

JEAN WANG PORTFOLIO

S E L E C T E D W O R K S | 2 0 2 0 - 2 0 2 3

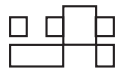


ACADEMIC WORK

01 *SMOOTH House*

Healthcare | Construction Development
Solar Decathlon Building Challenge - 2023

01



02 *A Historical Knot*

Memorial Museum | Individual Architectural Design
Museum of Emotion Competition - 2023

05



03 *The Wave*

Urban Renewal | Individual Urban Design
B.Arch Degree Project - 2020

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04 *Tower of The Vitality*

Commercial Complex | Architectual Design
Quzhou City Landmark Competition- 2023

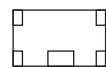
15



OFFICE WORK

01 *Jiangsong Technology Industrial Office* 01

Industrial Office | Architectural Design & Construction Development
Office Work - 2020



02 *Wuxi Xizhang Senior High School* 13

Educational | Architectural Design
Office Work - 2022



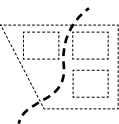
03 *Xishan Administrative Service Center* 21

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Office Work - 2020



04 *Wuxi Sunlant Bio-Tech Headquarters* 29

Industrial Office Park | Architectural Design
Office Work - 2021



01 SMOOTH HOUSE

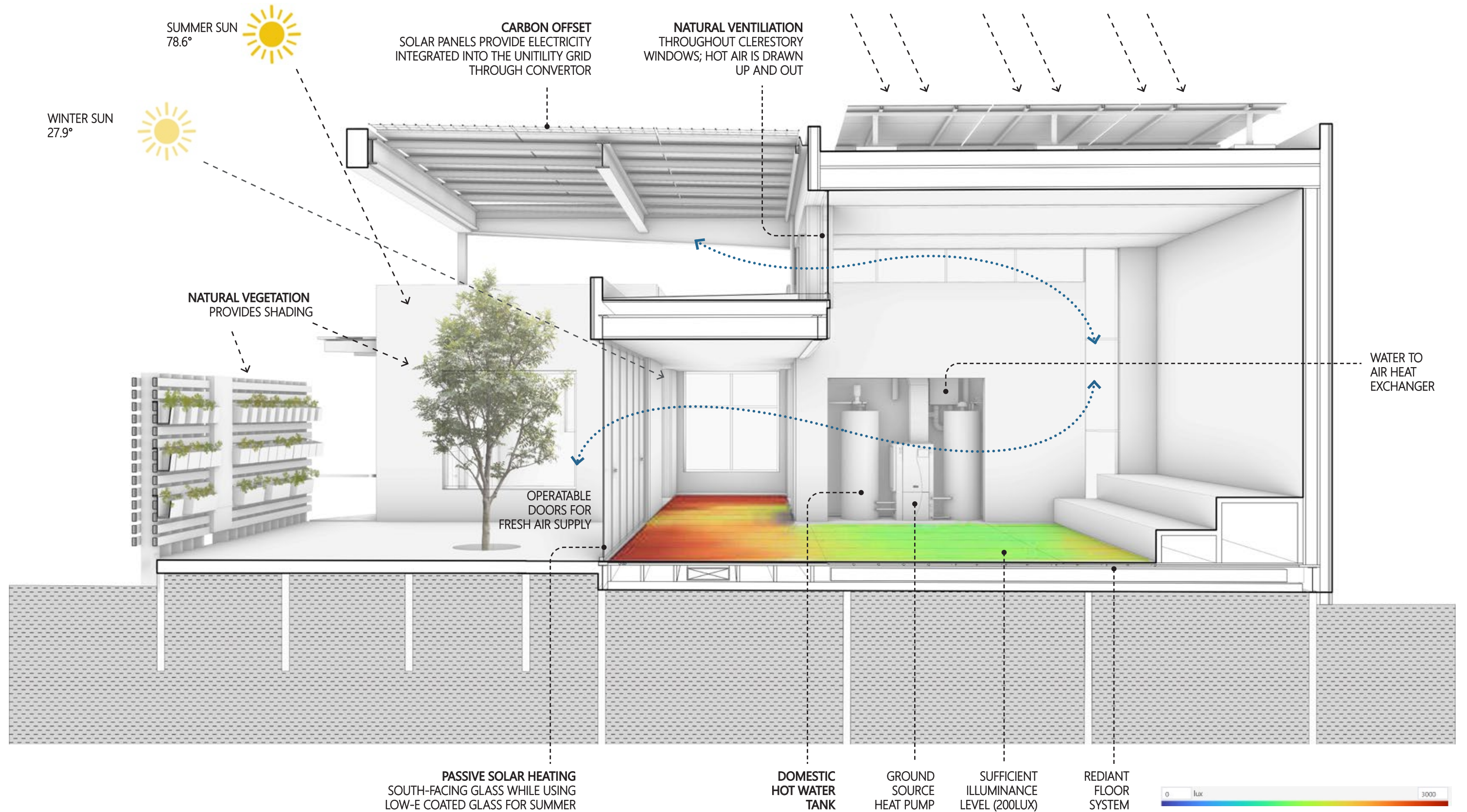
— *Therapy House*

Solar Decathlon Competition | 2023 To Be Constructed
Floor Area: 2161 ft² | Plot Ratio: 0.74
Location: St.Louis, MO
Tutor: Hongxi Yin, Daniel Hellmuth, Roy Wall
Work Scope: CD (Structural Drawings: Floor Framing, Underfloor Structure, Canopy PV Racking Structure, BIM)

Located at the intersection of Delmar Boulevard and Lake Avenue, SMOOTH House will help faculty in occupational therapy train students to deliver pro bono community-based services — an often-inaccessible level of care that prevents many patients from fully returning to the activities of daily life.

At the same time, by providing essential rehabilitative health care to underserved residents in north St. Louis, this practice-based education facility will help to bridge the service gap as patients transition from hospital to home. Wide doors and passageways can accommodate wheelchairs or those with mobility limitations. Model living spaces can help recovering patients relearn old skills and develop new strategies for completing domestic tasks. Some areas, such as the model kitchen, are outfitted with motion sensors to collect data that can aid caregivers in tailoring individual treatment plans.





Healing Energy

The building's environment combines a beautiful, nature-filled therapeutic space with features of a home environment and state-of-the-art rehabilitation technology. The design explores the balance experiential aspirations with economic and sustainable goals. The amount of carbon released through the construction process — will be approximately 13 kilograms per square foot, significantly less than current industry best practice. What's more, those emissions will be directly offset by the approximately 4,000 kilowatt-hours of excess power that SMOOTH House is expected to generate each year. It will achieve full carbon neutrality in less than three years.

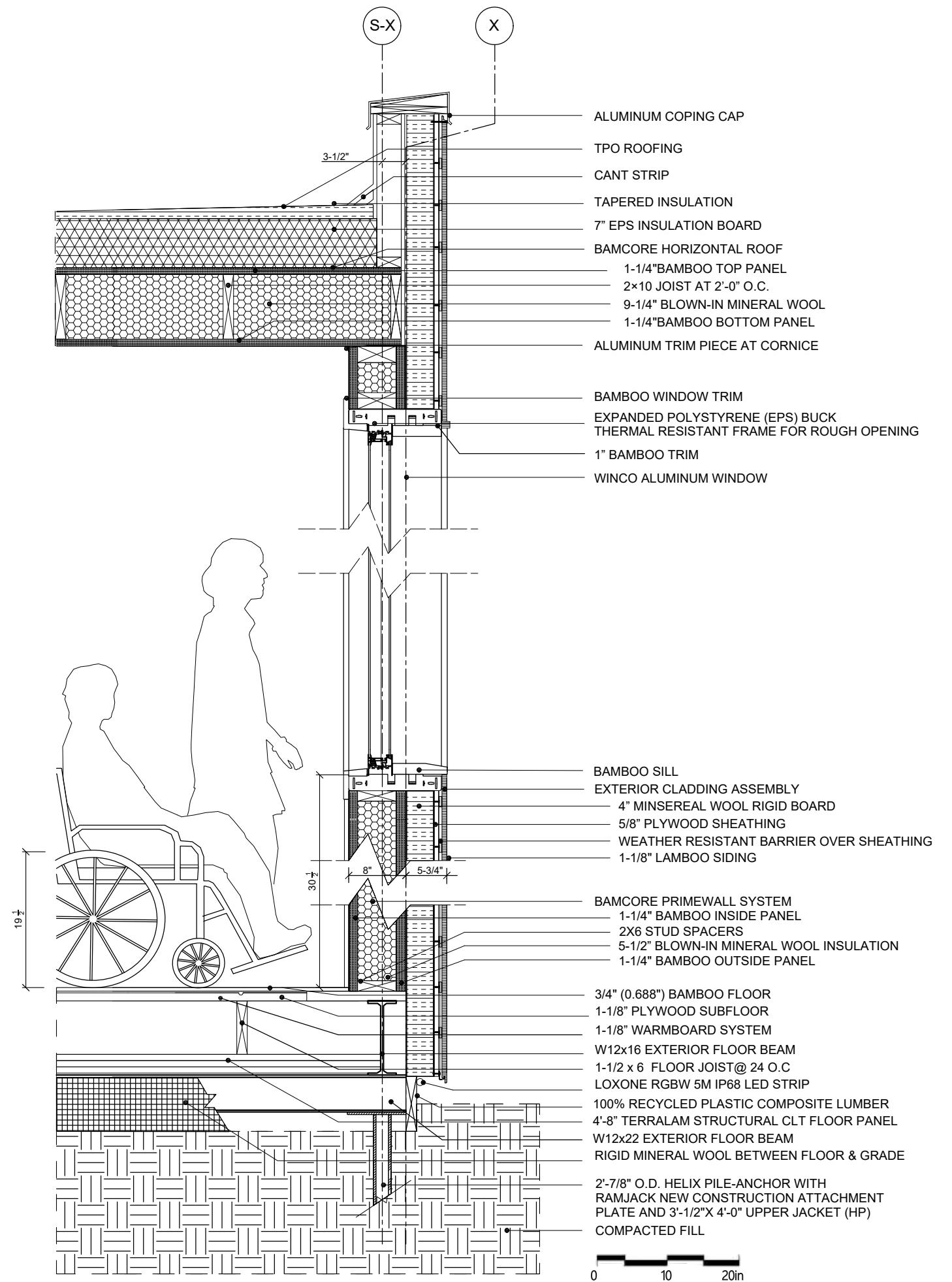
The building structure and envelope are characterized by sustainable materials and energy-efficient systems. Flooring, framing and external cladding all employ engineered bamboo, which is both stronger and more environmentally friendly than traditional steel or lumber. Large skylights, combined with roof-mounted solar panels and high-performance windows and enclosures, provide natural light while minimizing electrical loads and carbon emissions. Plumbing and heating, ventilation and air conditioning systems use geothermal heating and cooling. A living wall, part of the building's healing garden, will help to filter rainwater and mitigate urban noise.



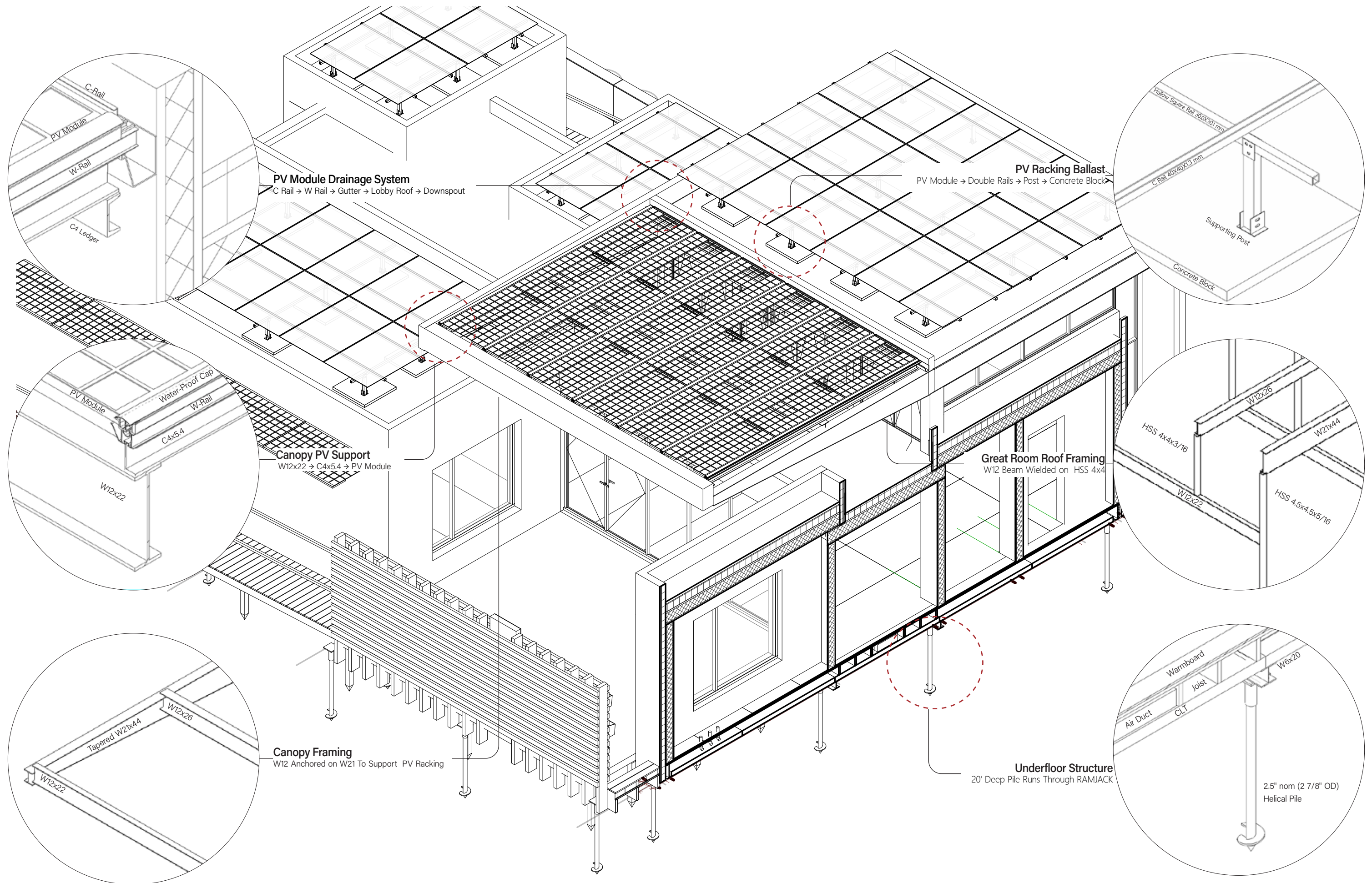
Central Lobby
From Main Entrance| SOM



Multi-Function Room
Rehabilitation Activities| SOM



Wall Section
Jean, Zitao | AutoCAD



02 A HISTORIC KNOT — *Memorial Museum*

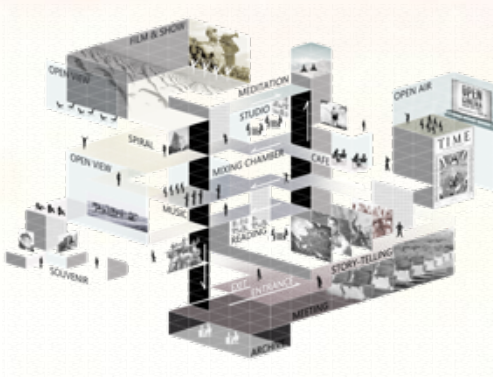
Museum of Emotion Competition | 2023

Location: Changchun, China

Individual Work

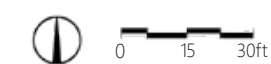
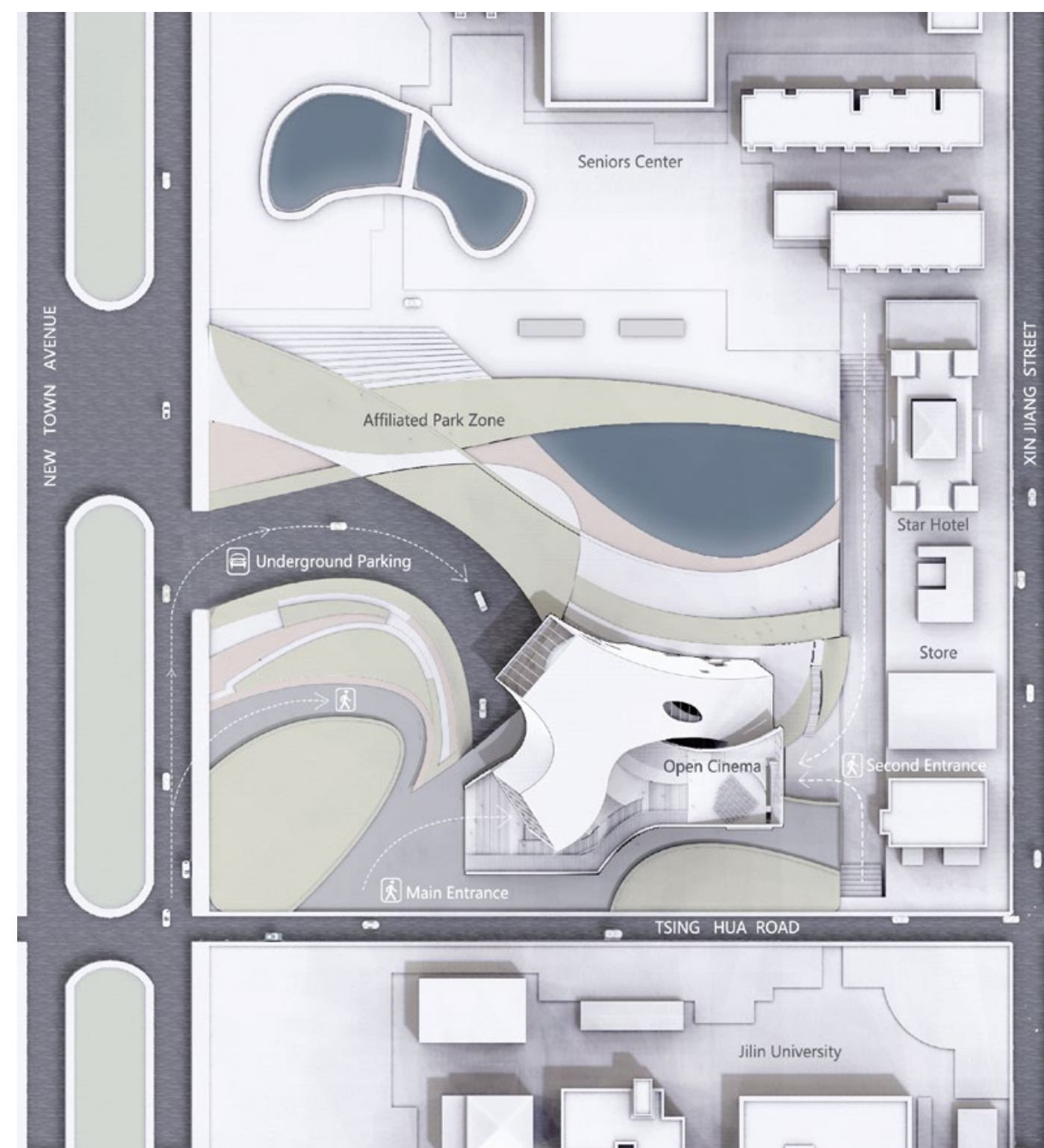
Xin Cheng Avenue in Changchun once was the political center of Manchurian Empire ruled by Japan. To remind people of this tragedy and disgrace, the city plans to build a memorial hall.

Rather than parody the existing buildings, my proposal is to extract the historical symbols to build a modern architecture as a implicit perceptual container of historical events where visitors could echo with the history inside. Also, I want to innovate in its structure and functions so that it can be a icon.





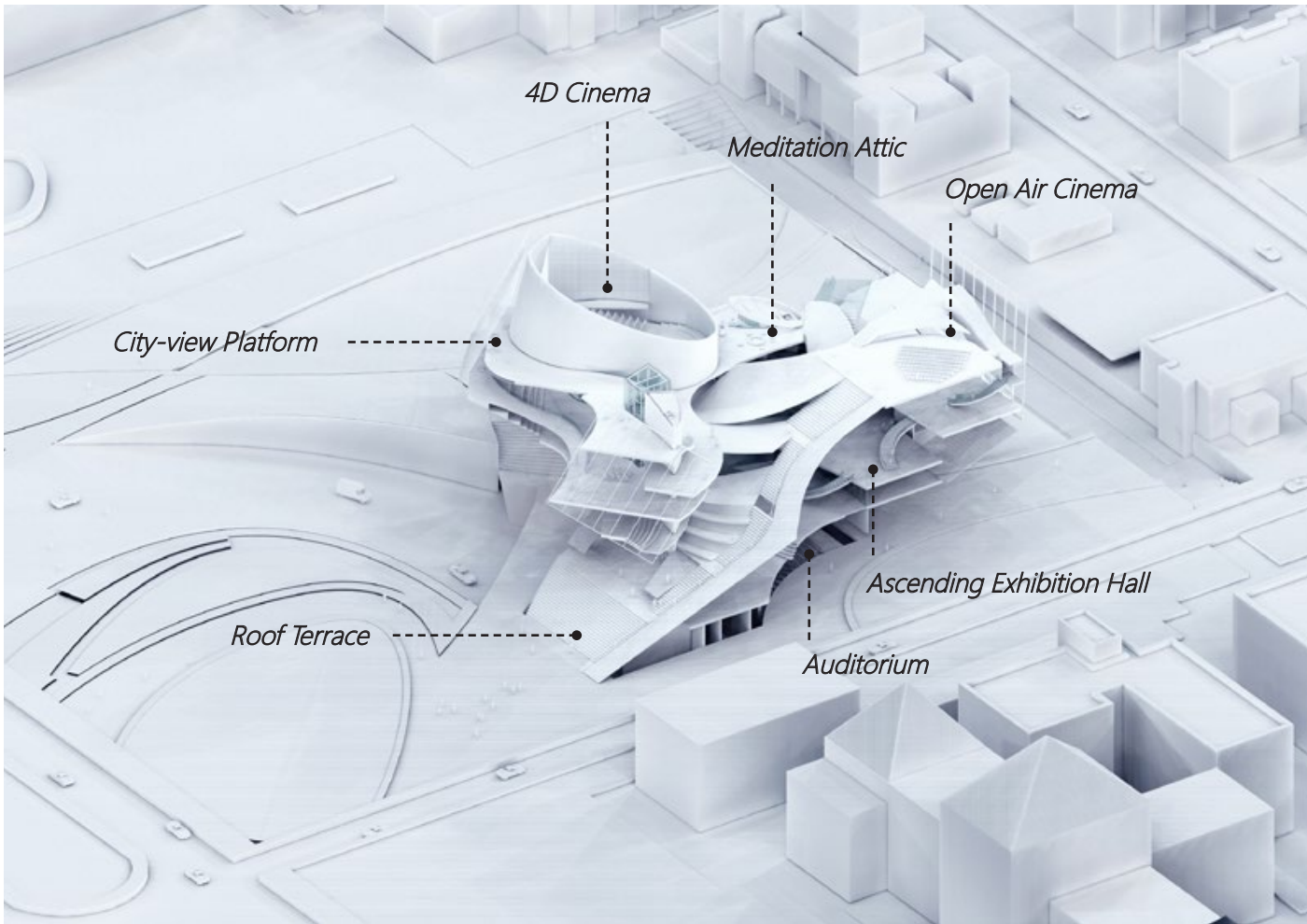
Pre-design Research of Manchurian Motif
Horizontal & Vertical Conversion and Recombination of Blocks to Form *the Knot*



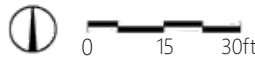
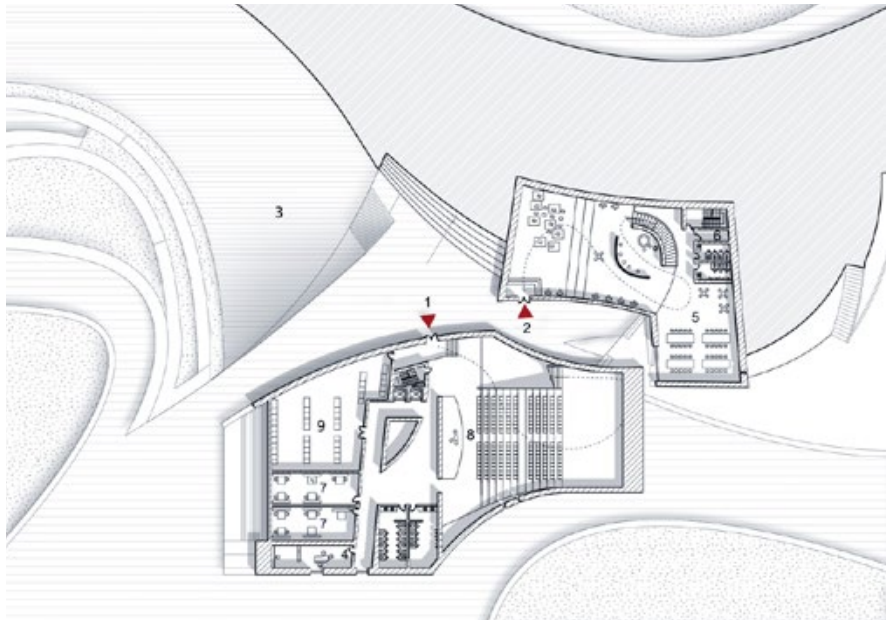
Site-Plan
The setting of entrances follows the direction of stream of people and cars.



Outside the Knok
A Connector of the Past and Future

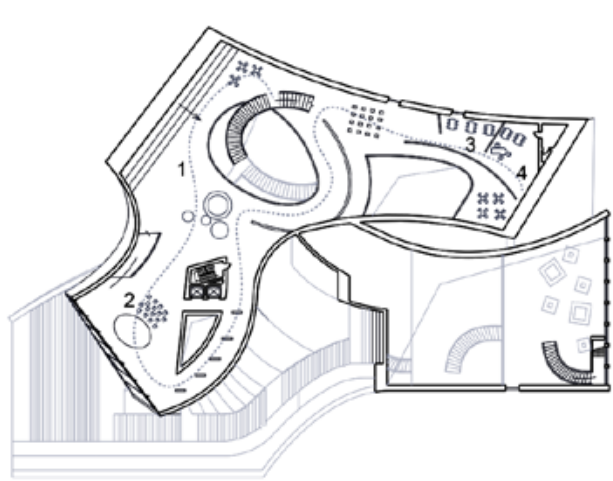


Inside the Knok
Strategy of the Void



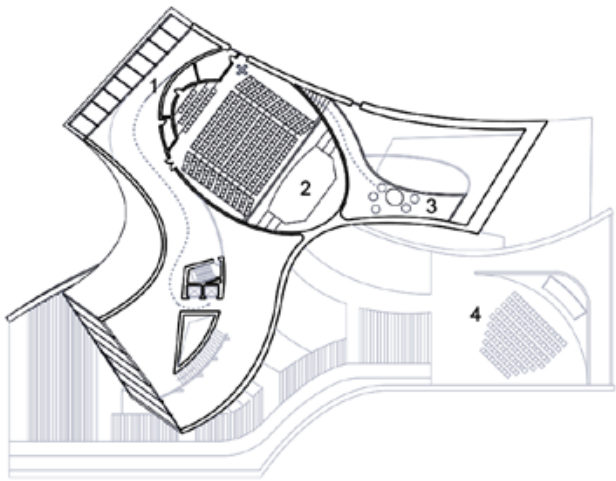
GROUND FLOOR PLAN

- | | | |
|-------------------------------|------------------------|----------------------|
| 1. Entrance (Conference Hall) | 4. Photographic Studio | 7. Relic Repair Room |
| 2. Entrance (Library) | 5. Reading Room | 8. Conference Hall |
| 3. Entrance (Parking Lot) | 6. Inventory room | 9. Storage |



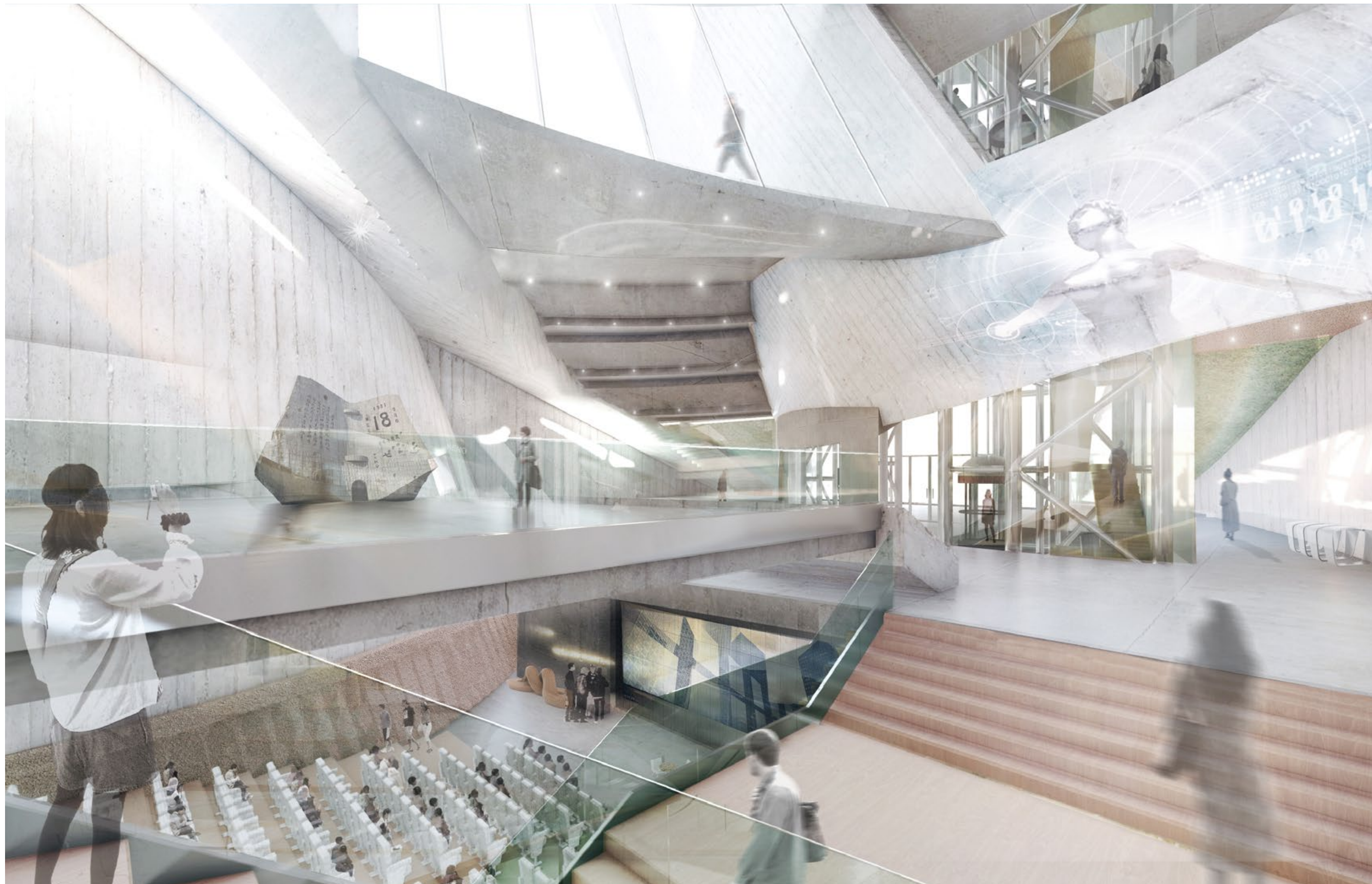
5 FLOOR PLAN

- 1. City-View Platform
- 2. Concert Hall
- 3. Open Fab Lab

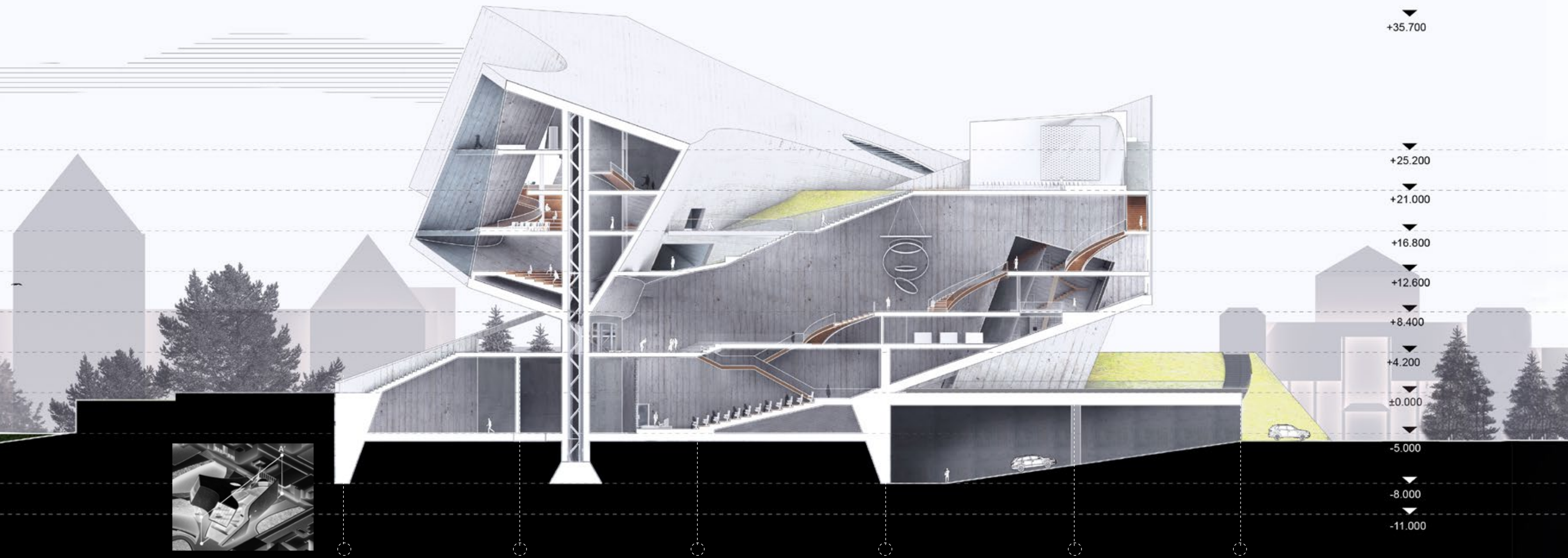


7 FLOOR PLAN

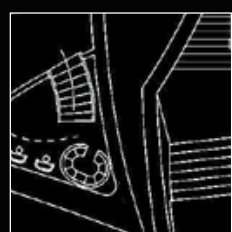
- 2. 4D Cinema
- 3. Meditation Attic
- 4. outdoor Theatre



Entrance Lobby
Walls are interlaced and spaces are choreographed.



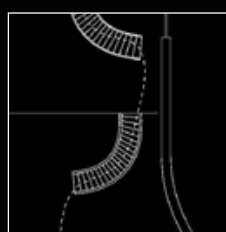
SECTION A-A'



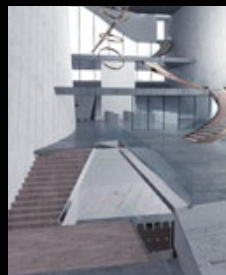
-1F



THE GAP
- Abyss -



1F



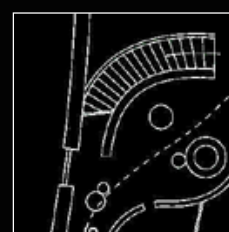
PREFACE HALL
- Rising Indignation -



2F



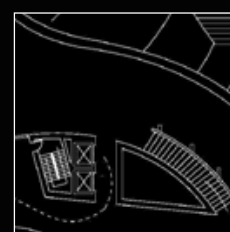
D-ART SPACE
- Intricacy -



3F



FOLK ART GALLERY
- Suffering -



4F



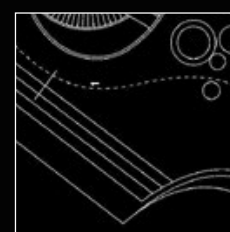
OBLIQUE CORRIDOR
- Turning Point -



5F



SPIRAL STAIRS
- Fighting Up -



6F



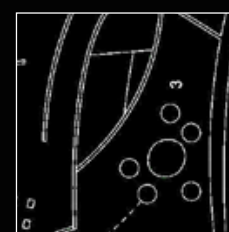
LOOKOUT PLATFORM
- Envision -



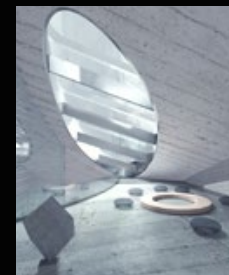
6F



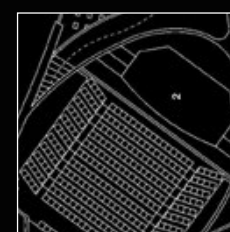
CONCERT HALL
- Celebration -



6F



MEDITATION ATTIC
- Tranquility -



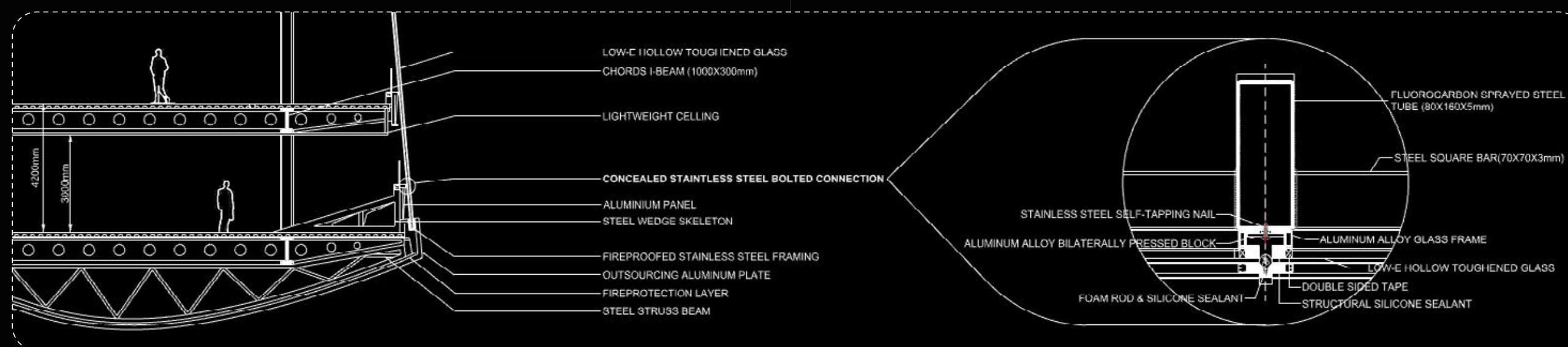
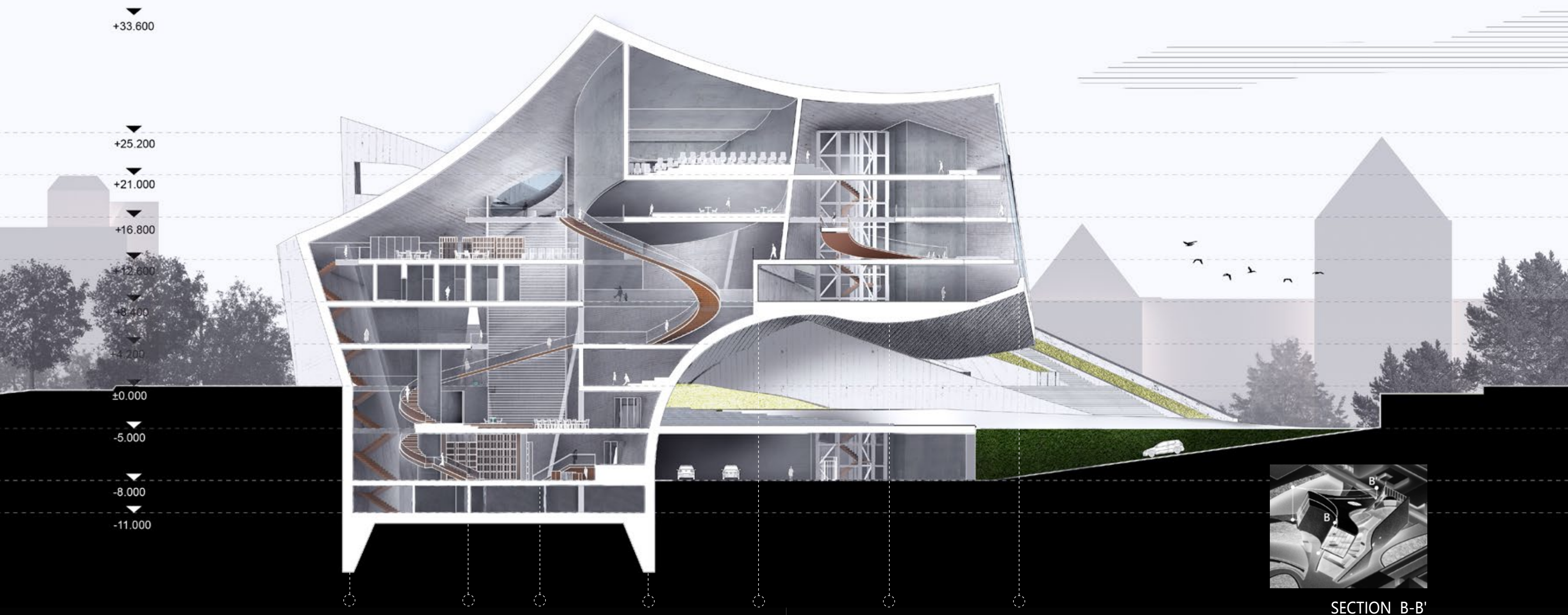
7F



4D CINEMA
- Reminiscence -

Spaces of Emotion

Spaces are designed by visitors' reaction to the historical events by timeline.



03 THE WAVE

Urban Revival

B.Arch Degree Project | 2020

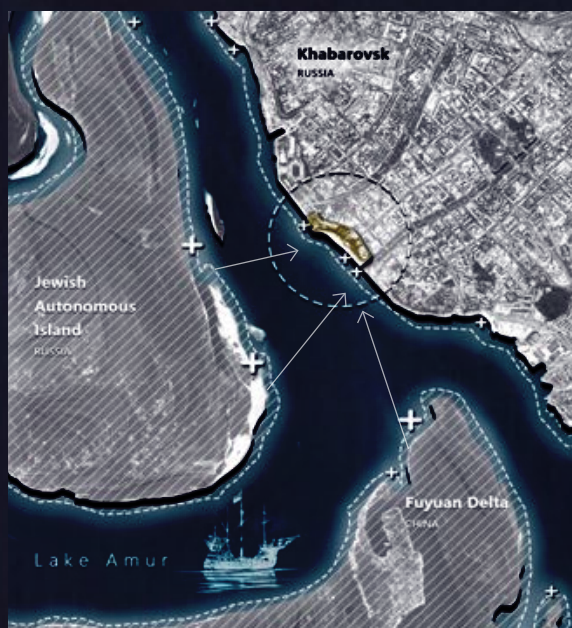
Tutor: Ryabkova Elena Borisovna

Location: Khabarovsk, Russia

Individual Work

Khabarovsk, the largest city in the Far East of Russia, has the most frequent trade with its inner state and northern China along the Amur River. However, the water level on the riverbank of Amur has risen severely in summer and autumn, flooding the original riverbank trails and piers. Therefore, the existing poor-designed bank of central Khabarovsk needs an urgent renovation.

Taking into account the large height difference and water level changes of the site, I try to solve the problem in the aspect of space and time. In regard to space, I use the curve of water flow as the formal language of the design. Also, to reshape the river bank, I re-analyse the site in four layers— inland, shoreline, waterborne and the connection to the city fabric. In consideration of time, I hope that when season changes, the new river bank could adapt to the nature with flexible space for public activities. Under the changing forms of architectural landscape, people could feel the trace of time.



Trading Market

Grass Slope

Sky Bridge

Bird-Watching

Beach

Boat Crossing

Fishing Pier

Water Pavilion

Improvisational Theatre

Recreational Island

Picnic / Hammock Grove

Amphitheatre

Outdoor Catering

Retail

Trail in Nature

Running Track

Entrance

Dock of Cruise

SITE PLAN 1
—Dry Season



Barge

Water
Diversion

Khabarovsk State Museum

Art Museum

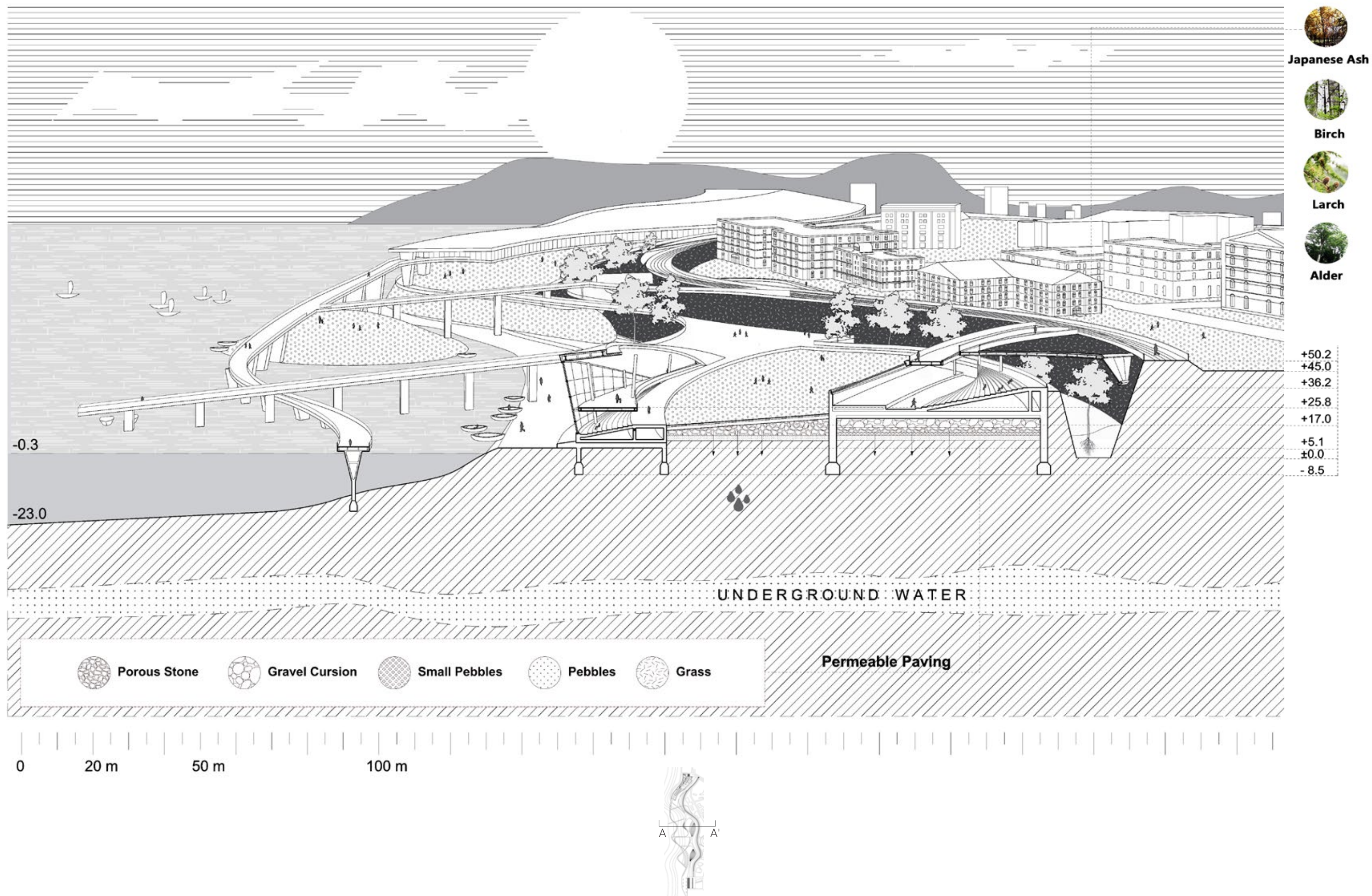
City Park

Central Square

Governmental Office

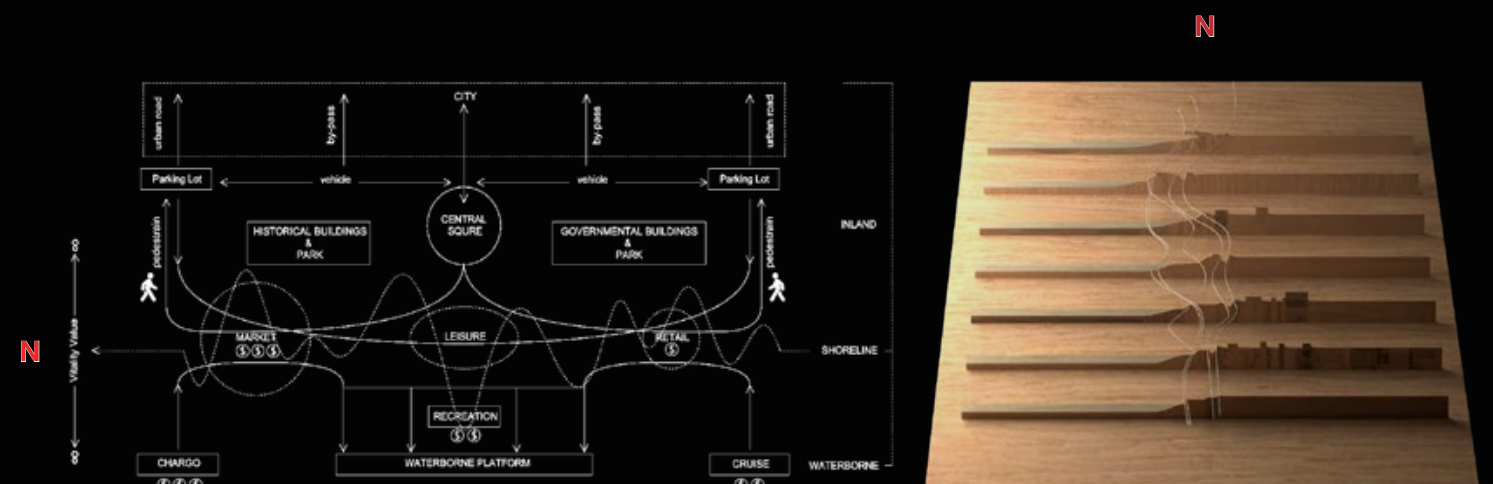
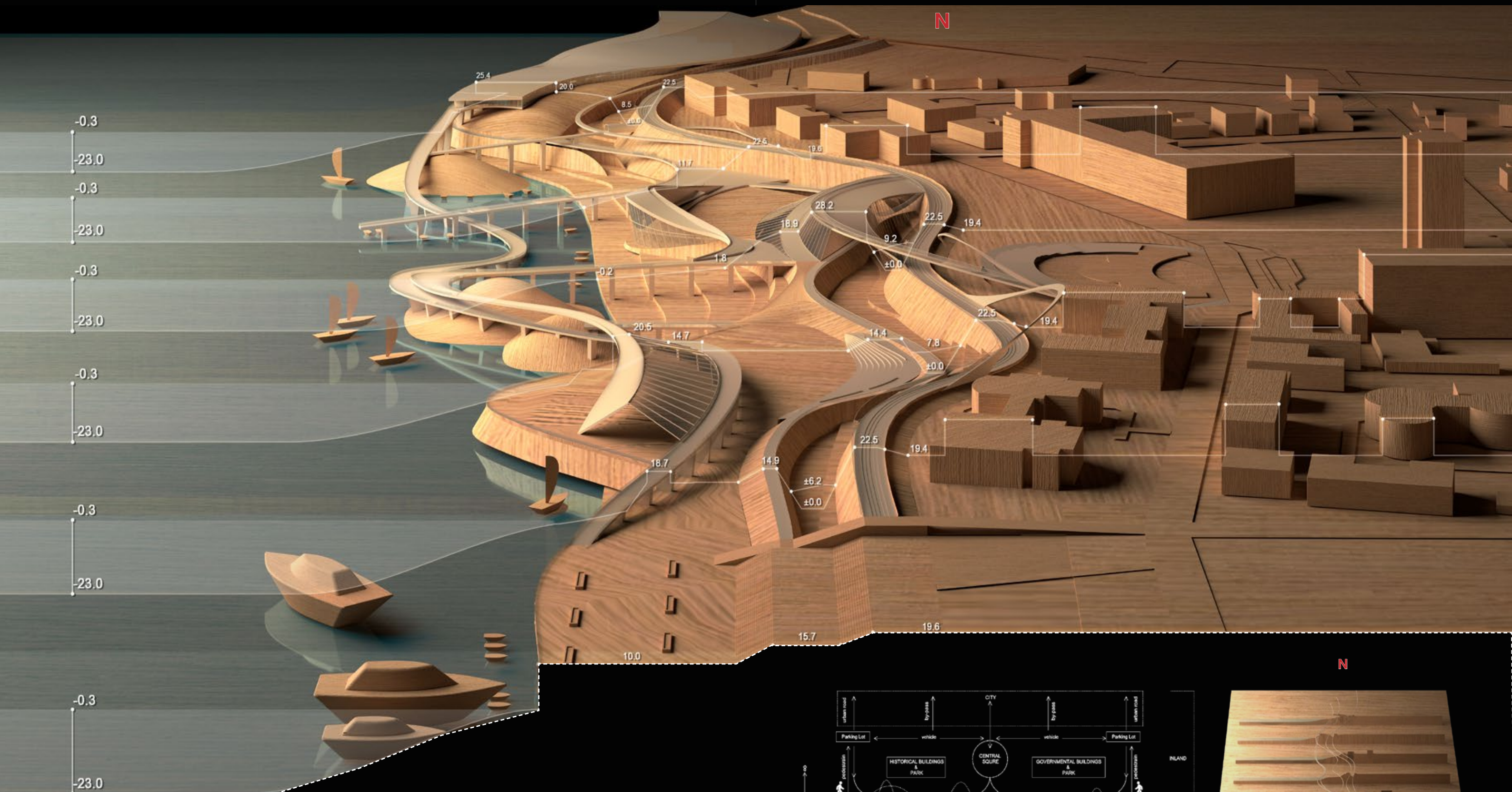
Seasonal Chanel

SITE PLAN 2
—Wet Season



A-A' SECTION: 'DOUBLE-DAM' SCHEME FOR FLOOD CONTROL

Double dam system forms a gap to channel flood and protect historical buildings nearby.



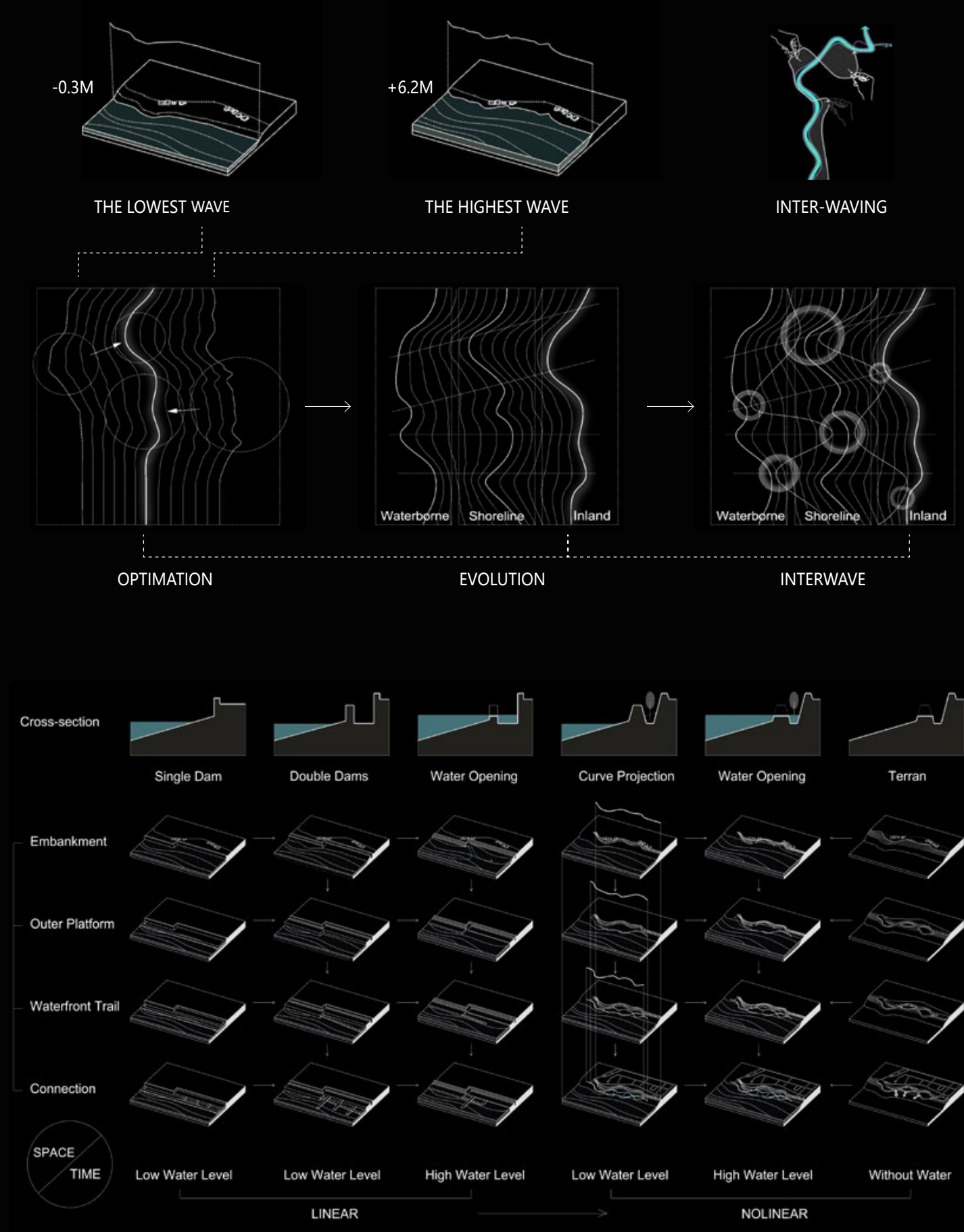
SITE RESHAPE BY THREE LINES

Firstly, the first line of the inland is to establish a double-dam based on the original topography to prevent flood. When the water level exceeds a certain height, the water channel in between serves as an drainage channel to ensure that the activity space is not submerged and protect the foundations of historical buildings along the river.

Space Value Analysis

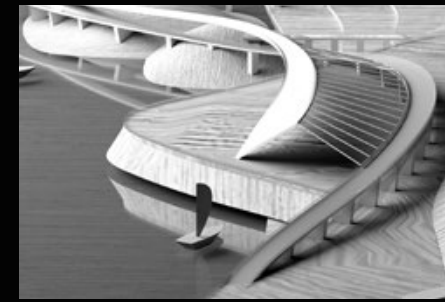
The second line creates main activity area for the crowd, providing a variety of recreational spaces. The third line is made to be hydrophilic platforms of different heights. Finally, the trails following the fabric of urban roads extend across the bank, intertwining with three main lines to form inclined docks.

Model: Cross Section Series



Concept: Adaptive Re-Shape

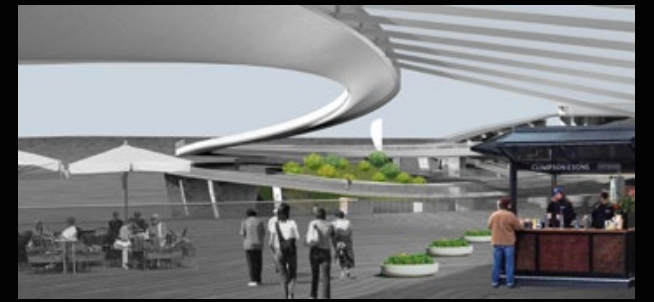
The extraction and optimization of the bank lines leads to the best adaptation to the nature ; the interweaving between three main lines results in the implantation point of the public space. With inclined platform, the activity space are crated by different shapes and functions under the interaction of different water levels that provides a variety of spatial experiences for citizens and allows people to perceive the change of seasons and the trace of time.



①

RETAIL & CATERING

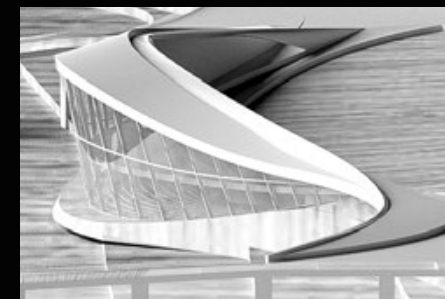
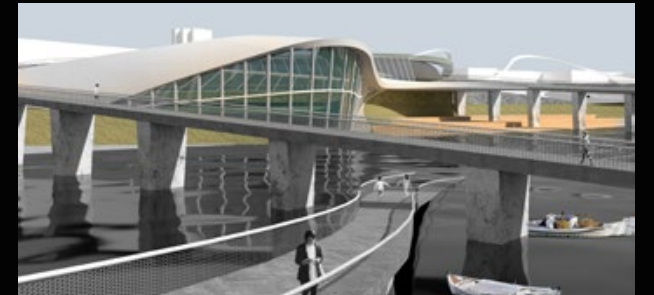
The integration of retails, catering, and tourism industries promotes the commercialization of public space.



②

WATERBONE TRAIL

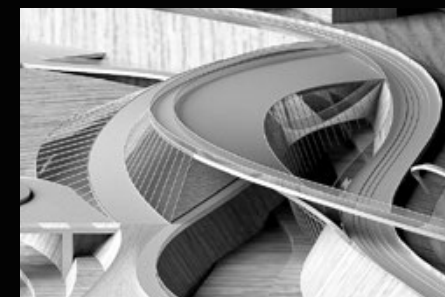
The increase in the number of docks and inclined trails would promote waterborn entertainment activities and riverbank business.



③

WATER PAVILION

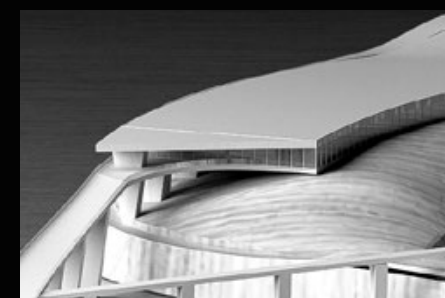
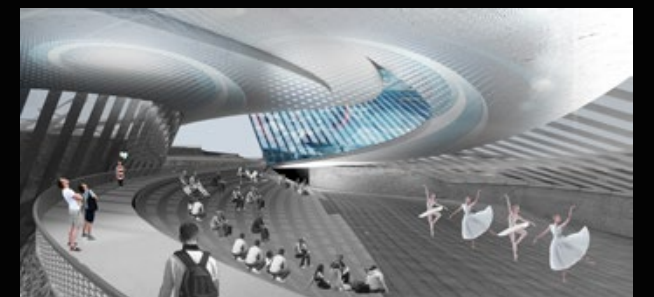
It allows people to see the organism below the water, and observe the water level change during different seasons .



④

IMPROVISATIONAL THEATRE

It can be a public gathering point for people, where any event could happen.



⑤

TRADING MARKET

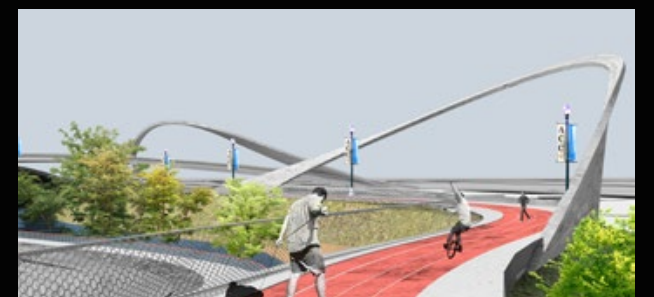
It Increases trade exchange efficiency of market and freight by water transport along the brage of Amur.



⑥

RECREATION TRAIL

While running, people overlook the whole bank and historical buildings along the coast.



04 TOWER OF VITALITY

— Commercial Complex

Quzhou City Landmark Competition | 2023

Location: Quzhou, China

Teammates: Mark Ma, Zidong Guo

Work Scope: Programming, Rendering

Xin The Quzhou Central City Complex is the commanding height of Quzhou New City and the new city center, relying on innovative architectural structure design. The main tower of the complex features a double helix shape, which is inspired by the expression form of DNA and symbolizes the development of science and technology in Quzhou. This design concept combines scientific and technological development with ecological greenness, reflecting Quzhou's ecological-oriented and people-oriented development vision.

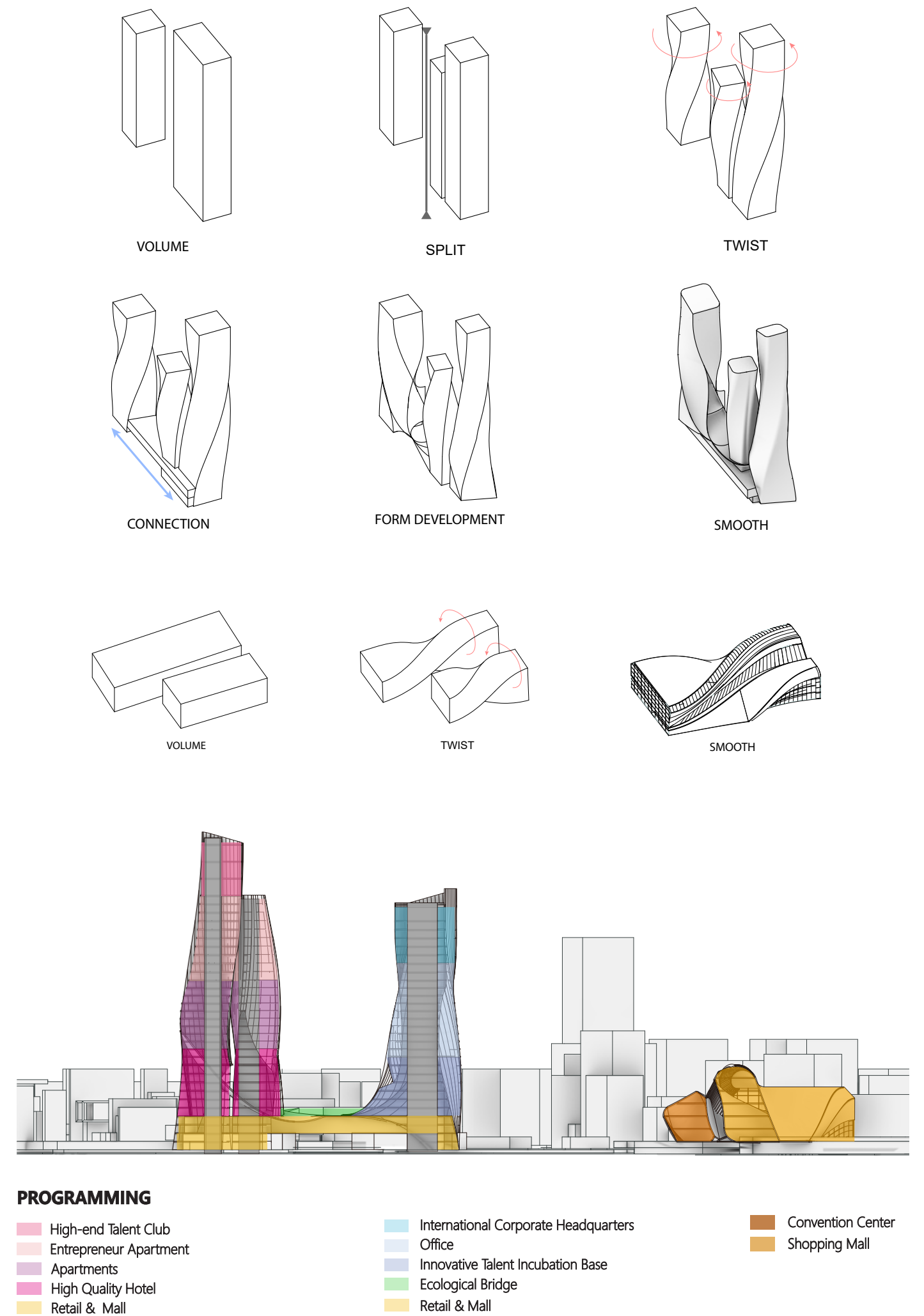
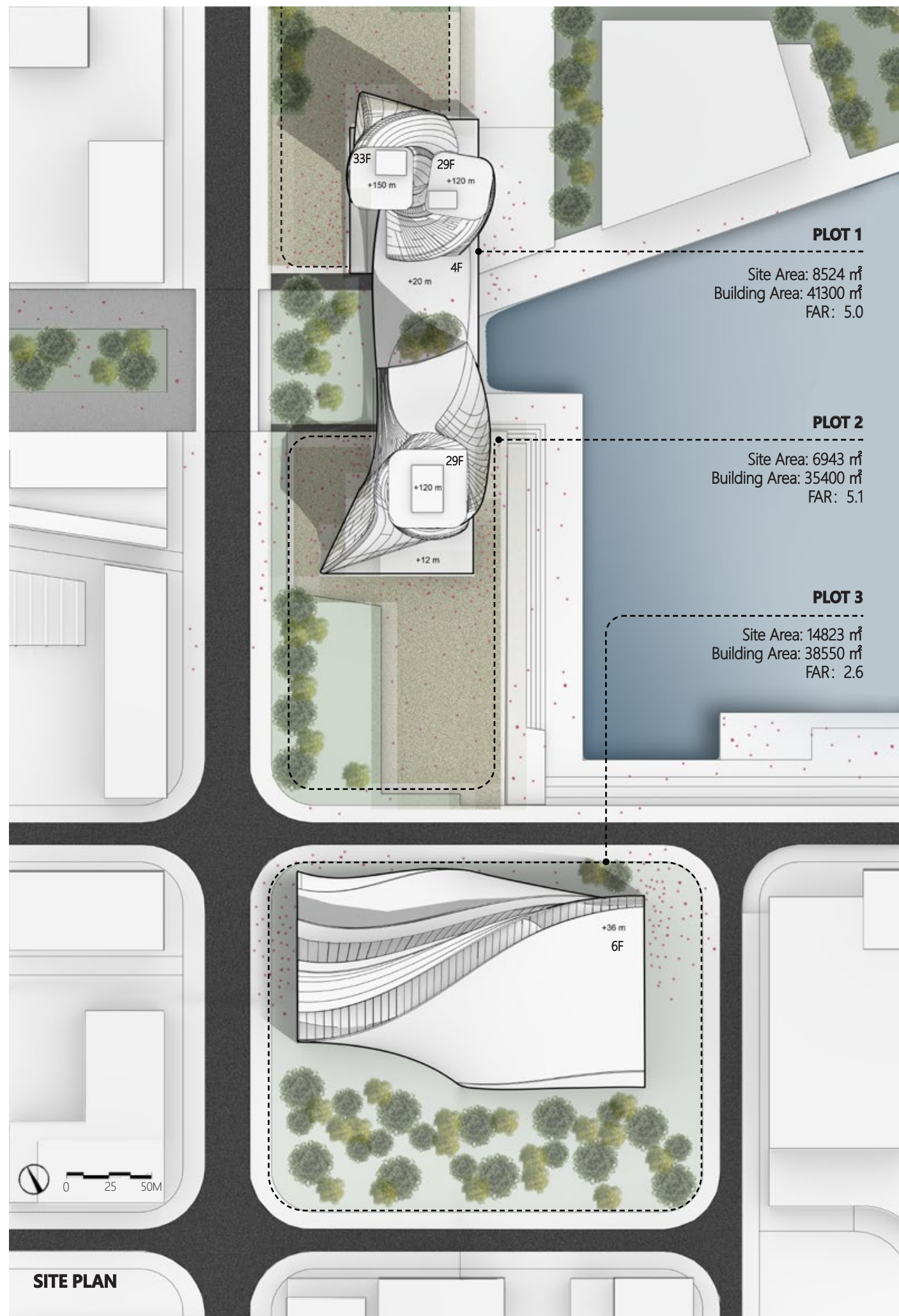
The project integrates ecological bridges into the double helix structure, connecting the east and west wings of the main tower and forming a small circle of ecological circles. The towers are designed to bring green into the interior, forming a natural oxygen bar, reducing carbon emissions, and improving the sustainability of the tower.



SITE ANALYSIS

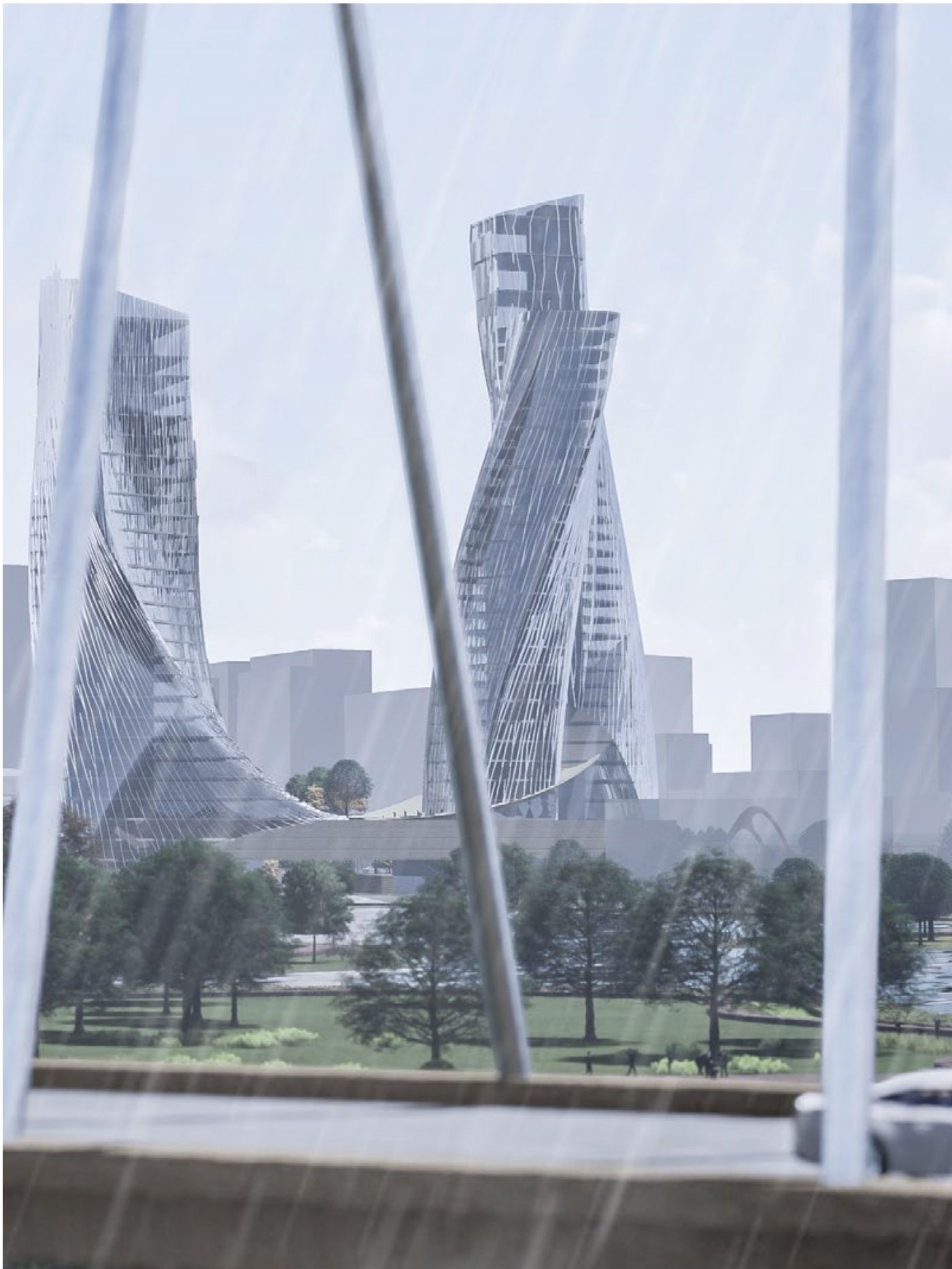
Plot is in the central area of city services group and the Intersection of garden corridor and natural ecological valley.







7:00 AM | WINDY
Commercial Connects to Wenli Lake.



1:00 PM | DRIZZLE
Looking Across the Bridge to the Tower



5:00 PM | SUNNY
Main Tower Entrance Square



9:00 PM | CHILLY
Waterfront Recreation Park



5:00 AM
Sunrise

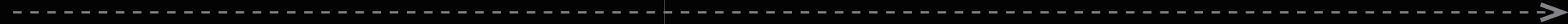
S E L E C T E D

O F F I C E

W O R K

Architectural Designer | 2020 - 2022

Wuxi Architectural Design and Research Institute CO.,LTD



01 JIANGSONG[®] TECHNOLOGY INDUSTRIAL-OFFICE

—— *Industrial Office*

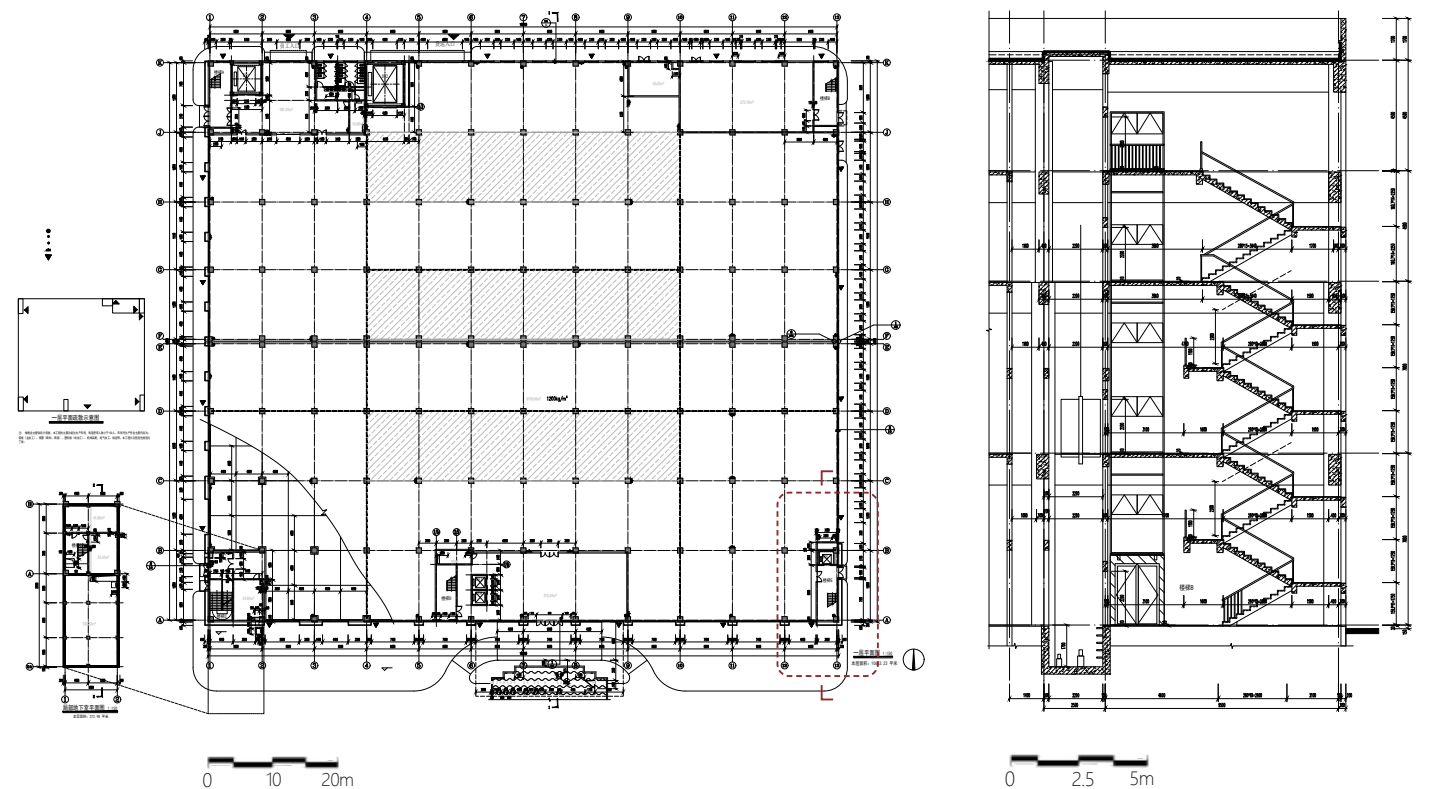
Office Project | 2020, Constructed in 2022
Floor Area: 42846m² | Plot Ratio: 1.99
Location: Wuxi, China
Supervisor: Ye Qian
Work Scope: AD (Facade Design, Modeling, Rendering),
DD (Facade, Section), CD (Plan, Section)

The project is situated on the east side of National Highway 312 in Wuxi City and the north side of Changjiang East Road, on a flat and expansive green space. The goal is to develop a state-of-the-art, highly-efficient plant that integrates production and research and development (R&D), while prioritizing comfort, health, safety, and economy in modern production and working environments.

The design aims to create a cutting-edge, modern industrial plant that serves as a model for excellence in layout, functionality, transportation convenience, environmental aesthetics, and energy conservation. Careful attention is paid to the site's characteristics and infrastructure, with the objective of strategically placing buildings, roads, and green spaces to maximize production efficiency, optimize traffic flow, and cultivate a top-quality production plant area.



Bird-Eye View
Jean, Hu Xiao | Sketchup+Vray



CD Sample: First Floor Plan & Traffic Core Section
Jean, Hao | AutoCAD (Unit: mm)

02 WUXI XIZHANG SENIOR HIGH SCHOOL

—— *Educational Building*

Office Project | 2021, constructing

Floor Area: 87398m² | Plot Ratio: 0.65

Location: Wuxi, China

Supervisor: Jingxin Hao

Work Scope: AD (Facade Design, Modeling);

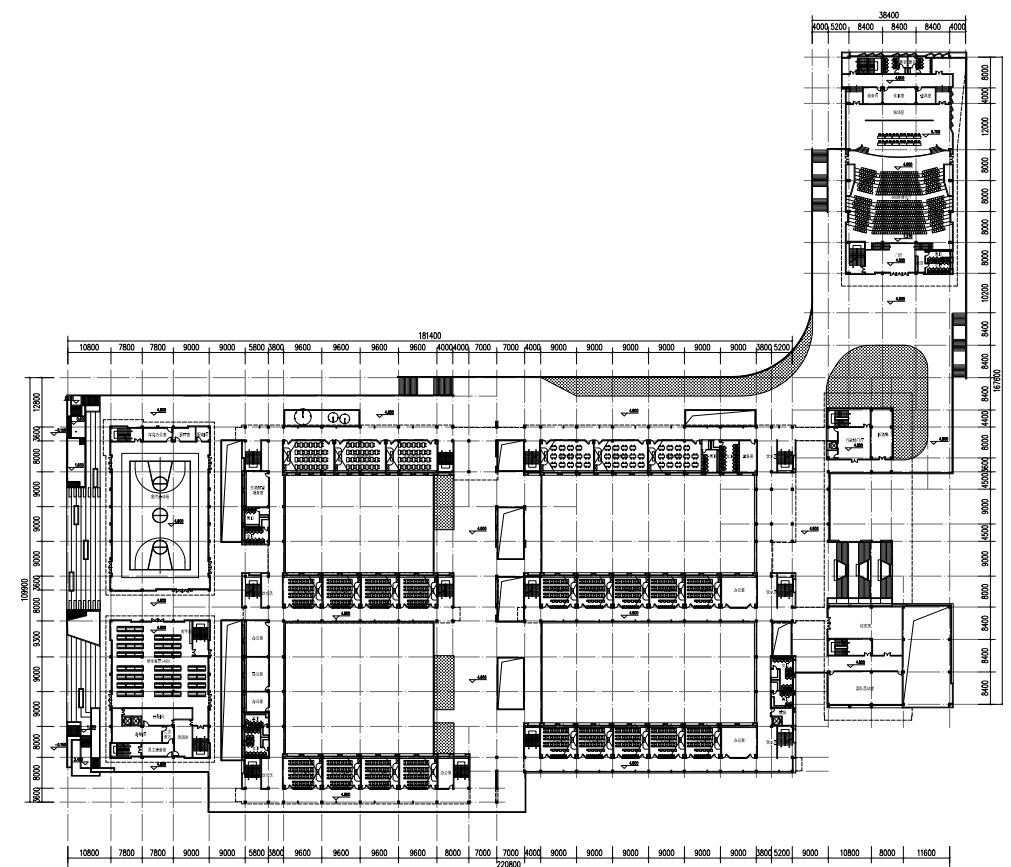
DD (Permit Drawing of Teaching Buidlings)

The project is situated in Huishan District, Wuxi City, to the south of Tianjin Road and west of Shicheng Road. The project land is divided into two phases: Phase I and Phase II, with Phase I covering an area of approximately 93,966.4 square meters. The design objective is to create a diverse campus space that reflects human-scale and promotes campus culture. The landscape design is tailored to the local environment, taking into account natural surroundings, topography, and landforms, while highlighting the cultural characteristics of the region.

The school comprises both primary and middle schools, with teaching buildings connecting to playgrounds, libraries, office buildings, and dormitories. The parking lot is designed as underground garages, and the image environment and behavioral environment are harmoniously combined to create an atmosphere of environmental education.



Teaching Building- View Along River
Modeled and Rendered by Jean | Sketchup+Lumion



Permit Drawing Sample: Second Floor Plan
Jean, Qingsheng Song, Xinxin Yuan | AutoCAD (Unit: mm)

03 ADMINISTRATIVE SERVICE CENTER OF XISHAN DISTRICT

—— *Governmental Building*

Office Project | 2021, Bid Proposal

Floor Area: 70350m² | Plot Ratio: 2.98

Location: Wuxi, China

Supervisor: Ye Qian

Work Scope: AD (Modeling, Rendering)

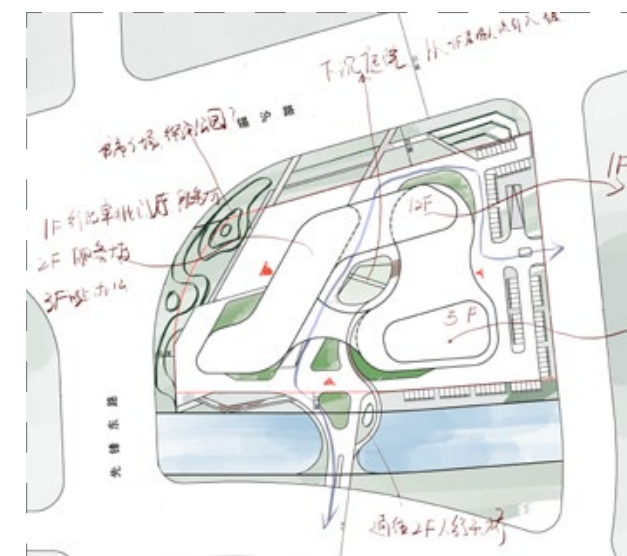
The project is situated at the intersection of Xihu Road and Xianfeng East Road in Wuxi City. This project is a multi-functional center that brings together more than municipal committees, offices, and bureaus to provide residents and enterprises with a comprehensive range of one-stop services including people's livelihood.

One of the main features of this project is its unique shape design, inspired by the majestic Xishan Mountain. The design incorporates the concept of a landscape city, which is intended to create an eco-friendly and sustainable urban environment that blends harmoniously with the natural surroundings. The building's layout is designed to enhance its functionality while also creating an attractive and inviting space for the public to visit and interact.



Bird-Eye View

Jean | Rhino+Lumion



Concept Sketch

Ye, Jean | CAD+iPad



Overpass

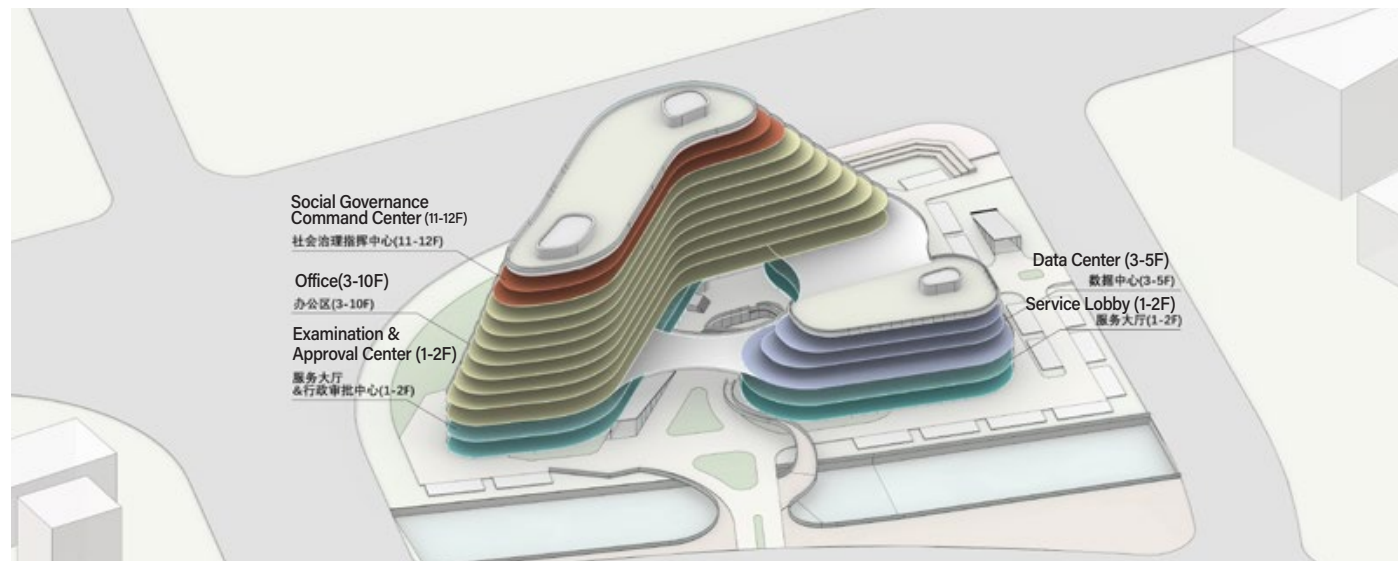
Connection between services

Central Plaza

Hub for Service Navigation

Entrance Bridge

Direct Guidance to Service Lobby on the 2nd Floor



Programming
Jean | Rhino + PS



Concept Sketch
Jean | Rhino

04 WUXI SUNLANT[®] BIOTECH HEADQUARTERS

—— *Research Center*

Office Project | 2021, to be constructed in 2023

Floor Area: 61698m² | Plot Ratio: 1.49

Location: Wuxi, China

Supervisor: Jingxin Hao

Work Scope: AD (Programming, Facade Design, Modeling, Rendering)

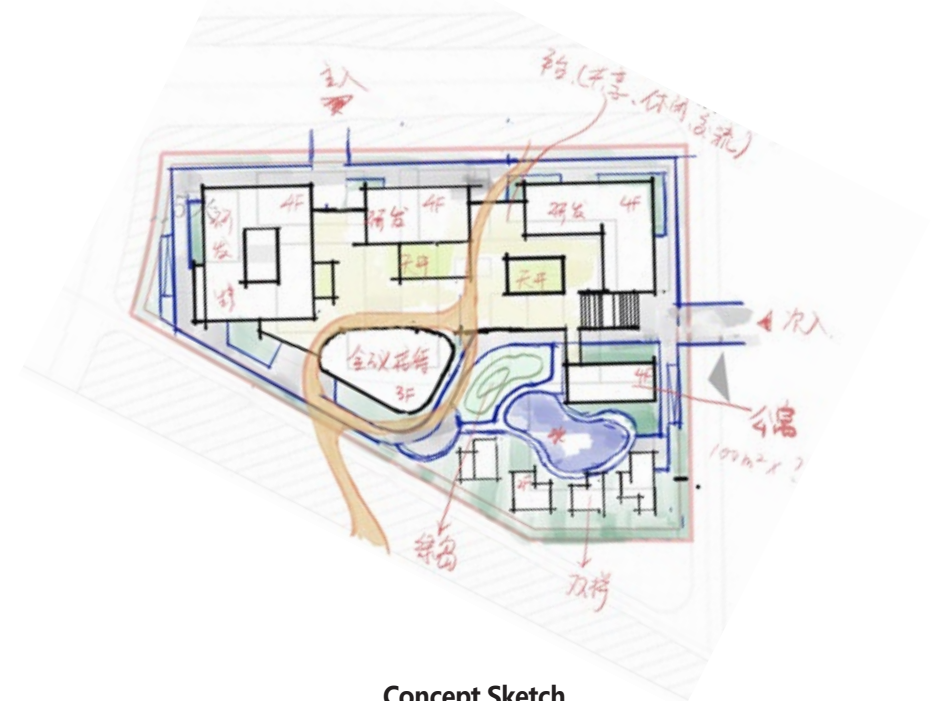
The project is situated in Mashan Street, Binhu District, Wuxi City. It covers an area of approximately 33,805 square meters and is surrounded by Shuichan Road in the west, Xiaguang Road in the north, Nanhuan River in the south, and Guihua Road in the east. The Jianshi medical project, which is under construction, is located on the north side. The project will establish a high-end medical device production base, R&D headquarters, training base, and trading company headquarters.

The most notable feature of the design of this science and technology industrial park is that the park serves as the center, with a core corridor that penetrates into the arterial roads of the surrounding cities. The building functions include a scientific research office area and expert building & academician workstation. After several rounds of revisions and customer reviews, the project is now at the construction drawing stage and is expected to commence construction in 2023.



Bird-Eye View

Jean, Hu Xiao | Rhino+Vray



Concept Sketch

Ye, Jean | CAD+iPad



Perspective from Main Road
Jean, Hu Xiao | Rhino+Vray



Apartment & Office - South View



Conference Center - West View



3-story academician home workstation- West View



Main Office Building - Main Entrance View



Main Office Building - Yard View



Main Office Building - Secondary Entrance View



More Facade Proposals
Jean | Sketchup+Lumion

E V E R M O R E .

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