

CONFIRMATIVE PRAXIS REPORT

Assignment Title : *Pavilion design*

Name of work : *Future Tense*

—— *Future waterfront landscape space*

Research contents : *The landscape design of waterfront cities in the future is the harmonious coexistence of pavilions, human and natural landscapes.*

From 2021 to 2022

Design by Yilin Zhou/2106219

Name: YiLin Zhou / Elin

Student ID: 2106219

Major: Environment Design

Professor: Ryan Stuckey

2022.07.15



Pavilion design

01 First stage

2022.01.27—2022.03.31

Preliminary attempt of pavilion design

02 The second stage-Part A

2022.04.01-2022.05.19

Construction of new ideas about pavilion design



Completion Schedule Timeline

03 The second stage

2022.05.19-2022.06.16

Pre-phase Analyses

Design concept—sketch stage

Deepening design—Conception of main landscape

04 The third stage

2022.6.16-2022.07.15

Improve and perfect into the project

2022.01.27—2022.03.31 (First stage)

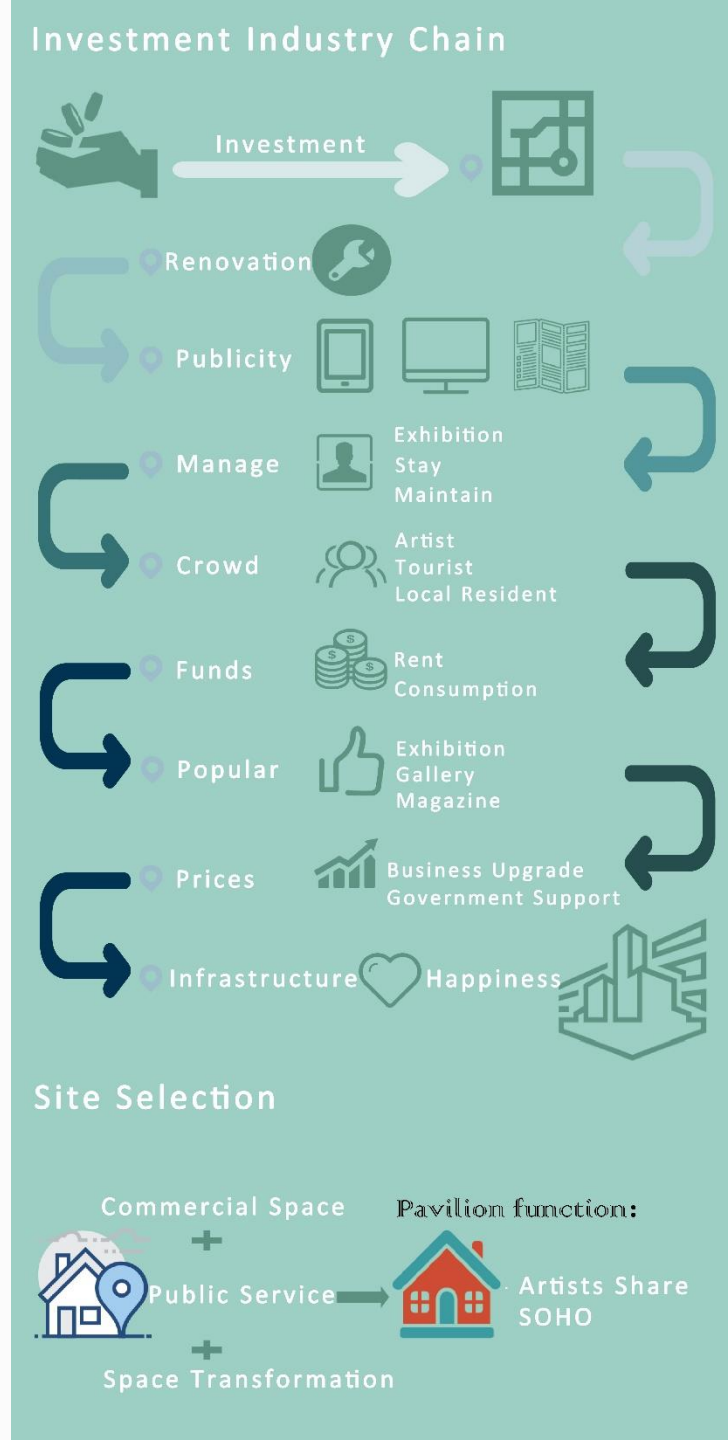
Preliminary attempt of pavilion design



Preliminary attempt of pavilion design

Starting from the new needs of residents, artists and tourists for the old urban area, the establishment of artist sharing Pavilion can reconstruct the relationship between people and space and between people, activate the spatial vitality of the old urban area, and improve people's sense of life happiness, neighborhood belonging and urban integration.

Therefore, I hope that through renovation and publicity, a small but reproducible soHo pavilion with functions of art exhibition, work and residence can be established for artists, tourists and local residents to share SOHO pavilion.



Preliminary attempt of pavilion design



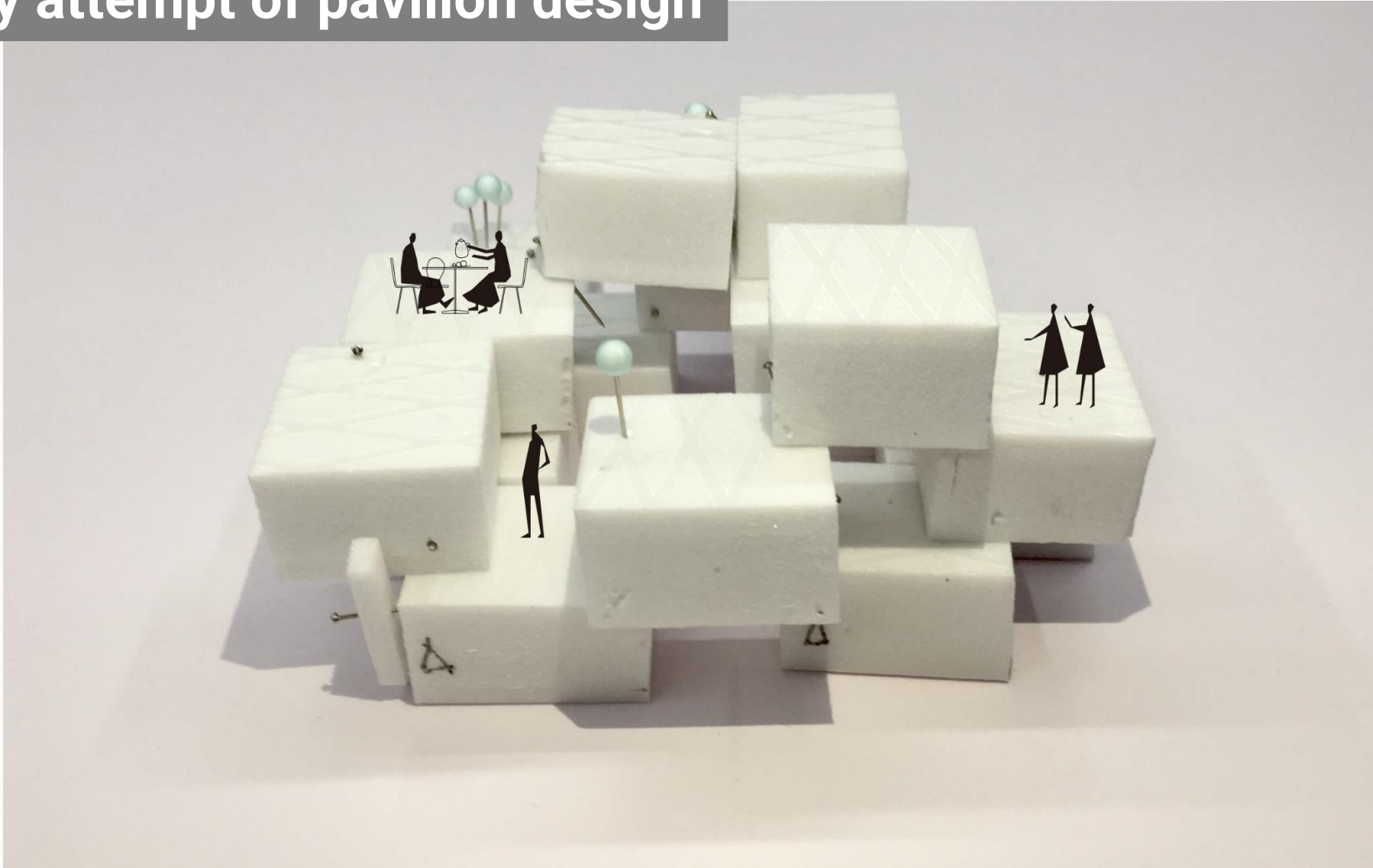
Pavilion



Reproducible functional area

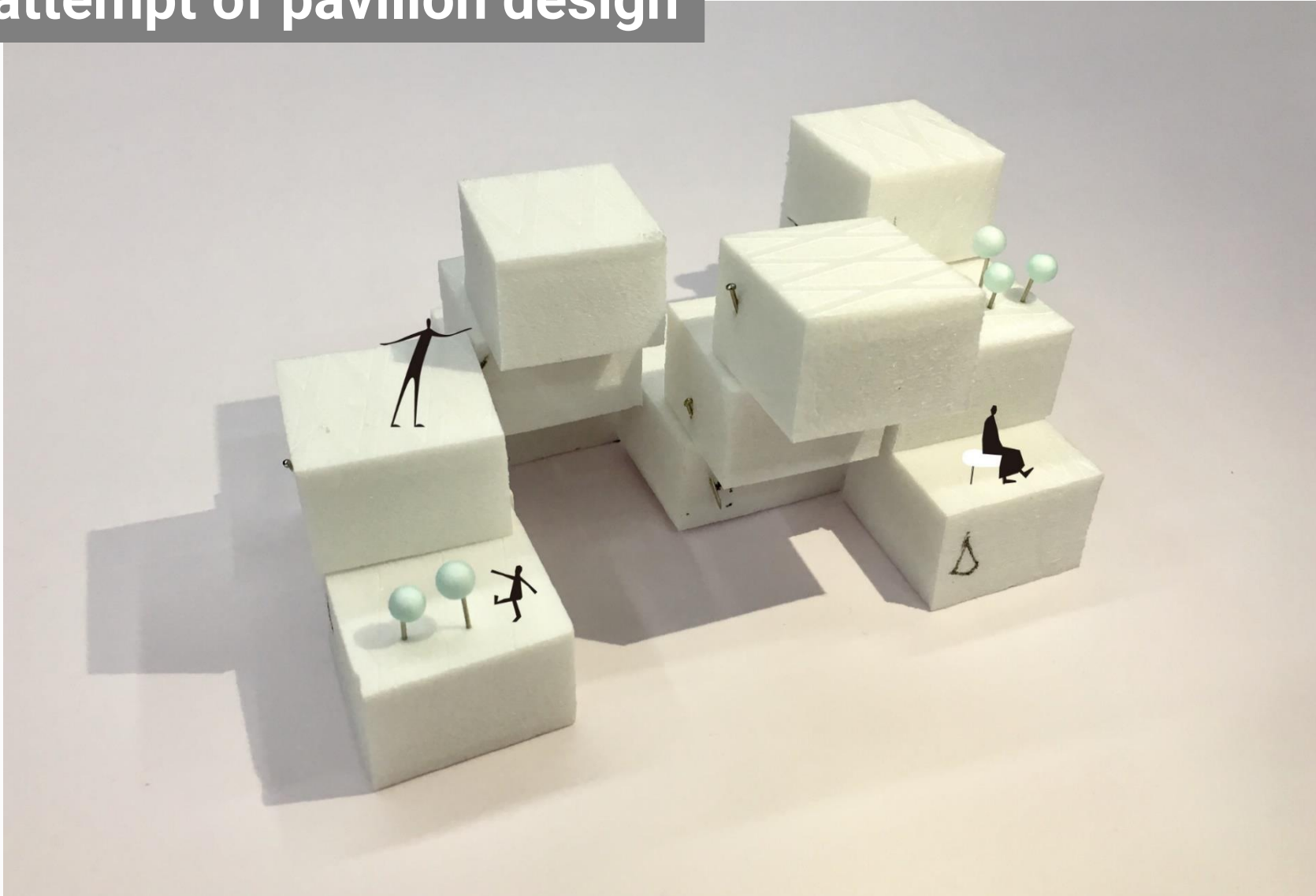


Preliminary attempt of pavilion design



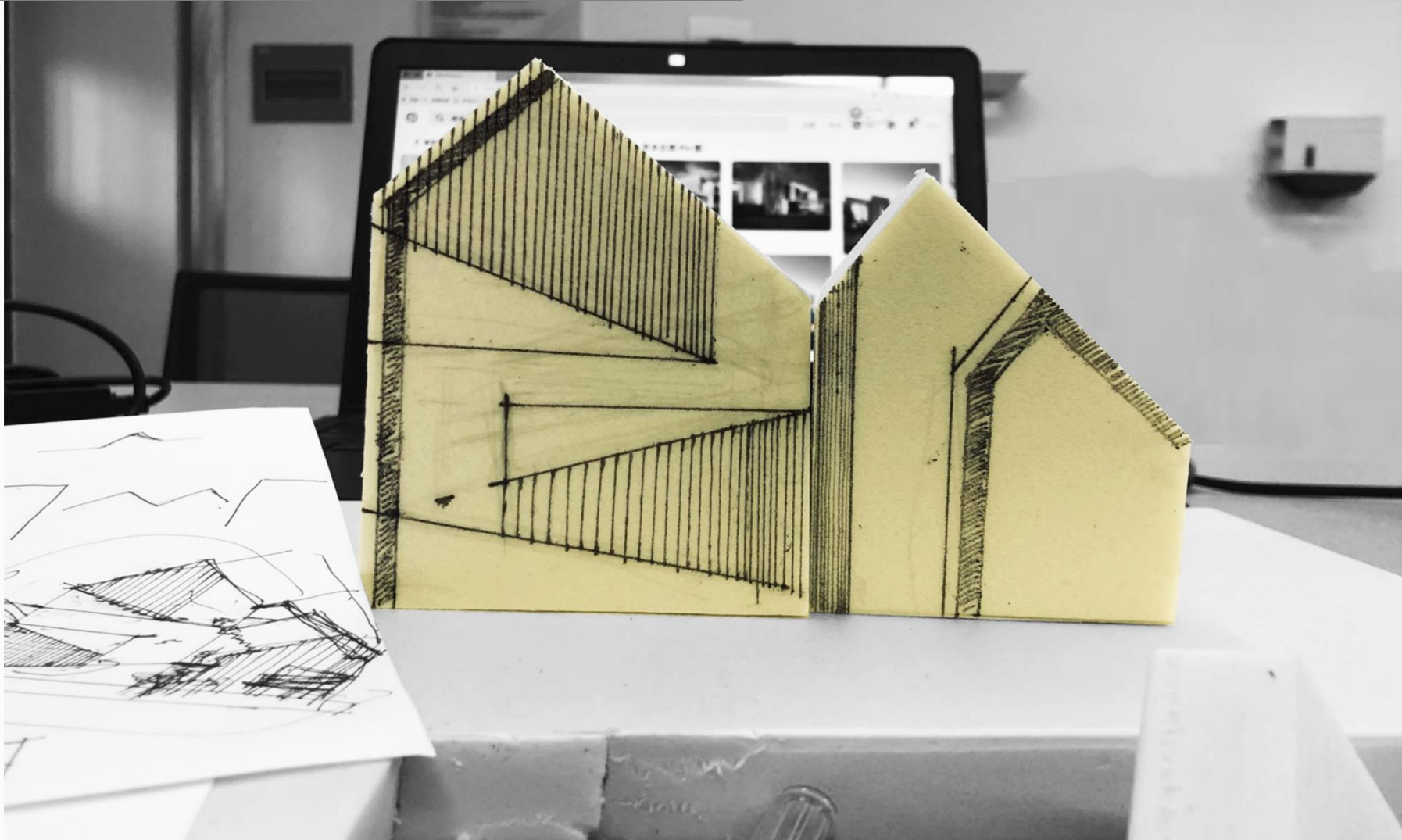
Model attempt of replicable / movable area

Preliminary attempt of pavilion design



Model attempt of replicable / movable area

Preliminary attempt of pavilion design



Preliminary attempt of Pavilion model

Preliminary attempt of pavilion design



Preliminary attempt of pavilion design

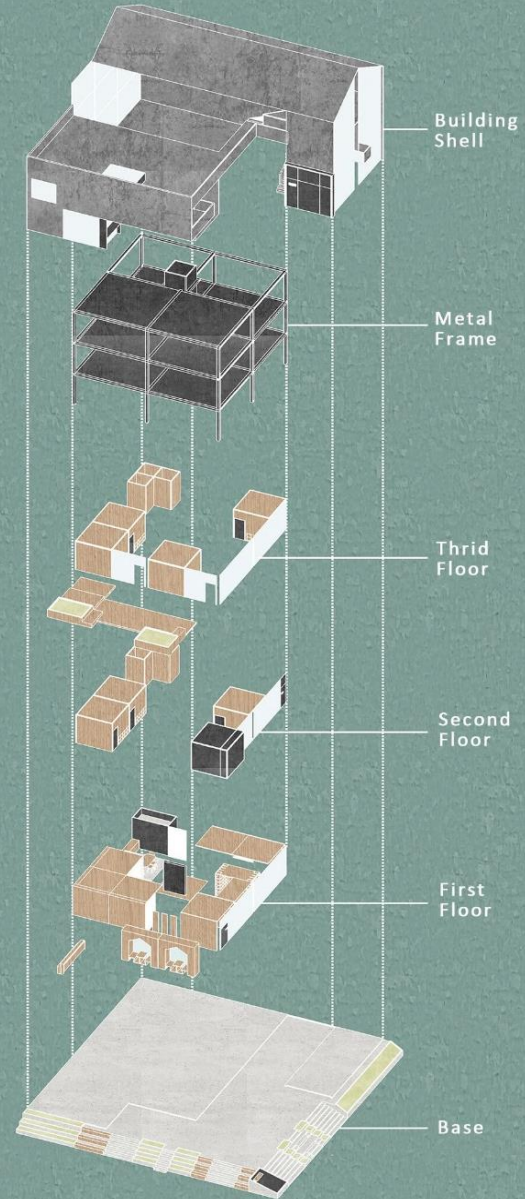


Reproducible functional area



The Yellow parts are all moved and can be placed separately on the site around Tanhualin street, giving functions according to the site requirements to form a new pavilion.

Other parts cannot be moved and are fixed.



Layer Analysis:

The top floor is the external structure of the pavilion.

The second floor is the inner metal frame of the space.(Because the internal space is stacked in the form of "boxes", the metal frame is needed as the local support.)

The third floor is the interior space on the third floor,

The fourth floor is the interior space on the second floor,

The fourth and fifth floors are the interior space on the first floor, including vertical Art Museum and coffee shop,

The bottom floor is the base of the pavilion.

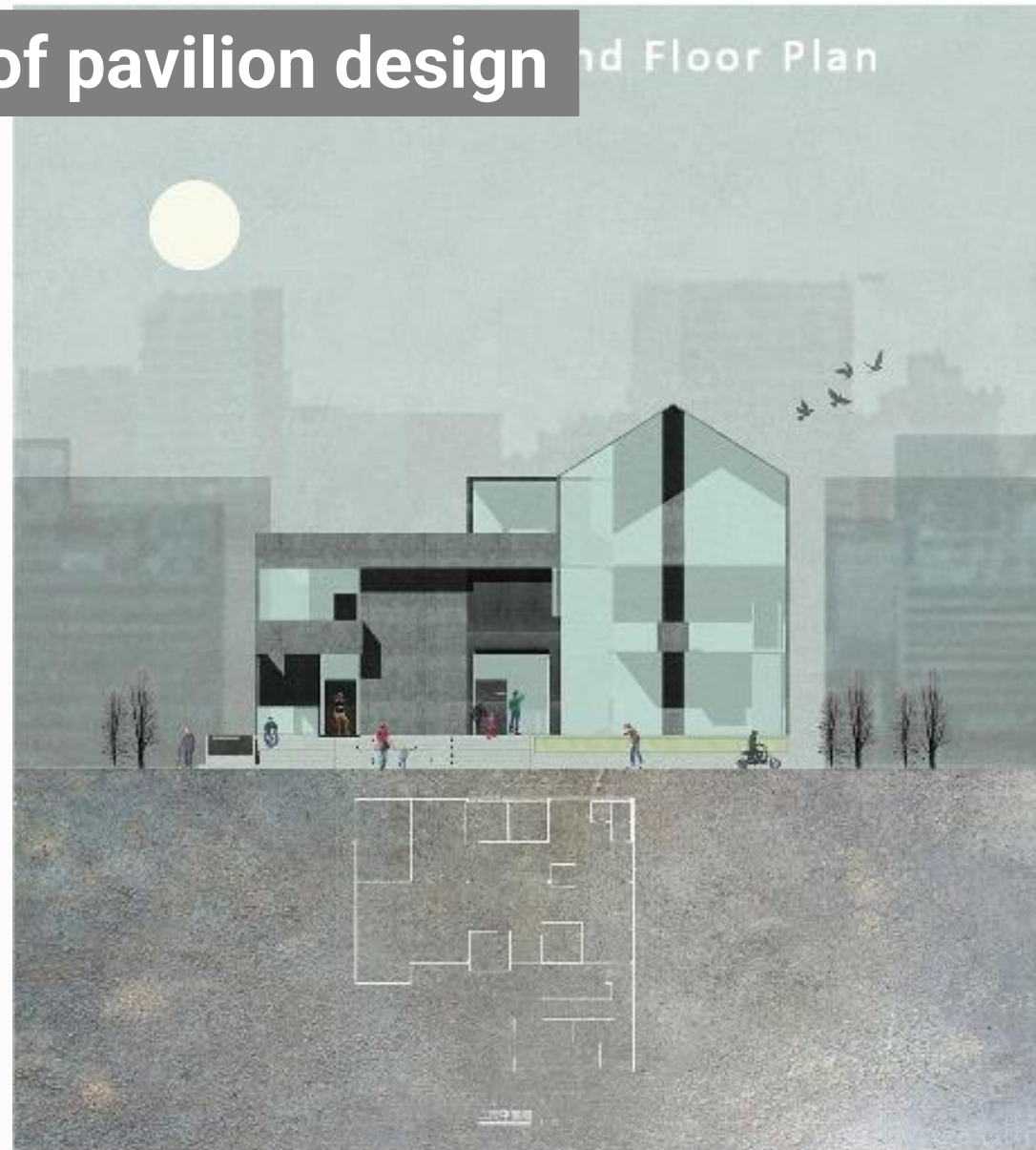
Explosion Analysis

Preliminary attempt of pavilion design



Functional layout of Pavilion——First floor

Preliminary attempt of pavilion design



Functional layout of Pavilion——Second floor

Preliminary attempt of pavilion design

Floor Plan



Functional layout of Pavilion—Third floor

Preliminary attempt of pavilion design



Rendering——Vertical Art Museum

Preliminary attempt of pavilion design



Rendering——Artist Studio on the first floor

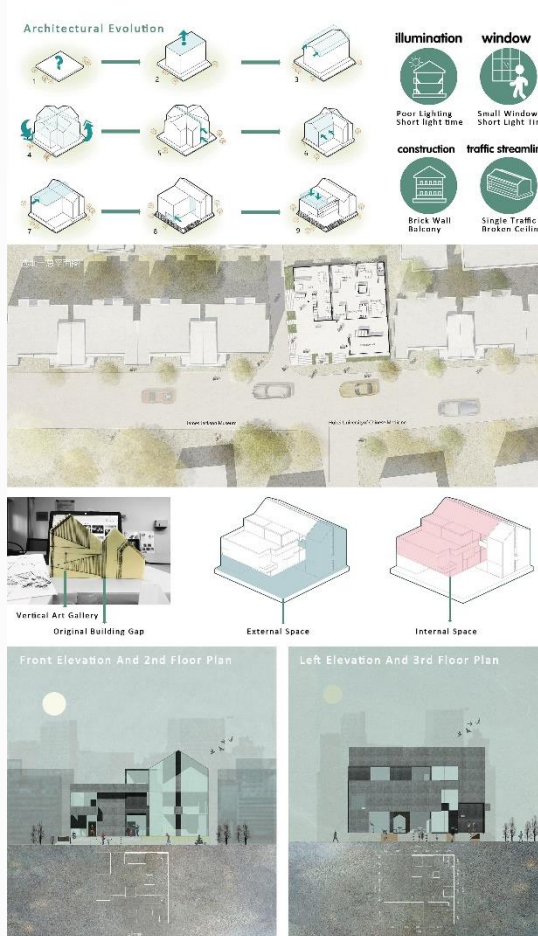
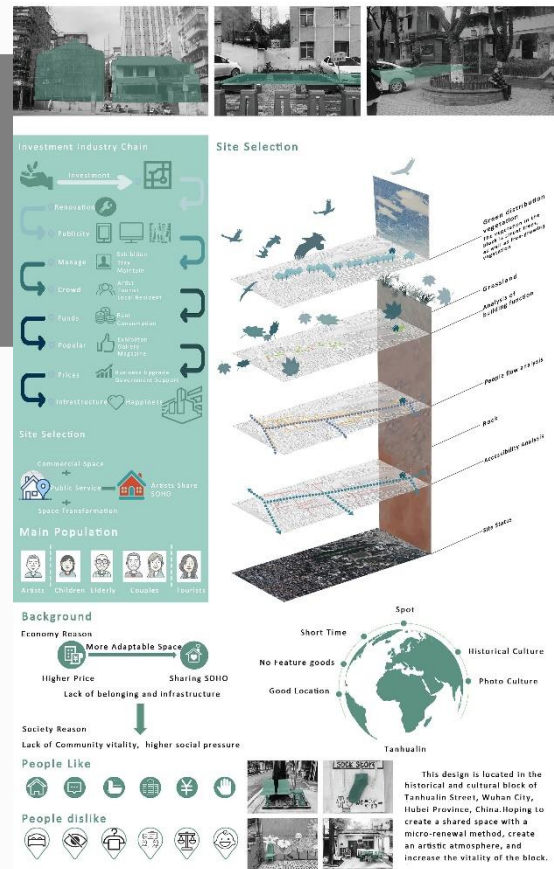
Preliminary attempt of pavilion design



Rendering——Artist Living area on the second floor

Preliminary attempt of pavilion design

Sharing · Micro-Updating



New idea and Birth of the new project ...

2022.04.01—2022.07.15

Construction of new ideas—Complete the project

2022.04.01——2022.05.19 (The second stage-Part A)

Construction of new ideas about pavilion design



Construction of new ideas

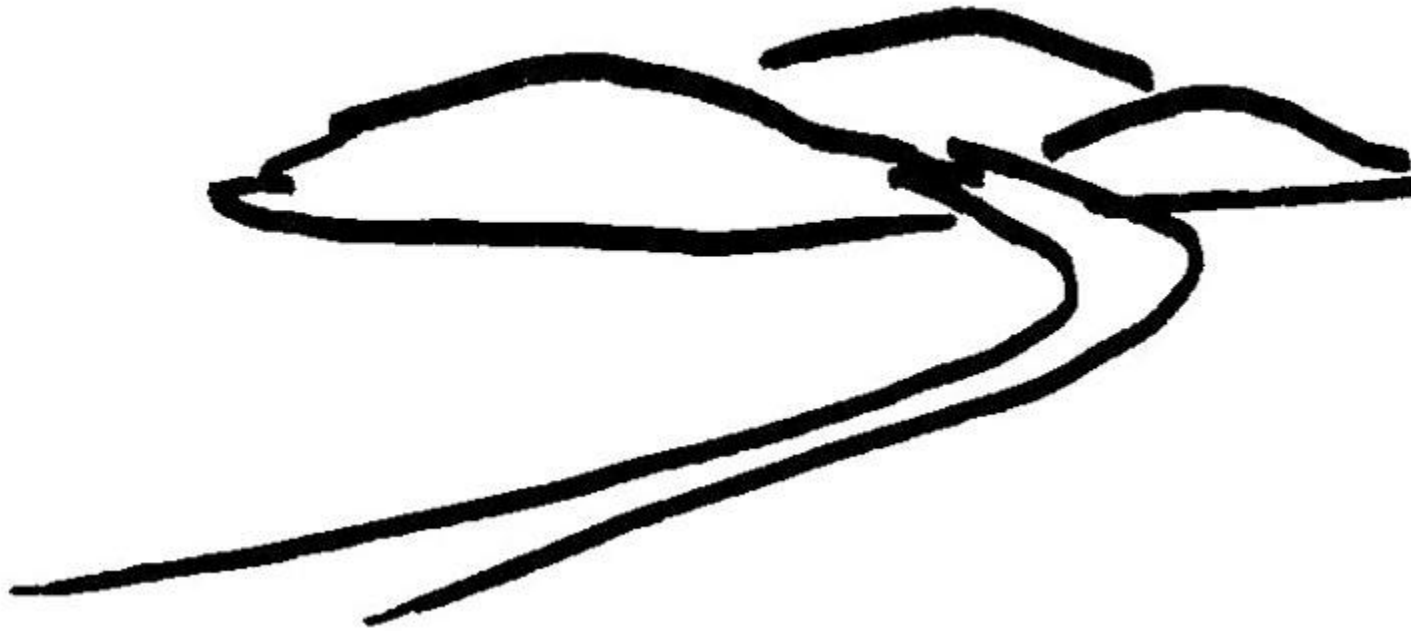
Why did I choose to change a site to continue to deepen the design of the pavilion?

During the holiday some time ago, my family and I went to Jiangtan, Wuhan, which is a tourist attraction, but I found that as a tourist attraction, there are very few people here, and according to the current situation, the site has many problems.

Therefore, I want to plan and design the pavilion in the future according to the existing problems. It is hoped that through the design of the riverside Pavilion, more people will be attracted to this place and the local vitality will be restored.

Occasionally, I also searched a large number of design cases related to Coastal cities and cities along the river. This case brightened my eyes, gave me a lot of inspiration, and gave me new ideas on pavilion design.

Case analysis



This is a landmark architectural design of an island city.

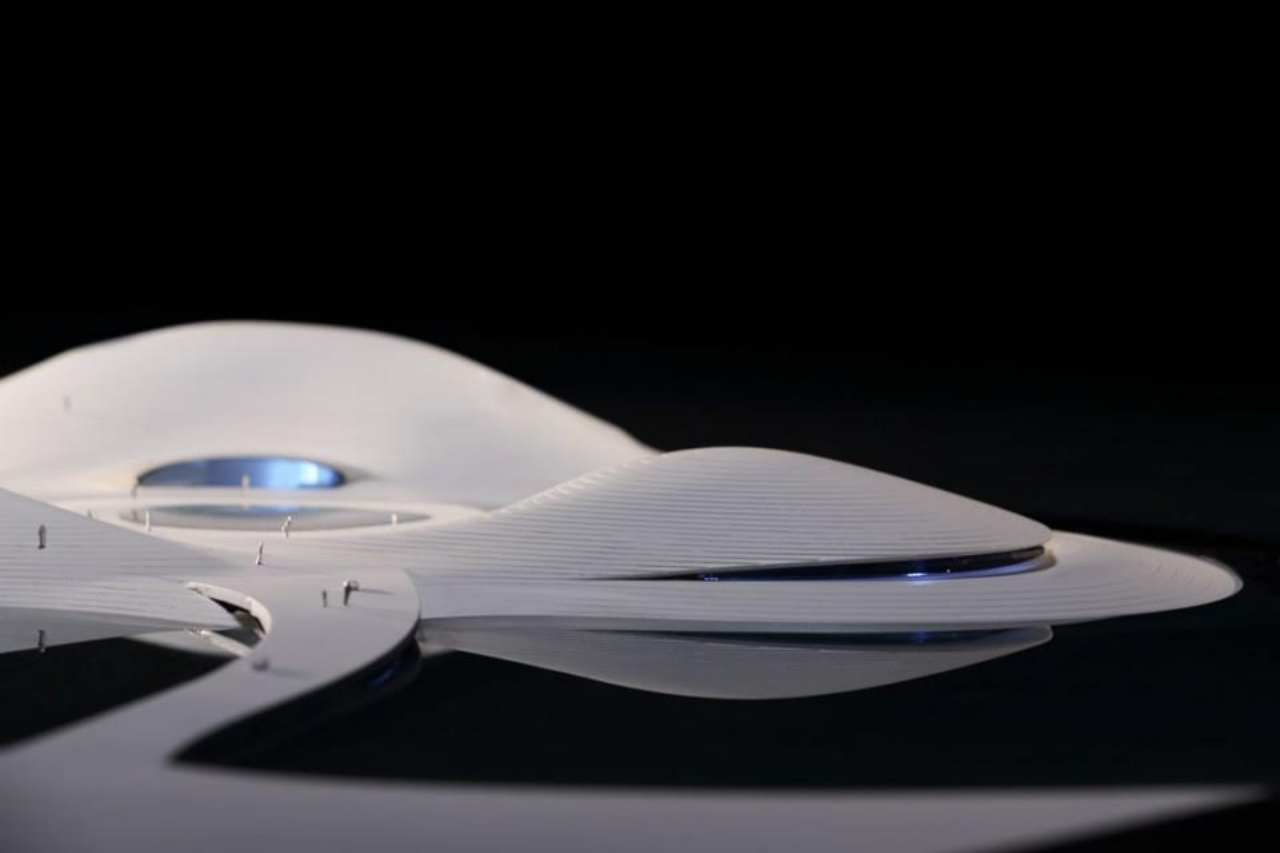
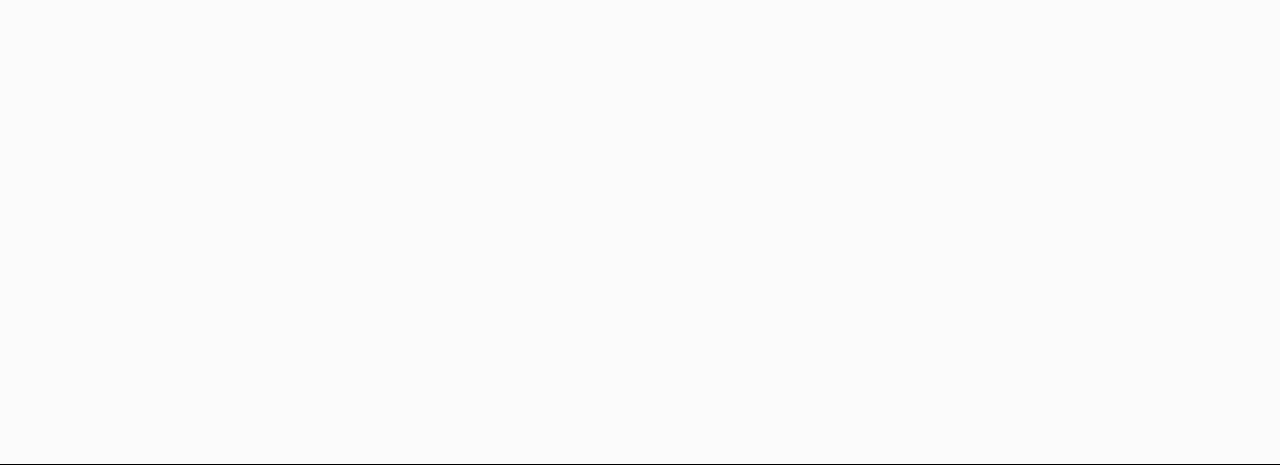
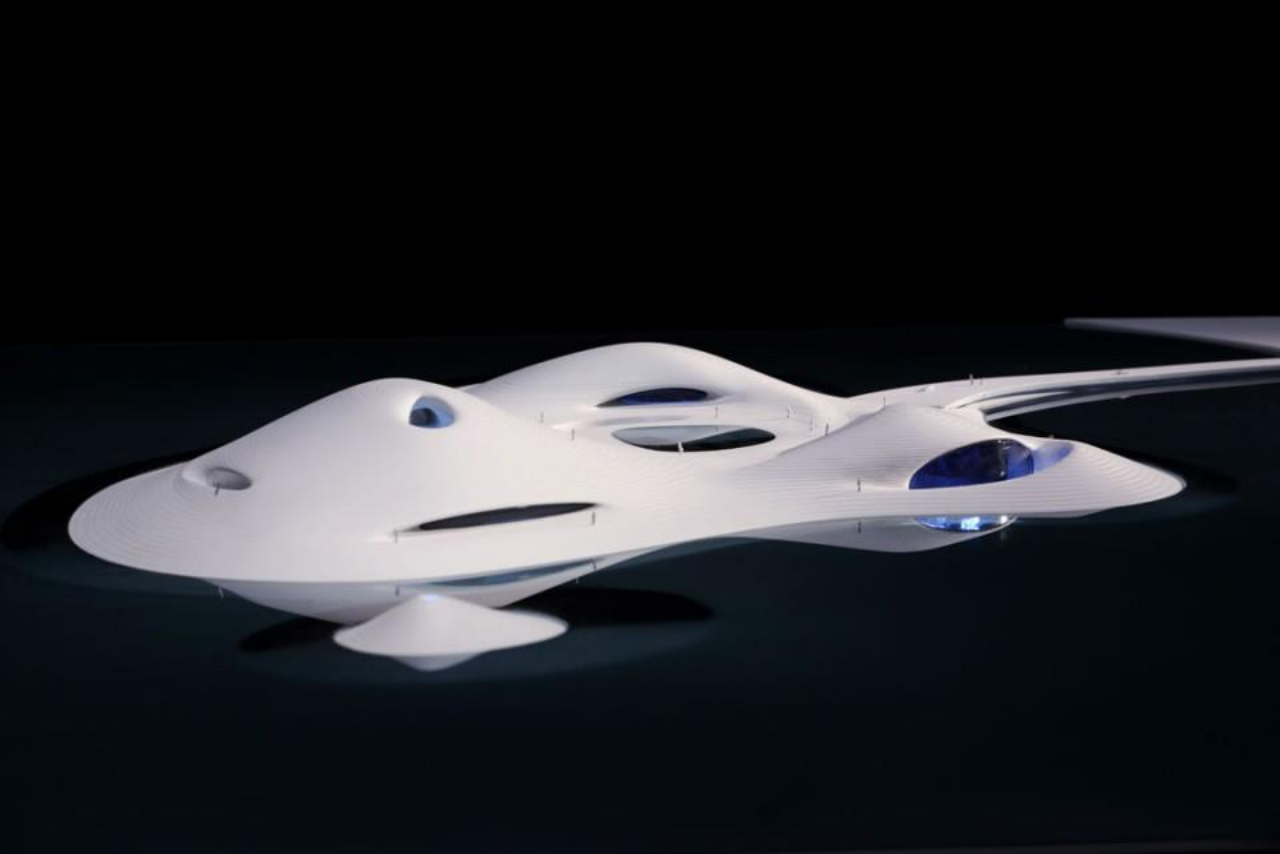
A slightly undulating trestle connects the mainland, human and nature, city and culture, history and future. It is a long-lasting land landscape in the water. It restates the birth of this island in ancient times and reflects the unique environmental style of the local area.



Rendering



Rendering



Rendering



Rendering

Construction of new ideas

Why did I choose to change a site to continue to deepen the design of the pavilion?

Through the analysis of this case, I think a good pavilion design needs to be combined with the landscape, terrain and cultural characteristics around the site, which can reflect the cultural style of the selected site.

At present, the pavilion design I have done only meets the rationality of the function and does not reflect these aspects. Therefore, I want to re-optimize my pavilion design scheme.

Construction of new ideas

What will I do next?

When I conducted research on the site, I found that the location and size of the site could not support my existing ideas. As for my current design, I feel that I am only satisfied with the function, and the appearance of the building is only copying the surrounding buildings, without certain innovation.

Therefore, I now want to choose a slightly larger site, so that the pavilion can become a landmark building in Wuhan. I think it has more possibilities for innovation. Just like the case I just shared, it can make the pavilion more interesting.

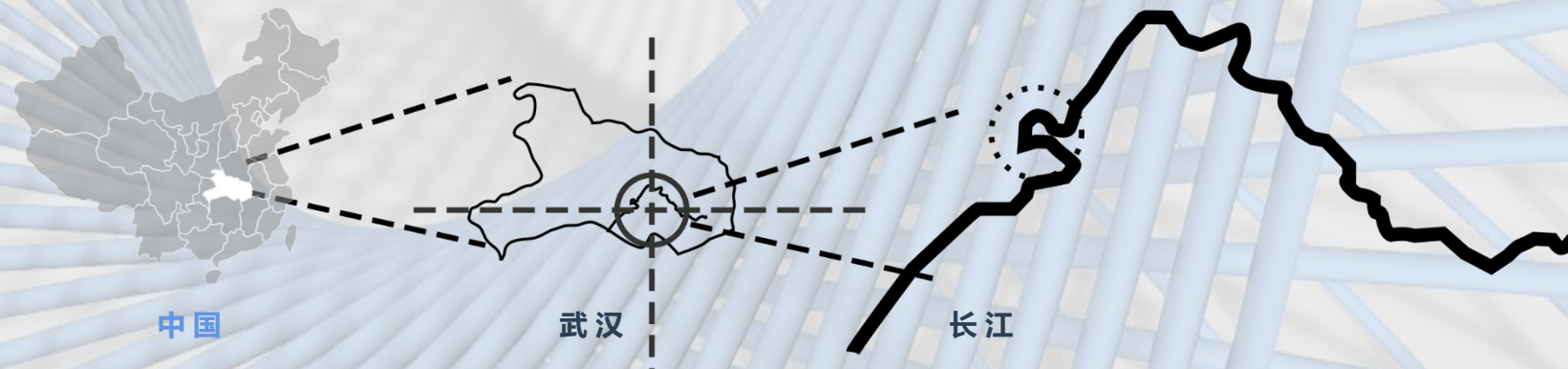
But in the research at this stage, it can not only meet the functions, but also form a breakthrough in form, and can be combined with the site I choose.

Moreover, the pavilion design should not only consider the architecture, but also with the landscape, terrain and Combination of cultural characteristics. . It can describe the landscape design of open space in a future waterfront city. It is not only architecture, but also the harmonious coexistence of landscape, human and nature. Therefore, I decided to change a venue and continue to deepen the pavilion design to make the pavilion design more mature.

Plante Analysis+

Location analysis1

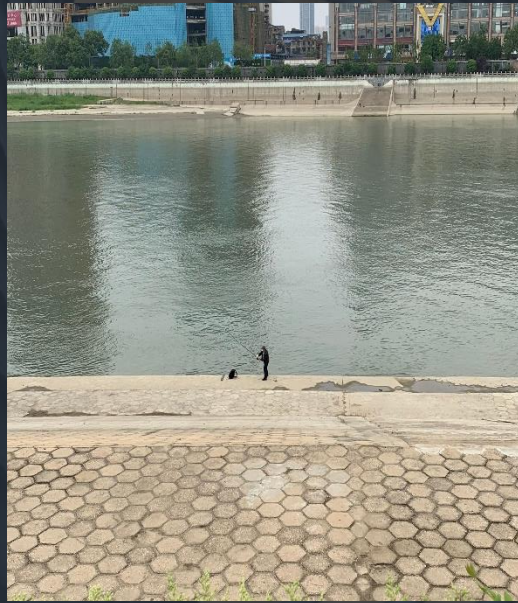
SITE ANALYSIS 1



The site is located at Nan'anzui park along the Yangtze River in Wuhan, Hubei Province.

Specific location of site selection





Site investigation

The site is located at Qingchuan Bridge, linking nananzui Park and Jijiazui wharf in Wuhan, Hubei Province.

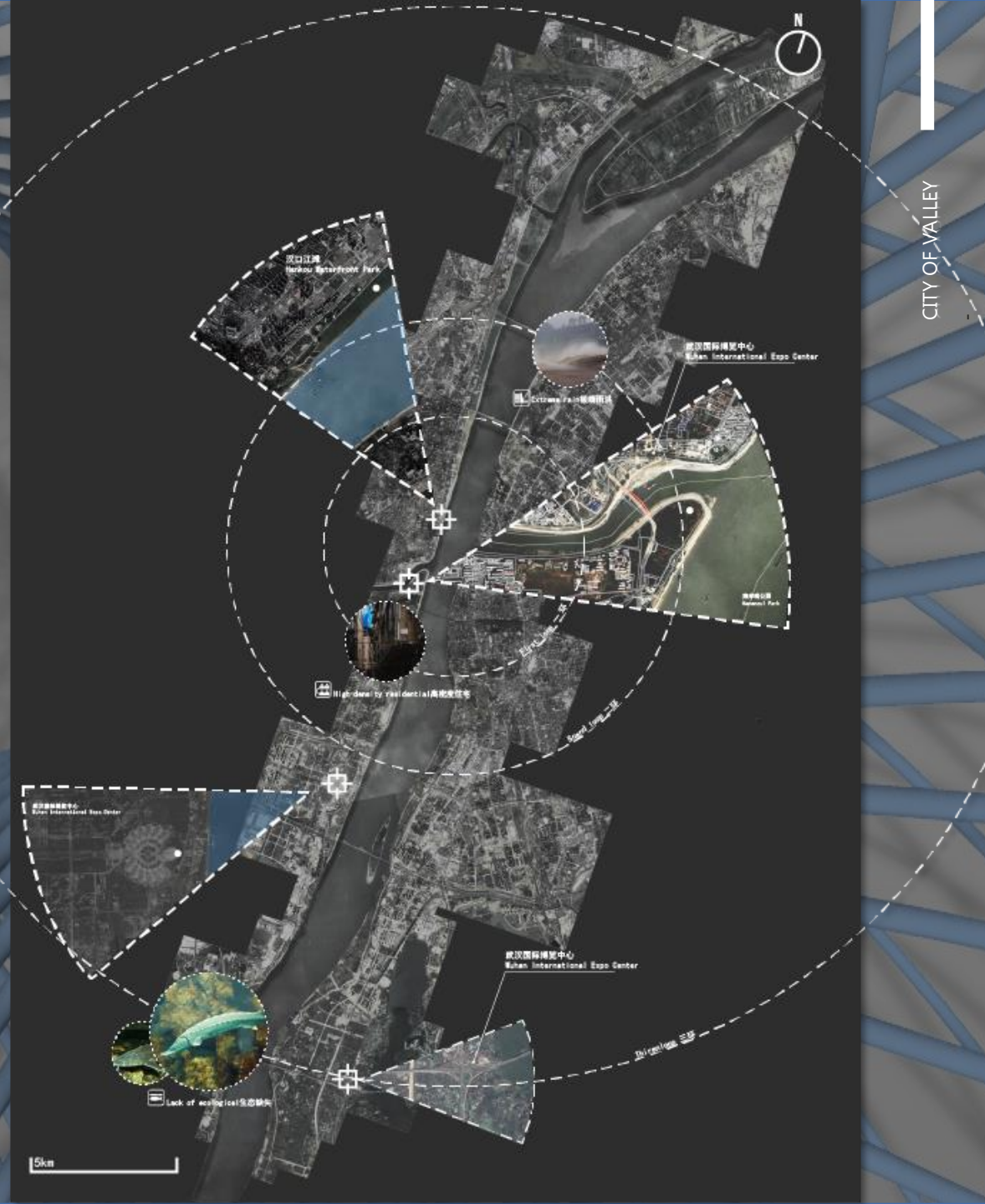
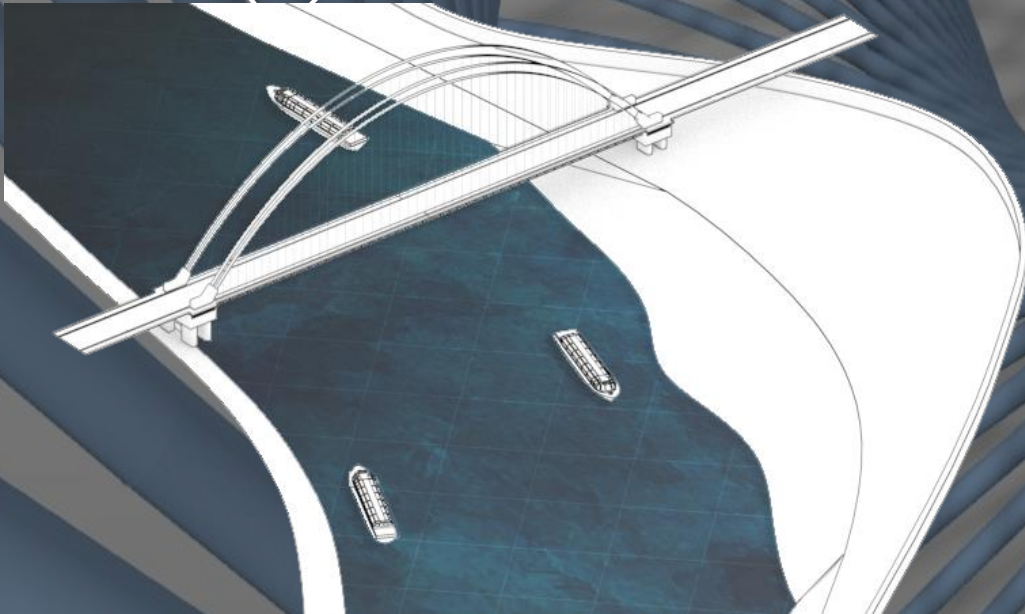
Existing problems of the site:

1. The site is empty and the facilities are aging
2. Lack of function
3. Lack of beauty and characteristics
4. Single Ecology & environmental issues
(Low greening, Ecological deficiency)
5. Lack of interaction between human and environment
6. Rain flood problem

Location analysis 2

The Site

I hope to form the corresponding landscape of both banks and rivers through the design of pavilions on both banks, forming the design of Pavilion, ecological revetment and landscape integration. Pavilions are only one element of this site and become a bright spot.



2022.05.19——2022.06.16 (The second stage-Part B)

Deepening design——Conception of main landscape



DESIGN CONTENTS.

01

PART ONE

主题解读

Theme Analysis.

02

PART TWO

设计方案

Design Project

03

PART THREE

整体展示

Overall display

04

PART FOUR

展板展示

Display board



01

PART ONE

主题解读 Theme analysis

[Read more →](#)

设计背景/ background

From 2020——Future



With the advent of 2020, this sudden epidemic situation once again awakens us to think about people's position in nature, and once again suggests how to coordinate the harmonious coexistence between human and nature.



Design Description - preliminary concept

The name of my work is future tense, which is a future waterfront landscape zone that breathes freely into the city. Like a valley in nature, it exists in modern cities. Based on the background of the outbreak of the epidemic in 2020, this plan is based on the Yangtze River culture of Wuhan, takes solving the frequent floods as the main starting point, integrates modern technology to create an active space atmosphere, and can arouse the emotional resonance between people and sites and make people, nature and waterfront space coexist harmoniously by building the future scene of Wuhan Yangtze River waterfront space.

Design Strategy — SMART LANDSCAPE CONCEPT

S: Sustainable

M: Multi Functional / Marketable

A: Alive / Adaptive (Dynamic / people-oriented landscape environment)

R: Resilience (Self resilience / resilient landscape)

T: Technology Driven

C: Culture (The historical inherent characteristics of the local city)



02. PART TWO

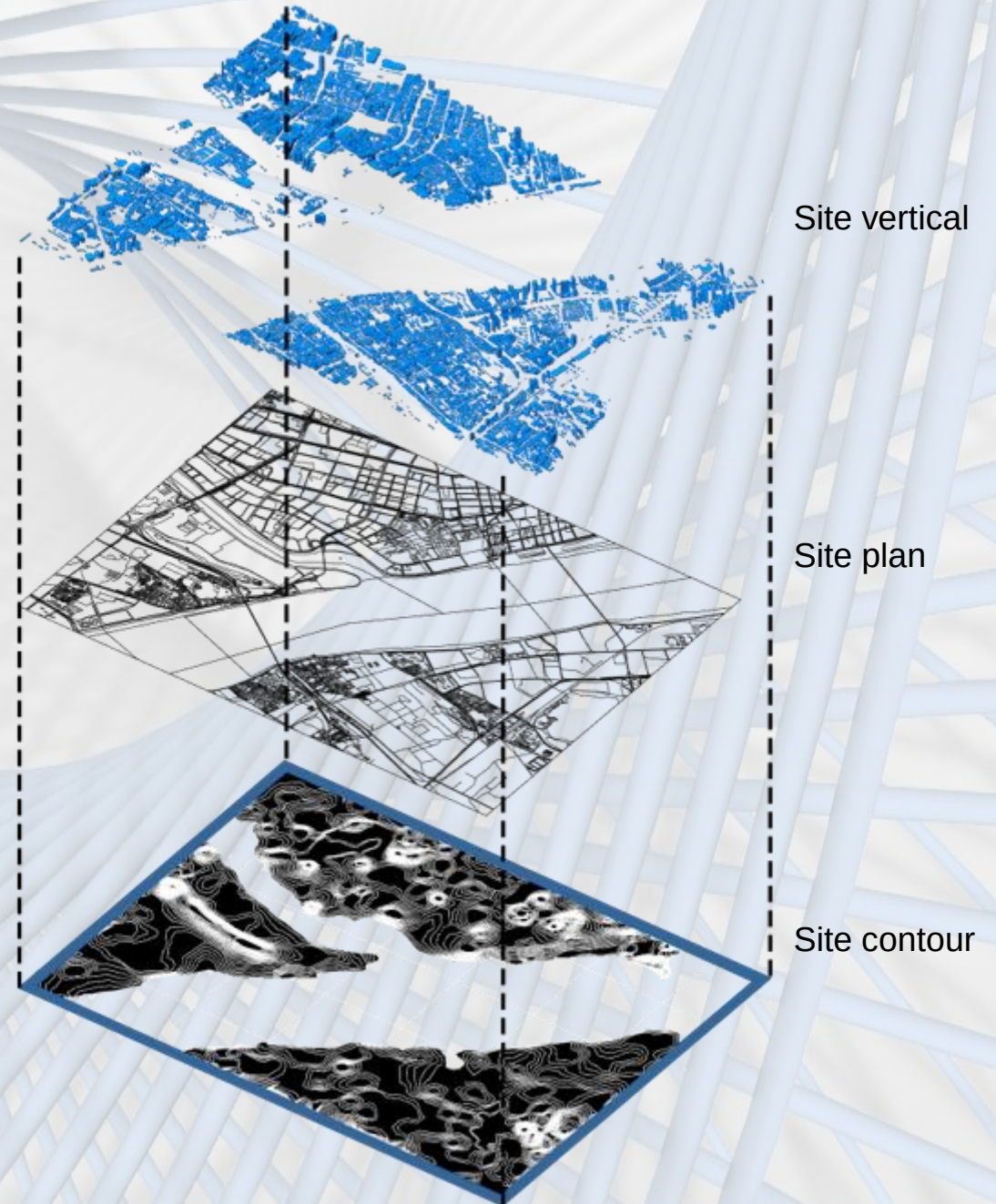
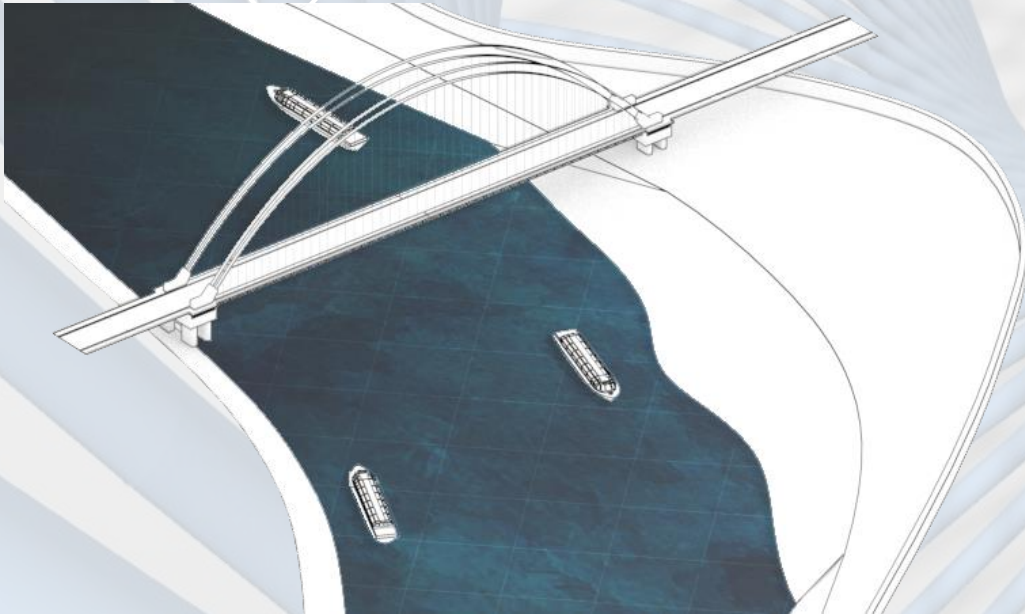
设计方案 Design Project
——Pre-phase Analyses

Axonometric analysis

The Site

Current situation of original site

Qingchuan Bridge links nananzui Park and Jijiazui wharf, forming the corresponding landscape of two rivers on both banks, forming the overall landscape of ecological revetment, viewing platform and park.



City Culture



武漢，簡稱“漢”，別稱江城，是湖北省省會，中部六省唯一的副省級市，特大城市

武漢地處江漢平原東部、長江中游，長江及其最大支流漢江在城中交匯，形成武漢三鎮隔江鼎立的格局，

據《漢口叢談》載：明嘉靖元年（1552），世子朱厚燠從鐘祥出發，經此赴北京繼承皇位，因此后人把皇帝經過的這個渡口稱為“接駕嘴”，后来因這裏碼頭多作轉運糧食之用，改稱“集家嘴”。

長江正源是一個寬闊的地理單元，它包括崑崙山至唐古拉山間的廣闊地域，

東西長約400公裏，南北寬約300公裏，總面積達10萬多平方公裏。

2018年5月18日，武漢中心城區遭遇短時強降水過程，1小時內降水量普遍超過20毫米。洪山區和東西湖區的雨勢強勁，金銀湖、華中師範大學等多個站點小時降水量超40毫米。

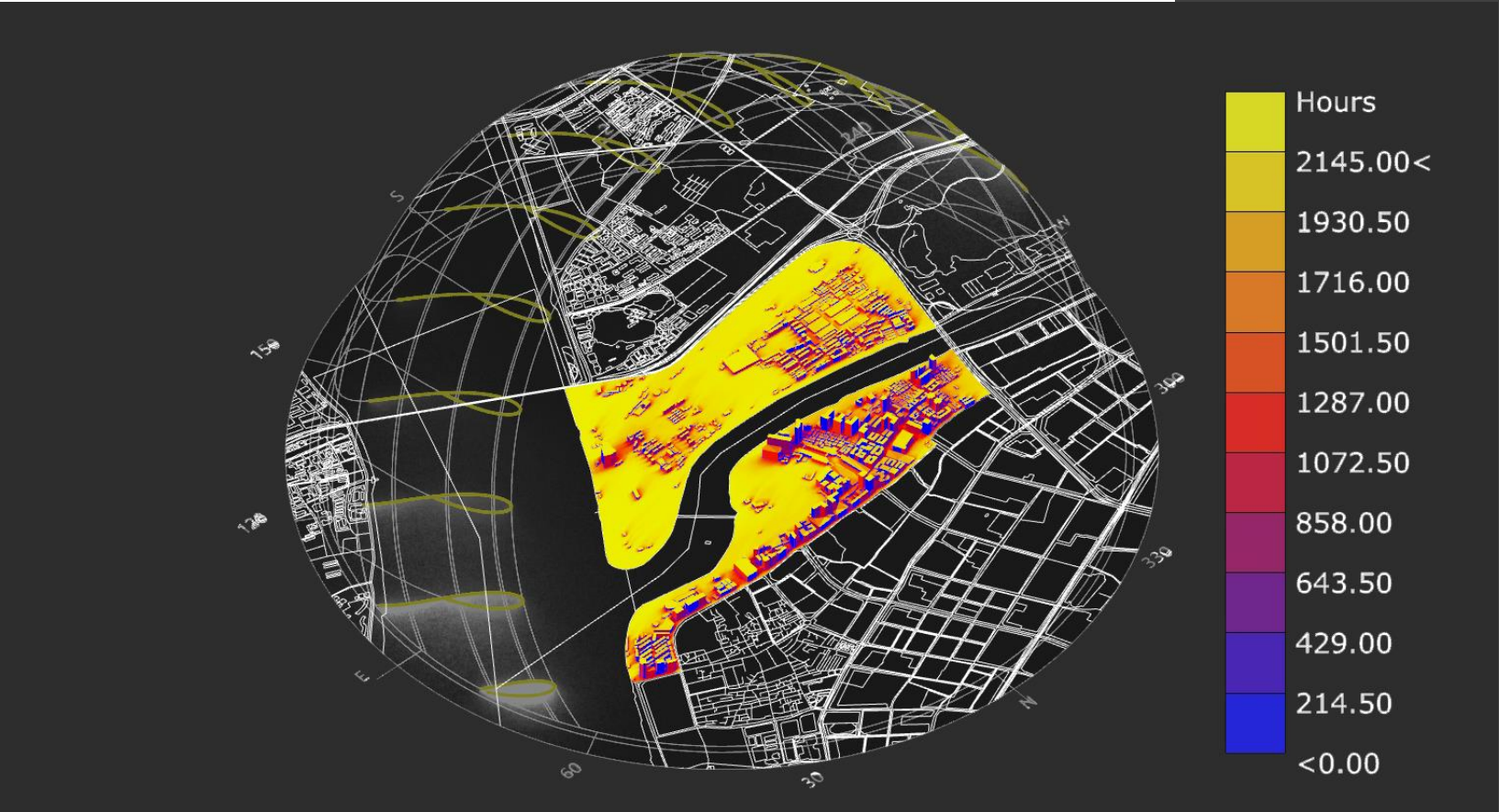
Urban characteristics



Wuhan urban characteristics

Humanities, food, scenic spots,
architecture and culture

Sunshine Analysis



场地日照时长

» Sunshine duration of the venue

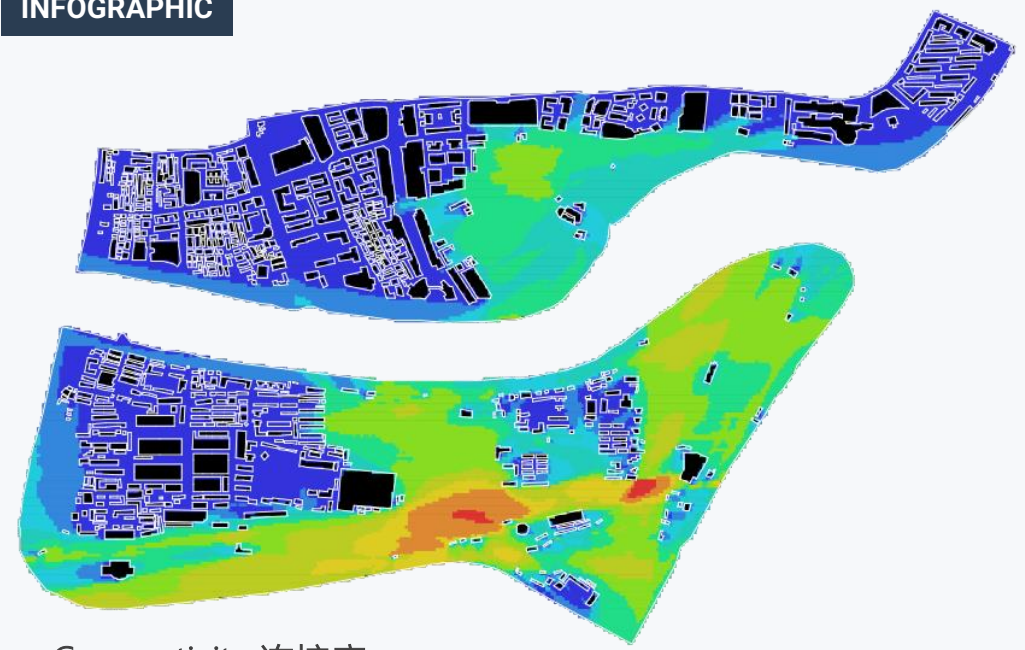
Use the Ladybug plug-in of the Rhino platform to download real weather data to simulate the daily sunshine of the venue. The distribution map is obtained. The waterfront area is unobstructed. The summer sunshine is long.

By analyzing the daytime sunshine in Wuhan from March to September, it is concluded that the longer the sunshine time in the yellow area is.

[Read more →](#)

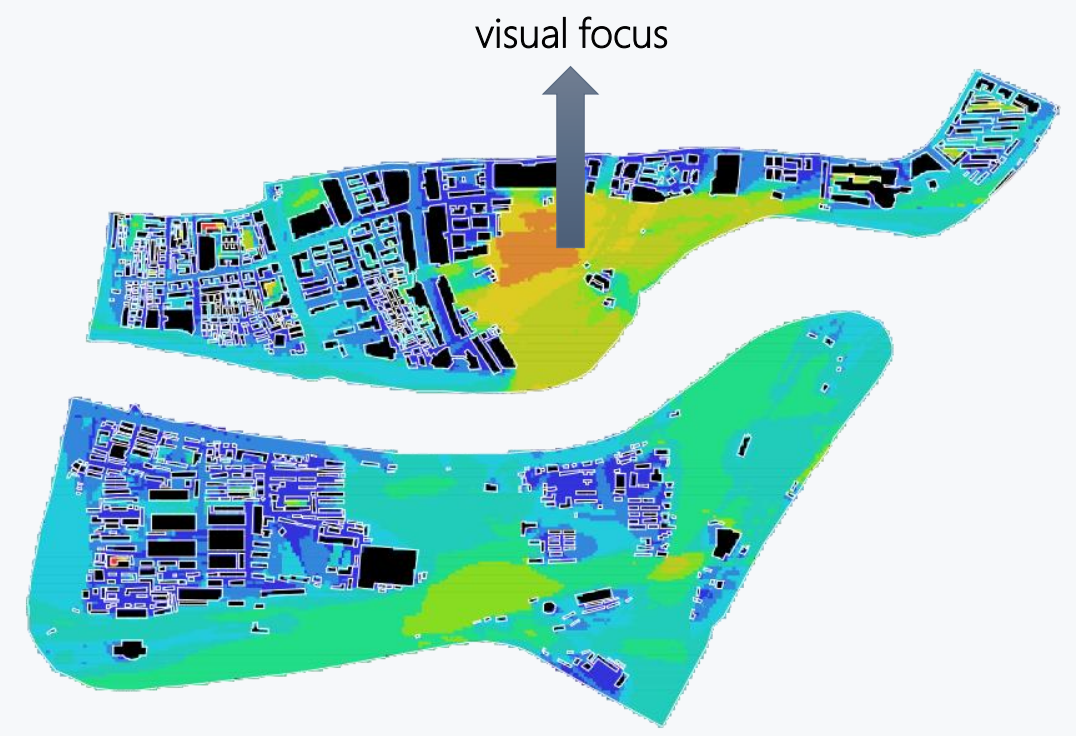
Space Syntax

INFOGRAPHIC



Connectivity 连接度

The importance of the site in the whole area
The probability of people passing in a certain area is high (how many people will pass here)



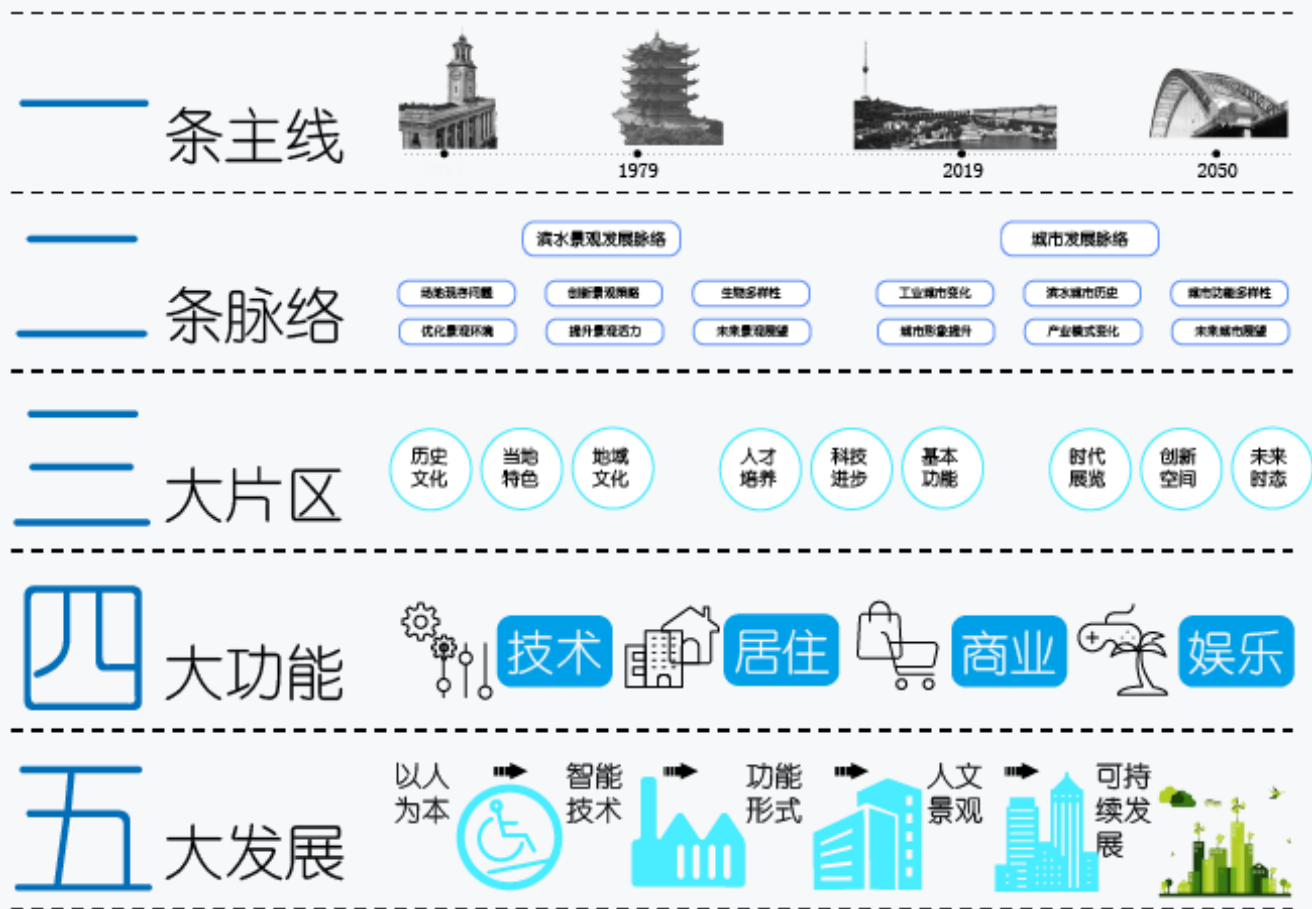
Visual Controllability 视觉可控性

The selected site can be seen by more areas (site visual center)

Through spatial syntax analysis, it can be concluded that the crowd on both sides of the Yangtze River is relatively dense, forming the main scene in the visual center. Therefore, the sites on both sides of the Yangtze River are selected for future landscape design based on the original sites.

DESIGN STRATEGY

INFOGRAPHIC



urban style and historical characteristics of Wuhan

reference to the future landscape development trend of the waterfront city

combine the functions of technology, residence, commerce and entertainment

combine the functions of technology, residence, commerce and entertainment

people-oriented, intelligent technology, functional form, humanistic landscape and sustainable development

Freehand sketch



Freehand sketch

Step1

Confirm site selection

Look for the central and important waterfront area of Wuhan

Step2

Looking for site opportunities - building future landscape

Analyze various elements of the site to find a design breakthrough

Step3

Setting main nodes - Scheme Implementation

Set entrances and exits and main nodes, generate paths and function areas

Freehand sketch



Step4

Deepening design

Form spatial form through paths and functional areas

Step5

Effect display

Display the final design results through effects

End

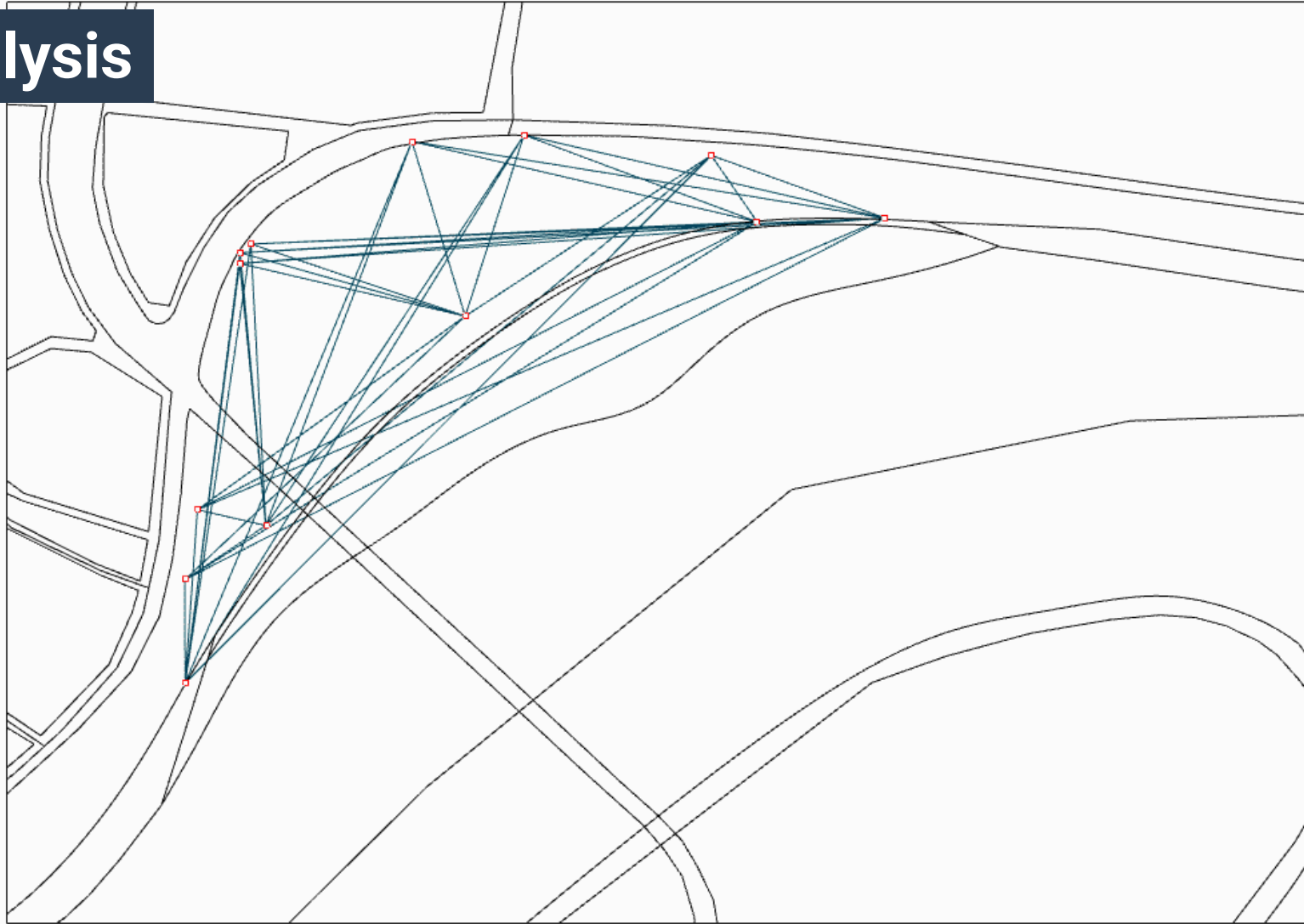
不足与展望：增强验证环节

2022.06.16——2022.07.15 (The third stage)

Improve and perfect into the project



Parametric Analysis



The parameterized wool algorithm is used to link the main nodes in the site, analyze the connection between points, use the algorithm to fit the best path, use the path to form a space, generate a three-dimensional node space, and combine the rainwater flow to set up a collection point to generate a landscape.

Master plan



伏地滨江公园（主景）
Jijiazui Riverside Park
(main scene)



滴露观景平台（次景）
Nananzui viewing platform
(secondary view)

Hinterland Riverside Park (main scene)

伏地滨江公园



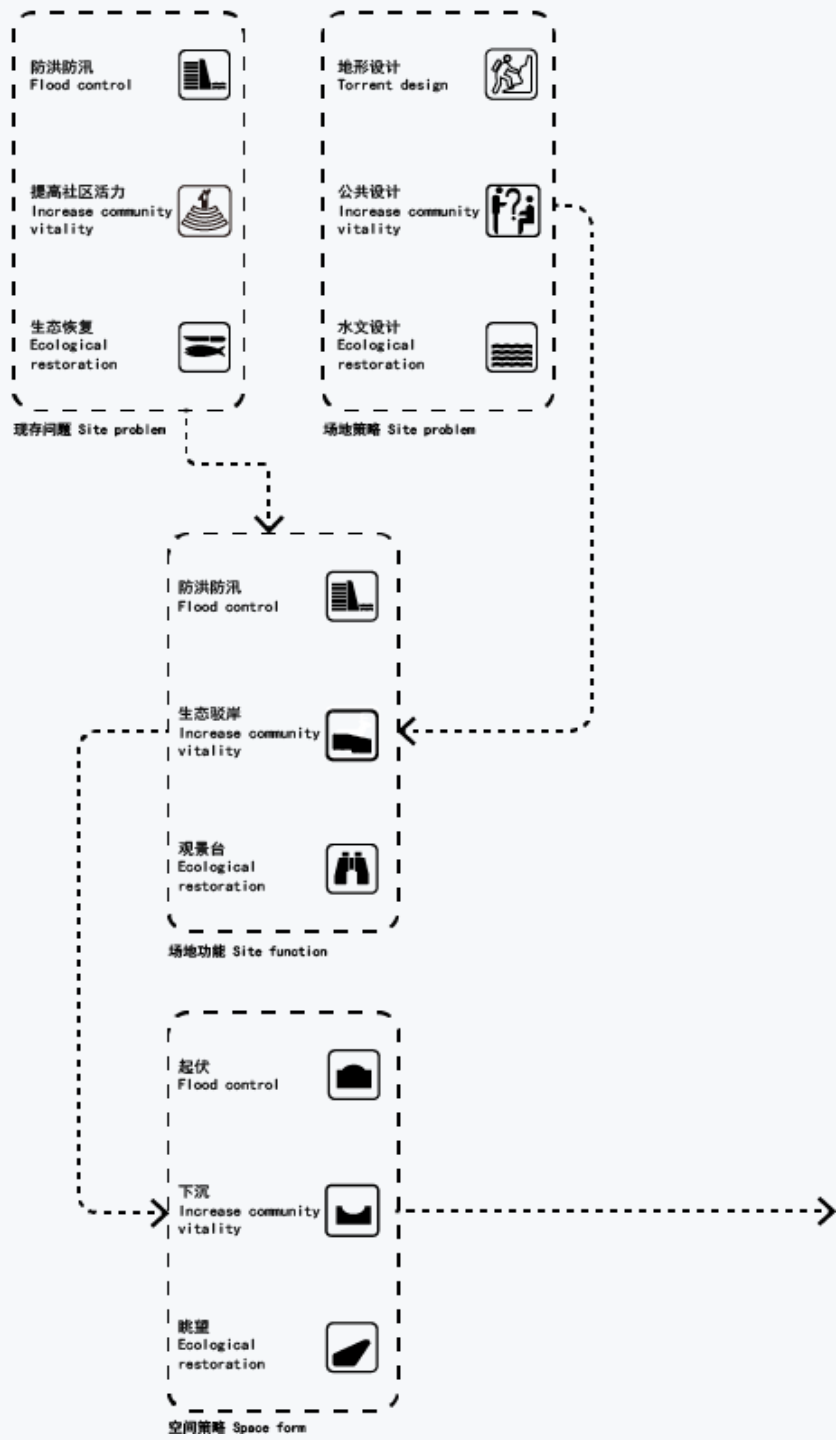
滴露观景平台
Viewing platform (secondary view)

Hinterland Riverside Park Plan

Illustration:

1. Bird-watching
2. Souvenir shop
3. Hinterland Riverside Park
4. Coffee shop
5. Natural steps
6. Rowing and splashing
7. Ecological revetment
8. Night market
9. Ecological Wharf
10. Viewing platform



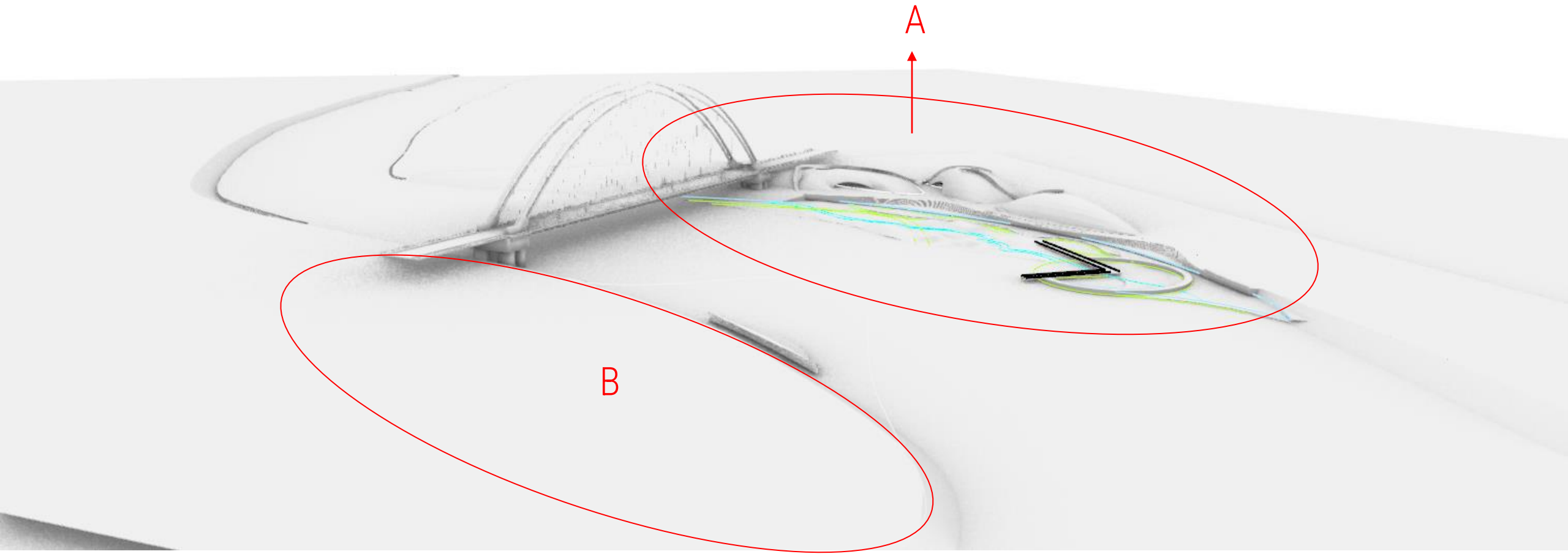


Through the site needs of Jijiazui: flood control, improving community vitality, and ecological restoration, formulate corresponding site strategies: terrain design, public space design, and hydrological design.

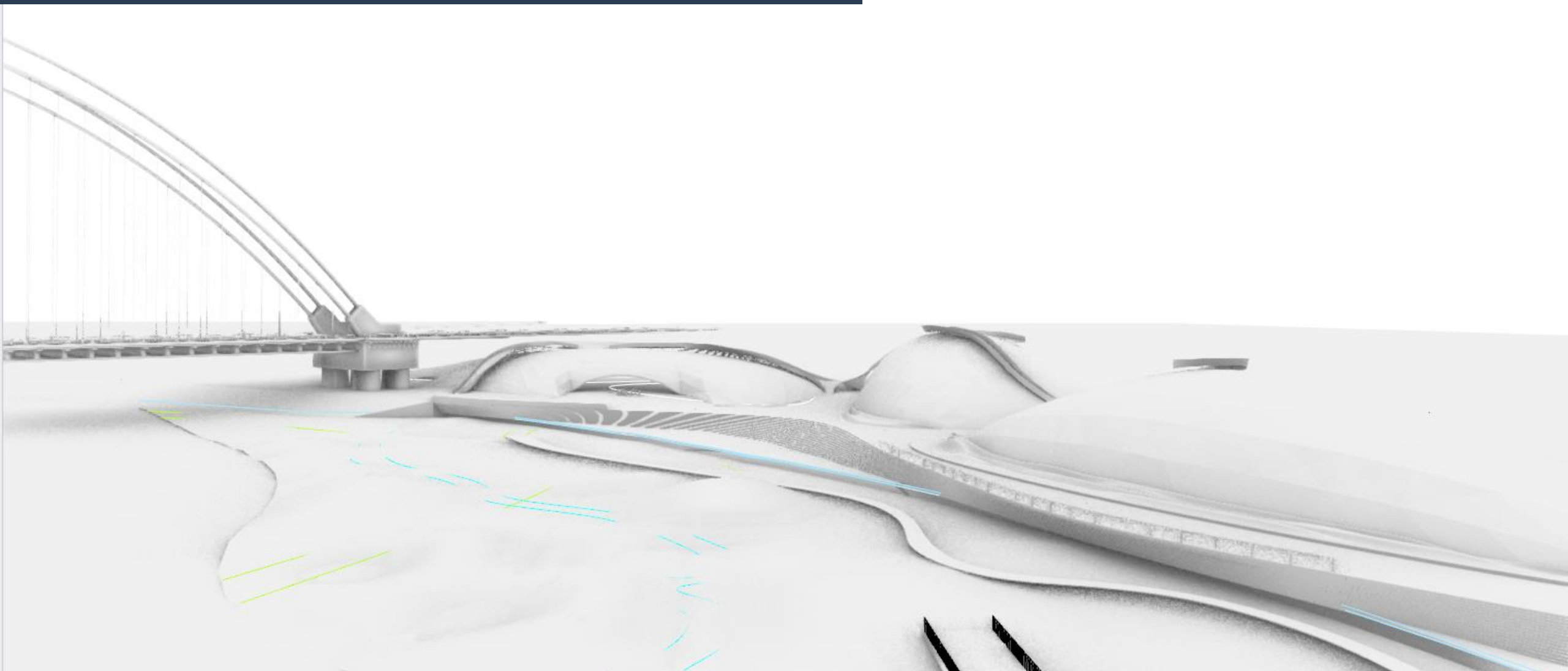
Finally, through the hinterland architectural form, Jijiazui Park adds roads to the undulating space of the building, and adds indoor space to the sinking space of the building, providing coffee shops, bars, shops and other functions. Ecological revetments are set in the building's overlooking space, adding a number of water projects to bring people more experience.

Design concept route of Jijiazui Riverside Park

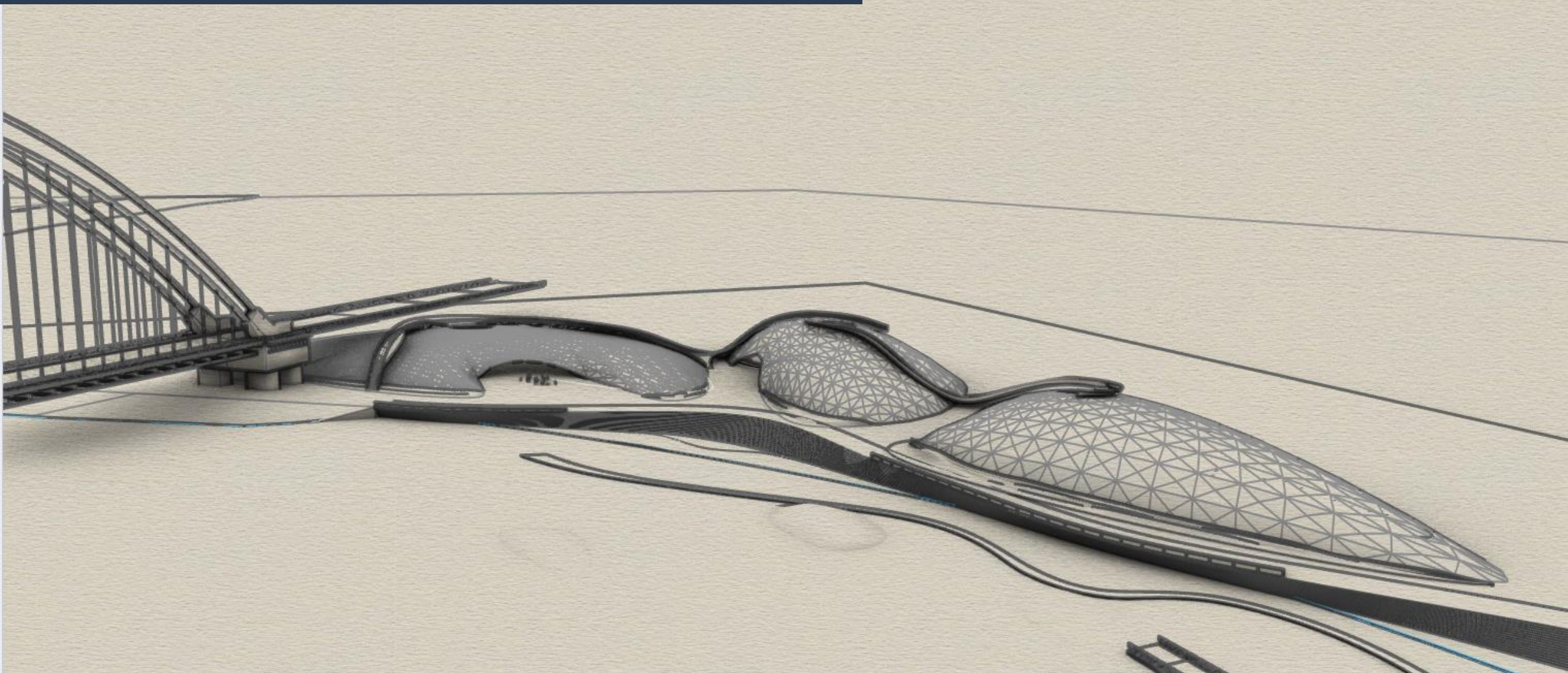
Design process of Jijiazui Riverside Park



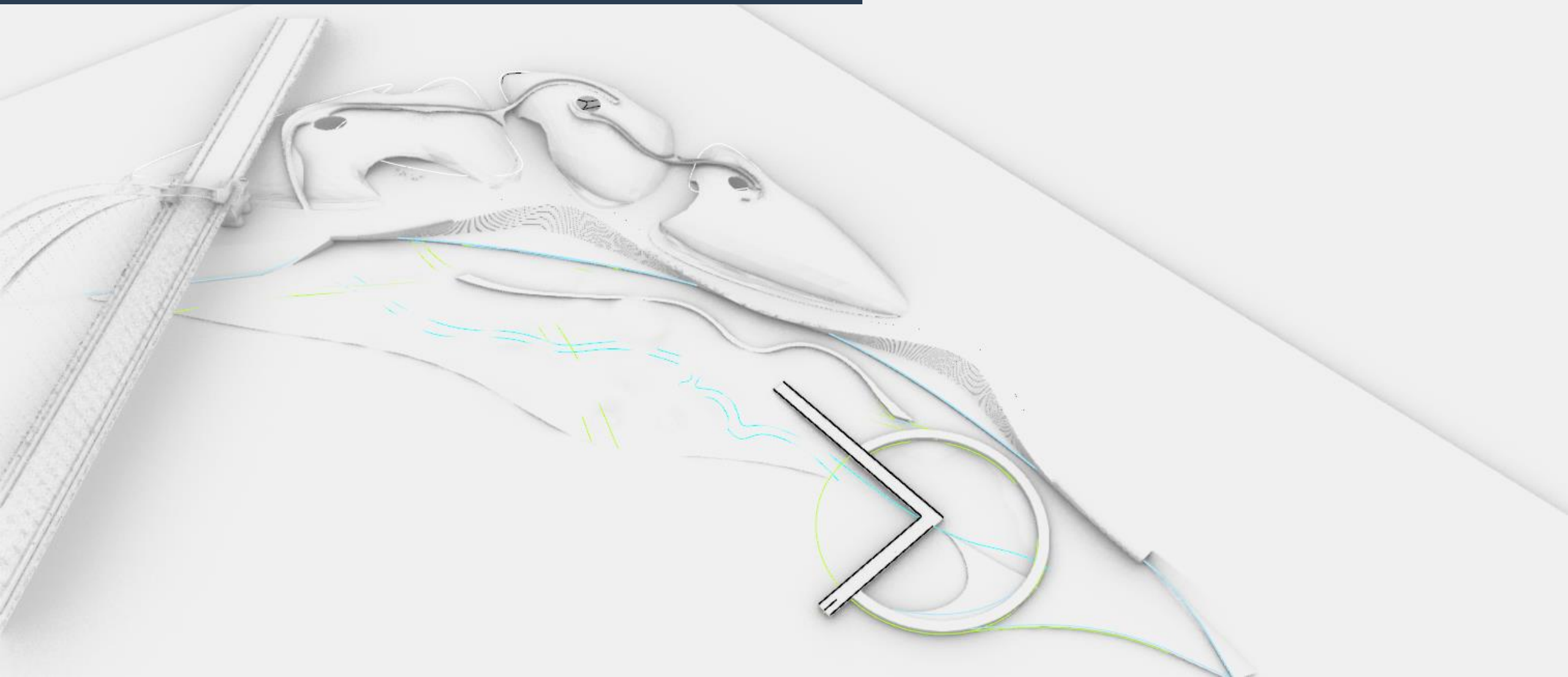
Design process of Jijiazui Riverside Park



Design process of Jijiazui Riverside Park

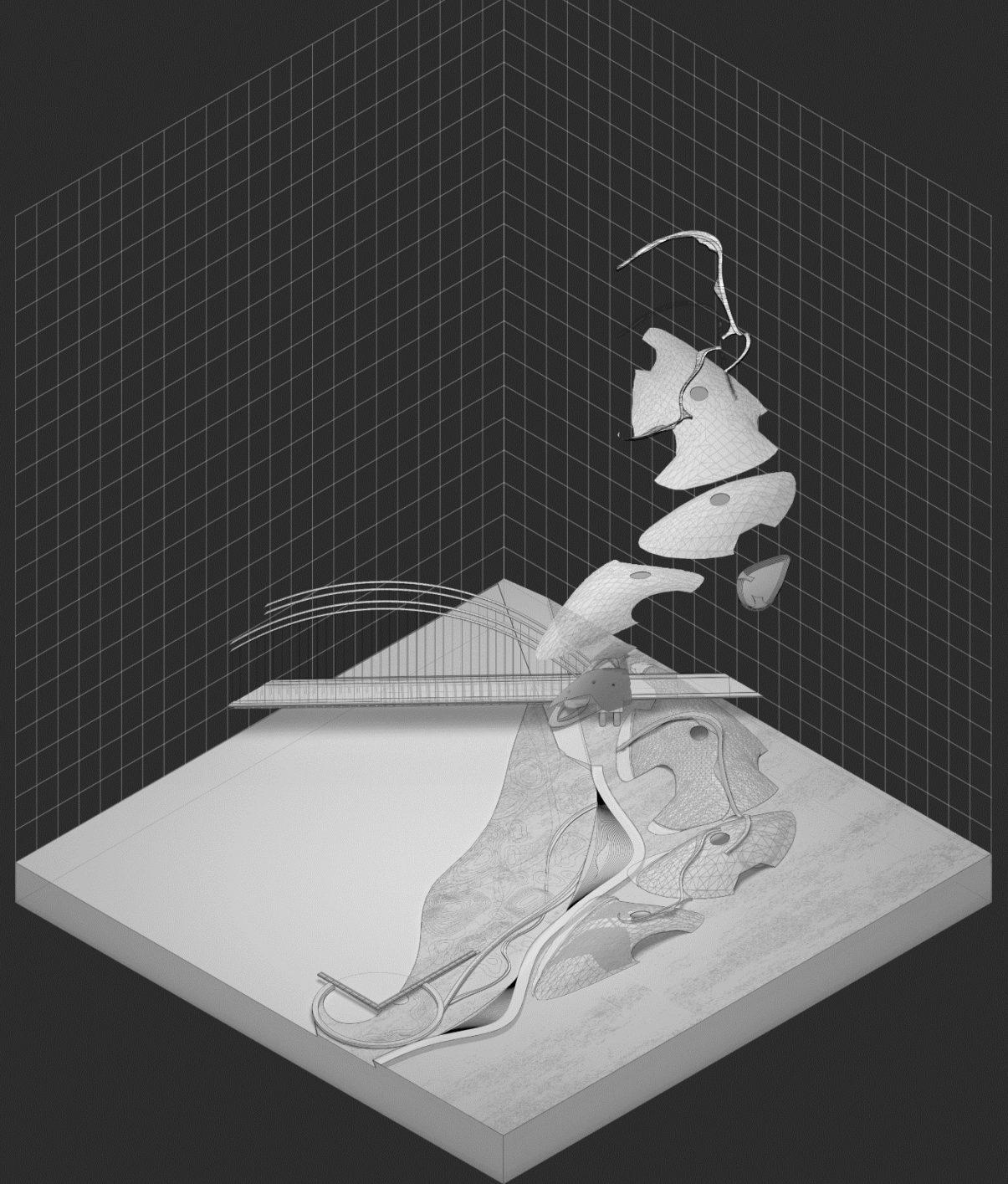
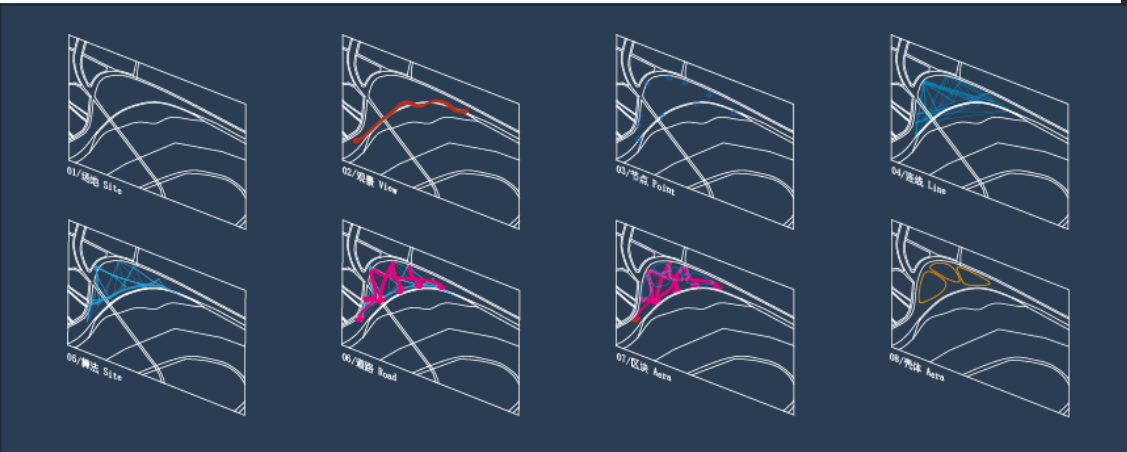


Design process of Jijiazui Riverside Park



Design of Jijiazui Riverside Park

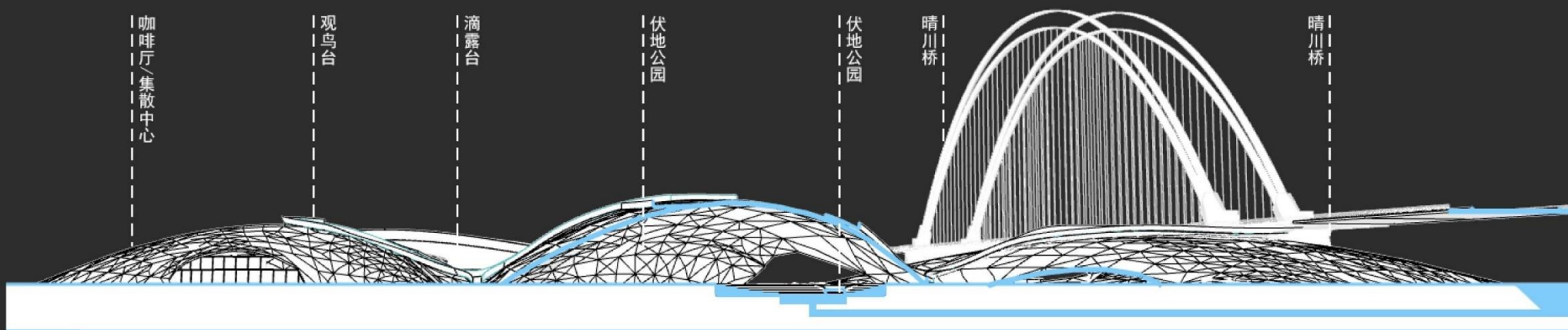
Process derivation:



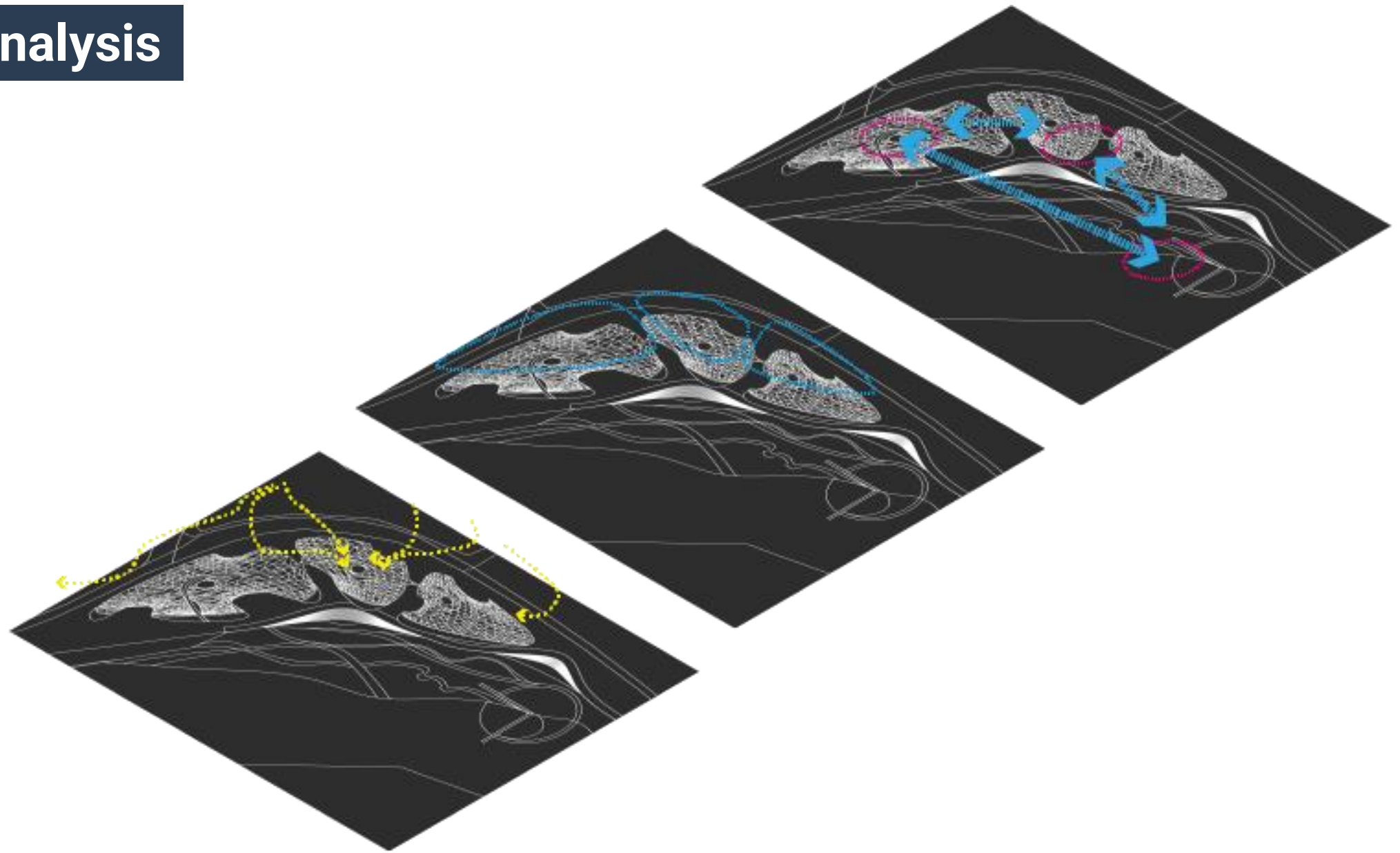
Elevation Design

晴川桥链接南岸嘴公园与集家嘴码头，形成两岸两河的对岸景观，构成生态驳岸，观景台，公园相互的总体景观，利用腹地建筑形成新的景观景观空间与滨水空间，临江而建，临江而憩，临江而乐，打造生态化，多元化，未来化的，可持续发展的景观空间。

立面分析 Elevation design:



Sight Analysis



local Renderings

Gazebo

A gazebo is set on the bank to provide a complete sports environment separated from the water system.

Gazebo

Overlooking the water, blending with the water

Running track

提供运动环境，与水系隔开，完整的运动环境
Provide sports environment, separated from water and water system, complete sports environment



local Renderings

Plank road

On the Bank of the barge, plants and revetments are exposed when the tide recedes, and the revetment is flooded when the tide rises. The riverside park can continue to be used.

潮落

潮退时露出植物与驳岸

Plants and barges are exposed when the tide recedes.

潮涨

涨潮时驳岸被淹，滨江公园可以继续使用
The bank was flooded during high tide, and Binjiang Park can continue to use



local Renderings

Ecological dock

The hydrophilic wharf is adjacent to the site, and the streamlined shape reflects the theme of water, walking through the water and plants on the bank to experience nature.

Ecological dock

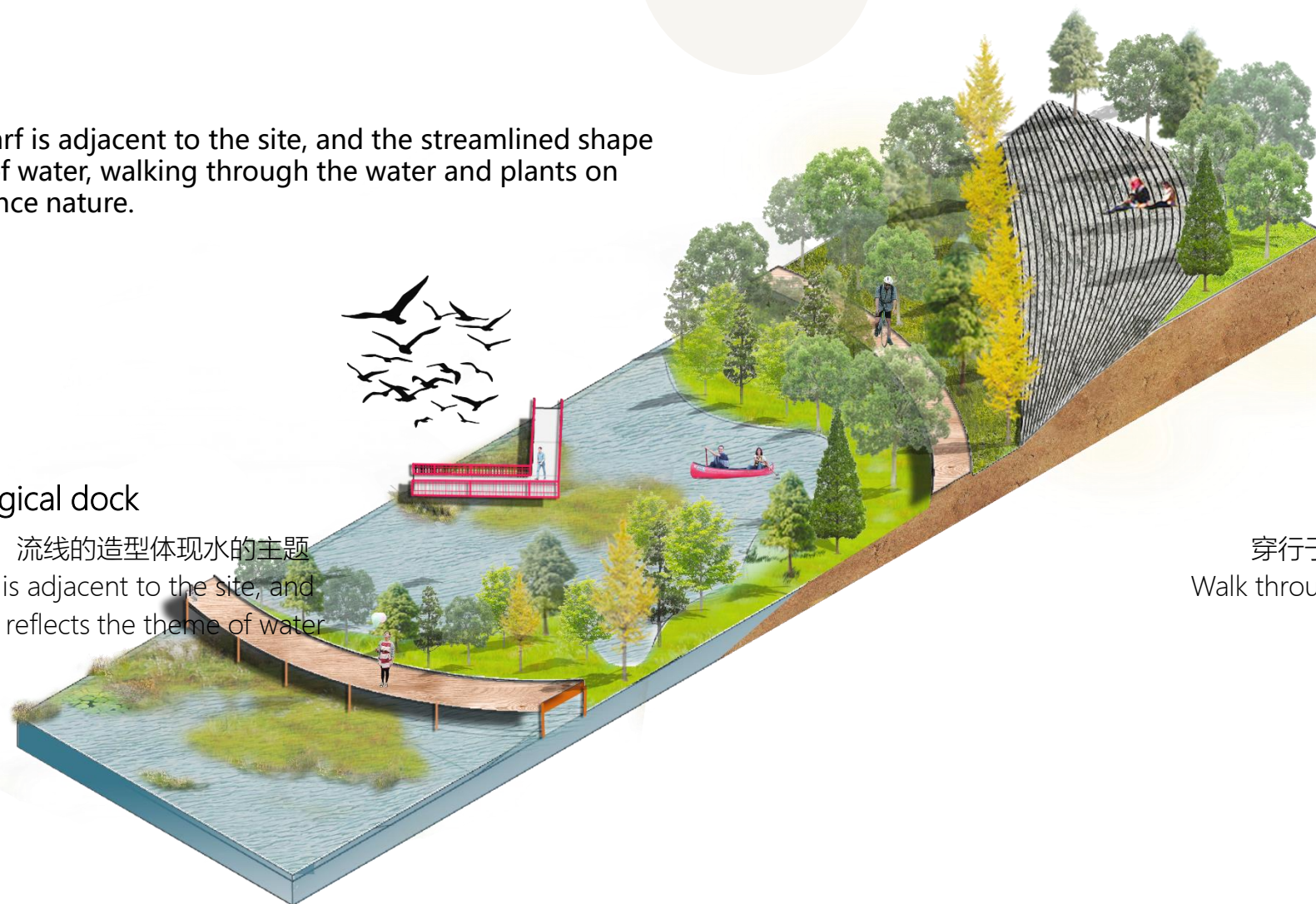
亲水码头与场地相邻，流线的造型体现水的主题

The hydrophilic dock is adjacent to the site, and the streamlined shape reflects the theme of water

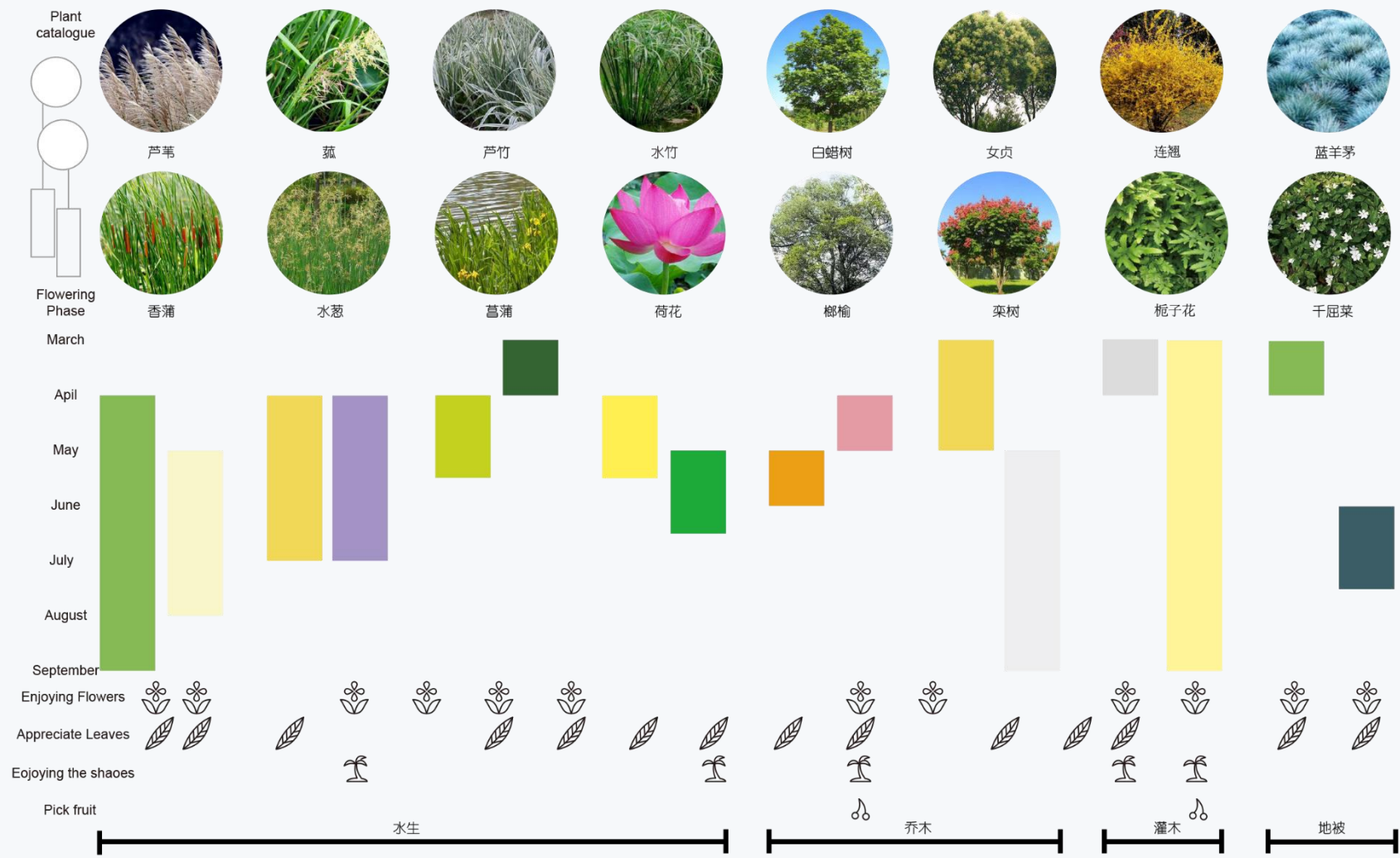
Footpath

穿行于岸边的水与植物之中，体验自然

Walk through the water and plants on the shore and experience nature

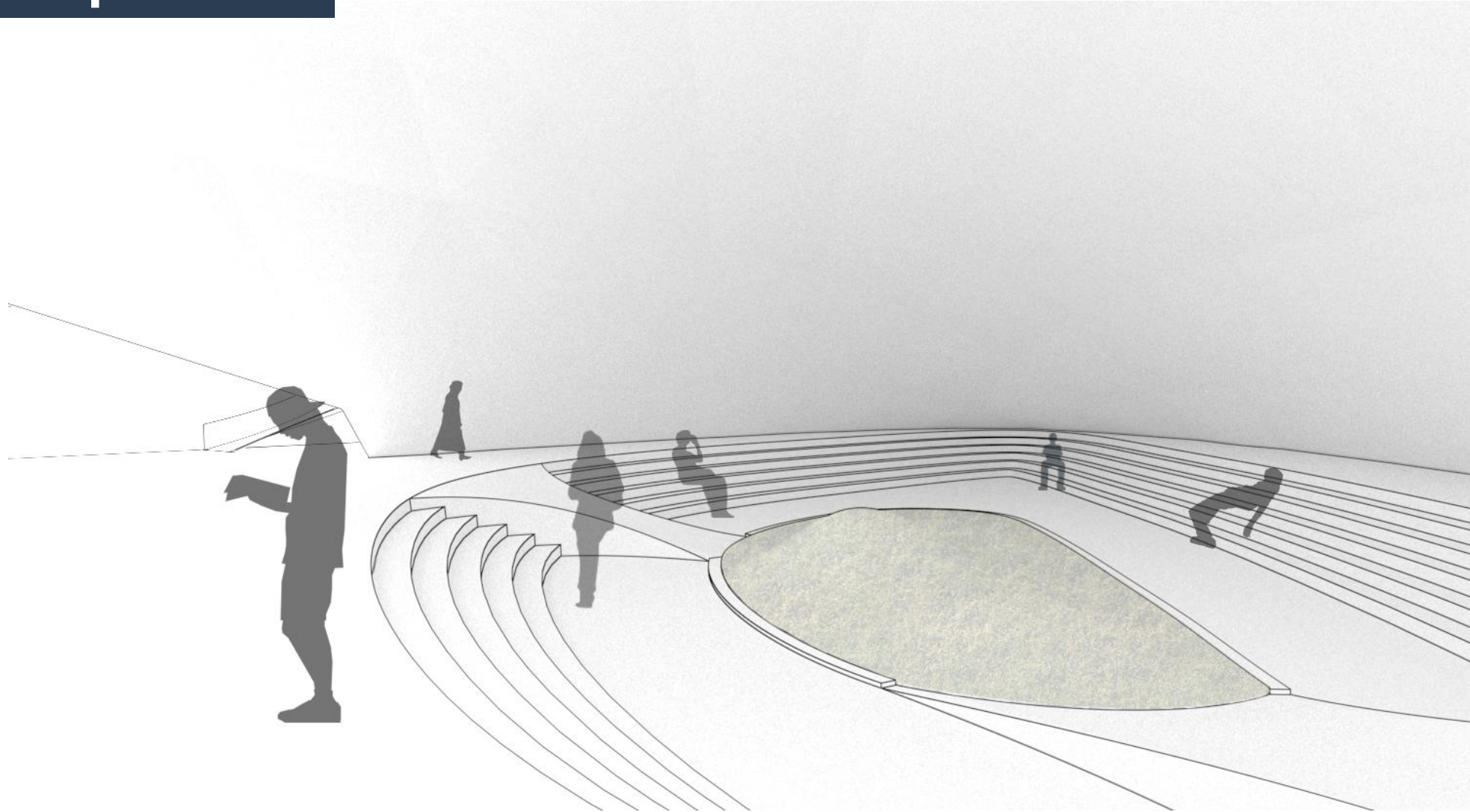


Plant Arrangement



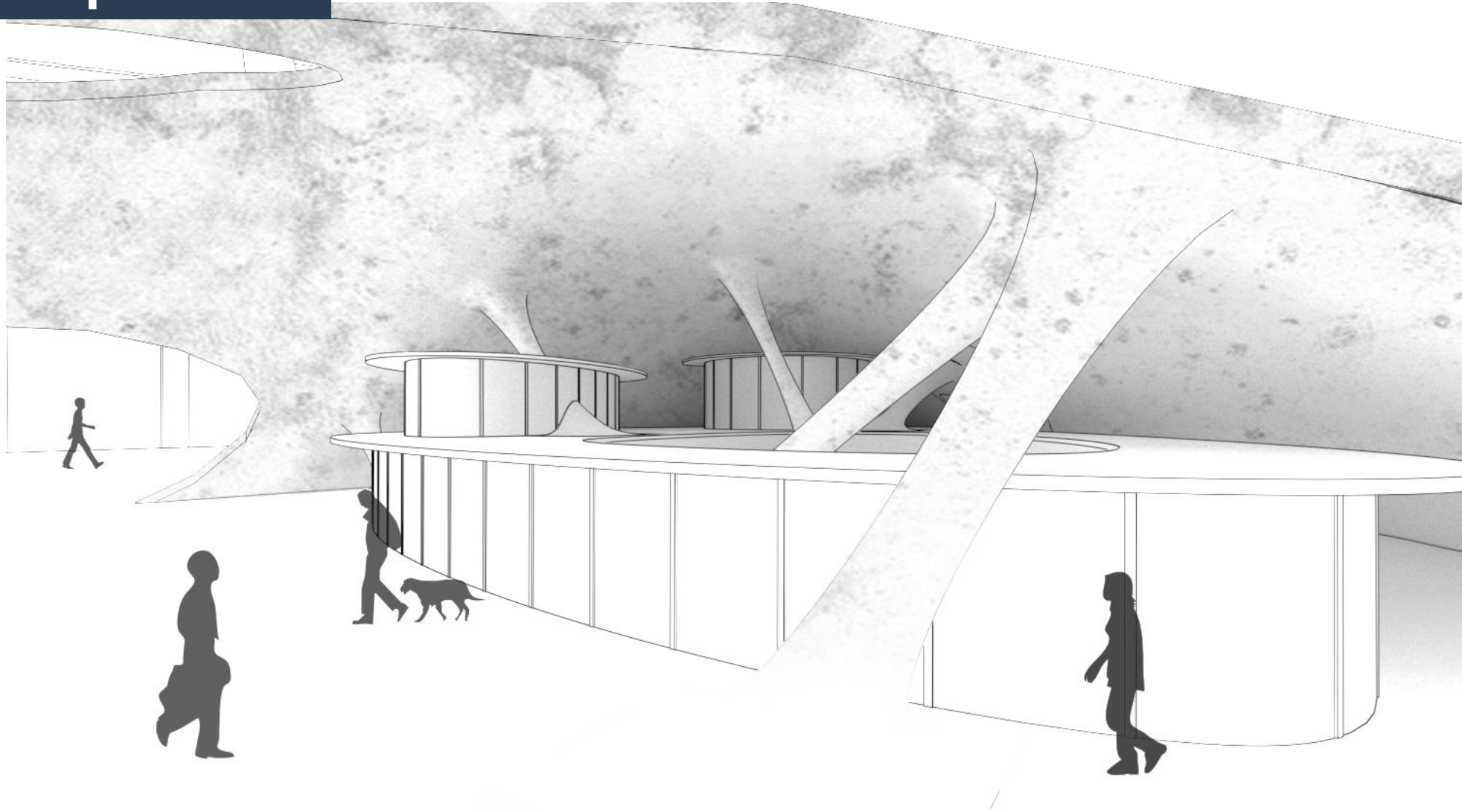
In terms of plants, I mainly focus on aquatic plants, trees, shrubs and ground cover plants. **Such as reed, Phyllostachys pubescens, Acorus calamus, Ligustrum lucidum, lotus, Luan tree, gardenia and other major plants.**

Indoor Perspective1



The interior space of the hinterland is for people to rest. In rainy and flood seasons, a reservoir is formed, and the middle ecological pool is used for purification and restoration.

Indoor Perspective2



The indoor building is an internal space integrating coffee shop, tourist center, leisure and bar, which can also be opened at night.

Nananzui viewing platform Plan

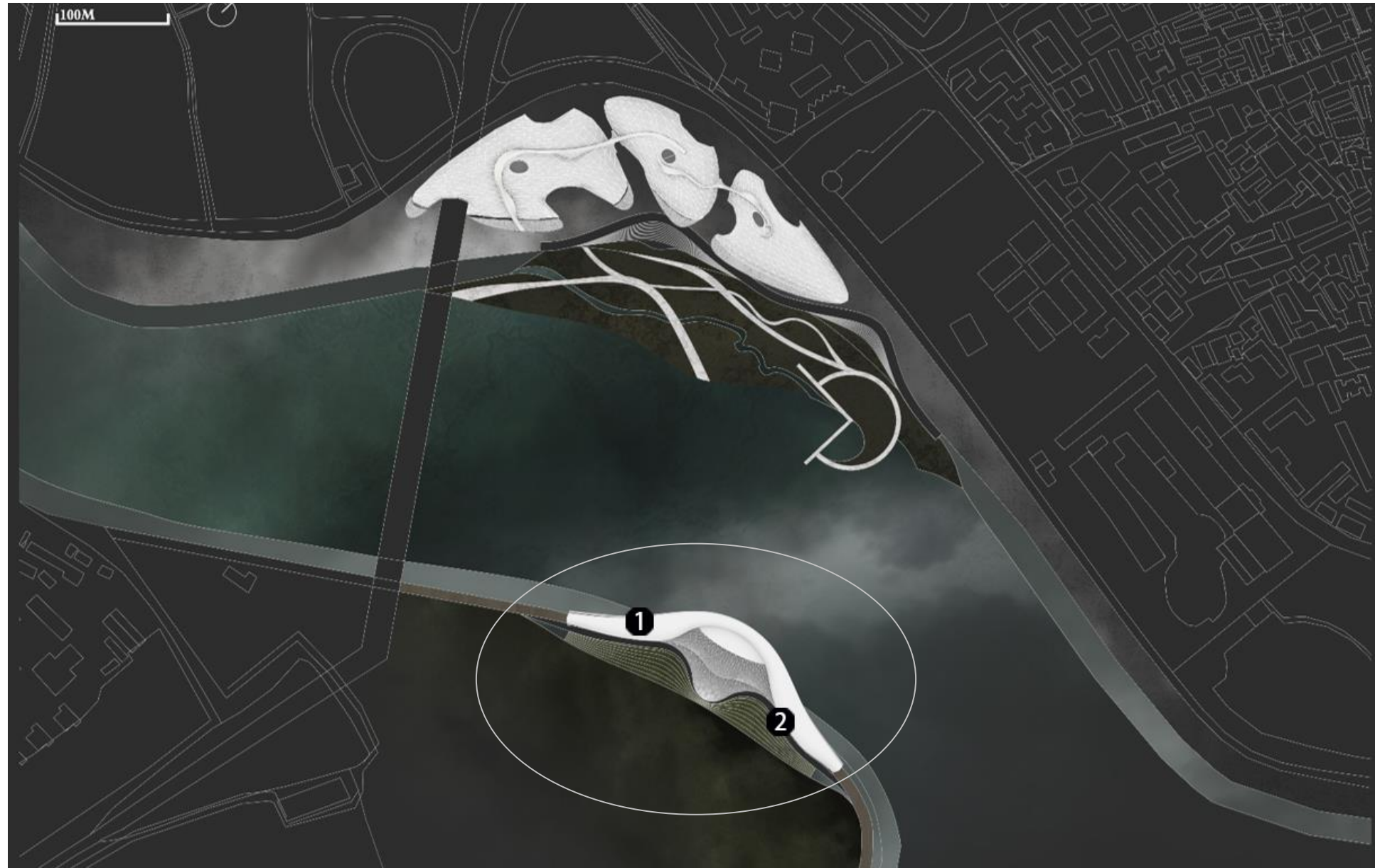


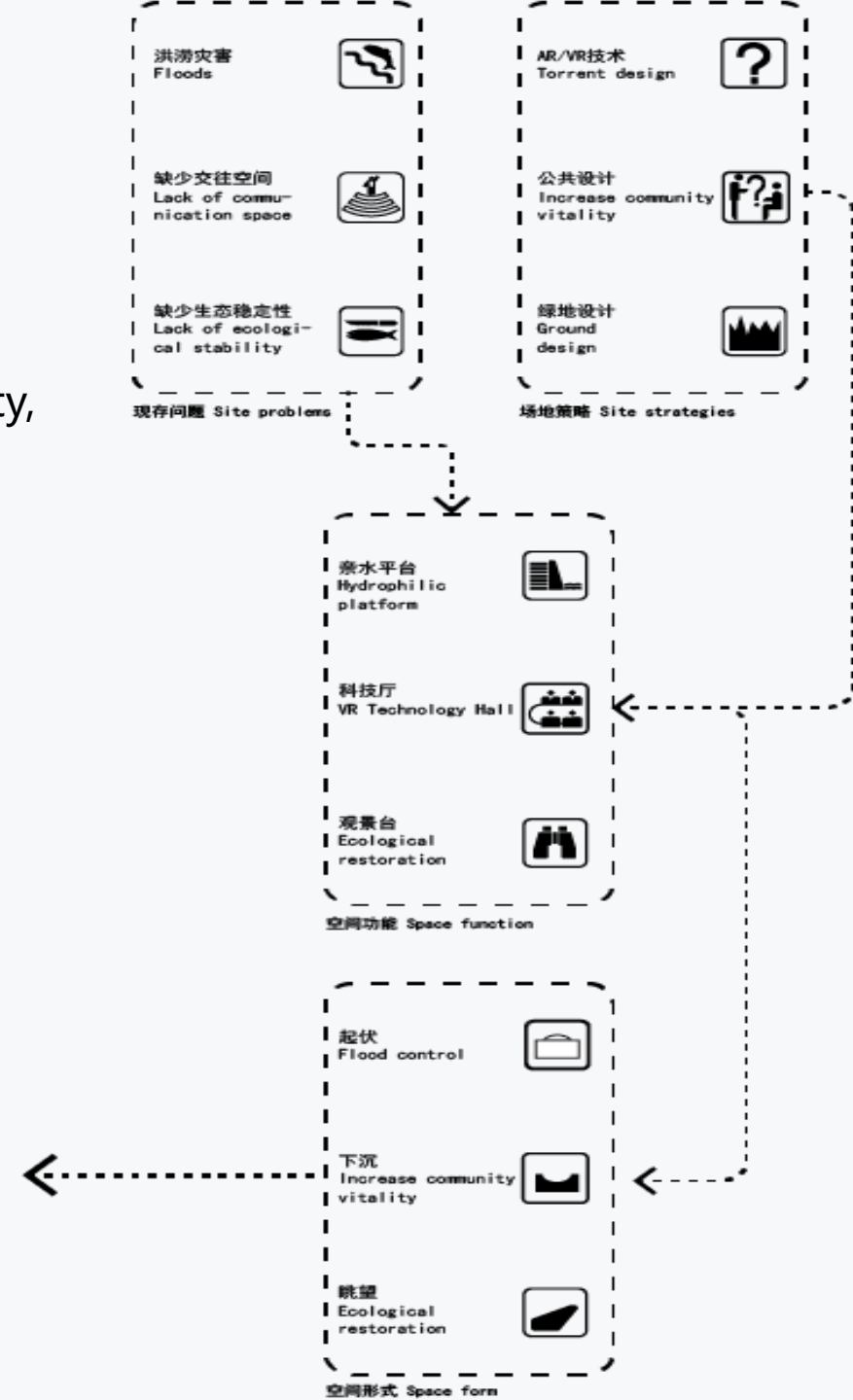
Illustration:

1. Sightseeing structure
2. Leisure footpath

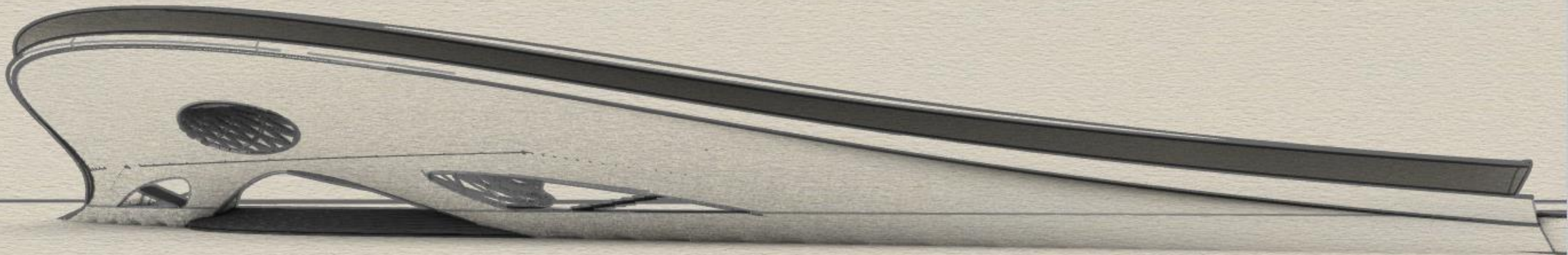
Through the site needs of Nan'anzui: flood disaster, lack of communication space, and ecological stability, formulate corresponding site strategies: increase AR/VR technology, public space design and green space design, and set up hydrophilic platform, science and technology hall, and viewing platform functions.

Finally, through the novel architectural form, nananzui park makes the main and secondary scenery on both sides of the Yangtze River form a landscape image of "you have me, I have you" and brings people more experience.

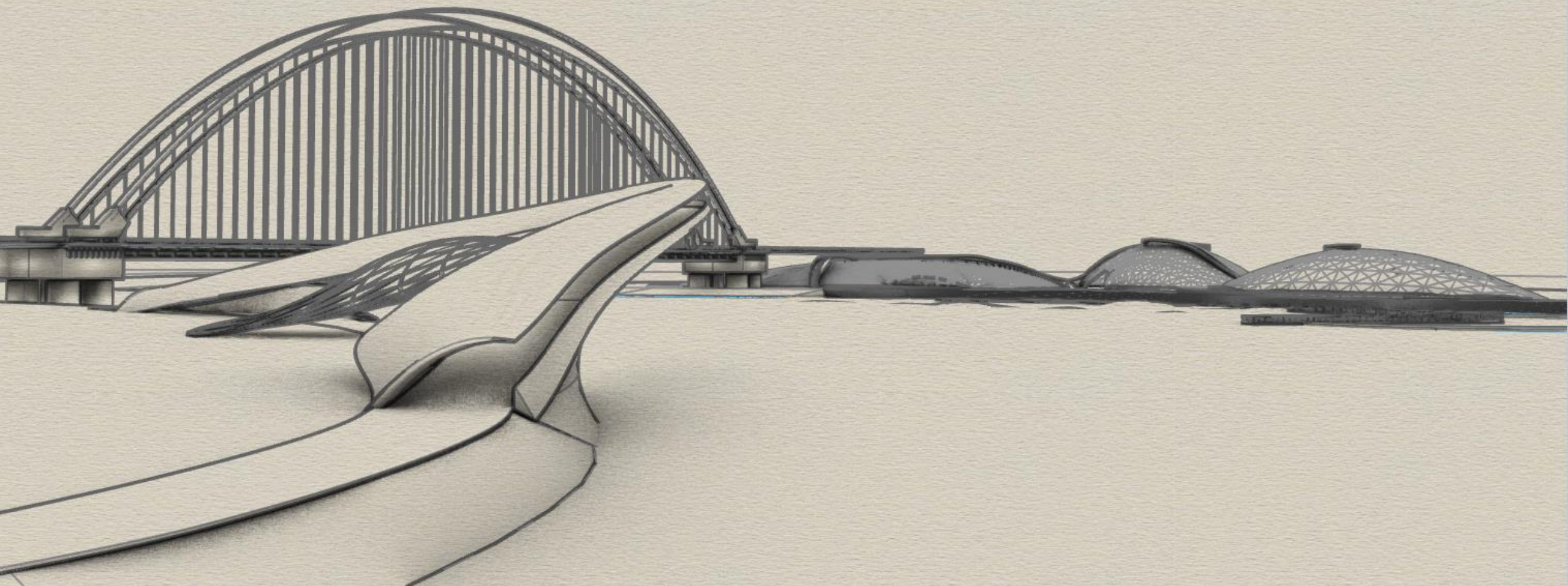
Design concept route of nananzui viewing platform



Design process of Nananzui viewing platform



Design process of Nananzui viewing platform



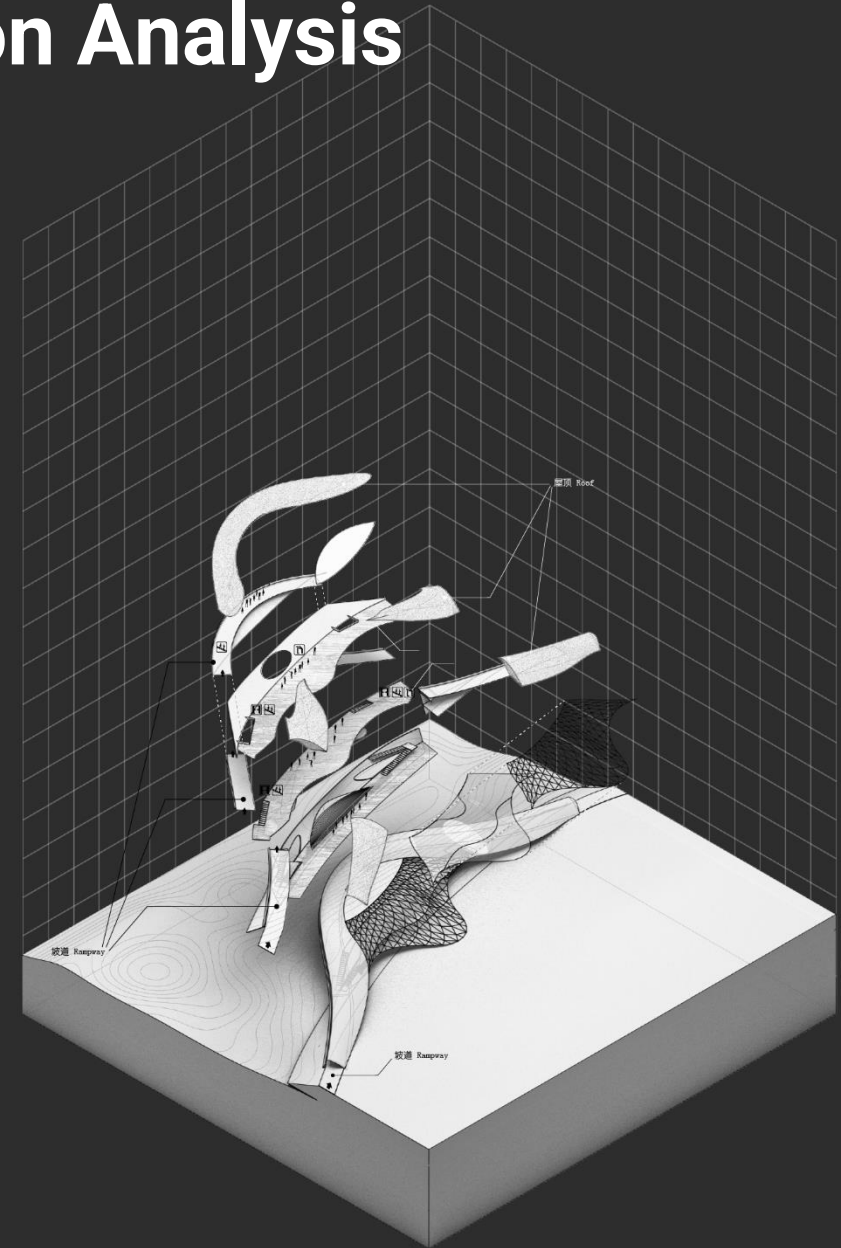
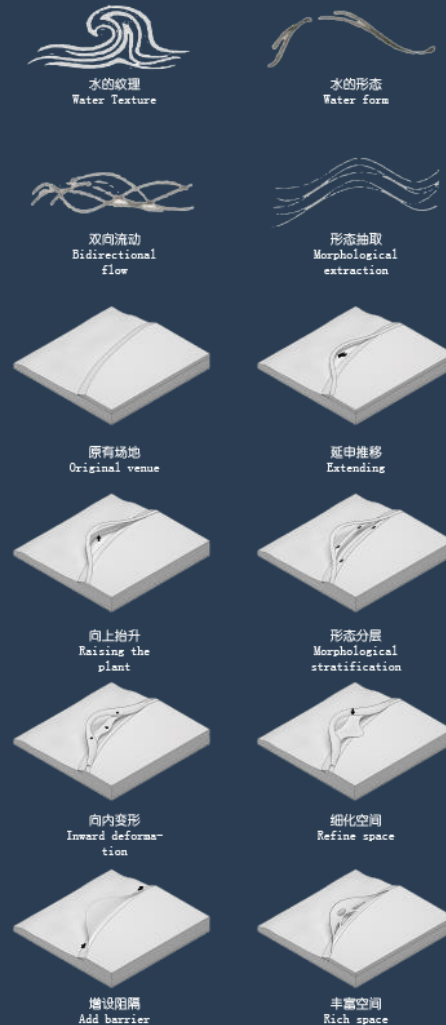
Explosion Analysis

Design of nananzui viewing platform

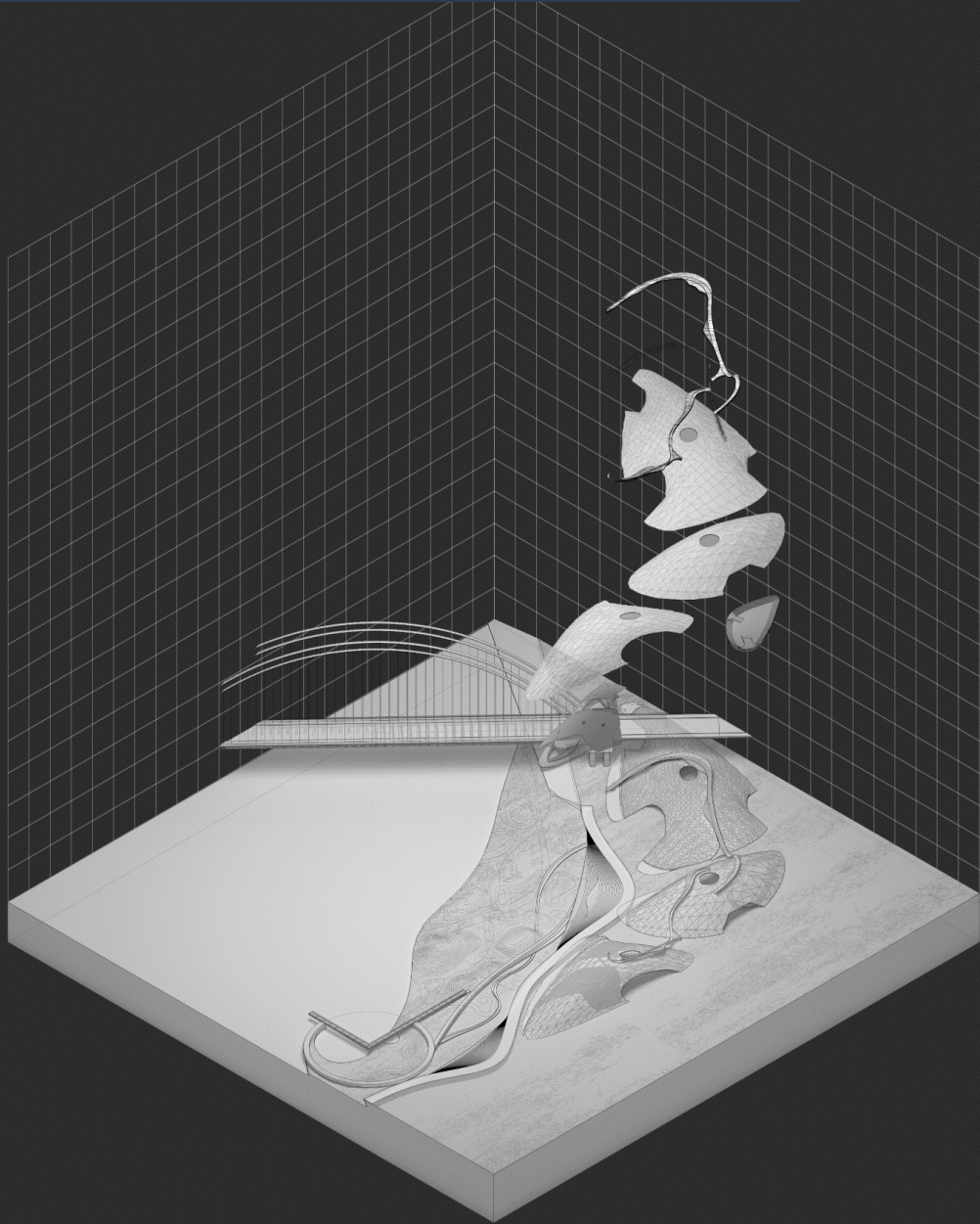
Element extraction & morphological derivation:

提取水的形态，利用水滴的几何形态构建构筑物的流线形，分割空间设置功能区域。

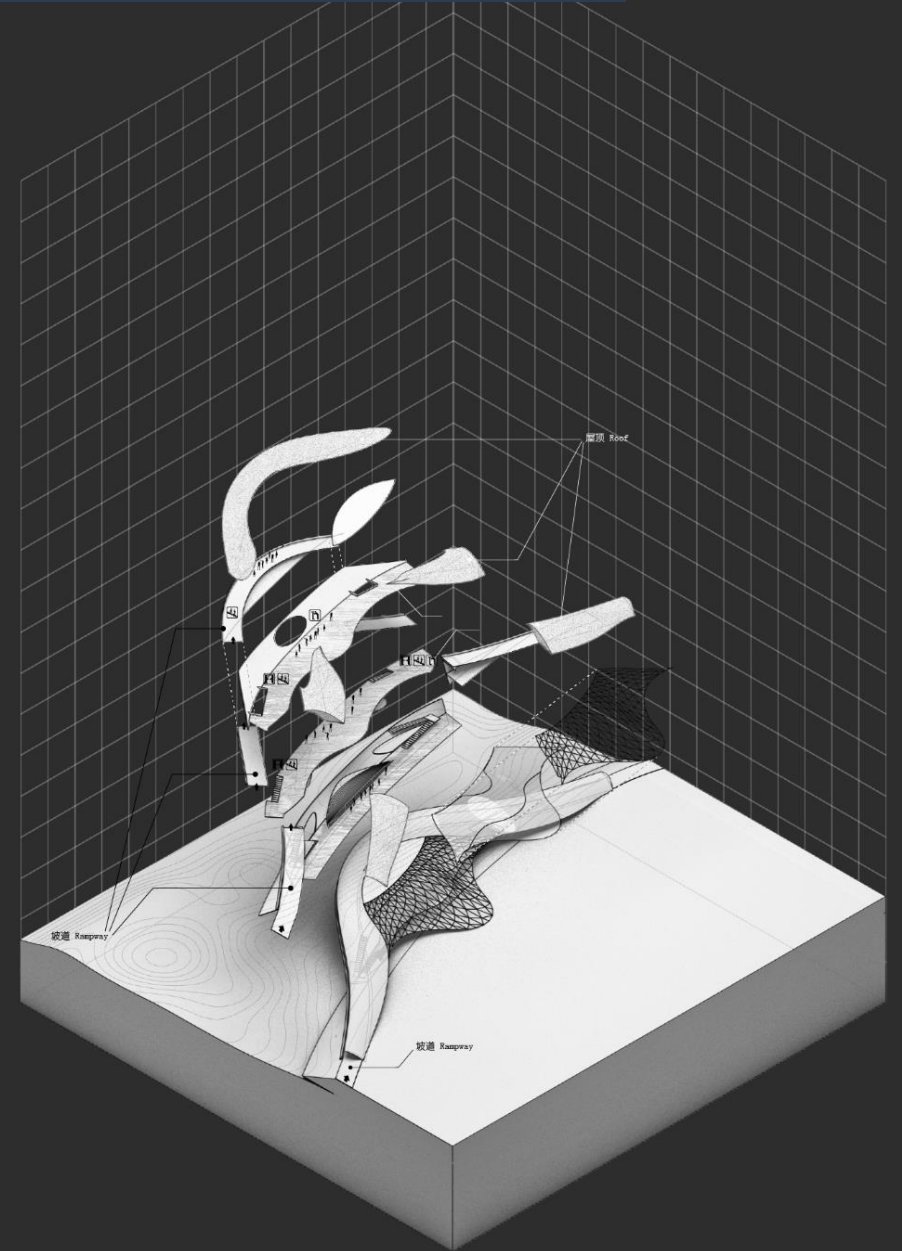
Extract the form of water, use the geometric form of water droplets to construct the streamline of the structure, divide the space and set up functional areas.



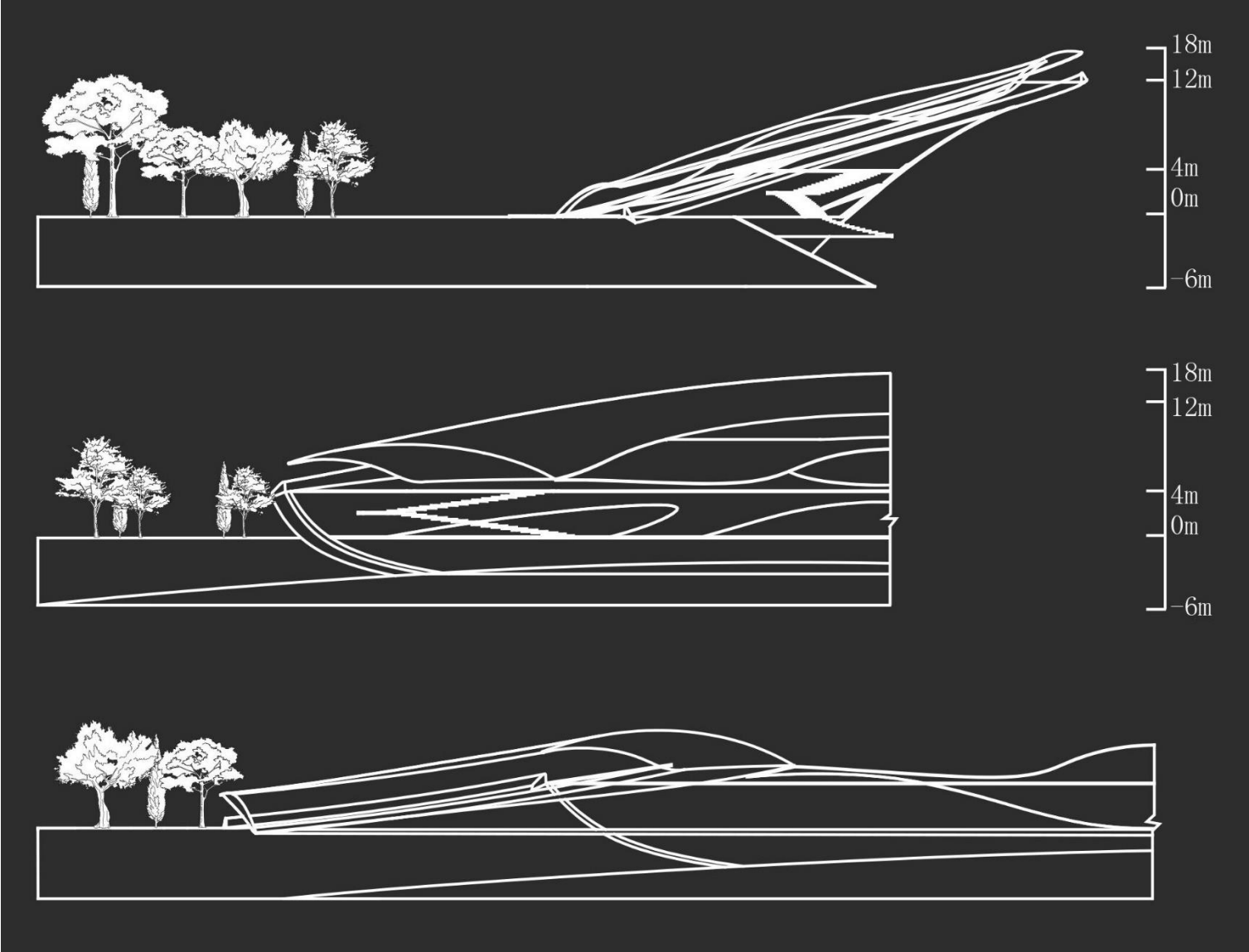
A-Jijiazui Hinterland Riverside Park



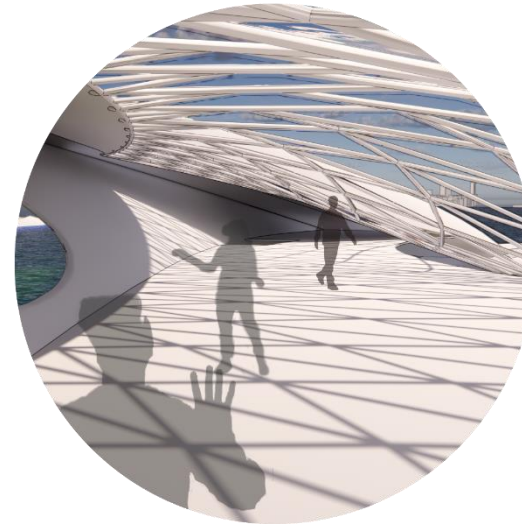
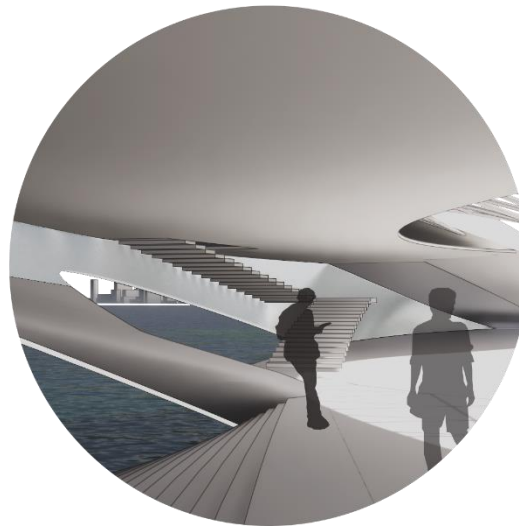
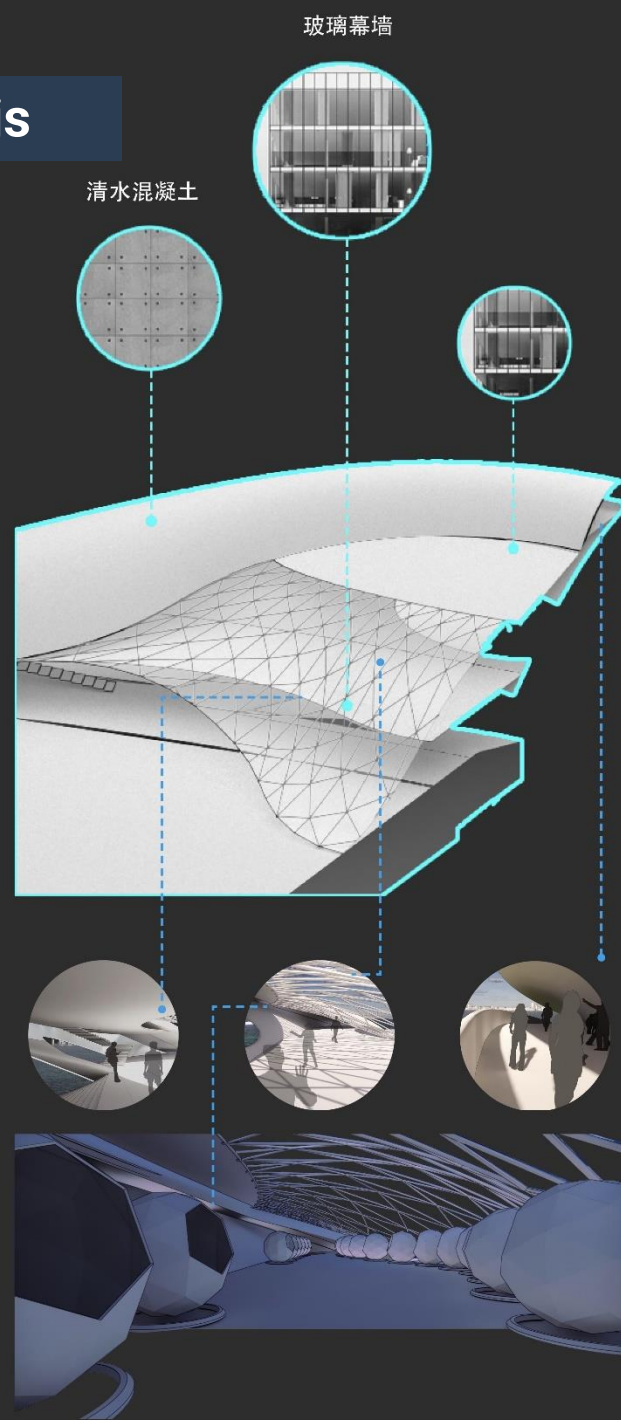
B-Nananzui viewing platform



Vertical Analysis



Layer Analysis



The building materials are mainly composed of fair faced concrete and curtain wall glass.

Hydrophilic platform

亲水

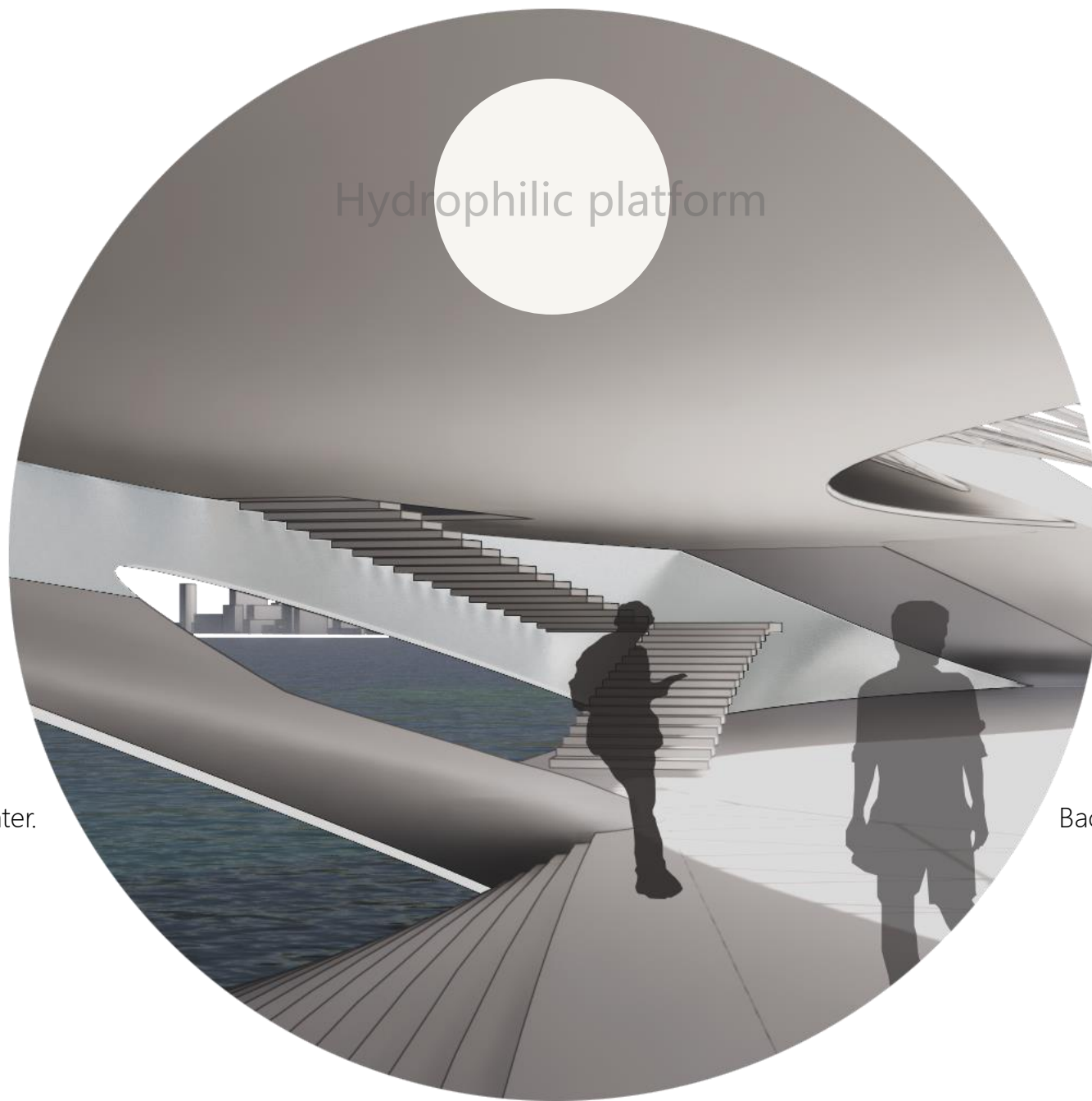
下台阶与水面相邻

Lower steps adjacent to the water.

绿地

背部台阶式绿地，供人休憩

Back stepped green space for rest.



A circular image showing a VR exhibition environment. The scene features a large, white, ribbed structure that resembles a modern architectural design or a large-scale art installation. The floor is a light-colored, textured surface. A person is walking away from the viewer towards the right side of the frame. The lighting is bright, creating strong shadows on the floor. The overall atmosphere is clean and futuristic.

VR exhibition

VR活动

提供可穿戴设备与场地

Provide wearable devices and venues

多人互动

VR内构建互联的多人同步虚拟世界
Construct an interconnected multi-person
synchronized virtual world in VR



长江

地处南岸嘴公园，北望长江武昌The
Located in Nan'anzui Park, looking north to the
Yangtze River in Wuchang. The scenery is unique
and the platform is wide

汉江

面朝汉江，与集家嘴生态驳岸相对
Facing the Han River, opposite the Jijiazui
Ecological Revetment



03.

PART THREE

整体展示 Overall display

Daytime renderings

Night renderings

[Read more →](#)

=

Day time ...



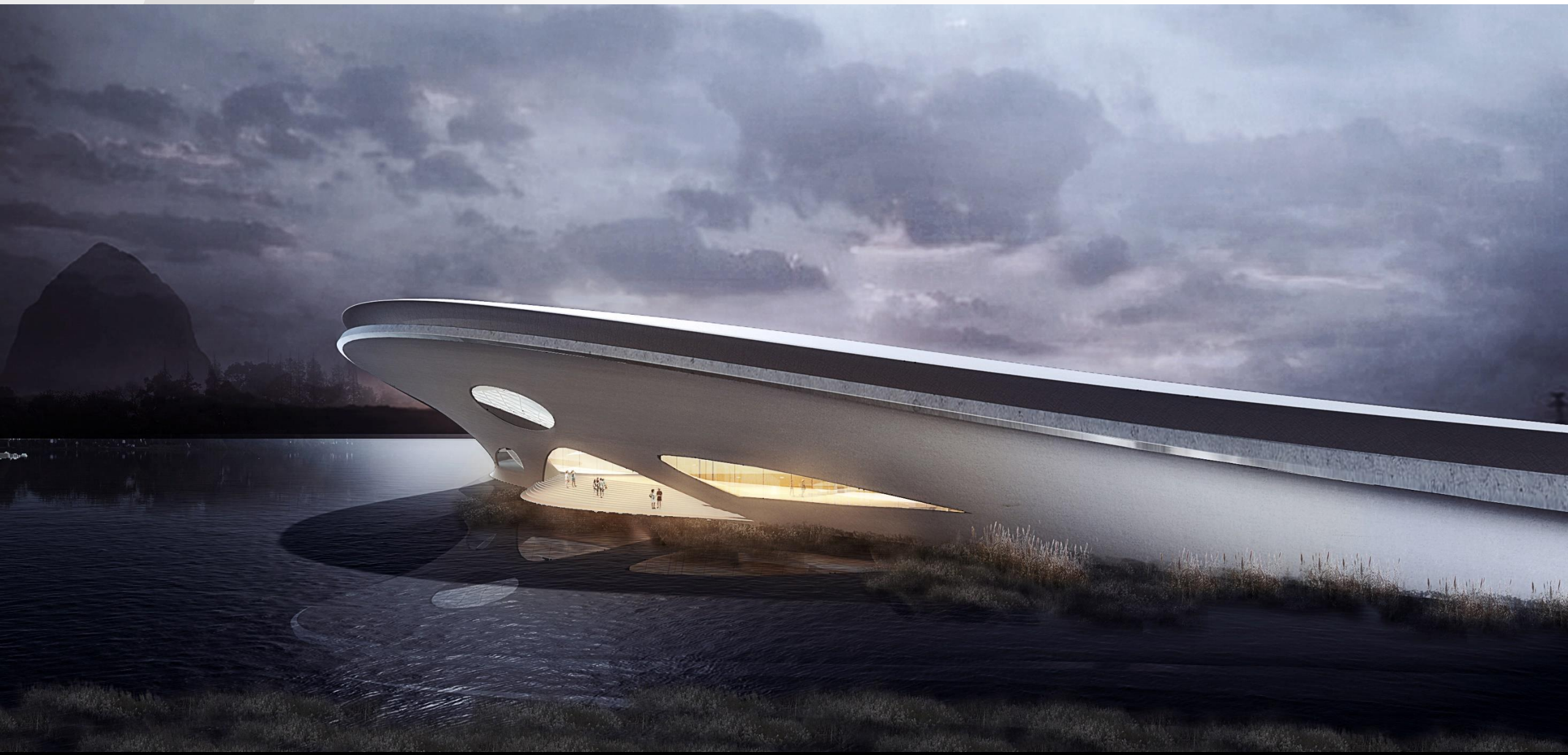


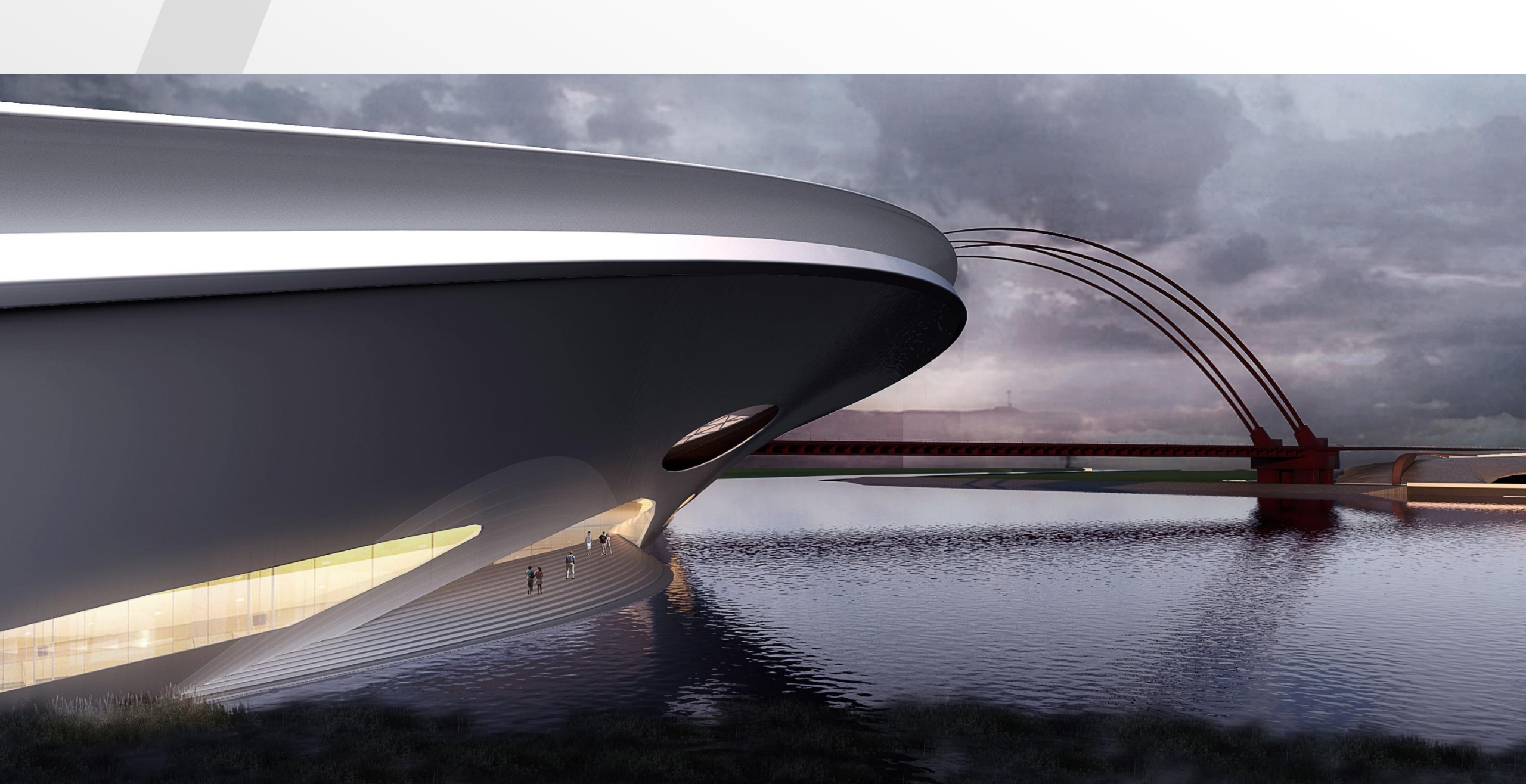






Night time ...











04. PART FOUR

展板展示 Display board

[Read more →](#)



THANKS

01

2022.01.27—2022.03.31

Preliminary attempt of pavilion design

02

2022.05.19-2022.06.16

Pre-phase Analyses

Design concept—sketch stage

Deepening design——Conception of main landscape

03

2022.6.16-2022.07.15

Improve and perfect into the project

CONFIRMATIVE PRAXIS REPORT

Assignment Title : *Pavilion design*

Name of work : *Future Tense*

—— *Future waterfront landscape space*

Research contents : *The landscape design of waterfront cities in the future is the harmonious coexistence of pavilions, human and natural landscapes.*

From 2021 to 2022

Design by Yilin Zhou/2106219

Name: YiLin Zhou / Elin

Student ID: 2106219

Major: Environment Design

Professor: Ryan Stuckey

2022.07.15