

ABSTRACT

Title of Thesis: GRAND THEATER SQUARE – SHANGHAI

Luming Li, Master of Architecture, 2005

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Over the last few years, Shanghai has been facing challenging urban problems resulting from rapid economic growth. Its traditional urban fabric is being destroyed hastily to make way for the galloping new constructions. To protect this city's priceless urban heritage from being engulfed by scaleless development is an emergency measure we must take now.

This thesis will explore the validity of the insertion of a new mixed-used commercial, cultural and residential complex into a 6.5-acre traditional city block in a very heterogeneous urban space of Shanghai. The purpose is to provide an aesthetically dynamic yet practical solution to fill the wide scale gap between contemporary high-rise buildings and the historic blocks, to set an example of revitalization and rehabilitation that inspiringly employs the spirit of old traditional neighborhoods to highlight the city's historical past, and finally, to redefine the place of history in a new urban environment.

GRAND THEATER SQUARE – SHANGHAI

By

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INTRODUCTION

The physical and economic transformation of Shanghai in the last 10 years is unparalleled in its urban history. Encouraged by national and local governments intent on shaping a new future, Shanghai's building activity is racing forward crudely and expediently. The slogan "a new look for the city in one year, and astonishing changes in three years", has become the guideline of urban reconstruction and redevelopment. With a population of over 18 million the city now has more than 2,800 buildings taller than 18 stories and another 2,000 being planned.¹



Figure 0.1 Great model of Shanghai in the Shanghai Urban Exhibition Hall, showing the ambitious urban plans of Shanghai's future.

Under such hasty developments the rich social and historic fabric of the city

neighborhoods is facing a crisis of destruction. The urban space of Shanghai is being replaced by a prevailing internationalization and gradually losing its distinctiveness. Commonplace buildings are taking the place of fine architectural works of exquisite design that were of acknowledged historical and cultural value. Historic buildings have been quickly submerged in an ocean of super high-rise buildings and numerous traditional alley houses are being torn down on a daily basis.

As the biggest city in the world, Shanghai needs to construct a clear urban identity for future development. To achieve this goal, the control of haphazard development, the preservation of the historical heritage and the reconstruction of urban open space are vital.

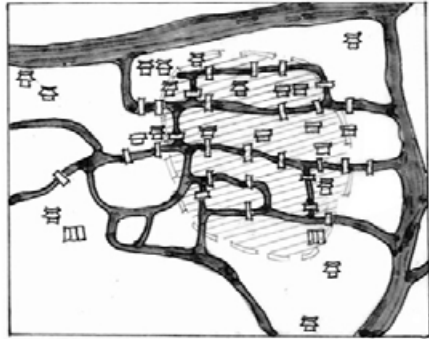
The proposed site is situated in the very prominent central part of Shanghai, an area dealing with a great variety of issues that reflect the problems above. The site is part of a very heterogeneous urban environment. It is facing the city's most bustling commercial avenue, West Nanjing Road. Shanghai's "Central Park", People's Park and the Municipal Hall are just across the street. Inside the site there are two rows of 2-story traditional alley houses (Linong). Several important historical buildings stand around the site, including the Grand Theater, Park Hotel and the Race Club, coexisting with some most modern skyscrapers, including the 282-meter high Tomorrow Square, the tallest building on the city's west bank of the Huangpu River. All of them form an urban texture that vividly manifests this city's hybrid characteristic.

This thesis tries to provide a practical solution to fill the wide-scale gap

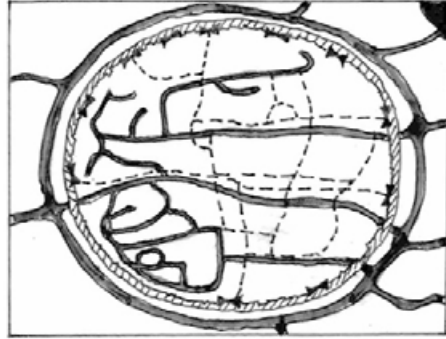
between contemporary high-rise buildings and the historic blocks, and to create a harmonious and united urban and architectural relationship between old and new, super scale and humble proportion, regionalism and modernism. The document essentially consists of several chapters: Chapter I provides an overview of Old Shanghai's urban development through its history, Chapter II gives the studies of Linong housing which characterize the city. On this basis Chapter III analyzes the site. After studying some precedents in Chapter VI, in the last two chapters a series of design strategies that address the primary design issues will be proposed at all scales- urban, architectural and detail.

CHAPTER I: URBAN DEVELOPMENT OF OLD SHANGHAI

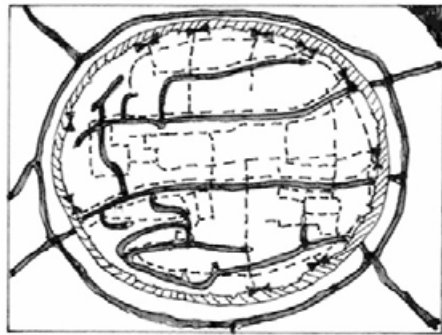
Historical Background



Shanghai in the late 13th century. The grey part indicates the approximate position of the wall built in 1554.



Shanghai in the early 17th century



Shanghai in the early 19th century



Shanghai in the late 19th century

Canals Walls Gates Main streets

Figure 1.0 Old Chinese city pattern of Shanghai in different time periods

Before 1845, the city of Shanghai was concentrated on a 505-acre piece of walled land whose elements – physical, political, social and cultural had remained essentially unchanged for almost five centuries. (Figure 1.0) This old city was based on the grid-like network of canals flowing from the Huangpu River. Unlike Beijing, the imperial capital which was utterly conservative and ordered to maintain an absolute and unchanging authority, the ancient Shanghai's urban

structure has always not been formal and perfect: the basic pattern that dominated the order of the city were transverse canals flowing into the Huangpu River. (Figure 1.1) Along the sinuous canals and rivers were the narrow streets, many bridges linked the paths, homes and workshops crowded onto the land between the canals.

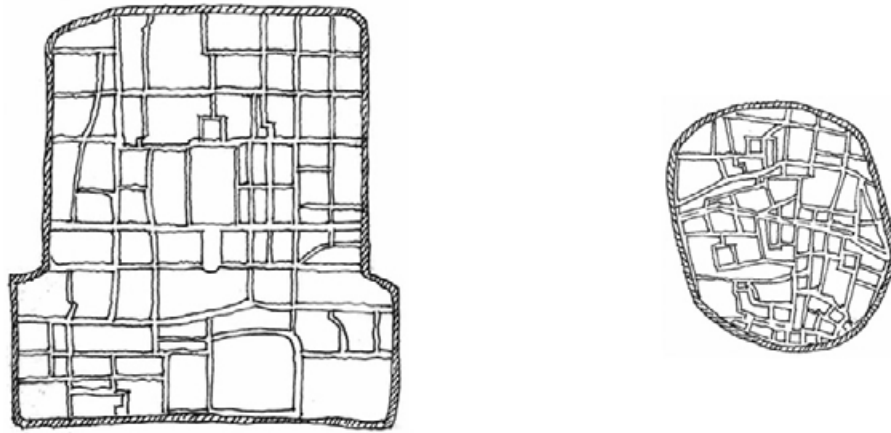


Figure 1.1 City structure comparisons, showing the walls
& main street-grids of old Beijing VS. old Shanghai.

However, it was this small town, which had caught the imagination of foreign capitalists and been forced to open as a treaty port to international trades after the Opium War (1839-42).

When the British capitalists first established their settlements after 1843, they chose a land north of the old Chinese city on the west bank of the Huangpu River for its strategic convenience in sea and river transportation. From the old path along the river edge they laid out three roughly parallel major streets, running westward cut by two transverse streets. (Figure 1.2) In the following urban developments all major streets were leading to the waterfront, along which the important public buildings were gradually built. Soon after, the French chose a site

to the south of the British Concession and the Americans developed a land to the west of British Concession. Later the British and the Americans joined their lands and named it the International Settlement.

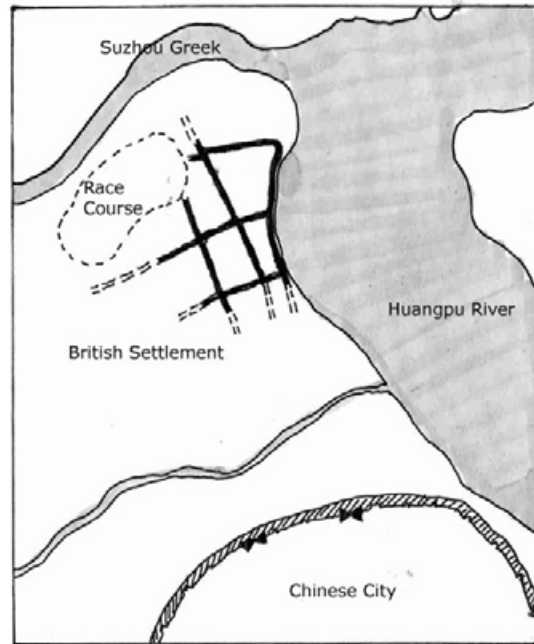


Figure 1.2 The British settlement at Shanghai, 1846

(Source: Alan Balfour & Zheng Shiling, Shanghai P50 2002)

Less than ten years after the establishments of the foreign concessions, the marshy and cultivated fields outside the old city were quickly replaced by a booming western city. (Fig 1.3) Based on the geographical convenience and colonial speculation, Shanghai soon exceeded all the other cities in China and had gradually been turned into a national economic, commercial, financial and transportation center. (Fig 1.4)



1. The original British Concession in 1846. Area: 55.36 ha.
2. Added patch of the British Concession in 1848. Area: 132.73 ha.
3. Added patch of the American Concession in 1893. Area: 524 ha.
4. Added patch of the International Settlement in 1899. Area: 15522.56 ha.
5. The Original French Settlement in 1849. Area: 65.77 ha.
6. Added patch of the French Concession in 1861. Area: 19.21 ha.
7. Added patch of the French Concession in 1900. Area: 68.63 ha.
8. Added patch of the French Concession in 1914. Area: 867.17 ha.
9. Old Chinese City

Figure 1.3 Distribution of foreign concession and road construction in Shanghai from 1846-1914.

(Source: Sheng Hua, Shanghai Linong Housing P17 1987)

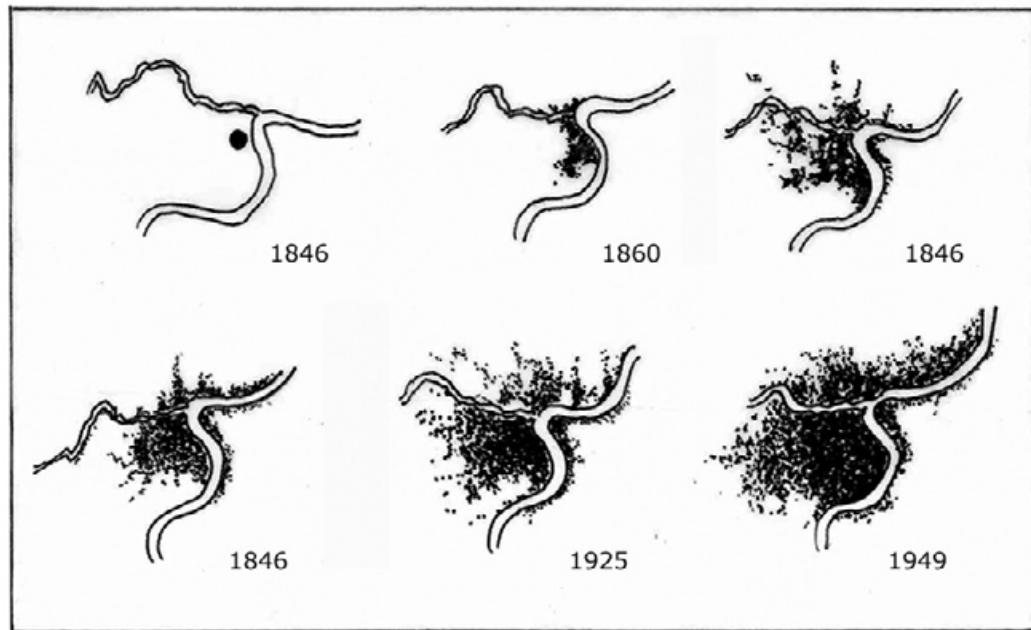


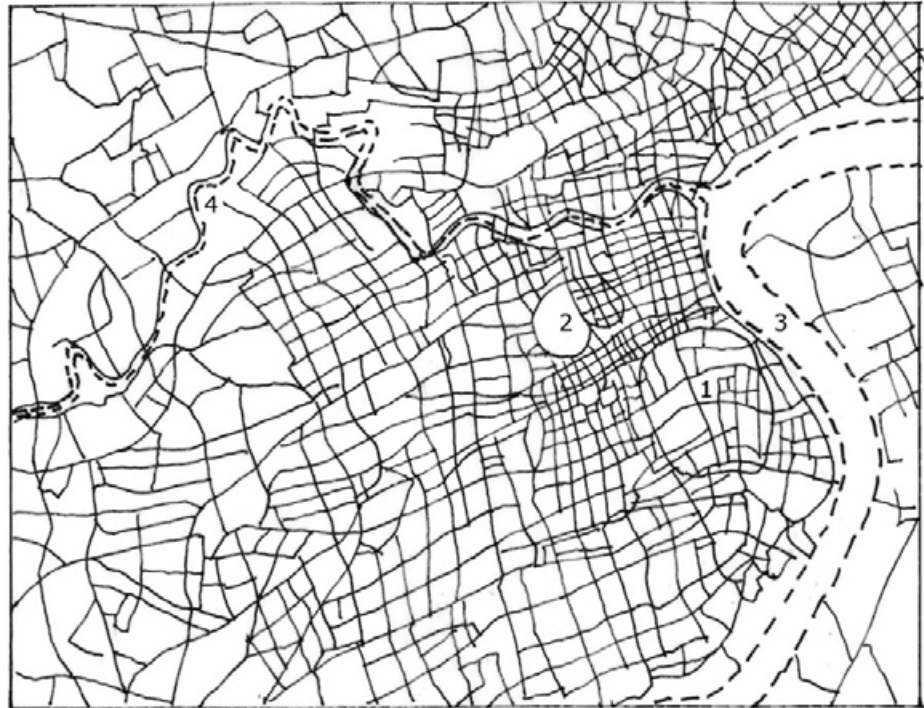
Figure 1.4 The evolution of Shanghai from 1840s to 1940s.

(Source: Song Zhang, An approach to Integrated
Urban Historic Conservation P13 1992)

Urban Characteristics of Old Shanghai

The commercial prosperity brought about further urban expansion. However, in this city's new urban development, the Chinese traditional pattern of street network – the checkerboard pattern was somehow respected but not exactly followed. Although most of the streets were following north-south or west-east directions, there was no single major road that was perfectly straight. Many streets seemed to start off from the place of the earlier concessions and radiated to the west, north and south. The street grids in the original concessions were comparatively regular and standardized; the patterns in later developed areas seemed more random and casual. As a result the urban fabric derived was

somehow crooked and spontaneous. The outcome was random but organic. (Fig 1.5)



1- the Old Chinese City 2-Race Course 3-Huangpu River 4-Suzhou Creek

Figure 1.5 Urban Frame of the Shanghai Inner City (Before 1945)

(Source: Francoise Ged & Feng Yueqiang, Shanghai's

Linong Standing the Test of Time P96 1992)

There are two factors that had major impacts upon shaping this street pattern and grid system. One is the restriction of the general positioning of the many waterways: it was hard to come up with a clear-cut traditional checkerboard pattern. The other is that the subdivision of foreign concessions and assignment of their development to different private owners or developers makes it difficult to bring up a uniformed urban grid.

CHAPTER II: LINONG: DISTINCTLY SHANGHAI

Generation of Linong

In consequence of the hasty urban development and commercial prosperity, the population in Shanghai grew rapidly, inducing the expansive development of slum housing. The first prototype of Linong, in terms of provisional huts, was thus generated in 1860's in the city to meet urgent dwellings needs. After the settlement law of 1870 forced these squalid firetraps to be rebuilt substantially in freestanding wood frames and backed by brick walls, the mature pattern of Linong came into being. (Figure 2.0)

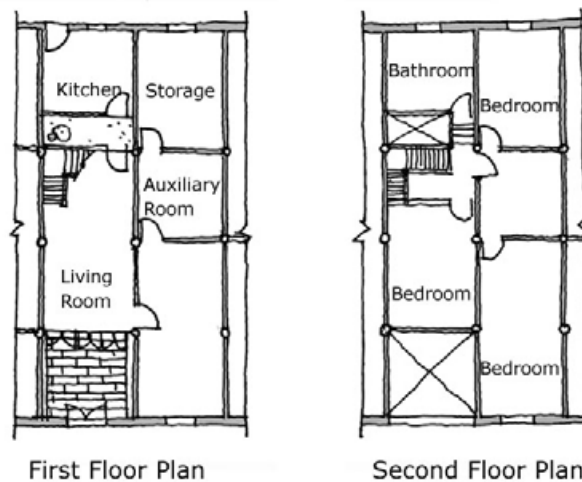


Figure 2.0 Typical plan of Linong housing

(Source: Sheng Hua, Shanghai Linong Housing P35 1987)

“Li” means neighborhood; “Nong” means lanes. Linong, is a unique type of lane-and-community based urban dwelling form of Shanghai. In scale and character this community housing was similar to the shop houses that dominated the old city, where shops occupied the street frontage and housing took the

enclosed hollow space. In Linong two or three storied single units were repeated side by side and formed a row of identical houses; Single rows of houses were then placed in parallel fashion one behind the other. The entire block was thus created. (Figure 2.1-2) This form was so successful and appropriate that by the end of 19th century the Linong neighborhoods dominated all but the central business district of the city.



Figure 2.1 Typical facade of Linong housing

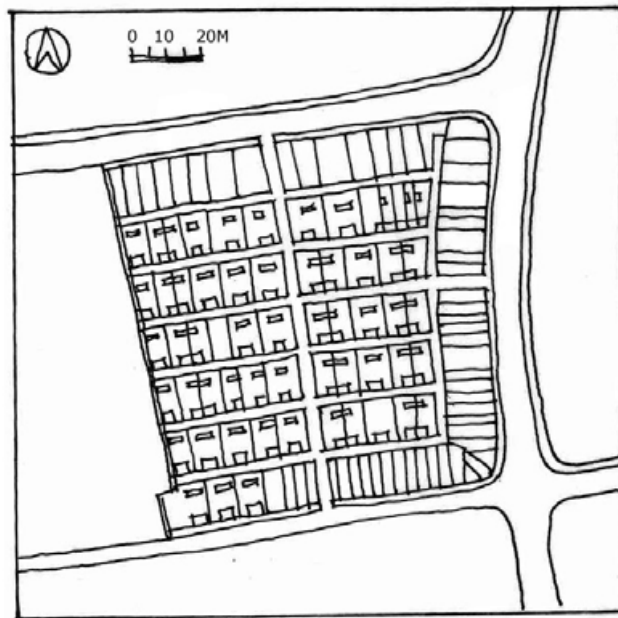


Figure 2.2 Typical Layout of Linong: Hongde Li

(Source: From Shanghai Municipal Building Survey Institution)



Figure 2.3-4 Photos of Linong Layout

Therefore in the city two major types of urban spaces were formed. One was the outer street space, which as mentioned before, was within an informal grid and occupied by commercial activities and traffic circulation. It was outward, public and dynamic. The other was the inner block-type space, consisted of mainly two-storey community housing laid out in narrow lanes like fish bones. This inner space separated from the first by gates was enclosed, quiet and safe. (Figure 2.3-4)

Urban Features of Linong Settlements

Land Use Pattern

Generally speaking, a Linong settlement mainly contains residential, commercial and circulation land use. (Figure 2.5)

a). Commercial land use

Shanghai's rapid development and its increasingly valued downtown land resulted in every street façade reserved for commercial activities. The strip-pattern

of commercial land use is in periphery of Linong. Most of these commercials are small home business such as groceries, barbershops operated by people living above them or inside the block. This promotes stronger social and economic interweaving within the whole community.

b). Residential land use

Residential land use is optimized within the block. Enclosed by surrounding commercial buildings, there is the peace, quiet, and pedestrian-dominating space very appropriate for domestic activities. The accesses to it are positively controlled.

c). Circulation land use

Generally a Linong settlement is composed of a dense network of rationally

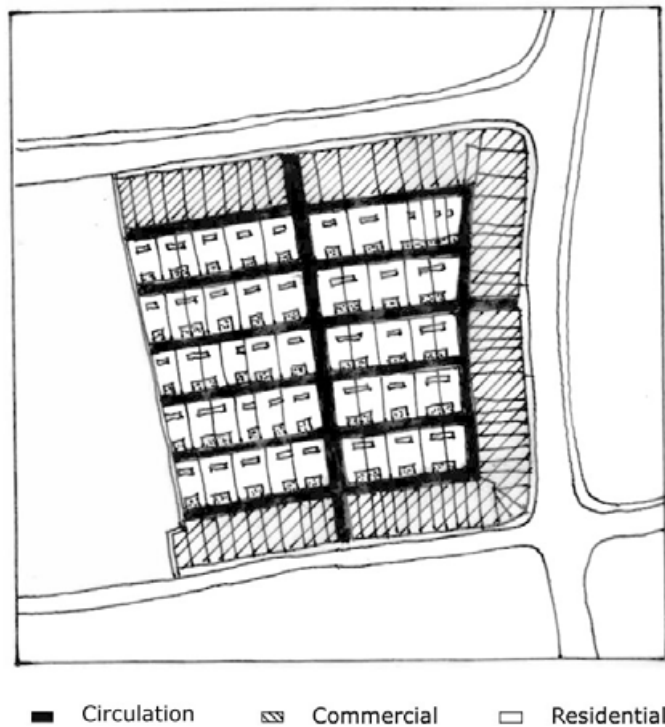


Figure 2.5 Land use of a typical Linong

girded lanes. The main lane, used as major public passage, forms the spine of the neighborhood. It is about 17 feet wide sufficiently to carry vehicles. The minor lane usually 10 feet wide, leads to every row of housing and has access to each home.

Spatial structure

In Linong the building coverage is much denser than the open space, with the result that the open space has a well-defined linear shape. They seem to be carved out of the building mass as a continuous flow linking the city, the neighborhood and each home. The void space is the vessel containing different types of human activities; its different scales represent the degree of sharing of dwellings and the tension between the public and individual.(Figure 2.6)

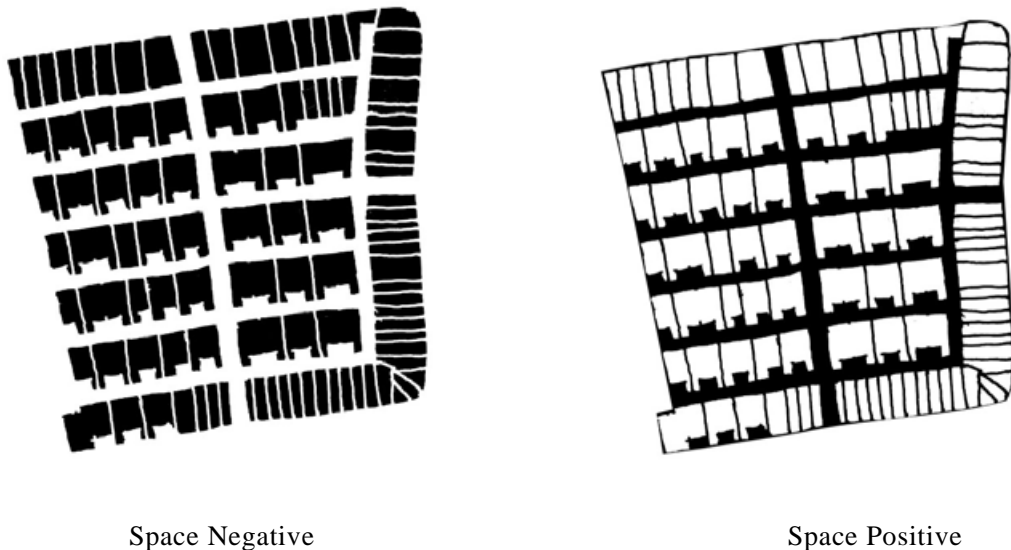


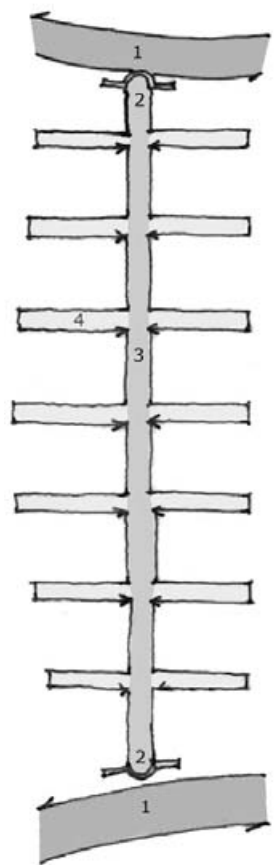
Figure 2.6 Figure/Ground

Street hierarchy

As mentioned before, in Linong settlements there are prominent distinctions

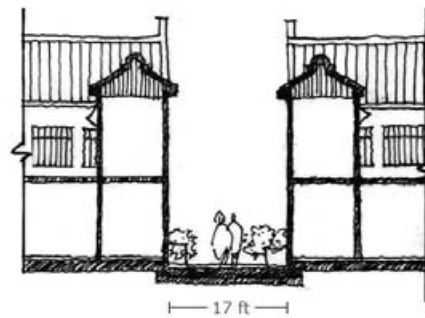
among streets, main lanes and minor lanes. The main and minor lanes form the primary organization structure of the community.

The main lane is placed in the center location of the site, and their intersections with the streets outside are the main entrances of the whole neighborhood. The main lane is the first level of circulation network, introducing the public space of the city into the public space of the community. The minor

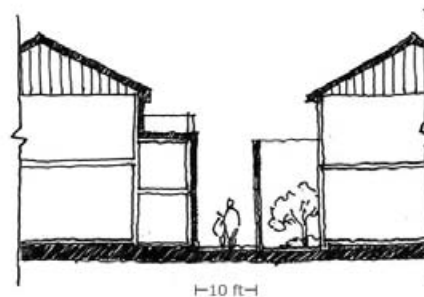


- 1 Streets of the City
- 2 Entrances of Linong
- 3 Main Lane
- 4 Minor Lane

Figure 2.7 Street Hierarchy



Major Lane Section



Minor Lane Section

Figure 2.8 Street sections of major & minor Lanes

lanes are to link the main lane to the entry gate of each unit. They are also places where the residents can have household activities or neighbor interactions. The intimate scale of minor lanes in relation to the surrounding buildings and their exclusive uses by a few residents, make them a quiet and safe buffer between private and public space. (Figure 2.7-8)

Linong and English Terraced House

Linong housing was initially designed and developed by Western enterprise, and its layout brings to mind contemporaneous English terraced houses. They have some similar characteristics, such as both of them were designed to satisfy the demand for dwelling for the fast increasing urban population; they also have similar advantages such as cost efficiency in terms of economic use of infrastructure and initial site development expense.

However, Linong settlement is the outcome of the integration of Western and Chinese culture. It has been refined to suit Chinese taste and social styles. It has taken into account the cultural background of Chinese traditional dwelling and integrated the concerned issues in the process of design.

Its most significant and explicit Chinese element is that each block and each lane was exclusive through being closed off by substantial gates. In the rear of the gates each lane of houses was a peaceful community, providing respite from the boisterous public activities outside and recapturing memories of the courtyards that once formed the center of Chinese family life.

Orientation is a major issue as well. Compared with the multiple-orientated

English terraced house, although within a relatively casual street grids, Linong's layout tries it best to keep the serial nature of its southward orientation.(Figure 2.9-10)

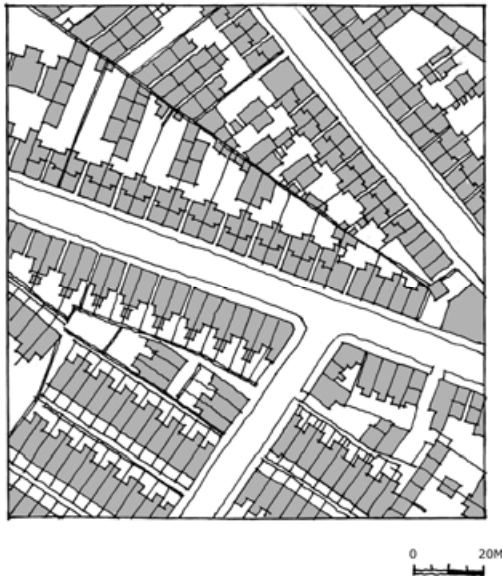


Figure 2.9 Pattern of English Terraced House
Birmingham. Early to Mid-19th Century.

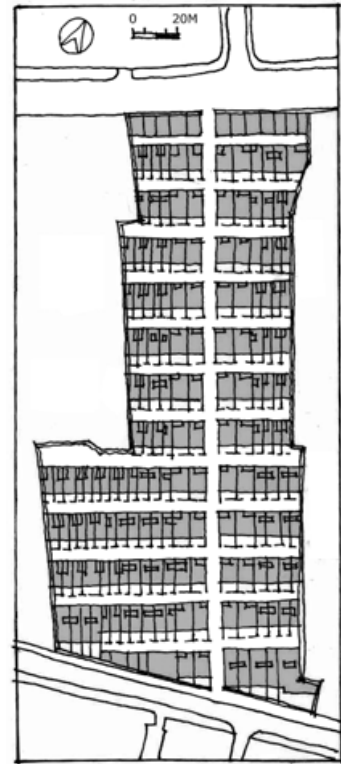


Figure 2.10 Pattern of Jing-an Villas
(Source: Sheng Hua, Shanghai Linong

Linong as Shanghai's characteristic housing pattern has many advantageous urban design features:

Clear Linkage: from courtyard to minor lane, from minor lane to major lane, from major to street, this hierarchical spatial sequence assures a clear sense of order and linkage from external to internal environment.

Security: the limited entrance, the efficient use of open space and lanes, and

the immediate residential environment have combined to establish a compact system which provides the community a strong sense of security and stability.

Diversity: the proper land use of Linong brings up a broadest possible mixture of residential, commercial, creates high degree of social diversity to urban mechanism and makes the urban living convenient, dynamic and pleasurable.

Human scale: the amiable width of lanes, the small courtyards inside each unit, the appropriate building distance arrangement, all these make Linong an inviting and friendly living place that provide people with an intense sense of familiarity and comfort.

Linong settlements are a precious cultural legacy of Shanghai. Other cities have courtyards and apartment blocks, but Linong is distinctly Shanghai, or were. Now it is encountering intense challenges in the hasty urban development. Many wonder if the pace of modernization, and the wrecking walls, will leave any of the Linong, or old Shanghai intact.

CHAPTER III: SITE SURVEY

The city of Shanghai is located at 31N 121E, and its elevation is 3M(10 FT). The weather is moderate and average annual precipitation is over 1000 cm.(Fig 3.0, Fig 3.1)

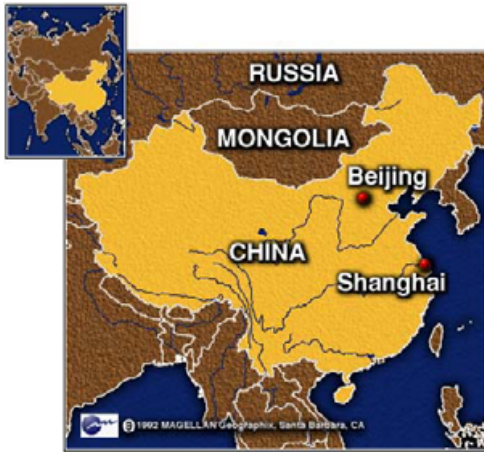


Figure 3.0 Map of China
(Internet Source)

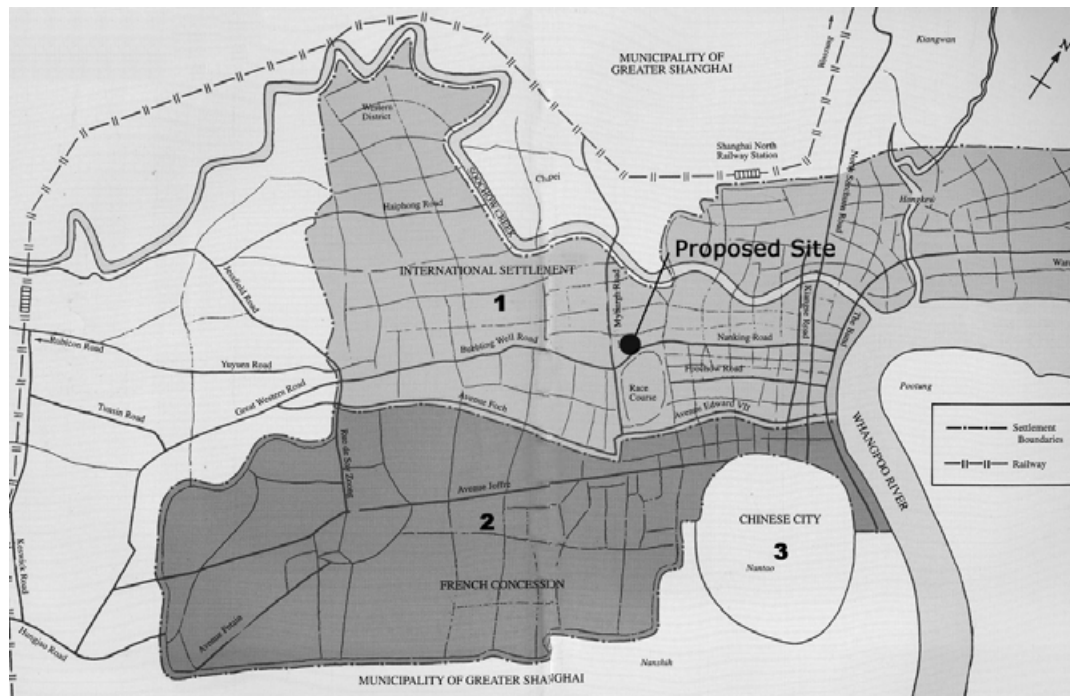


Figure 3.1 The Regional Map of Shanghai
(Internet Source)

Historical Background

The proposed site is located in the very prominent central part of Shanghai, which has been developed since 1920's, Shanghai's colonial heyday. At that time it belonged to the International Settlement. (Fig 3.2) It is facing the city's most bustling commercial avenue: West Naging Road. The greatest open space in the city, which used to be a noise Race Course built by the British in 1854, now Shanghai's "Central Park" - People's Park, is just across West Naging Road. In 1930s along the edges of the sites there were two or three storied small commercial buildings. And just like most of its neighborhoods at that time, inside

the site the whole block was occupied by “Linong” dwellings. (Fig 3.3) There are many important historical buildings clearly marking the Western style standing along West Nanking Road as well, like the Park Hotel, the Sports Club and the Grand Theatre. They formed the built-up front on the side of the large open Hippodrome area. (Fig 3.4)



1. The International Settlement, 2. French Concession, 3. Chinese City

Figure 3.2 Shanghai 1930s' municipality map, showing the locations of the International Settlement, French Concession and Chinese City.

(Source: Tess Johnston, *A Last Look: Western Architecture in Old Shanghai* frontpage 1993)

Park Hotel: 1931-1934. L.E. Hudeck.²

The Park Hotel is one of the most important historical buildings of Shanghai in terms of size and position. It was the highest building in the Far East until the

1980s (24 stories). It was an architectural landmark in the extensive void of the racecourse, and although now dwarfed by the new skyscrapers, it remains an impressive landmark on the northern side of the main square. It consists of a massive volume on a single base, with differences in the front, central body and back of the building as it rises up. The layout of the front building expands and rises up in tower form, with the façade looking onto the street, in a southward direction and towards the urban void.



Figure 3.3 Bird's eye view of the city center in the 1930s, showing typical Linong Housing in foreground and the Race Course in the center, the building to the left is the Park Hotel.

Grand Theatre: 1938 L.E. Hudeck.³

The Grand Theatre is an important example of modern architecture in Shanghai in 1930s. It is a large cinema/theatre still in use. The façade is divided into two parts, the lower part and the taller foyer section. Between these two zones there is a rectangular tower in milk-white glazing, with nighttime lighting hidden

behind the glass, which marks the entrance and divides it into the two parts.



Figure 3.4 North side of the Race Course, West Nanjing Road,
and the buildings along the road in 1930s.

(Source: Luigi Novelli, Shanghai, P47 1999)



Figure 3.5-6 Photos of the Park Hotel and the Grand Theatre today,
showing the busy West Nanjing Road

People's Park

Shanghai's "Central Park", built on the site of the colonial Shanghai Race Course, today contains the 12 hectares (30 acres) of trees, ponds, rock gardens, amusement rides packed with locals and their families. The southern portion of the park (free admission), People's Square (Renmin Guang Chang), which once contained the southern half of the racecourse, is Shanghai's Tiananmen Square. Opened in 1951 and renovated in 1994, the square has become Shanghai's cultural center with an underground shopping arcade, the central subway station, the Shanghai Museum, the new Grand Theatre, the 20-story Municipal Hall, and the Shanghai Urban Planning Exhibition Hall. The square is a popular place with locals who feed the pigeons, gossip on the benches, teach their kids to fly kites, and attend ballroom dancing lessons. (Fig 3.7)



Figure 3.7 People's Park & West Nanjing Road today, looking from the pedestrian bridge over West Nanjing Road, the Park Hotel is in the center.

Site Analysis

Located in the central part of the city, this 6.5-acre site's front elevation is 8.2 feet, approximately 750 feet north the site's elevation is 8.5 feet. It is considerably flat.



Figure 3.8 The city and the site, showing the Huangpu River and nearby smaller Suzhou Creek, the Lujiazui Financial District lies across the Huangpu River.

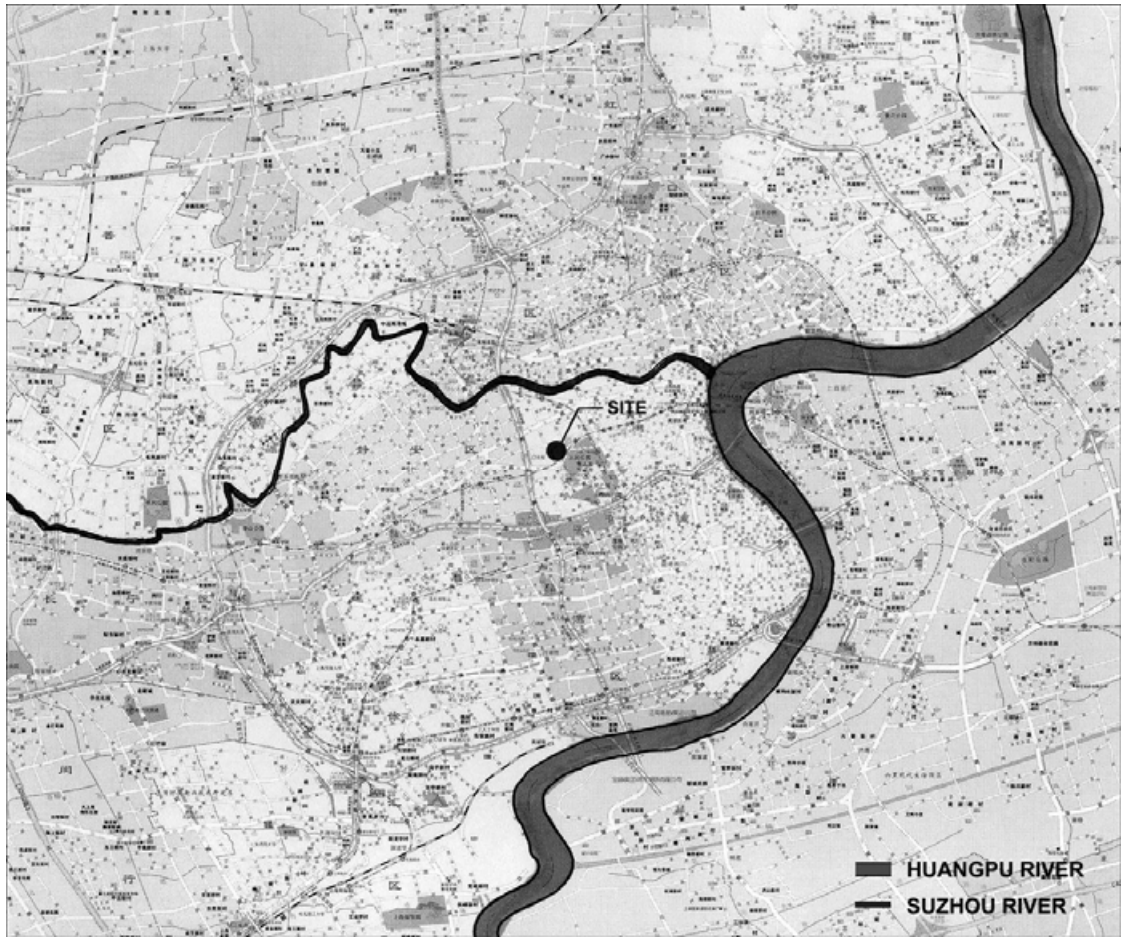


Figure 3.9 Two rivers in the city and the site.



Figure 3.10 Green lands in the city and the site

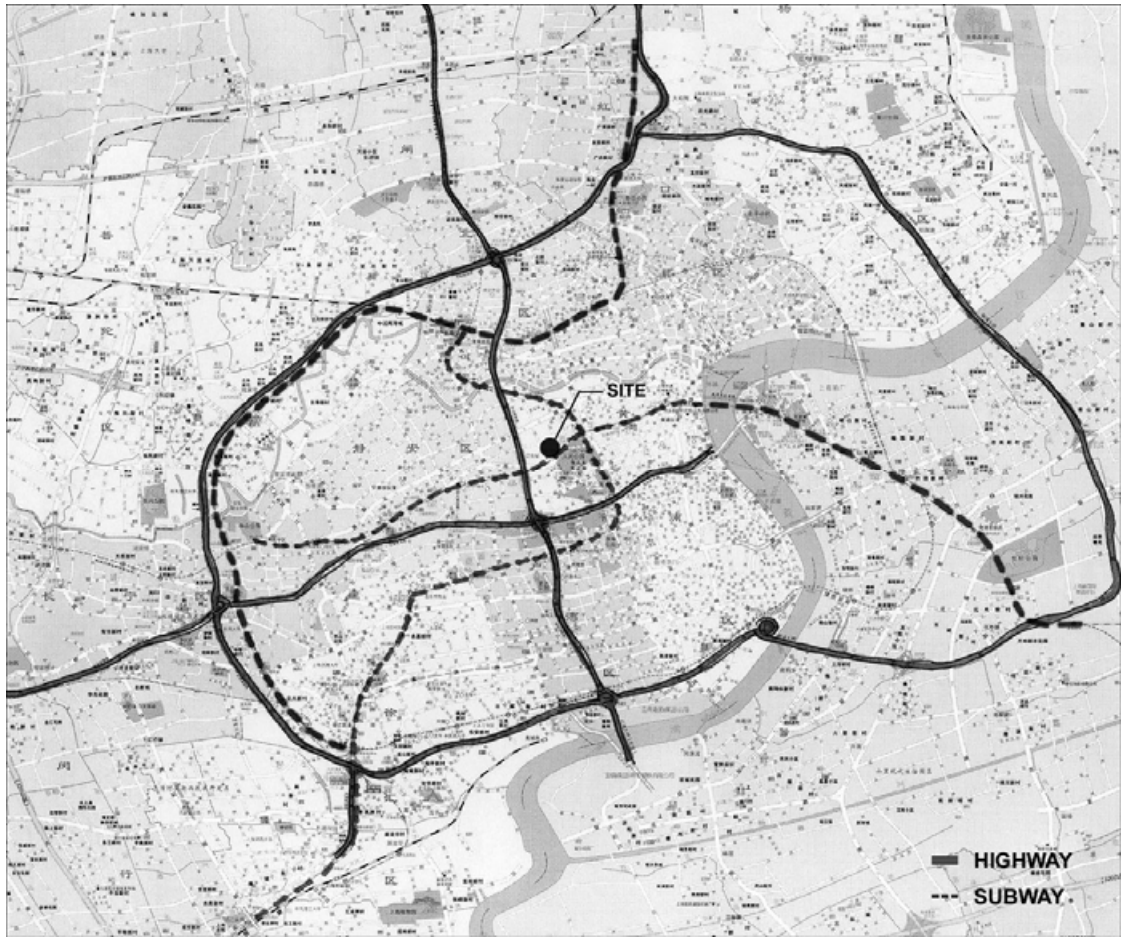


Figure 3.11 Transportation systems in the city and the site

At present in the site there are two rows of traditional Linong Housing—
Tongfu Li, two 5-story department stores, a 3-story warehouse and 1.6 acres of
cleaned-up construction site. On its nouthside is West Najing Road, 65 feet wide,
Westside, Xinchang Road, 20 feet wide, Northside, Fengyang Road, 30 feet
wide.(Fig 3.12)

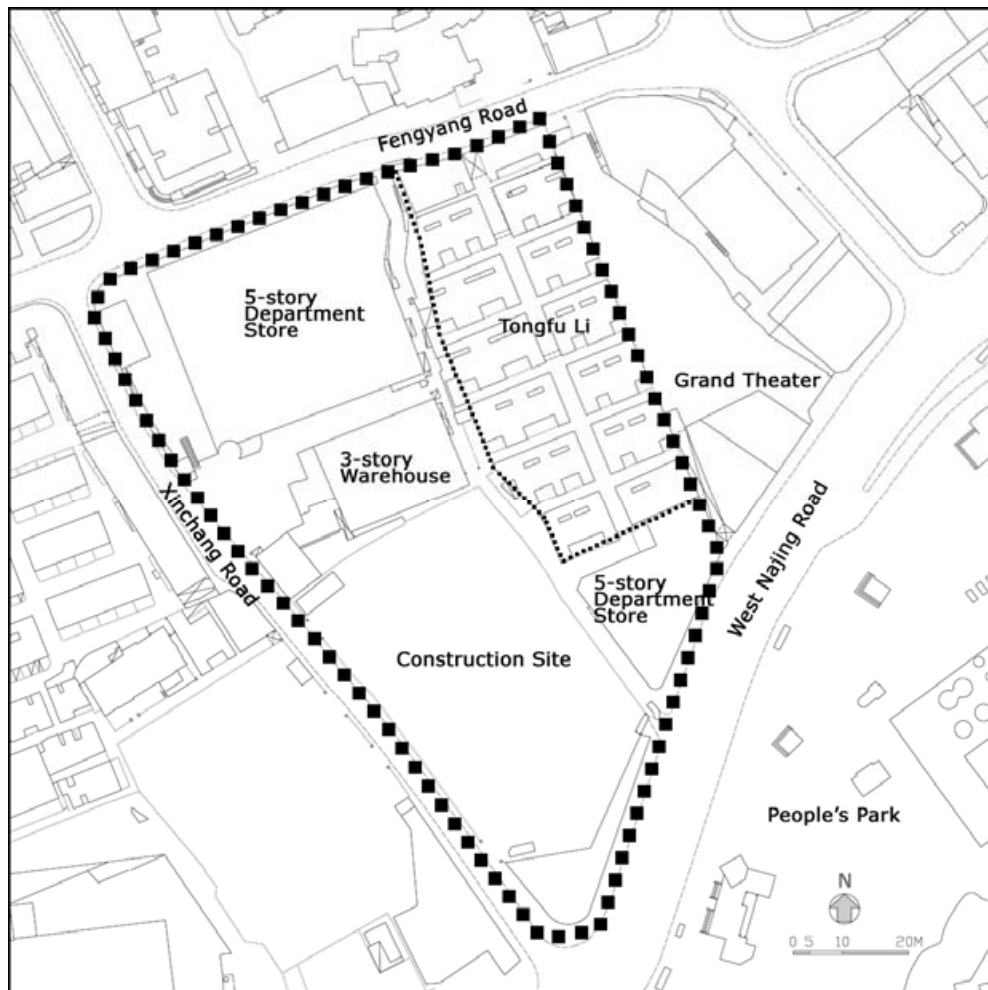


Figure 3.12 Site plan and context

Tongfu Li

The 1.8-acre Linong Housing: Tongfu Li occupies a narrow-long land inside the site adjacent to Grand Theater. It used to have two entrances set respectively on the south and north edge of the site, but now the south entrance part (along West Najing Road) is occupied by a 5-story department store. Therefore there is only the north entrance on the Fengyang Road left. Its main lane is 17 feet wide running from south to north, splits the neighborhood into two parts. All minor lanes, 10 feet wide, are orthogonally connected to the main lane. All the residential units inside are two stories high. (Fig 3.13-17)



Figure 3.13 Bird's-eye view of Tongfu Li (looking from the top of high-rise building across Fengyang Road), showing the main lane and the neighborhood.



Figure 3.14 Entrance of Tongfu Li on Fengyang Road



Figure 3.15 Main Lane of Tongfu Li



Figure 3.16 Minor Lane of Tongfu Li

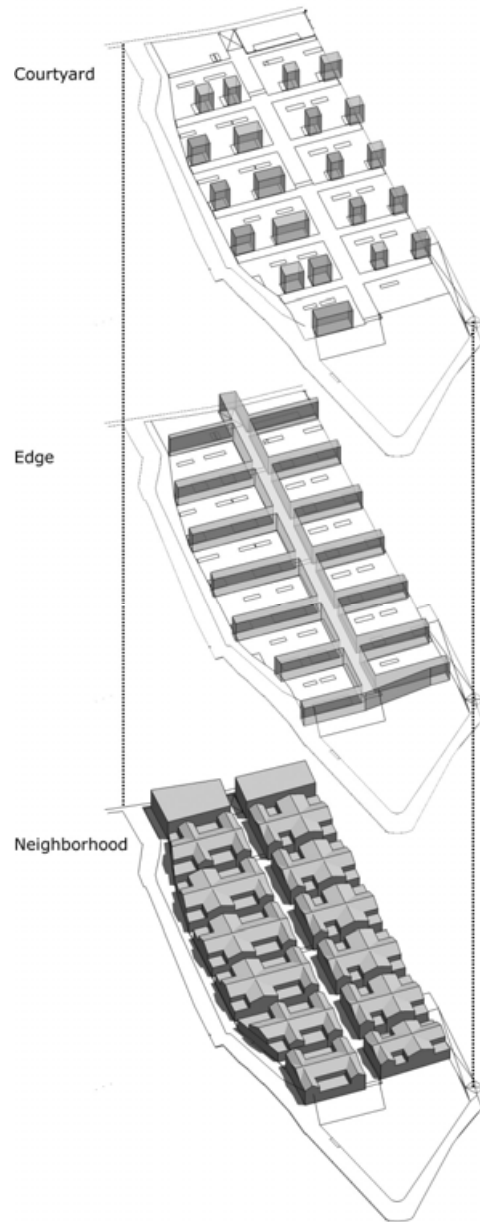


Figure 3.17 Axons, showing the structure of Tongfu Li

The site is in a very heterogeneous urban context. The surrounding blocks are commercial and residential mixed-used. High-rise residential buildings, super high-rise buildings incorporating the comprehensive program of hotel, office and retail function are coexisting with some traditional two or three storied residential houses. (Fig 3.18)

According to the regulations, the site is designated a mixed used district. If commercial uses the FAR should be less than 4, if residential uses the FAR should be less than 2.5. High-rise buildings are not recommended.

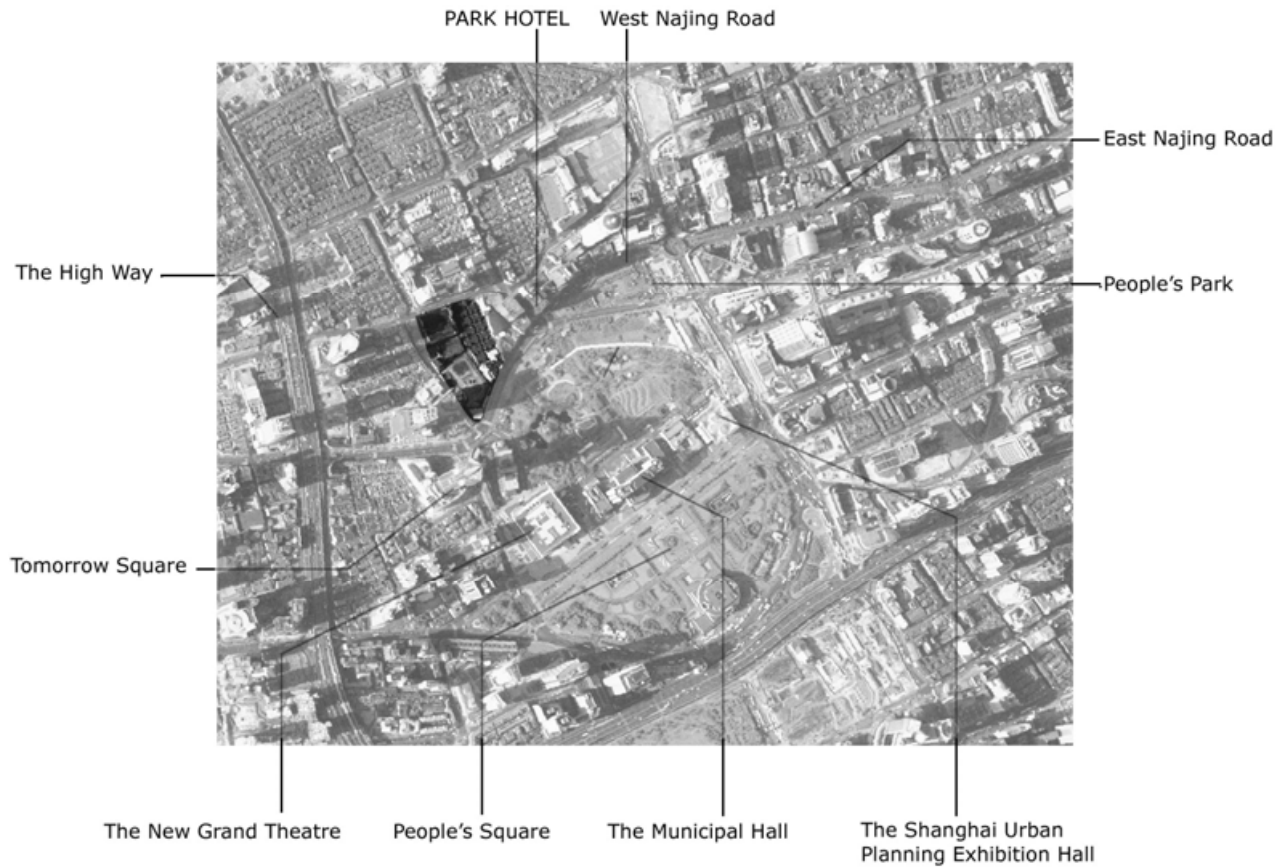


Figure 3.18 Aerial view of site and context

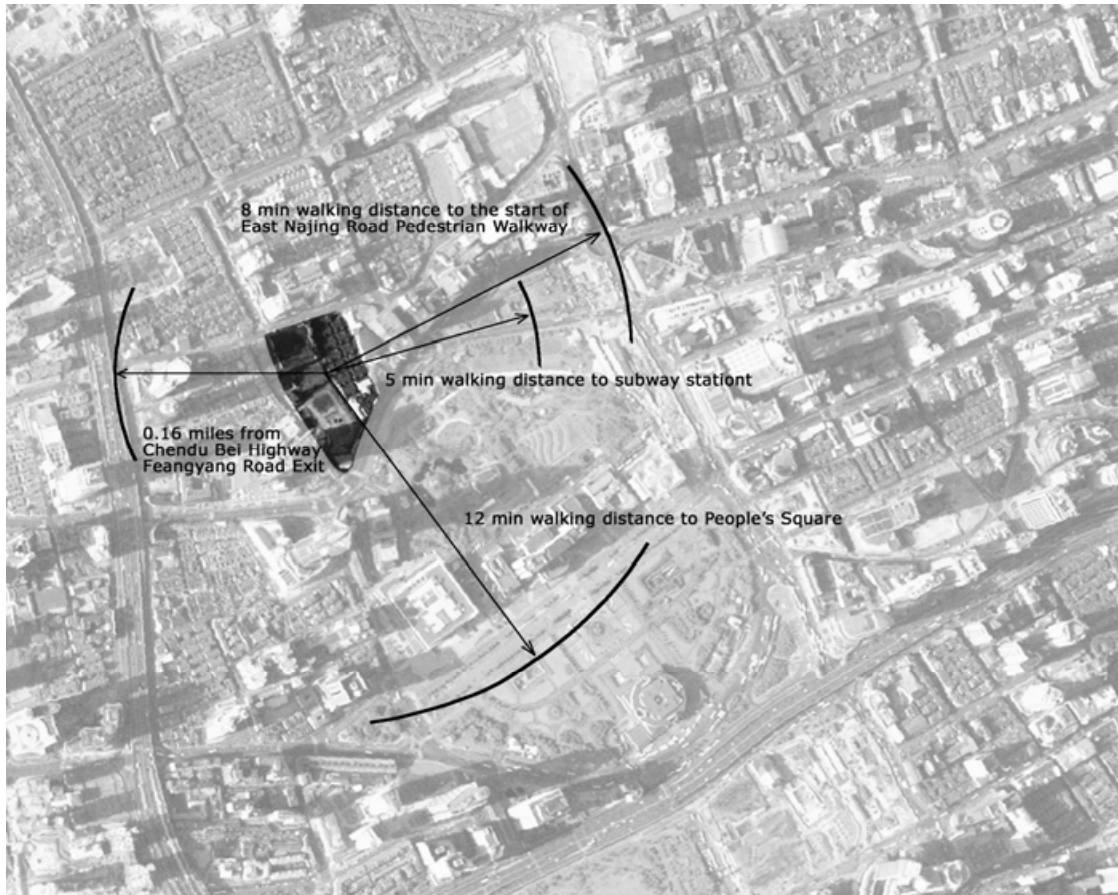
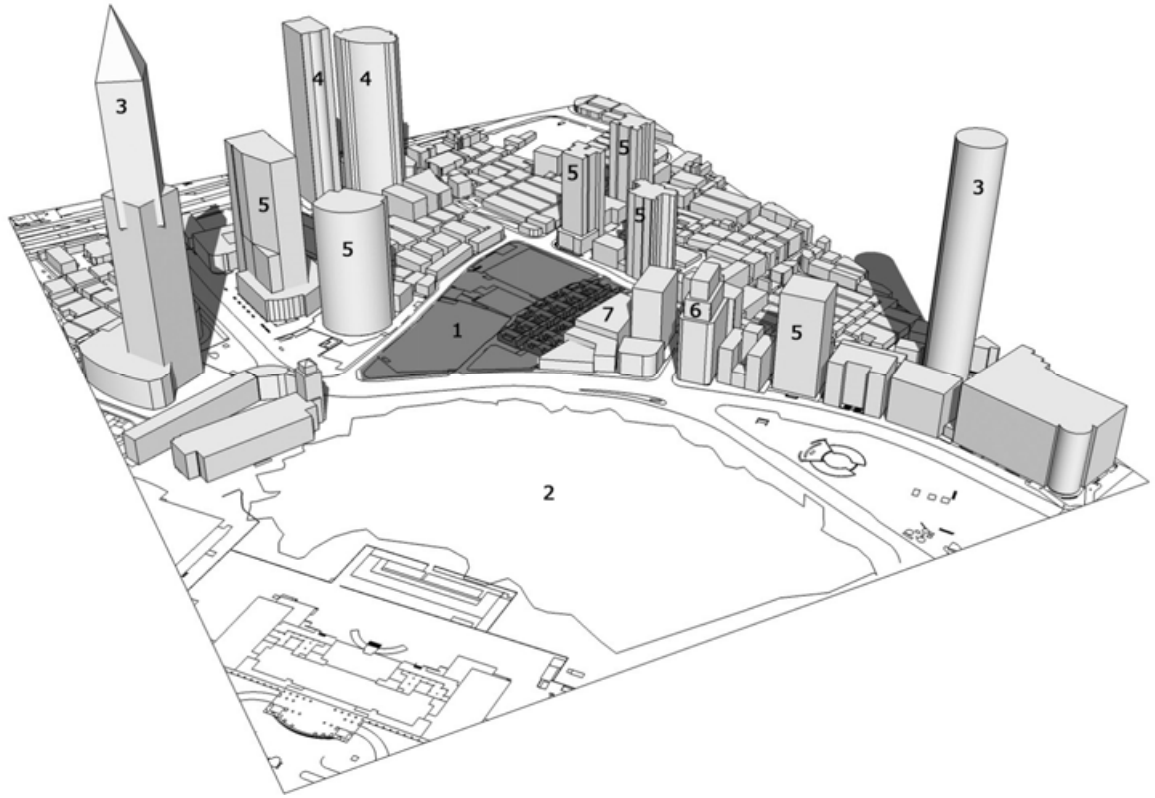


Figure 3.19 Walking Distance from the site to some important spots



1. The site, 2. People's Park, 3. Buildings over 900 feet, 4. Buildings at the height of 520 feet
5. Buildings at the height of 300 feet, 6. Park Hotel, 7. the Grand Theater.

Figure 3.20 Spatial analyses, showing the spatial structure of the site and context.



Figure 3.21 Bird's-eye view of the site (looking from the top of the high-rise residential building across Fengyang Road), showing Grand Theater to the left, two rows of Linong Housing-Tongfu Li in the center, Fengyang Road in foreground.



Figure 3.22 Aerial view of site and context

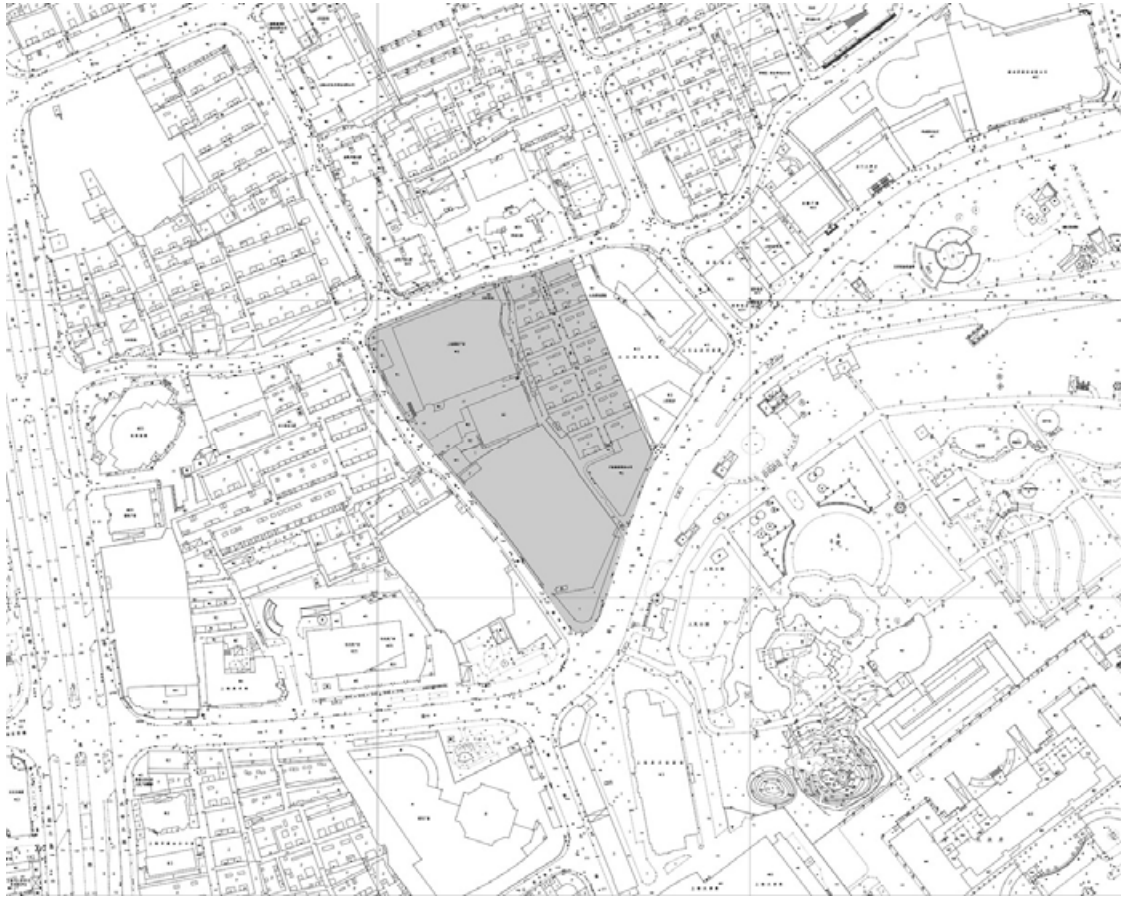


Figure 3.23 Site location relative to surrounding neighborhoods



Figure 3.24 Figure/Ground existing buildings, showing the dramatic change of texture between the traditional Linong fabric and the newer large scale mixed use projects.



Figure 3.25 Figure/Ground, open space



Figure 3.26 Figure/Ground, construction sites



Figure 3.27 Figure/Ground, street system

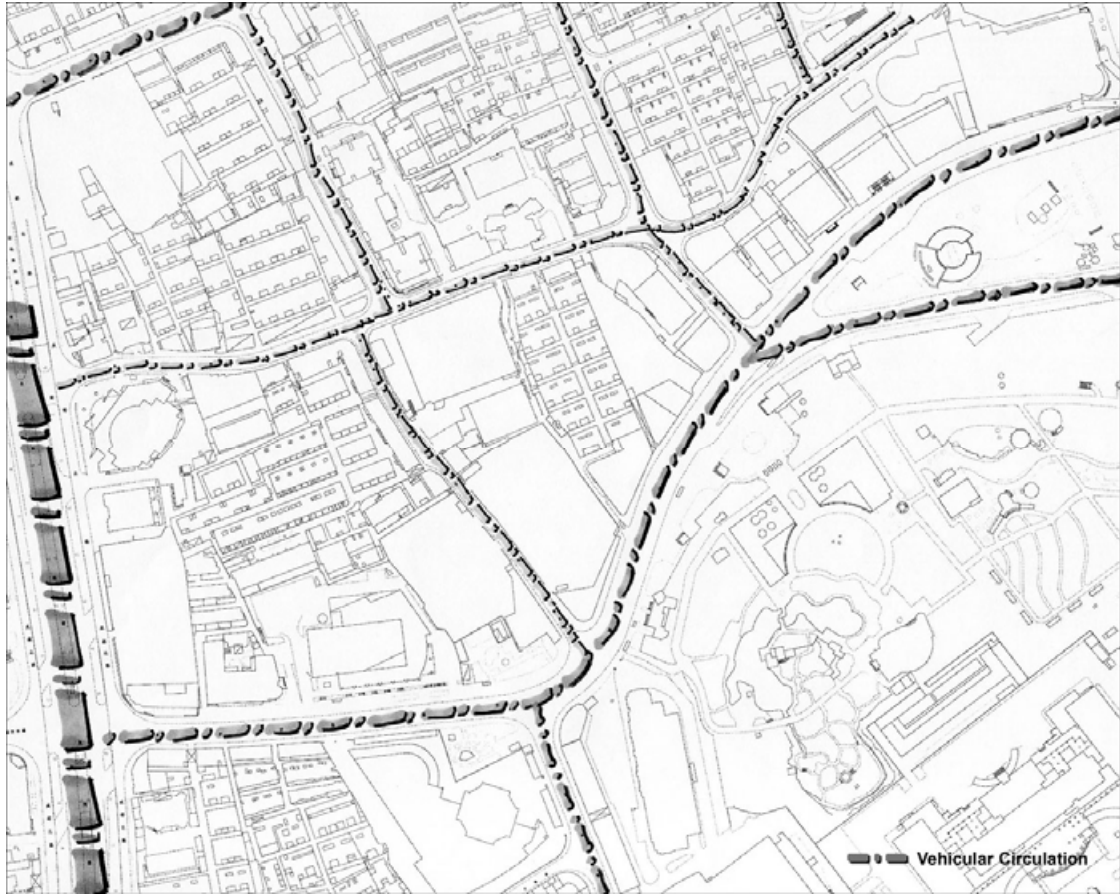


Figure 3.28 Vehicular Circulation

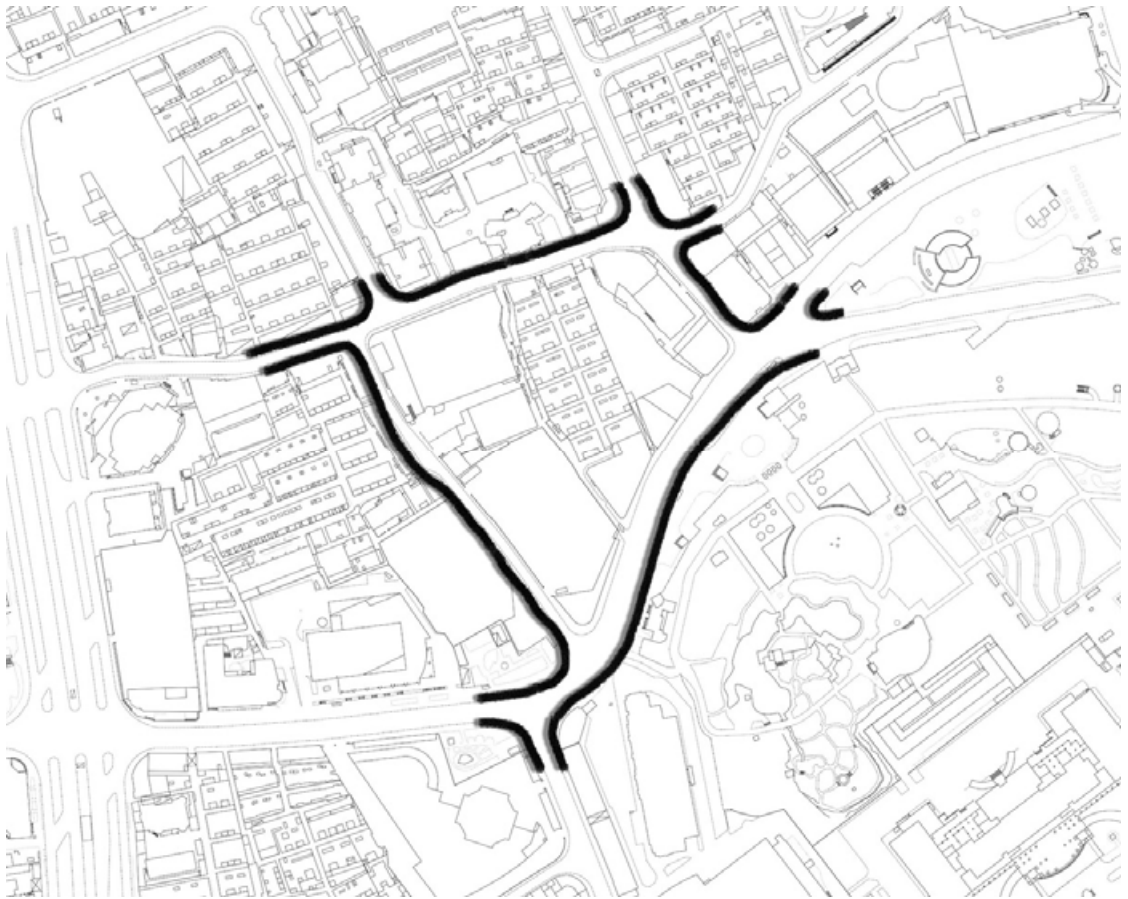


Figure 3.29 Edges/boundary of site area

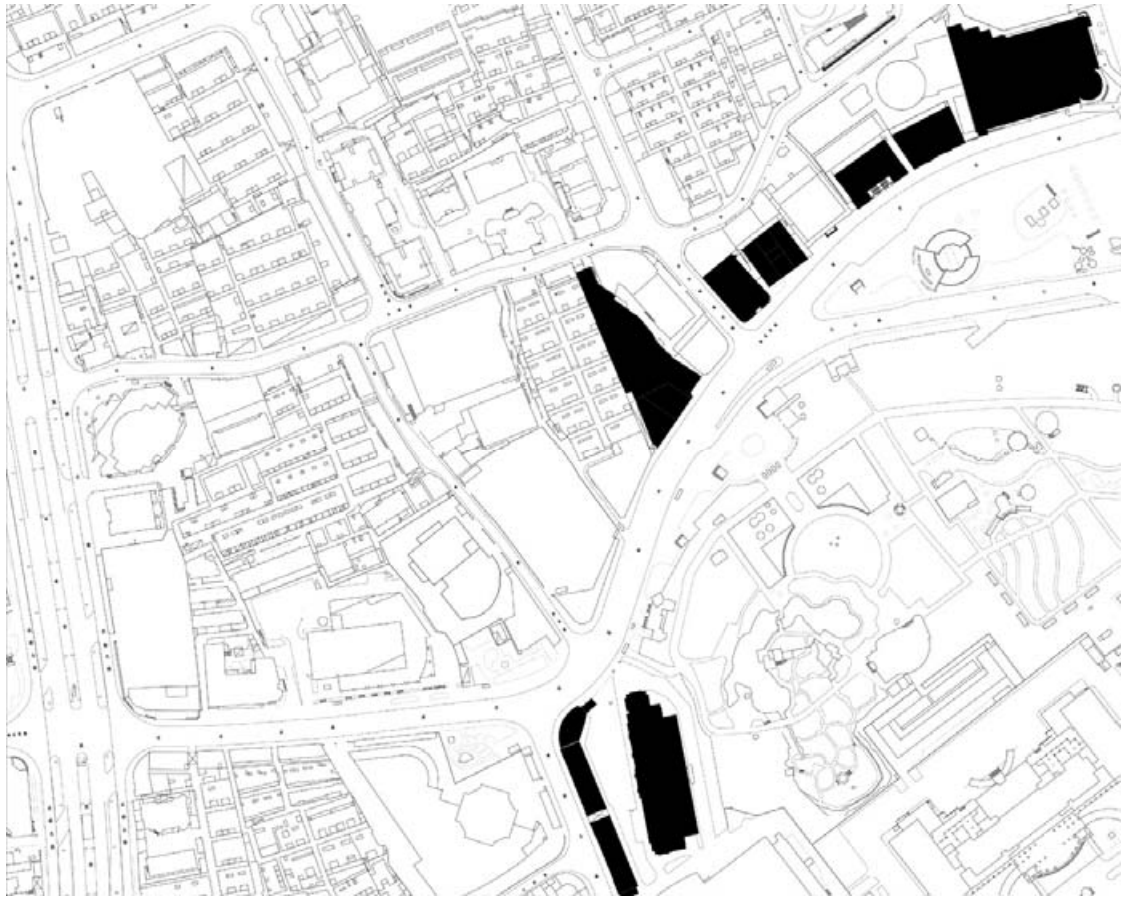


Figure 3.30 Significant historic buildings around the site

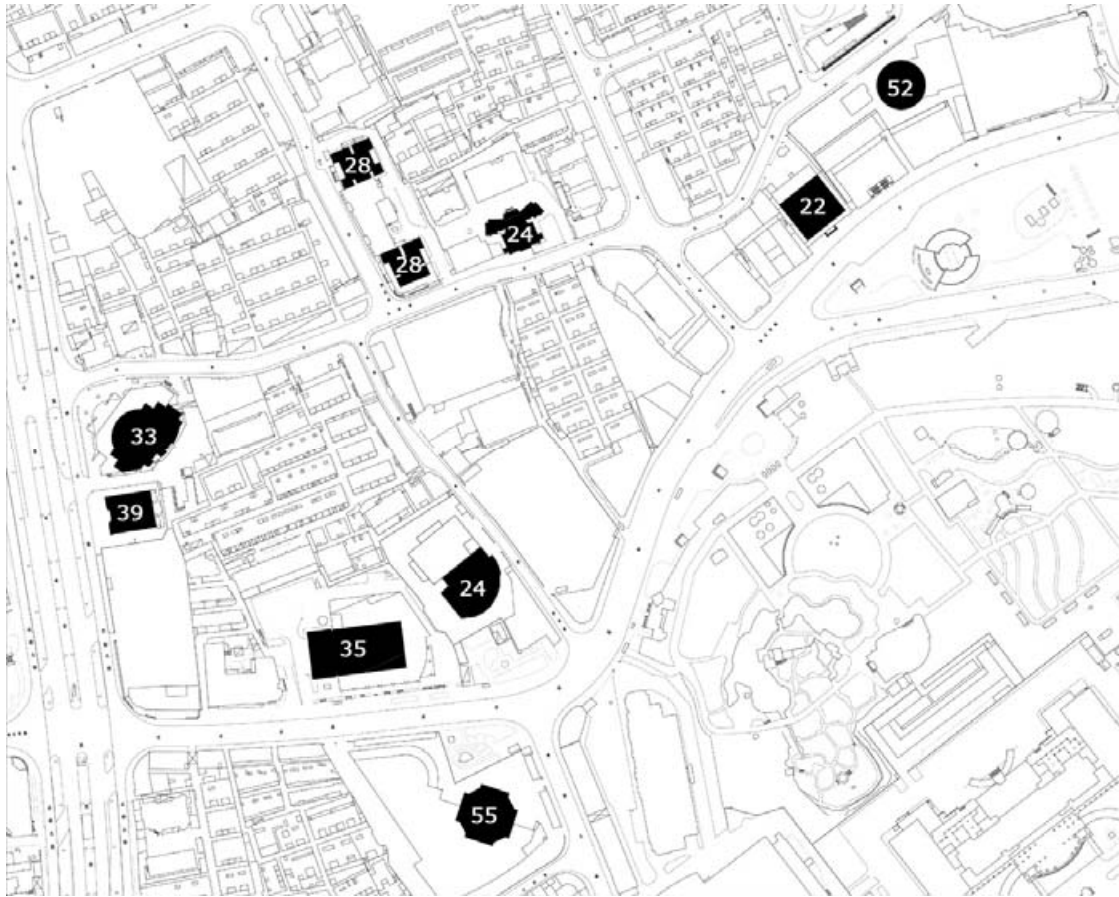


Figure 3.31 High-rise buildings around the site, figures on each building indicate the number of stories.

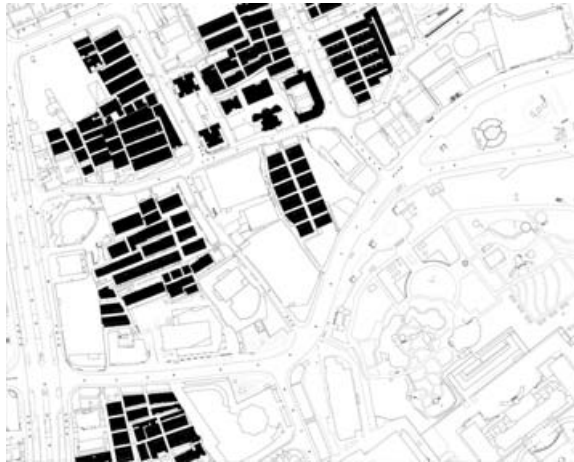


Figure 3.32 Existing residential uses

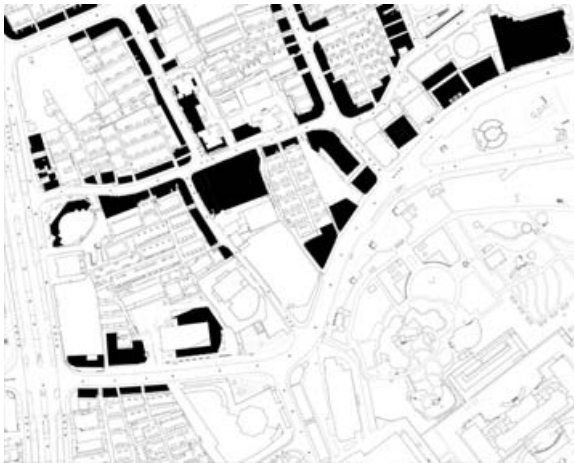


Figure 3.33 Existing commercial uses



Figure 3.34 Existing institutional uses

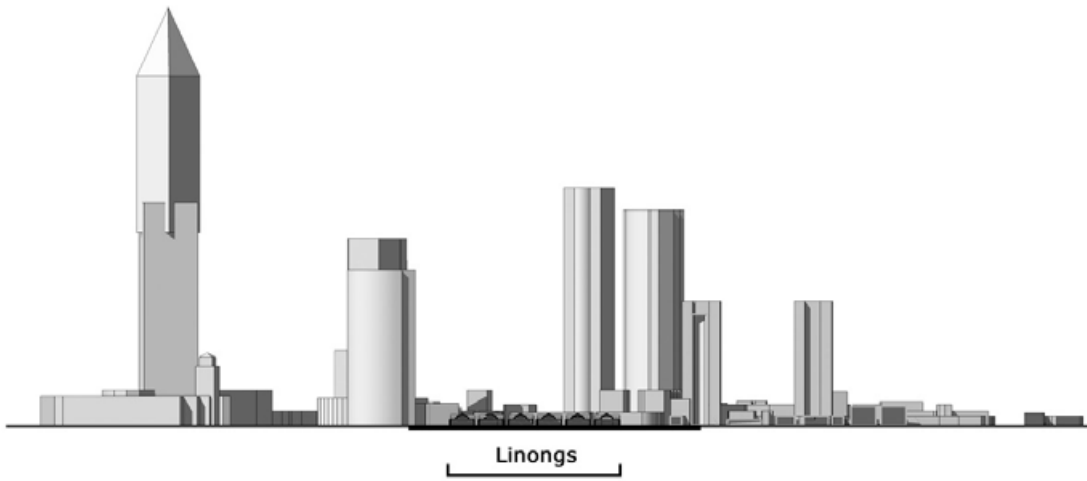


Figure 3.35 Site section I, perpendicular to the West Najing Road looking west

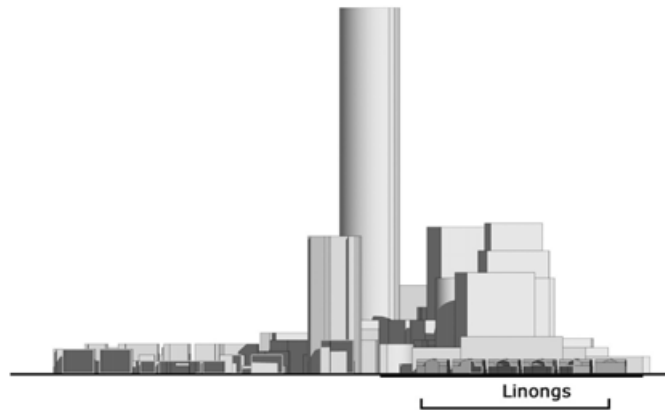


Figure 3.36 Site section II, perpendicular to the West Najing Road looking east

CHAPTER IV: PRECEDENT ANALYSIS

Xintiandi

Design by US architect Benjamin Wood, Xintiandi now is a very successful urban tourist attraction imbued with the city's historical and cultural legacies. Located only one block south of the Middle Huai Hai Road --- Shanghai's Fifth Avenue, the project has a site area of 30,000 square meters and a gross floor area of 60,000 square meters. The designer has transformed two city blocks of traditional Linongs from the 1920s and 1930s into a lively entertainment and retail quarter with a multitude of retail, entertainment, cultural, recreational, commercial and residential facilities. Tourists from all over the world now wander through the cobblestone alleyways and arcades where the designer also added new structures while adapting the surrounding older buildings to modern uses.

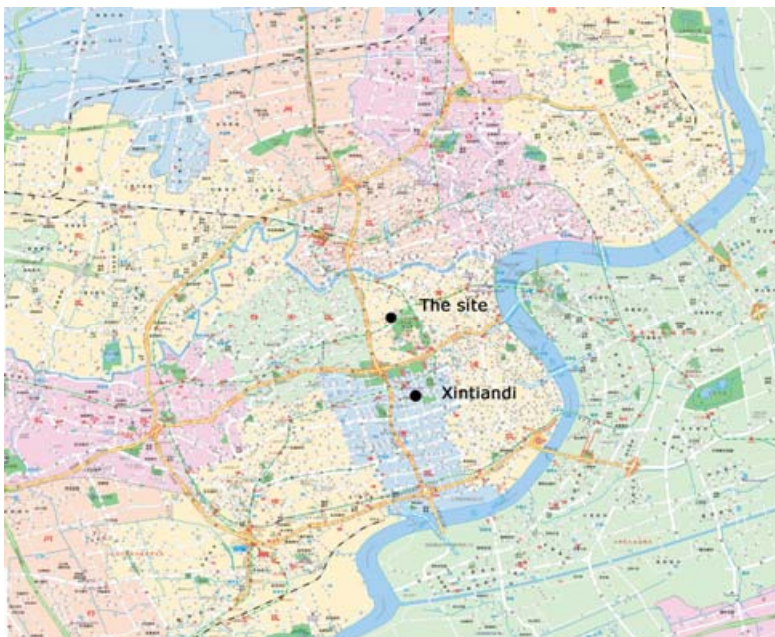


Figure 4.0 The location of Xintiandi in reference to the site.

Benjamin Wood credits the project with giving residents a sense of homegrown pride. He did not approach Xintiandi as historic preservation. Instead, he considered it as an exercise in adaptive reuses, in which the building's historic fabric would be used as one component in creating a new place with a new identity.

The design is considered as an excellent example of rehabilitation and re-creation that inspiringly employs the spirit of old traditional neighborhoods and their architecture to highlight the city's historical past, while placing it progressively in the present. ⁴

To the developers it is also a good example showing that the city's historic architecture can be a valuable commodity. By creating thus invocative project the surrounding area's property value will be greatly raised.”



Figure 4.1 Xintiandi plan



Figure 4.2 Bird's-eye view

Design Concept

1. Create a harmony between preservation and development.
 - a) Make the new development connected to the city's urban fabric
 - b) Create a strong tourist destination to ensure the land's value.
2. Create an active pedestrian street and square environment.
 - a) Keep the character of historic streets; regulate new developments such as height and scale to enhance the pedestrian environment.
 - b) Integrate several outdoor squares with pedestrian movement; make the sequence rhythmic.
 - c) Relatively large terminal square provide civic identity and orientation.



Figure 4.3 The renewed minor lane in Xintiandi

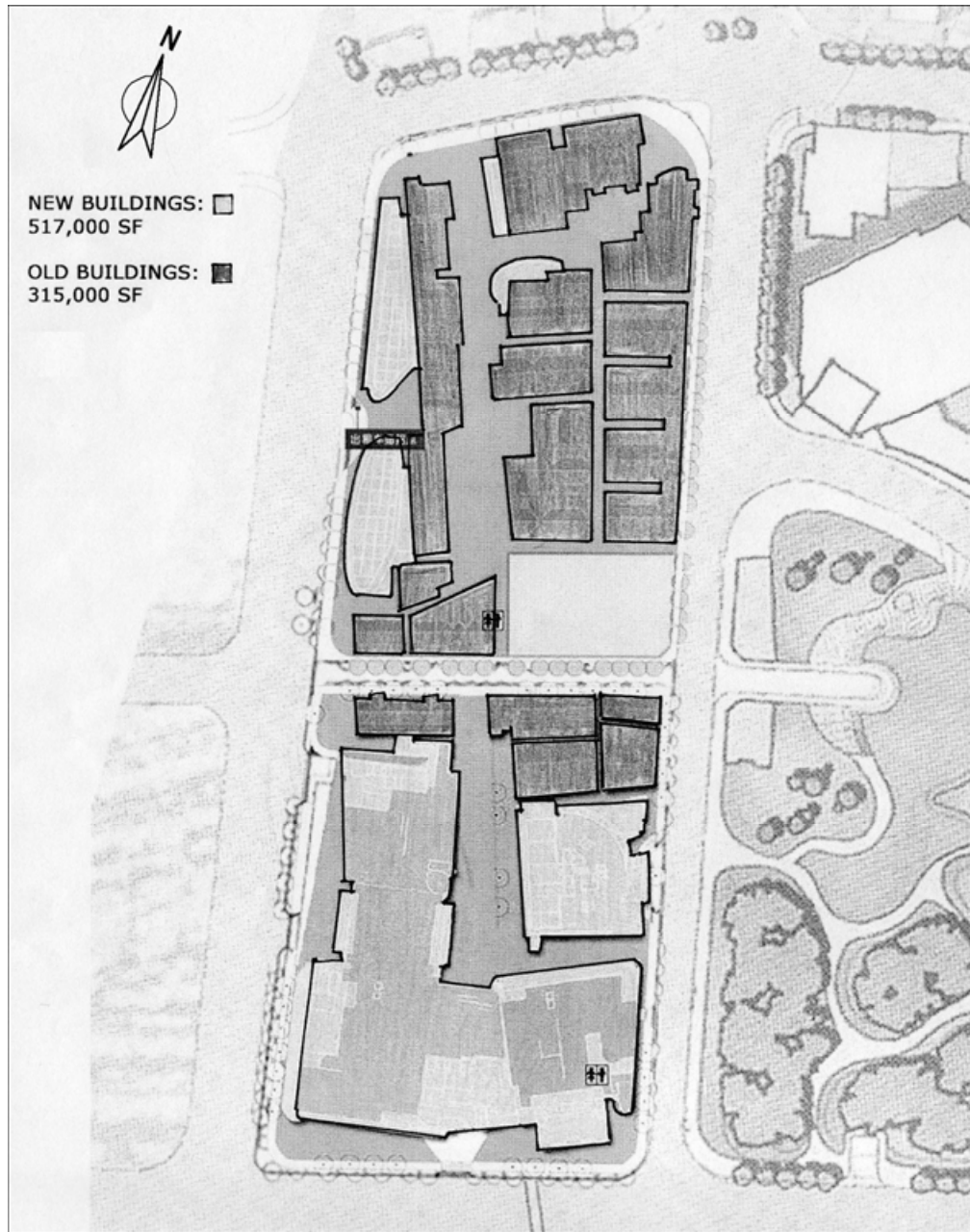


Figure 4.4 Old VS New

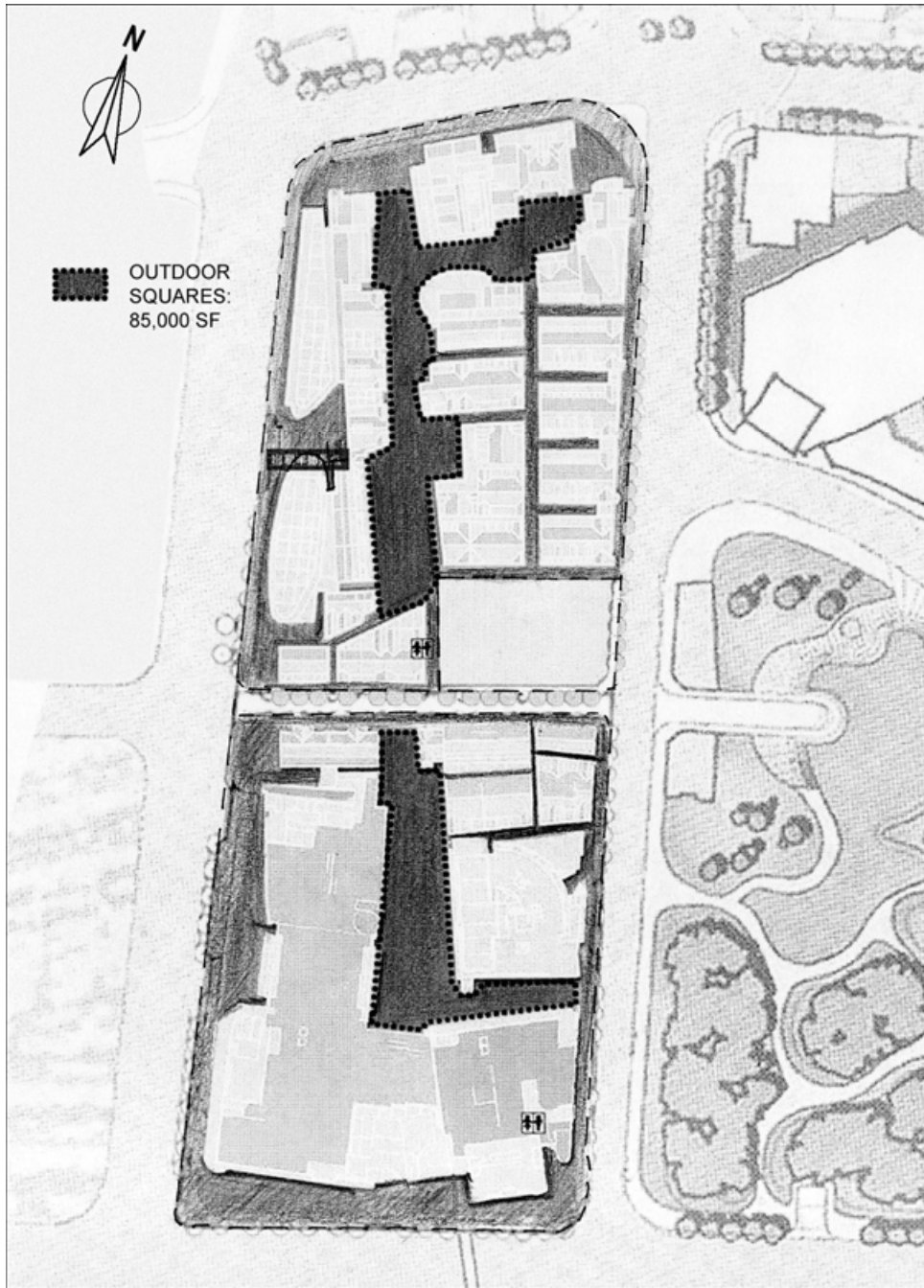


Figure 4.5 Outdoors space

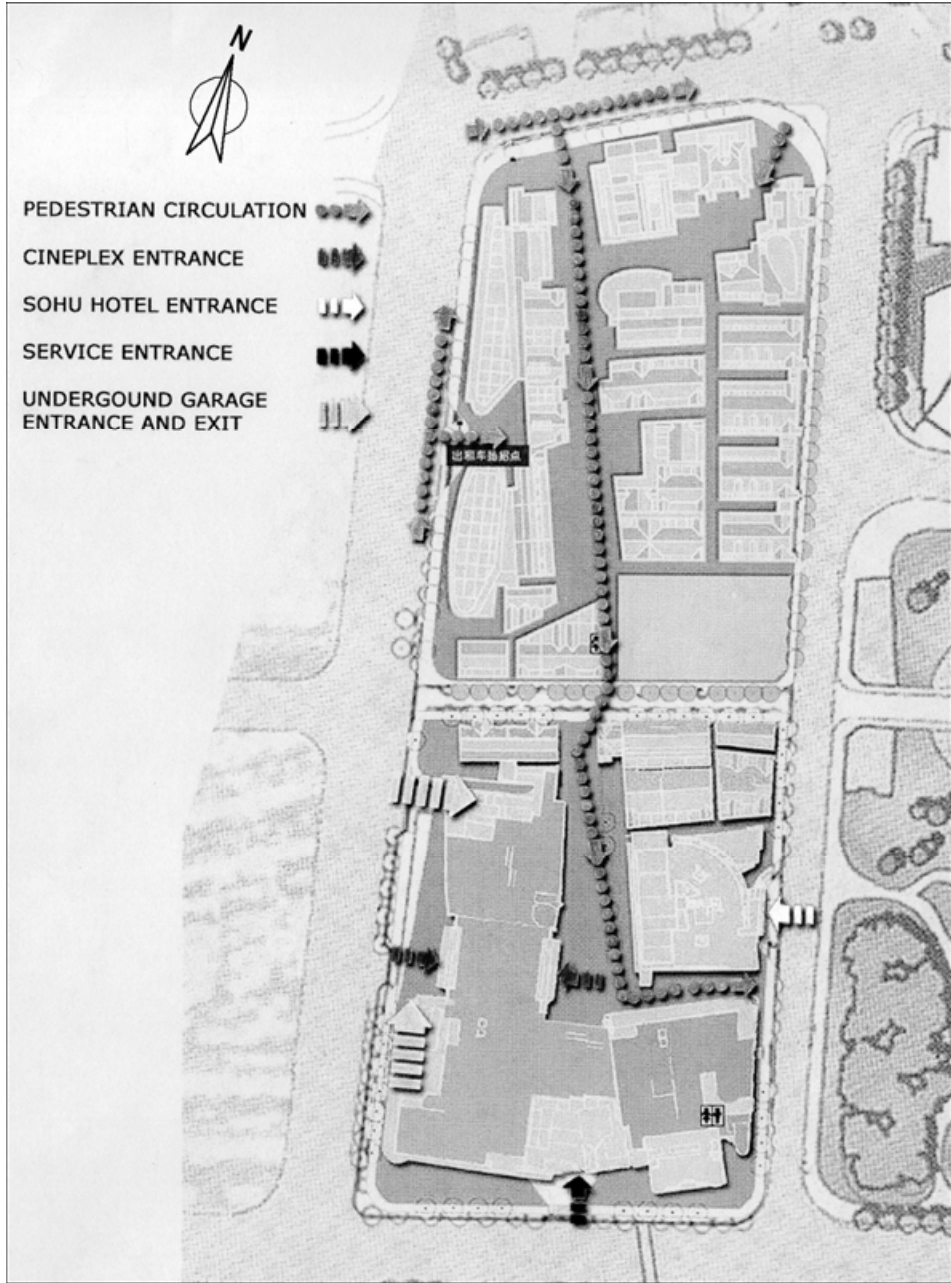


Figure 4.6 Circulation systems

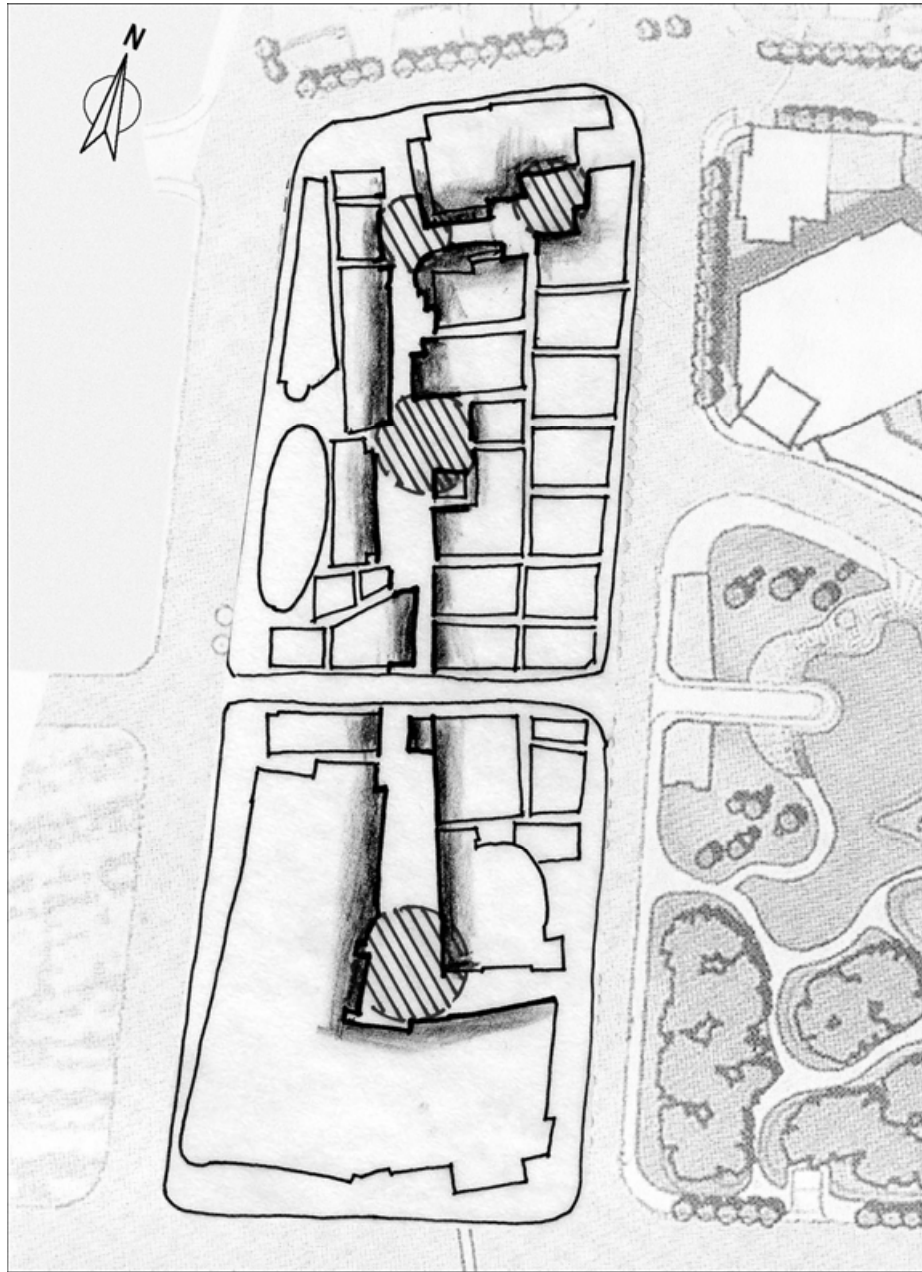


Figure 4.7 Squares and space boundary

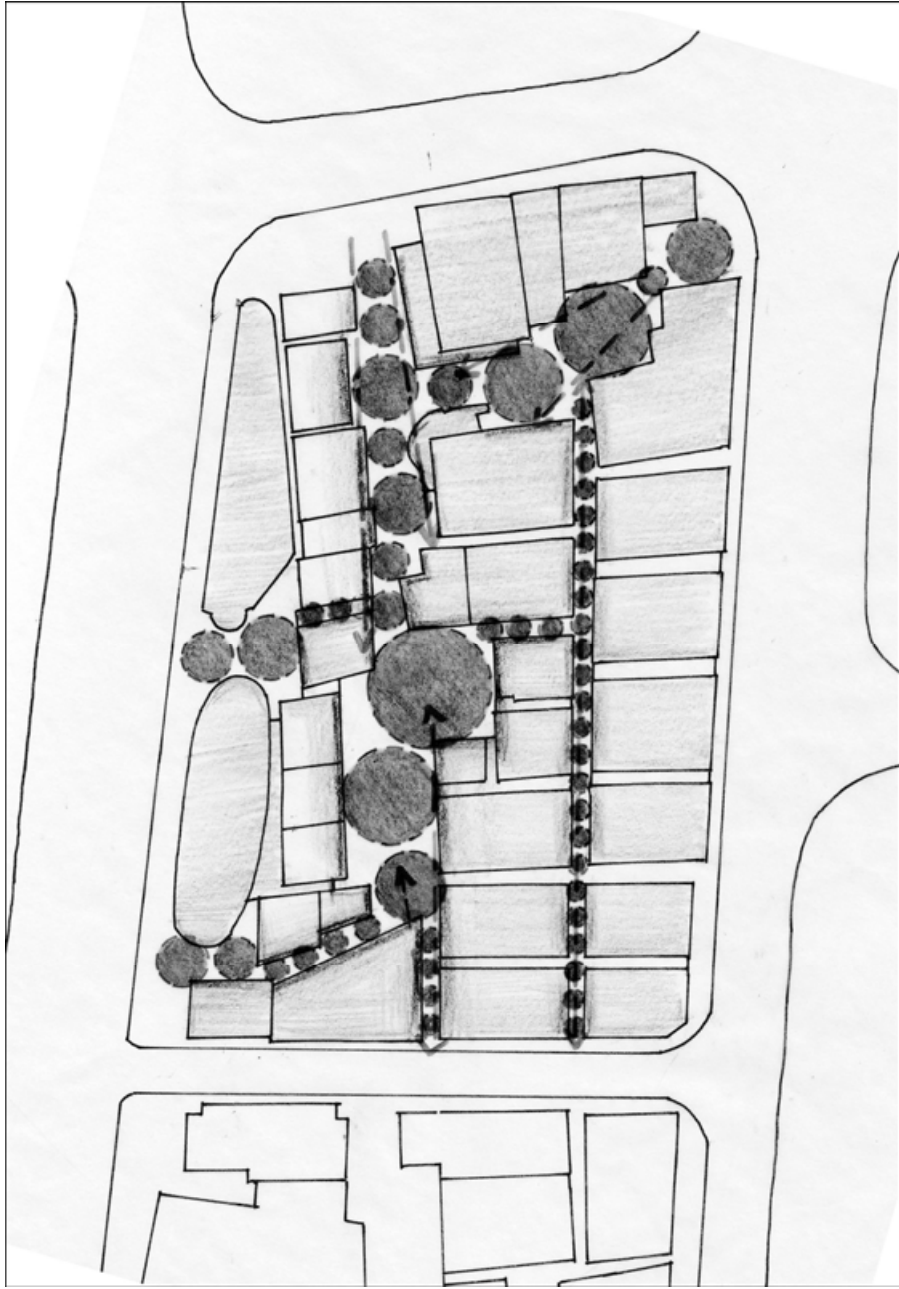


Figure 4.8 Spatial sequence and experience

Vesunna Gallo-Roman Museum

Designed by Jean Nouvel, The Vesunna, Gallo-Roman Museum is located in the heart of the ancient city of Périgueux and houses the remains of a grand Gallo-Roman residence. In this project the architect provides several architectural approaches dealing with the relationship between old construction and new building.

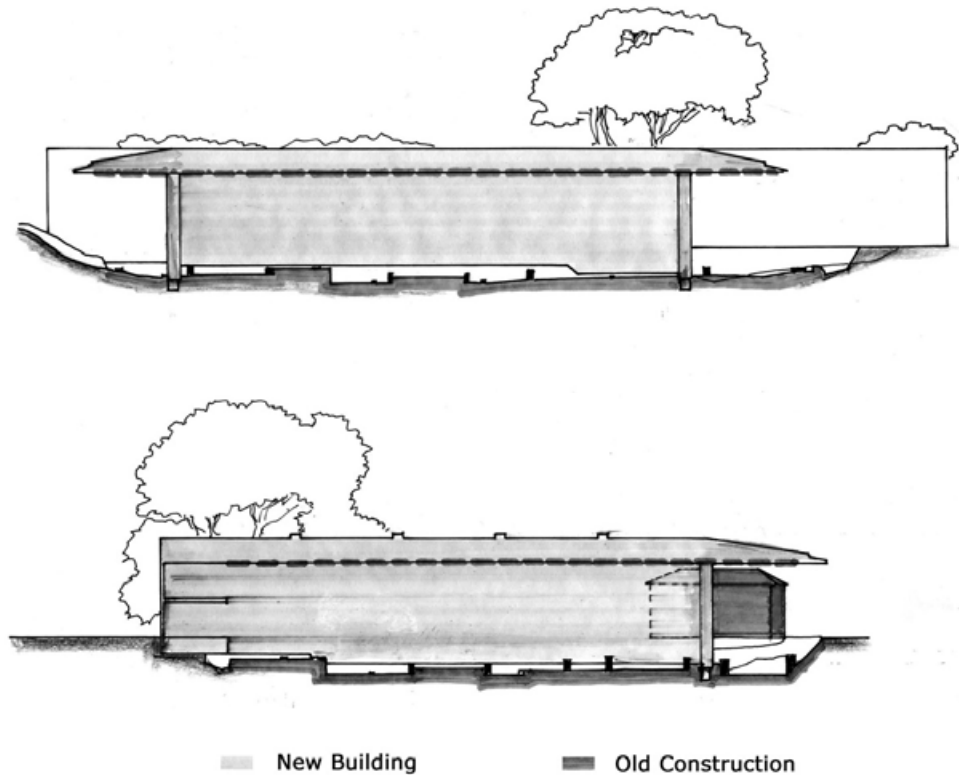


Figure 4.9 Sections, showing the relationship between old and new

Firstly, Nouvel has enclosed the extensive ruin in glass, supported by thin steel columns. The tall lightweight roof, calculated geometrically from the plan of the house, has deep overhangs to keep out the sunshine. Secondly, a small 18th-century house next to the ruin has been carefully restored. Under the light

roof it has a very good conversation with the new structure. Thirdly, inside the museum the structural elements are lightweight steel with a series of raised wooden walkways, around and above the remains, which make the remains well protected and at the same time guide visitors through the house. Finally, the architect has drawn a full-scale mirrored plan on the ceiling, extending beyond the glass walls, to make the layout of the house understandable and integrate the new building and the remains spatially into a whole.



Figure 4.10 The Museum and the restored 18th-century house

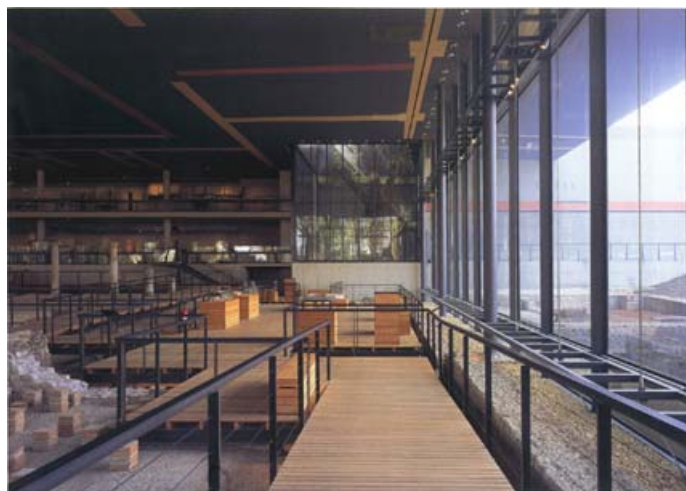


Figure 4.11 The walkway over the remains and mirrored plan on the ceiling

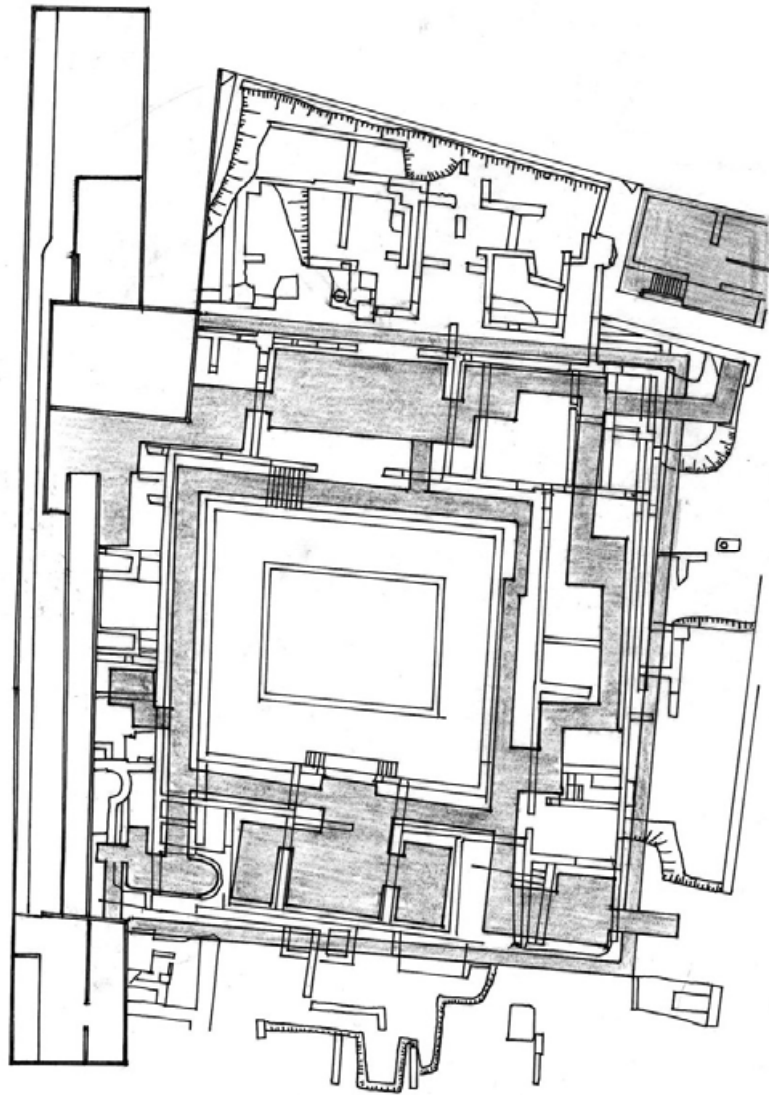


Figure 4.12 Plan showing the walkway (gray) and the remains

CHAPTER V: DESIGN APPROACHES

Design Objectives

The goal is to find an appropriate design modality of filling the wide scale gap between contemporary gigantic buildings and the historic blocks in this rapidly developing city, consequently to maintain the homogeneity of the urban pattern.

The Strategies guiding the exploration of the project include:

- * The proposal of a new mixed-use commercial and cultural complex, a new hotel and some residential units, and they will be integrated as a space transition between the skyscrapers and the traditional blocks. The commercial complex will include stores, restaurants, small playhouse, movie clubs, bars, etc, to bring day and nighttime activities enlivening the block.
- * The adaptive reuse of existing alley houses, acting as a medium integrating the new mixed-use buildings on one side and the historical theater on the other side, consequently reuniting the block into an organic whole.

The project intends to accommodate the whole city's speedy contemporary development while protecting this city's traditional characteristic. Emphasis will be on the following:

- * Maintaining the character of Shanghai traditional urban fabric
- * City's architectural culture preservation
- * Urban scale transition
- * Creation of a pleasant pedestrian environment.

* Combination of in-door space and out-door space

Special Problems and Issues

1. The city's most important public green space-People's Park across West Nanjing Road provides a great view to the south side of the site. It is such a precious landscape in this crowded city that a design for the maximum infiltration of the view through the whole site is required. The proposed network of circulation inside the site might be actively linked to the park as well.
2. West Nanjing Road is the extended part of East Nanjing Road, which is China's most bustling commercial pedestrian street, 1400 feet northeast the site. While West Nanjing Road is a vehicular and pedestrian combined street, most tourists coming from East Nanjing Road still promenade West Nanjing Road a certain distance. However, along the road the commercial facilities are fading. The new commercial complex might provide a variety of relaxing space for the tourists, therefore active the street to a greater extent.
3. There are two exits from the city's biggest metro transfer station at the edge of People's Park 1200 feet away from the site. Every day about 109 million people use the exits to travel around the city. Therefore beside the tourists from East Nanjing Road, the metro passengers have a great impact on the whole district. In response to this issue an actively buffer space is necessary.
4. There are five high-rise buildings towering over the site, vividly contrasting with two rows of two/three storied alley houses in the site. Three of them (Tomorrow Square 928 feet; Xianlesi Square 380 feet, Tian'an Mansion 328

- feet) cast long shadows on the site. The location of open space will be carefully chosen according to the shadow study.
5. Pedestrian access to the site is currently disordered at the edges along three roads (West Nanjing Road, Fenyang Road and Xinchang Road). No parking space is provided nearby. Pedestrian access should conform to the urban fabric. Parking will be located underground.
 6. The traditional alley houses are wood and masonry structures built in the 1920s. Adaptive reuse should pay serious attention to these old structures. Meanwhile the proposed design will also be concerned with the connection between the old and the adjacent new constructions.

Program Description

NAME	AREA(Sqft)
RESTORED OLD BUILDINGS	95,600
MOVIE EXPERIENCE CENTRE	45,800
Auditoriums(7)	21,600
Movie Bar & Restaurant	9,200
Service & Circulation	15,000
SHOPPING CENTRE	304,400
Operation Area	134,400
Service & Circulation	169,000

HOTEL	227,400
Guest Rooms(325)	131,700
Business Center	10,100
Restaurants & Bars	9,800
Service & Circulation	75,800
APARTMENTS	191,300
Apartments(122)	134,300
Service & Circulation	57,000
OTHER	13,100
UNDERGROUND PARKING (438)	173,500
TOTAL NEW BUILDING AREA	955,500
Over ground	689,800
Under ground	265,700
SITE	284,700
FAR	3.1

Design Alternatives

Scheme One:

This scheme tries to introduce a linear square pattern into the site. The linear square not only gives maximum infiltration of the view through the whole site, but acts as an extended commercial boulevard from West Nanjing Road, thereby attracting more pedestrians into the site.



Figure 5.0 Scheme One – site plan

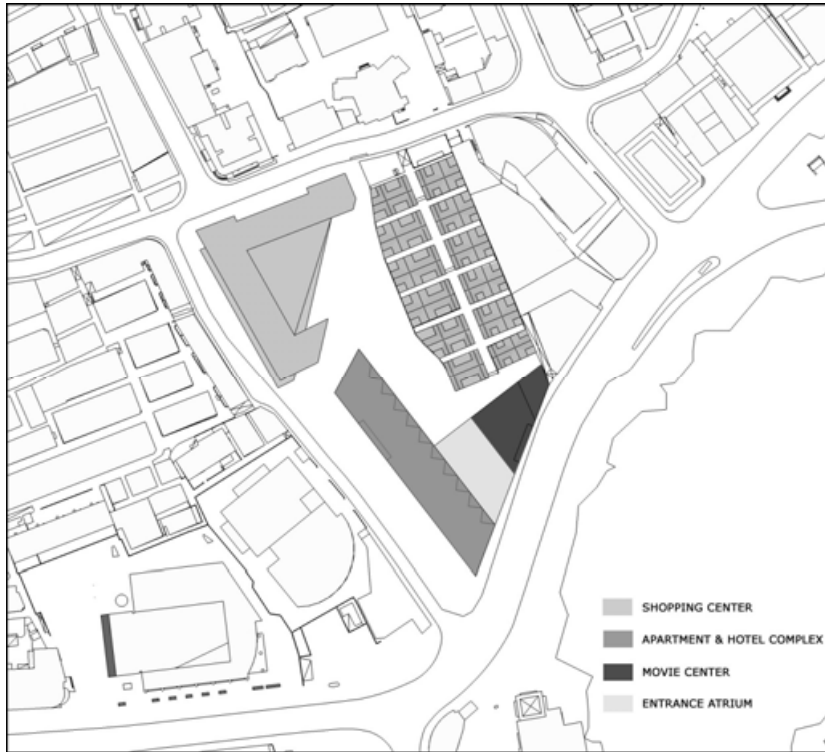


Figure 5.1 Scheme One – land use

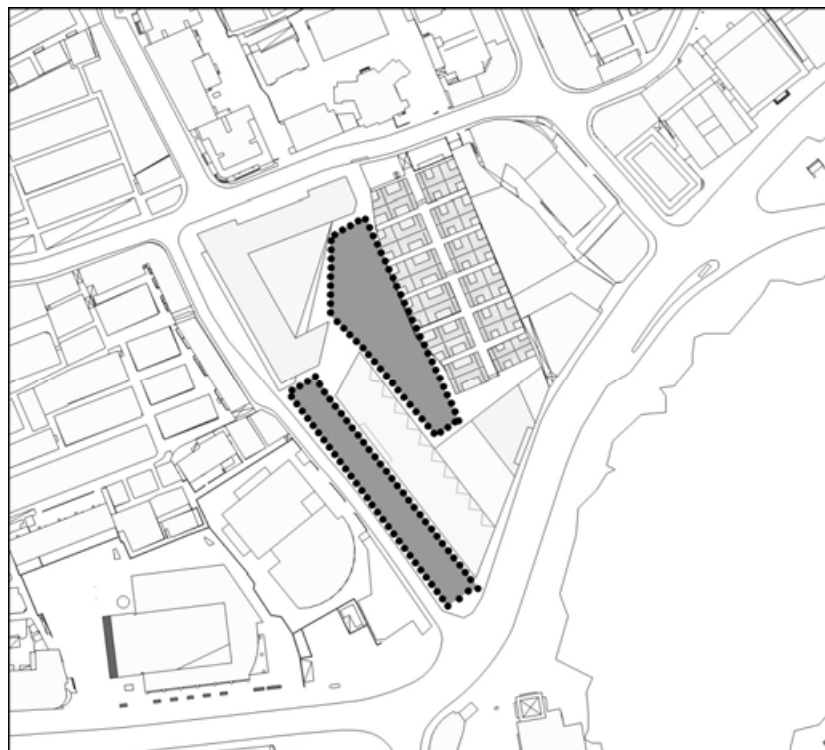


Figure 5.2 Scheme One – square pattern

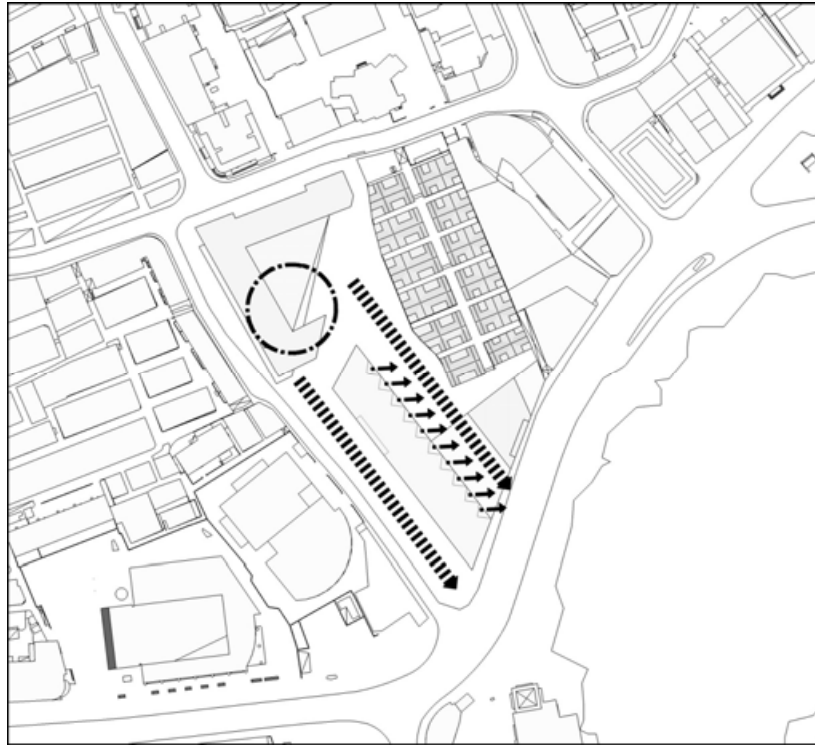


Figure 5.3 Scheme One – view corridors

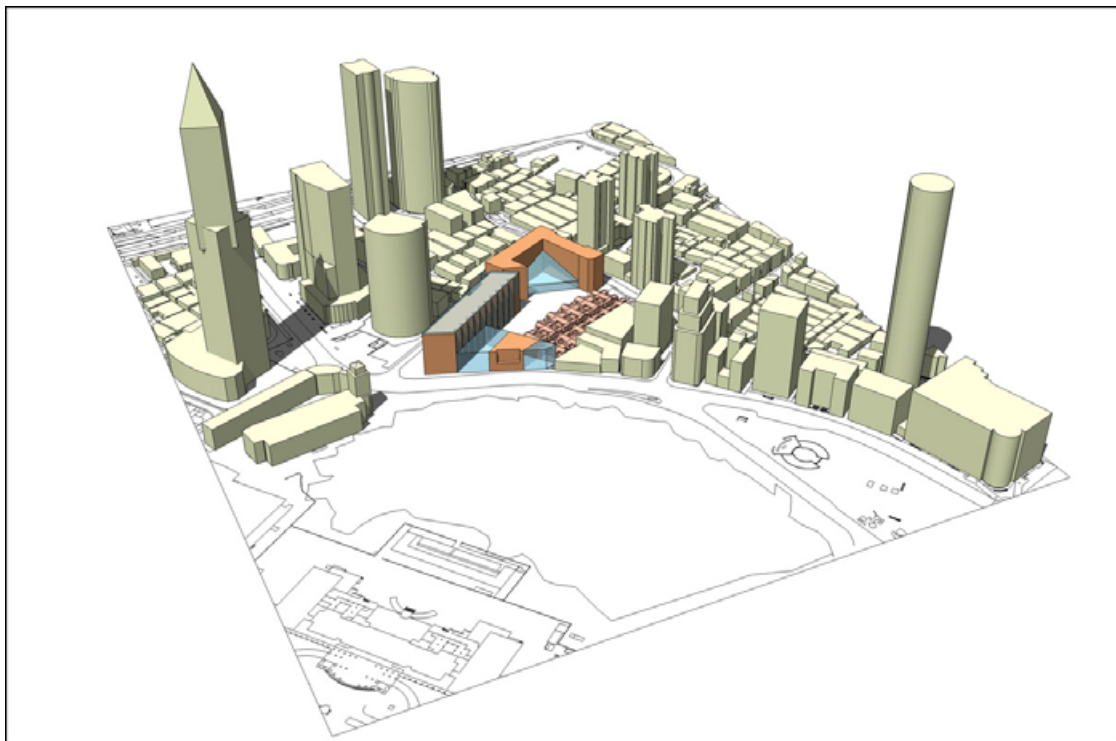


Figure 5.4 Scheme One – Bird's eye view of the site and context

Scheme Two:

By cleaning up the land and creating a square between Tongfu Li and the West Nanjing Road, this scheme tries to provide the traditional Linong a closer relationship with the boulevard and the park. A relatively closed circular square is a vessel space holding all kinds of commercial activities.



Figure 5.5 Scheme Two – site plan

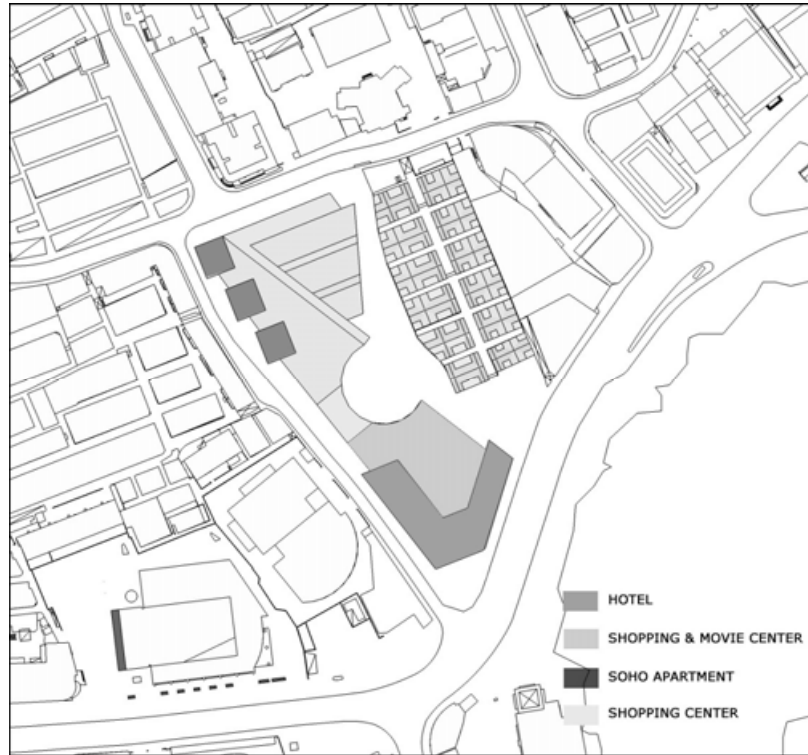


Figure 5.6 Scheme Two – land use



Figure 5.7 Scheme Two – square pattern

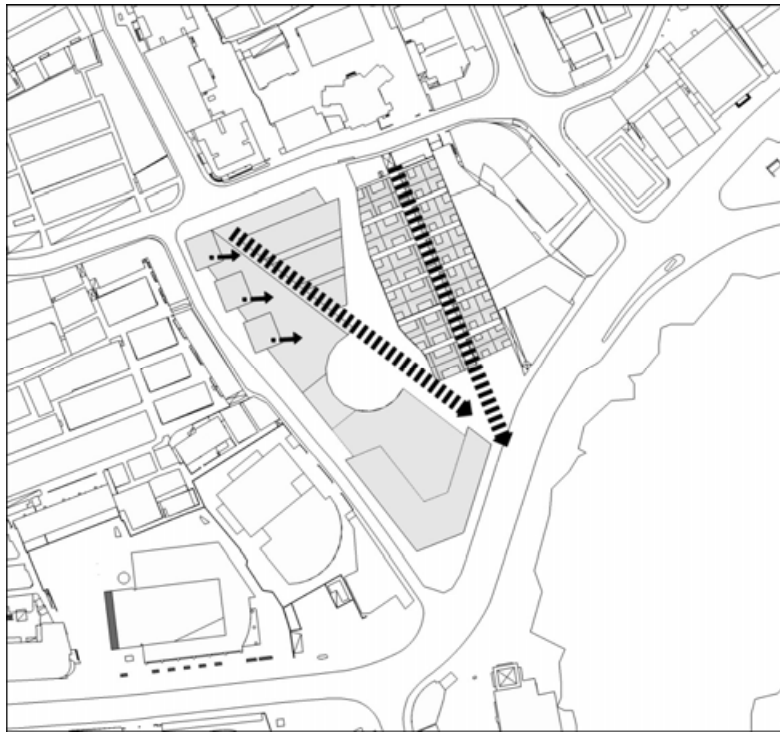


Figure 5.8 Scheme Two –view corridors

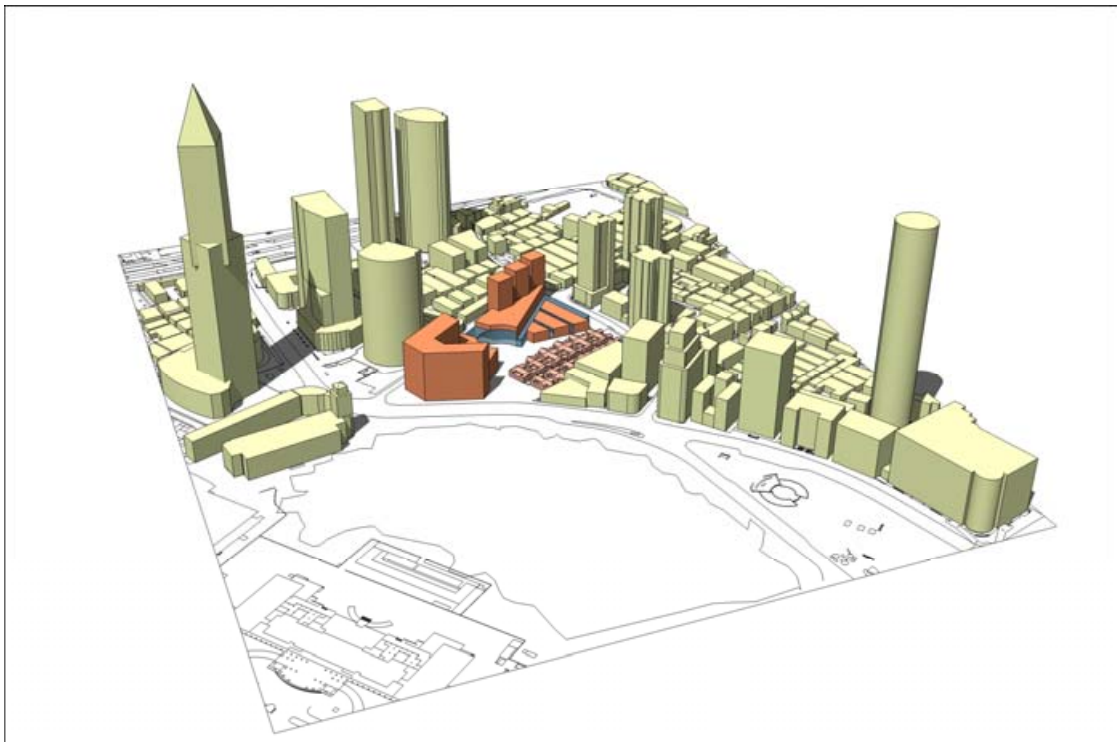


Figure 5.9 Scheme Two – Bird's eye view of the site and context

Scheme Three:

This Scheme integrates a multi-layer pedestrian movement system and a close connection between old and new. Visitors approach the inner square by a one story high platform, which also leads to the new constructions that are mixed with the traditional neighborhood.



Figure 5.10 Scheme Three – site plan

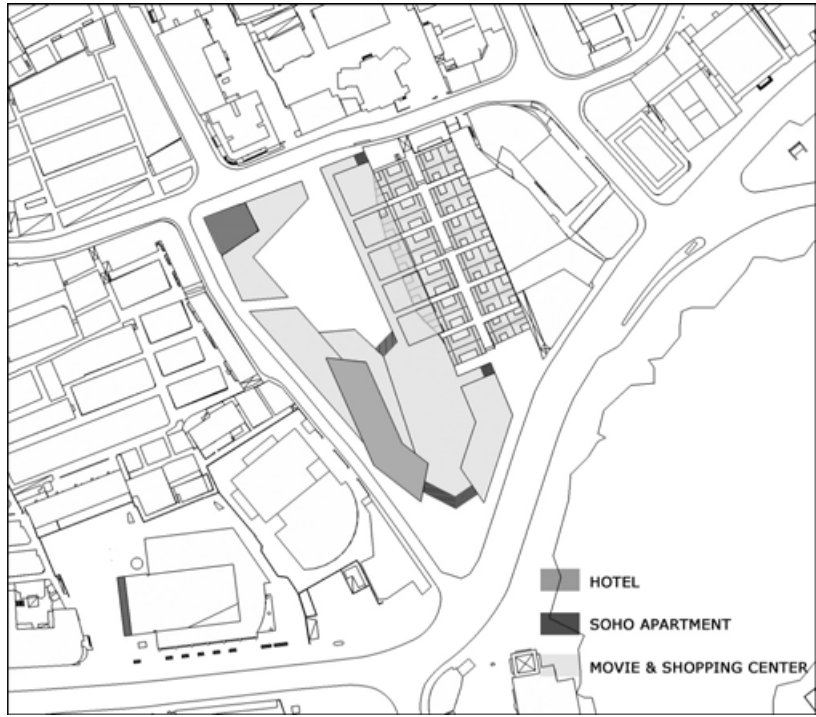


Figure 5.11 Scheme Three – land use



Figure 5.12 Scheme Three – square pattern

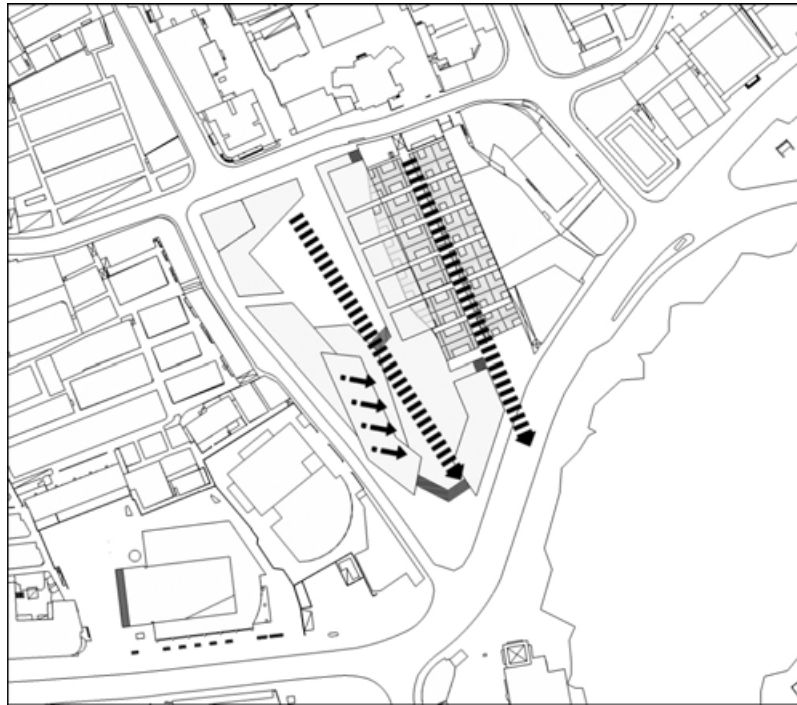


Figure 5.13 Scheme Three – view corridors

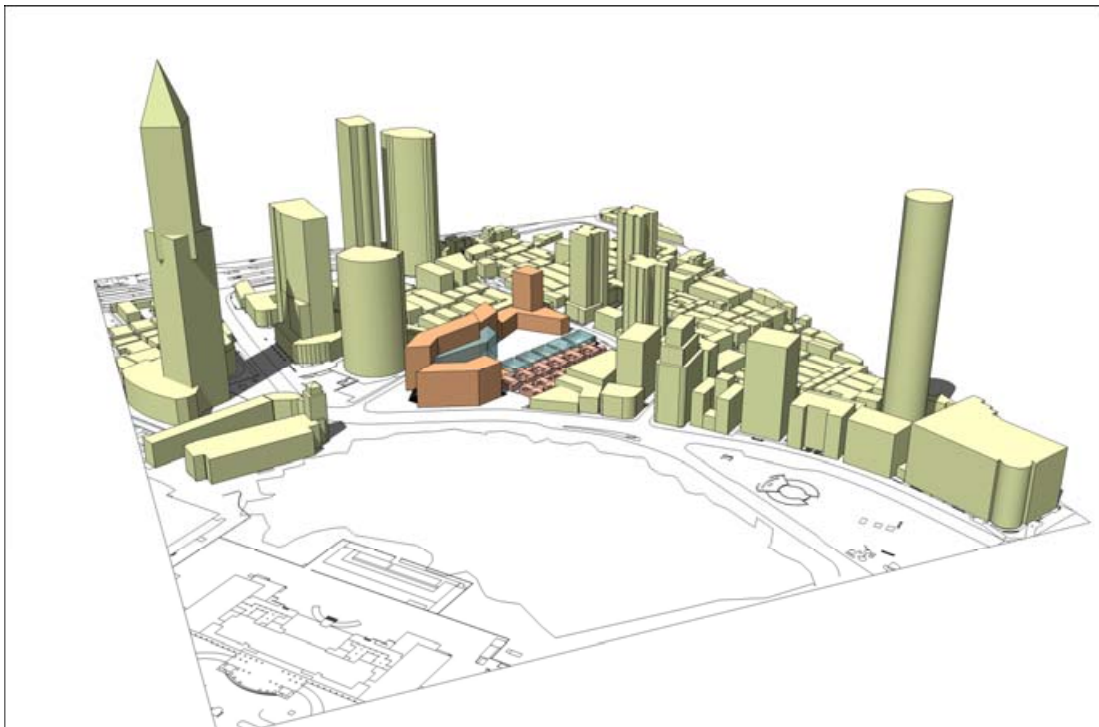


Figure 5.14 Scheme Three – Bird's eye view of the site and context

CHAPTER VI: DESIGN CONCLUSIONS

This thesis tried to set an example of revitalization and rehabilitation that inspiringly employs the spirit of old traditional neighborhoods to highlight the city's historical past, while placing it in the present progressively, and finally, to redefine the place of history in a new urban environment. The strategies include:

- Adaptive reuse is proposed to transform existing Linong into a lively entertainment and retail quarter. Its historic fabric would be used as one component in creating a new place with a new identity. A small public square is created as a medium integrating the new commercial buildings on one side and the historical theater on the other side, making Linong open to the main street and the park.
- A multi-level open space system organizes a sophisticated pedestrian movement network interplaying between the modern masses and traditional blocks: three distinct plazas are at different elevations, connected by glass arcades, stairs and elevators. A major focal point is the dynamic stair with rich landscaping orients toward the park, improving visual access to the whole project.
- The entrance to the movie center is open to the main street for the convenience of public circulation. The auditoriums are placed on the basement floor with connection to the sunken plaza, at the center of which is a glass circulation tower with a projection surface. At night the plaza will be an outdoor movie theatre. Rich landscapes and small water falls in the plaza reinforce the ambiance. This integral open space system reunites the

block into an organic whole.

- Commercial facilities are designed surrounding these plazas, connected by glass arcades; the arcades also give the modern masses a human scale. Hotel rooms and residential units are put on the high levels, having great views of the park and these outdoor spaces. Most buildings have roof gardens on top, hotel guests and residents can take advantage of recreation and leisure facilities.



Figure 6.1 Site Plan



Figure 6.2 Ground Floor Plan

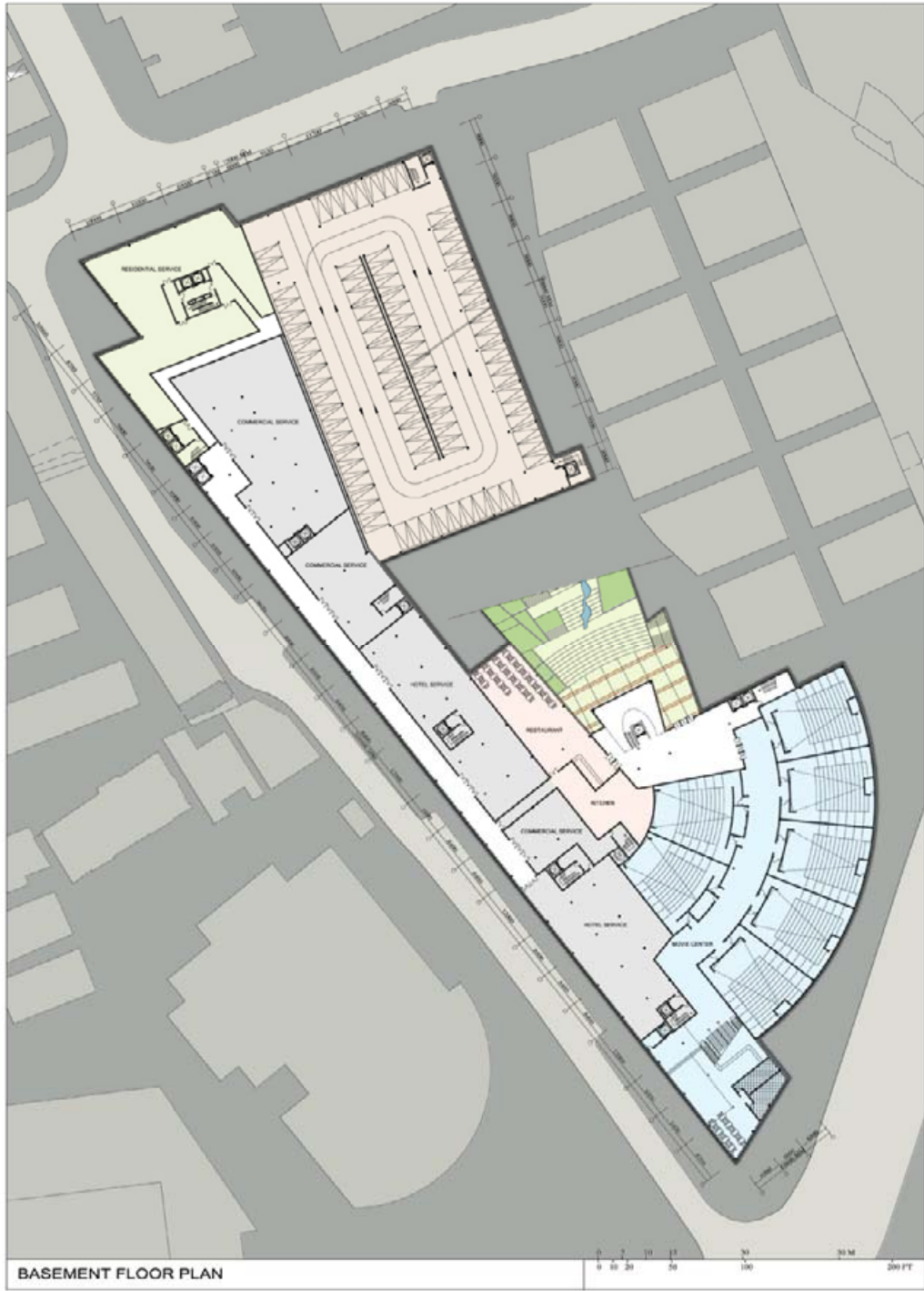


Figure 6.3 Basement Floor Plan



Figure 6.4 Second Floor Plan



Figure 6.5 Standard Floor Plan

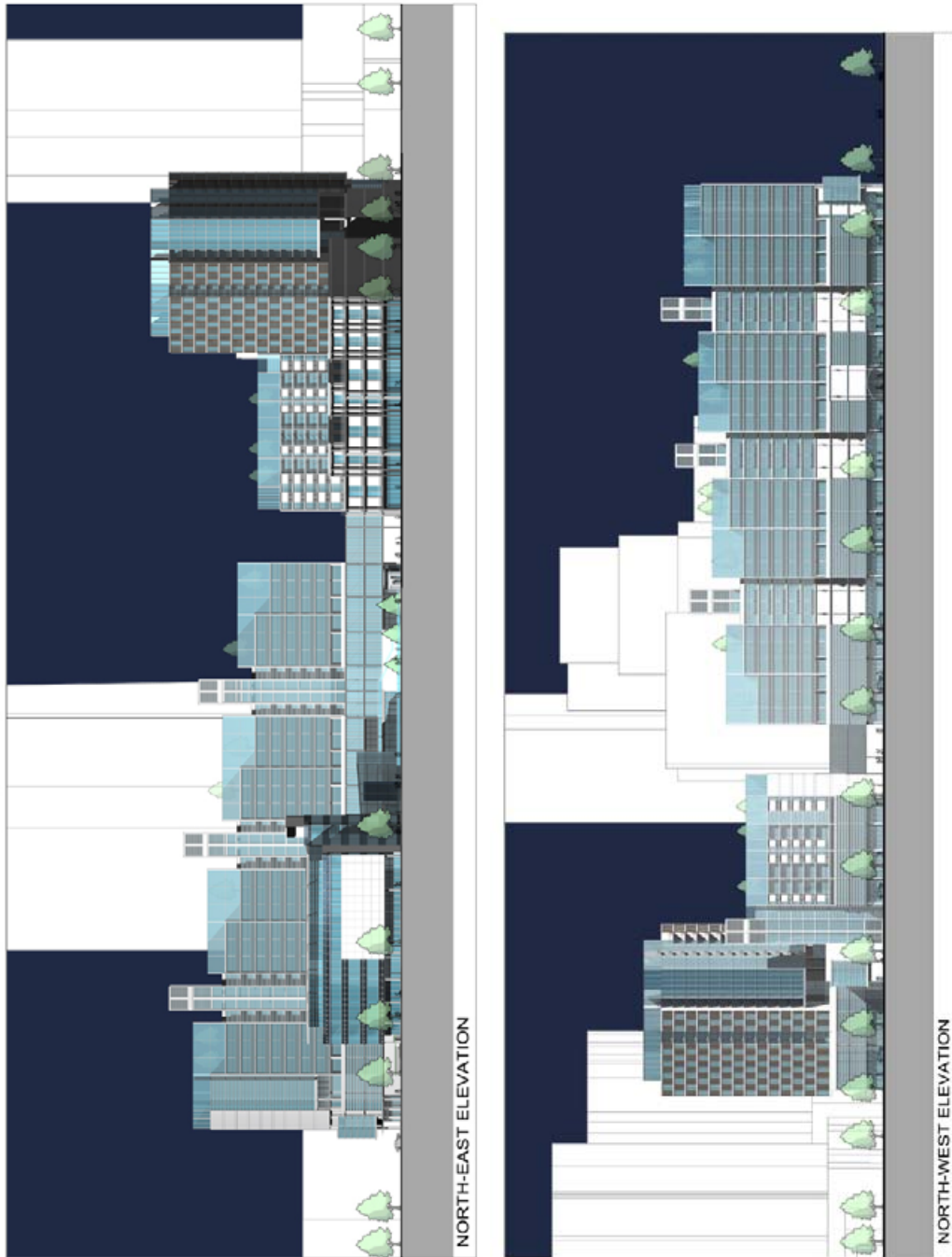


Figure 6.6 Elevations

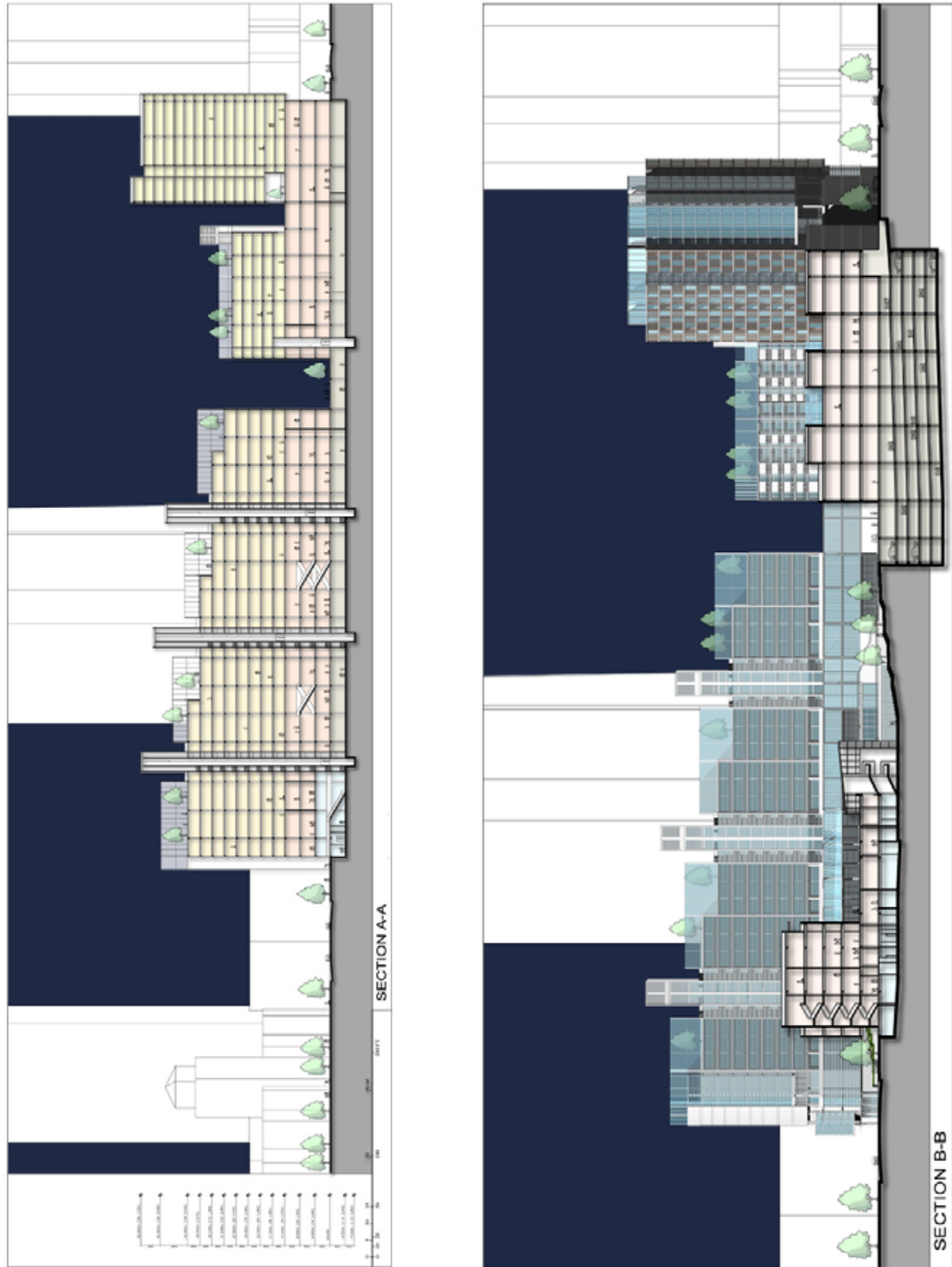


Figure 6.7 Sections

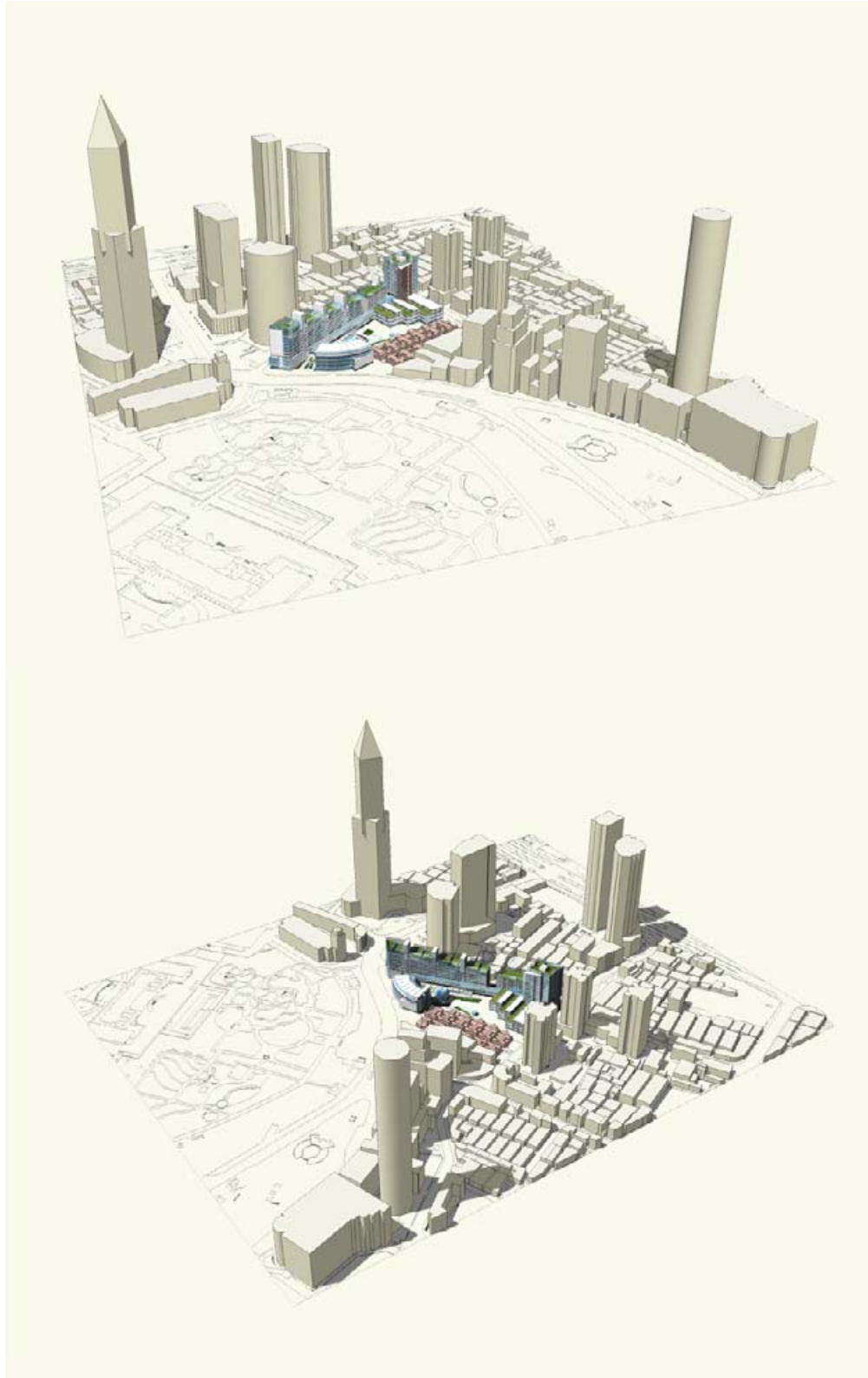


Figure 6.8 Bird's eye view of the site and context



Figure 6.9 Site Airview



Figure 6.10 Perspective from the People's Park

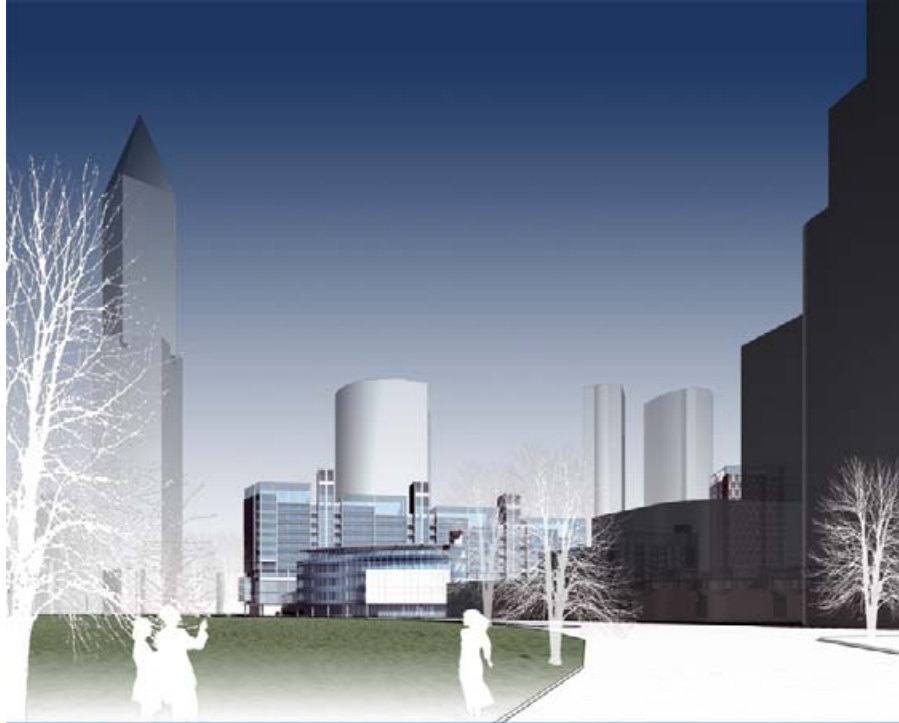


Figure 6.11 Perspective Sequences -1



Figure 6.12 Perspective Sequences - 2



Figure 6.13 Perspective Sequences - 3



Figure 6.14 Perspectives



Figure 6.15 Perspectives



Figure 6.16 Design Diagrams

Endnotes

¹ Alan Balfour, Zheng Shiling, Shanghai, P134 2002

² Luigi Novelli, Shanghai Architecture & the City between China and the West P64 1999

³ Luigi Novelli, Shanghai Architecture & the City between China and the West P58 1999

⁴ Jen Lin-Liu, Xintiandi Architectural Record, P96-99, March 2004

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