

city of contradictions



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"we borrow from nature the space upon which we build"

Tadao Ando

#### INTRODUCTION

Hong Kong is located in southern China, bordering Shenzhen, with a land area of 1114.35 square kilometers and is surrounded by sea on three sides. It has rich marine resources. Through a series of historical factors, Hong Kong has developed into one of the world's most densely developed cities, with a population of 7,498,100 people in 2023 and a population density of 6,728 people per square kilometer. In this objective environment, Hong Kong's housing development is one of the issues that the society needs to pay great attention.

In the future, as the population continues to rise, Hong Kong will need higher-density housing to meet population needs. Today's residential development comes at the expense of height and density between buildings, and is developed in an inverted pattern, with the ground floor used for commercial purposes and the upper floors used for commercial purposes. Residential. However, people living in Hong Kong are constantly surrounded by man-made buildings, and the city has lost the coexistence and balance with nature.

Through this project, I hope to study the relationship between high-density residential complexes and natural development to change the existing boring urban space.

## **HONG KONG'S URBAN STATUS QUO**

Against a background with a large number of natural elements, Hong Kong's tall buildings, residential buildings, commercial buildings, and factory buildings intersect with each other to form Hong Kong's unique urban landscape.

Hong Kong's urban landscape can be divided into 3 categories:

- 1. Among nature
- 2. At the boundary between city and nature
- 3. Among cities







Among the above three types of urban landscapes, what is more concerning is that natural elements have lost traces in the city.

If we use a human perspective to navigate between urban areas, it is difficult for us to find large-scale natural landscapes.

This is what this project focuses on. The natural environment and housing needs are inseparable. Architecture is born because of people. As far back as the Stone Age, people lived in trees and caves, and later built houses. The uniqueness of Hong Kong It has large areas of greenary and natural elements such as the ocean. However, due to population density and residential demand, Hong Kong's urban landscape has become only highrise buildings.

We need to find a balance between nature and high-density housing.

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There is an interesting scenery in the urban landscape. Some long-developed streets are filled with various signboards without unified standards. Their respective combinations bring a messy but harmonious feeling to the streets, just like It resembles a naturally growing forest and turns the street into a space under the sign, and attach to the building.

These signs replace the role of trees in the streets and provide shade for pedestrians. It is a kind of "man-made nature".

But now that the government has begun to regulate the size and design of signboards, this "manmade nature" is on the way to disappearing.







## **BETWEEN NATURE AND CITY**

Hong Kong is located in the south of China, bordering Shenzhen, with a land area of 1114.35 square kilometers and is surrounded by sea on three sides. It has rich marine resources.

Hong Kong consists of Hong Kong Island, Kowloon, and the New Territories. The developed land in these three parts is 24%. The high-density population requires Hong Kong to be highly urbanized to meet employment and housing needs.

In addition to urban areas, Hong Kong also has a large number of hills of different heights, country parks and "green belts" accounting for 67% of Hong Kong's land area. They are distributed in different parts of Hong Kong rather than concentrated in certain areas.

Distribution of Nature and Urban Area

As one of the world's most well-known cities, the reason why Hong Kong has only 24% of its developed land is because Hong Kong has many and steep mountains, which are evenly distributed and difficult to develop and connect between mountains.

There is no incentive for the government to spend a lot of resources on development. So the natural features of Hong Kong are preserved and very close to the developed areas.

# m 957 934

Principal Peaks

(above Hong Kong Principal Datum)

957 Tai Mo Shan934 Fung Wong Peak

869 Tai Tung Shan

4 702 Ma On Shan

639 Wong Leng602 Fei Ngo Shan

583 Castle Peak

3 557 Tai Lo Shan

9 572 Kai Kung Leng10 566 Tai To Yan

**1** 552 Victoria Peak

12 532 Neelde Hill

532 Mount Parker

495 Lion Rock

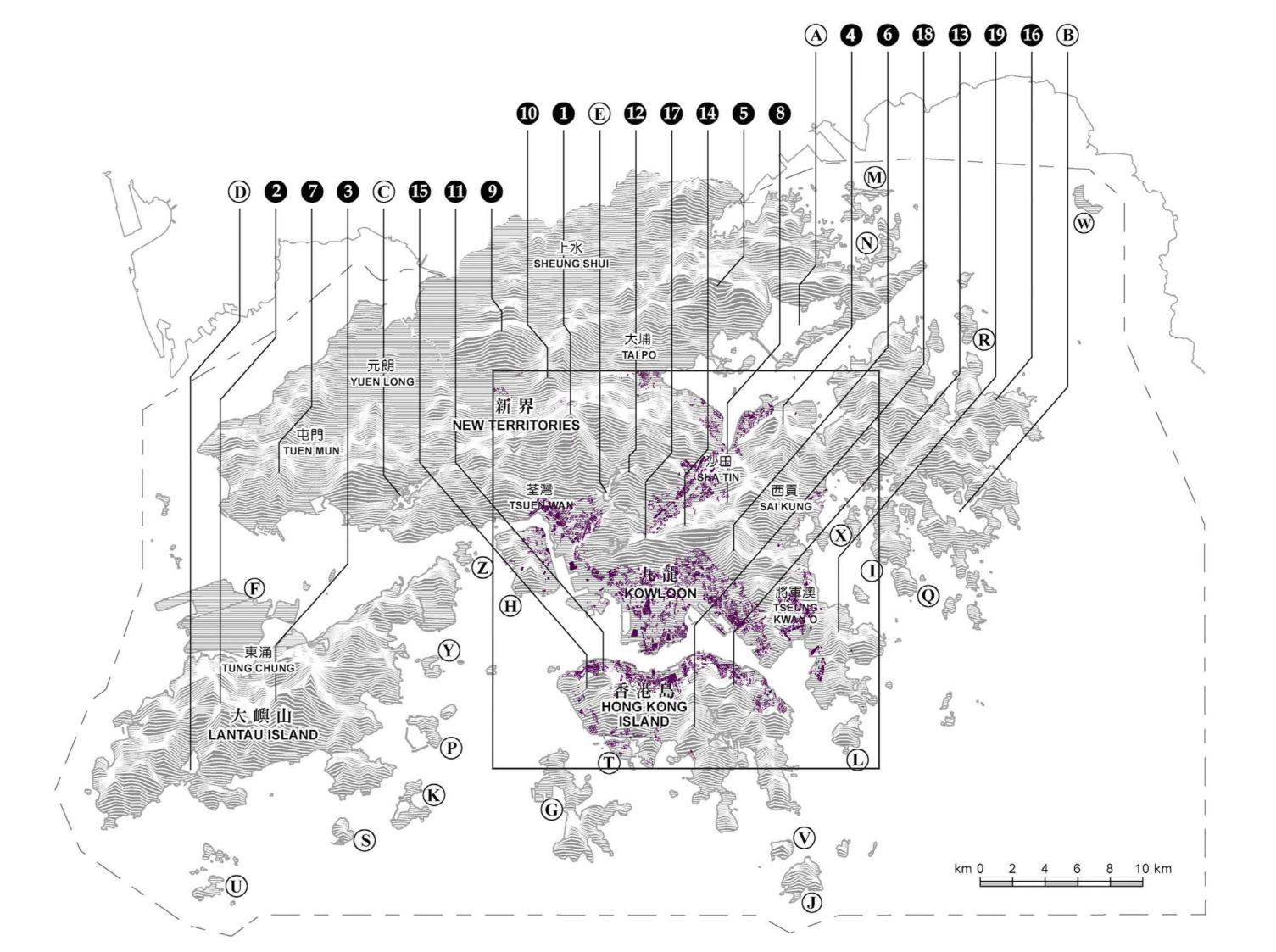
15 493 High West

16 468 Nam She Tsim

457 Beacon Hill

3 433 Violet Hill

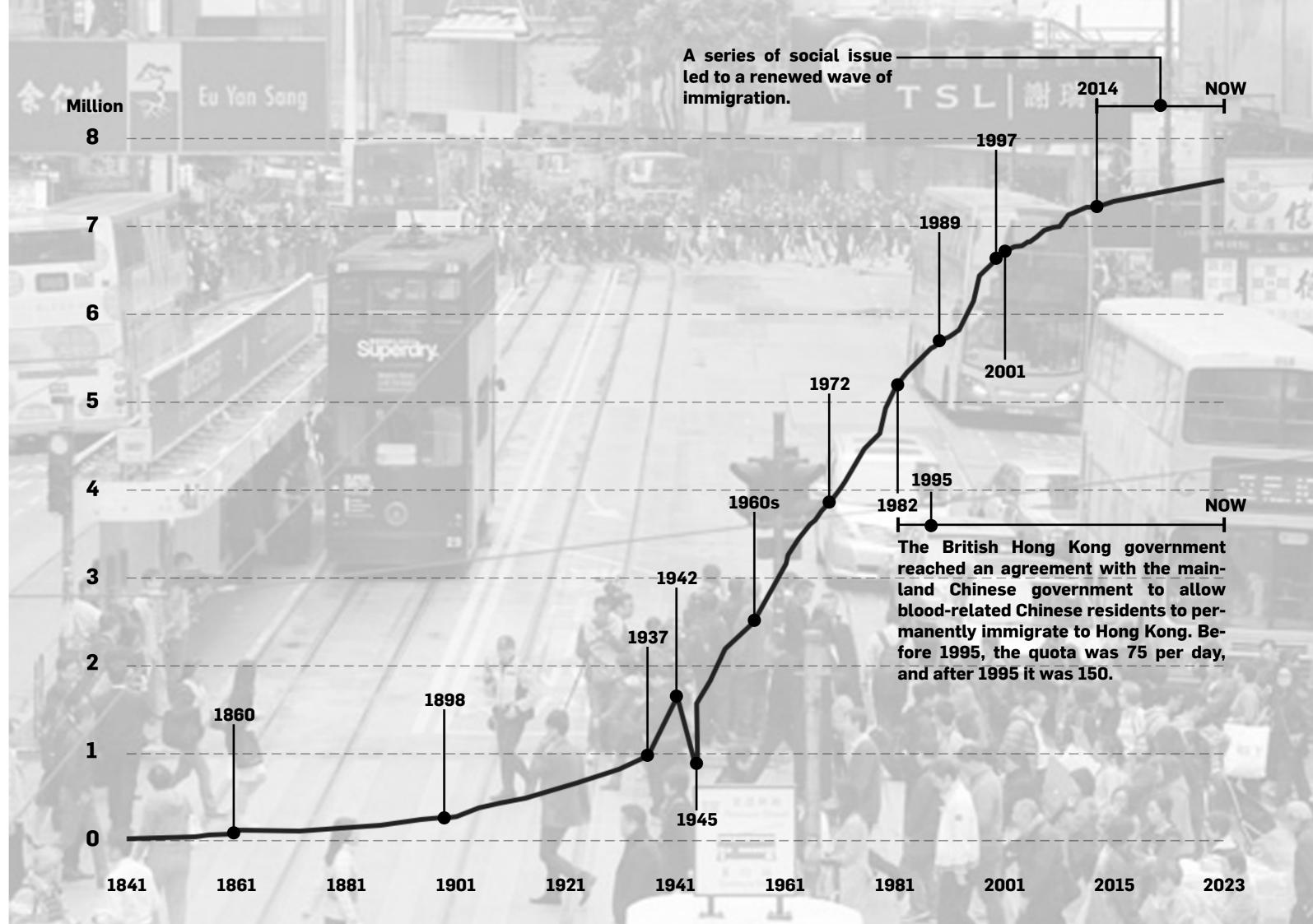
9 344 Tiu Yue Yung

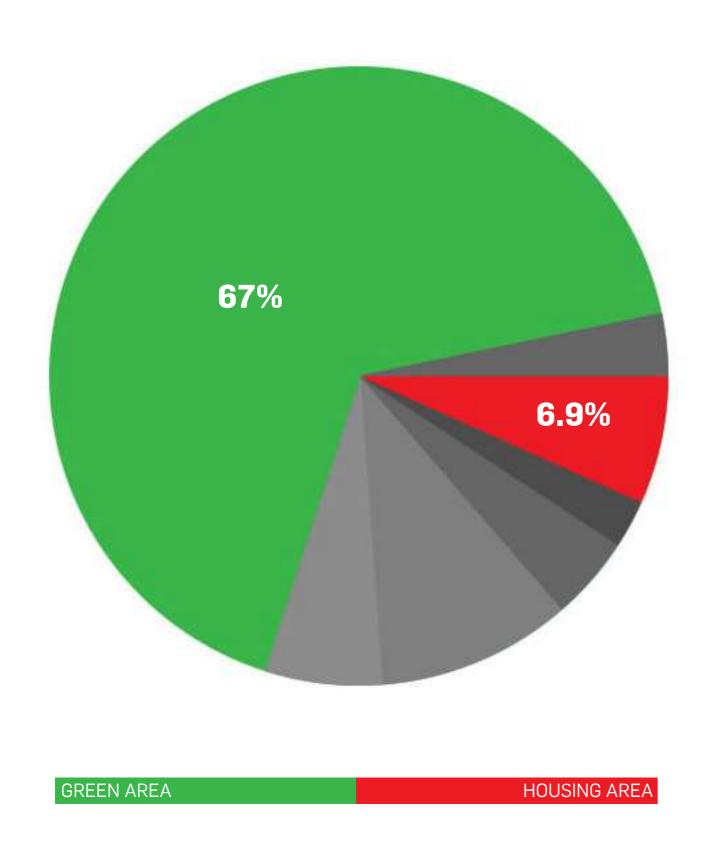


### **BETWEEN LAND AND POPULATION**

Since Hong Kong was ceded to Britain in 1841, it has developed from a small fishing village of about 4,000 people to an international city with ~7.5 million people in 2023. The important moments that affected the demographic transformation are reflected in the picture on the right and below:

1860:	Ceded Kowloon to Britain and incorporated British Hong Kong
1898:	Lease the New Territories to the UK for 99 years
1937:	Japan invaded China and Chinese refugees poured into Hong Kong
1942:	Hong Kong fell and Chinese refugees were deported
10/E.	Japan surrenders and civil war breaks out
1945: 1960s:	Famine in China, the outbreak of the Cultural Revolution, and a large number of Chinese people smuggled to Hong Kong
1972:	Implementing the barrier policy, as long as they arrive in the urban area of Hong Kong south of Boundary Street, illegal immigrants will be treated as legal temporary residents
1989:	The 64 Incident in Bejing led to a wave of immigration
1997: 2001:	Return to China  Mainland children born in Hong Kong have the right of abode in Hong Kong

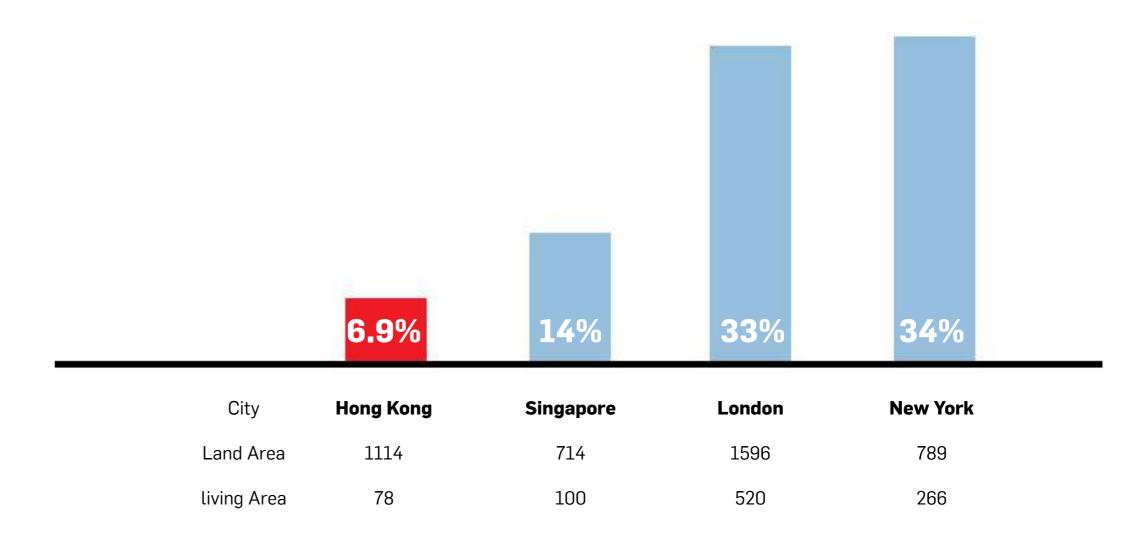




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Hong Kong has a land area of 1,114.35 square kilometers, with natural environment accounting for 67% and built-up land accounting for 24%. The amount seems to be quite large, but a closer look at the land use shows that only 6.9% of the land is used for housing development. Compared with other developed cities such as Singapore (14%), London (33%), and New York (34%) are much less.

To accommodate ~7.5 million people under 78 square kilometers, Hong Kong's per capita living area is only ~170 square feet. High population and limited land for housing development are factors that cause Hong Kong to become a high-density city, and housing development needs attention.



As one of the most well-known cities in the world, Hong Kong has only 24% of its developed land. It also has a large number of hills of different heights, country parks and "green belts", accounting for 67% of Hong Kong's land area. Because these natural environments are mountainous, steep and evenly distributed, it is difficult to develop and connect the mountains. They are very close to the developed urban areas, but the living environment in the city cannot be seen due to the height of the buildings and the narrow streets. There seems to be an invisible wall between nature and urban residences, and they cannot meet. This is a contradiction that belongs to Hong Kong.

I am imagining a residential building complex that can coexist with nature. Making improvements based on the existing residential building development pattern, adding different public spaces and uses on different floors in a taller and denser building pattern It provides different viewing platforms to enjoy Hong Kong's natural scenery.

Based on higher density development, will sunlight be blocked by buildings, can wind pass through the building, where can natural elements occur? What views does this building bring to the community when seen from different streets... etc. These issues are all considerations when designing a residential complex so that architecture and nature can coexist.

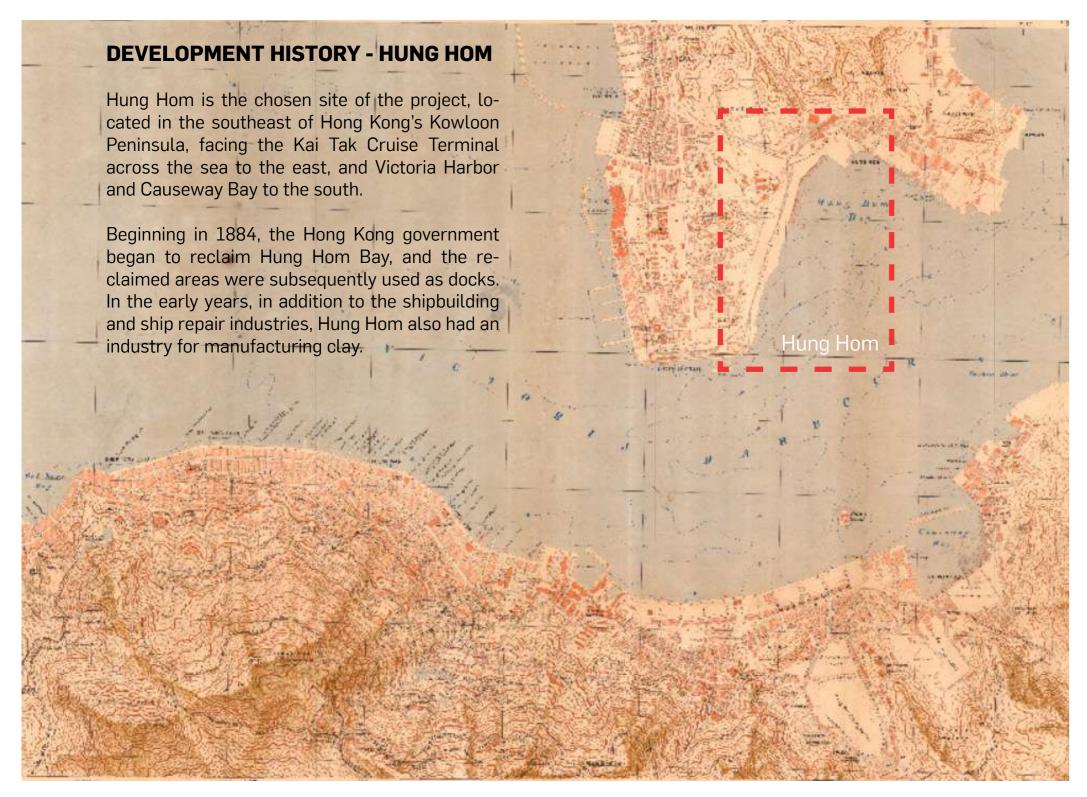
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# **PROJECT LOCATION**

From 1842 to the present, Hong Kong's coastline has been constantly changing to meet various infrastructure and land needs. Hong Kong's reclamation area is 78.20 square kilometers, accounting for 7% of the total area. What is interesting is the land reclaimed from the sea and the size of Hong Kong Island. The area is about the same (78.64sq.km). In addition to commercial, industrial and infrastructure uses, they also include some residential parts, such as the project location - **Hung Hom**.

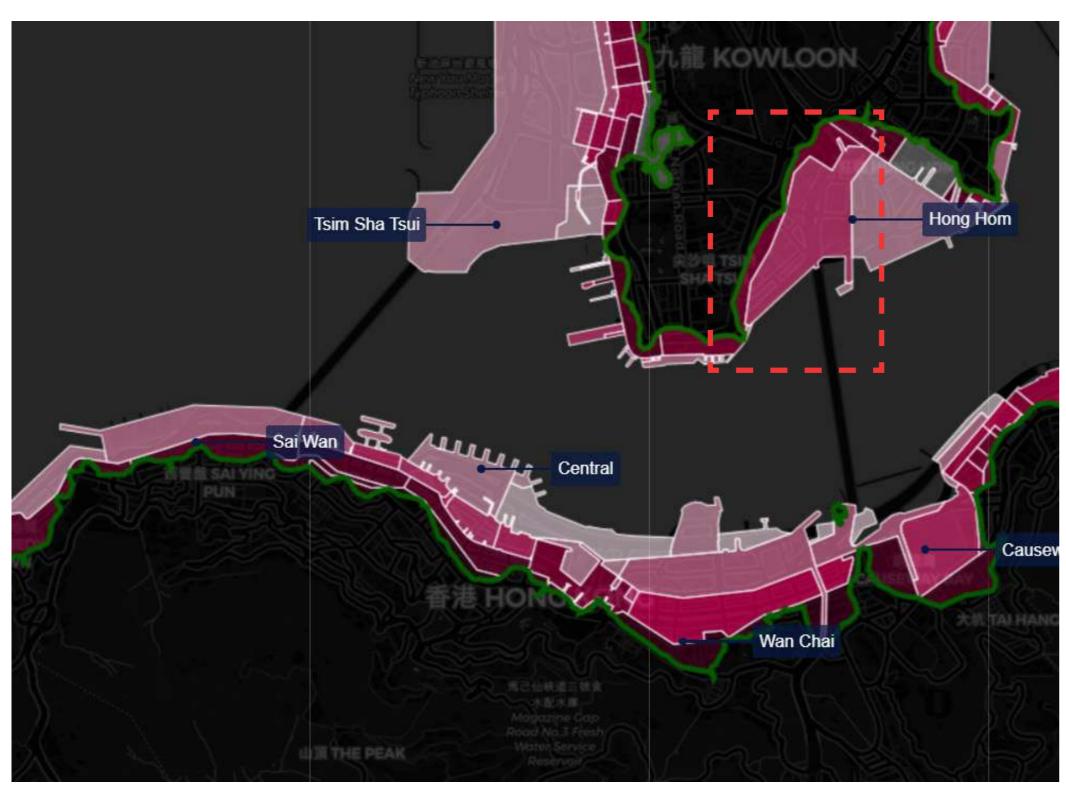


Partial map of Victoria Harbor - 1945

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Partial map of Victoria Harbor - Current



Partial map of Victoria Harbor - Reclamation Development

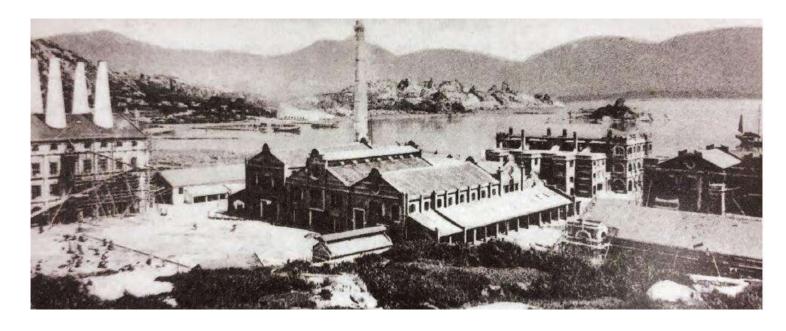
#### **RECLAMATION DEVELOPMENT**

Initially, only a small part of Hung Hom was land. It was not until the development of reclamation projects in the 1990s that all the original corners of the bay were filled in and the coastline was straightened. Its core area (i.e., the area around the MTR Hung Hom Station) was transformed from the ocean into residential buildings district.

In the 1980s, as Japanese and Korean companies expanded to China and Southeast Asia and set up bases in Hong Kong, the housing in the area attracted many Japanese and Korean families working in Hong Kong to rent. In recent years, there have been many Japanese and Korean shops in Hung Hom.

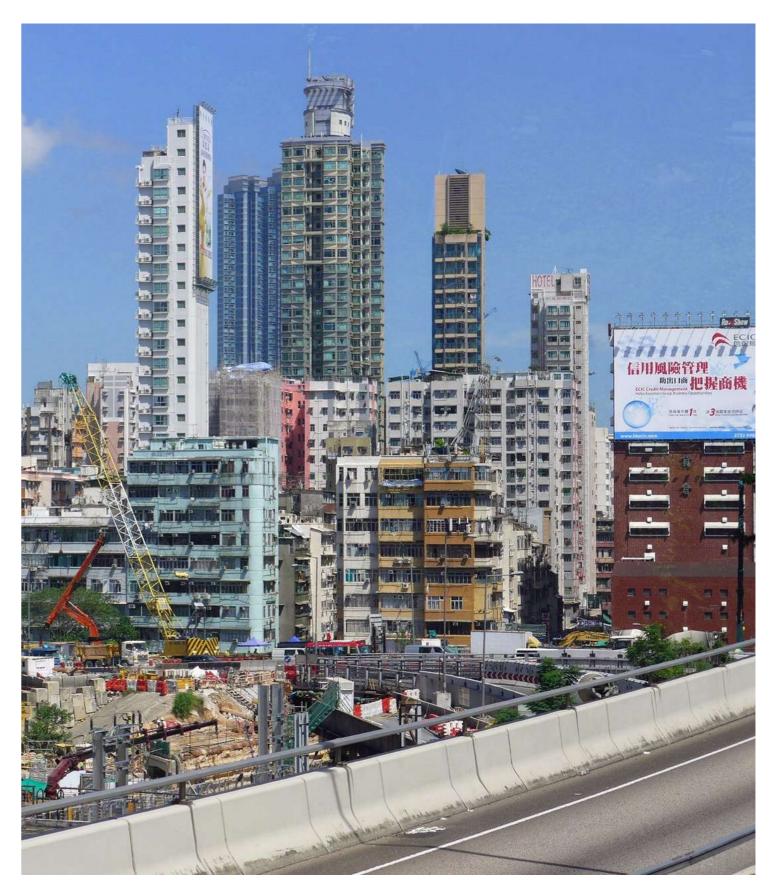
At present, most of the buildings in the area are residential buildings, mainly private housing estates, with a few public housing estates. A small part of Hung Hom is still reserved as an industrial area. Now the newly reclaimed land contains private housing estates, student dormitories, hotels, office buildings, funeral parlors and warehouses, etc.







Hung Hom's former shipyard and industrial area



In recent years, there have been many single buildings in Hung Hom.



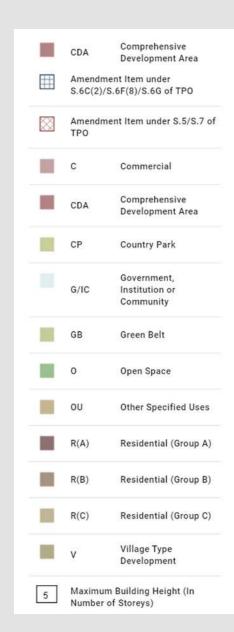
#### **HUNG HOM AND NATURE**

Hung Hom is located between Ho Man Tin and Victoria Harbour, between natural land and the ocean. Most of the land in Hung Hom is now reclaimed from the sea, and the terrain is very flat. On the contrary, most of Ho Man Tin is built on small hills, like A community built based on the natural environment. Compared with Ho Man Tin, Hung Hom has no obvious relationship with nature. It is a man-made community that focuses more on the self-development of buildings, while making Victoria Harbor increasingly narrow.

The project site was chosen here as a statement to re-examine the relationship between housing and the natural environment between the manmade community environment.

In the picture on the left you can see 3 levels:

Natural land – Artificial land – Harbour

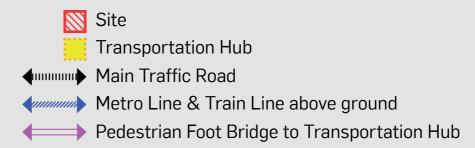




#### **SITE LOCATION**

Hung Hom's location in Kowloon is very important. There is an undersea tunnel connecting Hong Kong Island to the south, Hung Hom also connecting Kowloon East and Kowloon West to the east and west respectively. It is a major transportation hub between Hong Kong Island and Kowloon. There is also a pedestrian foot bridge connects the Hung Hom residential area and the transportation hub. The site is the first stop connecting this transportation hub to the Hung Hom residential area. It takes about 8 minutes to walk.

Hung Hom's metro was expanded in 2022 and connecting 2 different metro lines, and the train station will connect to mainland China. It not only brings convenience to the community, but also attracts people from outside the area to go and live. As a result, the local community has become busier and Demand for nearby housing increases.





#### SITE SPECIFIC ISSUES

The site is very important to the Hung Hom residential area. As the first stop from the Hung Hom transport hub to the Hung Hom residential area, the old buildings at the site have been demolished and are waiting to be rebuilt as new residential areas. The nearby buildings have different heights, counterclockwise from short to tall.

Site location serves as the entrance from the MTR line to the Hung Hom community. There is a 170-meter-high residential building on the south side, which will partially block the view. The west and north sides are used for private residences, funeral parlors and warehouses.

There are 3 blocks and a dead-end car road within the site. The car road itself serves two of the residential blocks and is mainly used for car parking and U-turns. In the new design, this road will be cancelled and become part of the building, while car parking will be arranged underground.

Site Area: ~7650 S.Q.M. (85m x 90m)

The site is surrounded by 4 roads, of which the southwest and northwest roads are relatively busy and are the main highways. The southeast road is a dead-end road, not busy and suitable as an entrance and exit for underground carparking. The northwest and northeast roads have a large flow of people, so they can be used as the entrance and exit of the shopping mall.

At the same time, there is a pedestrian bridge to the southwest connecting the site and the transport hub. This bridge will bring a large amount of people, and the design needs to consider how to bring these people to the ground level.

There are some green facilities on the ground level in the southeast, southwest, and west, and the site is like their meeting point.



## **TO BE REBUILT**

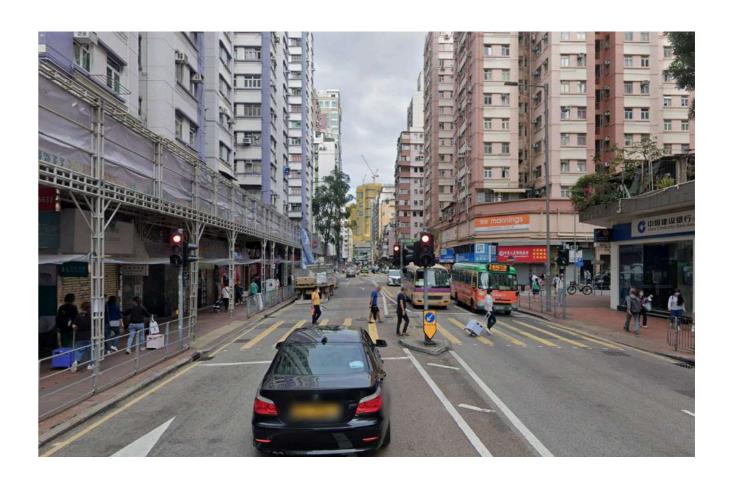
The residential redevelopment plan of Hung Hom is ongoing to meet the needs of higher density housing and population. The original 3 blocks of 6-storey tenement buildings in the site have been demolished and are waiting to be rebuilt. The advantages of this empty site are already on the analysis above, the artificial land that has replaced the ocean; many residential buildings; developing into a higher density community. It is very suitable for the starting point of this project - the contradiction between nature and architecture, the symbiosis experiment of nature and residential complex.

# Surrounding Photos of the Hung Hom Residential Zone









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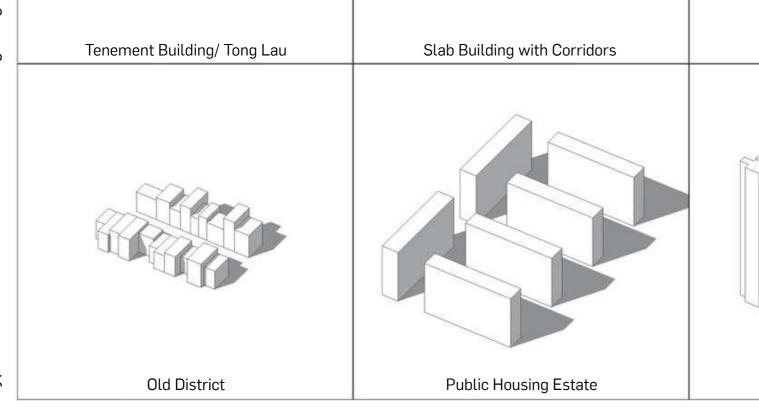
#### **RESIDENTIAL IN HONG KONG**

There are many types of housing in Hong Kong, which we can simply summarize as small houses, private housing, and public housing estates. The median living area per capita in Hong Kong is only 16 square meters in 2021.

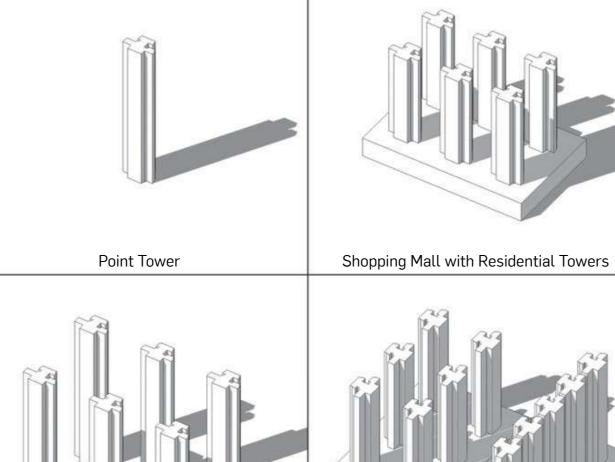
The small house is specially designed for the original residents of Hong Kong. It has only 3 floors and the area of each floor is 65 square meters.

There are many types of private housing, such as villas, tenement houses, single buildings, large-scale development complexes, and gated communities. The current development trend tends to be dominated by large-scale development complexes. We will have detailed explanation in the "Housing Development" chapter.

Public housing estates are large-scale government development projects that emerged in the 1970s to rent out to low-income citizens. They are mainly located on the fringes of cities, making it easier to access, enjoy and respect nature than in centers.



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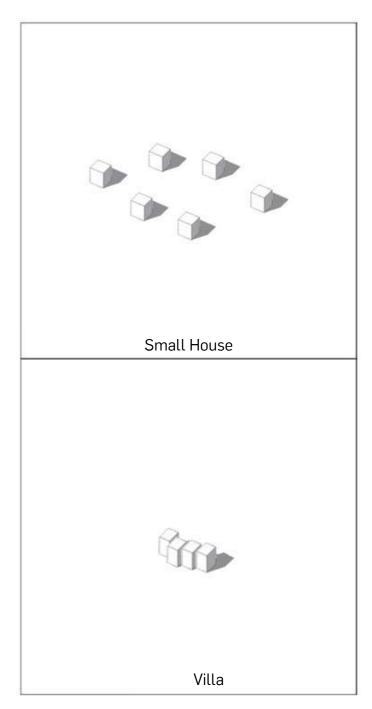
Private Housing Estate

## **TYPE OF HOUSING**

Common residential building types in Hong Kong include the single building, block development and gated community studied above, all of which are very similar.

A single building type can easily lead to a monotonous urban space under modern planning, because the same type means that the relationship between the building and the surrounding environment is also the same, and it is easy to lose your sense of direction when wandering in the city.

This single urban appearance has replaced Hong Kong's unique natural environment and become Hong Kong's urban characteristics.



Hong Kong Other Architectural Typologies

New Town/ Satellie City

#### TRANFORMATION OF URBAN GRID

In terms of urban planning for housing, Hong Kong has several strategies. The first is to utilize the foothills of hills, and the second is to reclaim the sea.

Based on the fact that Hong Kong has more hills and less land, part of the foothills serves as part of urban and residential development. This sign is easy to find in the early development of Hong Kong Island. The higher the location of the residences, the higher the social status of the residents. The urban pattern of grid system(regular) from the flat land will slowly changes to follow the shape of the foot of the mountain(irregular).

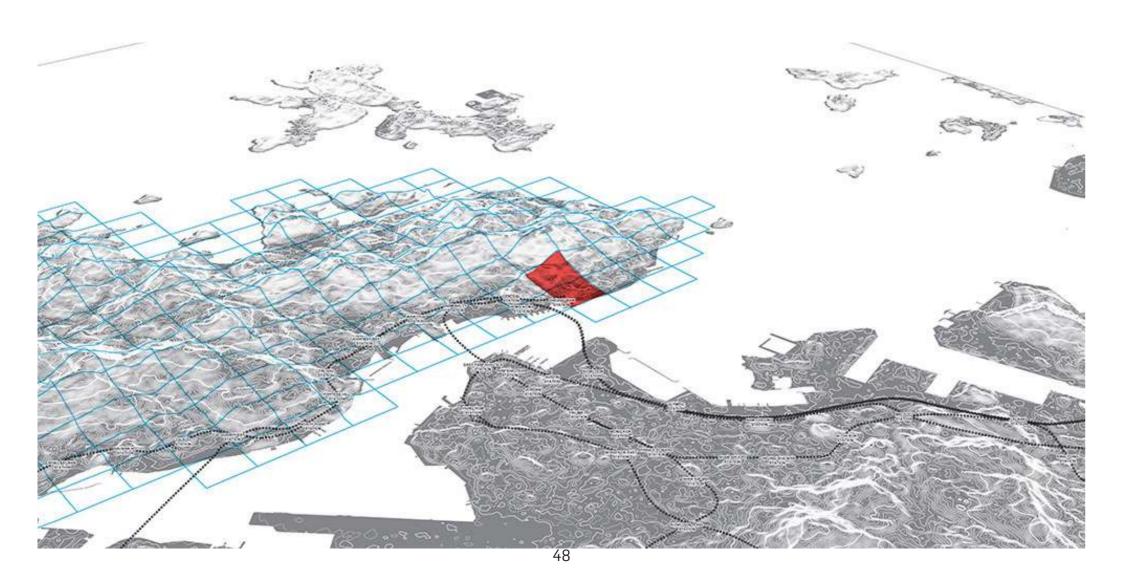
From this urban form, we can find that Hong Kong's urban development will be affected by the natural geographical environment.

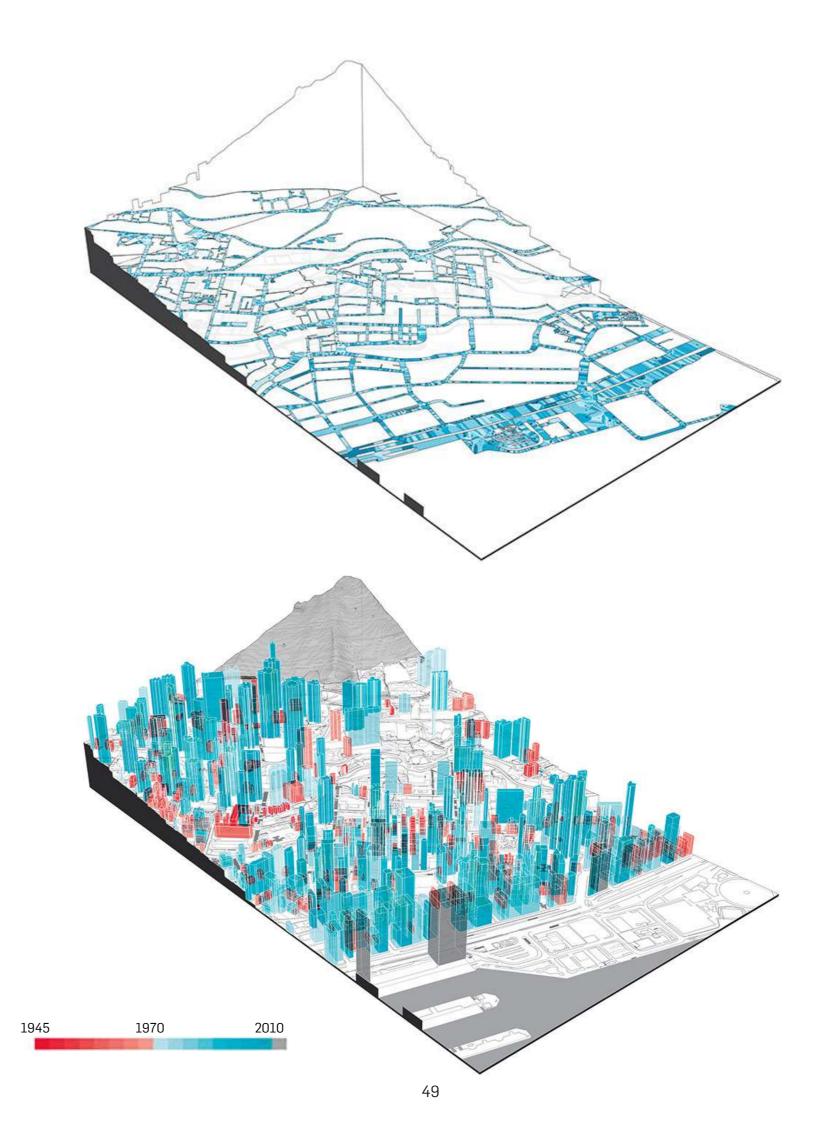


## **URBANIZATION DEVELOPMENT EXAMPLE**

This urbanization development example is located from Sai Ying Pun to Mid-Levels, Hong Kong Island, and contains a representative sample of Hong Kong's "characteristics", including forested hillsides, cascading artificial slopes, land obtained through reclamation, and urban structural tramformation from flatland to hillside.

At the same time, The urban development analysis model of Hong Kong Island reflects the shift in building density to a high-rise development pattern that began in the 1970s.





#### **KEYWORDS**

In the research stage of Hong Kong's residential, relevant searches were conducted based on the following Hong Kong's characteristics.

Hong Kong



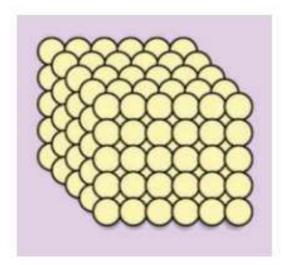
At the end of 19th century, it became an international metropolis. It slowly developed from a small fishing village into a city with a high population density and urbanization level.

Nature



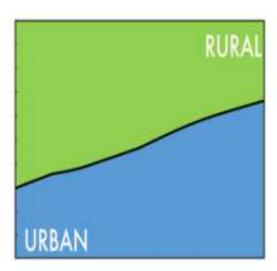
Hong Kong has a large amount of natural environment. Country parks and "green belts" account for 67% of Hong Kong's land area.

High Density



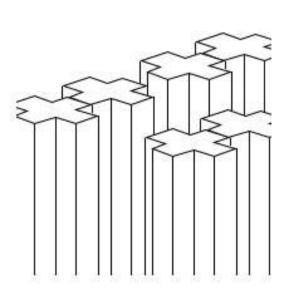
The high population density has brought vitality to Hong Kong, and it has sufficient human resources. In addition, there is also a large demand for housing.

Urbanization



High population density and geographical factors (developed land is 24%) require a high degree of urbanization in Hong Kong to meet employment and housing needs.

Residential

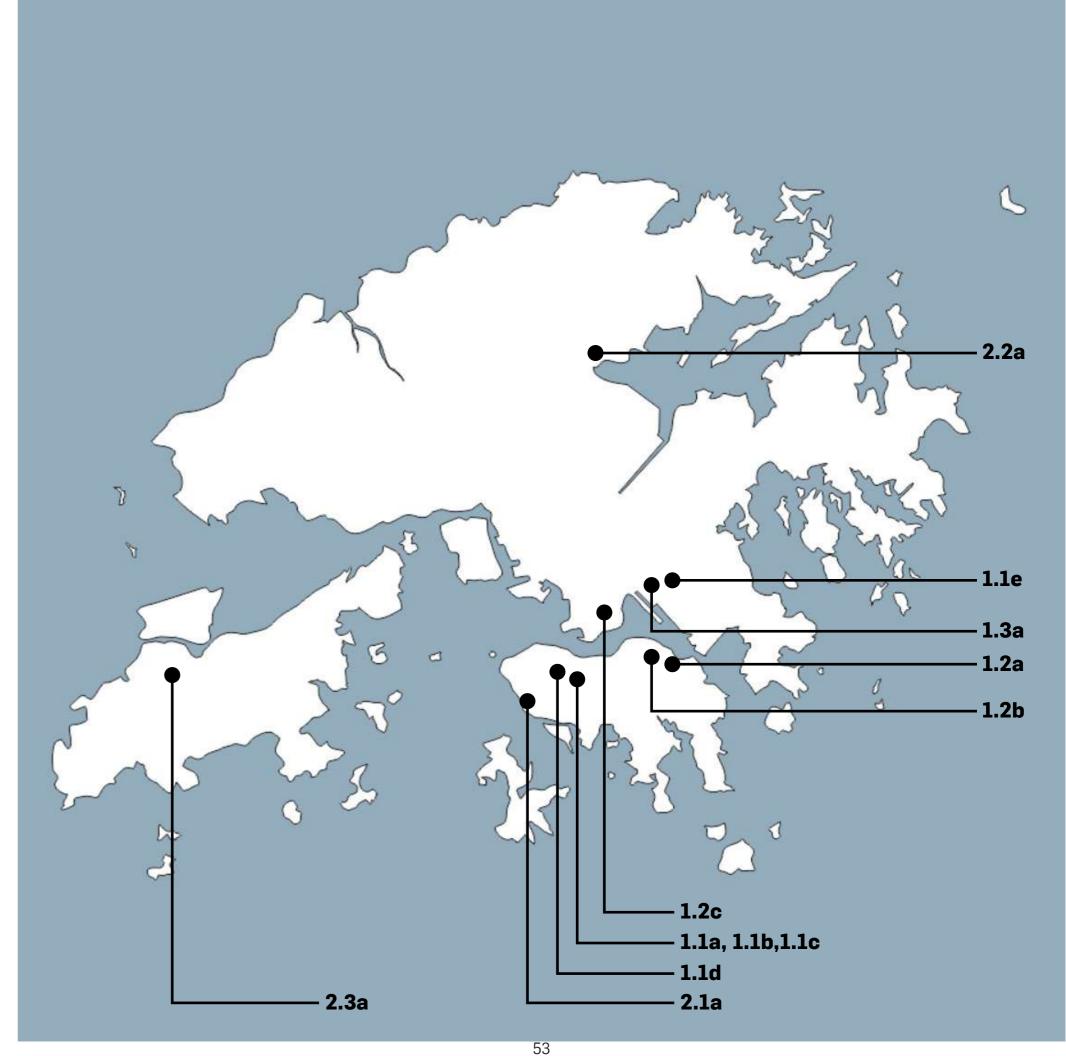


Under the small living environment and high-density buildings, there is no open landscape outside the window. And usually, it will be the building opposite.

### **CASE STUDY OF HONG KONG HOUSING**

The case study of the Hong Kong Housing will be distributed in different places and at different period in the urban area of Hong Kong, concentrated on both sides of Victoria Harbor, including Hung Hom. The case study will cover private housing and public housing to understand the existing housing and Natural relationship:

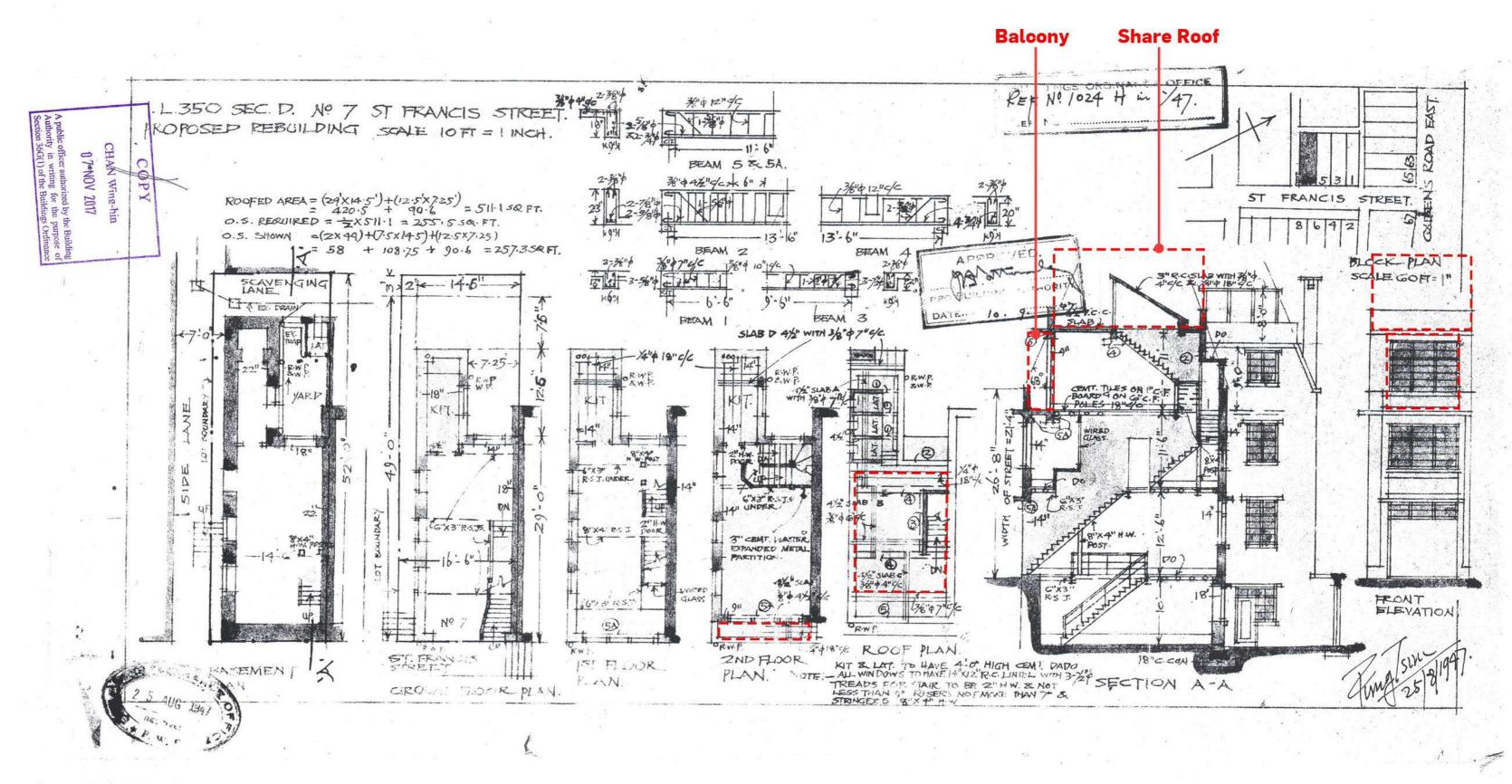
- 1 Private Housing
- 1.1 Single Building a: 1947 - b: 1962 - c: 1977 - d: 1986 - e: 2023
- 1.2 Block Development a: 1968 - b: 1983 - c: 2023
- 1.3 Gated Community a: 2023
- 2 Public Housing
- 2.1 Twin Tower a: 1970
- 2.2 Trident Tower a: 1990
- 2.3 New Cruciform Tower a: 2000



### 1.1a - SINGLE BUILDING - 1947





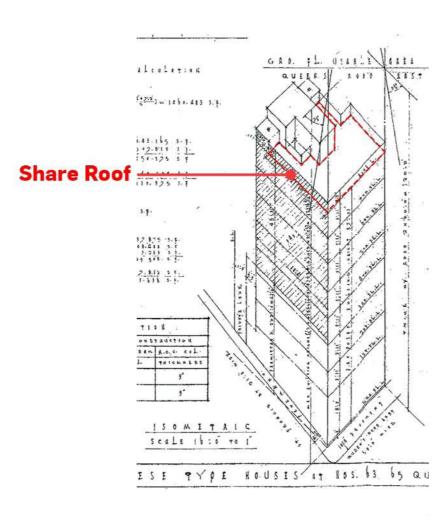


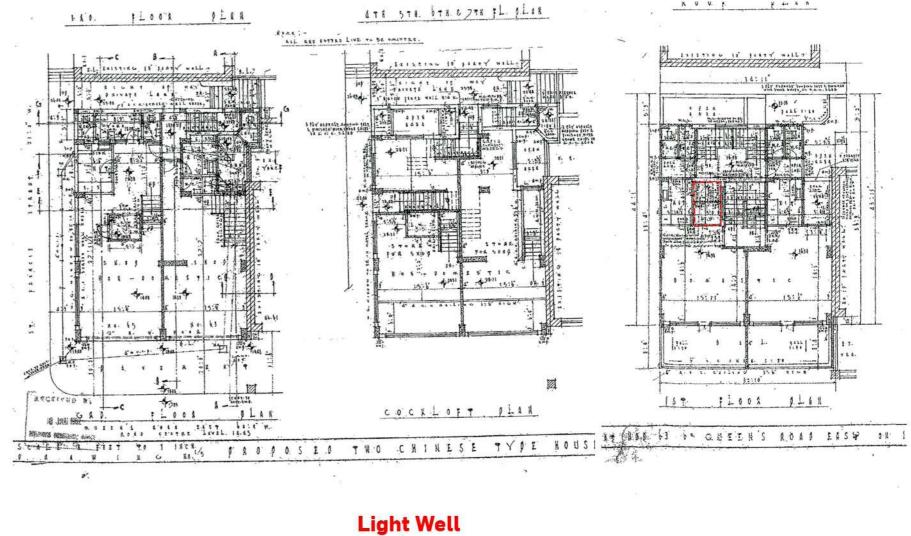
Location: Wan Chai Building Area: ~54.6 s.q.m. Number of Unit: 2

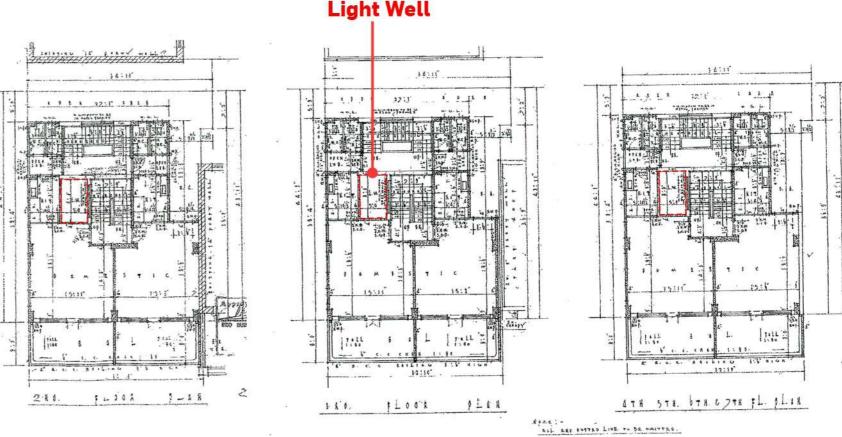
## 1.1b - SINGLE BUILDING - 1962











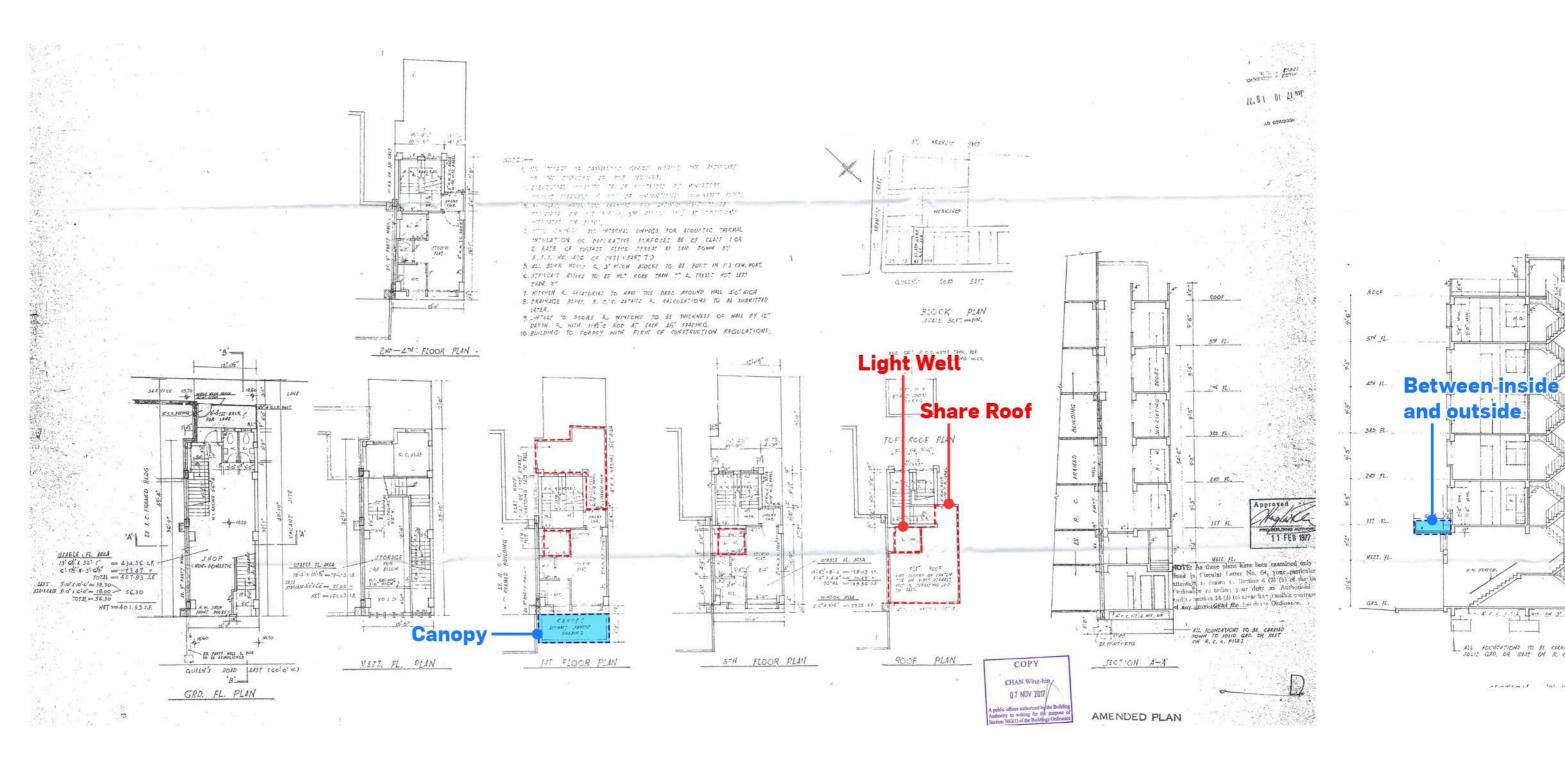
57

Location: Wan Chai Building Area: ~149.4 s.q.m. Number of Unit: 14

## 1.1c - SINGLE BUILDING - 1977







Share Roof

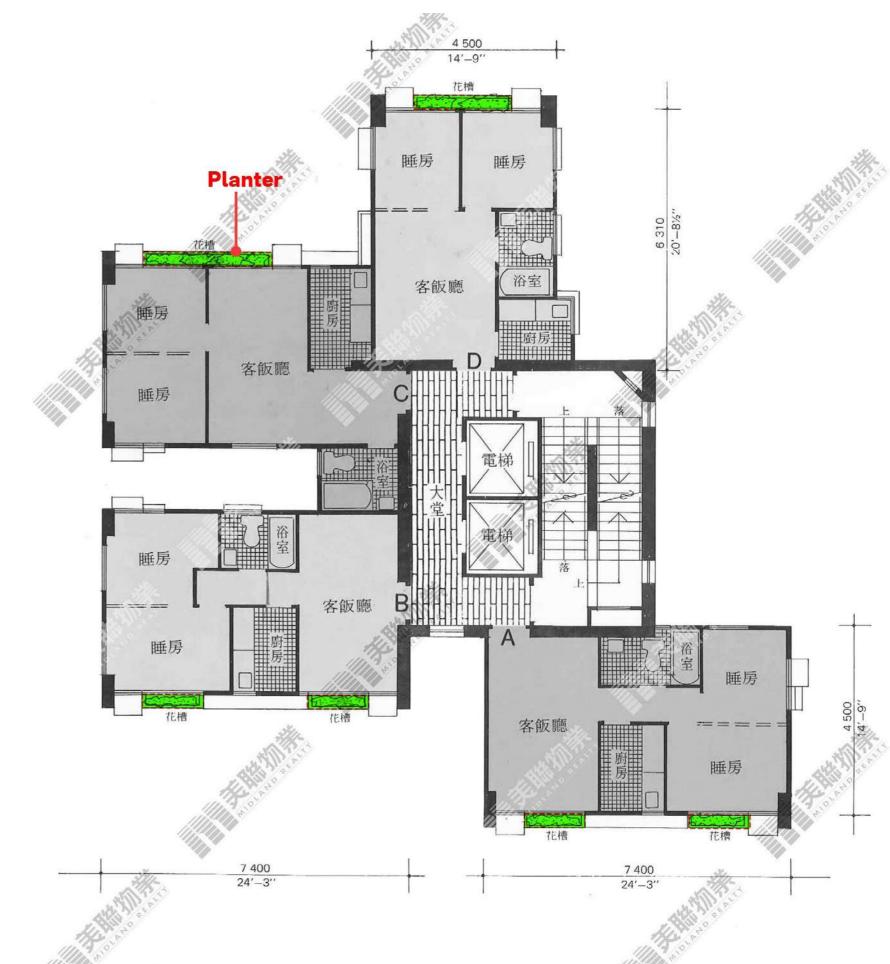
Location: Wan Chai Building Area: ~54.4 s.q.m. Number of Unit: 5

# 1.1d - SINGLE BUILDING - 1986





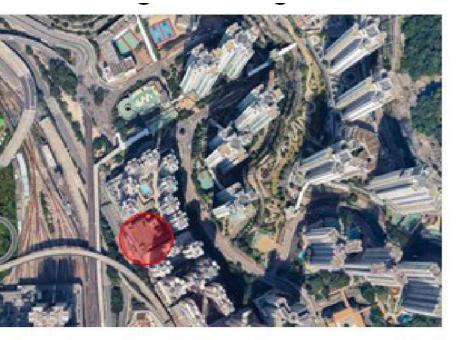
Location: Sheung Wan Building Area: ~275.3 s.q.m. Number of Unit: 44



二樓至廿二樓平面圖 2nd~22nd Floor Plan

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1.1e - SINGLE BUILDING - 2023

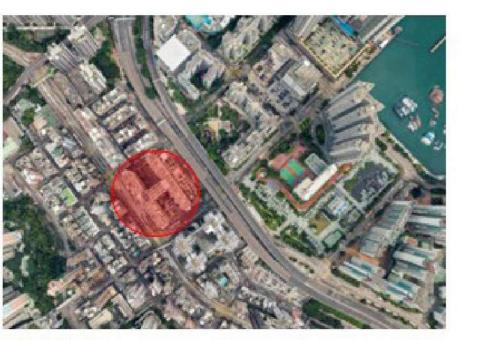




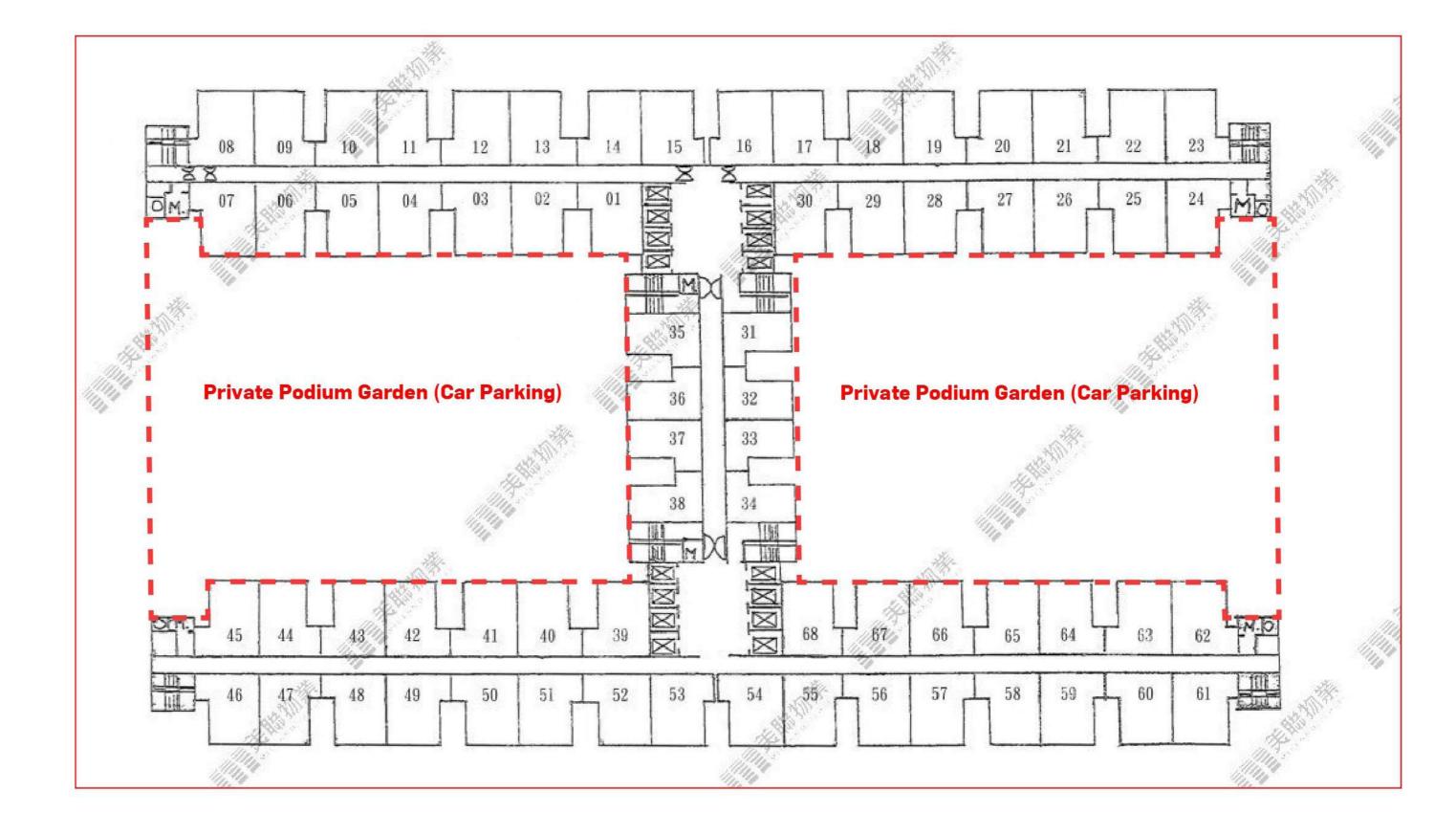
-Private Flat Roof Non-accessable **Flat Roof** 5/F - 12/F and 15/F - 20/F FLOOR PLAN 5樓至12樓及15樓至20樓平面關 Balcony, Spaces between inside and outside Covered Landscape 21/F - 23/F, 25/F - 33/F and 35/F - 36/F FLOOR PLAN 21模至23樓、25樓至33樓及33樓至36樓平面開 Flat Roof of Club House K

Location: Kowloon Bay Building Area: ~734.76 s.q.m. Number of Unit: 294

## 1.2a - BLOCK DEVELOPMENT - 1986

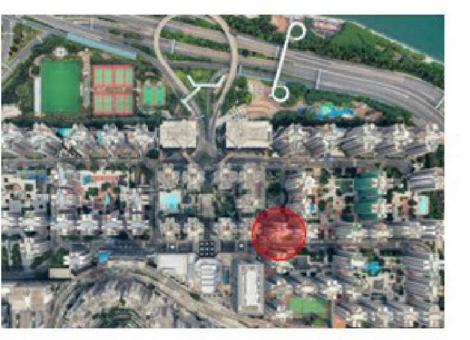




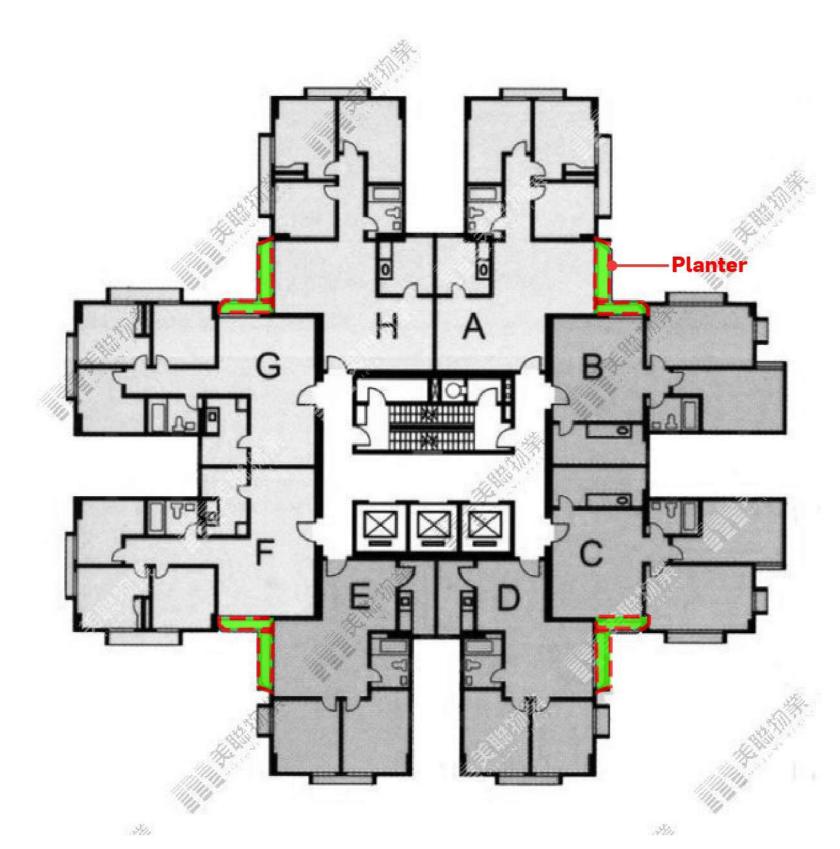


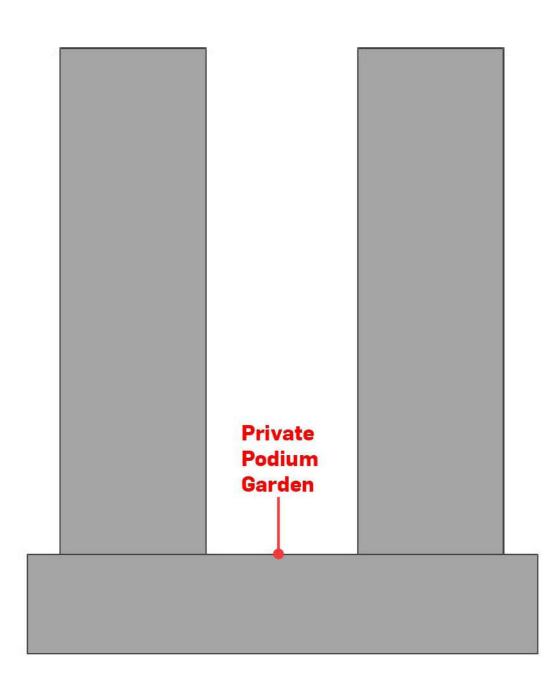
Location: Sai Wan Ho Building Area: ~3205 s.q.m. Number of Unit: 1864

# 1.2b - BLOCK DEVELOPMENT - 1990









Location: Tai Koo

Building Area: ~712.8 s.q.m. Number of Unit: 208

## 1.2c - BLOCK DEVELOPMENT - 2023





Location: Hung Hom Building Area: ~634.8 s.q.m.

Number of Unit: 278



## **1.3a - GATE COMMUITY - 2023**





-Club House High Rise Building **Building** 第1B座 TOWER 1B 第1A座 TOWER 1A -Balcony 第1B座 TOWER 1B 3樓・5樓至12樓・15樓至23樓・25 3/F, 5/F - 12/F, 15/F - 23/F and 25 第1A座 TOWER 1A 3樓、5樓至12樓、15樓至23樓、25樓至33樓 3/F, 5/F - 12/F, 15/F - 23/F and 25/F - 33/F 第1B座 TOWER 1B 35樓 35/F **Private Flat Roof Private Flat Roof** 71

Location: Kai Tak Building Area: ~1521.3 s.q.m.

Number of Unit: 660

#### **1.3a - GATE COMMUITY - 2023**





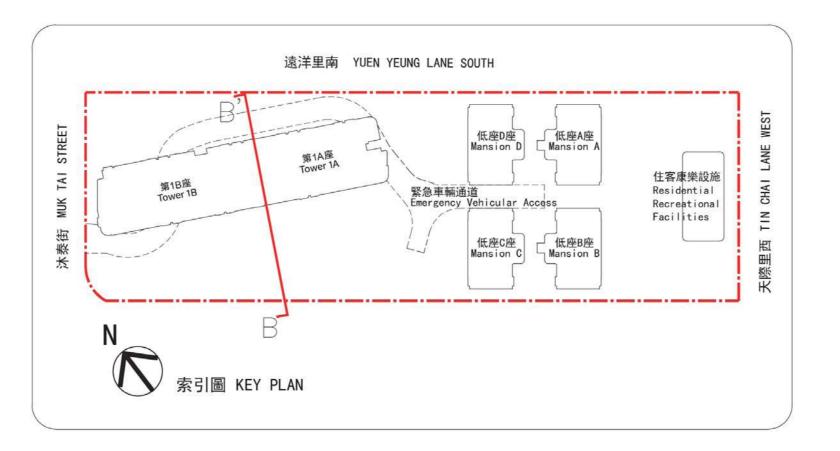
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#### 第1A座及第1B座 TOWER 1A & TOWER 1B

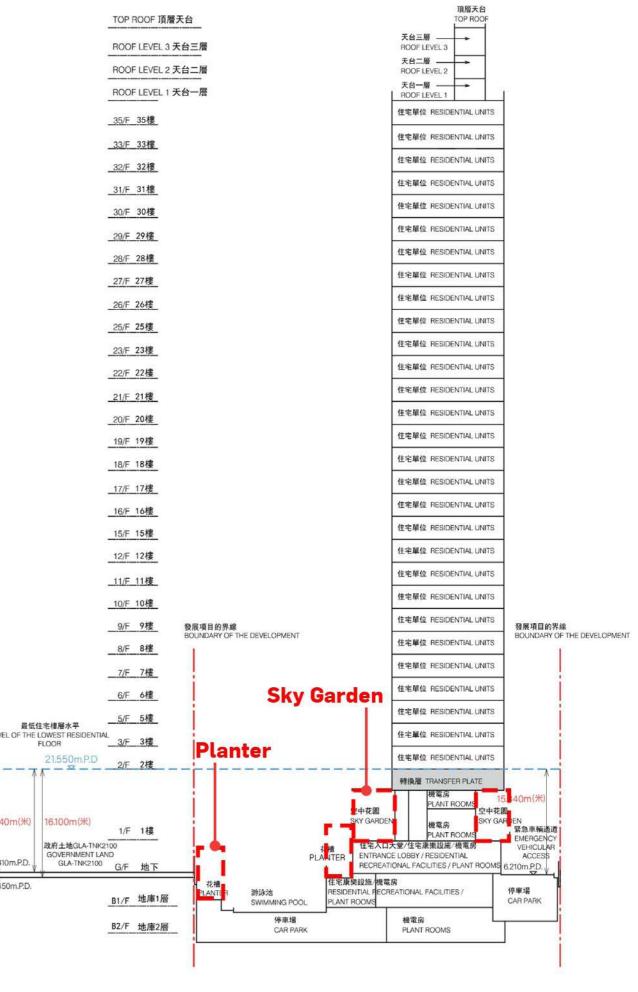
橫截面圖 B-B'

Cross - Section Plan B-B'

- 1. 毗鄰第1A座及第1B座的一段緊急車輛通道為香港主水平基準以上6.210米。
- 2. 毗鄰第1A座及第1B座的一段政府土地GLA-TNK2100為香港主水平基準以上5.450米至6.410米。
- 1. The part of Emergency Vehicular Access adjacent to Tower 1A & Tower 1B is 6.210 metres above the Hong Kong Principal Datum (m.P.D.).
- 2. The part of the Government Land GLA-TNK2100 adjacent to Tower 1A & Tower 1B is 5.450 metres to 6.410 metres above the Hong Kong Principal Datum (m.P.D.).



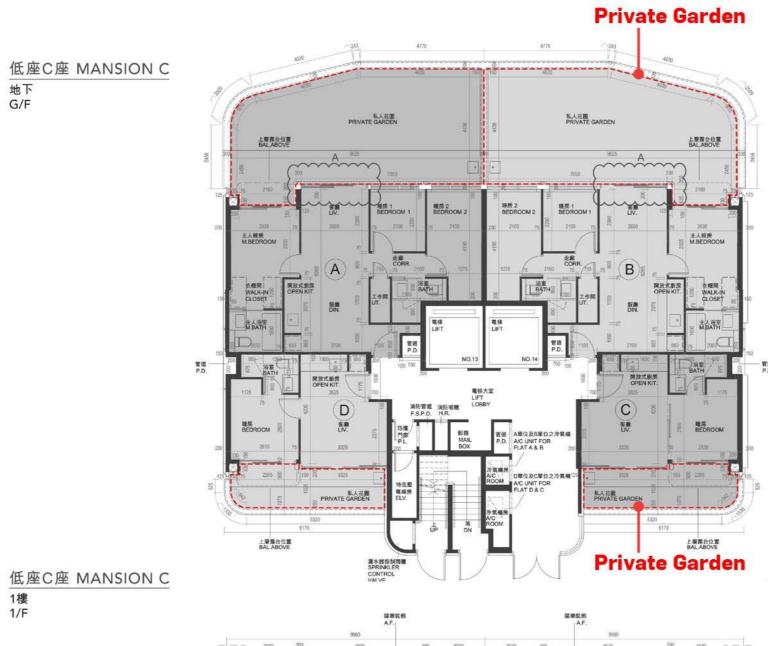
# 圖例 LEGEND 發展項目邊界線 Boundary of the Development 香港主水平基準以上高度(米) Height in metres above the Hong Kong Principal Datum (m.P.D.) 藍色虛線為該建築物最低住宅層水平 Blue dotted line denotes the level of the lowest residential floor of the building



#### **1.3a - GATE COMMUITY - 2023**





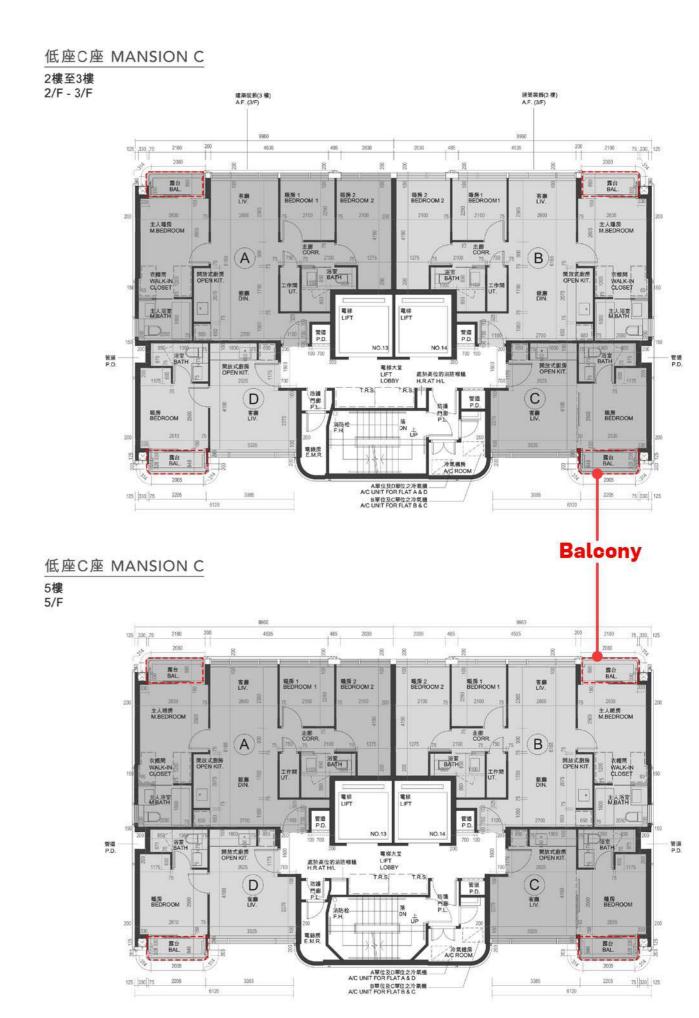


Balcony

Location: Kai Tak
Building Area: ~1091.4s.q.m. (Sum of 4)

Number of Unit: 20\*4 = 80

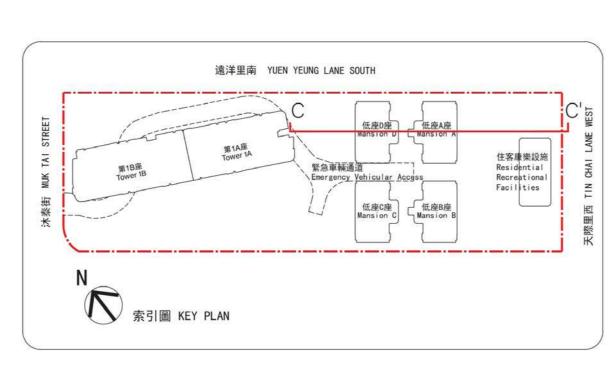
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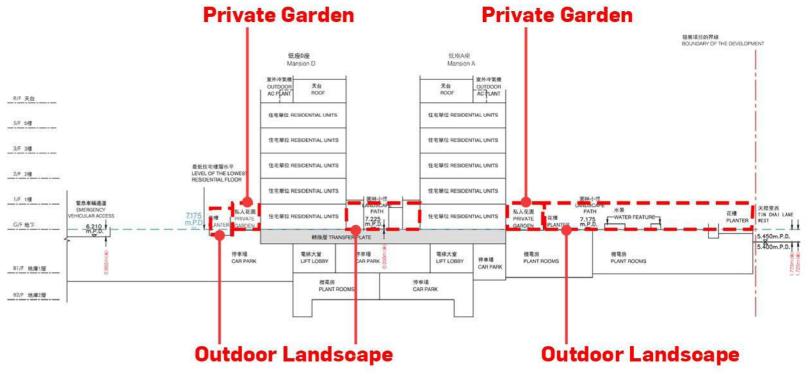


**1.3a - GATE COMMUITY - 2023** 









#### 圖例 LEGEND

76

發展項目邊界線 Boundary of the Development

香港主水平基準以上高度(米)
Height in metres above the Hong Kong Principal Datum (m.P.D.)
藍色虛線為該建築物最低住宅層水平
Blue dotted line denotes the level of the lowest residential floor of the building

## Building Regulation for GFA Concession Appendix A (PNAP APP- 151)

List of GFA Concessions 10%

		Practice Notes	Features subject to compliance with the pre- requisites in para. 6 & 7 of PNAP APP-151	Features subject to the overall cap of 10% in para.4 of PNAP APP-151	
	GFA under regulation 23(3)(b) of the lanning) Regulations (B(P)R)				
1.	Carpark and loading/unloading area excluding public transport terminus	PNAP APP-2 & APP-111			
2,	Plant rooms and similar services				
2.1	Mandatory feature or essential plant room, area of which is limited by respective PNAP or regulation, such as lift machine room, telecommunications and broadcasting (TBE) room, refuse storage chamber, etc. (1)	PNAP APP-35 & APP-84			
2.2	Mandatory feature or essential plant room, areas of which is NOT limited by any PNAP or regulation, such as room occupied solely by fire service installations (FSI) and equipment, meter room, transformer room, potable and flushing water tank, etc. (2)	PNAP APP-2 & APP-42			
2.3	Non-mandatory or non-essential plant room, such as air conditioning (A/C) plant room, air handling unit (AHU) room, etc. (3)	PNAP APP-2 & APP-42	1	1	
Disregarded B(P)R	I GFA under regulation 23A(3) of the				
3.	Area for picking up and setting down persons departing from or arriving at the hotel by vehicle	PNAP APP-40			
4.	Supporting facilities for a hotel	PNAP APP-40			
Green Featt	ures under Joint Practice Notes (JPNs)				
	Balcony for residential buildings	JPN1	1	1	
i,	Wider common corridor and lift lobby	JPN1	1	1	G.F.A. CONCESSION = 1 S.Q.M. max
	Communal sky garden	JPN1 & 2 PNAP APP-122	1		
	Communal podium garden for non-residential buildings	JPN1	1		
),	Acoustic fin	JPN1	1		
0.	Wing wall, wind catcher and funnel	JPN1	1		
11.	Non-structural prefabricated external wall	JPN2	1	1	
12,	Utility platform	JPN2	1	1	AREA = 1.5 S.Q.M.
13.	Noise barrier	JPN2	/		G.F.A. CONCESSION = 0.75 S.Q.M. ma

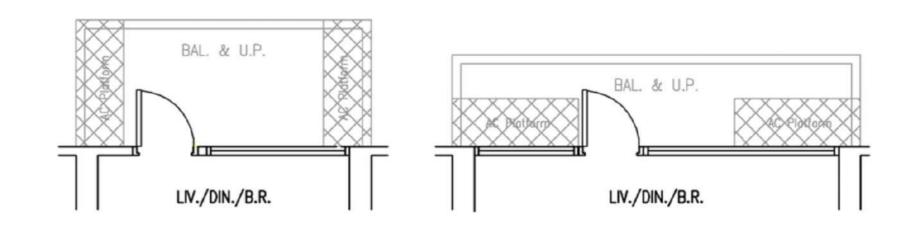


Figure B3: AC Platforms in combined Balcony and UP (one AC platform is also acceptable)

#### **SUMMARY OF PRIVATE HOUSING**

The trend in private residential building is toward ever-higher densities.

Single buildings have been built since a long time ago and are still being built today. However, with the emergence of new development models such as block development and gated community, single buildings no longer dominate the market.

Block development began to emerge in the midto-late 20th century and has now become a mainstream trend in urban redevelopment.

Gated communities are mainly concentrated in the suburbs. The development in the city center is mainly due to the reclamation of the adjacent sea and the re-planning of the airport land after the relocation of Kai Tak Airport.

Residential buildings in 2023 all have one thing in common, they all have attached balcony to meet regulations and make more money. This greenary feature is superficial and does not really respond to Hong Kong's natural environment.

Most of the old residential buildings are crossshaped. This design method allows natural light can be obtained to meet different rooms in the unit include toilets to meet the regulations at the time. Newer and under-construction residential buildings tend to be rectangular because of the emergence of open kitchens and toilets no longer need lighting. Rectangular residential buildings can provide more units. And these 2 All kinds of common residential buildings have low-rise podiums for commercial purposes to meet the daily needs of residents.

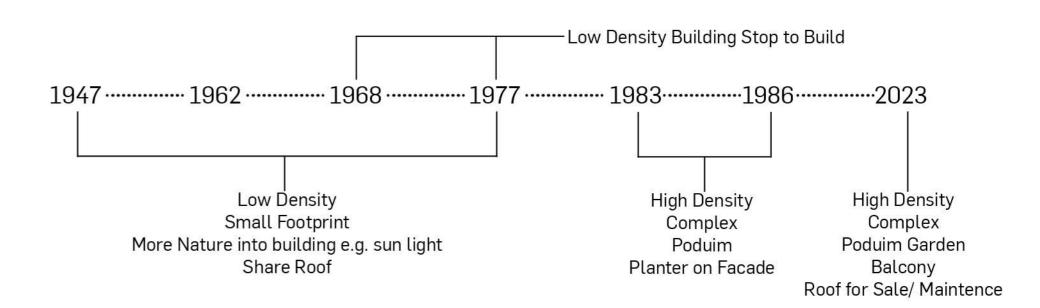
In addition, there are some low-density tenement buildings, which are being replaced by new rectangular residences.

The cross shape have 1 core serving 6-8 units per floor. The rectangular residential have 1 core serving 9-13 units per floor, they are taller than cross-shaped residential, and provide balcony to allow residents to contact the outside environment.

Newer rectangular shape has higher density than older cross-shaped residential, and the rectangle can be extended if conditions allow. Cross-shaped houses Based on the regulations and controls on area at the time. They could not become longer. And the 2 common types lacked green facilities and public spaces on the residential floors.

The older cross shape slowly transforming into the newer rectangle, and the process of transformation between them can become the potential reapplication of the project.

Private Housing				
Year	Туре	Building Area	Nos. of Unit	
		(S.Q.M.)		
1947	Single Building	~54.6	2	
1962	Single Building	~149.4	14	
1968	Block Development	~3205	1864	
1977	Single Building	~54.4	,5	
1983	Block Development	~712.8	208	
1986	Single Building	~275.3	44	
2023	Single Building	~734.76	294	
2023	Block Development	~634.8	278	
2023	Gated Community (H)	~1521.3	660	
2023	Gated Community (L)	~1091.4	80	

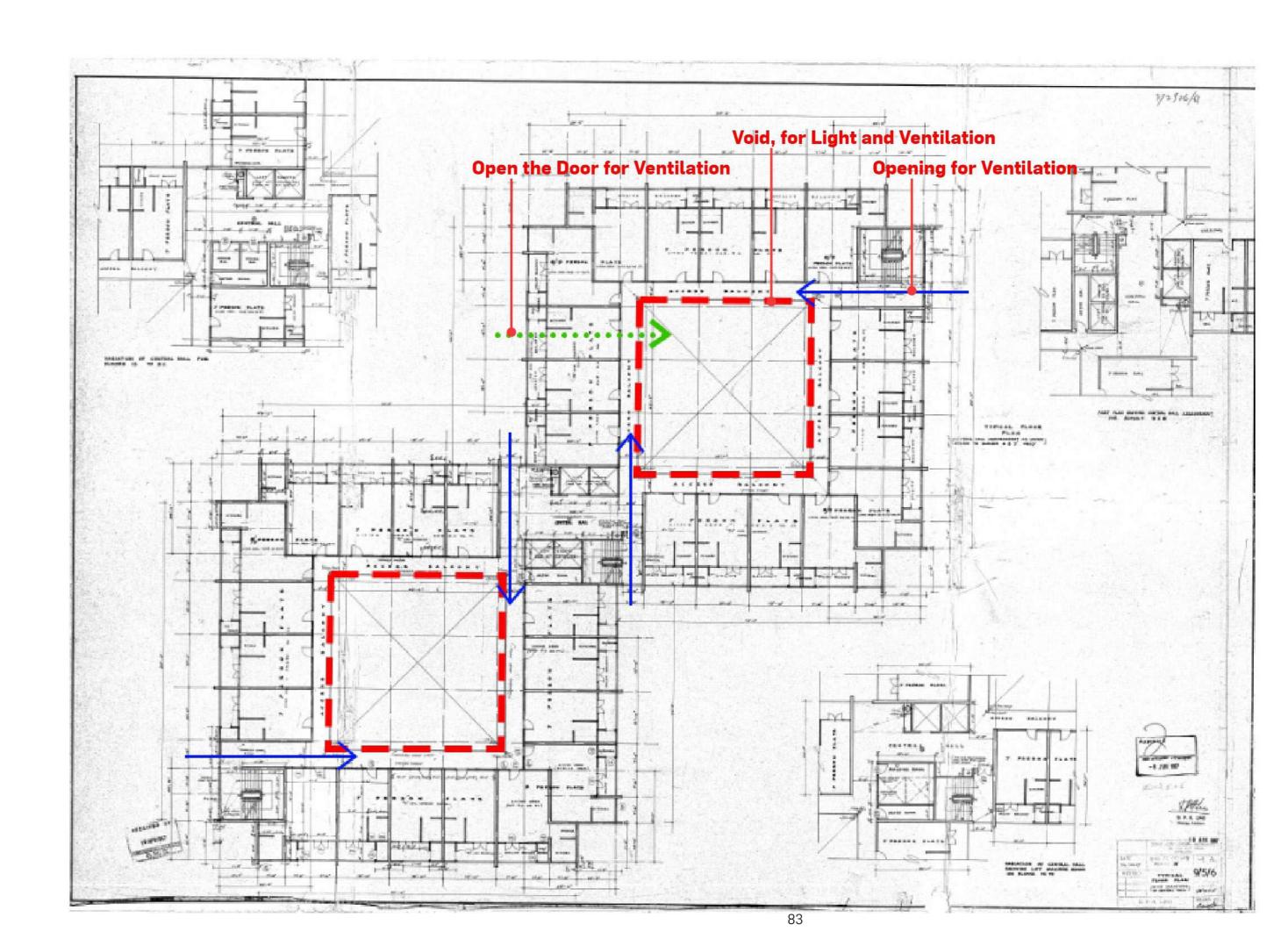


#### 2.1a - TWIN TOWER - 1970



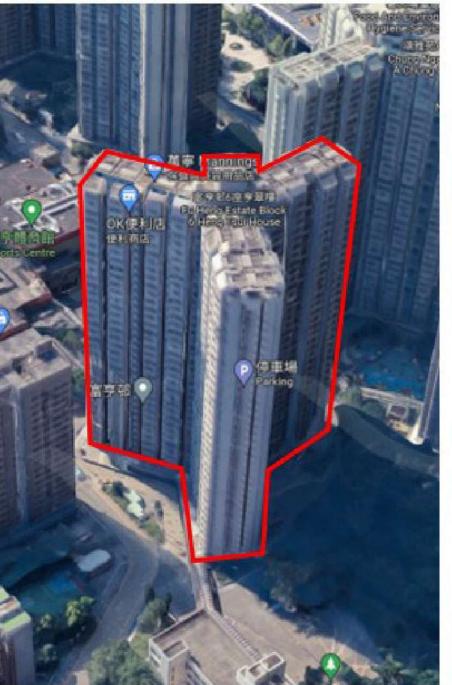


Location: Wah Fu Estate Building Area: ~1753.2 s.q.m. Number of Unit: 20\*4 = 765



#### 2.2a - TRIDENT TOWER - 1990





-Opening for Ventilation 標準型大廈 Y三型 標準樓層平面圖 标准型大厦 Y三型 标准楼层平面图 STANDARD BLOCK TRIDENT 3 TYPICAL FLOOR PLAN

85

Location: Fu Heng Estate Building Area: ~1561.5 s.q.m. Number of Unit: 816

#### 2.1c - NEW CRUCIFORM TOWER - 2000





**Opening for Ventilation** STANDARD BLOCK NEW CRUCIFORM TYPICAL FLOOR PLAN 標準型大廈 新十字型 標準樓層平面圖 标准型大厦 新十字型 标准楼层平面图 15 0 15 3 45 6 m

87

Location: Yat Tung Estate Building Area: ~816 s.q.m. Number of Unit: 400

#### **SUMMARY OF PUBLIC HOUSING**

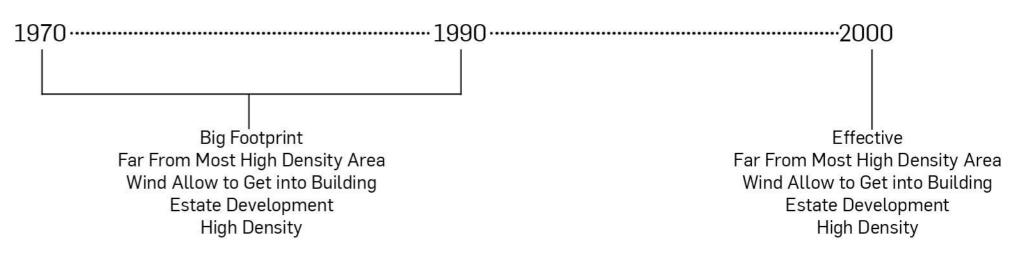
Since the original housing for low-income people had many safety and health hazards, the emergence of public housing in the 1970s aimed to solve the above problems.

Public housing is mainly located on the edge of the city, with an overall layout designed in the form of an estate and being larger in size. They were easier to get in touch with the natural environment maintain than housing in the city center.

In the early days, public housing had more natural elements and limited the views outside residents' windows. However, with more efficient design methods, public housing became smaller and smaller in paying attention to the natural environment. Instead, it focused more on smaller Land to build more units to meet population needs.

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Public Housing				
Year	Туре	Building Area	Nos. of Unit	
		(S.Q.M.)		
1970	Twin Tower	~1753.2	765	
1990	Trident Tower	~1561.5	816	
2000	New Cruciform Tower	~816	400	



#### **Residential Should Closer to Nature**

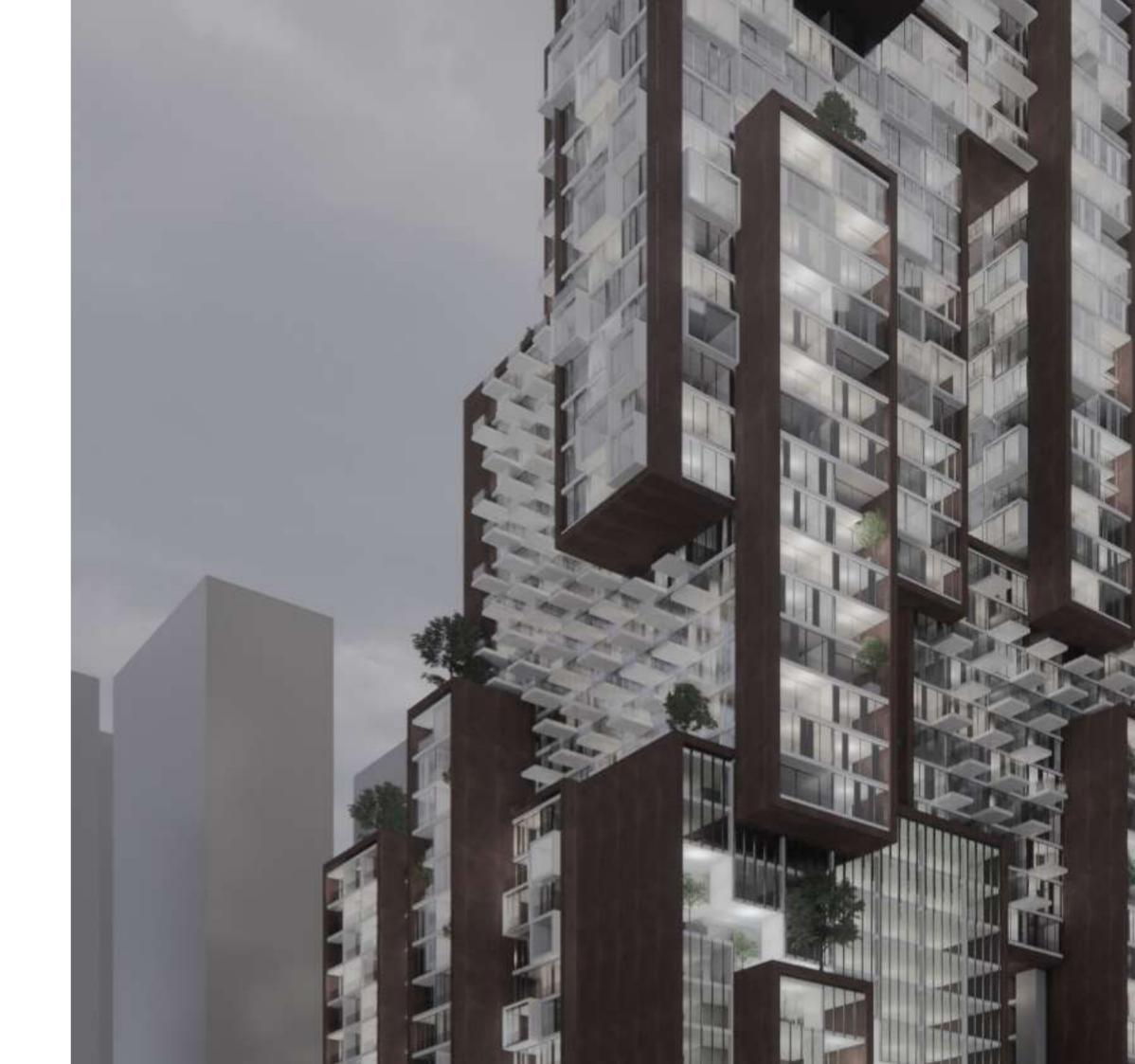
《重慶森林》(森林means forest), whose English name is "Chungking Express", is one of the classic masterpieces of Hong Kong movies. The story takes place in Chungking Mansions. The title "Chungking Express" uses Chungking Mansions in Hong Kong as a metaphor to refer to the city's cement forest, telling the story of how people live in a dense modern city. The inner world of loneliness in urban Hong Kong life. The title of this 1994 film reflects the psychological state of Hong Kong people living in high-density buildings, and also reflects that high-density residential cities have a long history in Hong Kong.

After the emergence of modernist architecture, many architects have focused on the relationship between residences and the natural environment. Respecting the site and the nature has become an important topic for architects, such as Philip Johnson's glass house. Great architects have been Respect the natural environment. The United Nations also began to propose the concept of "ecological city" in 1971.

We are constantly indoctrinated into the importance of the natural environment for residences, but the urban/residential development direction in Hong Kong is the opposite, so Residential Should Closer to Nature.

### 4 PROJECT

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## PUBLIC SPCAE **RESIDENTIAL GREEN FEATURE & SHOPPING** MALL **UNDERGROUND CAR PARKING**

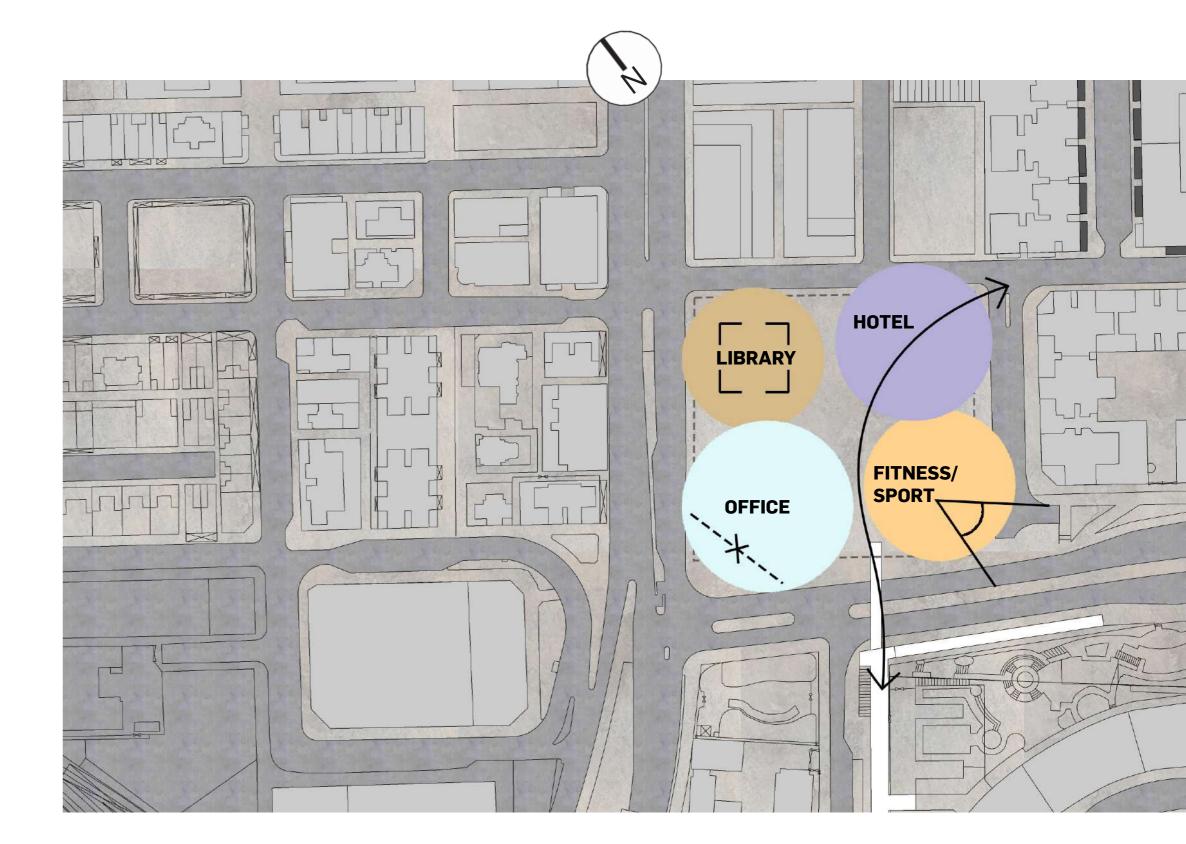
#### **PROGRAM**

Most of the existing residential towers in Hong Kong have a common concept. The floors (podium) below 15 meters are mostly used for commercial purposes such as shopping malls. The floors above 15 meters are residential, and most of them are stacked upwards from typical floors. Most of the newer buildings are equipped with a balcony. This is because of the Hong Kong government regulations mentioned in the above study that as a green feature, the balcony can be exempted from half of the floor area.

Based on the above reasons and the residential development model of Hung Hom District, the combination of residential and shopping malls will be the subject of this design. At the same time, as the residential space in Hong Kong becomes smaller and smaller, public space will become a part of daily life in the residence. share.

Public space will become a bridge of symbiosis between architecture and nature. Green features such as balcony will complement public space and will no longer be just a tool for making money.

Therefore, the program of this project will focus on four aspects: residences, shopping malls, natural elements and public spaces, while adding some different commercial elements to ensure that this higher-density residential complex than the existing one can meet the daily needs of residences.



#### **COMMERCIAL APPROACH**

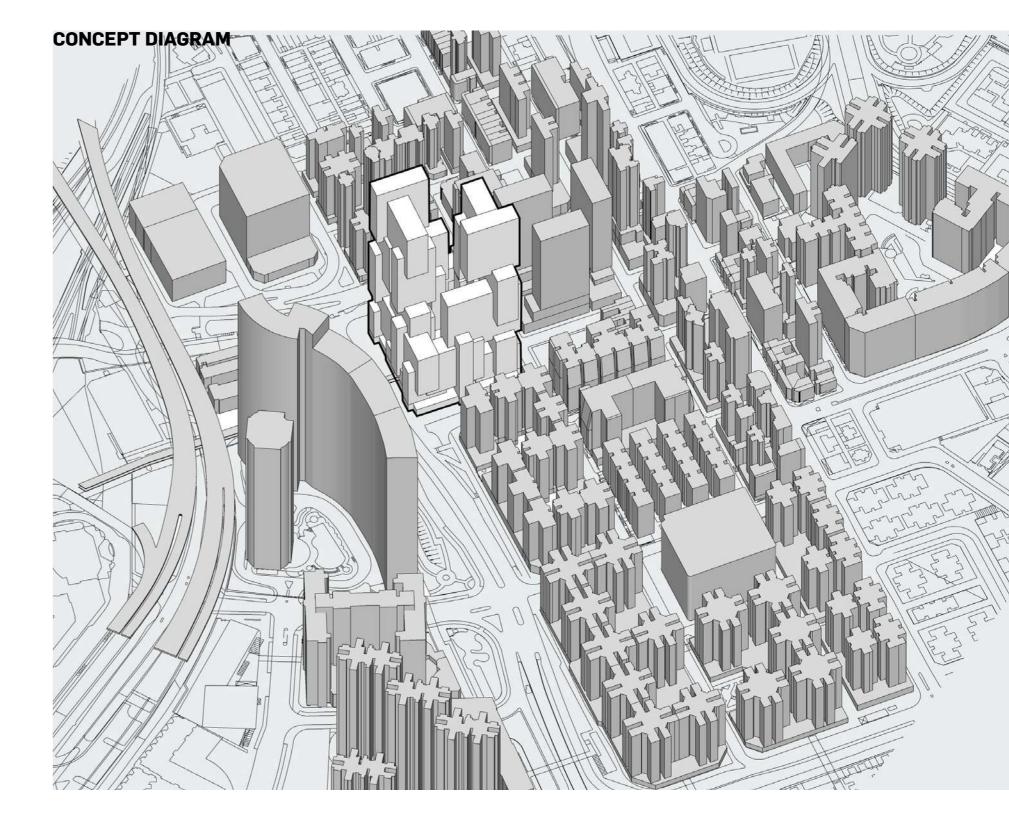
Depending on the site surrounding conditions such as the voice of the site environment, convenience, views, and the user's purpose, there will be different program responses in different corners of the site:

Oiffce: The office will be arranged on the busiest road, close to the main routes of external flow, such as bus stops and footbridges connecting the transportation hub. And it is far away from the community, so people going to work will not cause much confusion to the residents of the Hung Hom community.

Fitness/sport: A good landscape matches the exercise. Facing nearby buildings is more conducive to relaxation and concentration during exercise. At the same time, the flow of people on the street is minimal compared to other corners, and people on the treadmill will not be distracted by people on the street and avoid an awkward situation for pedestrians to watch.

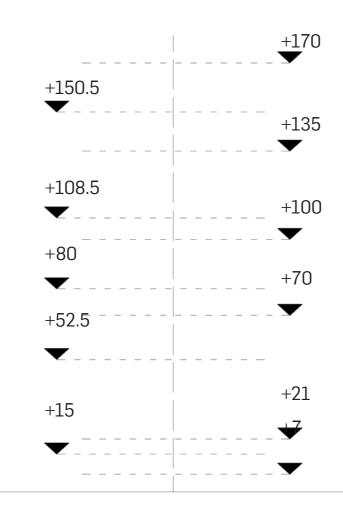
Hotel: The location of the Hotel is closest to the Hung Hom community, making it easier for travelers to connect with the community. At the same time, the main route for travelers to the hotel is the footbridge connecting the transportation hub. From the train/subway station, you can directly access the public platform of this building. And enter the hotel lobby located on 2/F without going through the ground.

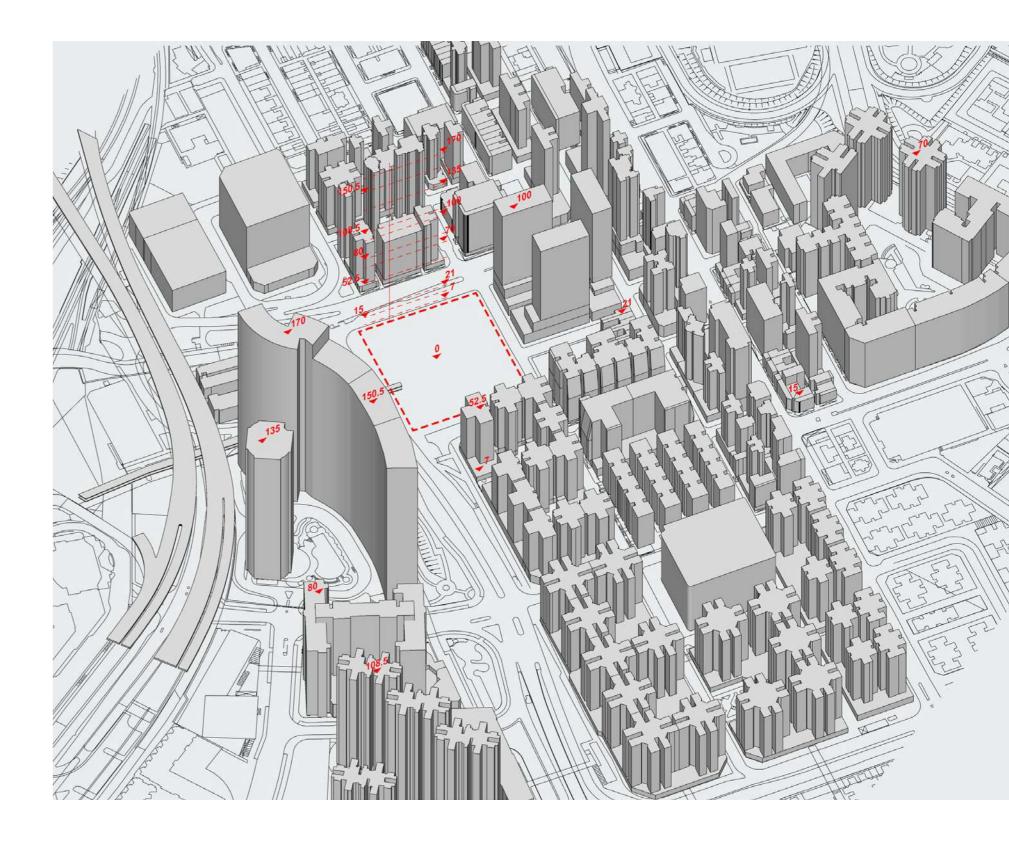
Library: The library is located facing a relatively busy street, but library users are more focused on reading, and it is connected to the outdoor space of the inner garden.



## SURROUNDING BUILDING HEIGHT AS A GUILD LINE

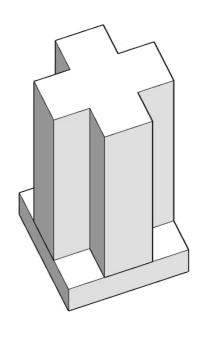
The Hung Hom community is being rebuilt. Some old buildings are slowly being replaced by new ones. The skyline of the community is getting higher and higher. The memory of the old community is disappearing. The height of the nearby buildings that represent different periods is used as a guide to preserve the community. trace

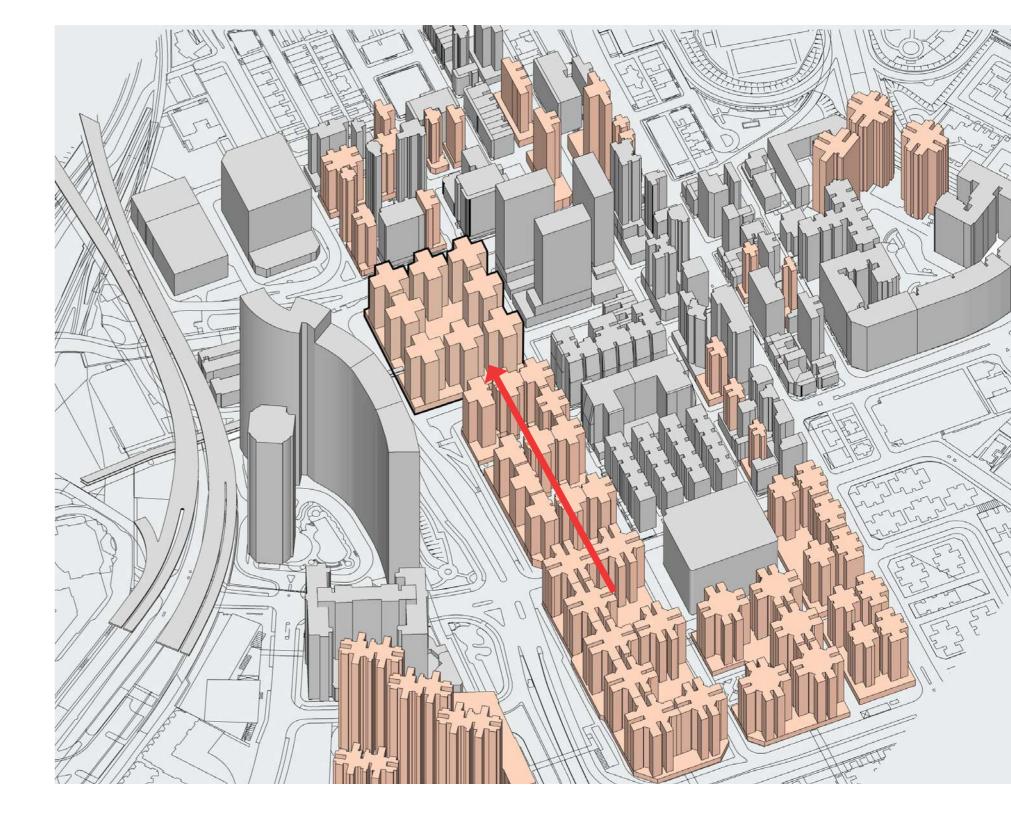




#### **EXTENSION OF COMPLEX**

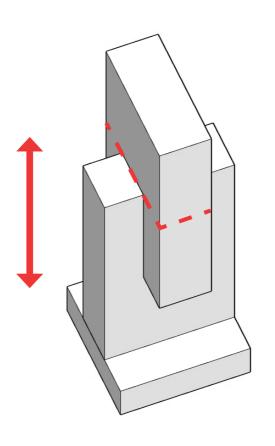
From a morphological point of view, the new design is based on eight cross-shaped old residential complexes, which serve as an extension of the Hung Hom Bay Center and Whampoa Gardens, which are also cross-shaped residential complexes in the southeast of the site.

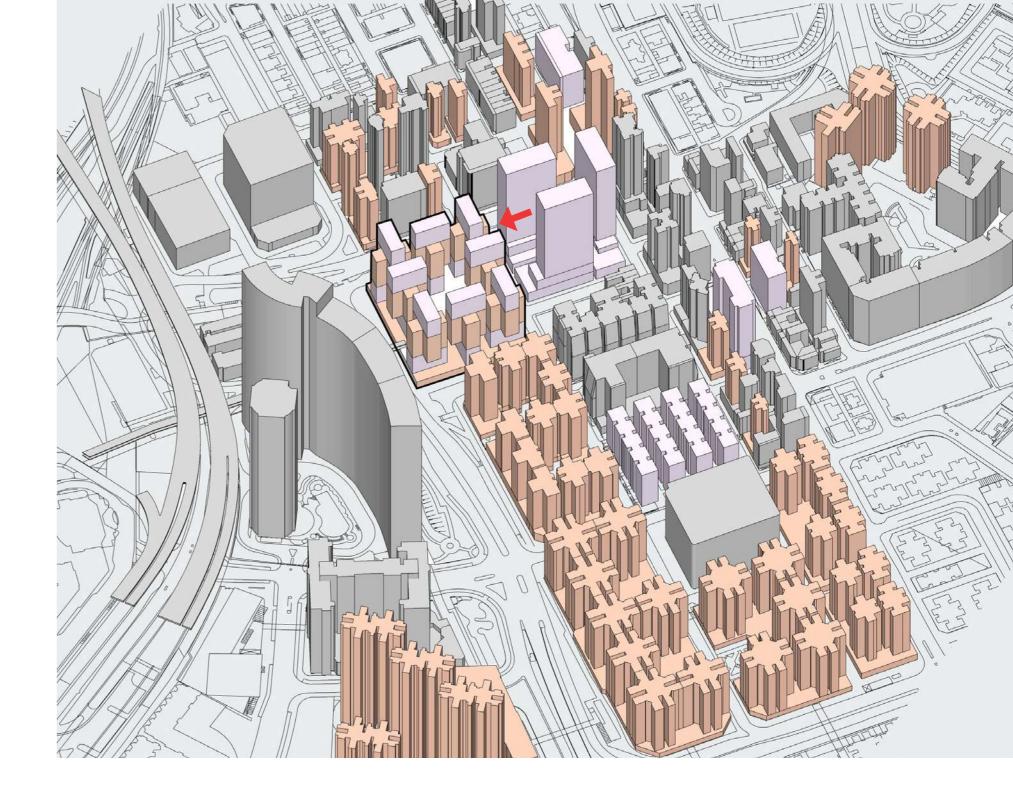




#### RISE

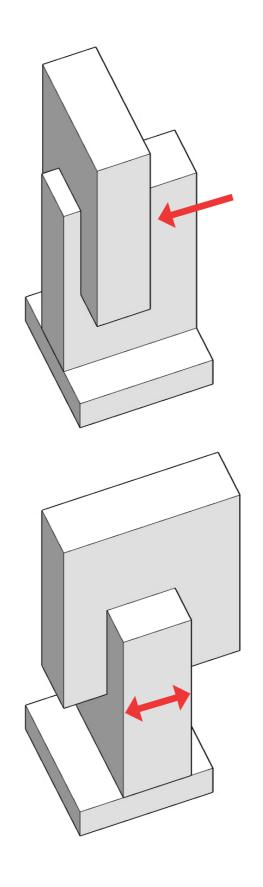
Lift one side of the cross upward and turn it into a rectangular residential profile on the northeast side of the site, thereby retaining the atmosphere of the community and integrating the new and old residential patterns common in these two communities into one building.

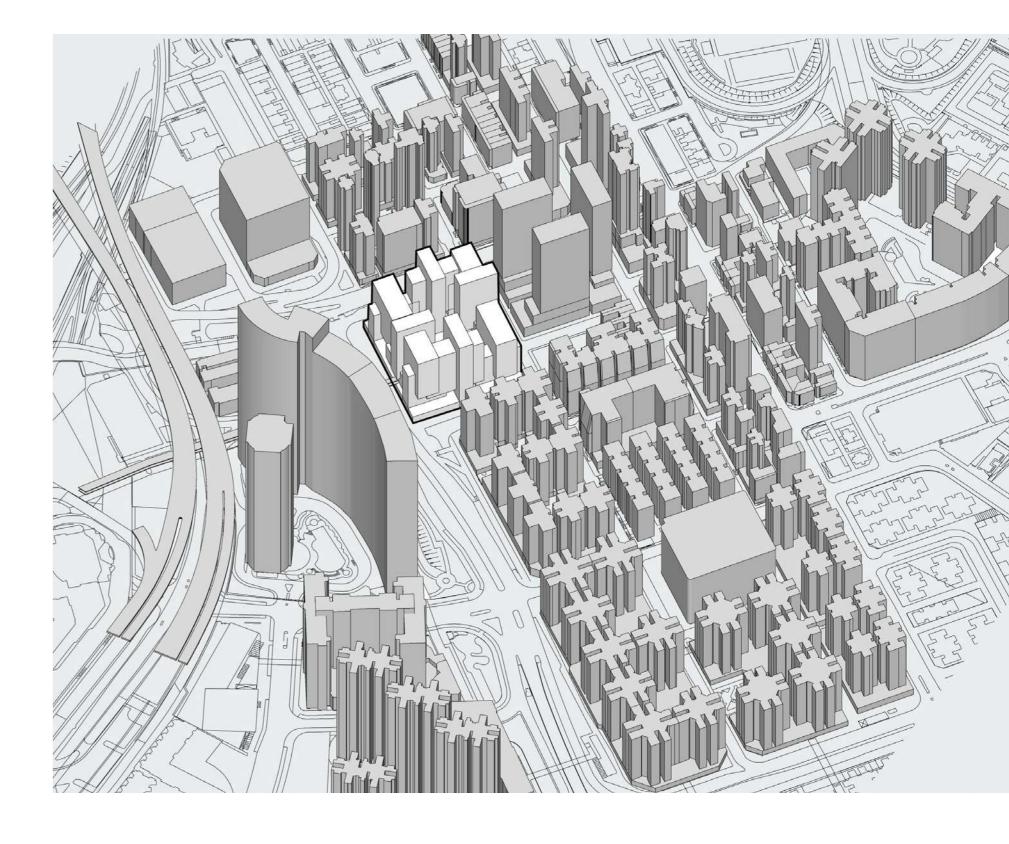




#### **SHIFT & VARIETY**

Such strategies can be combined into different combinations according to existing residential patterns, thereby creating different spaces. Residential buildings are no longer huge and boring typical models.







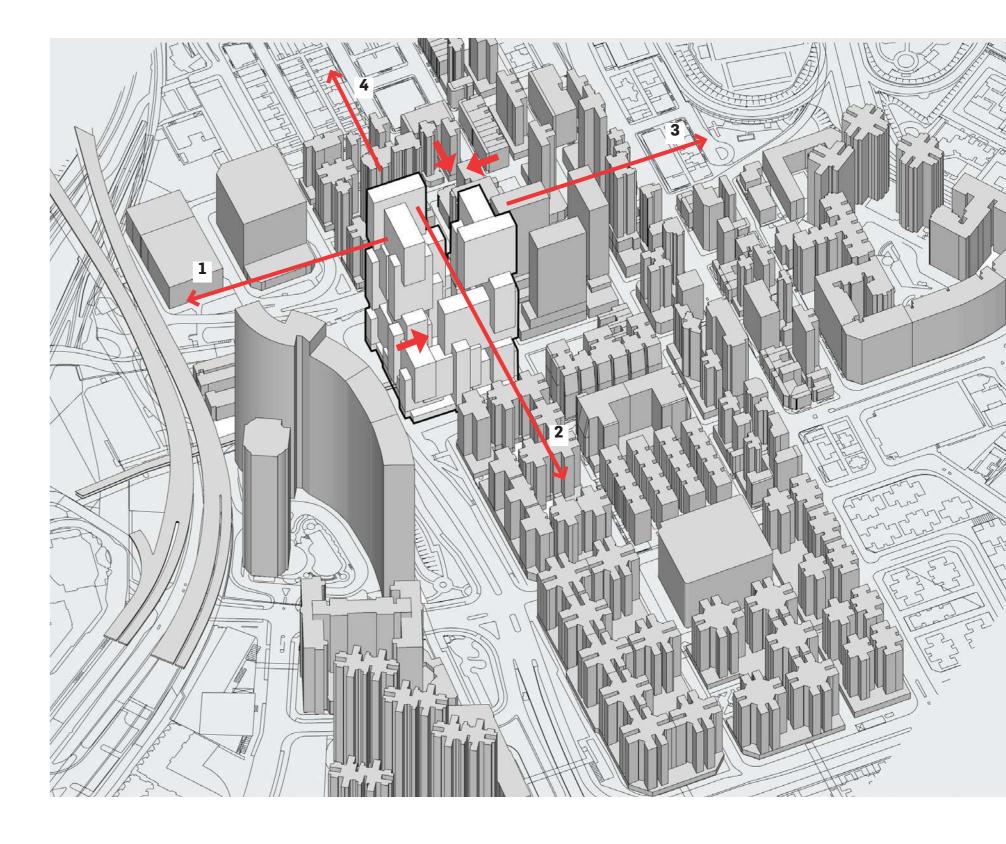
SETBACK

Setback according to the surrounding landscape to avoid blocking the landscape of nearby buildings and itself.





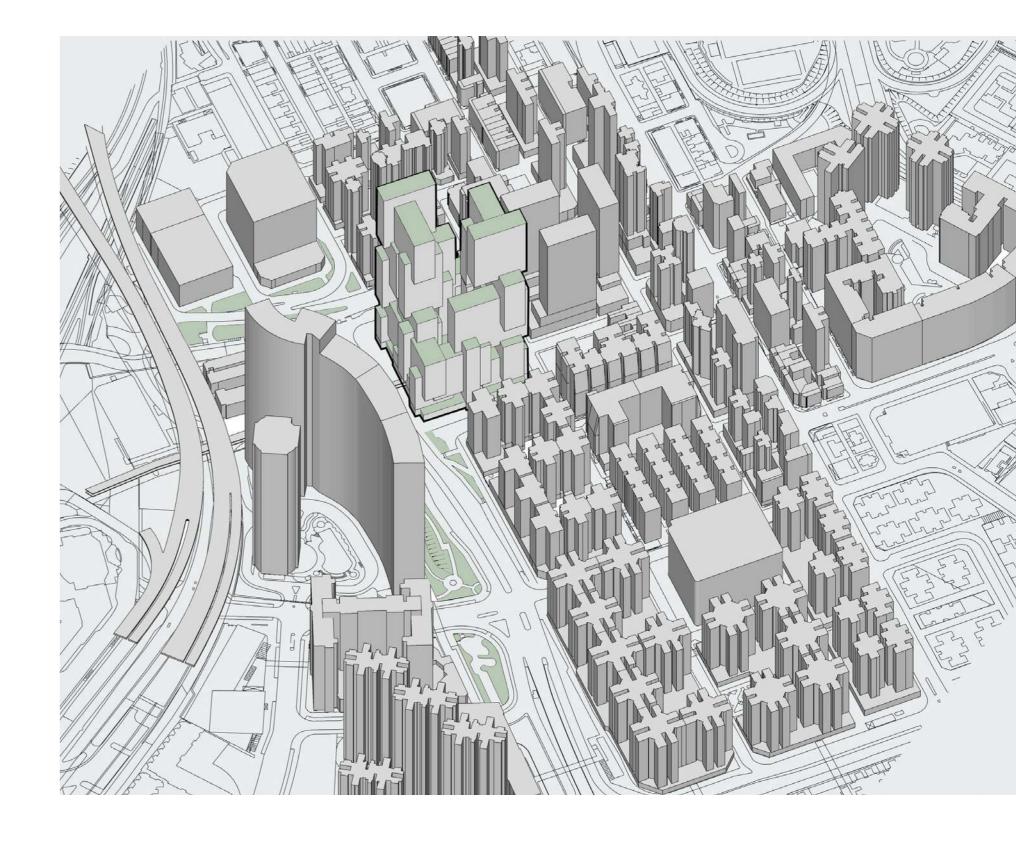




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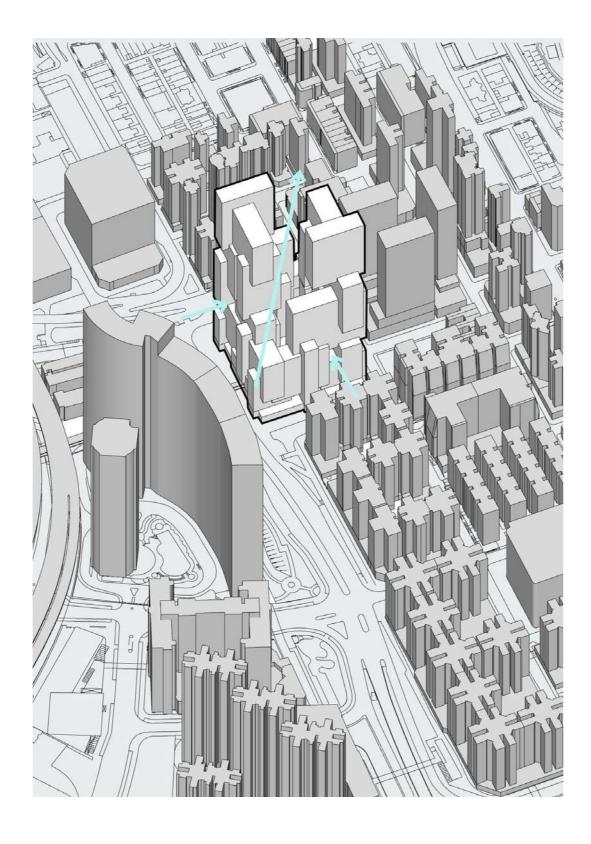
#### **GREEN POINT**

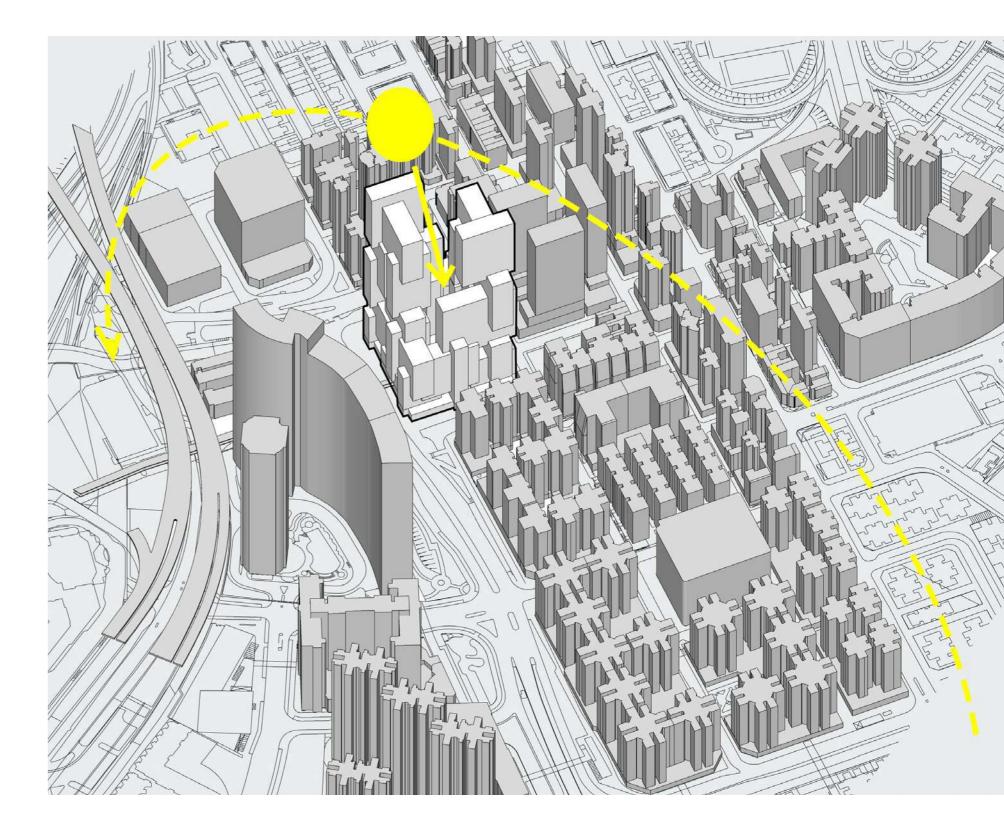
According to the above strategy, some distance is reserved between different "boxes" to provide different sky gardens and become the concentration point of nearby green facilities, turning this high-rise building into a "vertical forest" rather than becoming part of the "concrete Jungle" in Honng Kong. This brings a new atmosphere to the community and allows users and visitors to pay more attention to the relationship between living and nature.



#### WIND AND SUNLIGHT

In addition to green public spaces, natural elements such as wind and sunlight can easily enter and pass through the interior of the building, allowing air to circulate.



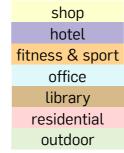


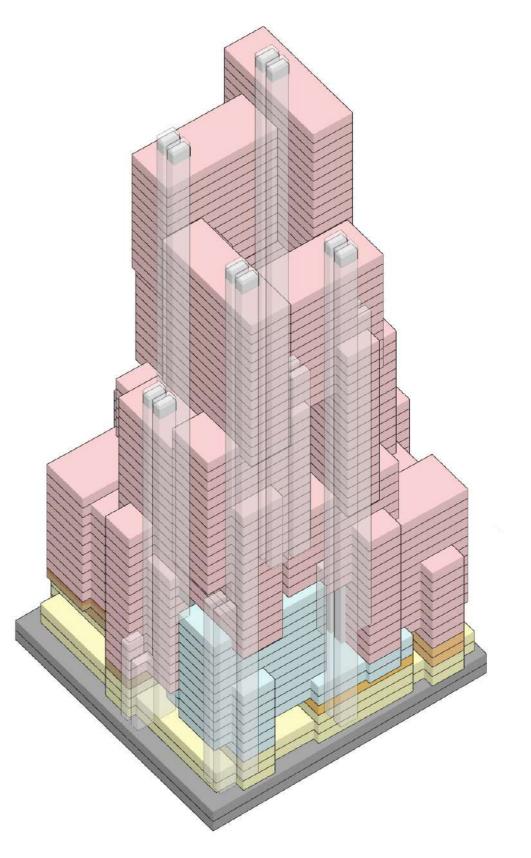


#### THE EDGE CORNER OF HUNG HOM

From this angle, you can see that the building starts from the nearby residential height and naturally sets back to the edge corner, which represents the entire community growing slowly step by step, and then becomes the highest point of the entire community at the edge corner, like Witnessing the transformation of the entire residential community from low density to high density, and recombining and rearranging the traces of residential buildings in the entire community, it seems to be the same as this community, but different, creating a new type of high-density residential architecture possibility.



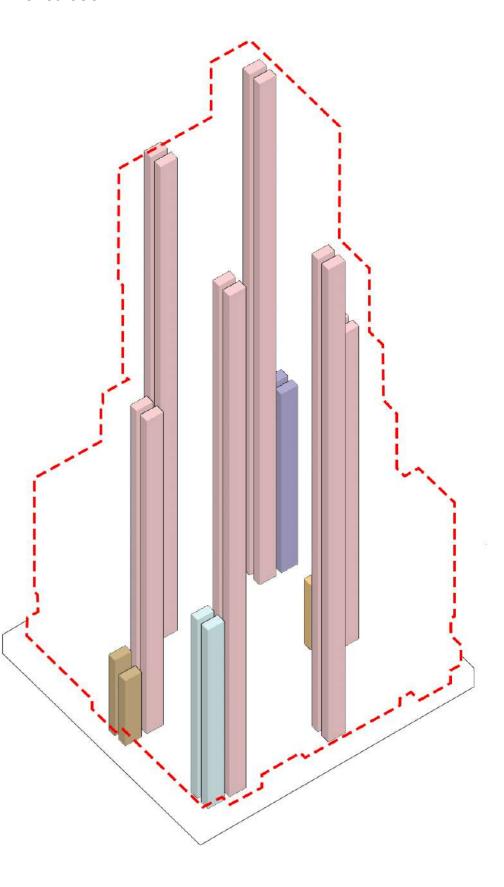


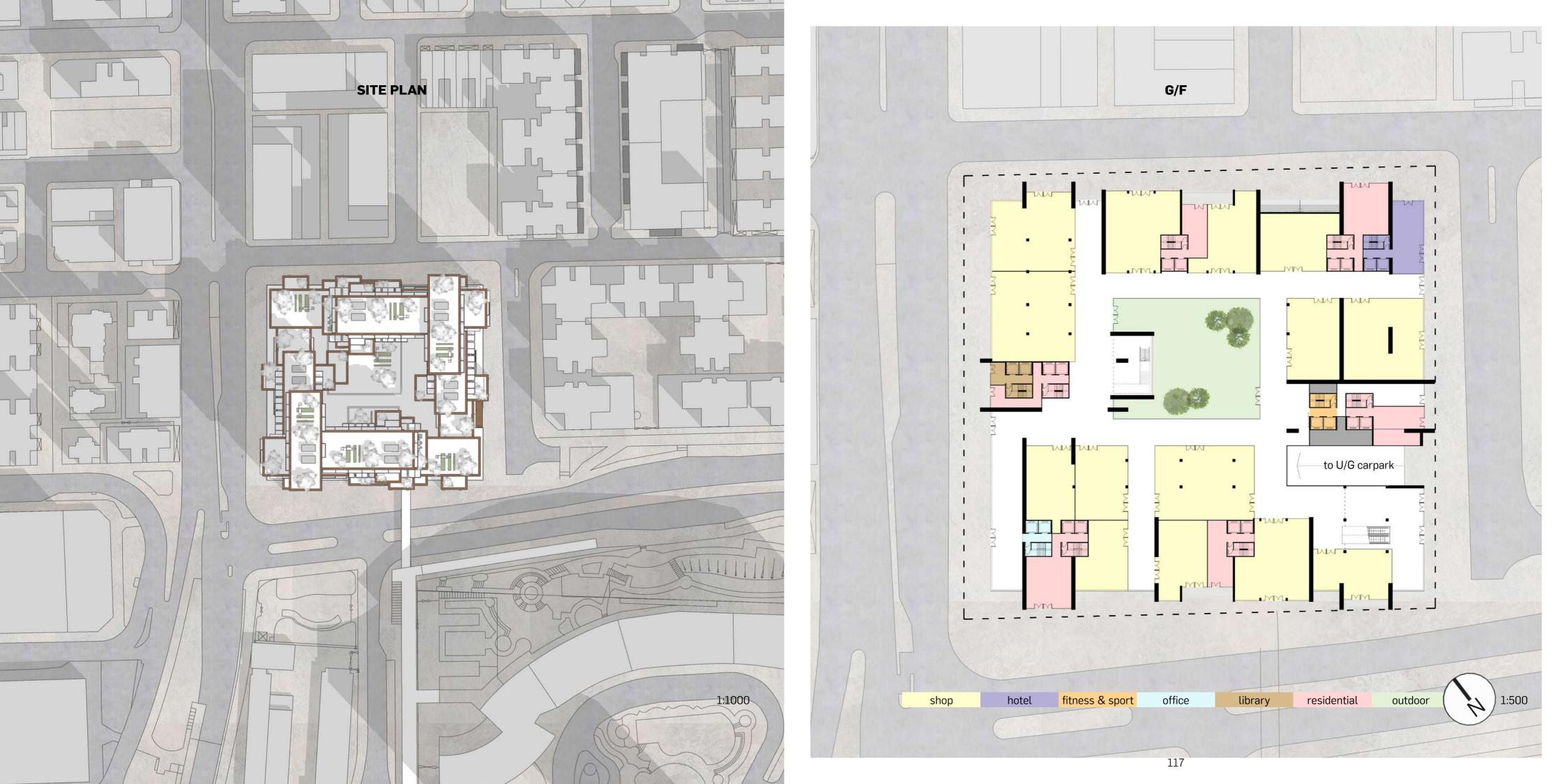


#### **AXONOMETRIC**

Shows the combinations and vertical connections of different programs.

The two sides of the entire building are like mirrors, but they are different because of the different programs and circulation.





1/F





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shop - 1/F hotel f&b - 2/F office library residential outdoo



3F 17/F

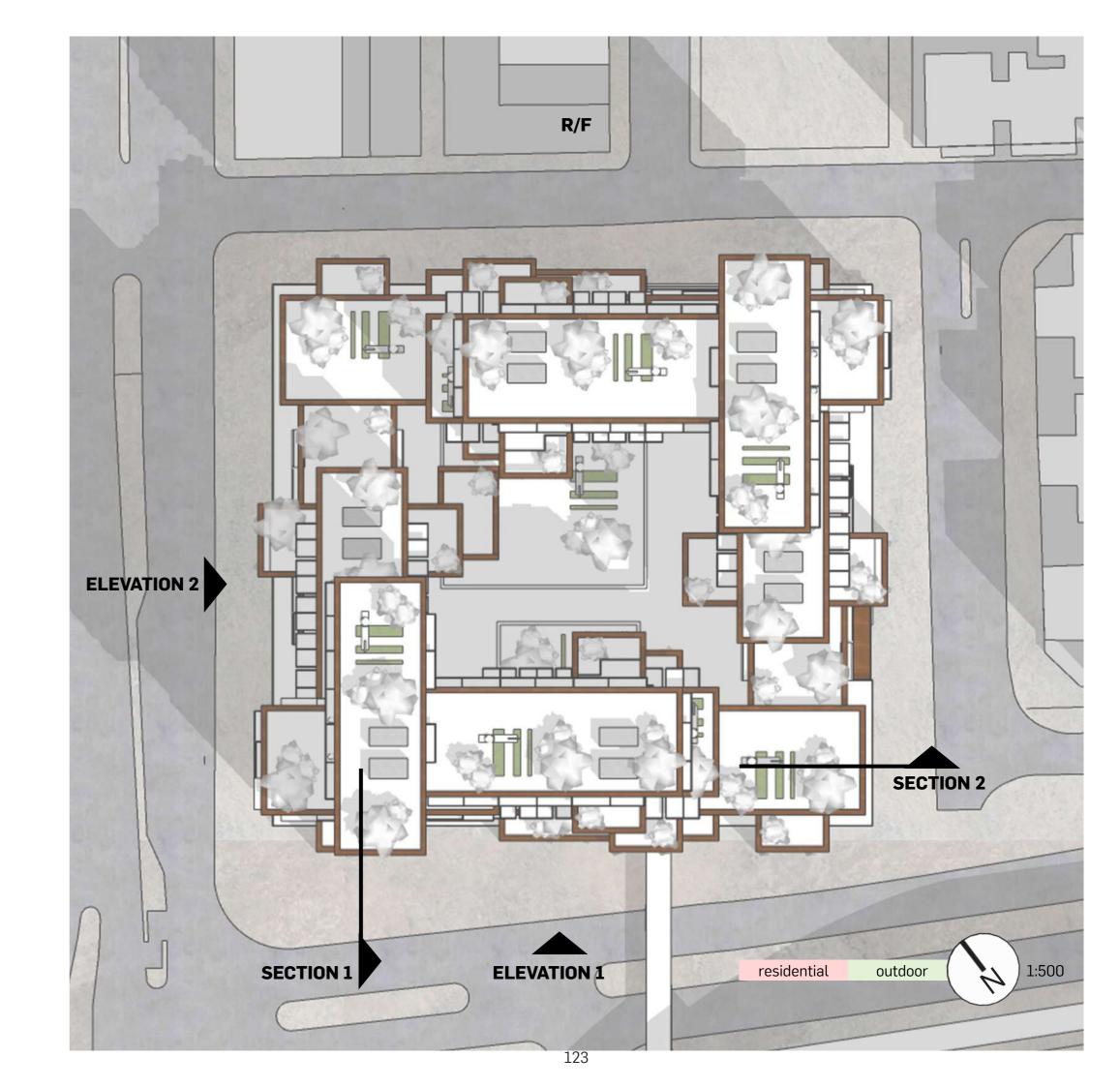






37/F















The "boxes" of different heights have different arrangements, they are 1 - balcony, 2 - setback terrace, and 3 - bay window. They come from Hung Hom, new private residences, public housing and high-end residential buildings. This building tries to combine them Bring them together and create some new combinations.











#### **MATERIAL**

Concrete is a very common material for residential buildings nearby in Hung Hom.

The "Hung" in Hung Hom means red in Chinese. Some nearby buildings are also designed based on red color. Red represents the memory of Hung Hom.

Corten Steel is a red metal. As time goes by, the original red color will slowly turn into other colors, which symbolizes the changes of nature over time.



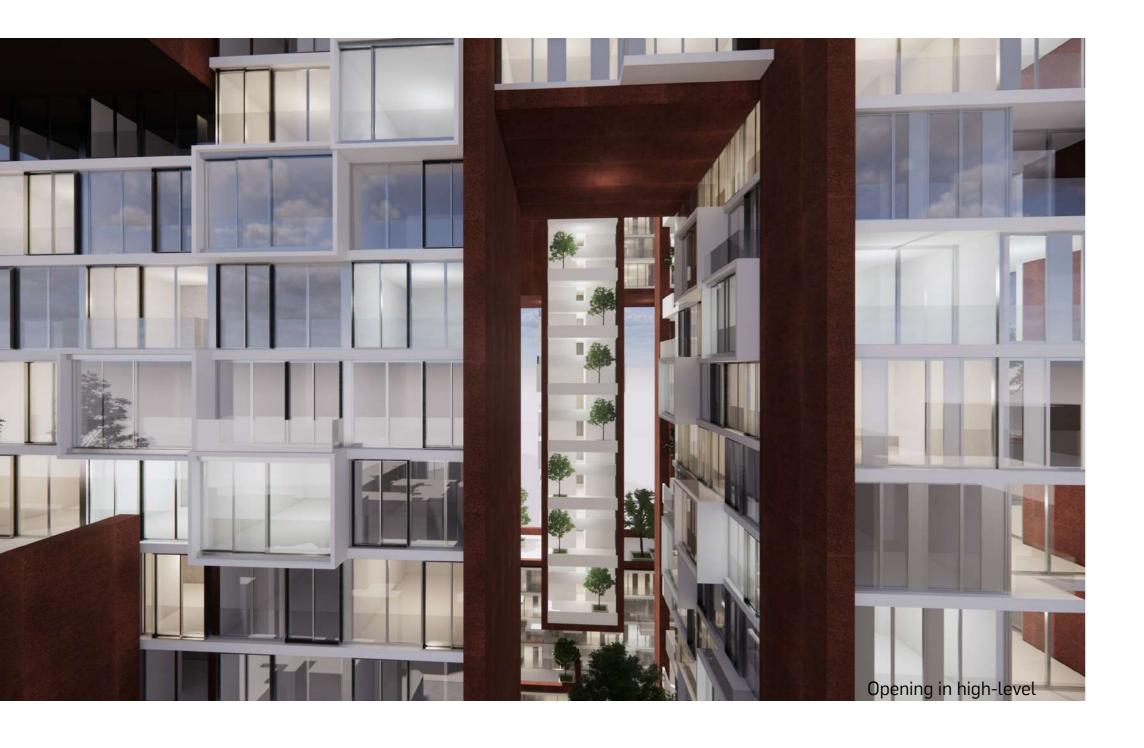
The space between the boxes provides a staircase that leads directly to the pedestrian bridge through the public platform on the second floor. The old urban memory is preserved and the distance with the community is shortened.





#### **SEPARATION OF A BUILDING**

The building slowly set back and separated from the adjacent residential complex. The broken down facade did not bring a sense of oppression to the street. Instead, pedestrians could see the sky between them.









Different public spaces on the mid-level

#### **CONCLUSION**

Architecture and nature can coexist.

We actually live in nature. Sunlight, air, and rain are all part of nature, especially Hong Kong, a place with a lot of natural environment.

However, analysis of residential properties in Hong Kong in different periods found that the relationship between buildings and the natural environment is constantly changing. In the past, low-density buildings with public space, light, and air circulation have now become high-density residential buildings with only the balcony. However, the opposite of the balcony is not In the distance are other residential balconies or facades, which show that urban housing is no longer connected to the natural environment.

Living in urban areas and having difficulty accessing the natural environment is the current situation of Hong Kong and it is also a contradiction of Hong Kong. Changes in the urban environment are having different negative impacts on the residents' bodies and minds. The building density is getting higher and higher, and the living space is getting smaller and smaller. The more people go out hiking on weekends and relax through the natural environment, our relationship with nature begins to be valued, and it is time for our living environment to start making changes.

This project aims to rethink the relationship between high-density residential buildings and nature, and the possibility of coexistence between them. Being able to be close to nature while meeting the needs of housing is the main purpose of this project. This project is located at different levels of public spaces and The sky garden has become a part of residents' lives. Resting and chatting are no longer limited to a small space with an average living area of 16 square meters per person. Instead, they get along with nature and people.

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