Revitalisation of the Rear Portion of the Cattle Depot at To Kwa Wan, Kowloon, Hong Kong

HERITAGE IMPACT ASSESSMENT
CONSERVATION MANAGEMENT PLAN

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1.0 INTRODUCTION

1.1 Project Brief

The front portion of former Cattle Depot[1] at To Kwa Wan, Kowloon, Hong Kong has been in use as an artists' village since 2001. The Revitalisation of the Rear Portion of the Cattle Depot (project site) is a Signature Project Scheme (SPS) Project, to provide an open space for recreation purpose in the To Kwa Wan area of Kowloon City District, and to facilitate the promotion of arts and culture to the community. The Architectural Services Department of the Hong Kong Special Administrative Region is the Government works agent to implement the project. The proposed scope of this project comprises the following:

The project aims to convert the disused Rear Portion of the Cattle Depot site, so as to provide to the public more open space and recreational facilities in Kowloon City District and to facilitate the promotion of arts and culture to the community. It will provide sitting-out area, landscaping, amenity lawn area, outdoor areas and other ancillary facilities (including toilet facilities cum baby care room, a first aid room and a park office). The area of the Subject Site is 6,114 sq.m. approximately and the construction area of the proposed new building is 230 sq.m. approximately.

1.2 Scope of the Heritage Impact Assessment

The scope of the Heritage Impact Assessment is based on the guidelines for Built Heritage Impact Assessment (BHIA) set forth by Antiquities and Monuments Office (AMO) of LCSD. The HIA would include a comprehensive inventory of the heritage site, identification of direct and indirect impact on the site in respect of conservation and mitigation measures for due protection of the preserved site. The objective of this HIA is on change management of the cultural landscape. The HIA provides a set of guiding principles on the proposal of revitalisation of the rear portion of the cattle depot. The scope of the HIA includes a comprehensive inventory taking of the heritage items within the Study Area, identification of the impact on the heritage items and proposal of mitigation measures for their due protection. The HIA would make reference to the proposed design scheme, and the following issues will be assessed and addressed in the HIA:

1) Identification of the heritage items required to be preserved and/or protected

[1] There were different names of the Cattle Depot. It was called Ma Tau Kok Slaughter House and Animal Depot at the beginning in the government reports. On Public Works Department (P.W.D.) drawing in 1920s the place was Ma Tau Kok Cattle Depot and Slaughter House. It was shortened as Ma Tau Kok Slaughter House on 1940-60s drawings. After the relocation of the slaughter function in 1969, it was used as Animal Quarantine Depot but people commonly use Cattle Depot to name the place up to now.

2) Understanding of the levels of significance of all the heritage items within the Study Area
3) Development of conservation policy
4) Assessment of the impact and mitigation measures on the heritage items due to the Project

1.3 Acknowledgements

The author of this report would like to acknowledge the following persons, parties, organizations and departments for their assistance and contribution in preparing this report:

- Antiquities and Monuments Office
- Architectural Services Department
- Leisure and Cultural Services Department
- Mr. Ko Tim Keung, Historian
- Mr. Ma Koon Yiu, Historian
- Ms. Patsy Cheng, SEE Network
- Mr. Cheng Shek Man, Former Cattle Depot worker

1.4 Methodology

Though the HIA is based on the two-stage approach of Dr. J. Kerr's Conservation Plan, Stage 1 of the process for understanding the place has been modified by the use of the more comprehensive Historic Places Initiative approach. The Venice Charter (ICOMOS), the Burra Charter (ICOMOS Australia) and the Principles for the Conservation of Heritage Sites in China (China ICOMOS), which give the established international principles in heritage conservation, will be used as the guidelines and standards for the HIA. The framework of the HIA has adopted the format of the Conservation Plan by Dr. J. Kerr, Sidney, National Trust of Australia (NSW), 7th edition (2013) with modification.

2.0 Understanding of the site

2.1 Location

The Project Site is located at the corner of San Shan Road and Kowloon City Road, To Kwa Wan, Kowloon. It was the extension of the Cattle Depot in 1950s.

Fig.1 The project site is on To Kwan Wan, Kowloon as indicated in red color on the aerial photo above

Source: Google earth, modified by author

Fig.2 The project site is at the corner of San Shan Road & Kowloon City Road as indicated in red color on the aerial photo above

Source: Google earth, modified by author

Fig.3 Plan of Study Area

Source: Architectural Services Department, modified by author

The proposed recreational open space is located at the Rear portion and the project site is the hatched area in Fig. 3 with boundary indicated by the dashed red line. It is adjacent to San Shan Road on the south, Kai Tak Tunnel on the west, Cattle Depot Artist Village on the north and Ma Tau Kok Gas Works on the east.

Adjacent to the whole heritage site on the north is the "Thirteen Streets" Residential/Commercial development. While on the west is another Residential/Commercial development. On the east is the Ma Tau Kok Gas Works and on the south is To Kwa Wan Recreation Ground.

There is a Ma Tau Kok Refuse Collection Point within the northwest corner while there are a electricity sub-station and public lavatories located outside. The rear portion was the extension of the front portion of the Cattle Depot in operation from 1950s to 1980s.

Fig.4 Cattle Depot Artist Village on the north of the project site

Source: photo by the author

Fig.5 "Thirteen Streets" Residential/Commercial development on the north of Cattle Depot Artist Village

Source: photo by the author

Fig.6 Refuse collection point, electricity substation and public lavatories on the northwest corner of the heritage site

Source: Google earth, modified by author

Fig.7 Residential / Commercial development on the west of the heritage site

Source: Google earth, modified by author

Fig.8 Ma Tau Kok Gas Work on the east of the heritage site

Source: Google earth, modified by author

Fig.9 To Kwa Wan Recreation Ground on the south of the heritage site

Source: photo by the author

2.2 Study Area

The HIA will cover the project site and the historic development study will cover the whole Cattle Depot heritage site with boundary indicated by the dashed blue line.

Fig.10 Plan of Study Area

Source: Architectural Services Department, modified by author

There are eleven sheds within the project site.

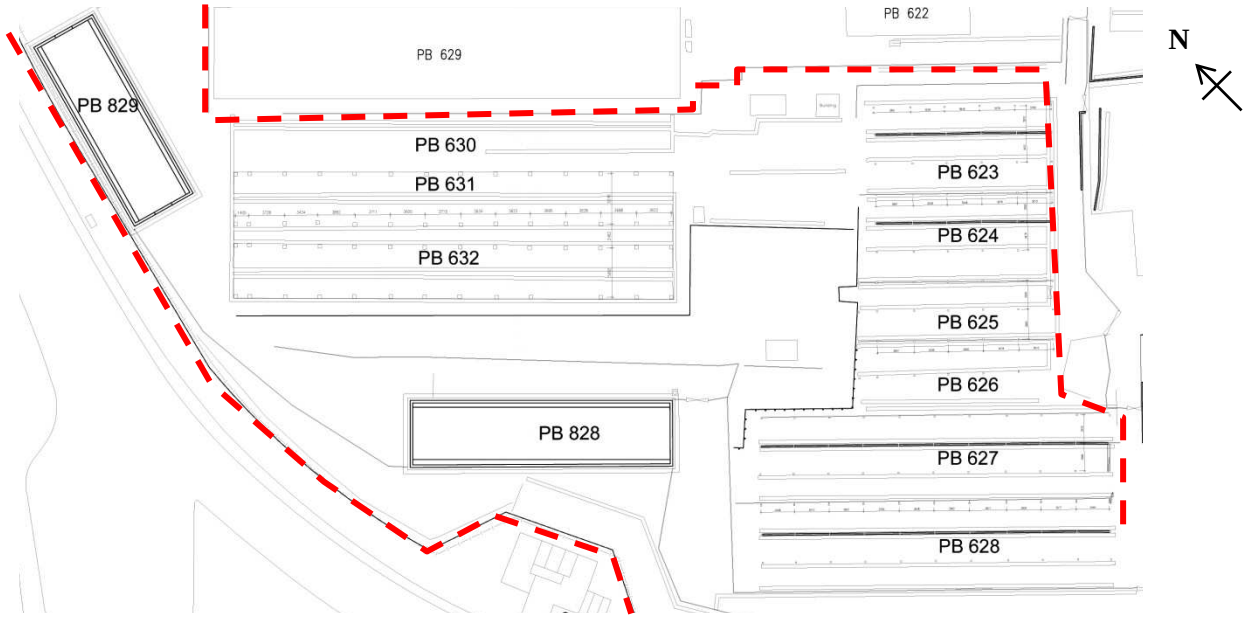


Fig.11 Plan of project site (with bold building code number)

Source: Architectural Services Department, modified by author

2.3 Grading Status

The project site at the rear portion of the Cattle Depot is currently a closed area. Together with the front portion of the Cattle Depot, Ma Tau Kok Refuse Collection Point and a closed factory within the red boundary below, the whole area was confirmed a Grade 2 historic site by the Antiquities Advisory Board in 2009.

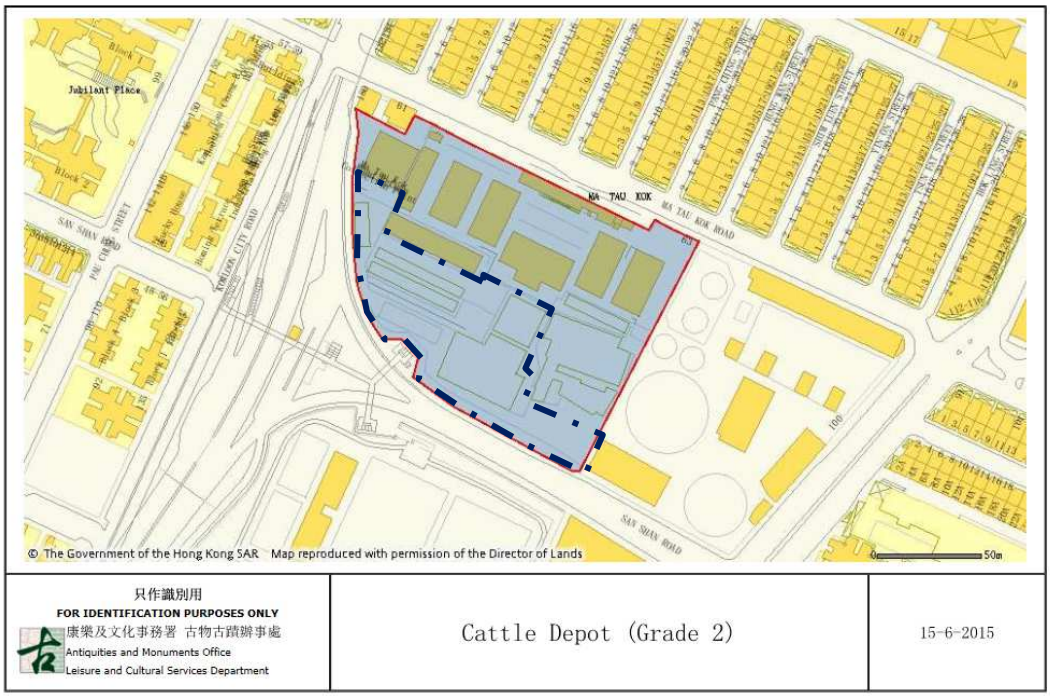


Fig.12 Plan of Cattle Depot historic building

Source: Antiquities and Monuments Office, modified by author

Project site

Grade 2 area

2.4 Outline Description

The construction work of the Cattle Depot was completed in November 1908[2]. It was to replace the old slaughter house and cattle depot at Hung Hom Bay for the construction of the Kowloon & Canton Railway. It consisted of sheds for 400 swine and 200 sheep or goats, 120 cattle, an isolation shed, offices and inspector's quarters. The land was allowed for future extension.[3] The Rear Portion of the Cattle Depot was not included in the original design. It was not until the 1950s that the Cattle Depot needed further extension. The land at the rear of the cattle depot was included as part of the extension. The sheds were constructed in different periods of time gradually from 1950s to 1980s. The slaughter function of the Cattle Depot was relocated to Cheung Sha Wan in 1969. The place was then purely used as quarantine and trading of cattle. The Rear Portion of the Cattle Depot was abandoned together with the closing down of the whole Cattle Depot in 1999. The Front Portion of Cattle Depot was converted into the current Artist Village in 2001. The Rear Portion remained out of use and was fenced off from the Artist Village by then. Some of the building structures within the Rear Portion collapsed over the years. All roof structures of the sheds no longer exist. Only the setting of the site, columns of the sheds and the feeding troughs remain on site. Through the passage of time, trees grow over the place and become one of the major features of the site.

[2] *Public Works Department Annual Report 1908*, Hong Kong Government Reports Online, University of Hong Kong

[3] *Report of Proceedings of the Public Works Committee 8 August 1907*, Hong Kong Government Reports Online, University of Hong Kong

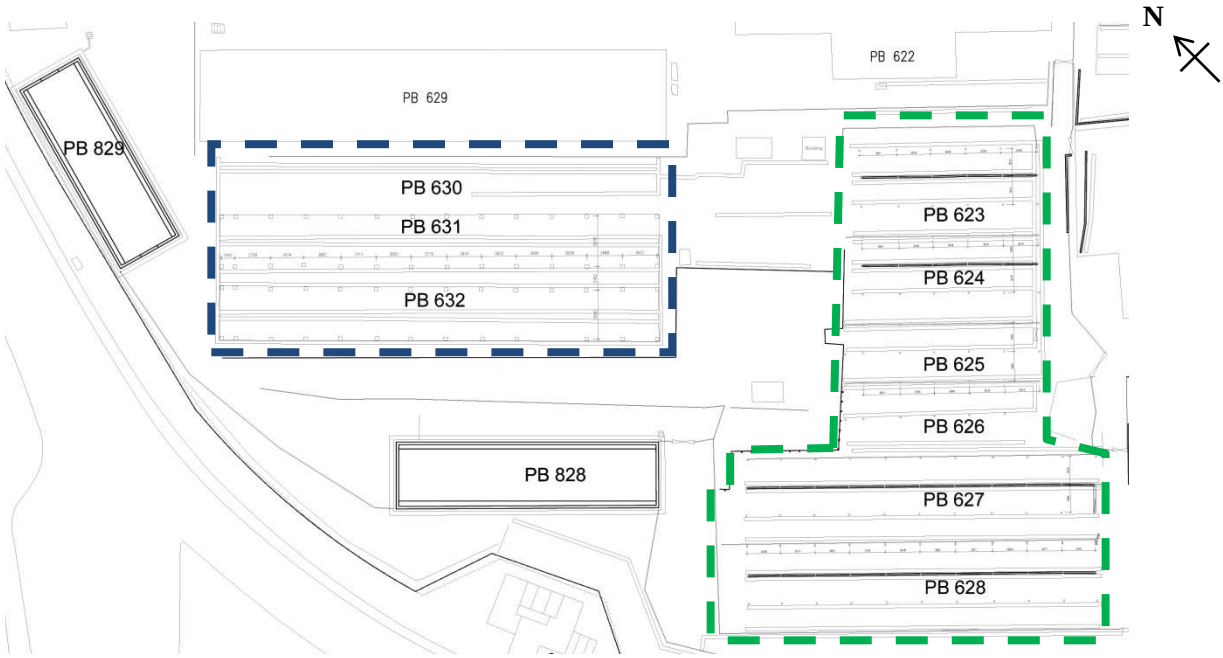


Fig.13 Plan of project site

Source: Architectural Services Department, modified by author

The Rear Portion of the Cattle Depot can be subdivided in different zones according to the time of development. The earliest development within the project site is called the Red Brick zone, where the sheds were constructed with red brick columns. Within the Red Brick zone, there are two remains of sheds named PB631, PB 632 and half of PB 630.

The other area with concrete columns structures is called Concrete zone which was constructed at a later stage. Within this zone, there are 6 remains of sheds named PB623 to PB628.

Other than these two zones, there remain two concrete structures called PB828 and PB 829 adjacent to the Red Brick zone which were constructed in the 1980s. There are also feeding troughs spreading all over the project site without sheds. After the closing of the whole Cattle Depot in 1999, the Rear Portion was fenced off and became covered with trees.

3.0 History and Development

3.1 Historical Development of Front Portion of Cattle Depot

Hong Kong became a British colony in 1841. At that time, only Hong Kong Island was occupied. Not until 1860 after the Second Opium War and the signing of Convention of Peking, Kowloon Peninsula became part of the British colony. The first slaughter house in Kowloon was in Yaumati in around 1879.[4] A new slaughter house was erected at Hung Hom in place of the old one at Yaumati in 1892.[5] Due to the construction of the Kowloon and Canton Railway, the Hung Hom slaughter house was relocated to the present site at Ma Tau Kok in the year 1908.[6]

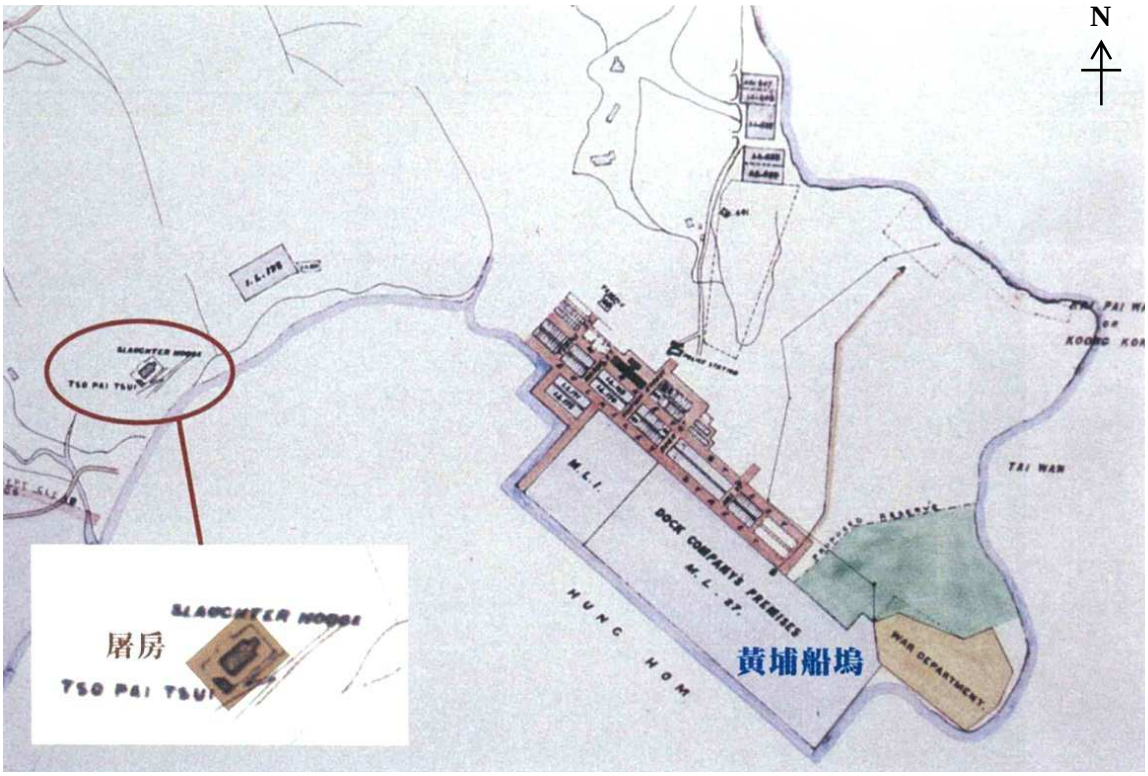


Fig.14 Map of 1887 showed the Hung Hom slaughter house

Source: Cheng Man Wah 鄭敏華,

Zhui yi long cheng tui bian 追憶龍城蛻變, 2011

[4] In the Government Gazette 3 December 1879, p.766 item 243, it was mentioned that " the sole privilege of Slaughter Cattle in the Eastern and Western Slaughter Houses will not give rights over any other Slaughter Houses which may be permitted by the Government at Yaumati," Hong Kong Government Reports Online, University of Hong Kong

[5] *SP 1893, Veterinary Surgeon's Report for 1892.* Hong Kong Government Reports Online, University of Hong Kong

[6] Public Work Committee report 1908, p. 19 item 68, it was mentioned that " Slaughter House and Animal Depot in Kowloon. – This work was finally completed in November at a total cost of $66,889.91

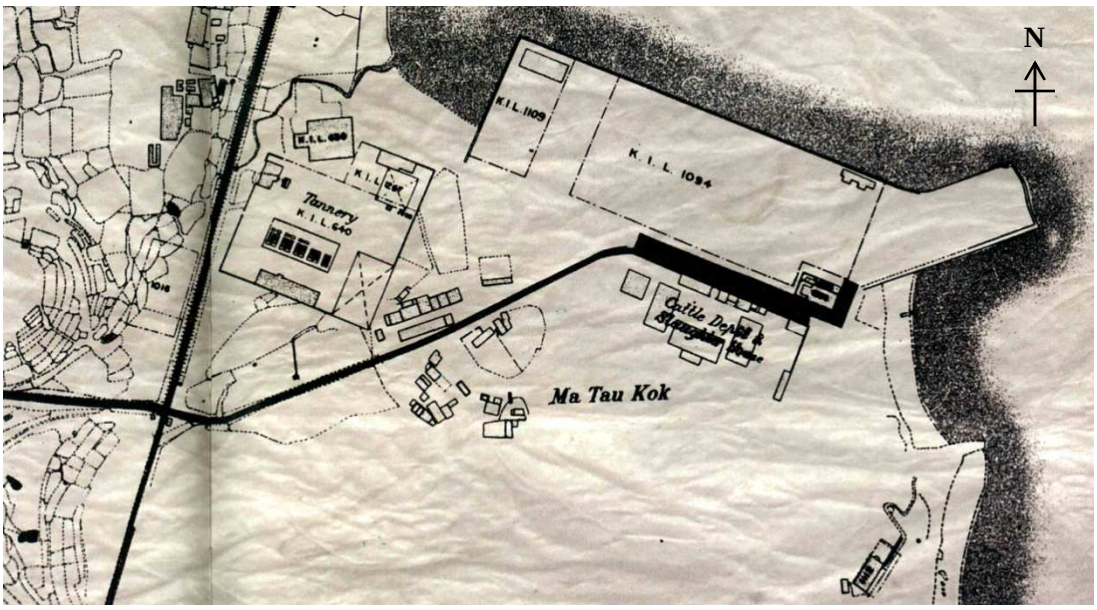


Fig.15 Map of 1920 showed the present site of slaughter house

Source: Cheng Man Wah 鄭敏華,

Zhui yi long cheng tui bian 追憶龍城蛻變, 2011

Fig.16 Ma Tau Kok Animal Quarantine Depot, c.1920

Source: Lau Yun Wo 劉潤和, Jiu long cheng qu feng wu zhi 九龍城區風物志

(A Guide to the Antiquities of Kowloon City District), 2005, P.67

Other than the staff quarters and the slaughter house, there were only three sheds. One of them was in square shape in the west which was about half in size in comparison with the others in the 1922 survey plan.

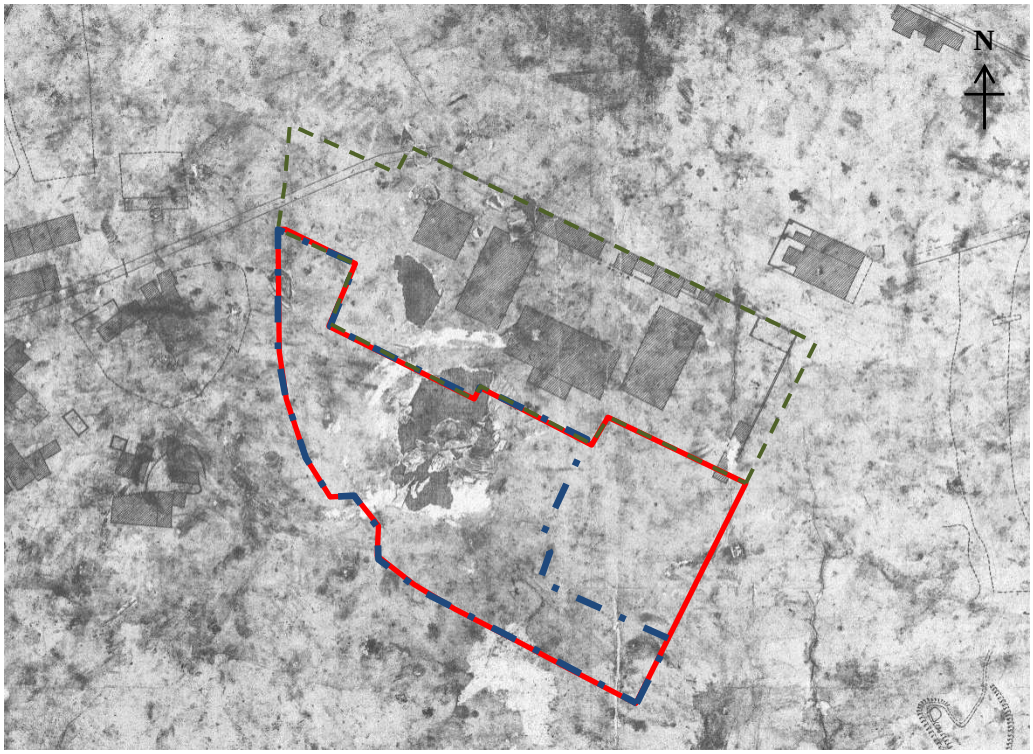


Fig.17 1922 survey plan of the cattle depot (with project site area highlight in dashed blue line)

Source: Lands Department, modified by author

Front portion

Rear portion (with factory)

Project site

From an 1949 aerial photo, the Cattle Depot was expanded with the square shape shed in the west and became rectangular. One more shed was built at the east side. A new pig lairage and a dog kennel were built after 1949 and completed before 1953[7].

Front portion
Rear portion (with factory)
Project site

Fig.18 1949 Aerial photo of the cattle depot

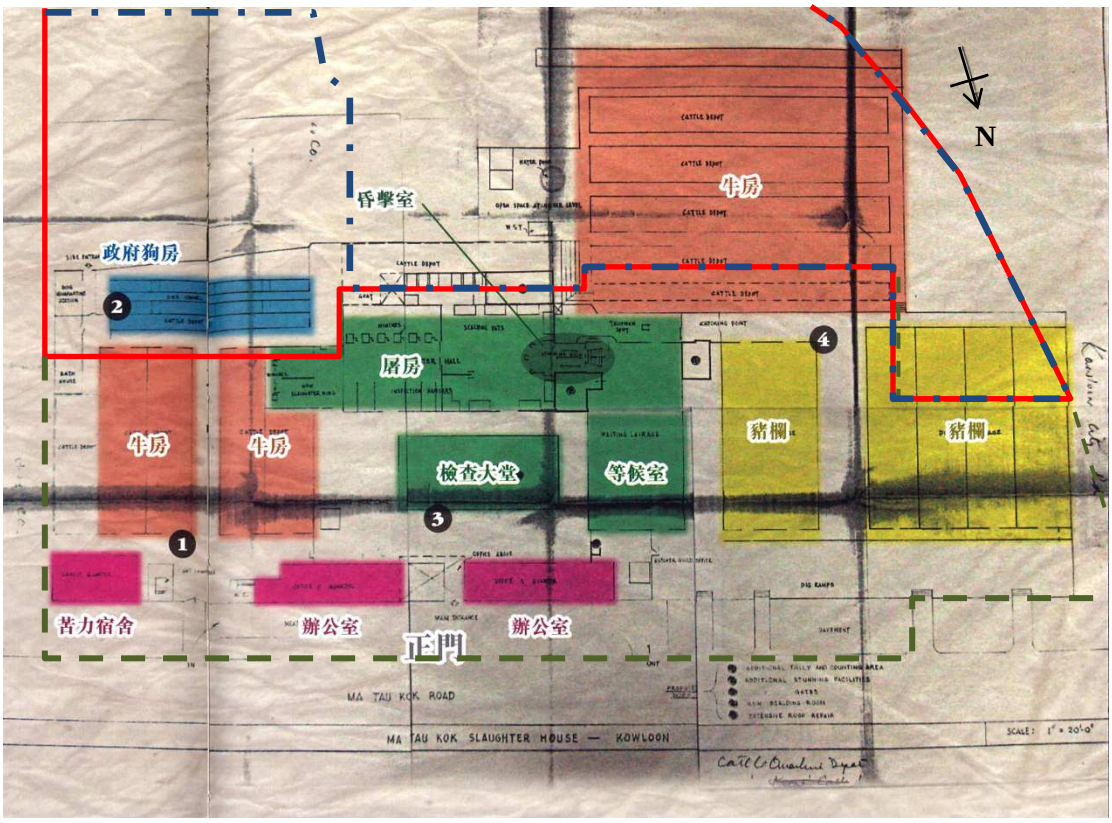
Source: Lands Department, modified by author

Front portion
Rear portion (with factory)
Project site

Fig.19 1953 Record plan of the cattle depot (with pig lairage highlight in yellow and dog kennel in blue)

Source: Lands Department, modified by author

[7] ASD record plan 1949 showing the design of the buildings & 1953 showing the buildings has been completed



Front portion

Rear portion (with factory)

Project site

Fig.20 Layout plan of Cattle Depot from 1950 to 1960

Source: 追憶龍城蛻變, 2011

The boundary of the front portion of the Cattle Depot was extended at the north-west corner for the construction of the pig lairage. A corner of the site in front of the pig lairage was taken out for the construction of a new electricity sub-station in a 1978 survey plan.

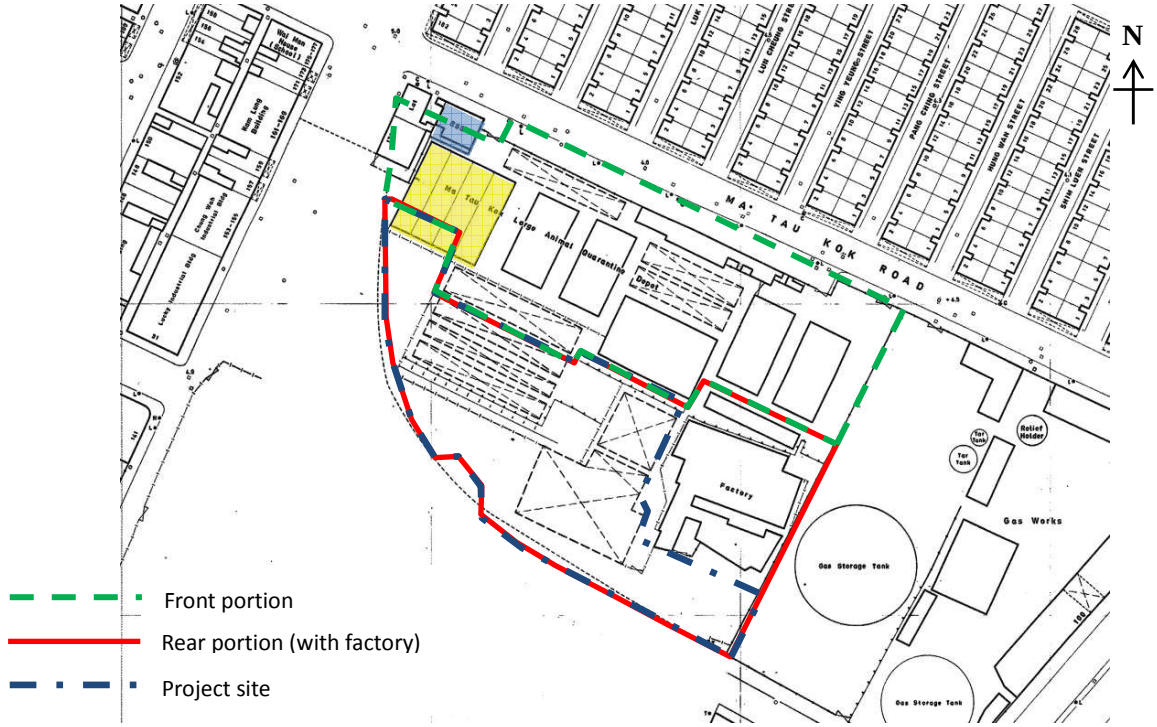


Fig.21 1978 record plan of the cattle depot

(with pig lairage highlight in yellow and new electricity sub-station in blue)

Source: Lands Department, modified by author

Cattle Depot was converted to an Artist Village in 2001. Three out of four pig lairage were demolished as shown in the 2001 survey plan. Land was crafted out from the Cattle Depot for the construction of a refuse collection point which was completed in 2003.

Front portion

Rear portion (with factory)

Project site

Fig.22 2001 record plan of the cattle depot

Source: Lands Department, modified by author

Front portion

Rear portion (with

Project site

Fig.23 2003 record plan of the cattle depot

(with Ma Tau Kok Refuse Collection Point highlight in green)

Source: Lands Department, modified by author

3.2 Historical Development of Rear Portion of Cattle Depot

The Rear Portion of the Cattle Depot was not constructed until 1950s. According to the 1949 and 1954 aerial photos, the Rear Portion was occupied by a few huts and vegetation. Further south was the area of an old quarry. *"Some alterations to a small building in the vicinity, which was taken over by Government on the completion of their quarrying operations"*[8]

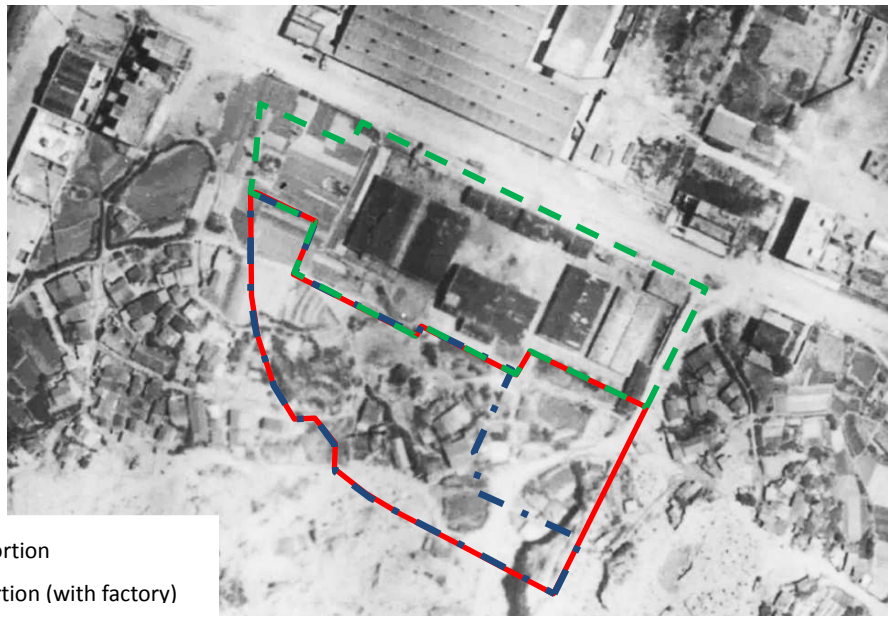


Fig.24 1949 Aerial photo of the cattle depot

Source: Lands Department, modified by author

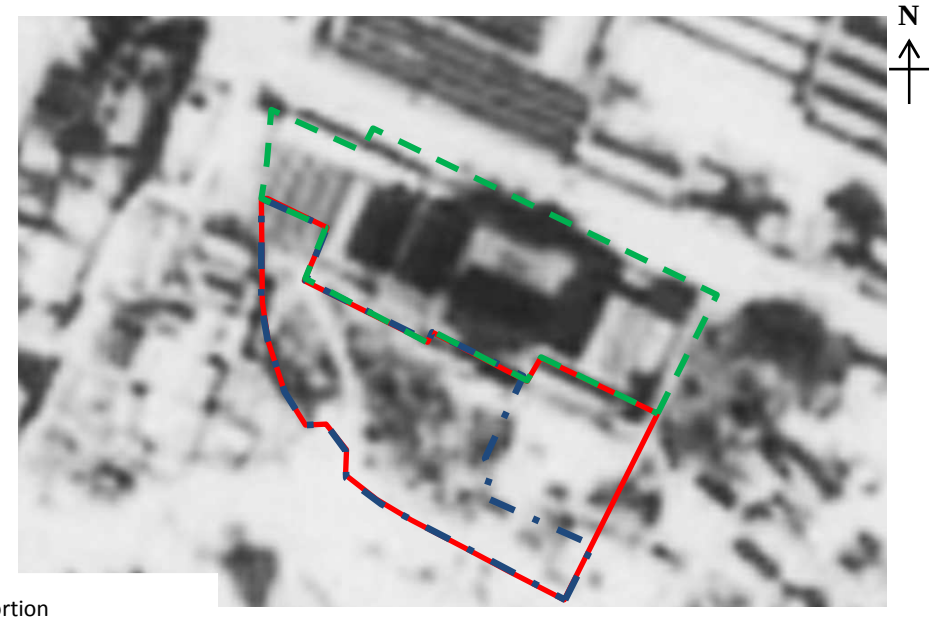


Fig.25 1954 Aerial photo of the cattle depot

Source: Lands Department, modified by author

[8] *Public Works Department Annual Report 1907, item 93*.Hong Kong Government Reports Online, University of Hong Kong

The extension to the Rear Portion was proposed in 1956 as shown in fig 26. Four cattle lairages to be named as “Red Brick zone” together with a water pond and an incinerator were proposed and completed in 1956 as show in figure 26.[9] The extent of the Rear Portion was not as large as existing as shown in a 1956 record drawing.

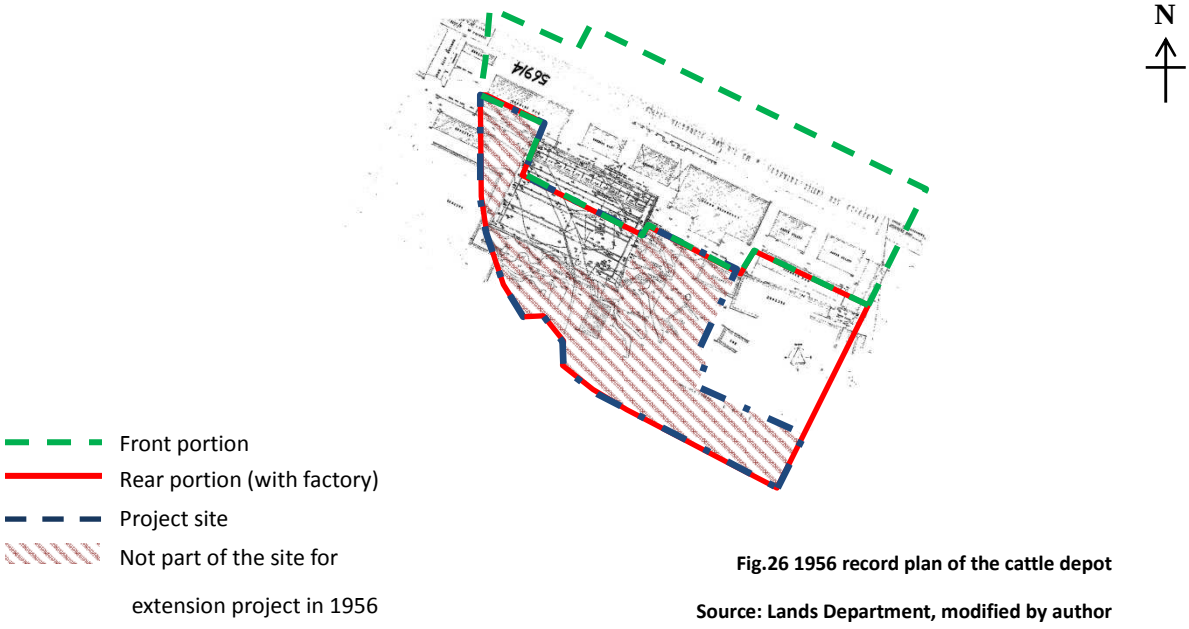


Fig.26 1956 record plan of the cattle depot

Source: Lands Department, modified by author

Fig.27 1956 record part plan of the cattle depot

Source: Lands Department, modified by author

[9] In the PWD 1957 record drawing, it was indicated that the cattle lairages were completed in 1956.

From the Urban Services Departmental annual report 1956-57[10], lairages for a further 400 cattle were constructed at Ma Tau Kok. In the 1959 aerial photo, the sheds PB630, PB631 and PB 632 in the Red Brick zone appeared.

Fig.28 1957 record plan of the cattle depot (with enlarged lairages highlight in blue dash line)

Source: Lands Department, modified by author

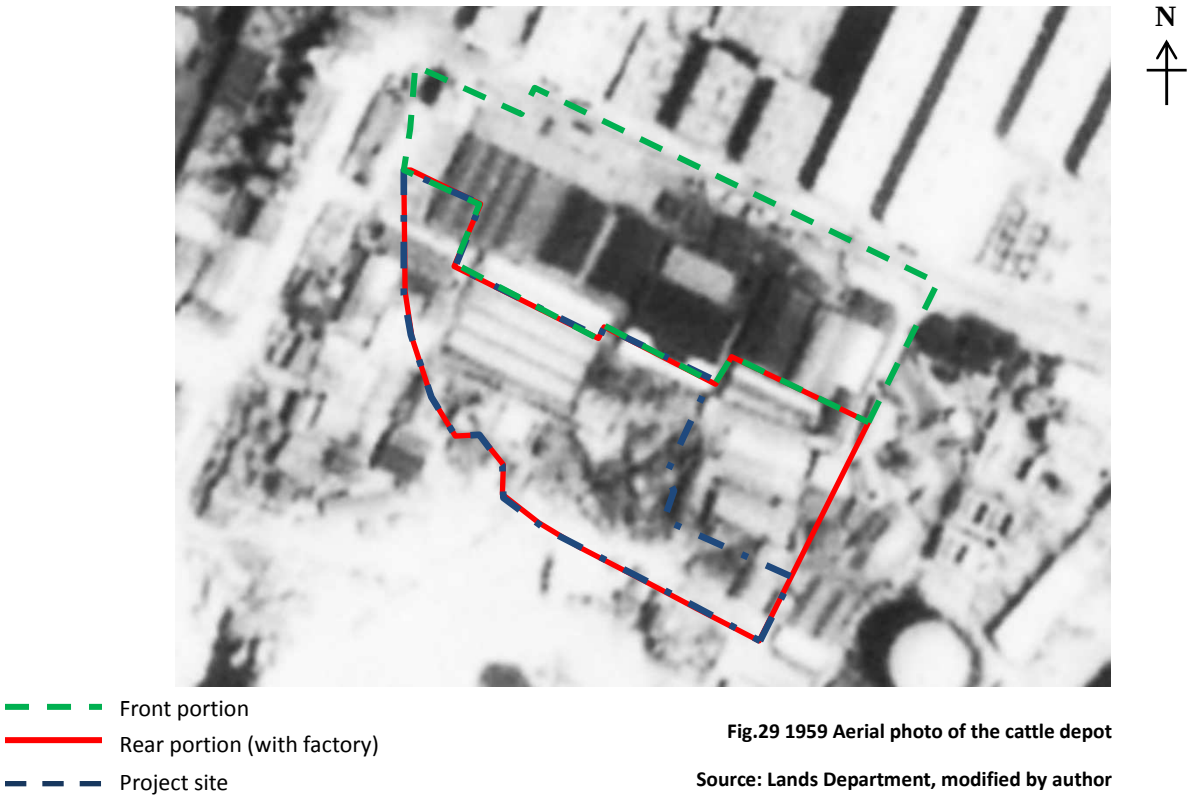


Fig.29 1959 Aerial photo of the cattle depot

Source: Lands Department, modified by author

[10] Urban Services Department Annual Report 1956-1957, P. 39

There were weaving factories and other factories around the Rear Portion in 1960 in survey plan.

Fig.30 1960 map of the cattle depot (with weaving factories highlight in green)

Source: Lands Department, modified by author

The incinerator found in 1960 in survey plan.

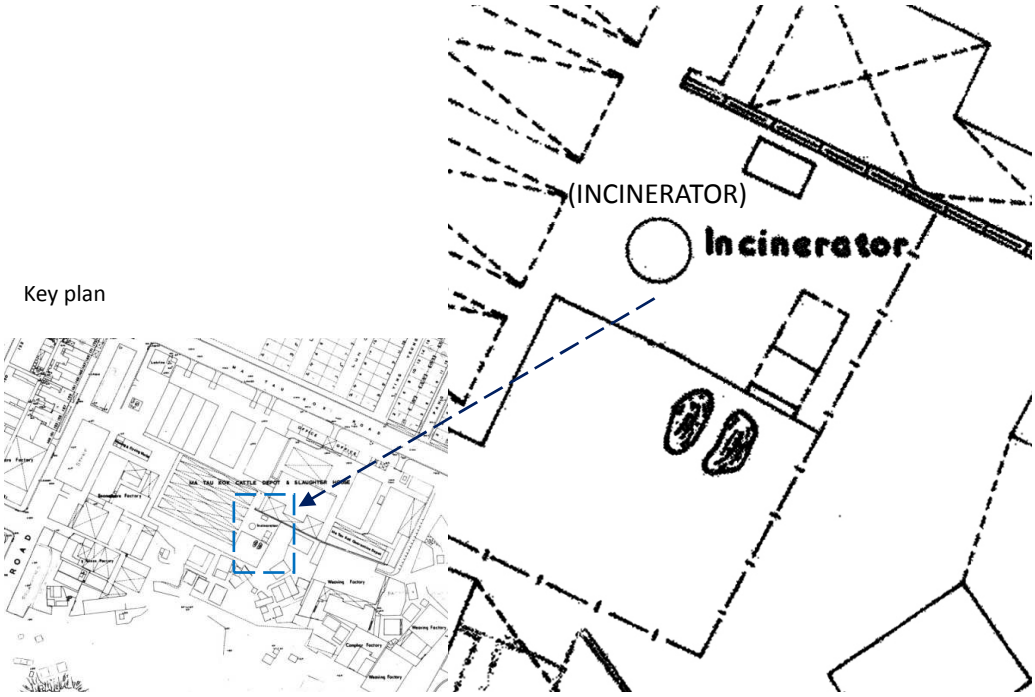


Fig.31 1960 enlarged map of the cattle depot

Source: Lands Department, modified by author

In 1961, the water pond, incinerator and W.S.T were shown in a 1961 record plan.

Fig.32 1961 record plan

Source: Lands Department, modified by author

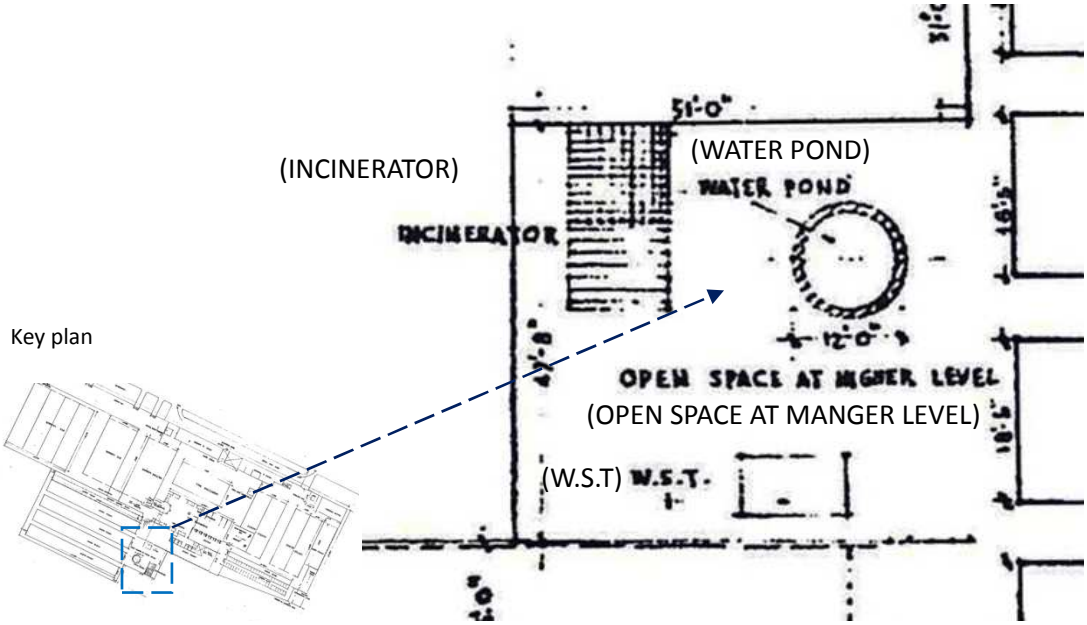


Fig.33 1961 enlarged record plan

Source: Lands Department, modified by author

From a record plan of 1964, the PB623 to PB 628 to be named as “Concrete zone” was proposed for construction.

Fig.34 Record enlarged Part Plan of “Concrete zone”

Source: Architectural Services Department, modified by author

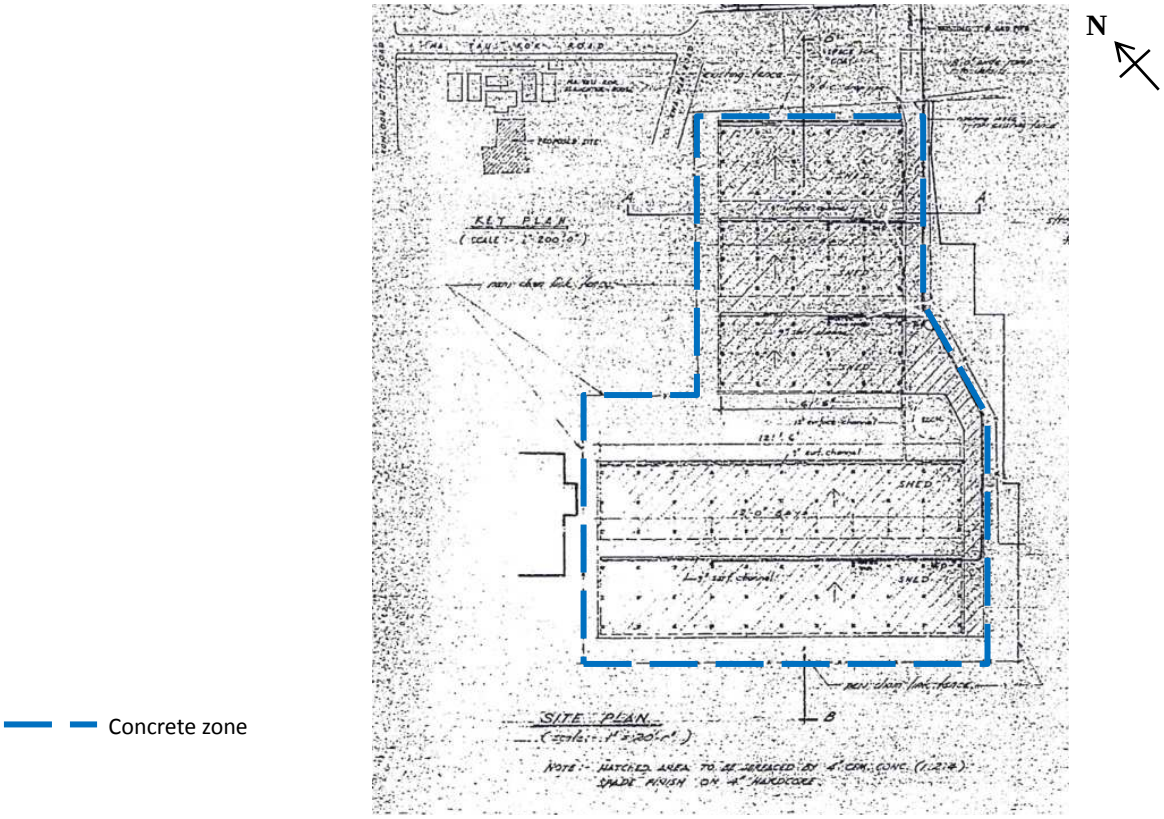


Fig.35 1964 record plan of the cattle depot (with concrete zone highlight in blue)

Source: Lands Department, modified by author

The construction works of the sheds in the concrete zone was completed in 1965 and the site boundary was extended to include the Concrete zone as indicated in the 1966 record plan at Fig. 36.

Fig.36 1966 record plan of the cattle depot

Source: Lands Department, modified by author

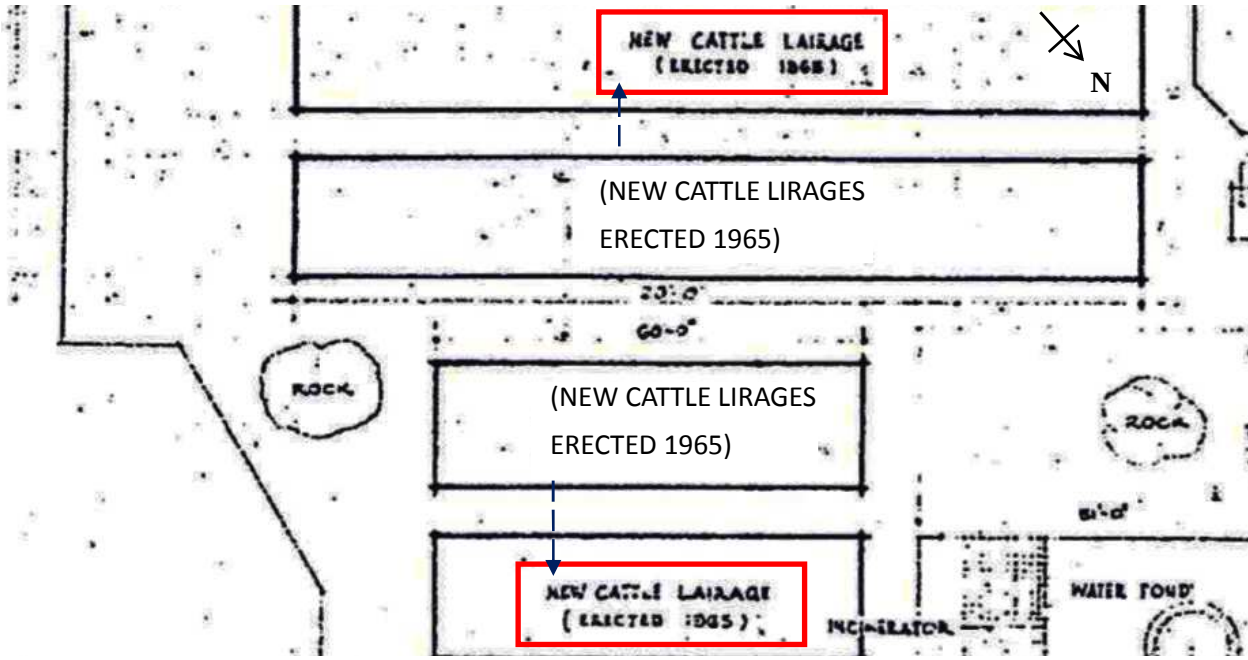
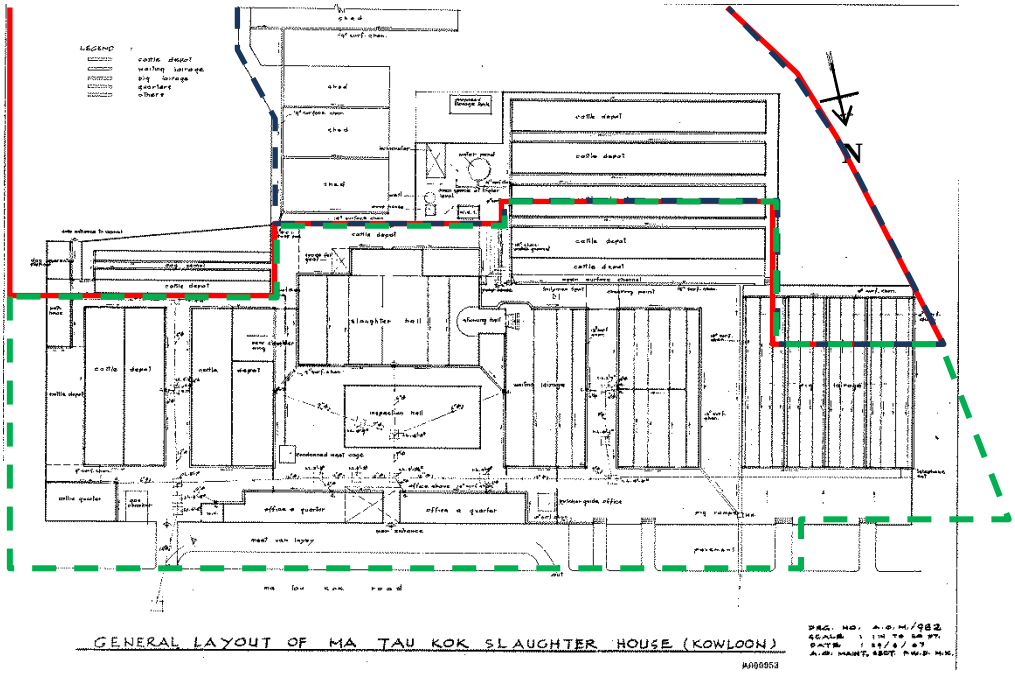


Fig.37 1966 enlarged record plan of the cattle depot that indicated the shed of concrete zone were elected in 1965 (highlight with red color)

Source: Lands Department, modified by author

The further proposed storage tank design adjacent to the water pond at rear portion can be found in a 1967 record plan.



Front portion
Rear portion (with factory)
Project site

Fig.38 1967 General layout plan of the cattle depot

Source: Public Record Office, modified by author

In the 1976 record plan, there was a proposed storage tank at the north. A water pond, incinerator, well, pump house and water storage tank (W.S.T) were shown at the south.

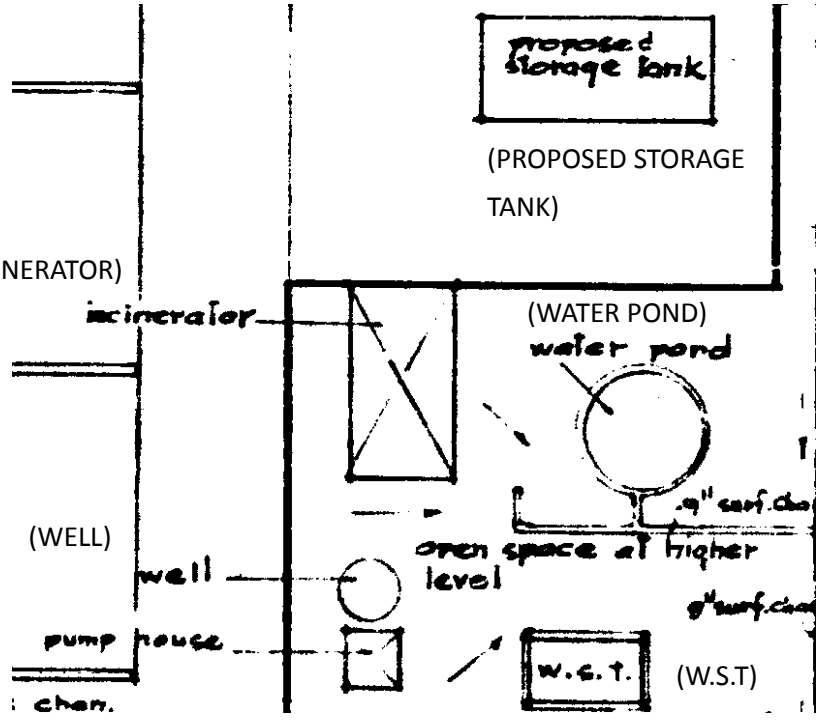


Fig.39 1967 General layout plan of the cattle depot

Source: Public Record Office, modified by author

But in the 1968 survey plan, only the PB627 to 628 was indicated. PB 623 to 626 was not shown until the 1970 survey plan.

Fig.40 1968 survey plan of the cattle depot (with Concrete zone highlight in blue)

Source: Lands Department, modified by author

In the 1968 survey plan, the front portion and rear portion together was name as Ma Tau Kok Cattle Depot & Slaughter House. In 1969, the slaughter function of Cattle Depot was relocated to Cheung Sha Wan. The name of the Ma Tau Kok Cattle Depot & Slaughter House changed to Cattle Quarantine Depot in 1977 in Fig. 48.

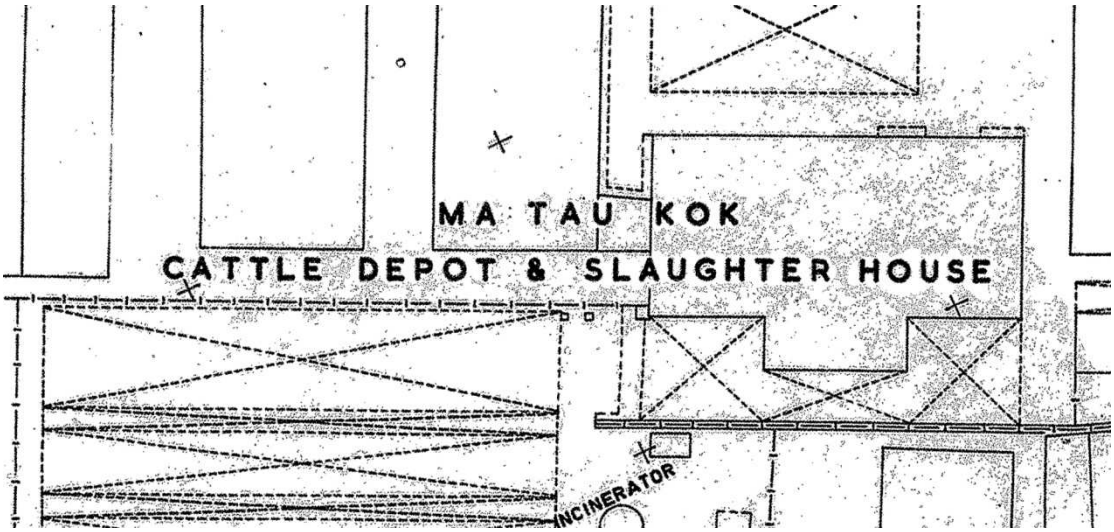


Fig.41 1968 survey plan of the cattle depot

Source: Lands Department, modified by author

In the 1970 survey plan, the concrete zone extend was completed.

Fig.42 1970 survey plan of the cattle depot (with Concrete zone highlight in blue)

Source: Lands Department, modified by author

From an 1972 aerial photo, the water pond in water pond zone still existed but no incinerator structure was found.

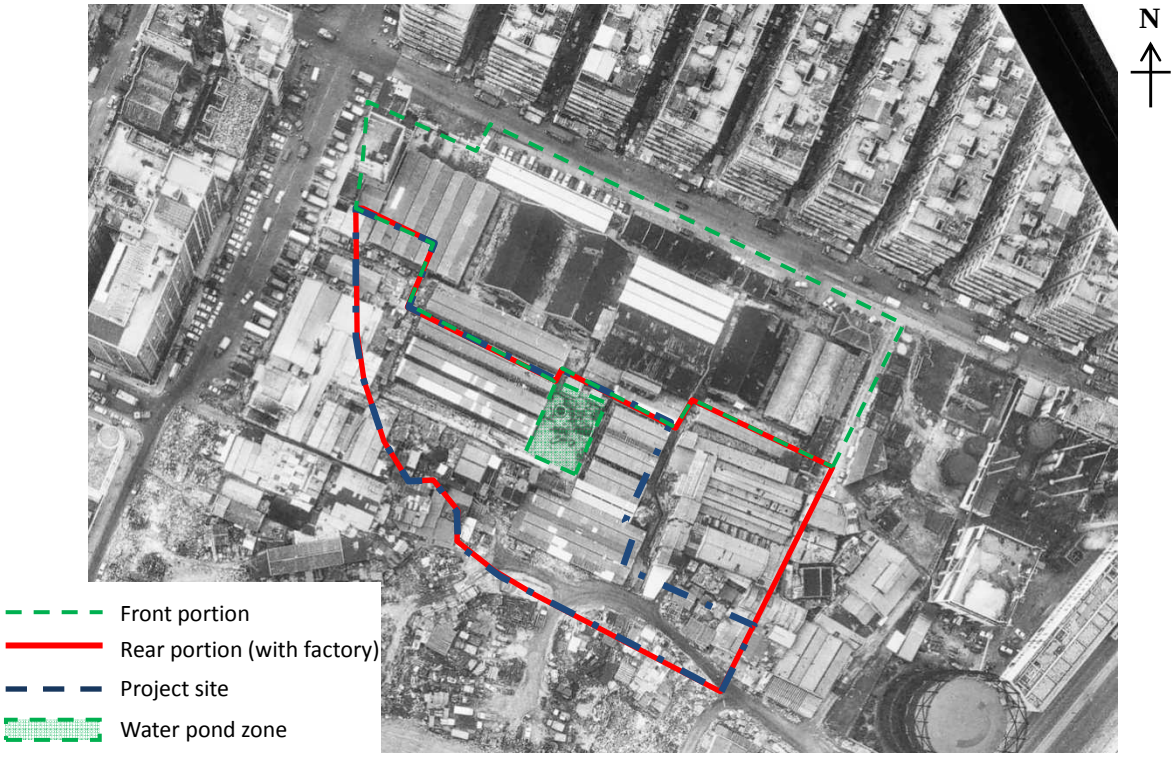


Fig.43 1972 Aerial photo of the cattle depot

Source: Lands Department, modified by author

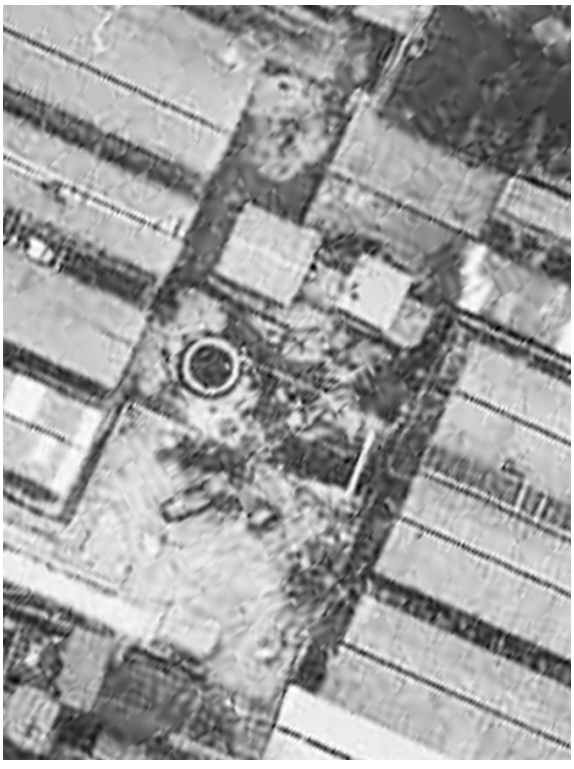


Fig.44 1972 Part aerial photo of the water pond zone

Source: Lands Department, modified by author

The water pond zone was covered up by a shed in an 1979 aerial photo.

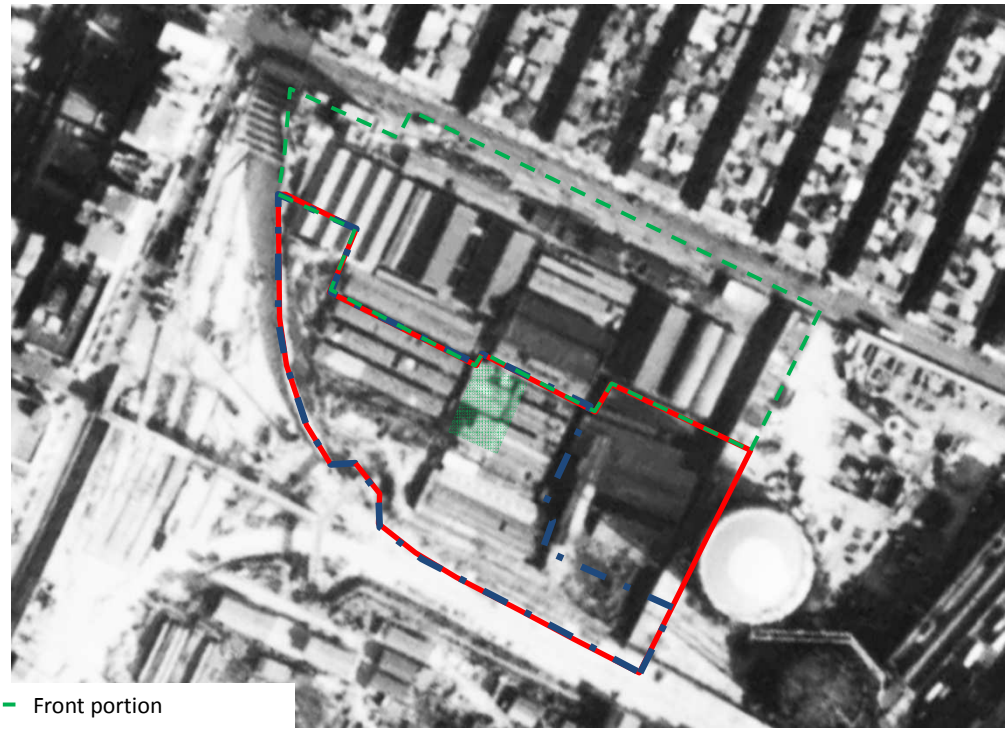


Fig.45 1979 Aerial photo of the cattle depot

Source: Lands Department, modified by author

The traces of the water pond still exist which is covered by concrete and feeding trough channel.

Fig.46 Current Condition of water pond in water pond zone

Source: photo by the author

The traces of the well still exit which is covered up by concrete and a manhole is constructed on top of the well.

Fig.47 Current Condition of the well in water pond zone

Source: photo provided by Architectural Services Department

Proposed extension for Cattle Depot from Old factory in the rear portion was found in a 1977 record plan. This area is outside but adjacent to our project site, also being part of the Cattle Depot extension.

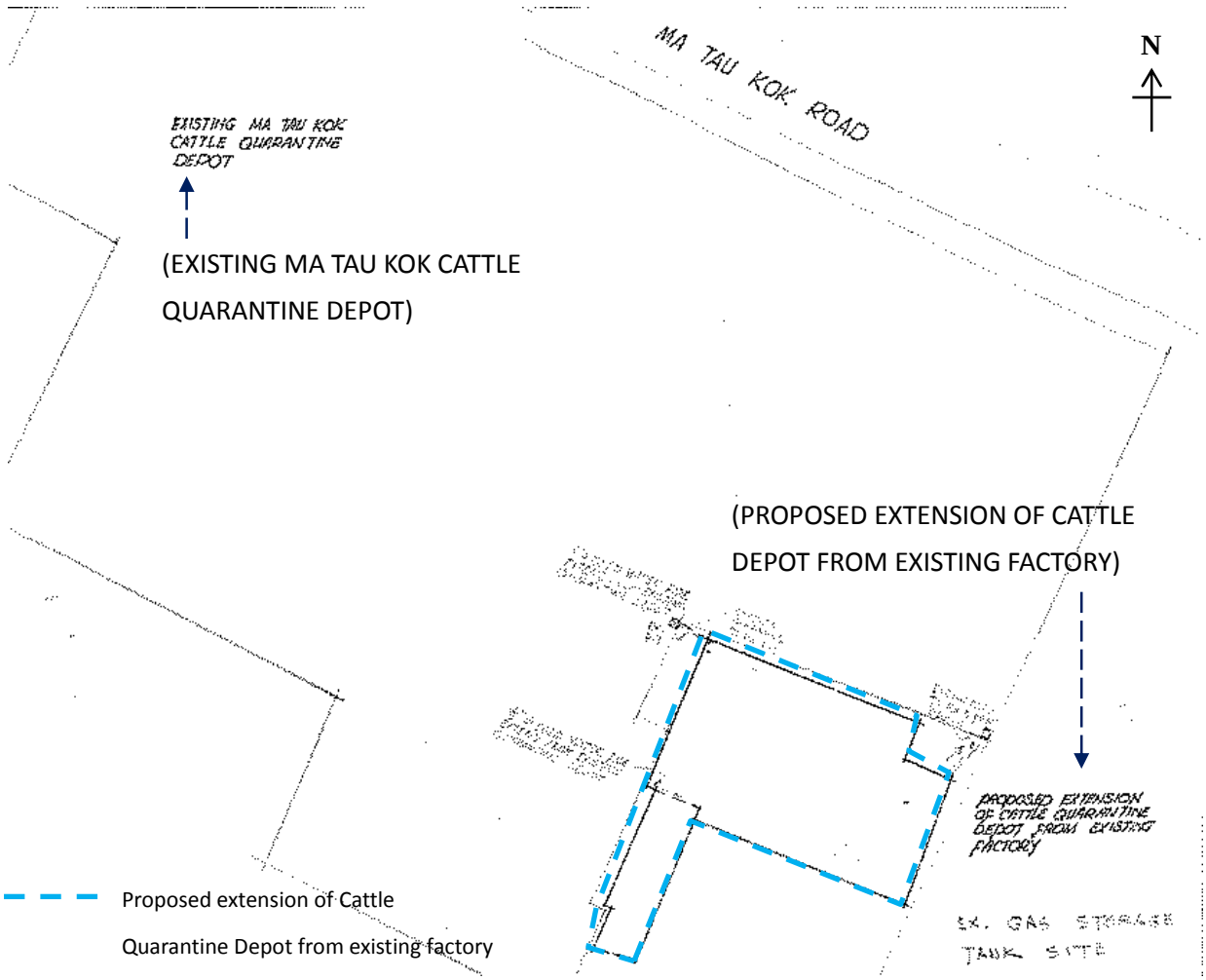


Fig.48 1977 record plan of Alteration of Ma Tau Kok Quarantine Depot

Source: Lands Department, modified by author

Many cattle feeding sheds are placed around in the extension of factory.

Fig.49 Current condition of the factory

Source: photo by the author

Fig.50 Current condition of the factory

Source: photo by the author

Fig.51 Current condition of the factory

Source: photo by the author

Fig.52 Current condition of the factory

Source: photo by the author

San Shan Road and Kowloon City Road together with the Kai Tak Tunnel was completed in 1980. The ultimate outline of the Rear Portion was formed.

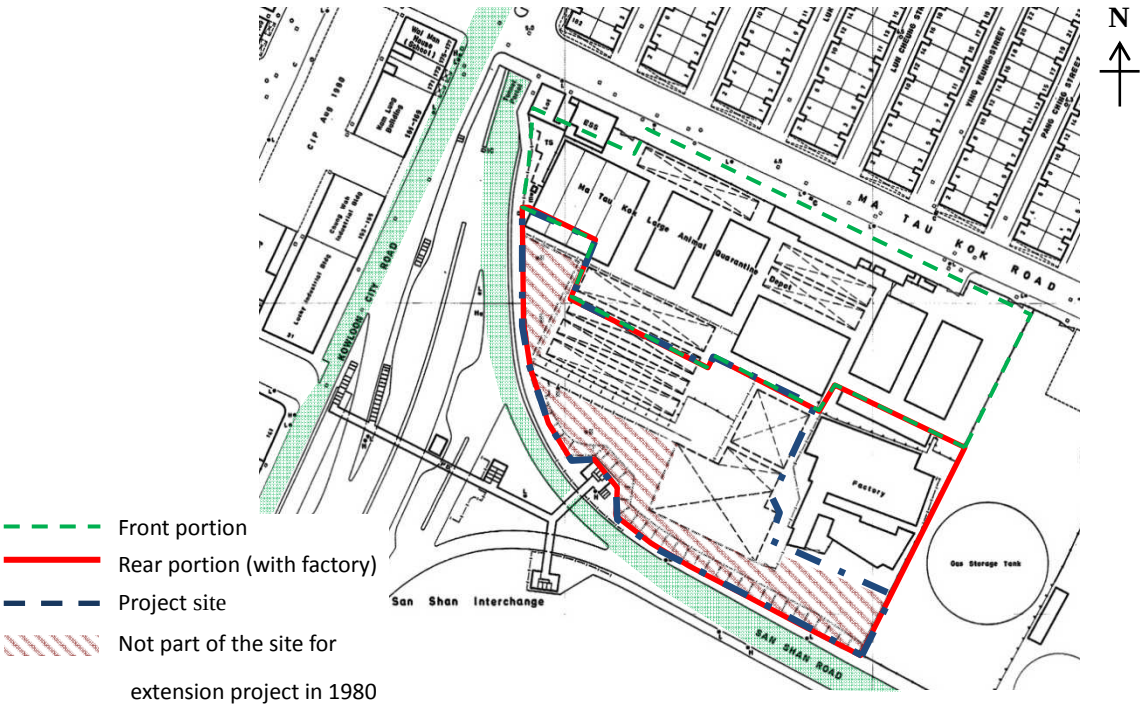


Fig.53 1980 survey plan of the cattle depot (with San Shan Road and Kowloon City Road highlight in green)

Source: Lands Department, modified by author

Further extension of the Rear Portion site boundary was found in a 1986 survey plan with the completion of the shed named as PB828 & PB829.

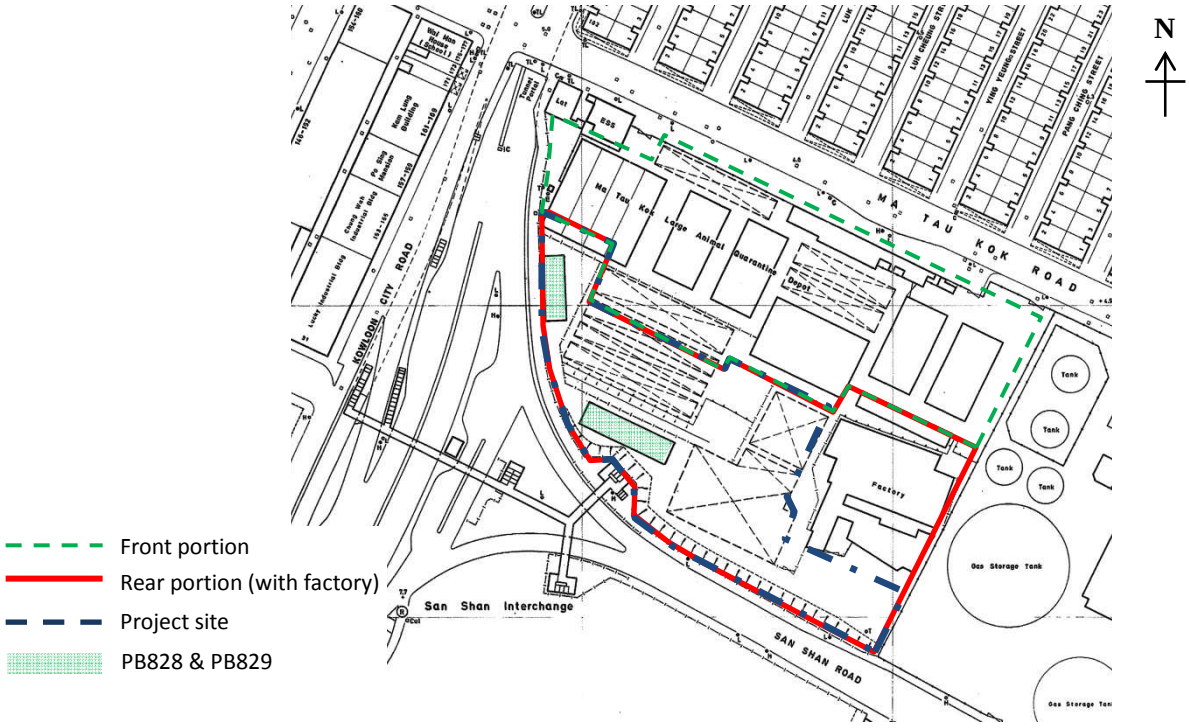


Fig.54 1986 survey plan of the cattle depot

Source: Lands Department, modified by author

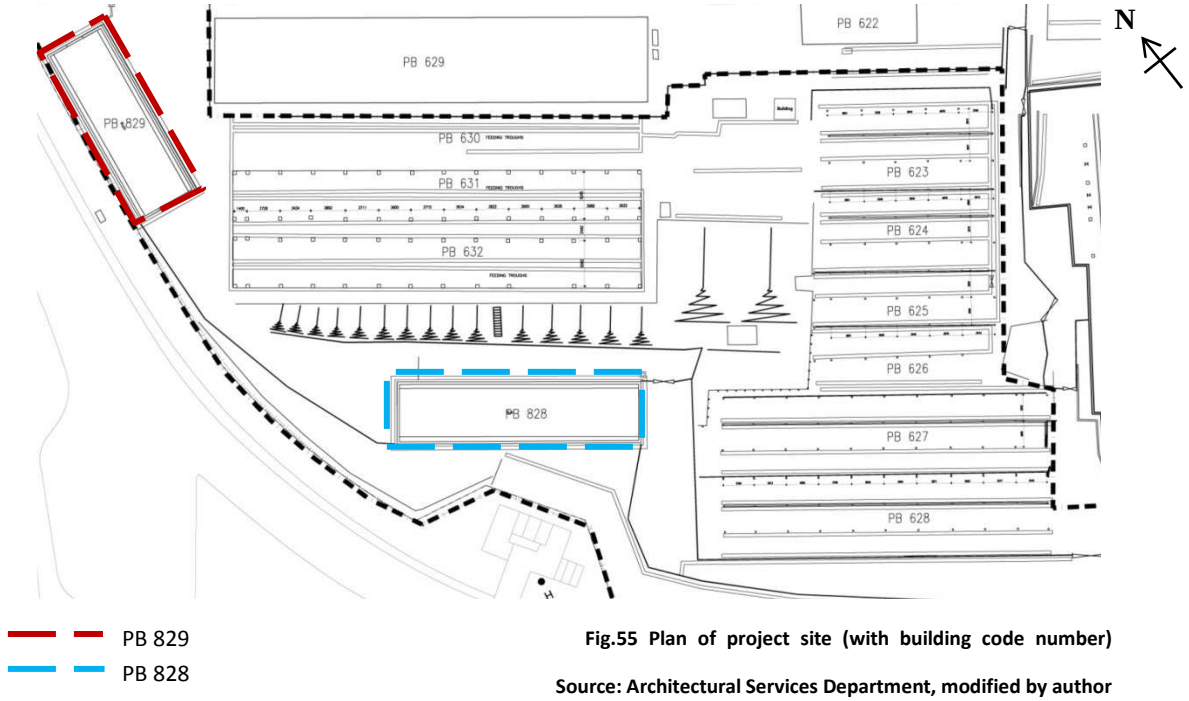


Fig.55 Plan of project site (with building code number)

Source: Architectural Services Department, modified by author

The whole Rear Portion of the Cattle Depot was then established. Feeding trough and remains of the water pond still exist on site. There is no trace of the incinerator. From the 2001 survey plan, part of the pig lairages at the north-west corner of the Cattle Depot was demolished for the construction of a refuse collection point. The Ma Tau Kok Refuse Collection Point appeared in the 2003 survey plan.

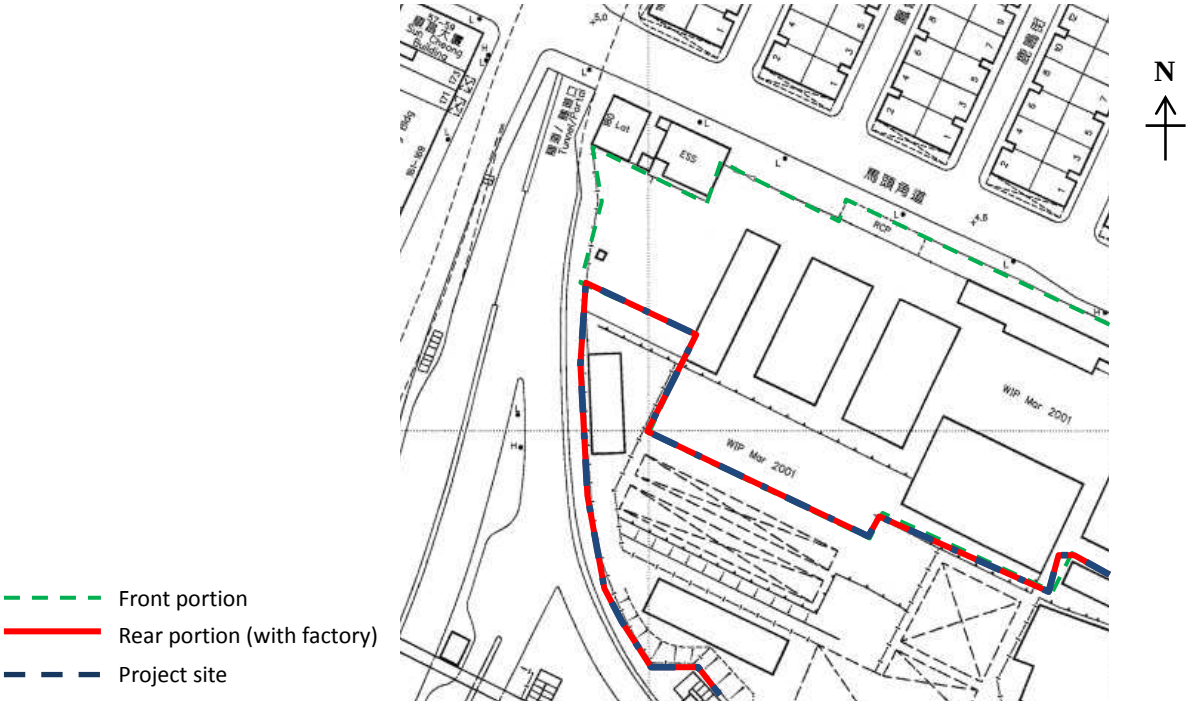


Fig.56 2001 survey plan of the cattle depot

Source: Lands Department, modified by author

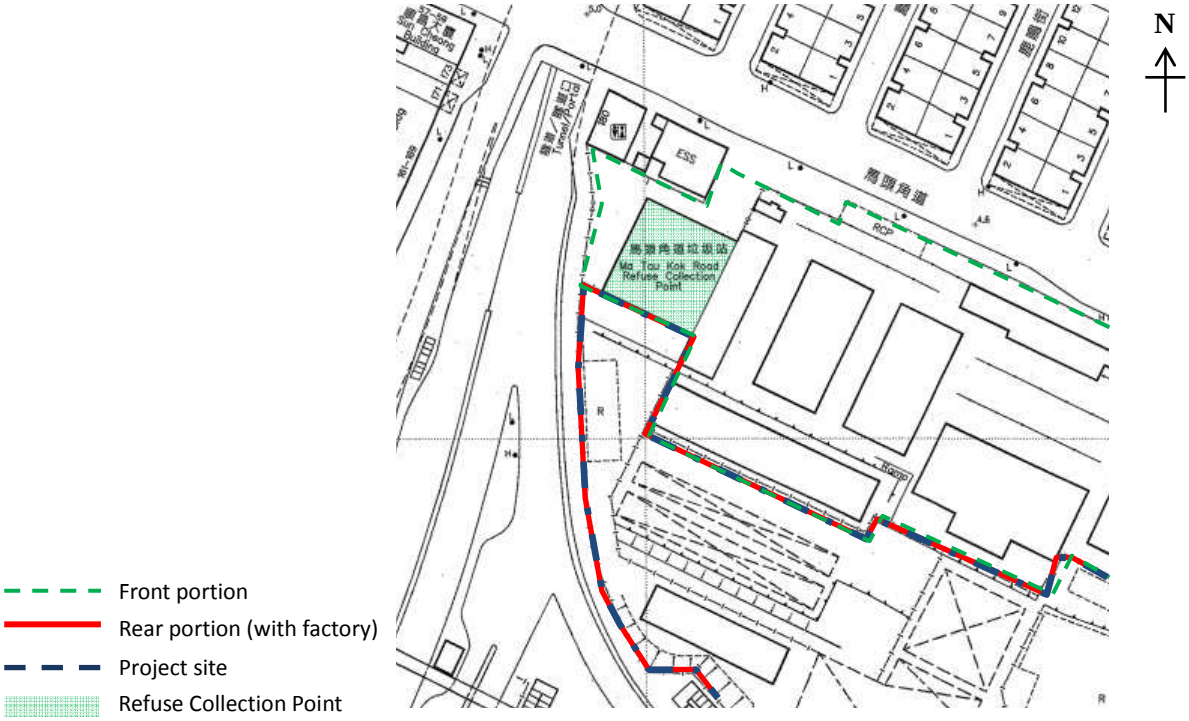


Fig.57 2003 survey plan of the cattle depot

Source: Lands Department, modified by author

Traces of the layout of the former pig lairages remain in the project site on ground.

Fig.58 Current condition of the traces of the former pig lairages

Source: photo by the author

Fig.59 Current condition of the traces of the former pig lairages

Source: photo by the author

The rear portion was kept closed from the public. From an aerial photo of 2006 and survey plan in 2007, all the sheds in to the Rear Portion were indicated as ruin. Today big trees are all over the site, some even grow in the middle of the shed areas.

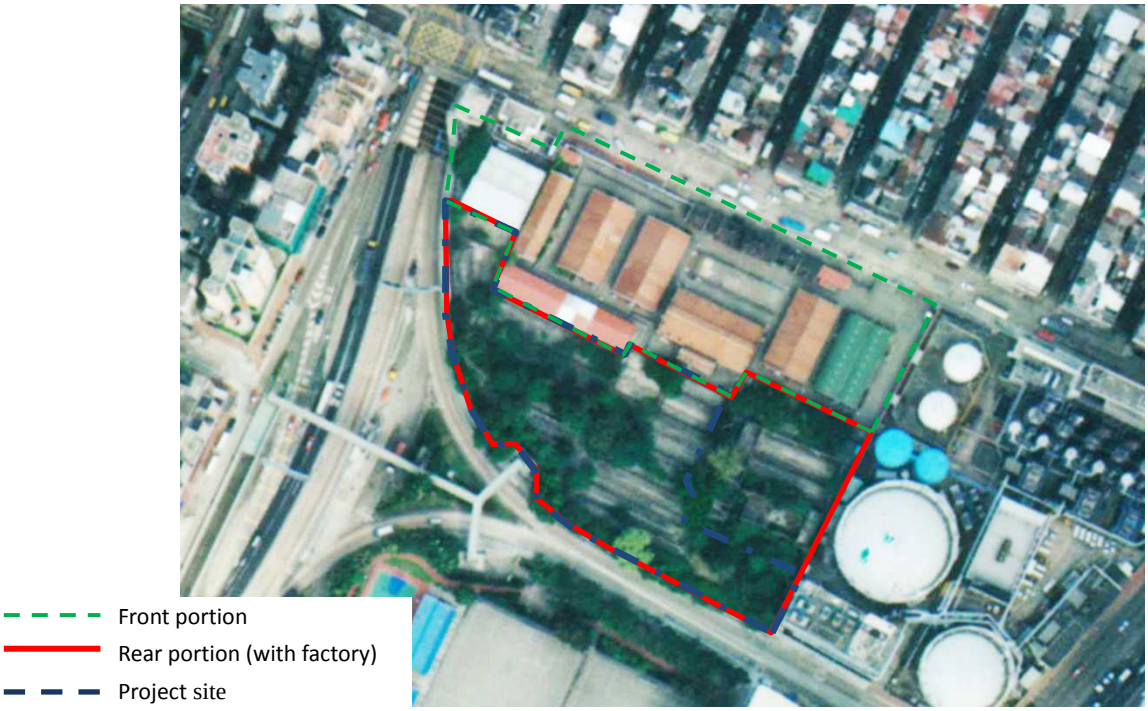


Fig.60 2006 Aerial photo of the cattle depot

Source: Lands Department, modified by author

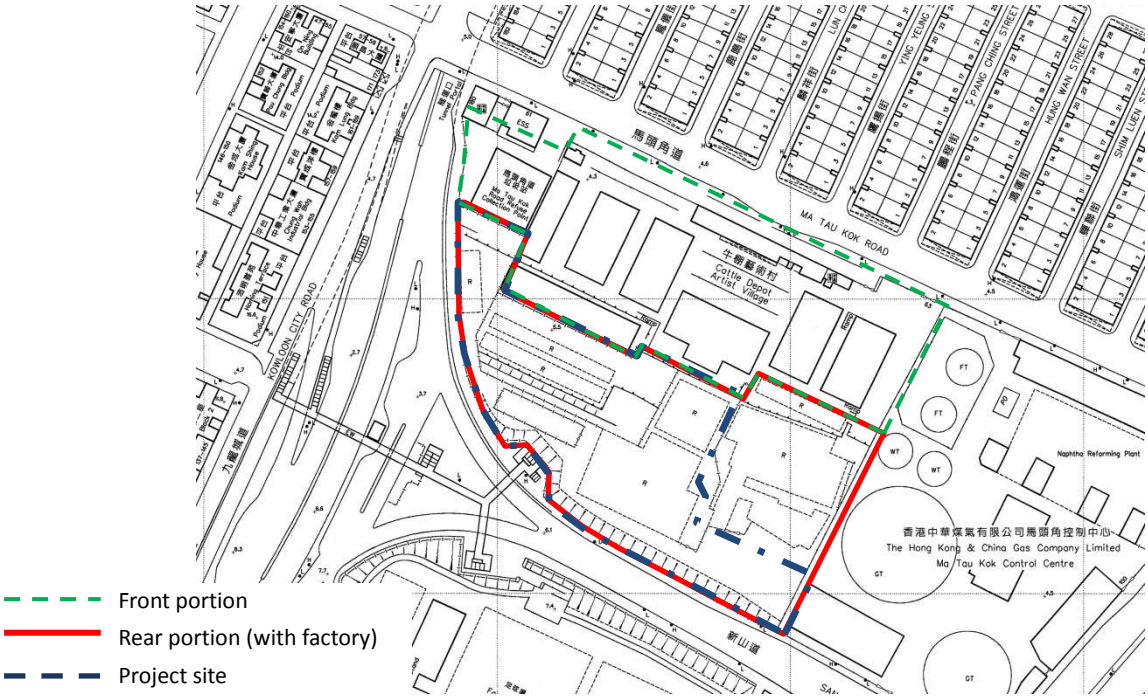


Fig.61 2007 survey plan of the cattle depot

Source: Lands Department, modified by author

3.3 Timeline

1879	First slaughter house in Kowloon in Yau Ma Tei.
1892	Second slaughter house in Hung Hom.
1907	Construction contract was awarded in October 1907
1908	Due to the construction of the Kowloon and Canton Railway, the Hung Hom slaughter house was relocated to the present site at Ma Tau Kok . Completion of the Cattle Depot in November 1908, rear portion not yet included.
1949-53	Cattle Depot was expanded with pig lairages and dog kennels
1956	Rear Portion was constructed with the completion of the Red Brick zone sheds.
1965	Completion of the Concrete zone sheds with the extension of the Rear Portion.
1969	The use of Cattle Depot changed from slaughter house to quarantine and trading of cattle since the slaughter function moved to Cheng She Wan.
1972	Factory conversion to Cattle Depot with erection of two new sheds.
1972-99	Conversion of water pond and incineration to shed
1980	Forming of the San Shan Road and Kowloon City Road connection.
1986	Completion of the new shed (PB828 & 829).
1993	Cattle Depot was listed as Grade 3 historic building.
c1999	Closing down of the whole Cattle Depot.
2001	Front portion of Cattle Depot was converted to Artist Village. Rear Portion was fenced off from the public.
2001	Part of the pig lairage at the northwest corner of the Cattle Depot was demolished and became the Ma Tau Kok Refuse Collection Point in 2003.
2009	Cattle Depot was listed as Grade 2 historic building.

4.0 STATEMENT OF CULTURAL SIGNIFICANCE

4.1 Historic Values

The Cattle Depot was completed in 1908. After the operation of the Cattle Depot, it attracted a lot of related industries including tannery and weaving businesses. This region became an area for offensive trades. The Cattle Depot was expanded before WWII. After WWII, due to the increase in population, the market demand increased. The existing Cattle Depot was filled up and required space for further expansion. The Rear Portion was therefore developed as part of the Cattle Depot in 1956 at the southwest corner with the new cattle lairages at the Red Brick zone. A piece of land at the south was also included in this extension for a water pond and an incinerator. The Cattle Depot still functioned as slaughter house and depot for the cattle, pig and sheep. In addition, dog kennels were also found in Cattle Depot.

The Rear Portion was mainly for the accommodation of cattle. The Rear Portion was further expanded to the south in 1965 with the construction of the sheds in the Concrete zone. In the original design there was no PB 626. It was a later addition between 1966 and 1972. There was a change in use from slaughter house to quarantine and trading of cattle for the whole Cattle Depot in 1969. Two more sheds (PB828 & PB829) were constructed adjacent to the Red Brick zone in 1986. After that, no more new structures were built in the Rear Portion. The whole Cattle Depot was closed down in 1999 and the front part was converted to Artist Village in 2001.

The Cattle Depot was listed Grade 3 & 2 historic building in 1993 and 2009 respectively. After almost 108 years, the Cattle Depot is the only surviving depot in Hong Kong built before WWII. The Cattle Depot tells the history of the slaughtering development in Hong Kong. The setting of the whole site including the Rear Portion shows the operation of the Cattle Depot in the past. The historical value of the Cattle Depot, including the Rear Portion as a whole is high.

4.2 Architectural Values

There are different sheds in the Rear Portion built in different period of time. The building structure of the sheds in the Rear Portion were simple and primitive shelters.

There are two shed remains to be named as PB 631 and 632 in the Red Brick zone together with part of the PB630. They were erected in 1956 and constructed of red brick columns, timber roof trusses and corrugated asbestos cement sheeting without enclosure. In the middle was the feeding trough subdividing the shed in two. The trough was constructed in concrete with low partition built of red bricks in between. Iron rings were installed at the bottom level of trough for the fixing of cattle. The red brick columns were reinforced by steel angles at four corners with horizontal ties. The roofs no longer exist. Some of the columns are collapsed and some are wrapped by trees. Some of the low partitions built of red bricks at the trough are missing or collapsed. But the setting of the sheds remains unchanged. The architectural value of PB 631 and 632 is medium.

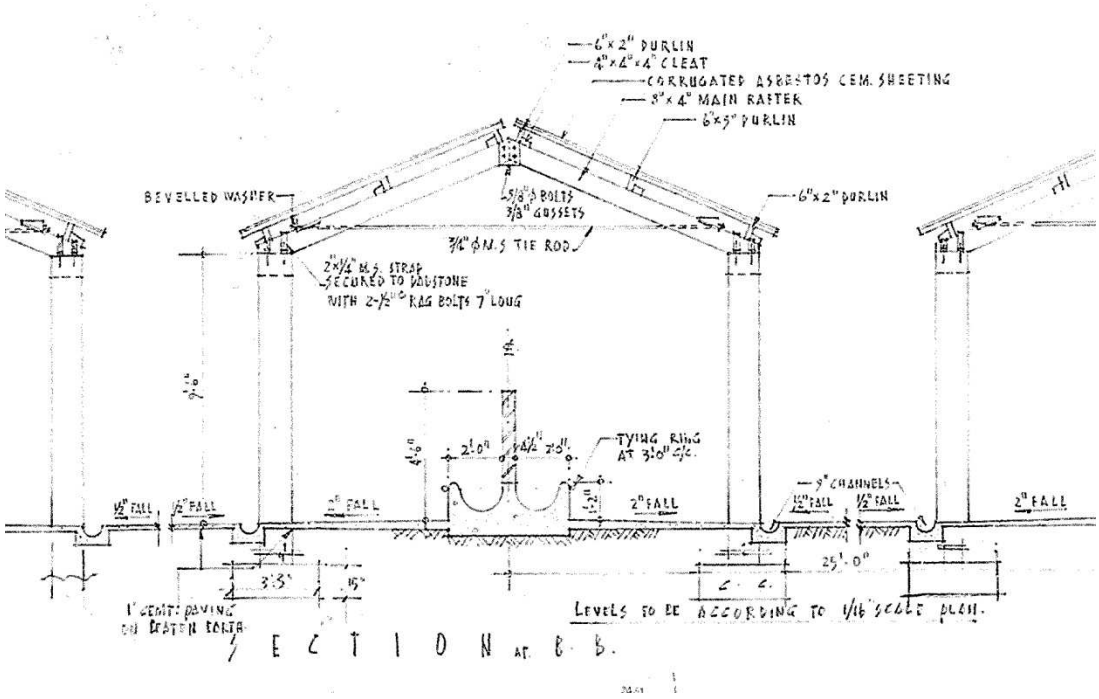


Fig.62 1956 part enlarged record section of the cattle depot Red Brick zone

Source: Architectural Services Department, modified by author

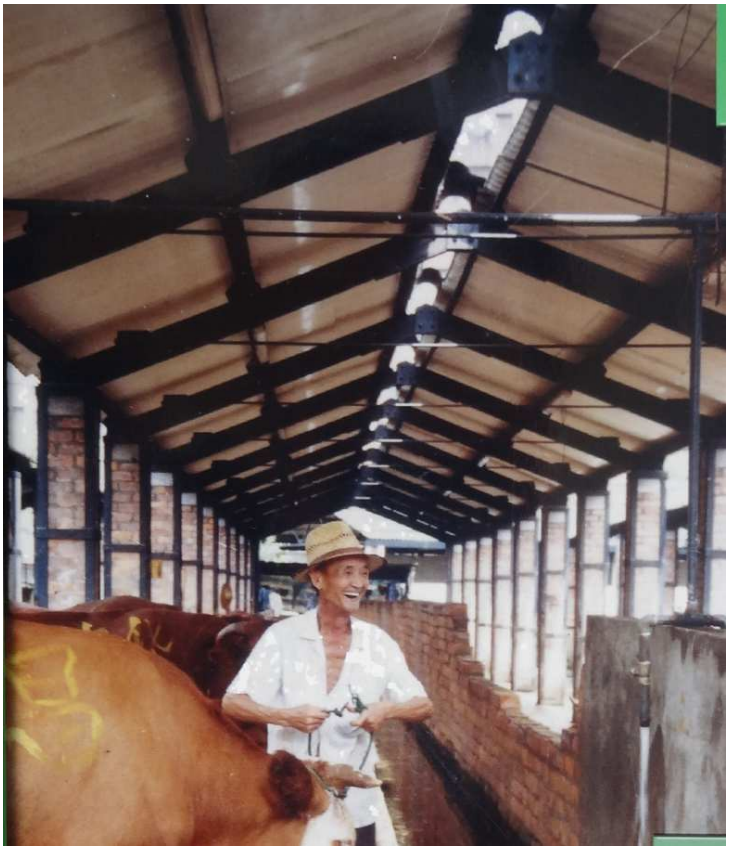


Fig.63 Former condition of "Red Bricks Zone" (Date unknown)

Source: Exhibition in Cattle Depot

Fig.64 Current condition of PB 632

Source: photo by the author

Fig.65 Current condition of PB 631

Source: photo by the author

Fig.66 Current condition of PB 630 & PB 631

Source: photo by the author

In the Concrete zone, there are six sheds remain to be named as PB623 to 628. They were erected in 1965 and constructed in concrete columns, timber roof trusses and corrugated asbestos cement sheeting without enclosure. In the middle was the feeding troughs subdivided the shed in two. Both the trough and low partition were constructed of concrete for PB623 and 624. In PB625 there are two feeding troughs at the side with metal railing while the middle is a row of concrete columns instead of placing the feeding trough in middle like the other sheds remains. There is no feeding trough but only a short portion of columns remain in PB626. The construction material of the low partitions in PB627 and 628 were constructed in red brick even though they were constructed in the same year as PB 623 and 624 in 1965. The architectural value of this group of sheds is neutral.

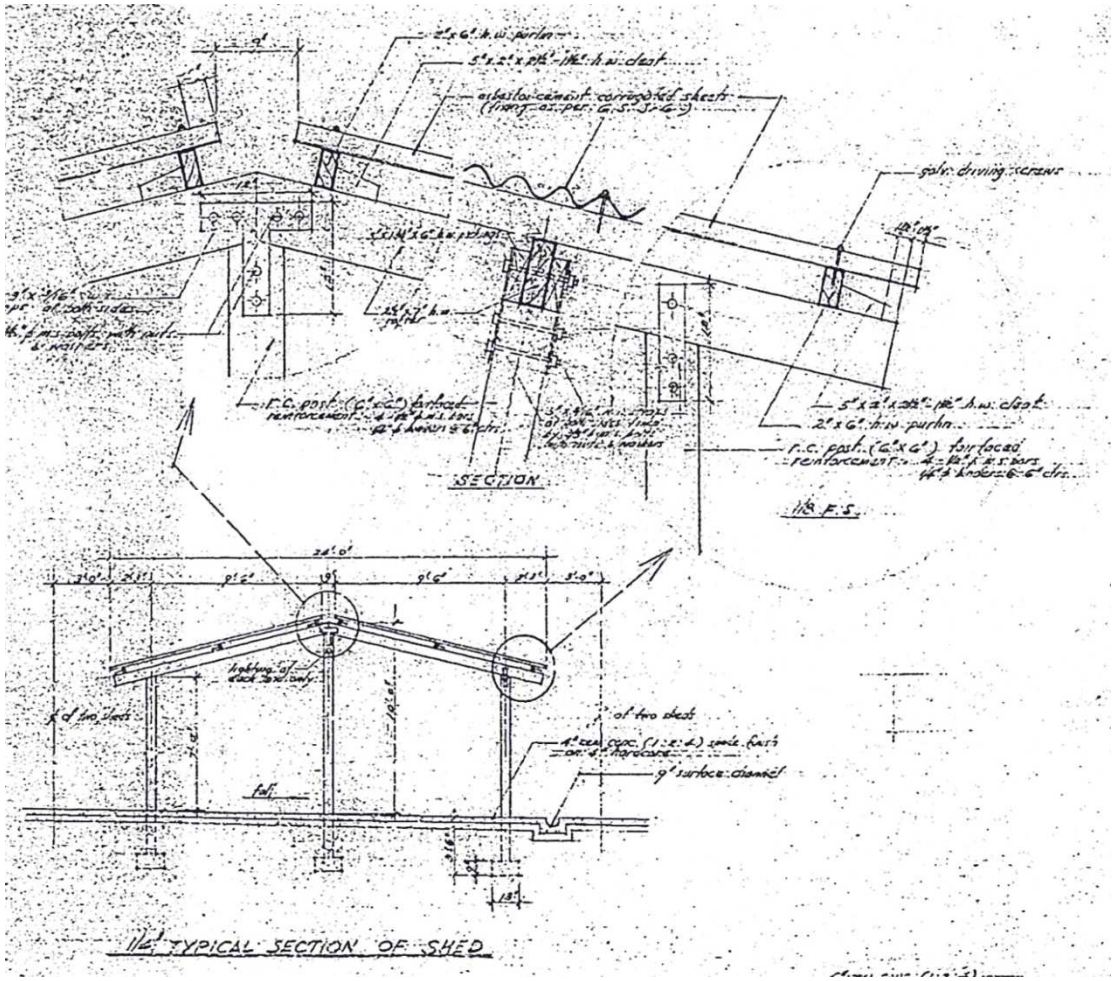


Fig.67 1965 part enlarged record plan of the cattle depot concrete zone

Source: Lands Department, modified by author

Fig.68 Current condition of PB 623

Source: photo by the author

Fig.69 Current condition of PB 624

Source: Architectural Services Department, modified by author

Fig.70 Current condition of PB 625

Source: photo by the author

Fig.71 Current condition of PB 626

Source: photo by the author

Fig.72 Current condition of PB 627 & PB 628

Source: photo by the author

The architectural design of sheds PB828 and 829 adjacent to the Red Brick Zone are the same. Each of the shed was rectangular in shape with openings at the two narrow ends with metal gates. Feeding troughs were at the two sides against the concrete walls and passage in the middle. One side of the concrete wall was full height facing San Shan Road and the other side was half height with concrete posts on top. The roof no longer exist and most likely, the roofs were constructed in timber trusses and corrugated asbestos cement sheeting. The architectural value of the two sheds PB828 and 829 are neutral.

Fig.73 Current condition of PB 828

Source: photo by the author

Fig.74 Current condition of PB 829

Source: photo by the author

4.3 Social Values

The Cattle Depot was there for more than 100 years. It affected the industrial development of the neighbourhood before and after WWII. Although it was not open to public, the surrounding residents were closely related to the Cattle Depot and related trades in this area. The Cattle Depot including the rear portion was closed down in 1999, but the people living around still remember the old Cattle Depot as slaughter house and quarantine depot. The front portion of Cattle Depot was then converted to Artist Village in 2001 and the Rear Portion became a ruin. However, the conversion to Artist Village still plays a role for the transformation of the district.

4.4 Contextual value

The project site was part of the Cattle Depot. The contextual value is closely related to the overall setting of the Cattle Depot Compound. The contextual relationship between the different zones and buildings is high. There are other historical sites in the vicinity of Kowloon District such as Kowloon Wall City Park, Lung Tsun Stone Bridge, Sung Wong Toi Garden, Archaeological site of Sung Yuan Dynasties, Holy Trinity Cathedral, Tin Hau Temple and Pak Tai Temple etc. Across the San Shan Road is the To Kwa Wan Recreation Ground, an important public open space within the district. It matches with the project site of the Cattle Depot which has rich vegetations.

4.5 Authenticity and Rarity

The project site forms part of the whole heritage site of Cattle Depot. It took part in the whole development history of the Cattle Depot. It is the only surviving depot in Hong Kong built before WWII. The setting of the whole site including the Rear Portion shows the operation of the Cattle Depot in the past. The remains and vegetations at the project site over the years give a strong characteristic to the place. It reflects both the power of nature over the built environment of human needs.

5.0 DEVELOPMENT OF CONSERVATION MANAGEMENT PLAN

5.1 Significant fabric/elements required to be preserved

The building fabric/elements have different levels of significance. This assessment of significance fabric/elements is to facilitate decisions to be made on the future conservation of the historic place concerning the establishment of conservation policies, recommended treatments for the building fabrics as well as the interpretation for the historic place. The categories of assessment are based on the Conservation Plan by J.Kerr.

Levels of Significance	Meaning
Exceptional	Where an individual space or element is assessed as displaying a strong contribution to the overall significance of the place. Spaces, elements or fabric exhibit a high degree of intactness and quality, though minor alterations or degradation may be evident.
High	Where an individual space or element is assessed as making a substantial contribution to the overall significance of the place. Space, elements of fabric originally of substantial quality, yet may have undergone considerable alteration or adaptation resulting in presentation, which is either incomplete or ambiguous. The category also includes spaces, elements or fabric of average quality in terms of design and materials, but which exhibit a high degree of intactness.
Moderate	Where an individual space or element is assessed as making a moderate contribution to the overall significance of the place. Spaces, elements or fabric originally of some intrinsic quality, and may have undergone alteration or degradation. In addition, elements of relatively new construction, where the assessment of significance is difficult, may be included. This category also includes original spaces, elements or fabric of any quality, which have undergone extensive alteration or adaptation.
Low	Where an individual space or element is assessed as making a minor contribution to the overall significance of the place, especially when compared to other features. Spaces, elements or fabric originally of little intrinsic quality, any may have undergone alteration or degradation. This category also includes original spaces, elements or fabric of any quality which have undergone extensive alteration or adaptation to the extent that only isolated remnants survive (resulting in a low degree of intactness and quality of presentation).

Neutral	Where an individual space or element is assessed as having an unimportant relationship with the overall significance of the place. Spaces elements or fabric are assessed as having little or no significance.
Intrusive	Where an individual space or element detracts from the appreciation of cultural significance, by adversely affecting or obscuring other significant areas, elements or items.

5.1.1 Overall master layout

The overall master layout of the Cattle Depot composes the front portion and the extension since 1950s to 1980s at the rear portion including the Project Site and closed factory. It was part of the Cattle Depot which consists of sheds PB623 to PB 628 (Concrete Column Zone), PB630 to PB632 (Red Brick Column Zone) and PB828 & PB829 Concrete Sheds and ancillary facilities. The vast vegetation grown in past decades during the abandoned period are well integrated. The revitalisation of the project site with the front portion and factory is a good tool for education to the public on the history and operation of Cattle Depot in Hong Kong.

Level of Significance : Exceptional

5.1.2 PB 623 to PB 628 (Concrete Column Zone)

PB 623 to PB 628 is a group of sheds constructed in 1965. The architectural design of the sheds is primitive. They were constructed with corrugated asbestos pitch roof supported by concrete columns. The remaining features are concrete columns, feeding troughs and metal railings.

Level of Significance : Neutral

5.1.2.a PB 623

5.1.2.b PB 624

5.1.2.c PB 625

5.1.2.d PB 626

5.1.2.e PB 627

5.1.2.f PB 628

5.1.3 PB 630 to PB 632 (Red Brick Column Zone)

They were constructed in 1956 as pig lairages with red brick columns, timber roof trusses and corrugated asbestos cement sheeting without enclosure. The feeding troughs were constructed in concrete with the associated low wall in brick. The only remains of the sheds are the red brick columns and feeding troughs. All roofs structure are gone. Some of the columns have collapsed and laying on the floor. The red brick columns, the feeding troughs and the associated low wall are the Character Defining Elements (CDE). They are in moderate condition but the integrity of the setting is retained.

Level of Significance : High

5.1.3.a PB 630

Half of the PB630 is within the project site. The only artifact remains on site is the feeding trough. No more columns are found on site except the marks of the column base. Part of the associated low wall on the feeding trough has collapsed.

5.1.3.b PB 631

Roofs no longer exist. Partial remains of the timber truss are found on the top of the red brick columns. Trees grew in the shed area over the past decades during the abandoned period of time. Feeding troughs and the associated low wall are in relatively good condition.

5.1.3.c PB 632

Collapsed columns and mature trees are found in the shed area. Feeding troughs and the associated low wall are in relatively good condition.

5.1.4 PB 828 & PB 829 Concrete Sheds

They were constructed around 1986 with concrete walls. One side of the concrete wall was full height facing San Shan Road and the other side was half height with concrete posts on top. The roofs were most likely constructed of timber trusses and corrugated asbestos cement sheeting. The roofs no longer exist. Both sheds are in good condition.

Level of Significance : neutral

5.1.4.a PB 828

5.1.4.b PB 829

5.1.5 Ancillary Facilities

There were ancillary facilities for the operation of the Cattle Depot such as water pond, well, water tanks, pump house and storage tank.

5.1.5.a Water Pond

A water pond appeared in the 1960 plan. The rim was constructed in brick. The pond was covered up in between 1972 to 1999. The pond can be restored by carefully hacking off the concrete filling to the original base subject to the availability of past record and drawings.

Level of Significance : Moderate

5.1.5.b Well

In the 1960s, well was a common source of water for rural site. It was an option of water supply system for that period of time. It was covered up after 1972.

Level of Significance : Neutral

5.1.5.c Water tanks

There are two water tanks within the project site. One is located next to the pump house and the other one is on the small hill.

Level of Significance : Neutral

Water tank A

Water tank B

5.1.5.d Pump House

The original use of the existing cleaner's shed next to the well was a pump house which was constructed in concrete.

Level of Significance : Neutral

5.1.5.e Feeding troughs

Feeding troughs are found all over the project site even in the open area. It reflects that in a certain period of time, the place was overcrowded and there was insufficient indoor space for the cattle. Some cattle had to stay in the open area.

Level of Significance : Neutral

5.1.5.f Remain of old pig lairages

The remain of the old pig lairages shows the historic development of the Cattle Depot at the northwest corner.

Level of Significance : Neutral

5.2 Applicant and user's requirement

The Revitalisation of the Rear Portion of the Cattle Depot (project site) is a Signature Project Scheme (SPS) Project to provide an open space for recreation purpose in the To Kwa Wan area of Kowloon City District, and to facilitate the promotion of arts and culture to the community. The applicant ArchSD has proposed the site to be adaptive re-used for the above purpose.

5.3 Community needs and social context

The project site is located in To Kwa Wan area. This is a district populated by people of the low and middle income groups with insufficient public open space. The demand for public open space is high. The To Kwa Wan Recreation Ground is nearby and connected. The proposed recreational open space managed by the Leisure and Cultural Services Department (LCSD) fits the need of the local people.

5.4 Statutory requirements

The existing project site was extension of the Cattle Depot built in 1950s to 1980s. Since the project site will become a public area, necessary upgrading and improvement works to the following aspects will be required due to the new use.

Protective Barrier

The existing balustrades and metal railings could not comply with the minimum height and maximum opening of the Buildings Regulations. Alteration and addition works are required to comply with this regulation.

Barrier Free Access

The existing project site does not have barrier free access. New disabled ramp will be installed to comply with the current Building Regulations.

Fire Service Installation

There is no Fire Services installation (FSI) at the open space on the project site. New FSI are required to comply with the statutory requirement for the new visitor centre only.

Building Services Installation

Since the project site will be adapted to new open space use, the new visitor centre have to comply with the Buildings Regulations. Upgrading and addition of building services system are required as follows:

a) Electrical Power Supply System – new electrical rooms, MCB boards & switches,

cable pipe ducts, trunking & conduits, power & lighting points etc.

b) Air Conditioning & Mechanical Ventilation System for the new visitor centre – addition of A/C plants, ventilation ducts for exhaust & fresh air.
c) Plumbing & Drainage Provisions – Addition of toilets, pump rooms, water meter cabinets, water pipe ducts and improvement of underground drainage system.

5.5 Condition of fabric

The project site is unoccupied at the moment. For the sheds PB 623 to PB 628 in the Concrete Column Zone, spalling and rusted reinforcement are noted at many of the columns. Most of the feeding troughs are in good condition.

For the sheds PB 630 to PB 632 in the Red Brick Column Zone, some of the red brick columns collapsed and are lying on the floor. The other remaining red brick columns are in fair condition but might also be at risk of falling. Some red brick partitions on the feeding toughs are missing or collapsed. The floor level is uneven and the cement surface is damaged by tree roots in some areas.

For the PB 828 & PB 829 Concrete Zone, the concrete walls, feeding troughs and floors are in good condition.

The water pond is currently covered up by concrete with later addition of a feeding trough on top. The red brick rim of the water pond remains whole but is partially damaged. The adjacent well is also covered up with concrete with a manhole on top. There are two concrete structures in the proximity which are a pump house and water tank but they are not in good condition and dead tree was found.

There is another water tank concrete structure located on the slope in the centre of the rear portion which would be demolished for the safety of future public since seriously spalling is found at the base with rusted reinforcement.

5.6 Conservation policy

Conservation Objectives, Standards, Principles and Guidelines

a) Objectives

Based on the Statement of Significance established and the assessment of the existing condition of the historic building, the Conservation Objectives adopted for the adaptive reuse of the project site are as follows:

- Preserve some of the existing remain of the building fabrics of the sheds for long term protection from further deterioration by effective management plan.
- Adaptive reuse the project site for a new compatible use as an open space and revitalise it as a living heritage.
- Enhance the cultural heritage of the project site by interpretation of its heritage value for public appreciation.
- Promote public awareness and education in heritage conservation, and bring social benefits to the local communities.

b) Standards

This HIA is based on the following international standards and local reference:

- The Venice Charter: UNESCO – ICOMOS
- The Burra Charter: Australia ICOMOS
- Principles for the Conservation of Heritage Sites in China: China ICOMOS
- Conservation Plan: NSW National Trust
- Guidelines from AMO and ArchSD

c) Principles

The following conservation principles will be used:

- Retain Authenticity & Integrity
- Minimum Intervention
- Maximum Reversibility
- Technically Feasible & Complying Regulations
- Enhance Heritage Value

d) Guidelines

i. Management of Conservation

The following Conservation Policies and Guidelines are formulated to provide guiding principles for future conservation of the project site:

Policy 1

Conservation principle and international practices should be observed and applied. The setting of the site should be preserved. Building that no longer survive should not be reconstructed. The policy should be reviewed in every five years.

Guidelines

When a new development is necessary, it should be carried out with minimum intervention to the setting and CDEs. Ensure the ambience could be preserved. Existing trees, slopes, ramp etc. have to be protected as far as possible. The context in the district should be maintained. Interpretation on the heritage value of the site should be provided. International conservation principles should form the base strategies for management of the Cattle Depot Compound.

ii. Management of Change of Use

The following Conservation Policies and Guidelines are formulated to provide guiding principles for future change of use of the project site:

Policy 2

The site should be properly documented.

Guideline

Photographic, topographic and/or cartographic survey should be conducted prior any works commence. The conservation, maintenance and new works should be properly recorded and archived and retained by the operator, maintenance agent and AMO for ease retrieval for posterity. All the conservation works should be documented and supervised by a conservation architect. Contractors engaged to work on the site shall be suitably qualified and experienced in conservation techniques.

Policy 3

The project site was originally used as an extension of the Cattle Depot. The adaptive reuse of the project site should be compatible. Some kinds of interpretation area and program should be provided in the project site for

introducing the cultural significance of the heritage to the public.

Guidelines

The proposed adaptive reuse as an open space is considered compatible with the heritage site. Ancillary facilities for the open space related to the operation of the new use should be allowed. The interpretation area with display of artifacts, historic photos and documents etc should be located in the open space for easy access by the public.

iii. Historic Fabrics

The following Policies and Guidelines are for guiding future conservation treatments of the existing fabric and retention of the identified fabric/elements:

Policy 4

The key fabric/elements should be preserved with minimum intervention and maximum reversibility in order to retain the cultural merit of the heritage.

Guidelines

The key fabric/elements identified of high & exceptional level of significance should be retained and repaired in situ as far as possible. At least one module of the remains of the sheds being one of the major fabric/elements should be kept intact. Those of moderate/ low/ neutral/ intrusive level of significance which can be altered, salvaged for reuse or removed from the site according to the Recommended Treatment as stated in this HIA.

iv. New Alteration and Addition

The following Policies and Guidelines are for guiding future design of new alteration and addition works to the project site:

Policy 5

Any new alteration and additional works to the project site should be at less obstructive location and not affecting the overall setting of the site. The new alteration and addition works should be of compatible design and distinguishable from the existing fabrics.

Guidelines

New addition and alteration works should comply with current regulations and standards. New ancillary facilities should be provided at the less obstructive location of the site. They should be with minimum size and screen by landscape elements to minimize intervention to the existing fabric.

v. Provision of Building Services

The following Policies and Guidelines are for guiding future additions, upgrading and improvement of building services and utilities to suit the adaptive reuse requirements:

Policy 6
Additional building services provisions should be put in a less obstructive area. New services pipelines should be concealed or screened if possible. Any exposed pipelines should be laid in a neat and tidy manner.

Guidelines

The new addition of building services installations such as plant rooms, air-conditioning units, fire services and water tanks should be located at less obstructive areas and of minimal size.

vi. Landscaping
The following Policies and Guidelines are for guiding future design of the open space:

Policy 7
The existing landscape should be preserved as much as possible.

Guidelines
The trees and rocks should be retained for the enjoyment of the public as far as practicable. Free access should be allowed for the public to the open space. Boundary fencing can be altered to enhance accessibility & visibility, but demarcation of the site boundary by such fencing should be retained. The landscape design should be compatible with the existing site character.

5.7 Strategies to document the change during the course of works introduced by the proposed project

Design Stage

Prior to the adoption of design proposal of the adaptive reuse, Heritage Impact Assessment has to be ready to make sure the cultural significance of the project site can be appropriately preserved. In addition to the above documents, Topographic & Photographic Surveys of the project site are also required for the implementation of the adaptive reuse, detailed design, for recording purpose for careful contractual arrangement of works and for tendering. Topographic and photographic survey reports are to be submitted to AMO prior to commencement of works on site. If there is any variation to the HIA report, AMO should be consulted.

Construction Stage

Pre-construction:

Prior to actual commencement of construction, Contractor is required to carry out works specific condition survey and report to document the situation before works and to verify the actual site condition against the design related to existing and surrounding historic structures. Method statement (e.g. for brick cleaning, structural alteration etc), safety measures (e.g. protection measures to existing and surrounding historic structures during works) and alternative proposals (should situation found varied from original detail / design intent) are to be submitted for AMO's comment. Monitoring system for structural impact on the adjacent surrounding historic buildings due to the construction works should be proposed for the agreement by AMO.

Post Construction:

All conservation studies, conservation plans, site inspection record during construction stage, record drawings and photographs after completion of work and record of any future alteration works, should be documented and filed at ArchSD and/or LCSD. It should be made available to future users or professionals who are responsible for up keeping the site and reviewing the development history of this project site.

5.8 Strategies on interpretation

This adaptive reuse project could also facilitate and promote public appreciation of the cultural significance of the project site by proper site interpretation.

This goal can be achieved by the following means:

- Preserve and revitalise the site by keeping the major existing structures of the site
- Establish display area(s) to showcase the historic fabric, historical photographs, background story and history of the site

It is recommended that the proposed display area(s) will be used as a heritage interpretation vehicle to tell the story and cultural heritage of the site to visitors and the public by old photographs, interpretive panels, historical objects and fabric.

The project site is to be open to public at opening hours. Other activities will also be arranged for appreciation of the place, as well as promotion of arts and culture to the community. Information of the story of the site can be provided in various forms such as pamphlets, electronic media or photograph prints for visitors. Where possible, it is also proposed to document the process of restoration and adaptation of the project site in the future interpretation material.

5.9 Management and maintenance strategies to operate and safeguard the historic site during operation stage against deterioration and improper use

1) Maintenance of the historic fabric

The new use with increased visitor would undoubtedly accelerate its wear and tear which is expected. Regular maintenance should be carried out to mitigate any problems found before further deterioration so as to lengthen its servicing period. On-going maintenance is necessary to keep the historic fabric in good form upon completion of the conservation work. Repairs should be carried out to match the materials, colour, texture, nature, craftsmanship of the existing historical fabrics for authenticity and maximum compatibility, visual and physical. Replacements should be avoided, it is acceptable only when the historical fabrics are beyond repair. Inspection and monitoring should be carried out as listed below:

1. Regular inspection of the preserved historic and architectural features
2. Annual inspection of the red brick columns and low partition walls in the Red Brick Column Zone
3. Regular cleaning of drainage system

The building management team and operational staffs of the site should make

reference to this HIA when carrying out maintenance of this historic fabric including but not limited to routine cleaning, maintenance of landscapes, site inspection, repair and maintenance. Repair works should be carried out by qualified contractor. All the above activities should be recorded accordingly.

2) Control of visitors

To avoid overloading of the site in view of wear-and-tear to the heritage and ensure the daily operation of the open space, extent of accessibility of different users / visitors should be identified by LCSD.

3) Routine maintenance by future operator

Routine maintenance and small scale alteration and additional works shall follow the recommendations of this HIA. The recommended conservation guidelines in this HIA should be made known to the frontline management & operational staffs, technicians and workmen who are responsible for carrying out or supervising the routine maintenance or repair works. The related parties shall be reminded to study the HIA and get understanding of the requirements in their duties.

4) Control of further development or alteration

It is unlikely that extensive alterations and additions would be required at this site in the near future. For any large scale renovation works involving substantial changes and prior consultation, the recommendations of this HIA endorsed by AMO should be followed with the input from heritage consultant.

Within the Rear Portion and outside the project site boundary, there is another Cattle Depot extension which is an abandoned factory building on the east side to the project site. Should these buildings be re-used, redeveloped or revitalized in future, the new use and design should also be compatible with the whole Cattle Depot Compound. Any new proposal should be subject to further study/assessment on the impact to the cultural significance of the site.

The original site of the existing refuse collection point (RCP) at the northwest corner outside the project site was part of the Cattle Depot. It is recommended if there is an opportunity in future that the RCP can be relocated, the land can be resumed as part of the Cattle Depot Compound.

6.0 IMPACT ASSESSMENT

The potential impact before mitigation measure arising from this project is assessed, based on the following levels of impact:

High	An impact that significantly alters or obliterates significant characteristics of the heritage resource
Medium	An impact that alters the character or surroundings of the heritage resource, but is consistent with existing and emerging trends
Low	An impact capable of measurement but with no alterations of significant characteristics
Neutral	No impact arising from the project
Beneficial	An impact is beneficial if the proposal will enhance the preservation of the heritage site;

The impact after mitigation measure based on the following:

Acceptable	Impact after mitigation measure is acceptable
Unacceptable	Impact after mitigation measure is unacceptable

6.1 Proposed building use, layout and setting

Change in use

The proposed use of open space to the project site is compatible with the cultural significance and the technical feasibility of the site. However, due to the operational need, compliance of current regulations and standards, there are alteration and addition works, which will cause impact to the site fabrics.

(Refer to Design Proposal for Adaptive reuse in Appendix C)

6.2 Potential impact to the fabric, setting and significance and the corresponding mitigation measures

The key proposed works for conservation are listed as follows:

PB630 to PB632 (Red Brick Column Zone)

The PB630 to PB632 will be used as a sitting out area for public appreciation of the historic elements of the sheds. The existing red brick columns and feeding troughs will be made good and preserved in situ. New steel frames will be erected to stabilize the existing columns for the safety of visitors. Since the floor level in this

area is uneven, raised wood deck will be provided for the visitors to walk around the sheds.

PB623 to PB628 (Concrete Column Zone)

Part of PB623 will be converted into a rain shelter. The feeding troughs at PB624 to PB626 will be removed to form a landscaped open space. Part of the feeding troughs of PB627 and PB628 will be removed to provide room for the necessary circulation space and seating-shelters. The free standing concrete columns with low cultural value are in poor condition and have to be removed for safety reason.

PB828 & PB829 (Concrete Sheds)

The existing concrete shed and feeding troughs will be preserved in-situ and to be used as outdoor areas which are suitable for display of artistic park features.

Remaining Ancillary Facilities of Cattle Depot

The ancillary facilities for the operation of the Cattle Depot such as water pond and well will be preserved in-situ. Further investigation will be carried out to determine the restoration proposal.

Water tanks and the pump house which are in poor condition and with low cultural value will be demolished for public safety reason to make way for a disabled ramp.

Remain of old Pig Lairages

Only a small portion of the old pig lairages area is within the project site. Planter and seatings following the location of the lairages and the fence wall at site boundary would showthe building profile of the old pig lairages for interpretation. A new disabled ramp will also be added to enhance the circulation.

New Ancillary Facilities

A new park entrance, loading/unloading area and a new Visitor Centre will be constructed at the southeast corner of the site which is at the least prominent and obstructive location from the setting. All new ancillary facilities for operational need will be grouped together at the Visitor Centre to minimize the new additional works at site.

6.3 Impact and Mitigation Measures

Potential impact during various stages of the conservation works of the project site to the rest of the Cattle Depot outside the project boundary is assessed and

identified as follows:

Potential Visual impact:
As the proposed open space is adjacent to the rest of the Cattle Depot site, any new construction within the project site may cause potential visual impact to it.

Mitigation Measures:
There will be no new buildings of substantial size in the project site. The only new ancillary facilities - the Visitor Centre, which is of minimal size, will be located at a least prominent and obstructive location of no historical significance and will be half sunken in order to minimize the visual impact. All new ancillary facilities for operational need at the Visitor Centre will be grouped together to minimize the new additional works at site.;

All new ancillary facilities such as ramp and new entrances will be of compatible design and aiming at benefiting the appreciation of the Cattle Depot by enhancing the connectivity of the project site with its surroundings

Potential impact during construction:
Due to the close proximity of the construction works, potential vibration, dust deposition, debris during demolition, excavation, foundation and superstructure construction in different stages of the conservation works may pose potential impact on the rest of the Cattle Depot site.

Vibration/settlement/tilting limit as recommended by the AMO will be fully adopted in the construction works. Corresponding monitoring system will be conducted as required.

Percussive piling would not be used in order to minimize the vibration during the construction works. Excavation and lateral support system along the construction site facing the rest of the Cattle Depot site will be provided to minimize the settlement and ground movement affecting the adjacent structures.

For areas where possible impact of the conservation works could not be avoided within the project site boundary, the following mitigation measures at different zones are proposed:

For the PB630 to PB632 (Red Brick Column Zone), the new steel frames and wood

decks are of compatible design. Both are built to be reversible;

For PB623 at Concrete Column Zone, the new columns for rain shelter will be at the same location as the old columns to reflect the setting of the shed. Part of the feeding trough and the concrete dividing wall will be preserved in situ for interpretation;

For PB624 at Concrete Column Zone, the floor pattern reminiscent of previous columns and feeding trough will be placed to interpret the setting. A certain portion of concrete feeding trough will be preserved. New seating with concrete feature low walls will be of a design based on the previous feeding trough

For PB625 and PB626 at Concrete Column Zone, floor pattern reminiscent of previous columns and feeding troughs will be placed to interpret the location;

For PB627 at Concrete Column Zone, part of the existing feeding trough and brick dividing wall will be preserved. New seating shelters with feature brick walls will be of a design based on the previous feeding trough;

For PB628 at Concrete Column Zone, most of the continuous feeding trough and brick dividing wall will be retained. Compensation trees will be planted at the original location of the removed columns at PB628 for interpretation of the setting of the shed.;

The table in Appendix D includes the summary of Mitigation Measures.

7.0 IMPLEMENTATION OF CONSERVATION MANAGEMENT PLAN

7.1 The responsible parties and staffing structure to implement the strategies

The responsible parties and staffing to implement the strategies are as follows:

1) Documentation:

ArchSD will maintain the record and distribute to relevant parties after the construction stage (detail refer to item 5.7 above). The management team from relevant government department will take over the role after handover of the open space. Heritage consultant may be engaged to assist if necessary.

2) Interpretation

Management team from relevant government department will be responsible for the selection of interpretation material and the way to present the collections.

7.2 The Implementation Programme

The proposed adaptive reuse will be open to the public in 2019. The impact to the fabric will be started by the commencement of construction works, which is scheduled by end 2016. The documentation of the change will be started prior to and after the construction works. The preparation of interpretation work will be started during the detailed design stage until the completion of the project. Regular review (e.g. annual review) on the strategies to operate and safeguard the heritage should be carried out by the time of opening of the open space.

8.0 RECOMMENDATION

This HIA should form the base for the planning, design and implementation of the adaptive reuse of the project site as recommended. The HIA should be regularly reviewed and updated with recommendation from Heritage Consultant whenever necessary.

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Plans & Aerial Photos

Survey Plans & Aerial photos: Lands Department

Outline Zoning Plan: Planning Department

Appendix A

Existing site survey plan

Appendix B

Topographic survey plan

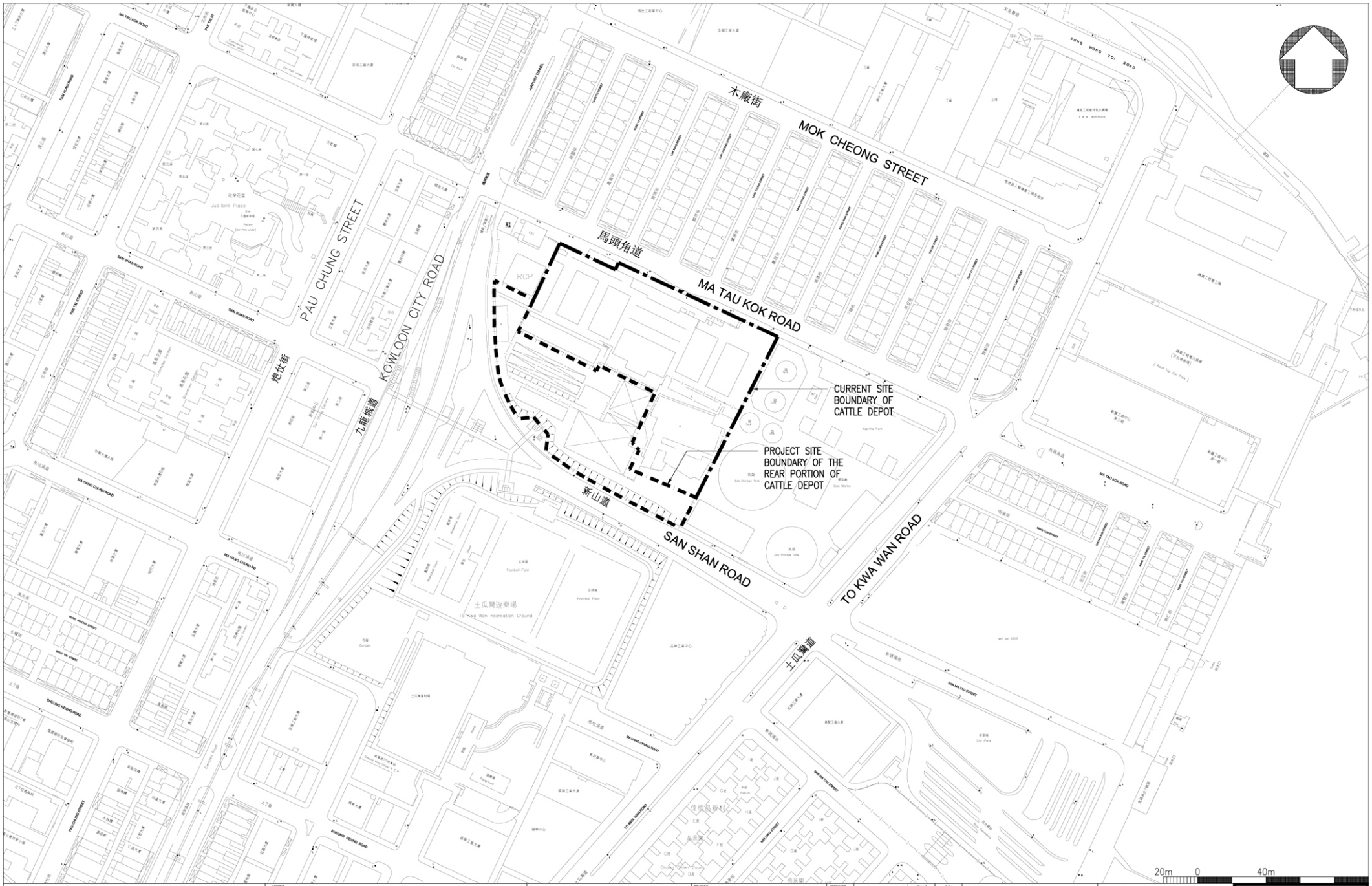
Appendix C

Design Proposal

Appendix D

List of Impact Assessment and Mitigation Measures

APPENDIX A – EXISTING SITE SURVEY PLAN



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APPROVED				
C.A.	YEUNG L.F.A.			11/2014
S.A.	C.S. LO			11/2014
P.A.	HUI K.W.M.			11/2014
designed				
drawn	W.K. HO			11/2014
checked	Stephen HO			11/2014

PROJECT TITLE
SIGNATURE PROJECT SCHEME – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE
SITE PLAN OF EXISTING BOUNDARY OF CATTLE DEPOT

scale 1:1000 (A1) / 1:2000 (A3)

drawing no.
AB/8254/HIA/GP001

OFFICE
ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

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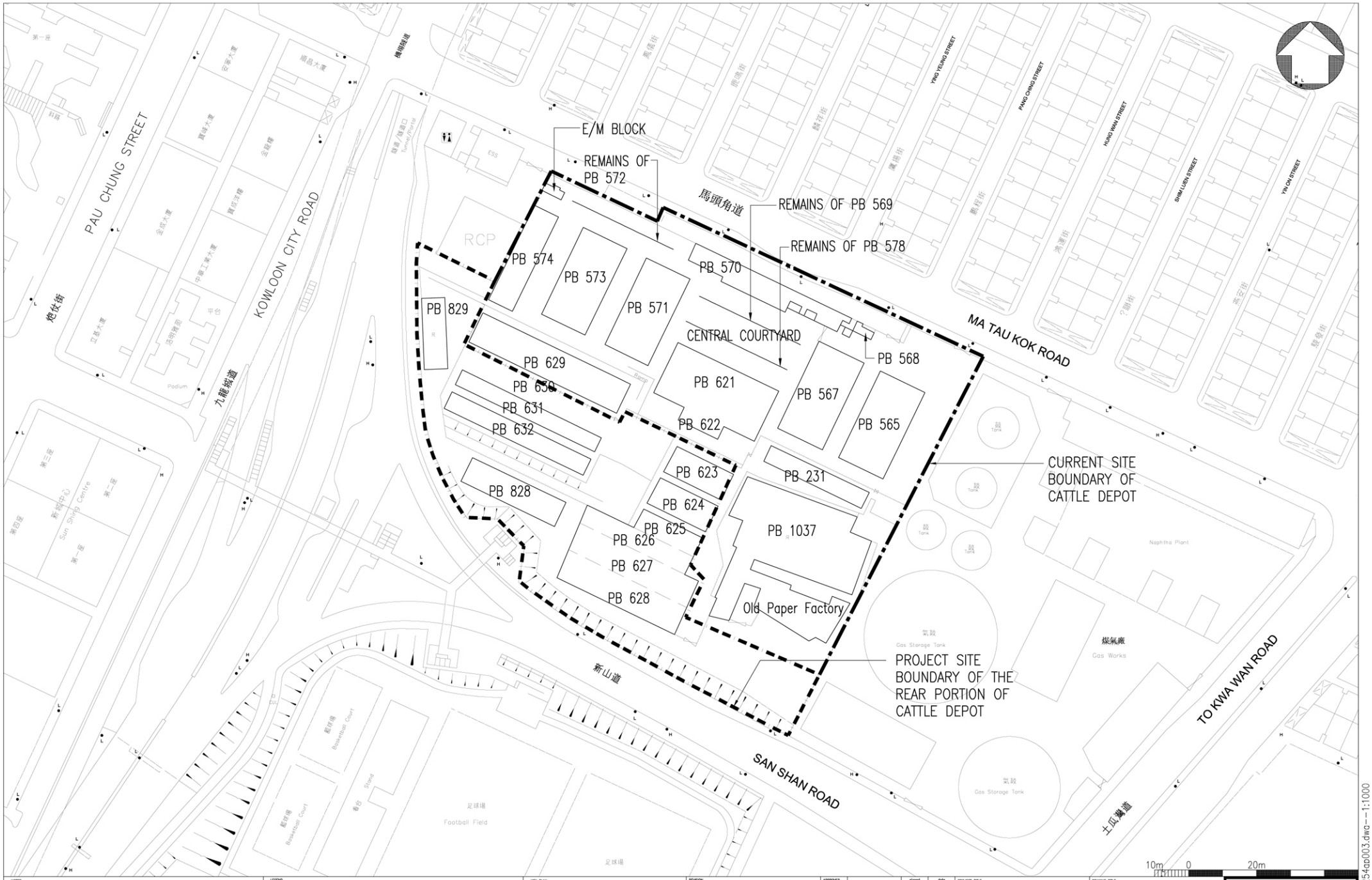

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P.A.	HUI K.W.M.		11/2014
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drawn	W.K. HO		11/2014
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contract no.

file no.

project no. RO 462

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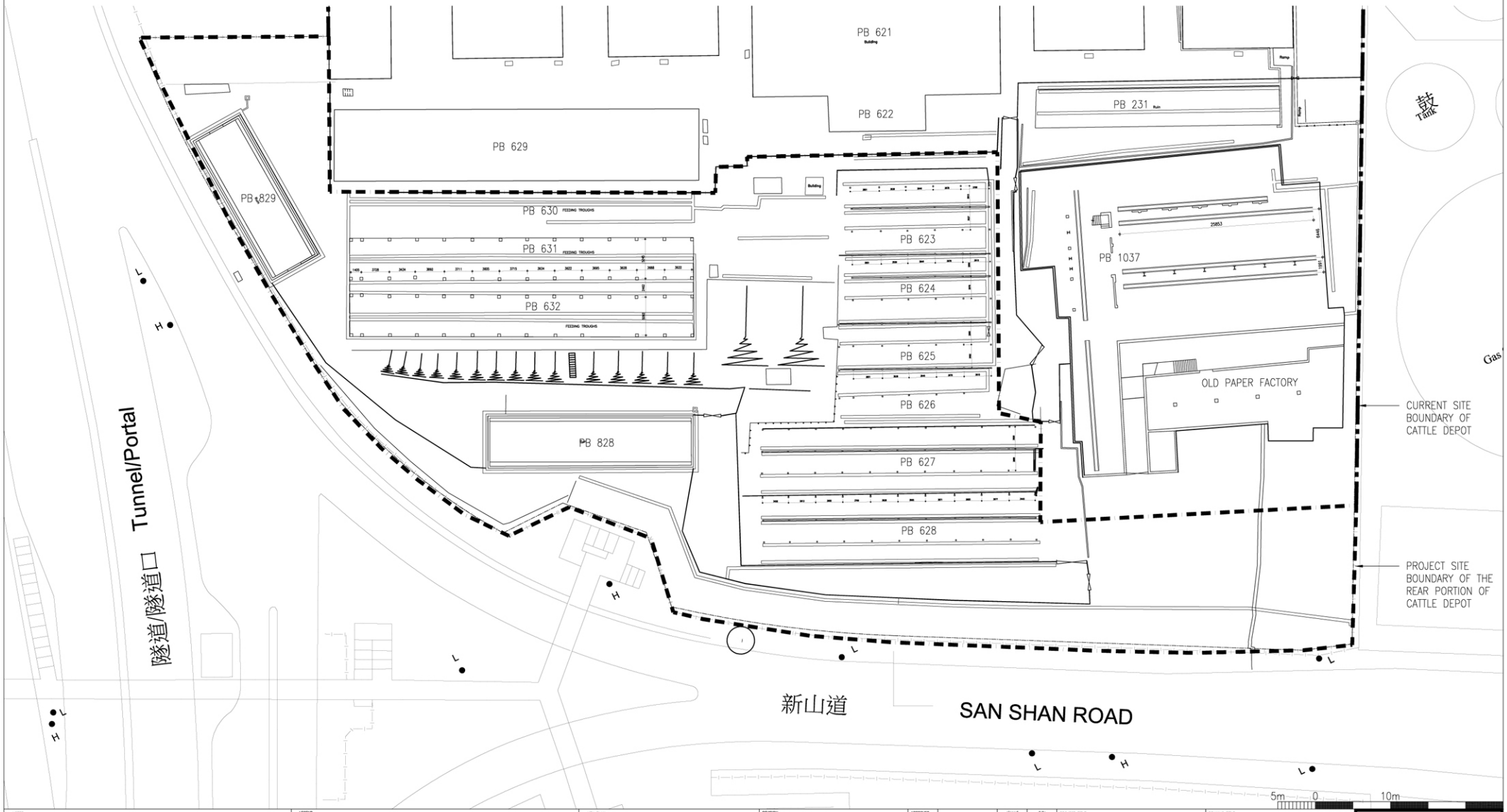

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P.A.	HUI K.W.M.			11/2014
designed				
drawn	W.K. HO			11/2014
checked	Stephen HO			11/2014

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contract no.

file no.

project no. RO 462

DRAWING TITLE
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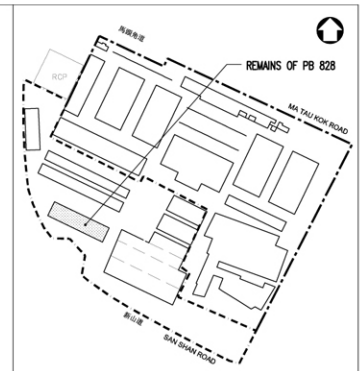

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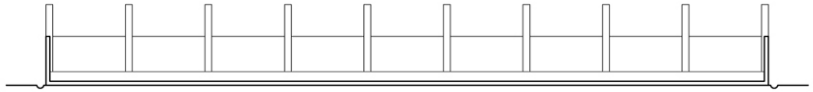

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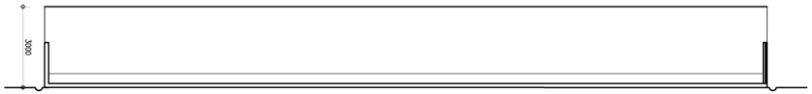

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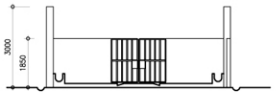

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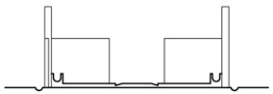

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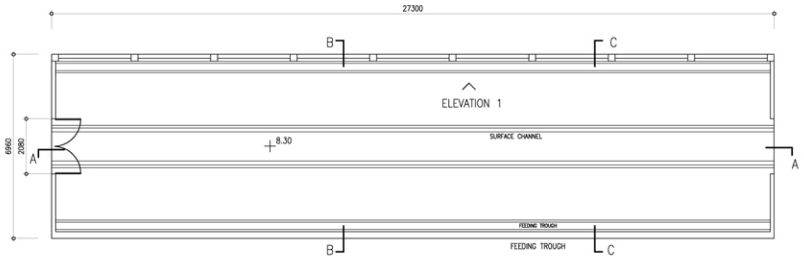

LAYOUT PLAN

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SITE BOUNDARY LINE

8.30 STRUCTURAL LEVEL

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S.A.	C.S. LO		11/2014
P.A.	HUI K.W.M.		11/2014
designed			
drawn	W.K. HO		11/2014
checked	Stephen HO		11/2014

PROJECT TITLE: SIGNATURE PROJECT SCHEME – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE: LAYOUT PLAN, SECTIONS & ELEVATIONS OF EXISTING REMAINS OF PB 828

scale 1:100 (A1) / 1:200 (A3)

drawing no. AB/8254/HIA/GP004

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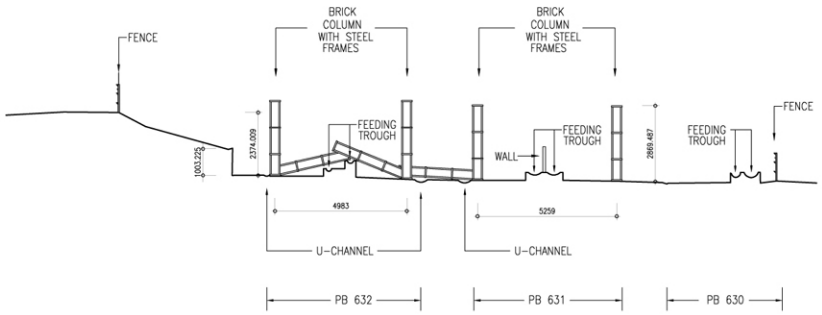

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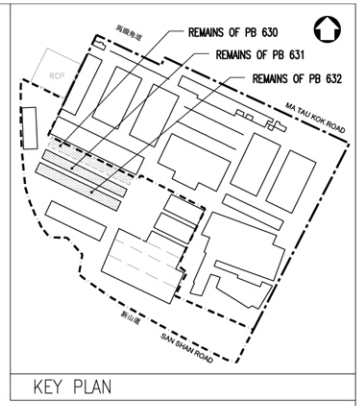

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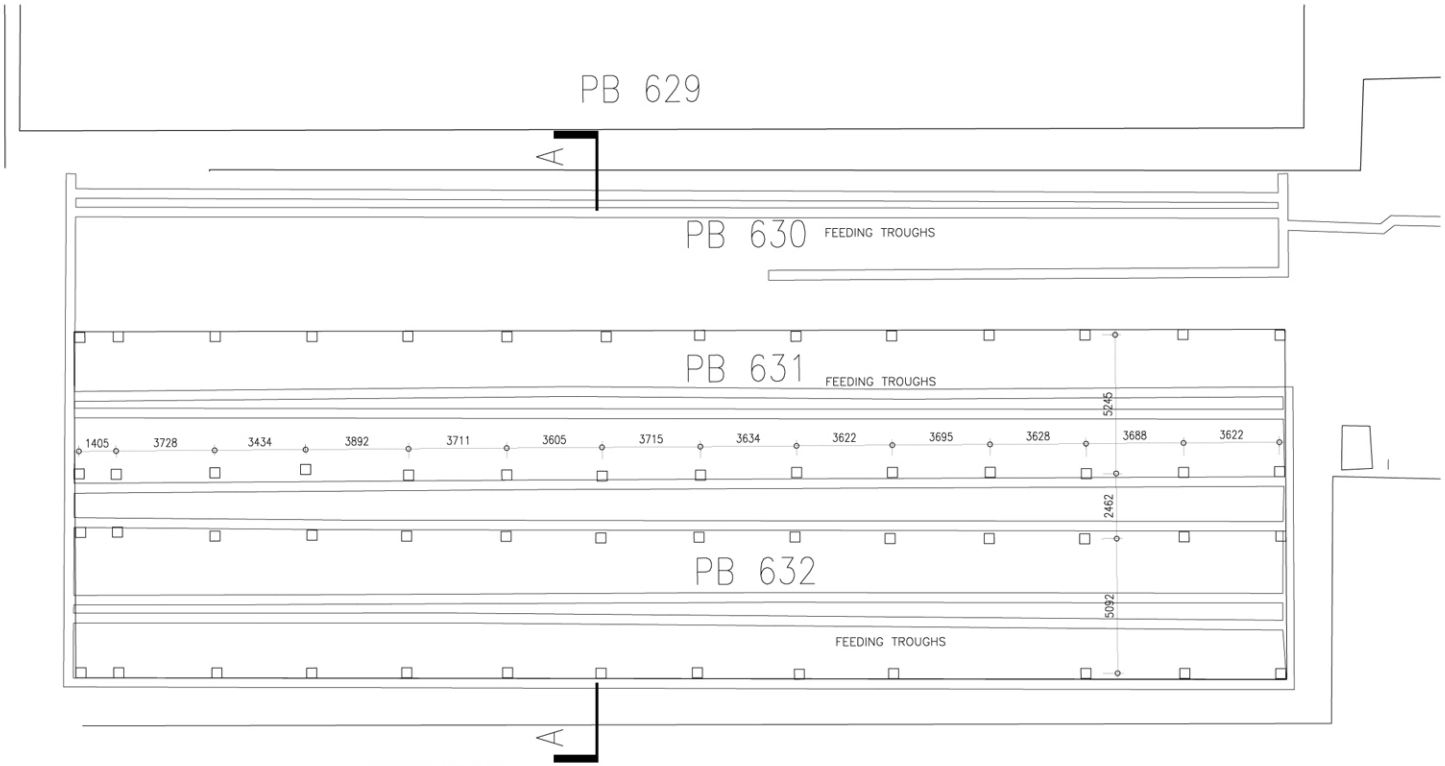

LAYOUT PLAN

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S.A.	C.S. LO		11/2014
P.A.	HUI K.W.M.		11/2014
designed			
drawn	W.K. HO		11/2014
checked	Stephen HO		11/2014

PROJECT TITLE: SIGNATURE PROJECT SCHEME – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

DRAWING TITLE: LAYOUT PLAN AND SECTION OF EXISTING REMAINS OF PB 630, PB 631 AND PB 632

contract no.

scale 1:100 (A1) / 1:200 (A3)

file no.

drawing no. AB/8254/HIA/GP008

project no. RO 462

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ARCHITECTURAL SERVICES DEPARTMENT

A1 841 x 594

LAYOUT PLAN

KEY PLAN

NOTES

LEGEND

SITE BOUNDARY LINE

7.08 STRUCTURAL LEVEL

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S.A.	C.S. LO		11/2014	
P.A.	HUI K.W.M.		11/2014	
designed				contract no.
drawn	W.K. HO		11/2014	file no.
checked	Stephen HO		11/2014	project no. RO 462

DRAWING TITLE

LAYOUT PLAN OF EXISTING REMAINS OF PB 623, PB 624, PB 625, PB 626, PB 627 AND PB 628

scale 1:100 (A1) / 1:200 (A3)

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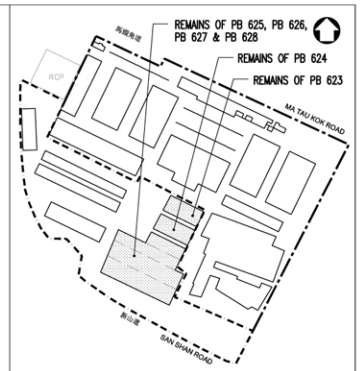

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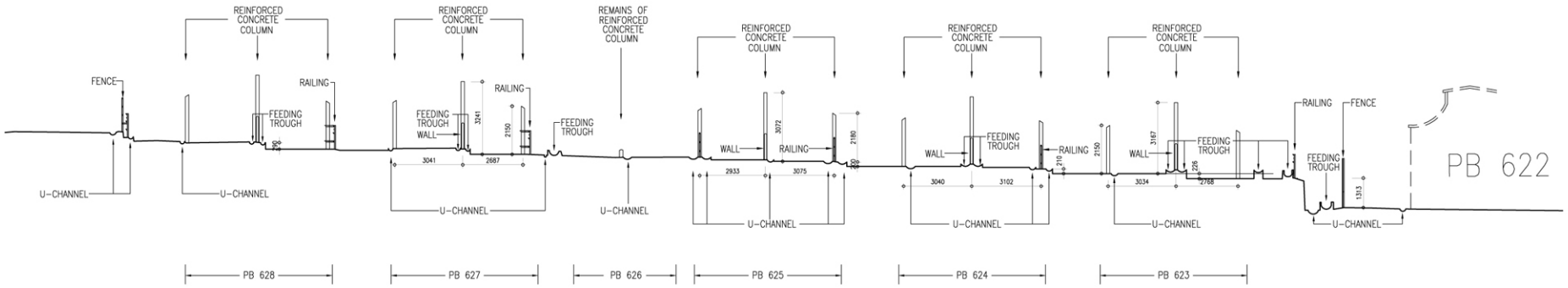

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P.A.	HUI K.W.M.		11/2014
designed			
drawn	W.K. HO		11/2014
checked	Stephen HO		11/2014

PROJECT TITLE: SIGNATURE PROJECT SCHEME – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE: SECTIONS OF EXISTING REMAINS OF PB 623, PB 624, PB 625, PB 626, PB 627 AND PB 628

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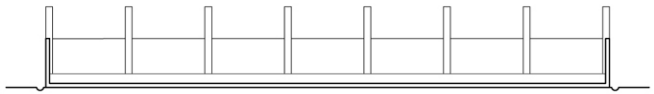

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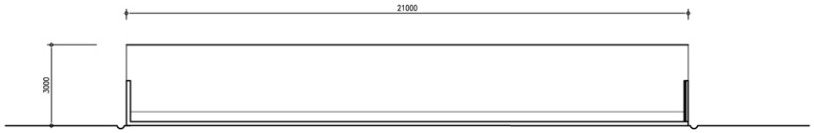

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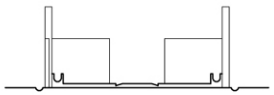

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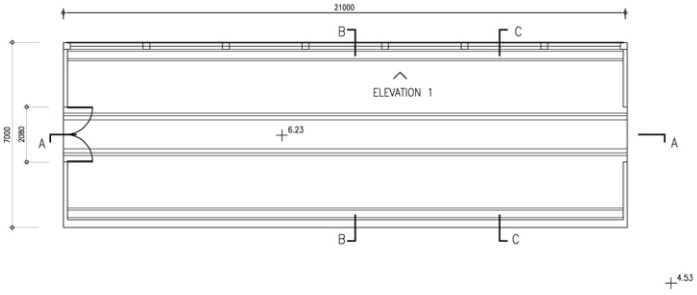
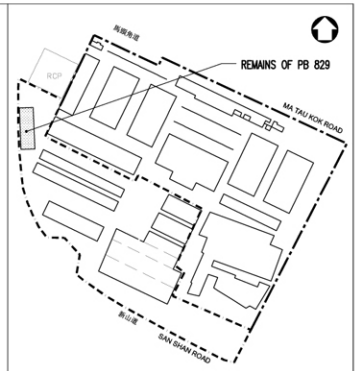


LAYOUT PLAN



KEY PLAN

NOTES

LEGEND

SITE BOUNDARY LINE

6.23 STRUCTURAL LEVEL

REVISION			
no.	date	description	initial

APPROVED		signed	date
C.A.	YEUNG L.F.A.		11/2014
S.A.	C.S. LO		11/2014
P.A.	HUI K.W.M.		11/2014
designed			
drawn	W.K. HO		11/2014
checked	Stephen HO		11/2014

PROJECT TITLE: SIGNATURE PROJECT SCHEME – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

DRAWING TITLE: LAYOUT PLAN, SECTIONS & ELEVATIONS OF EXISTING REMAINS OF PB 829

contract no.

file no.

project no. RO 462

scale 1:100 (A1) / 1:200 (A3)

drawing no. AB/8254/HIA/GP005

1m 0 2m

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

A1 841 x 594

APPENDIX B – TOPOGRAPHIC SURVEY PLAN

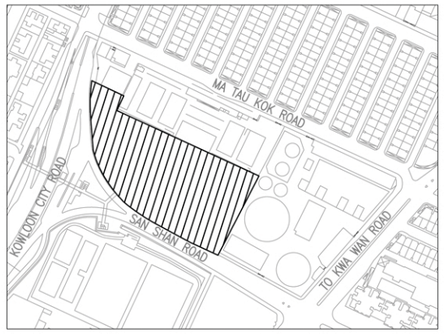
TREE SCHEDULE

Tree No.	Girth (m)	Height (m)	Spread (m)	Northing (m)	Easting (m)	Level (mpd)	Level of Trunk (mpd)
T1	191	5	8	820220.556	837696.325	4.62	6.53
T2	573	7	9	820194.718	837687.873	5.77	6.31
T3	509	7	12	820228.879	837687.136	5.37	5.92
T4	509	7	2	820216.757	837688.006	5.78	6.43
T5	191	6	9	820164.352	837781.917	6.14	8.31
T6	318	4	6	820165.367	837790.289	6.08	7.48
T7	191	5	8	820179.029	837689.822	6.58	8.63
T8	159	5	7	820174.529	837691.303	7.10	10.42
T9	286	6	9	820173.701	837691.501	7.07	7.28
T10	159	3	4	820172.796	837691.543	6.94	7.85
T11	223	7	8	820170.385	837692.565	7.00	8.30
T12	127	4	4	820165.081	837696.967	8.11	8.31
T13	127	7	5	820164.455	837697.871	8.05	11.00
T14	127	8	6	820162.945	837697.749	7.83	8.09
T15	255	7	6	820162.738	837698.860	8.03	9.33
T16	127	7	6	820163.854	837696.966	7.91	8.61
T17	127	8	7	820163.414	837695.854	7.07	8.54
T18	159	7	7	820158.618	837698.563	7.39	10.43
T19	95	8	5	820158.767	837698.950	7.57	10.25
T20	95	7	5	820158.390	837700.478	7.86	10.20
T21	127	8	8	820159.008	837700.992	7.83	9.96
T22	286	13	14	820156.173	837700.442	7.46	9.76
T23	255	8	7	820155.622	837702.591	7.71	9.86
T24	191	7	8	820154.158	837705.565	7.83	9.89
T25	286	4	7	820153.826	837707.732	8.00	8.43
T26	159	4	8	820153.375	837712.122	8.02	9.50
T27	191	6	8	820144.604	837720.147	7.84	8.24
T28	191	7	8	820146.845	837718.437	7.98	9.75
T29	159	5	6	820147.674	837717.927	8.05	9.50
T30	350	3	3	820122.159	837731.281	6.34	7.64
T31	223	8	8	820129.233	837722.018	6.49	10.59
T32	318	4	7	820135.991	837720.142	7.71	8.26
T33	382	5	9	820131.710	837724.886	8.19	8.49
T34	477	9	13	820125.086	837729.305	7.62	8.87
T35	255	7	7	820121.268	837737.564	8.01	8.27
T36	318	7	9	820120.886	837736.716	7.70	7.97
T37	223	6	8	820120.576	837737.094	7.66	9.47
T38	159	6	7	820118.128	837739.288	6.79	8.39
T39	286	5	6	820116.855	837743.867	7.23	7.53
T40	255	4	6	820116.337	837750.000	8.17	8.62
T41	127	8	6	820113.638	837746.110	6.05	10.05
T42	127	6	5	820112.799	837747.472	5.92	7.62
T43	668	14	20	820113.698	837749.645	7.06	9.16
T44	255	10	15	820112.883	837753.139	7.83	9.39
T45	255	7	8	820110.176	837754.099	6.37	8.27
T46	350	9	12	820106.120	837763.346	6.76	7.66
T47	127	4	4	820104.621	837766.969	6.94	12.04
T48	286	9	7	820102.896	837768.124	6.38	6.66
T49	382	7	10	820099.586	837773.106	6.17	7.07
T50	159	5	5	820097.321	837779.619	6.52	7.82
T51	191	6	8	820097.073	837779.516	6.36	7.56
T52	382	5	9	820097.089	837781.870	7.05	7.17
T53	191	7	7	820100.370	837777.060	7.76	8.38
T54	191	8	7	820112.869	837744.156	5.58	11.28
T55	223	9	7	820110.455	837748.465	5.49	10.59
T56	382	9	9	820108.101	837752.896	5.52	9.92
T57	318	9	8	820105.643	837757.169	5.37	9.57
T58	350	9	7	820103.433	837761.585	5.28	9.88
T59	414	7	7	820101.320	837765.838	5.18	8.48
T60	223	5	7	820163.207	837785.715	6.03	6.73
T61	350	5	10	820161.717	837786.493	6.00	6.46
T62	1592	12	20	820159.695	837796.135	6.06	7.36
T63	1592	10	18	820154.571	837808.891	6.12	7.42
T64	159	8	7	820153.535	837813.084	5.50	9.57
T65	700	8	15	820152.179	837816.611	4.68	5.96
T66	223	5	8	820175.742	837757.305	5.84	8.04
T67	223	5	9	820174.832	837757.019	5.92	7.12
T68	509	5	8	820144.809	837818.985	6.54	6.94
T69	286	8	7	820150.101	837781.850	6.75	9.54
T70	1751	10	20	820152.954	837778.066	7.23	8.53
T71	573	6	12	820158.096	837779.719	6.32	6.92
T72	–	–	–	–	–	–	–
T73	382	12	9	820143.255	837779.889	7.29	12.92
T74	286	8	7	820136.394	837777.564	10.81	12.01
T75	1114	9	14	820135.067	837777.084	10.93	12.23
T76	796	6	12	820168.449	837761.220	6.32	6.62
T77	191	4	6	820156.863	837749.454	8.00	8.37
T78	127	6	4	820159.008	837753.192	7.81	9.01
T79	318	8	8	820142.174	837780.465	10.63	11.20
T80	1432	12	20	820129.404	837773.564	7.91	9.21
T81	95	5	5	820136.527	837767.813	7.16	9.36
T82	318	5	7	820135.512	837765.840	7.15	8.35
T83	286	8	8	820139.350	837730.864	7.51	7.81
T84	573	4	9	820146.959	837744.543	8.30	9.60
T85	95	8	4	820150.177	837743.262	8.81	10.85
T86	637	14	18	820148.980	837745.069	8.87	9.97
T87	637	12	17	820145.589	837746.254	8.50	9.20
T88	477	5	9	820125.032	837743.888	8.13	8.43
T89	891	9	16	820147.578	837726.443	6.09	9.39
T90	350	8	9	820119.448	837771.756	7.66	9.06
T91	446	7	9	820116.320	837770.569	7.89	8.49
T92	1273	12	15	820112.813	837775.707	7.97	9.27
T93	1273	10	18	820119.743	837778.588	7.87	9.17
T94	223	9	8	820119.533	837781.945	7.86	9.34
T95	159	8	4	820117.171	837785.733	7.47	8.72
T96	127	8	6	820115.389	837791.134	7.40	7.77
T97	95	7	4	820119.286	837763.846	7.71	11.19
T98	191	10	7	820119.961	837794.063	7.82	10.34
T99	223	12	12	820117.440	837796.417	7.57	11.42
T100	159	9	8	820117.507	837800.039	7.64	10.98
T101	159	6	8	820114.438	837803.166	7.65	8.04
T102	286	7	10	820108.528	837801.173	7.40	9.80
T103	477	7	11	820102.735	837795.130	7.68	8.08
T104	95	4	4	820093.199	837795.387	7.30	7.55
T105	159	5	5	820091.631	837795.812	7.24	7.49
T106	127	4	4	820095.400	837791.647	7.86	8.76
T107	382	7	8	820095.632	837790.779	7.98	8.18
T108	223	11	6	820101.934	837788.007	8.24	11.79
T109	255	9	8	820101.976	837787.191	8.29	10.59
T110	382	12	10	820103.817	837786.009	8.26	10.86
T111	191	7	7	820106.830	837786.747	7.82	9.12
T112	382	8	12	820105.904	837790.799	7.74	8.21
T113	191	7	8	820115.272	837784.141	7.58	8.75
T114	255	7	8	820112.758	837782.491	7.56	8.33
T115	159	7	5	820110.755	837780.991	7.74	8.41
T116	191	6	8	820110.626	837780.045	7.75	8.35
T117	382	12	12	820109.216	837776.875	8.39	8.70
T118	159	5	3	820108.801	837775.372	8.38	9.58
T119	191	3	4	820108.378	837801.239	7.13	8.43
T120	350	9	10	820121.863	837786.954	7.78	9.86
T121	255	9	10	820122.625	837788.411	7.84	10.97
T122	159	3	4	820106.917	837776.709	8.28	8.60
T123	159	3	3	820107.301	837775.788	8.29	8.60
T124	191	9	8	820100.548	837782.535	8.19	10.09
T125	223	7	7	820099.878	837782.859	8.20	9.07
T126	127	8	2	820093.570	837786.611	7.23	13.58
T127	127	7	7	820088.887	837795.880	6.70	10.00
T128	255	6	9	820090.413	837790.469	5.80	7.28
T129	191	7	8	820136.558	837786.415	6.89	8.53
T130	382	7	7	820127.803	837813.581	9.82	11.12
T131	477	14	12	820127.246	837803.686	8.66	8.16
T132	1273	15	20	820130.066	837796.559	7.03	8.33
T133	573	12	18	820130.654	837796.794	7.07	7.87
T134	127	9	5	820124.951	837790.511	7.32	12.12
T135	318	9	8	820124.666	837781.203	7.26	8.16
T136	127	5	4	820127.451	837781.558	7.14	7.57
T137	127	8	7	820130.550	837782.799	7.01	8.41
T138	1273	8	10	820135.457	837816.768	10.73	12.03
T139	255	3	3	820141.586	837787.113	12.34	13.64
T140	796	7	10	820173.900	837761.461	6.06	7.36
T141	191	8	6	820158.787	837749.275	8.02	11.12
T142	350	9	9	820160.780	837743.066	8.12	9.12
T143	700	8	10	820161.702	837741.714	7.89	8.50
T144	382	9	9	820163.367	837740.945	7.05	12.75
T145	382	12	14	820161.244	837734.458	7.75	10.45
T146	286	9	7	820157.344	837733.781	9.39	12.89
T147	159	5	5	820155.717	837736.577	9.62	10.02
T148	637	8	12	820151.757	837737.375	8.56	8.96
T149	764	9	14	820153.769	837740.237	10.10	12.13
T150	127	5	7	820155.220	837736.180	9.38	9.38

TREE SCHEDULE

Tree No.	Girth (m)	Height (m)	Spread (m)	Northing (m)	Easting (m)	Level (mpd)	Level of Trunk (mpd)
T151	127	6	6	820153.487	837736.969	9.38	12.58
T152	286	7	9	820153.636	837737.378	9.79	10.54
T153	159	5	6	820157.002	837733.106	9.24	9.64
T154	286	10	9	820158.235	837733.462	8.79	9.14
T155	573	8	12	820168.749	837736.889	5.71	6.04
T156	191	7	6	820173.763	837731.974	5.70	6.53
T157	350	8	8	820176.575	837725.405	5.68	6.98
T158	286	7	10	820184.958	837712.931	5.74	7.19
T159	255	5	7	820185.369	837711.128	5.74	6.54
T160	318	7	8	820185.585	837706.066	5.62	7.27
T161	350	12	10	820186.113	837705.588	5.77	7.57
T162	127	5	5	820185.842	837687.812	5.61	7.54
T163	255	4	5	820186.146	837718.360	5.63	5.83
T164	255	4	6	820183.207	837723.985	5.61	5.91
T165	191	4	6	820182.883	837724.619	5.59	6.49
T166	350	5	8	820181.701	837727.831	5.61	6.11
T167	255	7	10	820182.419	837730.083	5.60	6.90
T168	350	7	10	820182.056	837733.778	5.60	6.47
T169	127	6	7	820178.613	837734.205	5.55	7.65
T170	286	7	9	820176.365	837737.198	5.57	5.82
T171	255	8	10	820177.141	837737.452	5.58	6.43
T172	477	12	14	820177.419	837741.657	5.51	6.12
T173	1273	12	20	820175.462	837741.124	5.60	6.90
T174	191	7	5	820167.026	837720.422	7.20	7.90
T175	191	6	5	820166.273	837724.516	7.04	7.74
T176	127	6	4	820164.327	837725.954	7.72	8.62
T177	255	10	8	820164.286	837728.934	7.49	10.09
T178	286	7	6	820162.861	837728.903	7.44	7.74
T179	127	4	4	820161.510	837730.905	7.84	8.24
T180	509	15	18	820162.638	837725.661	8.57	9.34
T181	223	9	6	820163.479	837721.044	8.37	12.02
T182	159	6	4	820165.369	837717.521	8.56	9.06
T183	477	8	12	820167.237	837717.223	8.09	10.99
T184	477	8	12	820168.453	837716.073	8.28	8.49
T185	446	17	10	820172.552	837710.467	7.09	9.59
T186	541	9	12	820171.682	837712.987	6.91	7.31
T187	286	8	8	820173.062	837727.927	5.78	6.07
T188	414	8	7	820171.214	837726.921	5.70	6.60
T189	286	7	6	820182.996	837708.131	5.74	7.12
T190	637	8	10	820181.842	837705.647	5.84	6.24
T191	732	9	12	820182.594	837704.305	5.80	6.35
T192	255	7	8	820182.806	837703.554	5.83	6.33
T193	700	12	16	820195.825	837699.896	5.66	6.76
T194	159	6	6	820180.838	837699.532	6.82	6.92
T195	255	7	7	820180.301	837696.107	6.78	8.08
T196	191	8	7	820178.998	837696.023	6.92	7.32
T197	127	5	4	820180.461	837694.258	7.03	8.28
T198	127	7	5	820177.732	837695.500	7.36	10.66
T199	127	7	4	820177.153	837696.920	7.34	10.04
T200	255	9	8	820175.712	837697.136	7.75	12.85
T201	255	7	6	820176.964	837698.586	7.05	7.50
T202	159	7	5	820176.345	837703.859	6.81	7.61
T203	159	8	6	820174.283	837699.544	7.85	8.04
T204	95	4	4	820175.160	837706.113	6.93	9.68
T205	605	12	15	820172.137	837705.163	7.86	8.86
T206	318	12	15	820169.355	837709.212	8.11	11.36
T207	637	12	18	820182.747	837693.351	6.51	7.31
T208	350	8	10	820185.813	837690.945	6.01	9.21
T209	1592	14	25	820199.743	837698.144	5.75	7.31
T210	286	15	9	820184.762	837693.977	5.77	9.77
T211	159	5	4	820188.521	837696.347	5.66	8.06

INDEX PLAN (SCALE 1:2000)



MA TAU KOK ROAD
REFUSE COLLECTION POINT

CATTLE DEPOT ARTISTS VILLAGE

SAN SHAN ROAD

ABBREVIATIONS :-

BH	BORE HOLE	LP	LAMP POST
BO	BOLLARD	MB	MAIL BOX
CCH	COVERED CHANNEL	MH	MANHOLE
CL	COVER LEVEL	PT	TRIAL PIT
CO	COLUMN	RK	ROCK
CP	CATCH PIT	SC	SPRAYED CONCRETE
DC	DUCT COVER	SCH	STEPPED CHANNEL
DP	DOWN PIPE	SE	SEAT
EC	ELECTRIC COVER	SP	SIGN POST
EE	ELECTRICITY EARTH	ST	SEPTIC TANK
EM	ELECTRIC MANHOLE	SV	STOP VALVE
ESS	ELECTRIC SUB STATION	SW	SWITCH BOX
FB	FLOWER BED	TC	TELEPHONE COVER
FH	FIRE HYDRANT	TL	TRAFFIC LIGHT
GA	GAS VALVE	TP	TELEGRAPH POLE
GU	GULLEY	TS	TEMPORARY STRUCTURE
IC	INSPECTION COVER	TV	CABLE TV
ICF	INSPECTION COVER-FOUL WATER	UCH	U CHANNEL
ICS	INSPECTION COVER-STORM WATER	WT	WATER TANK
IL	INVERT LEVEL	TR	TREE (GIRTH/HEIGHT/SPREAD)

SYMBOLS :-

ROCK BOULDER
DIRECTION OF FLOW
CANOPY
GATE
ARTIFICIAL SLOPE
TREE
WALL TREE (TRUNK NOT TO SCALE)
OVER-HANG STRUCTURE LEVEL (17,114)
HOUSE/BUILDING
HARD DETAIL
SOFT DETAIL
LOT BOUNDARY
VERTICAL RETAINING WALL
OVERHEAD STRUCTURE
DRAIN
FENCE/RAILING

NOTES :

1. All dimensions are in metres.
2. All spot level positions are indicated by a cross.
3. All levels are in metres to Principal Datum (PD) unless noted otherwise.
4. All co-ordinates are refer to Hong Kong (1980) metric grid co-ordinates system.
5. Channels are U shaped except where stated, widths are given.

ARCHETECTURAL SERVICES DEPARTMENT

REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT AT TO KWA WAN, KOWLOON CITY DISTRICT

TOPOGRAPHICAL AND TREE SURVEY

SCALE 1 : 200

10 8 6 4 2 0 metre 10 20

DATE OF SURVEY : DECEMBER 2014

LAND MARKER (1980) H.K. CO., LTD.
SUITE 1501, ONE MONGKOK ROAD COMMERCIAL CENTRE, KOWLOON
TEL: 2663 9138 FAX: 2666 9921 E-MAIL ADDRESS: general@landmarker.com

PLAN NO. 4043/01

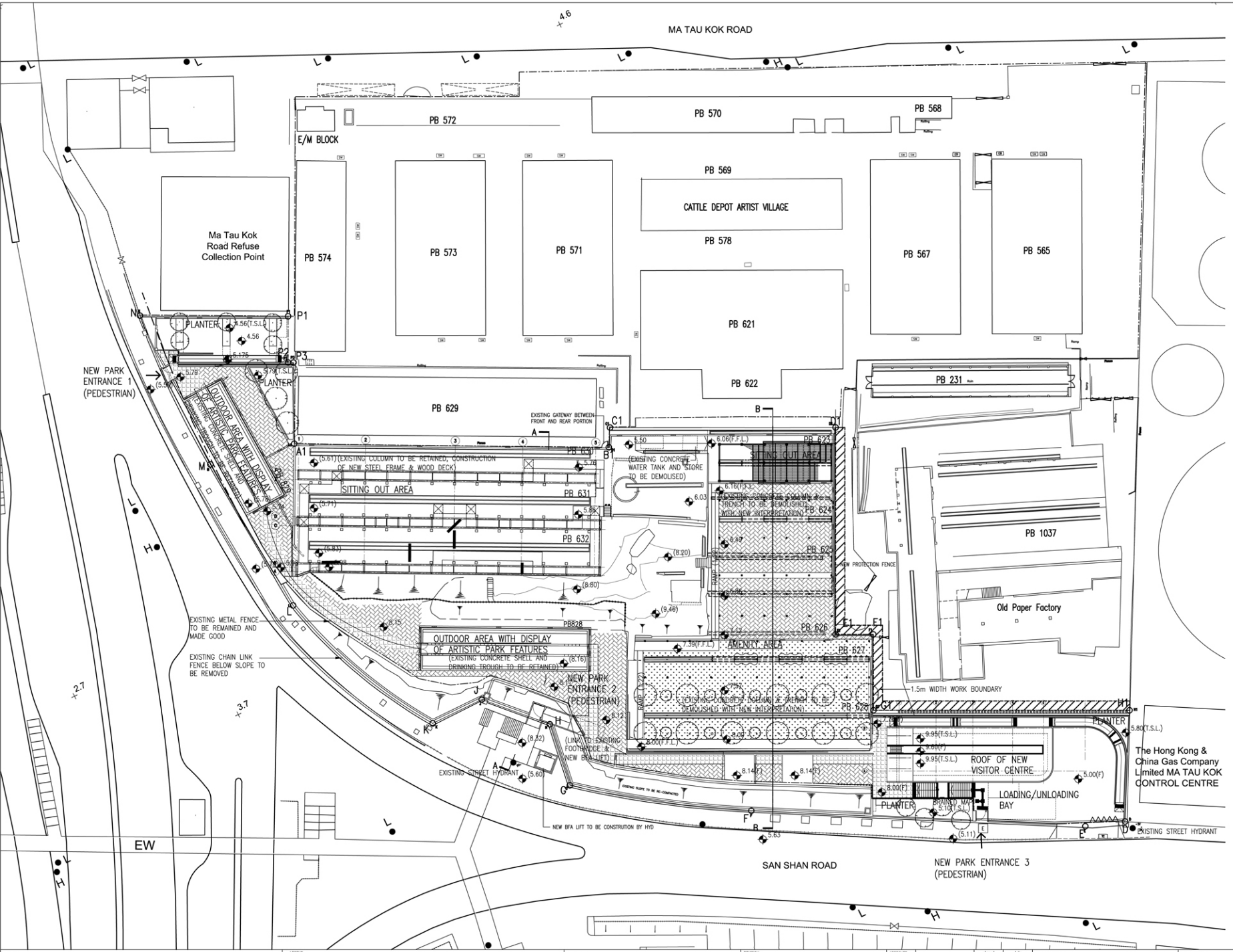
REVISION NO.	DESCRIPTIONS	DATE
0		09-FEB-2015

DRAWN BY: MICKEY HAU SURVEYED BY: MICHAEL NG

APPROVED BY:

JOSEPH Y C WONG
AUTHORIZED LAND SURVEYOR MHKIS MRICS RPS(LS)

APPENDIX C – DESIGN PROPOSAL



NOTES

LEGEND

LEGEND & ABBREVIATIONS :

KEY PLAN

REVISION			
no.	date	description	initial

APPROVED		signed	date
C.A.	A.L.F. YEUNG		07/2015
S.A.	J.C.S. LO		07/2015
P.A.	M.K.W. HUI		07/2015
designed			
drawn	M.F. LEUNG		07/2015
checked	Stephen HO		07/2015

PROJECT TITLE: SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE: MASTER LAYOUT PLAN

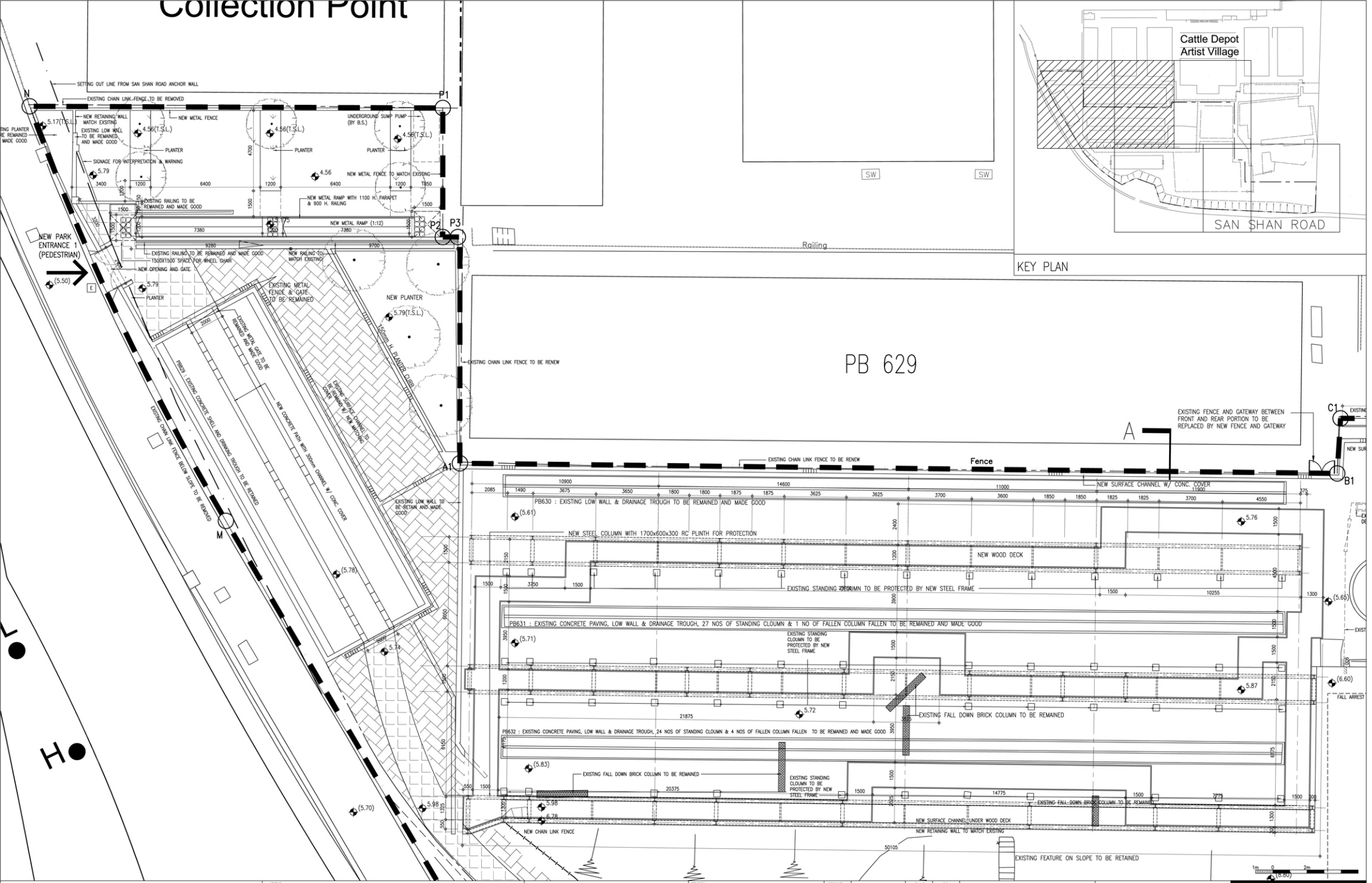
scale 1:300 (A1) / 1:600 (A3)

drawing no. AB/8254/HIA/GP101d

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

A1 841 x 594



NOTES

LEGEND

KEY PLAN

REVISION			
no.	date	description	initial

APPROVED		signed	date
C.A.	YEUNG L.F.A.		07/2015
S.A.	C.S. LO		07/2015
P.A.	HUI K.W.M.		07/2015
designed			
drawn	M.F. LEUNG		07/2015
checked	Stephen HO		07/2015

PROJECT TITLE
SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

DRAWING TITLE
PART PLAN OF PARK (PART 1 of 4)

scale 1:100 (A1) / 1:200 (A3)

drawing no. AB/8254/HIA/GP102b

contract no.

file no.

project no. RO 462

OFFICE
ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

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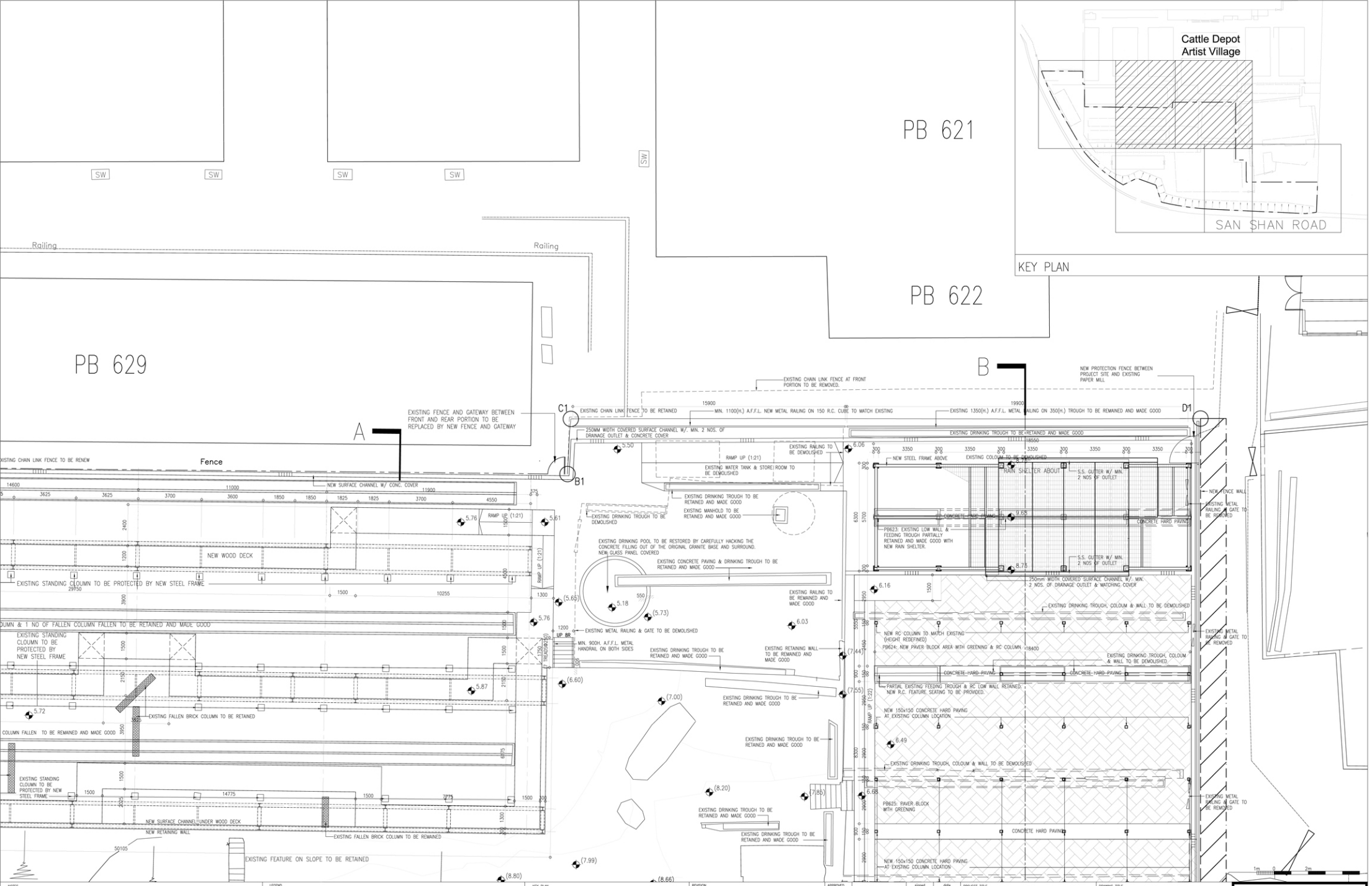


NOTES

LEGEND

KEY PLAN

REVISION			
no.	date	description	initial

APPROVED		signed	date	PROJECT TITLE
C.A.	A.L.F. YEUNG		07/2015	SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT
S.A.	J.C.S. LO		07/2015	
P.A.	M.K.W. HUI		07/2015	
designed				contract no.
drawn	M.F. LEUNG		07/2015	file no.
checked	Stephen HO		07/2015	project no. RO 462

DRAWING TITLE: PART PLAN OF PARK (PART 2 of 4)

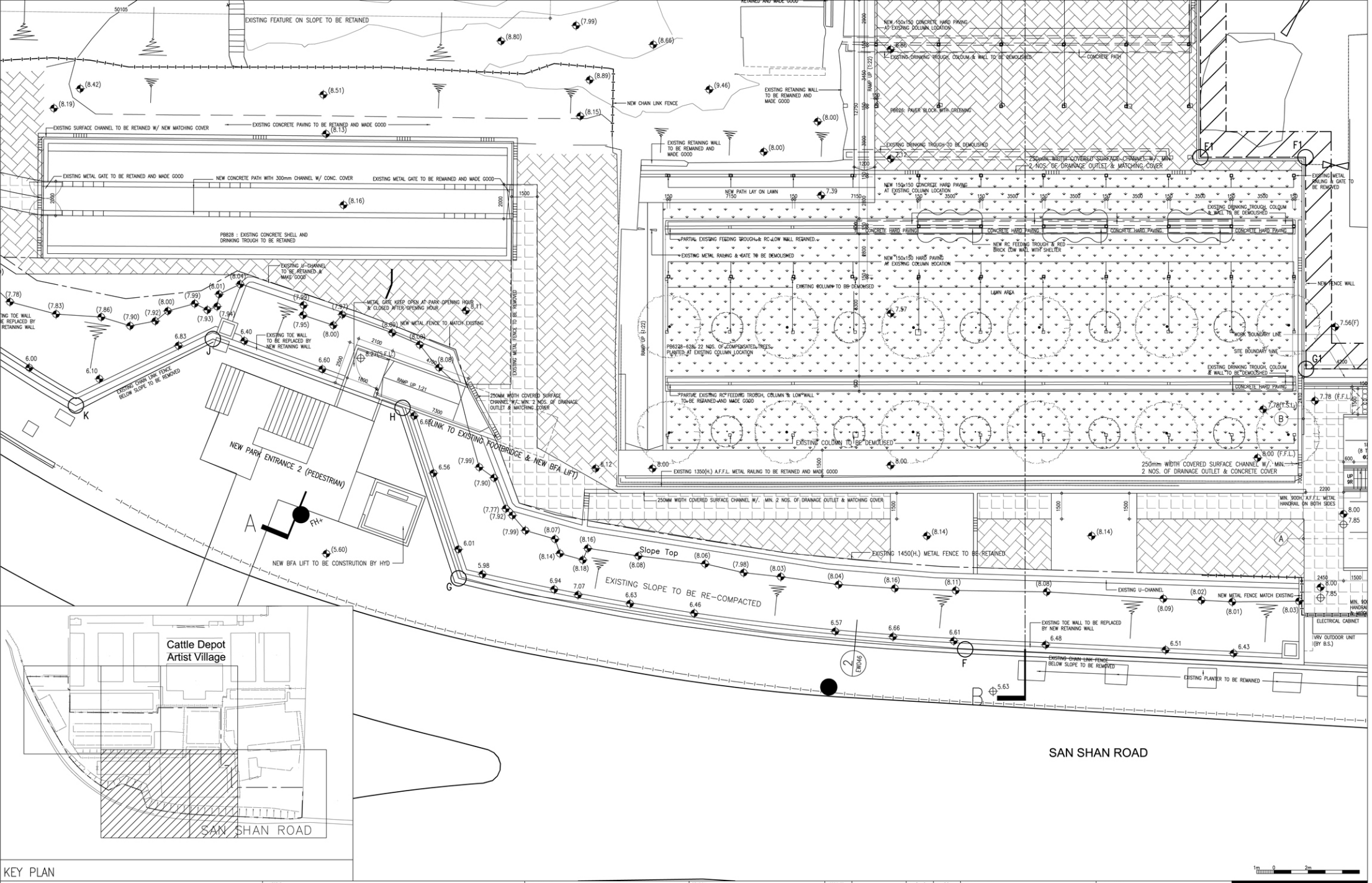
scale 1:100 (A1) / 1:200 (A3)

drawing no. AB/8254/HIA/GP103c

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

A1 841 x 594



KEY PLAN

NOTES

LEGEND

KEY PLAN

REVISION			
no.	date	description	initial

APPROVED		signed	date
C.A.	A.L.F. YEUNG		07/2015
S.A.	J.C.S. LO		07/2015
P.A.	M.K.W. HUI		07/2015
designed			
drawn	M.F. LEUNG		07/2015
checked	Stephen HO		07/2015

PROJECT TITLE
SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE
PART PLAN OF PARK (PART 3 of 4)

scale 1:100 (A1) / 1:200 (A3)

drawing no.
AB/8254/HIA/GP104c

OFFICE
ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

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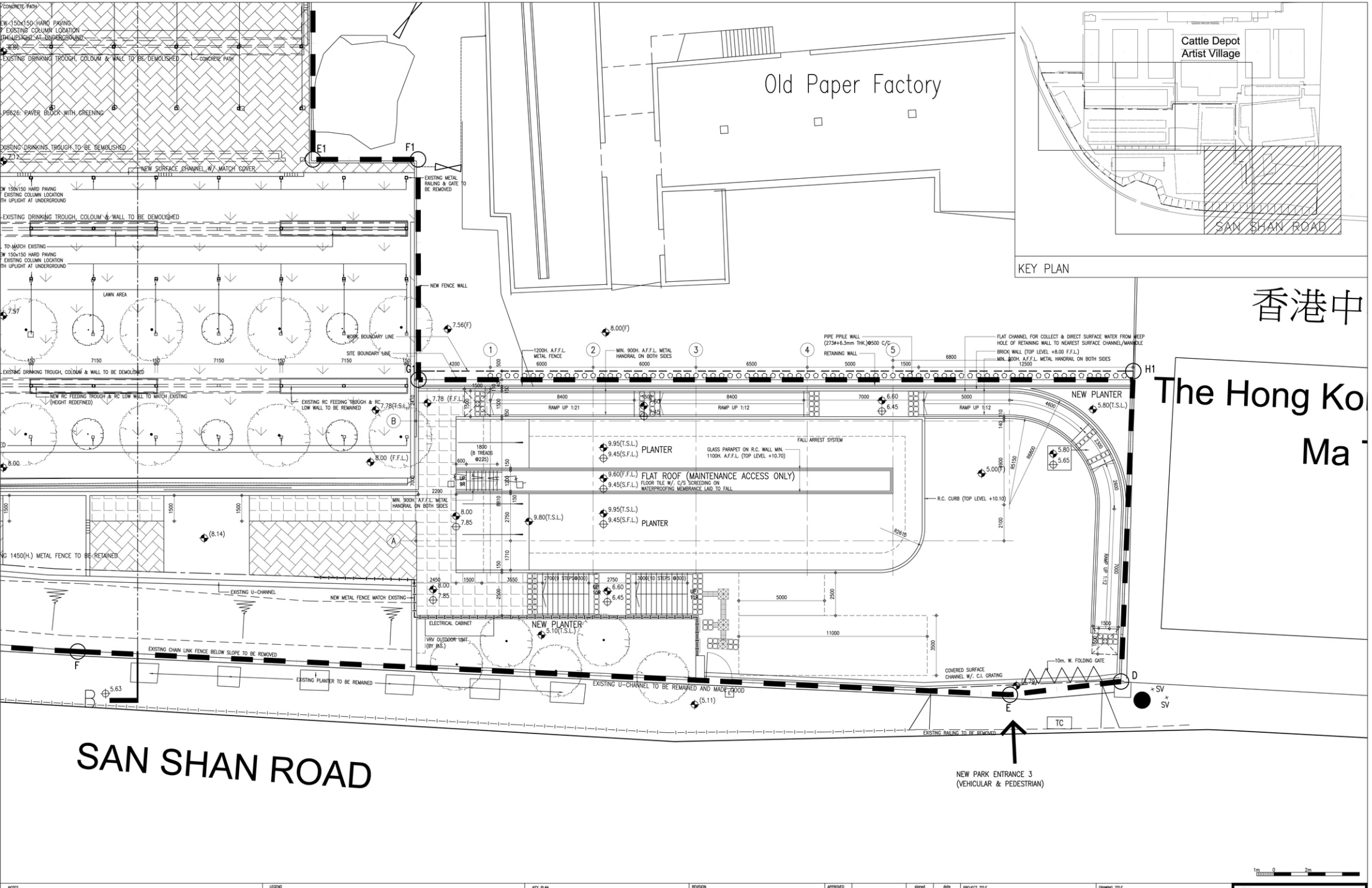

NOTES	LEGEND	KEY PLAN

REVISION			
no.	date	description	initial

APPROVED		signed	date
C.A.	YEUNG L.F.A.		07/2015
S.A.	C.S. LO		07/2015
P.A.	HUI K.W.M.		07/2015
designed			
drawn	M.F. LEUNG		07/2015
checked	Stephen HO		07/2015

PROJECT TITLE: SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

contract no.

file no.

project no. RO 462

DRAWING TITLE: PART PLAN OF PARK (PART 4 of 4)

scale 1:100 (A1) / 1:200 (A3)

drawing no. AB/8254/HIA/GP105b

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

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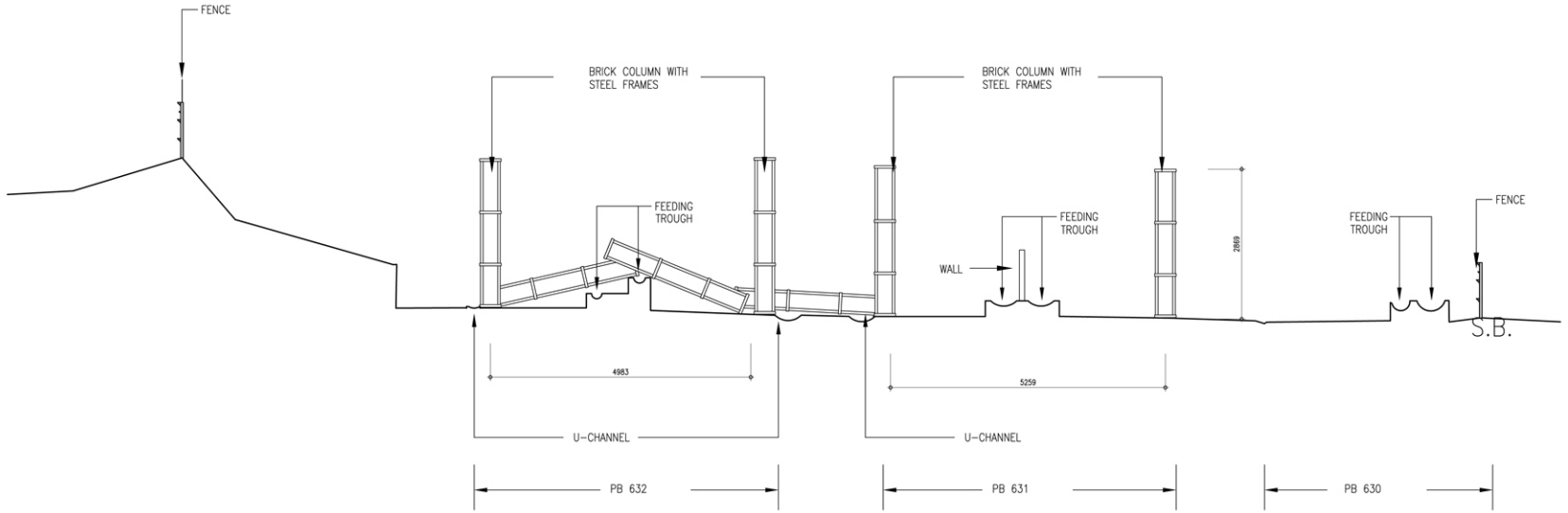

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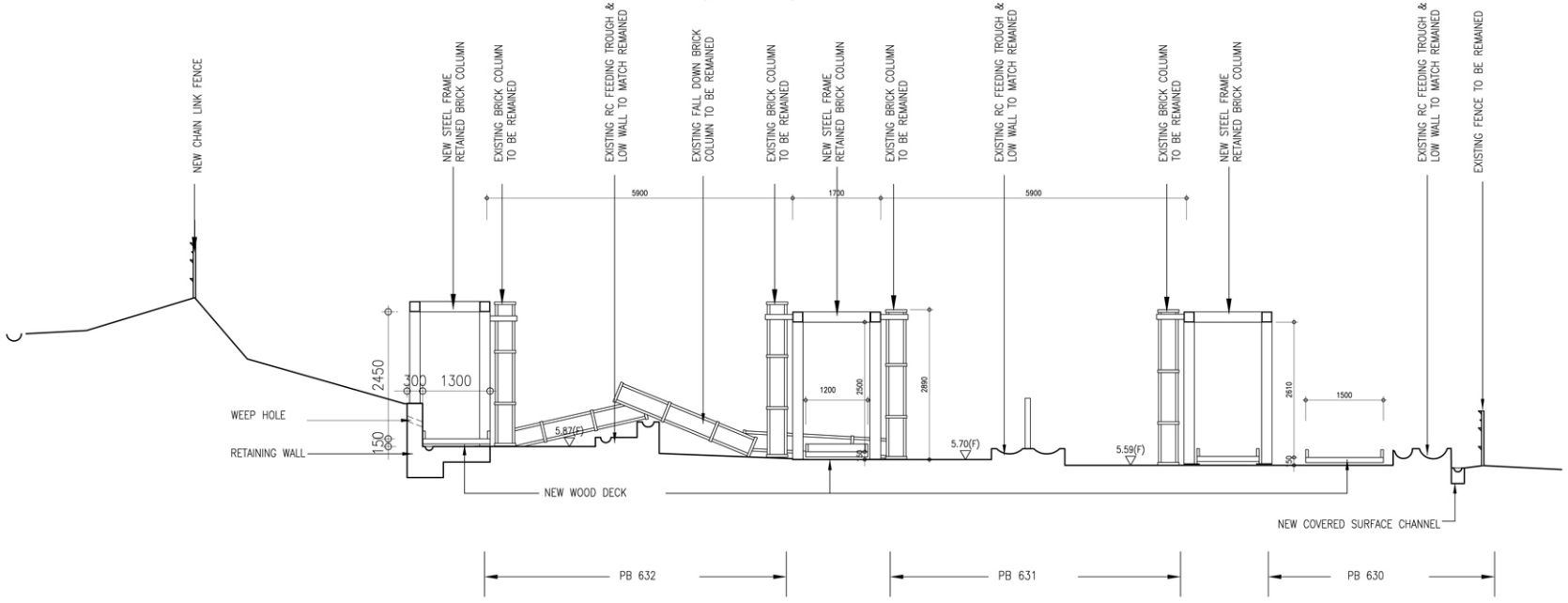
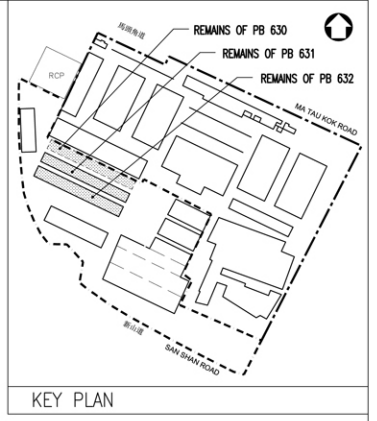


SECTION A–A (AFTER)



KEY PLAN

NOTES

LEGEND

SITE BOUNDARY LINE

6.23 STRUCTURAL LEVEL

REVISION			
no.	date	description	initial
a	2/15	LAYOUT REVISED	
b	5/15	LAYOUT REVISED	
c	8/15	LAYOUT REVISED	

APPROVED		signed	date
C.A.	YEUNG L.F.A.		11/2014
S.A.	C.S. LO		11/2014
P.A.	HUI K.W.M.		11/2014
designed			
drawn	W.K. HO		11/2014
checked	Stephen HO		11/2014

PROJECT TITLE: SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

DRAWING TITLE: LAYOUT PLAN AND SECTION OF EXISTING REMAINS OF PB 630, PB 631 AND PB 632

contract no.

scale 1:50 (A1) / 1:100 (A3)

drawing no. AB/8254/HIA/GP106c

file no.

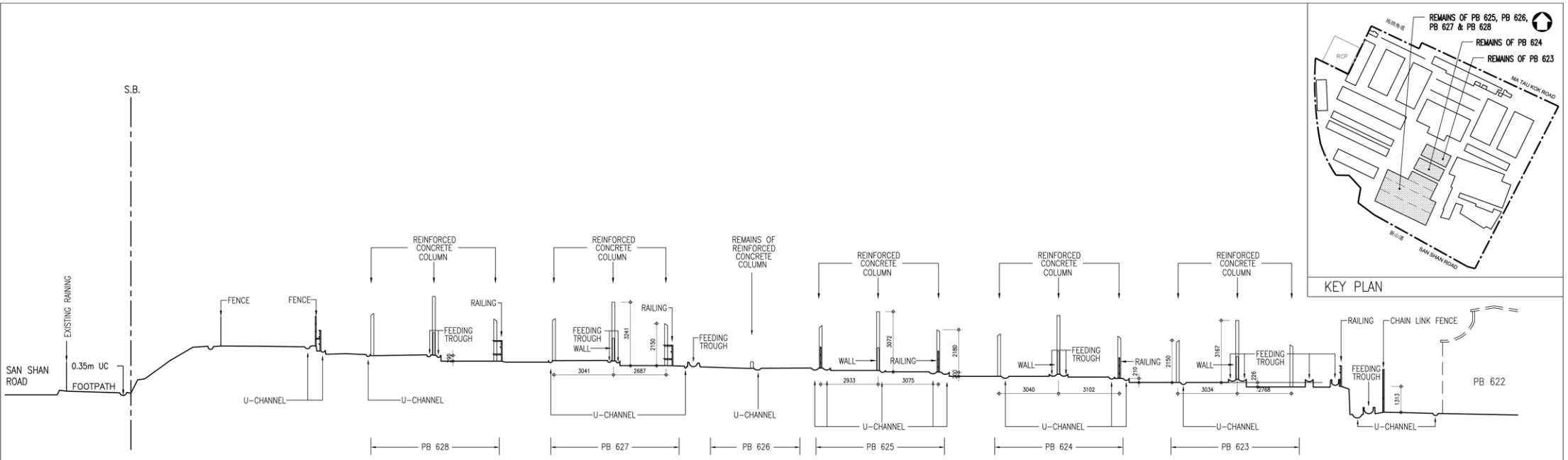
project no. RO 462

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

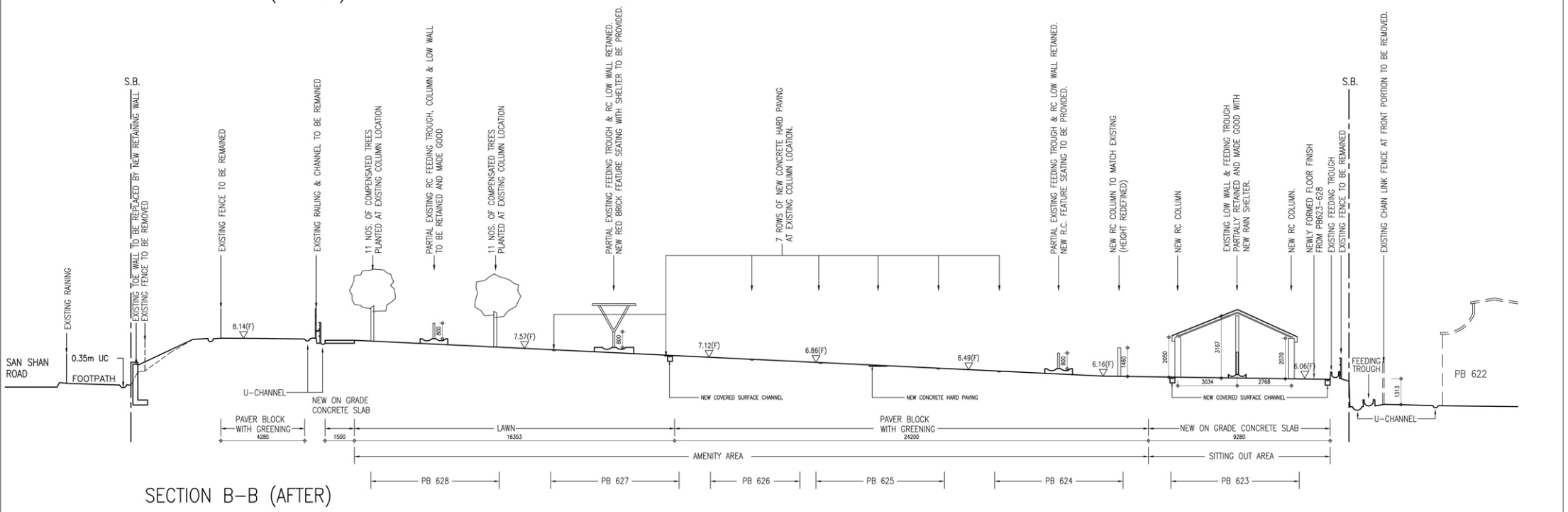
CAD Ref. = No-8254\dgn\107.dwg--1:50

A1 841 x 594



SECTION B–B (BEFORE)

KEY PLAN



SECTION B–B (AFTER)

NOTES

LEGEND

SITE BOUNDARY LINE

8.30 STRUCTURAL LEVEL

REVISION			
no.	date	description	initial
a	2/15	LAYOUT REVISED	
b	5/15	LAYOUT REVISED	
c	6/15	LAYOUT REVISED	

APPROVED		signed	date
C.A.	YEUNG L.F.A.		01/2015
S.A.	C.S. LO		01/2015
P.A.	HUI K.W.M.		01/2015
designed			
drawn	M.F. LEUNG		01/2015
checked	Stephen HO		01/2015

PROJECT TITLE: SIGNATURE PROJECT SCHEME (KOWLOON CITY DISTRICT) – REVITALISATION OF THE REAR PORTION OF THE CATTLE DEPOT

DRAWING TITLE: SECTIONS OF REMAINS OF PB 623, PB 624, PB 625, PB 626, PB 627 AND PB 828

contract no.

scale 1:100 (A1) / 1:200 (A3)

file no.

drawing no. AB/8254/HIA/GP107d

project no. RO 462

1m 0 2m

OFFICE: ARCHITECTURAL BRANCH

ARCHITECTURAL SERVICES DEPARTMENT

CAD Ref. – 8254gp022.dwg – 1:100

DIV2 GP 5

A1 841 x 594

Existing concrete zone

Proposed rain shlter, retained feeding trough and new RC feeding trough.

Existing condition at Red Brick Zone

Proposed new steel frame for support existing columns with raised wood deck.

Existing drinking pool condition.

Proposed drinking pool with grantie base on surrounding.

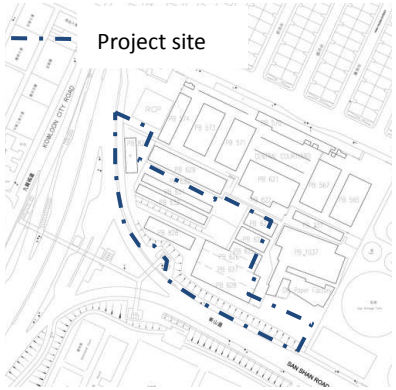
Existing view to the proposed new visitor centre condition.

Proposed new vistor visitor centre with sloped curved roof.

APPENDIX D – LIST OF IMPACT ASSESMENT AND MITIGATION MEASURE

Heritage Impact Assessment

With reference to Section 6.2, the following tables identified the Heritage Impact Assessment and mitigation measures for adaptive re-use of the Rear Portion of the Cattle Depot within the project site as a recreational open space.

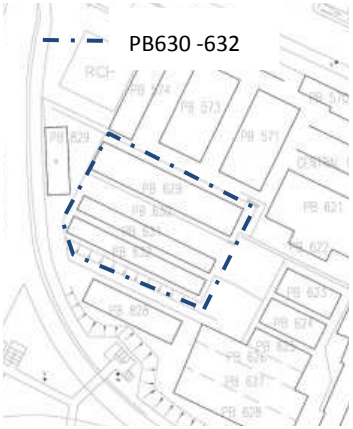
Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
A.  	**Overall master layout** The project site will be converted into a recreational open space for public.	**Exceptional**	The setting of the existing setting will be preserved. The adaptive re-use works will not affect the Cattle Depot Artists Village. Retain existing zoning with compactible use are recommended. The size of the new ancillary building should be minimal and in less prominent location.	**Low**	**Justification:** The project site will be converted into a recreational open space for public which is of compatible use for the Cattle Depot compound **Mitigation Measures :** Topographic & photographic surveys will be carried out for record. Panel showing the original layout will be displayed for interpretation. For the whole Cattle Depot, it enhances the accessibility, connectivity/integration with the remaining proportion and benefits the surrounding area.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
B.  	**<u>PB 623 to PB 628</u> (Concrete Column Zone)** The sheds will be converted into amenity use with sitting out, amenity and lawn areas.	**Neutral**	At least one module of the remains of the sheds being one of the major fabric/elements should be kept intact.			

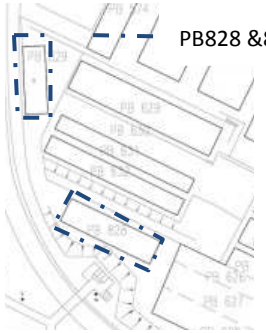
Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
B.1 	**PB 623** Part of the PB 623 will be converted into a rain shelter.	**Neutral**	Part of the existing columns and feeding trough will be removed for the construction of a new rain shelter. Existing low wall & feeding trough partially retained and make good.	**Medium**	**Justification:** The new rain shelter is a functional need for the public enjoyment. The structure of PB623 is less significance. **Mitigation Measures** : The new columns for rain shelter will be at the same location as the old columns to reflect the setting of the shed. Part of the feeding trough will be preserved in situ for interpretation. Topographic & photographic surveys will be carried out for record.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
B.2-B.4  **B.2 (PB624)**  **B.3 (PB 625)**  **B.4 (PB 626)**	**PB624 to PB626** The concrete columns and feeding troughs of PB624 to PB626 will be removed to form an open space for amenity use.	**Neutral**	The existing columns and feeding troughs will be removed for the construction of an amenity area. The ground will be paved with new grasscrete and new seating to be provided.	**Medium**	**Justification:** The amenity area is a functional need for the public enjoyment. **Mitigation Measures** : Square pattern paving material will be used with the same size and at the same location of the existing concrete columns for interpretation.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
B.5-B.6  **B.5 (PB 627)**  **B.6 (PB 628)**	**PB627 & PB628** The concrete columns and feeding troughs will be removed to form a landscaped area.	**Neutral**	Partial existing feeding trough, R.C low wall and the associated column above will be retained. The ground will be paved with grass and planted with trees as a lawn area.	**Medium**	**Justification:** A new open space is a functional need. The lawn area is also used for planting trees for compensation. Part of the new RC feeding trough & RC low wall with opening will match existing feeding trough. **Mitigation Measures:** Part of the feeding trough will be preserved in situ for interpretation. Compensated trees will be planted at the original location of existing column for interpretation. Alternatively where there are no trees, square pattern paving material will be used at the same location.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
C  	**<u>PB 630 to PB 632 (Red Brick Column Zone)</u>** They were constructed in 1956. The only remains of the sheds are the red brick columns and feeding troughs. Some of the columns are collapsed and laying on the floor. The Red Brick zone will be used as a sitting out area.	**High**				

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
C.1-C.3  **C.1 (PB 630)**  **C.2 (PB 631)**  **C.3 (PB 632)**			The existing red brick columns and feeding troughs will be made good and preserved in situ. New steel frames will be erected to stabilize the existing columns for the safety of visitors. Since the floor level in this area is uneven, raised wood deck will be provided for the visitors to walk around the sheds.	**Low**	**Justification:** Public appreciation of the historic elements of the sheds. **Mitigation Measures:** The new steel frames and wood decks are in compatible design. Both are reversible materials. Authenticity of the site can be maintained.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
D.  **D.1-D.2**  **D.1 (PB828)**	**PB 828 & PB 829 (Concrete Shed)** They were constructed around 1986 with concrete walls. One side of the concrete wall was full height facing San Shan Road and the other side was low concrete wall with concrete posts.	**Neutral**	Both sheds will be made good and preserved in-situ.	**Neutral**	**Justification:** These two sheds will be used as outdoor area with display of artistic park features. **Mitigation Measures:** Existing concrete shell and feeding troughs will be preserved in-situ for interpretation.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
 **D.2 (PB829)**						
E. 	**Ancillary Facilities** There were ancillary facilities for the operation of the Cattle Depot such as water pond, well, water tanks and pump house. Some of these items will be preserved					

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
E.1 	**Water Pond** The water pond with red brick rim was filled up with concrete. A feeding trough was later built on top of the old water pond.	**Moderate**	The water pond will be preserved in situ and excavated for checking subject to the condition and past record. Concrete cover of the water pond will be removed to review the condition for further decision on the treatment. The rim in red brick will be reinstated. The existing feeding trough on the water pond will be made good and preserved in-situ. The project team should try to restore the water pond subject to the	**Beneficial**	**Justification:** For public appreciation of the historic development of the Cattle Depot. **Mitigation Measures:** Interpretation on the water pond will be displayed on site.	**Acceptable**

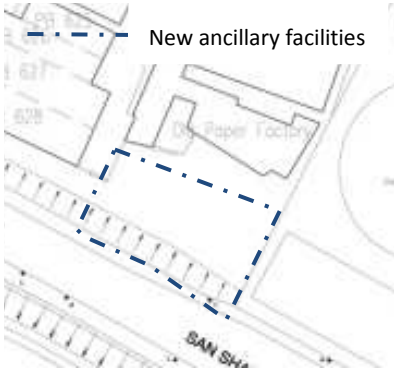
			existing condition and past record.			
Item No	**Assessment Items**	**Level of Significance**	**Recommended Treatment**	**Impact level before mitigation measure**	**Justification / Mitigation Measures**	**Impact Level after mitigation measure**
E.2 	**Well** The well was covered up with concrete and a manhole was constructed on top.	**Neutral**	The well will be preserved in situ. Manhole cover of the well will be removed for investigation to see the condition for further decision on the treatment.	**Neutral**	**Justification:** For public appreciation of the historic development of the Cattle Depot. **Mitigation Measures:** Interpretation on the well will be displayed on site.	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
E.3  **Water tank A**	**Water tanks** There are two water tanks within the project site. Water tank A is adjacent to the well. Water tank B is on the small hill.	**Neutral**	The existing water tank A will be demolished to make way for a disabled ramp. Water tank B on the small hill is in poor condition. It will be demolished for public safety.	**Medium**	**Justification:** Water tank A : to comply with statutory requirement for the provision of disabled access Water tank B : for public safety. **Mitigation Measures:** Cartographic & photographic surveys will be carried out for record. Panel showing the original location of these tanks will be displayed for interpretation.	**Acceptable**
 **Water tank B**						

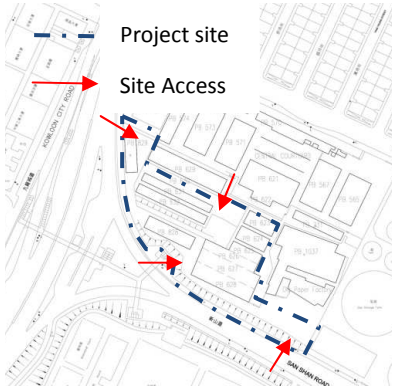
Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
E.4 	**Pump House** The original use of the existing store next to the well was a pump house.	**Neutral**	The pump house will be demolished to make way for a disable ramp.	**Medium**	**Justification:** To comply with statutory requirement **Mitigation Measures:** Cartographic & photographic surveys will be carried out for record. Panel showing the original location of these tanks will be displayed for interpretation.	**Acceptable**
F. 	**Feeding troughs** Feeding troughs are found all over the project site even in the open area. It reflects that at a certain period of	**Neutral**	The feeding troughs in the open area will be made good and preserved in-situ for display.	**Neutral**	**Justification:** Nil **Mitigation Measures:** Nil	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
	time, the site was overcrowded and there was insufficient indoor space for the cattle. Some cattle have to stay in the open area.					

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
G.  	**Remain of old pig lairages** The remain of the old pig lairages shows the historic development of the Cattle Depot. This area will be used as a landscaped area with planters.	**Neutral**	Planter and seatings will be provided in this area with a new disabled ramp. Part of the remains of the old pig lairages will be made good and preserved in –situ.	**Neutral**	**Justification:** To comply with statutory requirement and public enjoyment. **Mitigation Measures:** Cartographic & photographic surveys will be carried out for record. Panel showing the original layout of the old pig lairages will be displayed for interpretation. Lawn area with compensated trees to be provided for enjoyment of public	**Acceptable**

Item No	Assessment Items	Level of Significance	Recommended Treatment	Impact level before mitigation measure	Justification / Mitigation Measures	Impact Level after mitigation measure
H.  	**New ancillary facilities** A new park entrance, loading/unloading area and a new visitor centre will be constructed at the southeast corner of the site.	**Neutral**	The new ancillary facilities will be in compatible design. The paving of the new visitor centre will form part of the open space.	**low**	**Justification:** The new ancillary facilities are functional need for statutory requirement and the public enjoyment. The constraint are as following: **1.** Due to the lack of open space within the project site, the southeast corner is the only remaining empty space without historic element for new structure. So that there is minimal impact on overall setting. **2.** Although the PB828 & 829 are both in good condition, the structures are close to the San Shan Road which is not allow to be covered for Highways Department permission.	**Acceptable**

					Mitigation Measures: **1.** There is no historic element in this area (southeast corner). **2.** A new park entrance, loading/unloading area and a new Visitor Centre will be constructed at the southeast corner of the site which is at the least prominent and obstructive location from the setting. **3.** All new ancillary facilities for operational need will be grouped together at the Visitor Centre to minimise the new additional works at the site. **4.** The proposal minimizes the visual impact to the factory and the surrounding area. **5.** all new ancillary facilities, such as ramp and new entrances, will be of compatible design with an aim to benefit the appreciation of the Cattle Depot by enhancing the	

					connectivity of the project site with its surroundings.	
Item No	**Assessment Items**	**Level of Significance**	**Recommended Treatment**	**Impact level before mitigation measure**	**Justification / Mitigation Measures**	**Impact Level after mitigation measure**
I.  	**Site Access**	**N.A**	New opening from Cattle Depot Artist Village, San Shan Road and East Kowloon Corridor.	**Beneficial**	**Justification:** The design will improve the accessibility, connectivity / integration with the remaining proportion and the provision of interpretation areas. **Mitigation Measures:** The new design will not affect the setting of the site and any historical elements.	**Acceptable**