





賽馬會文物保育有限公司 The Jockey Club CPS Limited Central Police Station Conservation and Revitalisation Project 中區警署保育及活化計劃

Archaeological Investigation Report 考古調查報告

September 2011 二零一一年九月

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REPORT

The Jockey Club CPS Limited

Central Police Station Conservation and Revitalisation Project: *Archaeological Investigation Report*

September 2011

For and on behalf of Environmental Resources Management				
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香港特別行政區政府與香港賽馬會(下稱馬會)訂立伙伴合作關係,由馬會慈 善信託基金撥款,進行「中區警署保育和活化計劃」(下稱本項目),旨在將 中區警署建築群,活化成爲集文物、藝術和消閒的中心,供本港市民及海外遊 客享用。本項目亦有助推動香港整體藝術及文化發展,同時增添一個富有香港 特色的旅遊景點。

在本項目之下,馬會於2008年委託了保育建築師事務所 Purcell Miller Tritton 擬備《中區警署保育管理計劃》(下稱《管理計劃》),並於同年六月完成這 份《管理計劃》,為本項目提供保育準則。

本項目的《環境影響評估報告》(下稱環評報告),已於2011年4月得到批准, 並獲發環境許可證,以展開項目的興建及營運工作。環評中的文物影響評估, 包括了詳細的文獻研究和非破壞式檢測透地雷達勘察,結果發現中區警署建築 群內共有十個具考古潛質的地點。

本項目將會保育和活化十六幢歷史建築物,以及上、下層平台空地(亦稱為監 獄操場和檢閱廣場)。為了減少對現存歷史建築物的影響,本項目需要興建兩 幢新建築物和一個地下機房,用來放置各項藝術設施和必要的屋宇裝備,以符 合現行法例的要求和運作上的需要。而現存的歷史建築物,將根據其歷史背景 及獨特氛圍,給予新的用途。此外,在《管理計劃》內被評為屬於低文物價值 的車房、工場和洗衣場;以及被評有損歷史建築群整體佈局的監獄辦事處,將 會在進行詳細記錄後拆除。

為進行本項目的設計工作,我們曾在擬建的新建築物和地下機房位置,進行了 工地勘察,以檢視有關的地下情況。工地勘察分別於2011年1月至3月及同年 7月至8月兩個階段進行。同時,馬會亦聘請了香港環境資源管理顧問有限公 司,根據工地勘察所得的資料,編寫《考古調查報告》,以評估擬進行挖掘工 程位置之考古潛質,並同時進行考古影響評估,爲受影響之處提出相應的緩解 措施。

在參考了歷史地圖、舊照片和工地勘察結果後,顧問公司發現有以下幾個主要 的遺蹟:

- 位於檢閱廣場(下層平台空地)下,一條連接中區警署總部大樓維修通 道的隧道;
- 位於檢閱廣場「C 監房」之建築遺蹟;
- 位於檢閱廣場的一條樓梯通道遺蹟,連接上述隧道與廣場中一座已拆卸 的房屋(相信是助理警察總監及總督察之辦公室);及
- 位於監獄操場(上層平台空地)的「米字型監獄大樓」之地基遺蹟。

以上發現進一步確認較早前進行的文獻研究結果,並有助增加現有歷史地圖和 記錄的準確性,更能為將來詮釋整個建築群的歷史意義,重現昔日歷史建築物 面貌提供詳細的資料。

現場還發現其他遺物,主要是從別處運來的塡土中發現,其文物價値不高。

縱使本項目之初步設計已盡量避免影響現有歷史建築物和可能具有考古潛質的 地點,在考古影響評估中仍發現部份的考古遺蹟將會受到影響。有鑑於此,考 古影響評估中已對考古遺蹟可能受到的影響,建議了一系列的緩解措施,包括 修改設計、訂立考古緩衝區、進行考古監察和以記錄保存受影響的考古遺蹟, 現簡述如下。

由於發現了一條連接中區警署總部大樓維修通道的隧道,為了原址保留此具有 中度文物價值的隧道,地下機房的設計隨即進行修改,以縮減其面積至遠離現 有隧道,並預留緩衝地帶來避免工程對隧道的影響。

在所發現的遺蹟中,因「C 監房」屬於建築群內其中一幢最早興建的建築物, 其建築遺蹟具有重要的文化價值。

爲了能原址保留「C 監房」的建築遺蹟,地下機房的設計再作進一步的修改, 以縮減其面積至遠離「C 監房」的建築遺蹟,更在遺蹟四周預留緩衝地帶,以 避免工程對有關遺蹟的影響。

那條連接上述隧道與已拆卸房屋的樓梯通道遺蹟,具有中度的文物價值。為了 保存這樓梯通道遺蹟,以便詮釋上述隧道的用途,地下機房之設計需再作修 改,並預留緩衝地帶,以原址保留此遺蹟。由於地下機房再沒有空間可供縮 減,為了保留此通道遺蹟,地下機房惟有採取不規則形狀的佈局。此佈局不單 會令將來機房設施之運作和保養變得複雜,更需要進行較深的挖掘工程和興建 不規則形狀的機房外牆,這些都會增加施工的難度以及建築成本。

至於監獄操場,本項目將會保育和活化現有的 D倉。D倉是建築群內其中一幢 最早興建的建築物,被評為具有重要的文物價值。現有的 D倉是昔日「米字型 監獄大樓」佈局的一部份,該佈局覆蓋了現有的D倉、F 倉、監獄辦事處、D 倉新翼(位於現在D倉的西面)和監獄操場。為了保存現有的歷史建築物D倉、 F倉、以及監獄操場,擬建之奧卑利翼只可興建在沒有重要建築物的位置(即將 會拆除的D倉新翼和監獄辦事處的位置)。為了進一步保留米字型監獄大樓之地 基遺蹟,擬建之奧卑利翼地庫的面積已縮減,並預留了緩衝地帶。此外,擬建 連接奧卑利翼和亞畢諾翼新建築物之機電坑道走線亦相應作出修改,以盡量保 留米字型監獄大樓之地基遺蹟。這些修訂設計雖然可進一步減低對地基遺蹟的 可能影響,但奧卑利翼藝術廊之貯物及機房空間均要縮減。

除了實施上述措施以避免對現有遺蹟可能造成之影響外,受影響的遺蹟將會在 地下挖掘工程開展前以記錄方式保存,並會在地下挖掘工程期間進行考古監 察。在地下挖掘工程前亦會制定一份「考古工作計劃」予以執行。此外,更會 為工地員工提供入職培訓,以提高他們對地下考古遺蹟的認知並讓他們熟悉相 關的通報處理程序。

Summary

The Government of the Hong Kong Special Administrative Region (HKSAR) is partnering with the Hong Kong Jockey Club (HKJC) to take forward the conservation and revitalisation of the Central Police Station compound (CPS). Funded by the HKJC, the Project aims to transform a collection of historically significant buildings in the compound into a centre of heritage, arts and leisure facilities for the local community and overseas visitors. The project will complement the overall development of arts and culture in the city and adds an attraction with distinct Hong Kong character.

As part of the process to revitalise the CPS, the HKJC commissioned Purcell Miller Tritton LLP (PMT) in 2008 to prepare a Conservation Management Plan (CMP). The CMP was published in June 2008 and will serve as the basis for carrying out the revitalisation work of the site.

An Environmental Impact Assessment (EIA) Report was prepared and approved in April 2011 with the Environmental Permit granted for the construction and operation of the Project. Included in the EIA was a cultural heritage impact assessment involving a detailed desktop study and a nondestructive Ground Penetrating Radar survey of the CPS site. These studies identified 10 areas in the CPS site which may have archaeological potential.

The Project will conserve and revitalise 16 historic buildings as well as the upper and lower courtyards (commonly referred to as the Prison Yard and the Parade Ground). In order to minimise the intervention on the existing historic buildings, construction of two new buildings and one basement plant room are considered necessary to accommodate various arts facilities and essential building services to meet current functional and regulatory requirements. New uses will be provided in those historic buildings according to what they can offer with due regard for the history and unique ambience of the heritage site. The Workshops & Laundry and the Garage, which have been assessed to have low heritage value; and the General Office which is reported as intrusive in the CMP, will be carefully documented and removed.

As part of the design development, site investigations (SI) have been conducted to examine the nature of the ground conditions in those areas where new buildings and basement plant rooms are considered necessary. The SI works were carried out in two phases - from January to March 2011 and again from July to August 2011. Separately, the Project consultant, ERM-Hong Kong Ltd, was commissioned to prepare an Archaeological Investigation (AI) Report by utilising the field data compiled in the SI. The AI Report aims to evaluate the archaeological potential of the Site at those areas where ground excavation works are proposed. The consultant then carried out an archaeological impact assessment of the affected areas and recommended appropriate mitigation measures where necessary. After reviewing historic maps, old photographs and the SI findings, the following key features were identified:

- a tunnel underneath Parade Ground that connects to the service corridor of the Police Headquarters;
- building remains of the Gaol C at the Parade Ground (lower courtyard);
- a passageway with steps connecting the above tunnel to the demolished Offices of the A.S.P. (believed to be the Office of the Assistant Superintendent of Police) and the Chief Inspector building at the Parade Ground; and
- building foundation remains of the radial plan prison buildings at the Prison Yard (upper courtyard).

These discoveries confirmed the findings from previous desktop studies and would be helpful for enhancing the accuracy of existing historical maps and records. This in turn enables a detailed representation of the earlier buildings and assists in the interpretation of the whole site.

Other movable finds were mainly unearthed from fill materials with little heritage value.

While the design of the CPS Project had been conducted with due care to minimise the effect on existing historic buildings and possible archaeological potential areas, the archaeological impact assessment has revealed that there were still some impacts on the archaeological features. In this connection, various measures including the design revisions, archaeological buffer zones, archaeological watching brief and preservation by record are recommended under the AI report to mitigate the possible impacts on the archaeological features. These are described briefly below.

A tunnel underneath the parade ground connecting to the existing service corridor of the Police Headquarters was identified. In order to preserve the tunnel which is considered to have medium heritage significance, the basement plant room was redesigned to reduce its size to setback from the tunnel structure with a buffer zone to avoid it from the proposed construction works.

Among the buried materials exposed, the remains of Gaol C have high heritage significance as it belonged to one of the earliest buildings constructed on site.

In order to preserve the remains of Goal C in-situ, the size of the proposed basement plant room at the Parade Ground was further reduced and redesigned to avoid the remains with a buffer zone provided around these buried remains.

The passageway with steps connecting between the above existing tunnel and the demolished Offices of the A.S.P and Chief Inspector building is considered to have medium heritage significance. In order to preserve the passageway with steps, which helps the interpretation of the provision of the tunnel, the the layout design of the proposed basement plant room has been revised again to avoid the passageway with a buffer zone provided. Since there is no room for further reduction in size, an irregular layout has been adopted for the basement plant room to preserve the passageway with steps. Such layout would not only complicate the future operation and maintenance of the plant room, but also require deeper excavation which, together with the irregular perimeter basement wall, will increase the construction difficulty and building cost.

On the Prison Yard, the existing D Hall will be conserved and revitalized under the Project. D Hall has high heritage significance since it is one of the earliest buildings constructed within the site. In particular, the existing D Hall forms part of the former radial plan prison covering the existing locations of the F Hall, the D Hall annex (located at the west end of existing D Hall), the General Office and the Prison Yard. In order to preserve the existing historic buildings (including D Hall and F Hall) as well as the Prison Yard, the proposed OBW (Old Bailey Wing) new building has to be constructed within the area currently occupied by insignificant buildings (i.e. D Hall annex and General Office which will be removed). To further preserve the foundation remains of the radial plan prison, the basement footprint of the proposed OBW has been reduced to set back from the foundation remains with a buffer zone provided. Moreover, the alignment of the proposed utilities (E&M) services trench connecting the OBW and AW (Arbuthnot Wing) new buildings has also been revised to suit. While these design revision will further minimise the possible impact on the foundation remains but the spaces for art gallery storage and plant room of the OBW new building have to be reduced.

In addition to the above measures in avoiding the possible impact on the existing features, the affected remains will be preserved by record before ground excavation works and archaeological watching brief will be conducted during the ground excavation works. An Archaeological Action Plan will be prepared prior to commencement of the ground excavation works for implementation. Furthermore, induction briefings will be provided to site staff to raise their awareness of the underground archaeological remains and to familiarise themselves with the associated reporting procedures.

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1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Government of the Hong Kong Special Administrative Region (HKSAR) is partnering with the Hong Kong Jockey Club (HKJC) to take forward the conservation and revitalisation of the Central Police Station compound (CPS). Funded by the HKJC, the project aims to transform a collection of historically significant buildings in the compound into a centre of heritage, arts and leisure facilities for the local community and overseas visitors. The project will complement the overall development of arts and culture in the city and adds an attraction with distinct Hong Kong character.

As part of the process to revitalise the CPS, the HKJC commissioned Purcell Miller Tritton LLP (PMT) in 2008 to prepare a Conservation Management Plan (CMP). The CMP was published in June 2008 and will serve as the basis for carrying out the revitalisation work of the site.

An *Environmental Impact Assessment* (EIA) was prepared under the *Environmental Impact Assessment Ordinance* (*EIAO*). The EIA Report was approved under the *EIAO* on 18 April 2011 with the *Environmental Permit* (EP-408-2011) granted for construction and operation of the Project. The cultural heritage impact assessment (forming part of the EIA) included a detailed desktop study and a non-destructive Ground Penetrating Radar survey. These studies identified 10 areas in the CPS site which may have archaeological potential.

As part of the design development, site investigations have been conducted to examine the nature of the ground conditions in those areas where new buildings and basement plant rooms are proposed. These site investigation works were carried out in two phases from January to March 2011 and from July to August 2011.

In accordance with *Appendix Part A 2(i)* of the EP, an archaeological investigation report is required to fully present and analyze field data for subsequent detailed impact assessment during detailed design stage. The desktop findings from the CMP, the EIA Report and the recently completed SI for the Project provided representative and sufficient field data for an archaeological impact assessment. This Archaeological Investigation Report aims to evaluate the archaeological potential at areas where excavation works are proposed, evaluate the potential archaeological impact that may be caused by the excavation works, and recommend appropriate mitigation measures for those archaeological impacts identified.

1.2 PROJECT SITE

The location of the Project Site is shown in *Plate 1.1*. The CPS is bound by Hollywood Road to the north, Arbuthnot Road to the east, Chancery Lane to the south and Old Bailey Street to the west. It comprises three Declared

Monuments designated under the Antiquities and Monuments Ordinance in 1995. They are:

- Central Police Station;
- Former Central Magistracy; and
- Victoria Prison Compound.

For consistency, the terms used in *Section 3 Cultural Heritage Impact Assessment* of the EIA Report for the Central Police Station Conservation and Revitalisation Project (ERM 2011) are adopted in this Report. The site plan with the locations and names of each individual building is shown in *Plate 1.2*.

For the purpose of this Report, the CPS is divided into four platforms based on its stratified topography as illustrated in *Plates 1.3, 1.4, 1.5* and *1.6. Table 1.1* lists the buildings situated on different platforms.

Table 1.1Buildings Situated on Different Platforms

Platform Number	Existing Buildings within the Platform
Platform 1	 Central Police Station: Police Headquarters (Building 1); Married Sergeant's Quarters (Building 6); and Single Inspection Quarters (Building 7).
Platform 2 (2a &2b)	 Central Police Station: Armoury (Building 2); Barrack Block (Building 3); Married Inspectors Quarters and Deputy Superintendents House (Building 4); and Garage (Building 5).
	Central Magistracy (Building 9).
Platform 3	 Central Police Station: Ablutions Block (Building 8); and Superintendents House (Building 10).
	 Victoria Prison: A, B, C and E Halls (Buildings 11, 12, 13 and 15); East Extension of D Hall; Workshops & Laundry (Building 16); and Bauhinia House (Building 19).
Platform 4	Victoria Prison:D and F Halls (Buildings 14 and 17); andGeneral Office (Building 18).

1.3 STRUCTURE OF THE REPORT

Following this introductory section, the remainder of this *Report* comprises the following Sections:

Section 2 presents the methodology for the archaeological investigation;

Section 3 presents the summary of baseline conditions;

- *Section 4* presents the interpretation and evaluation of significance on the features identified from SI;
- *Section 5* presents the impact assessment and mitigation measures;
- Section 6 presents the conclusion; and
- *Section* 7 provides the bibliography.
- The following annexes are also included:
- *Annex A* Plates presenting maps and site plans
- *Annex B* Photographic Record of Features

2 METHODOLOGY

The methodology for this archaeological investigation comprises the following tasks:

2.1 TASK 1 – DESK-TOP RESEARCH

Comprehensive desktop research has been conducted with the findings detailed in the Conservation Management Plan (CMP) and the approved *EIA Report* (AEIAR-162/2011) of this Project. A summary of the findings are presented in *Section 3* below.

During the periods from January to March and from July to August 2011, site investigation (SI) works were conducted to examine the ground conditions at CPS for design purposes, in particular at areas where excavation works are proposed. The SI works within areas of archaeological potential were carried out under monitoring by an archaeologist. This is in line with the *Conservation Policy 6.3.4* of the *CMP*, which says "*Where any excavation work is planned this should either be investigated by archaeologists in advance or as a minimum they should have a watching brief.*" (PMT 2008: 122).

2.2 TASK 2 – ARCHAEOLOGICAL IMPACT ASSESSMENT

Based on the findings of previous desktop studies and the analysis of historic maps, old photographs and buried features identified from the SI findings, an interpretation of the buried features identified was conducted with their significance assessed. In assessing the significance of the features, each feature will be given a designation of significance, as defined in *Table 2.1* below, with reference to similar parameters adopted for assessing the standing buildings adopted in CMP (PMT 2008: 81 - 82) and the *Historic Buildings Assessment Criteria* adopted by AMO for graded historic buildings.

Table 2.1Criteria for Significance Evaluation

Significance	Parameters
High	Parameters considered:
	• Historic Interest: Features associated with significant historic events or figures and important in the historical development of Hong Kong
	 Architectural Interest: Excellent example of an architectural style or building type; excellent construction (design, decoration, construction material, craftsmanship) and with high aesthetic value;
	• With high social, group and local value;
	• High intactness (minimal disturbance); and
	• Very rarely found.
	High Significance defines features that are of such great cultural value tha total destruction or removal of the remains would be a great loss to local, regional or national heritage and would diminish the value of the feature.
	Acceptable treatments for features of high significance include:
	 Removal of inappropriate or intrusive features;

Significance Pa	arameters				
•					
	Conservation of the features to maintain or improve its condition.				
-	conservation of the reactives to maintain of improve his condition.				
Medium Pa	Parameters considered:				
•	Historic Interest: Features associated with historic events, figures and the historical development of Hong Kong in district/regional or community level;				
•	Architectural Interest: Good or very good example of an architectural style or building type; good construction (design, decoration, construction material, craftsmanship) and with medium aesthetic value;				
•	With medium social, group and local value;				
•	Medium intactness (medium disturbance); and				
•	Rarely found.				
cu po	edium Significance is used to describe features which retain a level of Itural importance, though with the realisation that partial impact is ossible. Acceptable treatments for features of medium significance clude:				
•	Allow non-major elements impact;				
•	Reuse of useful features' materials collected; and				
•	Any affected areas should first be fully recorded prior to removal.				
Low Pa	arameters considered:				
•	Historic Interest: Little association with the historic events, figures and importance in the historical development of Hong Kong;				
•	Architectural Interest: Ordinary example of an architectural style or building type; ordinary construction (design, decoration, construction material, craftsmanship) and with low aesthetic value;				
•	With low social, group and local value;				
•	Low intactness (high disturbance); and				
•	Commonly found.				
he	ow Significance is used to describe features where there is little cultural eritage present. Acceptable treatments for features of low significance clude:				
•	Reuse of useful features' materials collected; and				

Based on the significance evaluation result, an archaeological impact assessment was conducted in accordance with *EIAO Technical Memorandum Annexes 10 and 19* and the *Guidelines for Cultural Heritage Impact Assessment*. Preservation in totality has been taken as the baseline objective. In case if potential impacts on buried features identified are unavoidable, appropriate mitigation measures have been recommended to minimise the impacts.

2.3 TASK 3 – REPORTING

The report presented the baseline condition of the Project including review of the recently completed SI outcomes, interpretation of the identified features and evaluated their significance, and assessed the archaeological impact due to the construction and operation of the Project. Appropriate mitigation measures have also been recommended to minimise the impacts identified.

3 SUMMARY OF BASELINE CONDITIONS

The baseline condition of the CPS has been established and detailed in the CMP and the approved EIA Report is summarized below.

3.1 TOPOGRAPHIC BASELINE

The CPS is situated at the northwest part of the Hong Kong Island near the northern coast. The northern part of Hong Kong Island was heavily developed at the very beginning of the colonial period and the original coastline (see *Plate 3.1*) at the northern shore of the Island was reclaimed a number of times to the present location. The CPS is now surrounded by built urban environment. The 1843 and 1863 historic maps of the area as shown in *Plate 3.1*, indicate development commenced at the north of the CPS in 1843 and major roads around the CPS were developed in 1863.

The CPS is located not far from the original northern coastline at its north. To the southwest and southeast of the CPS is Victoria Peak (552m in height) and the Mount Gough (479m in height), respectively, and they are separated by the Victoria Gap. Review of 1843 and 1863 historic maps also indicated that number of south-north running streams adjacent to the CPS running from the mountains towards the sea. Based on the topographical condition of the area, the CPS is a possible location for human activities because it is well protected by the mountains at the south from strong wind; not far from the sea for water transportation and additional food supply; and supplied with fresh water from streams.

3.2 GEOLOGICAL BASELINE

The CPS is situated on Kowloon Granite (Klk), which are Cretaceous intrusive rocks with an approximate age of 140.4 ± 0.2 million years before present day. The lithology of Kowloon Granite is equigranular medium-grained biotite granite. Between the University of Hong Kong and the Central District, the granite is light grey to light pink, uniform, equigranular and medium-grained, with an average grain size of 3 to 4 mm. A NE-SW fault runs through the Victoria Gap. The superficial deposit of the CPS is debris flow deposit. (CEDD 2011) The geology map of the CPS and the adjacent area is shown in *Plate 3.2*.

3.3 HISTORICAL BASELINE

The CPS was first occupied by a prison and Chief Magistrate's residence, which were among the first buildings to be constructed in Hong Kong after colonisation in 1841. Early difficulties policing the new territory led to high arrest rates and within three years the prison was over capacity. The Colonial Police Force was established in 1844 to deal with law enforcement. The Superintendent of Police Charles May created a new prison in 1845 from the Chief Magistrate's residence; one half was converted into a Debtor's Prison and the other as a Gaoler's residence. Three cell blocks were also constructed: two for Chinese prisoners with communal cells and one for Europeans with individual cells (see *Plate 3.3*).

By 1851 the first Magistracy – a two storey structure with central courtroom – had also been constructed on the eastern edge of the CPS and large retaining walls had been built around the compound for security. There were several guard houses and look-outs within the perimeter walls, including Bauhinia House (building 19) (see *Plate 3.3*).

Further alterations in the 1850s included the construction of a Tread Wheel as a form of punishment for the prisoners, two Guard Houses and a Gaoler's House, and a new Debtor's Gaol to replace the original Goal building, which was in a poor state with filthy conditions for the inmates (see *Plate 3.4*).

Continued increase in the number of prisoners led to a complete redesign of the Victoria Gaol, based on popular radial plan prisons in the USA which had a central hall with radiating cell block (see *Plate 3.5* for design drawing of Radial Plan Prison, note that only the south-half of it was built). The new building (constructed 1858, now surviving only in part as D Hall, building 14) was located on the south side of the CPS, and had a T-shaped block containing cells and wings radiating diagonally and used as cook houses and a Goal Hospital. By 1864 the CPS was again suffering overcrowding, and all the prisoners were moved to a new gaol on Stonecutter's Island.

The north half of the CPS was quickly taken over as the Central Police Station and a new Barracks Block (building 3) was constructed in 1864 to provide accommodation for single and married Sergeants and Constables. The building was three storeys and situated east-west across the centre of the CPS, designed in the typical British Colonial style but with local adaptations such as verandahs and Chinese tile roofs. The A block of Officers' Quarters (building 4) was constructed in the north-east corner of the CPS at the same time. This could have marked the takeover of the whole CPS for police use, but in 1866 the prisoners were brought back from Stonecutter's Island to Victoria Gaol. From this time onwards the CPS was divided with the Central Police Station on the north half of the CPS and the Gaol on the south half (see *Plate 3.6*).

Presumably around the same time a Superintendent's House (building 10) was built at the south-east of the Barracks Block (see *Plate 3.6*). It was designed in a typically colonial style and featured a gabled roof of the same design as that on the Barracks Block. A blocked archway on the ground floor provided the main entrance to the prison.

The prison was by this point a remarkable architectural feature of Hong Kong and utilised the latest design theories in prison reform. In 1871, Japanese representatives visited the Victoria Gaol and used it as a basis for prison design under the Meiji reform. Reforms of the Police Force during the late 1860s and 1870s expanded the numbers of both Chinese and Indian officers. By 1880, the Force employed a total of 610 officers: 125 Europeans, 315 Chinese and 171 Sikhs. The expanding Force necessitated further accommodation. In 1906 an additional floor was added to the Barracks Block which reused of much of the original roof structure. Three blocks of new officers' quarters (only two survive; buildings 6 and 7) were constructed by 1908 in the north-east corner of the CPS (see *Plate 3.7*).

Overcrowding was a problem in the Gaol, though public opinion on a proposed extension was varied as the conditions in the prison, being far better than the prisoners' own homes, were not a deterrent to crime. It was reported that the Gaol "is already looked upon as a paradise by many a rascal". Despite these objections two new cell blocks (now demolished) were constructed in 1894 on the corner of Old Bailey Street and Staunton Street, to the west of the CPS. By 1887 the radial layout of the prison was being eradicated to provide a more efficient gaol. First was the demolition of the southwest wing to provide further yard space and a new workshop. At the same time the existing cells in the radial prison block were subdivided to provide individual cells.

The period between 1910 and 1920 saw a considerable amount of growth over the whole CPS. A new cell block (now demolished) was constructed in 1901 to replace the demolished southeast diagonal wing of the prison. A similar block (building 12, B Hall) was constructed in 1910 to the north of original cell block. Both provided space for 78 prisoners each (see *Plate 3.7*). In 1915 a further cell block building 15, E Hall) was constructed in the southeast corner of the CPS, and set on pillars over the lower yard. In 1917, the space adjacent to this cell block (building 16, Laundry) was also covered over to provide an additional exercise area for the prisoners (see *Plate 3.8*).

A new Magistracy (building 9) was built during 1912-1914 on the CPS of the earlier one, with its main classical design façade overlooking Arbuthnot Road (see *Plate 3.7*). The three storey building with a basement contained two large court rooms with associated offices and some officers' quarters. Extensive alterations were carried out to the top floor of this building in 1938 to insert a third courtroom.

The CPS was also expanded with the addition of a headquarters Block (building 1) on land purchased in the northwest corner of the CPS (see *Plate 3.8*). Construction started in 1916 and was completed in 1919. On the south side facing the Parade Ground the building had a more domestic, two-storey scale, while the north, public elevation was four storeys and of a much more imposing design.

There was then little space left on the CPS to expand the accommodation of either the Police Station or Gaol but smaller works were undertaken. In 1924 a new Armoury and Store (building 2) was built at the west end of the parade ground and in 1933 the veranda on the ground floor of this building was filled in to provide further storage. In 1927 a garage (building 5) for police cars

was constructed. Numerous other minor alterations were undertaken to all the buildings on CPS, such as the partitioning of rooms in the Barracks Block for offices of the Criminal Investigations Department (1928 - 9) and the construction of a new printing shop on the site of the workshop (in part building 17, F Hall) in the southwest corner of the CPS in 1929. In 1928 a new 'Reception Block' (building 11, A Hall) was constructed, in 1929 a building was constructed to the east of this for use as a male hospital and various offices (building 13, C Hall) and in the 1930s a new Ablutions block (building 8) was constructed west of the Reception Block (see *Plate 3.8*).

During the 1930s two new prisons were constructed at Lai Chi Kok and Stanley to once again try to solve the overcrowding problem. This left the Victoria Gaol for remaining prisoners, debtors, destitute and persons awaiting deportation.

Hong Kong was occupied by the Japanese from 1941 - 1945. The aerial bombardment caused damage to buildings of the Police Station and Prison, including the Headquarters Block. The Japanese then used the CPS as a military base during their three year occupation and by the time they surrendered little maintenance had taken place. After a programme of demolition, repair and reconstruction the CPS reopened in 1946.

Organisational changes took place in the Police Station and Gaol following the War. Female officers were first allowed into the Force in 1949. The Gaol was never used as a convict prison again - instead it was a remand prison. Various building functions were re-organised, such as the use of the Armoury and Store for the Traffic Police, the Parade Ground as a car park and a new radio control room on the top floor of the Barracks Block (later moved to the basement of the Headquarters Block for security). In 1956 F Hall was converted into use as the new Reception building, with the iconic blue gate on Old Bailey being built.

By the 1970s the prison was increasingly being used by the Immigration Office to detain illegal immigrants. In 1979 the Magistracy was converted for offices for the Immigration Department. The prison was also used as an institution for accommodating discharged inmates prior to repatriation or deportation. The Prisons Department was also reformed towards the end of the 20th century, changing its name to the Correctional Services Department and adopting the motto "We Care" to encourage team work and rehabilitation of offenders.

In the 1990s the CPS and Victoria Gaol were becoming less important with the construction of newer facilities across Hong Kong. The Central Police Station Compound, Magistracy and Victoria Gaol have been designated as Declared Monuments in 1995. By 2003 the decision had been made that the CPS would be redeveloped for tourism use and in 2006 the prison was officially decommissioned.

3.4 GROUND PENETRATING RADAR SURVEY RESULT SUMMARY

The process of carrying out site investigation began in August 2009 with the commissioning of a Ground Penetrating Radar (GPR) Survey to obtain field data. Detailed results of the GPR Survey are presented in *Annex A3* of the approved EIA Report and a summary of findings is presented below.

Generally, the survey revealed various areas of possible voids and loose materials typically occurring at 0.6 or 0.8m below the surface. The results of the GPR do not provide a clear indication of what these disturbances could be. There were several occurrences of utility cables and pipes ranging from 0.5 to 1.5 meters below ground.

The most substantial finding of the survey is a tunnel in the northwest corner of the Parade Ground, which runs south from the Headquarters Block (building 01) at the west end. The general location of this tunnel was previously known, though the GPR has identified its exact dimensions position and extent.

Another possible find is a series of drains in the Prison Yard, which appear to follow almost exactly the foundations of an earlier cell block in the southeast corner. This building was constructed in 1901 in an area previously occupied by the southeast wing of the radial plan prison, and was the first building to be designed in the style of the still remaining B and E Halls.

3.5 AREAS WITH ARCHAEOLOGICAL POTENTIAL

Based on the above desktop study findings, the following ten areas are considered to have archaeological potential to contain buried remains from the colonial period or even earlier period. The locations of these archaeological potential areas are presented in *Plate 5.1*.

- Parade Ground;
- Prison Yard;
- Barracks Lane;
- the Garage (building 05);
- the Married Inspector's Quarters and Deputy Superintendent's House (building 04);
- the area between A Hall (building 11) and B Hall (building 12);
- the area between and beneath Ablutions block (building 08) and the revetment wall to the south;
- west of D Hall (building 14);
- Laundry (building 16); and
- General Office (building 18).

Amongst these ten archaeological potential areas, there will not be any substantial excavation works proposed for the Garage (building 05) and the Married Inspector's Quarters and Deputy Superintendent's House (building 04). Therefore, further archaeological action will not be required for these two areas since there is no archaeological impact anticipated.

3.6 SITE INVESTIGATION FINDINGS SUMMARY

Under the Phase I SI works (conducted between January and March 2011), a total of 24 trial pits (i.e. T1 to T14, and T16, TP12, TP13, TP24, TP26, TP30, TP31, TP40, TP47 and TP48) fell within the archaeological potential areas. *Plate 3.9* presents the location of these trial pits with their dimensions presented in *Table 3.1*.

Table 3.1Phase I Trial Pits Dimensions

Trial Pits	Approximate Dimensions of the Pits (m)
Platform 2	
T1	1.5 (L) x 1.5 (W) x 1.6 (D)
T2	5 (L) x 1.5 (W) x 3.4 (D)
T3	3 (L) x 1.5 (W) x 2.25 (D)
T4	1.5 (L) x 1.5 (W) x 2 (D)
T5	1.5 (L) x 1.5 (W) x 1.4 (D)
T14	4 (L) x 2 (W) x 1.9 (D)
T16	4 (L) x 2 (W) x 3 (D)
TP12	1.5 (L) x 1.5 (W) x 0.64(D)
TP13	1(L) x 1 (W) x 1.5 (D)
TP47	2.65 (L) x 1.5 (W) x 1.5 (D)
TP48	1 (L) x 1 (W) x 1.5 (D)
Platforms 3 & 4	
Т6	4.25 (L) x 2.9 (W) x 1.5 (D)
T7	1 (L) x 1 (W) x 0.52 (D)
Τ8	4.8 (L) x 3 (W) x 1.95 (D)
Т9	2.5 (L) x 2.4 (W) x 1.5 (D)
T10	1.5 (L) x 1.5 (W) x 1.1 (D)
T11	21.86 (A) x 0.65 (D)
T12	1.5 (L) x 1.5 (W) x 0.78 (D)
T13	1.5 (L) x 1.5 (W) x 1.05 (D)
TP24	1 (L) x 1 (W) x 1.5 (D)
TP26	Combined with T6, see T6 above.
TP30	1 (L) x 1 (W) x 1.5 (D)
TP31	1 (L) x 1(W) x 1.5 (D)
TP40	1 (L) x 1 (W) x 1.5 (D)

Note: L=length; W=width; D= depth

Under the Phase II SI works (conducted between July and early August 2011), a total of 16 trial pits (i.e. TA1a, TA1b, TA2b, TA3a, TA3b, TA4, TA5a, TA5b, TA6a, TA6b, TA6c, TA6d, TA7, TA8, TA9 and TA10) fell within the archaeological potential areas. Their locations are shown in *Plate 3.9* with their dimensions presented in *Table 3.2*.

Trial PitsApproximate Dimensions of the Pits (m)				
Platform 2				
TA5a	2.5 (L) x 2.5 (W) x 1.5 (D)			
TA5b	5 (L) x 3 (W) x 1.2 (D)			
TA6a	2.5 (L) x 2.5 (W) x 1.2 (D)			
TA6b	2.5 (L) x 2.5 (W) x 1.5 (D)			
TA6c	2.5 (L) x 2.5 (W) x 3 (D) and 1 (L) x 0.6 (W) x 1.5 (D)			
TA6d	2.5 (L) x 2.5 (W) x 1.2 (D)			
Platforms 3 & 4				
TA1a	3 (L) x 1.4 (W) x 1.37 (D)			
TA1b	2.5 (L) x 1.9 (W) x 1.4 (D)			
TA2b	3 (L) x 2 (W) x 1.8 (D)			
TA3a	5.2 (L) x 1.1 (W) x 0.6 (D)			
TA3b	2.4 (L) x 2 (W) x 0.55 (D)			
TA4	2 (L) x 1 (W) x 1.5 (D)			
TA7	3 (L) x 1(W) x 1.44 (D)			
TA8	1.5 (L) x 1.5 (W) x 1.2 (D)			
TA9	1.5 (L) x 1.5 (W) x 1.2 (D)			
TA10	1.5 (L) x 1.5 (W) x 0.97 (D)			

Table 3.2Phase II Trial Pits Dimensions

Note: L=length; W=width; D= depth

3.6.1 Summary of Findings

A total of 43 features were recorded from the SI. These features are summarized in *Table 3.3* below and their photographic records are shown in *Annex B*.

Table 3.3Features Identified from the SI

Feature Code	Feature Description	Trial Pits	Existing Condition	Page No of Photographic Record of the Feature in Annex B
Platform	2			
Parade Gi	round			
F3	Remains of wall sections built with granite blocks and grey bricks paved external floor	T3, T14	Fair	1
G7	Ditch lined with granite blocks of F3	T3, T14	Good	2
S12	Tunnel built with concrete bricks and red bricks	N/A	Good	3

Feature Code	Feature Description	Trial Pits	Existing Condition	Page No of Photographic Record of the Feature in Annex B
S2, S9	Two parallel wall structures built with red bricks and concrete blocks and with steps in between	T16, TA5b	Fair	4
F4, F6	Remains built with red bricks	T16, TA5b	Fair	5
WF8	Granite blocks and red bricks remains	TA5a	Fair	6
S1, S5	Vaulted structure built with grey bricks and concrete	T2, TA6a, TA6b, TA6c	Poor	6 - 9
S3	Structure built with red bricks and concrete	TP47	Fair	7
S7	Remains of structure built with granite blocks and grey bricks	TA6a, TA6d	Fair	8
S11	Structure built with granite blocks and grey bricks	TA6c	Poor	9
G1	Pipe trench	T4	Fair	9
G2	Pipe trench	T4	Fair	10
G3	Pipe trench	Т5	Fair	10
G4	Pipe trench	Т3	Fair	11
G5	Pipe trench	Т3	Fair	11
G6	Pipe trench	T2, T14	Fair	1, 12
G11	Pipe trench	TA6b	Fair	12
G12	Pipe trench	TA6d	Fair	13
G14	Pipe trench	TA5a	Fair	13
G8, G13	Ditch lined with granite blocks	T16, TA5a	Fair	14
Platforms	3 & 4			
Prison Ya	rd			
WF2	Parallel granite blocks of foundation remains with grey bricks	TA2b	Good	15
WF 3	Granite blocks of foundation remains with grey bricks	TA2b	Good	15
WF 4	Granite blocks of foundation remains	TA2b	Good	15
WF 5	Granite blocks of foundation remains	TA2b	Good	15
F1a	Granite blocks of foundation remains	T8, T9	Fair	16
F1b	Granit blocks and grey bricks of foundation remains	T11	Fair	17
WF1	Granite blocks of foundation remains	TA2b	Fair	17
PF1	Granite blocks paved surface	T7	Fair	18
Between A	A & B Halls			
F2	Granite blocks of foundation remains	T6 (TP26)	Fair	18
Workshop	os & Laundry			
WF6	Granite blocks of foundation remains	TA1b	Good	19

Feature Code	Feature Description	Trial Pits	Existing Condition	Page No of Photographic Record of the Feature in Annex B
G15	Pipe trench	TA1b	Fair	19
G16	Pipe trench	TA1b	Fair	19
G10	Pipe trench	TA1a	Fair	20
S6	Structure built with red bricks and concrete	TA1a	Poor	20
F5	Remains built with red bricks and cement flooring	TA3a	Fair	21
M1	Remains of two parallel metal tracks	TA3a	Fair	21
S4	Structure built with red bricks and cement finishing	TA3b	Fair	21
S10	Structure built with concrete	TA9	Fair	22
WF7	Granite blocks of foundation remains	TA9	Fair	22
S8	Structure built with grey bricks	TA4	Poor	22
G9	Trench built with red bricks	TA3b	Fair	23
G17	Trench built with red bricks	TA10	Fair	23
G18	Trench built with broken grey bricks	TA8	Poor	24

Note:

 Features with two feature codes are features identified in both Phase I and Phase II SI works with a different feature code assigned under each Phase;

(2) N/A = not appropriate; and

(3) No features were identified in T1, T10, T12, T13, TA7, TP12, TP13, TP24, TP30, TP31, TP40 and TP48.

In addition to the above features identified, some movable finds were unearthed from the SI included pottery, porcelain, stone, metals, bones, bricks, roof tiles, floor tiles, shells, glass, charcoals, opium container, construction wastes, copper coins, pottery smoking pipes and tooth brush. All the finds collected were from fill materials with little heritage value.

4 INTERPRETATION AND EVALUATION OF SIGNIFICANCE ON THE FEATURES IDENTIFIED FROM SI

4.1 INTRODUCTION

This section provides an interpretation and evaluation of the significance of the features identified from the SI. In the explanatory statement of *Conservation Policy* 6.3.4 of the CMP, it says "*The site has been in continuous use since* 1842.... *There is likely to be evidence in some buildings of earlier structures that have been incorporated into lower levels of the newer buildings. There will be the remnants of earlier buildings below most of the non built on areas of the gaol. The careful examination of these early footings and foundations will add considerably to the understanding the development of the site...."* (PMT 2008:122). The SI findings have provided representative field data to help improve the understanding of the site.

In order to cross reference the findings of the trial pits with the historical maps for analysis, the current site plan marked with the pits conducted from the SI is overlaid on historical plans of the CPS in years 1852, 1856, 1887, 1914 and 1936 as presented in *Plates 4.1, 4.2, 4.3, 4.4* and 4.5 respectively.

4.2 **PLATFORM 1**

Although some trial pits were conducted in this Platform, they fell outside the archaeological potential areas and therefore no impact is anticipated.

4.3 *PLATFORM* 2

A total of seventeen (17) trial pits (T1, T2, T3, T4, T5, T14, T16, TA5a, TA5b, TA6a, TA6b, TA6c, TA6d, TP12, TP13, TP47 and TP48) were excavated in this Platform, most of which were located in the Parade Ground. Detailed locations are shown in *Plate 3.9*.

The features identified are listed in *Table 3.3* and their interpretations are detailed below.

Parade Ground

4.3.1 REMAINS OF GAOL C (FEATURES F3 AND G7) (1845-1858)

According to the CMP prepared by PMT (2008: 12-15), Gaol C was a cell block constructed during the alteration of the Victoria Gaol in 1845, together with Gaols A and B and a Guard House occupied the present day Parade Ground, the Barrack Block and Armoury building. Gaol C was indicated as "Jail C" in the 1852 plan and later retitled as "Gaol C" in the 1856 plan. Gaol C was a cell block built to house European Prisoners. Alteration of Gaol C had been carried out in 1851, which comprised the construction of an additional storey and the relocation of building entrance was changed from facing north to facing west. The plans of Gaol C in 1845 and 1851 are presented in *Plate 4.6*.

From analysis of the historic plans of Gaol C, it is believed that the remains found in trial pits T3 and T14 is the remains of the former Gaol C of Victoria Gaol as shown in the 1852 historic plan (see *Plates 4.1* and *4.6*). Two features identified from those plans supported this view. The first feature is shown on the 1851 plan, in the lower part of the ground plan, a line written "Pitching of Brick and Chunam" provides clue to the outdoor paving style and construction methods. "Pitching" could mean paving; and "Chunam" is a style of plastering. This description is consistent with the finding of grey brick paved flooring. Although no plaster was found on the brick surface, it is believed that the "Chunam" could refer to the mortar used to bond bricks and the granite lined ditch (feature G7).

The second feature is the entrances of the building revealed by comparing the Gaol C plans of 1845 and 1851. It is observed that the entrance to Gaol C had been altered from facing north in 1845 to facing west in 1851. In the 1845 plan, the entrance led directly to the central walkway between cells; while in the 1851 plan, the entrance led to a partition first before entering the central walkway. The number of cells on the ground floor did not change in the 1851 plan; but note that the former entrance had been blocked and altered to be a window; and the cell at the northwest corner was altered and opened with a new entrance. The trace of alteration has been revealed and confirmed in the northern part of trial pit T14. The three stone blocks and the perpendicular one on top of them were the steps to the newly opened entrance illustrated in 1851 plan. The grey finishing behind (east of) the three stone blocks was the finishing of the wall, but being covered by the later built stone blockwork steps.

The remains of Gaol C formed part of the earliest buildings of the earliest establishment of prison system introduced in Hong Kong by the British. The findings provide us deeper understanding of the history and therefore have high historic interest and high social, group and local value.

These remains (feature F3) included sections of granite blocks built walls at approximately 1.15m high and grey brickwork paved external floor in trial pits T3 and T14. The upper part of the wall had been destroyed due to previous construction works and the presence of site utilities and a disturbance of layer 3 of trial pit T14 had truncated the north wall of the revealed feature in trial pit T14 suggesting the northwest corner of Gaol C had been disturbed. The degree of disturbance is considered medium. In addition, ditch lined with granite blocks (feature G7) associated with feature F3 was identified. The ditch was found at the edge of the grey brickwork paved external floor. The ditch was built with no signs of disturbance observed and considered to be in good condition. The overall condition of the remains is considered as fair.

Review of old maps and the existing site condition enable the establishment of the indicative footprint of the Gaol C (see *Plate 5.2*). It is believed that further remains of the Gaol C may still survive east, north and south of trial pits T3 and T14 but considered to be partly damaged. The damaged areas included the northeast and southern parts of the footprint of Gaol C where the

existing tree roots in place and the previous construction of the Barrack Block should have partly damaged the building remains in these areas.

These building remains comprised revealed various elements of the building including grey bricks paving, a granite blockwork lined ditch and the lower parts of wall sections. Similar discovery in the urban areas of Hong Kong is very rare. Since Gaol C was intended as a gaol, it might be constructed as a simple building structure with small doors and windows. While the building was not constructed with any decorative features, its discovery assisted us in understanding the construction method and materials, the structural and architectural designs adopted for construction of the building at the beginning of British colonization. As such, its architectural interest is regarded as medium.

Table 4.1 below summarized the significance evaluation of the remains of the Gaol C.

Table 4.1	Heritage Significance	Evaluation	of Remains of	of Gaol C (Fe	atures F3 and G7)
	8 8 9			· · · · · · · · · · · · · · · · · · ·	

Evaluation Parameters	Degree of Significance	
Historic Interest	High	
Architectural Interest	Medium	
Social, group and local value	High	
Intactness	Medium	
Rareness	Very Rare	
Overall	High	

Based on the evaluation as presented in *Table 4.1*, the overall heritage significance of the remains of Gaol C is regarded as high.

4.3.2 A TUNNEL (FEATURE S12) (1910s - PRESENT)

There is an existing tunnel located underneath the Parade Ground. The tunnel can be accessible from the existing service corridor to the south of the Police Headquarters. As shown in *Plate 5.2* the tunnel extends from the Police Headquarters to a dead end underneath the Parade Ground with the interior dimension of approximately 11.8m (L), 1.8m (W), 2.1m (H). At the southern end east wall of the tunnel, a blocked opening was observed suggesting that the tunnel was once opened and connected to somewhere leading to the east but such entrance was blocked (see *Plate 5.2*). The existing condition of the tunnel is good.

The tunnel walls were built with concrete blocks and red bricks. Based on the observation within the tunnel, the N-S running walls were built with six courses of concrete blocks in English bond pattern; then six courses of red bricks were laid above the concrete blocks; an H-pile was then placed above the sixth course of the bricks; and then more bricks were laid on top of the Hpile but as the bricks were finished with cement, the number of courses cannot be observed. For the east-west running wall at the end of the tunnel, no H- pile was installed and red bricks were laid above the concrete blocks. The floor of the tunnel was paved with cement.

The top of the tunnel (i.e. the ceiling) was constructed with a series of reinforced concrete arched beams. As observed in the fill of S2 in trial pit T16 located at the southern end of the tunnel, the arched beams are T-shape in section. The ceiling of the tunnel was painted white.

The tunnel was a simple structure built with modern materials such as reinforced concrete, concrete blocks and red bricks. While its architectural interest and its social, group and local value are considered as low, it is considered a rare finding in the vicinity.

The material used for the tunnel construction suggested that it was built during the period when the present Police Headquarters building was constructed. As no traceable historical record has been found regarding the history of the tunnel, the physical evidence provides us information to understand its history and therefore it is of medium historical interest.

Table 4.2 below summarized the significance assessment of the tunnel.

Table 4.2	Heritage Significance Evaluation of the Tunnel (Feature S12)
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Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Low
Social, group and local value	Low
Intactness	High
Rareness	Rare
Overall	Medium

Based on the assessment as presented in *Table 4.2*, the **overall heritage significance of this tunnel is regarded as medium.**

4.3.3 A PASSAGEWAY WITH STEPS (FEATURE S2 / S9) CONNECTING AN EXISTING TUNNEL TO THE REMAINS OF OFFICES OF A.S.P. (BELIEVED TO BE THE OFFICES OF THE ASSISTANT SUPERINTENDENT OF POLICE) AND CHIEF INSPECTOR BUILDING (FEATURE F4/F6) (1910S TO1916 AFTER CONSTRUCTION OF FEATURE F4/F6)

As mentioned in *Section 4.3.2* above, there is an existing tunnel beneath the parade ground and a blocked entrance was observed on the east wall at the southern end of the tunnel. T16 was therefore excavated by the east wall at the southern end of the tunnel and confirmed that the blocked entrance was connected to an east-west oriented passageway (feature S2/S9) built with two parallel walls built with red bricks and cement blocks with steps leading to the east to ground level. This passageway was found in trial pit T16 and it extends east and ends with steps leading to ground level in trial pit TA5b. The passageway was purposely filled with soil, construction waste and

boulders as part of the sub base for the present parade ground. Its condition is considered fair.

According to the as-found features and review of historic plans, it is believed that the passageway had provided a link between the Police Headquarters building and the former Offices of A.S.P and Chief Inspector building through the existing tunnel.

The top of the walls of the passageway are located at a shallow level (some 0.3m from existing ground level). Based on the stratigraphical relationship of feature S2 in trial pit T16 and feature S9 in trial pit TA5b and feature F4/F6 located to the south of feature S2 / S9, features S2/S9 was built later than feature F4/F6. While the discovery is of low social, ground and local value, it has medium historic interest as it provides some indication of the function of the existing tunnel and the spatial use of the Site.

The feature is a common simple structure constructed with ordinary materials, its architectural significance is considered as low.

Table 4.3 below summarized the significance assessment of the passageway with steps.

Table 4.3Heritage Significance Evaluation of a Passageway with Steps (Feature S2 / S9)

Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Low
Social, group and local value	Low
Intactness	Medium
Rareness	Common
Overall	Medium

Based on the assessment as presented in *Table 4.3*, the **overall heritage significance of the passageway with steps is regarded as medium**.

4.3.4 REMAINS OF OFFICES OF A.S.P. AND CHIEF INSPECTOR BUILDING (FEATURE F4/F6) AND A WALL FOUNDATION REMAINS (FEATURE WF8) (1910S TO 1916)

Review of the 1914 site plan indicates that trial pits T16, TA5a and TA5b revealed with features are situated on the Offices of A.S.P. and Chief Inspector building (Building G as shown on the 1914 plan) of CPS (see *Plate 4.4*). The building, together with the Store and the matsheds for Chinese (Building F and J respectively on 1914 plan), were demolished in 1916 by a contract let to Messrs. Sang & Lee Co. to give way for the development of the Headquarters Block (which was approved by the Governor in 1913) (PMT 2008: 36). Based on those historical plans of the CPS, before 1916, the west part of the Parade Ground (before Platform 2b was built) were occupied by Gaols A & B, that is,

between 1845 and 1858; the Store and the Office after c.1890⁽¹⁾. Gaol C should be constructed similarly to Gaols A & B with granite blocks and grey bricks as they were built during the same period. Since the as-found feature was constructed with red bricks, it is likely the remains of the Offices of A.S.P. and Chief Inspector building rather than the Gaols A and B.

The above feature (feature F4/F6) at the southern section of trial pits T16, TA5a and TA5b, had been cut by feature S2/S9 at north in trial pit T16, and at northwest in trial pit TA5b. The stratigraphical relationship between feature F4/F6 and S2/S9 indicated that the passageway with steps was constructed later than the remains of the Offices of A.S.P and Chief Inspector building. This reflected that the Offices of A.S.P. and Chief Inspector building had been altered.

In addition, granite blocks and red bricks of foundation were found in trial pit TA5a (feature WF8). It is aligned east-west, in the same direction as the foundation of feature F4/F6. Review of an old photo dated around 1910s (see *Plate 4.7*) showing some buildings on the parade ground indicates that the Offices of A.S.P. and Chief Inspector building was constructed with a verandah. It is possible that feature WF8 is the foundation remains associated with the verandah.

Features F4/F6 and WF8 provide physical evidence to further understand the demolished Offices of A.S.P. and Chief Inspector building as shown in the 1914 plan. The building was short-lived and demolished after erection for about two years. It is believed that the building was built for temporary use to cope with the crowded conditions of the police station prior to the construction of the Headquarters building. Since it was only a temporary building that had been altered substantially, its historic and architectural interest, social, group and local value as well as its intactness are considered to be low. Similar red-bricks standing structures are commonly found within the Site as well as in the vicinity.

Table 4.4 below summarized the significance assessment of the remains of Offices of A.S.P. and Chief Inspector building.

Table 4.4Heritage Significance Evaluation of the Remains of Offices of A.S.P. and Chief
Inspector Building (Feature F4/F6)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

(1) A photo taken c1890 shows no sign of other structure in the Parade Ground.

Based on the assessment as presented in *Table 4.4*, the **overall heritage significance of the remains of the Offices of A.S.P. and Chief Inspector building is regarded as low.**

4.3.5 A Vaulted Structure (Feature S1 / S5) (BETWEEN 1864 AND PRE-1904)

A rectangular layout vaulted structure constructed with grey bricks and cement (feature S1/S5) was unearthed in trial pits T2, TA6a, TA6b and TA6c. The dimensions of the structure are approximately 10.5m (L), 6 m (W) and 3.5m (H). The top of the structure is approximately 51cm below ground level. Its interior width is 3.9m. It has a flat bottom, straight walls on both sides and a vaulted top but most of the vaulted top was destroyed for the purpose of filling the interior void to take up the heavy traffic loading on the present Parade Ground. The condition is considered poor and damaged with low intactness.

According to the observation from the Conservation Architect of PMT, it is possible that this structure was used for water storage: a pre-1904 historic photo (see *Plate 4.8*) shows a manhole near this location; horizontal water marks were visible on the interior side walls; and the use of a cement lining on the walls and bottom would not have been used without specific reason.

The stratigraphy relationship between trial pits TA6a to TA6d suggests that this vaulted structure was possibly cut into the structure (i.e. feature S7) found in trial pit TA6d. In 1858, all the earlier buildings except the Magistracy and Governor's house were demolished (PMT 2008:53) and the Barrack Block as shown in the pre-1904 photo was constructed in 1864. Based on these dates, it is believed that this vaulted structure was probably constructed sometime between 1864 and pre-1904.

The discovery is of low historic and architectural interest and low social, group and local value as it is merely a simple utility structure of the Site and grey brick structure was commonly use at the time and standing grey brick structures still exist on site and in the vicinity such as the tenement buildings in the area.

Table 4.5 below summarized the significance assessment of the vaulted structure.

Table 4.5Heritage Significance Evaluation of A Vaulted Structure (Feature S1 / S5)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.5*, the **overall heritage significance of the vaulted structure is considered low.**

4.3.6 A RED BRICK AND CONCRETE BUILT STRUCTURE (FEATURE S3) (NOT EARLIER THAN 1914)

In trial pit TP47, a red brick and concrete built structure was unearthed. It is located on Platform 2b which was an extension of Platform 2a for connection of the 1916-built Headquarters Block to the present parade ground. As the 1914 plan did not show Platform 2b, the structure should be built after 1914. This is a simple structure with low intactness and there is no traceable written record or historic maps or photos to confirm its nature. Based on the observation of the as-found feature, it is possible that the structure was used as some kind of an anchor to retain soil stability. It is believed that the structure is an ancillary structure of low historic and architectural interest and therefore not recorded in historic plans. Due to the ancillary nature of the structure and similar building materials structure is commonly found, its social, group and local value is low.

Table 4.6 below summarized the significance assessment of the structure.

Table 4.6Heritage Significance Evaluation of a Red Brick and Concrete Built Structure
(Feature S3)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.6*, the **overall heritage significance of the structure is considered low.**

4.3.7 Grey Bricks and Granite Blocks Remains of External Floor and Wall Foundation (FEATURE S7) (1845-1858)

In trial pit TA6d, the remains of a structure built with granite blocks and grey bricks (feature S7) were found. The remains extended into the north, east and south walls of trial pit TA6d, and reaching east wall of the trial pit. The remains comprise three components: paved floor, granite blockwork lined ditch with a grey brickwork bottom, and granite block foundation. The remains had been disturbed by a trench (feature G12) running approximately northeast-southwest, cutting the granite block foundation, and some of the grey brickwork paving were possibly removed, causing some disturbance of the structure. The overall condition is considered poor. The construction materials used was common at the time and similar example has been found

on Site with better condition. The remains is therefore of low architectural interest.

Review of plans of 1852, 1856 and 1914 suggests that the as-found feature S7, is located in proximity to the footprint of a guard house as shown in the 1852 and 1856 plans and a matshed (Building J) on the 1914 plan.

The matshed indicated in the 1914 plan and an old photo showing the matshed (see *Plates 4.4* and *4.7*) suggest that the standing structure was temporary in nature and was a simple structure which probably did not require granite blockwork foundation to support it. Red bricks seem to be more commonly used in the period for construction of similar structures on Site (e.g. Police Headquarters and E Hall). Therefore, it is believed that the structure was not associated with the matshed.

Observation of the remains shows that granite blocks foundations and grey bricks materials similar to the remains of Gaol C as revealed in trial pits T3 and T14 were used. The remains are found located in close proximity to the footprint of a guard house as shown in 1852 and 1856 old maps. Therefore, the structure was possibly built in similar period but at a higher ground level, suggesting that it might have been constructed later than Gaol C. As the structure may be related to the earliest buildings of the Site, it is of medium historic interest. Nevertheless, review of the 1856 plan and the vaulted structure indicated that if this structure is part of the guard house remains, the southern portion of the guard house would have been seriously damaged or even destroyed by the vaulted structure. Its intactness, as well as its social, group and local value is low.

Table 4.7 below summarized the significance assessment of this structure.

Table 4.7Heritage Significance Evaluation of Grey Bricks and Granite Blocks Remains
of External Floor and Wall Foundation (Feature S7)

Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.7*, the **overall heritage significance of the structure is considered to be low.**

Structure Built with Granite Blocks and Grey Bricks (FEATURE S11) (1845-1858)

A structure built with granite blocks and grey bricks (feature S11) was found in the south wall of trial pit TA6c. The eastern half of the structure was built

4.3.8

with three layers of granite blocks with a hole that may have been for drainage. The western part was built with two courses of grey bricks, but the arrangement appears to be quite random, indicating that this section has been disturbed. The condition of the structure is considered to be poor with low intactness.

Review of plans of 1852, 1856 and 1914 suggests that the as-found feature S11, is located in proximity to the footprint of a kitchen building as shown in the 1852 and 1856 plans and a matshed (Building J) on the 1914 plan.

The matshed indicated in the 1914 plan and an old photo showing the matshed (see *Plates 4.4* and *4.7*) suggests that the standing structure was temporary in nature and was a simple building which probably did not require granite blocks foundation to support it. Red bricks seem to be more commonly used in the period for the construction of similar structures on Site (e.g. Police Headquarter and E Hall). Therefore, it is believed that the structure was not associated with the matshed.

The remains were built with granite block and grey brick similar to the materials used for construction of Gaol C and it is located in proximity to the footprint of a temporary structure (kitchen) as shown in 1852 and 1856 old maps. It is possible that the remains may associate with the drainage structure of the kitchen. The structure was probably built during a similar period but at a later stage as it was constructed at a higher ground level. While it has medium historic interest, its social, group and local value, as well as architectural interest are low as similar structures are commonly found on Site.

Table 4.8 below summarized the significance assessment of the structure.

Table 4.8Heritage Significance Evaluation of Structure Built with Granite Blocks and
Grey Bricks (Feature S11)

Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.8*, the **overall heritage significance of the structure is considered to be low.**

4.3.9 PIPE TRENCHES

Features G1 to G6, G11, G12 and G14 are pipes trenches. All these pipes trenches were constructed to accommodate utilities, such as drainage and cable, which are commonly found at many locations within the Site. While a

comprehensive underground utilities plan for the Site is not available, SI revealed that all pipes appeared in the trenches had been abandoned or damaged with low intactness. Based on the stratigraphical information, their dating is summarized in *Table 4.20*.

These features are of low historic and architectural interest with low social, group and local value due to their ancillary nature.

Table 4.9 below summarized the significance assessment of these pipe trenches.

Table 4.9Heritage Significance Evaluation of Pipe Trenches (Features G1 to G6, G11,
G12 and G14)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.9*, the **overall heritage** significance of these abandoned underground utilities trenches is low.

Feature G8/ G13 is trench with ditch lined with granite blocks. The material used for its construction was common at the time. It is located north of feature WF8 in trial pit TA5a and extended to trial pit T16. Its style is different from feature G7 found in trial pits T3 and T14 which suggests it was built in a later period. Feature G8/ G13 was probably constructed as surface drainage and left abandoned with low intactness. It might be possible that it is a surface drainage outside the remains of Offices of A.S.P. and Chief Inspector building and abandoned after demolition of such building. Based on the stratigraphical information, its dating is summarized in *Table 4.20*.

It is of low historic and architectural interest and low social, group and local value due to its ancillary nature.

Table 4.10 below summarized the significance assessment of the trench.

Table 4.10Heritage Significance Evaluation of Ditch Lined with Granite Blocks (Feature
G8/G13)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common

ENVIRONMENTAL RESOURCES MANAGEMENT

Evaluation Parameters	Degree of Significance
Overall	Low

Based on the assessment as presented in *Table 4.10*, the **overall heritage significance of Feature G8/ G13 is low.**

4.4 PLATFORMS 3 AND 4

A total of twenty-three (23) trial pits (T6, T7, T8, T9, T10, T11, T12, T13, TA1a, TA1b, TA2b, TA3a, TA3b, TA4, TA7, TA8, TA9, TA10, TP24, TP26, TP30, TP31 and TP40) were excavated in these Platforms. Detailed locations are shown in *Plate 3.9*.

The features identified are listed in *Table 3.3* and their interpretations are detailed below.

<u>Prison Yard</u>

4.4.1 REMAINS OF RADIAL PLAN PRISON (FEATURES WF2, WF3, WF4, WF5, WF6, F1a AND F1b) (1858)

A radial plan prison was built on site in 1858 with reference to the design of Eastern State Penitentiary in Philadelphia, USA (PMT 2008: 18-20). Such design was a popular prison layout design of the period in Britain and in USA and was considered to be an advanced design at the time.

The radial plan prison marked one of the important achievements in the development of Hong Kong prison system. It also demonstrated the measures adopted by the British for the constant problem of housing convicts in Hong Kong at the time. For the Site itself, the development of a radial plan prison was one of the major transformations of the Site, which concentrated the entire gaol system on the south portion of the Site. It was constructed following the design of two British architects, John Haviland and William Crawford, and this design is rarely found outside the UK and the USA (PMT 2008: 87).

The historic plan of 1887 (see *Plate 4.3*) shows the layout of the radial plan prison on site constructed in 1858. The east wing and west wing of D Hall still standing on site are the only remaining above ground structures of the radial plan prison. It has been assessed to have high significance in the CMP (PMT 2008:87) which will be conserved and revitalized under this Project. Two trial pits (TA1a and TA1b) at the foot of D Hall were conducted at Platform 3 adjacent to the Workshops & Laundry area to obtain field data regarding the foundation characteristic of the radial plan prison. Foundation built with granite blocks (feature WF6) were found in trial pit TA1b belongs to the foundation of the existing D Hall, which is regarded as high heritage significance. Other above ground structures of the radial plan prison had been demolished and replaced by buildings constructed afterwards such as the General Office, the F Hall and D Hall annex (located at west end of existing D Hall).

Study of the historical plan and the development history of CPS reveal no other building stood on the locations of trial pits T8, T9, T11, TA2b before the existing General Office and the D Hall annex, except the radial plan prison. Therefore, the remains unearthed in trial pits T8, T9, T11, TA2b are regarded as foundation remains of the former radial plan prison. It is of medium historic interest as the findings provide further detailed information regarding the foundation of the demolished parts of the radial plan prison. Its social, group and local value is considered medium as the radial plan prison marked a significant establishment of the prison system in Hong Kong by the British. Similar example of finds is rarely found in the urban areas of Hong Kong but the construction materials used was common at the time.

The remains mainly comprised granite blocks and grey bricks (features WF2, WF3, WF4, WF5, F1a and F1b) built structures. Similar materials and construction method was adopted for construction of the radial plan prison but there are variations due to the original topography of the site. The findings provide information to understand the construction method and materials used for the construction of the radial plan prison, which would assist research into the colonial architecture of Hong Kong in the mid to late 19th century and this form of prison building and therefore with medium architectural interest. However, they are found to be partly damaged with medium intactness due to modern intrusions such as the presence of underground utilities at the prison yard and the construction of later buildings such as the General Office, the D Hall annex and the F Hall.

Table 4.11 below summarized the significance assessment of the remains of the radial plan prison.

Table 4.11	Heritage Significance Evaluation Remains of Radial Plan Prison (Features
	WF2, WF3, WF4, WF5, WF6, F1a and F1b)

Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Medium
Social, group and local value	Medium
Intactness	Medium
Rareness	Rare
Overall	Medium

Based on the assessment as presented in *Table 4.11*, the overall heritage value of the remains of the radial plan prison is regarded as medium.

4.4.2 GRANITE BLOCKS OF FOUNDATION REMAINS (FEATURE WF1) (MODERN)

In trial pit TA2b, two granite blocks were found at the southwest corner. The granite blocks are aligned head-to-head, north-south oriented. The blocks are found resting on a thick layer of soil, separating them from the radial plan prison foundation (feature WF3) below. Since the granite blocks of foundation remains (i.e. feature WF1) is simply constructed and seriously disturbed, its existing condition is considered poor with low intactness. Also, it does not associate with other foundation remains of the radial plan prison found in trial pit TA2b. Review of D Hall annex building plans indicated that the layout of D Hall annex had been altered. It is believed that feature WF1 was the foundation of the previous layout of the D Hall annex prior to alternation. D Hall annex is a modern building and therefore the foundation is considered to have low architecture and historic interest. Its social, group and local value is low as it was merely the remains of an alteration work of a modern structure without heritage value commonly found.

Table 4.12 below summarized the significance assessment of the foundation remains.

Table 4.12	Heritage Significance Evaluation Granite Blocks of Foundation Remains
	(Feature WF1)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.12*, the overall heritage significance of the foundation remains is regarded as low.

4.4.3 GRANITE BLOCKS PAVED SURFACE (FEATURE PF1) (1858 -1946)

In trial pit T7, a granite blocks paved surface was found. The granite blocks are aligned head-to-head in an east-west direction, forming a randomly coursed bond pattern on the surface. The granite blocks were laid vertically with their long, narrow sides exposed. They are of different length but similar width. The northwest corner of the surface in trial pit T7 had been destroyed. Review of historic plan and analysis of the as-found feature suggests that this paved surface was probably the external floor of the demolished west-wing of Radial Plan Prison. It is an ancillary feature of the Site associated with the radial plan prison. Therefore its social, group and local value is low and the historic interest is low.

Feature PF1 is a simple granite blocks paved surface associated with the demolished part of radial plan prison. Granite blocks paving was common

practise at the time and the paving has been found damaged. It is of low intactness and low architectural interest.

Table 4.13 below summarized the significance assessment of the surface.

 Table 4.13
 Heritage Significance Evaluation Granite Blocks Paved Surface (Feature PF1)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.13*, **the overall heritage significance of the granite blocks of foundation remains is regarded as low.**

Area Between A and B Halls

4.4.4 FOUNDATION REMAINS OF 1856 GAOLERS HOUSE OR 1914 RECEPTION ROOMS BUILDING (FEATURE F2) (1850s to 1910s)

Historical plan revealed that, in 1856, a Gaolers House was constructed at the approximate location of trial pit T6 (TP26). This building has two major parts: "*a square building at the north and a long rectangular building at the south with a walled courtyard between, and a small building to the west.*" (PMT 2008: 18) In the 1887 plan, part of the south long rectangular building of the Gaolers House was demolished to make room for a staircase led to the newly built radial plan prison. In the 1914 plan, the "D Hall" and the Reception Rooms (marked as Building Y and W respectively on the 1914 plan) of that time had replaced the entire Gaolers House. The standing A Hall is believed to have been built after World War II as part of the repairs and alterations works (PMT 2008: 86).

Based on the above historical information, feature F2 revealed in trial pit T6 is possibly the remains of part of the Gaolers House in 1856; or the Reception Rooms show in the 1914 plan. The remains are considered to have medium historic interest that may date to as early as 1856 or at later period in 1914. Its social, group and local value is considered low as the remains merely provide further information of the demolished buildings of the Site.

Feature F2 is foundation remains built with granite blocks (a common construction material used at the time). Review of the original footprints of the Gaolers House/ Reception Rooms indicated that the majority of the foundation should have been destroyed due to the construction works of the A Hall and B Hall and underground utilities. It is believed that more remains may still survive in the potential impact area but with low intactness. Its architectural interest is low.

Table 4.14 below summarized the significance assessment of the foundation remains.

Table 4.14Heritage Significance Evaluation Foundation Remains of 1856 Gaolers House
or 1914 Reception Rooms building (Feature F2)

Evaluation Parameters	Degree of Significance
Historic Interest	Medium
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.14*, **the overall heritage significance of the foundation remains is regarded as low**.

Workshops & Laundry Area

4.4.5 PIPE TRENCHES (FEATURES G10, G15 AND G16) (MODERN)

Features G10, G15 and G16 are modern pipes trenches. They were abandoned underground trenches commonly found on Site. As they are all modern utilities trenches carrying no heritage significance. As such, further significance evaluation is not necessary.

4.4.6 A STRUCTURE BUILT WITH RED BRICKS AND CONCRETE (FEATURE S6) (MODERN)

A structure built with red bricks and concrete was identified is feature S6. It was built with modern materials and then demolished. It is considered to have no heritage significance, therefore, significance evaluation is considered not necessary.

4.4.7 REMAINS OF LAUNDRY BUILDINGS (FEATURES F5, M1, S4 AND S10) (1910S)

Some red bricks of building remains with cement flooring (feature F5), a structure built with red bricks and cement finish (feature S4), a section of two parallel metal tracks (feature M1) were found in trial pits T10, TA3a and TA3b. Review of 1913 and 1914 Plans indicated that there was a Laundry building where these pits located. Based on the findings identified from trial pits T10, TA3a and TA3b, supplemented by the observation of an existing damaged wall structure standing above ground, it is believed that these remains are associated with the Laundry Building (Building 7) as shown in the 1914 Plan (see *Plate 4.4*). The remains are of low intactness as the presence of existing underground utilities disturbed the remains.

In addition, review of 1914 Plans indicated that a concrete structure (feature S10) as found in trial pit TA9 was found located on another Laundry Building. It is believed that the concrete built structure is associated with the Laundry Building.

Based on the SI findings, common construction materials had been used and the craftsmanship of the building works is of rough and low quality. The remains are therefore considered of low architecture interest with low historic interest and low social, group and local value as the buildings were constructed at a later period of the prison history merely for laundry purposes.

Table 4.15 below summarized the significance assessment of the remains of the Laundry Building.

Table 4.15Heritage Significance Evaluation Remains of the Laundry Buildings (Featuers
F5, M1, S4 and S10)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.15*, the overall heritage significance of the remains of the Laundry Buildings is considered low.

4.4.8 FOUNDATION REMAINS OF REVETMENT WALL (WF7) (1859 - 1910s)

Review of 1858 design drawing (see *Plate 3.5*), 1887 historic plan (see *Plate 4.3*) and an 1858 old photo (see *Plate 4.9*) indicated that there was a revetment wall outside the south wall of the east wing of D Hall. Inspection of the renovation scars on the existing east revetment wall of the Site indicated that trial pit TA9 was aligned with the scars section indicating that layers of granite blockwork foundation remains (feature WF7) unearthed in trial pit TA9 belong to the foundation remains of the demolished revetment wall. Such revetment wall alignment was not shown in the 1914 plan which suggests it was demolished some time before this date.

This demolished revetment wall is considered not a significant element on site as it was probably used to separate the radial plan prison (existing D-Hall) from the laundry area of the site. Therefore, it was probably a wall only for spatial management but not significantly used for security purpose and many parts of similar revetment walls with their standing section and of higher significance can still be found on Site and will be preserved. The historic interest and social, group and local value is therefore low.

Similar foundation remains are still commonly found on site. As the demolished revetment wall had been disturbed by the construction of later buildings and modern underground utilities. Its intactness is low with low architecture interest.

Table 4.16 below summarized the significance assessment of the foundation remains of revetment wall.

Table 4.16Heritage Significance Evaluation of the Foundation Remains of Revetment
Wall (Feature WF7)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.16*, the overall heritage significance of the foundation remains of the revetment wall is considered low.

4.4.9 REMAINS OF A SHED STRUCTURE (FEATURE S8) (1910s)

A structure built with grey brick paved surface (feature S8) was identified in trial pit TA4 which extends east and south into the walls of the pit. Another pit, trial pit TA7 conducted confirmed that the grey bricks surface did not extend to trial pit TA7 (or it had extended to trial pit TA7 but was completely destroyed).

The structure was not supported by any granite blocks as foundation indicated that this was not a heavy structure or temporary in nature. Charcoal was also unearthed from the pit indicating that there might be a wood structure built on top of the surface but had been destroyed perhaps by fire.

Review of 1914 plan indicated that trial pits TA4 and TA7 are situated on a shed structure about to be removed (Building 8 of the 1914 Plan) (see *Plate 4.4*). Therefore, it suggests that the surface may date to the 1910s associated with the shed structure or it is possible that the surface may be part of a temporary structure similar to the one as shown at the bottom of the photo dated around 1887 (see *Plate 4.9*).

Based on the SI findings, it is considered that this feature had been seriously disturbed with low intactness and probably a temporary or insignificant structure at the time with low historic and architectural interest. Its social, group and local value is also low as the finding is merely related to a temporary or insignificant structure and the material uses is ordinary at the time.

Table 4.17 below summarized the significance assessment of the remains of a shed structure.

Table 4.17Heritage Significance Evaluation Remains of the Shed Structure (Feature S8)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.17*, **the overall heritage significance of the remains of the shed structure is considered low.**

4.4.10 DRAINAGE CHANNEL BUILT WITH RED BRICKS (FEATURES G9 AND G17) (1910s)

In trial pits TA3b and TA10, red brick built channels (features G9 and G17) were unearthed. According to the material used and stratigraphy information of trial pit TA10, the red brick built channel is probably associated with the laundry building constructed around the 1910s. This channel was purposely filled in later period and probably used to drain sewerage from laundry works as dark soil was observed in the channel.

These features are considered minor and common underground utilities of the Site associated with the laundry works. Its historic and architectural interest and social, group and local value are low. The channels are found disturbed with low intactness.

Table 4.18 below summarized the significance assessment of the drainage channel.

Table 4.18Heritage Significance Evaluation Drainage Channel Built with Red Bricks
(Features G9 and G17)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.18*, **the overall heritage significance of the drainage channel is considered low.**

4.4.11 DRAINAGE CHANNEL BUILT WITH GREY BRICKS (FEATURE G18) (1910s)

In trial pit TA8, a section of a grey brick built channel (feature G18) was unearthed.

The grey brick built channel is covered with red tiles. The bricks used for its construction are found to be mostly incomplete with low intactness. In addition to the stratigraphy information provided from trial pit TA8, it is believed that this channel is also associated with the laundry works constructed around the 1910s which re-used the grey bricks for construction.

The feature is a minor and common underground utilities of the Site associated with the laundry works. Its historic and architectural interest and social, group and local value are low.

Table 4.19 below summarized the significance assessment of the drainage channel.

Table 4.19Heritage Significance Evaluation Drainage Channel Built with Grey Bricks
(Feature G18)

Evaluation Parameters	Degree of Significance
Historic Interest	Low
Architectural Interest	Low
Social, group and local value	Low
Intactness	Low
Rareness	Common
Overall	Low

Based on the assessment as presented in *Table 4.19*, the overall heritage significance of the drainage channel is considered low.

4.5 SUMMARY OF FINDINGS

Table 4.20 below summarized the interpretation result of features identified from the SI.

Feature Remains Identified Code		Dating	Associated Pits	Significance	
Platform 2					
Parade Gro	und				
F3	Remains of Gaol C	1845 - 1858	T3, T14	High	
G7	Remains of Gaol C	1845 - 1858	T3, T14	High	
S12	A tunnel	1910s – present	N/A	Medium	
S2, S9	A passageway with steps	1910s - 1916 after F4/F6.	T16, TA5b	Medium	
F4, F6	Remains of Offices of A.S.P and Chief Inspector building	1910s – 1916 before S2/S9	T16, TA5b	Low	
WF8	Remains of Offices of A.S.P and Chief Inspector building	1910s – 1916	TA5a	Low	
S1, S5 Remains of a water tank structure		Built between 1864 and pre-1904	T2, TA6a, TA6b, TA6c	Low	
S3 Structure built with red brick and concrete		Not earlier than 1914	TP47	Low	
S7 Grey bricks and granite blocks remains of external floor and wall foundation		1845 - 1858	TA6a, TA6d	Low	
S11 Structure built with granite blocks and grey bricks		1845 - 1858	TA6c	Low	
G1 to G6 Pipe trenches G11, G12, G14		After 1864	T2, T3, T4, T5, T14, TA6b, TA6d, TA5a	Low	
G8, G13	Ditch lined with granite blocks	1852 – 1910s	T16, TA5a	Low	
Platforms 3	& 4				
Prison Yard	l				
WF2 Foundation remains of radial plan prison		1858	TA2b	Medium	
WF3	Foundation remains of radial plan prison	1858	TA2b	Medium	
WE4	Foundation of radial plan	1959	TAOL	Madium	

Table 4.20Summary of Features Identified from the SI

prison

plan prison

plan prison

Foundation of radial plan

Foundation remains of radial

Foundation remains of radial

WF4

WF5

F1a

Medium

Medium

Medium

1858

1858

1858

TA2b

TA2b

T8, T9

Feature Remains Identified Code		Dating	Associated Pits	Significance
F1b	Foundation remains of radial plan prison	1858	T113	Medium
WF1	Granite blocks of foundation remains	Modern	TA2b	Low
PF1	PF1 External Floor of radial plan prison		T7	Low
Between A &	& B Halls			
F2	Foundation remains of the 1856 Gaolers House/the 1914 Reception Room building	1850s – 1910s	T6(TP26),	Low
Workshops	& Laundry			
WF6	Wall foundation of the standing D Hall	1858	TA1b	High
F5	ē		TA3a	Low
M1	Remains of Laundry Building (Remains of two parallel metal tracks)		TA3a	Low
S4 Remains of Laundry Building (Water tank associated with laundry)		1910s	TA3b	Low
S10 Remains of Laundry Building (Concrete built structure)		1910s	TA9	Low
WF7 Foundation remains of revetment wall		1858 to 1910s	TA9	Low
S8 Remains of a shed structure		1910s	TA4	Low
G10, G15, Pipe trenches G16		Modern	TA1a, TA1b	No
S6	6 A structure built with red bricks and concrete		TA1a	No
G9, G17	G9, G17 Drainage channel built with red bricks		TA3b, TA10	Low
G18	Drainage channel built with broken grey bricks	1910s	TA8	Low

5 IMPACT ASSESSMENTS AND MITIGATION MEASURES

5.1 EXCAVATION WORKS UNDER THE PROJECT

Excavation works in CPS may have direct impact on the historical features/structures. Based on the design proposal as presented in the EIA Report for the Project, areas that involve excavation works are presented in *Plate 5.1* and summarised in *Table 5.1*.

Table 5.1Excavation Works under the Project

	Excavation Works Description (as detailed in <i>Plate 5.1</i>)	Excavation Methods	Approximate Excavation Dimensions
А	Proposed basement plant room	Open excavation with traditional temporary support system	28m (L) x 21m (W) x 8m (D)
В	Proposed basement of Old Bailey Wing (OBW) new building	Open excavation with traditional temporary support system	42m (L) x 15m (W) x 11.5m (D)
С	Proposed principal electrical and mechanical (E&M) trench connecting OBW and Arbuthnot Wing (AW) new buildings	Open excavation with traditional temporary support system	2m (W) x 3m (D)
D	Proposed underground passageway under A Hall and B Hall	Trenchless construction method using horizontal pipe pile supports/Open excavation with vertical pipe piling support systems	8m (W) x 13 (L) x 6m (D)
E	Proposed basement of AW new building	Open excavation with traditional temporary support system	17m (L) x 9m (W) x 2.5m(D)
F	Proposed principal utilities trench connecting the OBW and the basement plant room	Open excavation with pipe piling and traditional temporary support systems	2m (W) x 3m (D)

5.2 IMPACT ASSESSMENTS AND MITIGATION MEASURES

In order to minimise the intervention to the existing 16 historic buildings and the upper and lower courtyards to be conserved and revitalised, it is essential to construct two new buildings and one basement plant room to accommodate primary arts' facilities and essential building services to meet current functional and legislative requirements.

Based on the design scheme as detailed in *Section 5.1*, there will not be any substantial excavation works to be carried out at D Hall. As such, features WF6, S6, G10, G15 and G16 will not be impacted. While there may be potential direct archaeological impact on other identified features, mitigation measures have been recommended to avoid and/or minimise the potential archaeological impact. This has resulted in a number of changes in the design of the proposed works. *Table 5.2* below summarised the identified features that may be affected by the excavation works detailed in *Table 5.1* with the associated mitigation measures detailed in *Sections 5.2.1* to *5.2.6* below.

Table 5.2	Summary of Potential Archaeological Impact due to Excavation Works under
	the Preliminary Design

	Excavation Works	cavation Works Impacted Features		Associated	Significance
		Feature Codes	Features	Trial Pits	of Features
A	Proposed	F3, G7	Remains of Gaol C	T3, T14	High
	basement plant room	S12	A tunnel	N/A	Medium
		S2, S9	A passageway with steps	T16 and TA5b	Medium
		F4, F6, WF8	Remains of Offices of A.S.P and Chief Inspector building	T16, TA5a and TA5b	Low
		S1, S5	Remains of a water tank structure	T2, TA6a, TA6b, TA6c	Low
		S3	Structure built with red brick and concrete	TP47	Low
		S7	Grey bricks and granite blocks remains of external floor and wall foundation	TA6a, TA6d	Low
		S11	Structure built with granite blocks and grey bricks	TA6c	Low
		G1 to G6 G11, G12, G14	Pipe trenches	T2, T3, T4, T5, T14, TA6b, TA6d, TA5a	Low
		G8, G13	Ditch lined with granite blocks	T16, TA5a	Low
В	Proposed basement of OBW new building	WF2, WF3, WF4, WF5, F1a	Foundation remains of radial plan prison	TA2b, T8, T9	Medium
		WF1	Granite blocks of foundation remains	TA2b	Low
		PF1	External floor of radial plan prison	T7	Low
	Proposed principal E&M trench connecting OBW and AW new buildings	F1b	Foundation remains of radial plan prison	T11	Medium
)	Proposed underground passageway under A Hall and B Hall	F2	Foundation remains of the 1856 Gaolers House/the 1914 Reception Room building	Τ6	Low
E	Proposed basement of AW new building	F5, M1, S4, S10	Remains of Laundry Building	TA3a, TA3b, TA9	Low
	ō	WF7	Foundation remains of revetment wall	TA9	Low
		S8	Remains of a shed structure	TA4	Low
		G9, G17	Drainage channel built with red bricks	TA3b, TA10	Low

	Excavation Works	Impacted	Features	Associated	Significance	
		Feature Codes	Features	Trial Pits	of Features	
		G18	Drainage channel built with broken grey bricks	TA8	Low	
F	Proposed principal utilities trench connecting the OBW and the basement plant room	N/A	Nil	N/A	N/A	

Note: N/A = not applicable

5.2.1 PROPOSED BASEMENT PLANT ROOM

The proposed basement plant room may affect the remains of Gaol C (features F3 and G7), a tunnel (feature S12) and a passageway with steps (features S2 and S9) with high/medium heritage significance. The following measures have been adopted to avoid the impacts.

• Avoidance of Impacts – Preserve in-situ with buffer zone

During the preliminary design stage, a basement plant room was proposed to be constructed underneath the parade ground. In order to avoid affecting the existing historic buildings and trees, the footprint of the proposed basement plant room has been reduced to provide necessary setback from the Police Headquarters at the north, the Barrack Block at the south, and the existing trees on both eastern and western sides (i.e. Original Design in *Plate 5.2*).

After completion of the desktop study, ground penetrating radar survey and detailed site survey, a tunnel underneath the parade ground connecting to the existing LG1/F level of the Police Headquarters was identified. This is further verified by trial pit T16 which found the end wall of the tunnel. The tunnel is of medium heritage significance and its discovery will enhance the understanding of the history of the site. In order to preserve the tunnel in-situ, the size of the basement plant room has been further reduced to setback from tunnel structure with a "buffer zone" provided (i.e. Design Revision 1 in *Plate 5.2*).

As revealed by trial pits T3 and T14, remains of Gaol C were found which is of high heritage significance as they belonged to one of the earliest buildings constructed on the site. In order to enable in-situ preservation of the Gaol C remains, the size of the proposed basement plant room was further reduced to setback from the Gaol C remains with a "buffer zone" provided around the buried remains (i.e. Design Revision 2 in *Plate 5.2*). For this purpose, the plant room has to be redesigned with substantial rearrangement of the plant room layout.

According to the findings of trial pits T16 and TA5b, a passageway with steps of medium heritage significance connecting the existing

tunnel as mentioned above and the demolished Offices of the A.S.P. and Chief Inspector building was found. In order to preserve the passageway with steps in-situ, which helps the interpretation of the provision of the tunnel, the proposed basement plant room has been redesigned again to setback from the passageway with steps with a "buffer zone" provided (i.e. Finalized Design in *Plate 5.2*). Since the plant room has been redesigned previously to avoid impacting the existing tunnel and Gaol C remains, there is no room for further reduction in size. In this connection, an irregular layout has been adopted for the plant room to preserve the passageway with steps although such layout would complicate the future operation and maintenance of the plant room. The reduced plant room size will also require deeper excavation which, together with the irregular perimeter basement wall, will increase the construction difficulty and building cost.

• <u>Minimisation of Impacts – Archaeological Watching Brief</u>

In order to ensure the preserved remains will not be impacted by the works under the Project, it is also recommended that prior approval from AMO would have to be obtained for any proposed excavation works within the buffer zones.

Compensatory planting of the trees at the existing tree site at the northeast portion of the original footprint of Gaol C has been recommended under the EIA Report. While it is unlikely that such planting works would have any impact on the Goal C remains, it is recommended that a tree expert should be consulted regarding the selection of tree species (e.g. non-deep root trees) and/or the installation of root barrier to prevent any possible future damage of the buried remains due to root growth of the newly planted trees. An archaeological watching brief should also be conducted during the excavation works for tree planting.

In addition, the design team is currently reviewing a drainage alignment that may run across the southern portion of the buried remains of Gaol C. It is recommended that if an alternative route avoiding the impact is not feasible, the drainage alignment should be located at the southern end of the footprint of Gaol C as far as practicable (i.e. the area that have been disturbed previously). In this connection, an archaeological watching brief should be conducted during the drainage excavation works within the footprint of Gaol.

The proposed basement plant room may also affect other remains. These affected features will be preserved by record prior to ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.

5.2.2 PROPOSED BASEMENT OF OBW NEW BUILDING AND PRINCIPAL E&M TRENCH CONNECTING BETWEEN OBW and AW NEW BUILDINGS

The existing D Hall will be conserved and revitalized under the Project. D Hall has high heritage significance since it is one of the earliest buildings constructed within the site. In particular, the existing D Hall forms part of the former radial plan prison covering the existing locations of the F Hall, the D Hall annex (located at the west end of existing D Hall), the General Office and the Prison Yard. Parts of the radial plan prison had been demolished and replaced by later buildings constructed on top such as the F Hall, the D Hall annex and the General Office, as well as the modern underground utilities in the vicinity. Based on the desktop study findings, the foundation remains of the demolished part of this radial plan prison should have been better preserved underneath the existing Prison Yard as it is relatively less disturbed during the previous redevelopment works. While some foundation remains of the radial plan prison may still survive underneath the F Hall, the D Hall annex and the General Office, it is believed that such foundation remains, if still survive, should have been highly disturbed due to the previous construction works.

In order to preserve the existing historic buildings (including D Hall and F Hall) as well as the Prison Yard, the proposed OBW has to be constructed within the area currently occupied by insignificant buildings (i.e. D Hall annex and General Office which will be removed). To preserve the foundation remains of the radial plan prison within the Prison Yard areas, the basement of the proposed OBW had not been extended into the Prison Yard but confined within the area underneath the existing D Hall annex and General Office where the ground has been highly disturbed due to previously construction works. On the other hand, the alignment of a proposed utilities (E&M) services trench connecting the OBW and AW new buildings has been designed close to the existing D Hall to minimize the possible impact on the surviving foundation remains underneath the Prison Yard (i.e. Preliminary Design in *Plate 5.3*).

Some foundation remains of the radial plan prison with medium heritage significance was found during the SI works. In order to preserve the foundation remains revealed in trial pits T11 and TA2b in-situ, the basement footprint of OBW has been reduced to set back from the foundation remains with a "buffer zone" provided. Moreover, the alignment of the proposed utilities (E&M) services trench connecting the OBW and AW new buildings has been revised with a setback buffer zone to suit (i.e. the Finalized Design in *Plate 5.3*). While this design revision will further minimise the possible impact on the foundation remains but the art gallery storage space and the plant room provision of the OBW new building has to be reduced.

Since part of the radial plan prison buildings still stands (i.e. the existing D Hall) and will be conserved, the physical evidence embodied in this existing historic building, together with the documented records, will construct a visual interpretation of what the radial plan prison once looked like and how it was used.

The proposed basement of OBW new building and the principal E&M trench may also affect other remains. These affected features will be preserved by record prior to ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.

5.2.3 PROPOSED UNDERGROUND PASSAGEWAY UNDER A HALL AND B HALL

In the original design of the underground passageway, the extent covered both A Hall and B Hall which will have impact on the foundation remains of the 1856 Gaolers House/the 1914 Reception Room building (feature F2). Though the remains is considered to be of low heritage significance (refer to Table 4.20), the design of such passageway was revised to minimise possible impacts, especially for feature F2, by avoiding any excavation works under B Hall. With the revised design, the size of the passageway has been substantially reduced by about 70% from the original dimension.

The affected feature will be preserved by record prior to ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.

5.2.4 PROPOSED BASEMENT OF AW NEW BUILDING

Features F5, M1, S4, S10, WF10, S8, G9, G17 and G18 as listed in *Table 5.2* will be affected by the excavation works for the AW new building. Given that these features are of low heritage significance, the impact is considered acceptable provided that the affected features will be preserved by record prior to ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.

5.2.5 PROPOSED PRINCIPAL UTILITIES TRENCH CONNECTING THE OBW AND THE BASEMENT PLANT ROOM

There is no remains of interest identified in trial pits T1, T4 and T5 at the Parade Ground and trial pit TP24 adjacent to the proposed utilities alignment near the Ablutions Block area. While the archaeological impact is considered minimal, it is recommended that an archaeological watching brief be conducted during the ground excavation works along the alignment to record any potential affected remains within the area.

5.2.6 SUMMARY

Table 5.3 below summarized the identified features that may be affected by the excavation works and the associated mitigation measures recommended. In order to preserve the Site better, an *Archaeological Action Plan (AAP)* including various archaeological mitigation measures as presented in *Table 5.3* at affected areas will be prepared prior to commencement of the excavation works for implementation before and during construction stage.

In addition, induction briefings should be provided to site staff to raise their awareness of the underground archaeological remains and to familiarise themselves with the associated reporting procedures. The content of the induction briefings should include the introduction on the historical development of the Site, the possible archaeological remains that may be found during excavation works, as well as the reporting procedures in case suspected underground heritage remains are identified. A set of the briefing materials with content details shall be forwarded to AMO for reference and record purpose. The Construction Contractor should ensure that the induction briefings are provided to all newly recruited staff.

Updated Excavation Works	Impacted Features		Associated	Significance	Mitigation Measures	
	Feature Codes	Features	Trial Pits	of Features		
Proposed basement plant room	F3, G7	Remains of Gaol C	T3, T14	High	 Design revised to preserve in-situ with buffer zone; Consult and seek AMO's prior approval for excavation works within the buffer zone. If excavation work is required, an archaeological watching brief shall be conducted; A tree expert should be consulted regarding the selection of tree species (e.g. non-deep root trees) and/or the installation or root barrier to prevent any possible future damage of the buried remains due to root growth of the newly planted trees. An archaeological watching brief should also be conducted during the ground excavation works for tree planting to document any surviving remains by record; and If an alternative drainage alignment route avoiding the impact is not feasible, the alignment should be located at the southern end of the footprint of Gaol C as far as practicable (i.e. the area that have been disturbed previously). In this connection, an archaeological watching brief should be conducted during the drainage excavation works within the footprint of Gaol. 	
	S12	A Tunnel	N/A	Medium	• Design revised to preserve in-situ with buffer zone.	
	S2, S9	A passageway with steps	T16 and TA5b	Medium	• Design revised to preserve in-situ with buffer zone.	
	F4, F6, WF8	Remains of Offices of A.S.P and Chief Inspector building	T16, TA5a and TA5b	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	

Table 5.3Summary of Impact and Mitigation Measures

	Updated Excavation Works	Impacted Features			Significance of Features	Mitigation Measures	
		Feature Codes Features					
A	Proposed basement plant room	S1, S5	Remains of a water tank structure	T2, TA6a, TA6b, TA6c	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		S3	Structure built with red brick and concrete	TP47	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		S7	Grey bricks and granite blocks remains of external floor and wall foundation	TA6a, TA6d	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		S11	Structure built with granite blocks and grey bricks	ТА6с	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		G1 to G6, G11, G12, G14	Pipe trenches	T2, T3, T4, T5, T14, TA6b, TA6d, TA5a	Low	 G4 and G5 in T3 and G6 in T14 will be preserved in-situ in the buffer zone of the remains of Gaol C. The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works. 	
		G8, G13	Ditch lined with granite blocks	T16, TA5a	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	

	Updated Excavation Works	Impacted Features		Associated Significance	Significance	e Mitigation Measures	
		Feature Codes	Features	Trial Pits	of Features		
В	Proposed basement of OBW new building	WF2, WF3, WF4, WF5, F1a	Foundation remains of radial plan prison	TA2b, T8, T9	Medium	 Design revised to preserve part of the remains in-situ with setback buffer zone; The affected area will be preserved by record; and Since part of the radial plan prison buildings still stands (i.e. the existing D Hall) and will be conserved, the physical evidence embodied in this existing historic building, together with the documented records, will construct a visual interpretation of what the radial plan prison once looked like and how it was used. 	
		WF1	Granite blocks of foundation remains	TA2b	Low	 Design revised to preserve part of the remains in-situ with setback buffer zone; 	
		PF1	External floor of radial plan prison	Τ7	Low	 The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works. 	
С	Proposed E&M trench connecting OBW and AW new buildings	F1b	Foundation remains of radial plan prison	T11	Medium	 Design revised to preserve part of the remains in-situ; The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works; and Since part of the radial plan prison buildings still stands (i.e. the existing D Hall) and will be conserved, the physical evidence embodied in this existing historic building, together with the documented records, will construct a visual interpretation of what the radial plan prison once looked like and how it was used. 	
D	Proposed underground passageway under A Hall and B Hall	F2	Foundation remains of the 1856 Gaolers House/the 1914 Reception Room building	Τ6	Low	 Design revised to reduce the impact area; and The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works. 	

	Updated Excavation Works	Impacted Features		Associated Signi	Significance	Mitigation Measures	
		Feature Codes	Features	Trial Pits	of Features		
E	Proposed basement of AW new building	F5, M1, S4, S10	Remains of Laundry Building	TA3a, TA3b, TA9	Low	 The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works. 	
		WF7	Foundation remains of revetment wall	TA9	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		S8	Remains of a shed structure	TA4	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		G9, G17	Drainage channel built with red bricks	TA3b, TA10	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
		G18	Drainage channel built with broken grey bricks	TA8	Low	• The affected area will be preserved by record before ground excavation works start and an archaeological watching brief will be conducted during ground excavation works.	
F	Proposed principal utilities trench connecting the OBW and the basement plant room	Archaeological potential area along the alignment.				 Archaeological watching brief will be conducted during ground excavation work along the alignment to record any potential affected remains. 	

CONCLUSIONS

An archaeological impact assessment on the proposed excavation areas under the Project has been conducted based on the desktop review supplemented by recently completed SI findings under which representative and substantial field data have been provided.

After reviewing historic maps, old photographs and the SI findings, an interpretation of the identified features and evaluation of their significance were conducted. The following key features were identified:

- a tunnel underneath the Parade Ground that connects to the service corridor of the Police Headquarter;
- building remains of the Gaol C at the Parade Ground;
- a passageway with steps connecting the above tunnel to the demolished Offices of the A.S.P. (believed to be the Office of the Assistant Superintendent of Police) and the Chief Inspector building at the Parade Ground; and
- building foundation remains of the radial plan prison buildings at the Prison Yard.

These discoveries confirmed the findings from previous desktop studies and would be helpful for enhancing the accuracy of existing historical maps and records. This in turn enables a detailed representation of the earlier buildings and assists in the interpretation of the whole site.

Other movable finds were mainly unearthed from fill materials with little heritage value.

While the design of the CPS Project had been conducted with due care to minimise the effect on existing historic buildings and possible archaeological potential areas, the archaeological impact assessment has revealed that there were still some impacts on the archaeological features. In this connection, various measures including the design revisions, archaeological buffer zones, archaeological watching brief and preservation by record are recommended under the AI report to mitigate the possible impacts on the archaeological features. These are described briefly below.

A tunnel underneath the parade ground connecting to the existing service corridor of the Police Headquarters was identified. In order to preserve the tunnel which is considered to have medium heritage significance, the basement plant room was redesigned to reduce its size to setback from the tunnel structure with a buffer zone to avoid it from the proposed construction works.

Among the buried materials exposed, the remains of Gaol C have high heritage significance as it belonged to one of the earliest buildings constructed

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on the site. In order to preserve the remains of Goal C in-situ, the size of the proposed basement plant room at the Parade Ground was further reduced and redesigned to avoid the remains with a buffer zone provided around these buried remains.

The passageway with steps connecting between the above existing tunnel and the demolished Offices of the A.S.P and Chief Inspector building is found and considered to have medium heritage significance. In order to preserve the passageway with steps, which helps the interpretation of the provision of the tunnel, the layout design of the proposed basement plant room has been revised again to avoid the passageway with a buffer zone provided. Since there is no room for further reduction in size, an irregular layout has been adopted for the basement plant room to preserve the passageway with steps. Such layout would not only complicate the future operation and maintenance of the plant room, but also require deeper excavation which, together with the irregular perimeter basement wall, will increase the construction difficulty and building cost.

On the Prison Yard, the existing D Hall will be conserved and revitalized under the Project. D Hall has high heritage significance since it is one of the earliest buildings constructed within the site. In particular, the existing D Hall forms part of the former radial plan prison covering the existing locations of the F Hall, the D Hall annex (located at the west end of existing D Hall), the General Office and the Prison Yard. In order to preserve the existing historic buildings (including D Hall and F Hall) as well as the Prison Yard, the proposed OBW has to be constructed within the area currently occupied by insignificant buildings (i.e. D Hall annex and General Office which will be removed). To further preserve the foundation remains of the radial plan prison, the basement footprint of the proposed OBW has been reduced to set back from the foundation remains with a buffer zone provided. Moreover, the alignment of the proposed utilities (E&M) services trench connecting the OBW and AW new buildings has also been revised to suit. While these design revision will further minimise the possible impact on the foundation remains but the spaces for art gallery storage and plant room provision of the OBW new building have to be reduced.

In addition to the above measures in avoiding the possible impact on the existing features, the affected remains will be preserved by record and archaeological watching brief will be conducted during the ground excavation works. An Archaeological Action Plan will be prepared prior to commencement of the ground excavation works for implementation. Furthermore, induction briefings will be provided to site staff to raise their awareness of the underground archaeological remains and to familiarise themselves with the associated reporting procedures.

7 BIBLIOGRAPHY

Books, Reports and Articles

- 1. Antiquities and Monuments Office (AMO). 2010. *Declared Monuments in Hong Kong (as of 12 November 2010)*; [information on line]; available from http://www.amo.gov.hk/form/DM_Mon_List_e.pdf; internet
- 2. Antiquities and Monuments Office. 2010. *List of Sites of Archaeological Interest in Hong Kong, November* 2010; [information on line]; available from http://www.lcsd.gov.hk/CE/Museum/Monument/form/list_archaeolo g_site_eng.pdf; internet.
- 3. Civil Engineering and Development Department. 2011. *The Geology of Hong Kong (Interactive On-line);* [information on line]; available from http://www.cedd.gov.hk/eng/about/organisation/org_geo_pln_map.h tm; internet.
- Department of Justice. 2011. *Bilingual Laws Information System*. Cap 53, Section 2; [information on line]; available from <u>http://www.legislation.gov.hk/eng/home.htm?SearchTerm=53</u>; internet
- Environmental Resources Management Hong Kong Limited (ERM).
 2011. Central Police Station Compound Conservation and Revitalisation EIA Report. Hong Kong: ERM.
- Environmental Resources Management Hong Kong Limited (ERM).
 2011. Central Police Station Compound Conservation and Revitalisation Site Investigation Report. Hong Kong: ERM.
- Purcell Miller Tritton LLP (PMT). 2008. The Old Central Police Station and Victoria Prison, Hong Kong – Conservation Management Plan. Hong Kong: PMT.

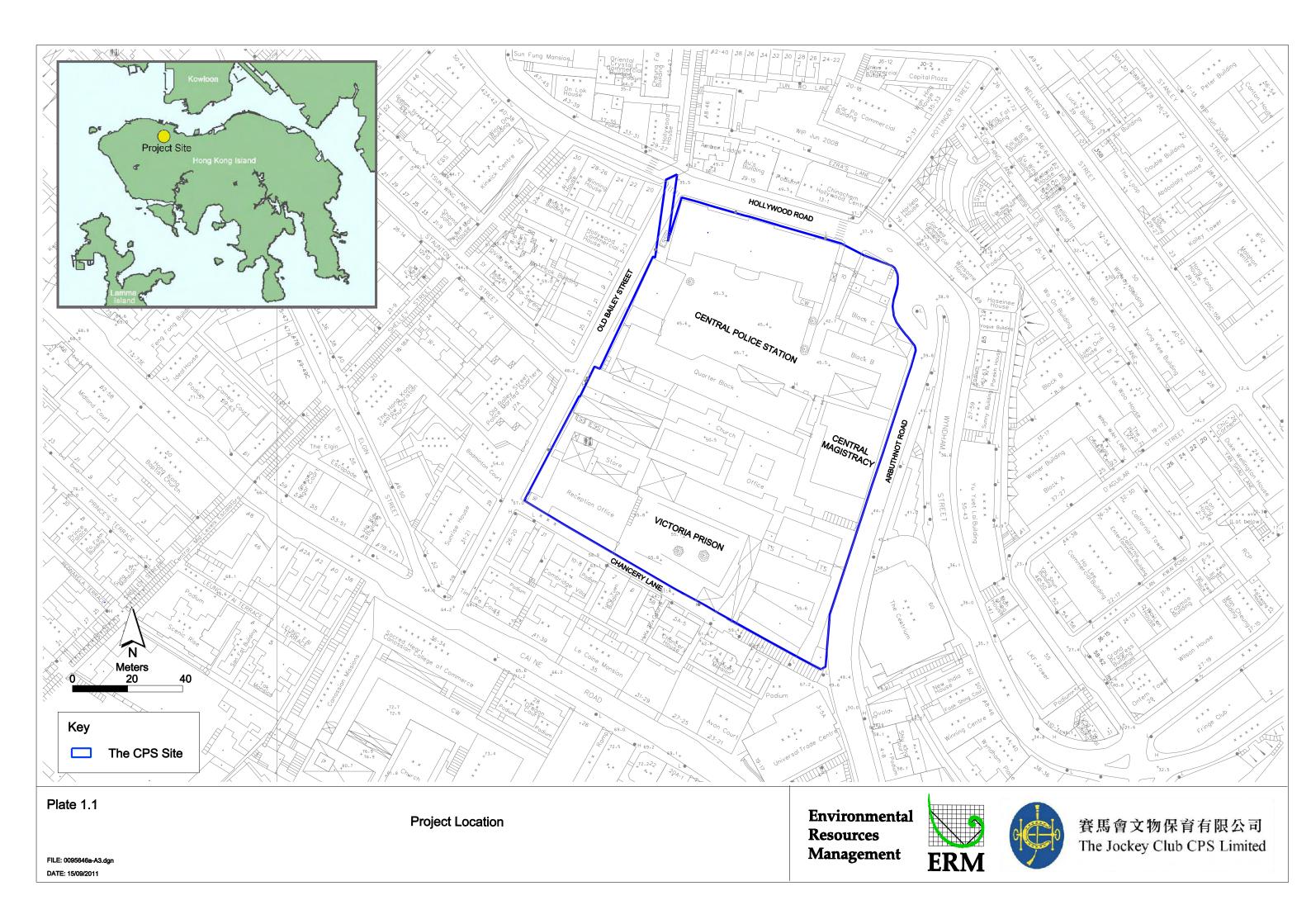
Maps and Photographs

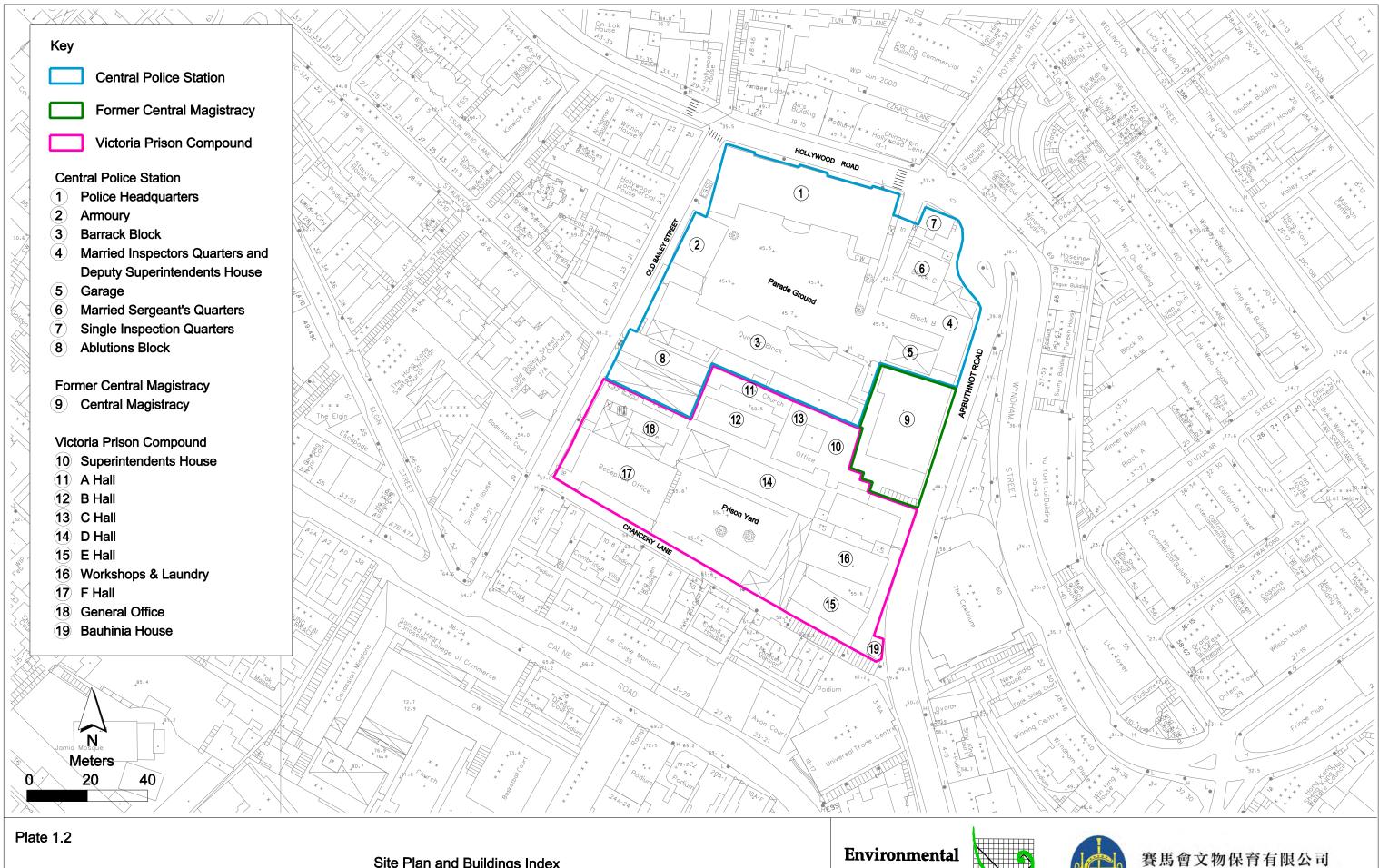
- 8. Crown Lands & Survey Office Hong Kong. 1949. *1949 Aerial Photo*. Hong Kong: Crown Lands & Survey Office.
- 9. Survey and Mapping Office, Lands Department. 2007. 2007 Aerial Photo. Hong Kong: Survey and Mapping Office, Lands Department.

Annex A

Plates

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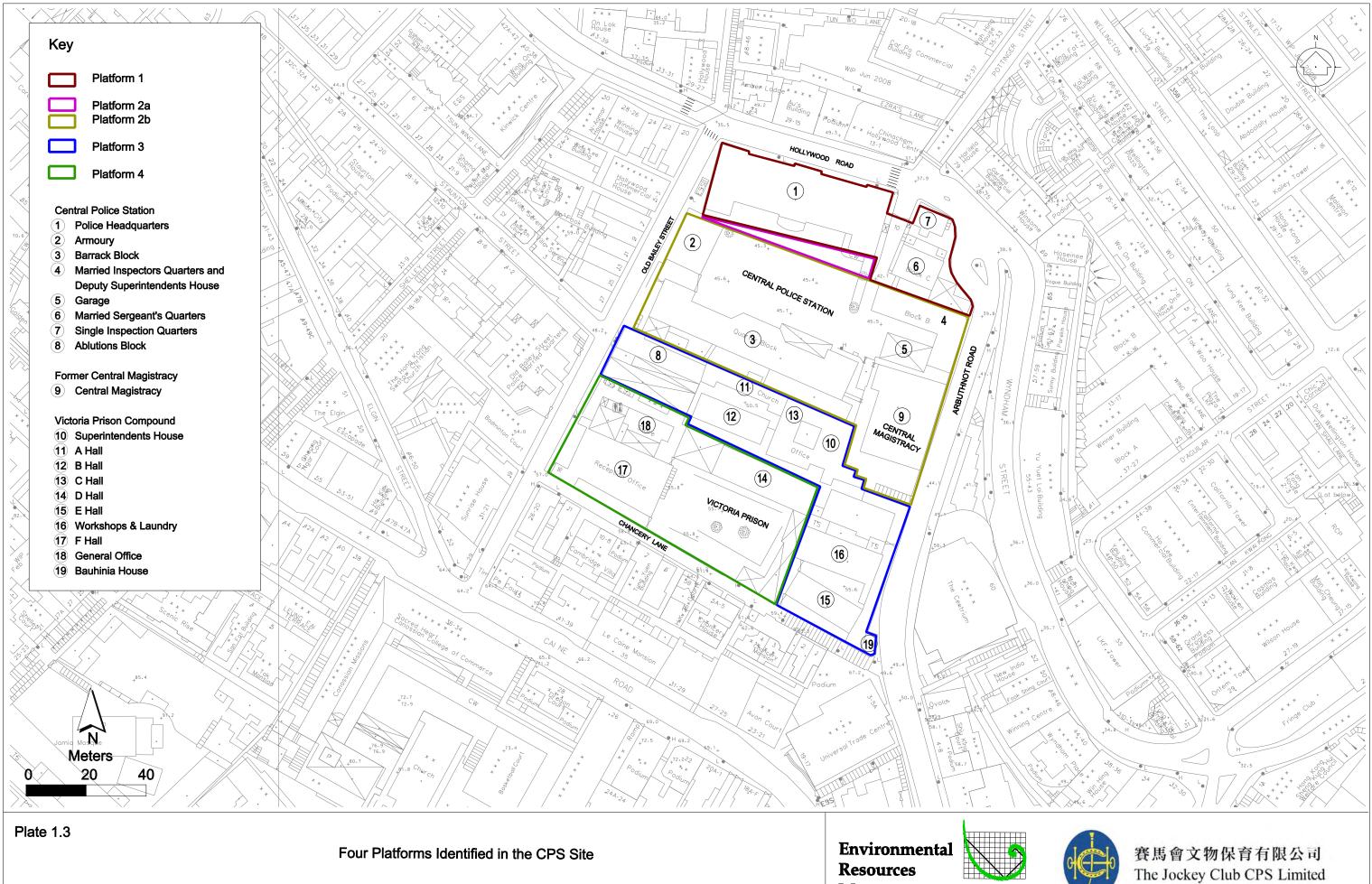
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Site Plan and Buildings Index

Resources Management



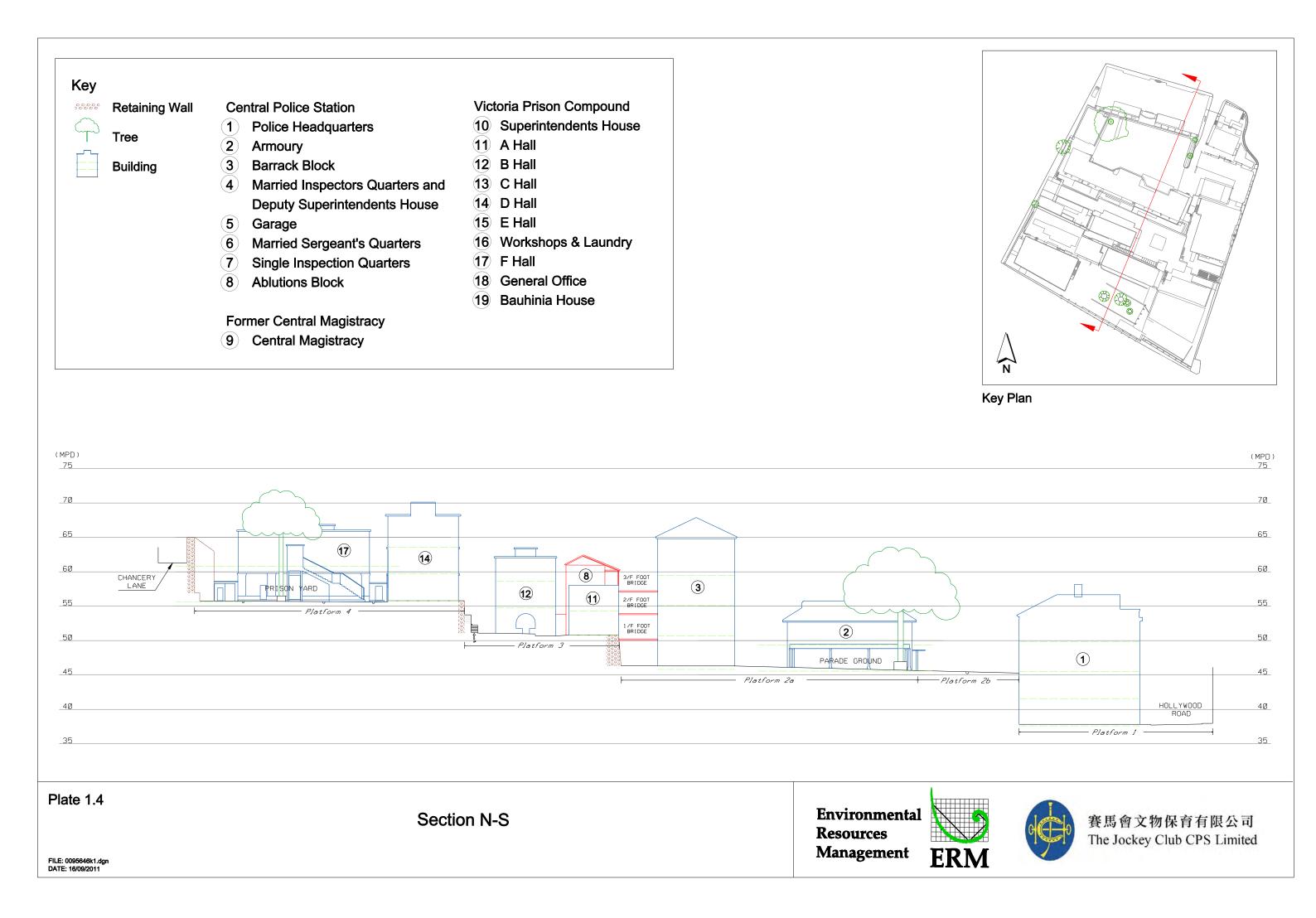
The Jockey Club CPS Limited

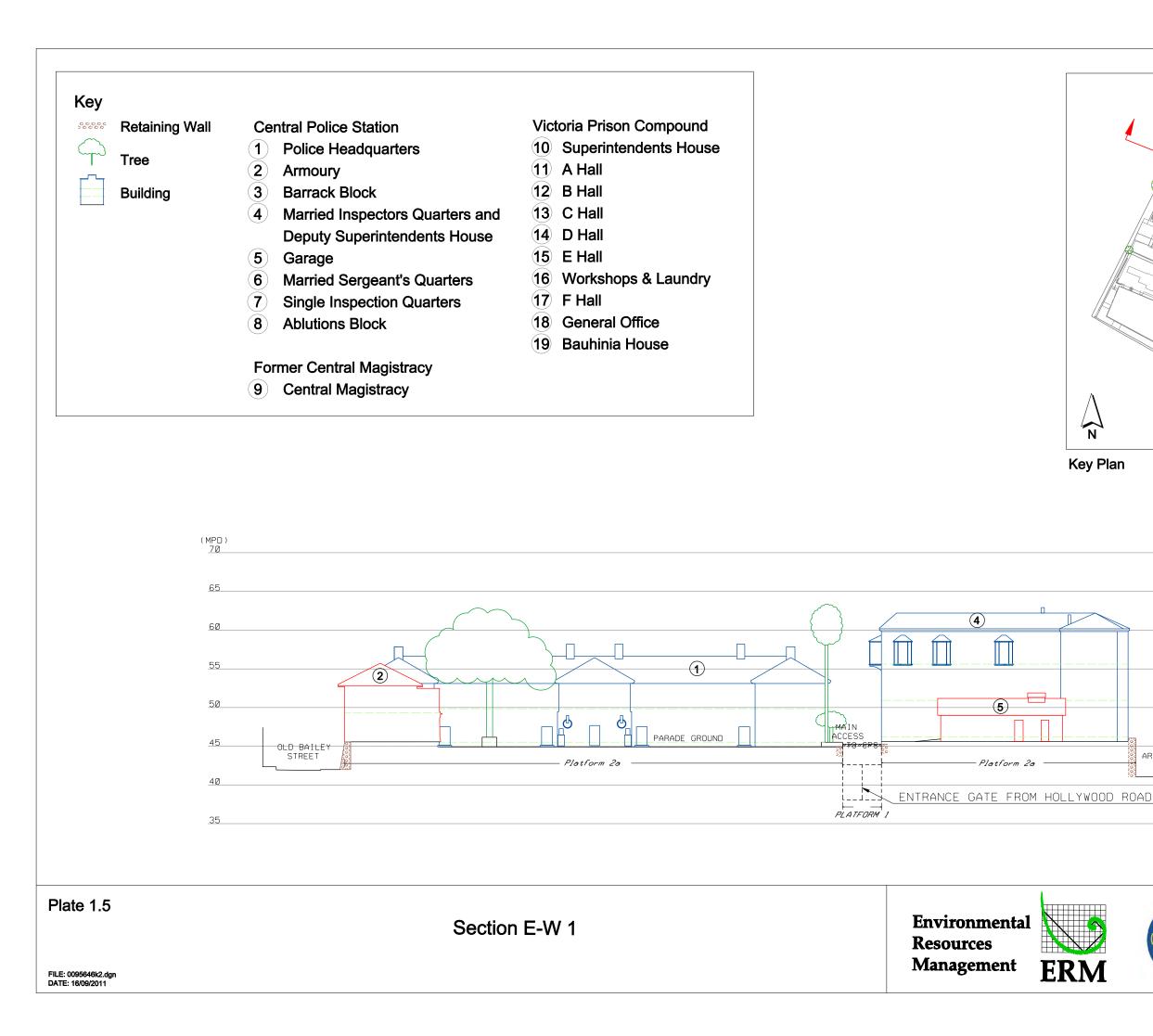


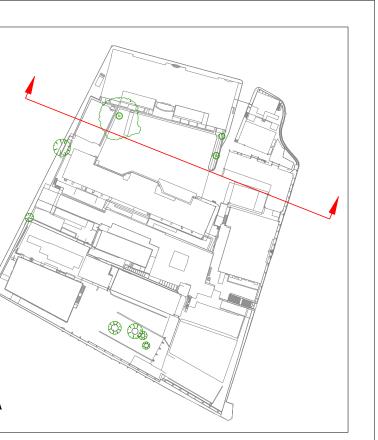
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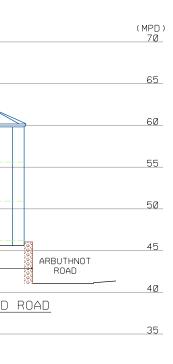


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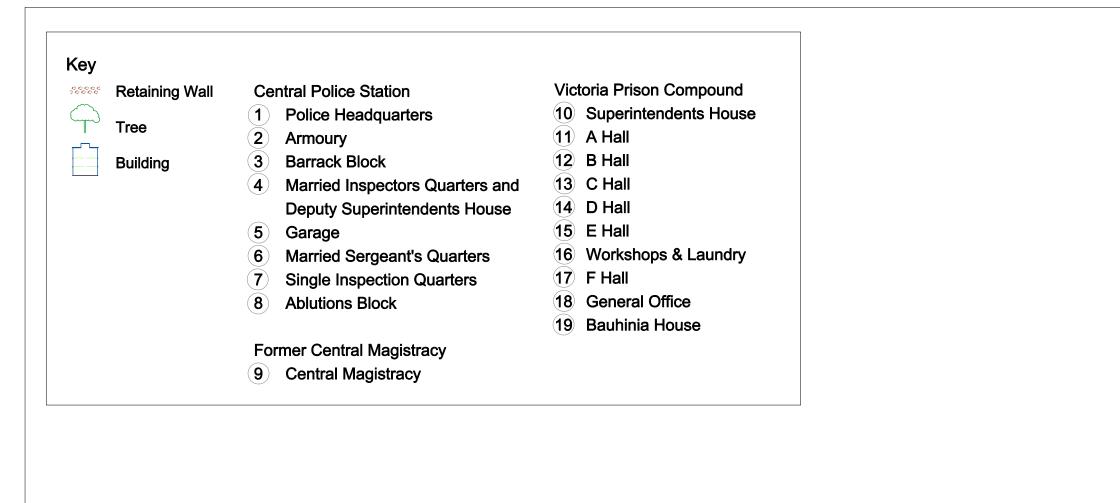


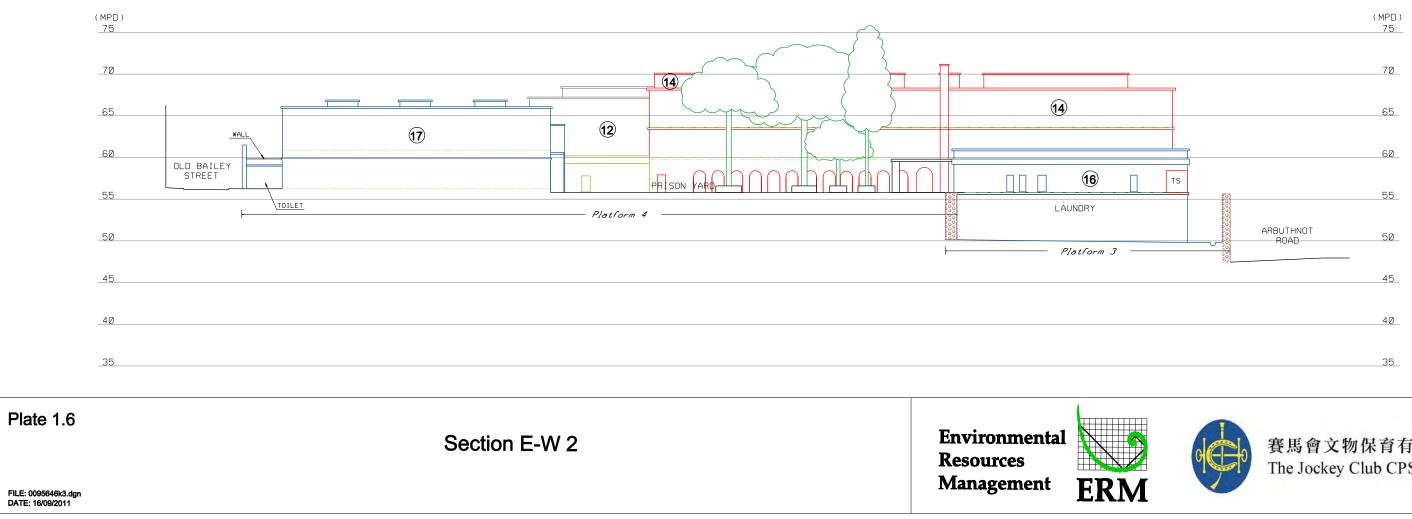


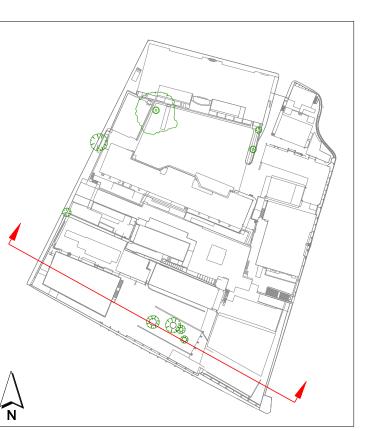




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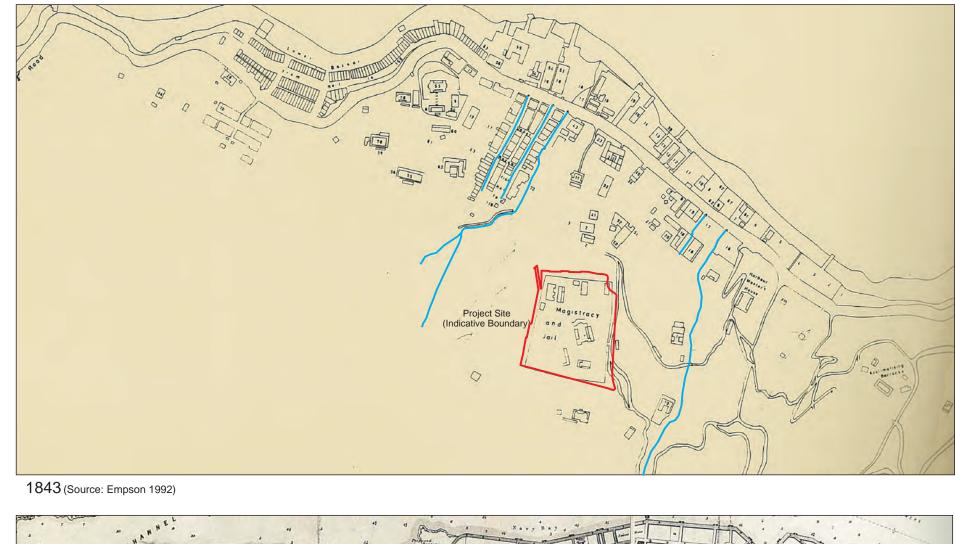


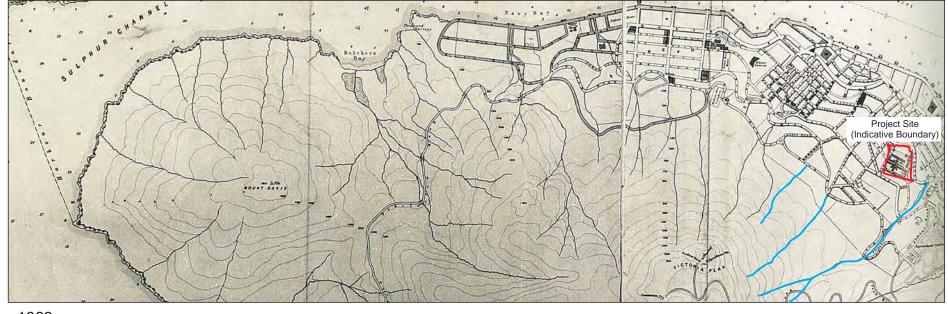




Key Plan

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1863 (Source: Empson 1992)

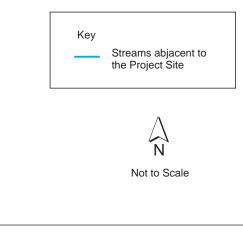
Plate 3.1

Historic Maps of the Project Site and Its Adjacent Area

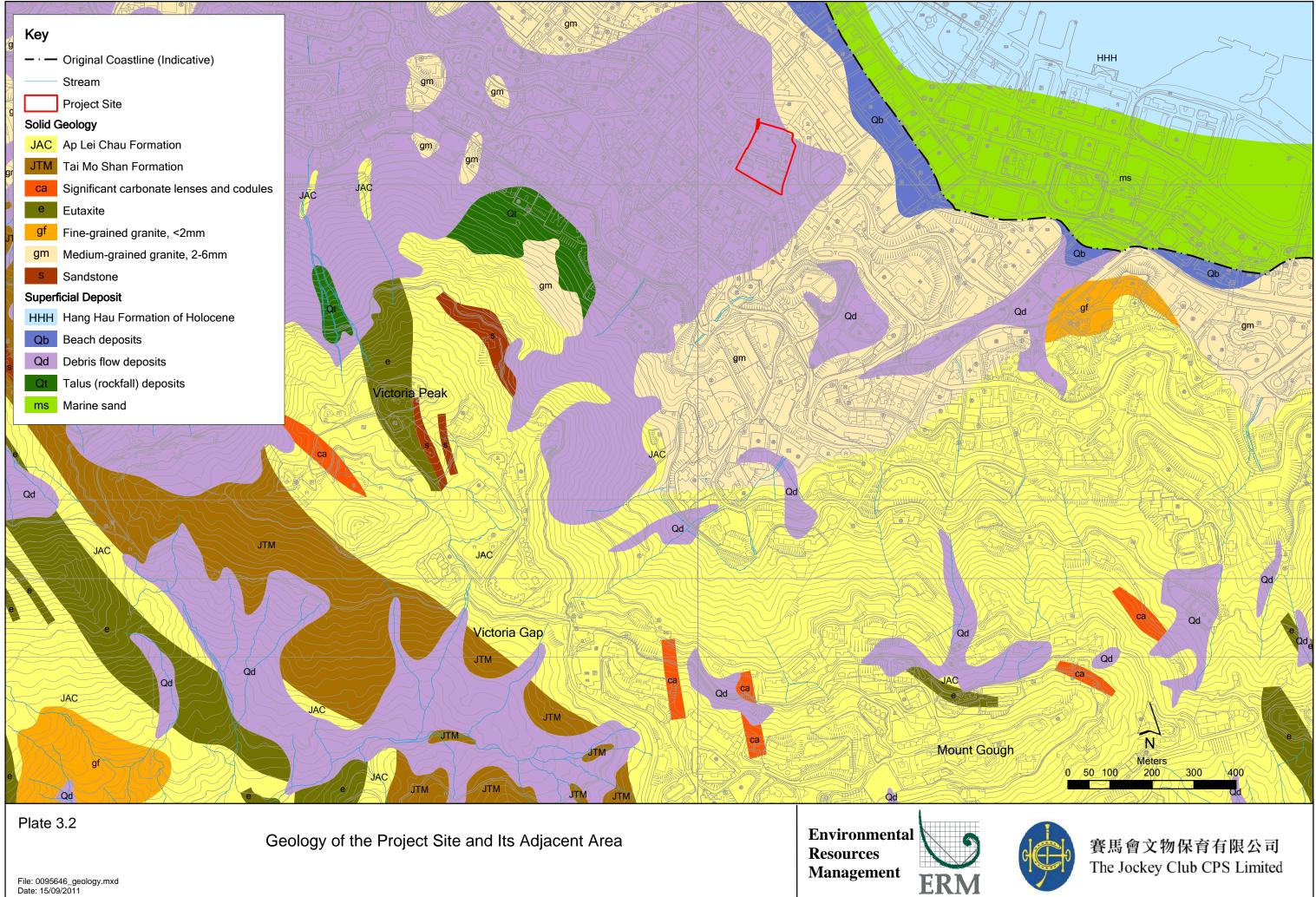


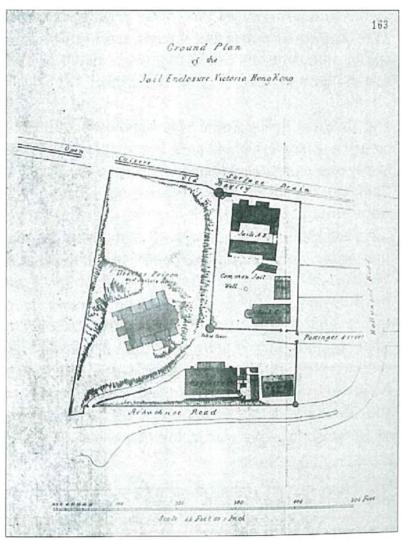


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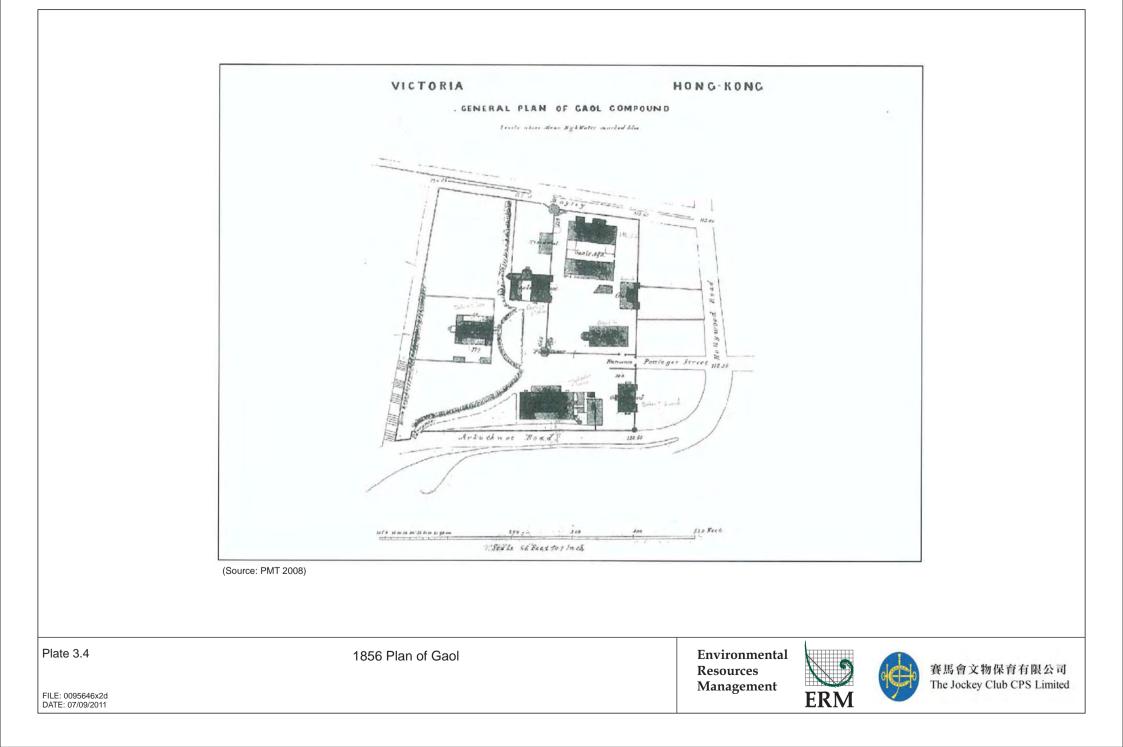


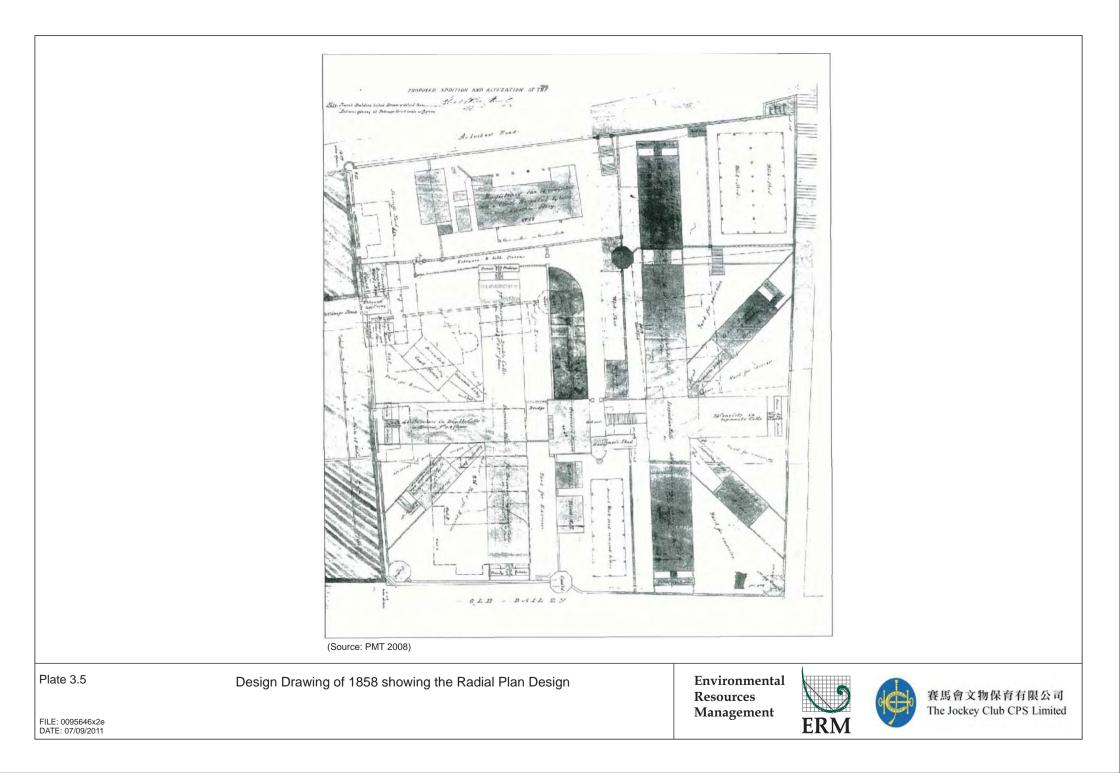


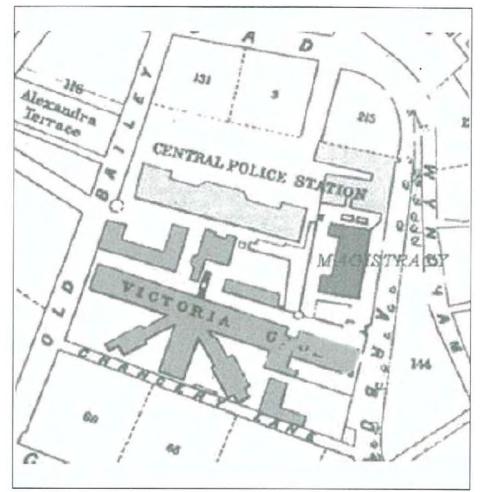


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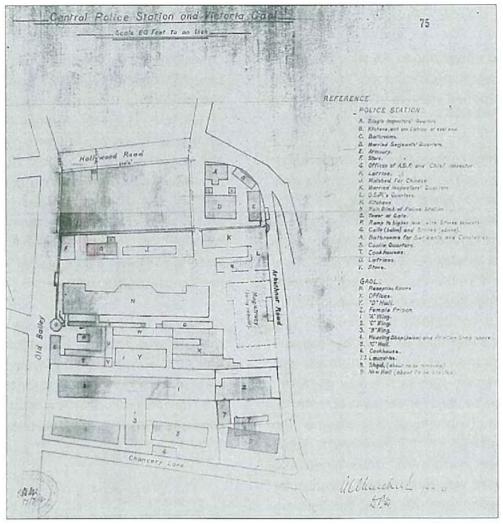






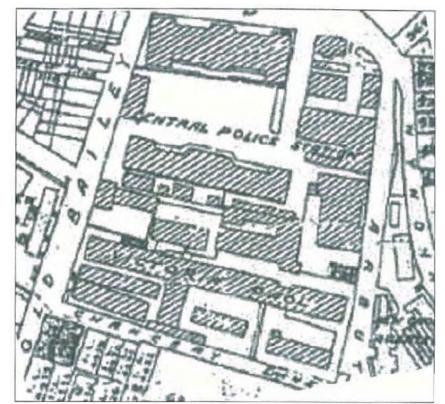
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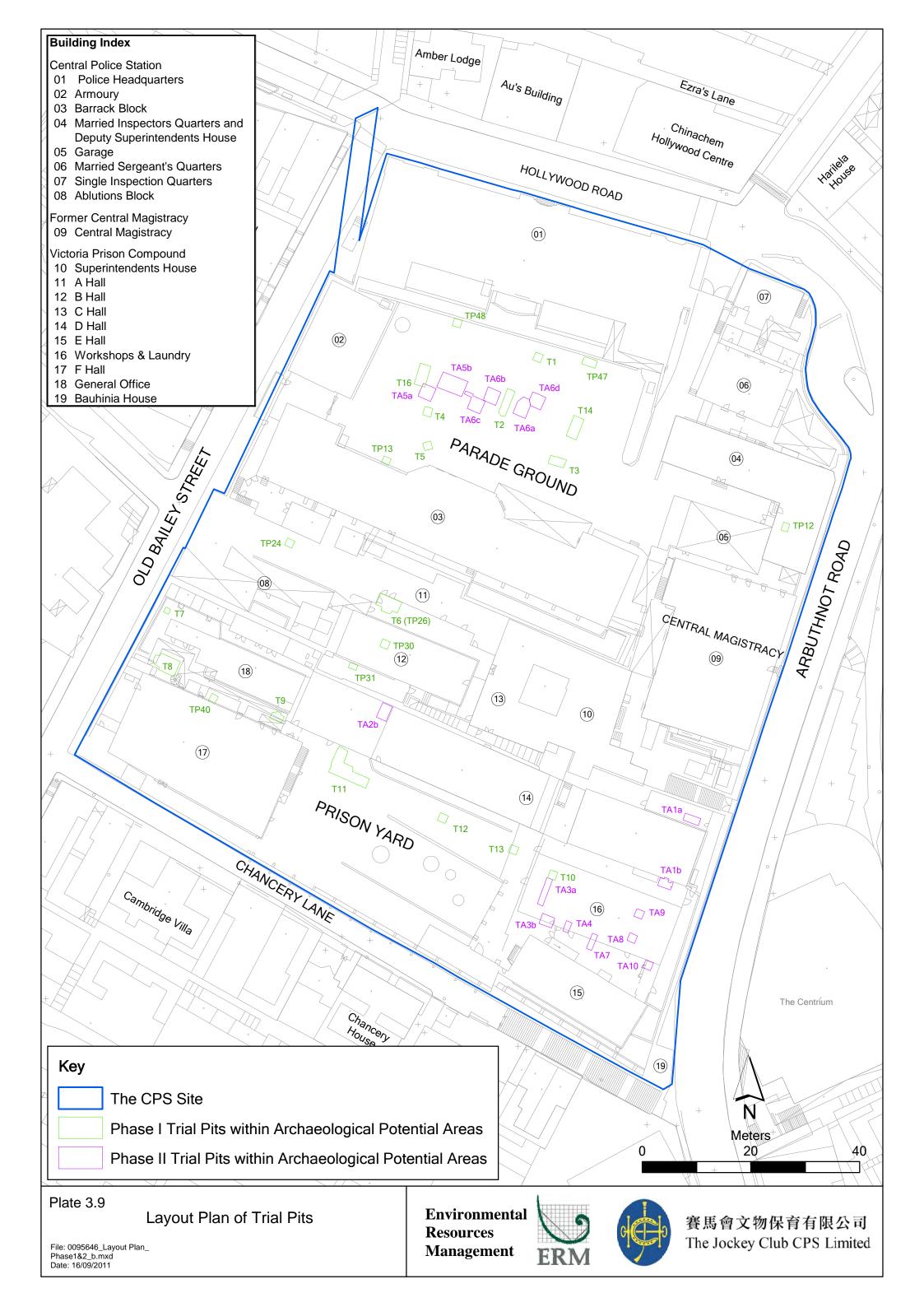
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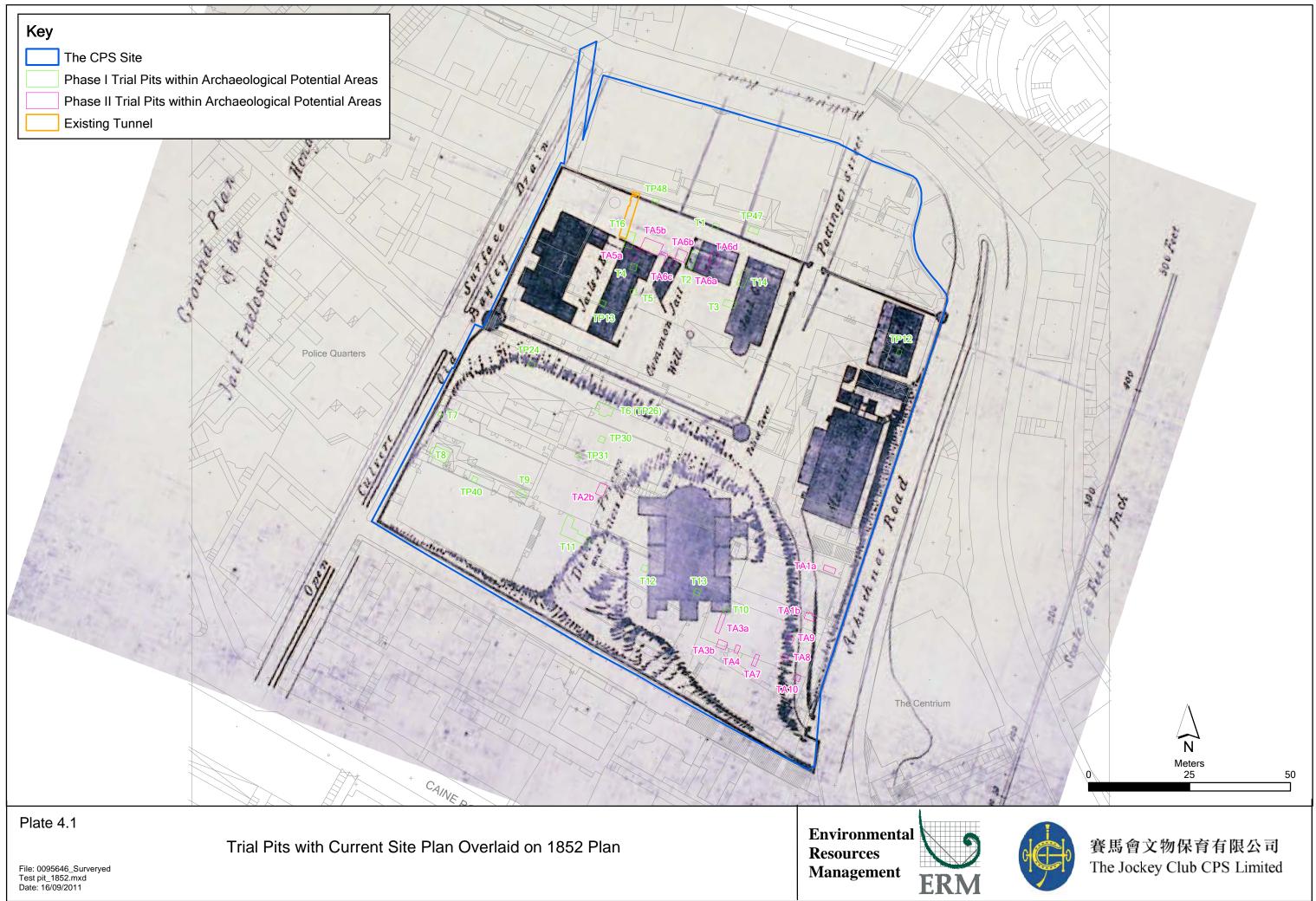




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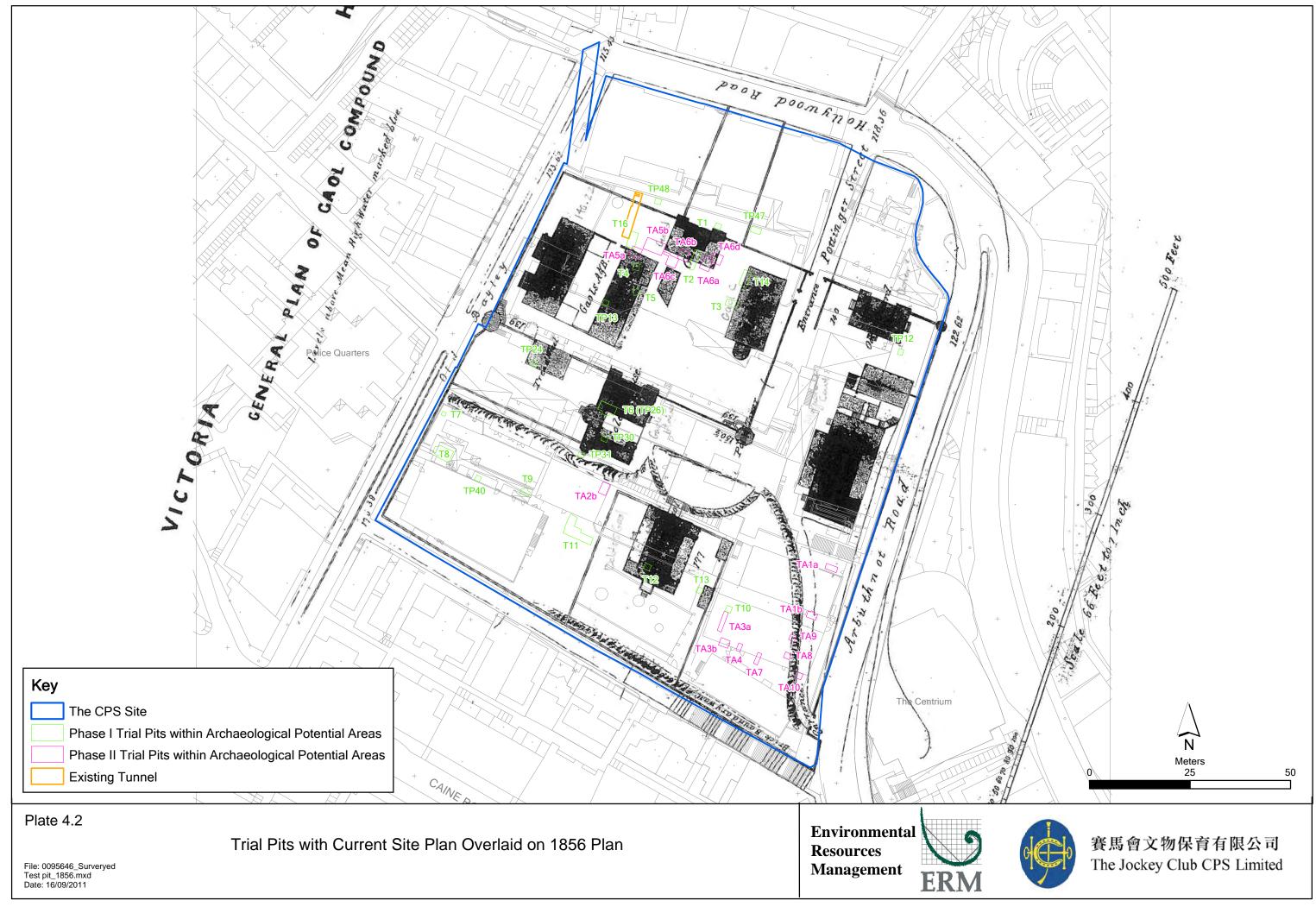


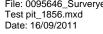


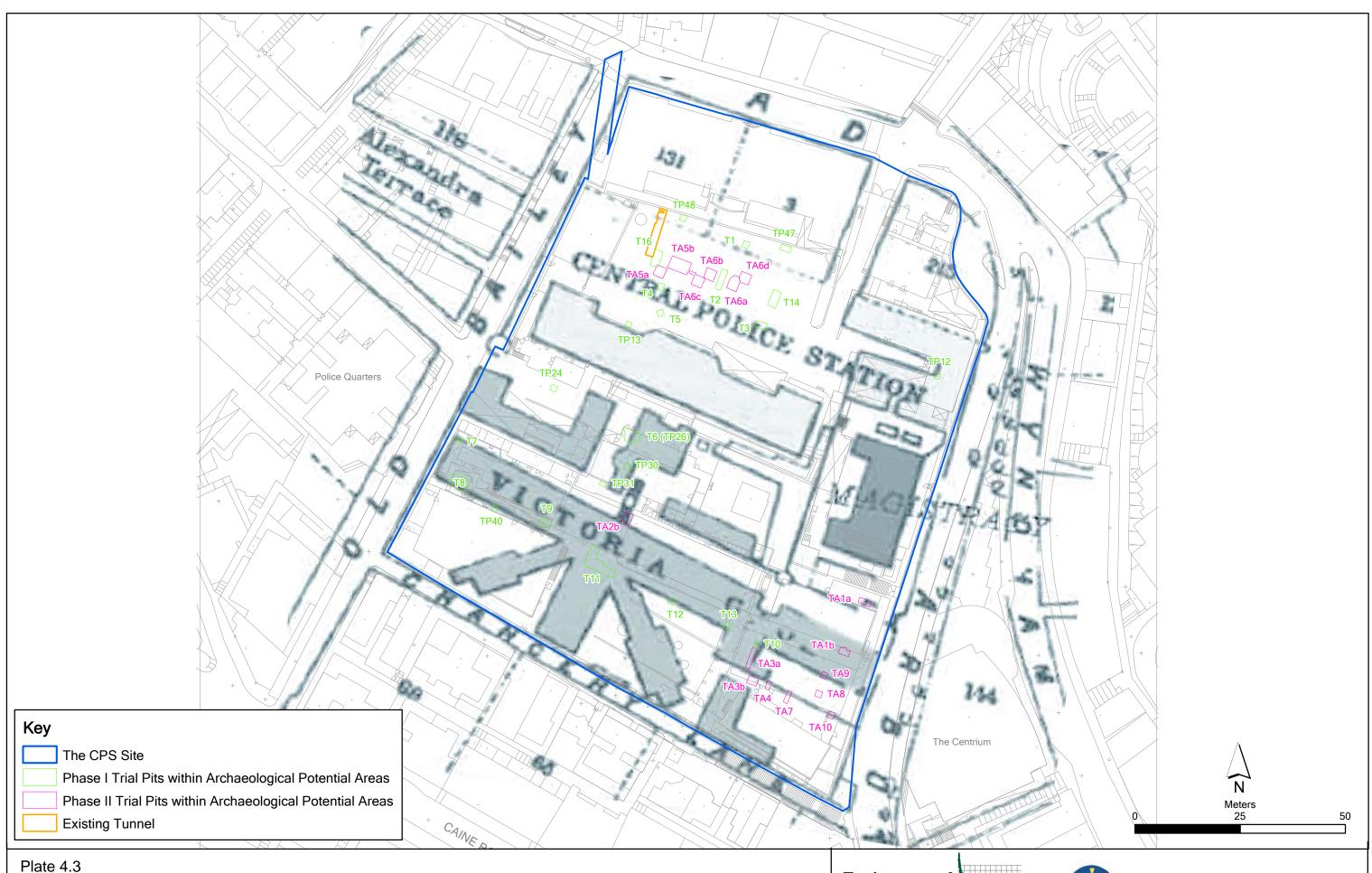




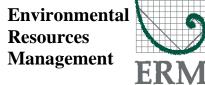








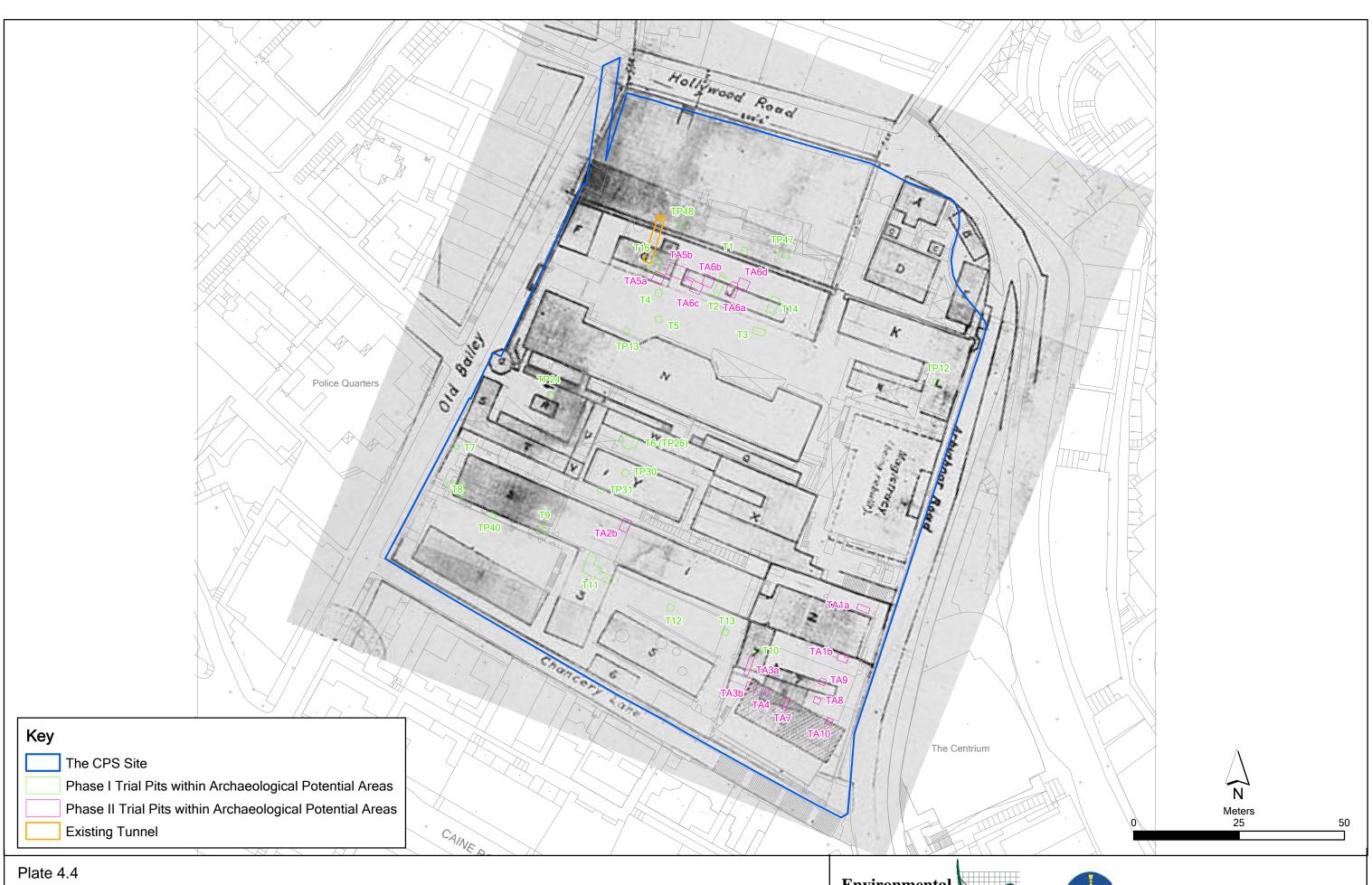
Trial Pits with Current Site Plan Overlaid on 1887 Plan



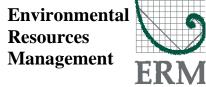
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File: 0095646_Surveryed Test pit_1914.mxd Date: 16/09/2011 Trial Pits with Current Site Plan Overlaid on 1914 Plan





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Trial Pits with Current Site Plan Overlaid on 1936 Plan

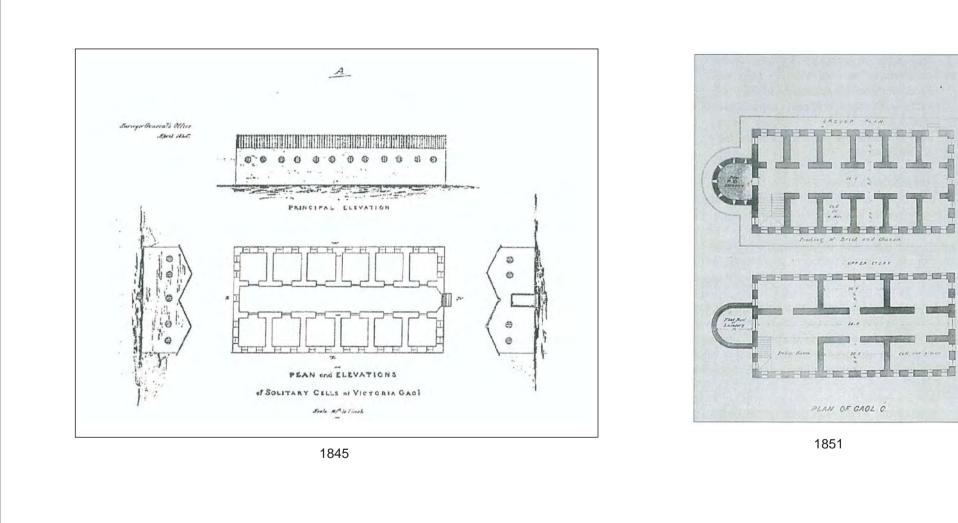
Environmental Resources Management



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(Source: PMT 2008)

Plate 4.6

Scaled drawing of Goal C in 1845 and 1851

Environmental Resources Management





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FILE: 0095646x2a DATE: 07/09/2011

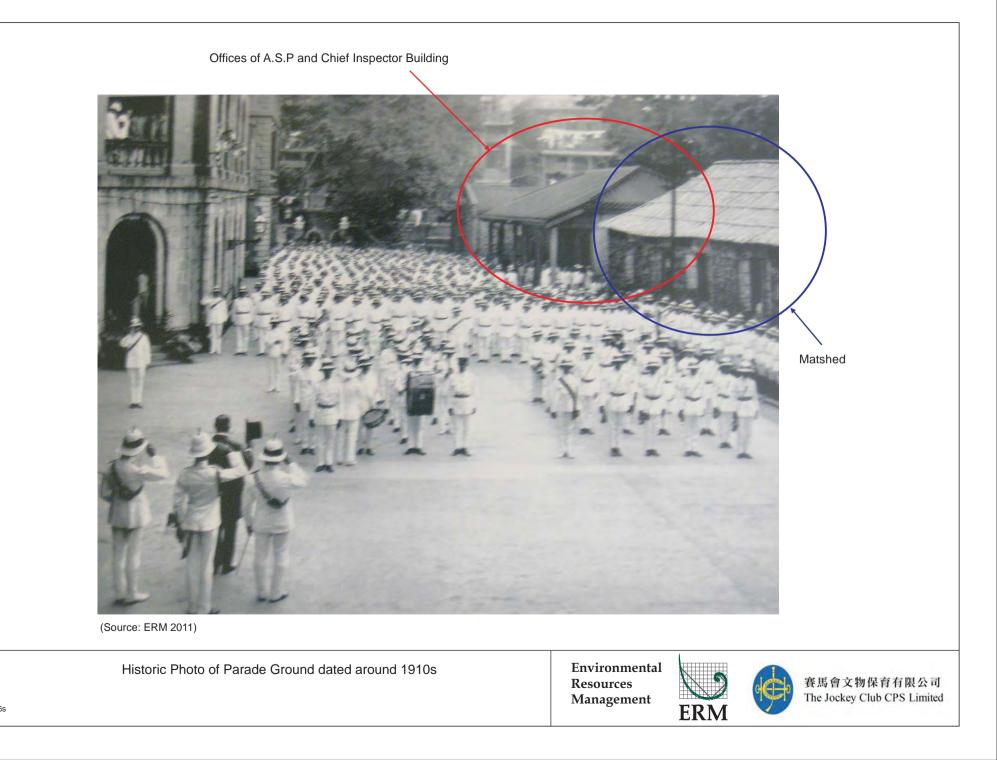
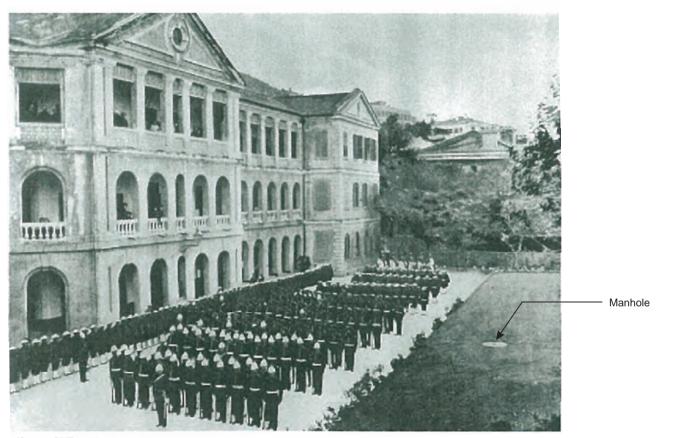


Plate 4.7



(Source: PMT 2008)

Plate 4.8

The Barrack Block, pre 1904

Environmental Resources Management



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FILE: 0095646x2i DATE: 15/09/2011



(Source: PMT 2008:22)

Plate 4.9

Historic Photo showing 1858 Victoria Prison

Environmental Resources Management





FILE: Aug2011/0095646s1 DATE: 23/08/2011

Key

Central Police Station

- **1** Police Headquarters
- Armoury
- 23 Barrack Block
- (4) Married Inspectors Quarters and **Deputy Superintendents House**
- (5) Garage
- (6) Married Sergeant's Quarters
- (7) Single Inspection Quarters
- (8) Ablutions Block

Former Central Magistracy

(9) Central Magistracy

Victoria Prison Compound

- (10) Superintendents House
- (11) A Hall
- (12) B Hall
- (13) C Hall
- (14) D Hall
- (15) E Hall
- (16) Workshops & Laundry
- (17) F Hall
- (18) General Office
- (19) Bauhinia House

Excavation Works (Indicative)

- A **Proposed Basement Plant Room**
- B Proposed Basement of OBW
- Proposed Principal E&M Trench connecting OBW & AW C
- D Proposed Underground Passageway between A Hall and B Hall
- E Proposed Basement of AW
- F Proposed Principal Utilities Trench connecting the OBW and Basement Plant Room

Areas with Archaeological Potential (Indicative)

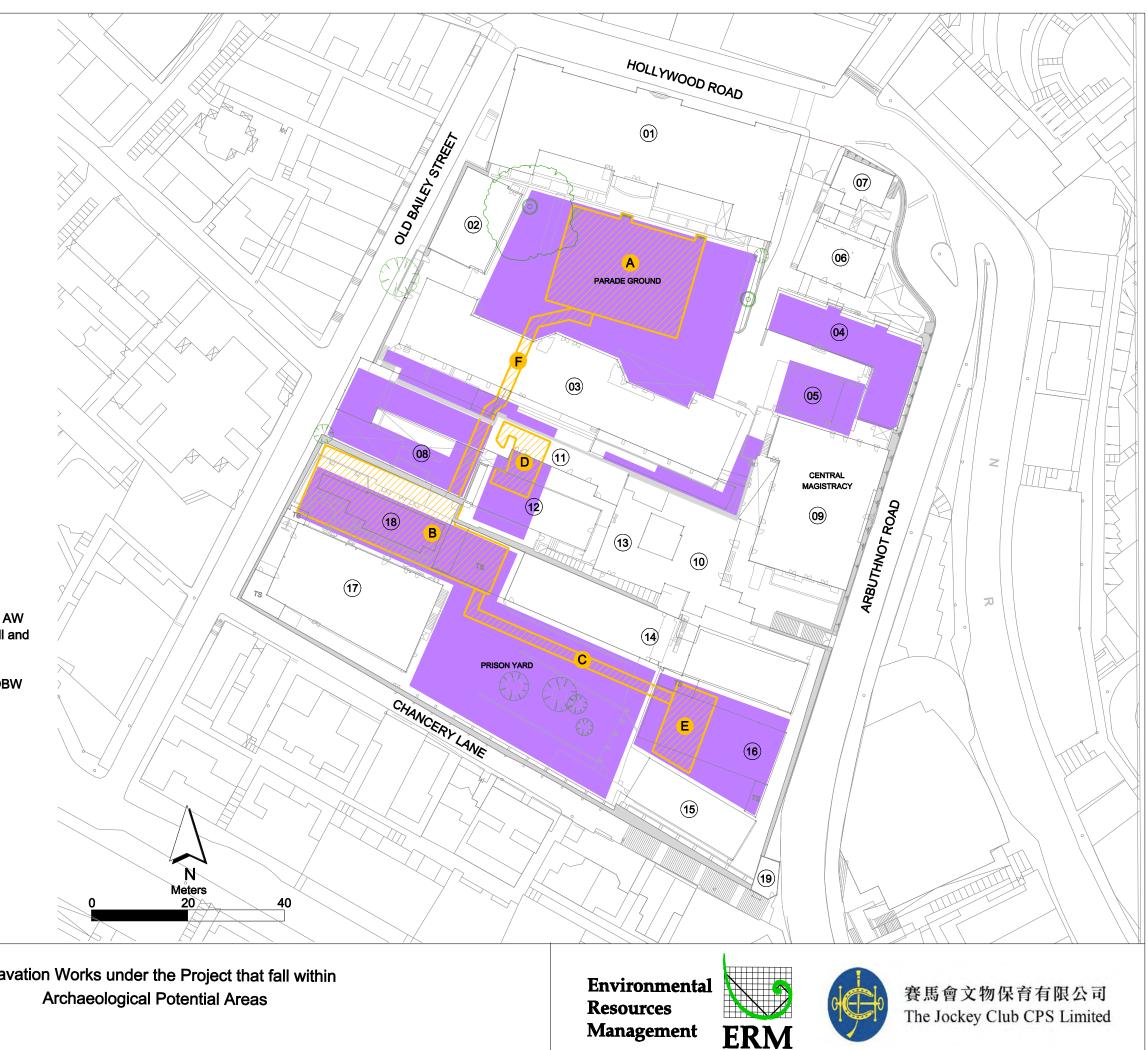
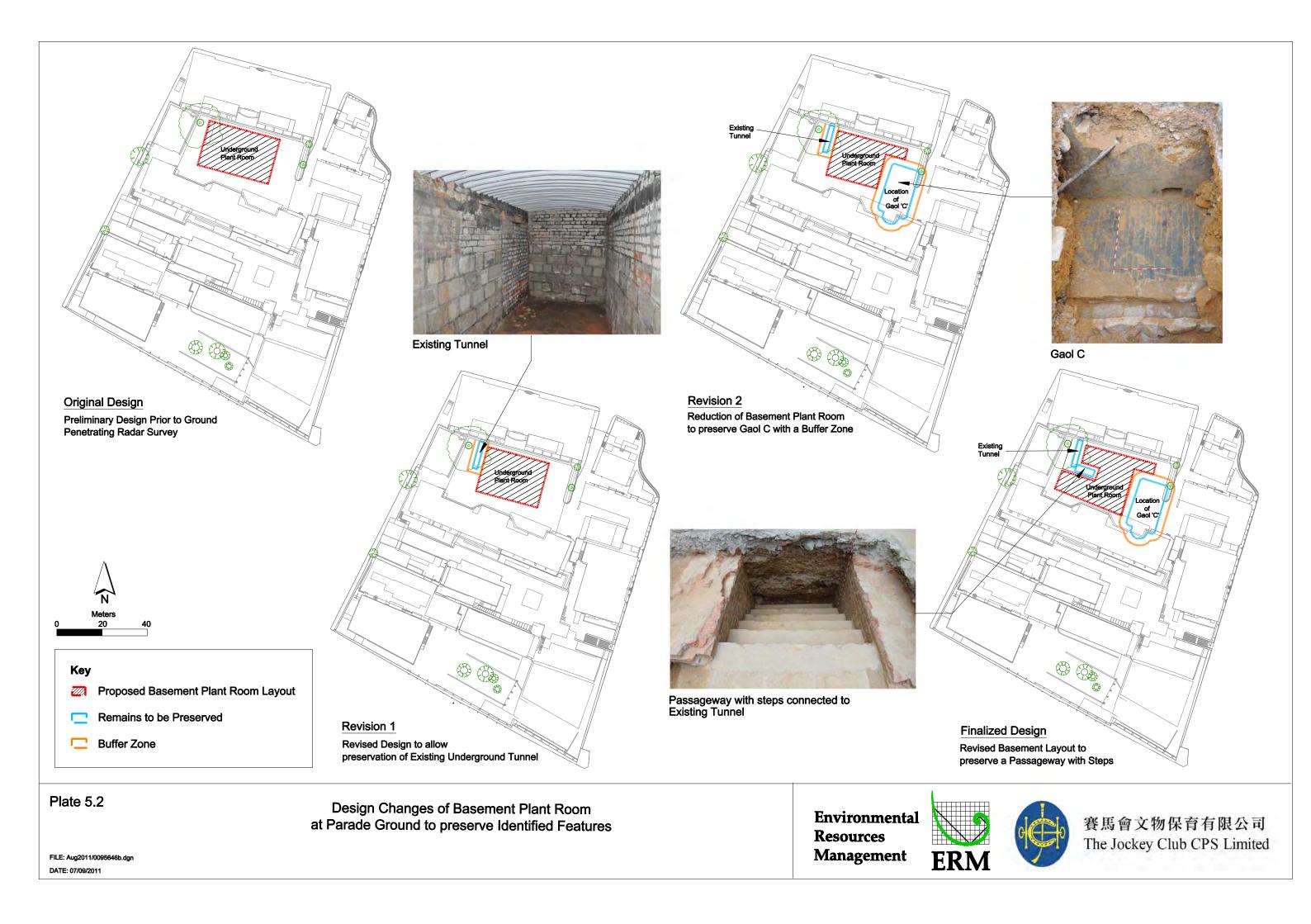
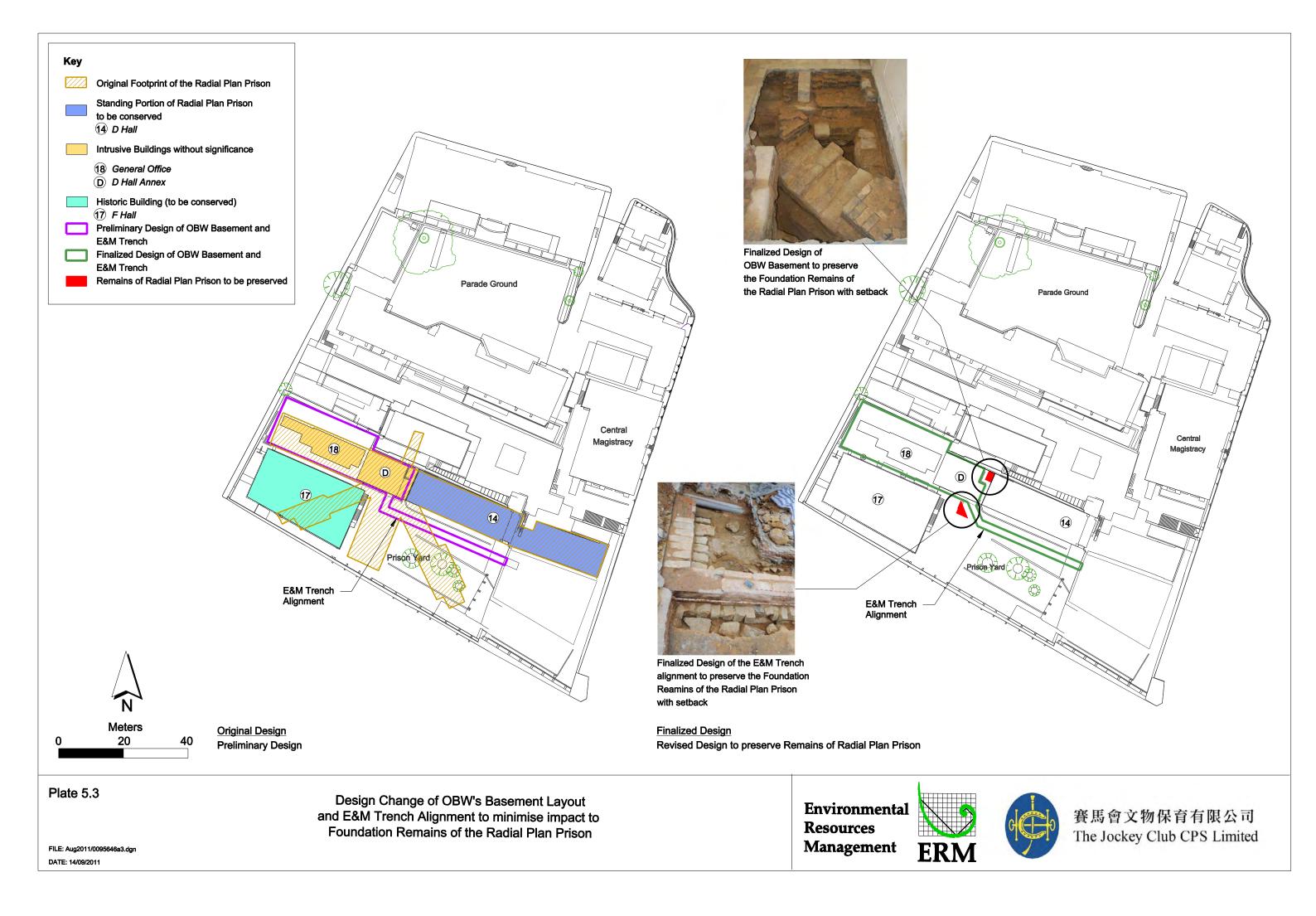


Plate 5.1

Excavation Works under the Project that fall within





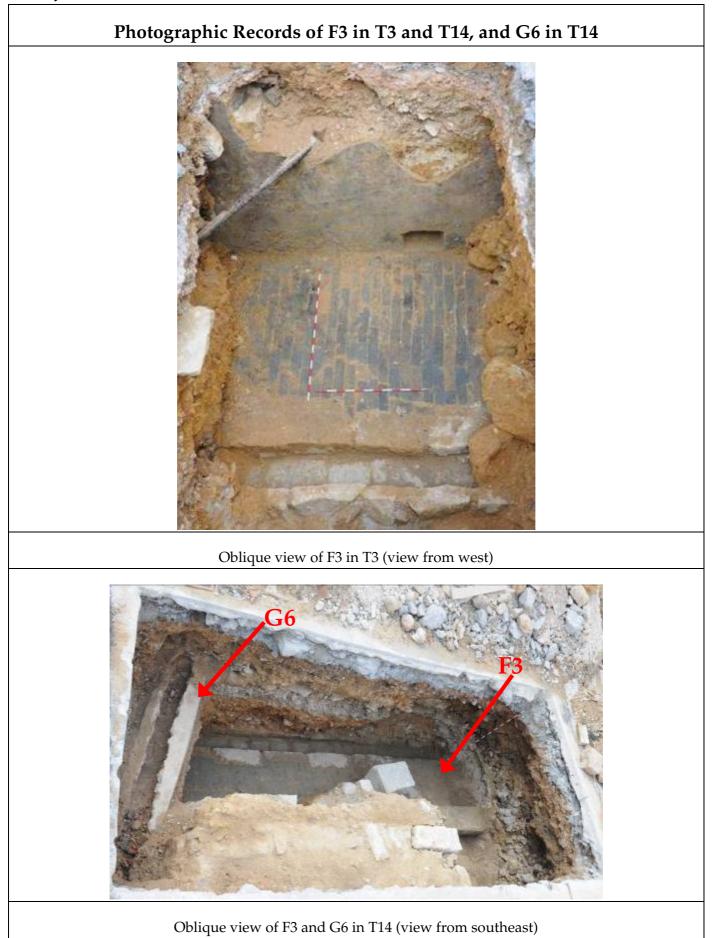


Annex B

Photographic Records of Features

Index		
Page No.	Features	
Platform 2		
1	F3 in T3 and T14	
2	G7 in T3 and T14	
3	S12	
4	S2 and S9 in T16 and TA5b	
5	F4 and F6 in T16 and TA5b	
6	WF8 in TA5a	
6 – 9	S1 and S5 in T2 and TA6a, TA6b, TA6c	
7	S3 in TP47	
8	S7 in TA6a and TA6d	
9	S11 in TA6c	
9	G1 in T4	
10	G2 in T4	
10	G3 in T5	
11	G4 in T3	
11	G5 in T3	
1, 12	G6 in T14 and T2	
12	G11 in TA6b	
13	G12 in TA6d	
13	G14 in TA5a	
14	G8 and G13 in T16 and TA5a	
Platforms 3 & 4		
Prison Yard		
15	WF2, WF3, WF4 and WF5 in TA2b	
16	F1a in T8 and T9	
17	F1b in T11	
17	WF1 in TA2b	
18	PF1 in T7	
Between A & B Halls		

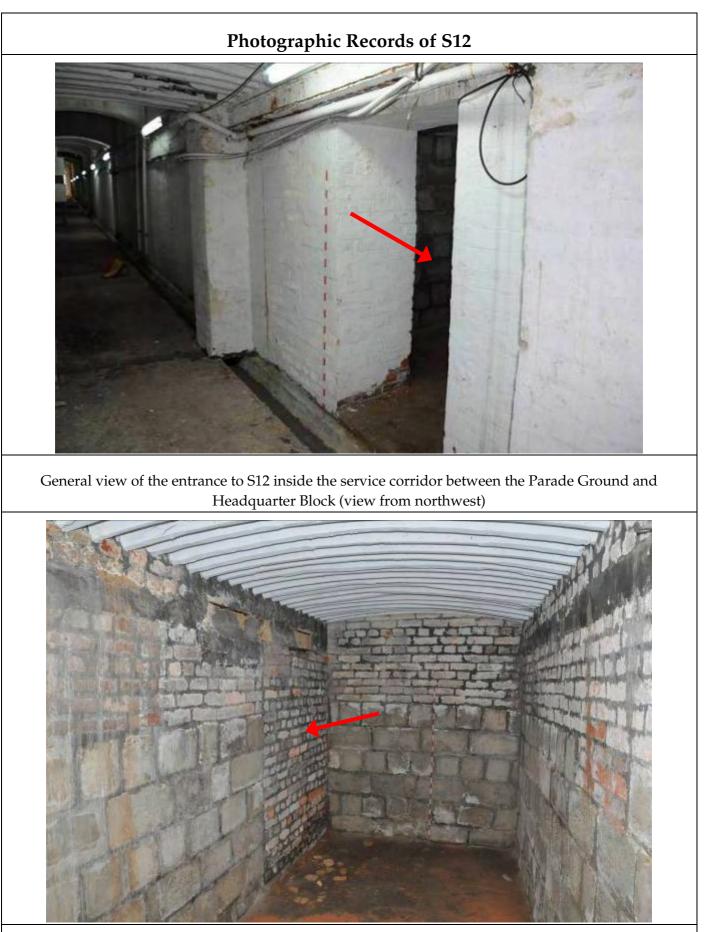
Index		
Page No.	Features	
18	F2 in T6 (TP26)	
Workshops/ Laun	dry	
19	WF6 in TA1b	
19	G15 and G16 in TA1b	
20	G10 in TA1a	
20	S6 in TA1a	
21	F5 and M1 in TA3a	
21	S4 in TA3b	
22	S10 and WF7 in TA9	
22	S8 in TA4	
23	G9 in TA3b	
23	G17 in TA10	
24	G18 in TA8	



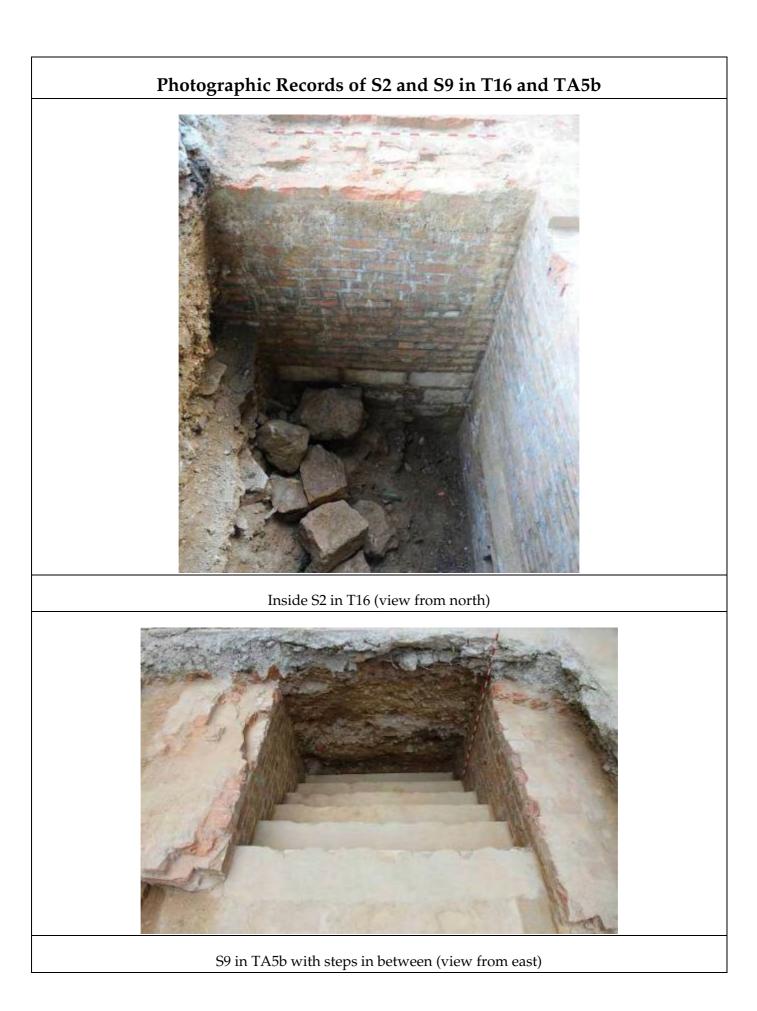
Photographic Records of G7 in T3 and T14



Oblique view of G7 in T14 (view from east)



General view inside S12. The blocked entrance at the southern end east wall of S12 (view from north) leading to the passageway with steps (S2, S9)



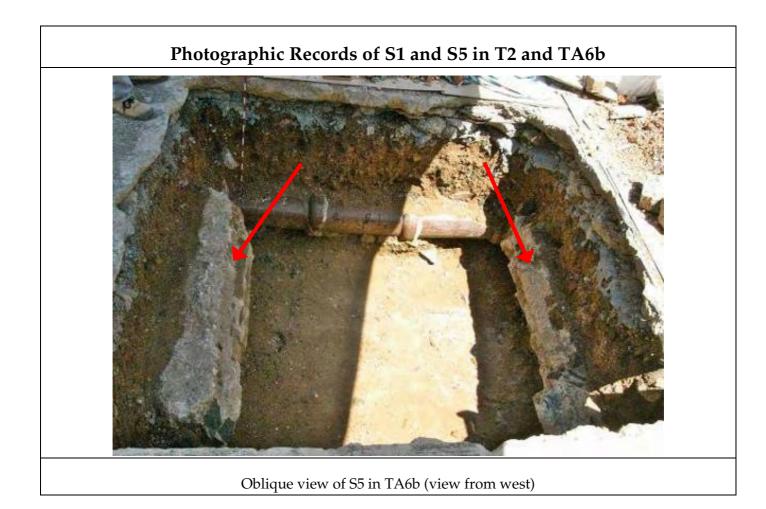


Oblique view of F6 in TA5b (view from west)

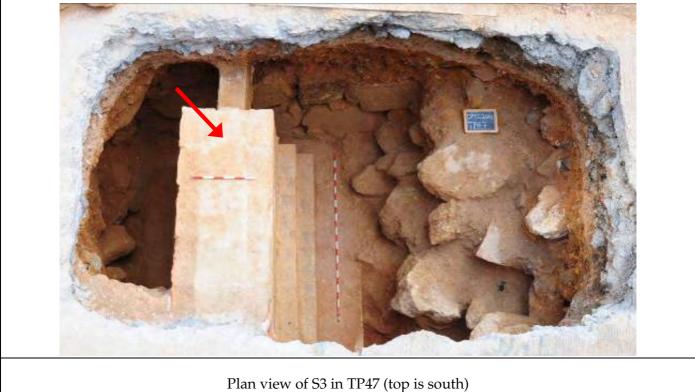
Photographic Record of WF 8 in TA5a Image: Contrast of the state of th



S1 in T2, with temporary wooden supporting system installed (view from south)



Photographic Records of S3 in TP47





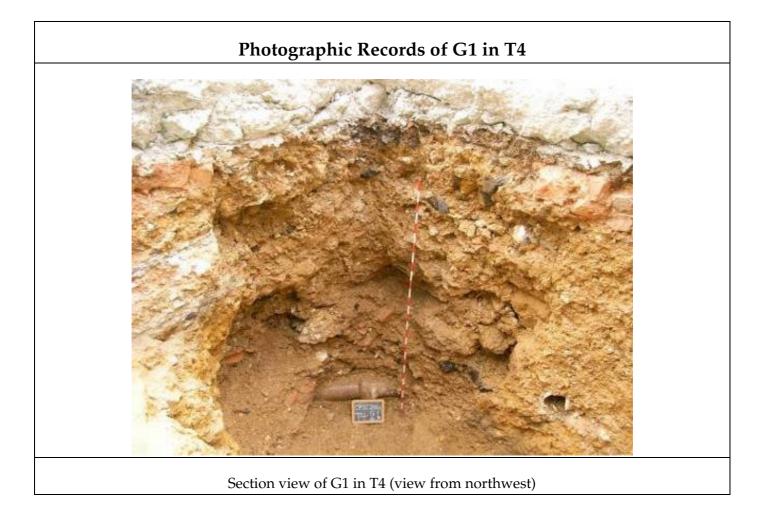
Oblique view of S5 and S7 in TA6a (view from north)

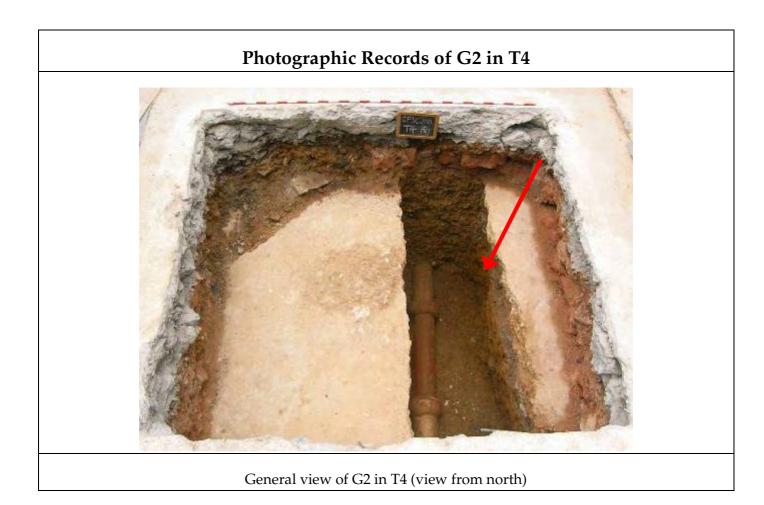
ENVIRONMENTAL RESOURCES MANAGEMENT

Photographic Records of S5 and S11 in TA6c

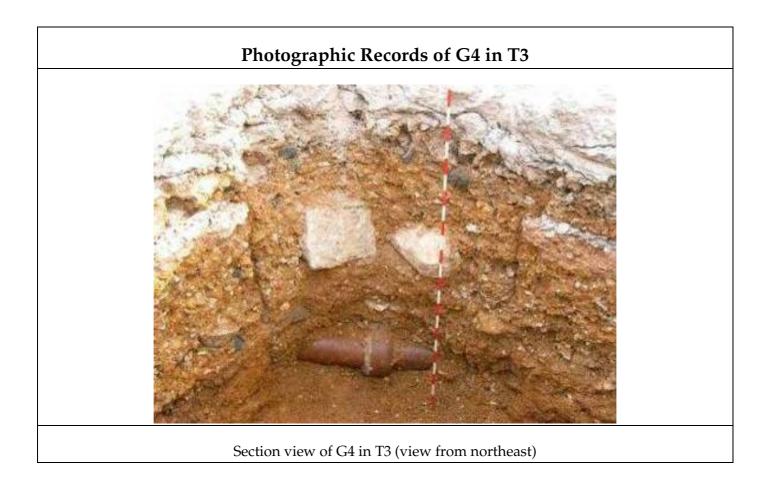


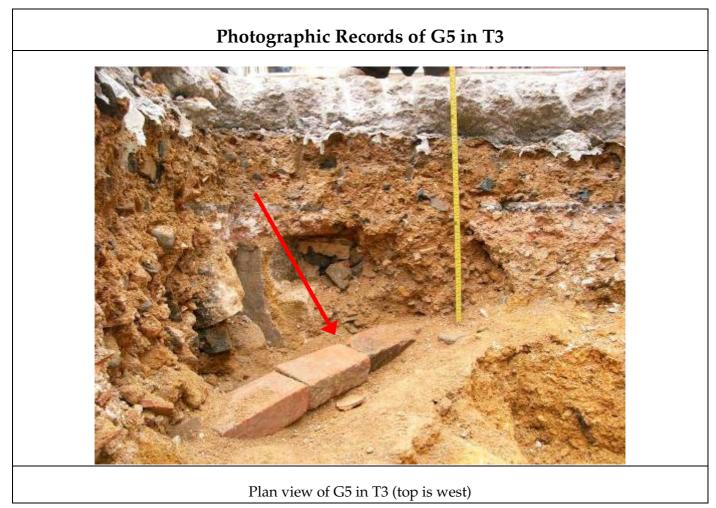
General view of S5 and S11 in TA6c (view from east)



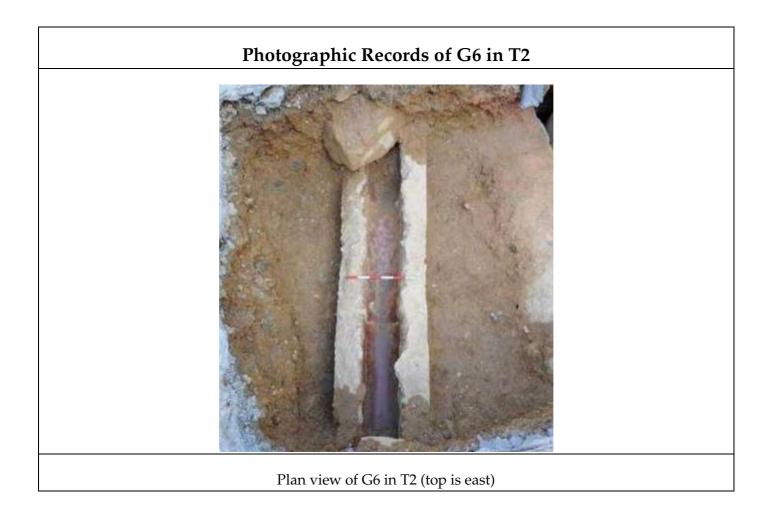


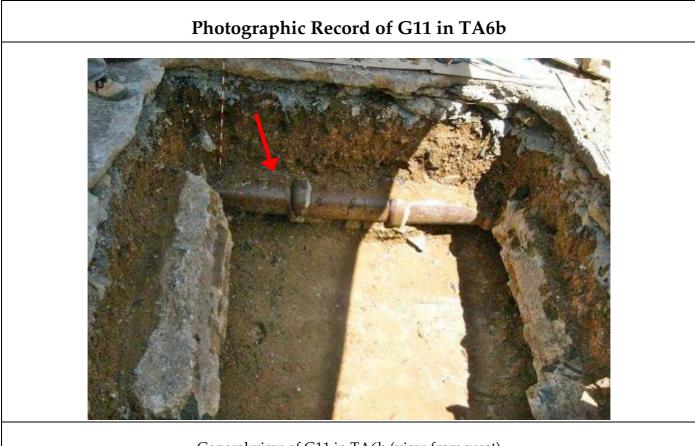
Photographic Records of G3 in T5



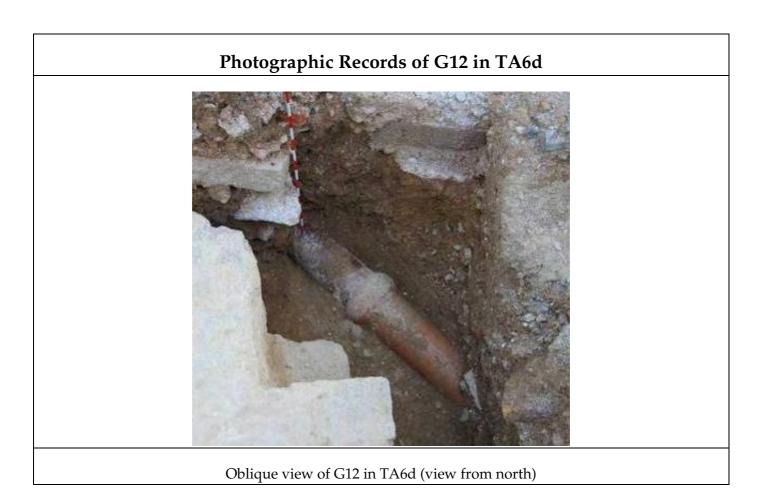


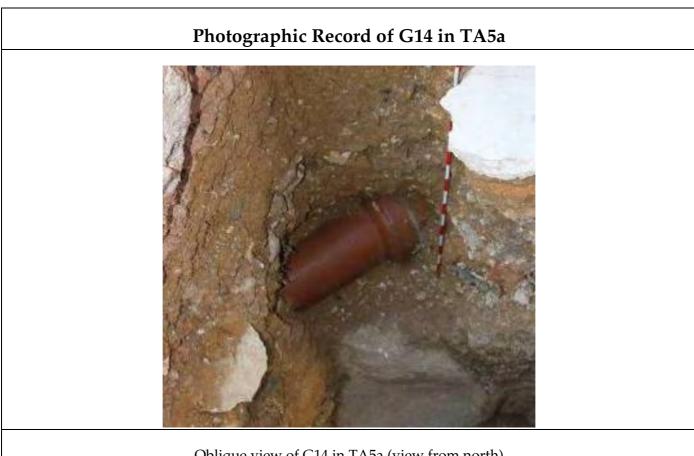
ENVIRONMENTAL RESOURCES MANAGEMENT





General view of G11 in TA6b (view from west)





Oblique view of G14 in TA5a (view from north)

Photographic Record of G8 and G13 in T16 and TA5a Oblique view of G8 in T16 (view from north)

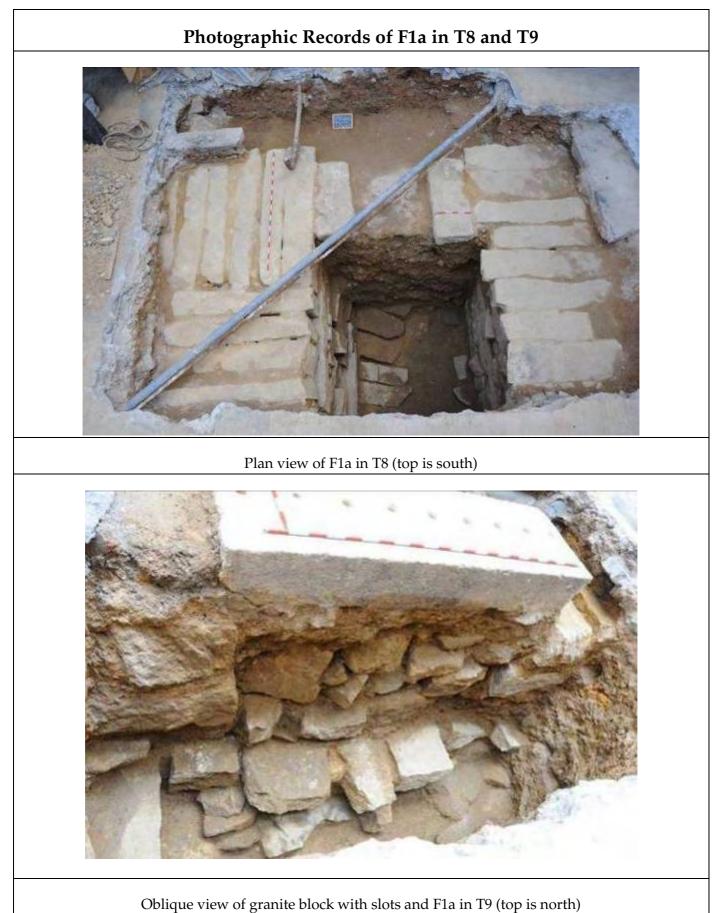
General view of G13 in TA5a (view from northwest)

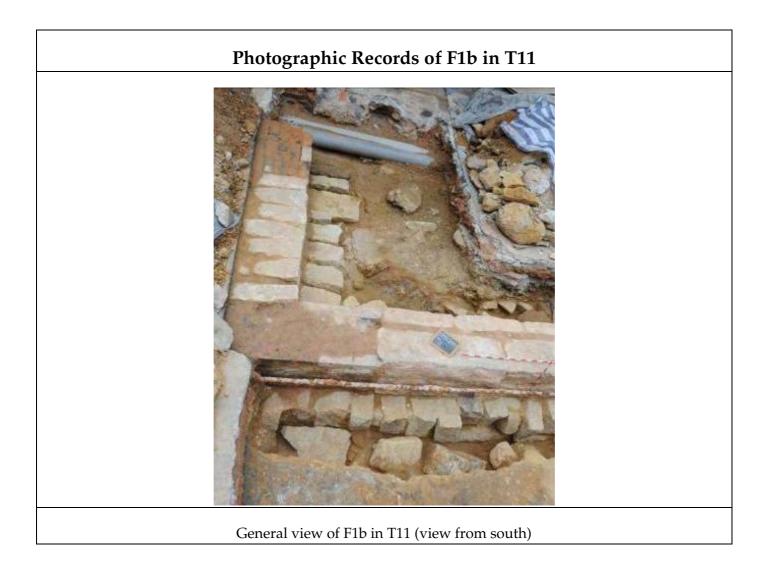
Platforms 3 & 4

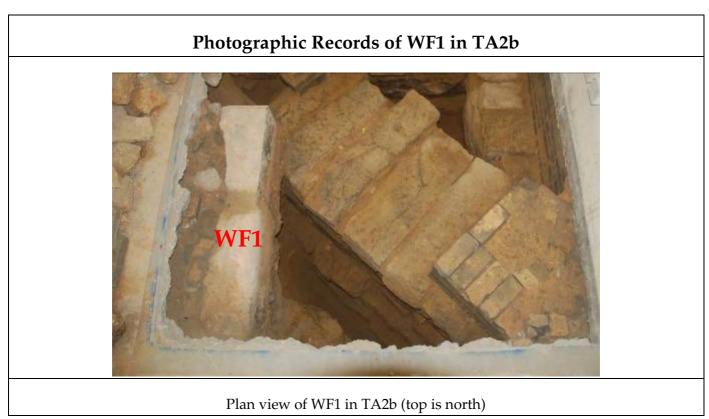
Prison Yard

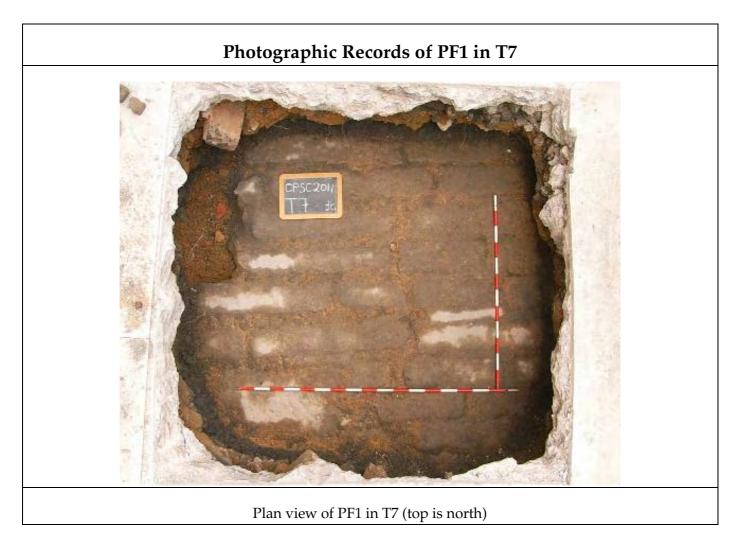


Oblique view of WF2, WF3, WF4 and WF5 in TA2b (view from south)

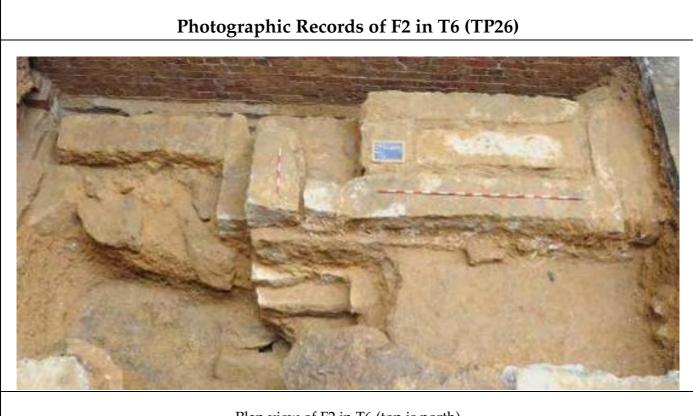




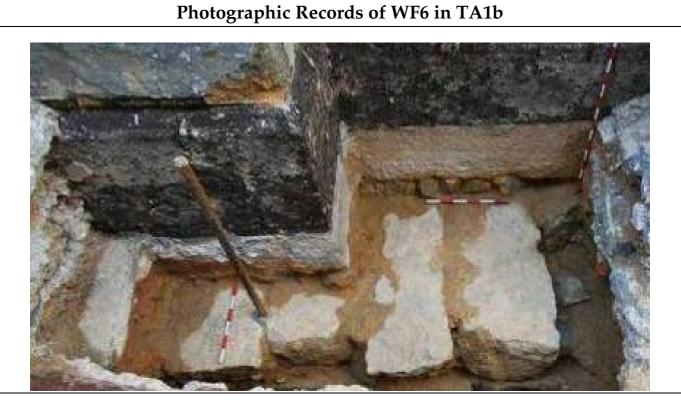




Between A & B Halls



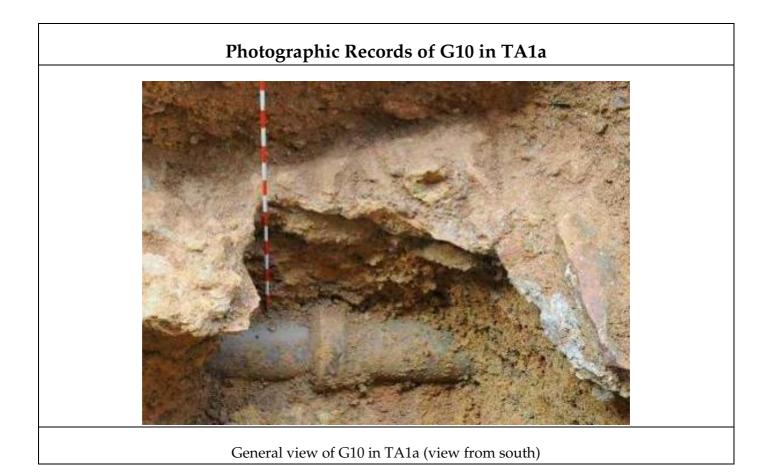
Plan view of F2 in T6 (top is north)

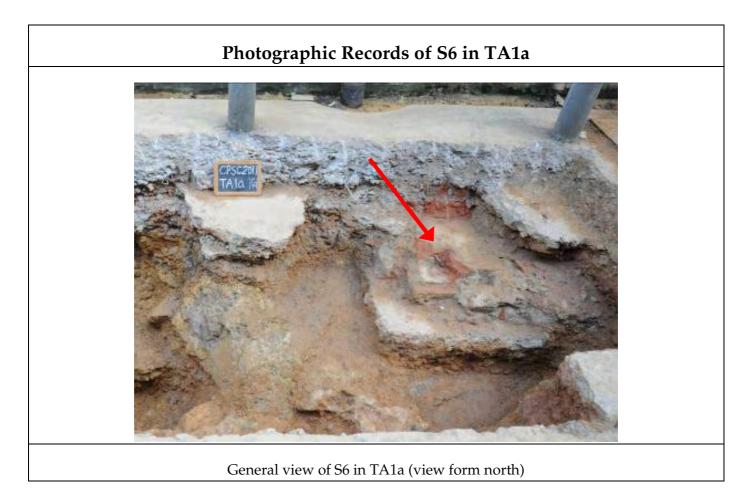


General view of WF6 in TA1b (view from south)

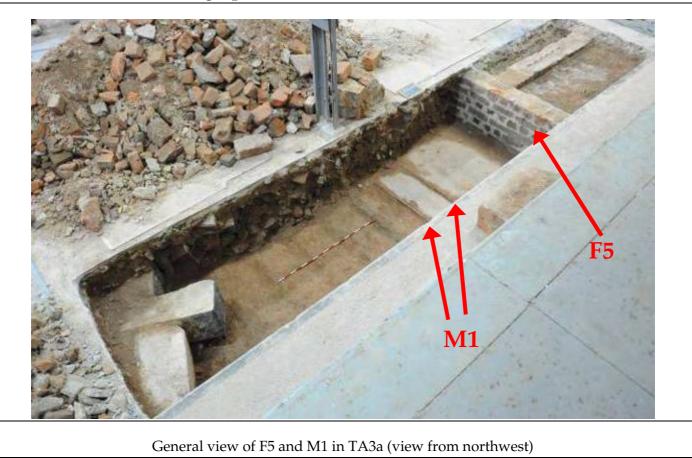


General view of G15 and G16 in TA1b (view form south)



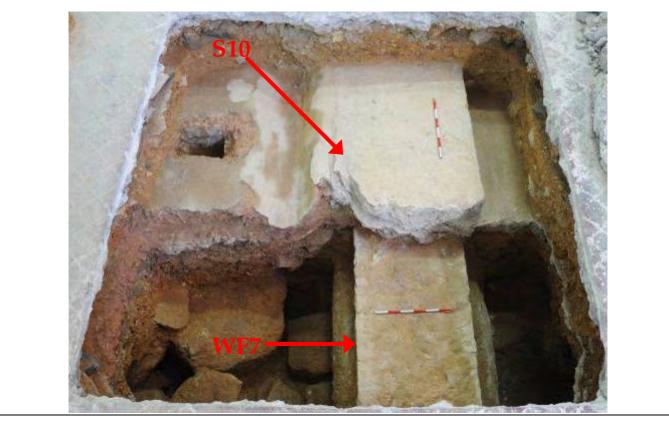


Photographic Records of F5 and M1 in TA3a





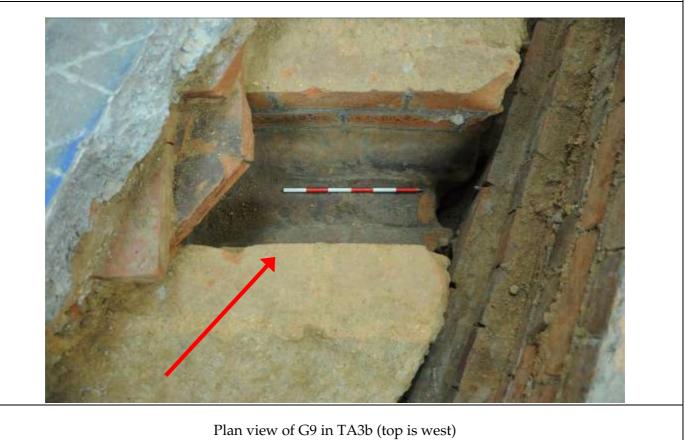
Photographic Records of S10 and WF7 in TA9



General view of S10 and WF7 in TA9 (view from east)



Photographic Records of G9 in TA3b



Photographic Records of G17 in TA10



Plan view of G17 in TA10 (top is east)

<section-header>

Plan view of G18 in TA8 (top is north)