Heritage Impact Assessment

in respect of the Block 3 at Old Lei Yue Mun Barracks

For

Architectural Services Department

By

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Consultancy Agreement No.: 2OC514

September 2016

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1.0 INTRODUCTION

1.1 Background

This Heritage Impact Assessment (HIA) has been commissioned by the Architectural Services Department (ArchSD) and prepared by Spence Robinson Ltd. to assess the heritage impact and provide guideline for the renovation works of Block 3 at the Lei Yue Mun Park (the Park).

Covering an area of 22.97 hectares, the Lei Yue Mun Park is located at the Eastern District and abutted by Chai Wan Road, A Kung Ngam Road and the Island Eastern Corridor in Chai Wan overlooking the Lei Yue Mun Channel. Block 3 is a three-storey standalone building in a relatively secluded part of the Park. It once served as the barrack room office and store for the British Army until the Army relinquished the site to the Hong Kong Government in 1985. It was confirmed as a Grade 2 Historic Building by the Antiquities Advisory Board (AAB) in 2009. The Grading Boundary Plan is shown at **Section 2.1**. The existing floor plans are shown in **Appendix I**. Part of Block 3 is currently used as film stores of the Hong Kong Film Archive. The rest of the rooms are being left vacant.

The proposed works would allow the Block to be converted from the existing storage into hostel of the Park managed by Leisure and Cultural Services Department (LCSD) during normal times and to be used as a quarantine centre on an *ad-hoc* basis with the Department of Health, LCSD, Civil Aid Service, Social Welfare Department, Hong Kong Police Force and etc. overseeing the operation in case of occurrence of an infectious disease with pandemic potential.. The detailed scope of works could be found in **section 8.0**.

1.2 Site Particulars

Property Name	Old Lei Yue Mun Barracks, Block 3
Address of the studied site	75 Chai Wan Road, Lei Yue Mun, Chai Wan, Hong Kong
AAB Grading	Grade 2 (Definition: Buildings of special merit; efforts should be made to selectively preserve[1])
Year of Grading	2009
Year of Construction	1939
Construction Floor Area	2,910m^2
Land Status	Government

[1] Definition of Grading from Antiquities and Monuments Office, http://www.amo.gov.hk/en/built2.php

Original Use	Defence

1.3 Definition and Abbreviation of Terms

The Site or ***the Historic Building*** refers to Block 3 of the Lei Yue Mun Park.

The following definitions have been abstracted from the ***Australia ICOMOS for Conservation of Places of Cultural Significance (the Burra Charter)*** as follows:

Cultural significance: aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Fabric: all the physical materials of the place, including components, fixtures, contents, and objects.

Conservation: all the processes of looking after a place so as to retain its cultural significance.

Setting: the area around a place, which may include the visual catchment.

Interpretation: all the ways of presenting the cultural significance of a place.

Maintenance: the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction.

Preservation: maintaining the fabric of a place in its existing state and retarding deterioration.

Adaptation: modifying a place to suit the existing use or a proposed use.

1.4 Methodology and Structure of the Report

According to the Development Bureau Technical Circular (Works) No.6/2009, a HIA shall contain:-

- Baseline Study;
- Methodology;
- Impact Assessment;

- Mitigation Measures; and
- Conservation Proposal and/or Conservation Management Plan (only for projects involving large scale conversion works/alteration works/addition works/demolition works within historic buildings/sites in the "heritage sites" list).

In view of the fact that ArchSD's proposed scope of works involves alteration works within a historic building, the Antiquities and Monuments Office (AMO) advised that all the above items including a Conservation Management Plan are required.

This report mainly comprises the following two Parts, which are based on the respective documents quoted for formulating the methodology of carrying out this HIA study:-

- Part A: Baseline Study
  The conservation process adopted for Part A generally follows:-

  - Venice Charter;
  - Burra Charter Process;
  - China Principles;
  - James Kerr's model of Conservation Plan;
  - Standards and Guidelines for the Conservation Historic Places in Canada, Park Canada, 2010

- Part B: Impact Assessment Study
  The heritage impact assessment study in Part B generally follows:-

  - James Kerr's Heritage Impact Assessment as introduced in his model of Conservation Plan.

PART A : BASELINE STUDY

2.0 UNDERSTANDING THE SITE

2.1 Location and Area of the Study

Lei Yue Mun (formerly known as Lyemun, Lye Moon Passage or Ly-ee-moon Passage) is at the waterfront of the narrow channel of the eastern end of the Victoria Harbour, separating Kowloon and the Hong Kong Island. The adjacent lands at the two sides of the channel are

also called Lei Yue Mun.

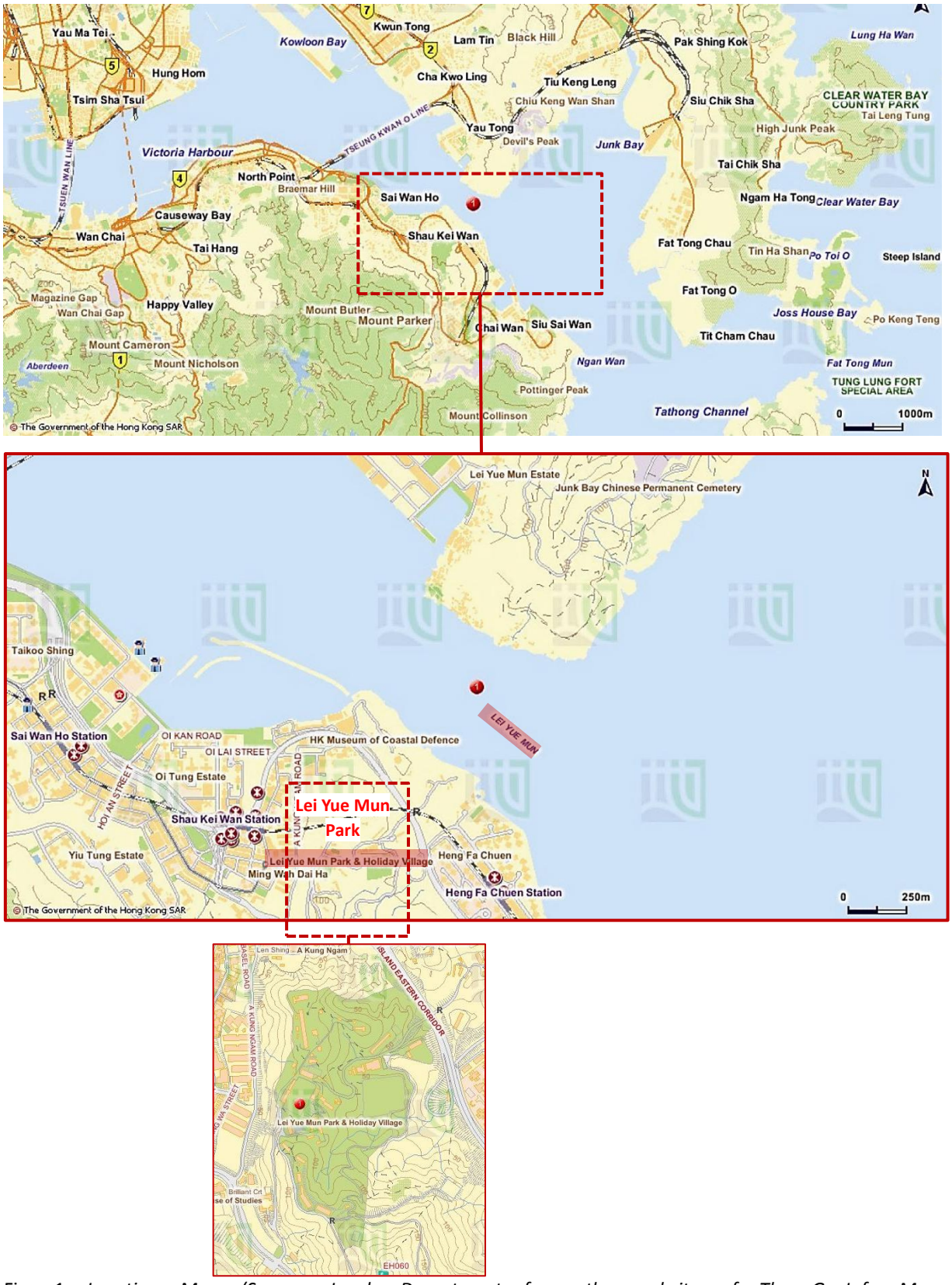


Fig. 1 *Location Map (Source: Lands Department from the website of The GeoInfo Map: http://www2.map.gov.hk/) Edited by Hannah LIU*

The Study Area is Block 3, the Lei Yue Mun Park, 75 Chai Wan Road, Hong Kong.

The following map shows the grading boundry of the building.

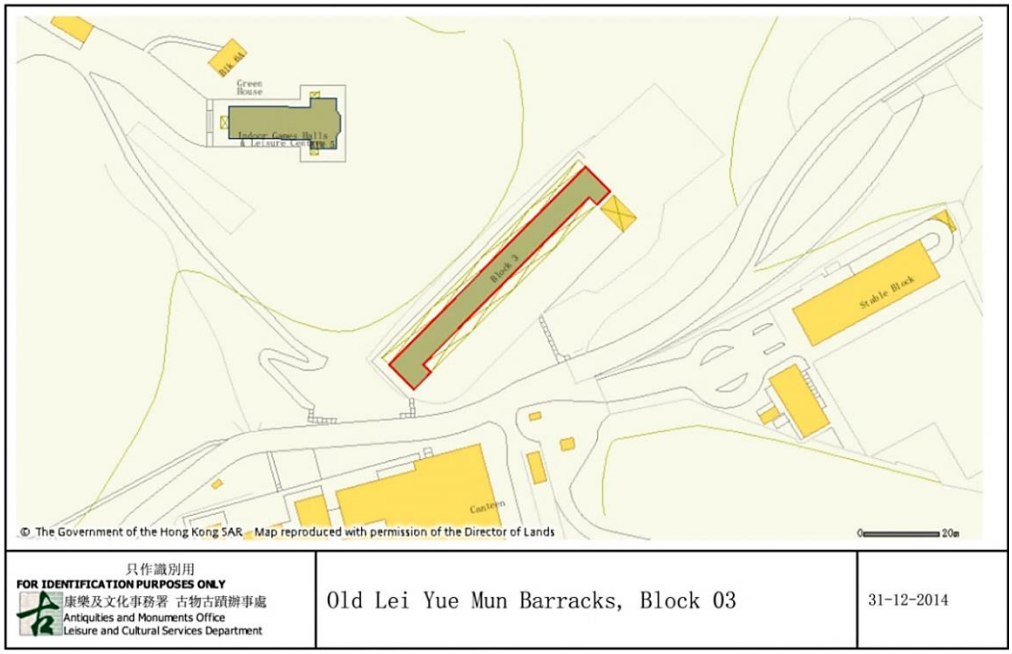


Fig. 2 *Grading Boundary Plan. (Source: The Geographic Information System on Hong Kong Heritage, 2012)*

Block 3 sits within the complex of the old Lei Yue Mun Barracks. In the context, although renovation works will only be carried out in Block 3 (and Block 4, which is not a historic building), it is essential that the heritage impact assessment also covers the entire old Lei Yue Mun Barracks.

2.2 Setting and Context

Block 3 is a three-storey standalone building in a relatively secluded part of the Park. It is built on a platform cut into a hillside reached by flights of steps from the camp road in front.

2.3 Current Status

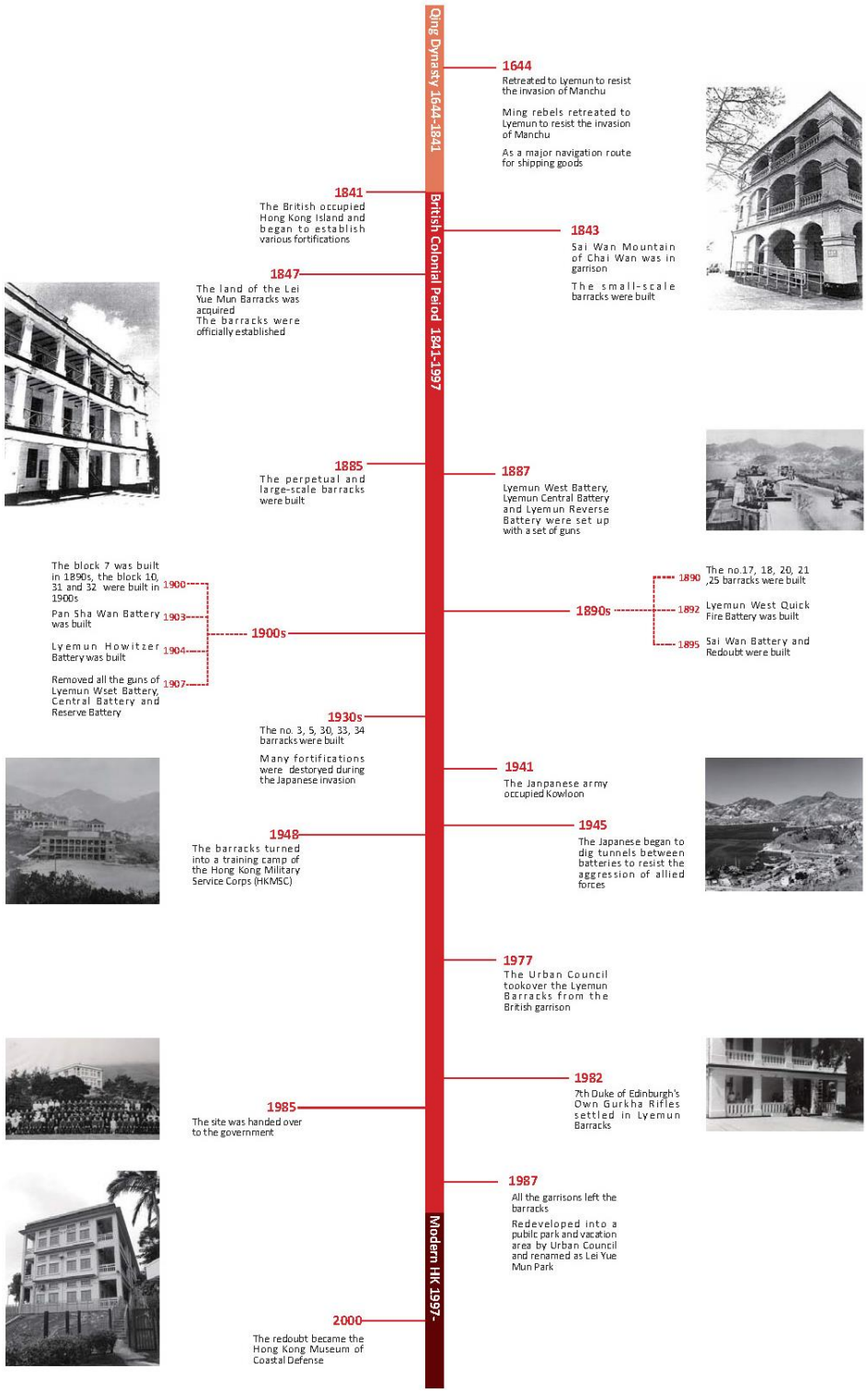
Part of Block 3 is currently used as film stores of the Hong Kong Film Archive. The rest of the rooms are being left vacant.

2.4 Limitations

The identification of heritage impact is based on ArchSD's latest schematic design. The findings may be subject to change due to design refinement.

3.0 HISTORY AND DEVELOPMENT

3.1 Summary Timeline of the Old Lei Yue Mun Barracks



3.2 Military Fortification in Colonial Hong Kong

3.2.1 Overview

The known military history of Hong Kong can be dated back to the Tang Dynasty, during which the Tuen Mun military fortification was established by the imperial government. Occupying a special strategic location of military defence, Hong Kong played a key role in military fortification history. When Hong Kong Island was seized by the British in 1841, a new era of military fortification evolved in Hong Kong. The British garrison, which included British Army, Royal Navy (including Royal Marines) and Royal Air Force, took over the defence of the territory from the Qing Dynasty and began constructing military fortifications which remained in their hands, except the three years and eight months' Japanese occupation in the Second World War, for approximately over one and a half century until Hong Kong returned to China in 1997. After that, a garrison of the Chinese People's Liberation Army was in charge of Hong Kong's defence affairs.

3.2.2 British Colonial Period

Hong Kong had been a beachhead of British Army penetration since the 19th century given its predominant geological location. In 1841, in order to guard the heartland of Hong Kong, the British government began reinforcing the defence by building batteries, barracks and redoubts on the Hong Kong Island. As early as 1845, the first battery was built by the British Army and was called the Murray's Battery (also named Central Battery) which was located on Battery Path, beneath the Government Hill in the Central. One-year later, the Murray Barracks, now known as Murray House, were also completed.

In the same year of 1845, the Royal Battery was built in a navy dockyard, aiming to strengthen the defence of the shore. Before the First World War, the Royal Navy, who acted as the first line defence of Hong Kong, had control over the shore and was able to cope with the threat from Asia. Subsequently, fortification after fortification sprang up to boost the defence on the whole Hong Kong Island. For example, in 1850s the Wellington Barracks were built in the middle of the island and its battery was built on the north side, the West Point Battery which was targeted to guard against Russia was built in 1856, the Belcher's Battery, the Fly Point Battery and the famous Victoria Battery were also built around the Sai Wan and Kennedy

Town in 1890s. Other batteries like the Victoria Peak Battery, the Mount Davis Battery and the Jubilee Battery were built around 1900-1930s.

Fig. 3 *Government Office with the Murray Battery (Source: The Government Hill Concern Group. Website: http://www.governmenthill.org/images/history-TPB.html)*

In the 1860s, the Kowloon Peninsula and the Stonecutters Island became part of the colony, which meant the colonial boundary began to extend inland. As a military forbidden area in the early time of British occupation, the only defence facilities in the Kowloon Peninsula includeed the Kowloon East No.1 Battery and the Kowloon West No.1 Battery which were built in 1842, and the Kowloon West No.2 Battery built in 1865. When policymakers realized that an enemy occupying Kowloon Ridge could take control of the Victoria Harbour and the north shore of the Hong Kong Island, they decided to extend the defence line to cover the Kowloon Ridge in 1899. With an urgency in implementing this defence objective, the British started to change its strategic focus to defend against attacks from the border or the New Territories instead of only concentrating on coastal defence on the Hong Kong Island. For this reason, the Kowloon defence line began to be built starting from the last

decade of the 19th century, and the Kowloon East No.2 Battery, the Stonecutters East, South, the West and Central Batteries were set up one after another.

When the First World War began, the construction of Kowloon defence line did not stop and instead more fortifications were erected to strengthen the defence of the Victoria Harbour. The Centurion and Albion Batteries on the Stonecutters Island, the Pan Sha Wan Battery and the Devil's Peak Battery on the southern and northern shores of the Lei Yue Mun Channel respectively were built to safeguard the eastern approach to the Harbour, reinforcing the Kowloon defence line progressively during this period.

At the same time, the policymakers had not slackened the pace in the construction of defence facilities on the Hong Kong Island. Fortifications including the Elliot Batteries, the Pinewood Batteries, the Mount Davis Batteries and the Victoria Peak Batteries were built during this time to improve the defence capability.

As other European powers became allies with British force, plans for the defence of Hong Kong were changed and upgraded from time to time. On the eve of the First World War, the British considered the most threatening potential enemy of Hong Kong was not France and Russia but their ally Japan.

After the First World War, the strategic importance of Hong Kong to the British Empire had not declined. It was a vital and advanced naval base of the Royal Navy against Japan particularly after the termination of the Anglo-Japanese Alliance in 1922, which saw the beginning of rapid expansion of Japanese invasion of Asia. The British Government adopted the Ten Year Rule in August 1919 which limited the British military spending by demanding that the armed forces should draft their estimates on the assumption that the British Empire would not be engaged in any great war during the next ten years. Unable to expand their regular army the British had to resort to enlarging the reserve forces in the New Territories. In the early 1930s, the famous Gin Drinker's Line was built to guard against Japanese invasion from the mainland and it was the last defence line of Hong Kong should Japanese cross the Shen Zhen River.

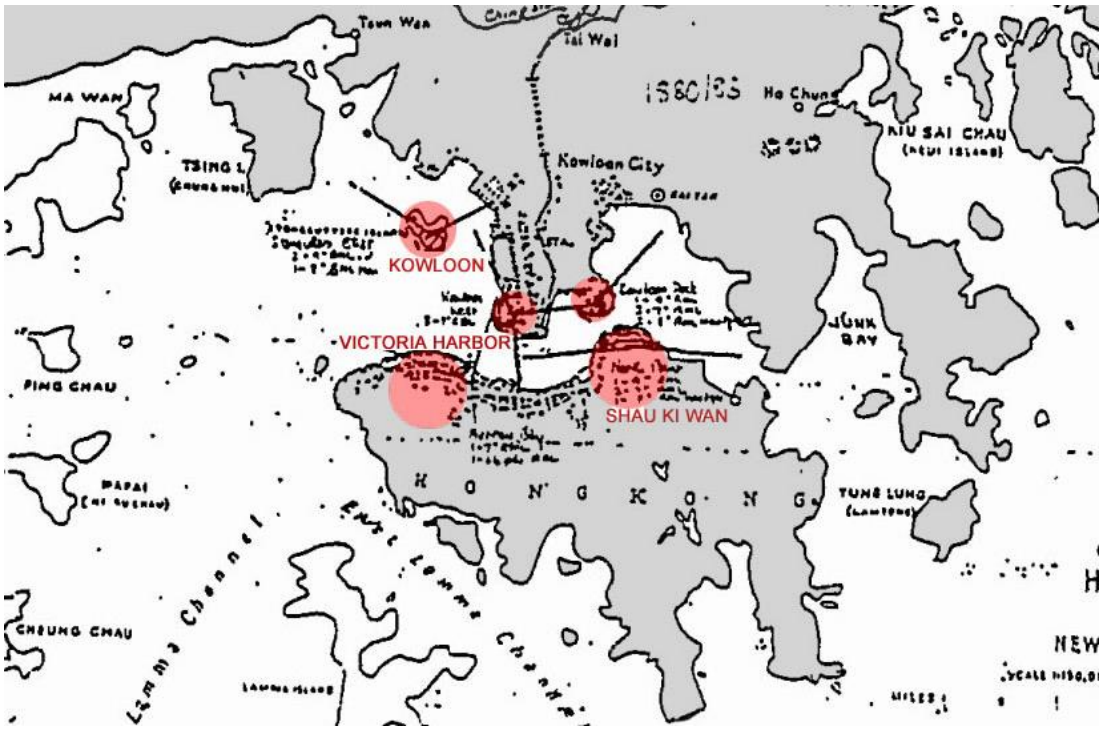


Fig. 4 *Hong Kong defence map of 1883 from the Memorandum for Members of The Museums Select Committee of The Urban Council, The meeting of The Museums Select Committee of Urban Council, 12/02/1992, Pg36 (Source: Multimedia Information System under Hong Kong Public Libraries, Leisure Cultural Services Department) Edited by Hannah LIU*

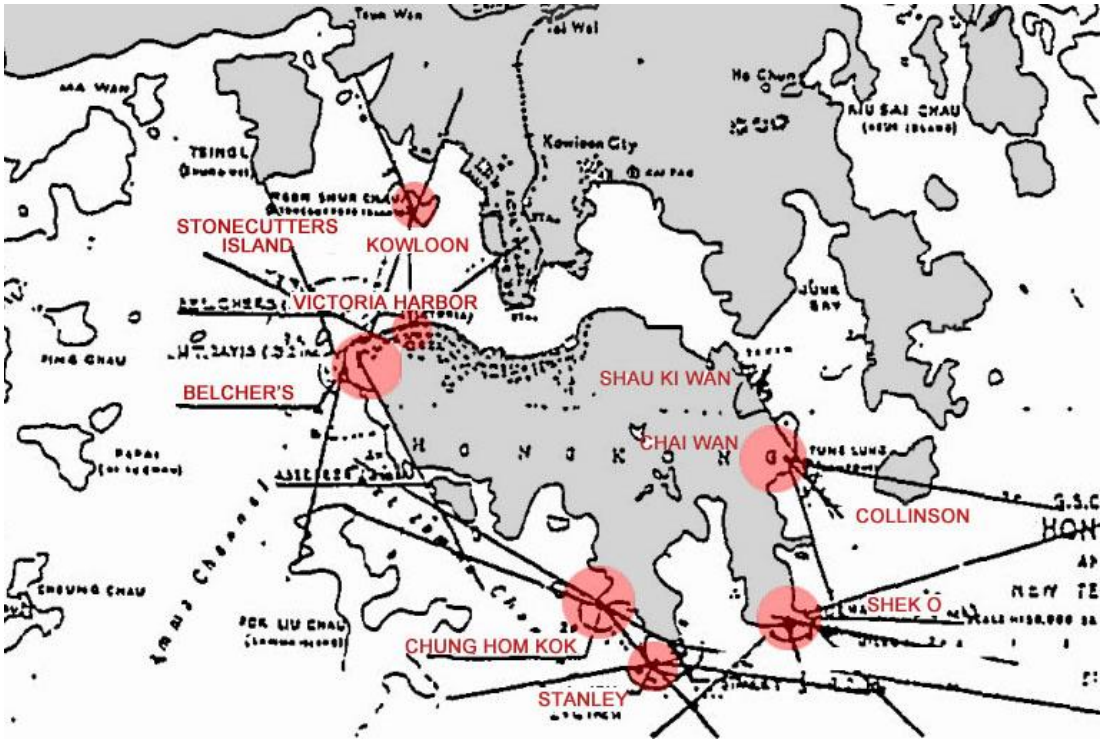


Fig. 5 *Hong Kong defence map of 1941 from the Memorandum for Members of The Museums Select Committee of The Urban Council, The meeting of The Museums Select Committee of Urban Council, 12/02/1992, Pg36 (Source: Multimedia Information System under Hong Kong Public Libraries, Leisure Cultural Services Department) Edited by Hannah LIU*

Facing the threat of the powers such as Germany, Italy and Japan in other colonial areas at the same time, however, the Royal Navy had no alternative but to shift its attention to the Mediterranean Sea. This was a turning point in the military history of Hong Kong, as the balance of the defence system had tilted to the disadvantage of the garrison in Hong Kong which could no longer maintain its earlier defence efforts. The garrison soon gave up the strategy of defending the Kowloon Ridge for protecting the Victoria Harbour, and concentrated on the Hong Kong Island which since then had remained the territory's last defence outpost. More fortifications were built on the island, and defence efforts in the Kowloon Ridge and the New Territories were withdrawn, for instance, the construction of the Gin Drinker's Line was canceled to give way to the coastal defence.

When the Second Sino-Japanese War broke out in 1937, the United Kingdom were placed in an embarrassing position, as on one hand they had to support the Chinese war efforts but on the other hand they had to avoid antagonizing Japan. From then on, Hong Kong had become China's window of trade to the outside world, and Japan's threat from the mainland also aggravated as they could attack the colony easily from the land frontier.

When the Second World War broke out, in order to step up coastal defence, various batteries were built on the Hong Kong Island. Unfortunately, many of the military fortifications were destroyed during war. Since Britain was defeated after two years of resistance, some batteries were soon left vacant after completion. In 1941, the Japanese occupation of Hong Kong began as the Governor surrendered. This period had lasted for three years and eight months until Japan surrendered at the end of Second World War. After the War, peace was gradually restored to Hong Kong when military threat from outside had diminished from 1949 to 1970. As they no longer served any practical purpose, many military fortifications were abandoned due to lack of management and maintenance. During the 1970s, the government took over some historic fortifications from the British Army, including as the old Lei Yue Mun Barracks and the Victoria Barracks for adaptive reuse such as redeveloping them as holiday village and public park. Notwithstanding quite a number of these redevelopment plans had been taken, some military heritage buildings fell into disrepair and some had crumbled down after witnessing the military history of Hong Kong and fulfilling their mission during the wars.

3.2.3 Important Military Fortifications of Hong Kong

KOWLOON AND NEW TERRITORIES			
YEAR	**NAME**	**LOCATION**	**DESCRIPTION**
1842	Kowloon East No. 1 Battery	Kowloon Peninsula	One of the earliest batteries on the Kowloon Peninsula.
1842	Kowloon West No. 1 Battery		One of the earliest batteries on the Kowloon Peninsula.
1890s	Kowloon East No. 2 Battery		Decommissioned from 1911.
1865	Kowloon West No. 2 Battery		Abandoned from 1916 and reconstructed as Kowloon Park with the Whitfield Barracks.
1880	Kowloon Dock Battery		Only a gun remained in Whampoa Garden.
1892	Whitfield Barracks		Closed in 1967 and reconstructed as the Kowloon Park in 1970.
1927	Sham Shui Po Barracks		Closed in 1977 and reconstructed as the Sham Shui Po Park.
1881	Stonecutters East Battery	Stonecutters Island	All three guns were demolished in 1912.
1885	Stonecutters South Battery		Abandoned from 1912.
1890s	Stonecutters West Battery		Two of the guns were relocated to the Collinson Battery in 1937 and only one gun was left to resist Japanese power.
1891	Stonecutters Central Battery		All three guns were removed from 1900 to 1904.
1904	Albion Battery		All two guns remained.
1905	Centurion Battery		Abandoned from 1935.
1900	Devil's Peak Redoubt	Around Devil's Peak	The guns were removed to the Hong Kong Island in 1935.

1900	Gough Battery		Two of the guns were removed to Stanley in 1935 and some improvement works were built in 2007.
1902	Pottinger Battery		Only the gun emplacement and part of the barracks remained.
1930s	Gin Drinkers' Line	New Territories	Well-preserved.
1930s	Shing Mun Redoubt		Well-preserved.
WEST DISTRICT OF HONG KONG ISLAND			
YEAR	**NAME**	**LOCATION**	**DESCRIPTION**
1845	Murray Barracks and Battery	Around City of Victoria	The Murray barracks was relocated to Stanley and the battery was abandoned in the 20th century.
1846	Royal Battery		The battery was built at the seaside where Tamar is situated today.
1850s	Wellington Battery and Barracks		The barracks closed in 1979 and was demolished in 1992.
1856	West Point Battery	Sai Wan and Kennedy Town	The battery was built on the site of the former Edger's Bungalow.
1886	Belcher's Battery		Abandoned from 1946.
1890	Fly Point Battery		Abandoned from 1912.
1900	Elliott's Battery		Abandon from 1904 and the guns were removed to the Belcher's Battery.
1890	Victoria Barracks and Battery		Constructed at where the residence of the Chancellor of the University of Hong Kong is today.
1911	Victoria Peak Battery	Victoria Peak and Hill Above Belcher's	Located at where the High West Picnic Area is at the intersection of Harlech Road and Lugard Road today.

1901	Pinewood Battery		Well-preserved and reconstructed as the Pinewood Picnic Area.
1909	Mount Davis Battery	Around Mount Davis	The Battery was blown up by its own personnel just prior to Hong Kong's surrender. Part of the battery still remained and installed leisure facilities recent years.
1939	Jubilee Battery		The site reconstructed as Victoria custody (The White House).
EAST DISTRICT OF HONG KONG ISLAND			
YEAR	**NAME**	**LOCATION**	**DESCRIPTION**
1880	North Point Battery	North Point, Quarry Bay and Shau Kei Wan	Abandoned from 1905
1880	Lei Yue Mun Barracks, Redoubt and Batteries		The batteries and redoubt were redesigned and renovated as the Hong Kong Museum of Coastal Defence and the barracks redesigned and renovated as the Lei Yue Mun Park.
1903	Pan Sha Wan Battery		Restricted to public access and managed by the Lei Yue Mun Park and the gun was removed to Chai Wan Park for heritage appreciation.
1898	Sai Wan Redoubt and Battery	Chai Wan and Collinson	Abandoned in 1978 and took over by government to be redesigned as park and launch station.
1930s	Collinson Battery		Well-preserved

SOUTH DISTRICT OF HONG KONG ISLAND			
YEAR	**NAME**	**LOCATION**	**DESCRIPTION**
1936	Shouson Hill Bunkers	Aberdeen and Deep Water Bay	Preserved well with part of the bunkers used as wine cellar and club.
1941	Aberdeen Battery		The Battery was nearly all blown up by its own personnel just prior to Japanese occupation.
1930s	Stanley Battery	Stanley and Tai Tam	No.1 battery remained while the site of No.2 & No.3 Battery was used for satellite stations.
1941	Bluff Head Battery		Abandoned.
1930s	Chung Am Kok Battery		No.1 gun emplacement was reconstructed as Chung Hom Kok Cheshire Home while some relics still remained for heritage appreciation.
1930s	Bokhara Battery	Shek O and Cape D'Aguilar	Reconstructed as radio stations.
1941	D'Aguilar Battery		Restricted area for satellite stations.

Table 1 List of Important Military Fortifications of Hong Kong

3.3 Strategic Location of the Eastern Fortress on the Coastal Defence

In 1881, Wu Guangpei (吳廣霈), a secretary of Li Hongzhang (李鴻章), noted the strategic importance of Hong Kong in the age of steam:

The islands of the south [China Sea] were of utmost importance…If under our control, our southern border would be secure… They [the British] travelled far away and put so much effort into taking this island [Hong Kong]; as a result, they are now able to hold the key to the south and control our country's front gate.

Hong Kong played a key role in military history given its peculiar geographical location. It is situated at the throat of the Pearl River Estuary and controls the main navigation route of

transportation and trade on the river. Hong Kong also faces the South China Sea and is located at the centre of the Western Pacific region. It was already one of the most important seaports in Asia in the 19th to 20th centuries, a sea transport hub between East Asia, Europe and the Americas.

The strategic significance of Hong Kong could be traced back to the Tang Dynasty (A.D. 618 - 907). Troops were garrisoned in Tuen Mun, which was a gateway to the Pearl River Estuary. It was recorded at that time that about 2000 soldiers were stationed at Tuen Mun to defend the coastal line, which reflected that Hong Kong has long been recognised as a strategic node since hundreds of years ago.

Considering Hong Kong a favourable location to establish a major naval base and trading port in the region, the British seized the area from the Qing Dynasty in 1841. After the British Army had garrisoned the colony, it never ceased constructing defence fortification facilities until the end of the Second World War, except during the Japanese occupation in the war. After the war, Hong Kong continued its role as an important naval base until the 1960s.

3.4 Evolution of the old Lei Yue Mun Barracks

As one of the most important strategic location in Hong Kong guarding the narrowest part of the Victoria Harbour in the waterway of the Lei Yue Mun Channel, the Lei Yue Mun Area included dozen of barracks, a cluster of batteries, underground munitions depot and torpedo station.

3.4.1 Ming and Qing Dynasty

The earliest record of the Lei Yue Mun settlement could be traced to 1644 during the war between the Ming Dynasty and the Manchu. Lei Yue Mun proved to be a crucial strategic point for the Ming resistance to guard the Lei Yue Mun Channel and check the Machurian attack, after they had retreated there. One of the patriots named Cheng Kung in the Ming settlement controlled the Lei Yue Mun Channel with a horde of pirates, who shipped goods between many coastal provinces. As a consequence, the Lei Yue Mun Channel became a vital and major navigation route.

3.4.2 British Colonial Period

Sai Wan Mountain in Chai Wan adjacent to the Lei Yue Mun area, was garrisoned in 1843 but the British troops had to evacuate soon after some soldiers were infected

with epidemic disease. In 1847, the British War Department acquired the land of the old Lei Yue Mun Barracks and the barracks were officially established, but for the first 40 years there was not any plan for developing the barracks. As Hong Kong became an important entrepot for trade in South China in 1885, the British army started building various military fortifications to prevent invasion from other European powers. Around 1887, the Lei Yue Mun West Battery with two 9-inch muzzle loading guns, the Lei Yue Mun Central Battery with two 64-pound muzzle loading guns, the Lei Yue Mun Reverse Battery with three 9-inch guns and the Lei Yue Mun Redoubt with two 6-inch guns were set up to reinforce the military fortifications.

With the Pak Sha Wan Redoubt and the Devil's Peak Redoubt and batteries constructed at today's Heng Fa Chuen and near to Lei Yue Mun in Kowloon respectively after the New Territories were leased to the United Kingdom, more and more barracks were built in the old Lei Yue Mun Barracks. Block 25 was the oldest building in the barracksbuilt during1884–1890, and was used as the Officers' Mess. From 1890 to 1895, other buildings including 17, 18, 20 and 21 were erected. After some years of lull, more married soldiers' quarters (Block 31 and 32) and Block 7 were built between 1905-1909. The remaining buildings in the barracks, including Block 2, 3, 10, 30, 33 and 34, were all completed before the outbreak of the Second World War. The Barracks Square was reconstructed in 1933.

Most of the barrack buildings were built in the Classical Revival style, while Block 2 and 3 which were identical barrack blocks were built in the International Modern style and Block 5 was a Gothic Revival church. Block 2 which was used to be on site where the Jockey Club Horse Riding School is now situated was demolished in 1992.

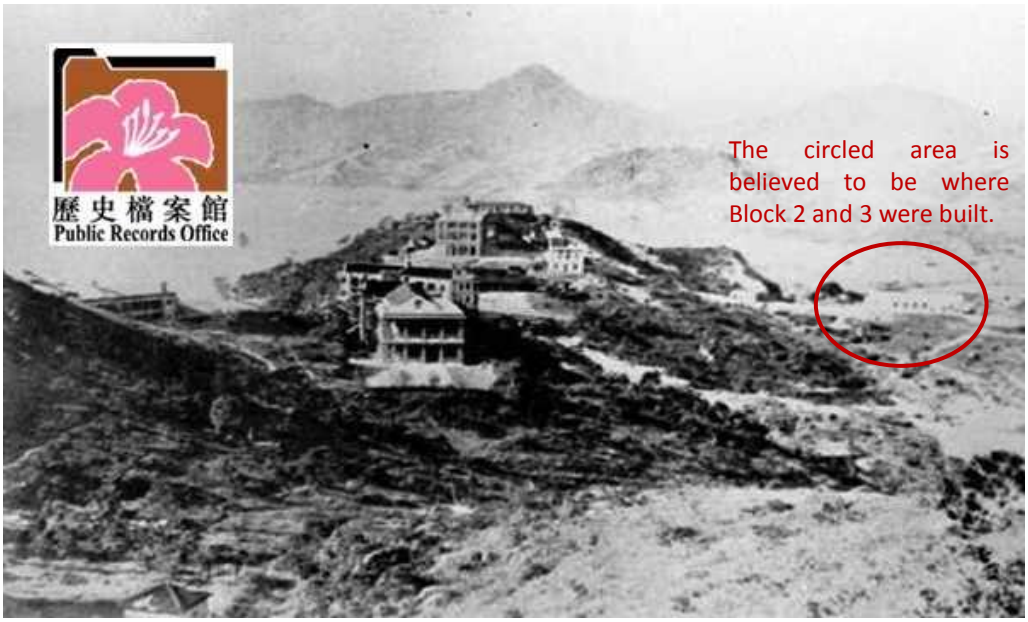


Fig. 6 *Lei Yue Mun Barracks 1935-41, looking NNE, across the Lei Yue Mun channel showing of Old Buildings, remainder of Old Buildings on left, new buildings on right. (Source: Courtesy of Hong Kong Public Record Office, Hong Kong SAR Government, ref no. : 08-09-221) Edited by Hannah LIU*

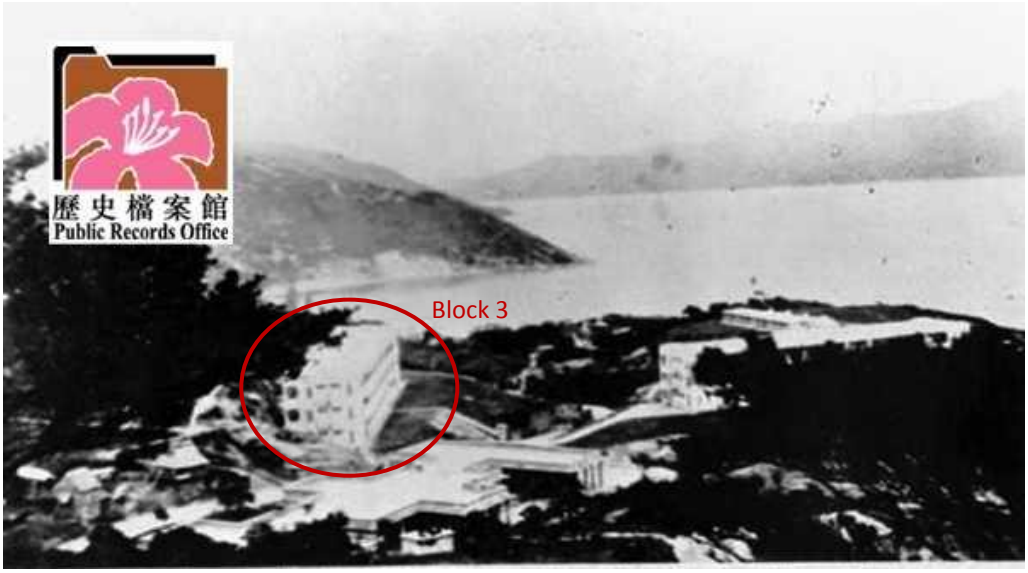


Fig. 7 *Lei Yue Mun Barracks 1935-41, looking NE, new buildings. (Source: Courtesy of Hong Kong Public Record Office, Hong Kong SAR Government, ref no. : 08-09-222) Edited by Hannah LIU*

The Japanese launched their attack on Hong Kong on December 8, 1941. After the fall of the New Territories and Kowloon, the British Forces immediately strengthened the defences at Lei Yue Mun to prevent the Japanese from crossing the Lei Yue Mun Channel from the Devil's Peak. The Lei Yue Mun Channel was the

target route for the Japanese Army to cross the Victoria Harbour due to its shortest distance between the shores in the harbour and, needless to say, the old Lei Yue Mun Barracks were the ideal target landing spot. The defence forces managed to repulse several raids by the Japanese, but were eventually overwhelmed and the Lei Yue Mun Redoubt finally fell into enemy hands on 19 December. Most of the military facilities were destroyed after the defeat. The old Lei Yue Mun Barracks no longer bore any defence significance to Hong Kong in the post-war period.

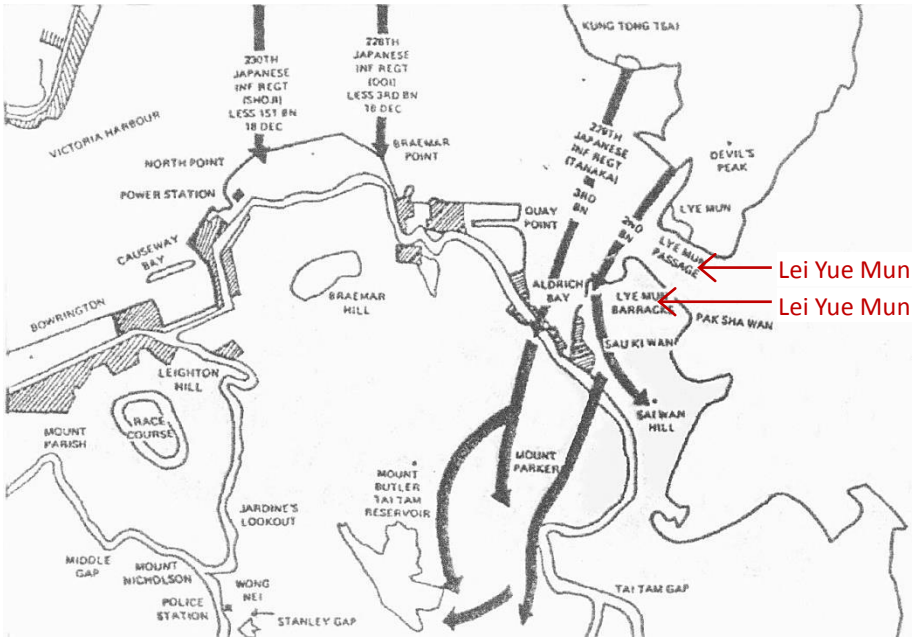


Fig. 8 *1941 Japanese Invasion Map (Source: Britain at War. Website: www.britain-at-war.org.uk)*

After the Second World War, the barracks were turned into a training camp of the Hong Kong Chinese Training Unit (HKCTU) in 1948 which finally moved to a new camp on the Stonecutters Island in 1984.

During the first half of the 1950's, the Top Redoubt (nowadays Hong Kong Museum of Coastal Defence) was taken over by a troop of Air Defence artillery. In 1962 the HKCTU became the Hong Kong Military Service Corps (HKMSC). In 1982 the Second Battalion of the Seventh Duke of Edinburgh's Own Gurkha Rifles moved into the barracks and, with the departure of the HKMSC, were now the sole occupant in the barracks. Three years later, the site was handed over to the government in 1985.

3.4.3 Post War Period

- History of Hong Kong Chinese Training Unit (HKCTU)

The situation in Hong Kong was quite peaceful except the internal unrest during 1956 and 1967. The Hong Kong Chinese Training Unit (HKCTU), which was established in 1948, was the predecessor of the Hong Kong Military Service Crops (HKMSC).

The history of the HKCTU could be traced back to the British-Chinese regiment set up by the British Army in 1857 during the Second Opium War. The British Army began to employ local Chinese in transportation of military supplies due to shortage of human power. At the same year, the Canton Chinese Commissariat, which was also known as the Chinese Coolie Crops, was established. From then on, Hong Kong locals were recruited constantly by the Royal Engineers in different military construction works.

Before the invasion of Japan in 1941, local people were recruited to work in the building of batteries and coastal defence works. In addition, the British-Chinese soldiers also resisted the attack of the Japanese Army alongside the British troops. Some of them even saw their service to help the British fight against Japanese powers outside Hong Kong, such as in Burma, Malaya and India. Unfortunately, many of them sacrificed their lives in the war.

As the British resumed the administration of Hong Kong after the Second World War, the British Empire decided to enlarge the manpower of military army to guard the colony. In 1948, the HKCTU was set up as a formal army to recruit local Chinese. The soldiers were allocated by personal characters. On 1 September 1962, the unit was renamed the Hong Kong Military Service Crops (HKMSC), and employed over 6000 local Chinese to strengthen the manpower of Locally Enlisted Personnel (LEP) from 1962 to 1993. The LEP provided support services to the British garrison in Hong Kong as regular soldiers.

From 1960s to 1997, the HKCTU's main responsibilities included rescue services in natural disasters and anti-illegal immigrant operations at the border between Hong Kong and China, and they also helped control riots and maintained security of society. Their service contributed to maintaining the stability and prosperity of Hong

Kong that enabled the city to thrive rapidly in the years to come.

- Depot of Hong Kong Chinese Training Unit (HKCTU)

In its early days the HKCTU was based at the old Lei Yue Mun Barracks, which were later converted to the Lei Yue Mun Park and the Hong Kong Museum of Coastal Defence today. The HKCTU was later relocated to the Stonecutters Island Barracks, which was currently occupied by the Hong Kong Garrison of the Chinese People's Liberation Army.

The HKCTU played an important role in guarding Hong Kong for half a century until the China took over the administration from British Garrison in 1997.

3.4.4 Late 20th Century

As early as 1974, the Urban Council expressed its willingness to undertake the redevelopment of the Lei Yue Mun area into public parkland. At that time, another proposal for using the site for development of public housing estate was also under the government's consideration. This latter proposal, however, had not been further pursued in view of the already over-taxed roads and transport networks in the vicinity.

The Urban Council would normally give high priority to the development of sites for intensive, and particularly active and recreational use. The Lei Yue Mun area, located between the high density residential areas of Shau Kei Wan and Chai Wan, both of which had little open space and parkland for the public's recreational use at that time. In that sense, the area more than met the conditions for intensive, and particularly active and recreational use, and the Urban Council had no hesitation in according a high priority to the development, not in the least arising from the urgency to identify the open space for the districts.

Another problem was how to balance between the active and passive use of the area, that is, to maintain heritage conservation in the site while allowing adequate recreational facilities to be provided in the future development. The solution eventually found was to develop a Holiday Village which would not only integrate as a whole the heritage treasure, but also would provide the much needed recreational facilities and tourist spots for the public.

In April 1975, the Urban Council Select Committee made decided to divide the development in two stages. (Committee Paper RA/16/75 and Committee Minutes)[2]

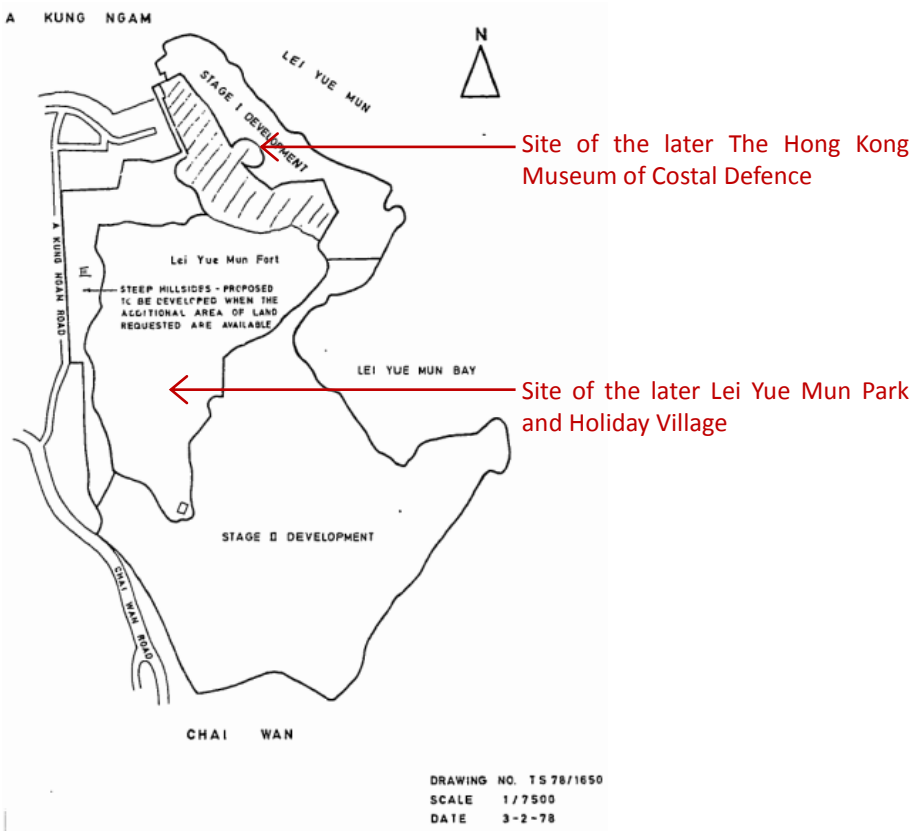


Fig. 9 *The proposed stages of development from the Memorandum for Members of The Recreation and Amenities Select Committee, and Planning and Development Select Committee, 14/02/1978, Pg5 (Source: Multimedia Information System under Hong Kong Public Libraries, Leisure Cultural Services Department)*

Stage I: Involving a 25-acre coastal range from Ah Kung Ngam running a long Lei Yue Mun Pass and ending at the old redoubt (see drawing attached). This project, to be financed from the U.A.B.V. (Urban Amenities Block Vote) was planned as a passive recreational area with barbecue pits, sitting-out areas/viewpoints, pathways and ancillary facilities such as toilets, refreshment kiosks, etc.

Stage II: This involved development of the remaining 110 acres of the site which stretches all the way to Chai Wan. The development concept was to provide a

[2] Memorandum for Members of The Recreation and Amenities Select Committee, and Planning and Development Select Committee of The Urban Council, 1978-02-14, from Multimedia Information System under Hong Kong Public Libraries, Leisure Cultural Services Department

through-route for walkers from Ah Kung Ngam to Chai Wan. However, as the area was quite steep, detailed investigations on its development had to be undertaken before concrete proposals could be drawn up.

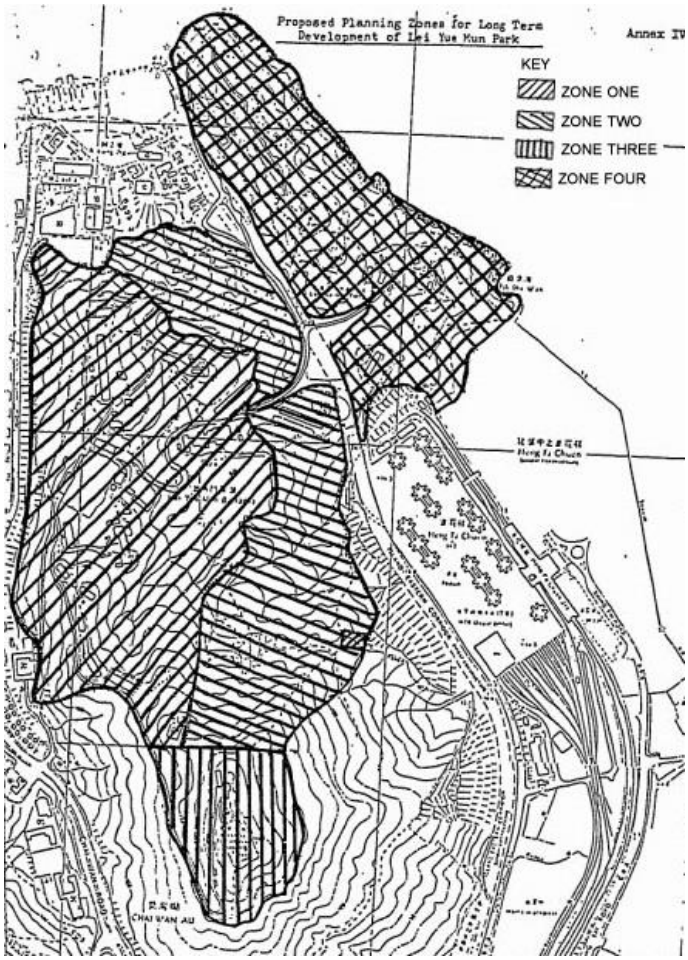


Fig. 10 *Proposed Planning Zones for Long Term Development of the Lei Yue Mun Park from the Memorandum for Members of The Recreation Select Committee, The Capital Works Select Committee and The Museum Select Committee of the former Urban Council, 09/04/1990. Pg17 (Source: Multimedia Information System under Hong Kong Public Libraries, Leisure Cultural Services Department)*

The Lei Yue Mun Park eventually opened for day camps in April 1988, and for night camps in September 1988, after renovation of the residential blocks. In April 1990, Council approved vides Committee Paper REC/l1/90, CAP/B/90 MUS/4/90 the initial scope of the long-term development of the park, which was divided into four zones for different development approaches:

Zone One: Good quality camping and recreation facilities
Zone Two: Special attraction, e.g. zoological garden and a horse riding centre
Zone Three: An astronomical observatory and/or leisure services facilities

Zone Four: Military museum, coastal trail and other leisure facilities

As a public park and holiday village, the site now contains various facilities such as rope courses, a Public Riding School (managed by Jockey Club) which was commissioned on 21 November 1992, basketball courts, tennis courts, football pitches and other indoor activity rooms. As a result, while the site has been adaptively reused with the introduction of different facilities and activities, the historical buildings can still be well respected and preserved. The original scale and the historic context of the site have not been upset and the new parts blend in exceptionally well to help keep the integrity of the external appearance and significance.

In 2000, the redoubt also became the Hong Kong Museum of Coastal Defence as a place for the public to learn about Hong Kong's military history.

3.4.5 Current Situation

The site was an important battleground in World War II. Some of the buildings inside the site are identified and recorded by the AMO as graded historic buildings. A table and site map below shows the allocation and the year of completion of the graded historic buildings within the Park:-

BUILDING	COMPLETION YEAR	GRADING (ACCORDED YEAR)	ORIGINAL USE	CURRENT USE
Block 2	1939	N/A	Soldiers' Quarters	Demolished in 1992
Block 3 	1939	Grade 2 (2009)	Soldiers' Quarters	Part of it is being used as the film stores of the Hong Kong Film Archive

BUILDING	COMPLETION YEAR	GRADING (ACCORDED YEAR)	ORIGINAL USE	CURRENT USE
Block 5 	1920s-1930s	Grade 2 (2009)	Church and Garrison Hall	Chapel
Block 7 	1890-1895	Grade 1 (2009) Declared Monuments (2016)	Field Officer's Quarter, Cook House and Boys' Room	Coffee Corner
Block 10 	1900-1909	Grade 1 (2009) Declared Monuments (2016)	Soldiers' Quarters, Canteen, Cook House, Boys' Quarters and Latrines	Indoor Recreation Centre
Block 17 	1890-1895	Grade 2 (2009)	Sergeants' Mess and Latrines	Art & Craft Centre, Storage
Block 18	1890-1895	Grade 1 (2009)	Soldiers' Quarters, Adult School, Company	Indoor Recreation Centre

BUILDING	COMPLETION YEAR	GRADING (ACCORDED YEAR)	ORIGINAL USE	CURRENT USE
			Office & Stores	
Block 20 	1890-1895	Grade 1 (2009)	Ablution House and Cook House	Entertainment Centre
Block 21 	1890-1895	Grade 1 (2009)	Soldiers' Quarters	Park Office
Block 25 	1884-1890	Grade 1 (2009) Declared Monuments (2016)	Officers' Mess and Quarters	Group Hostel
Block 30 	1936	Grade 1 (2009)	Married Soldiers' Quarters	Family Hostel
Block 31 	1907	Grade 1 (2009)	Married Soldiers' Quarters	Family Hostel
Block 32	1909	Grade 1 (2009)	Married Soldiers' Quarters	Family Hostel

BUILDING	COMPLETION YEAR	GRADING (ACCORDED YEAR)	ORIGINAL USE	CURRENT USE
				
Block 33 	1938	Grade 2 (2009)	Married Soldiers' Quarters	Staff Quarters
Block 34 	1936	Grade 2 (2009)	Married Soldiers' Quarters	Family Hostel

Table 2 *List of graded historic buildings in the old Lei Yue Mun Barracks (Data and Photos from Antiquities and Monument Office, Leisure and Cultural Services Department)*

Fig. 11 *Site map of the old Lei Yue Mun Barracks (Source: Courtesy of the Survey and Mapping Office, Lands Department, Hong Kong SAR Government, Survey sheet no. : 11-SE-8D, 11-SE-9C, 11-SE-13B, 11-SE-14A) Edited by Hannah LIU*

3.5 Evolution of Block 3

In addition to the provision of new batteries, works were also carried out to provide more and better accommodation for the troops in 1930s. Builders moved into the old Lei Yue Mun

Barracks again and the elegant and distinctive accommodation blocks bearing the 1930s dates on many a façade can still be seen today. No. 3 block was one of the products of the well-design accommodations.

3.5.1. The original use

Although the original layout plan of Block 3 could not be traced, record plans from 1913 below shows the original layout of other barrack blocks.

In old Lei Yue Mun Barracks, Block 10, 18 & 21 served as solders' quarters which have similar layout as Block 3. It is believed that Block 3 also served as the same purpose as single soldiers' quarter.

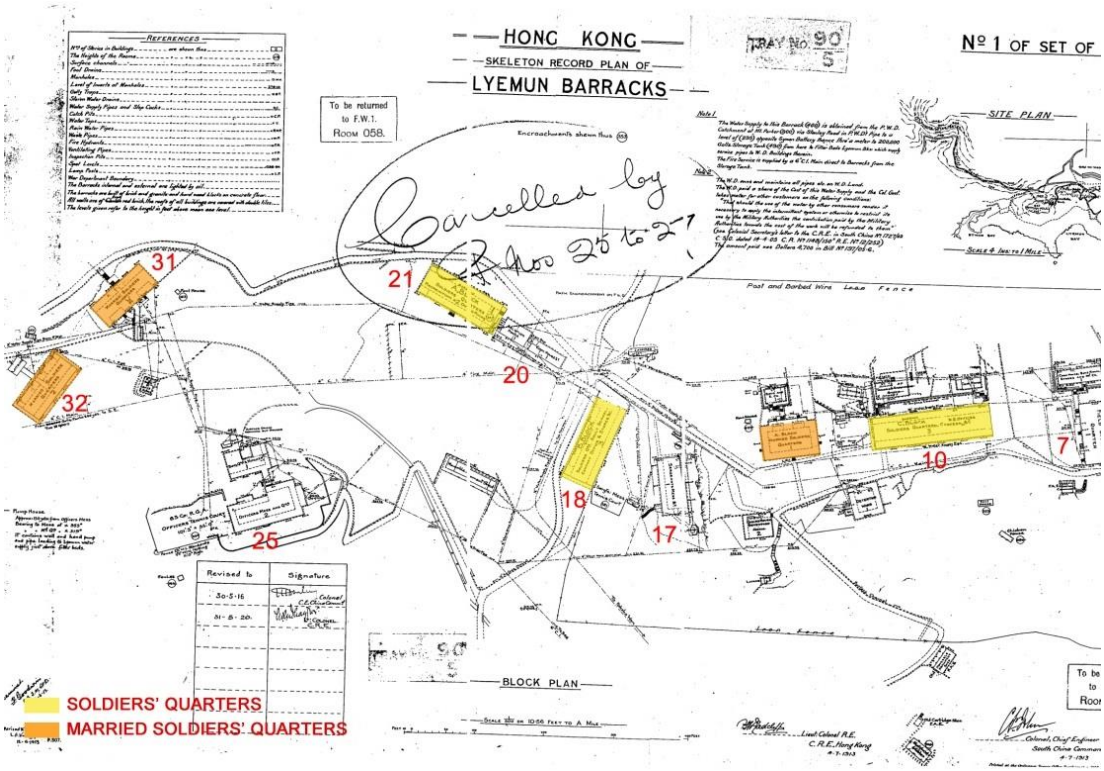


Fig. 12 *Skeleton Record Plan of the old Lei Yue Mun Barracks,1913 (Source: Courtesy of Hong Kong Record Office, Hong Kong SAR Government, ref. no. :MM-0449-01, Edited by Hannah LIU)*

There were two kinds of soldiers' quarters, the married soldiers quarters and single soldiers' quarters. The layout of the married soldiers' quarters was that it was shorter in length than the single solders' quarters with two families on each floor, while the single soldiers' quarters was more linear. In the old Lei Yue Mun Barracks, Block 10, 18 and 21 served as soldiers' quarters, and it is believed that Block 3 also

served the same purpose. In addition, fireplaces were found on the G/F and 1/F of Block 3 which was evidence that the block had been using gas as fuel.

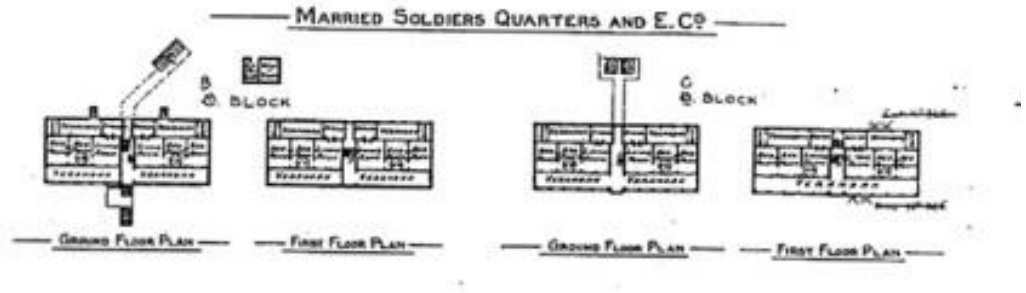


Fig. 13 *Floor Plan of the Married Soldiers' Quarters (Block 31) from the Skeleton Record Plan of the old Lei Yue Mun Barracks,1913 (Source: Courtesy of Hong Kong Record Office, Hong Kong SAR Government, ref. no. : MM-0449-01)*

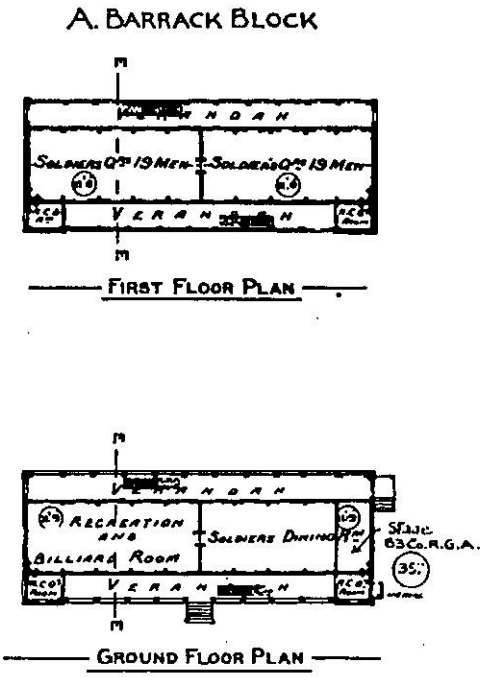


Fig. 14 *Floor Plan of the Soldiers' Quarters (Block 21) from the Skeleton Record Plan of the old Lei Yue Mun Barracks,1913 (Source: Courtesy of Hong Kong Record Office, Hong Kong SAR Government, ref. no. : MM-0449-01)*

3.5.2. The original layout

Another floor plan below shows the soldiers' quarters (Block 10) built in 1895. Ground floor level was mainly used as offices and store rooms, whereas soldiers' rooms were located on the first and second floor. The soldiers' quarters had large bay with two fire places on the each side. Similar configuration can be found in

Block 3. It is believed that the existing partitions on the first and second floor were later added to divide space.

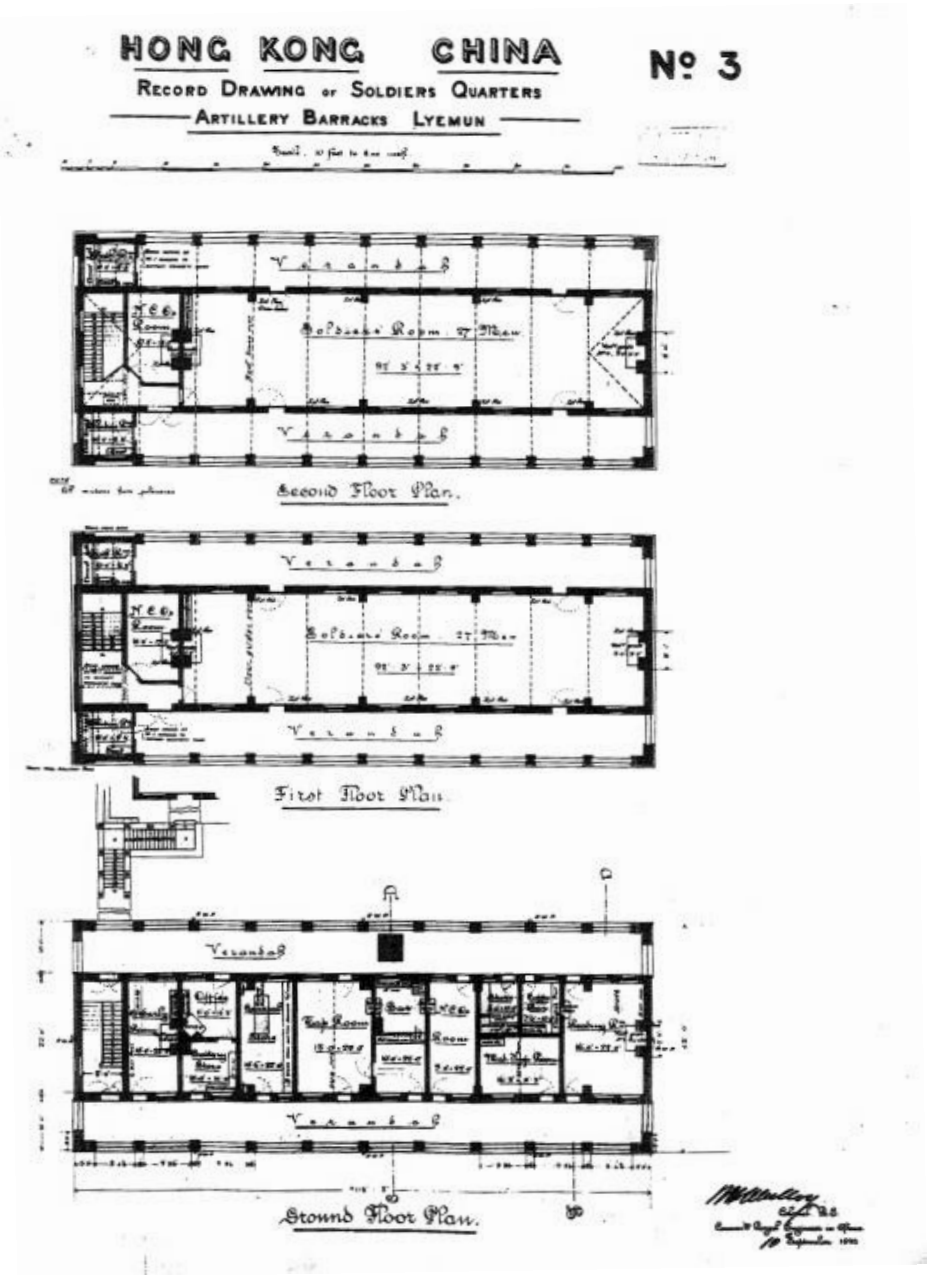


Fig. 15 *Floor Plan of Soldiers' Quarters (Block 10) from Plan of the Artillery Barracks, 1895 (Source: Courtesy of Hong Kong Record Office, Hong Kong SAR Government, ref. no : MM-0269)*

The alignment of the structure also reflects the original layout. An existing second floor plan below shows the walls on grid 1, 2, 5, 6, 9, 10, 13, 14 aligning with the centre of the columns. They are believed to be cross walls. Other walls which are not aligning with the grids are believed to be partitions added later on.

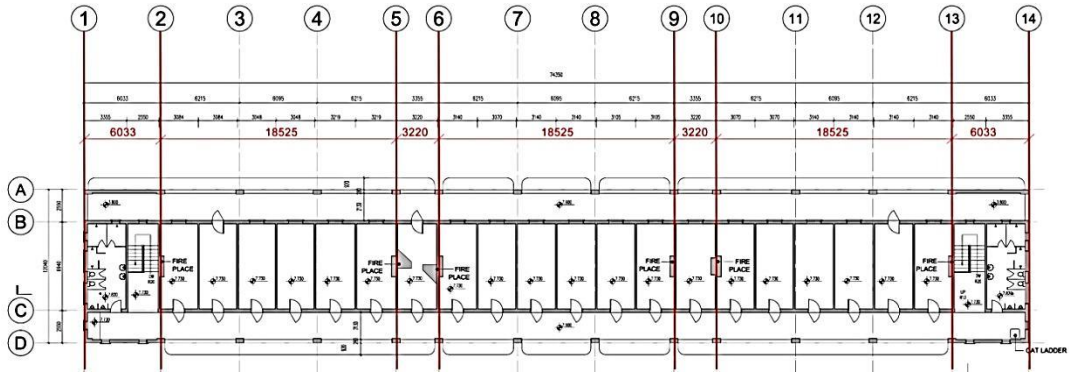


Fig. 16 *The existing second floor plan of Block 3, The grid no. 1, 2, 5, 6, 9, 10, 13, 14 were aligned with the central line of the walls, but the others were not aligned, drawn by Hannah LIU*

According to the regulations of construction of barrack rooms, specific to the Ventilation, it is provided that,

"Barrack Rooms. ---Outlets, in addition to the flue from fire place, should be provided having not less than 1 square in. clear cross sectional area to 60 cubic feet of room space"[3]

It could be calculated that the space of room 1 to room 6 on the second floor was 15112.37 cubic feet, as needs 251.87 square in. of flue for ventilation, which met the cross sectional area of the flue at room 1 and room 6. That is to say, the fireplaces of room 1 and 6 provided the whole large space in the past.

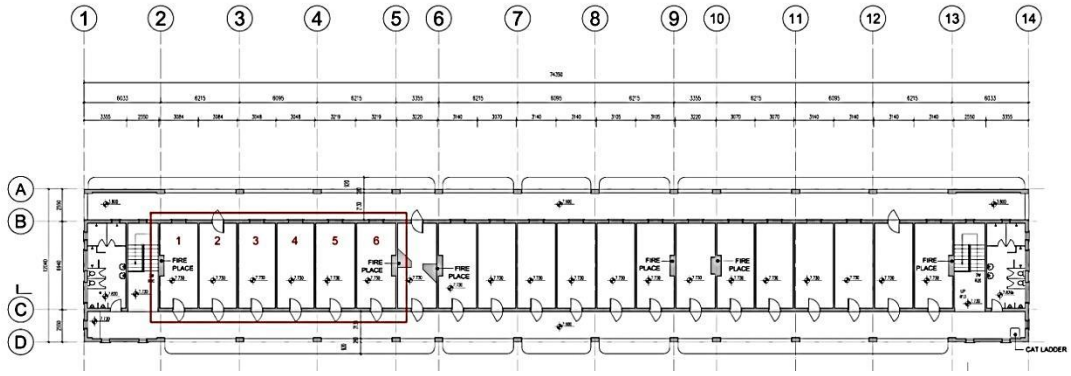


Fig. 17 *The existing second floor plan of Block 3, drawn by Hannah LIU.*

Last but not least, the record plan of conversion to Warrant Officers & Sergeants

[3] Design and Construction of Military Buildings - hand book for the use of Royal Engineer Officers and their staff

(WOs & SGTs) accommodation and Rank & File (R. & F.) mess drawn in 1978 documented the alteration and addition of new partitions as shown below:-

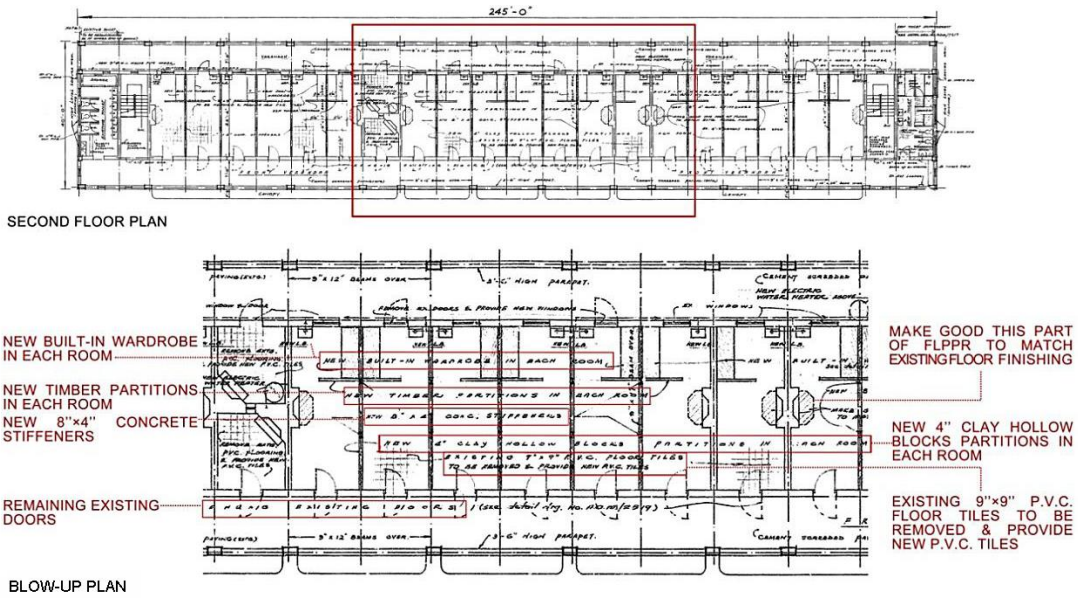


Fig. 18 *Proposed Second Floor Plan of Block 3 in 1978 (Drawn in Nov, 1978, Drawing no.: AOM/2515, from Architectural Service Department) Edited by Hannah LIU*

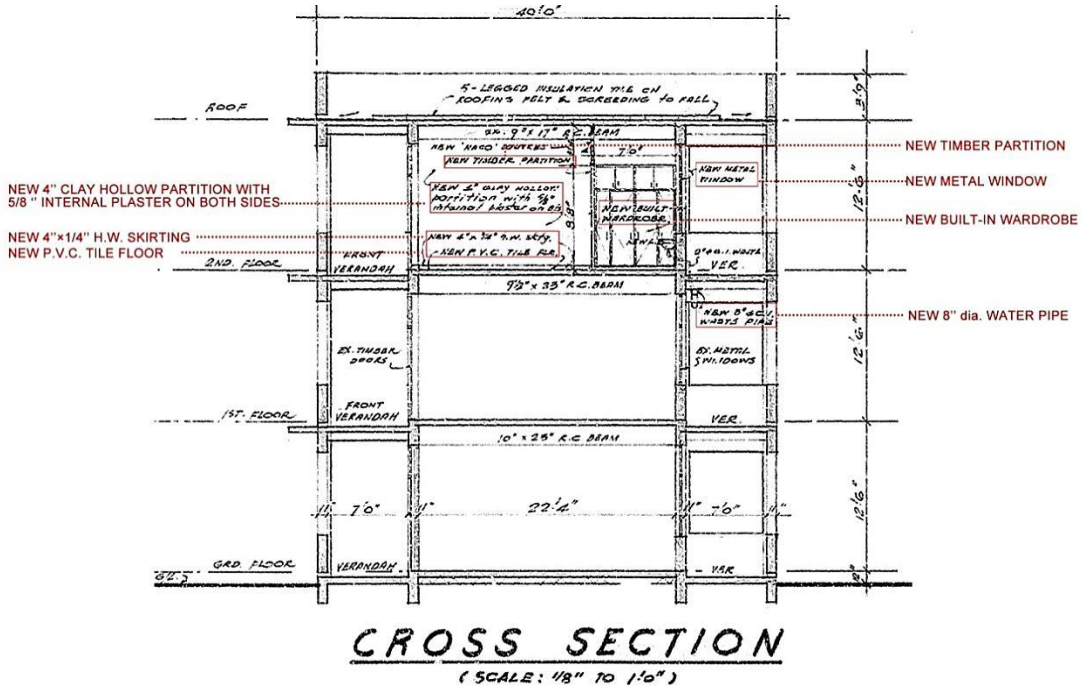
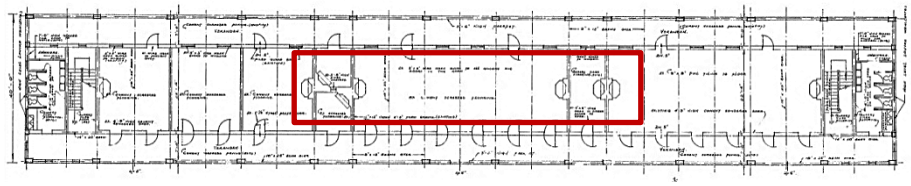


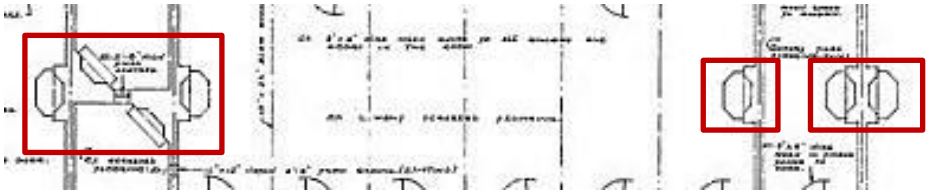
Fig. 19 *Cross Section of Block 3 in 1978 (Drawn in Nov, 1978, Drawing no.: AOM/2516, from Architectural Service Department) Edited by Hannah LIU*

Block 3 was originally built with large bays on the first and second floor. New

partitions were added to the second floor to divide rooms when it was changed to WOs & SGTs accommodation in 1978.



GROUND FLOOR PLAN



BLOW-UP PLAN

Fig. 20 *Proposed Ground Floor Plan of Block 3 in 1978 (Drawn in Nov, 1978, Drawing no.: AOM/2515, from Architectural Service Department)*

Fireplace hearths could be found on ground floor and second floor plan indicating the existence of fireplaces in the past. No fireplace was left in the current second floor. Only 1 no. on ground floor and 8 nos. on the first floor still remain. It is believed that some fireplaces were removed or blocked during the alteration works in 1978.

Fireplace on 1/F before it is opened up

Fireplace on /1F after it is opened up

Fireplace on 1/F after it is opened up

Fig. 21 *Photos Taken by Betty TAY*

In 1981, Block 3 was used as interim accommodation for the 5th Battalion, which was an infantry regiment of the British Indian Army in the Second World War. The layout plan drawn in 1981 is shown below.

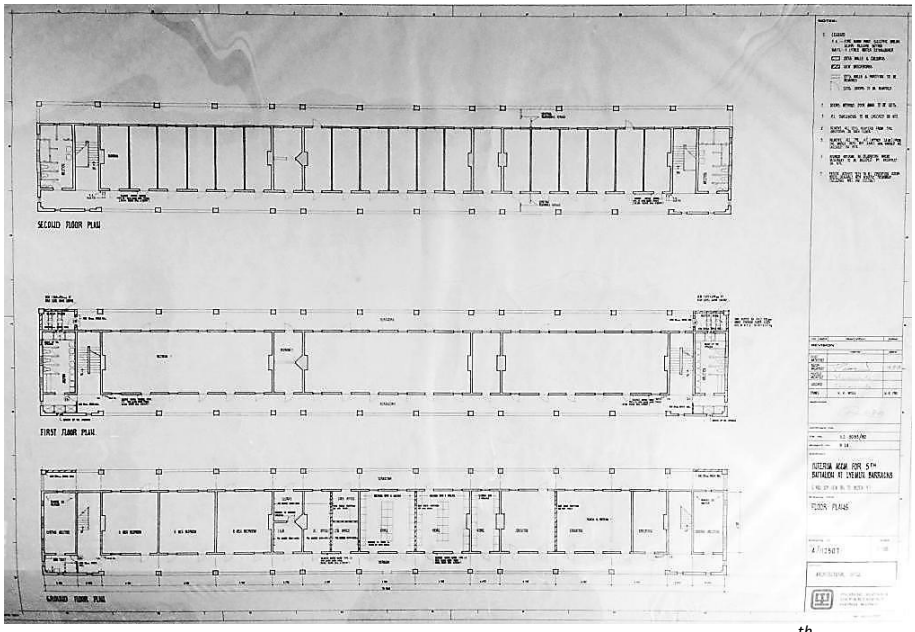


Fig. 22 *The layout plan of Block 3 as the interim accommodation of the 5th Battalion in 1981 (Source: Government Record Office, Drawing no. : A/112507)*

Compared to the 1978's plan, new partitions were added on the ground floor.

The mission of Block 3 as soldiers' accommodation came to an end in 1987 when the entire British Garrison vacated and handed over the old Lei Yue Mun Barracks to the Government for redevelopment of the site. The redevelopment must be considered a success in terms of heritage protection, as most of the heritage constructions are kept intact and the historical and heritage values are well preserved. On 18 December 2009, Block 3 was graded by AMO as Grade 2 Building. As of today, however, the building has not been converted to other use, and many rooms are currently being used as the stores for the Hong Kong Film Archive or left vacant. It would provide the opportunity for the public to appreciate the heritage values of the building and the site and allow them to know more about the past history of Hong Kong through renovation of the building for other use.

4.0 STATEMENT OF SIGNIFICANCE

4.1 Summary of Statement of Significance

4.1.1 Lei Yue Mun is the most important strategic waterway area in Eastern Hong Kong.

As Hong Kong became a crucial entrepot for trade in South China, the British army started to build the Lei Yue Mun Redoubt and the Sai Wan Redoubt in 1885 to prevent invasion from other European powers. Other fortifications including the Pak Sha Wan Redoubt and the Devil's Peak Redoubt and batteries sprung up from the ground, after the Qing Dynasty leased the New Territories to the United Kingdom in 1898.

During the Second World War, the Japanese army occupied Kowloon and started invading Hong Kong on13 December 1941. They carried out heavy and systematic bombardment on the military bases on the Hong Kong Island, and Hong Kong finally fell to the Japanese Imperial Army after the British held out for six days. Lei Yue Mun was the landing target site due to its shortest distance between both the shores in the Victoria Harbour.

4.1.2 Depot of Hong Kong Chinese Training Unit (HKCTU) in 1948

The barracks were turned into a training camp of the Hong Kong Military Service Corps (HKMSC) in 1948 and were garrisoned by the British army. The HKCTU played an important role in guarding Hong Kong for half a century until the China took over the administration from British Garrison in 1997.

Adaptive reuse by converting into the Lei Yue Mun Park in 1987

After 37 years, the site was handed over to the government in 1985 and converted into a park and holiday village in 1988. In 2000, the Lei Yue Mun Redoubt became the Hong Kong Museum of Coastal Defence.

4.2 Contextual Significance

4.2.1 Association with the development of military fortifications in context

After the Hong Kong Island was occupied by Britain in 1841, the area at the present old Lei Yue Mun Barracks compound was mainly settled by the British.

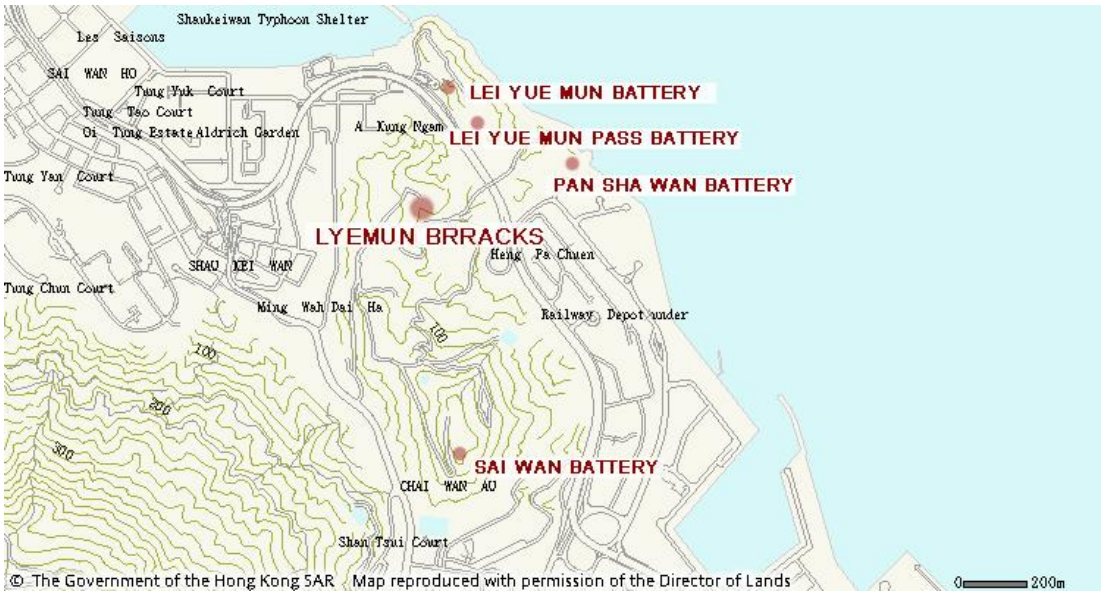


Fig. 23 *A map showing the relationship of the old Lei Yue Mun Barracks and context in early times (Source: Lands Department from website of Antiquities and Monuments Office) Edited by Hannah LIU*

During the colonial period, the British constructed various fortifications on the Hong Kong Island to reinforce the defence. There was no exception in the old Lei Yue Mun Barracks. Fortifications works including forts, batteries, tunnel systems, magazines, observation posts, barracks, searchlight position, ditch torpedo installations were set up on the site. The map above shows the locations of some vital fortifications in early times. These must not be regarded as just a cluster of structures, but are also a comprehensive part of the military heritage in Hong Kong.

With more military facilities constructed or installed, the Lei Yue Mun Area had become a crucial base for the military defence in time of war.

4.2.2 Association with the redevelopment of the site

In recent years, after the barracks had been handed over to the government, the Urban Council and government put forward several adaptive reuse approaches for the site. The intention of the adaptive reuse approach was to enhance the significance of historical buildings and integrate the buildings with the surrounding developments through sensitive design.

In July 1987, the Council agreed to the adaptive reuse of the site as a holiday village. The Lei Yue Mun Park opened for day camps on 30 April 1988 when the residential blocks had been renovated. The Park is clearly very popular and applications for weekend use are heavily over-subscribed. Because of the convenient location of the park being in the urban area, there is also increasing demand for using the camp for educational and community programmes at that time.

The Island Eastern Corridor (IEC) – Shau Kei Wan and Chai Wan sections of the IEC divide the site into two zones: the Lei Yue Mun Park and the Hong Kong Museum of Coastal Defence (HKMCD), which was opened to public in 1988 and 2000 respectively. More specifically, the old Lei Yue Mun barracks were changed into a holiday village whereas the San Wan Battery was turned into a park, and old Lei Yue Mun Battery became the HKMCD.

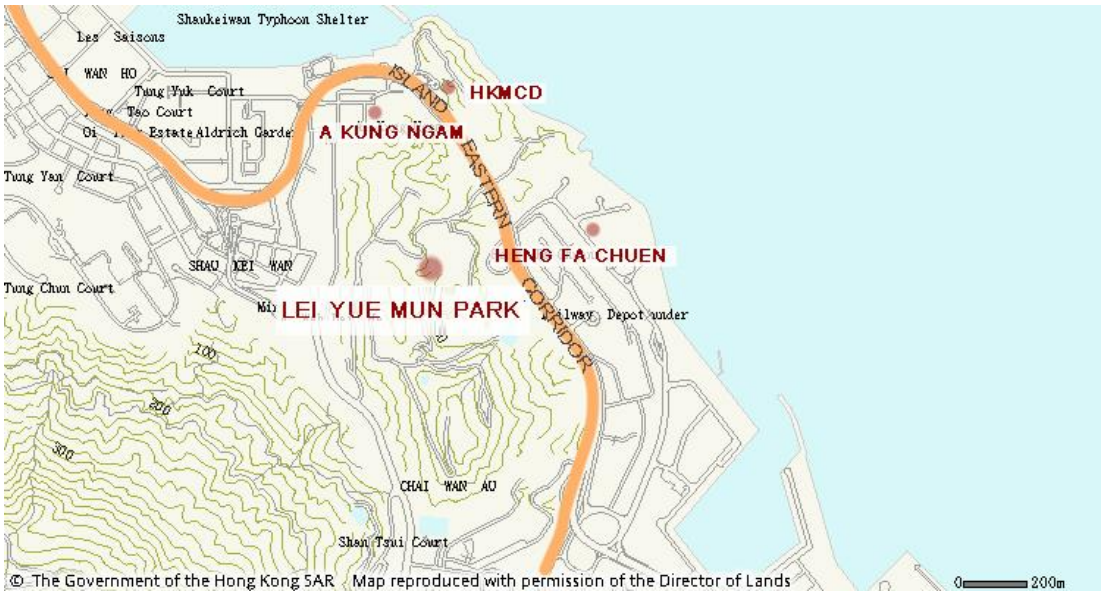


Fig. 24 *A map showing the relationship of the old Lei Yue Mun Barracks and the surrounding context in nowadays (Source: Lands Department from website of Antiquities and Monuments Office) Edited by Hannah LIU*

According to the approved Shau Kei Wan Outline Zoning Plan (OZP) No. S/H9/18 gazetted on 17 April 2015, the site zoned "Other Specified Uses" annotated "Comprehensive Recreational Development Area" (OU(CRDA)"). The site is intended to provide / reserve land for recreational and cultural facilities as well as holiday-camp type accommodation in the Lei Yue Mun Park and the Hong Kong Museum of Coastal Defence and for the preservation of the features of historical significance within the zone (S/H9/18-Shau Kei Wan).

All the fortifications in surrounding context witnessed the military development here and form its grand contextual significance with military setting. The historical buildings and context should be evaluated as a whole instead of assessing them individually and invalidating the contextual value.

4.3 Historic Significance

Block 3, built in 1939, has high historic significance because it had witnessed a whole sequence of historic and military events from a fortification site to a battlefield and finally a leisure and recreational area. The rich historical context has marked on the site traces of its historical past which will become our memory of city's history.

Block 3 in itself was already a historic document. It has witnessed the Second World War, the invasion of Japan, accommodated the HKCTU as its depot, served as garrison for different troops and remained as part the Lei Yue Mun Park nowadays. In this historic document is also written the daily and social life of the soldiers stationed here. It was soldiers' quarters during its first 40 years after completion. As with other soldiers' quarters in the site, the ground floor of Block 3 might be the offices and store rooms whereas the first and second floors were the soldiers' quarters. When the Second World War came to an end, the old Lei Yue Mun Barracks were transformed into a training camp of the HKCTU.

Despite the Urban Council took over the site and the HKMSC's removal to the Stonecutters Island in 1977, it continued to be used as accommodation for other troops. The original layout also continued to be altered and compromised as it turned into WOs and SGTs accommodation and Royal Fusiliers mess in 1978. Some new works were built on the second floor, such as new build-in wardrobes and partitions were added and the toilets were reconstructed totally with different spatial arrangement. Three years later, it was assigned to accommodate the 5th Battalion with further additional works on the ground floor.

In 1987, the garrison left the barracks and the government took over the heritage site for future development. In 1988, it became the Lei Yue Mun Park.

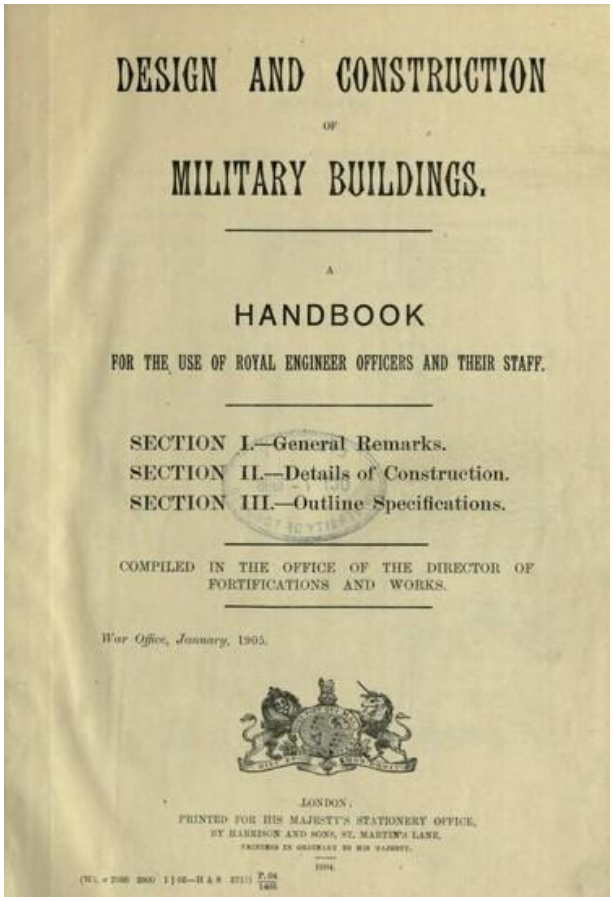
4.4 Architectural Significance

Block 3 is a noteworthy example of typical military barracks built by Royal Engineers in 1939. It is stated in "Design and Construction of Military Buildings - hand book for the use of Royal

Engineer Officers and their staff" that

- *'the building shall be suited in every aspect to its purpose; having regard both to the internal occupation and to the local and climatic conditions.'*
- *'Barrack Rooms should be designed with windows in opposite walls.'*
- *'Beds should be placed with their head against the external walls, with not more than one bed in any corner, and not more than two between any two windows'*
- *'Barrack Rooms, Sergeants' Rooms, Dining Rooms, Stores, Wash-up Rooms, Passages. --- Plastered.'(Ceiling)*
- *'Barrack Rooms. ---Outlets, in addition to the flue from fire place, should be provide having not less than 1 square in. clear cross sectional area to 60 cubic feet of room space'*

Block 3 is three-storey high with ablutions situated at the two ends of the block. It has long verandah on both sides along with barrack rooms divided by means of cross walls. The architectural style is International Modern, which is rare for military barracks. In the old Lei Yue Mun Barracks, Block 3 is probably the only one building built in this style after Block 2 has been demolished in 1992. It has much architectural value as it has been little altered and has kept its authenticity.



DESIGN AND CONSTRUCTION

OF

MILITARY BUILDINGS.

A

HANDBOOK

FOR THE USE OF ROYAL ENGINEER OFFICERS AND THEIR STAFF.

SECTION I.—General Remarks.
SECTION II.—Details of Construction.
SECTION III.—Outline Specifications.

COMPILED IN THE OFFICE OF THE DIRECTOR OF FORTIFICATIONS AND WORKS.

War Office, January, 1905.

LONDON:
PRINTED FOR HIS MAJESTY'S STATIONERY OFFICE,
BY HARRISON AND SONS, ST. MARTIN'S LANE.
PRINTERS IN ORDINARY TO HIS MAJESTY.
1904.

Fig. 25 *Design and Construction of Military Buildings - hand book for the use of Royal Engineer Officers and their staff*

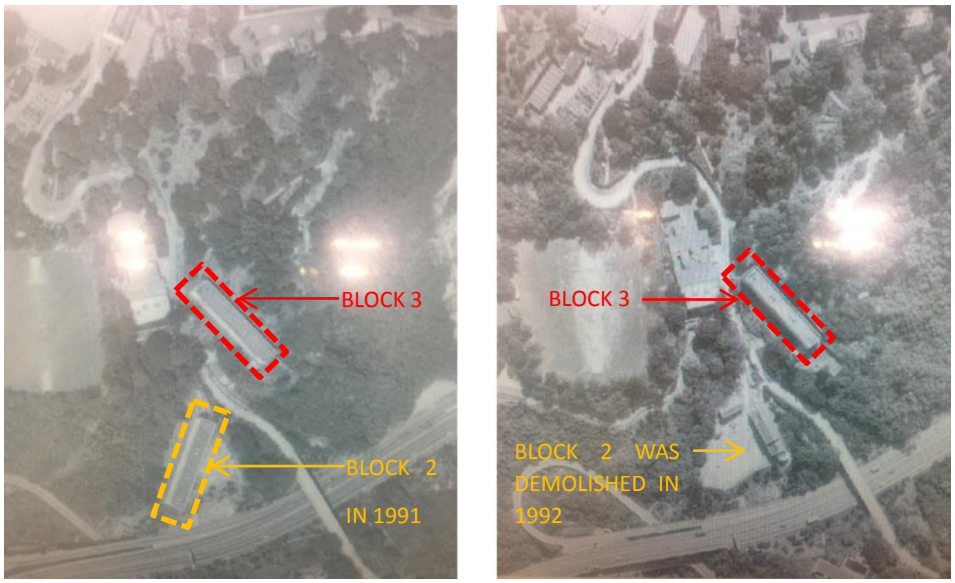


Fig. 26 *The photos of the Block 2&3 in 1991 and 1992 (Source: Hong Kong Survey and Mapping Office)*

Typical form of International Modern building found in the colonial period, is characterized by:

- Simple and clarified rectangular building form
- Visual expression of structure, as the columns and beams can be seen directly
- Functional and pragmatic approach on elevations, with minimum decoration and spatial articulation, painted plastered wall, flat roofs, void and solid configuration formed by alternative opened verandah and ablution block
- Verandah defined by solid parapet walls emphasizing horizontality along the whole façade
- Simple rectangular windows and doors on elevation
- Functional and pragmatic approach on interior layout, with spacious verandah and canopy in both front and rear façade to avoid direct sunlight on the walls

Block 3 is one of the very few remaining military barrack buildings built in Hong Kong that can best depict the soldiers' daily living in the 1930s when the International Modern style reached its peak of popularity. It is a building of immense architectural and historical significance.

4.5 Military and Strategic Significance

4.5.1 Built in the site, which is one of the most important military fortresses in Hong Kong with crucial location, the old Lei Yue Mun Barracks compound was a heritage site of military significance. It is not simply a group of structures, but a set of comprehensive historical remains and monuments. The barracks are typical military constructions in the colonial period.

Block 3 and other buildings in the barracks remind us the history of the garrison and invasion by the British and Japanese, and provide the setting for us to memorize the war and the soldiers who sacrificed their lives.

At the strategic location of the Lei Yue Mun Channel between the Junk Bay and the Victoria Harbour overlooking the main navigation passage leading to the South China Sea, and holding the east gateway of Hong Kong, the Lei Yue Mun site is naturally the best setting that has explained, to some extent, why the British should

decide to build the old Lei Yue Mun Barracks and other fortifications here in the first place. It military and strategic significance was again highlighted by the landing of the Japanese Army to embark on their final attack over the territories, after crossing the Lei Yue Mun Channel from Kowloon in the Battle of Hong Kong.

5.0 CHARACTER DEFINING ELEMENTS

5.1 Selection Criteria

CDEs is used to depict the materials, forms, locations, spatial configurations, uses and cultural associations or meanings that contribute to the heritage value of a historic place, which must be retained to preserve its heritage value[4]. The selection of the CDEs is based on the cultural significance of the Block derived from the previous chapter.

5.2 Level of Significance – Definition of Terms[5]

Five levels of significance have been used to describe the elements individually with descriptions listed below:-

Levels of Significance	Description
High	Elements which make a major contribution to the overall significance of the place. Spaces, elements, or fabric originally of substantial intrinsic quality, and exhibit high degree of intactness and quality, though minor alterations or degradation may be evident

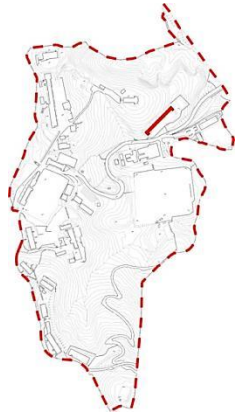
[4] Definition extracted from Standards and Guidelines for the Conservation Historic Places in Canada, Park Canada, 2010.

[5] Definition of Terms is developed based on James Kerr, Conservation Plan: A Guideline to the Preparation of Conservation Plans for Places of European Cultural Significance, National Truss, 2013

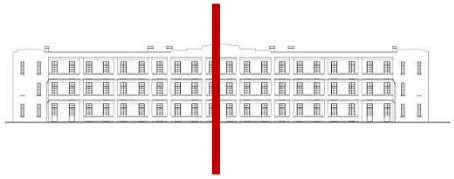
Levels of Significance	Description
Moderate	Elements which make a moderate contribution to the overall significance of the place. Spaces, elements, or fabric originally of some intrinsic quality, and may have undergone minor alteration or degradation.
Low	Elements which make a minor contribution to the overall significance of the place. Spaces, elements, or fabric originally of some quality, and may have undergone extensive alteration or adaptation to the extent that only isolated remnants survive.
Neutral	Elements which are of little consequence in terms or understanding or appreciating the site and its developments, without being actually intrusive.
Intrusive	Elements which are visually intrusive or which obscure the understanding of significant elements of the site, and may be identified for removal.

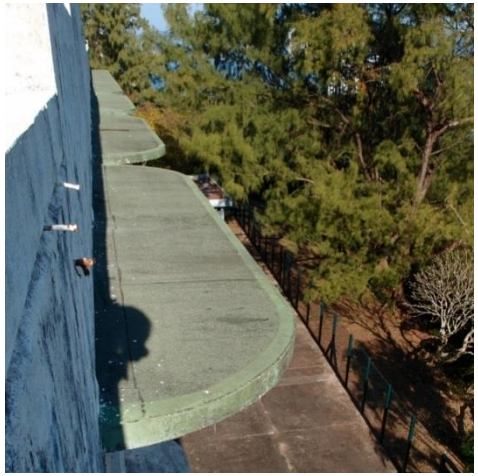
6.0 LIST OF CHARACTER DEFINING ELEMENTS

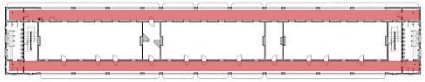
6.1 Setting and Context

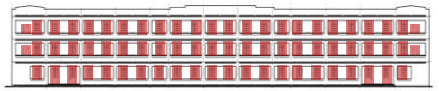
No.	CDE	Level of Significance	Photo	Location
S-01	Integrity of the site and its spatial organisation - The original setting of the historic buildings and the spatial organisation in the Lei Yue Mun Park is well preserved	High - The site in which Block 3 is located is physical evidence of the place's designation as a strategic area known as the old Lei Yue Mun Barracks.		 Lei Yue Mun Park  Block 3

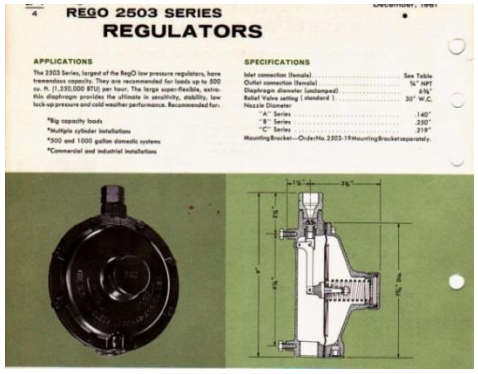
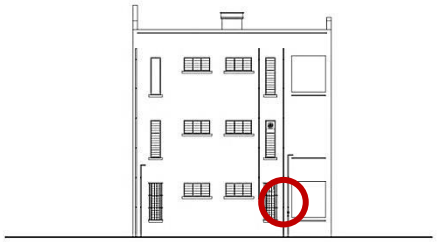
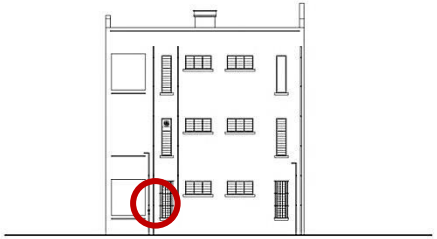
6.2 Exterior

No.	CDE	Level of Significance	Photo	Location
E-01	Long rectangular layout of the block - The long rectangular layout is typical for barrack block arrangement - Simple and clarified rectangular building form.	High - It is an example of typical military barrack blocks - Simple and clarified rectangular building form - Typical international modern style		 Site Plan
E-02	The Symmetrical elevation of the block	High - Prominent feature contributing to the original configuration of the typical International Modern style		 Front Elevation

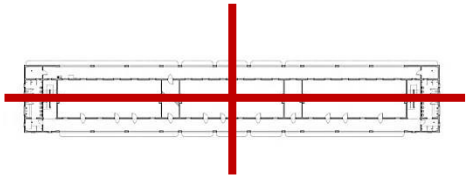
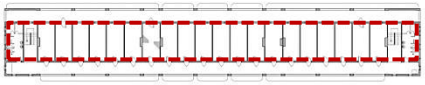
No.	CDE	Level of Significance	Photo	Location
E-03	Stepped "ziggurat" shaped parapet wall on the crown of the front façade with the lettering of the construction year "1939"	High - The shaped characters recording the year of the construction of the block		 Front Elevation
E-04	Typhoon canopy - The front façade consists of open colonnaded verandahs with each open bay protected by a projecting cantilevered typhoon canopy with rounded corners - Functional and pragmatic approach to avoid direct sunlight on the walls	High - Prominent feature giving the building a striking appearance - Feature having regard both to the internal occupation and to the local and climatic conditions - Functional and pragmatic approach to avoid direct sunlight on the walls		 Front Elevation

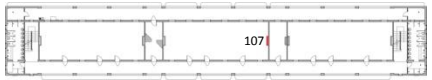
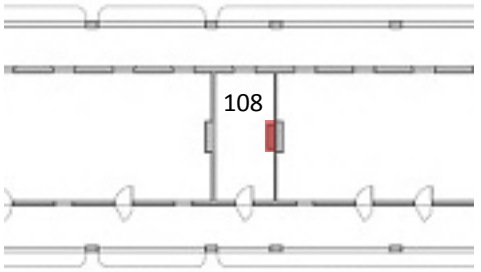
No.	CDE	Level of Significance	Photo	Location
E-05	Concrete verandahs along the front and rear elevations - The verandahs were designed to act as weather protective shelters. The Royal Engineers adopted the standard designs to suit the diverse climatic regions of individual colonies and this has become an early form of what is now termed "environmental design" - Functional and pragmatic approach to avoid direct sunlight on the walls	High - Major contributor to the original spatial configuration of military barracks - Feature having regard both to the internal occupation and to the local and climatic conditions - Functional and pragmatic approach to avoid direct sunlight on the walls		 First Floor Plan
E-06	Original brick built Chimney stacks on the roof	High - Evidence of the original daily living requirements of military barracks - Feature having regard both to the internal occupation and to the local and climatic conditions		 Roof Plan

No.	CDE	Level of Significance	Photo	Location
E-07	Metal door and window and their grid-like openings on the facade - The door and window openings on both front and rear facades forming a uniform grid like pattern. - According to the record plan and ironmongery schedule from ArchSD, the current doors and windows were later altered in 1972.	High - Major contributor to the original room arrangement and architectural style of the block	 	 Front Elevation  Rear Elevation

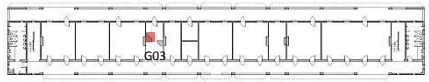
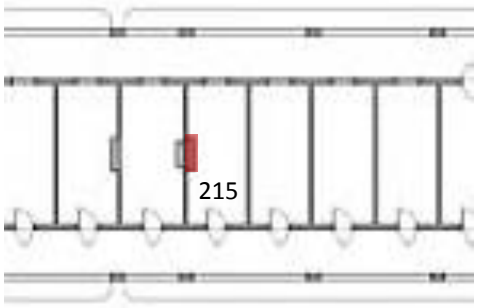
No.	CDE	Level of Significance	Photo	Location
E-08	Gas regulator - An obsolete 2503 Series LP-Gas regulator manufactured by the Bastian-Blessing Company of Chicago, IL USA in 1960s to deliver liquid petroleum gas to the heaters on first floor, which were installed when the block being used as the interim accommodation for the 5th Battalion in 1981.	Moderate - Evidence of the later alteration to the block and the use of LP-Gas in the past	  Cut Sheet of the 2503 Series regulator	 North East Elevation  South West Elevation

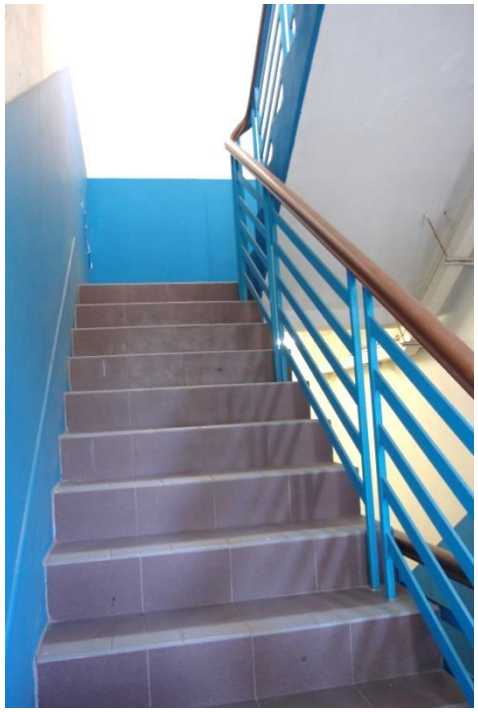
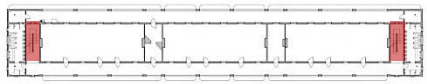
6.3 Interior

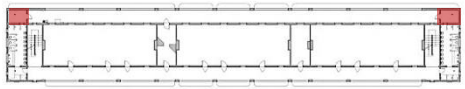
No.	CDE	Level of Significance	Photo	Location Plan
I-01	The symmetric layout of the block - The simple and symmetric form was a purposed design to suit the original function as military barracks.	High - Major contributor to the original spatial configuration of the block		 First Floor Plan
I-02	Internal layout - The original record plan could not be found but the internal layout has been altered many times according to the record drawings found on 1972 and 1981.	Low - Evidence of the later alteration and change of use of the building - Visual expression of structure		 Second Floor Plan

No.	CDE	Level of Significance	Photo	Location Plan
I-03	Fireplaces and chimney stacks - Edwardian fireplaces with chamfered hearth and round curb reflecting the influence of Art Deco aesthetics. Such type of fireplaces use coal as the source of fuel in the 1900s, as coal was considerably less expensive[6] than other available alternatives such as electrical or gas heating. - No fireplace was found in Rm108 on first floor. Instead there are two holes (one with cast iron door) on the wall of the chimney possibly for connection to a kitchen stove for cooking, oven and warmth. - Fireplaces on first floor and one fireplace on ground floor (room G03) are covered up by plywood.	High - Feature reflecting the original daily living requirements of the barrack block	 	 First Floor Plan (Chimney at Room 107)  Chimney at Room 108

[6] Lawrence, R.R., The book of the Edwardian & Interwar House. London: Aurum Press Limited, 2009, P. 195.

No.	CDE	Level of Significance	Photo	Location Plan
	The rest of the fireplaces on ground floor and second floor were blocked. Further investigate is needed to be carried out by carefully opening up the wall.		 	 Ground Floor Plan  Chimney at Room 215

No.	CDE	Level of Significance	Photo	Location Plan
I-04	Staircases and handrails - The current staircases at both ends of the block are finished with ceramic tiles paved in the past decades. According to a record plan from ArchSD, the staircases were paved with terrazzo in 1972. Handrails are also believed to have been altered in the past.	Moderate - Features reflecting the functional design of the block		 Western Staircase

No.	CDE	Level of Significance	Photo	Location Plan
I-05	Water Heaters - Added in 1981 for providing hot water to the ablutions (showers and toilets) at the two ends of the block.	Low - Feature reflecting the later alteration to the block for improving the living condition	 	 First Floor Plan

7.0 Conservation Principles

7.1 Conservation Standards and Principles

7.1.1 Standards

The following international standards and local reference were adopted in developing the appropriate treatments and level of intervention for the CDEs and other historic building fabrics:-

- Venice Charter (1964) – ICOMOS International Charter for the Conservation and Restoration of Monuments and Sites, UNESCO

- Burra Charter (2013) – The Australia ICOMOS Charter for Places of Cultural Significances

- China Principles (2002) – Principles for the Conservation of Heritage Sites in China

7.1.2 Principles

The conservation process of making a possible compatible use for the Block 3 adopted the following guiding conservation principles in developing the appropriate treatments and level of intervention for CDEs and other historic building fabrics with reference to international charters and other relevant conservation standards.

- Setting and Landscape

  - Preserve the context with other blocks in the Lei Yue Mun Park. Adaptive reuse shall be culturally appropriate or in a way that the understanding and overall values of the place would not be compromised. (Article 8 & 25, Burra Charter 2013)

- Conserve Heritage Value

  - Respect changes of the building over time and its various uses that

represent particular periods. Thus, it is not necessary to return its state to the original period when the building or the site was firstly erected. Only remove, and/or replace the physical fabric that has substantially altered the overall intactness of the buildings and the CDEs. (Article 19, Burra Charter 2013)

- Restore any deformed, collapsed, or misplaced components, and later additions considered intrusive should also be removed. (Article 14, Burra Charter 2013)

- Retain Authenticity & Integrity

  - Recognise each historic place as a physical record of its time, place and use. (Article 19, Burra Charter 2013)

  - Do not create a false sense of historical development by adding elements from other historic places or by combining features of the same property that never co-existed. (Article 19, Burra Charter 2013)

- Minimum Intervention

  - Keep any treatment or intervention to building fabric to the minimum and respect the heritage value when undertaking an intervention. (Article 21 & 22, Burra Charter 2013)

  - Use the gentlest means possible for any intervention. (Article 21 & 22, Burra Charter 2013)

  - Make any intervention physically and visually compatible and identifiable upon close inspection, and document any intervention for future reference. (Article 21 & 22, Burra Charter 2013)

- Integrating Old and New

  - Any proposed new works and alterations to the heritage building should be sympathetic to the heritage place in terms of its compatible proportion, form, design and materials and imitation will be avoided. Make the new

works physically and visually compatible with and distinguishable from the original fabric of the historic place. (Article 22, Burra Charter 2013)

- Reversibility

  - Make any intervention or adaptation to the building fabric reversible, without causing any damage to the existing structure when such intervention is to be removed in future. (Article 21, Burra Charter 2013)

  - Any new additions should be reversible and should not affect the essential form and integrity of the historic place, or that the building fabric should not be impaired if the new work is to be removed in the future. (Article 21, Burra Charter 2013)

- Repair Rather than Replace

  - Repair rather than replace character defining elements. Only when such elements are too severely deteriorated to repair, and with sufficient physical evidence, replace them with new elements that match the forms, materials and detailing of the same elements. (Article 16, Burra Charter 2013)

  - Where there is no sufficient evidence, make the form, material and detailing of the new elements compatible with the character of the historic place. (Article 16, Burra Charter 2013)

- Manage the Change

  - Allow changes to the heritage place in a way that guided by the cultural significance of it, and allow its interpretation. This desirable change should help to enhance and enrich the value of the place by its imposed changes which can add more layers of future interest and value. (Article 27, Burra Charter 2013)

7.2 Conservation Policies and Guidelines

7.2.1 General

- Policy 01

  Conservation principles and international practices should be observed and applied in the overall stage of conservation progress. All the policies should be review by heritage management team for certain period.

7.2.2 New use of Block 3

- Policy 02

  The new use of Block 3 should be compatible with its original use.

  Conservation guidelines

  The proposed use should involve minimum change to significant fabric and use to retain the cultural significance of the place. The proposed conversion of the block into a hostel and quarantine centre on an *ad-hoc* basis is considered compatible with the original purpose of the heritage building.

- Policy 03

  The allowable imposed loading of the existing building should be taken into account when considering the new use

  Conservation guidelines

  The proposed new use should be compatible with the original use in terms of loading requirement so as to minimise the structural alteration to the historic building. Additional structure should be structurally independent of the existing structure.

7.2.3 Setting and Landscape

- Policy 04

  The context of the Lei Yue Mun Park, established by a group of barrack buildings shall be preserved *in-situ*. Adaptive reuse shall be

introduced to less significant fabrics or in a way that the overall values of the place would not be compromised. Any changes which would adversely affect the setting or relationships are not appropriate.

Conservation guideline

Block 3 shall be adaptive re-used, with necessary changes to associate with other blocks, to take the place sustainable and contribute to cultural significance of the place.

- Policy 05

  The new development should minimise the impact on the setting of the site. The original setting and landscape of Block 3 in the context of other barrack blocks in the Lei Yue Mun Park should be respected and reserved.

Conservation guideline

Existing trees, slopes, external staircases and the open space in front of Block 3 should be retained as far as possible. The storage shed in front of the block added at a later stage should be demolished.

7.2.4 Conserve Heritage Value

- Policy 06

  Restore any deformed, collapsed, or misplaced components, and later additions considered intrusive should also be removed.

Conservation guideline

All fireplaces currently blocked by timber board should be revealed. Door and window openings should be retained as far as possible.

7.2.5 Preservation of Built Fabric

- Policy 07

  All conservation works should involve minimal change to significant building fabrics.

Conservation guideline

CDEs should be kept intact as much as possible to preserve the historic fabric, only carried out the works which are necessary. Determine the appropriate works and action base on the level of significance. External redecoration is restricted to colors that are compatible with the age and character of the buildings and the paint system is to be reversible.

7.2.6 Addition and Alteration

- Policy 08

  A full photographic and cartographic survey should be carried out prior to any renovation works to Block 3.

  Conservation guideline

  The photographic and cartographic survey should be carried by experienced surveyors / conservationists by making reference with the requirements from AMO. A set of records shall be kept by the operator, Architectural Services Department and Antiquities and AMO.

- Policy 09

  Any addition and alteration works necessarily to be carried out at the exterior of Block 3 should be kept to a minimum and at less conspicuous location.

  Conservation guideline

  The existing enclosed verandahs should be revealed while the open verandahs should be retained as far as possible. The overrun and mechanical plants of the new lifts should be set back and of minimum size, and should not be visually prominent. New services pipelines should be concealed if possible and the style of the enclosures for the building services provisions should be compatible with but distinguishable from the existing building fabric. Any exposed pipelines should be laid in a neat and tidy manner. Any new addition which is essentially required for the on-going service of the heritage building e.g. water pump and tank, should be put in a less

conspicuous area and in an less obtrusive manner with least physical and visual impact on the historic place.

- Policy 10
  Minimum intervention and maximum reversibility

  Conservation guideline
  All proposed works should incur minimum intervention and be reversible. Greater flexibility should be allowed to the hostel layout since it has been altered many times.

7.2.7 Interpretation

- Policy 11
  Interpretation should be provided to facilitate users and visitors' understanding of the historic building

  Conservation guideline
  Topics for interpretation can include (but not limit to) the history and the architecture of the Block 3, development of old Lei Yue Mun Barracks, military history in Hong Kong, as well as the conservation process.
  On the other hand, the activity room on G/F with original fireplace provides a best area for display in normal time, which might be in the form of a small exhibition at the beginning or at the end of the guided tour equipped with some written material to give some insight into the history and significance of the building and make the visit a worthwhile experience.
  Interpretation should not be interfered in quarantine time. Some historical photos and articles shall be displayed on the walls and columns as a brief interpretation.

7.2.8 Management and Maintenance

- Policy 12
  A maintenance and management plan should be drawn up to ensure that the heritage site is well kept in good condition.

Conservation guideline

The maintenance and management plan will provide framework and information describing how Block 3 should be managed and maintained, including an indication of who should be responsible for the works, maintenance schedule and tracking methods. The plan shall be reviewed annually by building management professionals, conservationists and professionals with thorough understanding of managing a historic building to ensure the execution of a proper maintenance programme.

7.2.9 Documentation

- Policy 13

  The documentation produced for the purpose of obtaining statutory approvals, procurement and construction (including method statements, contractor-designed elements and manufacturers' data sheets), should be held indefinitely together with this Heritage Impact Assessment and photographic and cartographic surveys, as a record of the changes to the building and the policy considerations related to these changes.

- Policy 14

  Any CDEs that may be found at later stage shall be recorded in the table of significance and the impacts, if any, recorded in the impact assessment table with mitigation measures which agreed with AMO.

  Conservation guideline

  Record any conservation, new and maintenance works. All documentation should be properly kept and archived by operator, maintenance agent and AMO.

PART B : IMPACT ASSESSMENT STUDY

8.0 INTRODUCTION

8.1 Project Background

Under the existing arrangement, in case of an outbreak of an infectious disease with pandemic potential, the Lady MacLehose Holiday Village and the Lei Yue Mun Park are used by the Government as quarantine centre alternatively.

These two camps are managed by LCSD for public use during normal times and are not purpose-built as quarantine centre. Once designated as quarantine centre, the toilets and shower facilities in residential units cannot be used on a communal basis as they are in normal times for the sake of infection control. Moreover, the camps would need to be closed entirely from public use, regardless of the number of confinees. In 2013 and 2014, when there were confirmed human cases of avian influenza A (H7N9), there were relatively few contacts subject to quarantine. Nevertheless, the Lady MacLehose Holiday Village, which was used as quarantine centre, was closed from public use. This has raised the questions on the justifications of surrendering the whole holiday camp to less than 20 asymptomatic contacts.

The FHB has explored the option of redeveloping an LCSD holiday camp in its entirety, in addition to upgrading the residential units, to become fit for quarantine purposes. However, the engineering works would disrupt normal camp operations for much longer periods and would be far more expensive. Some holiday camps were also found to be unsuitable for large scale redevelopment due to problematic individual sites within the camp.

Eventually, Block 3 of the LYMP was chosen as the site for the dedicated quarantine facility.

8.2 Proposed Use

The proposed site of Block 3 is in a relatively secluded part of the Park. FHB proposed to renovate the block into a dedicated quarantine facility, primarily with upgraded residential units that meet infection control purposes. When the quarantine facility is in operation, FHB and DH will consider from the health perspective if other parts of the Park may operate as normal as the confinees residing in Block 3 will be suitably segregated from other camp

users.

If quarantine facilities of a larger capacity are required, the Government will follow the existing practice of using the whole campsite of the Park and/or Lady MacLehose Holiday Village.

After renovation, Block 3 will be used by the public during normal times and managed by LCSD as part of the campsite. This will enhance the overall capacity of the camp, hence some other facilities in the Park will also need to be correspondingly upgraded as part of the proposed construction project.

8.3 User's Requirement

FHB has proposed to convert Block 3 to provide the following quarantine facilities:-

8.3.1 Residential Units

15 nos. of 3-person rooms and 1 nos. of 4-person rooms with shower, toilet and other standard installations on the second floor and first floor.

8.3.2 Activity room / Medical post

1 room located on G/F at the size of at least 5 nos. of 3-person rooms. During normal times, this may be used as an activity room for camp users. During quarantine operation, this will be used as the medical post. Other standard installations for power and communications are required.

8.3.3 Activity room / Medical post / Briefing, Reception

1 room located on G/F at the size of at least 2 nos. of 3-person rooms. During normal times, this may be used as an activity room for camp users. During quarantine operation, this room will be used for briefing of confines, reception of new confines for temperature assessment and / or waiting room for confines requiring transfer to hospital. Standard installations for power and communications are required.

8.3.4 Storage room

3 nos. of Store rooms on first floor for LCSD's storage of cleansing and sanitary, furniture, hostel and appliance equipment. 1 no. of store room on second floor for LCSD's linens, mattresses, etc. and Personal Protective Equipment (PPE) for daily cleansing.

2 nos. of store rooms on ground floor and second floor respectively for DH to store materials used in quarantine operation. 2 nos. of multiple purpose rooms on ground floor also serve as gowning (Donning of PPE for quarantine operation) & de-gowning (Removing of PPE after quarantine operation) rooms. Toilet and shower installation are required.

8.3.5 Ventilation

Windows that allow natural ventilation and split-type air conditioning in all rooms. Air conditioning unit with cooling and heating function is allowed. High efficiency air filter, air-flow control and negative pressure control is not required.

8.3.6 Communication links

Telephone lines, Internet connection by WiFi/LAN line, television in all rooms.

8.3.7 Power supply

Power sockets to be provided in all units, back-up emergency power supply is required for essential services. Stand-alone emergency power generator is not required.

8.3.8 Access facilities

One barrier-free residential unit on both first and second floor respectively. Lift and staircase access to all storeys except the roof. Proper access at the main entrance such as ramp or lift for the disabled and goods delivery. Existing access road can serve as emergency vehicular access. A separated entry / exit point for staff by way of existing staircases adjacent to main entrance.

8.3.9 Water supply and drainage

Potable water supply and drainage system without backflow or leakage.

8.3.10 Security facilities

Installations for fire and other safety hazards will be provided according to prevailing regulations. The site should be able to be fenced off. One kiosk guard post station with air conditioning will be set up at the main entrance.

8.4 Statutory Requirement

8.4.1 Planning and Land Requirement

Block 3 falls within an area zoned "Other Specified Uses" annotated "Comprehensive Recreational Development Area" (OU(CRDA)") on the approved Shau Kei Wan Outline Zoning Plan (OZP) No. S/H9/18 gazetted on 17 April 2015. This zone is intended primarily to provide / reserve land for recreational and cultural facilities as well as holiday-camp type accommodation in the Lei Yue Mun Park and the Hong Kong Museum of Costal Defence, and for the preservation of the features of historical significance within the zone. Development within the zone is subject to maximum height restriction of 3 storeys, or the height of the existing building, whichever is the greater.

The proposed dedicated quarantine facility at Block 3 is regarded as "Government Use" which is always permitted within the "OU(CRDA)" zone. However, any demolition of, or addition, alteration and / or modification to (except those minor alteration and / or modification works which are ancillary and directly related to the always permitted uses) any of the existing historic buildings requires planning permission of the Town Planning Board. As the project may have implications on the preservation of the features of historic significance as set out in the planning intention of the "OU(CRDA)" zone, a section 16 planning application with supporting technical assessment should be submitted for Town Planning Board (TPB)'s consideration.

8.4.2 Compliance with the Building Ordinance

- Mean of Escape

Existing Means of Escape (MOE) provisions of Block 3 do not fully comply with the current statutory requirements. The two existing staircases deviate from the current MOE requirements for serving as escape routes.

- Means of Access for Fire Fighting and Rescue

The major facade of the building served by the Emergency Vehicular Access is less than 1/4 of the total length of perimeter walls of the building due to inherent site constraints.

There is currently no Fireman's lift provided for the block. Addition of Fireman’s lift shall be required.

- Fire Resisting Construction

The exits at ground floor are not separated from the remainder of the block by continuous wall or protected lobby due to inherent site constraints.

- Barrier Free Access

There is currently no barrier free access from the front camp road to the platform where Block 3 is located. Addition of ramp shall be required.

There is currently no provision of barrier free access connecting different floors within the blocks. An accessible lift shall be provided to comply with the current building regulation.

- Sanitary Fitment Provisions

The current sanitary provision is inadequate and inappropriate for new use. New toilets shall be provided to comply with the statutory requirements.

- Protective Barrier

The verandah and roof are now equipped with parapet lower than 1100mm. For area where existing floor level has to be raised to form a ramp matching the new lift landing level, upgrading works to these parapet walls and floor slabs will be required.

8.4.3 Compliance with the Fire Services Requirements

- Fire Services Installation

The following major fire services installations and equipment are not provided within the building:-

- Wet fire protection system (i.e. fire hydrant / hose reel and sprinkler system)
- Manual and automatic fire alarm system
- Emergency light units and exit sign
- Fireman's lifts
- Portable firefighting equipment
- Ventilation / air-conditioning (VAC) control system
- Emergency generator

8.5 Condition of Fabrics

Block 3 is an early example of reinforced concrete construction. The structural system consists of reinforced concrete beams and columns, floor slabs and cross walls. Open colonnaded verandahs run along the front and rear façades protected by cantilevered typhoon canopies. The flat roof is also of concrete construction.

8.5.1 Appraisal

A structural appraisal has been carried out in 2015/2016, and it is concluded that in general, the building fabrics are in acceptable conditions and repair works may be needed for cracks, localised concrete spalling, deteriorated wall finishes and roof waterproofing works.

An asbestos survey has been carried out in 2015. Asbestos was discovered at the vinyl floor tile with mastic, insulation material inside switch box, and plaster lagging of hot water pipe and debris. Removal of asbestos containing material is required.

8.5.2 Loading assessment

The structural works of the building which is constructed in 1930s were likely to be designed in accordance with LCC by-law 1915 and "Design and Construction of military Buildings – A handbook for the use of Royal Engineer Officers and their staff" by the War Office in January 1905. According to the 1905 Military Building Handbook, the design imposed load for barrack rooms and office uses were 1 cwt/sq.ft which is equivalent to 5.4kPa.

The proposed renovation work is to convert the existing block into a hostel which will also be used as quarantine centre when necessary. In accordance with recommendation of "Practice Guidebook for Adaptive Reuse of and Alteration and Addition Works to Heritage Buildings 2012", any change in the use of the building, all parts of buildings affected should be checked in accordance with the current standards. In this connection, all imposed load used for any change in use is required to comply with the new "Code of Practice for Dead and Imposed Loads 2011". In accordance with the Code of Practice for Dead and Imposed Load, 2011, the live load for hostels and wards are 2kPa. Other common areas (such as Activity Room/Briefing, Reception and Waiting Room etc.) may be considered as assembly area and the design live load may range from 3kPa (if not considered as assembly area) to 5kPa.

The proposed change of floor layout would alter the requirement on the imposed floor loading. The structural adequacy of the existing portion should be checked against the building regulations and codes of practice prevailing at the time of construction.

8.5.3 Recommendations

The new proposed lifts will be self-standing supported by new reinforced concrete structure and foundation.

8.6 Proposed Layout and Setting

8.6.1 Function of proposed layout plan

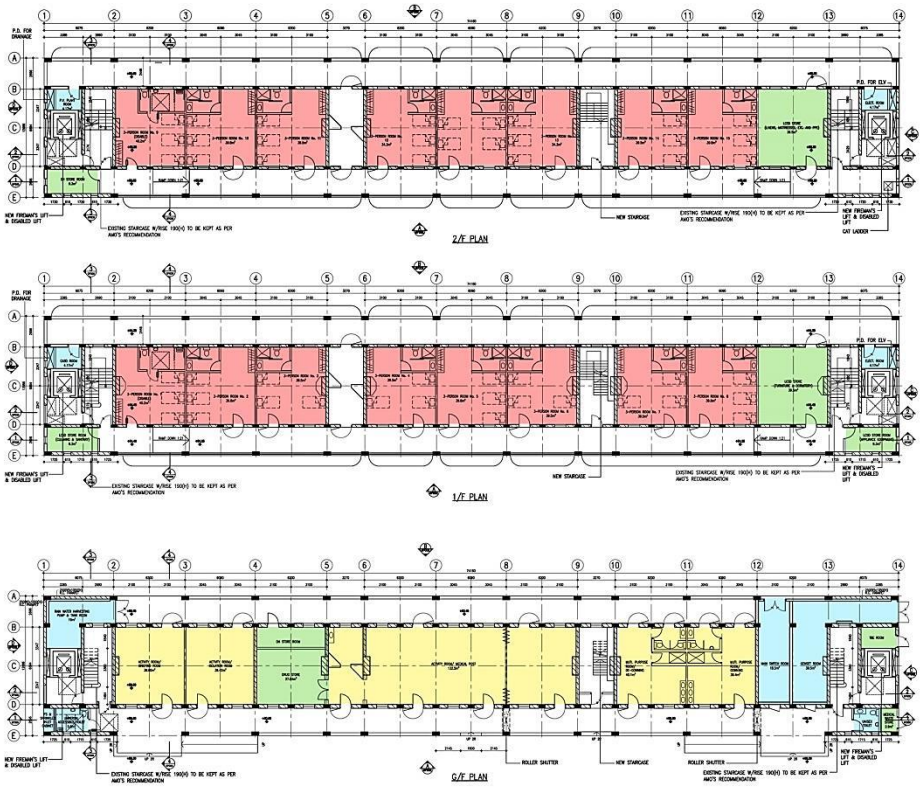


Fig. 27 *Floor plans (Source: Architectural Services Department) Edited by Hannah Liu*

FLOOR	FUCTION			
	ACTIVITY AREA (normal times)	**MEDICAL POST (quarantine operation)**	**STORAGE**	**OTHERS**
GF	Activity room	• Briefing room • Isolation room • Medical post	• Drug store • DH store room • Clinical waste store	• Unsex toilet • Universal accessible toilet • Main switch room • Multi propose room/Gowning (Donning) • Multi propose room/De-gowning (Removing) • Genset room • TBE room, rain water harvesting pump & tank
1F	**DORMITORY**		**STORAGE**	**OTHERS**
	3-person room		• LCSD store (furniture & hostel) • LCSD store (appliance equipment) • LCSD store (cleansing & sanitary)	• CABD room • Electrical room
2F	**DORMITORY**		**STORAGE**	**OTHERS**
	3-person room, 4-person room		• LCSD store (linens, mattresses, etc. and PPE) • DH store room	• Plant room • Electrical. room

FUNCTION	DESCRIPTION
ACTIVITY AREA (normal times)	• Holds leisure and cultural activities as a regular communal area
MEDICAL POST (quarantine operations)	• Function as medical post for medical consultation and monitoring of the confinees' conditions • Briefing of confines, reception of new confines for temperature assessment and/or waiting room for confinees requiring transfer to hospital
HOSTEL	• Provides two kinds of residential units (2-bed rooms and 3-bed rooms), with individual shower and toilet
STORAGE	• Stores required equipment for dedicated quarantine facility
OTHERS	• Ensures unisex toilet, universal accessible toilet, gowning, de-gowning and all the building services including electrical system, fire service system and air conditioning system, etc. operate normally

8.6.2 The conservation, adaptive reuse and upgrade of the Block 3

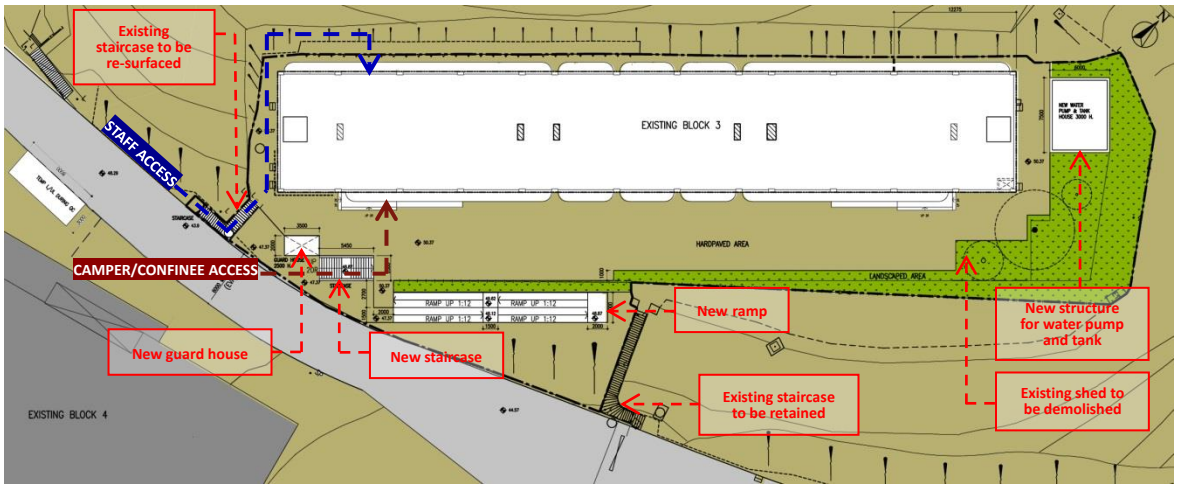
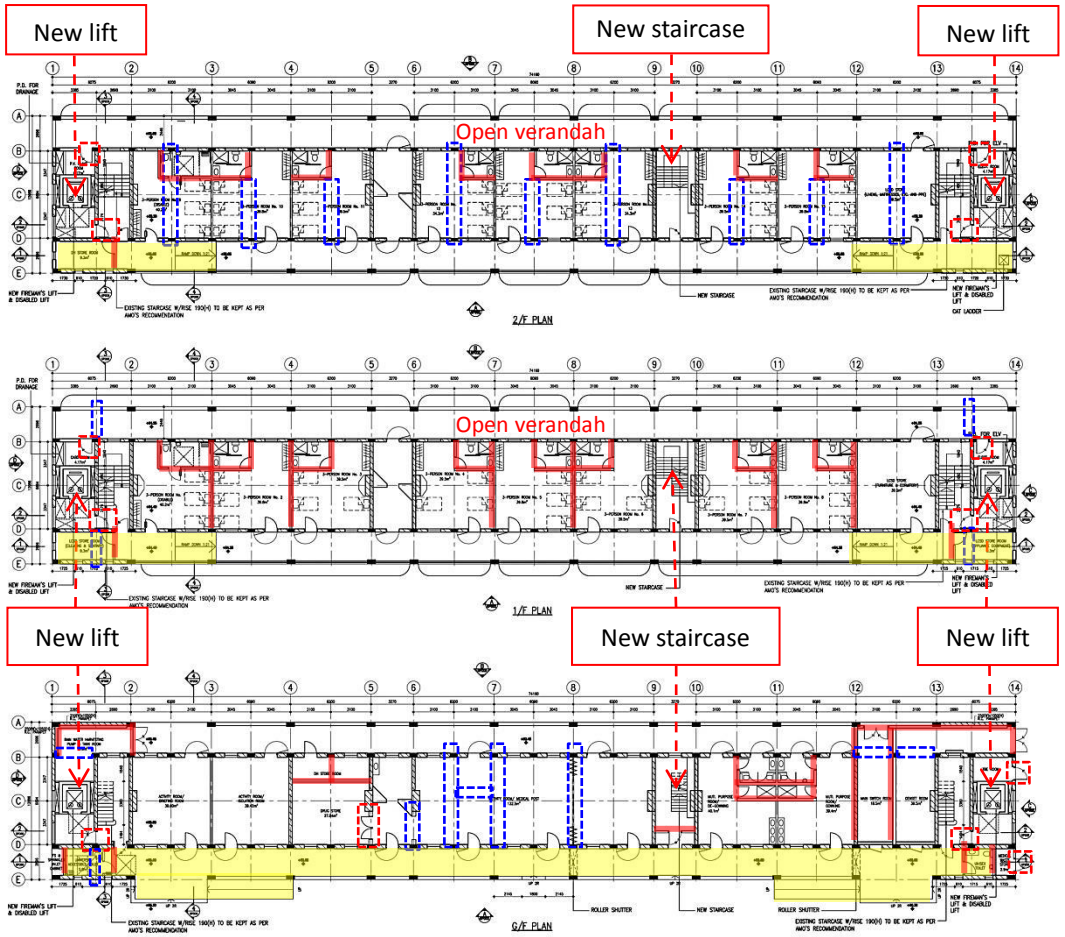


Fig. 28 *Site Plan (Source: Architectural Services Department) Edited by Hannah Liu*



New walls
New door opening
Demolition of walls
Increase the thickness of floor slab for addition of new ramp
* Replacer all windows and doors to match with existing

Fig. 29 *Plans of Ground floor, First floor and Second floor (Source: Architectural Services Department) Edited by Hannah Liu*

The existing Block 3 will be adaptively reused as a dedicated quarantine facility. It will be upgraded as necessary to suit new uses and fulfill statutory requirements. New proposed layout plans are attached in the later part of this section.

Block 3-Site

- Retain existing staircase on the slope in front of the Block 3.
- Retain existing staircase on the slope at the South side of Block 3.
- Construct a new external ramp or install a new lift for barrier free access to the building from the camp access road.
- Construct a new staircase for connection from front camp road to the platform where the building is located.
- Construct a new guard house in front of the new staircase.

- Replace the chain-linked fence with railing.
- Construct an ancillary structure to accommodate water pump and tanks. The new structure should be detached from Block 3 with compatible design to reduce the visual impact to the building.
- Demolish the existing storage shed in front of the building which is no longer suitable for the proposed new use.

Block 3-Exterior

- Construct an external ramp linking the open ground in front of the building to the ground floor level.
- Generally repair the external façade including repainting the facade with compatible new paint tone.
- Extend the existing rain water pipes to the canopy of the second floor and install new rain water pipes at both front and rear façades for drainage requirements.
- Protective barrier to be added behind the existing parapet wall to comply with current statutory requirements.
- Exchange some door openings with window openings without changing their alignment.
- Replace all doors and windows to match with existing.
- Partially enclose the verandah on G/F to accommodate new plants and equipment.
- Add of louvre and access doors in the electrical and mechanical room.

Block 3-General Layout

- Alter the internal non load bearing walls and add new partition walls to suit the proposed use.
- Convert the toilets at both ends of each floor into building service rooms, new lifts, unisex and universal accessible toilets.
- Retain and restore existing fireplaces.
- Add lifts at both end of the block.
- Add staircase between Grid 9 and 10 of the building to access G/F to 2/F for MOE provision.
- Install new building services including electrical system, fire services system, drainage system, and air conditioning system, etc.
- Carry our remedial works for structural elements with insufficient concrete covers.

- Increase the thickness of floor slab at the front verandah on G/F and at both ends of front verandah on 1/F and 2/F to flush with the indoor floor level of the endmost rooms for barrier-free access.

Block 3-Interior

Ground Floor

- Demolish some later added partitions on the ground floor for reuse as activity area / medical post.
- Convert part of existing store room (Room G03) to treatment room for the activity room/medical post.
- Two new internal door openings along Grid 5 and 6 for the new drug store and two for the new lift on the both sides of the block.
- Demolish part of the existing parapet wall at the front facade (between grid E9 and E10) for MOE provision.
- Enclose the verandah at both ends of the rear facade for accommodation of rain water harvest pump & tank room, main switch room and genset room.
- Convert the existing toilet into new lift, TBE room, unisex toilet and universal accessible toilet for new adapted reuse.
- Convert the existing film archive store rooms to gowning/de-gowning room.
- Enclose the right-hand-side end of verandah at front façade for accommodation of clinical waste store.

First Floor

- Re-partitioning of the interior rooms to create eight 3-bed rooms with individual bathroom.
- Demolish the existing boiler rooms at both ends of the verandah and reveal the open verandah
- Convert the existing toilets at both ends of the verandah into electrical room, CABD room, new lifts and LCSD store rooms for adapted reuse.

Second Floor

- Re-partitioning of the interior rooms to create seven 3-bed rooms and one 4-bed rooms with individual bathroom.
- Convert the existing toilets at both ends of the verandah into electrical room, CCTV Equipment room, new lifts and LCSD store rooms for adapted reuse.

Roof

- Addition of lift shafts on the roof top.
- Preserve and repair all existing chimneys and cat ladder access on the roof top.

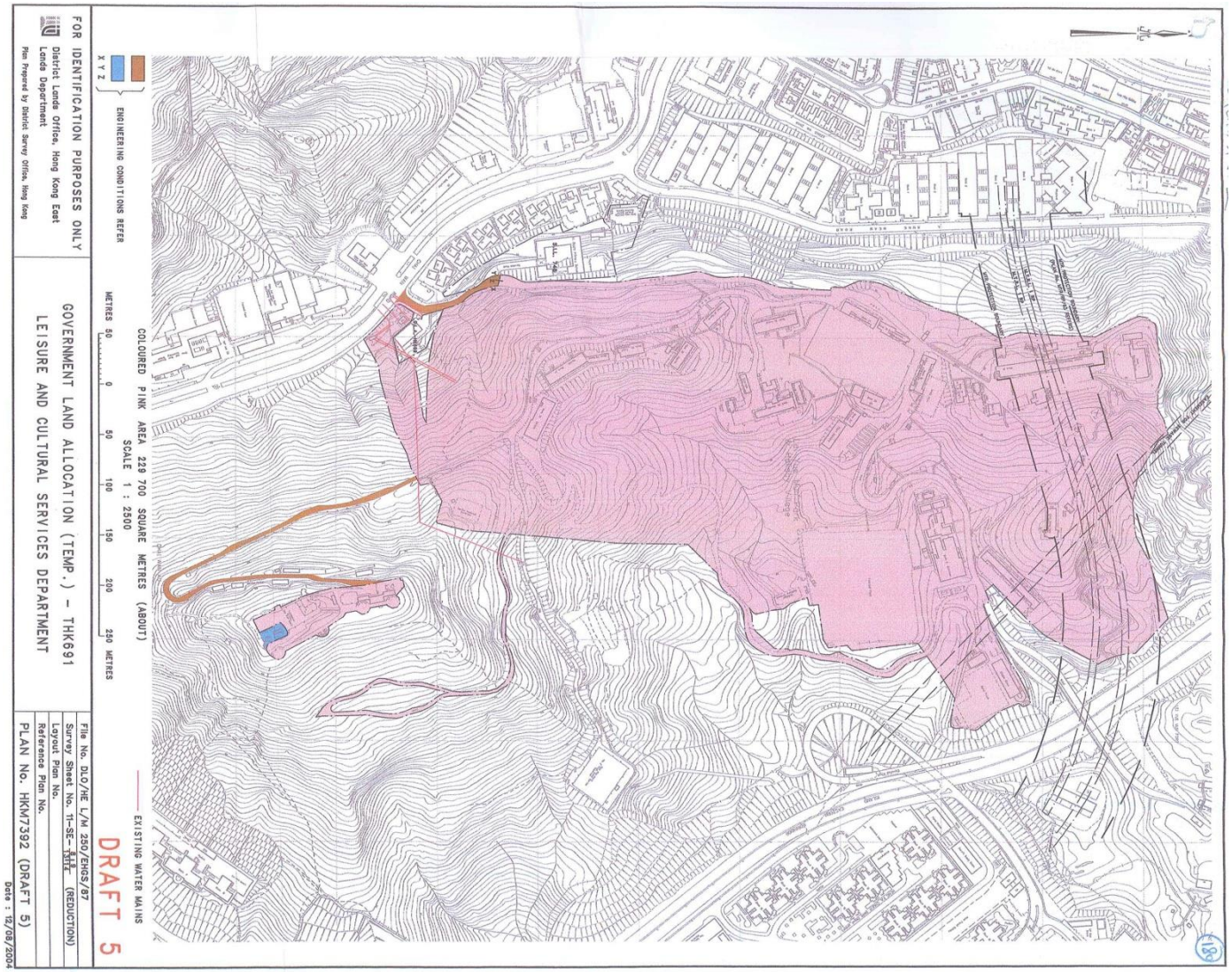


Fig. 30 *Site Plan of Lei Yun Mun Park and Village*

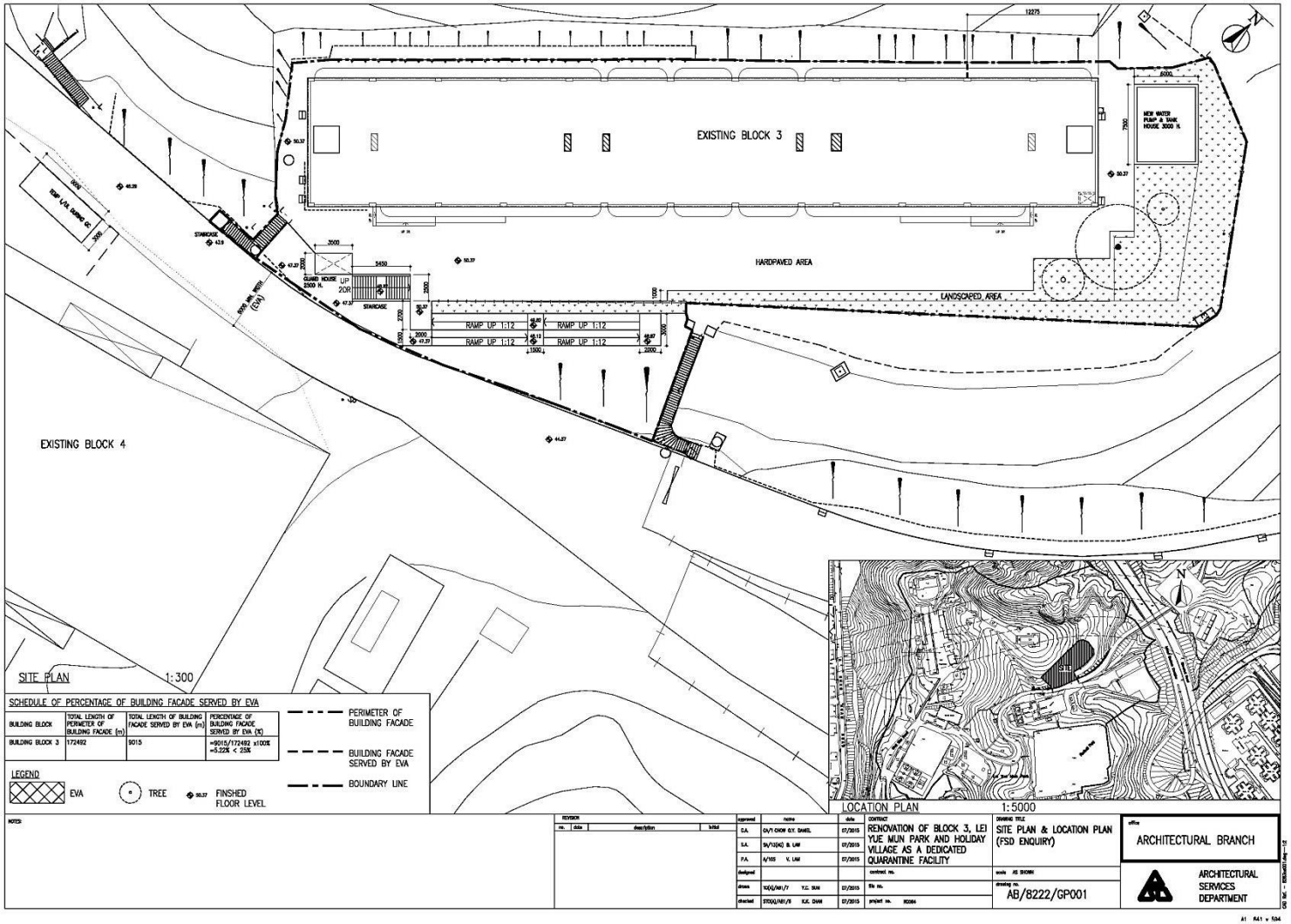


Fig. 31 *Site Plan and Location Plan*

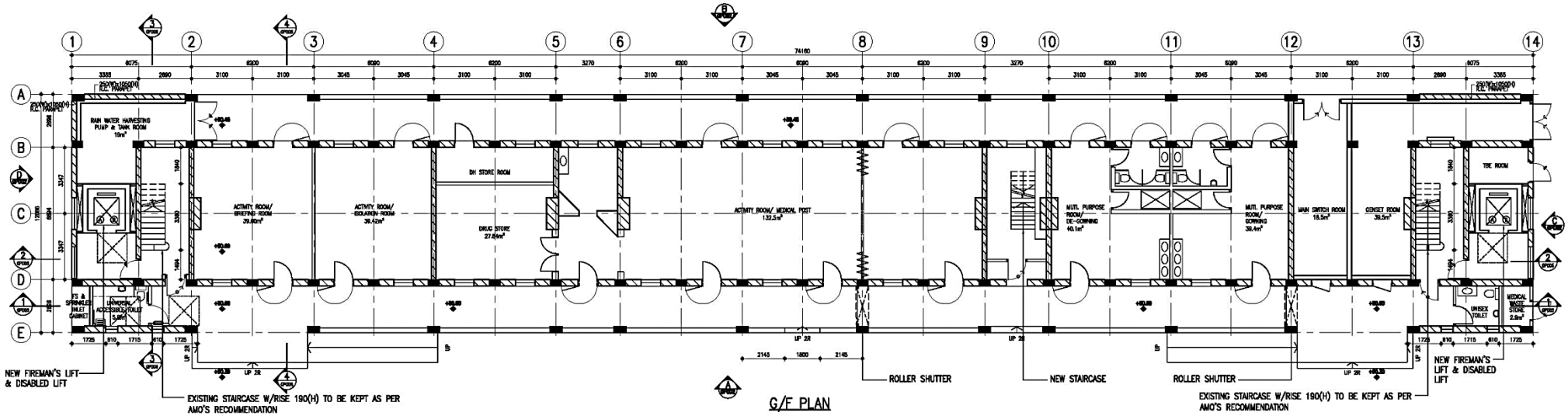


Fig. 32 *Ground Floor Plan*

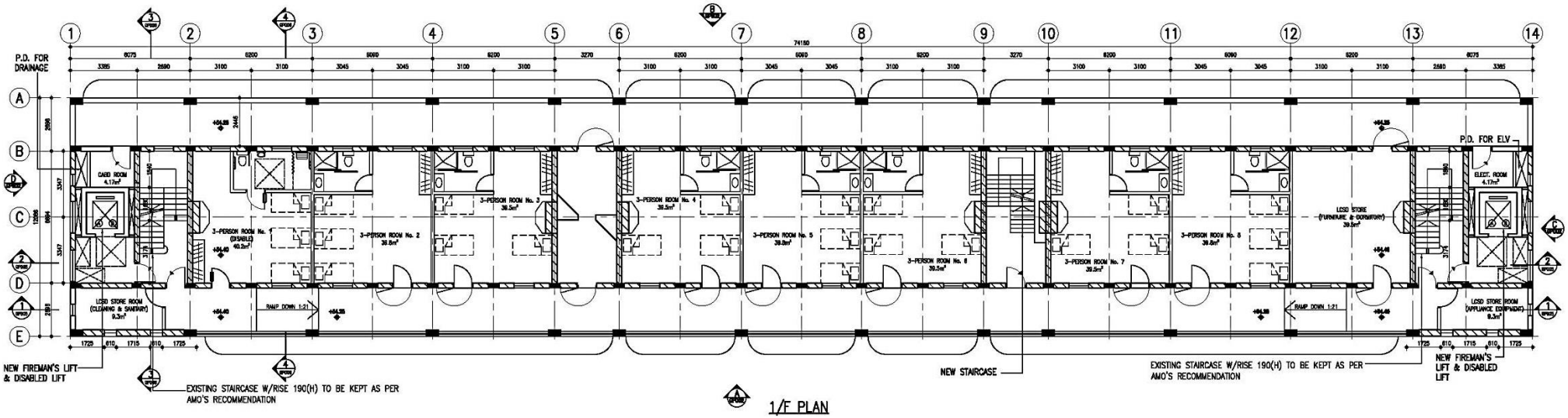


Fig. 33 *First Floor Plan*

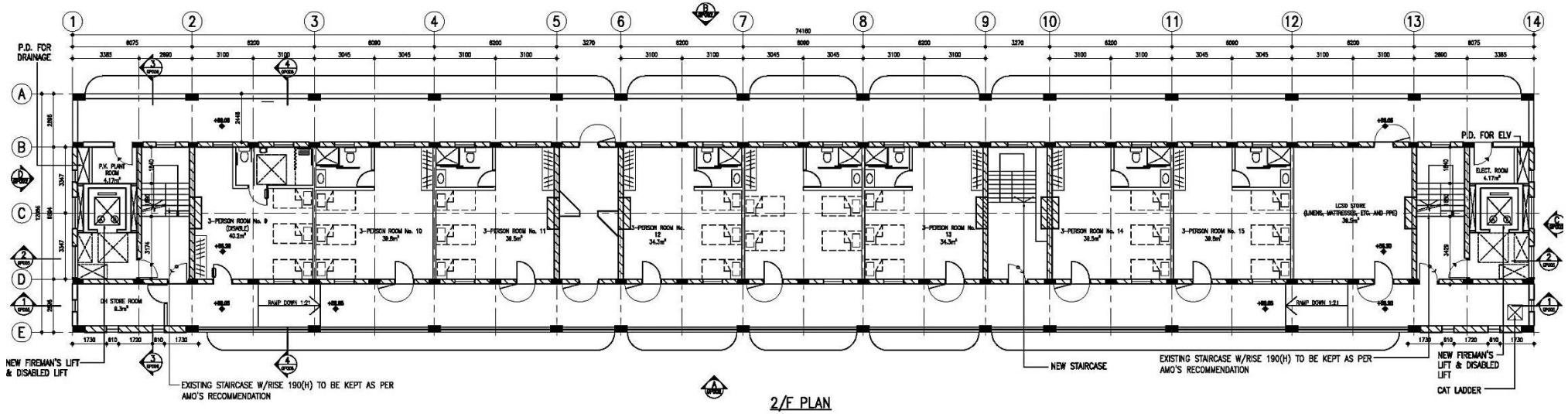


Fig. 34 *Second Floor Plan*

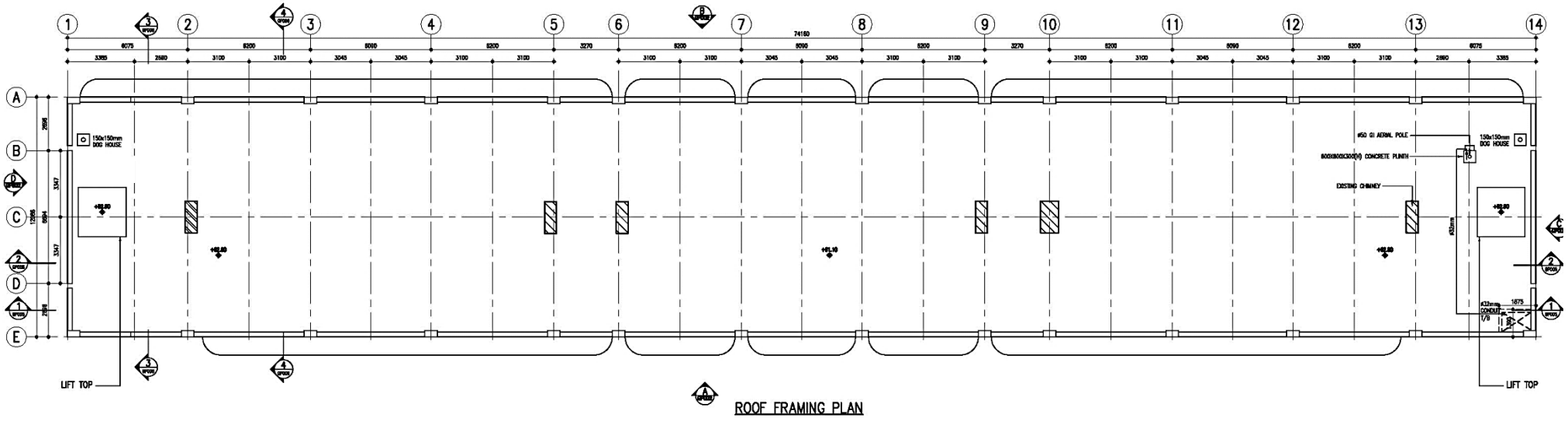


Fig. 35 *Roof Plan*

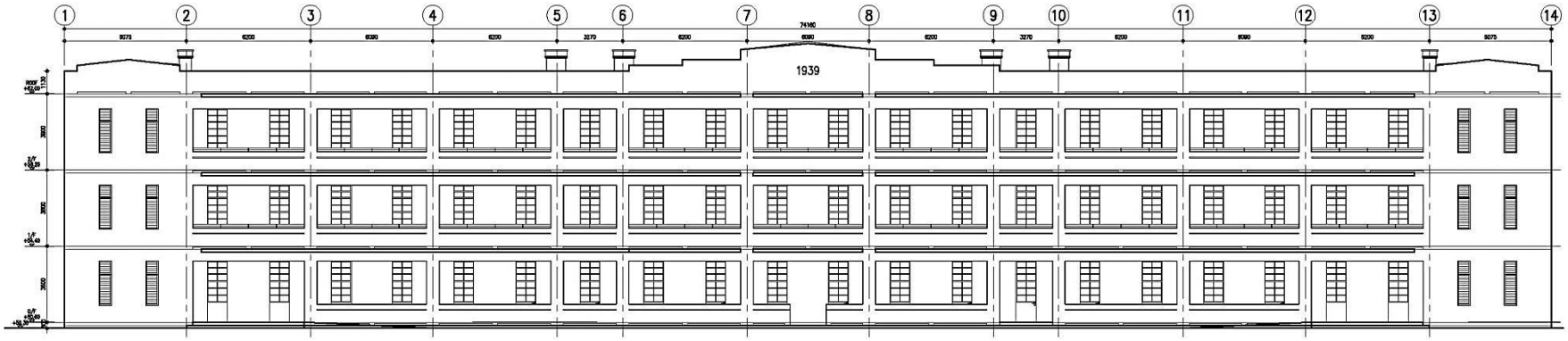


Fig. 36 *Front and Rear Elevation*

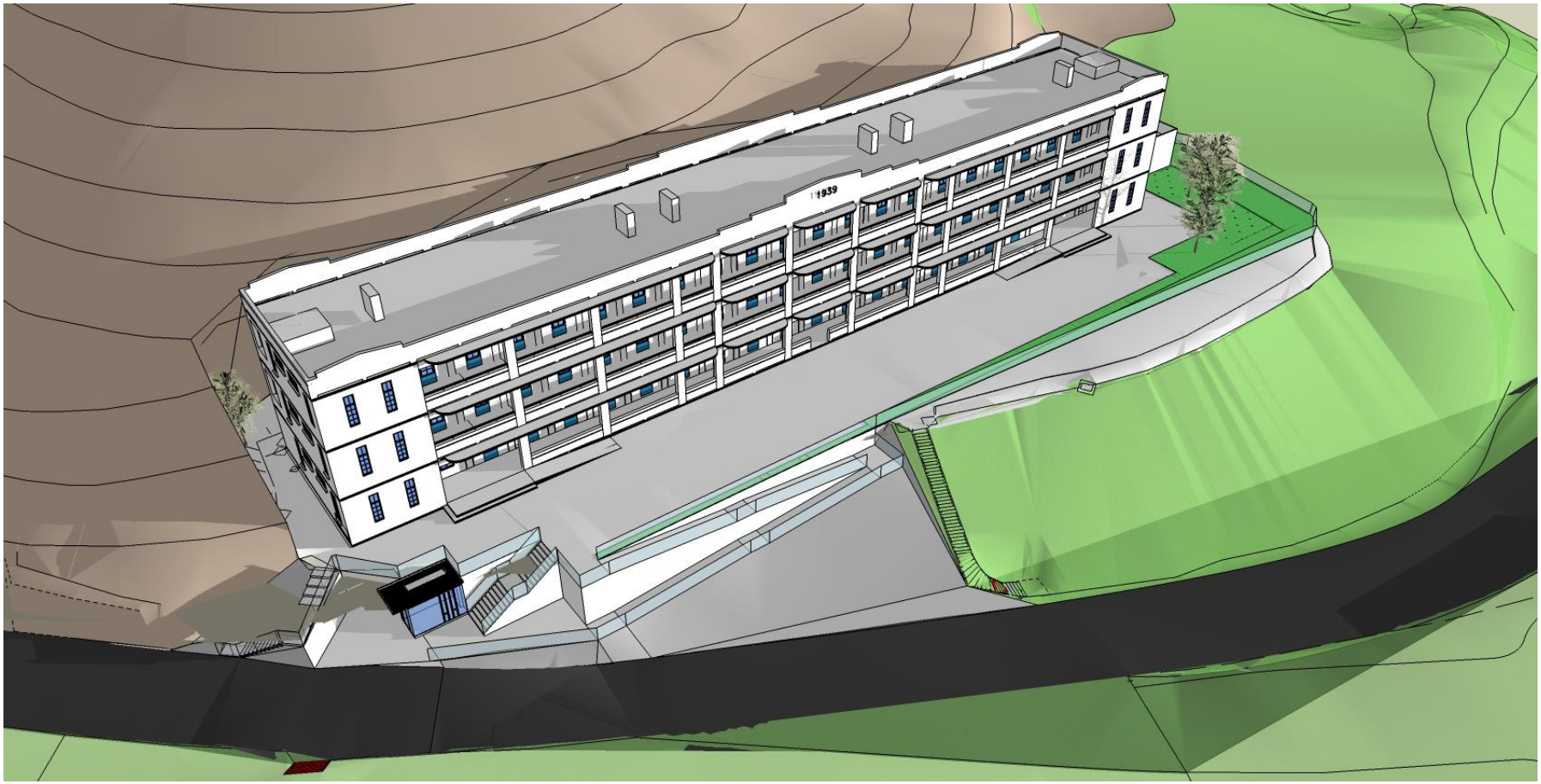


Fig. 37 *Proposed Perspective 1*

Fig. 38 *Proposed Perspective 2*

9.0 IMPACT ASSESSMENT

9.1 Potential Impact and Mitigation Measure

9.1.1 Definition of Terms[5]

Four levels of significance have been used to describe the elements individually with description listed below:-

Levels of Significance	Description
High	Elements which make a major contribution to the overall significance of the place. Spaces, elements, or fabric originally of substantial intrinsic quality, and exhibit high degree of intactness and quality, though minor alterations or degradation may be evident
Moderate	Elements which make a moderate contribution to the overall significance of the place. Spaces, elements, or fabric originally of some intrinsic quality, and may have undergone minor alteration or degradation.
Low	Elements which make a minor contribution to the overall significance of the place. Spaces, elements, or fabric originally of little intrinsic quality, and may have undergone alteration or degradation. Spaces, elements, or fabric originally of some quality, and may have undergone extensive alteration or adaptation to the extent that only isolated remnants survive.
Neutral	Elements which are of little consequence in terms or understanding or appreciating the site and its developments, without being actually intrusive.
Intrusive	Elements which are visually intrusive or which obscure the understanding of significant elements of the site, and may be identified for removal.

[5] Definition of Terms is developed based on James Kerr, Conservation Plan: A Guideline to the Preparation of Conservation Plans for Places of European Cultural Significance, National Truss, 2013

Five levels of impact have been used to evaluate the impact based on the type and extent of the effects concluded in the Heritage Impact Assessment:-

Impact Level	Description
Beneficial Impact	The impact is beneficial if the project will enhance the preservation of the heritage site
Acceptable Impact	The assessment indicates that there will be no significant effects on the heritage site
Acceptable Impact with Mitigation Measures	There will be some adverse effects, but these can be eliminated, reduced or offset to a large extent by specific measures, such as conducting a follow-up conservation measure for the affected heritage site before commencement of work in order to avoid any inappropriate and unnecessary intervention to the historical building
Unacceptable Impact	The adverse effects are considered to be too excessive and are unable to be mitigated practically
Undetermined Impact	The adverse effects are likely to be significant, but the extent to which they may occur or may be mitigated cannot be determined from the study. Further detailed study will be required for the specific effects in question.

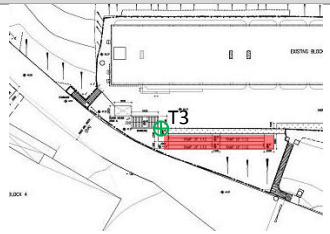
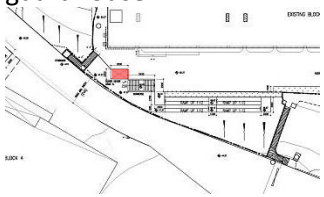
9.1.2 Impact Assessment

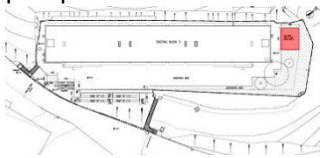
General

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
A-01	Change of Use: Convert Block 3 into a hostel of the Park which can be used as quarantine centre when need arises	Adaptive reuse of the place	Understanding of the history of the site	N.A.	Acceptable impact with mitigation measures	- Documentation, photographic and cartographic survey of the building and its surrounding should be carried out before commencement of the works. - Interpretation area / display to facilitate understanding of the history of the site.

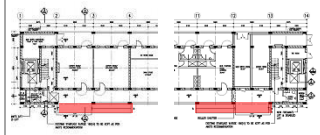
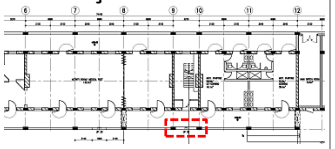
Site

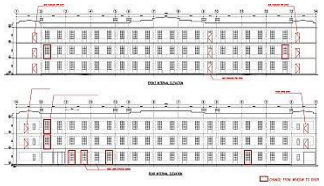
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
B-01	Construction of external ramp and staircase for connecting the front camp road and the platform	Fulfill the statutory requirements under the Design Manual - Barrier-Free Access 2008	Existing slope	Moderate	Acceptable with mitigation measures	- Simple and light weight compatible design. - The new additions should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building. - The new additions should avoid impact to the existing trees as far as possible. - One existing tree (T3) will be affected by the new access ramp. T3 will be transplanted / new tree to be planted in open space as

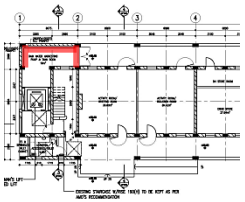
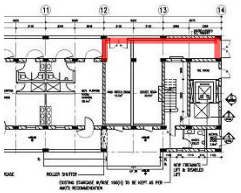
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
						compensation subject to further review by landscape consultant.
B-02	Construct a new guardhouse 	Adaptive reuse of the place	Existing slope	Moderate	Acceptable with mitigation measures	- The new guard house will be located adjacent to the base of the staircase leading from the camp access road to the platform on which Block 3 is situated to minimise visual impact to the building. - The new additions should be of compatible design, in terms of suitable material, color and texture. - It should be built in simple form to minimise visual impact to the building.
B-03	Demolition of existing storage shed in front of the block 	The shed is no longer suitable for the adaptive reuse	The later added storage shed, Front facade	Intrusive	Beneficial impact	- Record by photo before demolition. - The removal works are considered beneficial since the original setting of the site and the front façade could be completely revealed.

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
B-04	Construction of an ancillary structure for accommodation of water pump and tanks. 	To comply with the current statutory requirements on fire service installation and equipment to enhance the fire safety of the building	Open space	Moderate	Acceptable with mitigation measures	- The new additions should be placed at a less prominent location. The North East façade is of less significance compared with the front façade. - The new additions should be kept away from the building. - The new additions should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building.
B-05	Replacement of existing chain-linked fence with railing 	Adaptive reuse of the place and provide barrier / security to the building.	Existing fence	Neutral	Beneficial impact	- Record by photo before demolition. The new railing should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building.

External

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
C-01	Construction of external ramp and extension of stair platform for the access from G/F 	Fulfill the statutory requirements under the Design Manual - Barrier-Free Access 2008	Front facade	High	Acceptable with mitigation measures	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details for possible future restoration. - The new additions should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building. - The new additions should be discernible from the original historic fabric.
C-02	Demolition of part of the existing parapet at the front façade on GF 	To comply with the current statutory requirementsfor MOE for the new staircases	Front facade	High	Acceptable with mitigation measures	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details for possible future restoration. - The symmetric elevation of the building should be kept.

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
C-03	Addition of louvre in electrical and mechanical room	For ventilation of new plant room necessary for the adaptive reuse	Building facade	Moderate to High Depends on location	Acceptable with mitigation measures	- The alteration should be made at less prominent location to minimise visual impact to the main facade. - Existing windows should be utilised as far as practicable instead of creating new openings for accommodating the lourve. - The existing window frame would be replaced by new ones which will match the existing installations. - The size and location of the existing openings should not be altered. - The new louvre should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building.
C-04	Exchange some door openings with window openings 	Provision of the new residential units and satisfied the nature ventilation and lighting.	Building facade	High	Acceptable with mitigation measures	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details - For the existing window use change to door use, the openings should be altered without changing their alignment to the façade. - For the existing door use change to window use, the openings should not be altered and the design shall make reference to Dutch door. - For the door and window openings would not be suitable in adaptive reuse should be

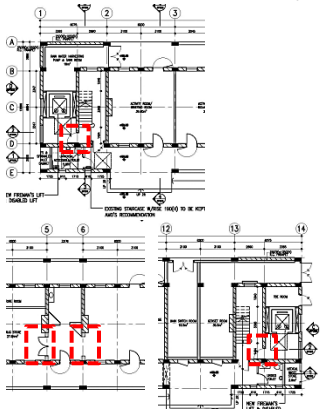
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
						retained and keep locked instead of filling up. - The new windows and doors should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building.
C-05	Enclosure of verandah on GF  	To accommodate new plants and equipment necessary for the adaptive reuse	Building facade	Moderate to High Depends on location	Acceptable with mitigation measures	- The alteration should be made at less prominent location to minimise visual impact to the main facade. - The size and location of the existing openings should not be altered. - The alteration should be reversible and shall not cause adverse impact to the existing parapet wall. - The new additions should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building. - The new enclosure should be recessed for easy tracing of the original configuration.

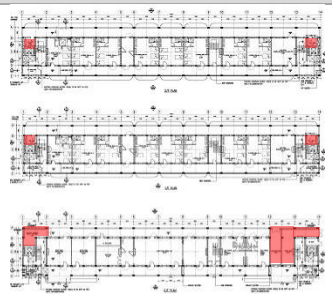
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
C-06	Demolish the boiler room and reveal the verandah on 1/F 	The boilers are no longer suitable for future use Preserve the original feature for future interpretation	Rear facade	Moderate	Beneficial	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details
C-07	Make good and keep the gas regulators in North East and South West facades 		Building facade	Low	Nil	- Make good and keep the gas regulators which have fallen out of use at their original locations for demonstrating the building service equipment in the past. -

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
C-08	Upgrade the parapet on each floor in terms of protective barrier requirements 	To fulfill protection barrier requirements under Building Ordinance	Building facade	High	Acceptable with mitigation measures	- Protective barrier to be added behind the existing parapet wall to comply with current statutory requirements. - The design of the parapet upgrade should be simple and render it disguisable from the existing works. The details should allow the upgrade to be reversible.
C-09	Extend existing rain water pipes from 1/F to 2/F for canopy drainage requirements and install new pipes at both front and rear façades for building drainage requirements. 	Enhance the performance of drainage system	Building façade	High	Acceptable with mitigation measures	- The alteration should be made at less prominent location to minimise visual impact to the main façade. - The new water rain pipe should be of compatible design, in terms of suitable material, color and textured It should not impose visual impact to the building.

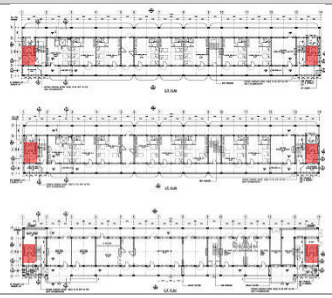
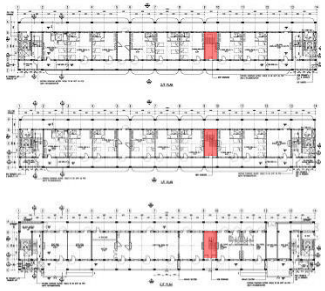
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
C-10	Additon of copper strip on the façade for lightning propection. 	For the lightning protection and equipment necessary for the adaptive reuse	Building Facade	High	Acceptable with mitigation measures	- The lightning system adopted should be consistent with other historic buildings in Lei Yue Mun Park as block 10. - The alteration should be made at less prominent location to minimize visual impact to the main façade. - The number of lightening strips should be minimized and painted with color matching with adjacent wall to minimize visual impact to the main façade.

Internal

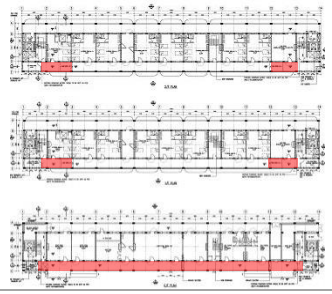
No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
D-01	Incorporate new internal uses including adding and removing internal non load bearing walls	Adaptive reuse of the place	Internal layout and finishes	Moderate	Acceptable Impact	- Recording and documenting t, with photos and record drawing, the existing layout, finishes and details for possible future restoration.
D-02	New door openings to the internal walls on G/F 	Adaptive reuse of the place	Building structure	Moderate	Acceptable with mitigation measures	- Conduct structural survey of the building prior to finalization of the design scheme.
			Internal layout and finishes	Moderate	Acceptable with mitigation measures	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details for possible future restoration.
D-03	Conversion of the toilets at both ends of each floor into building service rooms	Enhance the performance of building services system to meet current standard of human	Building facade	High	Acceptable with mitigation measures	- All the pipes and ducts of all kinds of building services installation should be grouped together when entering the building to minimise the number of openings on the existing walls and slabs. - The number of downpipes should be

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
		comfort				minimized and painted with color matching with adjacent wall to minimize visual impact to the main façade.
			Building structure			- Conduct structural survey of the building prior to finalization of the design scheme. - The new plants and equipment shall not affect the structural stability of the historic structures.
			Original room finishes	Neutral	Acceptable Impact	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details for possible future restoration. - The number of downpipes should be kept to a minimum and painted with colour matching adjacent walls to minimise visual impact to the main façade.

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
D-04	Retain and restore existing fireplaces *in-situ*.  	To reveal the fireplaces	Fireplaces	Moderate	Beneficial impact	- The reinstatement is considered beneficial and acceptable provided that the works are carried out by experienced workmen under the guidance of conservationists. - Although most fireplaces on ground floor and second floor have already been removed (except one blocked by timber board in G03), open up inspection is recommended to verify if there was any proof that fireplaces that had actually been installed. - The investigation should be carried out by removing existing paint with hand-held tools or suitable stripper with due care. - Recording and documenting, with photos and record drawing, for any findings. Replicate of new fireplaces is not recommended.
D-05	Addition of lifts at both ends of the block for barrier free access to all storeys	Fulfill the statutory requirements under the	Building structure	Moderate	Acceptable with mitigation measures	- Conduct structural survey of the building prior to finalization of the design scheme. - For the lift shaft support, light and small structure which is independent from the

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
		Design Manual - Barrier-Free Access 2008				building structure to reduce structural impact and disturbance to the ground slab and footing should be used as far as possible.
			Original building layout	High	Acceptable with mitigation measures	- Keep the lift overrun in minimum height as much as possible to minimise visual impact. - The new additions should be discernible from the original historic fabric.
D-06	Addition of staircase to access G/F to 2/F 	To comply with MOE provision	Building structure	Moderate	Acceptable with mitigation measures	- Conduct structural survey of the building prior to finalization of the design scheme.
			Internal layout and finishes	High	Acceptable with mitigation measures	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details. - The alteration should be of compatible design, in terms of suitable material, color and texture. It should not impose visual impact to the building. - The new additions should be discernible from the original historic fabric. - The new staircase should not block the two holes connecting to the chimney in room 108 on first floor. - Existing staircases should remain untouched.

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
D-07	Installation of new building services including electrical system, fire services system, drainage system, air conditioning system, etc.	Utilities necessary for the adapted reuse	North West façade, Internal walls	Moderate	Acceptable with mitigation measures	- All the pipes and ducts of all kinds of building services installation should be grouped together when entering the building to minimise the number of openings on the existing walls and slabs. - Existing openings should be utilised as far as practicable instead of creating new holes. - Internal piping is preferable to external piping for reducing impact to the façade. If external piping cannot be avoided installing it at the rear façade which is less significant as a CDE is preferable installing it at the front façade. - Utilities like hose reel and fire sprinkler should be placed at reachable but less prominent location to minimise visual impact to the internal spaces.

No.	Assessment Items	Reasons for Changes	Affected CDEs / Fabric	Level of Significance	Impact Level after Mitigation Measures	Treatment / Mitigation Measures
D-08	Increase the thickness of front verandah on G/F and both ends of front verandah on 1/F and 2/F to flush with the indoor floor level of the endmost rooms for barrier-free access 	Fulfill the statutory requirements under the Design Manual - Barrier-Free Access 2008	Building structure	Moderate	Acceptable impact	- Conduct structural survey of the building prior to finalisation of the design scheme.
			Original finish	No significance	Acceptable impact	- Recording and documenting, with photos and record drawing, the existing layout, finishes and details for possible future restoration. - The alteration works should be reversible.

9.2 Management and Implementation

This section intends to provide guidance on the management of the site after completion of the renovation of Block 3 at the Lei Yue Mun Park. Future frontline maintenance staff should thoroughly study the guidance to ensure they have adequate understanding of their duties and they will safeguard the cultural significance of the historic fabrics of the heritage site.

9.2.1 Maintenance Management Plan

Maintenance is an essential part of the conservation process and should be taken where fabric is of cultural significance and its maintenance is necessary for retaining that cultural significance. A maintenance schedule should be developed and reviewed annually by building management professionals, conservationists and professionals.

A maintenance schedule including the followings should be developed:

- Regular inspection of the condition of all CDEs
- Regular inspection of internal and external finishes and fittings
- Regular cleansing of drainage and plumbing system
- Regular checking of site drainage system

The maintenance management plan should be reviewed annually by management professionals, conservationists and professionals with thorough understanding of managing a heritage site to ensure the execution of a proper maintenance programme.

A maintenance manual with repairing method of identified conservation items and schedule of building materials should be provided to the future frontline maintenance staff. All repair works should be carried out to match the existing materials, color, texture and craftsmanship of the historic fabrics for authenticity and maximum compatibility. Replacements should be avoided except the historical fabrics are beyond repair.

9.2.2 Management Measures for the Non-Compliant Staircases

Exemption/modification should be sought under the Buildings Ordinance and relevant Regulations with justification for the staircases at both ends of the block which do not comply with these prevailing Buildings Ordinance and relevant regulations.

Management plan: Monitoring mechanism with traceable records of evidence that

can be retrieved: survey data of population, CCTV tape recordings, etc. as a proof of compliance with approval conditions/ justifications.

Maintenance plan: on testing and maintenance procedures and schedule of the long term implementation of the compensatory measures.

Training plan: for key personnel who will implement the compensatory measures.

9.2.3 Documentation

A detailed photographic and cartographic surveys should be conducted prior any works commence. All Existing fabric, use, associations and meanings should be adequately recorded before any change is made to the place.

To facilitate future management, all the survey reports, conservation studies, inspection records and monitoring reports should be kept at the management office and made available to the users and professionals who are responsible for future inspection, repair and up-keeping works.

9.2.4 Future Development

The immediate environs of block 3 and setting should be maintained. For future development of this Grade 2 historic building, including renovation, restoration, alteration and addition, advice should be sought from AMO prior to commencement. The proposed works should follow the internationally accepted conservation principles and practice. They should be designed and supervised by Conservation Architect or a Heritage Consultant.

9.2.5 Interpretation

The hostels and dedicated quarantine facility would promote the inherent historical value and significance of the Lei Yue Mun Park by appropriate interpretation. The focus of interpretation of the dedicated quarantine facility shall be its linkage to the historic evolution of the old Lei Yue Mun Barracks and activities taken place when the garrison was settled there.

- The large-scale barracks were built in the area while fortifications were set up in the neighborhood from 1890s to 1930s.

- During the Japanese invasion in 1940s, many fortifications were destroyed and the barracks turned into a training camp the HKMSC after the war.

- The Urban Council took over the old Lei Yue Mun Barracks from the British garrison in 1977and the site was handed over to the government in 1985.

- The garrison left the barracks in 1987 and the site was redeveloped into a public park and vacation area by the Urban Council and renamed as the Lei Yue Mun Park which was opened to the public.

The conceptual framework of the interpretation is proposed to tie in with the different uses of the building as follows:

Location	Interpretation	Presentation
Public Accessible Area (on G/F)	• Display of the history and architectural background of the old Lei Yue Mun Barracks by photograph prints. • Display of the process involved in heritage conservation and adaptive reuse. • Exhibition or other activities may be arranged on G/F for appreciation of the building via appointment.	• Photograph prints
3-person Room (on 1/F)	• Preserves and displays old fireplaces and other artifacts for the interpretation of the daily living in the past.	• Display of old fireplaces

9.2.6 Implementation of Heritage Impact Assessment (HIA)

Heritage consultant should be appointed by main contractor at the design and construction stage to ensure the conservation policies in the HIA are properly executed.

APPENDIX I – AS BUILT DRAWING

BIBLIOGRAPHY

English Publications

Burra Charter: the Australia ICOMOS Charter for Places of Cultural Significance. Australia ICOMOS Incorporated, 2000.

Kerr, James Semple. *Conservation Plan – A guide to the Preparation of Conservation Plans for Places of European Cultural Significance.* 5th Edition Australia: National Trust, 2000.

Ko Tim Keung, Jason Wordie. *Ruins of war: a guide to Hong Kong's battlefields and wartime sites*, Joint Pub. (H.K.) Co., 1996

Kwong Chi Man and Tsoi Yiu Lun. *Eastern Fortress: A Military History of Hong Kong*, 1840–1970, Hong Kong University Press, 2014.

Phillip Bruce. *Lyemun Barracks: 140 years of military history*, 1987

Solomon Matthew Bard. *Notes on the History of Hong Kong's Coastal Defence during the British Administration, with Special Reference to Lei Yue Mun*. The Hong Kong Museum of Coastal Defence, 2015

Great Britain. War Office. Director of Fortifications and Works, *Design and Construction of Military Buildings - A Handbook for the Use of Royal Engineer Officers and Their Staff,* London: Printed for H.M.S.O. by Harrison, 1904.

Chinese Publications

郭少棠,*東區風物志: 集體記憶社區情*, 東區區議會, 2003.

黃棣才, *圖說香港歷史建築 1841-1896*, 中華書局(香港)出版有限公司, 2012

蕭國健, *香港之海防歷史與軍事遺跡*, 中華文教交流服務中心, 2006.

謝永光, *香港淪陷： 日軍攻港十八日戰爭紀實*, 商務印書館, 1995.

Government Records

Land Office, *Military Reserve Land at Lyemun, Hong Kong*, 29th November 1935 (Original Reference No. CSO 856/1935, Public Record Office record ID: HKRS58-1-180-6)

Urban Council, *Memorandum for Members of Recreation and Amenities Select Committee: Development of Military Land at Lyemun Barracks,* 14 April 1975, Committee Paper RA/16/75

Urban Council, *Memorandum for Members of Recreation and Amenities Select Committee: Lyemun Barracks*, 10 May 1976, Committee Paper RA/28/76

Urban Council, *Memorandum for Members of Recreation and Amenities Select Committee, Planning and Development Select Committee, Standing Committee of the Whole Council and*

General Administration Select Committee: Lyemun Park Stage 1, 10 January 1979, Committee Paper RA/253/78, PD/162/78, CW/166/78, GA/170/78

Urban Council, *Memorandum for Members of Recreation and Amenities Select Committee, and Planning and Development Select Committee: Lyemun Park*, 10 January 1979, Committee Paper RA/361/77, PD/135/77

Website

Antiquities and Monuments Office, *List of Graded Historic Buildings in Hong Kong*, (as at 24 October 2014). <hhttp://www.aab.gov.hk/form/AAB-SM-chi.pdf>

Antiquities and Monuments Office, Introduction to 1,444 Historic Buildings, (as at 23 January, 2014), <http://www.aab.gov.hk/form/AAB_brief_info_en.pdf>

Antiquities and Monuments Office, *Historic Building Appraisal of 1,444 Historic Buildings* - Part II (Item 213-578) (as at 23 January, 2014), <http://www.aab.gov.hk/form/brief_information_grade2.pdf>

The Geographical Information System on Hong Kong Heritage, <http://www5.lcsd.gov.hk/gishinter/html/viewer_en.htm>

The Hong Kong Museum of Coastal Defence <http://hk.coastaldefence.museum/en_US/web/mcd/aboutus/history.html>

Lei Yue Mun Park and Holiday Village <http://www.lcsd.gov.hk/en/camp/p_lymp.php>