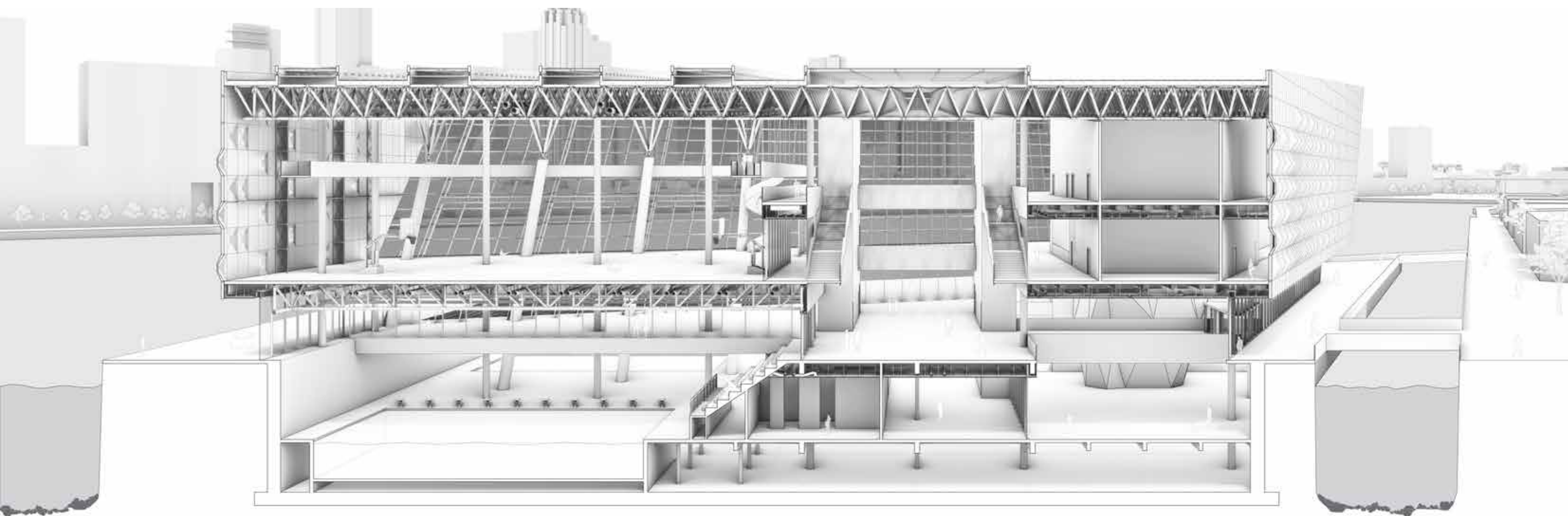




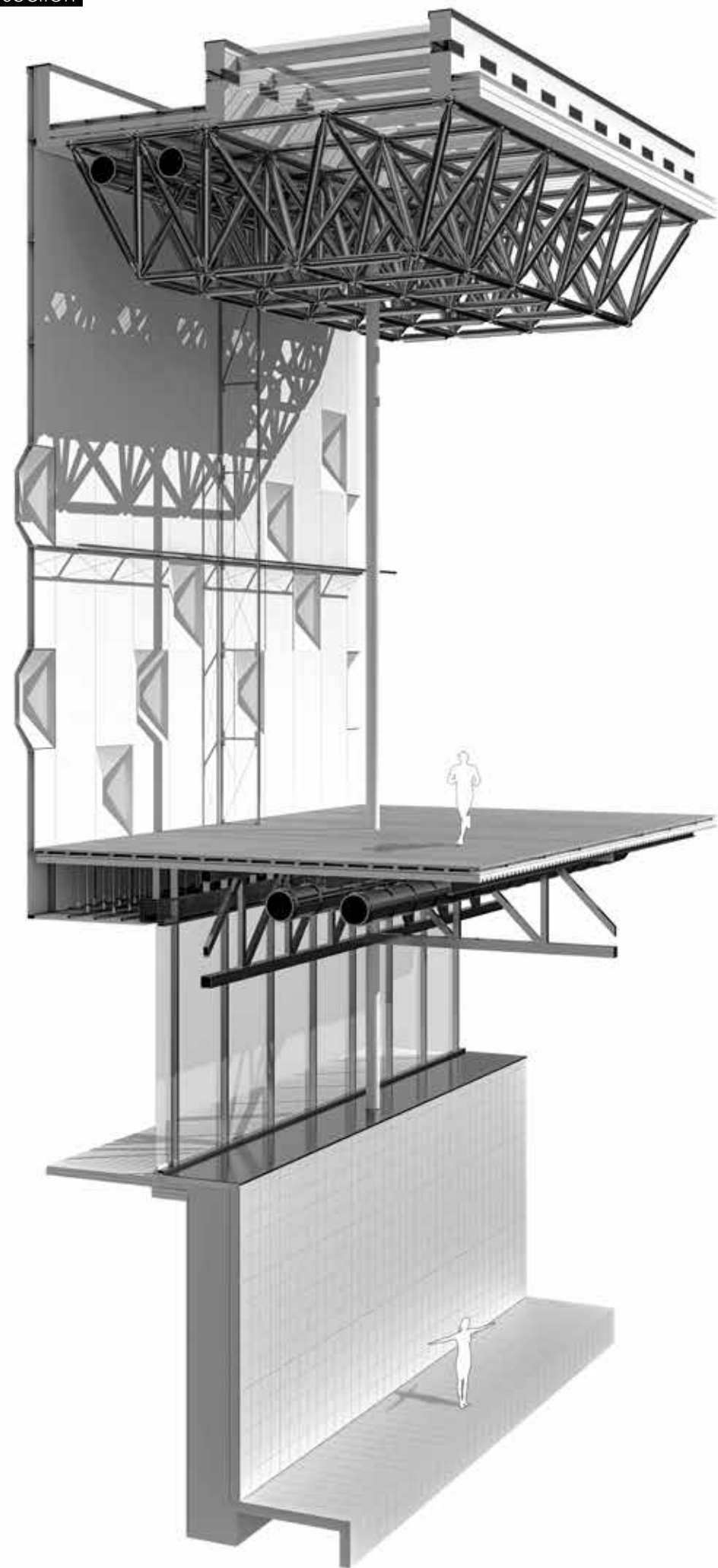




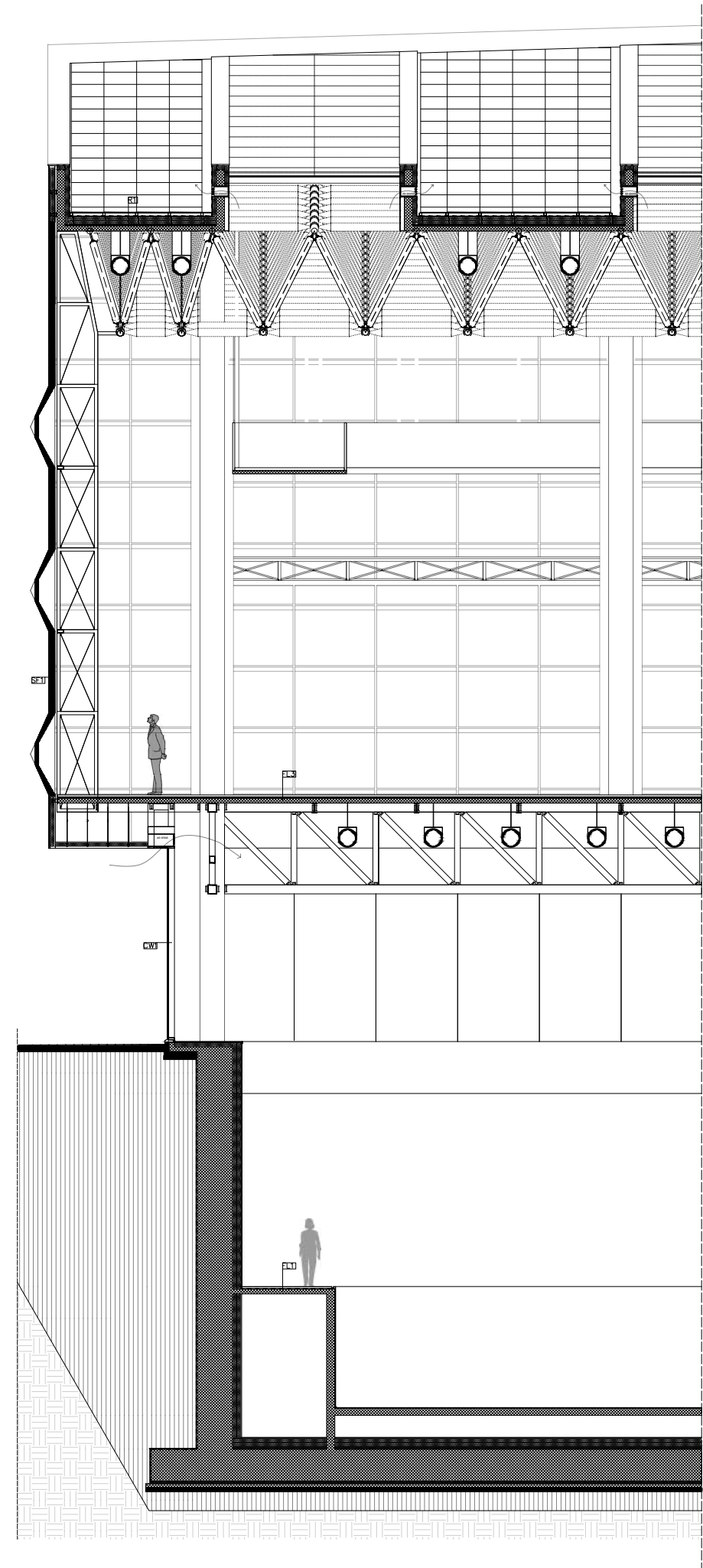




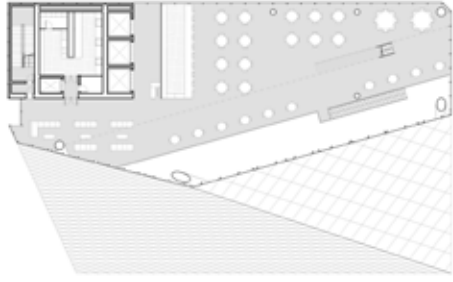
perspective system section



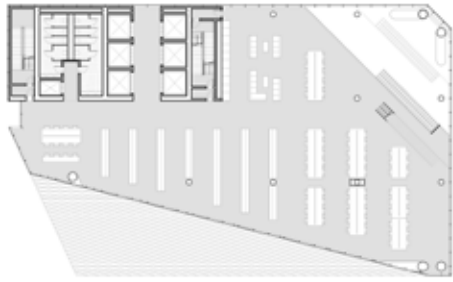
side facade detail 1:50







21st floor - restaurant & bar



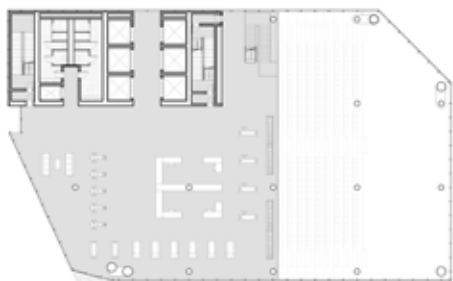
17th floor - library



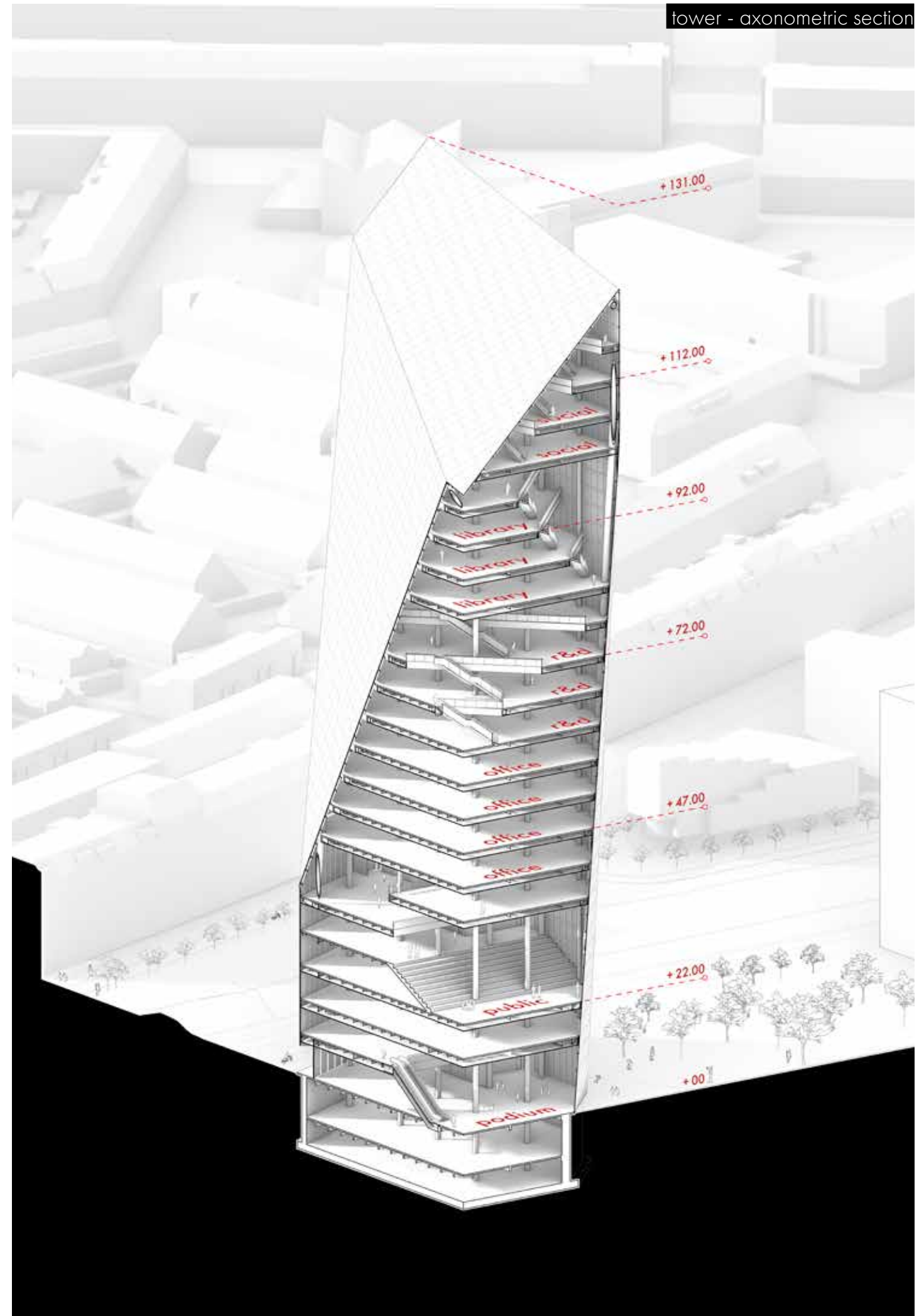
13th floor - research & development



8th floor - offices & meeting rooms



5th floor - experimental research for sports



NEW INNOVATION HUB

ETH Zurich-H nggerberg

with Carolin Rode, Juliana Volpi
June 2023

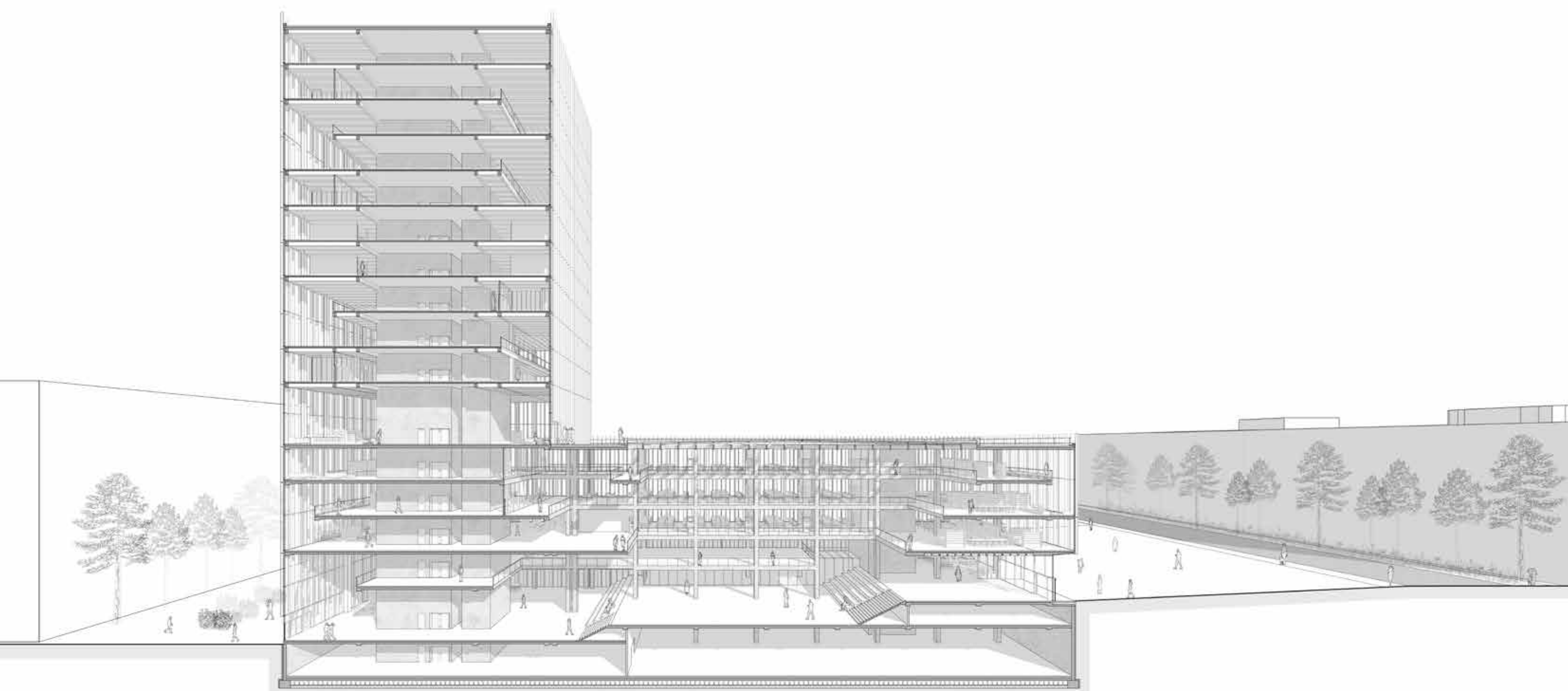
The project is located at ETH H nggerberg, the second main campus of ETH Zurich. Out of three available construction sites, we chose to position our building at the heart of the campus, where two main perpendicular axes intersect. One axis spans across green spaces, while the primary axis connects the campus from the south entrance to the north. Our building enhances permeability between the main axis and surrounding public spaces with its elongated form and thoughtful integration with the adjacent structures.

The building adheres to the campus height limit of 80 meters and is composed of two intersecting rectangular volumes. The lower structure, referred to as the "Box," fosters permeability with open spaces and a podium, while the tower element rises as the design extends toward the site's edge.

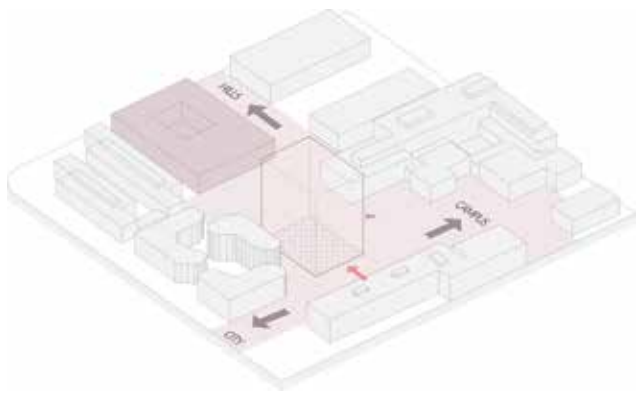
The "Cut" between the two volumes is also reflected in the building's structural and material choices. Analyzing the surrounding context, where concrete is a dominant material, we maintained this consistency by using concrete for the Box to create a sense of harmony, stability, and strength. However, above the roofline of the Box, the tower transitions into a hybrid structure, utilizing a wood-concrete mix for the slabs and wood for the main structural elements. This design not only lightens the upper form but also aligns with Zurich's new direction of constructing sustainable towers with hybrid materials.



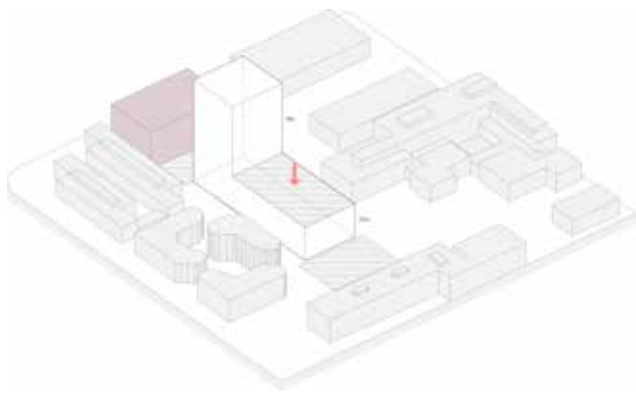




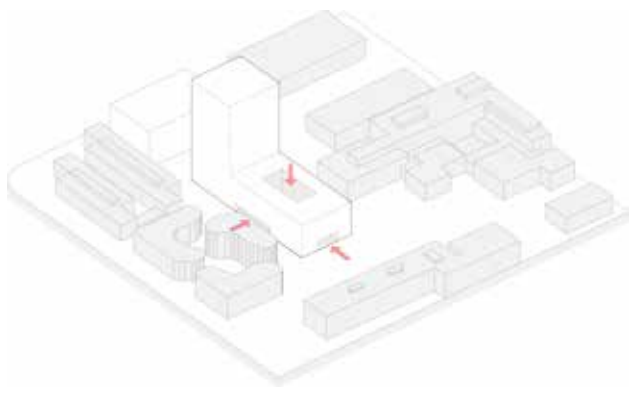




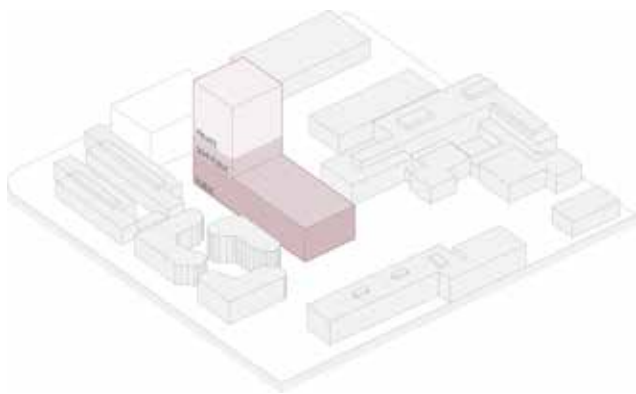
Original Master Plan Proposal



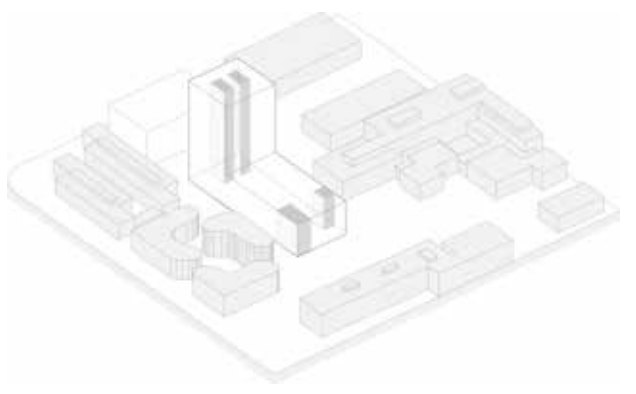
Full Volume Of The New Building



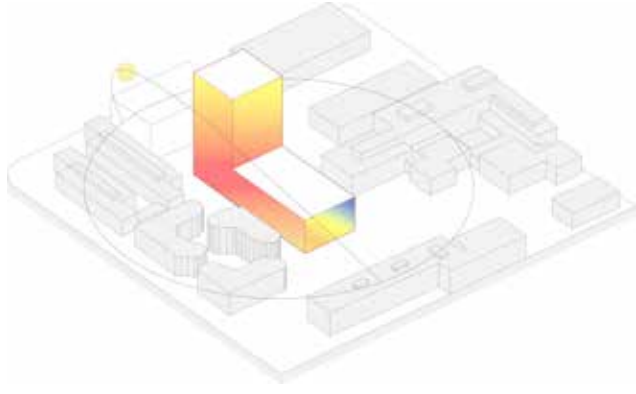
Subtraction Of The Volume



Functions Of The Building



Main Interior Circulation



Solar Radiation On Facade

TYPICAL FLOOR PLAN 3

- Offices
- Meeting Rooms
- Printing And Archive
- Lockers
- Lounge Area
- Toilets

TYPICAL FLOOR PLAN 2

- Open Space
- Co-Working
- Multifunction Meeting Space
- Printing And Archive
- Toilets

TYPICAL FLOOR PLAN 1

- Offices
- Open Space
- Meeting Rooms
- Printing And Archive
- Toilets

FOURTH FLOOR

- Restaurant
- Garden Roof
- Open Spaces
- Toilets

THIRD FLOOR

- Library
- Research Laboratories
- Open Space
- Printing Area
- Lounge Area
- Toilets

FIRST FLOOR

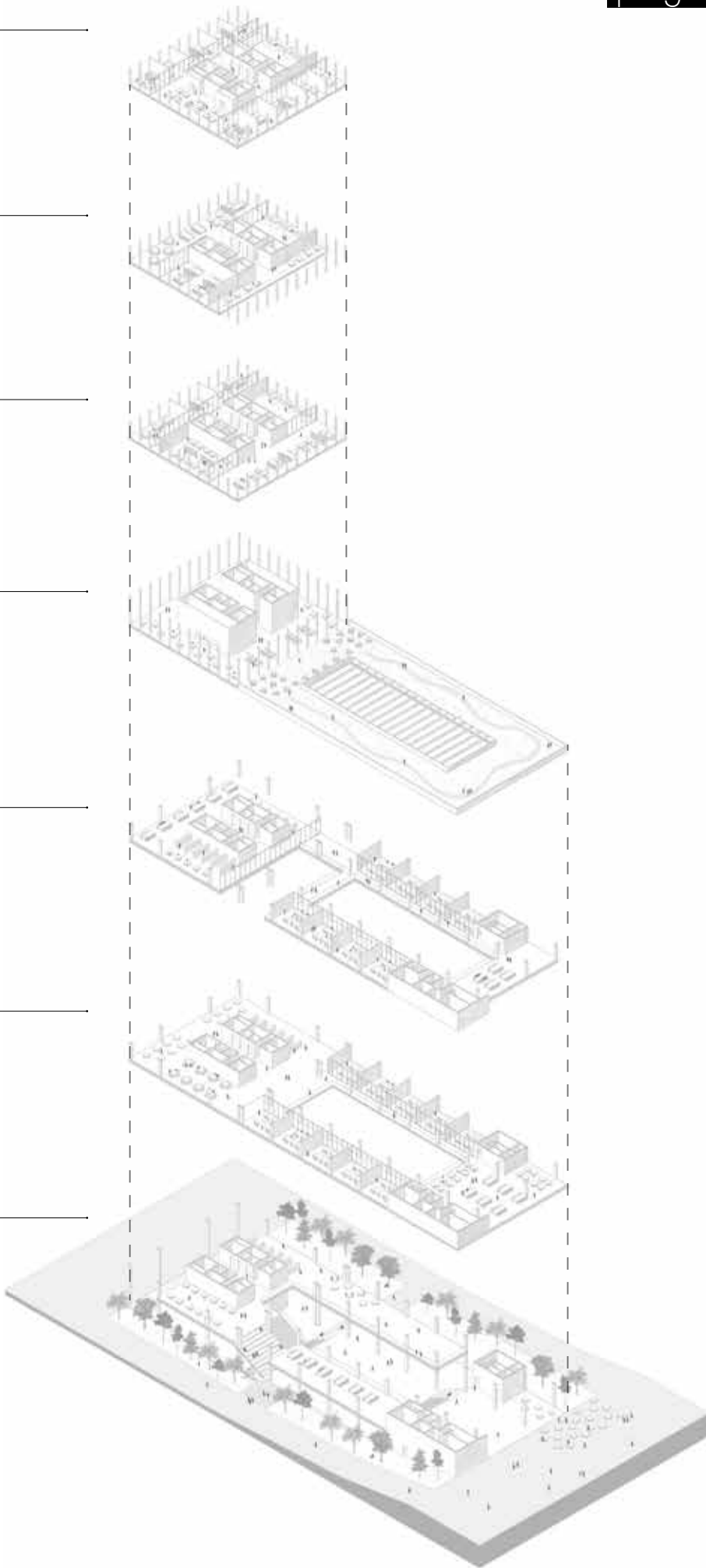
- Open Space
- Research Laboratories
- Printing And Archive
- Lounge Area
- Toilets

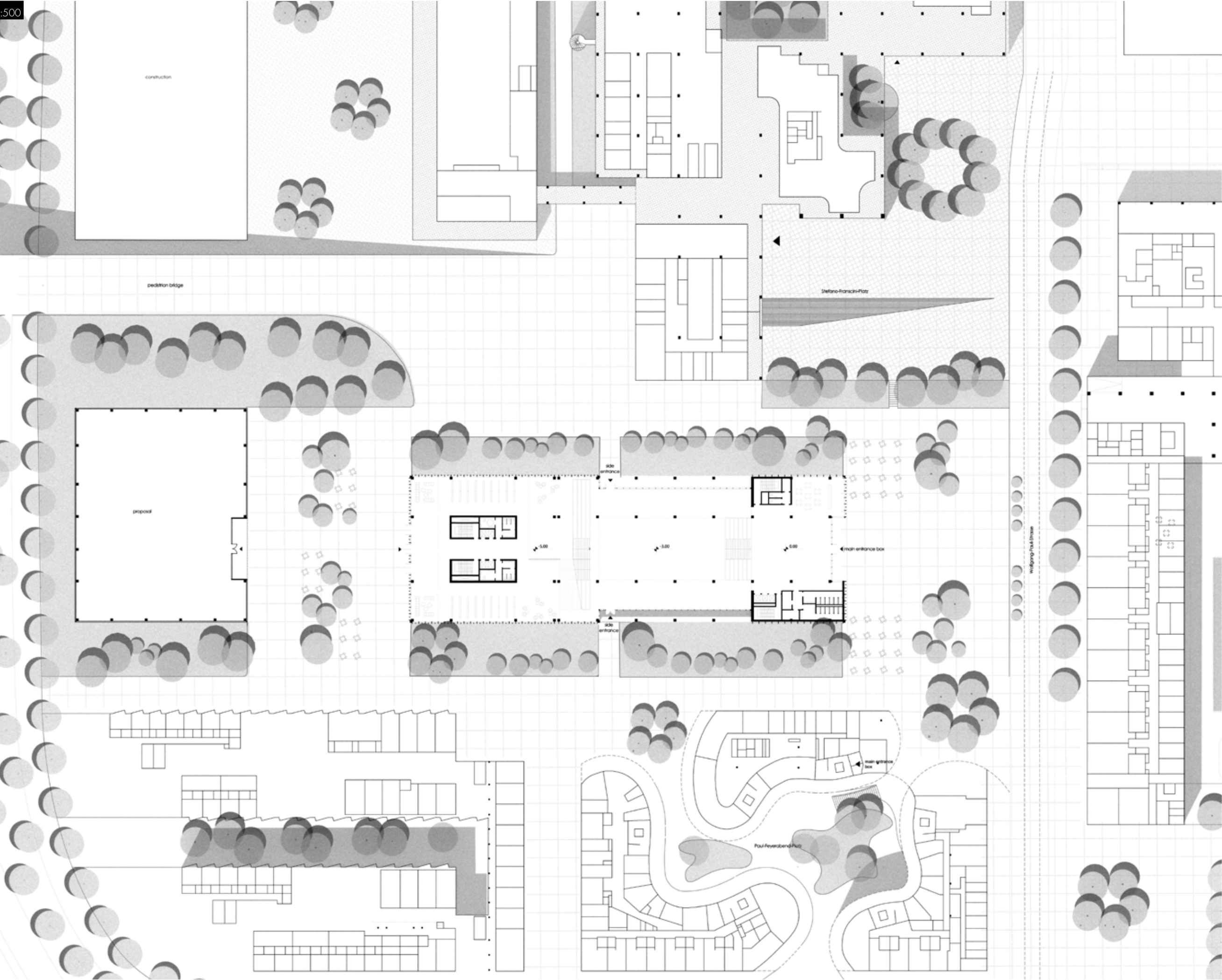
GROUND FLOOR + MEZZANINES

- Reception
- Bar/Cafe
- Open Space
- Event Space/Flexible
- Toilets

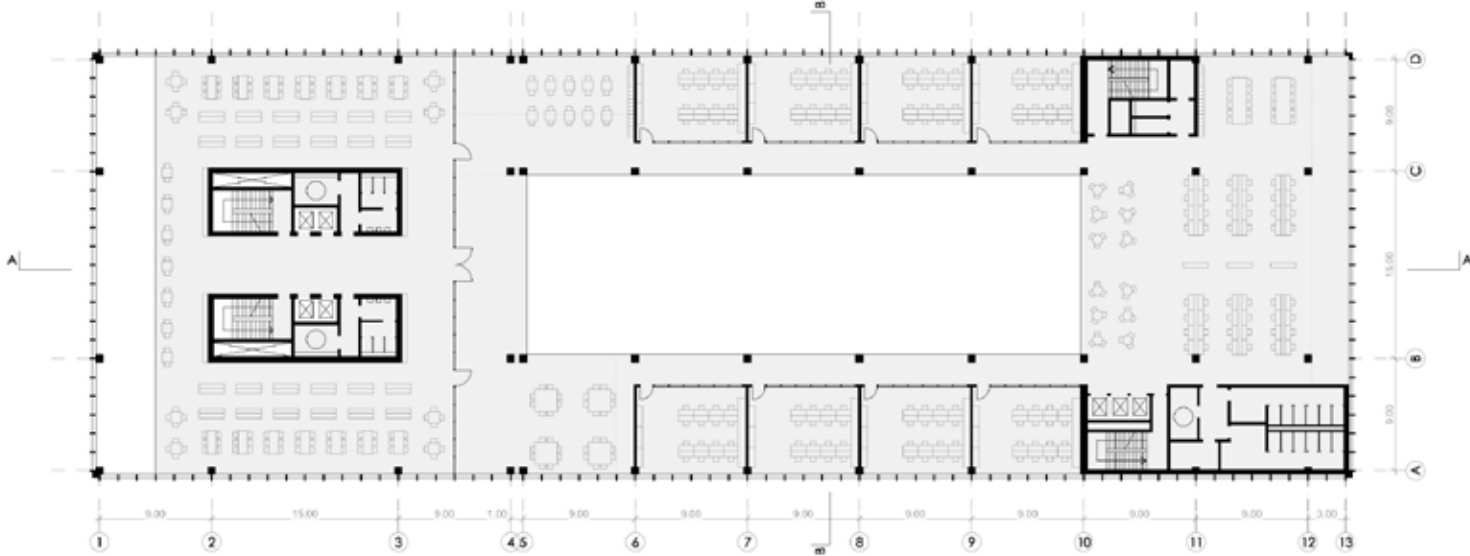
UNDERGROUND

- Technical Area
- Storage Area
- Facilities For Staff

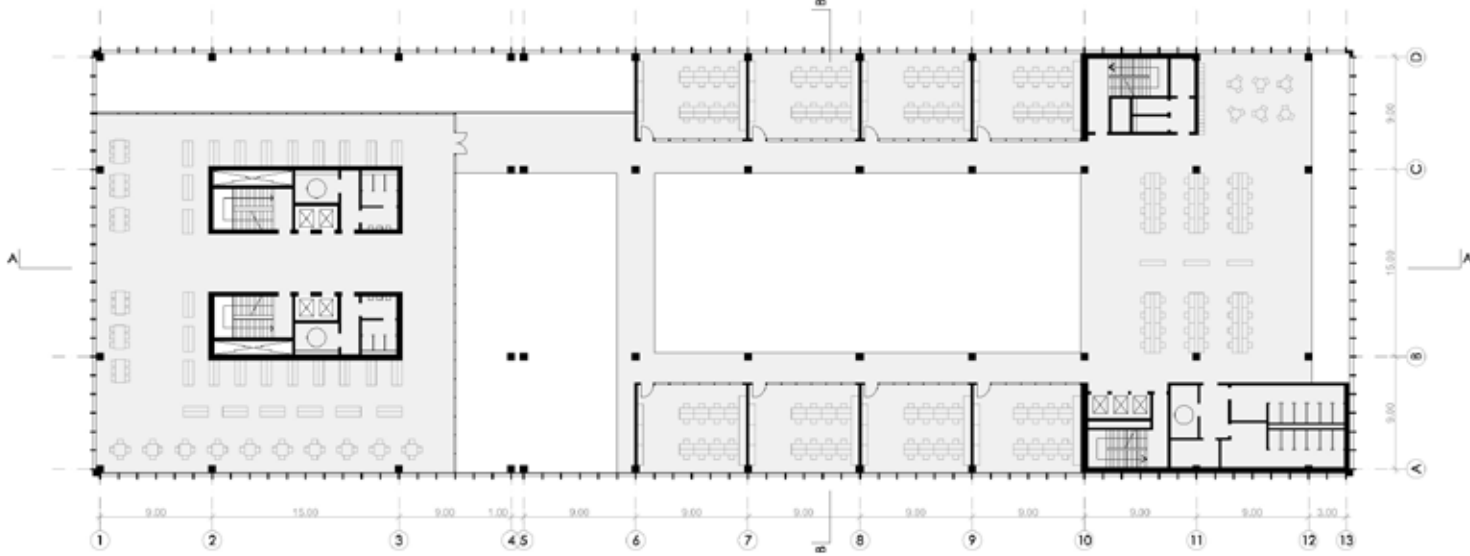








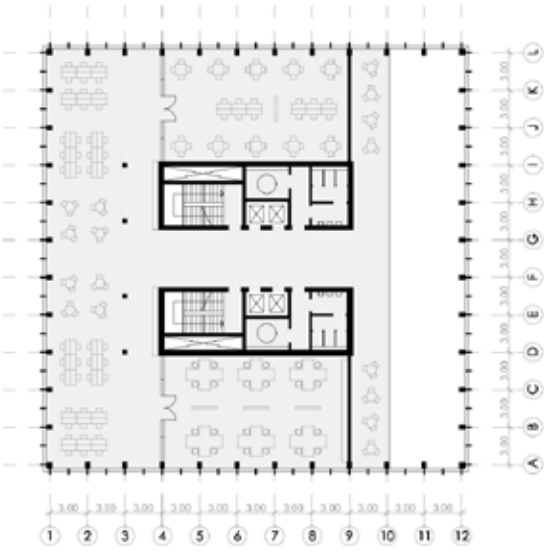
plan - 2nd floor



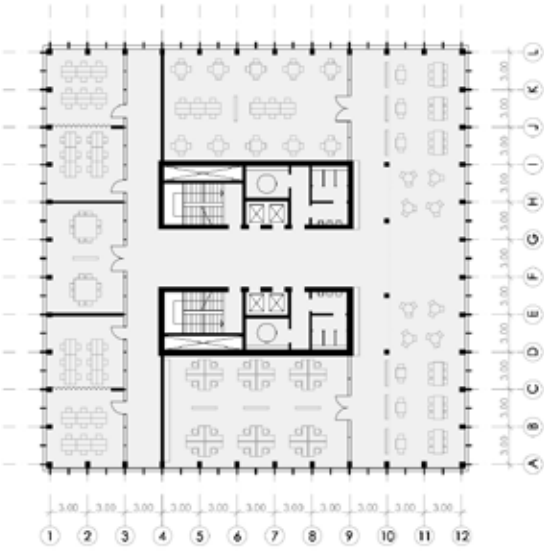
plan - 3rd floor



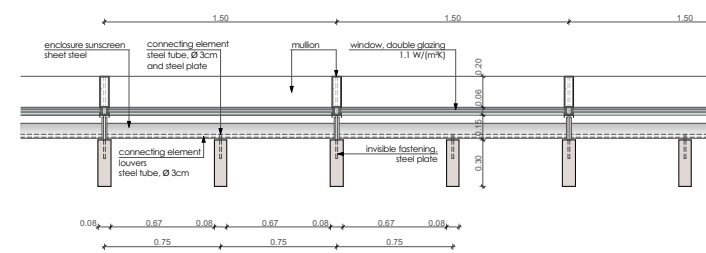
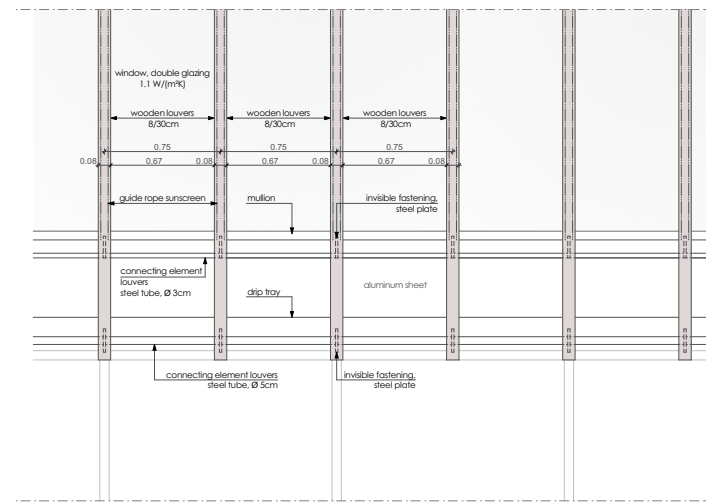
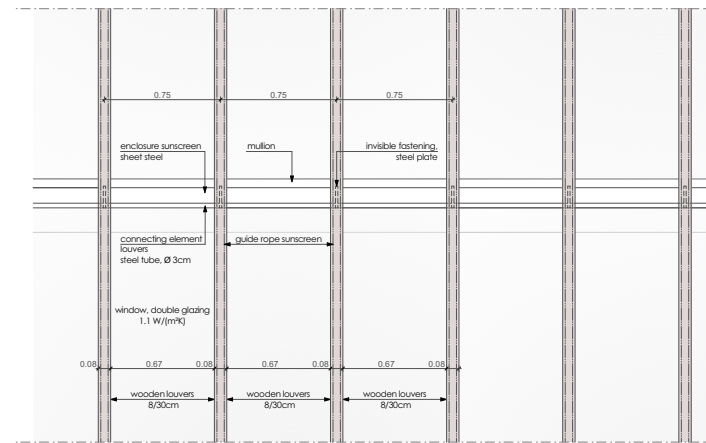
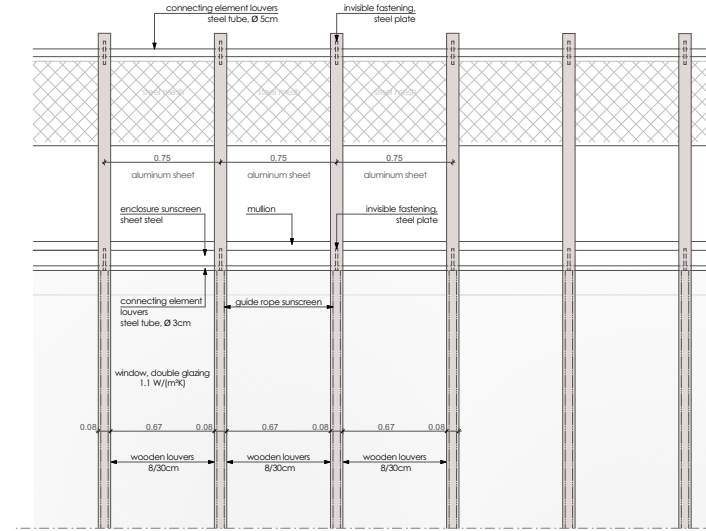
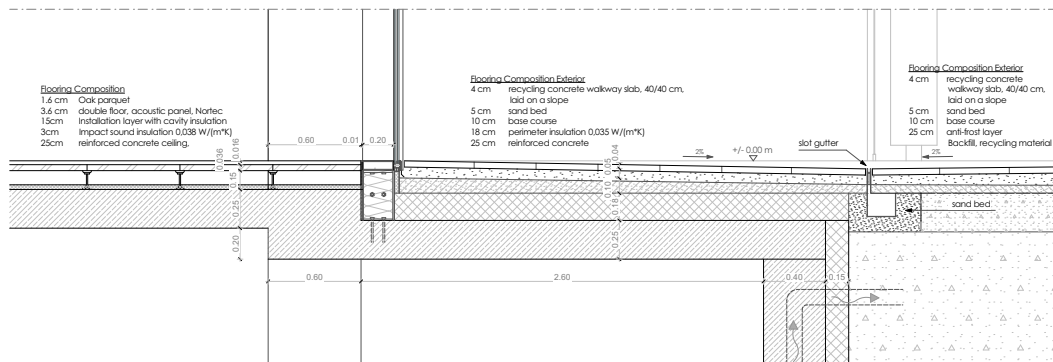
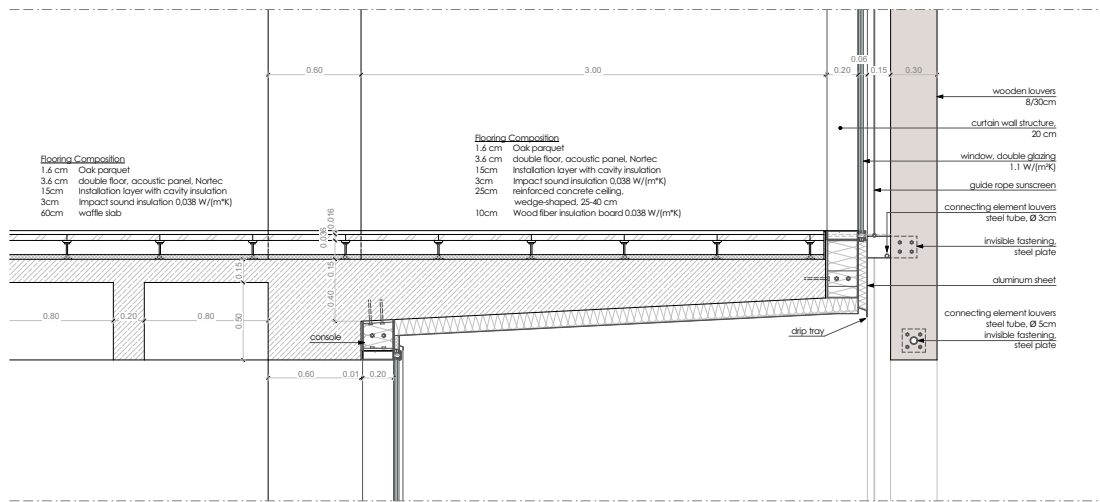
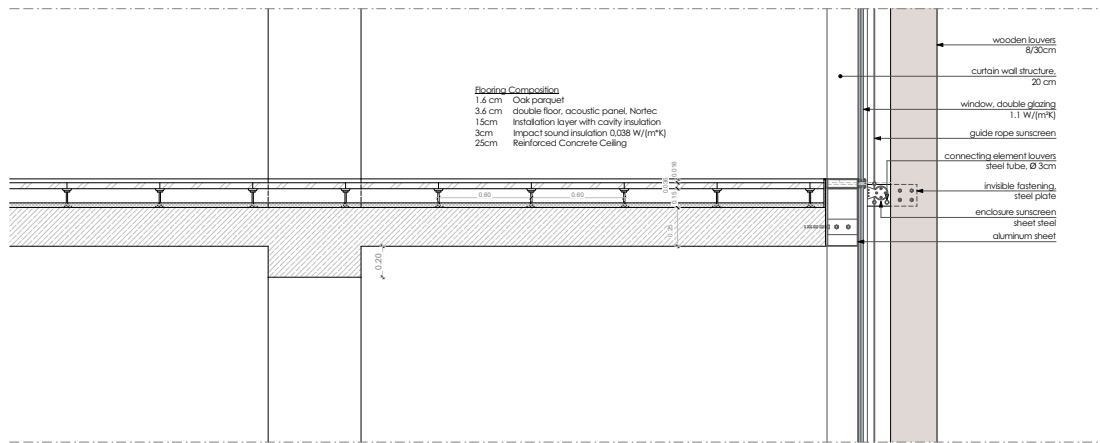
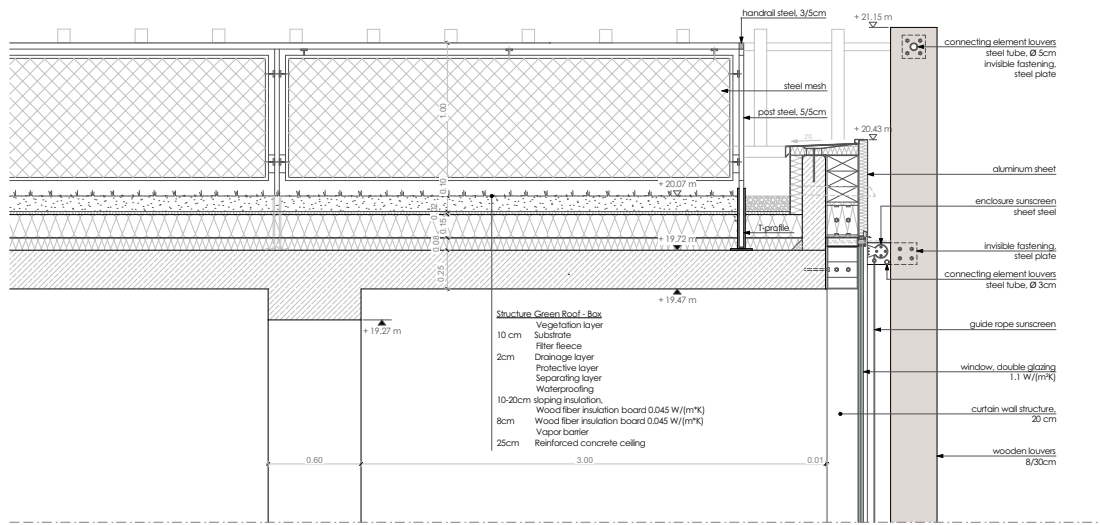
plan - 13th floor



plan - 12th floor



plan - 6th floor



MOBIOUS

'The element's continuation of itself in different axes and forming the other elements as a whole.'

CEDBIK Sustainability Idea Competition 2020
Honorable Mention Prize

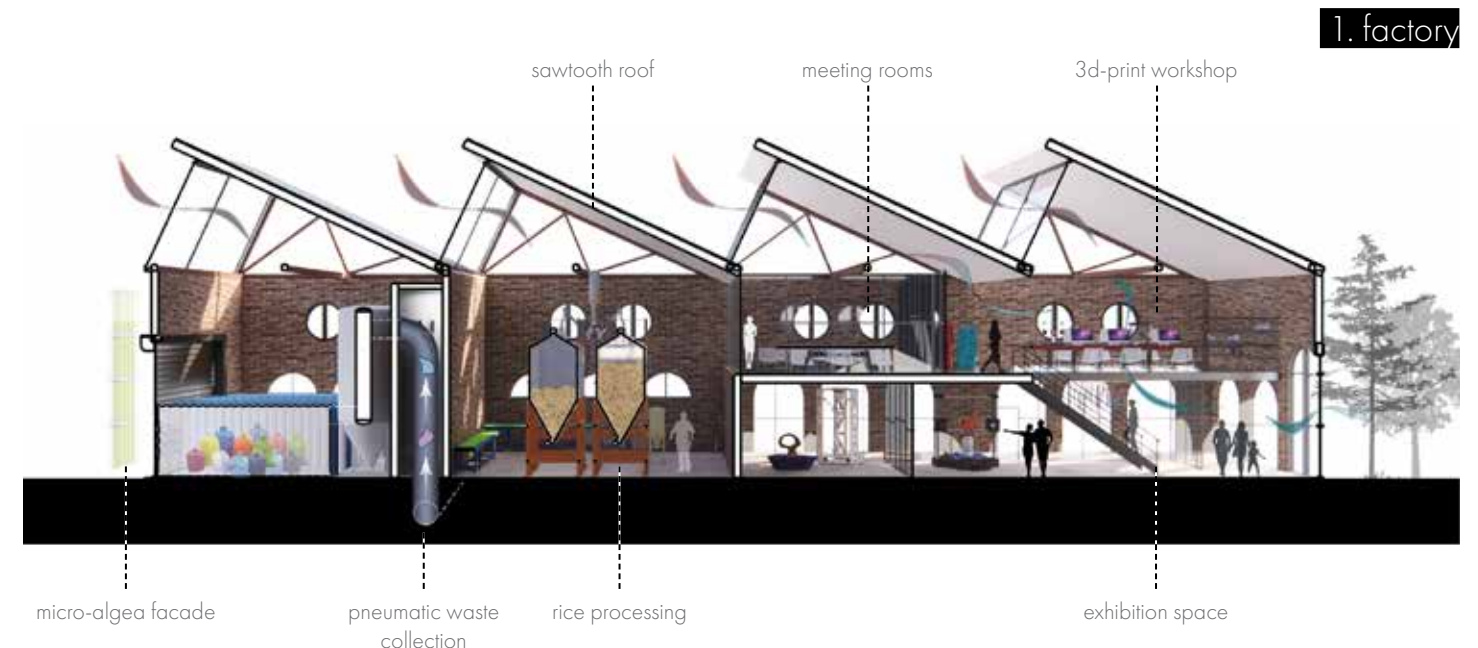
Berkay A., Arch; Mine D., Arch; Duygu S., Arch;
Kazim B.C., Urban Planning; Selin G., MSc. Env. Eng.

Mobius is an ecological village designed for 300 inhabitants, promoting sustainable living across 120,000 sqm of land. At the core of its self-sufficiency are two key elements: a repurposed paper factory that anchors the village's circular economy, and an aquaponics building that integrates rice paddies and fish farms. This structure not only supports local food production but also contributes to material sourcing. The entire campus infrastructure is constructed using 3D printing technology, with rice—cultivated within the aquaponics system—serving as a key biodegradable material for printing. The village also implements a pneumatic waste collection system, channeling all household waste to the factory, where selected materials are repurposed for 3D printing. Together, these systems create a resilient, closed-loop environment that redefines sustainable rural living.

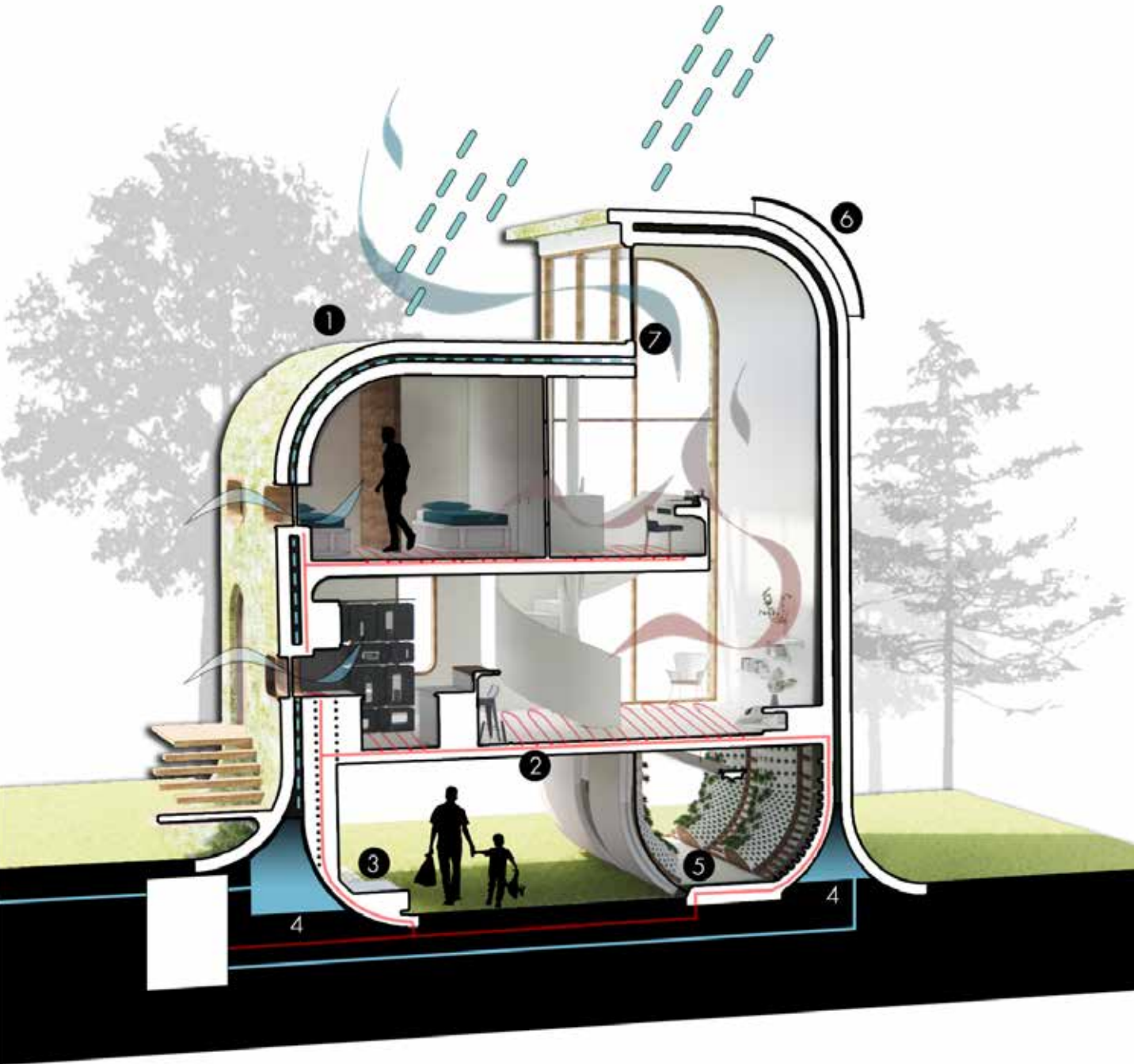
The residential area of Mobius village consists entirely of Mobius Houses—unique, flexible homes built using the village's own 3D printing technology. These houses, the standard residential type throughout the village, are designed to adapt to different family sizes through flexible room configurations. Each house features a continuous green surface that forms the walls, floor, and roof, seamlessly blending into the surrounding landscape. This design embodies the concept of the Mobius strip, from which the project takes its name, symbolizing continuity, unity, and the cyclical nature of life within the village.



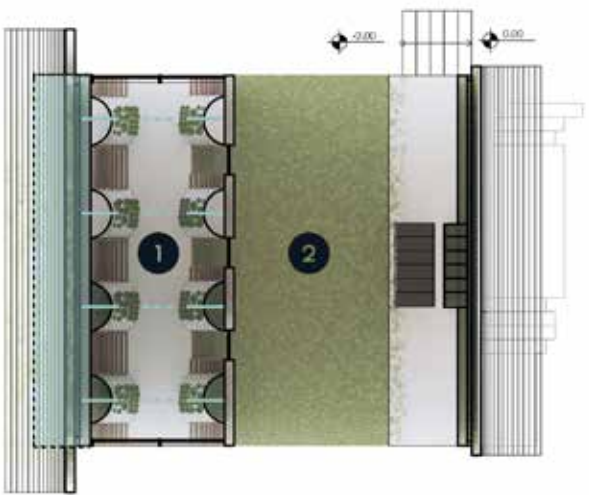
- | | | | |
|--------------------|----------------------|---------------------------|------------------------|
| 1- factory | 8- old pier entrance | 15- bicycle park | 22- parking areas |
| 2- aquaponics | 9- administrative | 16- boat pier | 23- residential |
| 3- bio-gas tank | 10- social center | 17- health center | 24- railway |
| 4- river theatre | 11- old town road | 18- school | 25- ecological bridge |
| 5- open exhibition | 12- cultural square | 19- school courtyard | 26- waste collection |
| 6- piezo square | 13- commercial areas | 20- children's playground | 27- transit stops |
| 7- "agac" | 14- atat rk's house | 21- vehicle charge points | 28- natural activities |



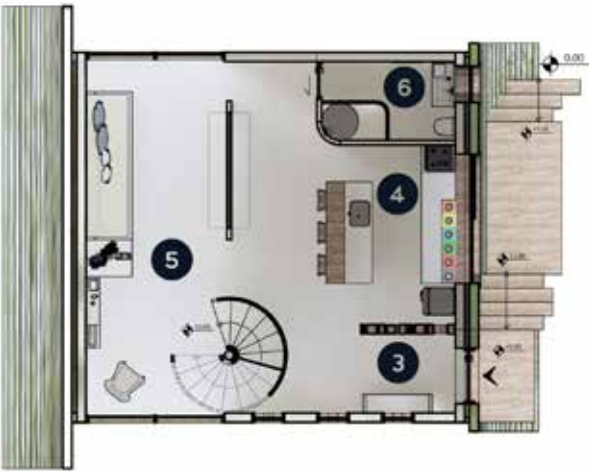




- 1- double layered green roof/wall
- 2- hydronic-radiant heating system
- 3- waste collection
- 4- rainwater collection
- 5- artificial greenhouse
- 6- pv panels
- 7- operable windows



green house floor



ground floor



first floor type 1



type 2



type 3

- 1- artificial greenhouse
- 2- semi-open garden
- 3- entrance
- 4- kitchen
- 5- living unit
- 6- bathroom
- 7- working space
- 8- bedroom
- 9- flexible room

thank you.

Contact

Email : berkay.akyuz4@gmail.com

Phone : +39 351 624 77 35

[linkedin.com/in/berkayakyuz](https://www.linkedin.com/in/berkayakyuz)