



"OPEN
COMMUNITY"
BREAK UP THE
"SUPERBLOCK"

Rhode Island School of Design
M.Arch2
May.2018
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Thesis Book

"OPEN COMMUNITY" BREAK UP THE "SUPERBLOCK"

Submitted in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Architecture in the Department of
Architecture at the Rhode Island School of Design.

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CHAPTER 1



BACKGROUND INTRODUCTION

Wide Road
Superblock
Gated Communit



" kuan ma lu "

“宽马路” = WIDE ROADS

It is a common view in the Chinese megacity that the width of an artery is around 200 feet. This distance does not allow pedestrians enough time to cross during the walk signal. The dramatic highway scale deprived pedestrians from the street making the city unwalkable.



" da jie qu "

“大街区” = SUPER BLOCK

Matched with the tremendous roads, cities are divided into much larger blocks. These "superblock" are composed of different program types, the one most widely known by citizens is the residential block. Like the old argument on "which came first, the chicken or the egg?", the cause and effect of the "superblock" and the large-scaled low-density network are in a mutually causal loop.



" feng bi xiao qu "

“封闭小区” = GATED COMMUNITY

Nowadays, real estate development and construction companies are belonging to property developers. In most cases, the developers get a piece of land, then divide it up into meticulous packages, making unique "products" to introduce to the marketplace. This package is of the highest value for developers, and the motivation behind the gated communities. The gated community isolates residential blocks from one another and the city. The gated community has interrupted traffic arteries, removed continuity and rhythm from the city facade, and deprived citizens from the human scale and the intimate street atmosphere. The traditional street life and neighborhood spaces are gone, it is hard to build a benign interpersonal relationship as we had in old residential districts.

THESIS PROBE (2017 FALL)

I choose my hometown — Wuhan as a case study site, in this model, the nails represented the density and height of the building, while the white board shows the city traffic network.





NEW YORK

BARCELONA

ROMA

There are several grids form worldwide famous cities, the contrast indicated that Wuhan needs a denser traffic network.

CHAPTER 2
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URBAN ANALYSIS

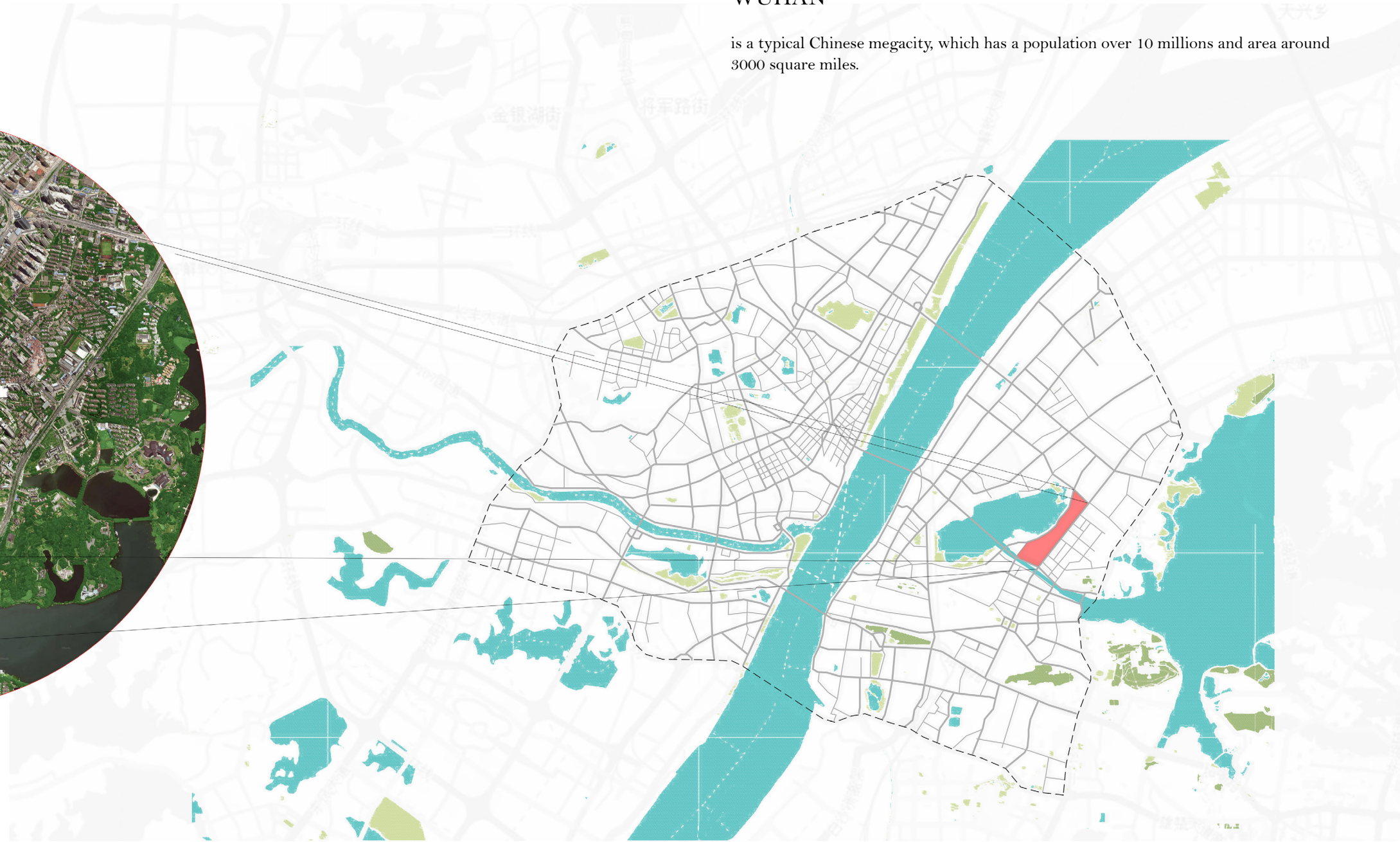
Map
Grid
Zoning
Transportation
Green
Water

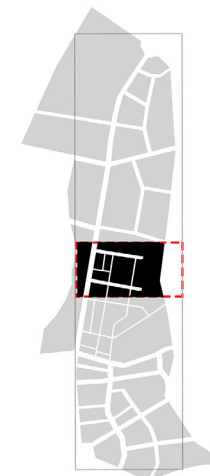
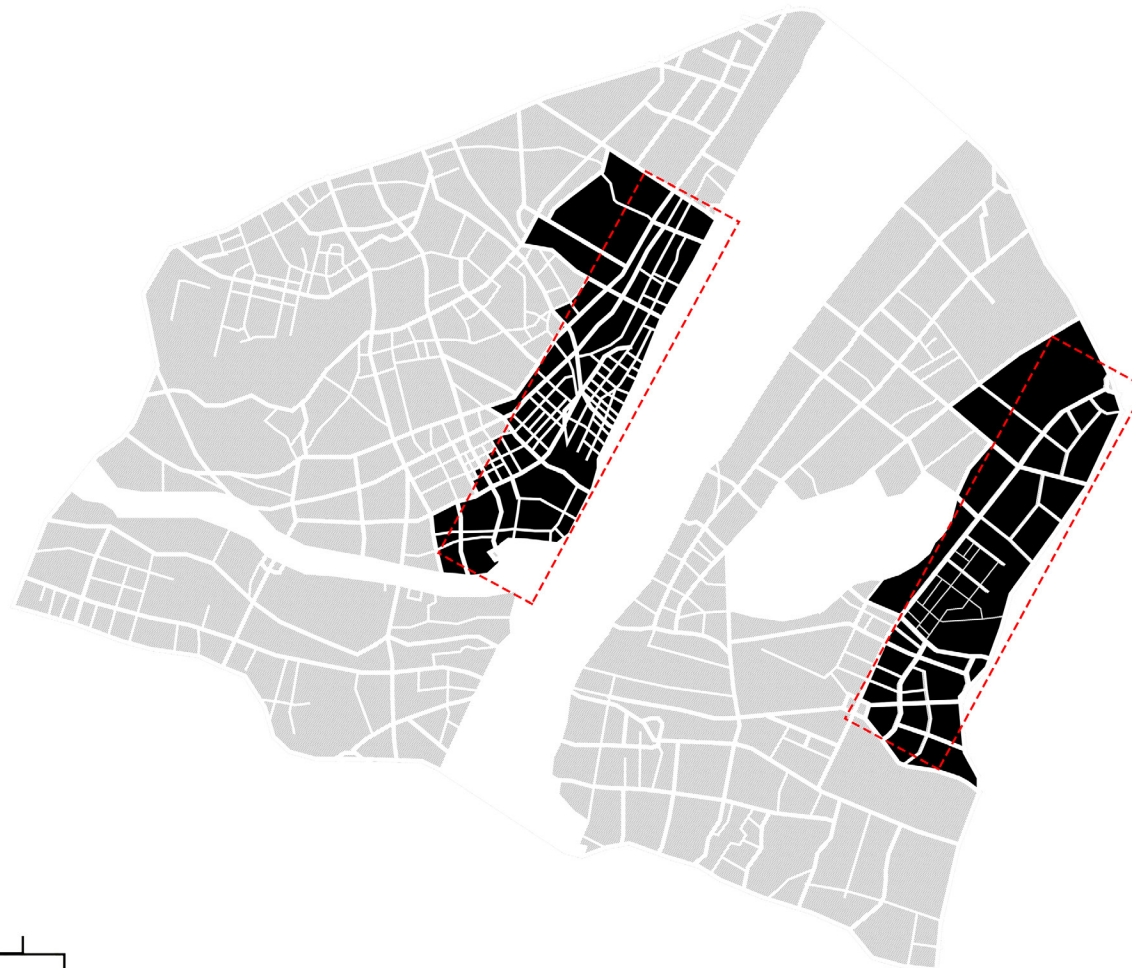
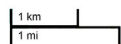
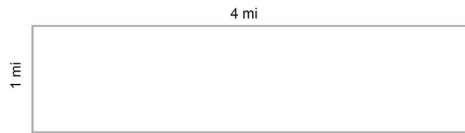
WUHAN

is a typical Chinese megacity, which has a population over 10 millions and area around 3000 square miles.



BASE MAP

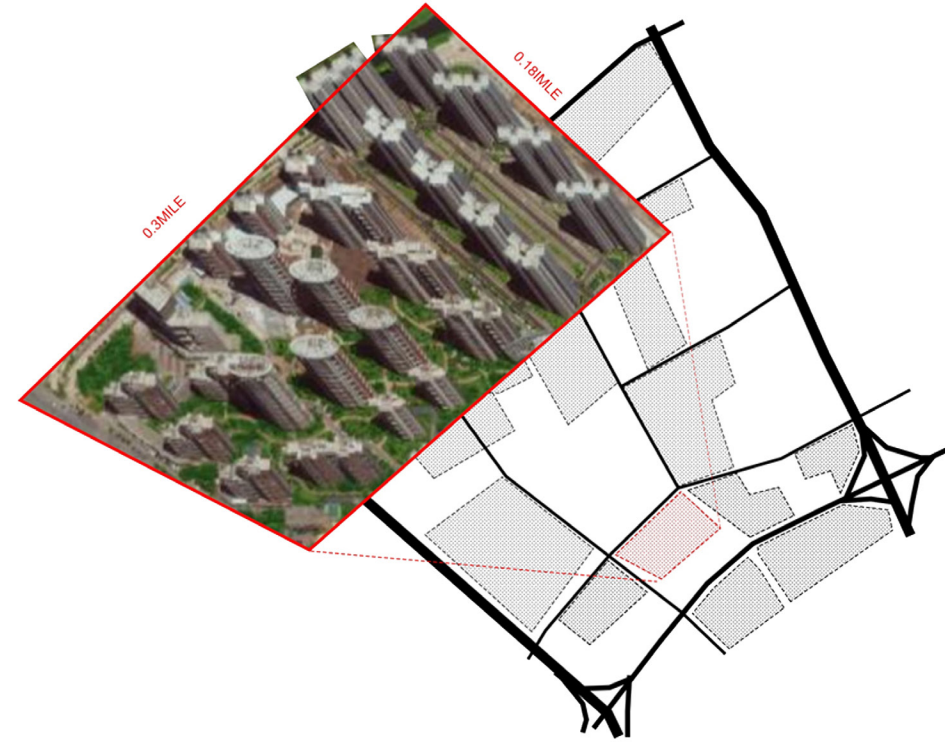




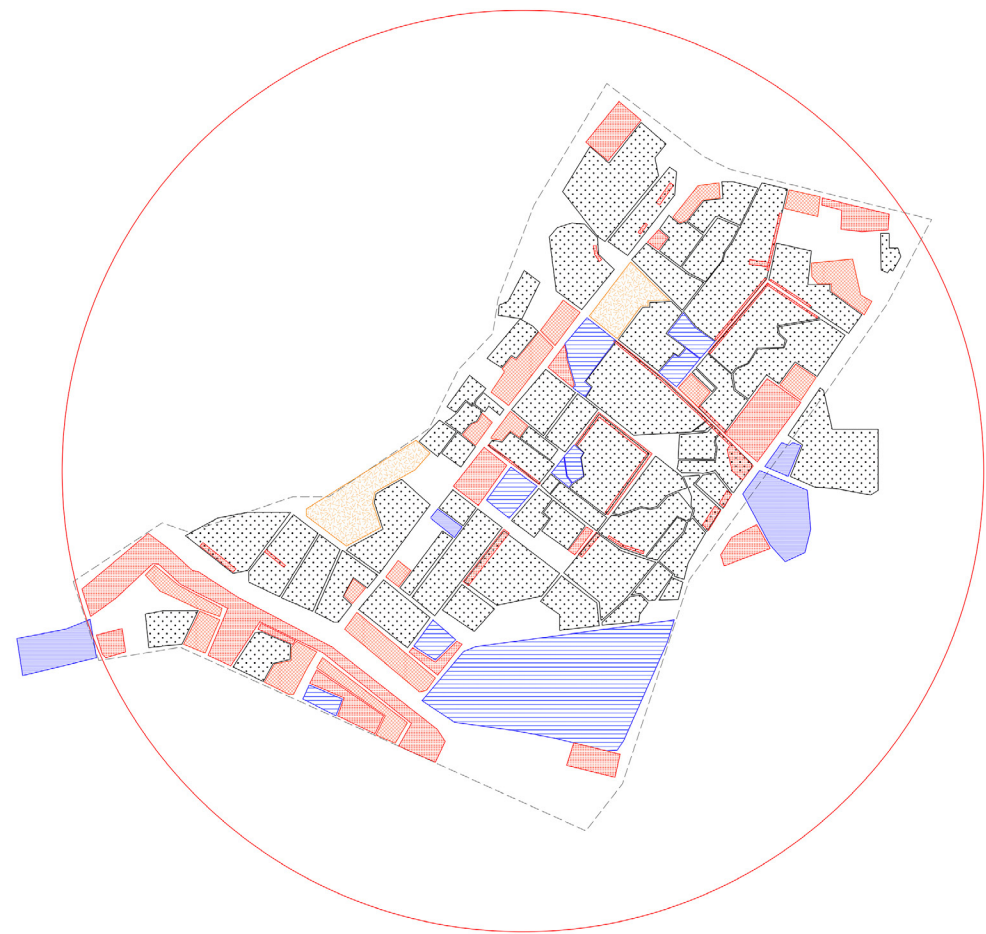
The left part is the old town grid while the right part is the new developed area. The block size of the new area is four to five times larger than the old one.



GRID

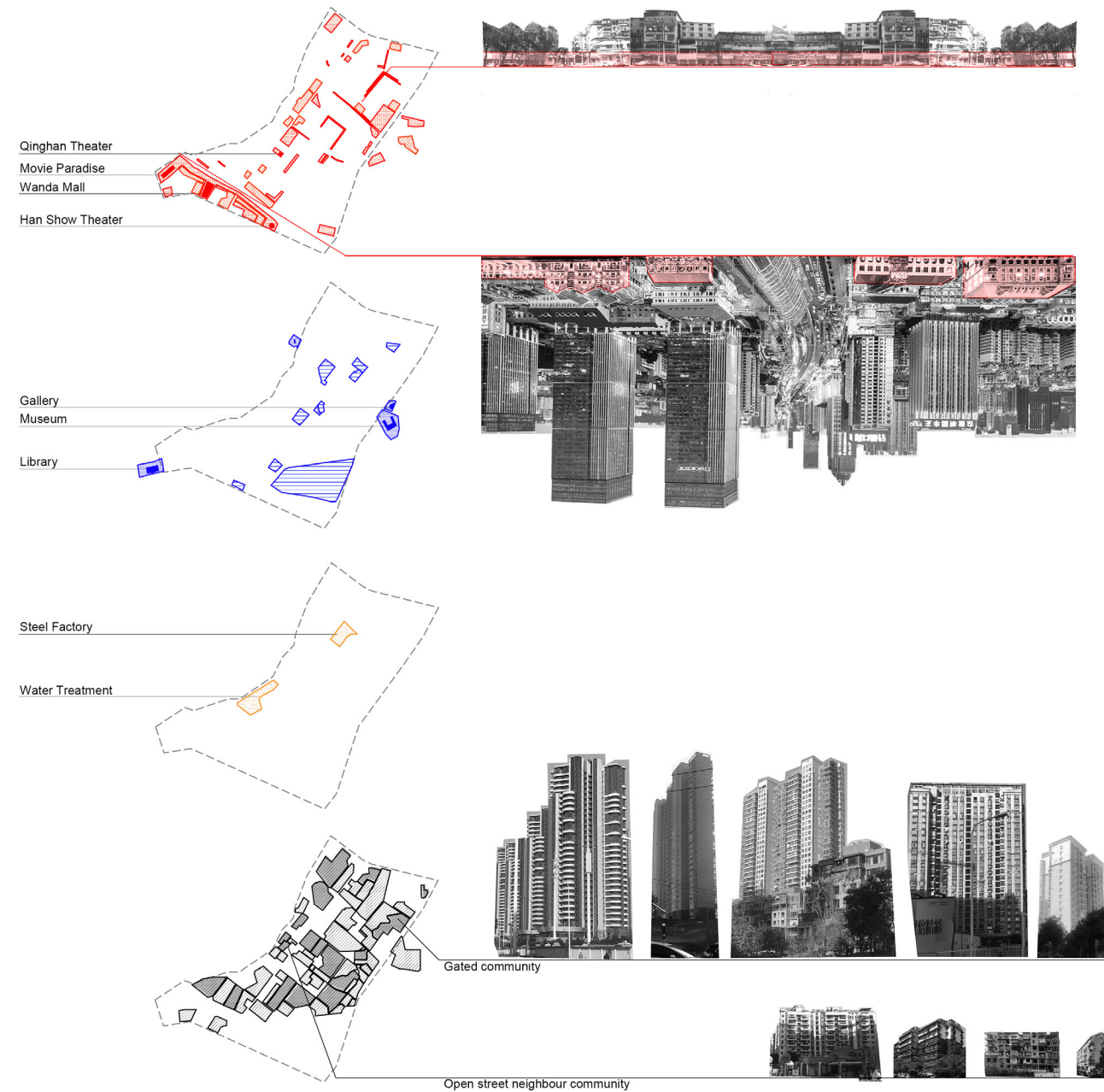


In the new developed area the average block size is around 1000ft by 1500ft.



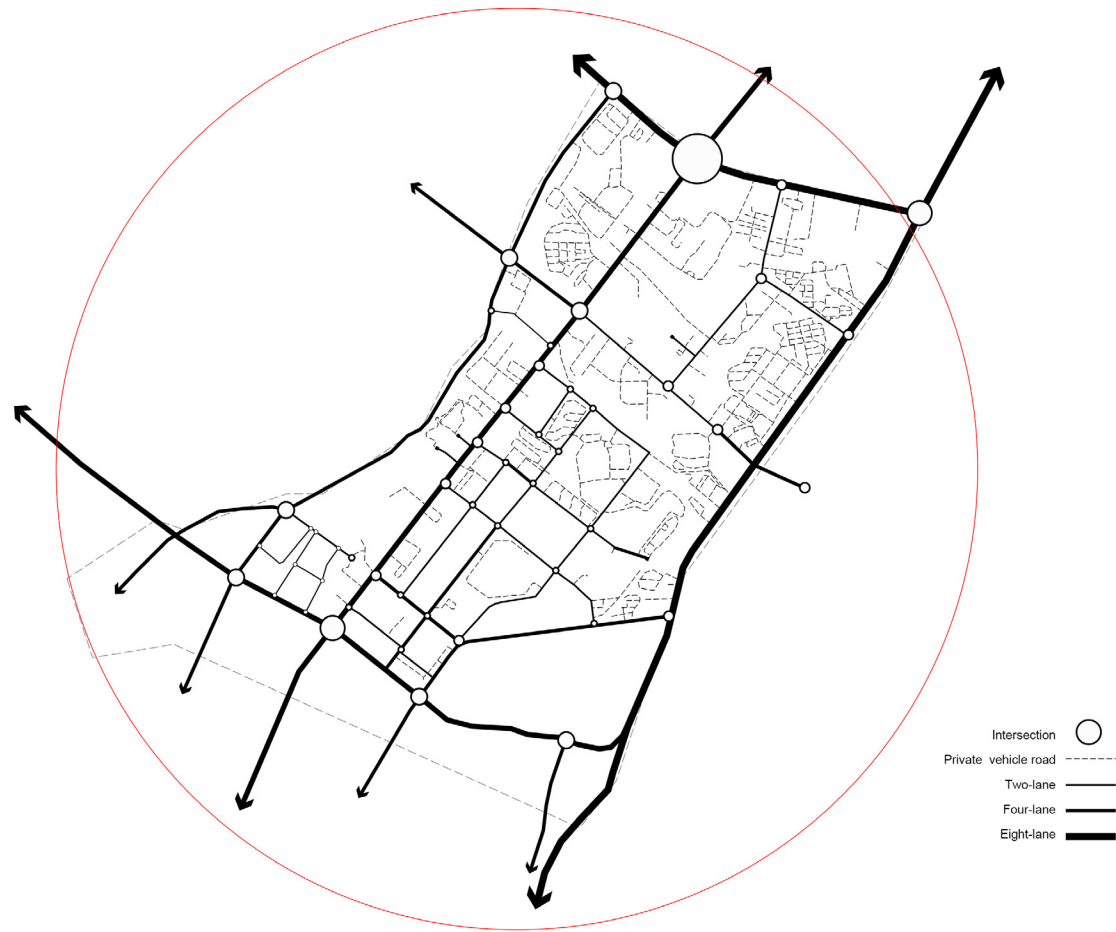
- Residential
- Industry
- Commercial
- Business
- Culture
- Education

ZONING



Gated community

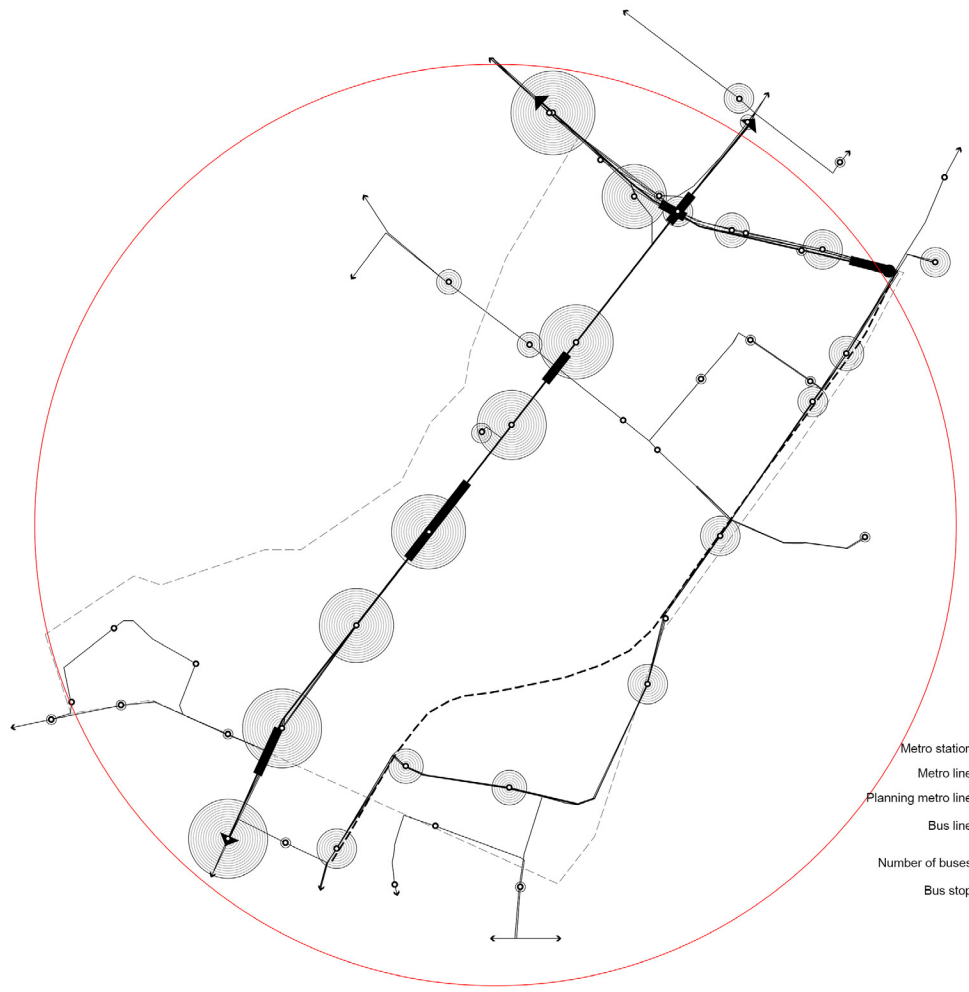
Open street neighbour community



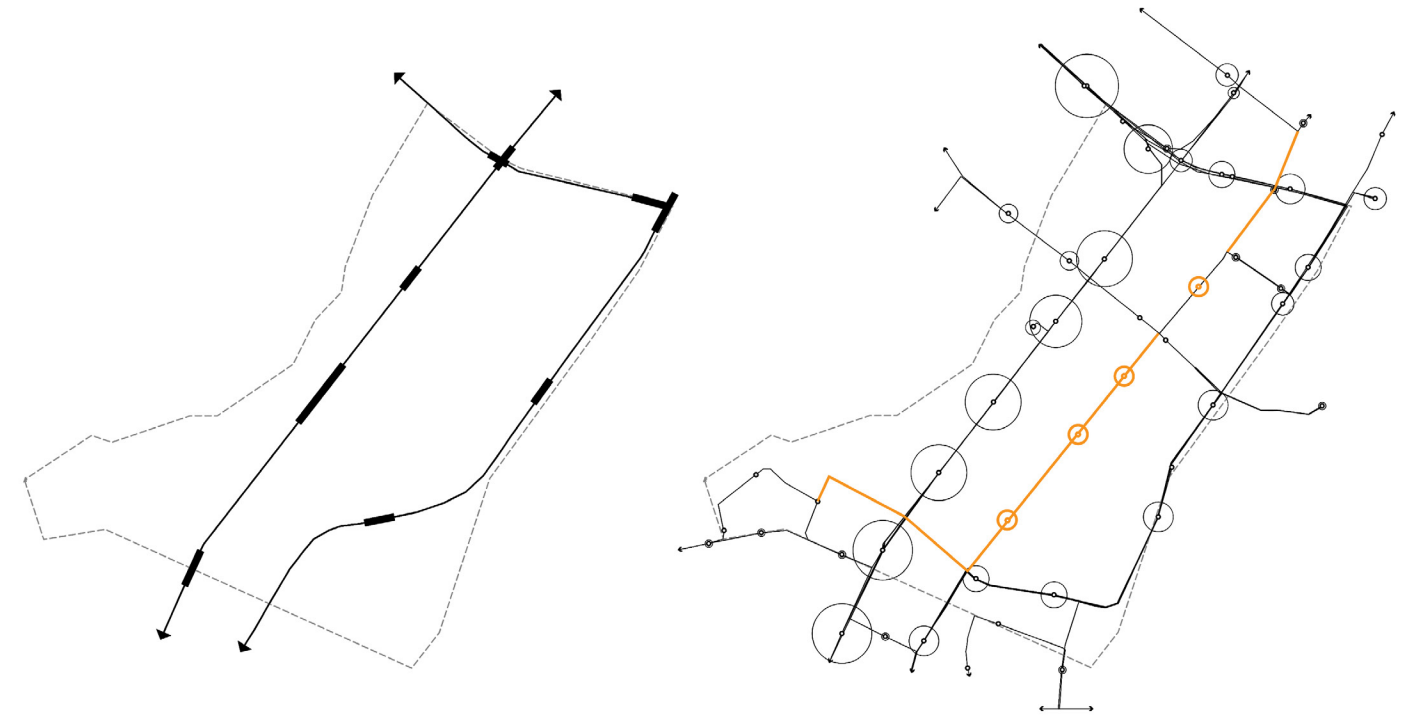
ROAD NETWORK



Now, the street network are disconnected and discontinuous.
 New proposal is to connect the break road network and balancing the grid-scale.
 Creating a road hierarchical system.
 Using the pedestrian path to link each community.



PUBLIC TRANSPORTATION



Crear more public transportation station within the community area.

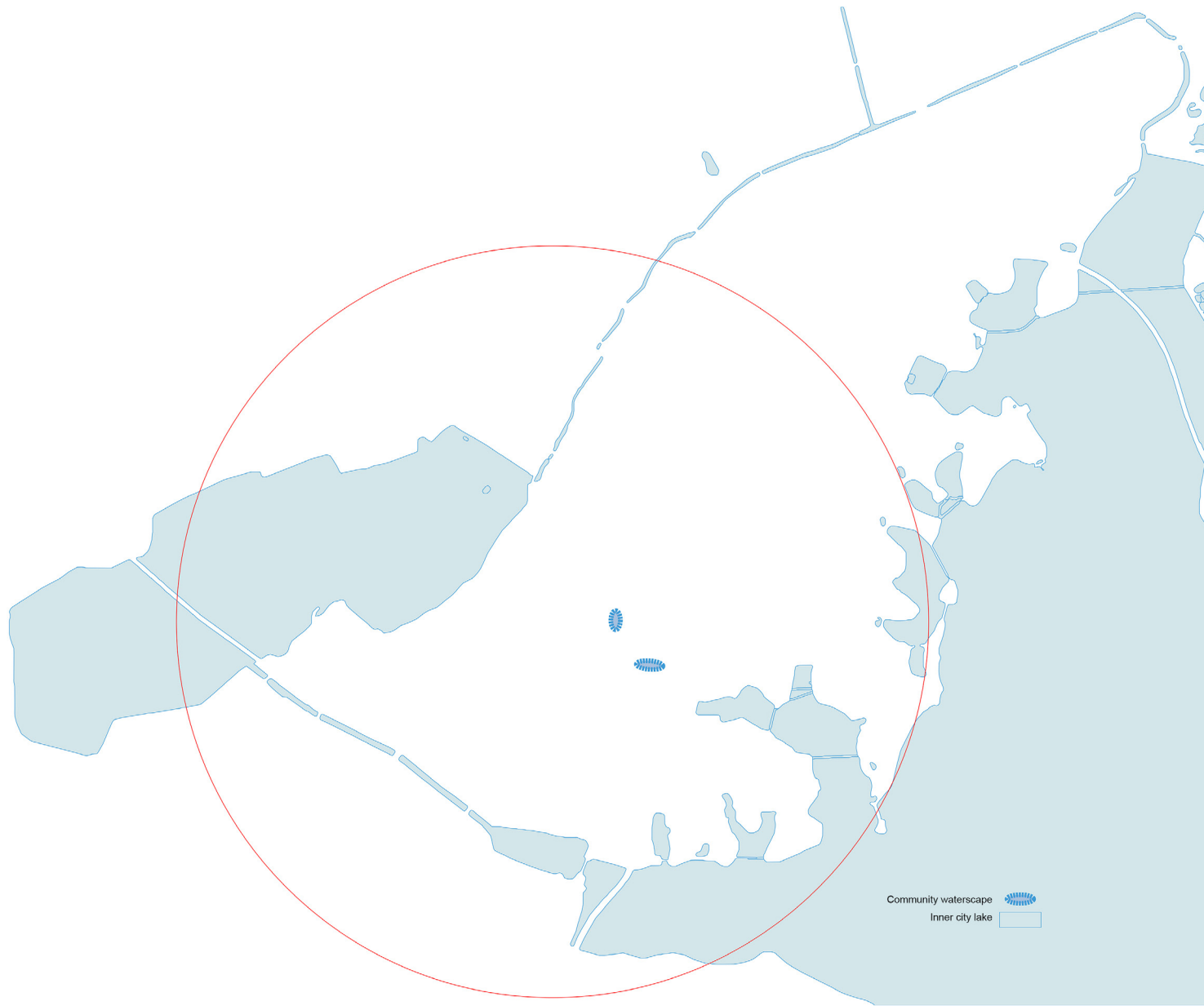


GREEN

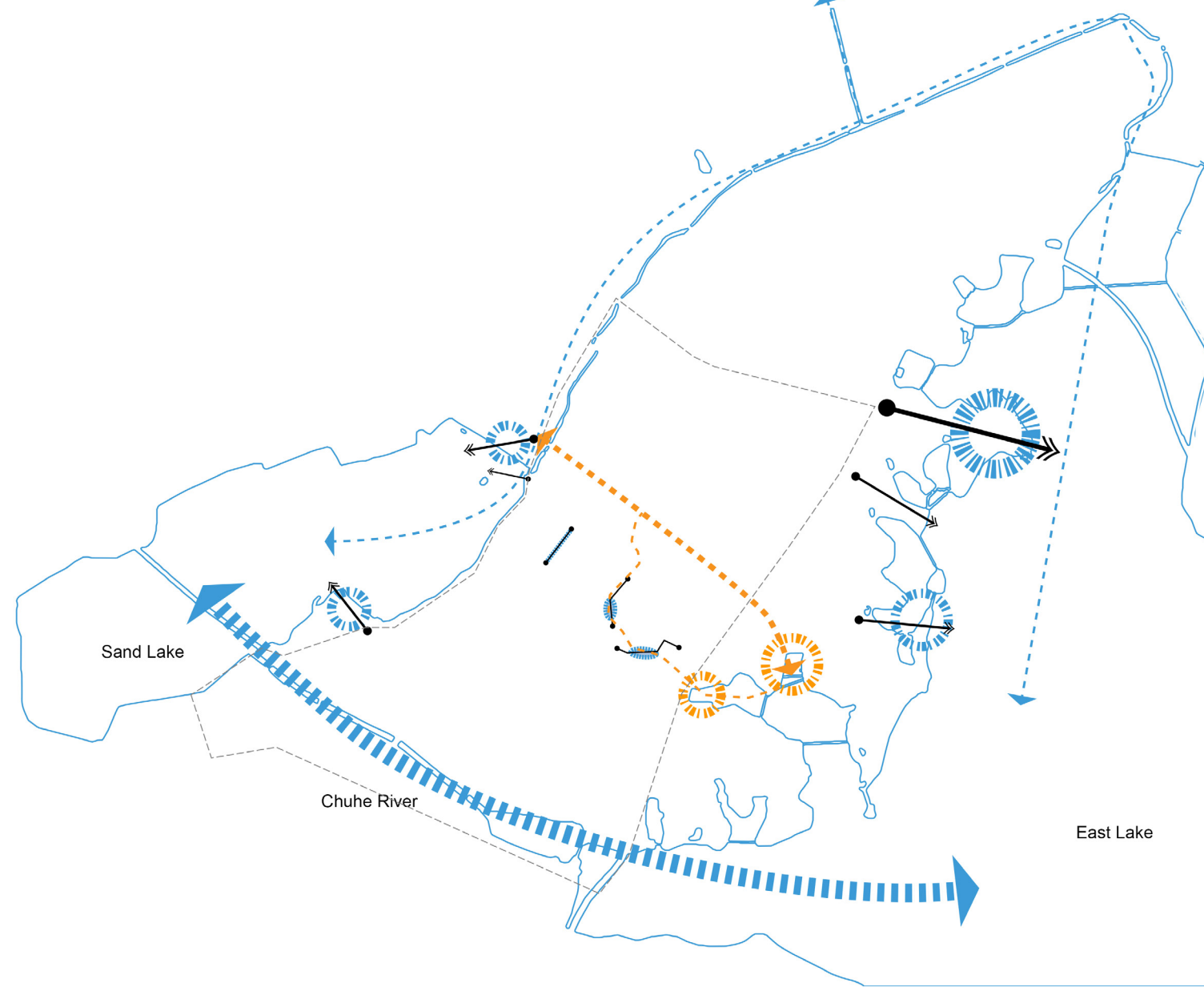


Creating a continuous waterside walking loop to string various landscape spots. Parks, gallery and museum are landmarks in this city, for this reason a green axis are used to reinforce the connection. And it will become an important cultural and landscape strap.

Open spaces along the street encourage public engagement and enrich the street life. If we can open the Gated community and creat pedestrain path, the internal landscape can be link with the external space.



WATER

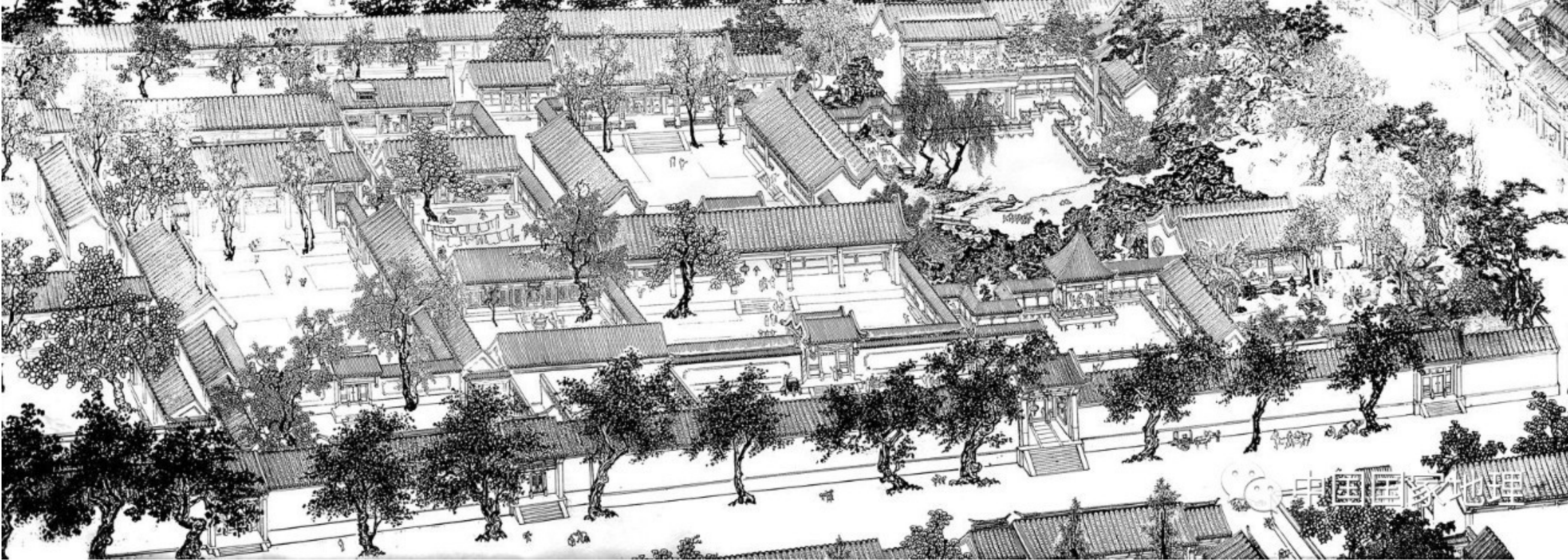


Crear a inner city canal to connect the nature water body, creating a accessible water landscape for citizens.
This lake is more about exercises health living and environment, the function should be different form Chuhe, which is designed for commercial. And the water landscape inside each community can be linked with the canal forming a moving loop.

CHAPTER 3

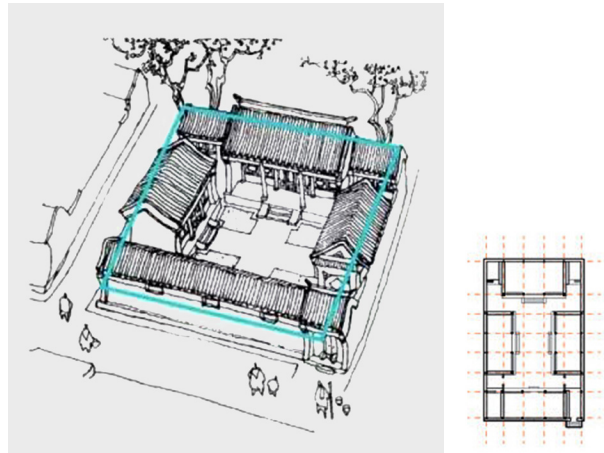
LEARN FORM ANCIENT

study of "courtyard house"
five principle for the new mode

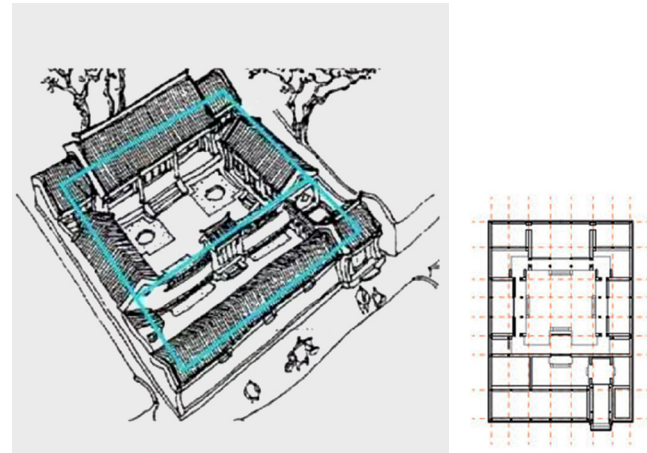


I am intoxicated with the richness of the spacial quality and the heriarched and tight street network that the ancient "Chinese courtyard" residential has.

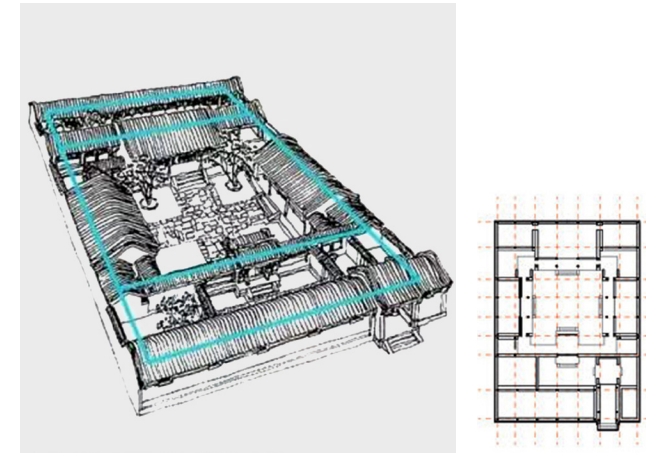
FOUR "COURTYARD HOUSINGS" MODE



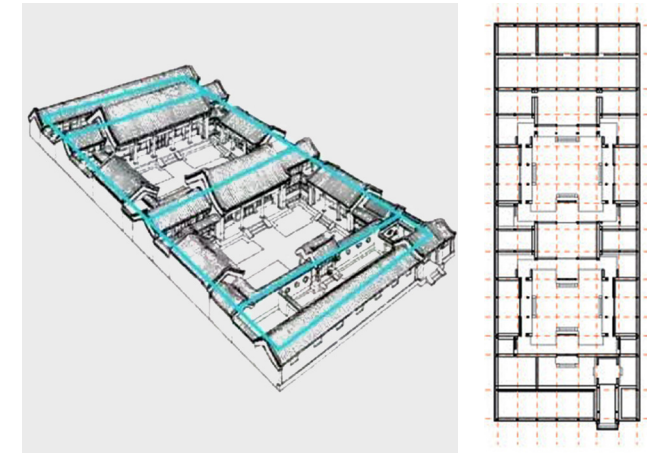
"ONE-ENTRY" COURTYARD HOUSINGS



"TWO-ENTRY" COURTYARD HOUSINGS

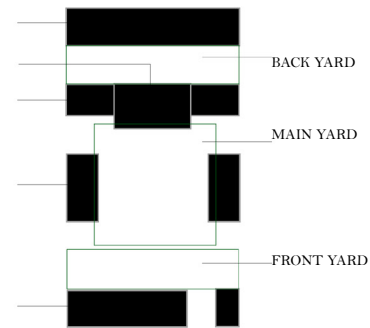
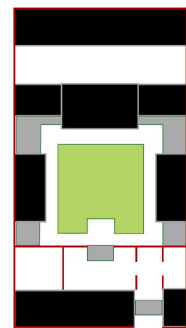
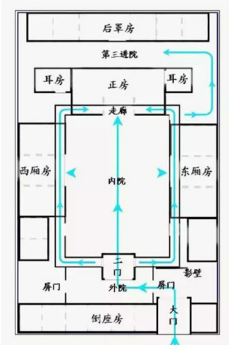


"THREE-ENTRY" COURTYARD HOUSINGS

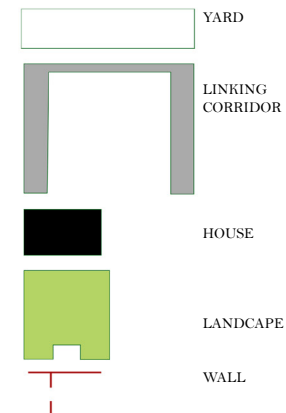


"FOUR-ENTRY" COURTYARD HOUSINGS

"THREE-ENTRY" COURTYARD HOUSING SPACIAL ANALYSIS

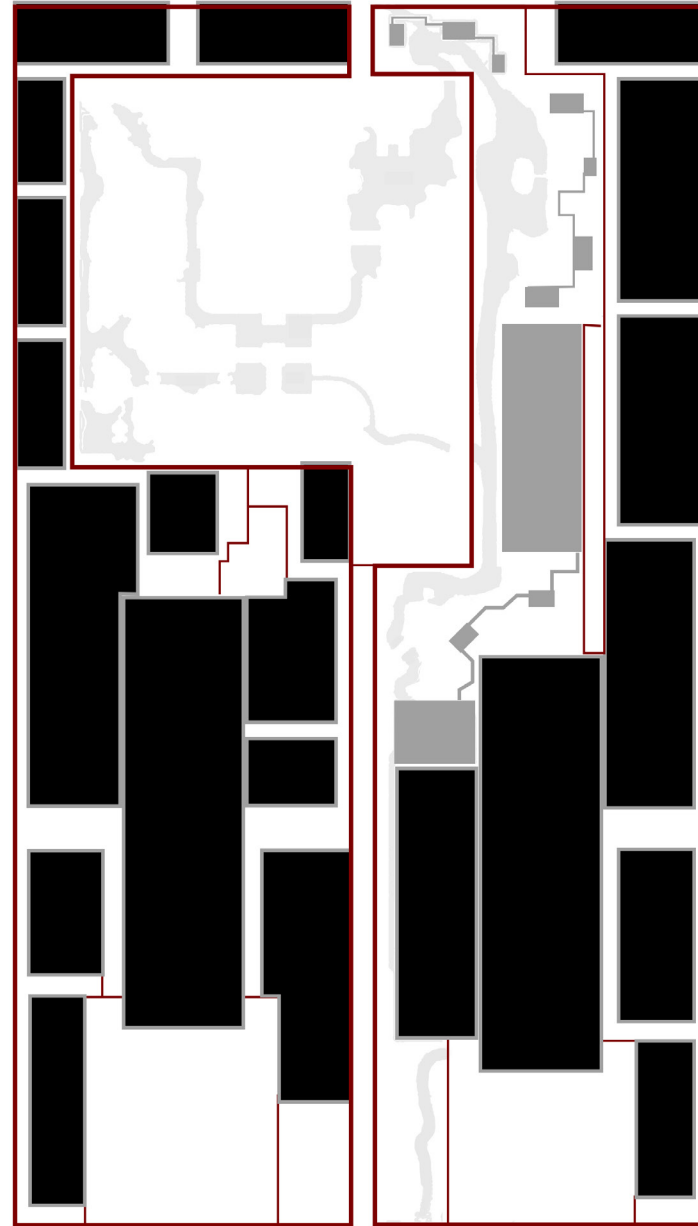
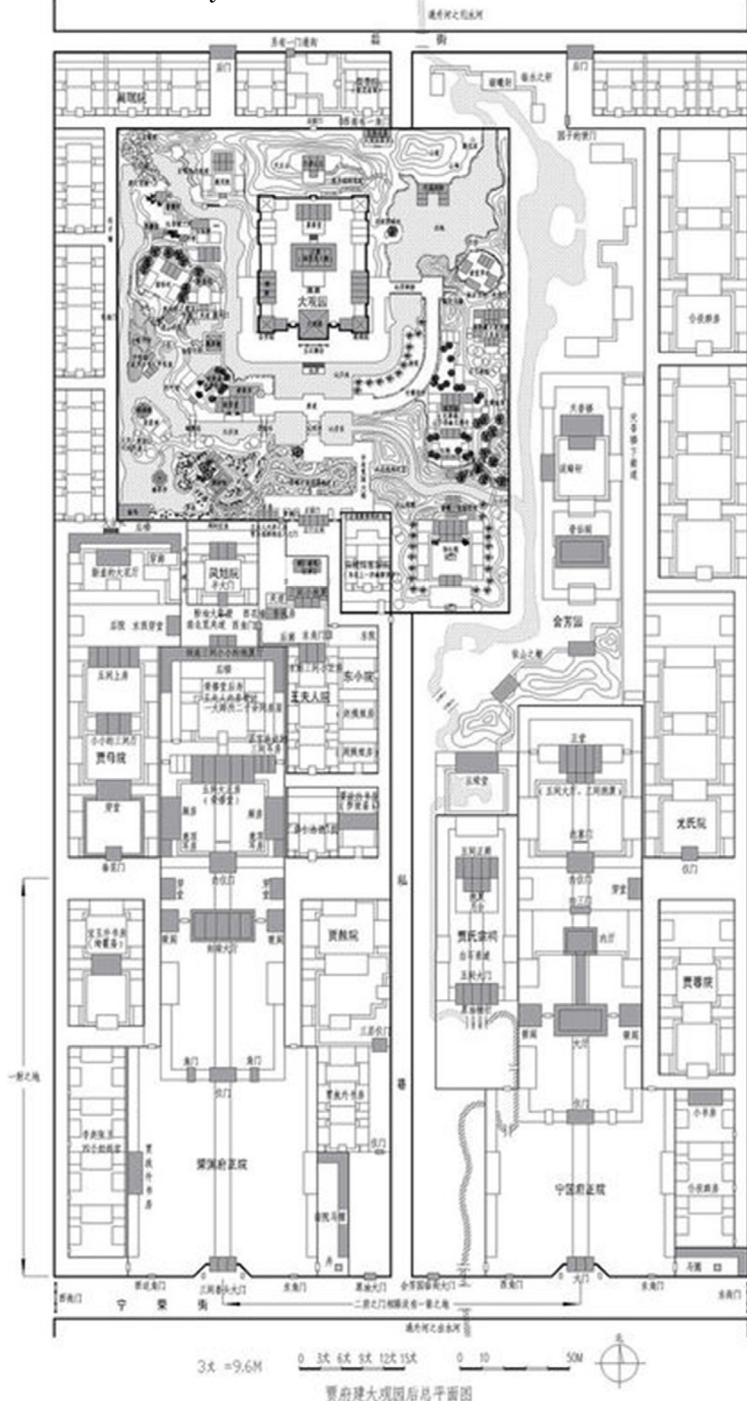


COMPONENT



Look into one single courtyard house, the layout of each room is defined by the hierarchy of its resident. Specifically, the front house next to the entry is for servants, the house in the middle towards the main yard is for the male host, while the woman and children live in the room towards the back lane. There is a clear change of spatial quality from public to private, from outside to inside and from noisy to quiet.

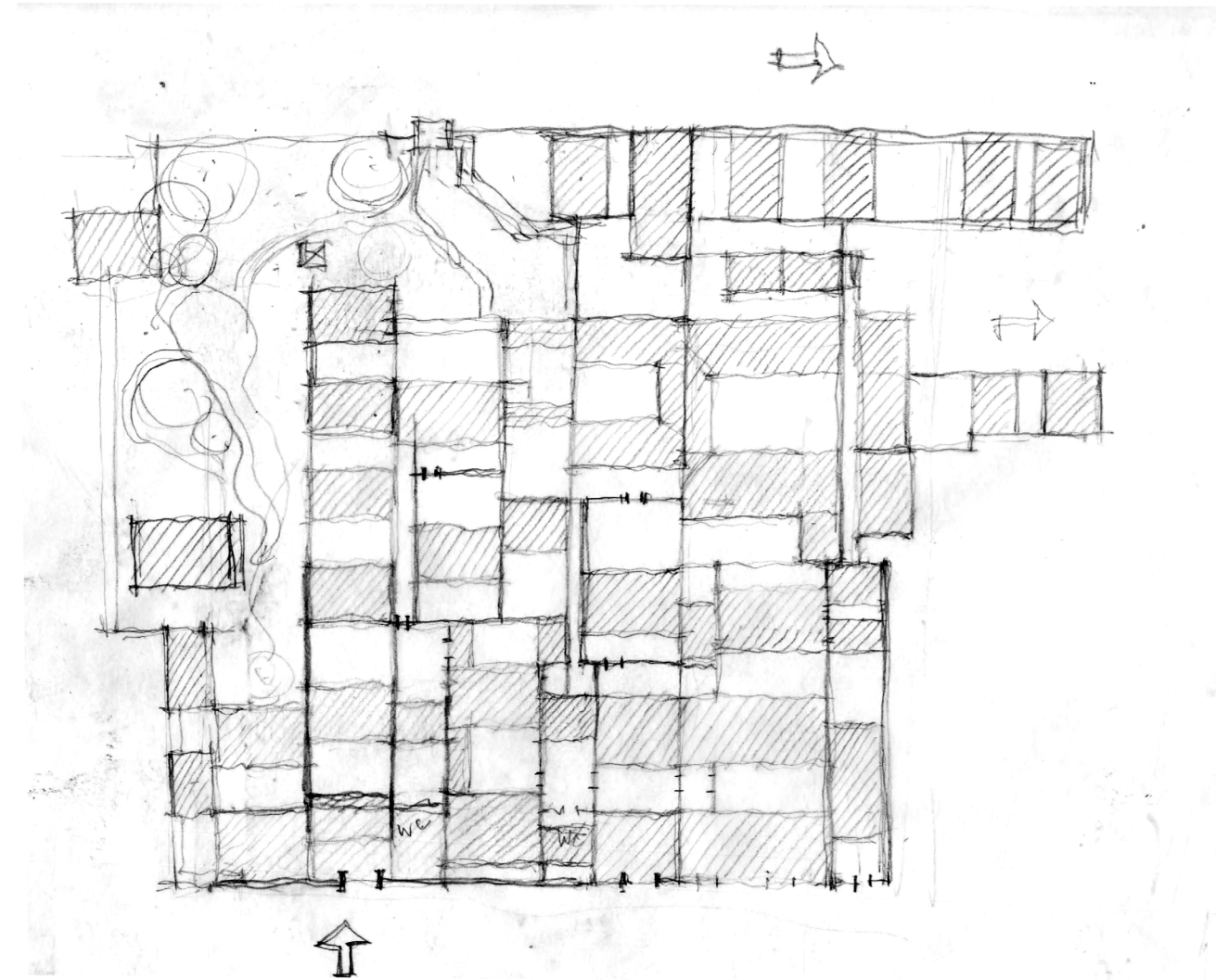
The Jia's family house in the Chinese fiction "A Dream in Red Mansions"

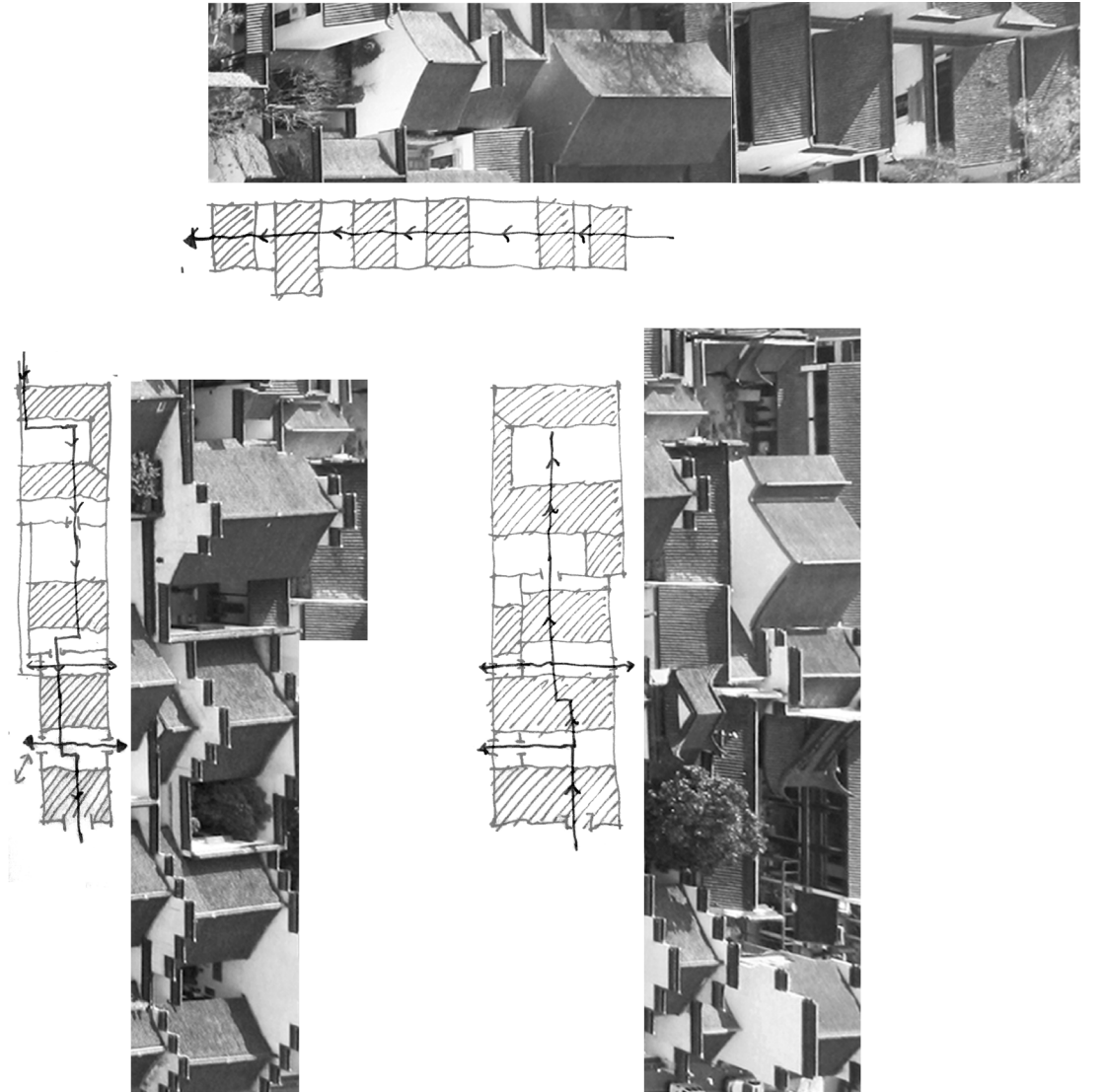
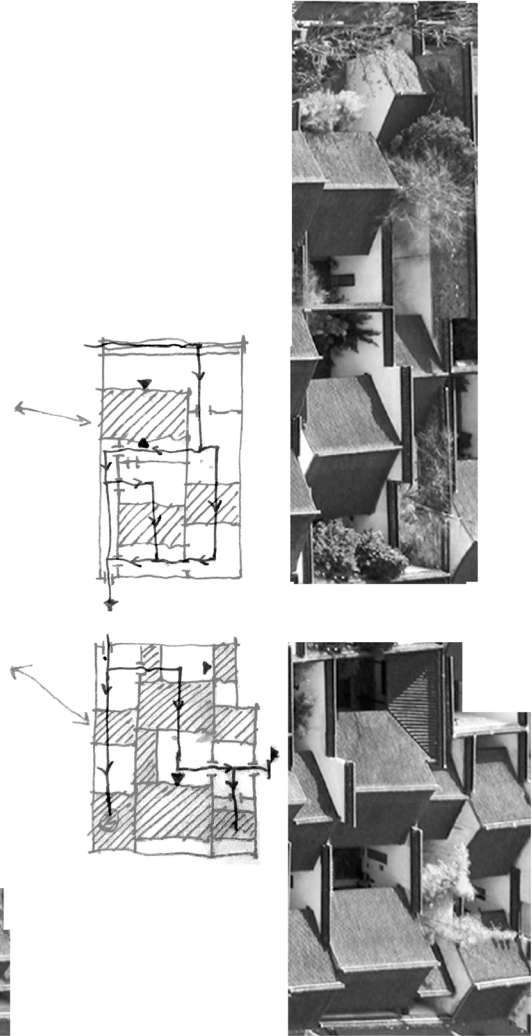
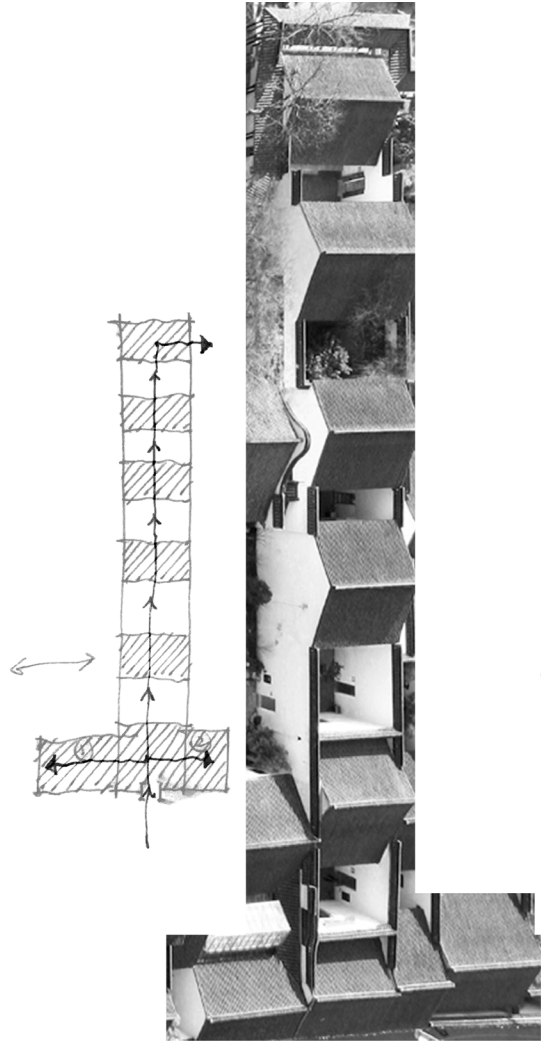
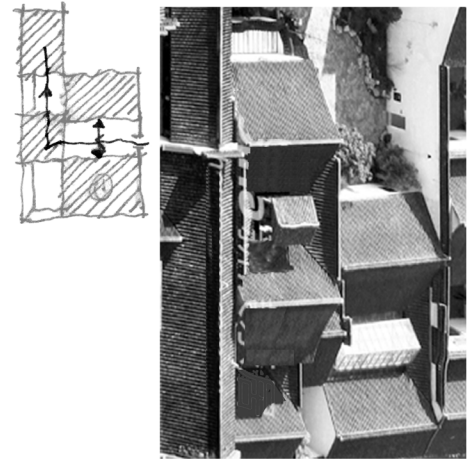


The courtyard became the core element to organise the layout. And multiple courtyard house organically integrated with the landscape thus forming a block. Also, create a linear movement to walk through that full of experiences.



The Gan's family house in the Nanjing, China







"OPEN COMMUNITY" MODE

The ancient close network of Chinese residential have their advantages to balance the relationship between each building and each human-being. The progressive spatial quality transferring from public to private as well as street hierarchies are what I can learn from and design with to keep in a modern community.

Extracting the spatial properties from ancient residential areas and applying them to the current urban scale, density, and capacity; will derive a new "community" mode. The ground is shared with the city, and the connected urban network. Also allowing the possibilities to create "the green path" and "visual corridor" connecting separate residential groups to public urban space. In the urban planning view those new blocks will generating "slow traffic systems", which will embrace a walkable city.

FIVE PRINCIPLES TO DESIGN THE "OPEN COMMUNITY"

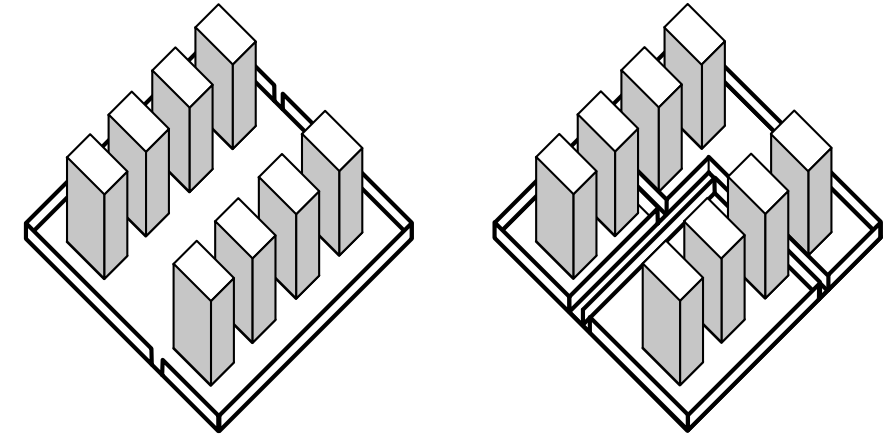
- Community miniaturization prevent one community from privating to much inner resources.

- "Zigzag" help the vehicle to slow down when acrossing the residential block.

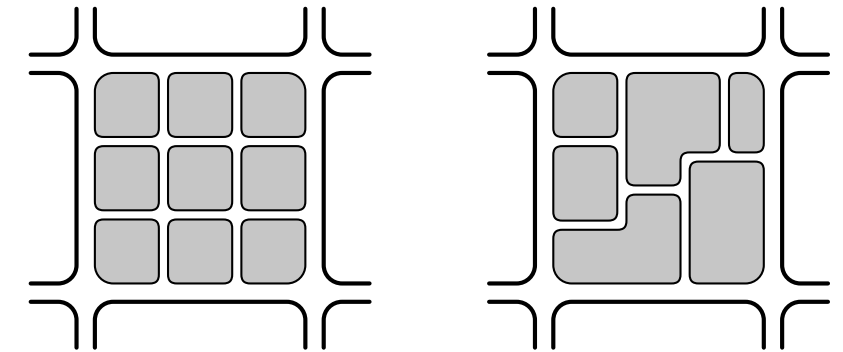
- Seperated resources can meet the average supply for each mini community, and prevent intensive usage from the public.

- In the anicient courtyard residential version, the block is flat (one or two floor), while now the tower building rising straight out of the ground. The new mode need to make a balance between those two types, and creat more horizational connections through different layers from the ground.

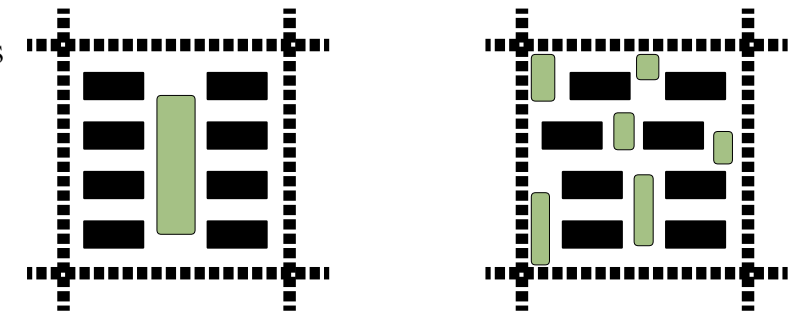
1. COMMUNITY MINIATURIZATION



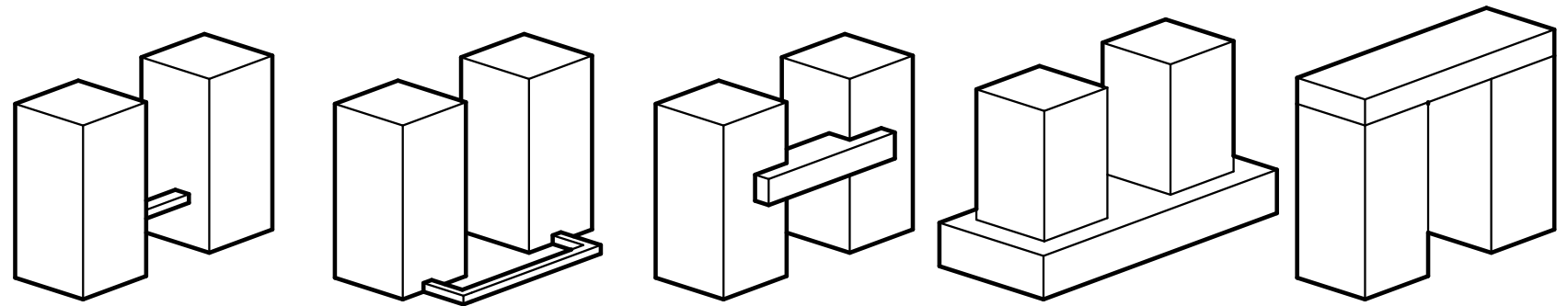
2. ZIGZAG INNER STREET



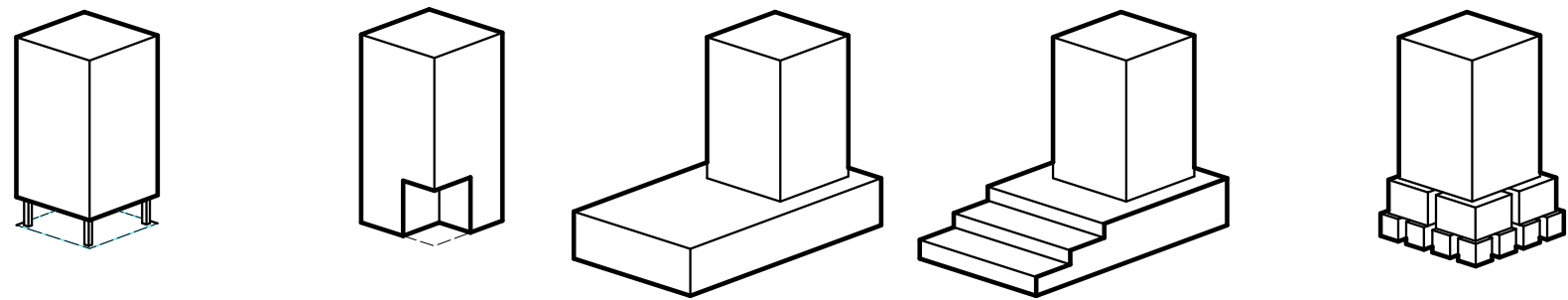
3. SEPERATED THE COMMON RESOURCES



4. ENHANCING CONNECTION



5. CONSIDERING GROUND CONDITION



CHAPTER 4
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DEVELOPMENT

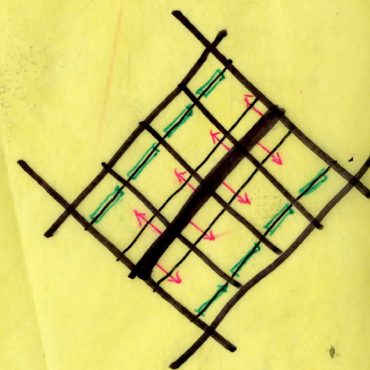
study of "courtyard house"
five principle for the new mode

PLAN STUDY

Directly use the plan of one three-entry courtyard house, divided the block into eight same units. The entrance for each units towards the a public street in the middle. The whole block has a dense grid.

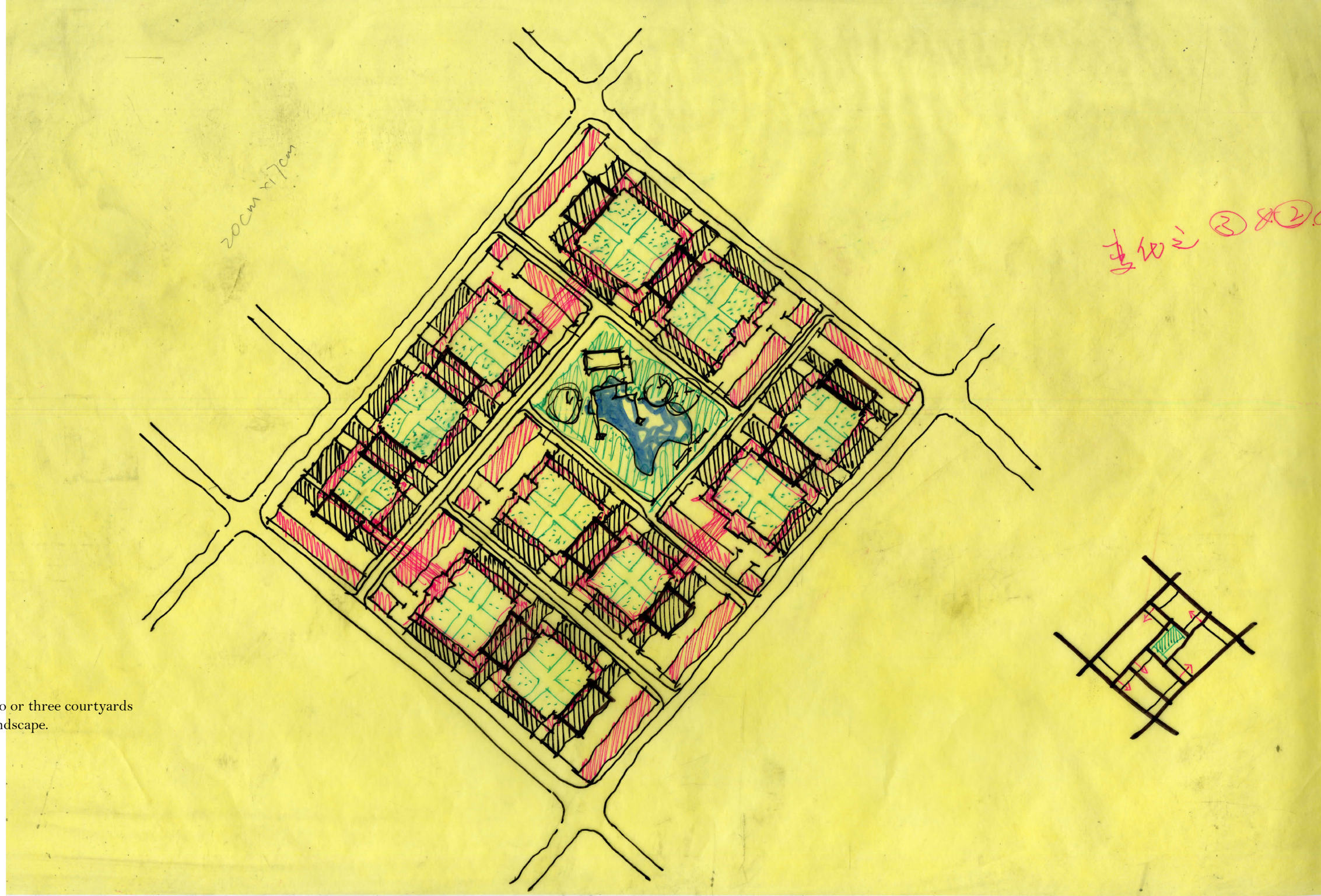


- ★ 单元到啥呀?
- ① 单元大小
 - ② 单元数量
 - ③ 单元连接
 - ④ 连接方式
- 数量.

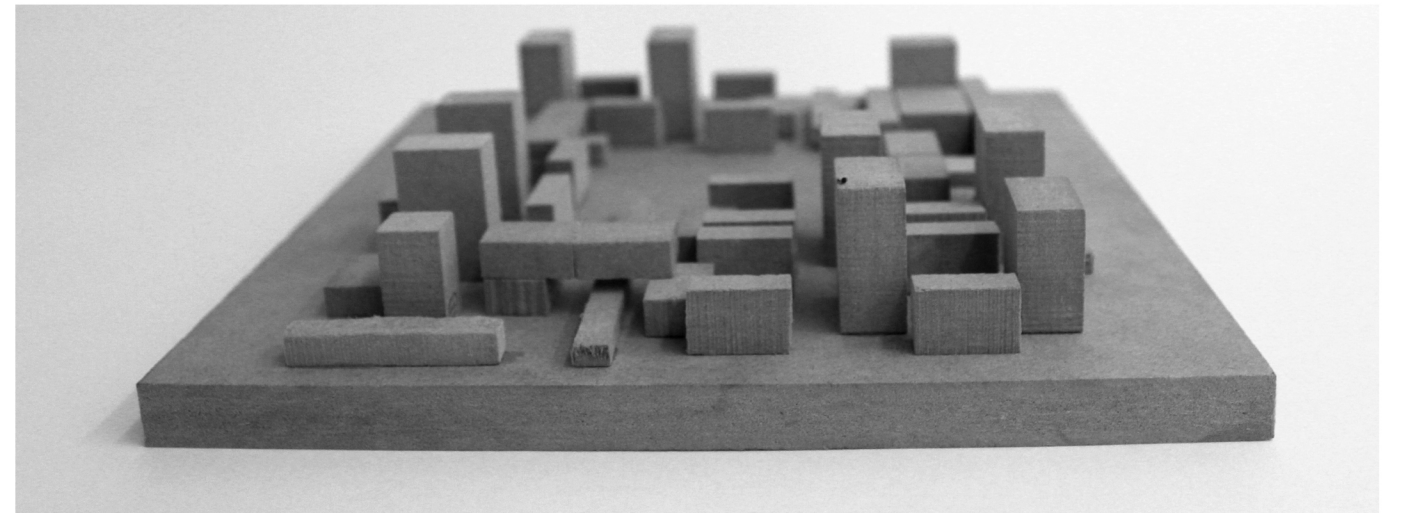
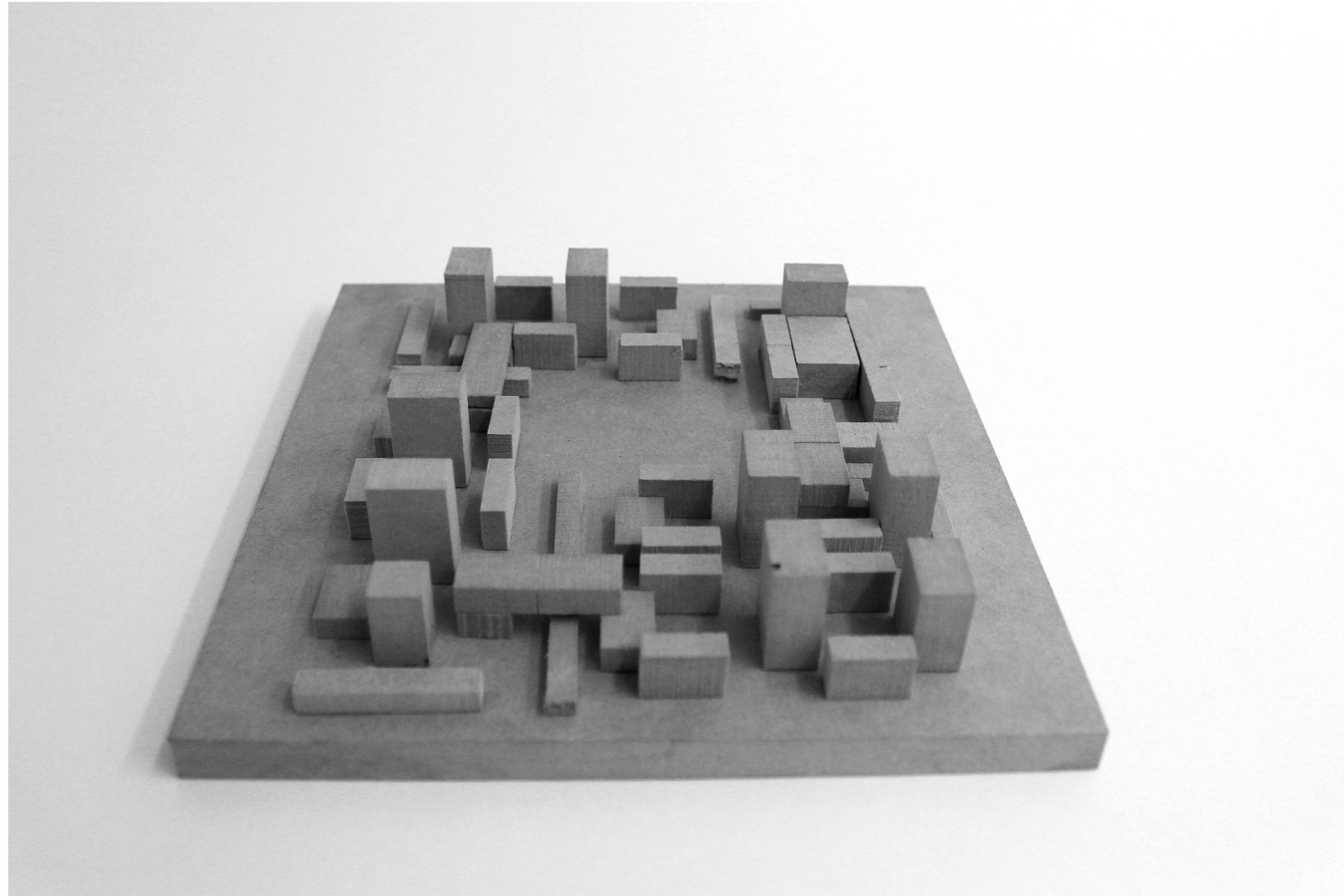


PLAN STUDY

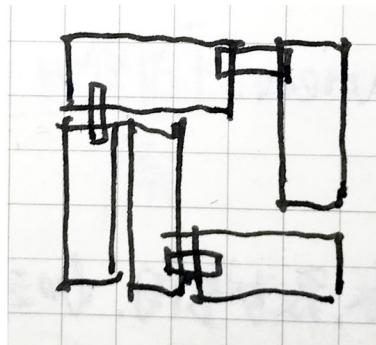
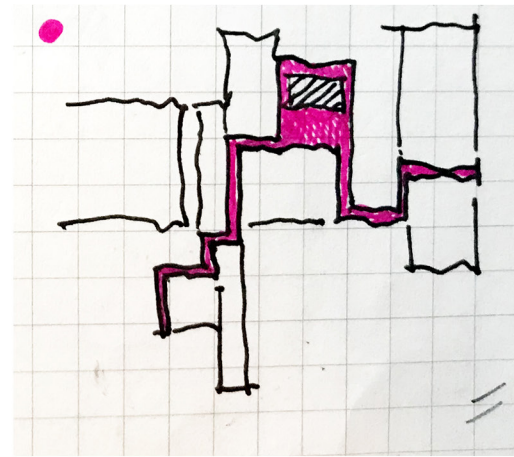
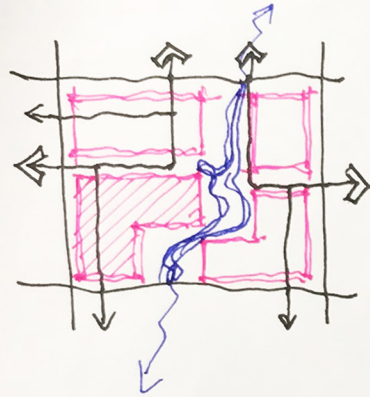
Break up the homogeneous plan, in this version, units that has two or three courtyards combined together. And changed direction, generated with the landscape.



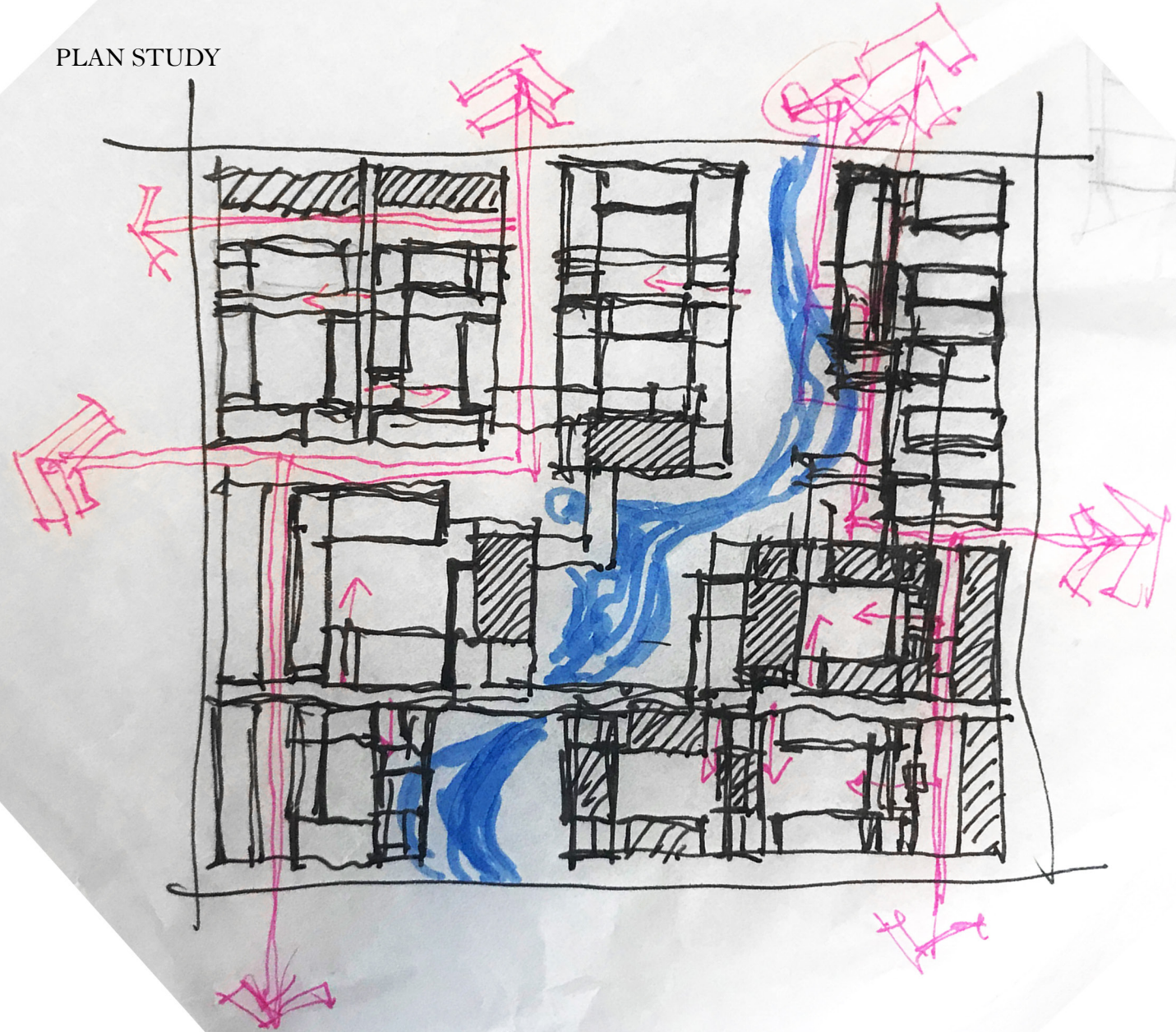
MODEL STUDY



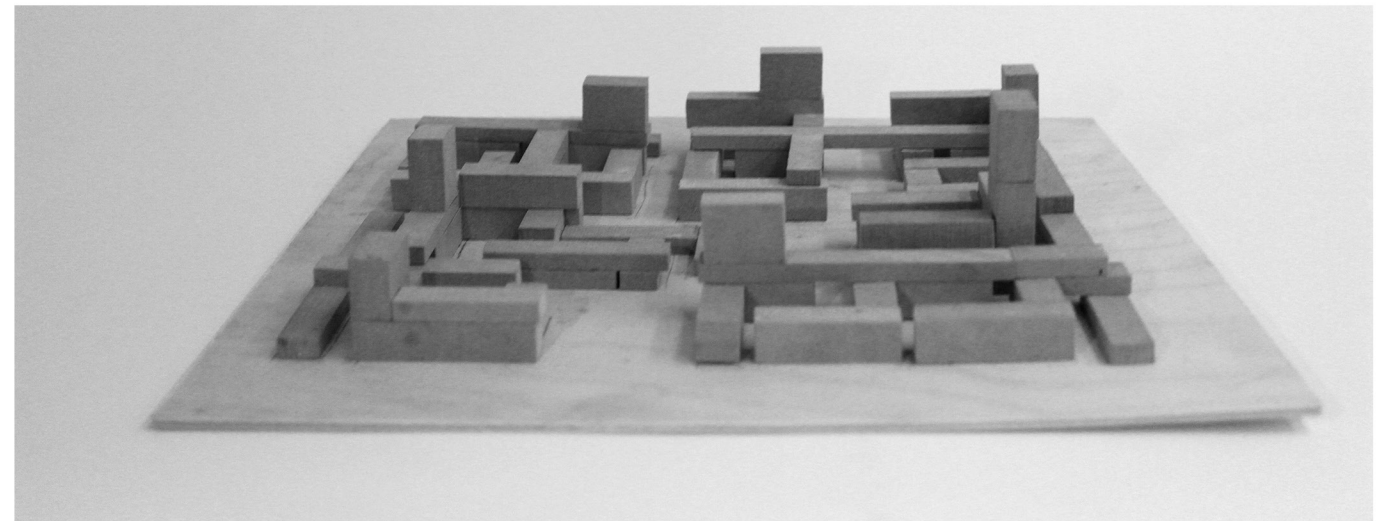
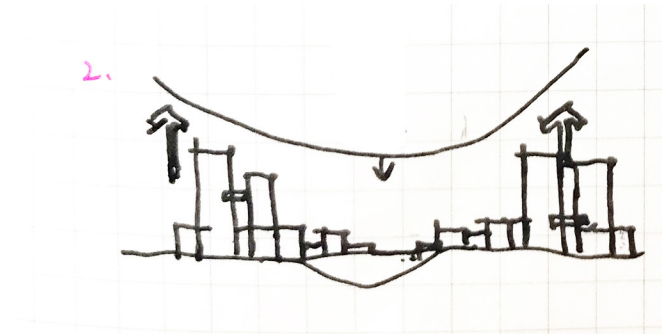
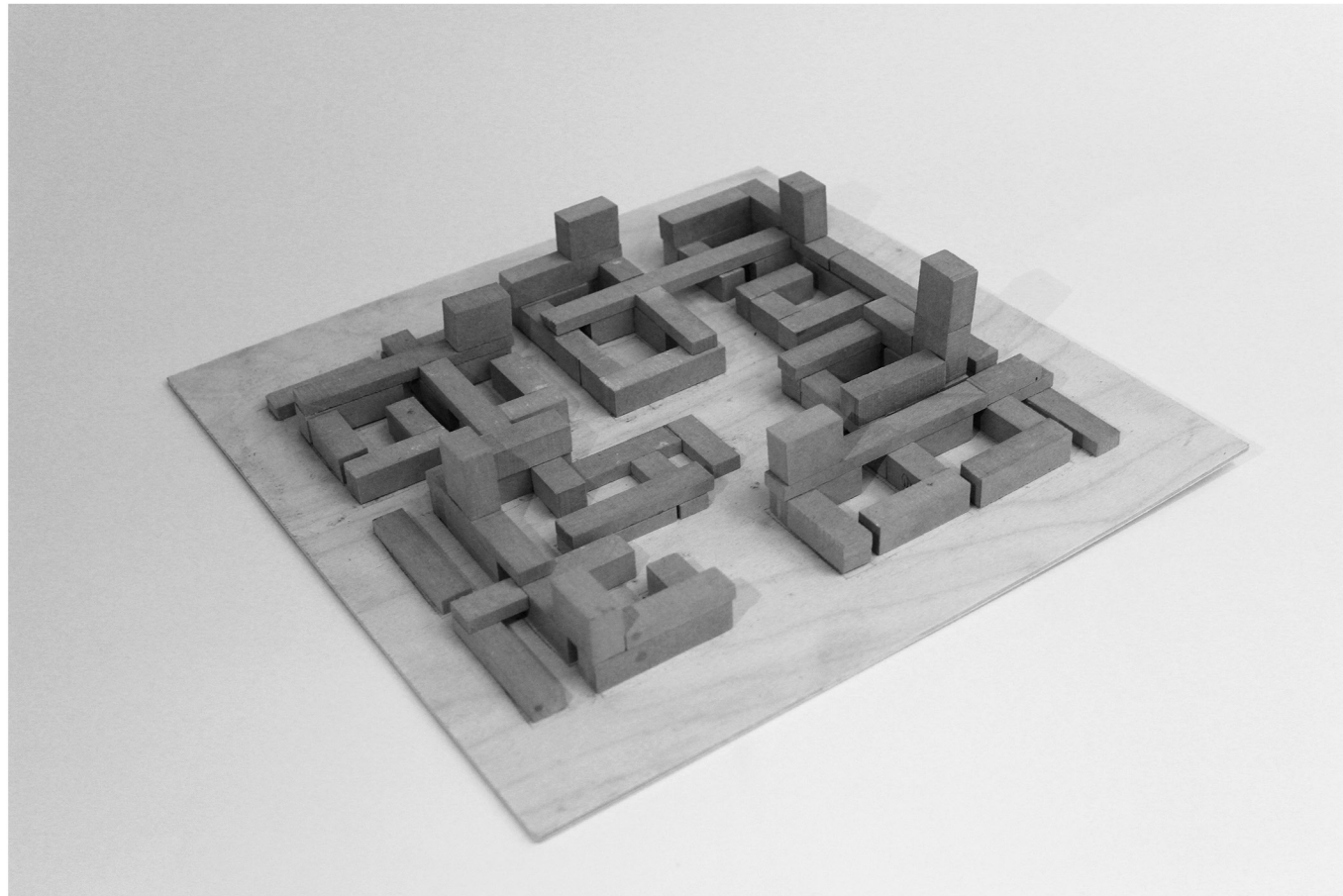
1. 250m x 250m Block break into Four Units? Minimized community



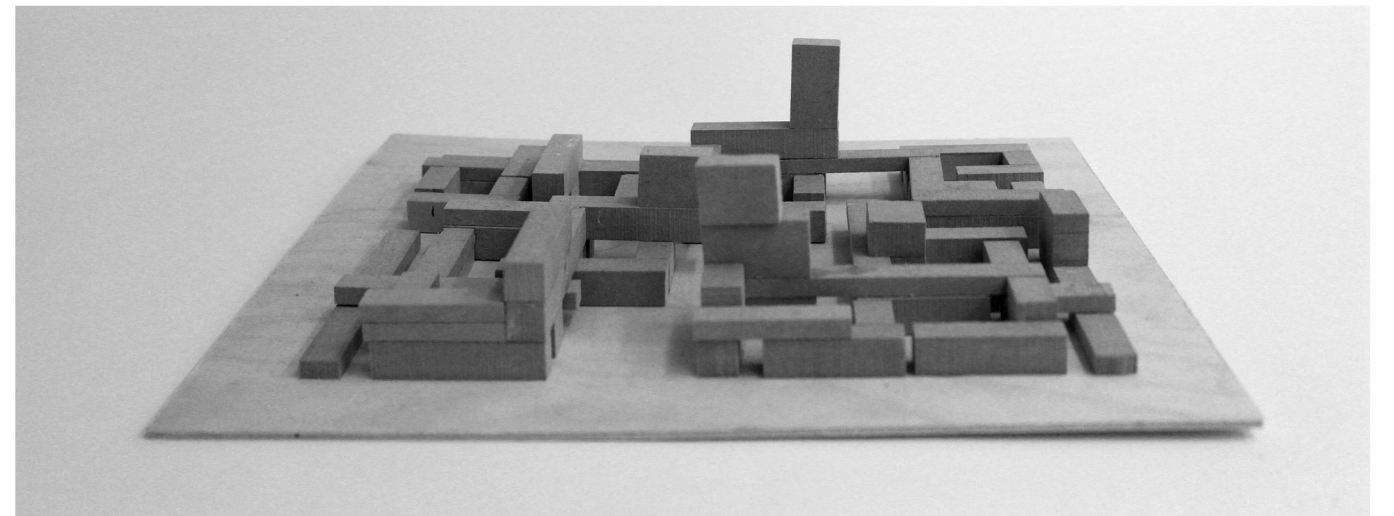
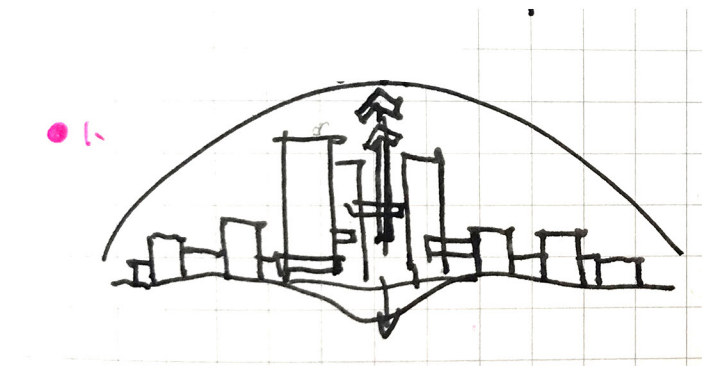
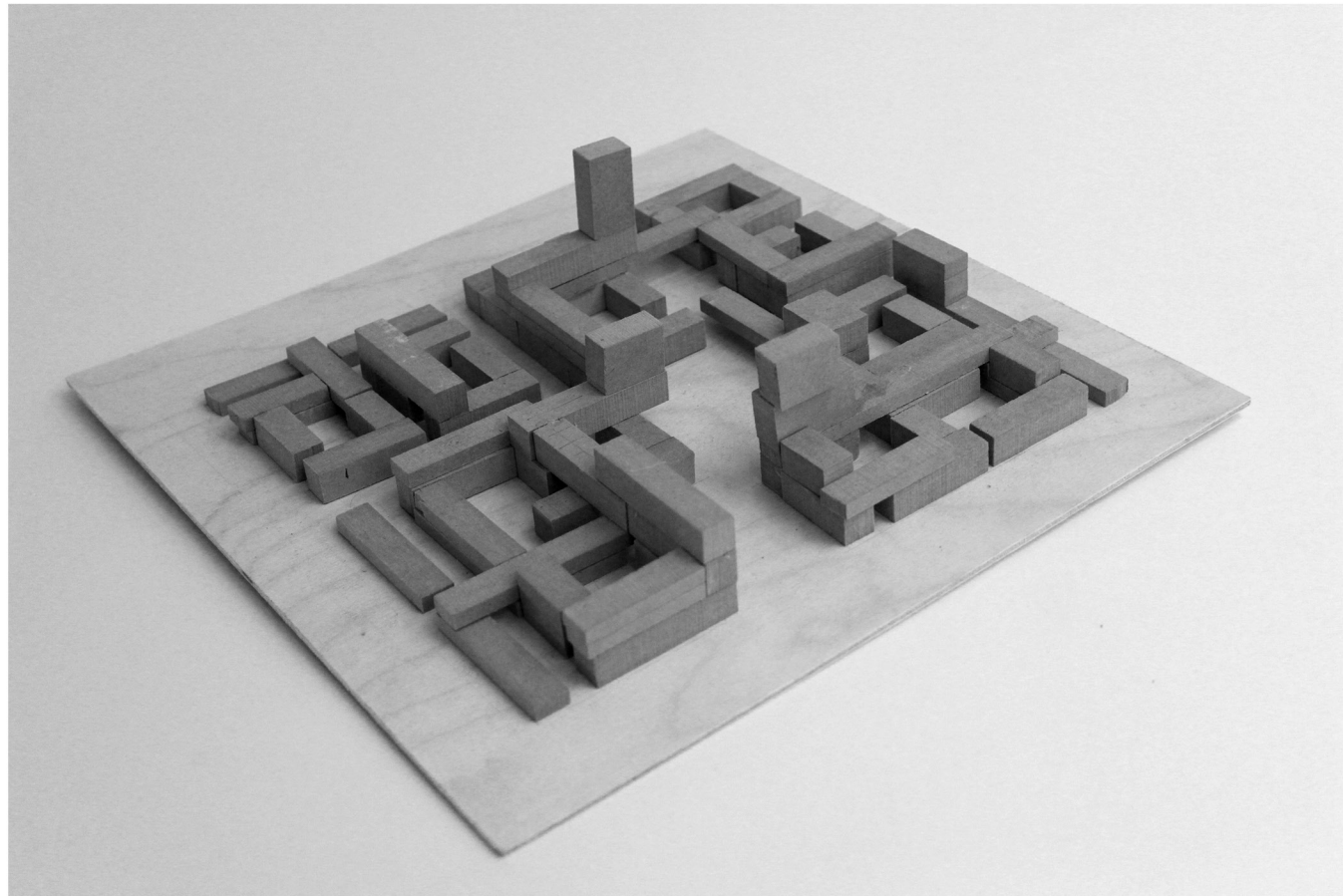
PLAN STUDY

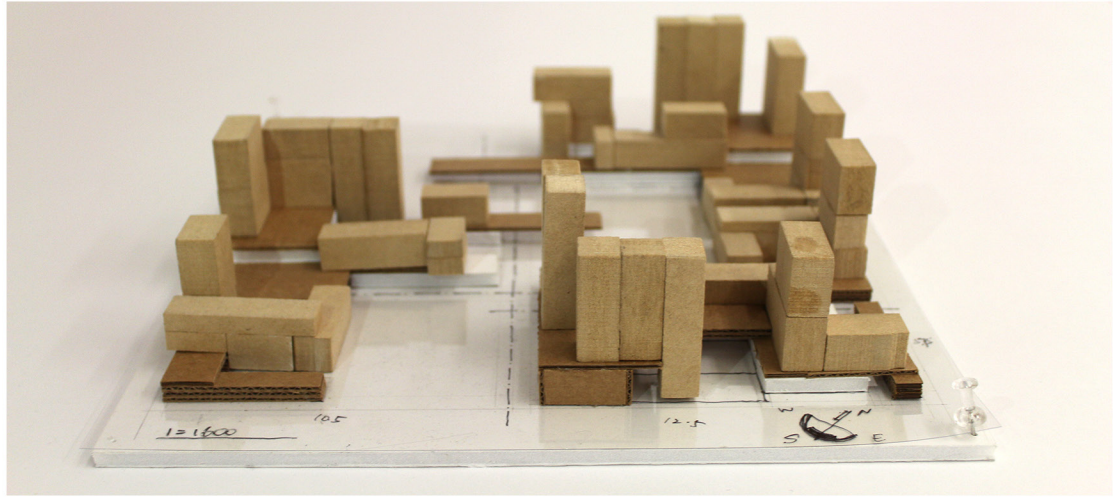


MODEL STUDY

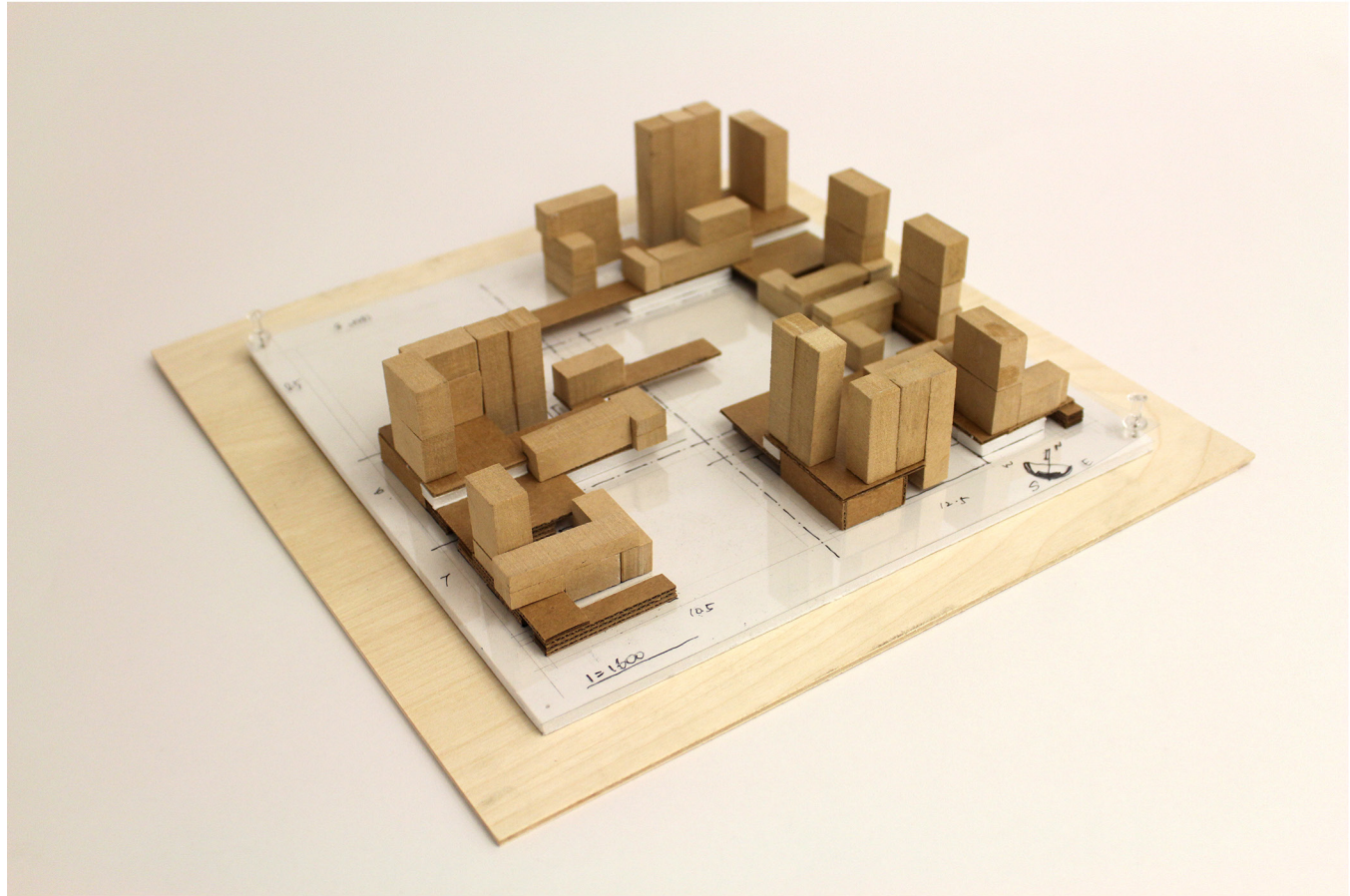
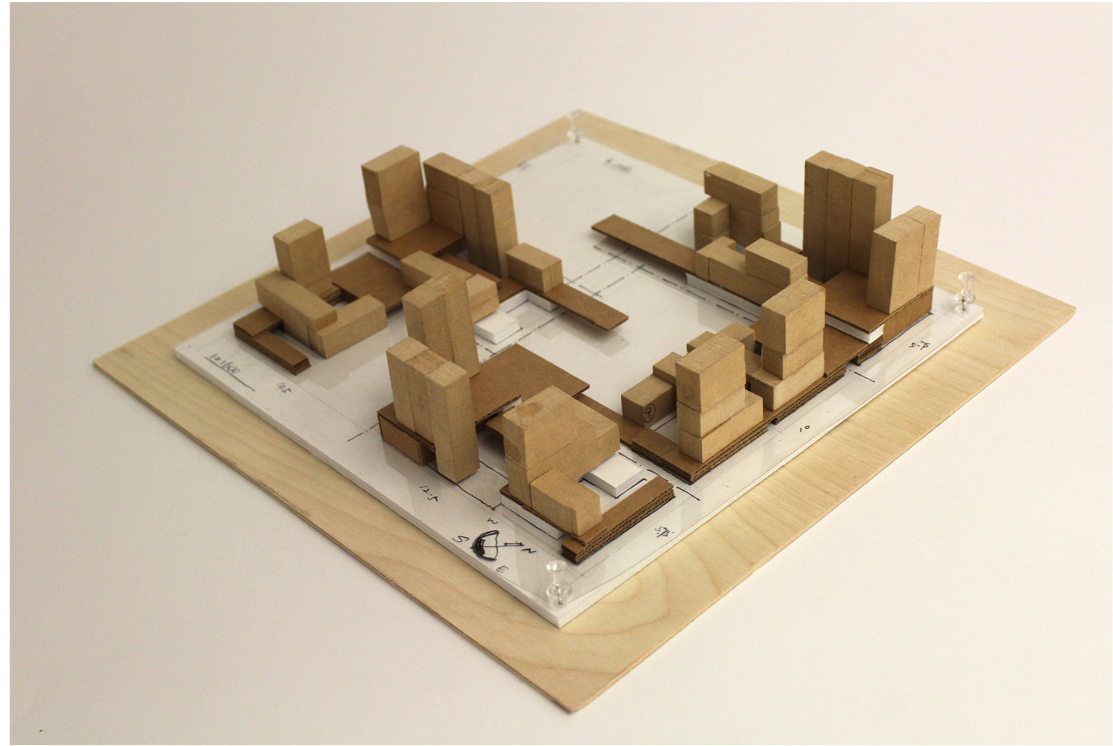


MODEL STUDY



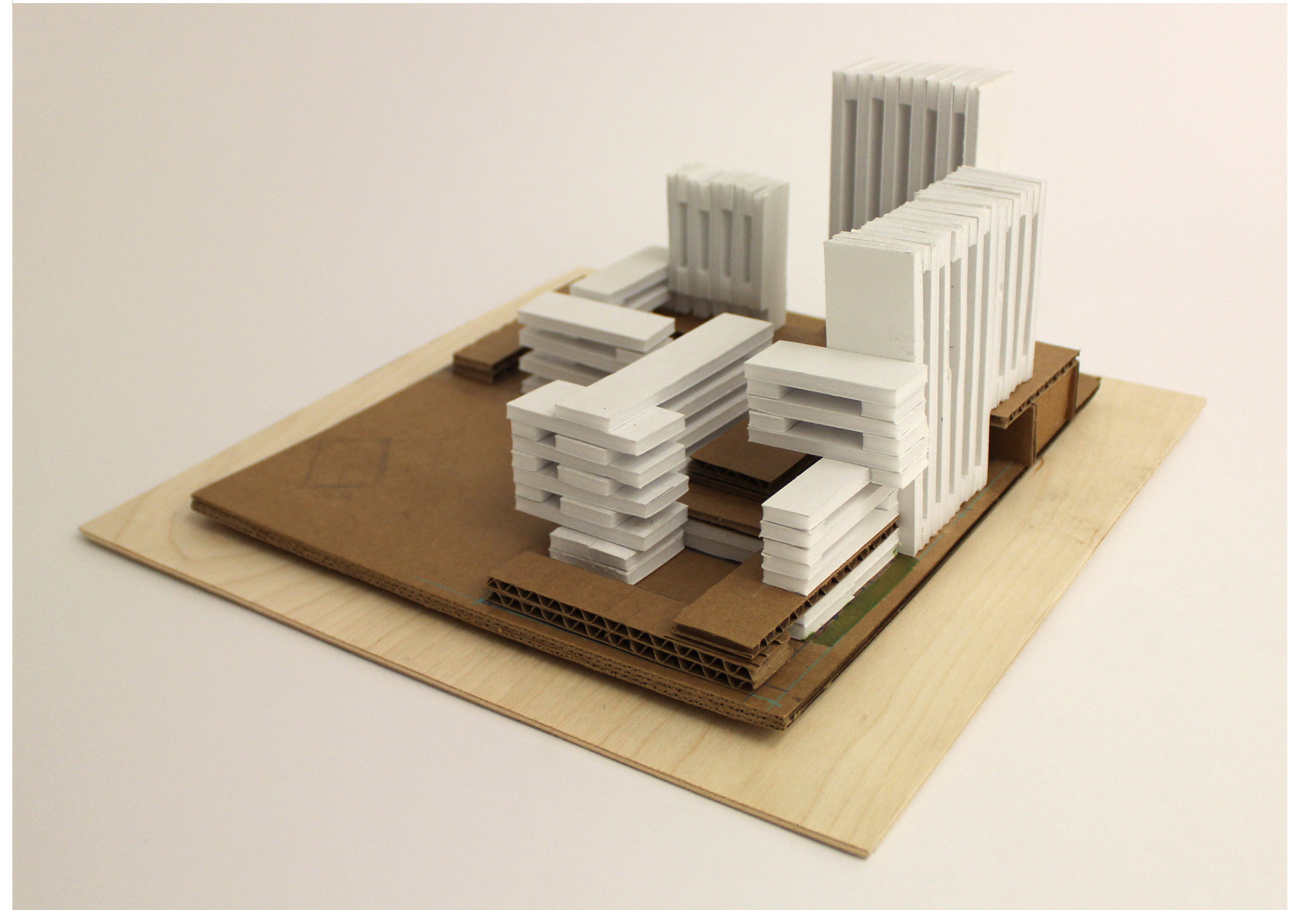
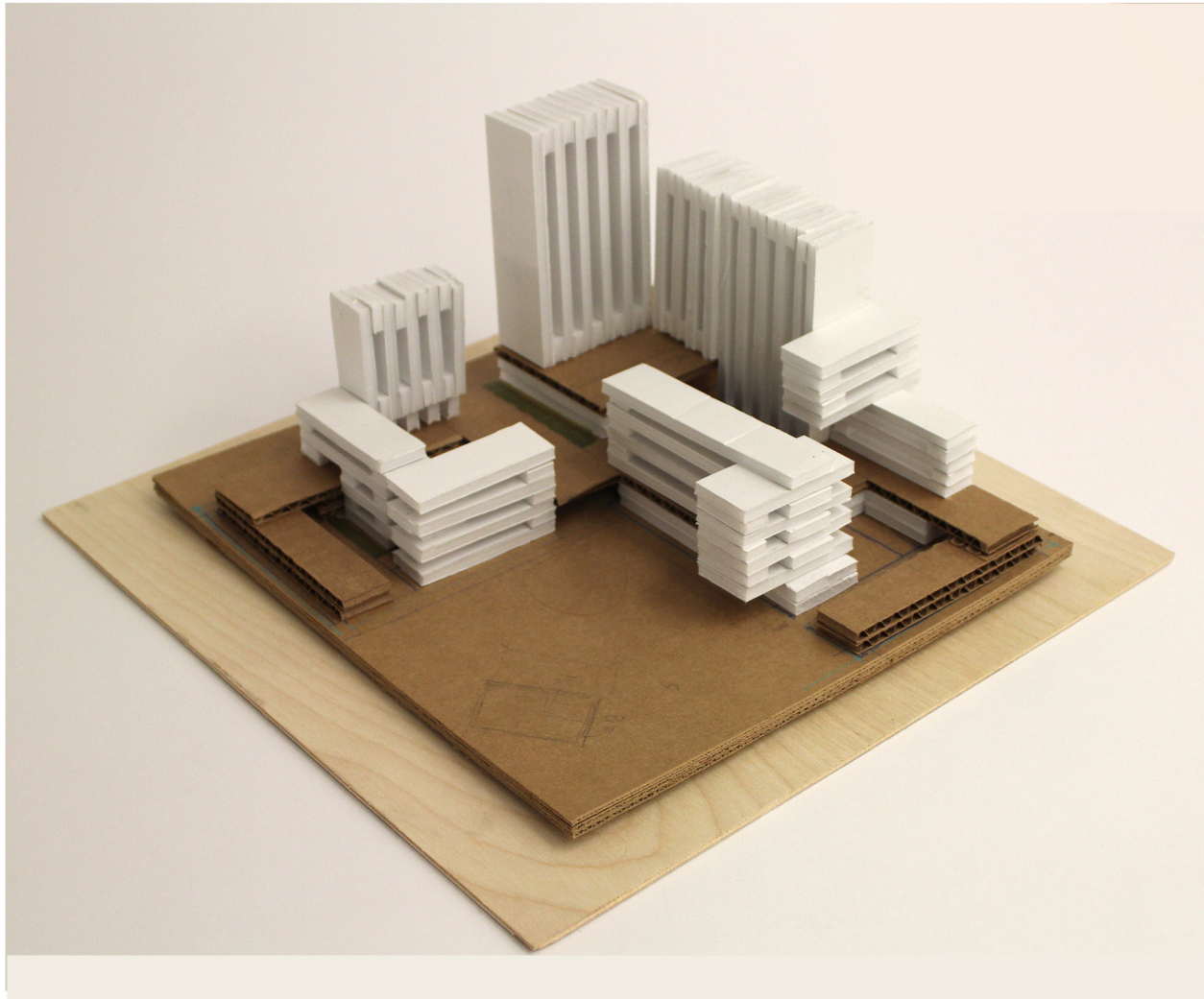
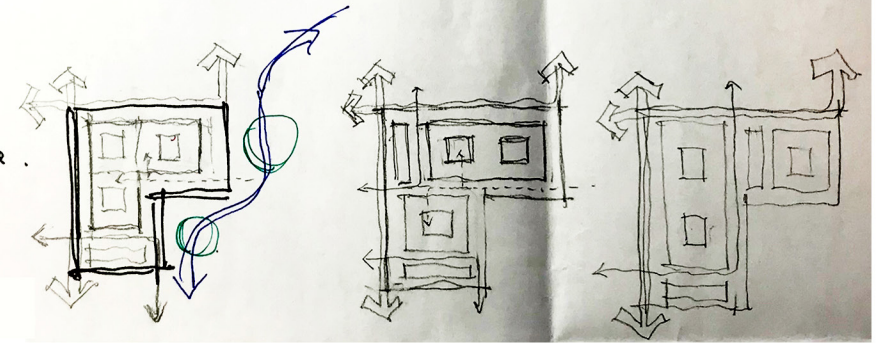
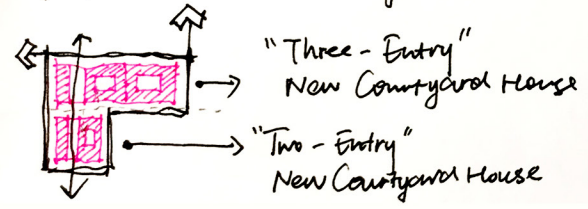


MODEL STUDY



ONE UNIT MODEL STUDY

II. Pick one Unit to study.

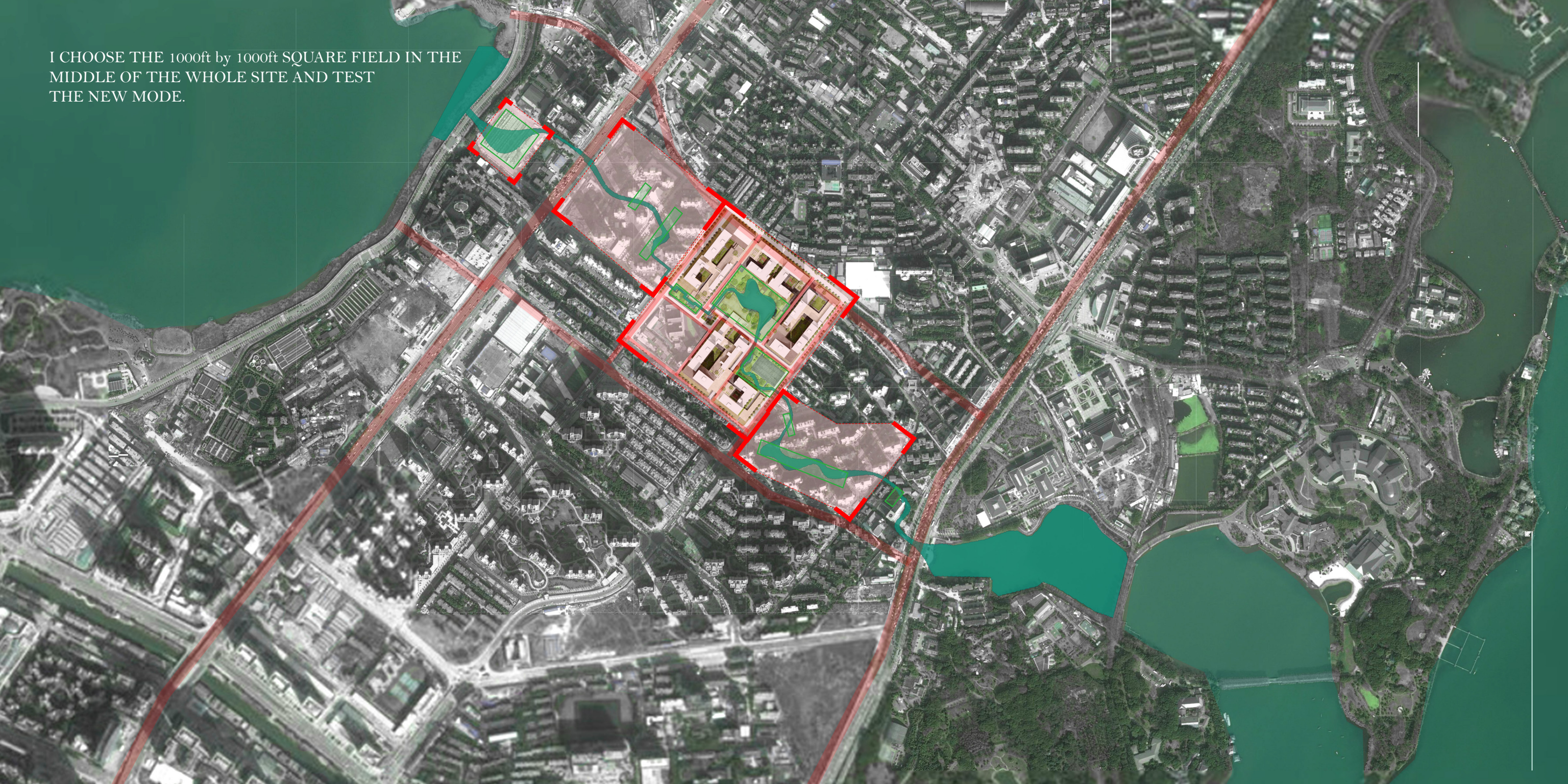


CHAPTER 5

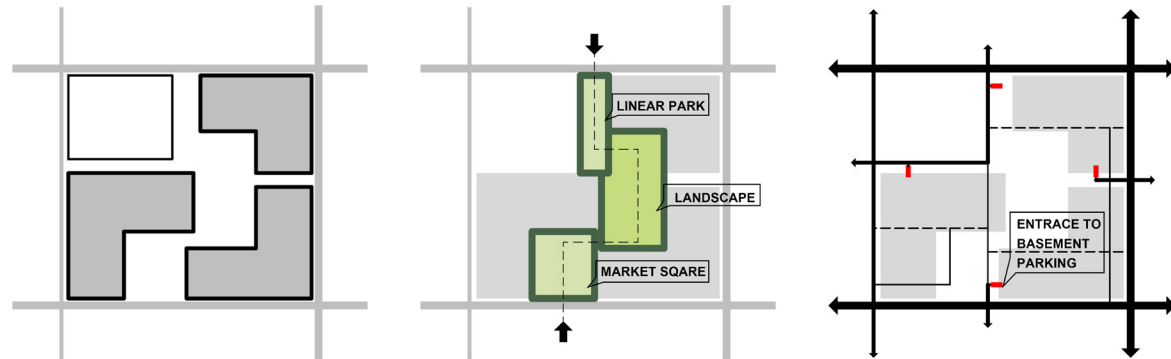
"OPEN COMMUNITY" DESIGN

master plan
movement moment
three type apartments' plan & rendering
model photo

I CHOOSE THE 1000ft by 1000ft SQUARE FIELD IN THE MIDDLE OF THE WHOLE SITE AND TEST THE NEW MODE.



BLOCK DESIGN DIAGRAM



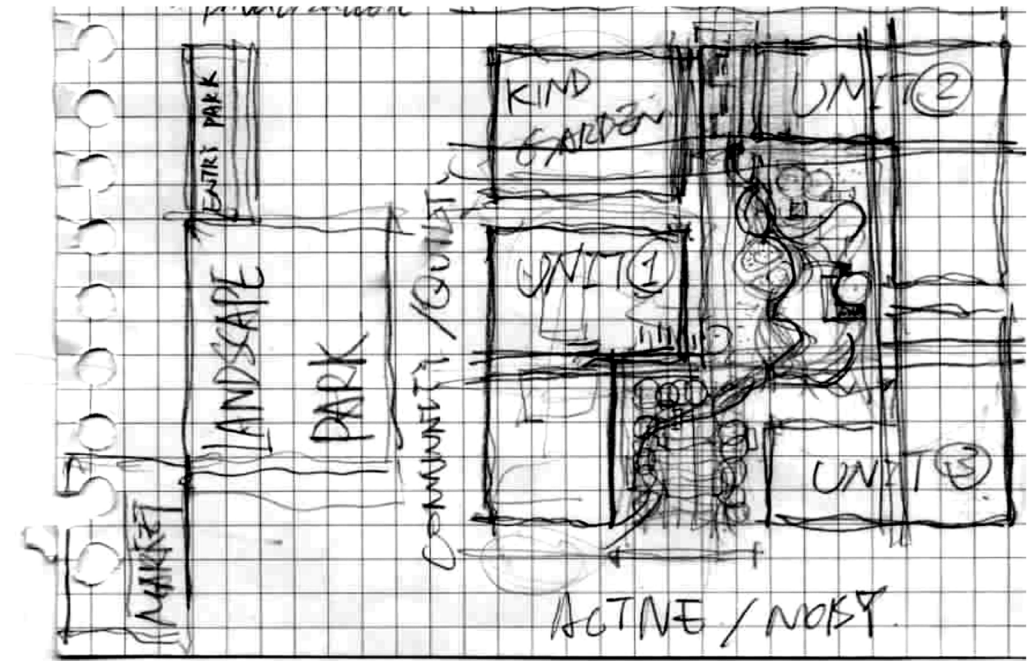
- The whole block are divided into three "L" shape units and one public area (primary school).

-Between each unit, there are three public space.

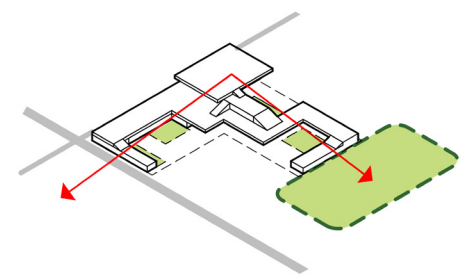
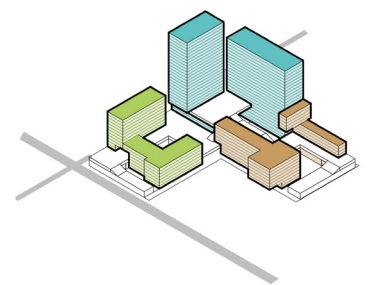
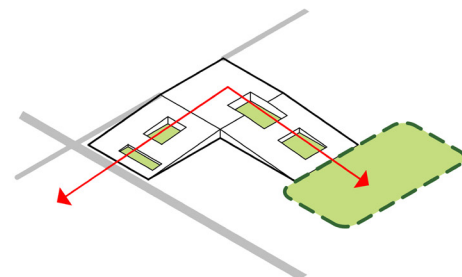
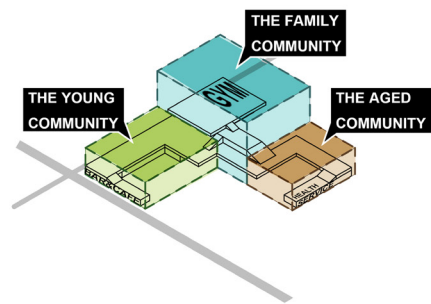
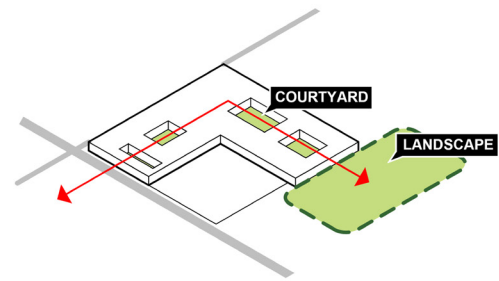
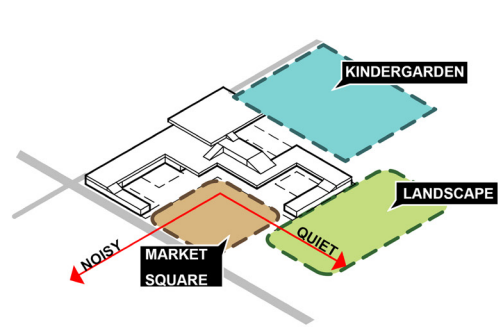
The one open to the south is an empty square, has flexible usages. It can be used as a free market or a dancing place. It located near the most activit road.

The one in the middle is a large natural landscape park.

The one towards the north artrey is a linear park to reduce the smoke and noise and as an entry path to approach the inside landscape.



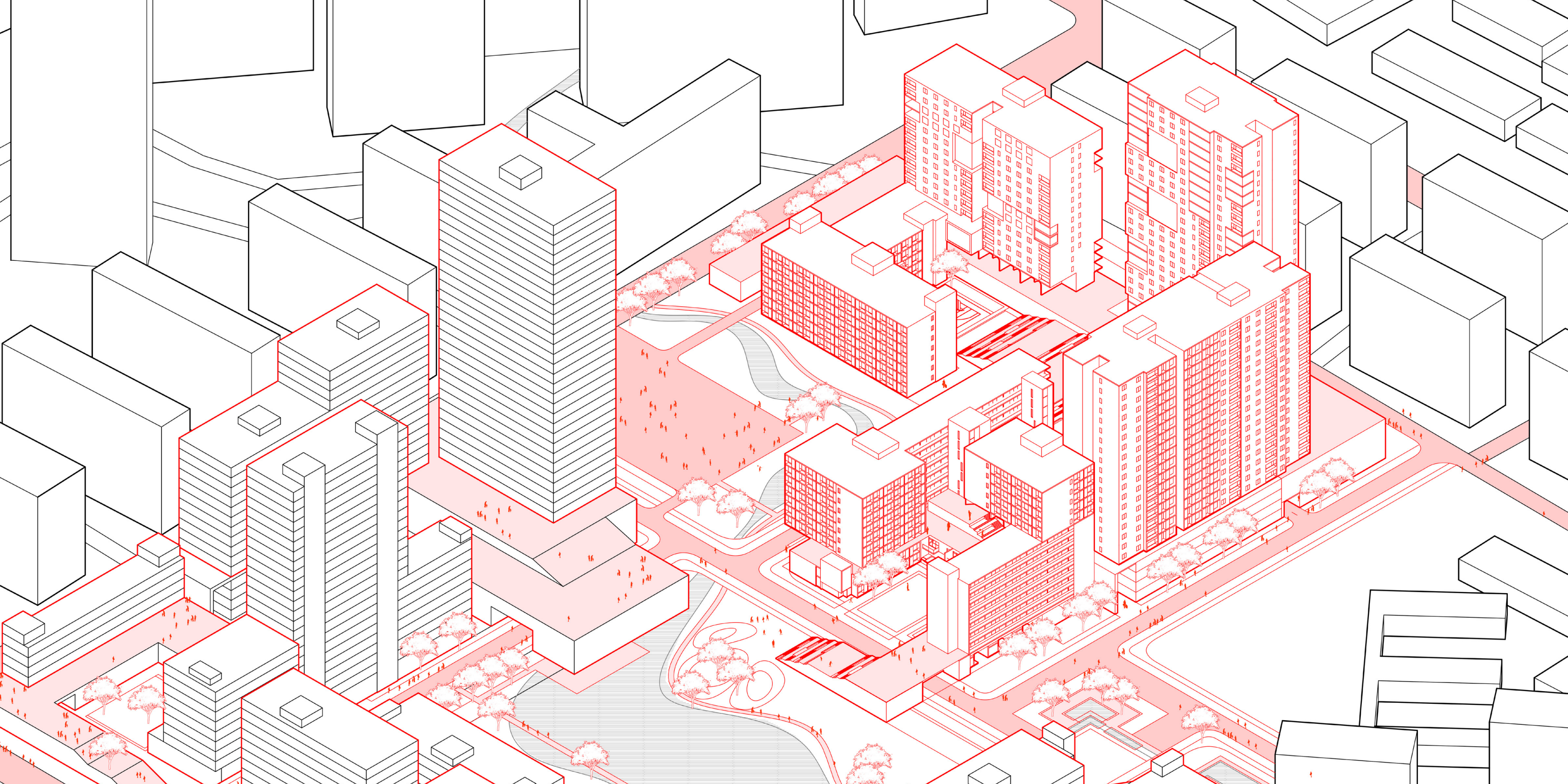




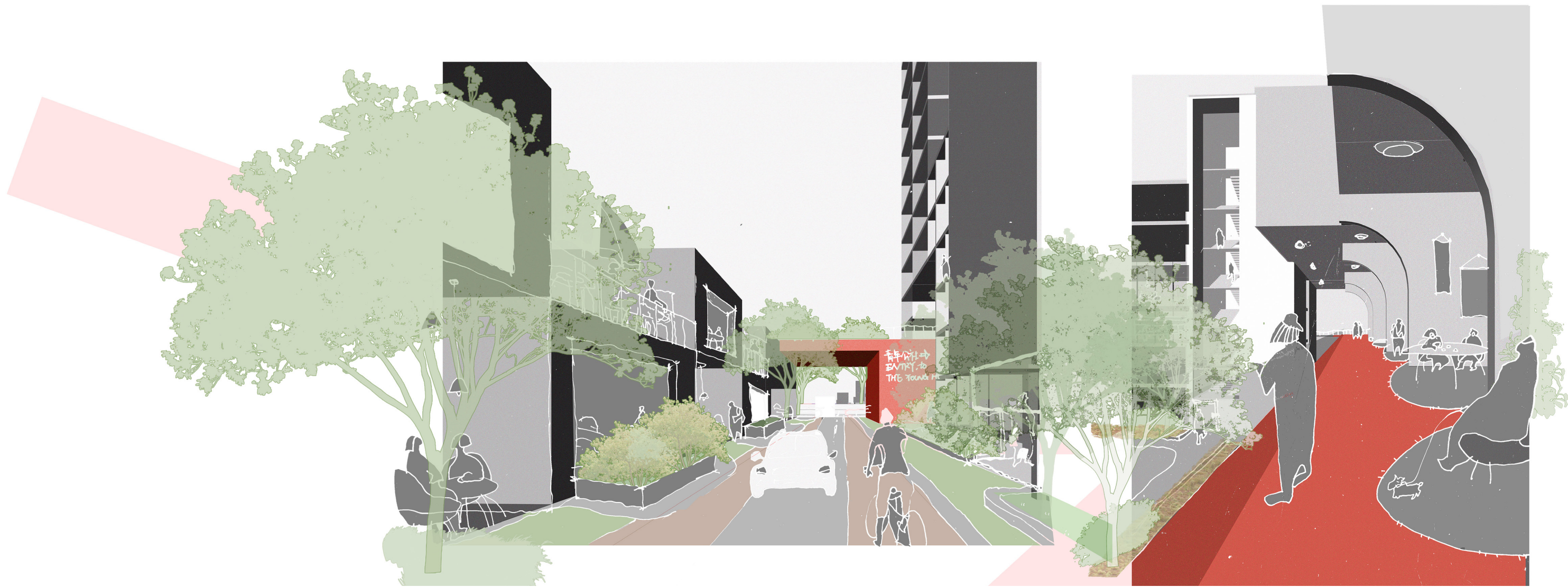
DYNAMIC MOVEMENT & CLIMBING LANDSCAPE

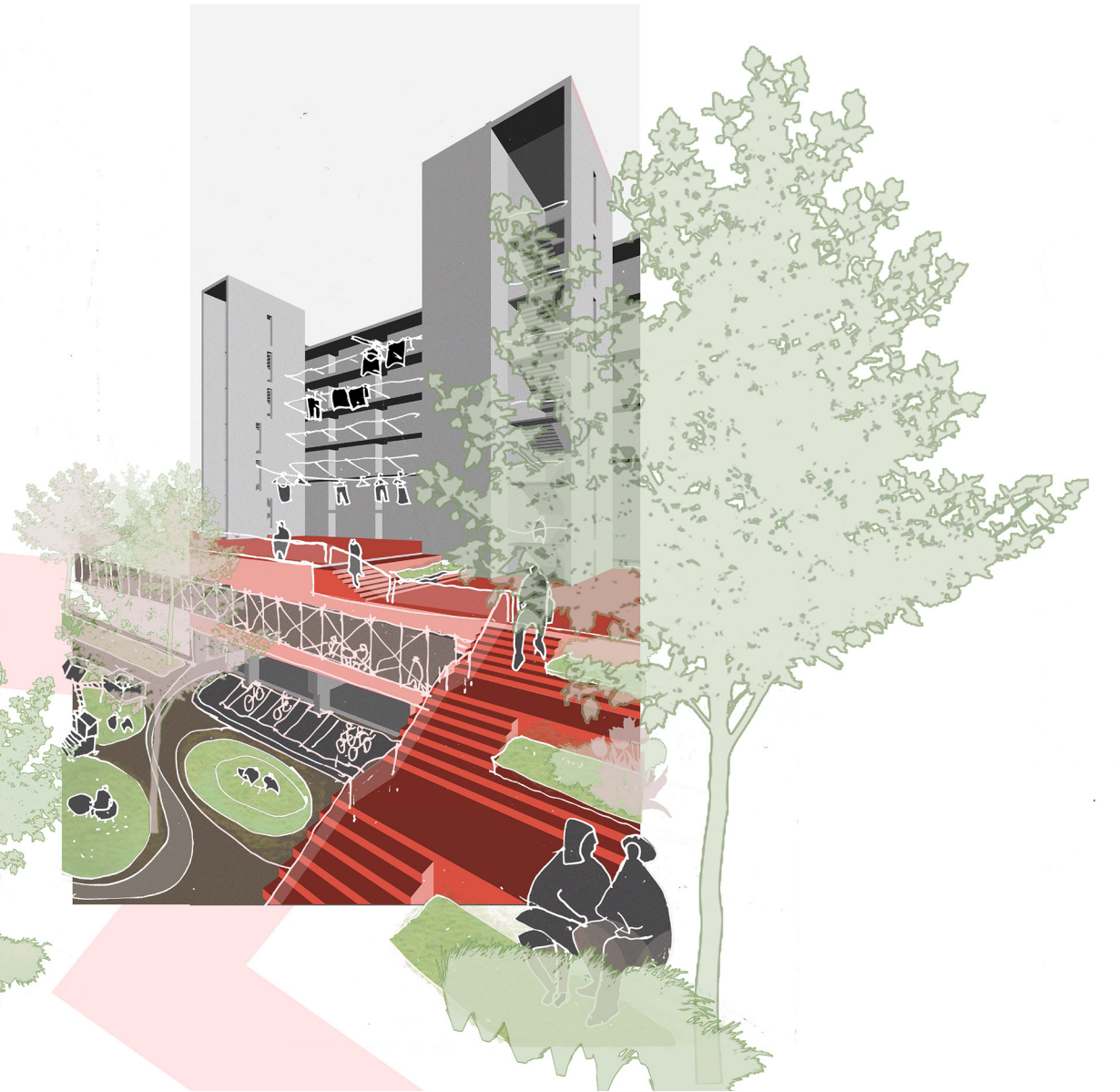
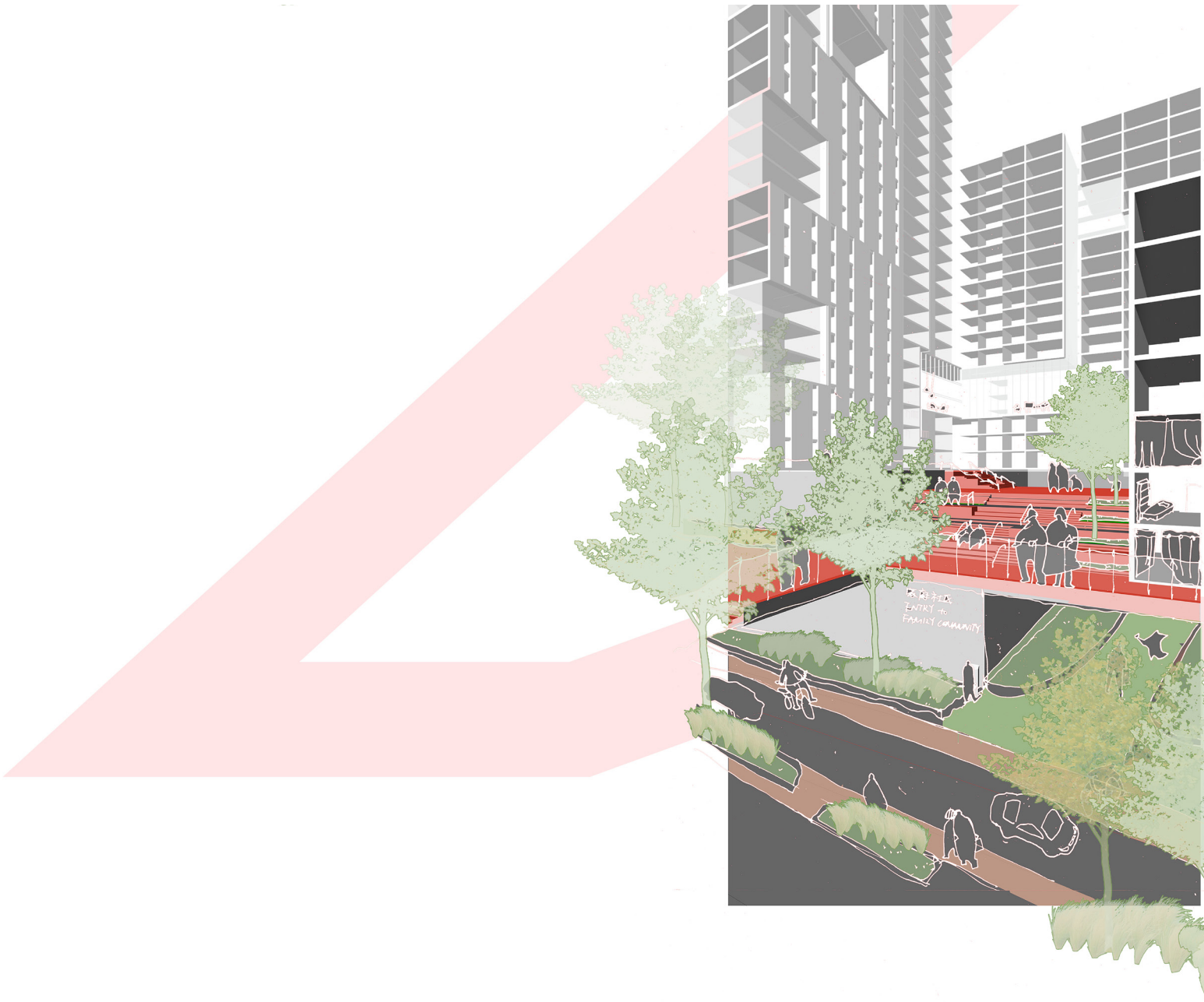
One unit is consisted of three courtyards, each one serves for one apartment. The westsouth is the youth apartment surrounded by the bar streets and market square, is very active. And the northeast is the senior courtyards, near the quiet landscape. The middle is the family apartment, it has the highest tower and podium.

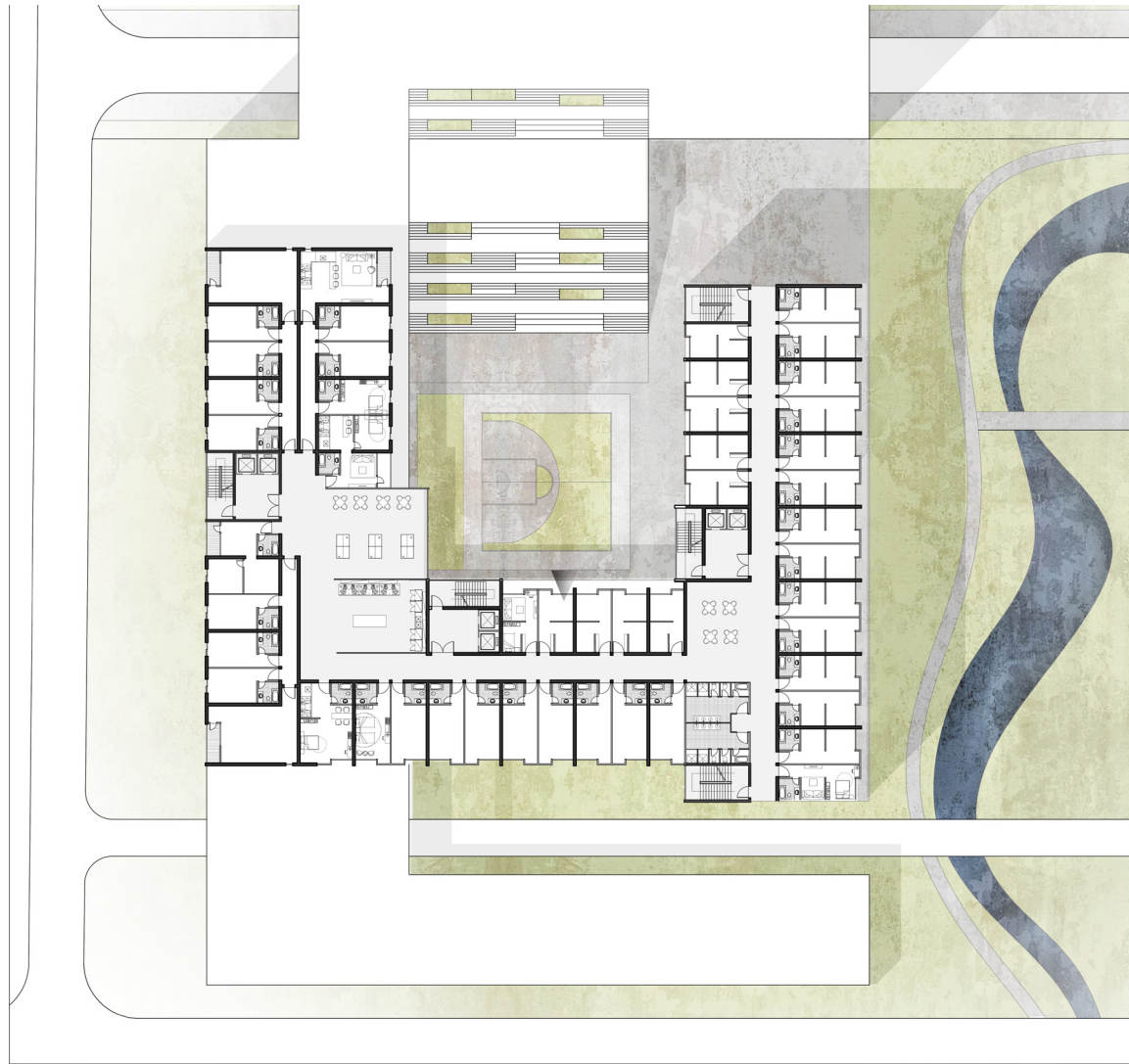
There is several public activity room in the upper level, so people can move through the ground, climbing to the podium roof then going up vertically to the towers.











THE YOUTH APARTMENT (5th floor)

It has three or four roommates apartment as well as dormitory. There are shared bathroom, kitchen and activitive room in each floor. And the courtyard used as sport square.

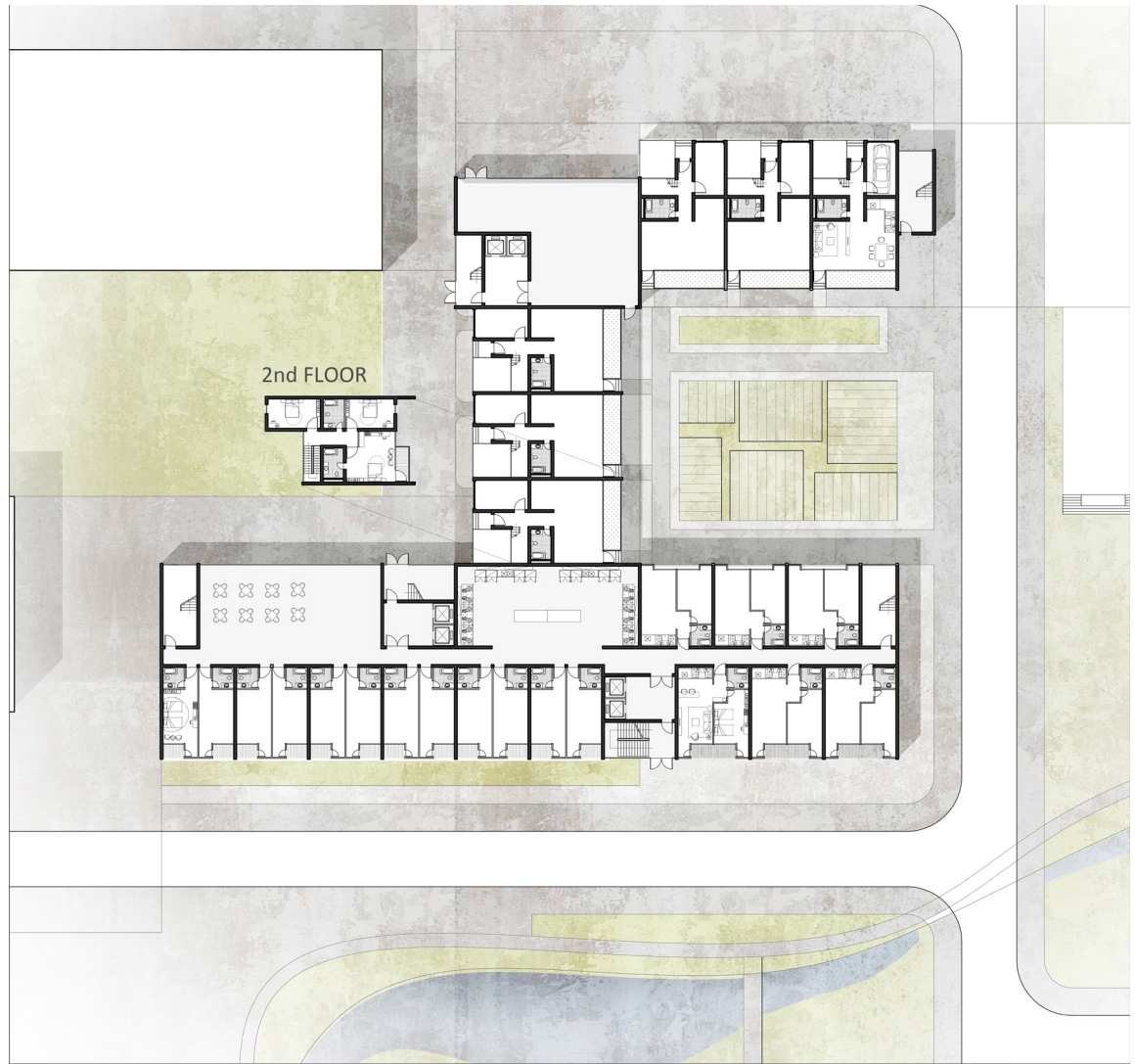




THE FAMILY APARTMENT (9th floor)

There are more multiple-bedroom housing options, the shared zone can be children's playground.

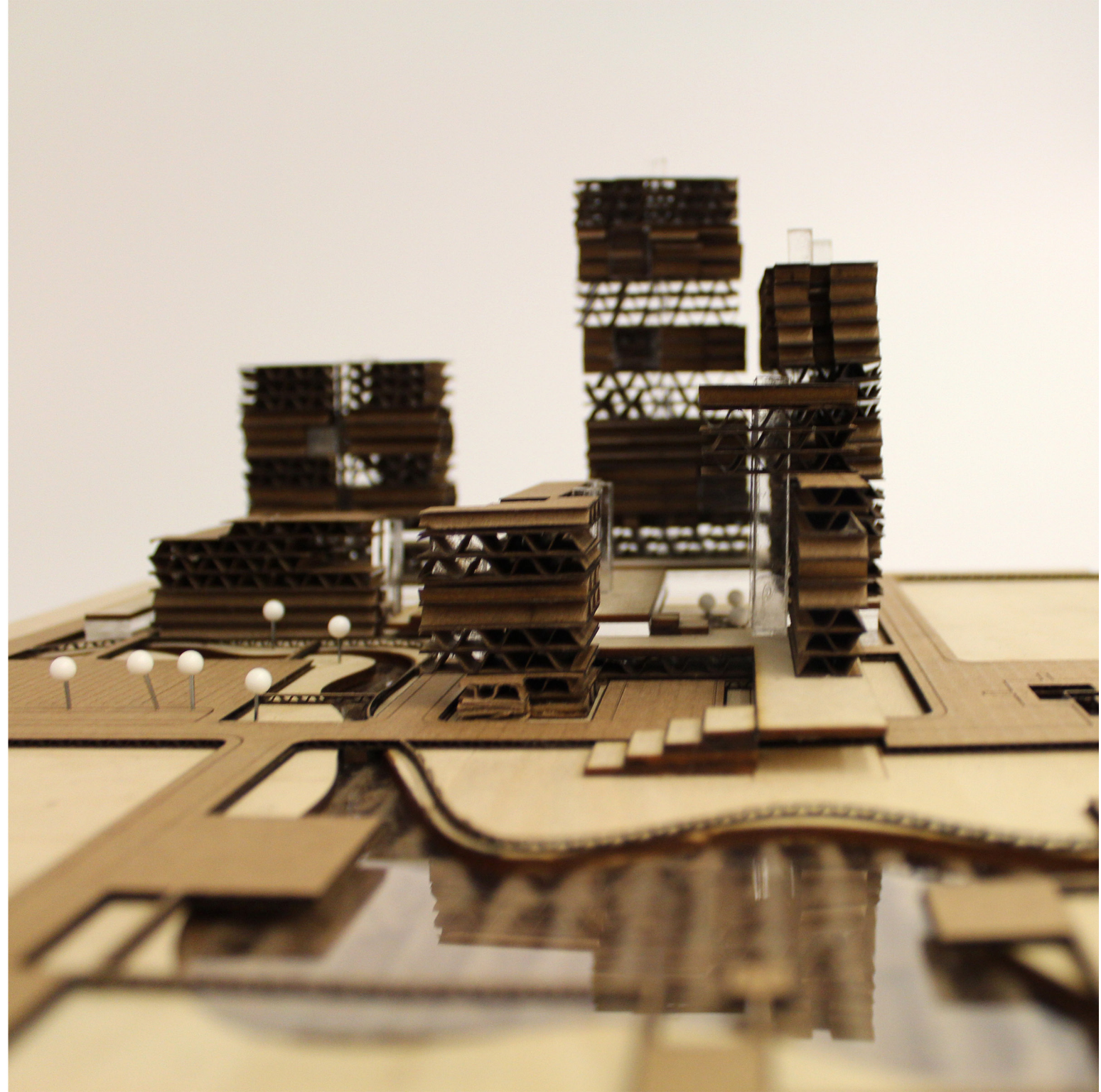
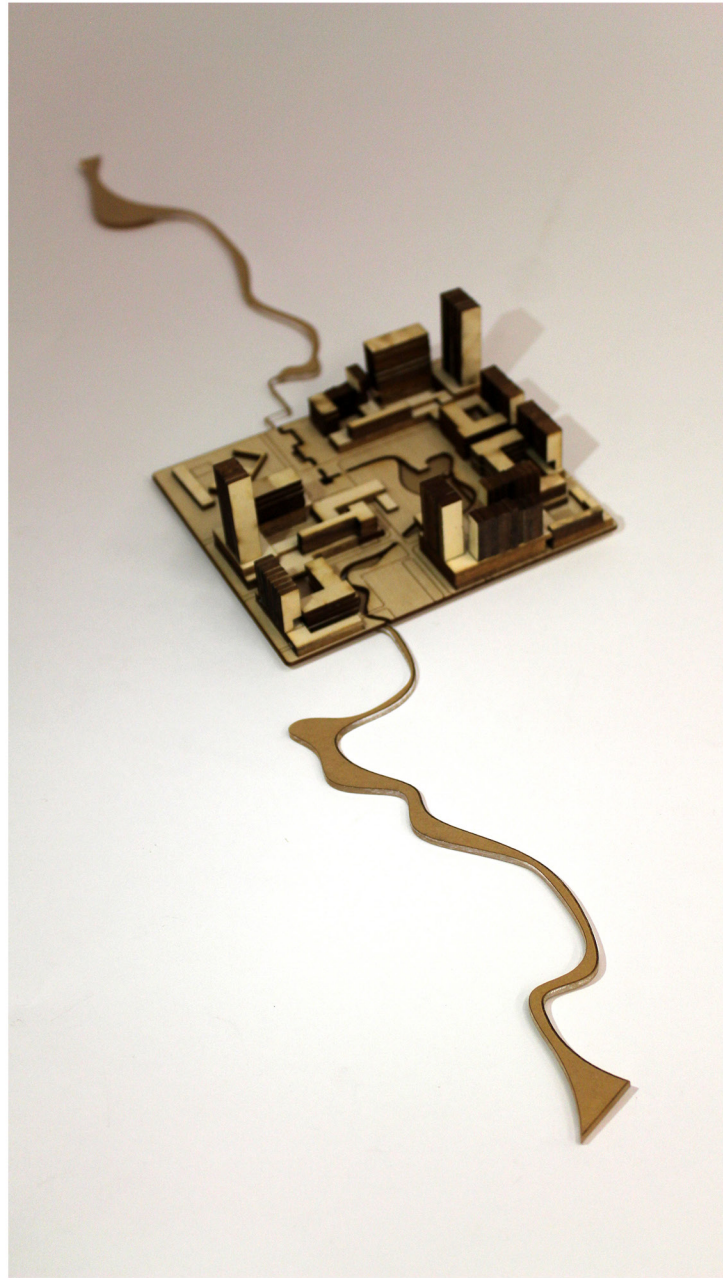


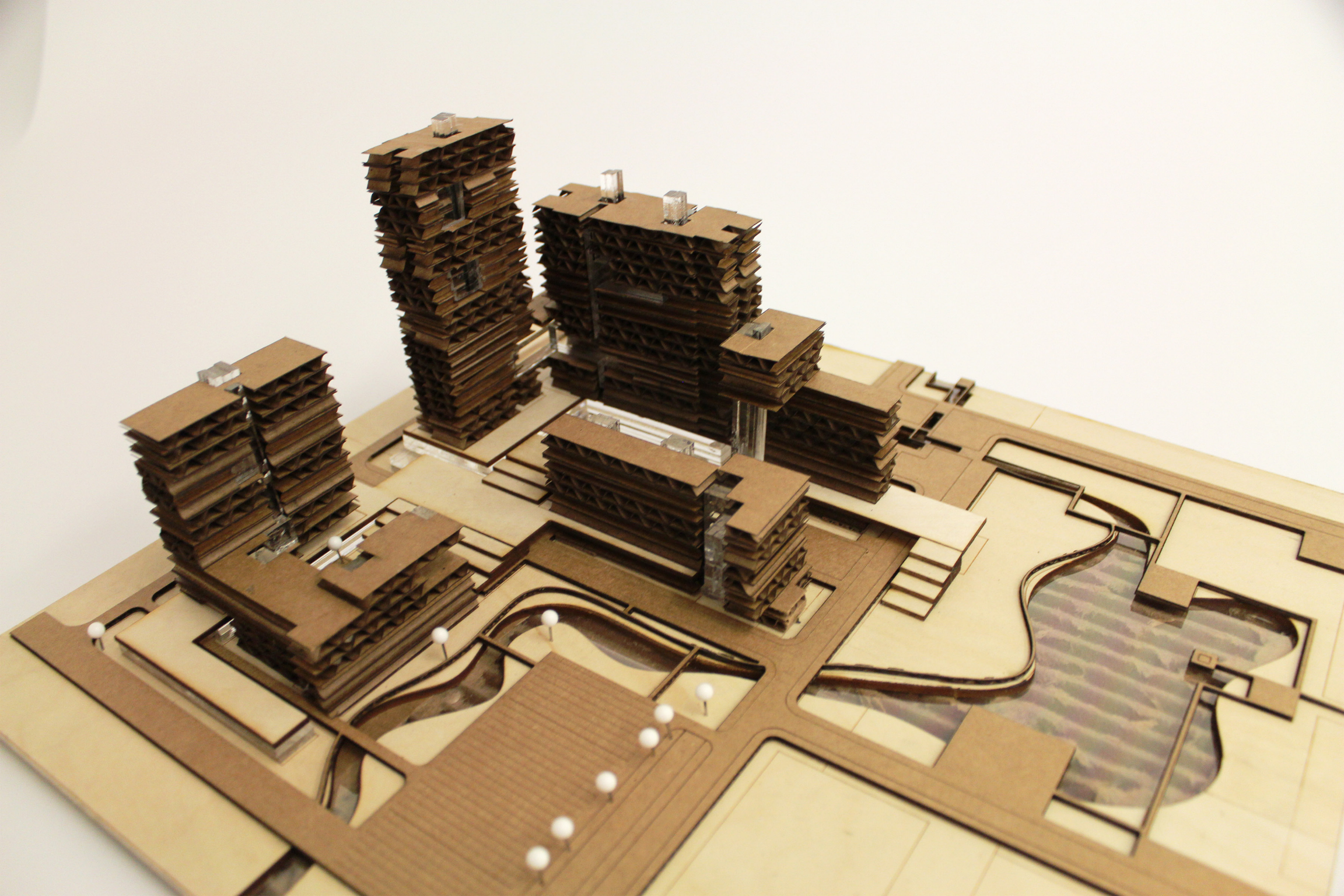


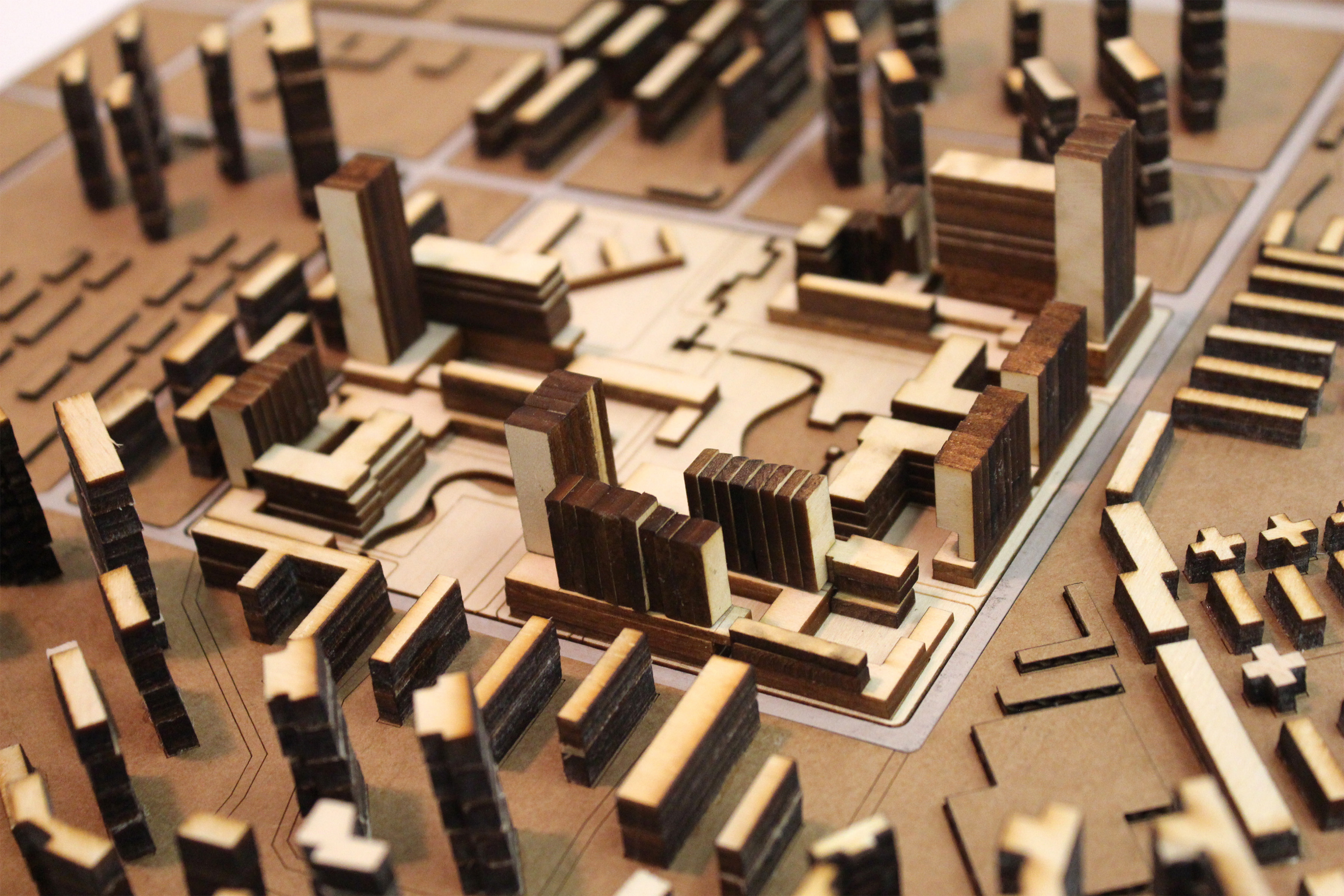
THE SENIOR APARTMENT (Ground floor)

The housing type is similar to the youth apartment, while the service space can be used as health care for the elderly. In addition, there are several double floor row house for those who do not like to live in the tower. And the courtyard here can be a farm land for the senior.









ACKNOWLEDGEMENTS

To whom giving me support and love.
谨以毕业设计送给给予我爱与支持的你们。

It is not a smooth path to arrive at the destination, standing in the Woods Gerry, introducing the work I had been loved and hated for a year long. I am glad I never abandon, and I am lucky I got the best support during my thesis period.

A big thank you goes to my two advisors, Anne Tate and Jonathan Knowles, who always clearing my mind and pointing out the right way to move on. Thanks to Anne, guiding me back to my hometown, the place where my life goes on. That make this project a special meaning for me.

Special thanks to my thesis group, especially my constant friend Iris King who reminding me all the deadlines and pushing my progress. And thanks to Yisi Rao's fully support during my final, thanks to all the friends helping me pin-up within a rush hour.

I am extremely grateful to my parents Changzheng Xie, Xiao Zhou, and my boyfriend Yi Sun back home in Wuhan. Although you are not by my side physically but I can feel your strong trust and support from heart.

At last, My deepest sincerity and gratitude goes to the staff, educators, and employees at the Rhode Island School of Design for their constant dedication. Also, thanks to my advanced studio advisor Warren Schwartz for coming to see my work at the last moment and giving me precious presentation suggestions.

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