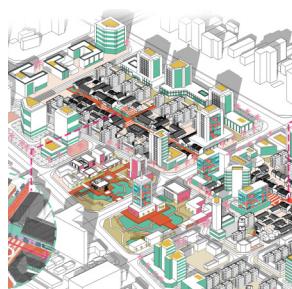
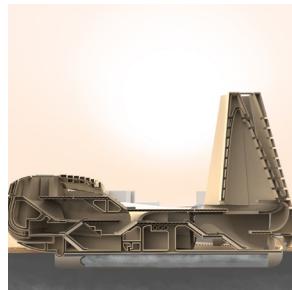
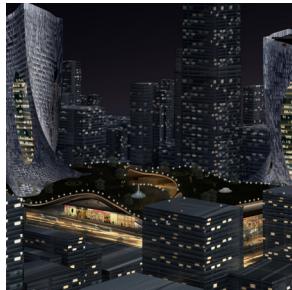


# ARCHITECTURE PORTFOLIO



**SELECTED  
WORK**

# Table of Content

<b>COMMUNITY COMPLEX DESIGN</b> Combination of community, transportion and commercial	01	
<b>HOPSCA</b> Combination of hotel, office, parking, shopping mall, convention, and apartment	15	
<b>SUSTAINABLE MACHINE</b> Commercial Complex Design	27	<b>URBAN DESIGN FOR HEALTH AND PENSION SYS-</b> <b>Urban design</b>
<b>CULTURE CENTER</b> Provide public and cultural activities for people	33	<b>RENEWAL DESIGN OF DIVERSIFIED SPACES IN TRADITIONAL BLOCKS</b> <b>Urban design</b>
		47
		55

01

# COMMUNITY COMPLEX DESIGN

1

Combination of  
community,  
transportation and  
commercial

Individual  
Studio work  
March 2019

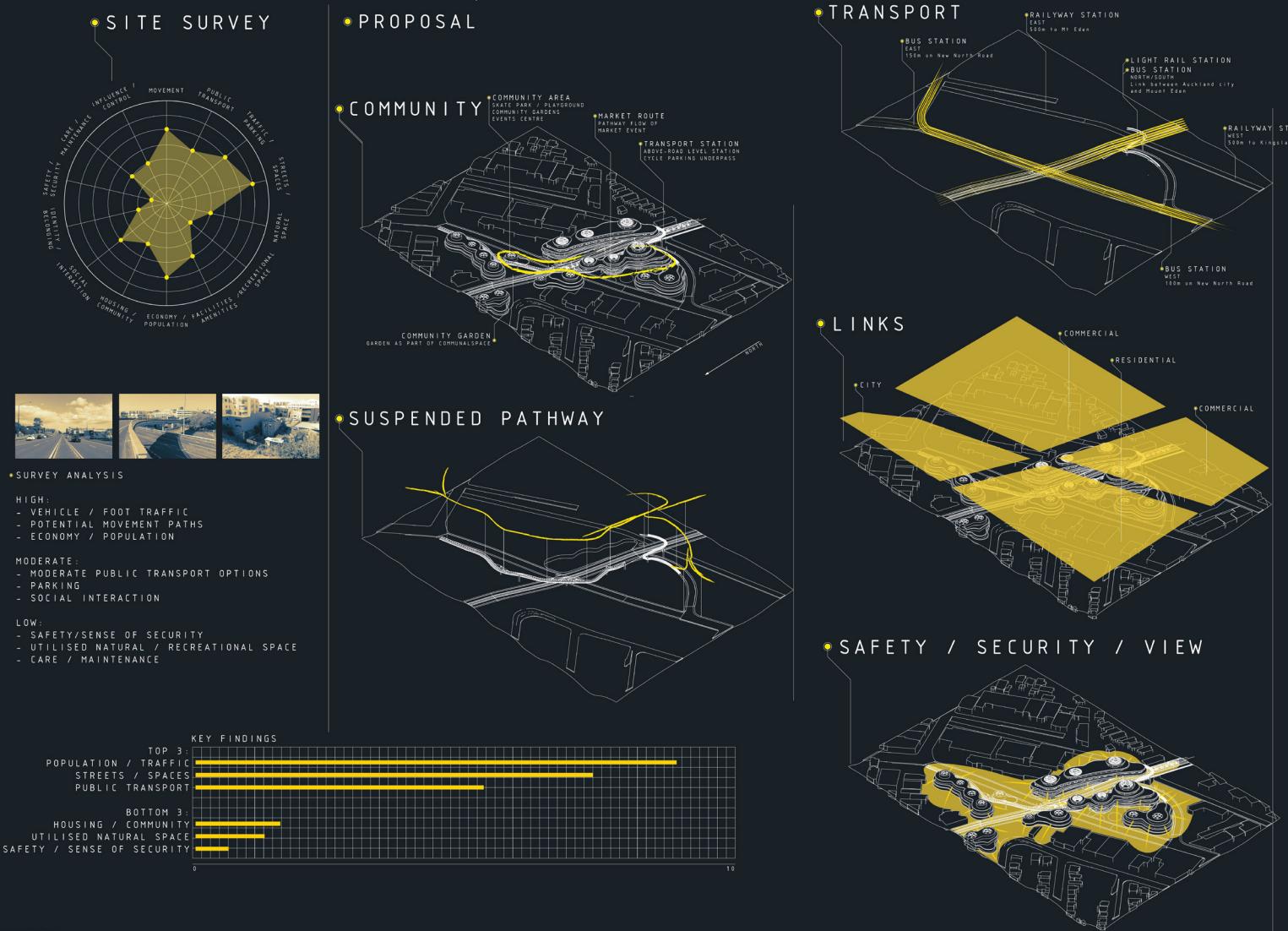


2

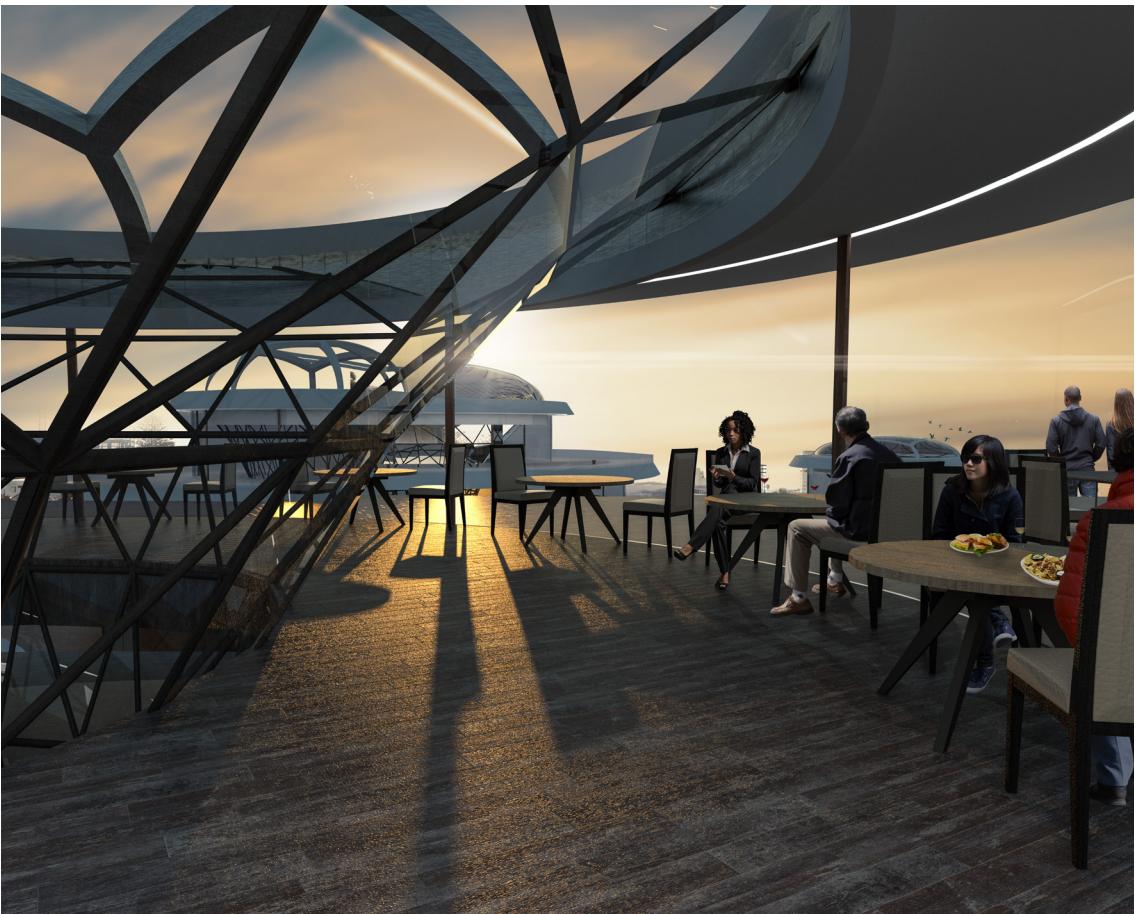




# Site Analysis

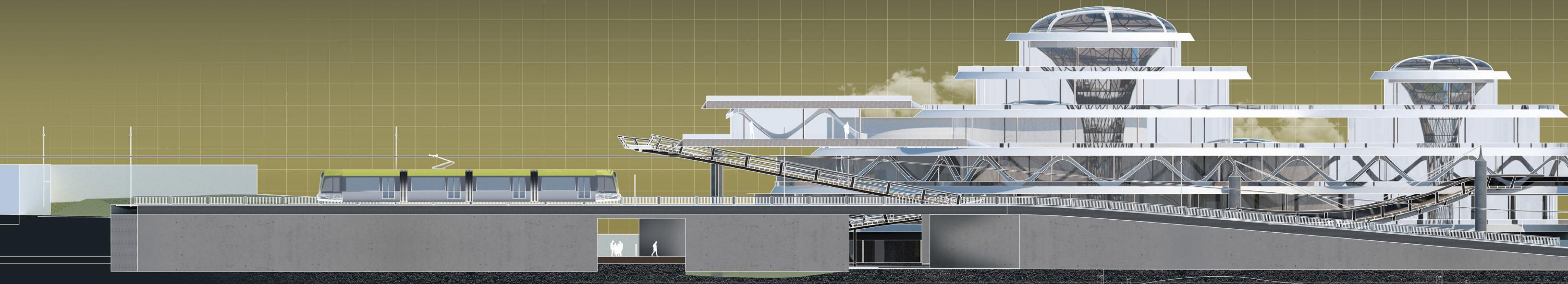


Combination of hotel, office, parking, shopping mall, convention, and apartment

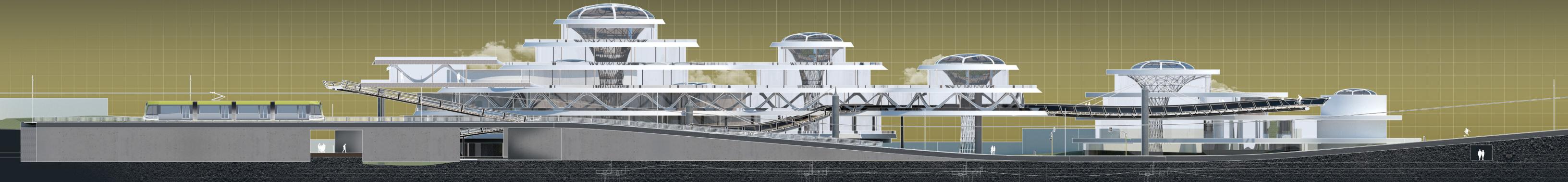


# Public Space

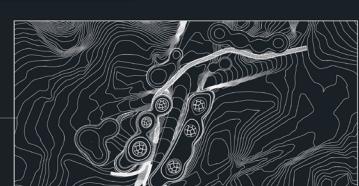
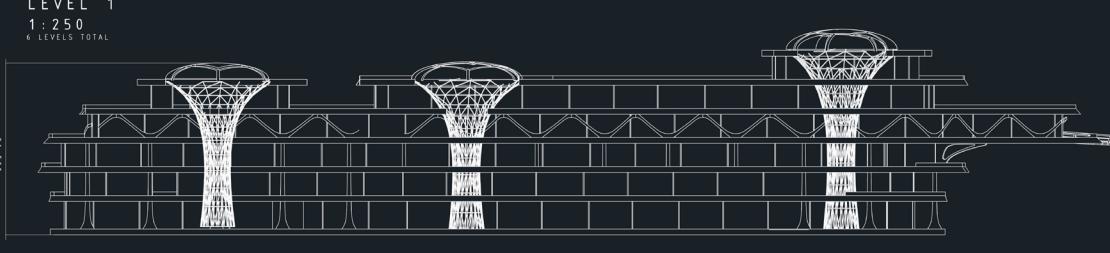
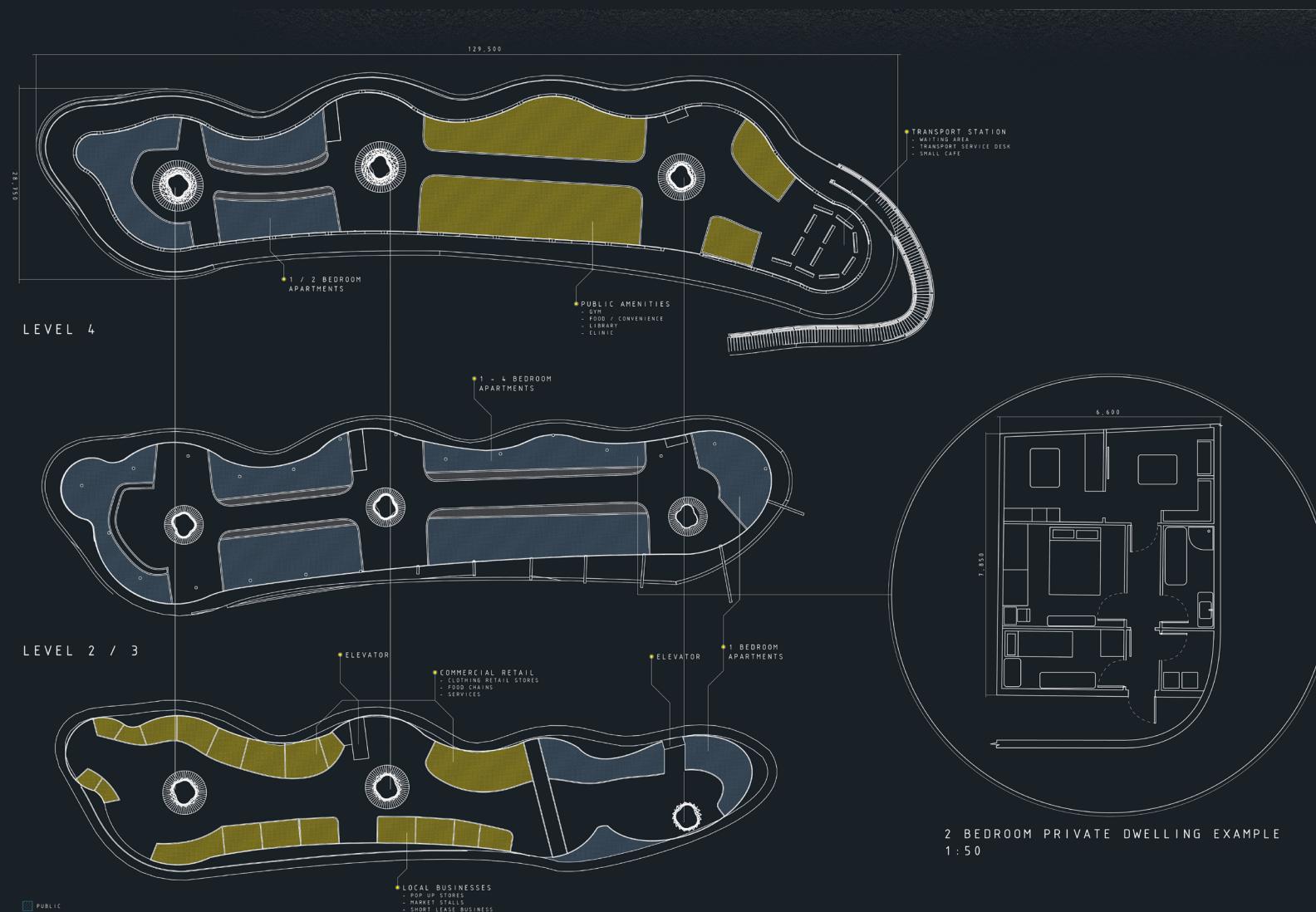




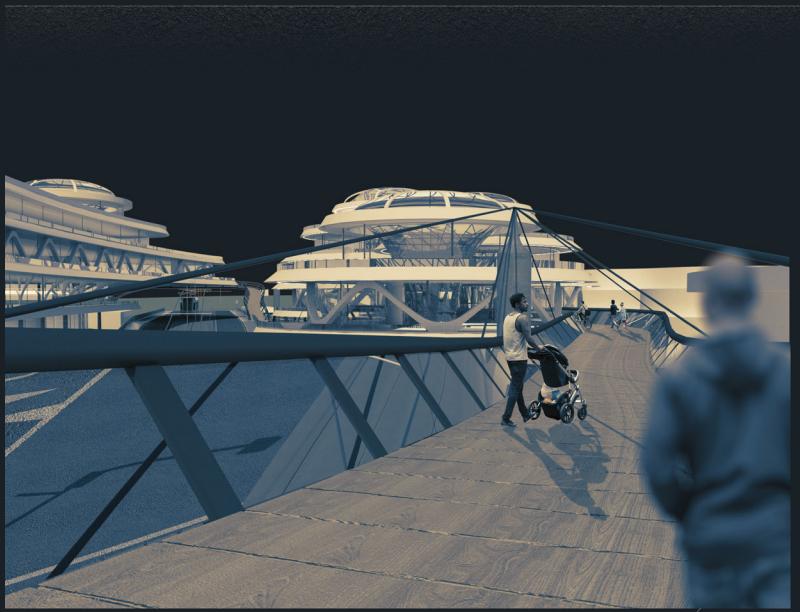
129,500



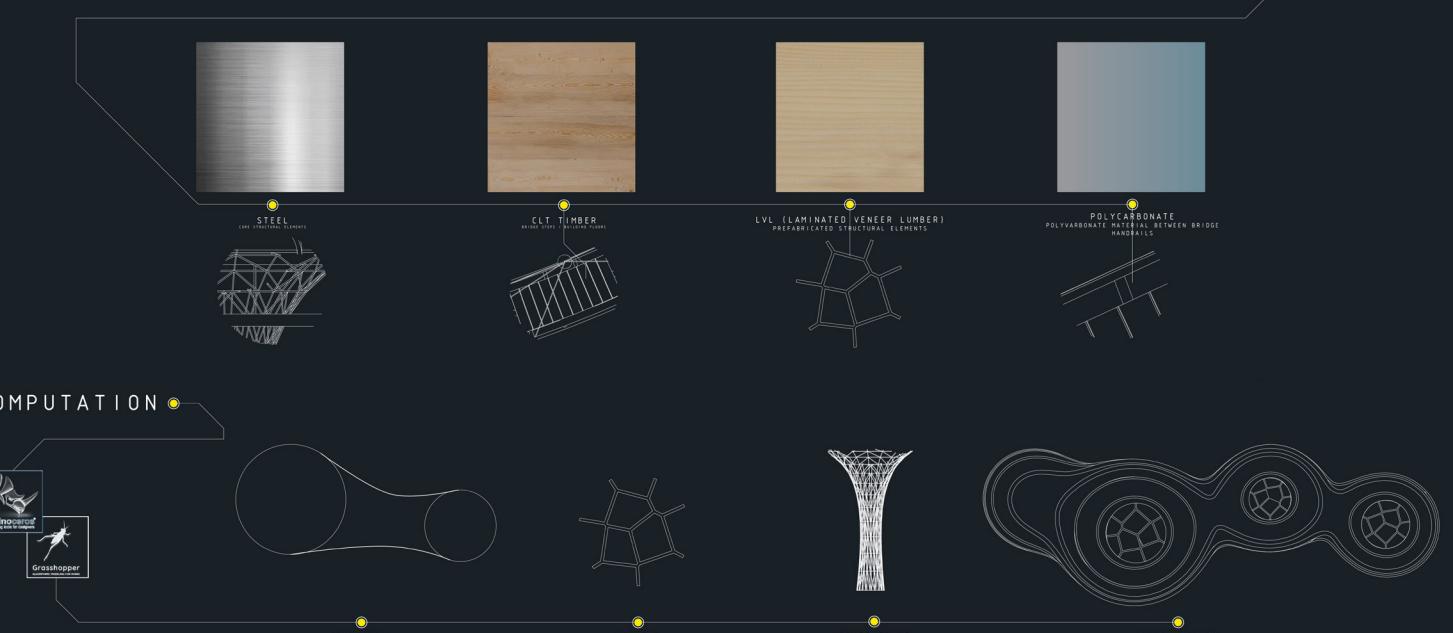
# Design Analysis



PROPOSAL  
BUILDINGS DERIVED FROM SITE CONSTRAINTS



WALKWAY VIE



## • PRECEDENTS

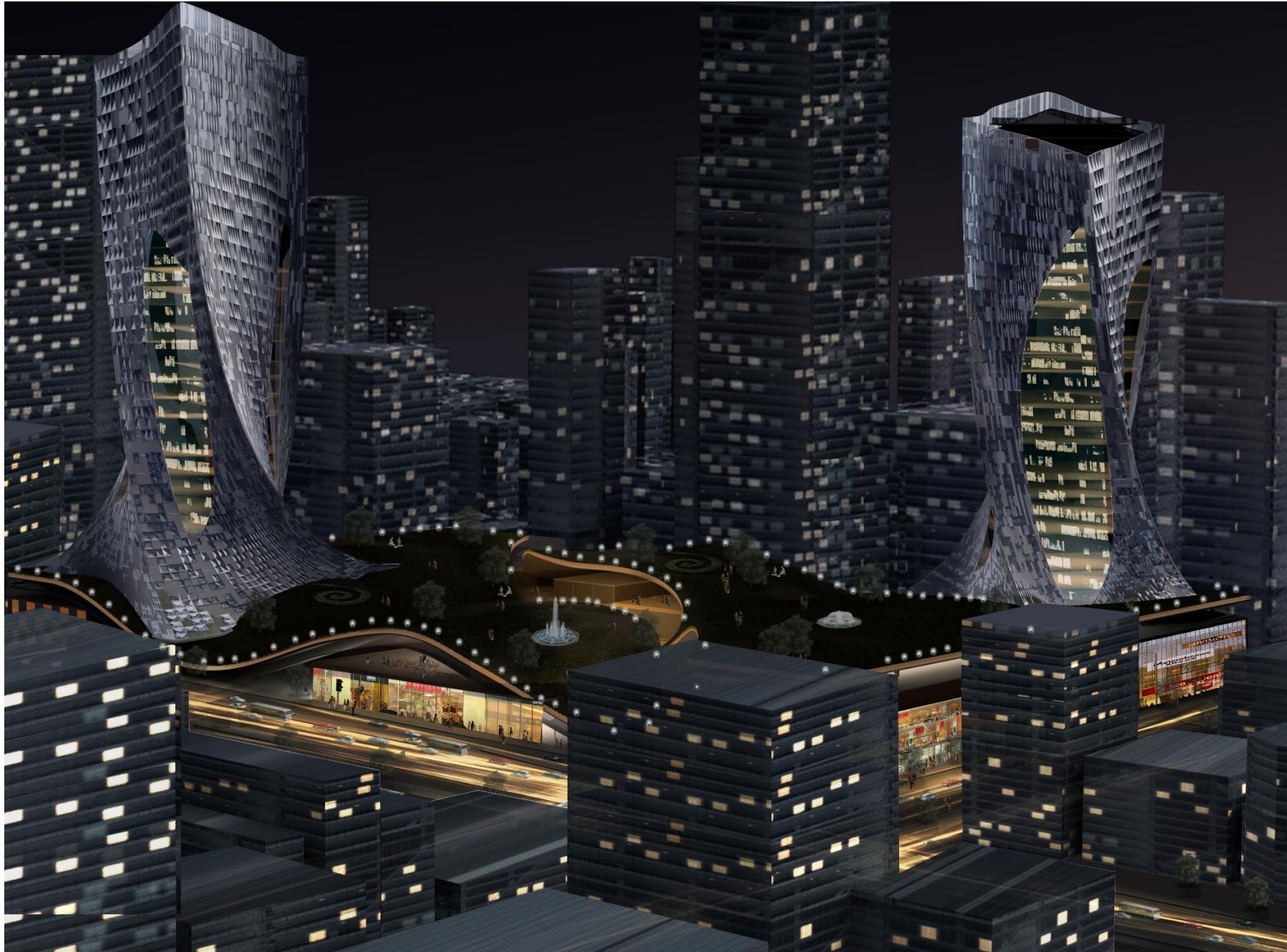
02

## HOPSA

1 Combination of hotel,  
office, parking, shopping  
mall, convention, and  
apartment

Individual  
Studio work  
March 2018



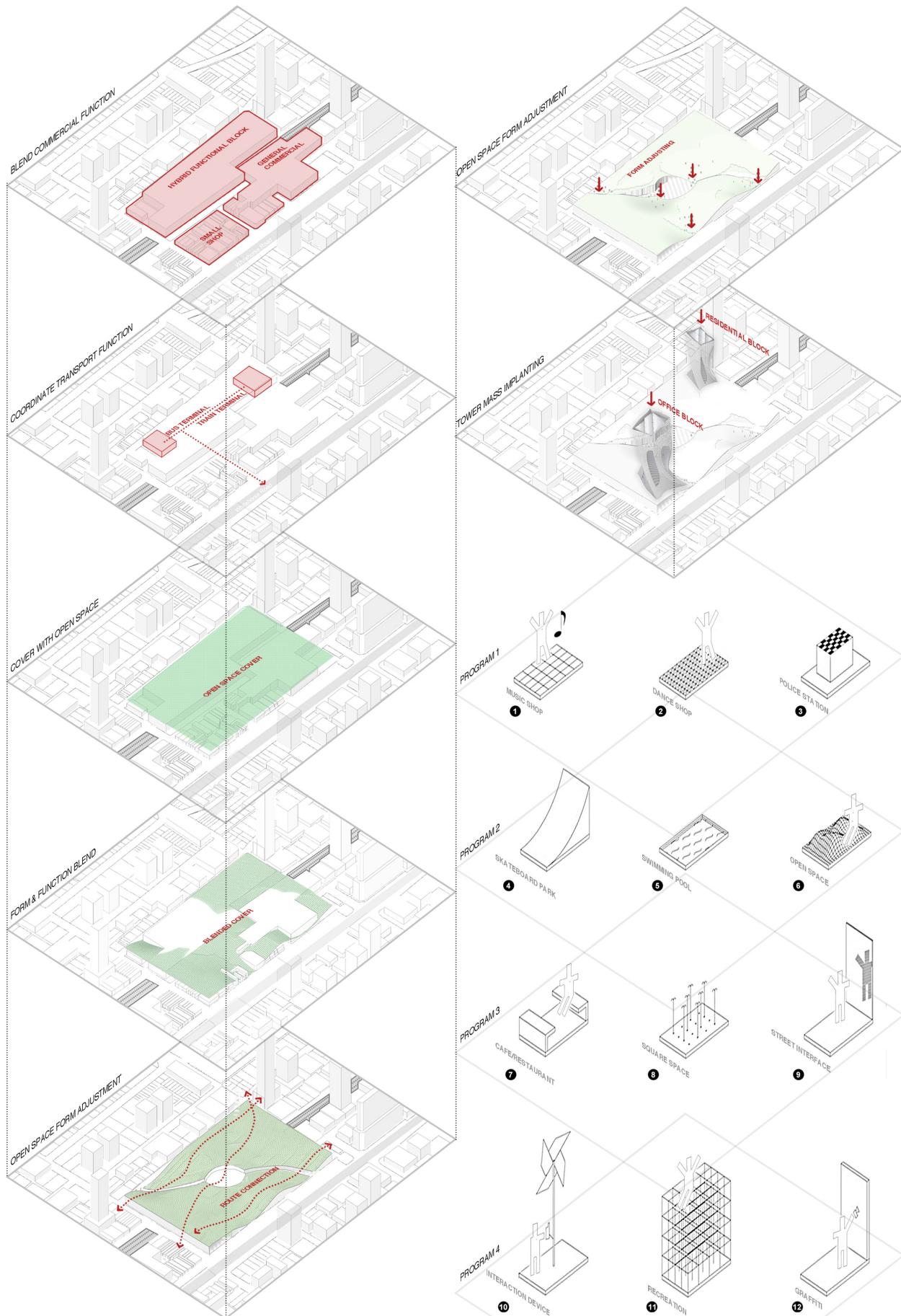


## PERSPECTICE

### PERSPECTIVE

The tower is situated directly across the street from the community center for local precinct. The scheme aims to create a rich, holistic experience from top to bottom, inside and out, and in the interior for all residences, offices and amenities.

Braking away from usual monolithic appearance of a high rise, the tower design takes inspiration from the shapes of streamline sealife and natural shape. The unique curtain wall consists of a series of tilted triangular glass planes and a series of parametric controlled facade panels, which reflects sunlight in different angles to give the form and facade a kaleidoscopic quality. At dawn, light beams run through the perimeter of polygon planes to define the patterns in the facade and enhance the building silhouette.

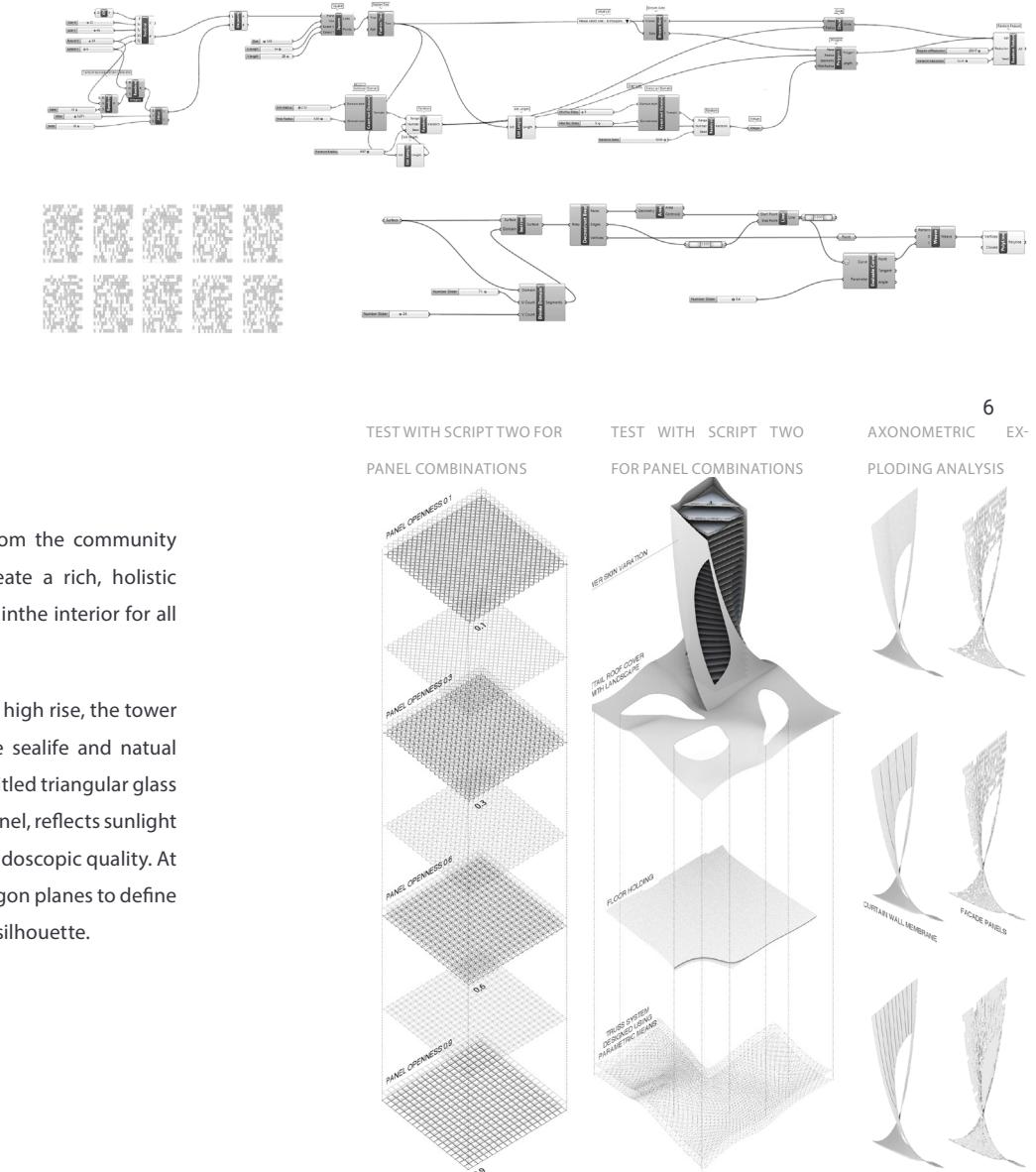


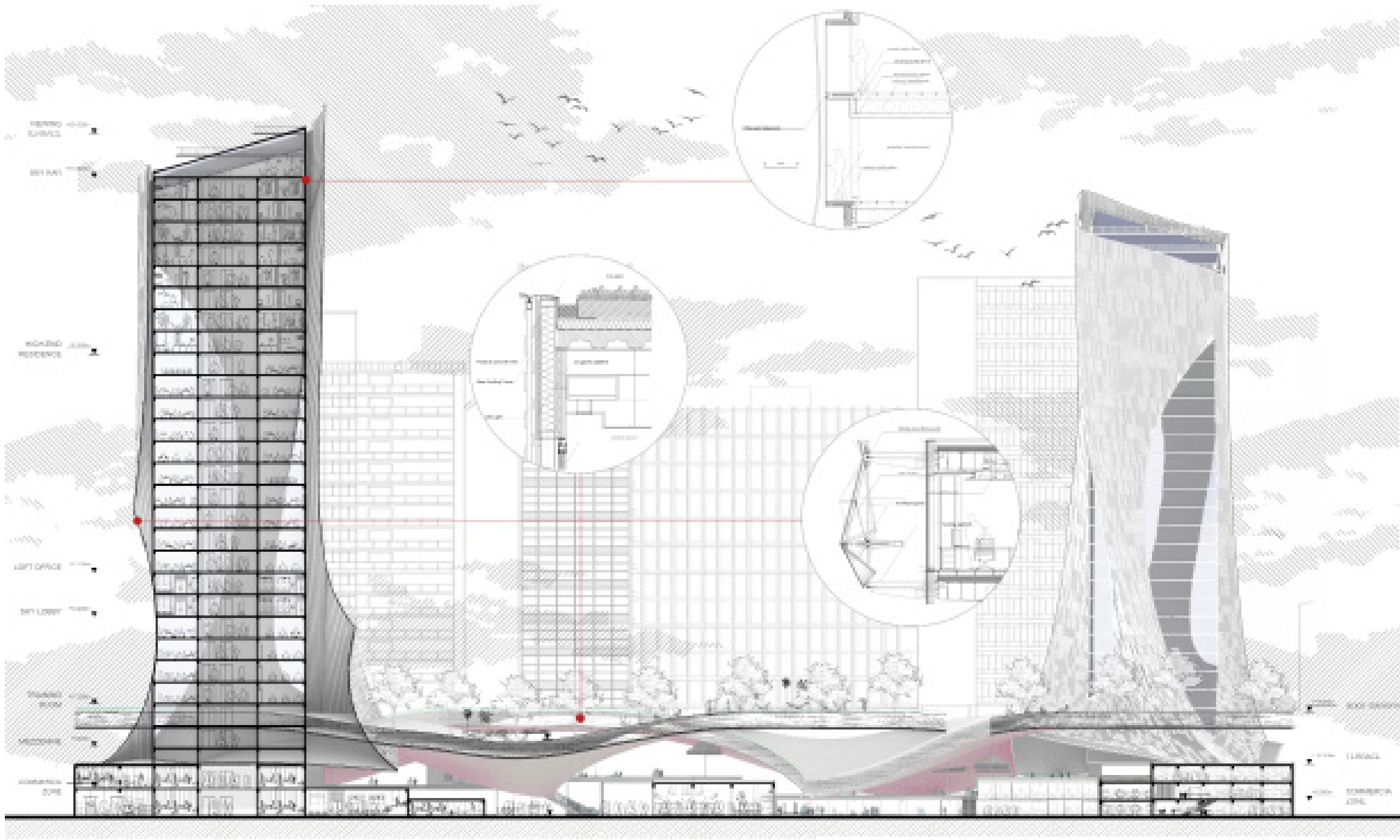
# TOWER FACADE TEST

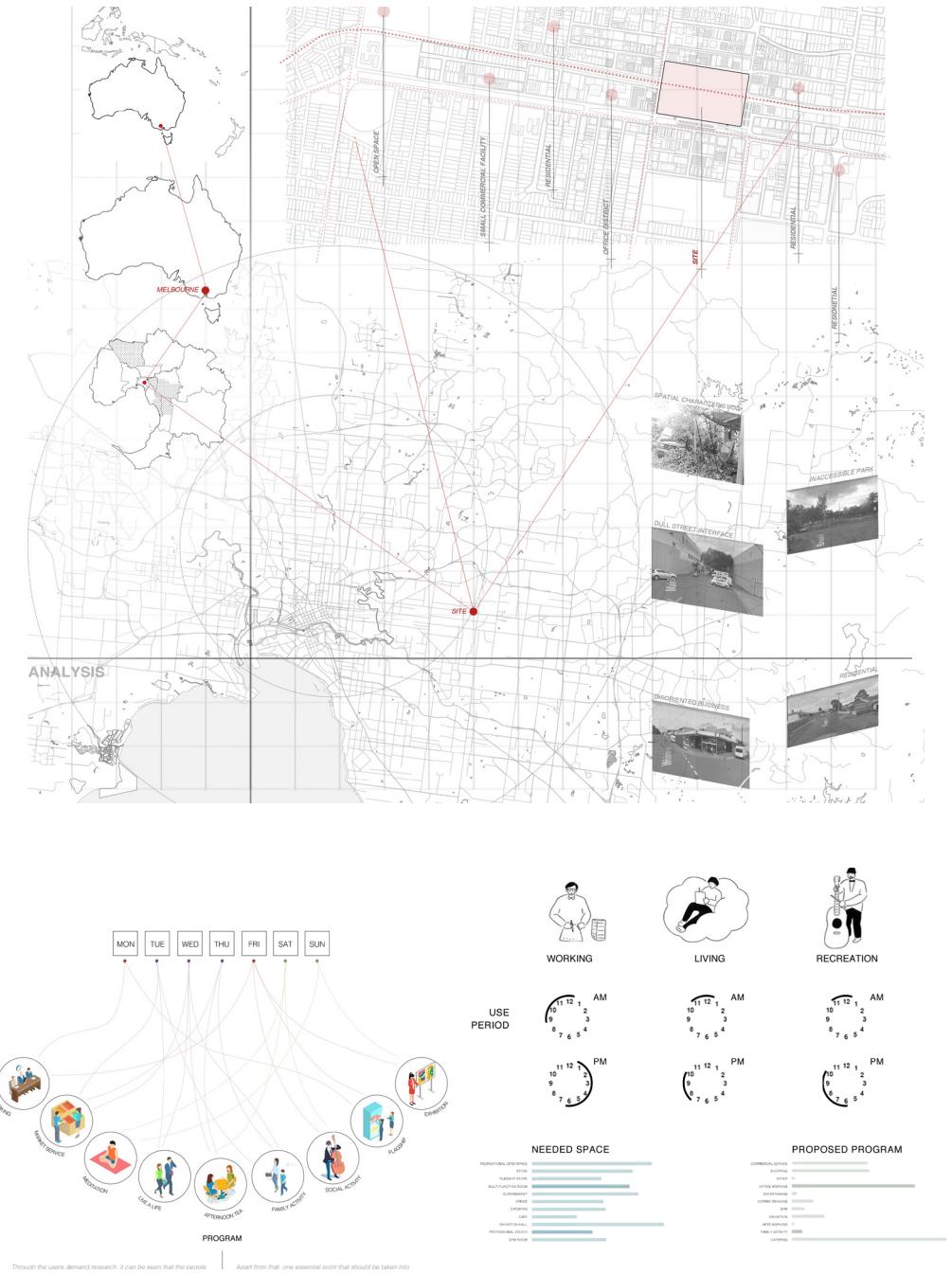
## PERSPECTIVE

The tower is situated directly across the street from the community center for local precinct. The scheme aims to create a rich, holistic experience from top to bottom, inside and out, and in the interior for all residences, offices and amenities.

Breaking away from usual monolithic appearance of a high rise, the tower design takes inspiration from the shapes of streamline sailboats and natural forms. The unique curtain wall consists of a series of tilted triangular glass planes and a series of parametric controlled facade panels, which reflect sunlight in different angles to give the form and facade a kaleidoscopic quality. At dawn, light beams run through the perimeter of polygonal planes to define the patterns in the facade and enhance the building silhouette.

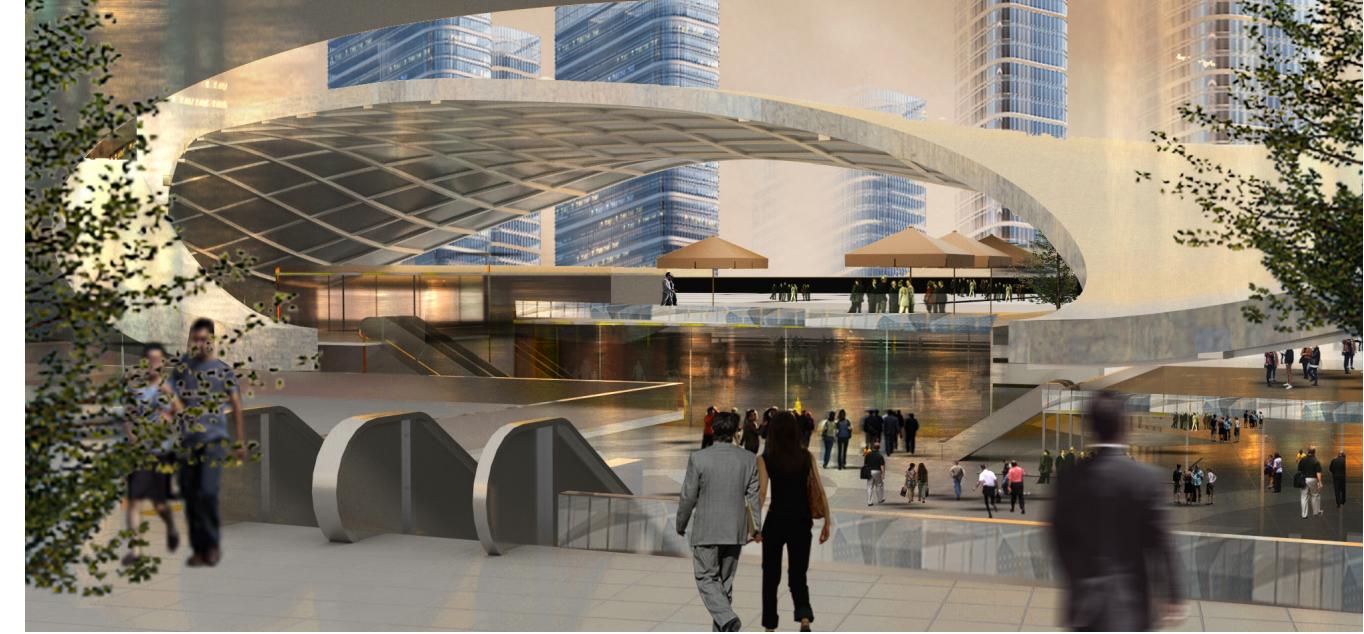






# SITE & USER ANALYSIS

Through the users demand research, it can be seen that people in a commercial complex always need flexible spaces for multiple uses. For instance, the recreational space for having their daily activities after work, like a big room with mats for meditation activities.



An architectural rendering of a modern transit hub or station. The building features a large, curved glass facade with a grid pattern. The interior is a bright, open space with a high ceiling supported by a steel truss structure. People are seen walking through the space, and there are several levels with balconies and stairs. The building is set against a backdrop of tall, modern skyscrapers.

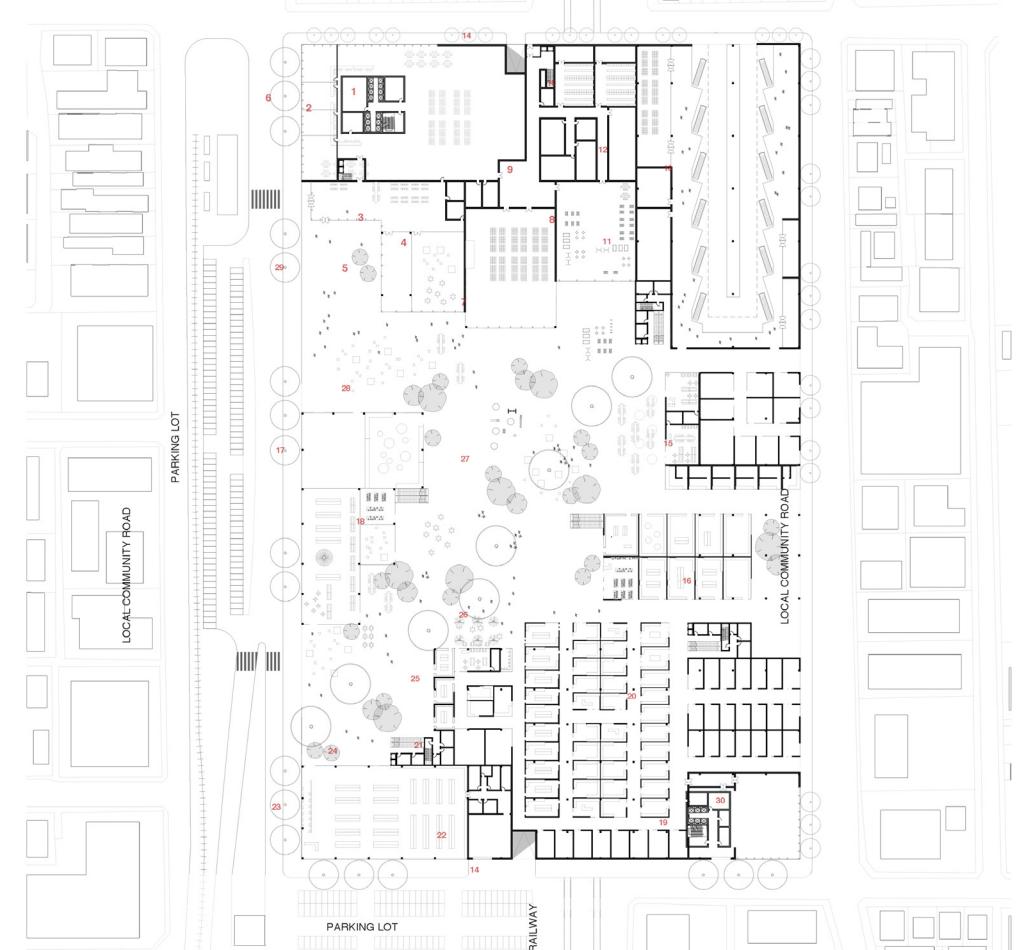
INDOOR RENDERING



11



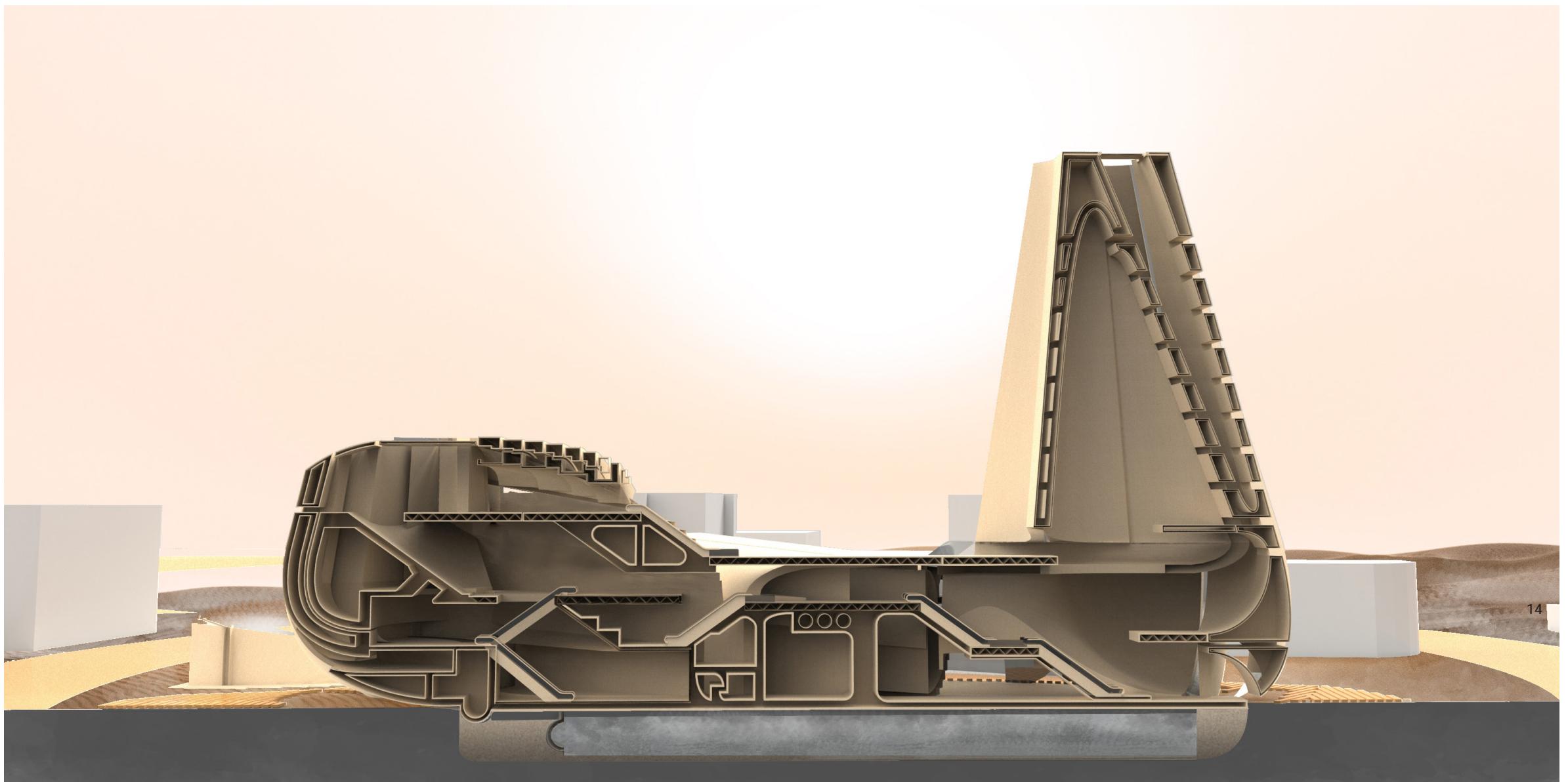
plan



In this case, a HOPSCA (hotel, office, parking, shopping mall, convention, and apartment) is proposed in the city of box Hill taking the efficient combination of social public activity space and commercial activity space as the starting point of design.

12

03



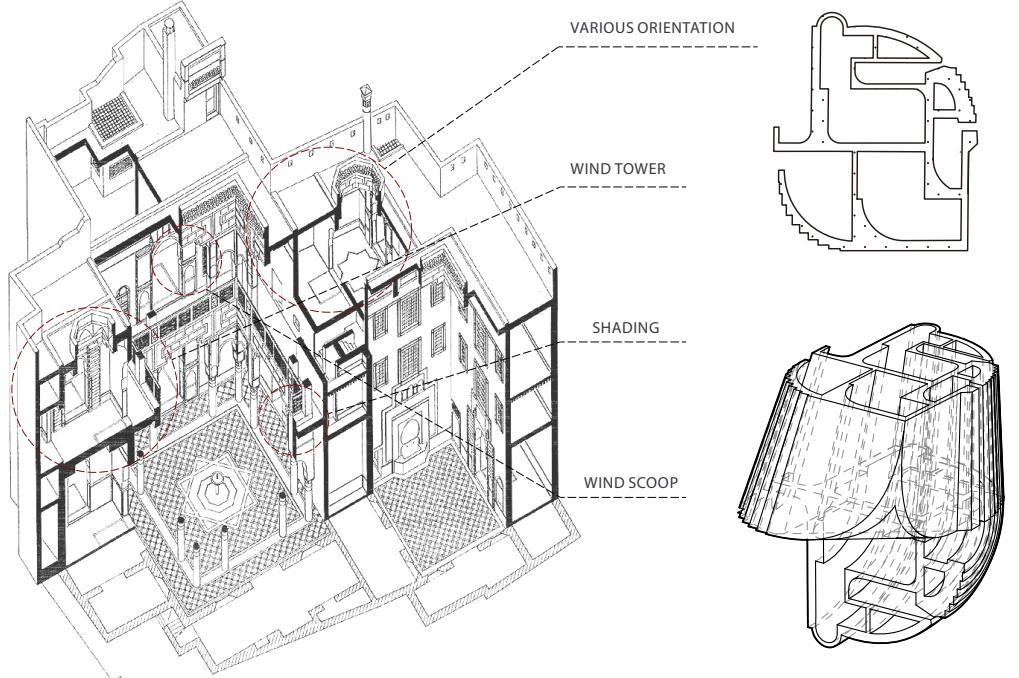
## SUSTAINABLE MACHINE

Commercial Complex Design  
DUBAI  
Individual  
May 2018

The design of the whole project aims to use the interior courtyard to organize both vertical and horizontal spaces. The vertical tower is the main natural resource collector, which adjusts interior temperate with breathable epidermis made by compressed sand and adjusted by ventilation. The patterns on the facade are solar panel and rain water collector, which generates the solar and water battery for the whole building. The main visiting streamline is guided by bifurcated structure parts in the horizontal.

The main material of the structure is compressed sand that is infinite in the desert. To use 3D print sand technique makes the whole project renewable, reusable and stable in the desert.

The geometry of the whole design is inspired by Mosque and Dubai historical building. They are start from the same section, but changed in scales, directions and quantities by repetition or rotation. Surrounded spaces are served for people and the pocket spaces are served for resources transportation.



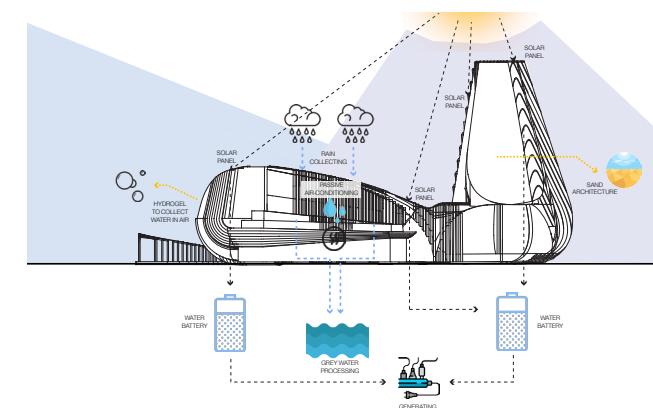
## SUSTAINABLE MACHINE

DESIGN STRATEGY

Response to temperature and ventilation)

15

16

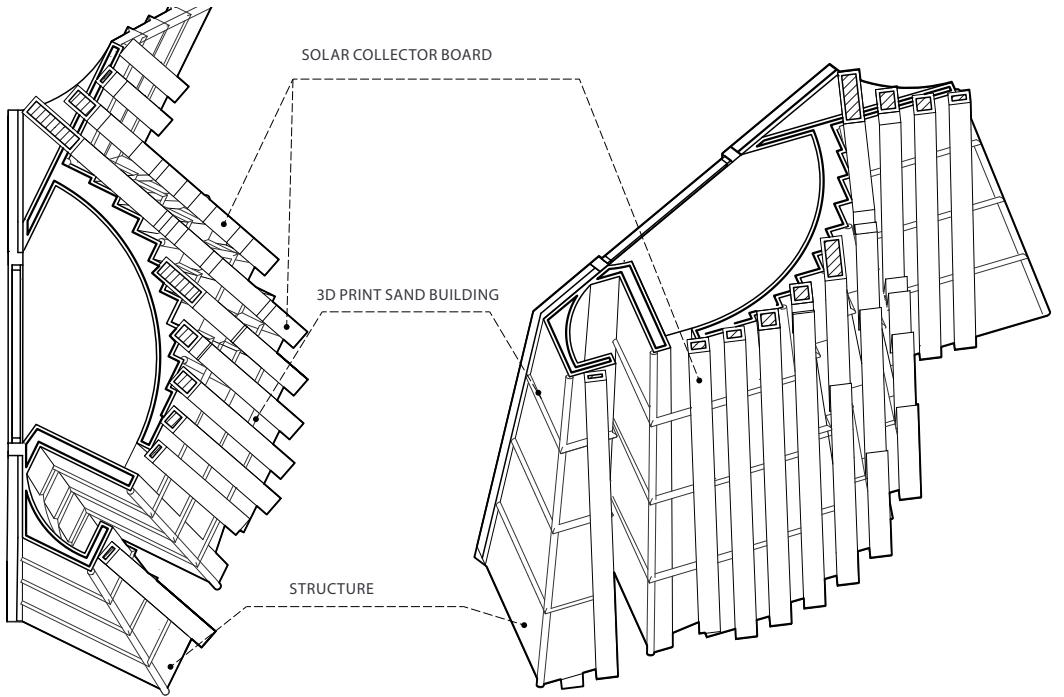


The background of the project is Dubai's sustainable Pavilion. Dubai is situated on the Persian Gulf and lies directly with the Desert and has a hot desert climate with less precipitation. The sustainable strategy of the project is to use sand, solar resource, wind resource, and water circulation.

The precedent research is Dubai historical living spaces-Gulf House. It enables the inhabitants to live in those parts of the house that are most comfortable in terms of temperature and ventilation. Taking advantage of different orientations of rooms and using sunshine as the main heat factor are the responses of the season.

The most effective response to temperature change is vertical nomadism. The wind tower and scoop are method to adjust ventilation which is most important in humid coastal situations with little drop of temperature during the night.

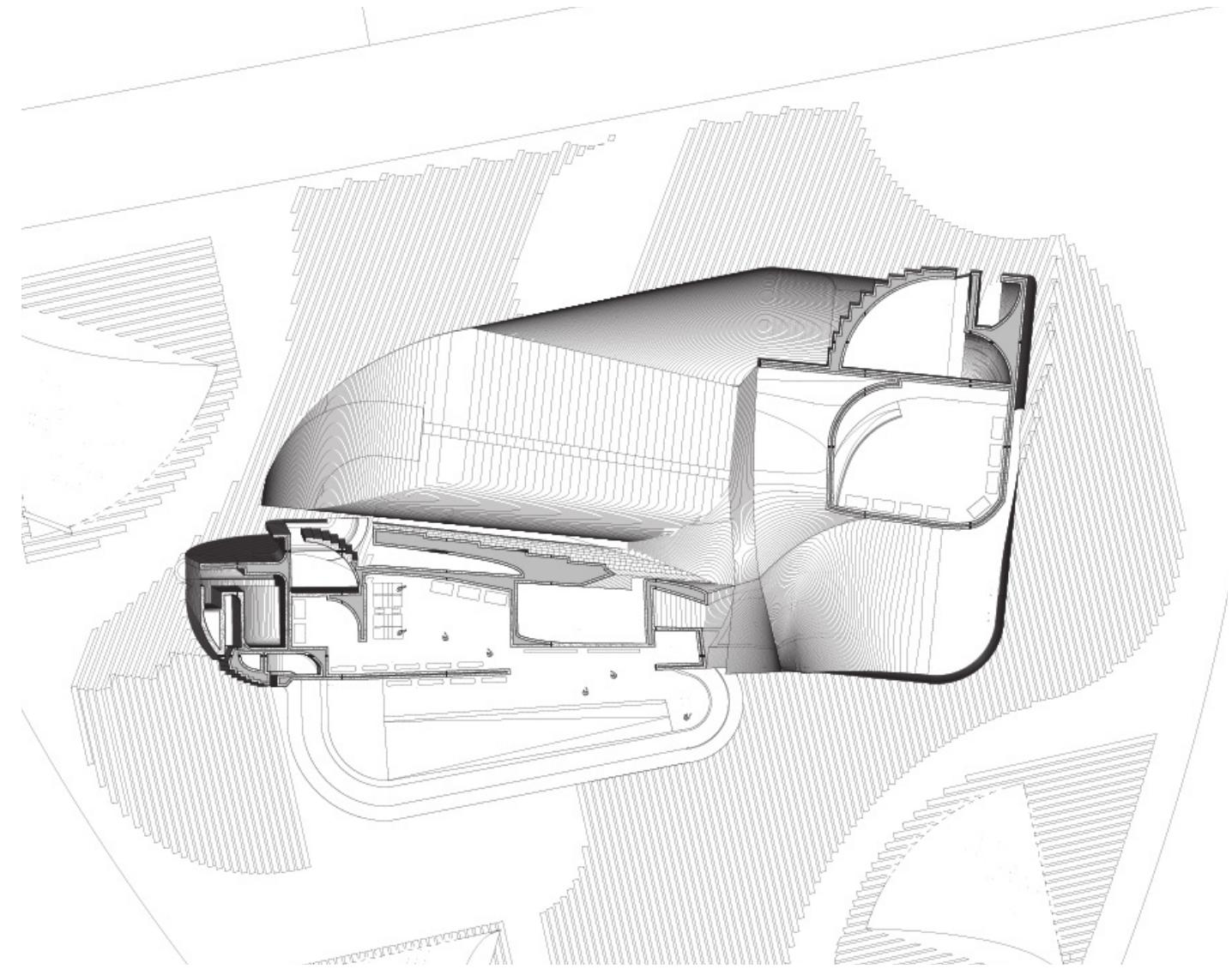




17



The facade are designed based on the solar path, which is denser facing south. There are metal structures attached on the sand building to support the serrated solar and rain collector panels



18

## FACADE DESIGN

SUSTAINABLE

## PLAN

FIRST FLOOR PLAN



04

## CULTURE CENTER

Commercial Complex  
Design

Xi'an, Shaanxi  
Individual  
April 2017

Outer frame system

Main truss system

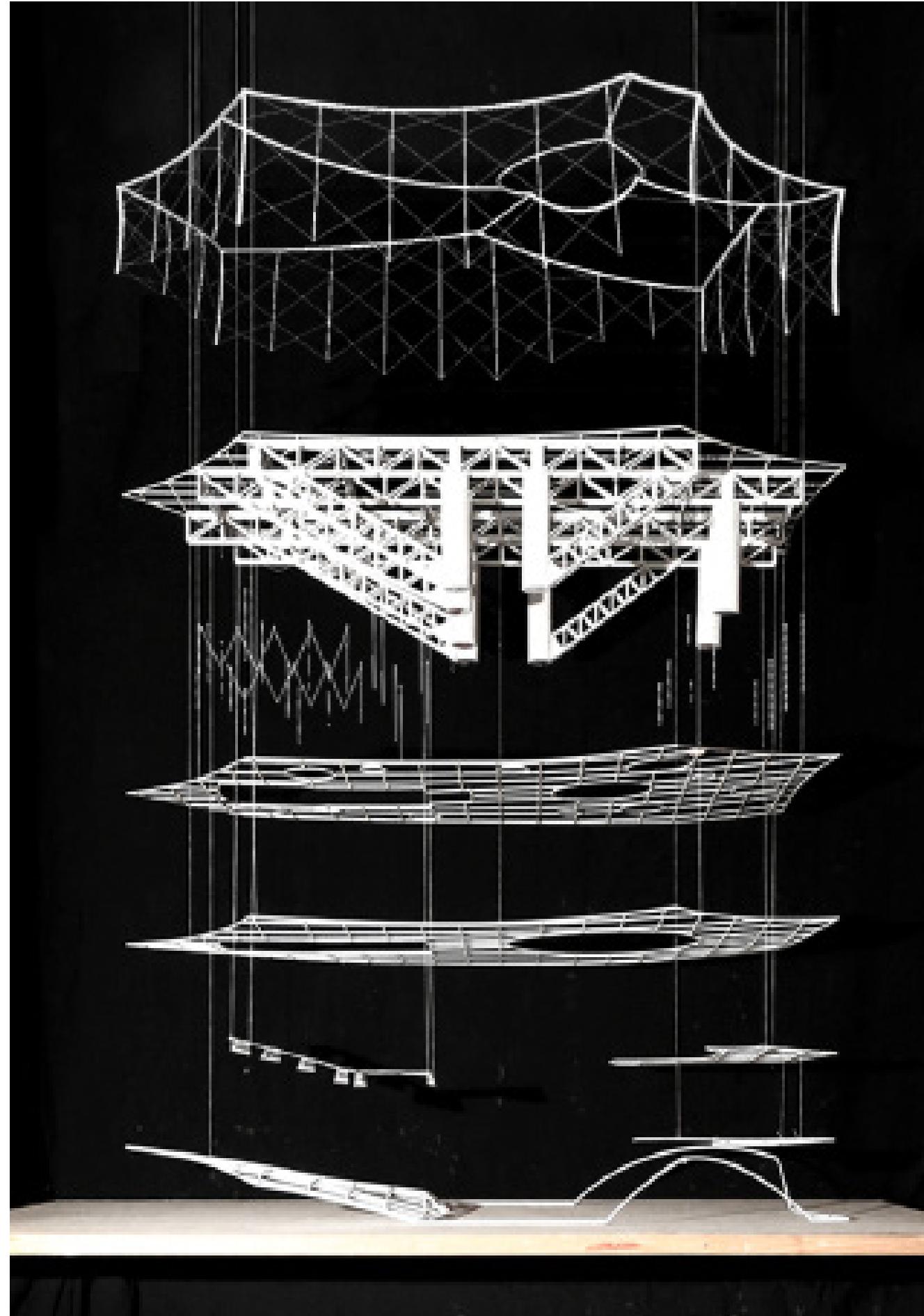
Steel tie rods

Beams of floor

Beams of floor

Bottom beams of theatre

Beams of cantilever



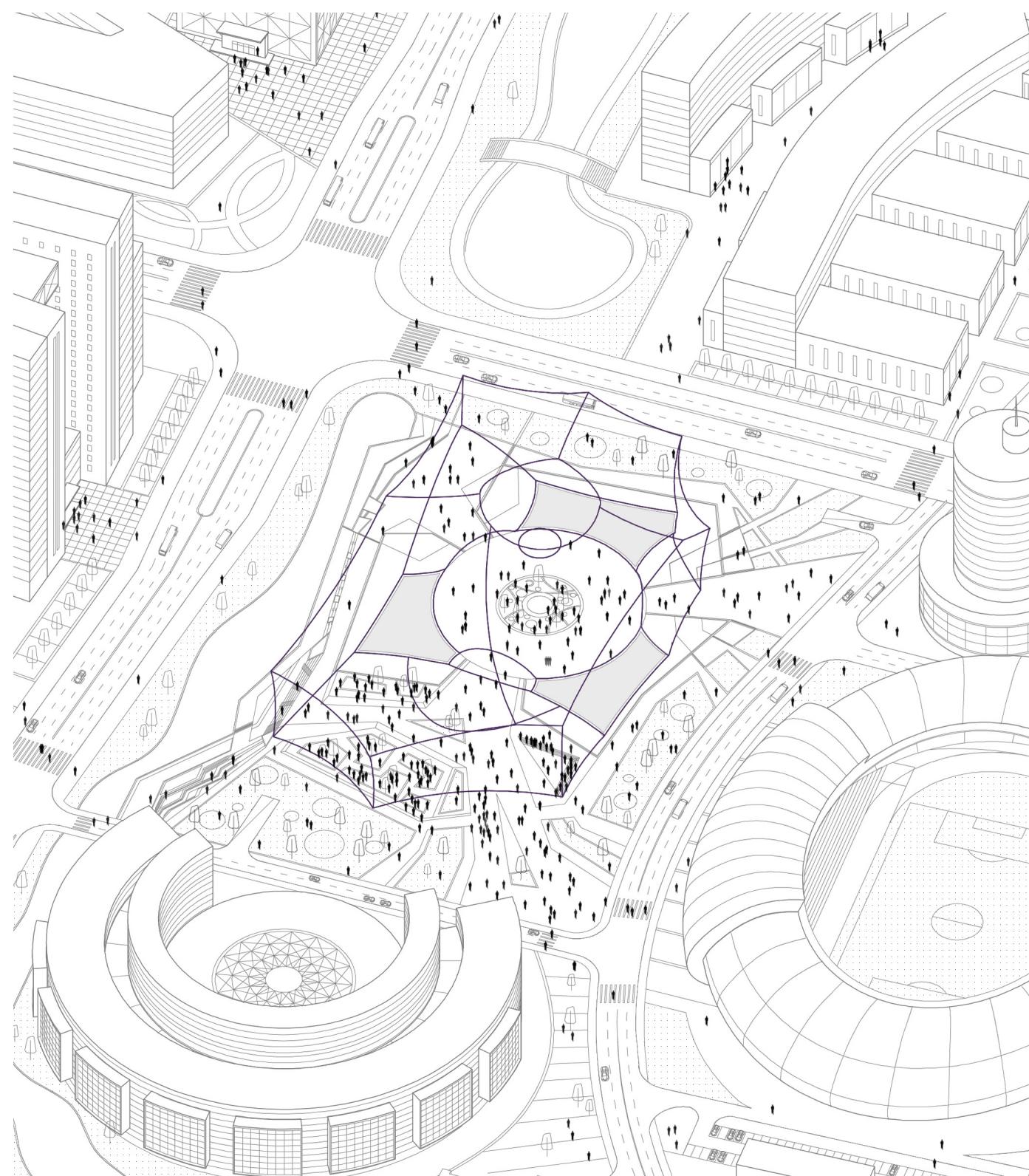
## "UMBRELLA"

22  
PROVIDE PUBLIC AND CULTURAL ACTIVITIES FOR PEOPLE

When it rains, people find some place to shelter from the rain. If we take the high density spatial stress of a city as the rain, where can people go to shelter from this stress?

We all know that in modern cities, it is hard for a building to expand in horizontal direction due to the insufficient land. So designers usually fill the site to the full with a building then expand the building in vertical direction, which leads to a city without open public space. For this reason, I raise the building, leaving the large space in ground floor to the city, thus, the building is just like an umbrella that holds up an open city space to be enjoyed by everyone.

23



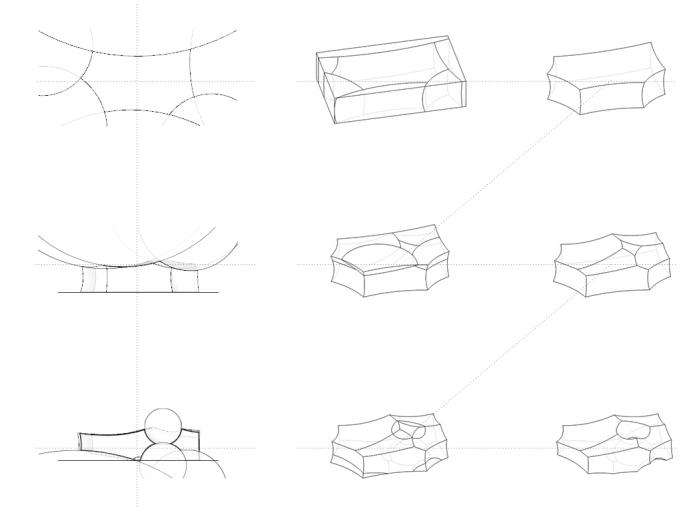
## BIRD VIEW

LONDON

BUILDING ECHOES SITE FLOW

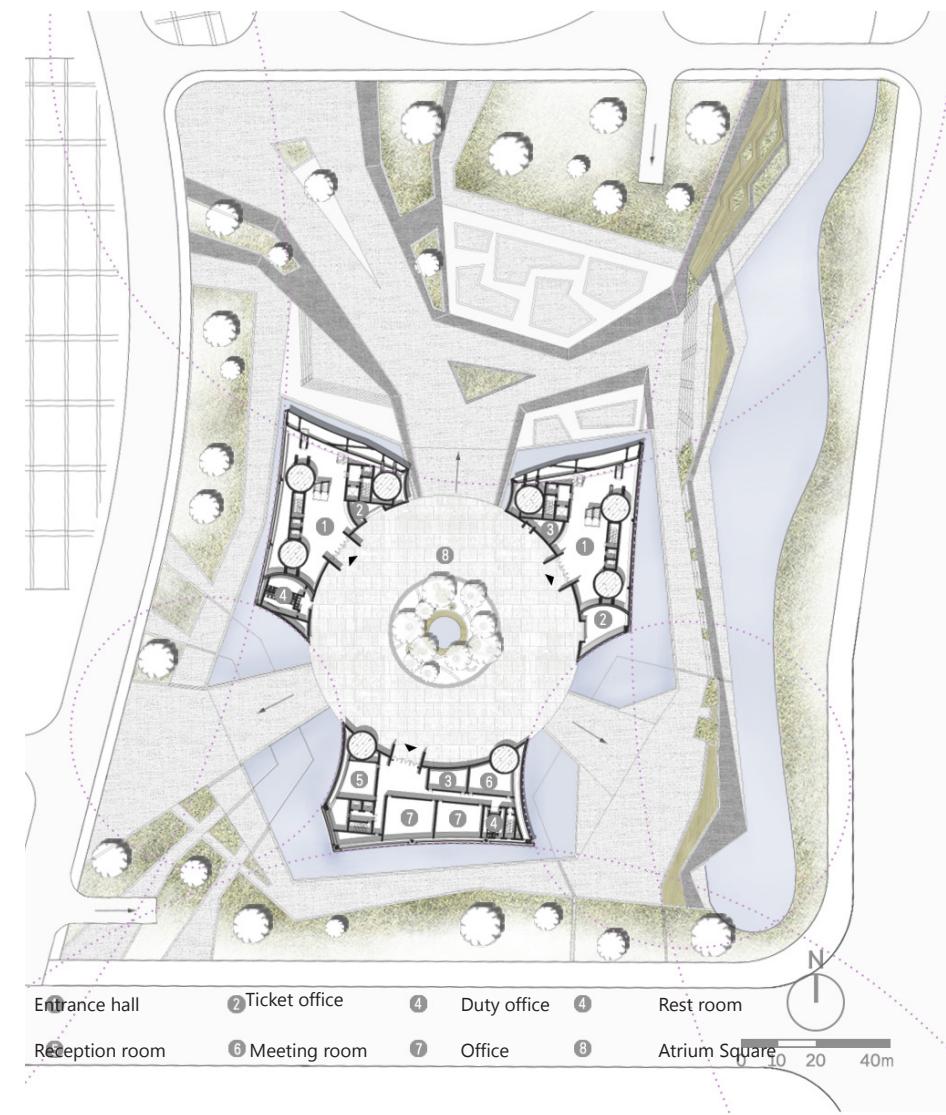
With the development of the society, cities are now getting more and more crowded. Some performing buildings and culture centers in the city did not set aside enough public space when they were built, which leads to the consequence that these buildings supposed to provide public and cultural activities for people, nowadays, can not meet people's needs any more.

24

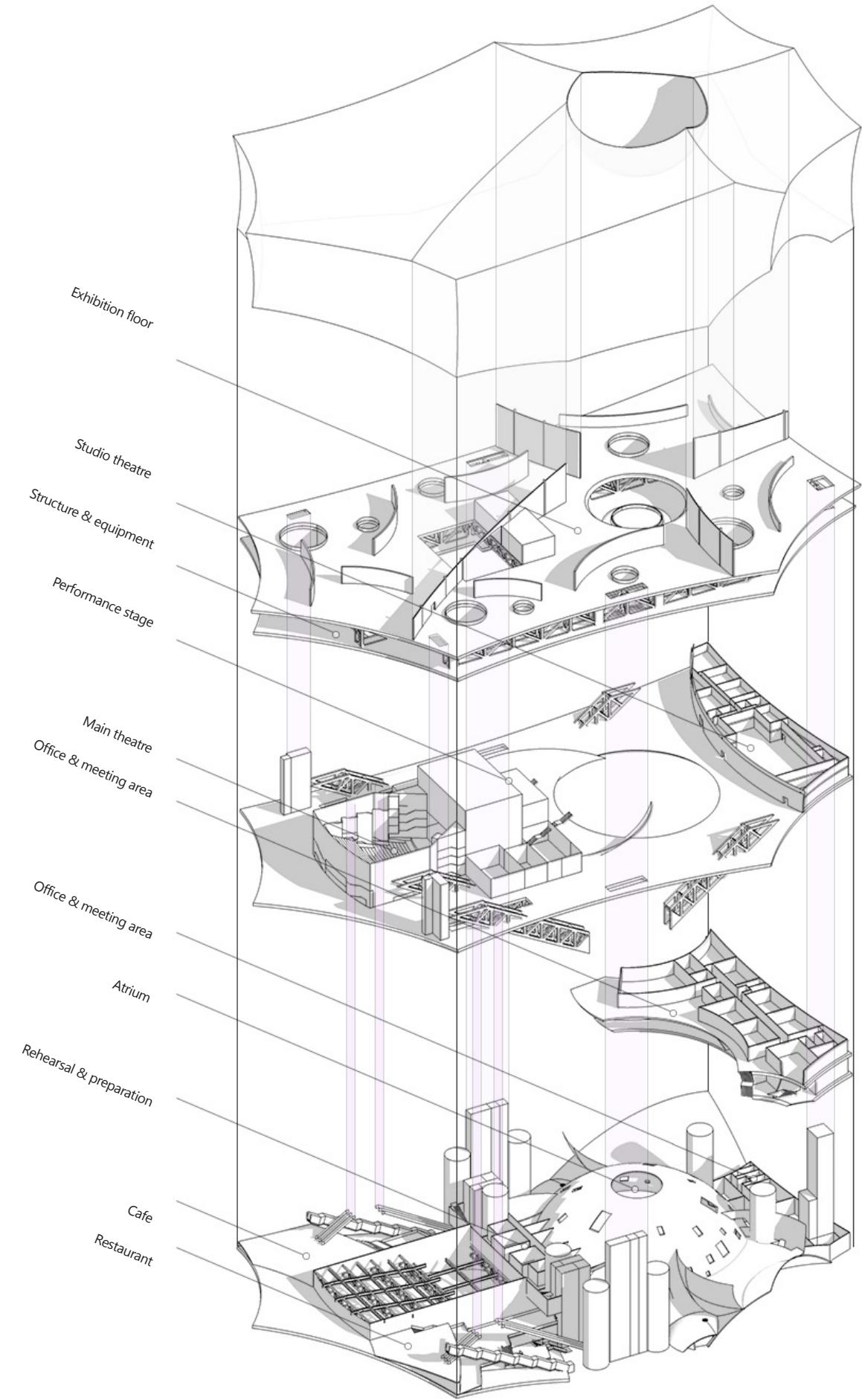


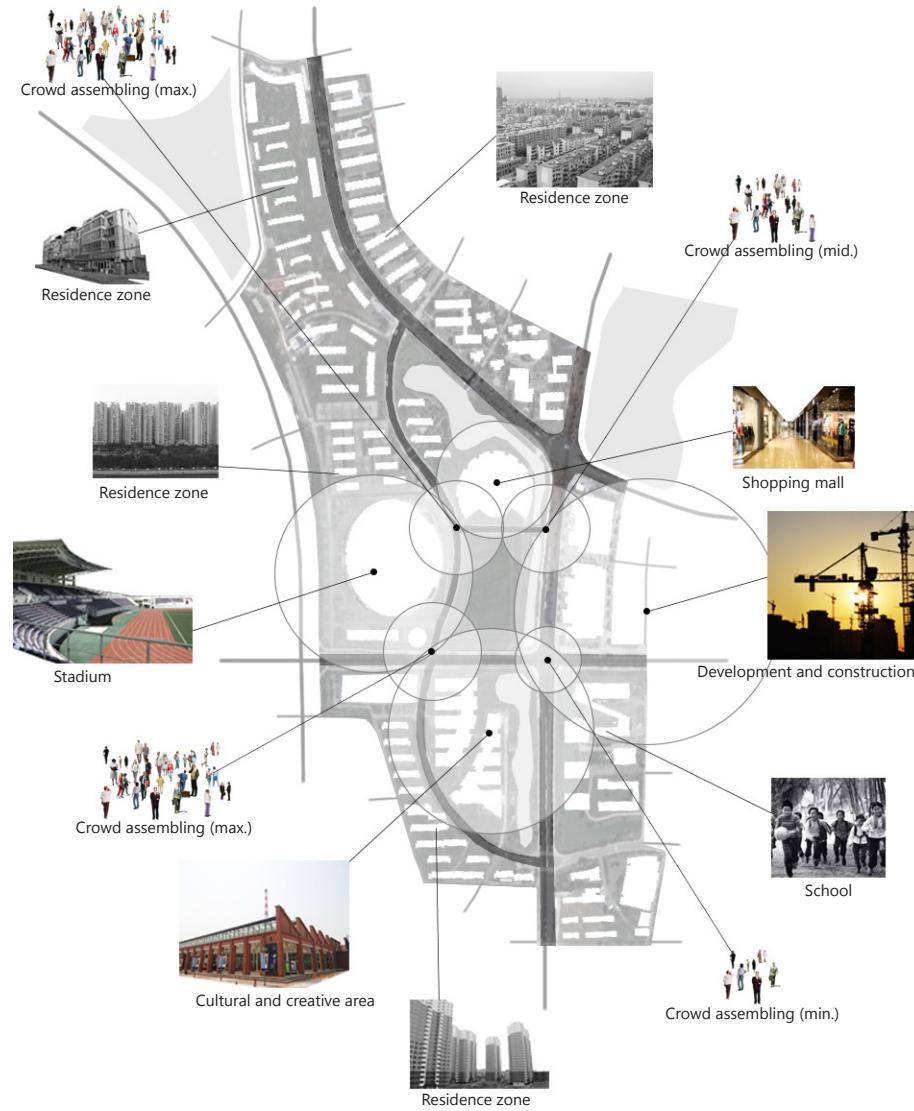
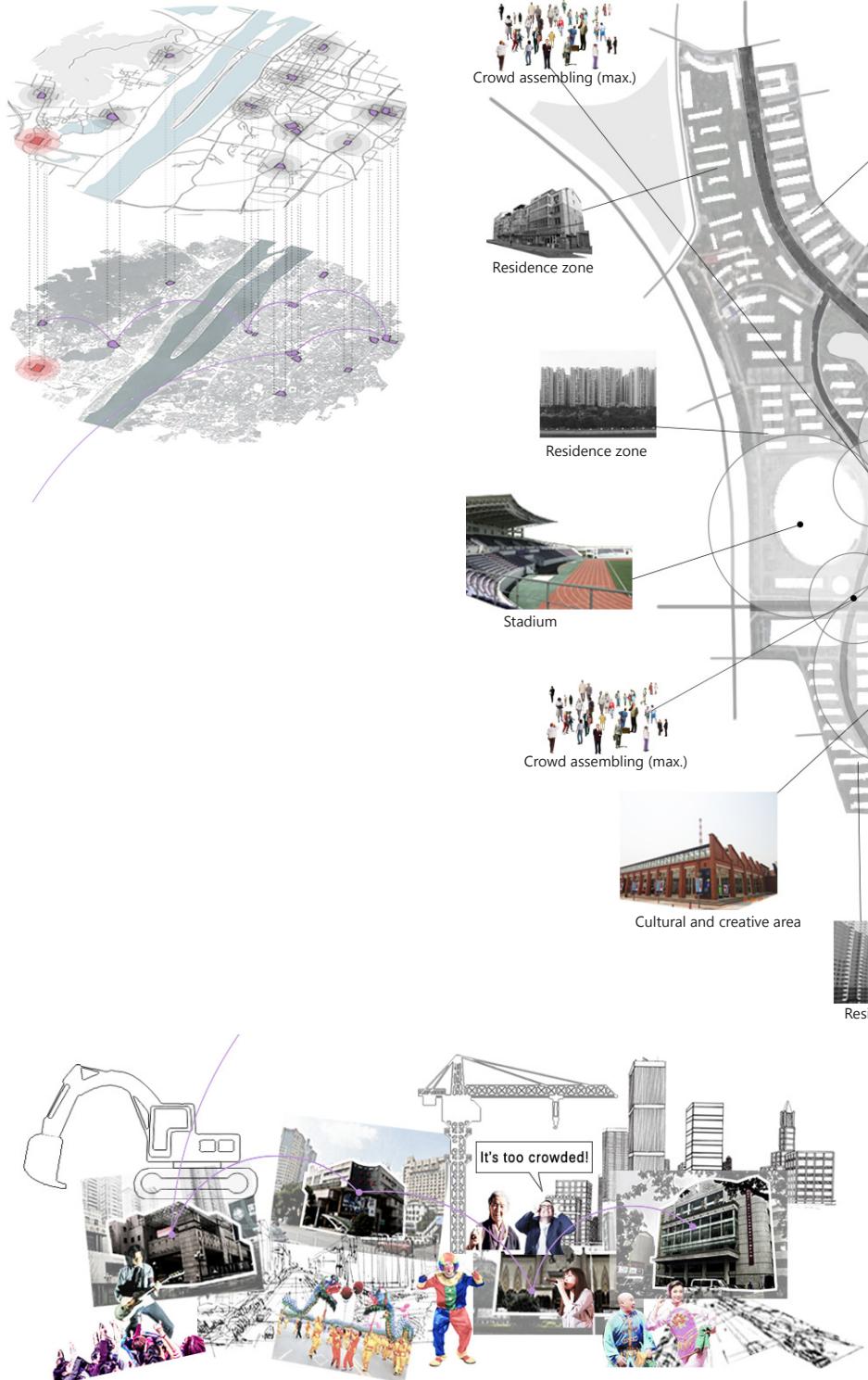
MORPHOGENESIS

The shape of the building is shaped around the central circular public space. According to the functional requirements it carries, the building is cut and divided, and the form formed can attract and gather people



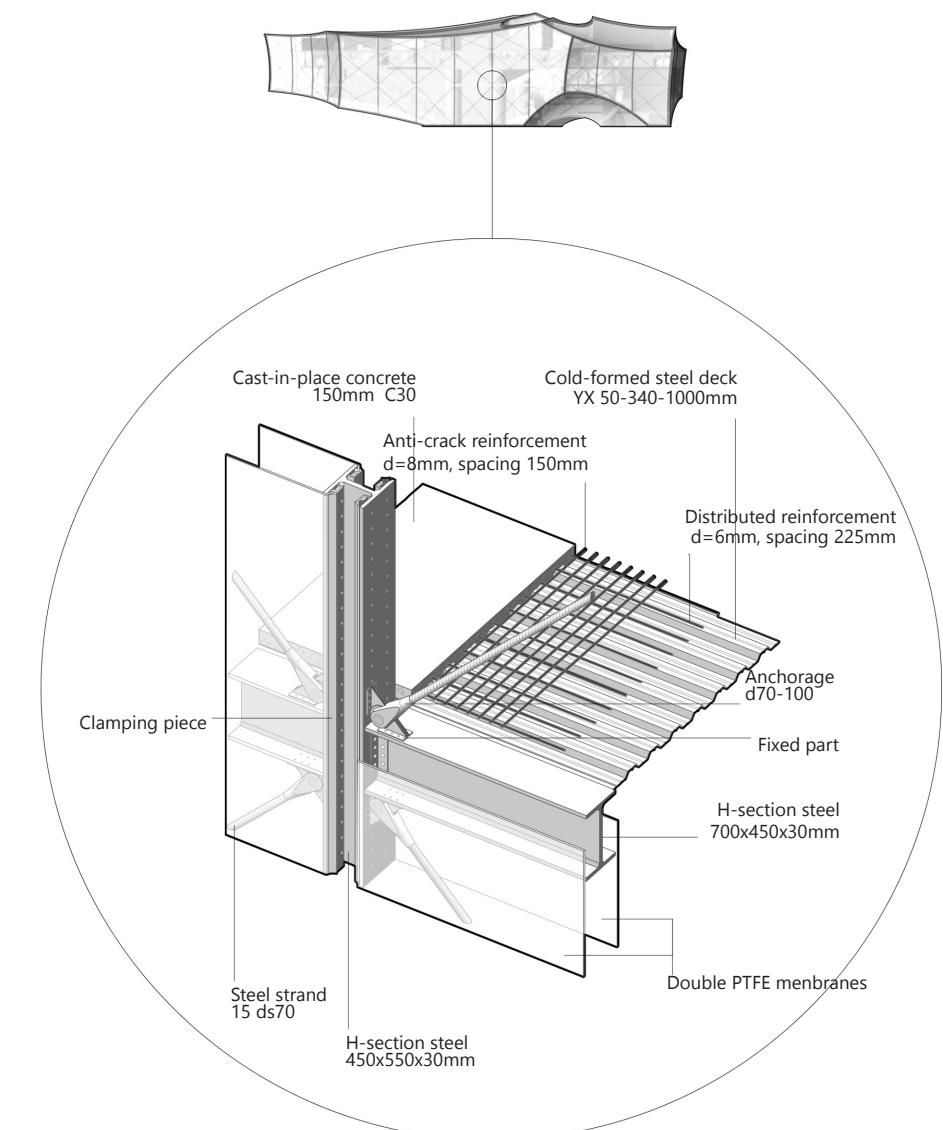
# plan





## DETAIL ANALYSIS

With the development of the society, cities are now getting more and more crowded. Some performing buildings and culture centers in the city did not set aside enough public space when they were built, which leads to the consequence that these buildings supposed to provide public and cultural activities for people, nowadays, can not meet people's needs any more.





29

PUBLIC SPACE RENDERING



30

## CENTRAL DOME HALL

All functions in the building are centered around the central dome hall. The hall is made of concrete and has circular openings at a high level, giving the space a sacred atmosphere. Curved walls make the space more flexible and vivid.

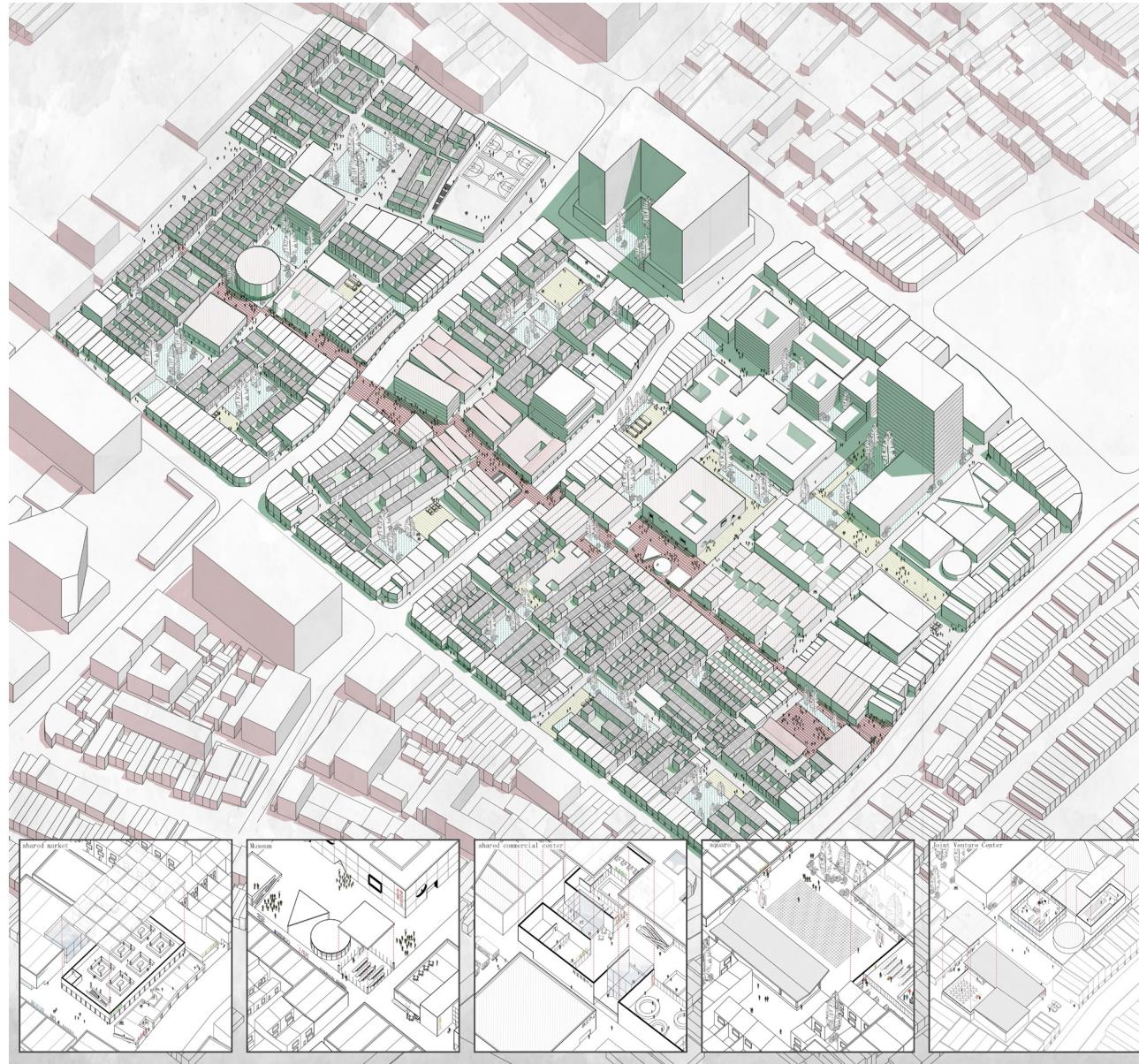
## SECTION

31

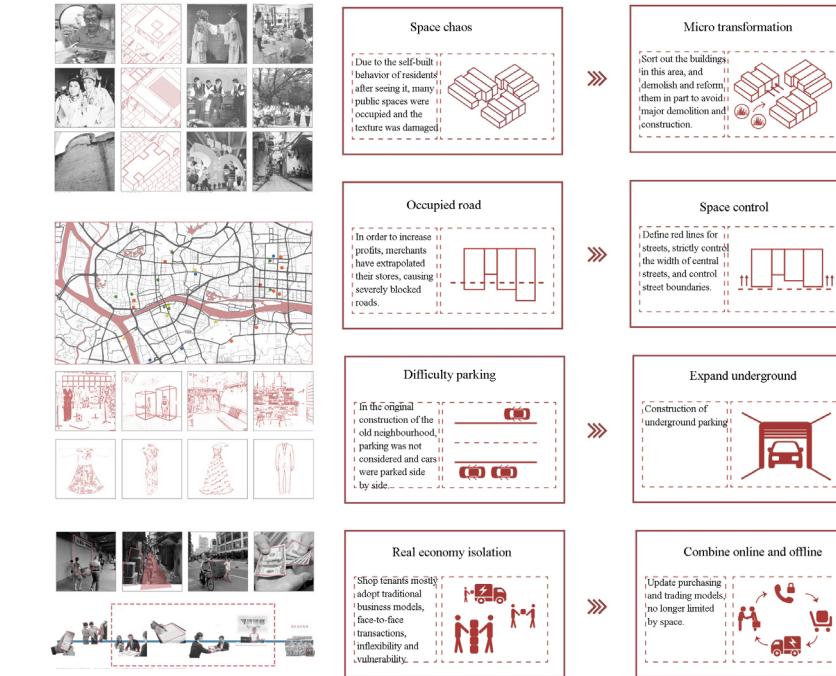


We all know that in modern cities, it is hard for a building to expand in horizontal direction due to the insufficient land. So designers usually fill the site to the full with a building then expand the building in vertical direction, which leads to a city without open public space. For this reason, I raise the building, leaving the large space in ground floor to the city, thus, the building is just like an umbrella that holds up an open city space to be enjoyed by everyone.

32



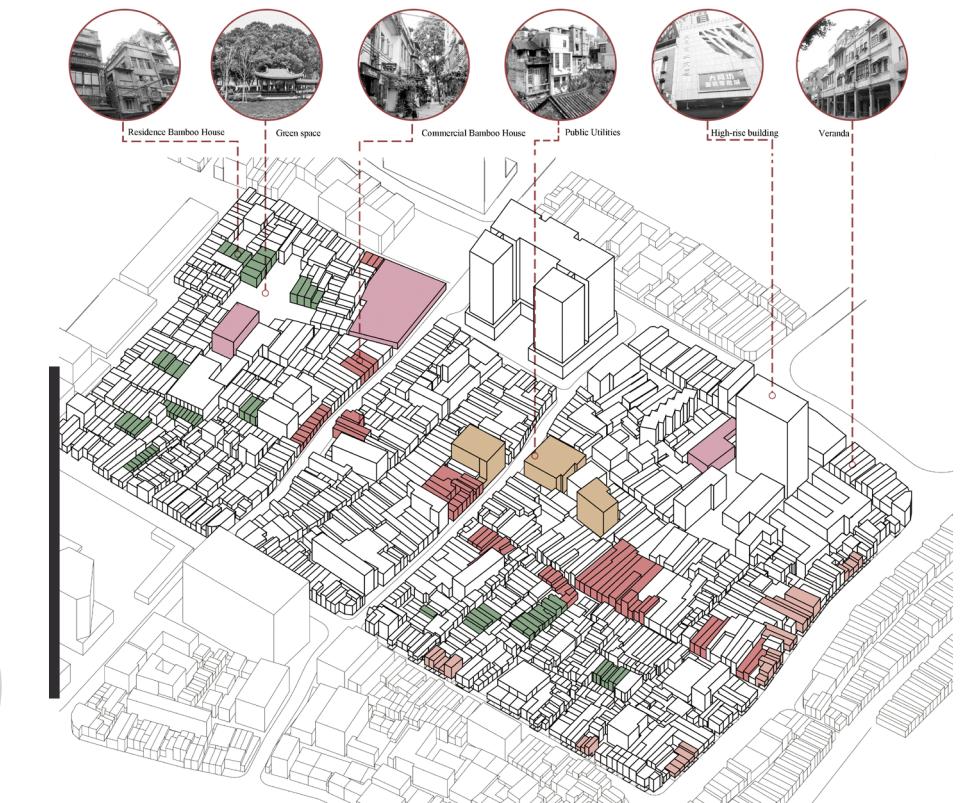
Design Bird View 05



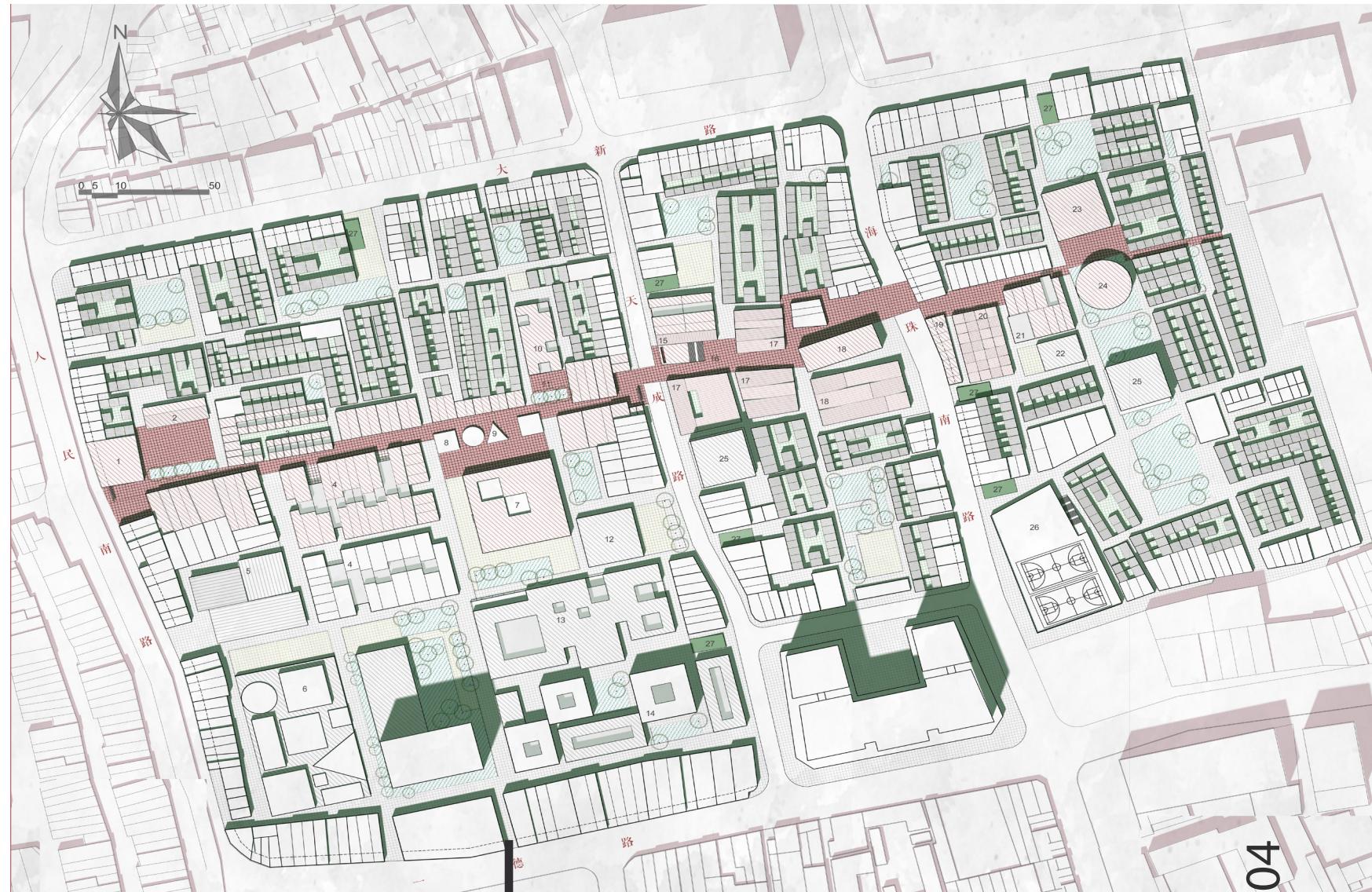
The base is 260 meters in length, 5 meters in width, and only 2 meters at its narrowest point. It is accompanied by many problems such as occupation of roads, poor roads, difficult parking, and many debris on the facade. It used to have the most famous costume embroidery culture, as well as the unique bamboo house and the tower building.



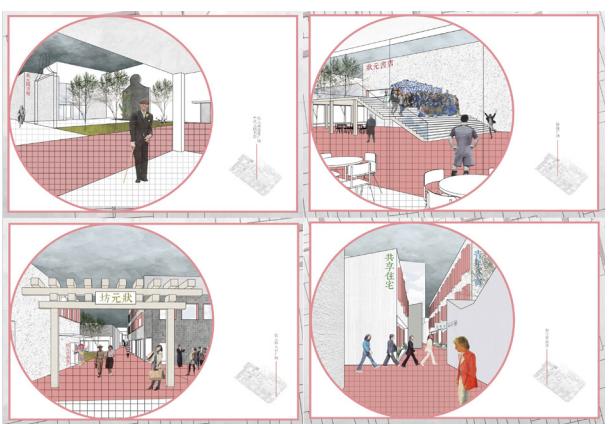
## Site Analysis<sup>34</sup>



The project is located in Zhuangyuanfang District, Guangdong Province, China, and is an old street in the old city. It used to be famous for embroidery and costumes and has a history of 700 years. The neighborhood is rich in tangible intangible cultural heritage and has local characteristics. However, due to the impact of e-commerce, fire control, dirty internal environment and other factors, it is gradually declining.



## Design Plan



# RENEWAL DESIGN OF DIVERSIFIED SPACES IN TRADITIONAL BLOCKS

Guangzhou  
Individual  
Sep, 2016



The planning structure takes the main street of the base as the main axis and connects important spatial nodes in series to form the secondary axis and the green axis.

Based on the existing green space, it was expanded and some of the poorer quality buildings were demolished. In addition, the corner green space and open space on the street are sorted out.

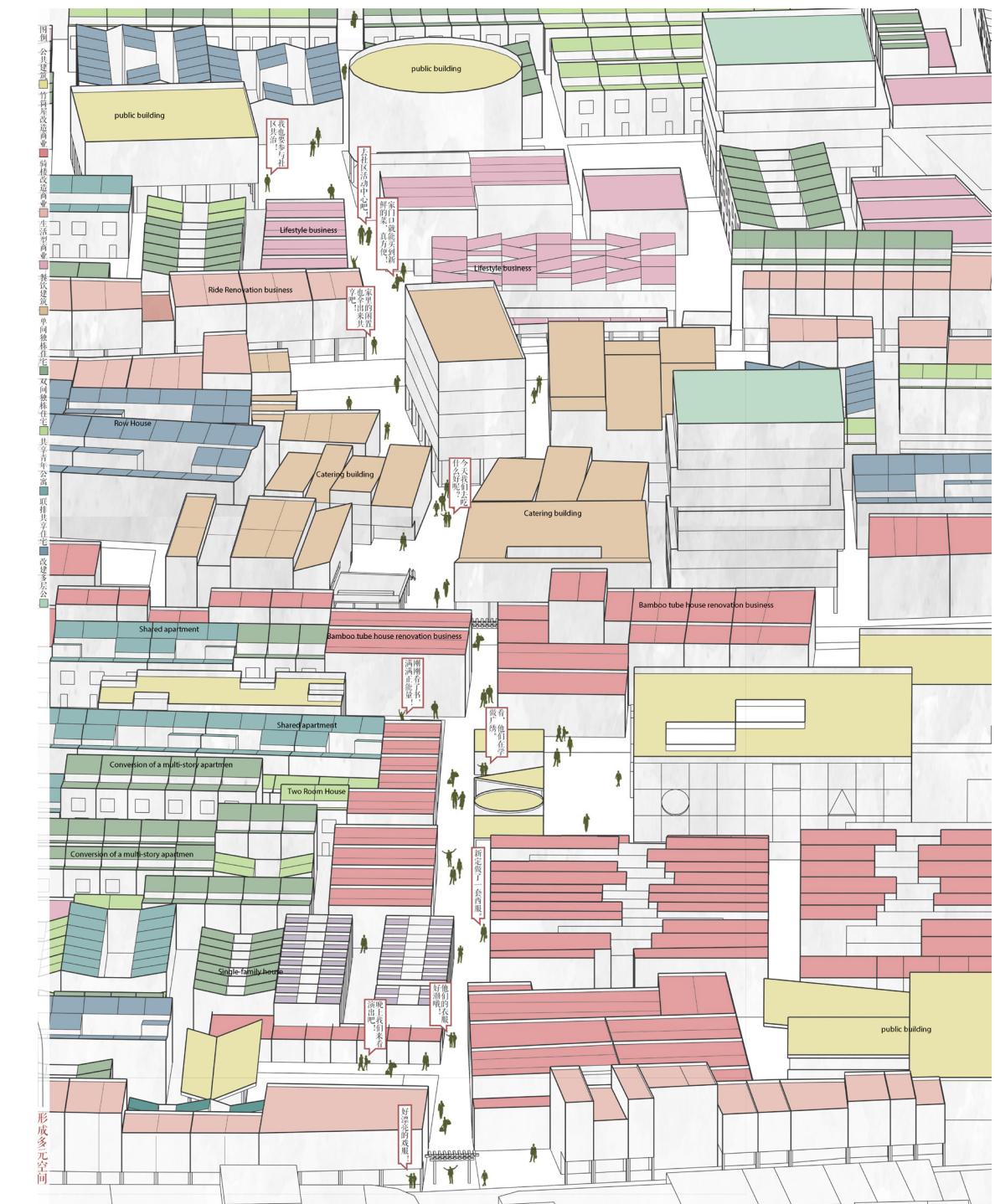
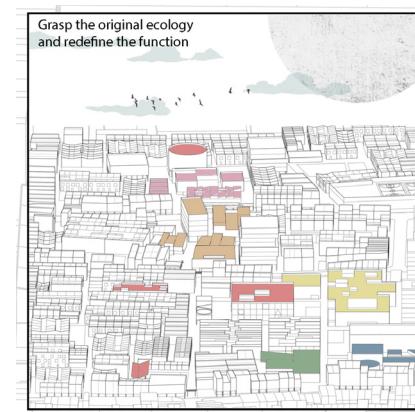
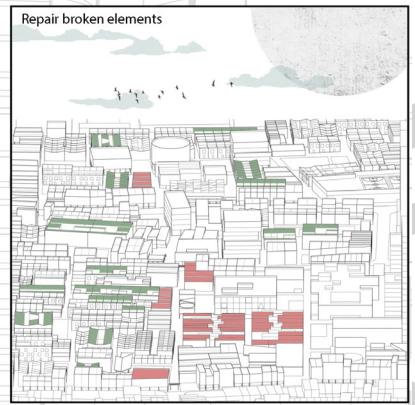
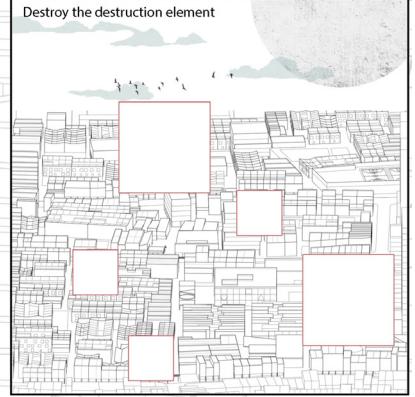
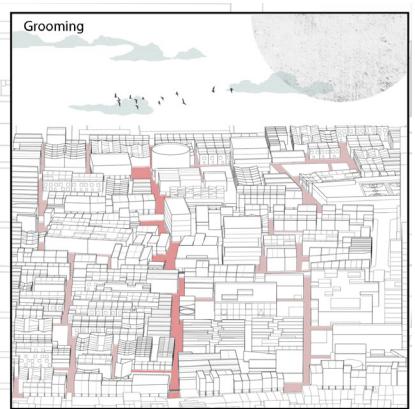
With the main street as the central axis, it connects the core business district, business district, food district, and living commercial district.

Current parking is difficult, and a large number of cars can only be parked on the roadside, which seriously affects traffic. Underground parking is used in the planning, part of the road parking is designed, and open space is also used.

The roads on the base are chaotic, lack of class division, and flow lines cross. The plan introduces the concept of grouping and divides roads into two levels: main pedestrian street and alley.

Comb the texture of the original block. In the continuous updating and development of the block, there are many constructions that ignore the texture destruction mechanism. And in the development, many poor-quality buildings have also been manufactured, which have seriously damaged the appearance of the neighborhood and should be demolished or repaired.

37



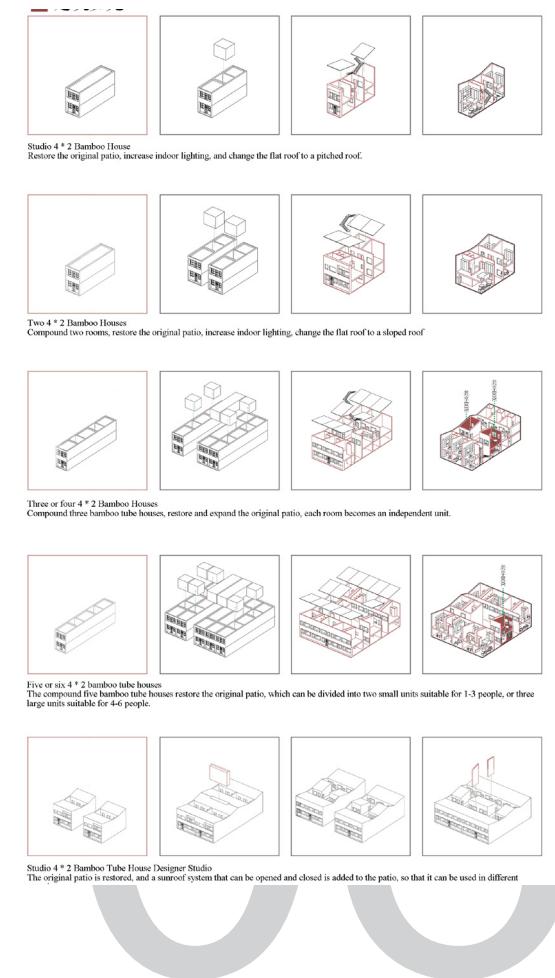
38

# Design Bird View

## CATALOG SUBLIME

The building inside the block has local characteristics, such as the bamboo tower and the Veranda. Its interior is difficult to meet the needs of modern life. It should undergo a reasonable transformation to get a new life.

# Building Strategy



39



40

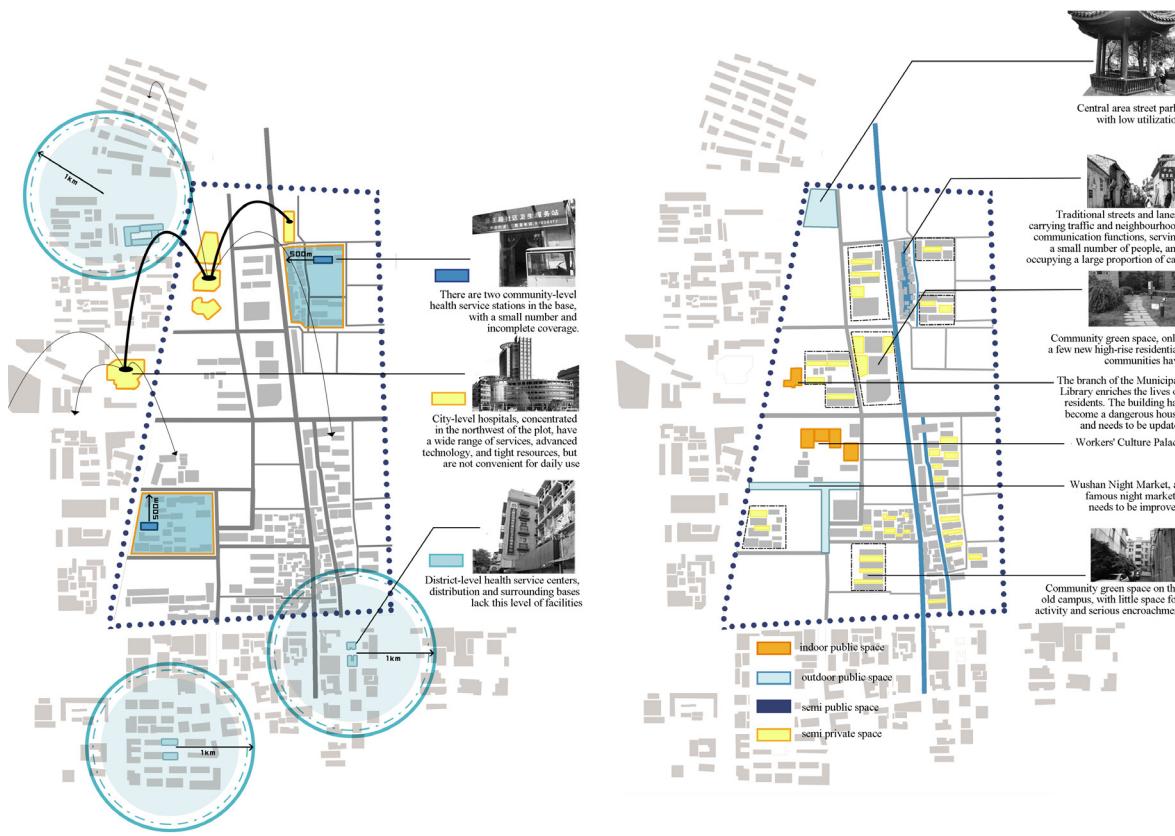
# URBAN DESIGN FOR HEALTH AND PENSION SYSTEMS

Hangzhou  
Individual  
Sep, 2017

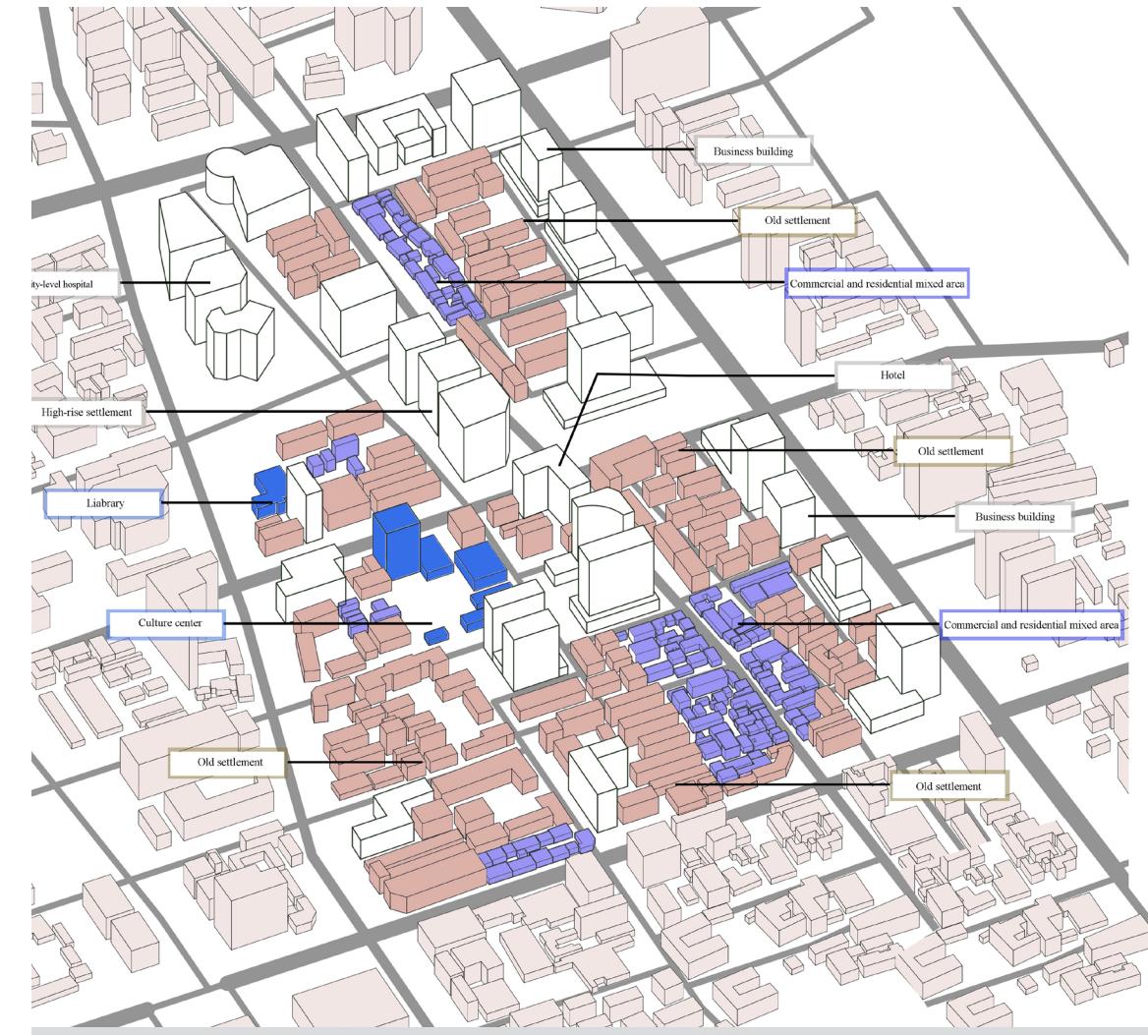
# 06

As the Chinese population enters a period of rapid development, the demographic dividend has gradually disappeared, and the proportion of the elderly population has continued to increase. The population structure of Chinese society has gradually changed from a pyramidal young type to an elderly type. The proportion of the elderly population has continued to increase, and the population has become aging. Especially in the first- and second-tier cities, the issue of pensions cannot be ignored. The expedient measures for nursing homes in nursing homes can no longer meet the needs of the nursing homes. How to use limited resources and means to explore the requirements suitable for the development of contemporary society. This design attempts to give an answer to this question in Hangzhou, where modern and traditional coexist, through urban design.

41



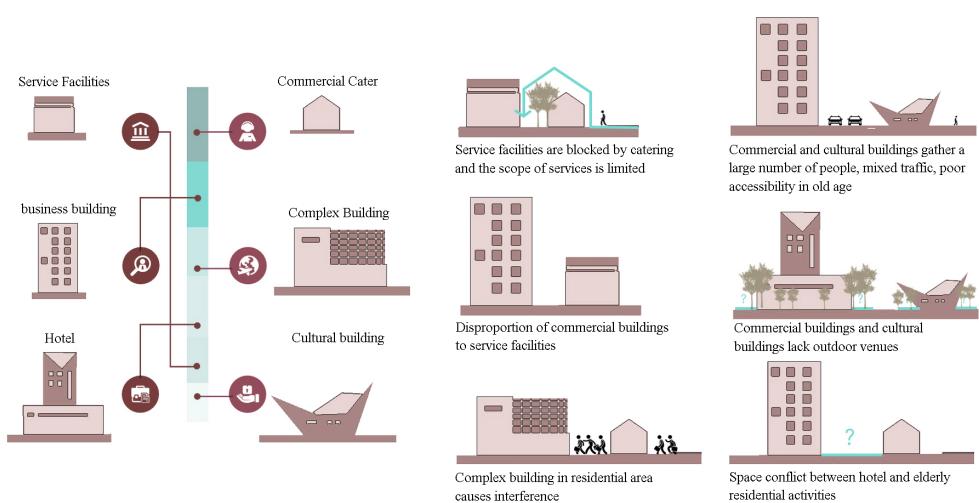
## Suitable for elderly analysis



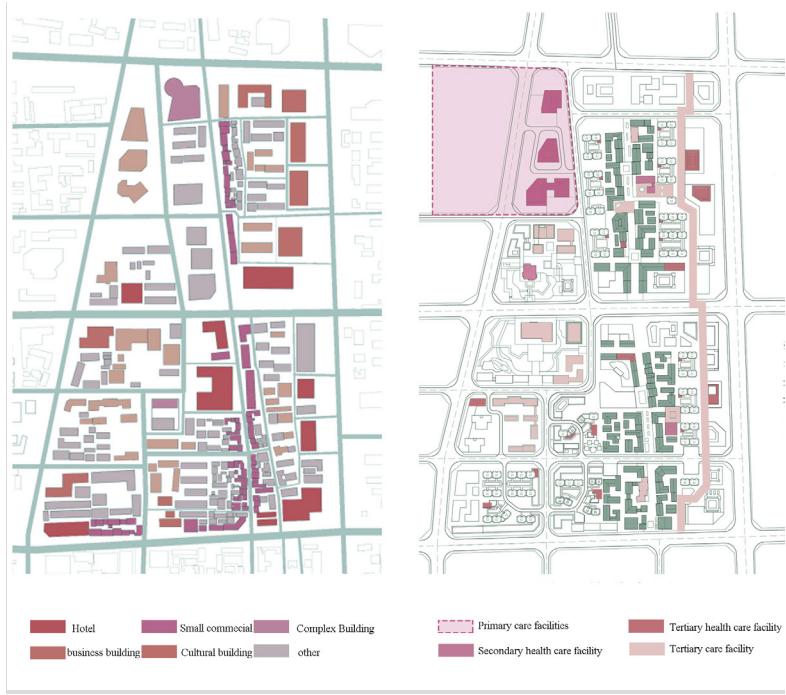
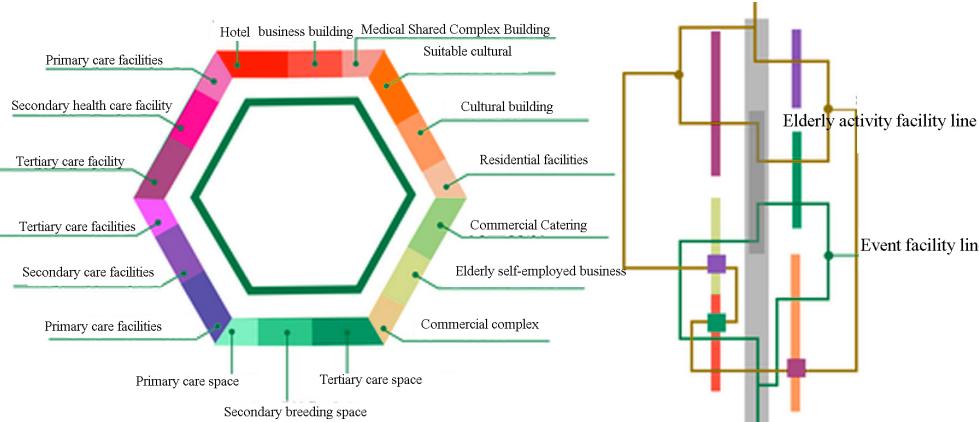
42



# Site Analysis

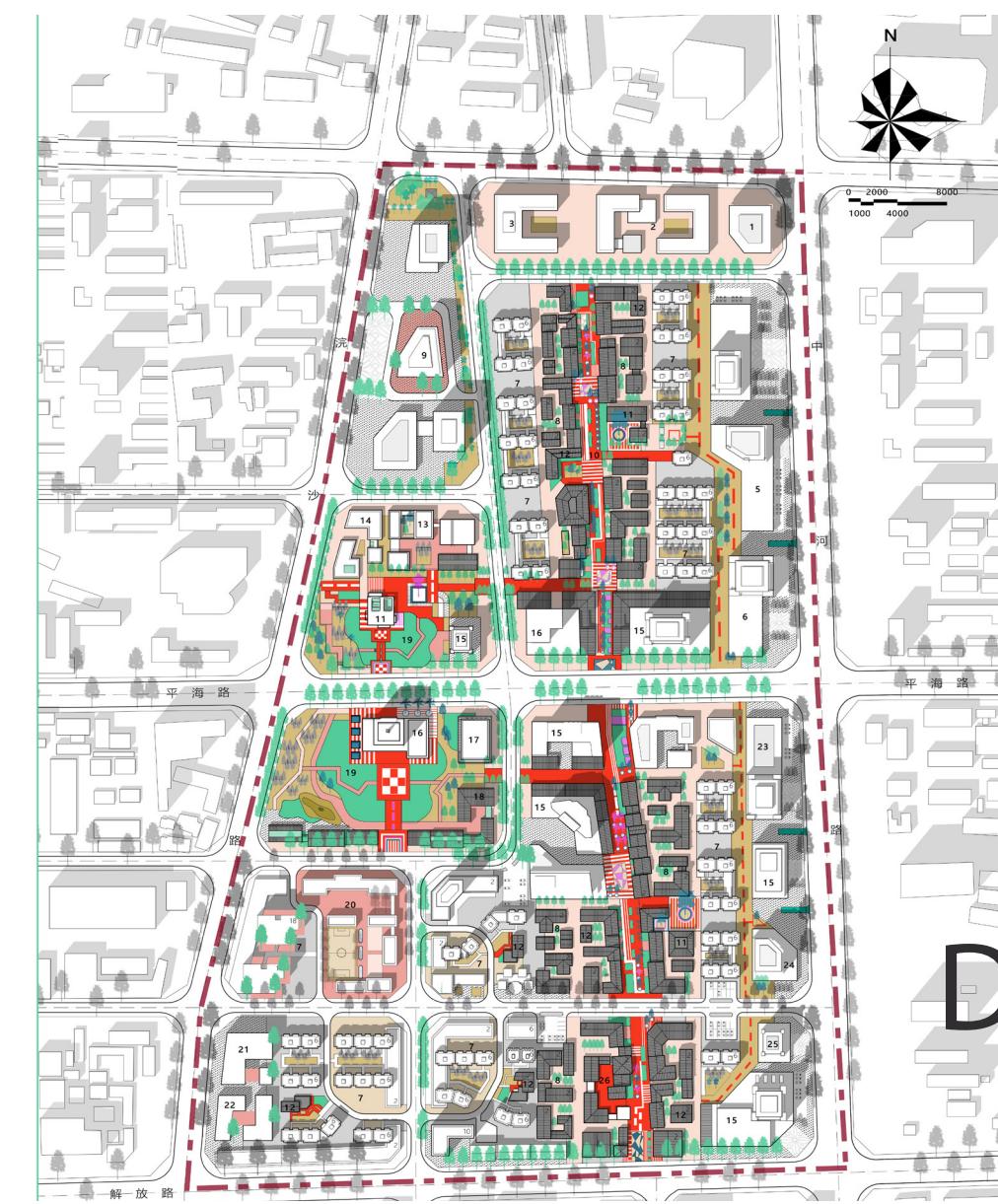


43



## Industry Analysis

In this design, the area with the most serious problem of aging in Hangzhou-Hubin Street, Shangcheng District, was selected as the base. With the purpose of providing elderly care in situ, a comprehensive radiation-based well-being system with unique characteristics in Hangzhou Lakeside was constructed to use the existing resources to build a complete elderly care service system. At the same time, in combination with the historical streets of Zhongshan Road, its industrial form is adjusted to better suit the needs of the elderly and create a commercial space suitable for the elderly. Combined with the living needs and habits of the elderly in Hangzhou, we create a shared life and sports circle to support the health care system

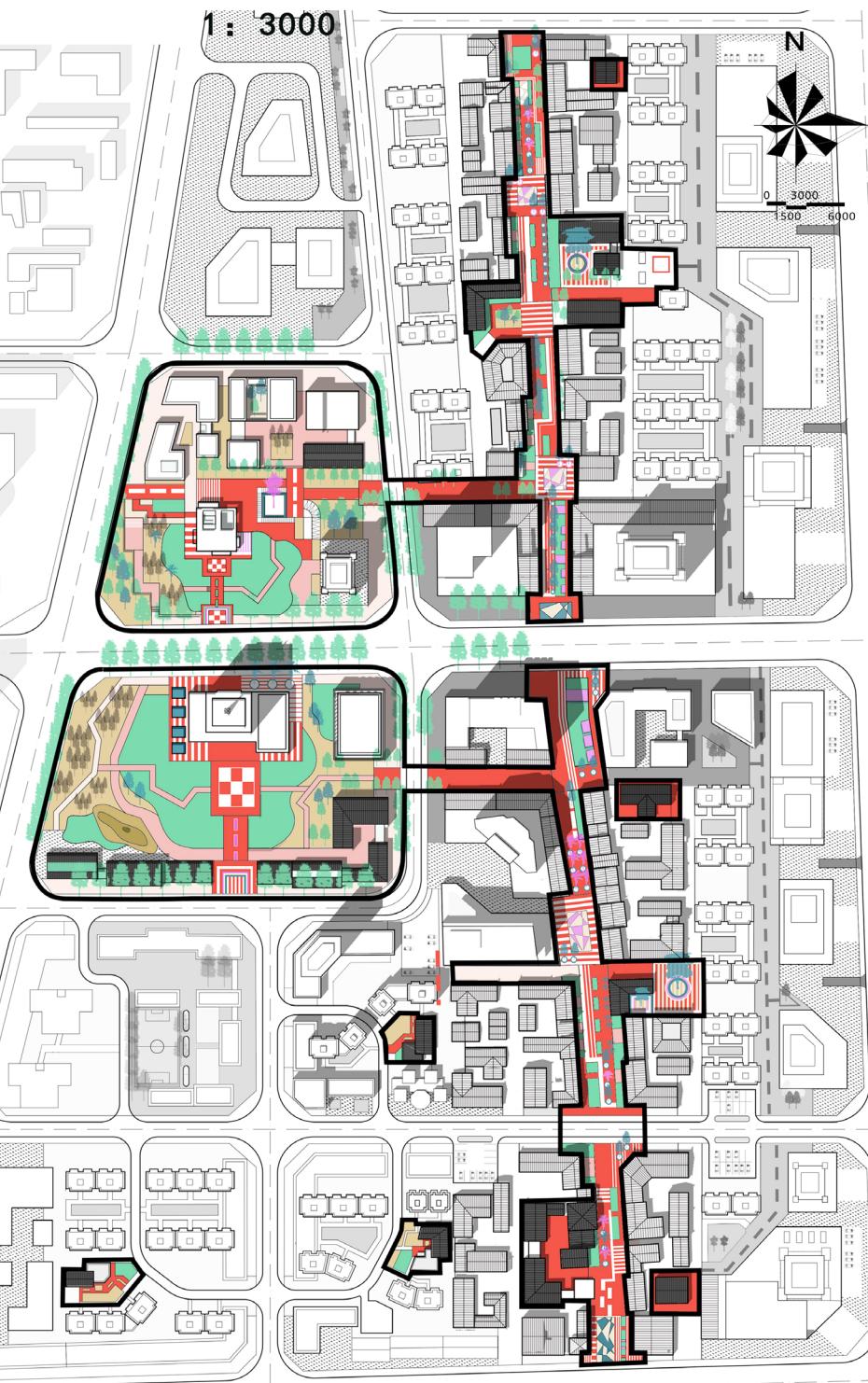
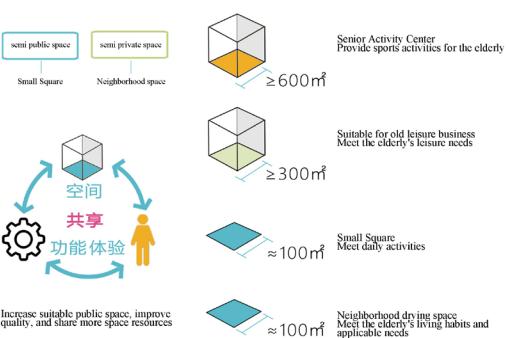
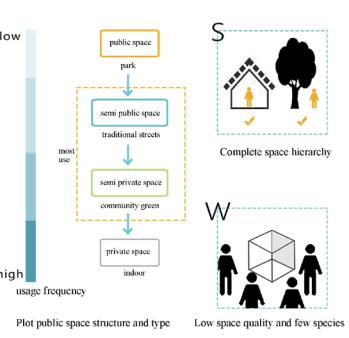
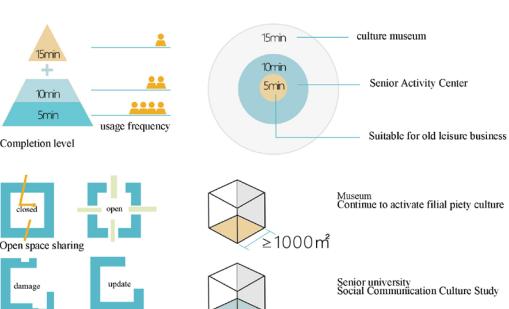
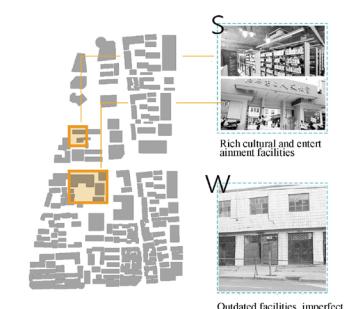
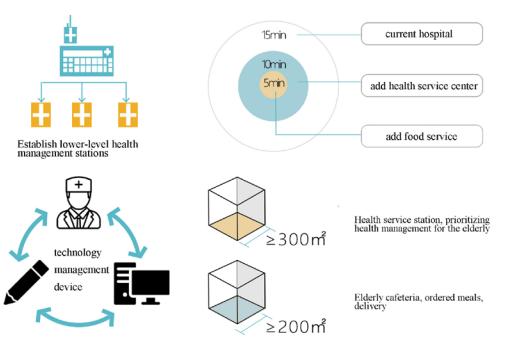
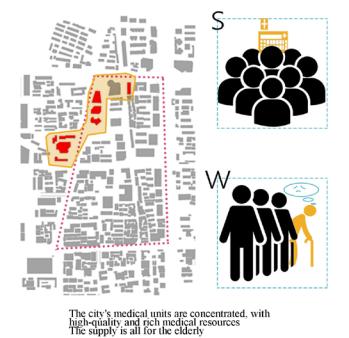
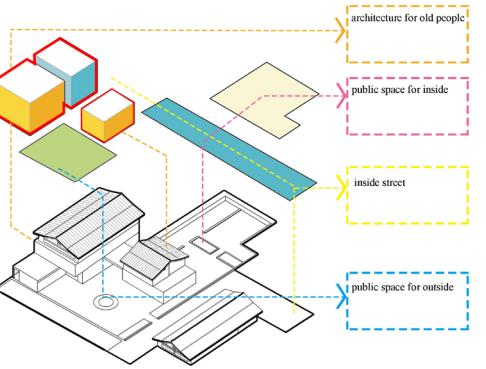
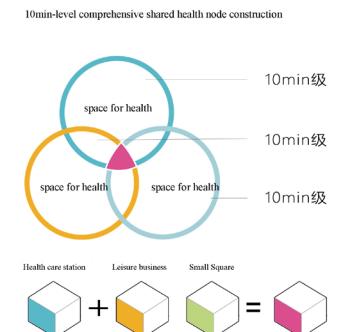


44

## Design Plan

## Design Strategy

45

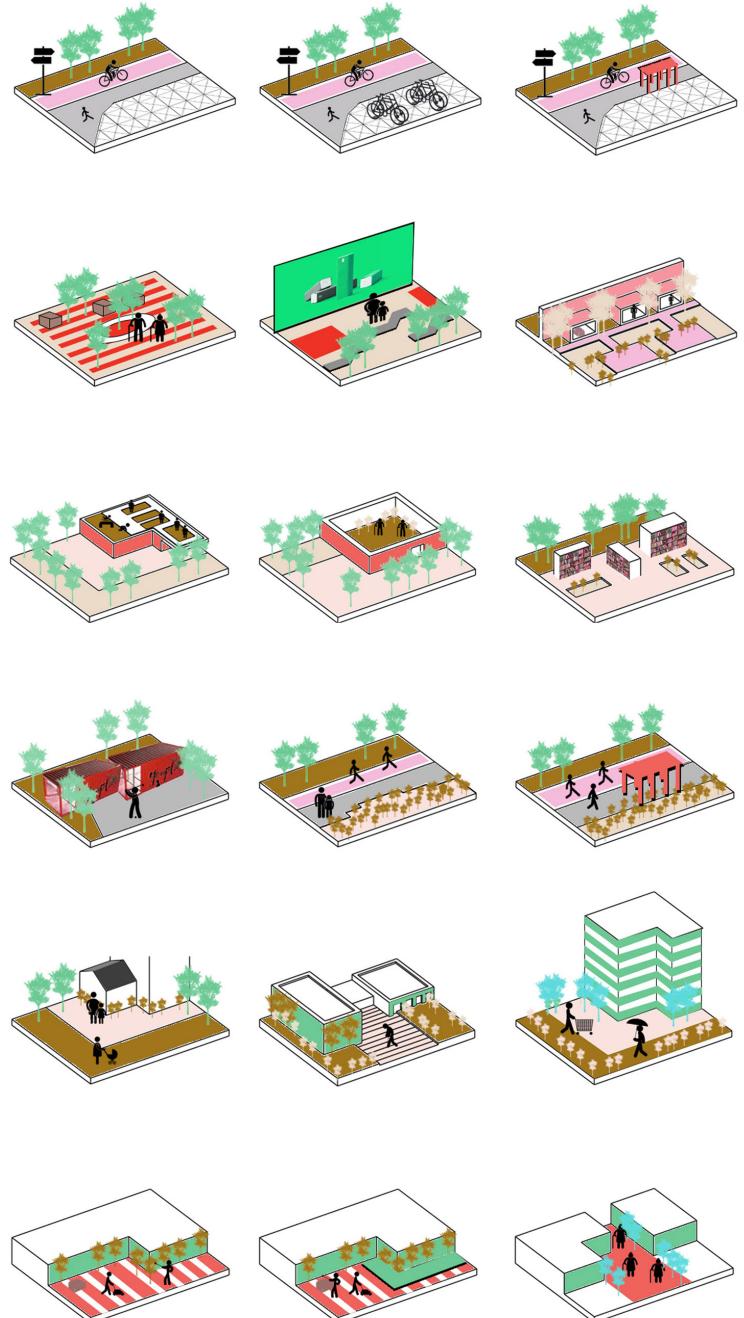


# Health Care Strategy

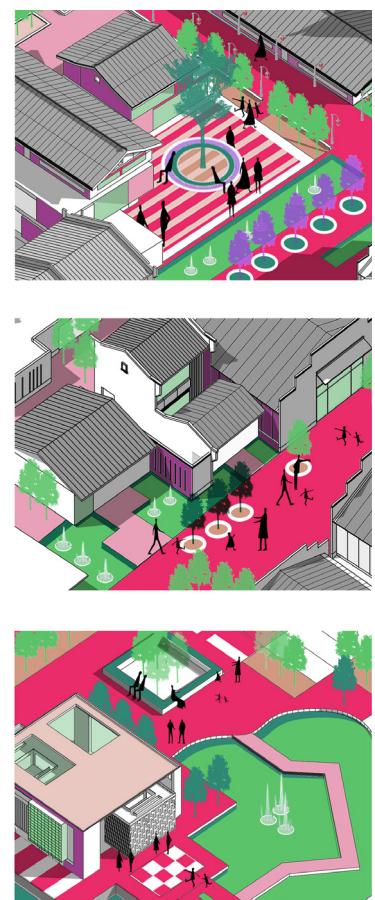
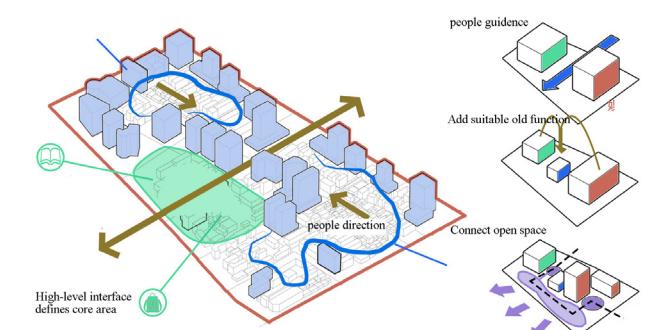
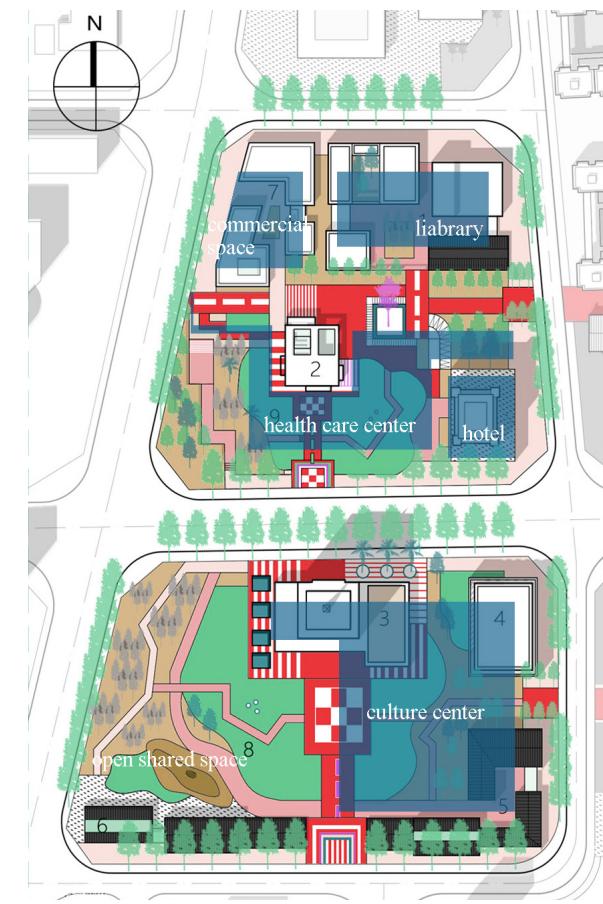
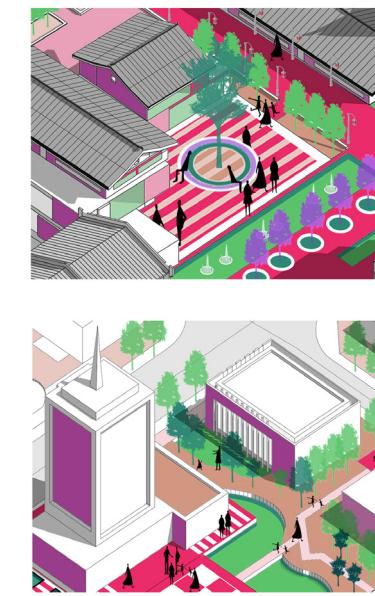
46

## SHARING DESIGN FOR EDERLY

47



## SHARING DESIGN



48



# 06

## Aerial View

49

Through the above methods, the area will eventually be transformed into a unique and suitable old age sharing area, so as to enhance vitality and respond to social problems. At the same time, it also serves as an experimental exploration of the problem of adaptability to the old in the new era.

## Design Bird View

