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The Jockey Club CPS Limited

Central Police Station Conservation and Revitalisation Project
中區警署保育及活化計劃

Executive Summary
行政摘要

January 2011
二零一一年一月

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The Jockey Club CPS Limited

Central Police Station Conservation and Revitalisation Project: *Executive Summary*

January 2011

For and on behalf of
Environmental Resources Management

Approved by: Frank Wan

Signed: 

Position: Partner

Date: 13 January 2011

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1 INTRODUCTION

1.1 PROJECT BACKGROUND

The Central Police Station (CPS) (including the three declared monuments: Central Police Station, Former Central Magistracy and Victoria Prison Compound) was first established in 1841 when the British Royal Navy took possession of Hong Kong Island. The Site was selected as the centre for law and order, with the police station, magistracy and jail located close together. The CPS functioned as Police Headquarters on a regional and district level until 2006 when they were closed or relocated, and has since been closed to the public.

The Chief Executive (CE)'s 2007-2008 Policy Address highlighted revitalization as the guiding principle of heritage conservation and the Project was among one of the specific proposals put forward by the CE in the same Policy Address. At the meeting of the Executive Council (ExCo) on 15 July 2008, the ExCo advised and the CE ordered that Government should enter into a partnership with the HKJC in the form of an agreement (or agreements) to take forward the conservation and revitalization of the CPS (hereafter "the Project") based on various guiding parameters. The Project is now being undertaken in partnership with the Development Bureau of the HKSAR Government. The HKJC has taken on board the decision at the ExCo meeting and further investigated the design and implementation of the Project.

ERM-Hong Kong Ltd (ERM) has been commissioned by the Jockey Club CPS Limited ("the CPS Ltd") to undertake the Environmental Impact Assessment (EIA) Study in accordance with the EIA Study Brief (No. ESB-205/2009) issued under the *Environmental Impact Assessment Ordinance* (EIAO). The cultural heritage impact assessment was prepared by the conservation architect Purcell Miller Tritton LLP. This Executive Summary summarizes the key findings of the EIA.

1.2 NEED FOR THE PROJECT

The conservation and revitalization of the CPS was among one of the specific proposals put forward in the CE's 2007-2008 Policy Address, which highlights revitalization as the guiding principle of heritage conservation. The vision of the Project embraces three major principles:

1. *Heritage:*

    - to set the Hong Kong benchmark for excellence in the restoration, revitalisation and adaptive reuse of historic structures; and

    - to be the focal attraction in the Government's Conserving Central project.

2. *Visual Arts:*

- to establish an international reputation for organising art exhibitions;
- to attract a high quality cluster of arts organisations;
- to create a programme and arts facility that will appeal to a wide cross section of the people of Hong Kong;
- to complement the visual arts with a lively and varied performing arts schedule;
- to provide an international platform for Hong Kong and Pearl River Delta creative talent;
- to attract international talent to Hong Kong through exhibitions and artists' residency programmes; and
- to provide a practical training base for Hong Kong and China based arts professionals.

3. *History:*

- to provide a unique and informative interpretative experience;
- to relay the history and stories of the Site to students, local visitors and tourists; and
- to explain the role of law and order in the context of Hong Kong's development.

The Project aims to transform a cluster of Declared Monuments into a thriving cultural and historic centre which is financially supported by suitably compatible commercial activities.

1.3 OBJECTIVES OF THE EIA STUDY

The Project is within a site of cultural heritage, and therefore is classified as a designated project under Item Q.1 in Schedule 2 of the EIAO and therefore the construction and operation of the Project will require an Environmental Permit.

The overall objectives of the EIA Study are to provide information on the nature and extent of environmental impacts arising from the construction and operation of the Project; to recommend appropriate mitigation measures to control the potential environmental impacts so that it complies with the requirements of the *Technical Memorandum on Environmental Impact Assessment Process of Environmental impact Assessment Ordinance* (EIAO-TM); and to confirm the environmental acceptability of the Project. Key environmental issues identified include cultural heritage, landscape and visual, air quality, noise, water quality and waste management.

The EIA was conducted in accordance with the guideline on assessment methodologies provided in the EIAO-TM. The general approach for the assessment includes description of baseline environmental conditions for the impact assessment, identification and evaluation of potential impacts and recommendation of mitigation measures and an environmental monitoring programme. The assessments in this EIA Study are conducted using well-proven and internationally accepted methods based on reasonable worst-case conditions.

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2 PROJECT DESCRIPTION

2.1 EXISTING ENVIRONMENT

The location of the Project Site is shown in *Figure 2.1*. It is bounded 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.

Figure 2.2 shows the location of the Declared Monuments within CPS and the buildings of the Declared Monuments.

Without the Project, the CPS will remain closed to the public and the opportunity to provide a cultural and leisure space in the heart of Central will be forgone. Moreover, without immediate remedial works and long term maintenance, the condition of its historical buildings may deteriorate.

2.2 CONSIDERATION OF ALTERNATIVES

2.2.1 *Overall Design*

To bring the CPS to life and in order to achieve the vision for revitalising the CPS as an arts hub in the centre of the city, a new medium sized exhibition space that can house international high value loans and similarly scaled multi-purpose space, complemented by supporting educational and commercial facilities will have to be provided.

Different design options have been identified and examined. The option of only utilising the existing buildings for adaptive use was initially examined. Larger spaces within existing buildings (the Old Gymnasium in the Police Headquarters; the two courtrooms in the Magistracy; some of the upper floor dormitory rooms in the Barrack Block) were considered for the multi-purpose space and for the art galleries, however these were all ruled out due to limited space availability, requirement of substantial intervention or for other difficulties.

The physical constraints of the spaces in the existing buildings make it impossible for the purpose built international quality exhibition and multipurpose spaces (for education/performance) are to be housed within the existing buildings. If this were to happen, parts of the interiors would have to be stripped out in order to provide the necessary security, climate and

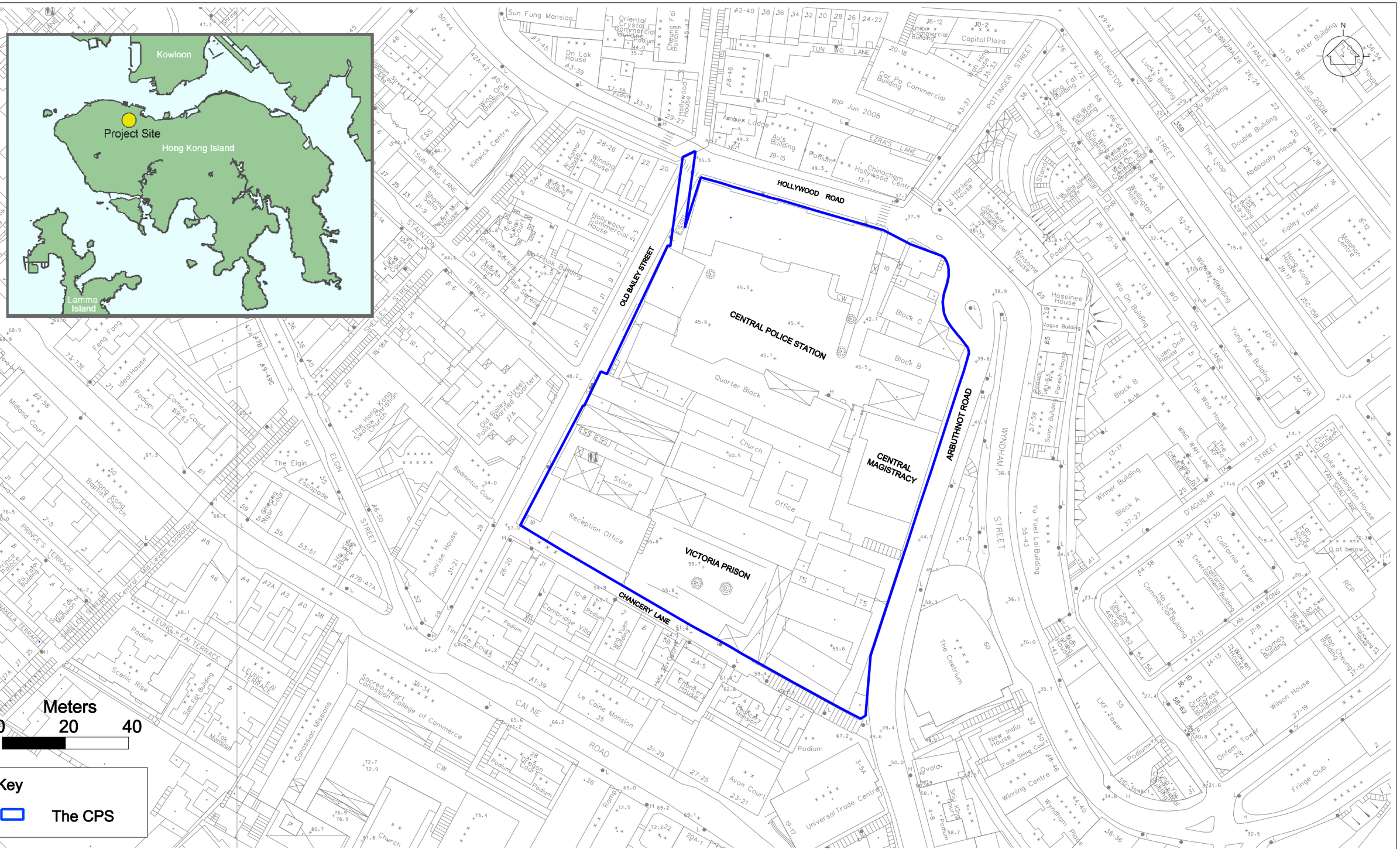

Figure 2.1

Project Location

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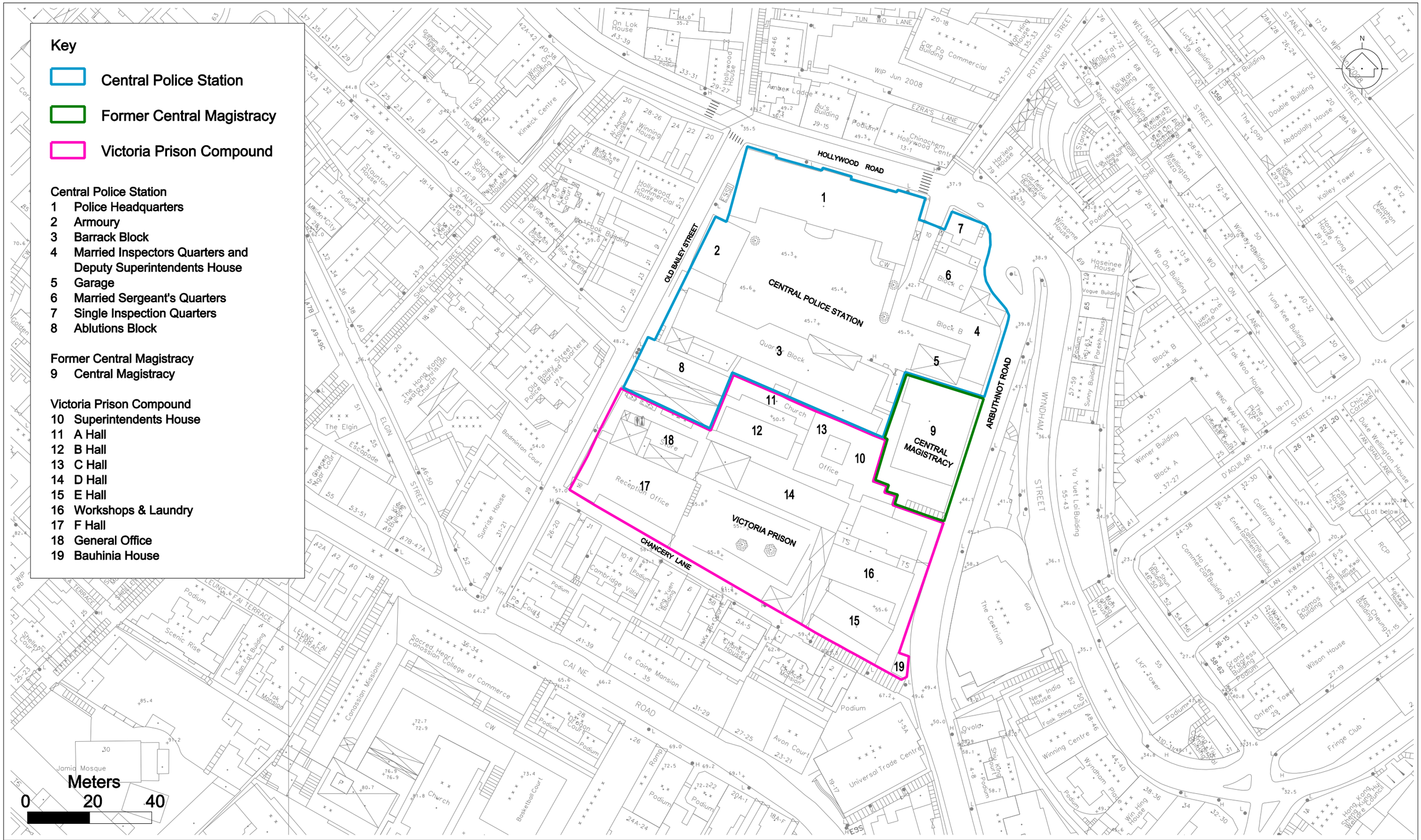

Figure 2.2

Declared Monuments within the Project Site

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display conditions for high quality exhibitions. This approach would not require the construction of any new buildings and has been adopted by art museum developments in a number of heritage sites around the world. However, the interior heritage features would have to be demolished to provide the necessary facilities and environment for the new purpose with only the retention of the facades. This deviates from the CPS model to retain, conserve and adapt the interiors of the heritage buildings for suitable reuse. The CPS Ltd is mindful that there is a need to strike a balance to achieving both the "heritage" and "visual arts" aims in its vision of the Project and felt that limited new building was the best way of providing accommodation for international quality exhibitions and conferences/ events/ performance/ education space as well as for the necessary machinery and plant to service the whole site. The modestly dimensioned new buildings will enrich the CPS immeasurably by providing added flexibility, function and cultural use to the site while preserving the existing heritage buildings and making them accessible to the public. This is in line with many other examples of heritage buildings worldwide that have been converted for modern/contemporary visual arts use but that need new buildings added to them to adequately fulfil their role.

In 2008, a Conservation Management Plan (CMP) (1) for the CPS was prepared, which identified only two potential sites where new buildings could be inserted. These sites were on the west side of the Prison Yard where the General Office is located (consisting of some modern single storey office buildings, some small brick single storey stores and the modern single story asbestos roofed extension on the west end of 'D' Hall) and the east side of the Prison Yard (consisting of the Laundry Yard, the single storey work shed and adjacent lavatories) (see *Figure 2.2*). Both these sites have very limited heritage value. In fact, the benefit to the rest of the Site in replacing them with modern purpose built new facilities far outweighs the benefits of any possible adaptive re-use.

Therefore, the conclusion was reached that in order to provide museum-quality exhibition space and a flexible venue for performances/ concerts/ lectures and events at the CPS, and minimising intervention in the existing historic buildings by housing the cooling plant at a new centralised location, as well as to make it both culturally and financially viable, new buildings would be needed, potentially taking the footprint of the General Office and the Laundry Yard.

2.2.2 *Design of the New Building*

The height of the new buildings conforms to the imposed height limit of 80 mPD for any new buildings on the upper platform area in the *Draft Sai Ying Pun and Sheung Wan Outline Zoning Plan (OZP) S/H3/24*. The new buildings are intended to house facilities such as a gallery, multi-purpose space, as well

(1) Purcell Miller Tritton (2008) The Old Central Police Station and the Victoria Prison Conservation Management Plan.

as food and beverage (F&B) outlets. Two design schemes have been identified:

Scheme A: The F Hall is used for gallery space, gallery support and the new building to the north of F Hall contains gallery space and the supporting facilities, including part of the central plant rooms to provide chilled water to the whole site (see *Figure 2.3*). This allows for the retention but modification to the Laundry Yard steel structure with the yard used as a multi-purpose space and the upper open deck at the level of the Prison Yard used as a sculpture exhibition area.

Scheme B: The F Hall is used for gallery space, gallery support and some portions would be retained for interpretation of its former role as a reception area of the Prison. The new building to the north of F Hall provides the main gallery spaces and a new art themed restaurant (see *Figure 2.4*). The old Laundry Yard is used as a site for another new building to be used as a new multipurpose space/hall, which acts as a proper introduction/linkage to the arts educational/arts related facilities in D/E Halls. The top floor of Arbuthnot Wing also accommodates the major space for central plant rooms to serve the overall Site.

These schemes were evaluated taking into account their ability to satisfy the demand for the cultural and mechanical plant space needed, the level of intervention at the existing historic buildings, integration with other buildings at the upper courtyard, engineering constraints and the potential environmental impacts. Scheme A being smaller in scale will have less potential environmental impact (particularly on construction dust, noise and landscape and visual impact), but will not provide enough space to meet the demand for cultural space and mechanical plant space needed. With regard to the cultural heritage impact of the new buildings on the existing buildings, the design of the new buildings under both schemes will set back from the existing buildings to ensure least impact to the existing buildings and no building of heritage significance will be demolished. The insufficient space for accommodating all cooling towers and chillers under Scheme A means that some of these plants have to be provided at the existing buildings, meaning more intervention at the existing buildings and thus more significant impact on cultural heritage point of view. Although Scheme B will require the demolition of the Laundry Yard, as discussed above, all associated alteration for upgrading the Laundry Yard structures (as in Scheme A) to current safety and services standard would also already be a compromise against its heritage value. Moreover, the structures to be removed are not considered as a significant loss in heritage terms. Hence, in terms of minimising potential heritage impact, both schemes perform similarly.

Hence, having considered and balanced the demand for the cultural space needed, the level of intervention at the existing historic buildings, integration with other buildings at the upper courtyard, engineering constraints and the potential environmental impacts while achieving the vision of the Project, the implementation of Scheme B is more preferable.

Key

- New Building
- Laundry Yard used as Sculpture Exhibition & Multipurpose Space
- Project Site

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10	Superintendent's House
11	A Hall
12	B Hall
13	C Hall
14	D Hall
15	E Hall
17	F Hall
19	Bauhinia House

Proposed Footbridge

HOLLYWOOD ROAD

Car Po Commercial Building

OLD BAILEY STREET

Police Quarters

ARBUTHNOT ROAD

WYNDHAM STREET

CHANCERY LANE

The Centrium

A

A'

B

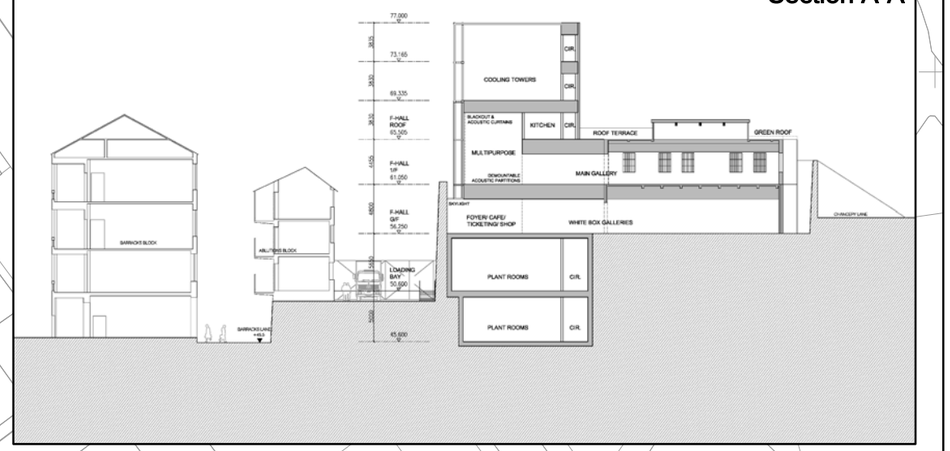
B

N

Meters

0 25 50

Section A-A



Section B-B

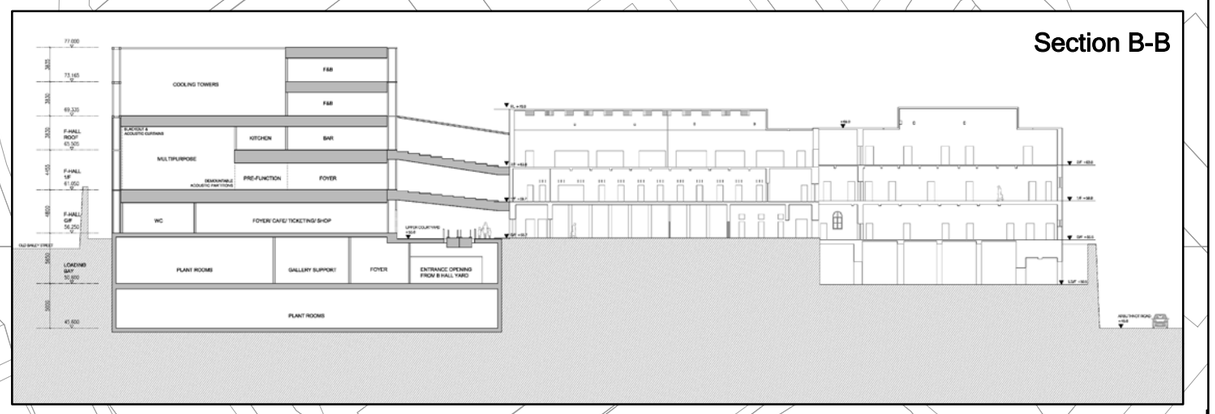


Figure 2.3

Key Features of Scheme A

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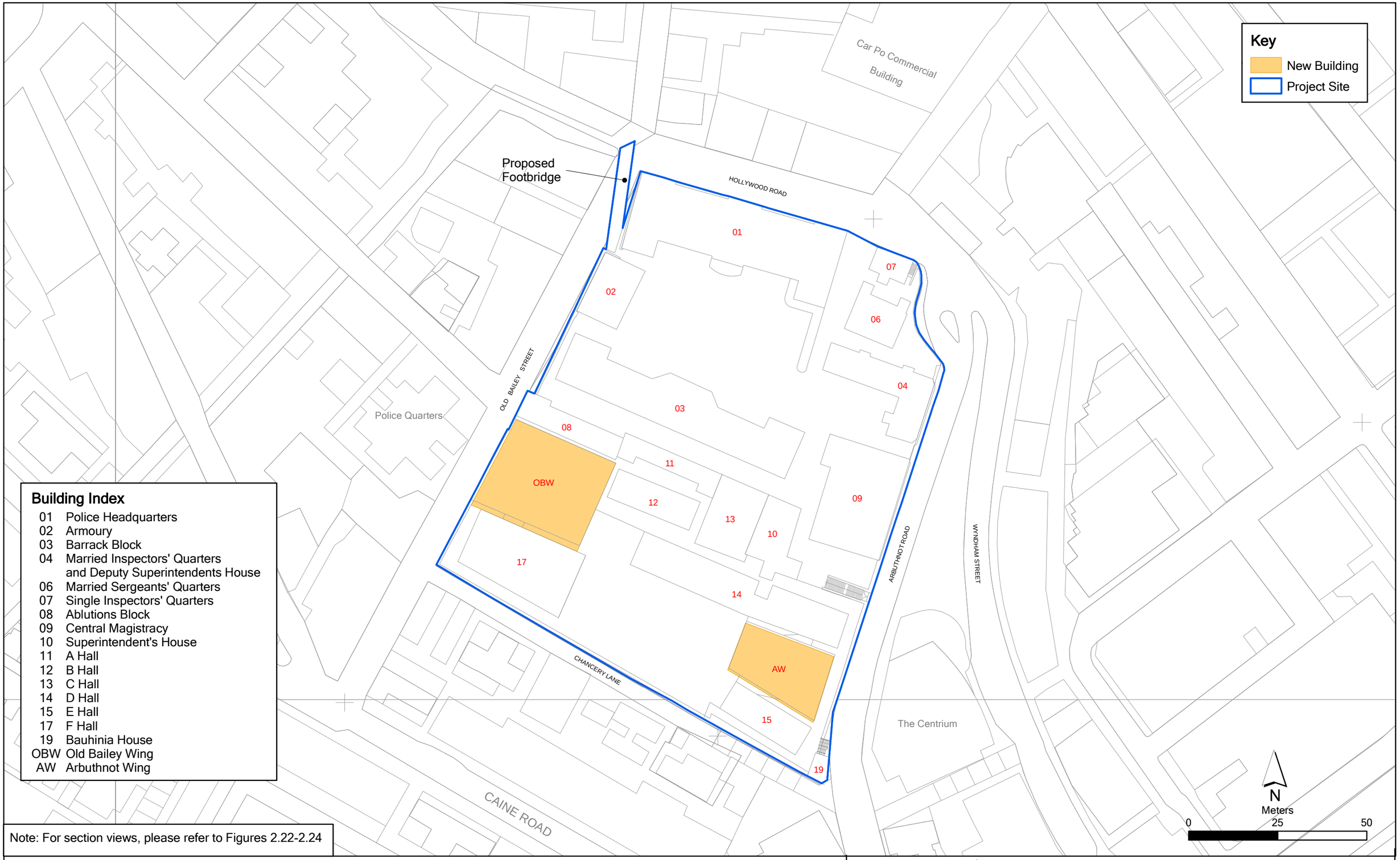

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13	C Hall
14	D Hall
15	E Hall
17	F Hall
19	Bauhinia House
OBW	Old Bailey Wing
AW	Arbuthnot Wing

Note: For section views, please refer to Figures 2.22-2.24

Figure 2.4

Key Features of Scheme B

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The architectural style to be adopted for the new building could broadly take either a historical or a modern approach. The use of a modern approach over a historical approach has been recommended. The massing and style of the new buildings was dictated by the zoning envelope and height restriction set for potential new buildings under the OZP and the internal space (floor area and ceiling height) needed for the proposed uses. The design takes the approach to set back from the maximum building envelop so as to minimise disturbance to the adjacent historic buildings and leave them intact. Hence, in terms of the massing of the building, it is compatible in terms of both visual and cultural heritage perspective. Different façade treatments have been considered for the new building. The versatility of aluminium in terms of texture, malleability, light weight, lifecycle and general aesthetic makes it the preferred material for the distinctive integration of new construction within the historical heritage compound.

2.2.3 Adaptive Reuse in the Existing Buildings

It is the aim of the Project to bring all the buildings on the Site back into beneficial uses. All buildings will need to be fitted with some modern services, improved fire compartmentation and fire escape provisions. Many will need floors strengthening to accommodate greater floor loads than they were designed for. An attempt has been made to find uses that can be accommodated in the existing buildings with the minimum of disturbance and alteration. In order to ensure that the impact to the historic fabric of the buildings is minimal due to the floor strengthening proposal, a detailed structural report will be prepared by the structural engineer during the detailed stage to evaluate if the strengthening proposal needs to be revised and determine any strengthening work is required for the floors and foundations resulting from the loadings of the new uses, or the alterations, or from the condition of the existing structures. Any structural strengthening proposals will be assessed for their impacts on the character defining elements, and mitigation measures will be considered.

Space is also needed to house the E&M equipment to support the functioning of all facilities and activities on Site. Two options have been considered for locating the chillers and cooling towers:

- Option 1: to locate the chillers and cooling towers in individual building;
- Option 2: to locate the chillers and cooling towers in centralised locations in the new building adjacent to the upper courtyard.

Compared to Option 1, Option 2 has the merits in terms of minimising the modification works at many of the existing buildings and offers a more sustainable solution, therefore has been incorporated into the design of the Project.

2.2.4 *Site Circulation*

Site Circulation To/From the Project Site

The success of revitalising the CPS will rely on convenient access to the Site and good circulation within the Site. To improve accessibility to the Site, new openings and a footbridge extension linking between mid-levels escalator and the CPS will be needed. To minimise the intervention to the existing fabric of the CPS, openings at the boundary wall are kept to minimum locations where necessary to comply with safety and site servicing requirements.

With the proposed footbridge connection, visitors to the CPS can directly access the Mid-Levels Escalator and minimise the usage of the at-grade pedestrian crossing at the junction of Hollywood Road and Old Bailey Street and the footpath along Hollywood Road. The study of the footbridge design is currently on-going. However, the architectural idea of an open footbridge is the extension of the Parade Ground, which means a simple, minimal slab or platform reaching out to the existing mid-level escalator. The only thing needed in addition to the slab is the handrails on both sides to provide safety. It is also essential to carry through the same hard-paved open-ground character of the Parade Ground. The footbridge design as it is now only provides the minimum width necessary for the public flow to keep the whole structure as simple and as light as possible to minimise potential visual impact. The conceptual design is illustrated in *Figure 2.5*

Site Circulation Within the Site

To improve the site circulation within the Site, modification or new addition of stairs and walkways between buildings is required. A stairway passage provided with disabled access will be constructed to link up the lower courtyard and the upper courtyard, via A Hall and B Hall. The stairway passage is complemented with a historical path, which winds through the side and back of the Barrack Blocks and the prison halls. The stairway passage provides direct access to all the main public spaces of the Site (exterior and interior, old and new). Although modification to the interior and part of the exterior of B Hall will be required, the construction of the stairway passage will minimise the need of adding new staircases and walkway between the buildings thus minimising exterior building modification works at the CPS.

The key pedestrian circulation corridor is shown in *Figure 2.6*

2.2.5 *Selection of Preferred Design Option*

To meet the Project's vision while balancing different consideration aspects, including minimising potential environmental impacts (particular to the historic buildings), Scheme B was chosen as the preferred design of the new buildings at the CPS. The massing of the new buildings respect the height limit imposed by the OZP and their scale is considered to be compatible with the existing historical buildings from the visual and cultural heritage angles.

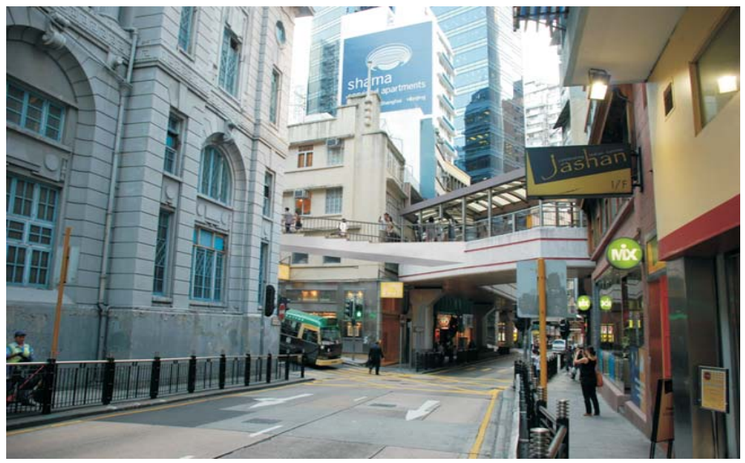

Figure 2.5

Conceptual Design of Footbridge

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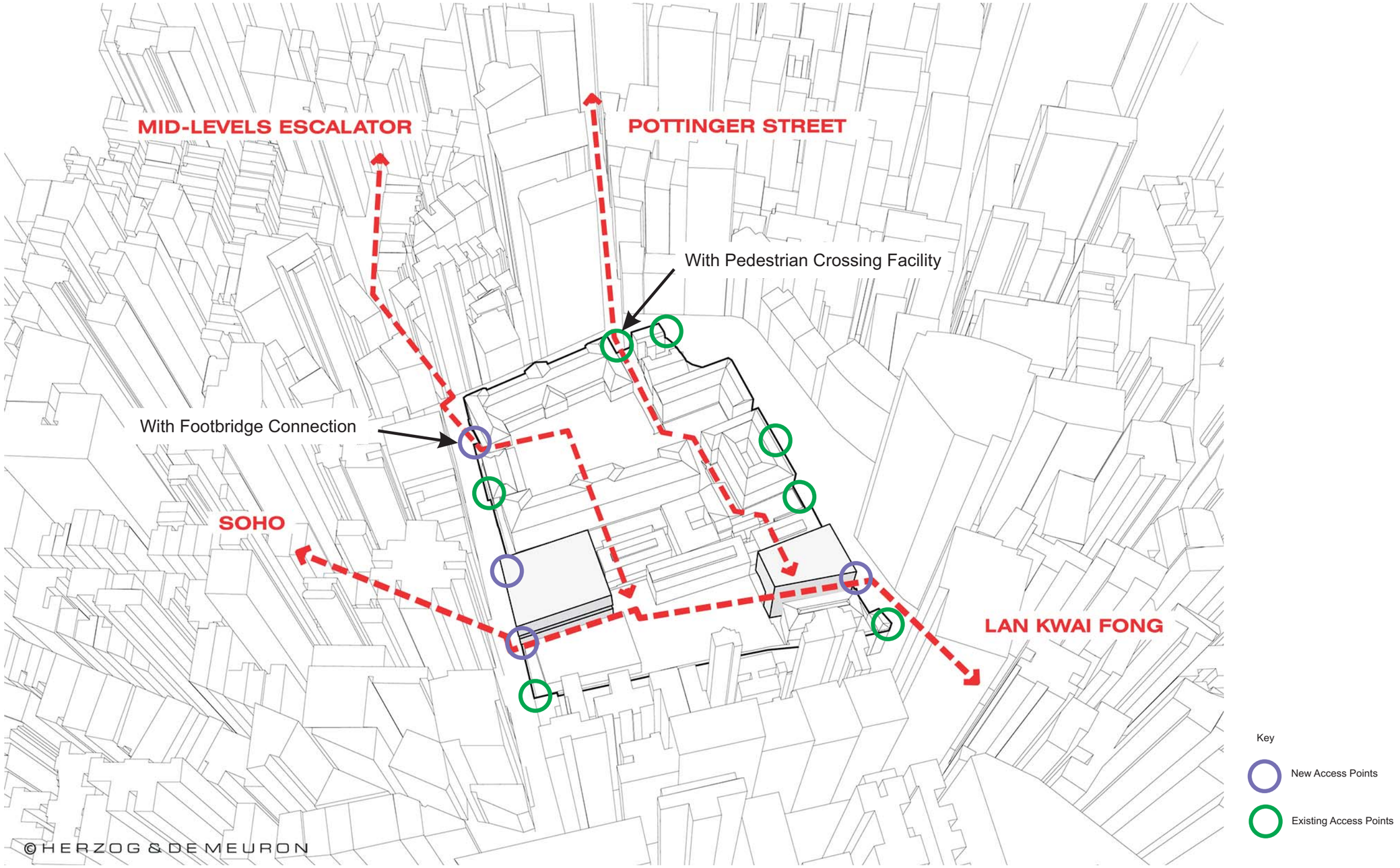

Figure 2.6

Site Connectivity

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Regarding the proposed adaptive reuses in the existing buildings, a concerted approach has been taken to find uses that can be accommodated in the existing buildings with the minimum of disturbance and alterations. The preferred scheme will keep modification of the existing fabric to a minimum by limiting the openings at the boundary wall.

The modification/refurbishment works at the existing buildings are kept to a minimum by carefully assigning appropriate uses to fit in the spaces and adopting a fire engineering approach to minimise alteration while complying with fire safety requirements. Hence, the preferred design has environmental benefits in most of the key aspects of the design. Where environmental impacts are unavoidable, especially during the construction stage, these impacts will be localised and transient and can be mitigated by the implementation of appropriate control measures.

2.3 PROJECT DESCRIPTION

2.3.1 Design Philosophy

New Build

The intention is to use the new buildings as a magnet to draw people to the more enclosed and remote southern part of the Site – the old Prison area. The Old Bailey Wing needs to be large enough to accommodate international touring exhibitions and the Arbuthnot Wing not only has to accommodate a major multi-purpose performance space but is also being used as the location for the cooling systems that will serve the whole Site – this makes it essential to use the space available to the best effect.

The two new buildings have been designed to suit the scale of the Site, and to make maximum use of the available space without dominating the surrounding buildings nor the open space of the Upper Courtyard. The new buildings will be assertive in their difference to the historic buildings. There is no intention to take any of the existing finishes (granite, brick, and painted render) in an attempt to work with them. Rather the proposed cladding of textured metal will pick up the rhythm and scale of the granite walls and will offer a dialogue with the adjacent buildings whilst remaining entirely distinct. This is a well recognised approach to the insertion of new buildings on significant heritage sites. It is generally regarded as a poor solution to have buildings which are a simple pastiche of the adjacent historic buildings. This can lead to confusion in interpretation and tends to diminish rather than enhance the character and quality of the original buildings. Well designed new buildings which are thoughtful in their scale and relationship to the existing buildings and yet have their own contribution as architecture of their own time are widely accepted as the ideal solution to this sort of intervention. The new buildings can be exciting and act as a focus for the visitor without detracting in any way from the significance of the historic buildings, and very importantly in this case, without encroaching on the Prison Yard.

Each new building's basic massing begins as a full measure of the zoning regulations. They are created as offsets from the historical buildings and rise to +80.0 mPD in height. Distinctive spaces are carved out of the new volumes at the ground level, resulting in generous protected places for gathering. At the same time, these voids shape the direction of pedestrian flow connecting Artbuthnot Road and Staunton Street through the Old Prison Yard.

The design of the new buildings and the Upper Courtyard is illustrated in *Figure 2.7*.

The Courtyards

One of the main components of the design intention is to preserve the openness of both the Upper and Lower Courtyards and re-activate them for public use as a new type of urban found space. They will define the Site both physically and programmatically as places of gathering, leisure and respite. The Lower Courtyard will be surrounded on each side by several of the Site's most historic buildings, resulting in a formal open space with generous room for public recreation, organised events, direct access to restaurant and retail attractions as well as smaller scale cultural and educational spaces. The Upper Courtyard will be more thoroughly transformed from a rough and forbidding area to a new open public space with an emphasis on cultural venues. It will be less formal than the Lower Courtyard, with significant existing trees preserved and the rear prison wall enhanced with new green planting.

Site Connections

With three different ground levels and a prison wall around, the Site is currently hard to navigate and access. The main entrance will remain at the extension of Pottinger Street, with new openings added on the East and West sides to improve the Site's porosity. A new footbridge connected to the Mid-levels escalator system will provide short direct access to the Lower Courtyard, and also publicise the Site's changes at the key corner of Hollywood Road and Old Bailey Street. An opening in the prison wall along Old Bailey Street, close to Staunton Street, will create a new Western entrance that will be matched on the opposite Eastern side with another wall opening towards Arbuthnot Road. The Bauhinia House will be rehabilitated as a new gatehouse linking Arbuthnot Road to the Old Prison Yard. Together, these openings create an important new East-West route through the upper level of the compound.

To link the new pedestrian network of public spaces within the Site, two main circulation paths running North-South are proposed. A meandering historical path will include re-opened doors and passages, supplemented by a few carefully-crafted new incisions and insertions through existing buildings and walls. New stairs and lifts will provide a more direct path to link the Parade Ground and the Old Prison Yard.

Figure 2.7

Design of New Buildings and Upper Courtyard

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The key pedestrian circulation corridor is shown in *Figure 2.6*.

2.3.2 Site Layout and Proposed Uses

The Site Plan is shown in *Figure 2.8*. Public access to the Site will be via the existing and new gates along Hollywood Road, Old Bailey Street and Arbuthnot Road and via the new footbridge. In addition, there will be an additional access point to the loading area along Old Bailey Street.

A combination of cultural and commercial uses is proposed within the CPS. Spaces for interpretation of the architectural and historical features of the existing historic buildings have also been allowed. The commercial facilities include a wide range of restaurants and F&B outlets. There are also multi-purpose spaces which are capable of hosting a wide range of events/activities. These are supplemented by various venues that will be available to the public to hire whether it will be for cocktail parties to host the launch of a new play or product, or conduct a workshop or conference to further the growth of Hong Kong's economy and its role as a major tourism and growing art hub in the region.

The courtyards within the CPS will remain as open space for general public use. Occasional cultural events may take place in both courtyards. A cross-sectional plan of the upper courtyard showing the new buildings and the stairway passage is presented in *Figures 2.9* to *2.11*.

2.3.3 Construction and Modification/ Refurbishment Works

The construction and modification/refurbishment works are designed to match the requirements of the proposed uses and enhance the spaces and connections between the buildings and improve circulation throughout the Site. The key modification/refurbishment works will include repairs to internal finishes and necessary alterations, repair of facades, electrical and mechanical upgrading, improve the paving and site circulation between buildings and opening up part of the existing boundary wall to facilitate access to the Site.

Specific refurbishment/modification details of the existing historic buildings varies between individual buildings depending on the existing condition and proposed uses of that building. However, much of the works are to remove later accretions and to bring the buildings back into a good state of repair.

2.4 CONSTRUCTION PROGRAMME

The construction works are tentatively scheduled to commence in early 2012 and complete during 2014. The modification works at the existing buildings are divided into four phases. The major demolition and excavation work will be conducted in Phase 1 while Phases 2 to 4 will involve renovation work carried out mainly by the use of handheld/light equipment. The construction work for the new building will be undertaken in parallel to the modification works at the existing buildings.

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Figure 2.8

Site Plan

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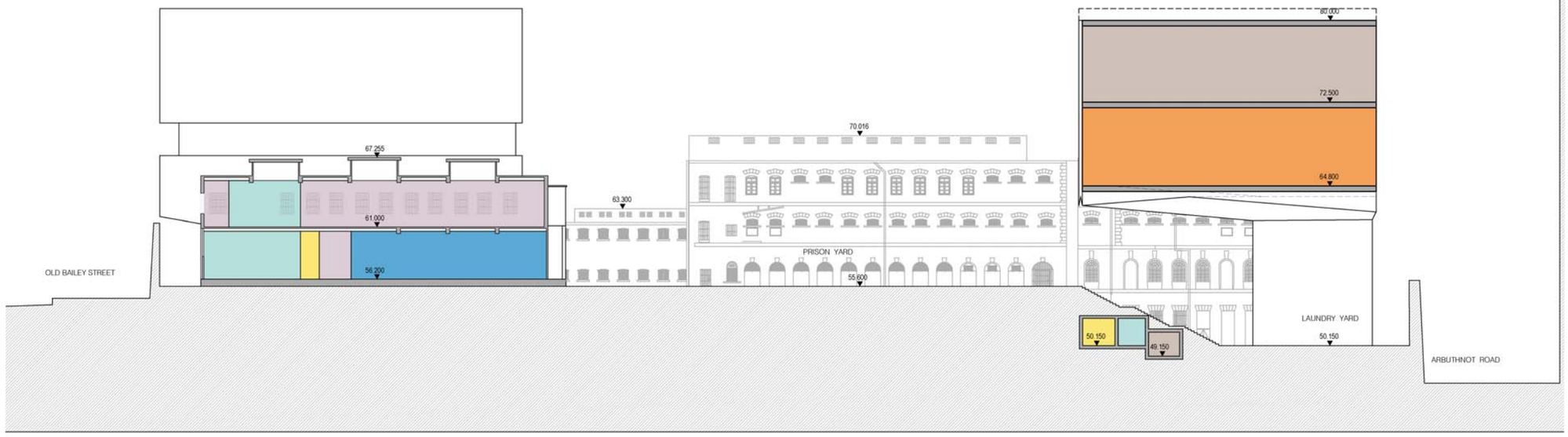
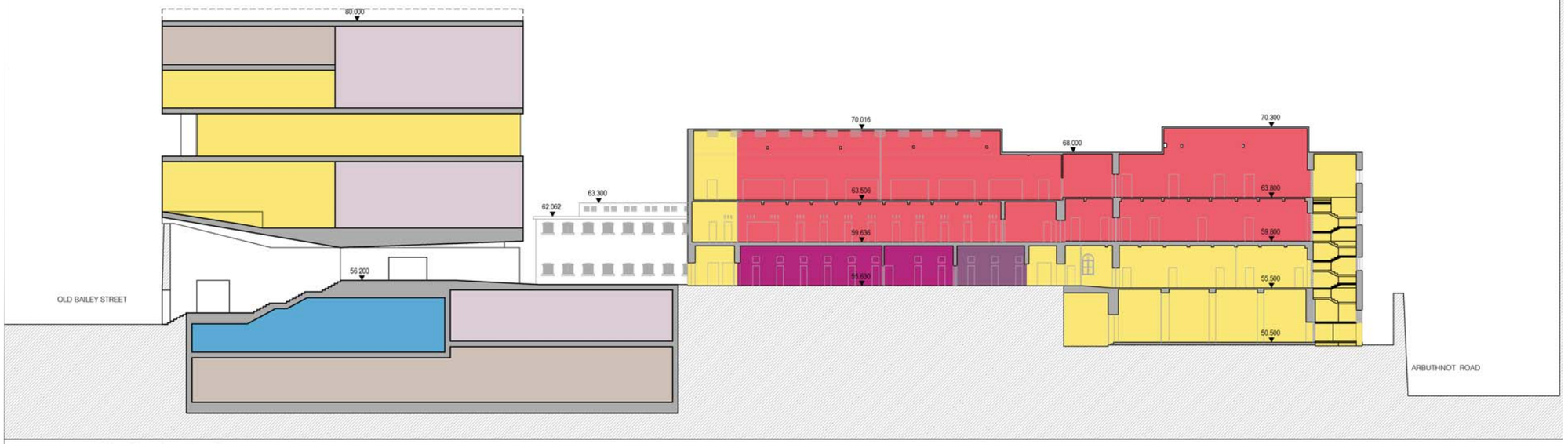


Site Section A - A



Site Section B - B

USES LEGEND

- F & B AND ANCILLARY SUPPORT
- RETAIL AND ANCILLARY SUPPORT
- CIRCULATION
- TOILET
- PLANT ROOMS AND MAINTENANCE ACCESS
- INTERPRETATION ROOM
- EDUCATION CENTRE AND ANCILLARY SUPPORT
- MULTI-PURPOSE AND ANCILLARY SUPPORT
- ART GALLERY AND ANCILLARY SUPPORT
- ARTS RELATED SUPPORT SPACE
- POLICE REPORTING CENTRE
- ARTS RELATED ORGANISATION ARCHIVES AND RECORD CENTRE
- SITE MANAGEMENT OFFICES AND STORE ROOMS

NOTE: THE STRUCTURAL FLOOR LEVEL OF MAIN ROOF FOR NEW BUILDINGS WILL NOT EXCEED 80MPD, CERTAIN NON-STRUCTURAL ELEMENTS WILL PROJECT ABOVE THIS STRUCTURAL FLOOR LEVEL, SUCH AS ROOF FINISHES, BUILDING MAINTENANCE SYSTEM, LIGHTNING PROTECTION PROVISION, ARCHITECTURAL FEATURE AND/OR SKYLIGHT; SUBJECT TO DETAIL DESIGN DEVELOPMENT.

0 5 10 15 20m

Figure 2.9

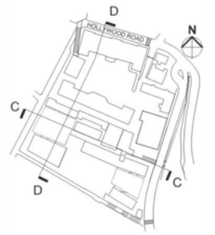
Proposed Master Layout
Section A-A & B-B

FILE: 0095646w12
DATE: 04/01/2011

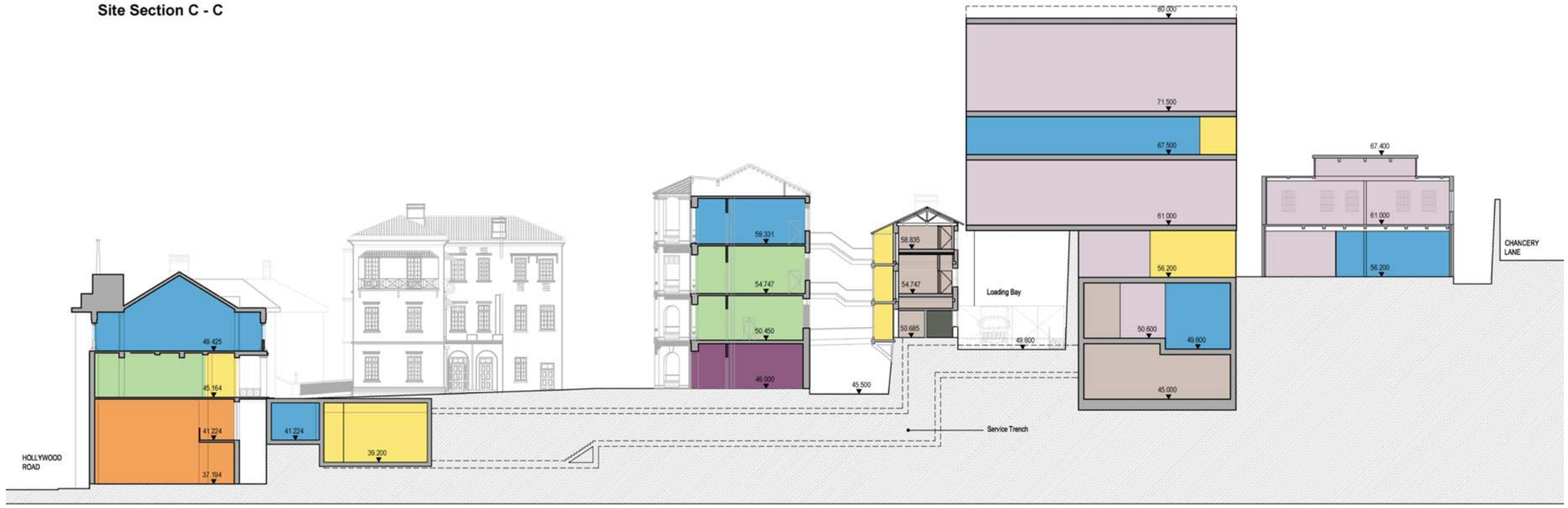
Environmental Resources Management

ERM

賽馬會文物保育有限公司
The Jockey Club CPS Limited



Site Section C - C



Site Section D - D

USES LEGEND

- F & B AND ANCILLARY SUPPORT
- RETAIL AND ANCILLARY SUPPORT
- CIRCULATION
- TOILET
- PLANT ROOMS AND MAINTENANCE ACCESS
- INTERPRETATION ROOM
- EDUCATION CENTRE AND ANCILLARY SUPPORT
- MULTI-PURPOSE AND ANCILLARY SUPPORT
- ART GALLERY AND ANCILLARY SUPPORT
- ARTS RELATED SUPPORT SPACE
- POLICE REPORTING CENTRE
- ARTS RELATED ORGANISATION ARCHIVES AND RECORD CENTRE
- SITE MANAGEMENT OFFICES AND STORE ROOMS

NOTE: THE STRUCTURAL FLOOR LEVEL OF MAIN ROOF FOR NEW BUILDINGS WILL NOT EXCEED 80MPD. CERTAIN NON-STRUCTURAL ELEMENTS WILL PROJECT ABOVE THIS STRUCTURAL FLOOR LEVEL, SUCH AS ROOF FINISHES, BUILDING MAINTENANCE SYSTEM, LIGHTNING PROTECTION PROVISION, ARCHITECTURAL FEATURE AND/OR SKYLIGHT, SUBJECT TO DETAIL DESIGN DEVELOPMENT.

0 5 10 15 20m

Figure 2.10

Proposed Master Layout
Section C-C & D-D

FILE: 0095646w13
DATE: 04/01/2011

Environmental Resources Management

ERM

賽馬會文物保育有限公司
The Jockey Club CPS Limited

Site Section E - E

Site Section F - F

USES LEGEND

- F & B AND ANCILLARY SUPPORT
- RETAIL AND ANCILLARY SUPPORT
- CIRCULATION
- TOILET
- PLANT ROOMS AND MAINTENANCE ACCESS
- INTERPRETATION ROOM
- EDUCATION CENTRE AND ANCILLARY SUPPORT
- MULTI-PURPOSE AND ANCILLARY SUPPORT
- ART GALLERY AND ANCILLARY SUPPORT
- ARTS RELATED SUPPORT SPACE
- POLICE REPORTING CENTRE
- ARTS RELATED ORGANISATION ARCHIVES AND RECORD CENTRE
- SITE MANAGEMENT OFFICES AND STORE ROOMS

NOTE: THE STRUCTURAL FLOOR LEVEL OF MAIN ROOF FOR NEW BUILDINGS WILL NOT EXCEED 80MPD, CERTAIN NON-STRUCTURAL ELEMENTS WILL PROJECT ABOVE THIS STRUCTURAL FLOOR LEVEL, SUCH AS ROOF FINISHES, BUILDING MAINTENANCE SYSTEM, LIGHTNING PROTECTION PROVISION, ARCHITECTURAL FEATURE AND/OR SKYLIGHT, SUBJECT TO DETAIL DESIGN DEVELOPMENT.

Figure 2.11

Proposed Master Layout
Section E-E & F-F

FILE: 0095646w14
DATE: 04/01/2011

Environmental Resources Management

ERM

賽馬會文物保育有限公司
The Jockey Club CPS Limited

3 SUMMARY OF ENVIRONMENTAL IMPACTS

3.1 INTRODUCTION

This *Section* summarises the environmental impacts associated with the construction and operation of the Project. An impact summary is shown *Table 3.1.*

3.2 CULTURAL HERITAGE

The proposed development attempts to achieve a balance between the redevelopment of the Site into a vibrant and fully accessible area and the conservation of the historic and cultural significance of the Site. The challenge is to ensure that the Site has a long term future and to do this the buildings must have viable uses that generate sufficient revenue to allow for their proper upkeep. This has to be done with the minimum of alteration to the existing fabric of the historic buildings consistent with allowing them to be code compliant and able to be used safely. This has been achieved by selecting proposed uses that fit the current layout of the buildings and where the original fabric can largely be conserved with interventions kept to a minimum.

To achieve the arts hub that is necessary to energise the southern part of the Site it is proposed to erect two new buildings to house gallery and multi-purpose spaces. The new buildings have been sited to avoid major impacts on the fabric of the existing historic buildings whilst providing new access and allowing new uses in the adjacent historic buildings.

The proposed development leave the Site accessible to all members of the public as open space that they can walk through and with many common areas of the buildings available to the public even if they are not using any of the facilities on the Site. There are also spaces that will be retained and have their interiors conserved as interpretation spaces that will allow both formal and informal interpretation of the site. These interpretation spaces are in all the major buildings on the Site.

The proposed development will leave all of the significant historic buildings intact and with very little alteration to their external fabric. There will be some intrusion into the historic interiors but this will be minimal and will be offset by the restoration of much of the interior of the buildings to something close to the original design intention with the removal of modern insertions. The primary external spaces, the Police Parade Ground and the Prison Yard, are left in their present form with no intrusion into the historic space. Similarly the walls that surround the site and divide it between Police, Prison and Magistracy will all be retained and conserved. Such minimal alteration as is proposed to the external walls is to provide good public access to allow the Site to be genuinely open to all people.

The key mitigation measures proposed to minimise the impact of the new structure construction to the existing buildings include the use of non-percussive piling methods for the construction of the foundation for the new buildings and a lateral support system to minimise any potential vibration impact. To mitigate impacts associated with the modification/refurbishment works at the existing buildings, a comprehensive survey and impact assessment of the Character Defining Elements (CDE) will be undertaken during the detailed design stage and the associated protection measures for implementation during the construction phase will be proposed and implemented. Prior to commencement of the construction works, a baseline condition survey and baseline vibration impact assessment will be conducted by a specialist to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings in CPS.

An archaeological investigation will be carried out during detailed design stage to determine the impact to potential archaeological resources, if any, and recommend and implement appropriate mitigation measures, as necessary. Details of the proposed mitigation measures for implementation during the detailed design and construction phases can be referred to *Table 3.1*.

During the operation phase, the Conservation Management Plan (June 2008), the Heritage Operational Strategy and Manual and the Interpretation Strategies/Plans will be implemented. The compliance and effectiveness of the implementation of these plans/strategies will be subject to regular audit.

To conclude, the potential impacts on the built heritage and potential archaeological resources within the Site and the built heritage resources within 50m from the Site are considered acceptable with mitigation measures.

3.3 LANDSCAPE AND VISUAL

A baseline study was conducted and nine landscape resources (LRs), seven landscape character areas (LCAs), and twelve visual sensitive receivers (VSRs) representing four VSR categories were identified and their sensitivity/quality assessed. The impact on these LRs/LCAs and VSRs was assessed and measures suggested to mitigate the impacts.

The Project will produce some adverse landscape and visual impacts but these can be eliminated, reduced or offset to a large extent by specific mitigation measures (e.g. aesthetic treatment of the proposed visible structures, tree compensation and protection measures, lighting control etc). There will also be some beneficial landscape and visual impacts from the renovation and refurbishment of the existing buildings and open spaces within the Site and along the Site boundary wall, the addition of a new green wall and planting site and protection and enhancement of the existing soft landscape. All adverse landscape impacts are reduced to slight-insignificant by year 10, with the impact on the open space with the declared monument (LR4) being slightly beneficial. All adverse visual impacts are reduced to moderate to insignificant by day 1 of operation (and remain the same at year 10).

Eleven trees were found within the Site. Amongst the eleven trees found on site, four dead/damaged trees (T1, T2, T3 and T4) and one healthy tree (T10) will be removed. The rest of the trees will be retained. Due to site and technical constraints, in situ preservation and transplanting cannot be recommended. Mitigation measures to protect the retained trees and compensation of the removal of the healthy tree (T10) by planting of six trees with total Diameter at Breast Height (DBH) exceeding that of T10 will be implemented. With the implementation of the mitigation measures, impacts on the trees are considered acceptable.

The design intention for the new buildings is to use non-reflective material for the façade which will help to minimise potential glare interference. At night, light emitted from the building will be partially screened by the façade units, creating a balance between being able to express the life of the buildings within while also being able to reduce light pollution. The most open area within the new buildings at night is the public restaurant which is located on the north end of Old Bailey Wing and away from the row of residential buildings directly to the south. All lights within the CPS will be turned to night time mode (dimmed) after 11pm. Currently no façade lighting is proposed for the existing buildings. Given the choice of façade treatment and Site lighting considerations, the glare impact from the Project is considered to be acceptable.

Therefore according to *Annex 10* of the *EIAO-TM*, the potential Landscape and Visual Impacts due to the construction and operation of the Project are considered acceptable with mitigation.

3.4 NOISE

3.4.1 Construction Phase

Owing to the close proximity of some of the NSRs to the works area of the Project Site, mitigation measures are required to be implemented to mitigate the construction noise impacts. Practicable mitigation measures, including good construction site practices, use of quiet PME, movable noise barriers and scheduling of PME/construction activities, are recommended. With the implementation of the recommended mitigation measures, the mitigated construction noise levels at the representative NSRs are predicted to range between 67 dB(A) to 75 dB(A), compling with the construction noise criterion of 75 dB(A) throughout the construction period. Noise monitoring during the construction stage is recommended to ensure compliance with the relevant noise criteria.

3.4.2 Operation Phase

The predicted operational noise levels at the representative NSRs are expected to comply with the day-time and evening-time criteria based on the assessment using a set of specified maximum SWLs for the fixed plant to be installed for the Project. The predicted noise levels during day-time and evening period and night-time period at NSRs ranged from 52 dB(A) to 56

dB(A) and 42 dB(A) to 49 dB(A), respectively. The maximum sound power level for the fixed plant will be included in the contract specification to be issued to suppliers or contractors for the equipment. Attenuation measures, if required, will be provided to the fixed plant for achieving the guaranteed noise levels during the detailed design stage. The requirements of not exceeding the total sound power level and noise monitoring for each independent event at the courtyards will be specified in the event organiser's contract document.

3.5 AIR QUALITY

3.5.1 Construction Phase

The construction of the Project involves small-scale site formation/foundation works, new structure construction, refurbishment works for the existing buildings, and minor-scale demolition of existing structures. Excavation, truck movements, materials handling and wind erosion of open stockpiles of dusty materials were identified as the major dust generating activities. In view of the small size of the worksite and small quantity of excavated materials to be generated, limited excavated soil will be stockpiled on-site. No adverse fugitive dust impact is envisaged with the implementation of dust control measures and adoption of good construction site practices.

Minor air quality impacts associated with gaseous emissions of diesel-powered construction plant and equipment are anticipated as only a small number of construction vehicles and plant will be operated in the limited works areas at any one time.

3.5.2 Operation Phase

During operation phase, it is confirmed that electric stoves will be used for the kitchens and electrostatic precipitators (ESPs) will also be installed at the exhausts of the kitchens to capture potential particulate emissions. Proper siting of kitchen exhaust will be considered during the detailed design stage. As such, potential air quality impacts associated with gaseous emissions from kitchen exhausts are not anticipated.

Three stacks were identified to be in operation within the study area and were all operated by restaurants. They are all located at least 30m above ground. It was anticipated that these operating stacks were operating with towngas or ULSD or alternative fuel types in which emissions are low and comply with the requirements in the *Air Pollution Control (Fuel Restriction) Regulation* and its amendment of 2008. Taking into account the height of emission points, the presence of high-rise buildings located between the Project Site and the operating stacks and the recent 5 year NO_2 and SO_2 monitoring data obtained from the nearby EPD air quality monitoring station, no adverse air quality impacts are anticipated for the Project.

The design of the Project encourages visitors to get to the Site via footbridge and pedestrian crossings, therefore, traffic flow induced by operations of the

Project (eg tourist buses and private cars) is anticipated to be very small as compared to the existing traffic flow on nearby roads. No adverse traffic emission impact during the operation phase of the Project is therefore expected.

3.6 WATER QUALITY

3.6.1 Construction Phase

Potential sources of water quality impact associated with the construction activities include Site runoff from the Project Site and sewage produced by on-site workforce. Prior to the modification works, perimeter cut-off drains to direct off-site water around the site will be constructed and internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers will be provided on site to direct potential contaminated runoff to the on-site slit trap before discharged to the stormwater drains. The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer system. In view of the nature and scale of the Project, with the implementation of good construction and site management practices, adverse water quality impact is not anticipated.

3.6.2 Operation Phase

During operation phase of the Project, the sewage generated by the staff, visitors, café and restaurant have the potential to cause adverse water quality impacts if not managed properly. The anticipated quantities of wastewater to be generated during the Project will be small (a peak flow of 50.25 L/s). The existing sewers will be adequate to handle the anticipated volume of sewage to be discharged from the CPS and the adjacent developments, and no improvement to the existing sewers is required. No adverse water quality and sewerage impacts are envisaged.

3.7 WASTE MANAGEMENT

3.7.1 Construction Phase

C&D Material will be segregated on-site into inert and non-inert materials and stored in different containers or skips to facilitate reuse of the inert materials and proper disposal of the non-inert construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable. Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.

It is estimated that a total of 16,440 m^3 of public fills (consisting of 12,900 m^3 of excavated materials, 3,540 m^3 of public fill from new building construction

and modification/ renovation works) and 890 m^3 of construction waste will be generated during the construction phase. The public fill will be sent to public filling facilities for beneficial reuse while the construction waste will be disposed of at landfills.

With respect to the scale of the construction activities, it is anticipated that the quantity of chemical waste to be generated will be small (less than a hundred litres per month during the construction phase). It is also estimated that about 130 kg of general refuse will be generated per day by the construction workers. With the implementation of general good construction site practices, the construction of the Project will not cause adverse waste management, traffic or environmental impacts (including potential hazard, air and odour emissions, noise and wastewater discharge).

3.7.2 Operation Phase

It is estimated that general refuse (9,250 kg per day) and food waste (460 kg per day) will be generated during the operation phase. Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. With good site practices, the potential environmental impacts (including potential hazard, air and odour emissions, noise and wastewater discharge) associated with the storage, handling, collection, transport and disposal of waste arising from the operation of the Project will meet the criteria specified in the EIAO-TM and no adverse waste management impacts are anticipated.

Table 3.1 Impact Summary

Assessment Aspect	Construction Phase	Operation Phase
Cultural Heritage		
Assessment Points / Sensitive Receivers	• The CPS (including three Declared Monuments: the Central Police Station, the Central Magistracy and the Victoria Prison) • Potential archaeological remains within the CPS • Built heritage resources within 50m of the Project Site (including the Grade 1 historic street (Pottinger Street), Proposed Grade 3 historic building (No. 20 Hollywood Road), Hollywood Road, Old Bailey Street, Chancery Lane and Steps, Arbuthnot Road and Walls at Old Bailey Street)	• The CPS (including three Declared Monuments: the Central Police Station, the Central Magistracy and the Victoria Prison) • Potential archaeological remains within the CPS
Relevant Criteria	• *Environmental Impact Assessment Ordinance (EIAO) (Cap. 499. S16), Technical Memorandum on the EIA Process, Annex 10 and 19 (EIAO TM)* and *Guidance Notes on Assessment of Impact on Sites of Cultural Heritage* in EIA Studies; • *Antiquities and Monuments (AM) Ordinance (Cap. 53);* • *Guidelines for Cultural Heritage Impact Assessment (CHIA) for Adaptive Reuse Projects (as at May 2009);* • *Hong Kong Planning Standards and Guidelines (HKPSG);* and • *Land (Miscellaneous Provisions) Ordinance.*	• *Environmental Impact Assessment Ordinance (EIAO) (Cap. 499. S16), Technical Memorandum on the EIA Process, Annex 10 and 19 (EIAO TM)* and *Guidance Notes on Assessment of Impact on Sites of Cultural Heritage* in EIA Studies; • *Antiquities and Monuments (AM) Ordinance (Cap. 53);* • *Guidelines for Cultural Heritage Impact Assessment (CHIA) for Adaptive Reuse Projects (as at May 2009);* • *Hong Kong Planning Standards and Guidelines (HKPSG);* and • *Land (Miscellaneous Provisions) Ordinance.*
Results of Impact	Built Heritage within the CPS • The range of Impact Category Ratings for the interventions in the following buildings are 1 (Beneficial), 2 (Acceptable), and 3 (Acceptable with Mitigation Measures). The overall Heritage Impact of the proposed interventions to these buildings is therefore regarded as acceptable to enable the building to have a new adaptive use: o Headquarters Block o Armoury o Barrack Block o Married Inspectors' Quarters and Deputy Superintendents House o Married Sergeant's Quarters o Single Inspectors' Quarters o Ablutions Block o Central Magistracy o Superintendent's House o A Hall o B Hall o C Hall o D Hall o E Hall o F Hall o Bauhinia House o Parade Ground o Laundry (structure with little architectural interest and has been altered over time with substantial repairs to be demolished) o Walls and Revetments • An impact rating of the interventions in the following buildings/features is 2 – Acceptable Impact: o Garage (structure with no architectural or historical significance to be demolished to make way for open space) o General Office (structure with no architectural or historical significance to be demolished) o Prison Yard	It is anticipated that with the implementation of the Conservation Management Plan, the Heritage Operational Strategy & Manual and the Interpretation Strategies/Plans, the impact rating for the CPS as a whole will be 1 – Beneficial.

Assessment Aspect	Construction Phase	Operation Phase
	Potential Archaeological Resources within the CPS • It is anticipated that the areas identified to have archaeological potential are considered to be low or fairly low. Therefore, the impact on the low archaeological potential resources areas is likely to be acceptable with mitigation measures being taken. Impact ratings for specific areas are as follows: o Parade Ground: 3 – Acceptable Impact with Mitigation Measures o Prison Yard: 3 – Acceptable Impact with Mitigation Measures o Barracks Lane (cell blocks south of building 3): 3 – Acceptable Impact with Mitigation Measures o The Garage: No Impact o Married Inspectors' Quarters and Deputy Superintendent's House: No Impact o The area between A Hall and B Hall: 3 – Acceptable Impact with Mitigation Measures o The area between and beneath Ablutions block and the revetment wall to the south: 3 – Acceptable Impact with Mitigation Measures o West end of D Hall (building 14): 3 – Acceptable Impact with Mitigation Measures o Laundry (building 16): 3 – Acceptable Impact with Mitigation Measures o General Office (building 18): 3 - Acceptable Impact with Mitigation Measures Built Heritage Resources Outside the CPS • Generally the works within the Site will have little or no impact on built heritage resources outside the CPS. This is in large part because the changes to occur within the CPS are contained within the constraints of the compound itself. Impact ratings for specific areas are as follows: o Grade 1 historic building (Pottinger Street: 1 – Beneficial Impact) o Proposed Grade 3 historic building (No. 20 Hollywood Road): 2 – Acceptable Impact with mitigation measures o Hollywood Road: 2 – Acceptable Impact o Old Bailey Street: 2 – Acceptable Impact o Chancery Lane: 1 – Beneficial Impact o Arbuthnot Road: 1 – Beneficial Impact o Walls and Tunnel of Old Bailey Street: 2 – Acceptable Impact o Chancery Lane Steps: 1 – Beneficial Impact	
Extents of Exceedance	Not expected	Not expected
Avoidance / Mitigation Measures	Prior to construction commencement during the detailed design stage of the Project, the following works will be conducted to ensure adequate information are obtained to finalise the design and conservation work required: • Comprehensive survey and impact assessment of Character Defining Elements (CDE); • Archival recording; • Addition and alteration (A&A) works proposal submissions; • Detailed structural assessment; and • Archaeological investigation. The modification/refurbishment works at the existing buildings are kept to a minimum by carefully assigning appropriate uses to fit in the spaces and adopting a fire engineering approach to minimise alteration while complying with fire safety requirements. The general mitigation measures to be used during the construction phase will include: • Prior identification and recording of the all the significant features, finishes, fittings and contents in the existing buildings, and assessment of their vulnerability during construction. This should include for instance the recording of historic doors which are vulnerable to damage if left in situ or carelessly removed and stored. • Permanent or temporary removal off site of loose or vulnerable items. • Preparation of a schedule of protection works to preserve or secure items and finishes remaining in situ during construction. • Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings and a lateral support system will be used to minimise the potential vibration impact to adjacent historic buildings during construction. • Protection measures to the exteriors and interiors of the buildings during construction operations. • Ensuring the responsible contractor understands the significance and vulnerabilities of the building	To implement the Conservation Management Plan (June 2008), the Heritage Operational Strategy and Manual and the Interpretation Strategies/Plans. Regular audit for checking the compliance and effectiveness of the mitigation measures recommended in Sections 3.7.4 and 3.7.5 of the EIA report. The detailed proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc) and the conservation professionals to be engaged should be agreed with AMO prior to operation commencement.

Assessment Aspect	Construction Phase	Operation Phase
	structures, constructions, features and finishes prior to starting the work to avoid overloading or inappropriate storage or construction activities. • Use of appropriate heritage related construction methods for the modification and refurbishment works As there is no development proposal that involves soil excavation on one of the nine areas (Garage), other than possibly for new underground services which will be designed during the detailed drawing stage no impact on this archaeological potential area is anticipated. Subject to the findings of the archaeological investigation, appropriate mitigation measures will be recommended and agreed with the AMO. Prior to commencement of the construction works, a baseline condition survey and baseline vibration impact assessment has been recommended to be conducted by a specialist covering the existing historic buildings in the CPS Site and the Proposed Grade 3 Historic building (No. 20 Hollywood Road) outside CPS to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings in CPS. As the concerned historic buildings in the CPS Site are declared monuments, the proposal should be submitted to the Antiquities Authority under the AM Ordinance for granting a permit for the work. If the evaluated and/or measured vibrations have been found to exceed the allowable values or if damage to either structural or non-structural elements of the historic buildings has been identified, the construction work should be stopped and the construction method and appropriate mitigation measures should be reviewed and submitted to the Antiquities Authority for approval.	
Residual Impact	Slight to moderate residual impact is expected due to the alteration to the overall visual appearance of the Site. However, the majority of the potential impact is beneficial to the CPS and its users. With the implementation of the CMP and the mitigation measures recommended in *Section 3.7* the residual impact is considered acceptable.	Not expected
Environmental Acceptability	Impacts to cultural heritage resources are acceptable with mitigation measures.	Impacts to cultural heritage resources are acceptable with mitigation measures.
Landscape & Visual		
Assessment Points / Sensitive Receivers	<u>Landscape Resources (LRs):</u> LR1 – Transport Route LR2 - Commercial / Residential /Institutional Building Area LR3 – Buildings within Declared Monument LR4 – Open Space within Declared Monument LR5 – Public Park/ Recreational Area LR6 – Hong Kong Zoological & Botanical Garden LR7 – Vegetated Slope LR8 – Natural Woodland on Hillside LR9 – Temple Area <u>Landscape and Visual Character Areas (LCAs):</u> LCA1 – Historical Landscape LCA2 – LCSD Theme Park Landscape LCA3 – Medium/High-rise Commercial Urban Landscape LCA4 – Residential/ Commercial Urban Landscape LCA5 – Central Civic Administration Landscape LCA6 – Natural Hillside Landscape LCA7 – Major Transport Corridor <u>Visually Sensitive Receivers (VSRs) and Vantage Points (VPs)</u> VSR T2 – Central/ Mid-Levels Escalator above Hollywood Road (VPa) VSR H/O1 – Medium/ High Level Commercial/Residential Building(s) above Hollywood Road (VPb) VSR T3 – Street Level at The Centrium on Arbuthnot Road (VPc) VSR H2 – Medium/High Rise Level Residential Building(s) on Chancery Lane (VPd) VSR T4 – Street Level at Old Bailey Street/ Chancery Lane Junction (VPe) VSR T5 – Street Level at Hollywod Road/ Pottinger Street Junction (VPf) VSR T1 Street Level at Staunton Street/ Peel Street Junction VSR O1 Medium/High Level Commercial Building(s) (IFC Building) VSR O2 Medium/High Level CommercialBuilding(s) (QRC Building) VSR H1 Medium/High Level Residential Buildings in Mid-levels (Grand Panorama Building)	<u>Landscape Resources (LRs):</u> LR1 – Transport Route LR2 - Commercial / Residential /Institutional Building Area LR3 – Buildings within Declared Monument LR4 – Open Space within Declared Monument LR5 – Public Park/ Recreational Area LR6 – Hong Kong Zoological & Botanical Garden LR7 – Vegetated Slope LR8 – Natural Woodland on Hillside LR9 – Temple Area <u>Landscape and Visual Character Areas (LCAs):</u> LCA1 – Historical Landscape LCA2 – LCSD Theme Park Landscape LCA3 – Medium/High-rise Commercial Urban Landscape LCA4 – Residential/ Commercial Urban Landscape LCA5 – Central Civic Administration Landscape LCA6 – Natural Hillside Landscape LCA7 – Major Transport Corridor <u>Visually Sensitive Receivers (VSRs) and Vantage Points (VPs)</u> VSR T2 – Central/ Mid-Levels Escalator above Hollywood Road (VPa) VSR H/O1 – Medium/ High Level Commercial/Residential Building(s) above Hollywood Road (VPb) VSR T3 – Street Level at The Centrium on Arbuthnot Road (VPc) VSR H2 – Medium/High Rise Level Residential Building(s) on Chancery Lane (VPd) VSR T4 – Street Level at Old Bailey Street/ Chancery Lane Junction (VPe) VSR T5 – Street Level at Hollywod Road/ Pottinger Street Junction (VPf) VSR T1 Street Level at Staunton Street/ Peel Street Junction VSR O1 Medium/High Level Commercial Building(s) (IFC Building) VSR O2 Medium/High Level CommercialBuilding(s) (QRC Building) VSR H1 Medium/High Level Residential Buildings in Mid-levels (Grand Panorama Building)

Assessment Aspect	Construction Phase	Operation Phase
	VSR R1 Open/Park Area off Old Bailey Street VSR H3 Medium/High Level Residential Buildings on Old Bailey Street The tree survey undertaken indentified eleven trees within the Site, using the government's definition of a tree as a woody plant with a trunk diameter of at least 95 mm at 1.3 m height. None of the trees can be gauged as being in 'excellent' health and only two trees, namely the large T5 (*Mangifera indica*) in the Parade Ground, and the relatively small wall tree T10 (*Ficus microcarpa*) between the Police and Prison sites, have performed sufficiently well to deserve the good rating.	VSR R1 Open/Park Area off Old Bailey Street VSR H3 Medium/High Level Residential Buildings on Old Bailey Street Trees within the Site.
Relevant Criteria	• *Environmental Impact Assessment Ordinance (Cap.499, S.16)* and the *Technical Memorandum on EIA Process (EIAO TM)*, particularly: o *Annex 10 (Criteria for Evaluating Visual and Landscape Impact, and Impact on Sites of Cultural Heritage)* o *Annex 18 (Guidelines for Landscape and Visual Impact Assessment)* • *EIAO Guidance Note No. 8/2002 (Preparation of Landscape and Visual Impact Assessment under the Environmental Impact Assessment Ordinance);* • *ETWB TCW No. 3/2006 - Tree Preservation*; • *ETWB TCW No. 29/2004 - Registration of Old and Valuable Trees, and Guidelines for their Preservation* • *ETWB-TC(W) No. 10/2005 - Planting on Footbridges and Flyovers* • *Land Administration Office (LAO), Lands Department Practice Note No. 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects* • *WBTC No. 7/2002 - Tree Planting in Public Works;* • *Hong Kong Planning Standards and Guidelines Chapter 4 (Recreation, Open Space and Greening)* and *Chapter 11 (Urban Design Guidelines);* and • *Study on Landscape Value Mapping of Hong Kong*	• *Environmental Impact Assessment Ordinance (Cap.499, S.16)* and the *Technical Memorandum on EIA Process (EIAO TM)*, particularly: o *Annex 10 (Criteria for Evaluating Visual and Landscape Impact, and Impact on Sites of Cultural Heritage)* o *Annex 18 (Guidelines for Landscape and Visual Impact Assessment)* • *EIAO Guidance Note No. 8/2002 (Preparation of Landscape and Visual Impact Assessment under the Environmental Impact Assessment Ordinance);* • *ETWB TCW No. 3/2006 - Tree Preservation*; • *ETWB TCW No. 29/2004 - Registration of Old and Valuable Trees, and Guidelines for their Preservation* • *ETWB-TC(W) No. 10/2005 - Planting on Footbridges and Flyovers* • *Land Administration Office (LAO), Lands Department Practice Note No. 7/2007 - Tree Preservation and Tree Removal Application for Building Development in Private Projects* • *WBTC No. 7/2002 - Tree Planting in Public Works;* • *Hong Kong Planning Standards and Guidelines Chapter 4 (Recreation, Open Space and Greening)* and *Chapter 11 (Urban Design Guidelines);* and • *Study on Landscape Value Mapping of Hong Kong*
Results of Impact / Extent of Exceedance	During the construction stage, potential landscape and visual impacts may arise from: • works for demolition of surrounding stone brick wall and construction of entrance to service yard; • works for demolition of works for demolition of existing building structures – the Garage, Workshop & Laundry and General Office; • works for cleaning, re-painting, dismantling and reinstatement of sections of surrounding stone brick wall; • conservation, repair and refurbishment work on the external façade of the retained buildings including erection of scaffolding; • excavation work including that for construction of basement in lower courtyard; • new custom paving works throughout the Site; • construction of new built structures (Old Bailey Wing, Arbuthnot Wing, new footbridge); • construction of new pavement west of Arbuthnot Road and extension of existing pavement on Old Bailey Street around pier for new footbridge; • temporary stockpiling of construction and demolition materials and temporary storage of construction equipment; • temporary use of construction equipment on-site including cranes and vehicles; • off-site construction traffic such as haulage of excavated materials; • temporary traffic/ road diversions; • night-time lighting; and • dust during dry weather. Significant Impact on the following LRs/LCA at construction phase without mitigation: • LR3 – Buildings within Declared Monument • LR4 – Open Space within Declared Monument • LCA1 – Historical Landscape Slight Impact on the following LRs/LCA at construction phase without mitigation: • LR1 – Transport Route • LCA4 – Residential/Commercial Urban Landscape Impacts on all other LRs/LCAs at construction phase without mitigation are insignificant. Amongst the eleven trees found on site, four dead/damaged trees (T1, T2, T3 and T4) and one healthy tree	During the operation stage, potential landscape and visual impacts would be related to the following: • landscaping works (eg new planting site, new green wall, existing tree treatment); • repaired and refurbished external façades of retained buildings; • operation of new built structures (Old Bailey Wing, Arbuthnot Wing, new footbridge, new access points); • new pavement – west of Arbuthnot Road and extension of existing on Old Bailey Street around pier for new footbridge; • cleaned, re-painted, refurbished and repaired sections of external stone wall and building façades; and • night time lighting. The impacts of the Project's operation phase before mitigation on any LR/LCA are not considered significant. Moderate impact on the following LRs/LCA at operation phase without mitigation o LR3 – Buildings within Declared Monument o LCA1 – Historical Landscape Insignificant impact on the following LRs/LCA at operation phase without mitigation o LR1 – Transport Route o LR4 – Open Space within Declared Monument o LCA4 – Residential/Commercial Urban Landscape Significant Impact on the following VSRs at operation phase without mitigation: • T3 – Street Level at The Centrium on Arbuthnot Road • H2 – Medium/High Rise Level Residential Building(s) on Chancery Lane • H3 – Medium/High Level Residential Buildings on Old Bailey Street Moderate Impact on the following VSRs at operation phase without mitigation: • T2 – Central/Mid-Levels Escalator above Hollywood Road • H/O1 – Medium/High Level Commercial/Residential Building(s) above Hollywood Road • T4 – Street Level at Old Bailey Street/ Chancery Lane Junction • H1 – Medium/High Level Residential Buildings in Mid-levels (Grand Panorama Building) Slight Impact on the following VSRs at operation phase without mitigation: • T5 – Street Level at Hollywood Road/Pottinger Street Junction

Assessment Aspect	Construction Phase	Operation Phase
	(T10) will be removed. The rest of the trees will be retained. The size, tree form, performance, and landscape and amenity value of T10, in comparison with the large and robust wall trees in other parts of the city, are relatively low. Due to site and technical constraints, in situ preservation and transplanting cannot be recommended. Significant Impact on the following VSRs at construction phase without mitigation: • T2 – Central/ Mid-Levels Escalator above Hollywood Road • H/O1 – Medium/High Level Commercial/Residential Building(s) above Hollywood Road • T3 – Street Level at The Centrium on Arbuthnot Road • H2 – Medium/High Rise Level Residential Building(s) on Chancery Lane • T5 - Street Level at Hollywood Road/Pottinger Street Junction • H3 – Medium/High Level Residential Buildings on Old Bailey Street Moderate Impact on the following VSRs at construction phase without mitigation: • T4 – Street Level at Old Bailey Street/ Chancery Lane Junction • H1 – Medium/High Level Residential Buildings in Mid-levels (Grand Panorama Building) Slight Impact on the following VSRs at construction phase without mitigation: • T1 – Street Level at Staunton Street/ Peel Street Junction • O1 – Medium/High Level Commercial Building(s) (IFC Building) • O2 – Medium/High Level Commercial/Residential Building(s) (QRC Building) • R1 – Open/Park Area off Old Bailey Street	• T1 – Street Level at Staunton Street/ Peel Street Junction • O1 – Medium/High Level Commercial Building(s) (IFC Building) • O2 – Medium/High Level Commercial Building(s) (QRC Building) • R1 – Open/Park Area off Old Bailey Street Glare Impact/Interference and Night-time Lighting The design intention for the new buildings is to use non-reflective material for the façade which will help to minimise potential glare interference. At night, light emitted from the building will be partially screened by the façade units, creating a balance between being able to express the life of the buildings within while also being able to reduce light pollution. The most open area within the new buildings at night is the public restaurant which is located on the north end of Old Bailey Wing and away from the row of residential buildings directly to the south. All lights within the CPS will be turned to night time mode (dimmed) after 11pm. Currently no façade lighting is proposed for the existing buildings. Given the choice of façade treatment and Site lighting considerations, the glare impact/interference and night-time lighting from the Project is considered to be acceptable.
Avoidance / Mitigation Measures	M1 Detailed Design Consideration CM1 In-situ Tree Protection - Cordon Zone (CZ) CM2 In-situ Tree Protection - Advanced & Phased Root Pruning CM3 In-situ Tree Protection - Foliage cleansing system CM4 In-situ Tree Protection - Monthly inspection CM5 Light Control CM6 Compensatory Tree Planting CM7 Vertical Greening CM8 New Custom Paving	OM1 In-situ Tree Protection - Quarterly inspection OM2 Soft Landscape Maintenance OM3 Architectural Maintenance OM4 Light Control
Residual Impact	Moderate Impact on the following LRs/LCA at construction phase with mitigation: • LR3 - Buildings within Declared Monument • LR4 – Open Space within Declared Monument • LCA1 – Historical Landscape Slight Impact on the following LRs/LCA at construction phase with mitigation: • LR1 – Transport Route • LCA4 – Residential/Commercial Urban Landscape Impacts on all other LRs/LCAs at construction phase with mitigation are insignificant. Mitigation measures to protect the retained trees and compensation of the removal of T10 will be implemented. With the implementation of the mitigation measures, impacts on the trees are considered acceptable. Construction is assumed to be carried out following standard good practise, and the construction impact will not be significantly reduced by additional mitigation measures such that upon mitigation, all the visual impacts are considered to remain the same as prior to mitigation. However, it is worth noting that the impact will be transient and will be reduced gradually following operation.	The residual impacts on all LCAs at day 1 of operation with mitigation are insignificant, with the exception of a slight residual impact on LR3 – Buildings within Declared Monument LCA1 – Historical Landscape. All ratings for the residual impacts at year 10 of operation with mitigation remain the same, with the exception of LR4 – Open Space within Declared Monument which is enhanced from insignificant to slightly beneficial. Upon implementation of mitigation measures, at operation day 1 the visual impacts on: • T3 (Street Level at the Centrium on Arbuthnot Road), H2 (Medium/High rise Level residential Building(s) on Chancery Lane) and H3 (Medium/High Level Residential Buildings on Old Bailey Street) will reduce to moderate while that for T2 (Central/Mid-levels Escalator above Hollywood Road) will remain moderate. • H/O1 (Medium/High Level Commercial/Residential Building(s) above Hollywood Road), T4 (Street Level at Old Bailey Street/ Chancery Lane Junction) and H1 (Medium/High Level Residential Buildings in Mid-levels [Grand Panorama Building]) will reduce to slight while impacts on T5 (Street Level at Hollywood Road/Pottinger Street Junction), T1 (Street Level at Staunton Street/ Peel Street Junction) and O2 (Medium/High Level Commercial Building(s) [QRC Building]) will remain slight. • O1 (Medium/High Level Commercial Building(s) [IFC Building)) and R1 (Open/Park Area off Old Bailey Street) will reduce to insignificant. At operation year 10 with mitigation, the residual impacts remain the same for all the VSRs.
Environmental Acceptability	Impacts on landscape resources and sensitive receivers are acceptable with mitigation measures.	Impacts on landscape resources and sensitive receivers are acceptable with mitigation measures.

Assessment Aspect	Construction Phase	Operation Phase
Noise		
Assessment Points / Sensitive Receivers	N1 – Amber Lodge N2 – Ho Fook Building N3 – Old Bailey Street Police Married Quarters N4 – Cambridge Villa N5 – Chancery House N6 – Chancery Mansion	N1 – Amber Lodge N2 – Ho Fook Building N3 – Old Bailey Street Police Married Quarters N4 – Cambridge Villa N5 – Chancery House N6 – Chancery Mansion
Relevant Criteria	Daytime (0700-1900 hours) construction noise standards stipulated in the EIAO-TM is Leq 30min75 dB(A) for all domestic premises on any day not being a Sunday or general public holiday for general construction works. General construction works during the restricted hours follow the criteria set in the GW-TM. These are: 1. LAeq, 5min 65 dB for area with Area Sensitivity Rating of B for all days during the evening (1900-2300 hours) and general holidays (including Sundays) during the day and evening (0700-2300 hours); and 2. LAeq, 5min 50 dB for area with Area Sensitivity Rating of B for all days during the night-time (2300-0700 hours)	The criteria noise limits for planning purposes are set out in the *EIAO-TM* as follows: • the total fixed source noise level at the facade of the nearest NSR is at least 5 dB(A) lower than the appropriate Acceptable Noise Levels (ANL) as specified in the *IND-TM*; or • the prevailing background noise level (for quiet areas with level 5 dB(A) below the ANL). Based on the above EIAO-TM and IND-TM specification, daytime and evening (0700-2300 hours) noise limit for N1-N3 and N4-N5 is 59 dB(A) and 54 dB(A), respectively. The night-time (2300-0700 hours) noise limit for N1-N3 and N4-N5 is 50 dB(A) and 49 dB(A), respectively.
Results of Impact	The predicted unmitigated noise levels at NSRs ranges from 79 to 89 dB(A). With the implementation of mitigation measures, the noise levels predicted at NSRs ranges from 67 to 75 dB(A).	The predicted noise levels during day-time and evening time period at NSRs range from 52 to 56 dB(A). The predicted noise levels during night-time period at NSRs range from 42 to 49 dB(A).
Extents of Exceedance	Without the implementation of mitigation measures, exceedance up to 14 dB(A) is predicted. With the implementation of mitigation measures, noise levels at all NSRs comply with the criteria.	Not expected.
Avoidance / Mitigation Measures	• Good construction site practice; • Use of quiet PME; • Adoption of movable noise barriers; • Use of noise insulation sheet; and • Scheduling of PME/construction activities.	Although no adverse noise impact is expected due to the operation of fixed plant items, it is still recommended that the following good practices be implemented as far as practicable to minimise the potential impact: • Choose quieter equipment; • Include noise levels specification when ordering new plant items; • Locate fixed plant items or noise emission points away from the NSRs as far as practicable; • Locate noisy machines in completely enclosed plant rooms or buildings with suitable and practicable noise remedies; and • Develop and implement a regularly scheduled plant maintenance programme so that plant items are properly operated and serviced. The programme should be implemented by properly trained personnel. The maximum sound power levels for the fixed plant will be included in the contract specification to be issued to suppliers or contractors for the equipment. *Noise Emissions from Courtyard Events and Public Address (PA) System* • good management practices shall be in place, including noise monitoring, setting up a complaint hotline, and distributing advance notice to nearby NSRs. It is recommended that good management practices be implemented during both rehearsals and shows; • in any event that an outdoor event is expected, the event organizer is required to undertake noise monitoring at least at one of the affected NSR. One set of $L_{eq(30min)}$ noise measurements before and during the event should be taken; • as a fallback option, should non-compliance of the relevant noise criteria at the NSRs be identified for the event, immediate mitigation measures (such as turning down/off of music volume) should be implemented; and • the requirements of not exceeding the total sound power level and noise monitoring for each independent event are specified in the event organisers' contract document.
Residual Impact	Not expected.	Not expected.
Environmental Acceptability	No adverse noise impact with the implementation of mitigation measures.	No adverse noise impact with the implementation of good practices.
Air Quality		
Assessment Points / Sensitive Receivers	A1 – Au's Building A2 – Chinachem Hollywood Centre A3 – Carfield Commercial Building A4 – Vimark House A5 – Yu Yuet Lai Building A6 – The Centrium A7 – Chancery Mansions	A1 – Au's Building A2 – Chinachem Hollywood Centre A3 – Carfield Commercial Building A4 – Vimark House A5 – Yu Yuet Lai Building A6 – The Centrium A7 – Chancery Mansions

Assessment Aspect	Construction Phase	Operation Phase
	A8 – Chancery House A9 – Cambridge Villa A10 – Sunrise House A11 – Old Bailey Street Junior Police Office Married Quarter A12 – Ho Fook Building A13 - Winning House	A8 – Chancery House A9 – Cambridge Villa A10 – Sunrise House A11 – Old Bailey Street Junior Police Office Married Quarter A12 – Ho Fook Building A13 - Winning House
Relevant Criteria	Hong Kong Air Quality Objective: Daily average TSP level of 260 μg m^{-3} Annual average TSP level of 80 μg m^{-3} EIAO-TM: Hourly average TSP level of 500 μg m^{-3}	Hong Kong Air Quality Objectives: NO_2 : Hourly average of 300 μg m^{-3}; daily average of 150 μg m^{-3}; annual average of 80 μg m^{-3} SO_2 : Hourly average of 800 μg m^{-3}; daily average of 350 μg m^{-3}; annual average of 80 μg m^{-3} RSP : Daily average of 180 μg m^{-3}; annual average of 55 μg m^{-3}
Results of Impact	The construction of the Project involves small-scale site formation/foundation works, new building construction, refurbishment works for the existing buildings, and minor-scale demolition of existing structures. Excavation, truck movements, materials handling and wind erosion of open stockpiles of dusty materials were identified as the major dust generating activities. In view of the small size of the worksite and small quantity of excavated materials to be generated, limited excavated soil will be stockpiled on-site. No adverse fugitive dust impact is envisaged with the implementation of dust control measures and adoption of good construction site practices. Minor air quality impacts associated with gaseous emissions of diesel-powered construction plant and equipment are anticipated as only a small number of construction vehicles and plant will be operated in the limited works areas at any one time.	Gaseous emissions from kitchens are identified as potential sources of air pollutants. Electric stoves will be installed in the kitchens within the Project, and therefore no gaseous or liquid fuels will be used for cooking operations. Electrostatic precipitators (ESPs) will also be installed at the exhausts of the kitchens to capture potential particulate emissions and the location of the exhaust will be sited vertically upward and away from the nearby air sensitive uses as far as practicable. As such, potential air quality impacts associated with gaseous emissions from kitchen operations to the surroundings are not anticipated. As the design of the Project encourages visitors to get to the Site via footbridge and pedestrian crossings, traffic flow induced by operations of the Project (eg tourist bus and private cars) is anticipated to be small and no adverse cumulative traffic emission impact during the operation phase of the Project is therefore expected. Three restaurant stacks were identified within 500m Study Area. The nearest stack is located at about 70m from the Site boundary and all the stacks were identified to be at least 30m above ground with high-rise buildings located in between. Through the interview with the stack owners, one of the restaurants indicated that Towngas was used for the cooking stoves. However, the owners of the other two stacks refused to provide stack emissions information. Nonetheless, it is anticipated that both premises are using ultra low sulphur diesel (ULSD), gaseous fuel or alternative fuel types in which emissions must comply with the requirements in the *Air Pollution Control (Fuel Restriction) Regulation* and its amendment of 2008. The five-year average of NO_2 (54μgm^{-3}) and SO_2 (22μgm^{-3}) data from 2005 to 2009 recorded at the Central/Western AQMS demonstrated that the ambient concentrations of the respective pollutants are low. As a result, no adverse air quality impacts are anticipated for the Project.
Extents of Exceedance	Not expected.	Not expected.

Assessment Aspect	Construction Phase	Operation Phase
Avoidance / Mitigation Measures	The following dust control measures stipulated in the *Air Pollution Control (Construction Dust) Regulations* and good site practices will be incorporated into the Contract Specification and implemented throughout the construction period: • The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity; • Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished; • An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings; • Impervious sheet will be provided for skip hoist for material transport; • Vehicle washing facilities will be provided at the designated vehicle exit points; • Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite; • Road sections between vehicle-wash areas and vehicular entrances will be paved; • The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles; • Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings will be constructed; • The main haul road will be kept clear of dusty materials and will be sprayed with water so as to maintain the entire road surface wet at all the time; • Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; place in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time; • Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides; • All exposed areas will be kept wet always to minimise dust emission; • ULSD will be used for all construction plant on-site; • The engine of the construction equipment or trucks during idling will be switched off; and • Regular maintenance of construction equipment deployed on-site will be conducted to prevent black smoke emission.	The following measures will be implemented for kitchens to minimize the potential kitchen fumes or stack emissions: • Electric stoves will be used; • Electrostatic precipitators (ESP) will be installed to control the oily fume and cooking odour; • Siting the kitchen exhausts away from the nearby air sensitive uses as far as practicable;; • Direct the kitchen exhausts vertically upwards; and • Provide sufficient separation distance from the nearby air sensitive uses.
Residual Impact	Not expected.	Not expected.
Environmental Acceptability	No adverse air quality impact with the implementation of mitigation measures.	No adverse air quality impact with the implementation of mitigation measures.
Water Quality		
Assessment Points / Sensitive Receivers	• Existing stormwater drain along Old Bailey Street and box culverts along Arbuthnot Road and Hollywood Road • Victoria Harbour at about 650m from the Site • Seawater abstraction points along the seafront at about 650m from the Site	• Existing stormwater drain along Old Bailey Street and box culverts along Arbuthnot Road and Hollywood Road • Victoria Harbour at about 650m from the Site • Seawater abstraction points along the seafront at about 650m from the Site
Relevant Criteria	• *Water Pollution Control Ordinance (WPCO) (Cap. 358);* • *Environmental Impact Assessment Ordinance (Cap. 499. S.16), Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM), Annexes 6 and 14;* • *Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Inshore Waters (TM);* • *Practice Note for Professional Persons on Construction Site Drainage (Prop PECC PN 1/94); and* • *Hong Kong Planning Standards and Guidelines (HKPSG).*	• *Water Pollution Control Ordinance (WPCO) (Cap. 358);* • *Environmental Impact Assessment Ordinance (Cap. 499. S.16), Technical Memorandum on Environmental Impact Assessment Process (EIAO-TM), Annexes 6 and 14;* • *Technical Memorandum Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Inshore Waters (TM); and* • *Hong Kong Planning Standards and Guidelines (HKPSG).*
Results of Impact	Given the scale and nature of the construction work, with the implementation of good construction and site management practices, adverse water quality due to site runoff and general construction activities is not anticipated. The amount of sewage to be generated will be about 30 m^3 per day. The existing toilet facility of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer. If necessary, portable toilets will be provided on site to ensure that sewage from the site staff is properly collected. No adverse impact water quality is anticipated due to the treatment and disposal of sewage generated from the	Sewage will arise from the dinning areas, operation staff and visitors of the CPS. According to the Sewerage Impact Assessment of the Project, the proposed development will generate a peak flow of 50.25 L/s. The hydraulic analysis concluded that there is sufficient freeboard allowed in the existing 225mm diameter public sewers along Hollywood Road, Old Bailey Road and Arbuthnot Road. The existing sewers will be adequate to handle the anticipated volume of sewage to be discharged from the CPS and the adjacent developments, and no improvement to the existing sewers is required. No adverse water quality and sewerage impacts are envisaged.

Assessment Aspect	Construction Phase	Operation Phase
	workforce.	
Extents of Exceedance	Not expected.	Not expected.
Avoidance / Mitigation Measures	Prior to the modification works, perimeter cut-off drains to direct off-site water around the site will be constructed and internal drainage works and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers will be provided on site to direct potential contaminated runoff to the on-site slit trap before discharged to the stormwater drains. The design of any slit removal facilities will be based on the guidelines in *Appendix A1* of *ProPECC PN 1/94*. Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor. Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal, in accordance with the *Waste Disposal Ordinance*. The stomwater discharge from the Site will be monitored as part of the routine monitoring under the *WPCO* licence, if applicable. The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer system.	Not required.
Residual Impact	No residual impact.	No residual impact.
Environmental Acceptability	No adverse water quality impact with the implementation of good site practices and mitigation measures.	No adverse water quality impact is expected.
Waste		
Assessment Points / Sensitive Receivers	CPS	CPS
Relevant Criteria	• *Waste Disposal Ordinance* (Cap 354); • *Waste Disposal (Chemical Waste) (General) Regulation* (Cap 354C); • *Land (Miscellaneous Provisions) Ordinance* (Cap 28); and • *Public Health and Municipal Services Ordinance* (Cap 132) - *Public Cleansing and Prevention of Nuisances Regulation* • *Hong Kong Planning Standards and Guidelines* • *Waste Reduction Framework Plan, 1998 to 2007* • *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes* (1992) • *WBTC No. 32/92, 2/93, 2/93B, 25/99, 25/99A, 25/99C, 12/2000, 12/2002* • *ETWBTC No. 33/2002, 19/2005* • *DevBTC No. 6/2010*	• *Waste Disposal Ordinance* (Cap 354); • *Waste Disposal (Chemical Waste) (General) Regulation* (Cap 354C); • *Land (Miscellaneous Provisions) Ordinance* (Cap 28); and • *Public Health and Municipal Services Ordinance* (Cap 132) - *Public Cleansing and Prevention of Nuisances Regulation* • *Hong Kong Planning Standards and Guidelines* • *Waste Reduction Framework Plan, 1998 to 2007* • *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes* (1992)
Results of Impact	It is estimated that 12,900 m^3 of excavated materials, 3,540 m^3 of public fills and 890 m^3 of construction waste will be generated during the construction phase. With respect to the scale of the construction activities, it is anticipated that the quantity of chemical waste to be generated will be small (less than a hundred litres per month during the construction phase). It is also estimated that about 130 kg of general refuse will be generated per day by the construction workers.	It is estimated that general refuse (9,250 kg per day) and food waste (460 kg per day) will be generated during the operation phase.
Extents of Exceedance	N/A	N/A
Avoidance / Mitigation Measures	C&D Material will be segregated on-site into inert and non-inert materials and stored in different containers or skips to facilitate reuse of the inert materials and proper disposal of the non-inert construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable. The contractor will register as a chemical waste producer with the EPD. Chemical waste will be handled in accordance with the *Code of Practice on the Packaging, Handling and Storage of Chemical Wastes*. General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station or landfill, separately from construction and chemical wastes,	Chemical waste will be handled in accordance with the *Code of Practice on the Packaging, Handling and Storage of Chemical Wastes*. General refuse and food and beverage waste will be stored in enclosed bins and disposed of at the tipping area on a daily basis to reduce odour, pest and litter impacts. Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling

Assessment Aspect	Construction Phase	Operation Phase
	on a daily basis to reduce odour, pest and litter impacts. Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling. At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	
Residual Impact	No residual impact	No residual impact
Environmental Acceptability	No adverse environmental impact associated with the handling and disposal of waste.	No adverse environmental impact associated with the handling and disposal of waste.

3.8 ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

The assessments presented in the preceding section indicate that the implementation of the Project is not expected to give rise to adverse environmental impacts with the implementation of good construction site practices and mitigation measures. A focused EM&A programme is considered appropriate, however, to ensure that the proposed mitigation measures are effectively implemented and the quality of the surrounding environment is not prejudiced. A summary of the requirements for each of the environmental parameters is detailed in *Table 3.2*.

Table 3.2 Summary of EM&A Requirements

Parameters	Construction Phase [a]	Operation Phase [a]
Cultural Heritage	M + SA	SA
Landscape and Visual	M + SA	M
Noise	M + SA	M [b]
Air Quality	SA	-
Water Quality	SA	-
Waste	SA	-

Note:
(a) M = monitoring, SA = site audit
(b) Monitoring will be required for outdoor events only and will be implemented through contract requirement for the event organisers.

As part of the EIA study, a detailed EM&A Manual has been prepared for this Project which includes an Implementation Schedule for environmental mitigation measures recommended in the EIA study.

3.9 OVERALL CONCLUSION

The environmental impact assessment has concluded that with the implementation of recommended mitigation measures, no unacceptable environmental impacts are envisaged as a result of the construction and operation of the Project.

目錄

1 引言

1.1 本工程項目背景

中區警署(包括三個法定古蹟：中區警署、前中央裁判司署和域多利監獄建築群)是在 1841 年英軍佔領香港島時建造的。該處是當時的司法和治安中心，設有警署、裁判司署和監獄。中區警署一直以來都是總區和分區的警察總部，直至 2006 年關閉或搬遷時爲止，此後便再沒有對外開放。

行政長官於 2007-2008 年度的施政報告中指出，要以活化再用作爲保育文化遺產的指導原則。本項目是行政長官在該份施政報告中所提出的其中一項具體建議。在 2008 年 7 月 15 日的行政會議中，行政長官及行政會議均認爲，政府應該與香港賽馬會以合約方式攜手合作，按照多項指導參數，爲中區警署開展保育及活化工作（以下簡稱「本項目」）。本項目現時由香港特別行政區政府發展局與香港賽馬會合作進行。香港賽馬會接受了行政會議的決定，並進一步探討了本項目的設計和實施計劃。

香港環境資源管理顧問有限公司受賽馬會文物保育有限公司委託，按照「環境影響評估條例」（以下簡稱「環評條例」）所發出的環境影響評估研究大綱（編號 ESB-205/2009）（以下簡稱「環評大綱」）的要求，進行環境影響評估（以下簡稱「環評」）。其中的文化遺產影響評估，是由保育工程師 Purcell Miller Tritton LLP 負責。本行政摘要闡述了是次環評的主要結果。

1.2 本項目的必要性

中區警署的保育和活化計劃是行政長官於 2007-2008 年度施政報告提出的其中一項具體建議。該份施政報告提出以活化再用作爲保育文化遺產的指導原則。本項目的目標包含了三項主要原則：

1. 文化遺產：

- 爲香港歷史建築的修復、活化和活化再用等工作訂立基準；及
- 成爲政府「保育中環」計劃中的焦點。

2. 視覺藝術：

- 奠定本港舉辦國際藝術展覽的聲譽；
- 吸引優質藝術團體進駐本港；
- 創造多元化的節目和藝術設施，吸引不同類型的香港市民；及
- 爲視覺藝術增添生動和多樣化的表演藝術節目；
- 爲香港和珠江三角洲創意藝術人才提供一個國際平台；
- 透過展覽和藝術家居留計劃來吸引國際人才來港；

- 給予駐香港及中國的藝術專才一個練習實踐的基地。

3. 歷史：

- 提供獨特和內容豐富的親身體驗；
- 向學生、本地和外地遊客重述當地歷史掌故；及
- 解釋法治在香港的發展過程中所扮演的角色。

本項目旨在將一個法定古蹟群改變爲具活力的文化和歷史中心，並由可配合的商業活動提供財政支持。

1.3 是次環評研究的目標

本項目位於一項文化遺產的地點上，因此屬於「環境影響評估條例」（以下簡稱「環評條例」）附表 2 第 Q.1 項所述的指定工程項目，所以必須於施工和運作前取得環境許可證。

是次環評研究的整體目標包括：就本項目在施工和運作階段可能造成的環境影響，提供有關影響性質和受影響範圍的資料；建議適當的緩解措施，務求把各項潛在環境影響控制至能夠符合「環境影響評估程序技術備忘錄」（以下簡稱「環評技術備忘錄」）的要求；並確定本項目在環境事宜上達到可接受的程度。已知的主要環境事項包括：文化遺產、景觀和視覺、空氣質素、噪音、水質及廢物管理。

是次環評是按照「環評技術備忘錄」所闡述的評估方法指引而進行。一般的評估程序包括：闡述該次影響評估的基線環境情況；找出各項潛在影響並加以評估；以及建議適當的緩解措施和環境監察計劃。是次環評研究採用了行之有效及獲國際認可的評估方法，並合理地假設當中最壞的情況來進行研究的。

2 工程項目說明

2.1 現有環境

圖 2.1 顯示了本項目地點的位置。它的北面是荷李活道；東面是亞畢諾道；南面是贊善里；西面是奧卑利街。根據 1995 年的「古物及古蹟條例」，項目地點內有下列三個法定古蹟：

- 中區警署；
- 前中央裁判司署；及
- 域多利監獄。

圖 2.2 展示了中區警署內的法定古蹟和相關建築物的位置。

若不進行本項目，中區警署會維持不對外開放的狀態，因而會錯過在中環核心地帶提供一個文娛及消閒空間的機會。此外，中區警署若不進行即時的改善工作和缺乏長期的維修保養，各個歷史建築物的狀況也可能會逐漸惡化。

2.2 不同方案的考慮

2.2.1 整體設計

爲了使位處香港中心地帶的中區警署再一次活現眼前，以及爲了達到活化的目標，必須在該警署的所在地提供一個中等大小的多用途場地、一個可以容納國際藝術展覽的優質展覽空間，以及相應的教育和商業設施。

本項目擬訂和探討了多個設計方案。爲了盡量減低本項目對中區警署帶來的變化，本項目首先探討了利用現有建築物作活化用途的方案。現有建築物中各個較大的場所（警察總部內的舊健身室；裁判司署的兩個法庭；營房大樓上層的部份宿舍房間）均曾被考慮作多用途場地和藝術展覽室之用。然而，由於這些場所的可用空間有限，大量加建的需要或因爲其他困難，例如通道受限制等，最後都被剔除。

現有建築物的各種實質限制是不容許它們改成爲國際級的展覽和多用途場地（供教育／表演之用）。若要將之改成國際級展覽和多用途場地，部份內部間隔必須予以拆除，才能夠提供優質展覽所需的保安、氣氛和展覽條件。這個方法無需建造新建築物。世界上有多個古蹟都採用這個方法來發展成藝術博物館。然而，這種安排需要拆除古蹟的內部結構，以提供新場地所需的設施和環境，並只能保留古蹟的外牆。這種做法偏離了保留、保育和活化中區警署建築物內部來適當地重新再用的模式。香港賽馬會注意到，本項目必須在「遺產」和「視覺藝術」兩項目標原則之間取得平衡，並認爲大小適中、有限的新建築物是最好的方法來提供能夠容納優質國際展覽、盛事表演和教育等所需要的場地，並能夠爲整個項目地點提供必要服務。於中區警署內建造新建築物能提供更靈活、更多用途和更多的文化用地，有助豐富本項目，同時保留現有歷史建築物和使它們開放予公眾人士。事實上，在各國的文物建築當中，有很多被改

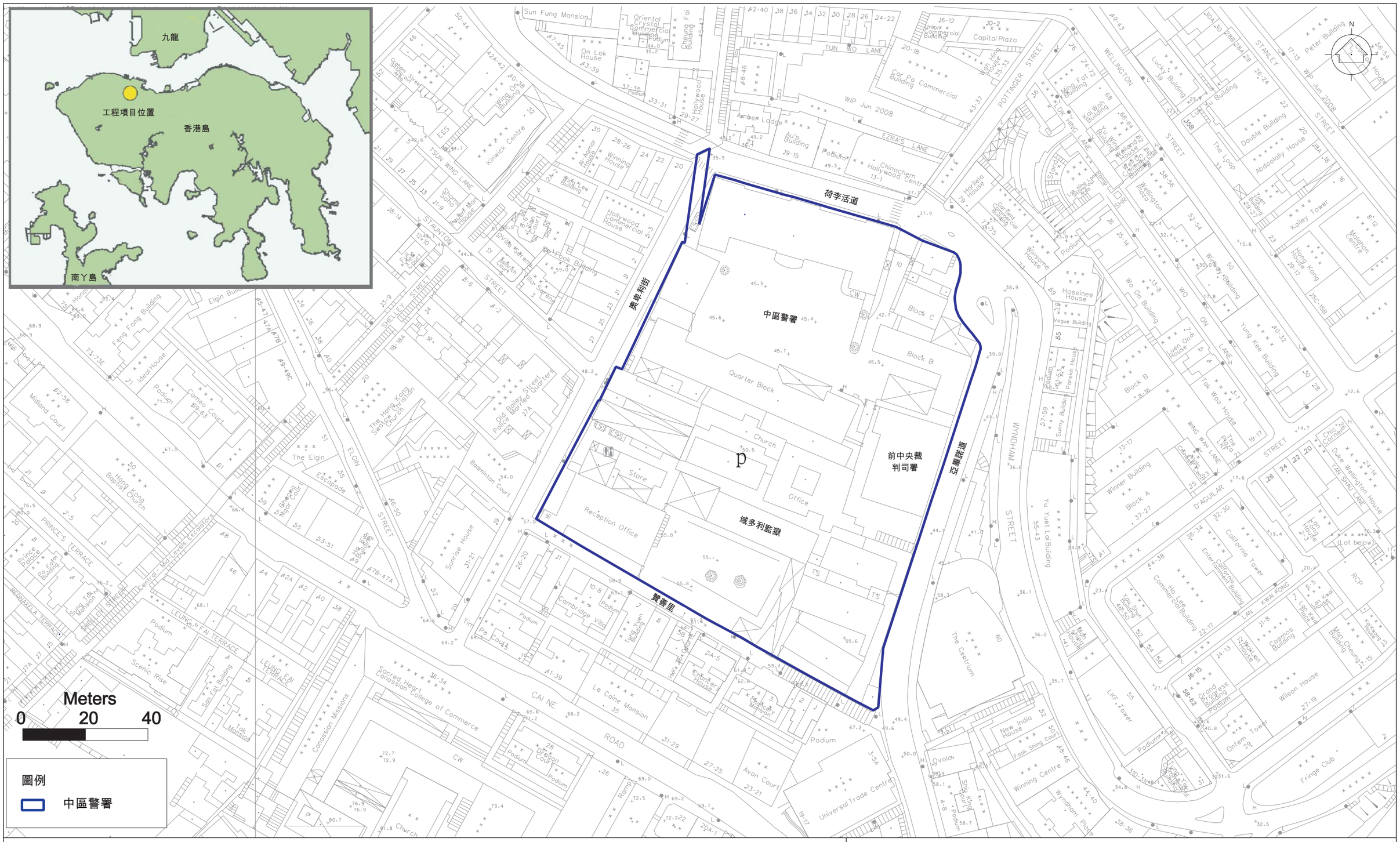


圖 2.1

工程項目位置

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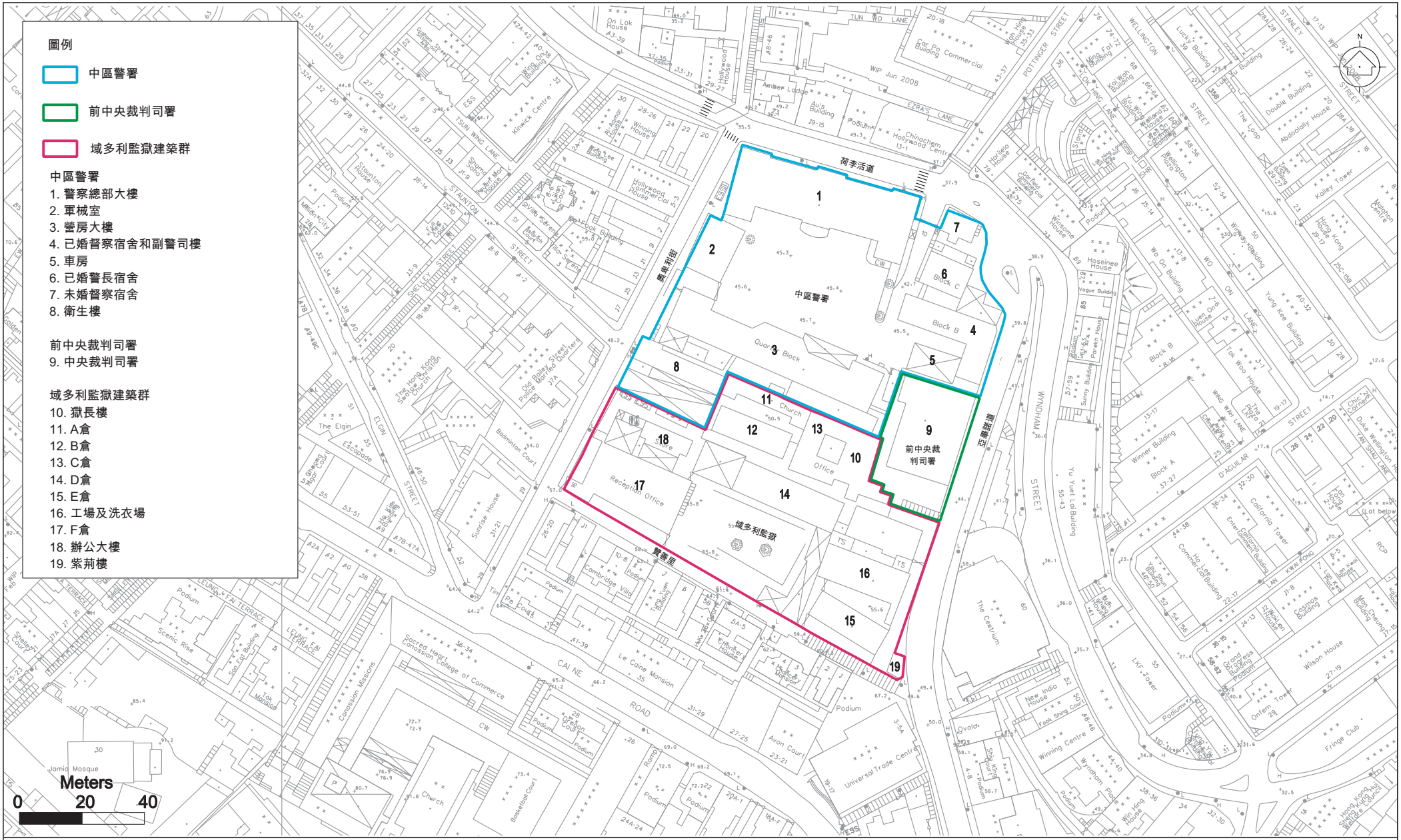

圖 2.2

位於項目地點的法定古蹟

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DATE: 07/01/2011

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建成現代／當代視覺藝術用途，但仍需加建新建築物才能令它們充份發揮作用。

本項目的顧問公司於 2008 年爲中區警署擬訂了一份「保育管理計劃」(1)，當中指出了只有兩個可以建造新建築物的地點。它們分別是位於監獄操場西側，即辦公大樓所在的地區（該區包括一些現代單層辦公室樓宇、小型磚砌單層儲物室和在「D 倉」西端的現代單層石棉瓦屋頂加建部份），以及監獄操場東側（包括洗衣場、單層工作棚和毗鄰的廁所）（見*圖 2.2*）。這兩個建築物的文物價值屬有限。事實上，對本項目其餘的地點而言，將這些建築物改建成現代化的新設施會比保留和活化再用它們帶來更大的效益。

所以總結來說，爲了提供博物館級數的展覽場地和有彈性的場地於中區警署作表演／演唱會／授課和舉辦活動用途、設置冷卻廠房在新的中央位置來盡量減少對現有建築物的改建，以及令本項目在文化上和財政上都可行的話，建造新建築物是必要的，選址可考慮辦公室大樓和洗衣場。

2.2.2 *新建築物的設計*

新建築物的高度會符合「西營盤及上環分區計劃大綱草圖 S/H3/24 號」所規定關於興建在較高平台的新建築物之高度限制，即不超出主基準水平以上 80 米。新建築物會作多項設施之用，例如藝術廊、多用途場地和飲食零售點等。目前共擬訂了兩個設計方案。

方案 A：F 倉作藝術廊和藝術廊輔助設施之用。位於 F 倉北面的新建築物會裝設藝術廊空間和相應的輔助設施，包括部份中央機房來爲整個項目地點提供冷凍水（見*圖 2.3*）。這樣便可以保留但改動洗衣場的鋼質結構，讓洗衣場可以作爲多用途場地，而與監獄操場位於同一層的上層空地則可用作雕塑展覽區。

方案 B：F 倉用作藝術廊、藝術廊輔助設施和部份會保留用作觀賞之用，讓遊人可在此緬懷昔日的監獄接待處。位於 F 倉北面的新建築物會提供主要的藝廊場地和一個新的藝術主題餐廳（見*圖 2.4*）。舊洗衣場會被用作另一座新建築物的興建地點，爲連接 D/E 倉的藝術教育或有關藝術的設施提供正規的進口空間、一個新的多用途場地和看台。亞畢諾道的頂層亦會用作中央機房的主要放置地方。

這些方案都按照多項準則予以評估，其中包括：滿足本項目所需文化和安置機房場地的能力、對現有歷史建築的干擾程度、與上層庭院其他建築物的融合程度、工程限制和潛在環境影響。方案 A 的規模較小，因此潛在環境影響也較少（特別是在建築塵埃、噪音和景觀及視覺影響方面），但未能提供足夠空間來滿足本項目對文化場地和機房空間的要求。由於新建築物可能會對現有建築物造成文化遺產影響，因此，兩個方案中的新建築物設計都與現有建築物保持一段距離，以確保現有建築物受到最少影響，而且不會拆卸任何具文物價值的建築物。方案 A 不足以安置所有冷卻塔和冷凍機，這表示部份這些機器需要在現有的建築物內安置，現有建築物將因此有更多的改動，所以從文化遺產的角度來看這方案有比較顯著的影響。雖然方案 B 如上文所述，需要拆除洗衣場，所有因要符合現行安全和服務標準而必須改善洗衣場建構物(如方案 A)的改動將會改變其文物價值。此外，需要拆卸的結構不會造成重大的文物損失。因此，在減少潛在文物影響方面，兩個方案的效果都相差不大。

(1) Purcell Miller Tritton (2008)「舊中區警署和域多利監獄的保育管理計劃」。

圖例

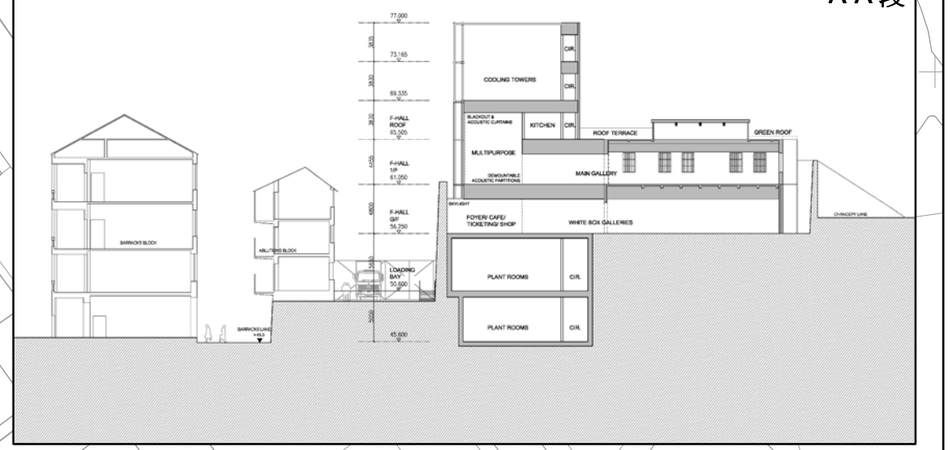
- 新建築物
- 將用作雕塑展覽和多用途場地的洗衣場
- 工程項目位置

建築物索引

01	警察總部大樓
02	軍械室
03	營房大樓
04	已婚督察宿舍和副警司樓
06	已婚警長宿舍
07	未婚督察宿舍
08	衛生樓
09	中央裁判司署
10	獄長樓
11	A倉
12	B倉
13	C倉
14	D倉
15	E倉
17	F倉
19	紫荊樓

嘉寶商業大廈
建議行人天橋
荷里活道
奧卑利街
警察宿舍
01
02
03
04
06
07
08
09
10
11
12
13
14
15
17
19
A
A'
B
B
亞畢諾道
雪咸街
賀善里
中央廣場
N
0
25
50
米

A-A 段



B-B 段

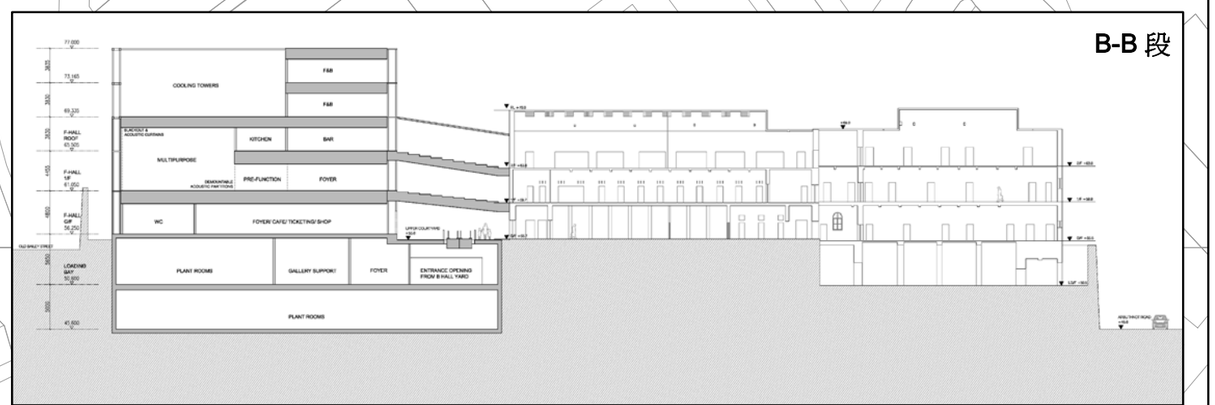


圖 2.3

方案A 的主要特色

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註: 段示意圖請參考圖2.22-2.24

圖 2.4

方案B 的主要特色

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Date: 04/01/2011

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因此，在考慮過滿足本項目所需文化場地的能力、對現有歷史建築的干擾程度、與上層庭院其他建築物的融合程度、工程限制和潛在環境影響等多項準則與達到本項目的目標之間的平衡後，方案 B 被認爲是最可取的方案。

新建築物的建築風格大致可沿用歷史或現代風格。相比之下，我們建議沿用現代風格。新建築物的規模和風格受到分區計劃大綱圖對新建築物設定的土地規劃和高度的限制，以及建議用途所需的室內空間(樓宇面積和天花高度)。設計採用從最大可建範圍向內移入方法，以減低對鄰近歷史建築物的影響和讓它們保留原狀。所以在建築規模方面，現代風格無論在視覺或文化遺產兩方面都是可行的。建築物外牆的處理方法考慮過不同的方案。就結構、延展性、輕量、生命週期和一般的藝術角度來看，鋁的多用性是比較可取的物料選擇，因爲它正可把新建築容入歷史文物群中。

2.2.3 現有建築物的活化再用

本項目旨在令項目地點內所有建築物都能夠重新作有效益的用途。因此，所有建築物都必須設置現代樓宇設施，並改善消防分隔設備和消防逃生設施。其中有多座建築物需要加固樓層，以便承受比原先設計更重的樓面負荷。本項目曾試圖找出一些對現有建築物造成最少干擾和改動的用途。爲了確保建議的地面鞏固措施對建築物歷史物料的影響減到最低，結構工程師會在詳細的設計階段草擬一份詳細的結構報告。此報告會評估鞏固建議是否需要修訂和決定地面和地基是否需要進行任何鞏固工程，因爲新用途、改動或現有建構物的狀況可能需要鞏固工程來加強樓面的承載力。任何結構鞏固的建議會按它們對特色定義元素的影響來評估，而相應的緩解措施亦會考慮。

同時亦需要有足夠的空間來容納項目地點內所有設施和活動所需要的機電設備。在裝設冷凍機和冷卻塔的地點方面，共考慮了兩個方案：

- 方案 1：把冷凍機和冷卻塔裝設在各個建築物內；
- 方案 2：把冷凍機和冷卻塔全部集中在上層庭院旁的新建築物內。

若與方案 1 相比，方案 2 減少了需要改動現有建築物的數目，並能提供一個更持久的解決方法，因此已被納入本項目的設計中。

2.2.4 項目地點的行人通道

往來項目地點的行人通道

中區警署活化計劃的成功，有賴於通往現場和在現場內的行人通道是否方便。爲了改善往來項目地點的通道，需要在中區警署開設更多進出口，並建造一條行人天橋連接警署和中環至半山扶手電梯。爲了盡量減少干擾中區警署的現有結構，只會在相關的安全規定和現場服務所必須的圍牆位置增設出入口。

在設置建議的行人天橋後，前往中區警署的遊客可以直接使用中環至半山扶手電梯，並減少使用位於荷李活道和奧卑利街路口的地面行人過路設施，以及在荷李活道旁的行人路。有關行人天橋設計的研究現正進行。露天行人天橋的建築概念是伸延檢閱操場，即一塊簡單、最小的樑板或台階伸延至現時的半山區行人電梯。除了台階之外，只需另加扶手在兩旁以確保行人安全。另外，必須擁有跟檢閱操場一樣的堅硬鋪路和空曠特色。現時的行人天橋設計只能提供人

流所需的最小寬度，這可以使整個結構物的設計簡單和輕巧，以盡量減低潛在的視覺影響。圖 2.5 展示了這設計概念。

項目地點內的行人通道

爲了改善項目地點內的行人通道，必須在各個建築物之間改建或新建樓梯和行人路。因此，將會建造一條設有傷殘人士通道的階梯式通道，通過 A 倉和 B 倉把下層庭院和上層庭院連接起來。這條階梯式通道會連接一條蜿延經過營房大樓旁、大樓後和各個監倉的歷史徑。這條階梯式通道可以讓遊人直接通往項目地點內所有主要公共空間（無論是室內或室外、新場地或舊場地）。雖然建造這條階梯式通道需要改建 B 倉的內部和部份外牆，但它可以減少興建新樓梯和各個建築物之間的行人路數目，因此可以減少中區警署室外建築的修改工程。

圖 2.6 顯示了主要行人通道走廊。

2.2.5 最可取設計方案的篩選

爲了達到本項目的目標，同時又能平衡各種考慮因素，包括減少潛在環境影響（特別是對歷史建築的影響），本項目選擇了方案 B 作爲中區警署新建築物的最可取設計方案。新建築物的規模會遵守分區計劃大綱圖所規定的高度限制，並會採用從視覺和文化遺產的角度可配合現有歷史建築的規模。

至於各個現有建築物的活化再用建議，都是以綜合的方法找出對現有建築物造成最少干擾和改動的用途。最可取的方案會透過限制圍牆出入口數目，來把現有結構的改動減至最少。

本項目謹慎地把適當的用途編配至合適的空間內，並採用消防工程方法來減少符合消防安全要求所需的結構修改工程，目的是要把現有建築物的改建／翻新工程減至最少。因此，在最可取的設計中，大部份主要範疇的設計都具有環境效益。縱使未能完全避免造成環境影響，特別是在施工階段，有關的影響都會是局部性和短暫的，而且可以透過實施適當的控制措施來加以緩解。

2.3 工程項目說明

2.3.1 設計宗旨

新建築物

本項目的設計意圖，是要利用新建築物吸引人流至比較封閉和偏遠的現場南部－舊監獄區。由於「舊奧卑利翼」的大小必須足以容納國際性的巡迴展覽；而「亞畢諾翼」也不僅需要容納主要的多用途表演場地，亦需要裝設整個項目地點的冷卻系統，因此必須有效地運用所有可用的空間。

兩座新建築物的設計都能夠配合整個項目地點的規模，並且充份利用了所有可用空間，而不會比四周的建築物或上層庭院的戶外空間更突出。新建築物會與各個歷史建築物有顯著分別，其設計不會採用任何現有的表面裝飾（花崗石、磚和油漆）來加以變化，而是建議採用具質感的金屬覆蓋層來展現花崗石牆的節奏和規模，並會與毗鄰的建築物互相呼應，同時又保持自己的獨特性。這個在重要的文物地點加入新建築物時所採用的方法，已被廣泛認可。一般而言，

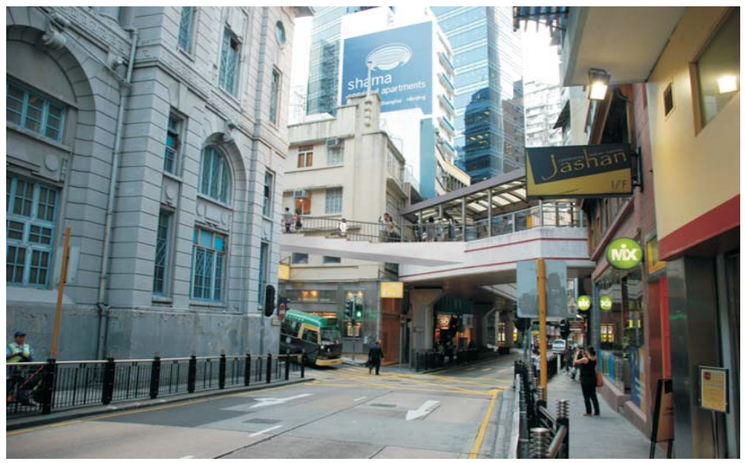

圖 2.5

行人天橋的初步設計

FILE: 0095646t5
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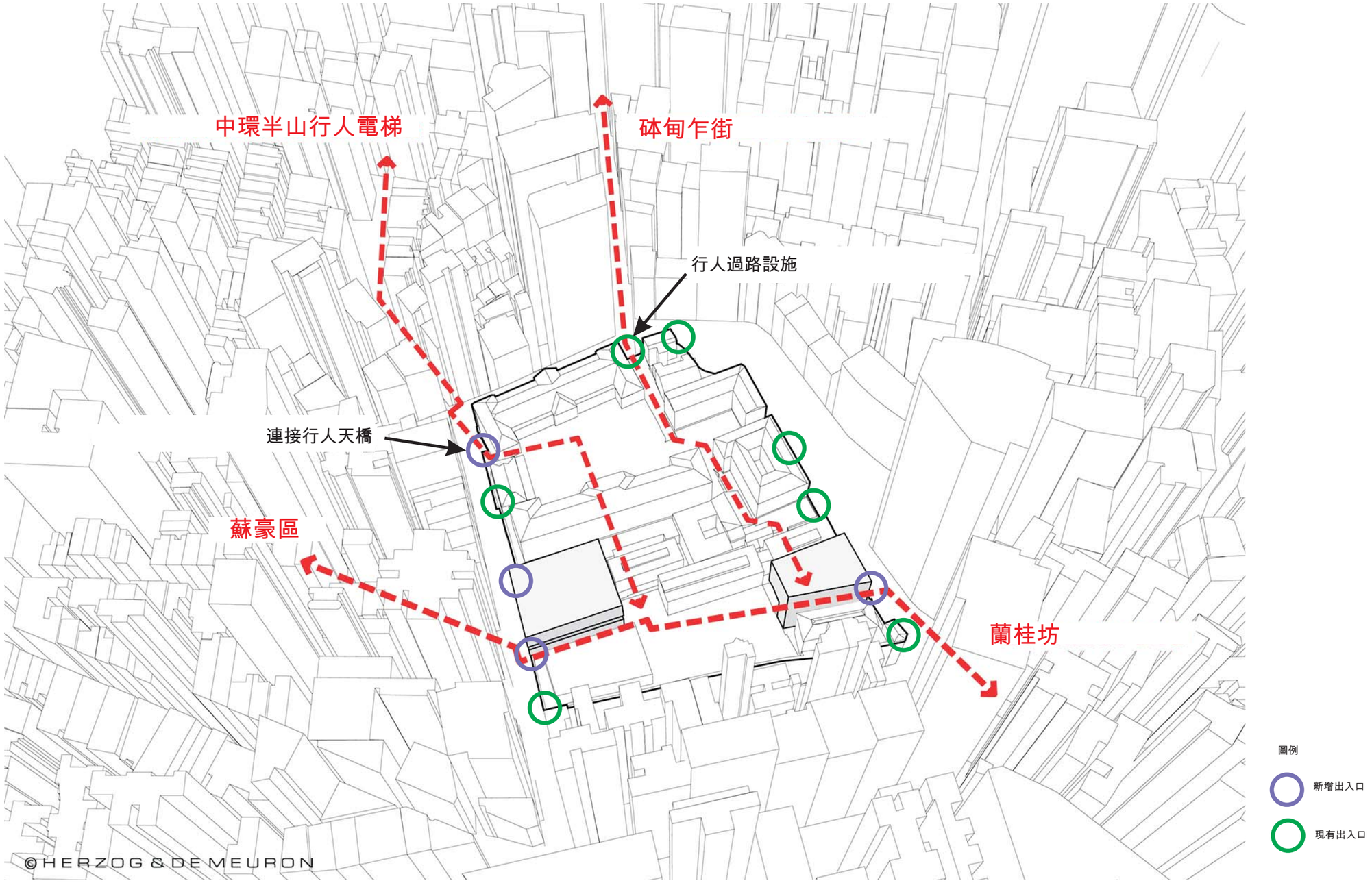

圖 2.6

項目地點的連接通道

FILE: 0095646t7
DATE: 04/01/2011

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在毗鄰歷史建築的地方加建與歷史建築相似的新建築物都屬劣作，因爲這樣會令人混淆新舊建築，而且會削弱而非促進原有建築物的特色和質素。然而，新建築物若有出色的設計和適當的規模，並可配合現有建築物，同時又能展現出當代建築風格，便大都會被廣泛接受爲解決這類干擾的理想方法。這種新建築物可以令人耳目一新，並成爲遊客的焦點，但又不會令人忽略各個歷史建築物的本身價值，在本個案中至爲重要的是它不會佔用監獄操場。

每座新建築物的基本體塊，均完全按照土地用途區劃的規定建造。它們都與歷史建築保持距離，而高度則達到主基準水平以上+80.0 米。建築物之間的地面留有明顯空間，從而形成受屏蔽的廣闊空地，供遊人聚集。同時，這些空地亦塑造出在亞畢諾道與士丹頓街之間，通過舊監獄操場的行人流動方向。

新建築物和上層庭院的設計，均展示於*圖 2.7*。

上、下層庭院

本項目的主要設計意圖之一，是要保留上層及下層庭院的開闊程度，並活化它們成爲新型的都市休憩空間。上下層庭院將會在實質上和活動安排上，令本項目地點成爲遊人聚集、消閒和休憩的場所。下層庭院的四周都由項目地點內最具歷史價值的建築物圍繞，因而形成一個四正的開闊空地，有足夠空間容納公眾娛樂活動、有組織的節目、直接通往食肆和零售設施的通道，以及較小型的文化和教育場地。上層庭院會較徹底地從一個粗糙的禁區變成一個嶄新的、以文化場地爲重點的露天公共空間。它的形狀會比下層庭院較不規則，並會保留相當數量的現有樹木，以及在監獄後牆進行綠化種植。

項目地點的連接通道

本項目地點有多個不同的地面層和一幅監獄圍牆，對進出及內部遊覽都造成不便。因此，除了會保留砵典乍街的正門之外，還會在東西兩側加設進出口，以改善本項目地點對外的連接通道。此外，將會新建一條行人天橋連接中環至半山的扶手電梯，也可以直接通往下層庭院，以及顯示項目地點在荷李活道和奧卑利街交界處這個主要角落的變化。在奧卑利街一側的圍牆，靠近士丹頓街的位置會新開一個西面進出口，並會在對面的圍牆開設東面進出口，通往亞畢諾道。紫荊樓亦會被修復，作爲連接亞畢諾道與舊監獄操場的新門樓。這兩個進出口會形成一條重要的東西走向的新通道，穿過建築群的上層。

爲了把本項目範圍內各個新行人公共空間所形成的網絡連接起來，建議建造兩條南北走向的主要行人通道。此外，會重開一些門戶和通道，再在現有建築物和圍牆上加添一些經過小心安排的新門戶和通道，從而形成一條蜿蜒曲折的歷史徑。還會新建一些樓梯和升降機，以便在檢閱操場和舊監獄操場之間提供一條更直接的連接通道。

圖 2.6 顯示了主要行人通道走廊。

2.3.2 *項目地點的佈局和建議用途*

圖 2.8 展示了本項目的平面圖。遊人會經由設於荷李活道、奧卑利街和亞畢諾道的現有和新設閘口和新建的行人天橋進出本項目地點。此外，亦會在奧卑利街的裝卸區增設一個出入口。

圖 2.7

新建築物和上層庭院的設計

FILE: 0095646t4
DATE: 04/01/2011

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圖 2.8

項目位置圖

File: 0095646_site plan_chi.mxd
Date: 04/01/2011

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在中區警署內，建議設置多項文化和商業設施。同時亦預留了空間，以便說明現有歷史建築的建築風格和歷史特色。商業設施方面，會包括多種食肆和飲食零售點。項目地點內亦設有多用途場地，可以舉辦多種節目／活動。此外，還有各種場地可供市民租用，以便舉辦各種活動，包括舉辦新劇或產品的推介酒會，或舉辦工作坊或促進香港經濟、旅遊和藝術中心等的會議。

中區警署內的庭院仍會保留作爲休憩空間，供市民和遊客享用。兩個庭院都會偶爾進行文化活動。*圖 2.9 – 2.11* 乃上層庭院的剖面圖，當中展示了新建築物和階梯式通道。

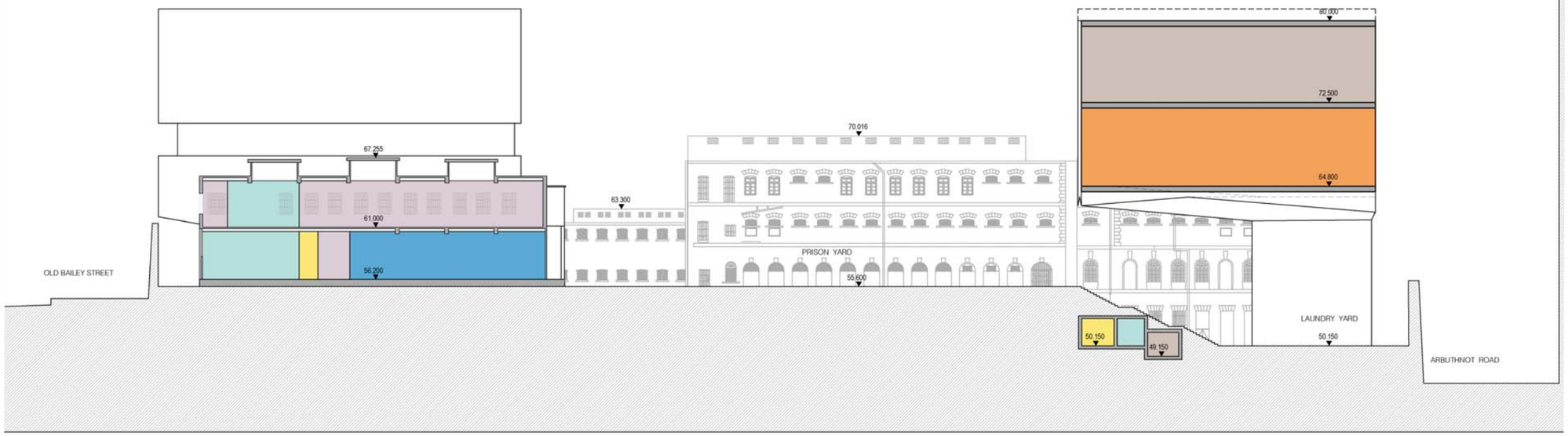
2.3.3 建造及改建／翻新工程

各項建造及改建／翻新工程都是爲了配合各項建議用途的要求、改善場地、改善建築物之間的連接通道，以及改善整個項目地點的通道而進行。主要的改建／翻新工程包括：內牆裝飾的修理和必要改動、正面外牆的修理、改進機電設施、改善建築物之間的路面鋪築和行人通道，以及在現有邊界圍牆上開闢出入口，以便進出項目地點。

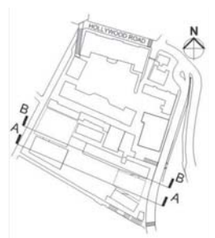
各個現有歷史建築物所需進行的具體翻新／改建工程細節各有不同，需視乎每座歷史建築的現有狀況和建議用途而定。然而，大部份工程都是拆除建築物的後加部份，以及把建築物恢復至良好狀態。

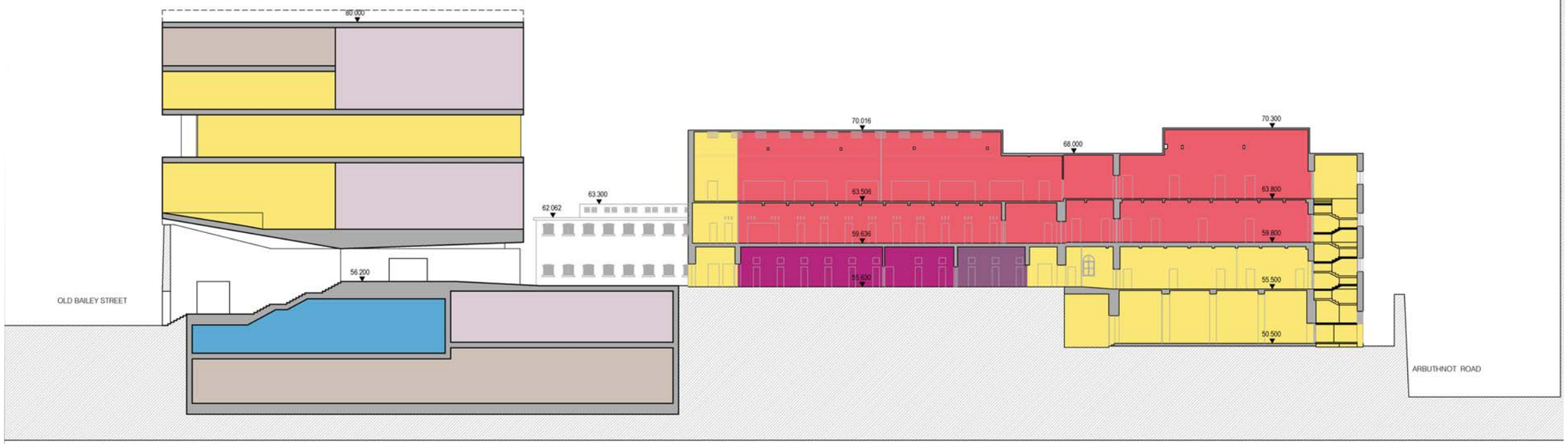
2.4 施工計劃

建築工程暫訂於 2012 年初動工，並於 2014 年竣工。現有建築物的改建工程會分作四期進行。主要的拆卸和挖掘工程會在第一期進行，而第二至第四期則會進行裝修工程，並會以手持／輕型設備作爲主要工具。新建築物的建造工程會與現有建築物的改建工程同時進行。



擬建 A-A





擬建 B-B

用途示例

- 食肆和輔助設施
- 零售和輔助設施
- 行人通道
- 洗手間
- 機房和維修通道
- 觀賞室
- 教育中心和輔助設施
- 多用途和輔助設施
- 藝術畫廊和輔助設施
- 有關藝術支援空間
- 警署
- 有關藝術組織的檔案室和圖書館
- 場地管理辦公室和儲物室

0 5 10 15 20m

圖2.9

擬建 A-A 及 B-B 段示意大綱圖

FILE: 0095646r1
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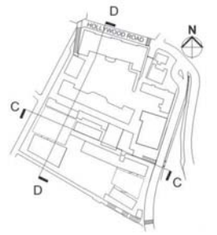
擬建 C - C



擬建 D - D

用途示例

- 食肆和輔助設施
- 零售和輔助設施
- 行人通道
- 洗手間
- 機房和維修通道
- 觀賞室
- 教育中心和輔助設施
- 多用途和輔助設施
- 藝術畫廊和輔助設施
- 有關藝術支援空間
- 警署
- 有關藝術組織的檔案室和圖書館
- 場地管理辦公室和儲物室

0 5 10 15 20m

圖2.10

擬建 C-C 及 D-D 段示意大綱圖

FILE: 0095646f11
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擬建 E-E

擬建 F-F

用途示例

- 食肆和輔助設施
- 零售和輔助設施
- 行人通道
- 洗手間
- 機房和維修通道
- 觀賞室
- 教育中心和輔助設施
- 多用途和輔助設施
- 藝術畫廊和輔助設施
- 有關藝術支援空間
- 警署
- 有關藝術組織的檔案室和圖書館
- 場地管理辦公室和儲物室

圖2.11

擬建 E-E 及 F-F 段示意大綱圖

FILE: 0095646r3
DATE: 04/01/2011

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3 環境影響摘要

3.1 引言

本章摘述了本項目在施工和運作期間可能造成的環境影響。各項影響摘要均羅列於*表 3.1*。

3.2 文化遺產

擬建項目銳意發展項目地點成爲一個充滿活力和完全開放予公眾的地方，同時亦希望能夠保留項目地點在歷史和文化方面的重要性。這個目標的難度在於要確保在項目地點的建築物長遠而言有適當的用途，並透過這些用途來製造足夠的盈利來保育建築物。爲達到這個目的，必須盡量減少對現有歷史建築物物料的改動，但它們同時亦必須符合法例要求，確保活化再用這些歷史建築物是安全的。透過建議和選擇合適建築物現有設計的用途，加上大部份原有的物料都獲保留，這個目的可算是達到了。

爲促使項目地點的南面部份能蛻變成爲一個多姿多采的藝術中心，是次研究建議興建兩座新建築物來用作畫廊和多用途空間。新建築物的選址已盡量避免對現有歷史建築物的物料造成影響，其選址同時提供全新的通道和重新善用鄰近的歷史建築物。

擬建項目令所有公眾人士能夠前往項目地點，即使公眾人士並不需要使用項目地點的任何設施，他們都可以隨意前往和使用項目地點的公眾空間。項目地點亦有某些地方特別保留下來作觀賞和懷緬昔日中區警署之用。在項目地點的主要建築物內均設有這些觀賞空間。

擬建項目將保留所有重要的歷史建築物，對它們的外牆物料亦只會作出非常輕微的改動。雖然對歷史建築物的內部將會有某些改動，但這些改動是非常有限的，而且拆除後加物料之後，大部份歷史建築物的內部將會獲復原至它們原有的面貌。主要戶外空地、檢閱操場和監獄操場將會原封不動地保留其歷史完素。環繞項目地點和分隔警署、監獄和裁判法院的牆身亦會保留和保育。這些有限的變動是希望方便公眾人士前往項目地點，以達到真正開放中區警署予所有人的目的。

對於擬建新結構物對現有建築物的影響，建議緩解其影響的紓緩措施包括採用非撞擊式打樁的方法來建造新建築物的地基，以及採用橫向支援系統來減少任何潛在的振動影響。爲了援解在現有建築物有關改動／修葺工程所帶來的影響，在詳細設計階段會對特色定義元素進行一個詳盡的調查和影響評估，而在施工階段有關施工時的保護措施亦會建議和實行。在建築工程開始前，會由專家進行一個基線狀況調查和基線振動影響，來決定中區警署的振動控制限度和爲有關歷史建築物提交振動監察建議書。在詳細設計階段會進行一項考古調查來決定是否對潛在考古資源（如有）有任何影響，及如有需要的話，建議和實施適當的緩解措施。有關在詳細設計階段和施工階段擬實施的緩解措施詳情，請參閱表 3.1。

在運作階段會實施「保育管理計劃」(2008 年 6 月)、「文化遺產運作策略及手冊」和「說明策略／計劃」。這些計劃／策略是否有效和已落實報行將會作出定期監察。

總括而言，當實施緩解措施後，本項目對文化遺產、項目地點內的潛在考古資源，以及項目地點 50 米內的文化遺產資源的潛在影響是可以接受的。

3.3 景觀及視覺影響

是項報告已進行了基線研究。研究辨認出 9 個景觀資源、7 個景觀特色區和 4 個類別內共 12 個視覺敏感受體及觀景點，它們的敏感度和質數已被評估，亦提出了相應的方法來緩解這些影響。

本項目將會產生部份不良的景觀及視覺影響，但這些影響是可以透過實施某些緩解措施減少或抵消的（例如對疑建的新建築物作美化外貌處理、樹木補償和保護措施、照明控制等等）。本項目亦存在有利的景觀及視覺影響。這些有利影響來自對項目範圍內及項目地點圍牆的現有建築物和空地的復修和翻新、新加建的綠化牆和植被地，以及對現有園景植物的加強和保護。景觀影響方面，在運作後的第十年，所有不良的景觀影響會減至輕微至微不足道，至於對法定古蹟內空地(LR4)的影響則是稍爲有利的；視覺影響方面，在開始運作的第一天起，所有不良的視覺影響會減至中等至微不足道，而此影響將會維持至第十年。

在項目地點內找到 11 棵樹。在 11 棵樹當中，4 棵已枯萎或遭破壞的樹(T1, T2, T3 及 T4)及 1 棵健康的樹將會被移除。其餘剩下的樹將獲保留。基於現場和技術限制，並不建議原址保留和移植。項目會實施保護樹木措施和補償種植 6 棵樹幹直徑總和大過 T10 樹幹直徑的樹。當實施這些緩解措施後，對樹木的影響認爲是可以接受的。

新建築物正面的設計特意採用不反光物料，這有助減低潛在的反光影響。在晚上，由建築物內釋出的光部份會被建築物正面阻隔，這樣一方面可以表現出從建築物內顯露出來的生命力，同時減少光污染。晚上在新建築物內最爲開放予公眾的地方是位於奧卑利翼北端並遠離南面一排住宅樓宇的餐廳。晚上 11 時後，在中區警署內的所有燈將會轉爲晚間模式(昏暗)。現時沒有建議在現有建築物的正面加設照明。若建築物正面的用料恰當，以及考慮到項目地點的照明因素，本項目的反光影響是可以接受的。

根據「環境影響評估程序技術備忘錄」的附件 10，本項目在施工和運作階段的潛在景觀及視覺影響在實施緩解措施後是可以接受的。

3.4 噪音影響

3.4.1 施工階段

基於部份噪音敏感受體與項目工程的施工地點很近，所以必須實施緩解措施來緩解施工期間的噪音影響。建議可行的緩解措施包括有良好的施工方法、採用

低噪音的機動設備、採用可移動的隔音屏障和妥善地編排機動設備／施工活動。在實施緩解措施後，所有代表噪音敏感受體處的噪音聲級在整個施工階段均預期會介乎 67 至 75 分貝，符合施工噪音 75 分貝的標準。亦建議在施工階段進行噪音監察，以確保符合相關的噪音標準。

3.4.2 運作階段

經採用一系列固定機器的特定最高聲功率級，是項研究爲工程項目的固定機器噪音作出評估。根據是項評估，預計於運作期間在所有代表噪音敏感受體處的噪音聲級均會符合日間和晚間的標準。在噪音敏感受體處的日間和晚間預計噪音聲級是介乎 52 至 56 分貝(A)，而在噪音敏感受體處的晚間預計噪音聲級是介乎 42 至 49 分貝(A)。固定機器的最大聲功率級將會詳列在給予供應商或承辦商的詳細合同說明書內。若有需要的話，將會爲固定的機器提供抒緩措施，以確保於詳細設計階段能達到一定的噪音聲級。給予戶外活動籌辦者的詳細合同說明書內均會詳列不超越聲功率級之準則及爲每個活動進行噪音監測的規定。

3.5 空氣質素

3.5.1 施工階段

本項目的建築工程包括小規模的工地平整／地基工程、新建設的建築工程、現有建築物的翻新工程，以及現有結構的小型拆卸工程。主要產生塵埃的活動包括挖掘、貨車行駛、處理物料和露天堆放的多塵物料受到風化。由於本項目的工地範圍細小，而且只會產生小量掘出物料，因此，現場只會有限度堆放掘出的泥土。預計在實施塵埃控制措施和採用良好施工方法後，本項目將不會造成不良的塵埃影響。

由於工程範圍細小，任何時間都只會有小量建築車輛和機器在工地內運作，因此預計本項目的柴油機器和設備所產生的氣體排放物只會造成輕微的空氣質素影響。

3.5.2 運作階段

在運作階段，項目地點內的廚房會使用電子爐灶，而在廚房的排氣口亦會裝置靜電除塵器來抽走所有可能排出的微粒。因爲於詳細設計階段會考慮將廚房排氣口放置在適當的地點上，所以由廚房排氣口排放的氣體所產生的潛在空氣質素預料不會受到任何影響。

在研究範圍內辨認出三個正運作的煙囪，全部都由餐廳運作。它們均位於離地面至少 30 米以上的地方。估計這些運作中的煙囪是使用煤氣、超低硫柴油或其他低排放量並符合「空氣污染管制（燃料限制）規例」及其 2008 年修訂要求的燃料。考慮到排放地點的高度，在工程項目地點和運作中的煙囪之間有高樓大廈，此外最近五年內從附近環保署的空氣質素監察站所錄得的二氧化氮和二氧化硫監察資料，預料排放物對本項目不會構成不良的空氣質素影響。

本項目的設計鼓勵遊人利用行人天橋和行人過路設施前往現址，因此相比起現在附近馬路的交通流量，本項目的運作所產生的交通流量(如觀光巴士及私人車輛)預料會非常小。因此預料此項目的運作將不會產生不良的汽車排放影響。

3.6 水質

3.6.1 施工階段

與建築工程有關的水質影響的潛在源頭包括由工程範圍排出的污水以及由現場工作人員所產生的污水。在進行改建工程前，會先在工地周邊建造截流渠，藉以把工地外的水引導至繞過工地；並會在工地內進行排水工程和裝設侵蝕及沉澱控制設施。工地內會設置渠道、土堤或沙包屏障等，藉以把可能已受污染的徑流引導至現場的隔濾設施，然後才排進雨水渠。建築工人將可使用在中區警署的現有廁所設施。污水會排放到公眾污水系統。鑑於建築工程的規模和性質，預計在實施良好的施工方法和工地管理方法後，本項目的工地徑流和一般施工活動都不會造成不良的水質影響。

3.6.2 運作階段

在項目運作的階段，由工作人員、遊人、咖啡室和餐廳所產生的污水，如未經妥善處理，有可能造成不良的水質影響。預期因項目產生的廢水不多(最高流量爲每秒 50.25 公升)。現有的污水渠將足以應付由中區警署和鄰近發展所排放的預計污水量，因此亦不需要爲現有污水渠作任何改善工程。預計不會對水質和污水收集系統造成任何不良的影響。

3.7 廢物處理

3.7.1 施工階段

在工地產生的拆建物料會在現場分作惰性和非惰性兩類物料，並以不同的容器存放，方便再用惰性物料，以及妥善處置非惰性的建築廢物。本項目會在工地內劃出特別地區來進行廢物分類，以及存放未能即時再用的廢物。工地上的主要位置都會放置回收箱，以便回收鋁罐和廢紙。在展開建築工程前會爲工人提供培訓，內容是關於工地清潔和適當的廢物管理程序，包括減少廢物、廢物再用和循環再造等概念。

估計在施工階段會總共產生 16,440 立方米的公眾填土(包括 12,900 立方米的掘出物料、3,540 立方米由新建築物的建造工程和改建/復修工程所產生的公眾填土)和 890 立方米的建築廢物。公眾填土將被運送至公眾填土設施作循環再用，而建築廢物將送往堆填區棄置。

鑑於工程規模不大，預計本項目只會產生小量化學廢物（在施工階段每月產生少於 100 公升）。此外，估計本項目的建築工人每日會產生約 130 公斤的一般垃圾。透過良好的施工方法，項目的建築工程不會造成不良的廢物管理、交通或環境影響（包括潛在危害、空氣和氣味、噪音和污水排放）。

3.7.2 運作階段

估計本項目在運作階段會產生一般垃圾（每日 9,250 公斤）和廚餘（每日 460 公斤）。工地上的主要位置都會放置回收箱，以便回收鋁罐和廢紙。透過良好的施工方法，在項目運作時廢物儲存、處理、收集、運輸和棄置所帶來的潛在環境影響（包括潛在危害、空氣和氣味、噪音和污水排放）將會符合「環境影響評估程序技術備忘錄」所列明的標準。估計本項目不會有不良的廢物管理影響。

表 3.1 影響摘要

評估事項	施工階段	運作階段
文化遺產		
評估地點／敏感受體	• 中區警署（包括三個法定古蹟：中區警署、中央裁判司署和域多利監獄）。 • 中區警署內的潛在考古遺物。 • 在本項目地點 50 米範圍內的文物建築資源（包括一級歷史街道(砵甸乍街)、擬議三級歷史建築物(荷李活道 20 號)、荷李活道、奧卑利街、贊善里和贊善里階梯、亞畢諾道以及奧卑利街圍牆）。	• 中區警署（包括三個法定古蹟：中區警署、中央裁判司署和域多利監獄）。 • 中區警署內的潛在考古遺物。
相關準則	• 「環境影響評估條例」（環評條例）（香港法例 499 章 16 條）、「環境影響評估程序技術備忘錄」附錄 10 和 19，以及「評估對文化遺產地點影響的指南」； • 古物及古蹟條例（香港法例 53 章）； • 活化再用項目的文化遺產影響評估指南（至 2009 年 5 月止） • 香港規劃標準與準則；及 • 土地（雜項條文）條例。	• 「環境影響評估條例」（環評條例）（香港法例 499 章 16 條）；「環境影響評估程序技術備忘錄」附錄 10 和 19，以及「評估對文化遺產地點影響的指南」； • 古物及古蹟條例（香港法例 53 章）； • 活化再用項目的文化遺產影響評估指南（至 2009 年 5 月止） • 香港規劃標準與準則；及 • 土地（雜項條文）條例。
影響的結果	中區警署內的文物建築 • 各項擬議干擾對下列建築物的影響級別都在 1（有利）、2（可接受）和 3（實施緩解措施後可以接受）之間。因此，擬議對這些建築物進行的各項干擾帶來的整體文化遺產影響屬於可以接受的級別，並可以活化再用這些建築物： o 總部大樓 o 軍械室 o 營房大樓 o 已婚督察宿舍和副警司樓 o 已婚警長宿舍 o 未婚督察宿舍 o 衛生樓 o 中央裁判司署 o 監獄長樓 o A 倉 o B 倉 o C 倉 o D 倉 o E 倉 o F 倉 o 紫荊樓 o 檢閱操場 o 洗衣場(此建構物只有少許建築特色和曾遭數次改動的和維修，需要拆除) o 圍牆及護牆 • 各項擬議干擾對下列建築物／特色地點的影響級別都是 2 – 可接受的影響： o 停車場(此建構物沒有任何建築／歷史重要性，需要拆除來提供空地) o 辦公大樓(此建構物沒有任何建築／歷史重要性，需要拆除) o 監獄操場 中區警署內的潛在考古資源。 • 預計被識別爲具有考古潛力的地區都只具有低或十分低的考古潛力。因此，在實施適當的緩解措施後，本項目對具有低潛力的考古資源所造成的影響會屬於可接受水平。特定地區的影響級別如下： o 檢閱操場：3 – 在實施緩解措施後屬可接受的影響 o 監獄操場：3 – 在實施緩解措施後屬可接受的影響 o 軍營里（3 號樓南面的監倉）：3 – 在實施緩解措施後屬可接受的影響 o 車房：不受影響 o 已婚督察宿舍和副警司樓：沒有影響 o 位於 A 倉和 B 倉之間的地區：3 – 在實施緩解措施後屬可接受的影響。 o 位於衛生樓和南面護牆之間和地下的地區：3 – 在實施緩解措施後屬可接受的影響。 o 位於D倉（14 號樓）西端的地區：3 – 在實施緩解措施後屬可接受的影響。 o 洗衣房（16 號樓）：3 – 在實施緩解措施後屬可接受的影響	預計在實施「保育管理計劃」、「文化遺產運作策略和手冊」和「說明策略／計劃」之後，中區警署所受到的整體影響級別會是 1 – 有利。

評估事項	施工階段	運作階段
	o 辦公大樓（18 號樓）：3 – 在實施緩解措施後屬可接受的影響 中區警署外的文物建築資源 • 項目地點內的工程對中區警署以外的文物建築資源通常都只有很小或毫無影響，其中的主要原因是中區警署內所發生的變化都被建築群包圍起來。特定地區的影響級別如下： o 一級歷史建築（砵甸乍街：1 – 有利的影響） o 建議三級歷史建築（荷李活道 20 號）：3 – 在實施緩解措施後屬可接受的影響 o 荷李活道：2 – 可接受的影響 o 奧卑利街：2 – 可接受的影響 o 贊善里：1 – 有利的影響 o 亞畢諾道：1 – 有利的影響 o 奧卑利街的圍牆和隧道：2 – 可接受的影響 o 贊善里階梯：1 – 有利的影響	
超標幅度 避免產生影響／緩解措施	預料沒有 在本項目詳細設計階段正式施工前，將會進行以下工序，確保已收集足夠的資料來決定最終的設計和保育要求： • 詳細調查和評估對特色定義元素的影響； • 檔案記錄； • 提交擬加建和改動工程的建議書； • 詳細的結構評估； • 考古調查。 本項目謹慎地把適當的用途編配至合適的空間內，並採用消防工程方法來減少符合消防安全要求所需的結構修改工程，目的是要把現有建築物的改建／翻新工程減至最少。在施工階段所採用的一般緩解措施包括： • 在動工前找出現有建築物內的所有重要特色、裝飾、裝置和內容，並評估它們在施工期間受損的可能性。其中應該包括記錄具歷史價值的門戶等物品。這些物品無論是留在原地，或不小心地拆除和存放，都很容易受損。 • 把鬆動或容易受損的物品永久或暫時移離現場。 • 擬訂一份保護工程計劃，來保存或保護在施工期間仍留在現場的物件和裝飾。 • 新建築物的地基將會採用非撞擊式打樁的方法來建造，在施工期間並會採用橫向支撐系統來盡量減低可能對附近歷史建築物的振動影響。 • 在施工期間爲建築物的內部和外部實施保護措施。 • 在動工前，確保負責施工的的承建商明白到各項建築結構、建造物、具特色的物件和裝飾等是重要和容易受損的，避免有任何負荷過重、儲存不當，或不適當地施工的情況出現。 • 各項改建和翻新工程都應該採用適當的文物施工方法。 在本項目九個地區的發展建議中，其中一個，即車庫 05 號樓，是無需進行挖土工程（除非在詳細設計階段在該區安排地下設施）。因此，預計本項目不會對該區的考古資源造成影響。 視乎考古調查的結果，將會建議適當的緩解措施並與古物古蹟辦事處確定。 在建築工程開始前，建議由專家爲項目地點內的現有歷史建築物和位於荷李活道 20 號的擬三級歷史建築物，進行一個基線狀況調查和基線振動影響，來決定中區警署的振動控制限度和爲有關歷史建築物提交振動監察建議書。由於在中區警署內的歷史建築物爲法定古蹟，根據古物及古蹟條例，建議書需要向古物咨詢委員會提交，以取得准許證進行有關工作。如果已評估及／或已量度的振動超越容許的數值，或如果發現歷史建築物的結構或非結構的元素受到破壞，建築工程應立即停止，而建築方法和適當的緩解措施應立刻重新檢閱，並提交予古物咨詢委員會審批。	預料沒有 實施「保育管理計劃」(2008 年 6 月)、「文化遺產運作策略及手冊」和「說明策略／計劃」。 進行定期監察來確保在環評報告內第 3.7.4 及 3.7.5 節所建議的緩解措施得以有效地實施。有關定期監察的詳細建議如擬進行的方法(例如表現、監察指標、採用的工具、監察密度等)以及文化遺產專家等，都會在正式運作前徵詢古物古蹟辦事處的意見。
剩餘影響	由於項目地點的整體外觀有所改變，因此本項目會造成輕微至中等的剩餘影響。然而，大部份的潛在影響都對中區警署及其使用者有利。在實施保育管理計劃和第 3.7 節所建議的緩解措施後，剩餘影響會在可接受水平。	預料沒有
環境影響的可接受程度	在實施緩解措施後，本項目對文化遺產的影響屬可接受水平。	在實施緩解措施後，本項目對文化遺產的影響屬可接受水平。

評估事項	施工階段	運作階段
景觀及視覺影響		
評估地點／敏感受體	景觀資源 LR1 – 交通路線 LR2 – 商業／住宅／機構樓宇區 LR3 – 位於法定古蹟範圍內的建築物 LR4 – 位於法定古蹟範圍內的露天空地 LR5 – 公園／文娛區 LR6 – 香港動植物公園 LR7 – 種植區 LR8 – 山坡上的天然林地 LR9 – 廟宇區 景觀特色區 LCA1 – 歷史景觀 LCA2 – 康樂及文化事務署主題公園景觀 LCA3 – 市區中建／高建商業景觀 LCA4 – 市區住宅／商業景觀 LCA5 – 中環市政景觀 LCA6 – 天然山坡景觀 LCA7 – 交通走廊 視覺敏感受體及觀景點 VSR T2 – 荷李活道上方之中環至半山扶手電梯 (VPa) VSR H/O1 – 荷李活道上方之中層／高層商業／住宅樓宇 (VPb) VSR T3 – 亞畢諾道中央廣場之街道層 (VPc) VSR H2 – 贊善里上的中建／高建住宅樓宇 (VPd) VSR T4 – 位於奧卑利街／贊善里路口之街道層 (VPe) VSR T1 – 位於士丹頓街／卑利街路口之街道層 (VPe) VSR O1 – 商業樓宇中層／高層 (國際金融中心) VSR H/O2 – 商業／住宅樓宇中層／高層 (QRC 大廈) VSR H1 – 半山區住宅樓宇中層／高層 (嘉兆臺) VSR R1 – 奧卑利街對開之休憩／公園區 VSR H3 – 奧卑利街住宅樓宇中層／高層	景觀資源 LR1 – 交通路線 LR2 – 商業／住宅／機構樓宇區 LR3 – 位於法定古蹟範圍內的建築物 LR4 – 位於法定古蹟範圍內的露天空地 LR5 – 公園／文娛區 LR6 – 香港動植物公園 LR7 – 種植區 LR8 – 山坡上的天然林地 LR9 – 廟宇區 景觀特色區 LCA1 – 歷史景觀 LCA2 – 康樂及文化事務署主題公園景觀 LCA3 – 中層／高層商業市區景觀 LCA4 – 住宅／商業市區景觀 LCA5 – 中環市政景觀 LCA6 – 天然山坡景觀 LCA7 – 交通走廊 視覺敏感受體及觀景點 VSR T2 – 荷李活道上方之中環至半山扶手電梯 (VPa) VSR H/O1 – 荷李活道上方之中層／高層商業／住宅樓宇 (VPb) VSR T3 – 亞畢諾道中央廣場之街道層 (VPc) VSR H2 – 贊善里上的中建／高建住宅樓宇 (VPd) VSR T4 – 位於奧卑利街／贊善里路口之街道層 (VPe) VSR T1 – 位於士丹頓街／卑利街路口之街道層 (VPe) VSR O1 – 商業樓宇中層／高層 (國際金融中心) VSR H/O2 – 商業／住宅樓宇中層／高層 (QRC 大廈) VSR H1 – 半山區住宅樓宇中層／高層 (嘉兆臺) VSR R1 – 奧卑利街對開之休憩／公園區 VSR H3 – 奧卑利街住宅樓宇中層／高層
	已完成的樹木調查在項目地點內辨認出十七棵樹。沒有一棵樹可以被列爲「非常健康」的狀況。只有兩棵樹，分別是位於檢閱操場內的大樹 T5 (Mangifera indica)以及位於警署和監獄之間相對較小的樹 T10 (Ficus microcarpa)，是保育得較好而能夠被評爲良好狀況的。	項目地點內的樹

評估事項	施工階段	運作階段
相關準則	• 「環境影響評估條例」（香港法例 499 章 16 條）及「環境影響評估程序技術備忘錄」，特別是： o 附件 10（評價景觀和視覺影響以及對文化遺產地點影響的準則） o 附件 18（景觀及視覺影響評估的指引） • 環評條例指南編號 8/2002（按照環境影響評估條例準備景觀及視覺影響評估） • 環境運輸及工務局工務技術通告 3/2006 號－樹木保存 • 環境運輸及工務局工務技術通告 29/2004 號－古樹名木冊及樹木保存指南 • 環境運輸及工務局技術通告第 10/2005 號 – 行人天橋和行車天橋的種植 • 地政總署地政處作業備考第 7/2007 號－私人項目發展建築物的樹木保育和移除申請 • 工務署技術通告 7/2002 號－工務中之樹木種植 • 香港規劃標準與準則第 4 章（康樂、休憩用地及綠化）和第 11 章（城市設計指引）；及 • 香港具景觀價值地點研究	• 「環境影響評估條例」（香港法例 499 章 16 條）及「環境影響評估程序技術備忘錄」，特別是： o 附件 10（評價景觀和視覺影響以及對文化遺產地點影響的準則） o 附件 18（景觀及視覺影響評估的指引） • 環評條例指南編號 8/2002（按照環境影響評估條例準備景觀及視覺影響評估） • 環境運輸及工務局工務技術通告 3/2006 號－樹木保存 • 環境運輸及工務局工務技術通告 29/2004 號－古樹名木冊及保存指南 • 環境運輸及工務局技術通告第 10/2005 號－行人天橋和行車天橋的種植 • 地政總署地政處作業備考第 7/2007 號－私人項目發展建築物的樹木保育和移除申請 • 工務署技術通告 7/2002 號－工務中之樹木種植 • 香港規劃標準與準則第 4 章（康樂、休憩用地及綠化）和第 11 章（城市設計指引）；及 • 香港具景觀價值地點研究
影響結果／超標幅度	本項目在施工階段的潛在景觀及視覺影響的來源包括： • 拆卸部份四周的石磚牆和建造後勤場地入口的建築工程； • 拆卸現有建築物和結構物－車房、工場和洗衣場以及辦公大樓的建築工程； • 清潔、重新油漆、拆除及修復四周的石磚牆的工程； • 在保留的建築物外牆進行的保育、維修和翻新工程，包括搭建棚架； • 挖掘工程，包括建造下層庭院地庫的挖掘工程； • 在整個項目地點內鋪設全新訂造的路面； • 新結構物的建築工程（奧卑利翼、亞畢諾翼和新建行人天橋）； • 位於亞畢諾道以西的新建行人路的建築工程，以及延長位於奧卑利街、近新建行人天橋的現有行人路的建築工程； • 修理現有建築物的外牆設施，例如窗戶； • 臨時堆放建造及拆卸物料，以及臨時存放建築設備； • 在現場臨時使用的建築機械，包括起重機和重型車輛； • 工地外的建築車輛，例如運送被掘出的物料； • 臨時交通／道路改道； • 晚間的照明； • 新建的建築結構；及 • 旱季時的塵埃。 若在施工階段不實施緩解措施，下列景觀資源／景觀特色區會受到顯著影響： • LR3－位於法定古蹟範圍內的建築物 • LR4－位於法定古蹟範圍內的露天空地 • LCA1－歷史景觀 若在施工階段不實施緩解措施，下列景觀資源／景觀特色區會受到輕微影響： • LR1－交通路線 • LCA4－住宅／商業市區景觀 若在施工階段不實施緩解措施，其他所有景觀資源／景觀特色區所受到的影響均屬微不足道。 在項目地點內找到的 7 棵樹中，當中 4 棵已枯萎或遭破壞的樹(T1, T2, T3 及 T4)及 1 棵健康的樹將會被移除。其餘剩下的樹將獲保留。相比起其他在本港依附在牆身的大樹，T10 的體積、樹形、表現、景觀和休憩價值都相對較低。基於現場和技術限制，並不建議原址保留和移植。 若在施工階段不實施緩解措施，下列視覺敏感受體會受到顯著影響： • T2 －荷李活道上方之中環至半山扶手電梯 • H/O1－荷李活道上方之中層／高層商業／住宅樓宇 • T3－亞畢諾道中央廣場之街道層 • H2－贊善里上的中建／高建住宅樓宇 • T5－荷李活道和砵甸乍街交界的街道層 • H3－奧卑利街住宅樓宇中層／高層	在運作階段的潛在景觀及視覺影響來源包括： • 在施工階段失去樹木而造成的剩餘影響； • 園景工程（新植樹地點、新綠化牆身和保留的樹木）； • 維修和翻新獲保留的建築物外牆； • 新建建築結構的運作（奧卑利街翼、亞畢諾道翼、新建行人天橋和新設出入口通道）； • 新建行人路（位於亞畢諾道以西的新建行人路以及位於奧卑利街、近新建行人天橋的現有行人路之延長路段） • 清潔、重新油漆、翻新及維修對外石牆和建築物外牆的部份及 • 晚間的照明。 在實施緩解措施前，在項目的運作階段對任何景觀資源／景觀特色區的影響是微不足道的。 若在運作階段不實施緩解措施，下列景觀資源／景觀特色區會受到中等程度影響： • LR3－法定古蹟範圍內的建築物 • LCA1－歷史景觀 若在運作階段不實施緩解措施，下列景觀資源／景觀特色區會受到微不足道影響： • LR1－交通路線 • LR4－在法定古蹟範圍內的休憩空間 • LCA4－住宅／商業市區景觀 若在運作階段不實施緩解措施，下列景觀資源／景觀特色區會受到顯著影響： • T3－亞畢諾道中央廣場之街道層 • H2－贊善里上的中建／高建住宅樓宇 • H3－奧卑利街住宅樓宇中層／高層 若在運作階段不實施緩解措施，下列視覺敏感受體會受到中等程度影響： • T2－荷李活道上方之中環至半山扶手電梯 • H/O1－荷李活道上方之中層／高層商業／住宅樓宇 • T4－位於奧卑利街／贊善里路口之街道層 • H1－半山區住宅樓宇中層／高層(嘉兆臺) 若在運作階段不實施緩解措施，下列視覺敏感受體會受到輕微影響： • T5－荷李活道和砵甸乍街交界的街道層 • T1－位於士丹頓街／卑利街路口之街道層 • O1－商業樓宇中層／高層 (國際金融中心) • O2－商業／住宅樓宇中層／高層 (QRC 大廈) • R1－奧卑利街對開之休憩／公園區 反光影響／干擾及晚間照明 新建築物正面的設計特意採用不反光物料，這有助減低潛在的反光影響。

評估事項	施工階段	運作階段
	若在施工階段不實施緩解措施，下列視覺敏感受體會受到中等程度影響： • T4 – 位於奧卑利街／贊善里路口之街道層 • H1 – 半山區住宅樓宇中層／高層 (嘉兆臺) 若在施工階段不實施緩解措施，下列視覺敏感受體會受到輕微影響： • T1 – 位於士丹頓街／卑利街路口之街道層 • O1 – 商業樓宇中層／高層 (國際金融中心) • H/O2 – 商業／住宅樓宇中層／高層 (QRC 大廈) • R1 – 奧卑利街對開之休憩／公園區	在晚上，由建築物內釋出的光部份會被建築物正面阻隔，這樣一方面可以表現出從建築物內顯露出來的生命力，同時減少光污染。晚上在新建築物內最爲開放予公眾的地方是位於奧卑利翼北端並遠離南面一排住宅樓宇的餐廳。晚上 11 時後，在中區警署內的所有燈將會轉爲晚間模式(昏暗)。現時沒有建議在現有建築物的正面加設照明。若建築物正面的用料恰當，以及考慮到項目地點的照明因素，本項目的反光影響／干擾及晚間照明是可以接受的。
避免產生影響／緩解措施	M1 詳細設計考慮 CM1 就地樹木保護 – 警戒區 CM2 就地樹木保護 – 前期及分階段修剪樹根 CM3 就地樹木保護 – 樹葉潔淨系統 CM4 就地樹木保護 – 每月檢查 CM5 光線控制 CM6 補償植樹計劃 CM7 垂直綠化 CM8 鋪設新的地面	OM1 原地樹木保護 – 每季檢查 OM2 園景植物護養 OM3 建築維修 OM4 光線控制
剩餘影響	若在施工階段實施緩解措施，下列景觀資源／景觀特色區會受到中等程度影響： • LR3－法定古蹟範圍內的建築物 • LR4－法定古蹟範圍內的休憩空間 • LCA1－歷史景觀 若在施工階段實施緩解措施，下列景觀資源／景觀特色區會受到輕微程度影響： • LR1－交通路線 • LCA4－住宅／商業市區景觀 若在施工階段實施緩解措施，所有其他的景觀資源／景觀特色區都只會受到微不足道的影響。 由於本項目將會實施緩解措施來補償將被移除的 T10 和保護獲保留的樹木，因此本項目對樹木的影響是可以接受的。 建築工程會根據良好的標準手法來進行，而且建築工程所帶來的影響並不會因額外的緩解措施而有大幅度的減少。這是因爲實施緩解措施後，所有視覺影響仍然會維持在原有水平，但是影響將會是短暫的，而且會隨著運作而逐漸減少。	在運作的第一天以及實施緩解措施後，除了 LR3–在法定古蹟範圍內的建築物和 LCA1–在法定古蹟範圍內的歷史景觀會受到輕微的剩餘影響外，所有景觀資源都只受到微不足道的剩餘影響。 在開始運作後的第 10 年以及實施緩解措施後，除了 LR4–在法定古蹟範圍內的休憩空間會由微不足道變爲輕微有利的剩餘影響外，所有景觀資源的剩餘影響會維持不變。 當實施緩解措施後，在運作的第一天： • T3(亞畢諾道中央廣場之街道層)、H2(贊善里上的中建／高建住宅樓宇)和 H3(奧卑利街住宅樓宇中層／高層)的視覺影響將會減至中等程度，而 T2(荷李活道上方之中環至半山扶手電梯)的視覺影響則會維持在中等程度； • H/O1(荷李活道上方之中層／高層商業／住宅樓宇)、T4(位於奧卑利街／贊善里路口之街道層)和 H1(半山區住宅樓宇中層／高層 (嘉兆臺))的視覺影響將會減至輕微水平，而 T5(荷李活道和砵甸乍街交界的街道層)、T1(位於士丹頓街／卑利街路口之街道層)和 O2(商業／住宅樓宇中層／高層 (QRC 大廈))的視覺影響將會維持在輕微水平； • O1(商業樓宇中層／高層 (國際金融中心))和 R1(奧卑利街對開之休憩／公園區)的視覺影響將會減至輕微水平。 在開始運作後的第 10 年以及在實施緩解措施後，所有視覺敏感受體的剩餘影響會維持在原來水平。
環境影響的可接受程度	在實施緩解措施後，各項景觀資源和敏感受體所受到的影響均屬可接受水平。	在實施緩解措施後，各項景觀資源和敏感受體所受到的影響均屬可接受水平。
噪音		
評估地點／敏感受體	N1 – 金珀苑 N2 – 浩福大樓 N3–奧卑利街已婚警員宿舍 N4 – 金碧臺 N5 – 贊善樓 N6 – 贊善大廈	N1 – 金珀苑 N2 – 浩福大樓 N3 – 奧卑利街已婚警員宿舍 N4 – 金碧臺 N5 – 贊善樓 N6 – 贊善大廈
相關準則	按照環評技術備忘錄中有關一般建築工程的規定，所有住宅樓宇在非周日或公眾假期的日間（上午七時至晚上七時）建築噪音標準是 30 分鐘連續噪音聲級爲 75 分貝(A)。 至於在受限制時段進行的一般建築工程，則須遵守「管制建築工程噪音（撞擊式打樁除外）技術備忘錄」所闡述的準則，其中包括： 1.在地區噪音感應級別屬 B 級的地區，所有日子的晚間（晚上七時至十一時）和一般假日（包括星期日）的日間和晚間（上午七時至晚上十一時）均不可超過 A 加權 5 分鐘等效連續聲壓級 65 分貝。 2.在地區噪音感應級別屬 B 級的地區，所有日子的凌晨（晚上十一時至上午七時）均不可超過 A 加	「環評技術備忘錄」對規劃時的噪音準則有以下規定： • 在最接近噪音敏感受體的正面的固定噪音源總噪音聲級，必須比「管制非住用處所、非公眾地方或非建築地盤噪音技術備忘錄」內所闡述的可接受噪音聲級最少低 5 分貝(A)；或 • 普遍的背景噪音聲級（適用於比可接受噪音聲級低 5 分貝(A) 的寧靜地區）。 根據上述「環評技術備忘錄」和「管制非住用處所、非公眾地方或非建築地盤噪音技術備忘錄」的規定，N1-N3 和 N4-N5 的日間和晚間（上午七時至晚上十一時）噪音上限分別是 59 分貝(A)和 54 分貝(A)。N1-N3 和 N4-N5 的凌晨（晚上十一時至上午七時）噪音上限分別是 50 分貝(A) 和 49 分貝(A)。

評估事項	施工階段	運作階段
	權 5 分鐘等效連續聲壓級 50 分貝。	
影響的結果	根據預測，在噪音敏感受體處的未經緩解噪音聲級會介乎 79 至 89 分貝(A)。在實施緩解措施後，在噪音敏感受體處的預測噪音聲級會介乎 67 至 75 分貝(A)。	在噪音敏感受體處的日間和晚間預計噪音聲級是介乎 52 至 56 分貝(A)。 在噪音敏感受體處的晚間預計噪音聲級是介乎 42 至 49 分貝(A)。
超標幅度	若不實施緩解措施，預計本項目的噪音會超出標準 14 分貝(A)。在實施緩解措施後，所有噪音敏感受體處的噪音聲級均會符合相關準則。	預料沒有。
避免產生影響／緩解措施	• 良好的施工方法； • 採用低噪音的機動設備 • 採用可移動的隔音屏障； • 使用隔音布；及 • 妥善地編排機動設備／施工活動。	雖然預計運作期間使用固定的機器不會產生不良的噪音影響，但仍然建議盡可能實施下列各項良好的施工方法來減少潛在影響： • 選用噪音較低的設備； • 在訂購新機器時，把噪音聲級納入規格內； • 把固定的機器或噪音發聲點盡量放置於遠離噪音敏感受體的地方； • 把高噪音的機器放置於完全封閉的機房或建築物內，並實施適當和可行的噪音補救措施；及 • 擬訂和實施一套定期維修機器計劃，藉此令機器可以妥善運作和得到保養。該套計劃必須由受過適當訓練的人員推行。 固定機器的最大聲功率級將會詳列在給予供應商或承辦商的詳細合同說明書內。 庭園活動及公共廣播系統所發出之聲浪 • 應實施良好的管理措施，如噪音監測、設立投訴熱線、以及向附近的噪音敏感受體預先發出通知。同時，排練及表演時均建議採取良好的管理措施； • 當預料有需要進行使用公共廣播系統的戶外活動進行時，活動的發起人應於至少一個噪音敏感受體處於活動進行前及進行中進行噪音監測。而噪音監測應以 $L_{eq(30min)}$作爲單位； • 當噪音監測指出噪音不符合有關之噪音標準時，活動的發起人應採取即時的緩解措施，如將音樂聲浪調低或關上；和 • 給予戶外活動籌辦者的詳細合同說明書內均會詳列不超越聲功率級之準則及爲每個活動進行噪音監測的規定。
剩餘影響	預料沒有。	預料沒有。
環境影響的可接受程度	在實施適當的緩解措施後，本項目不會造成不良的噪音影響。	在實施良好施工方法後，本項目不會造成不良的噪音影響。
空氣質素		
評估地點／敏感受體	A1 – 歐士大廈 A2 – 華懋荷李活中心 A3 – 嘉兆商業大廈 A4 – 威瑪樓 A5 – 余悅禮行 A6 – 中央廣場 A7 – 贊善大廈 A8 – 贊善樓 A9 – 金碧臺 A10 – 新陞大樓 A11–奧卑利街已婚警察宿舍 A12 – 浩福大樓 A13 – 永寧大廈	A1 – 歐士大廈 A2 – 華懋荷李活中心 A3 – 嘉兆商業大廈 A4 – 威瑪樓 A5 – 余悅禮行 A6 – 中央廣場 A7 – 贊善大廈 A8 – 贊善樓 A9 – 金碧臺 A10 – 新陞大樓 A11–奧卑利街已婚警察宿舍 A12 – 浩福大樓 A13 – 永寧大廈
相關準則	香港空氣質素指標 每日平均懸浮粒子總量爲 260 μg m^{-3} 每年平均懸浮粒子總量爲 80 μg m^{-3} 環評技術備忘錄： 每小時平均懸浮粒子總量爲 500 μg m^{-3}	本港空氣質素指標： 二氧化氮(每小時平均總量爲 300μg m^{-3};每日平均總量爲 150μg m^{-3};每年平均總量爲 80μg m^{-3}) 二氧化硫(每小時平均總量爲 800μg m^{-3};每日平均總量爲 350μg m^{-3};每年平均總量爲 80μg m^{-3}) 可吸入懸浮粒子(每日平均總量爲 180μg m^{-3};每年平均總量爲 55μg m^{-3})

評估事項	施工階段	運作階段
影響的結果	本項目的建築工程包括：小規模的工地平整／地基工程、新樓宇的建築工程、現有建築物的翻新工程，以及現有結構的小型拆卸工程。主要產生塵埃的活動包括：挖掘、貨車行駛、處理物料和露天堆放的多塵物料受到風化。由於本項目的工地範圍細小，而且只會產生小量掘出物料，因此，現場只會有限度堆放掘出的泥土。預計在實施塵埃控制措施和採用良好施工方法後，本項目將不會造成不良的塵埃飄逸影響。 由於工程範圍細小，任何時間都只會有小量建築車輛和機器在工地內運作，因此，預計本項目的柴油機器和設備所產生的氣體排放物只會造成輕微的空氣質素影響。	潛在的空氣污染物包括廚房排放之氣體。本計劃內的廚房均採用電爐。因此，煮食時不會用氣體或液體之燃料。廚房的排氣管會加設靜電除塵煙器以減少潛在之微粒排放。另外，排氣管會採用垂直向上的設計，並盡可能遠離附近的空氣敏感受體。因此，預期廚房之氣體排放將不會對空氣質量作出影響。 本計劃的設計鼓勵遊客盡量使用行人天橋及行人過路線。因此，預期本計劃運作時所引起的交通流量(如旅遊巴士及私家車)爲少。預計於本計劃運行期時不會造成不良的累積車輛氣體排放影響。 於 500 米的研究範圍內發現了三條排氣管，分別屬於三所食肆。最近的排氣管位於項目範圍約 70 米處。所有的排氣管均至少離地 30 米，排氣管之間亦有高樓相隔。經訪問排氣管負責人後，一所食肆表示使用煤氣煮食，而另外兩所食肆則拒絕提供有關其排氣管的資料。預計此兩所食肆均使用超低硫柴油、氣體燃料或其他符合《空氣污染管制（燃料限制）規例》及其 2008 年的修訂規例的燃料。從中西區的空氣監測站所得，二氧化氮及二氧化硫的五年平均濃度分別爲 54μgm-3 及 22μgm-3。顯示出該區之污染物濃度屬低。因此，預期附近環境將不會對本項目作出不良的空氣質量影響。
超標幅度	預料沒有。	預料沒有。
避免產生影響／緩解措施	「空氣污染管制（建造工程塵埃）規例」所闡述的下列各項塵埃控制措施和良好施工方法，均會被納入合約條款中，並在整個施工期間實施： • 在拆卸工程展開之前、進行期間和完成之後，都會在進行拆卸工程的地區灑水或灑上能減少塵埃的化學品； • 在拆卸建築結構或爲建築結構進行表面翻新時，若施工地區毗鄰或正面對著公眾可以到達的露天地區，便需設置不透水的防塵網或防塵布，其高度必須比被拆卸結構的最高處高出最少 1 米。 • 在爲新建築物建造上層結構時若需要搭棚，便會從地面層起裝設有效的防塵網，把棚架圍起。 • 在以吊斗起重機運送物料時，會以不透水布料覆蓋； • 會在指定的車輛出口設置洗車設施； • 每輛車在離開工地前，都會先清洗底盤和車輪，務求清除多塵物料； • 在洗車區和車輛出入口之間的路段都會鋪築路面； • 貨車所載的貨物都會被完全覆蓋，以確保不會有塵埃從車輛飄散； • 在項目工地邊界的沿路位置，而未來將在該處興建新建築物的地方，都會裝設高出地面不少於 2.4 米的圍板； • 本項目會保持主要的運輸道路上沒有任何多塵物料，並會在路面灑水，令路面在任何時間都保持濕潤； • 所有暫時堆放的多塵物料堆都會以不透水布料全面覆蓋，或放置於頂部和三面都有遮蔽的地方；或在物料堆的表面灑水，務求令整個表面在任何時間都保持濕潤； • 若堆放超過 20 包水泥、乾的粉煤灰或多塵的建築物料，便會以不透水的布料完全覆蓋，並放置於頂部和三面都有遮蔽的地方； • 所有外露的地方都會經常保持濕潤，藉以減少塵埃飄散； • 現場的所有建築機器都會使用超低硫柴油； • 建築設備和貨車在不使用時都會關掉引擎；及 • 在現場使用的建築設備都會定期維修，防止排出黑煙。	以下緩解措施會在廚房實施，以減少潛在廚房黑煙或煙囪排放： • 使用電子爐灶； • 安裝靜電除塵器來控制油煙和煮食氣味； • 放置廚房排氣口於遠離附近的空氣敏感受體之地方； • 使廚房排氣口垂直向上排放；以及 • 使源頭和空氣敏感受體之間有足夠的距離。
剩餘影響	預料沒有。	預料沒有。
環境影響的可接受程度	在實施適當的緩解措施後，本項目不會造成不良的空氣質素影響。	在實施適當的緩解措施後，本項目不會造成不良的空氣質素影響。
水質		
評估地點／敏感受體	• 奧卑利街的現有雨水渠，以及亞畢諾道和荷李活道的箱形暗渠。 • 距工地約 650 米的維多利亞港 • 距工地約 650 米的海旁海水抽取點	• 奧卑利街的現有雨水渠，以及亞畢諾道和荷李活道的箱形暗渠。 • 距工地約 650 米的維多利亞港 • 距工地約 650 米的海旁海水抽取點
相關準則	• 水污染管制條例（358 章） • 「環境影響評估條例」（香港法例 499 章 16 條）、「環境影響評估程序技術備忘錄」附件 6 和 14； • 技術備忘錄：排放入排水及排污系統、內陸及海岸水域的流出物的標準 • 專業人士實務守則「建築工地的排水渠」（1/94 號）；及 • 香港規劃標準與準則	• 水污染管制條例（358 章） • 「環境影響評估條例」（香港法例 499 章 16 條）、「環境影響評估程序技術備忘錄」附件 6 和 14； • 技術備忘錄：排放入排水及排污系統、內陸及海岸水域的流出物的標準；及 • 香港規劃標準與準則。
影響的結果	鑑於建築工程的規模和性質，預計在實施良好的施工方法和工地管理方法後，本項目的工地徑流和一般施工活動都不會造成不良的水質。	中區警署的食肆，工作人員和遊客會產生污水。根據本項目的污水收集系統影響評估，擬建項目在高峰時將會排出每秒

評估事項	施工階段	運作階段
	每日所產生的污水約達 30 立方米。中區警署建築群的現有廁所設施可供建築工人使用。有關的污水會被排進公共污水渠。有需要的話會在現場提供流動廁所，以確保工地人員所產生的污水會被妥當地收集。工作人員所產生的污水會被妥當處理和處置，因此不會產生不良的水質影響。	50.25 公升的污水。根據水動力分析所顯示，現時位於荷李活道、奧卑利街和亞畢諾道直徑 225 毫米的公共污水渠是有足夠的空間容納排放的污水。現有污水渠預計足以應付中區警署以及附近一帶所排出的污水量的，並且無需要修改現有污水渠。預料本項目不會對水質和污水收集造成負面影響。
超標幅度	預料沒有。	預料沒有。
避免產生影響／緩解措施	在進行改建工程前，會先在工地周邊建造截流渠，藉以把工地外的水引導至繞過工地；並會在工地內進行排水工程和裝設侵蝕及沉澱控制設施。工地內會設置渠道、土堤或沙包屏障等，藉以把可能已受污染的徑流引導至現場的隔濾設施，然後才排進雨水渠。所有沙泥清理設施的設計，都會根據「專業人士環保事務諮詢委員會實務守則 1/94 號」附件 A1 的指引進行。 車輛和機器維修區、車輛清洗區和潤滑區等，都會盡可能設於有上蓋的地區。這些有上蓋地區的排水管會被接駁至截油器，然後才連接污水渠。這樣，溢漏的汽油會被攔截，並馬上清理。廢油會被收集和儲存，以便循環再造或按照「廢物處置條例」的要求予以處置。 此外，亦會監察從工地排出的雨水，作爲「水污染管制條例」的牌照（若適用）所要求的例行監察的一部份。 中區警署的現有廁所設施可供建築工人使用。有關的污水會被排進公共污水收集系統。	不需要
剩餘影響	無剩餘影響	無剩餘影響
環境影響的可接受程度	在實施良好施工方法和緩解措施後，本項目不會造成不良的水質影響。	預計本項目不會造成不良的水質影響。
廢物		
評估地點／敏感受體	中區警署	中區警署
相關準則	• 廢物處置條例（354 章） • 廢物處置（化學廢物）（一般）規例（354C 章） • 土地（雜項條文）條例（28 章）；及 • 公眾衞生及市政條例（132 章）– 公眾潔淨及防止妨擾規例 • 香港規劃標準與準則 • 減少廢物綱要計劃：1998 至 2007 年 • 包裝、標識及存放化學廢物的工作守則（1992 年） • 工務局技術通告編號 32/92、2/93、2/93B、25/99、25/99A、25/99C、12/2000、12/2002 • 環境運輸及工務局技術通告編號 33/2002、19/2005 • 發展局技術通告編號 6/2010	• 廢物處置條例（354 章） • 廢物處置（化學廢物）（一般）規例（354C 章） • 土地（雜項條文）條例（28 章）；及 • 公眾衞生及市政條例（132 章）– 公眾潔淨及防止妨擾規例 • 香港規劃標準與準則 • 減少廢物綱要計劃：1998 至 2007 年 • 包裝、標識及存放化學廢物的工作守則（1992 年）
影響的結果	估計在施工階段會產生 12,900 立方米的掘出物料、3,540 立方米的公眾填土和 890 立方米的建築廢物。 鑑於工程規模不大，預計本項目只會產生小量化學廢物（在施工階段每月產生少於 100 公升）。此外，估計本項目的建築工人每日會產生約 130 公斤的一般垃圾。	估計本項目在運作階段會產生一般垃圾（每日 9,250 公斤）和廚餘（每日 460 公斤）。
超標幅度	不適用	不適用
避免產生影響／緩解措施	在工地產生的拆建物料會在現場分作惰性和非惰性兩類物料，並以不同的容器存放，方便再用惰性物料，以及妥善處置非惰性的建築廢物。本項目會在工地內劃出特別地區來進行廢物分類，以及存放未能即時再用的廢物。 本項目的承建商會在環保署登記爲化學廢物生產者。所有化學廢物都會按照「包裝、處理及存放化學廢物的工作守則」所述的方法處理。 一般垃圾則會與建築廢物和化學廢物分開，並以封閉式的垃圾箱存放。然後每日運送至垃圾轉運站和堆填區棄置，務求減少因產生氣味、害蟲和垃圾等而造成的影響。此外，工地上的關鍵位置都會放置回收箱，以便回收鋁罐和廢紙。回收到的物料都會出售予循環再造商。	所有化學廢物都會按照「包裝、處理及存放化學廢物的工作守則」所述的方法處理。 一般垃圾和飲食廢物都會以封閉式垃圾箱存放，並會每日運往傾倒區棄置，務求減少因產生氣味、害蟲和垃圾等而造成的影響。 此外，工地上的關鍵位置都會放置回收箱，以便回收鋁罐和廢紙。回收到的物料都會出售予循環再造商。

評估事項	施工階段	運作階段
	在展開建築工程前會爲工人提供培訓，內容是關於工地清潔和適當的廢物管理程序，包括減少廢物、廢物再用和循環再造等概念。	
剩餘影響	無剩餘影響	無剩餘影響
環境影響的可接受程度	本項目在處理和處置廢物時，不會產生不良的環境影響。	本項目在處理和處置廢物時，不會產生不良的環境影響。

3.8 *環境監察與審核的要求*

上文各章節所闡述的評估結果顯示，本項目在實施良好施工方法和緩解措施後，將不會造成不良的環境影響。然而，爲了確保各項建議的緩解措施均已有效實施，而且附近環境的質素亦沒有受損，應該實施一套有重點的環境監察與審核計劃。有關每項環境參數的要求摘要，請參閱*表 3.2*。

表3.2 *環境監察與審核的要求摘要*

參數	**施工階段[a]**	**運作階段[a]**
文化遺產	M + SA	SA
景觀及視覺	M + SA	M
噪音	M + SA	M[b]
空氣質素	SA	-
水質	SA	-
廢物	SA	-

註：

(a) M = 監察； SA = 實地審核

(b) 只有戶外活動需要監察，監察詳情會於合同文件內訂明予活動籌辦人。

本項目準備了一份詳細的環境監察與審核手冊，作爲是次環評研究的其中一環，當中包括了一份是次環評研究所建議的環境緩解措施的「實施時間表」。

3.9 *總結*

是次環境影響評估認爲，在實施各項建議緩解措施後，本項目在施工和運作期間，都不會對環境造成不可接受的影響。