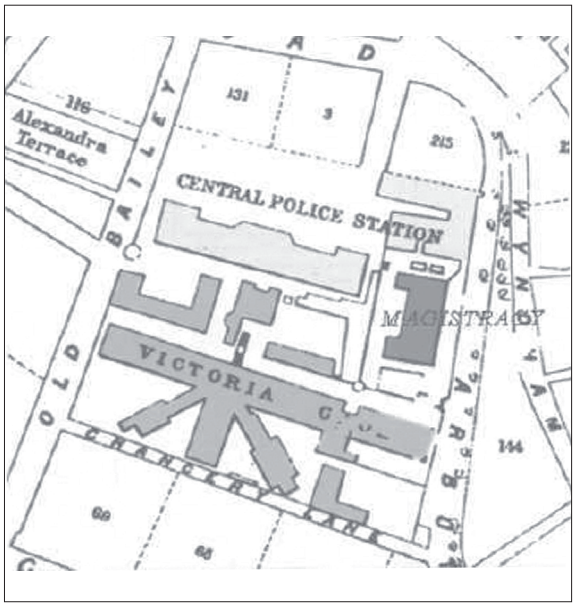
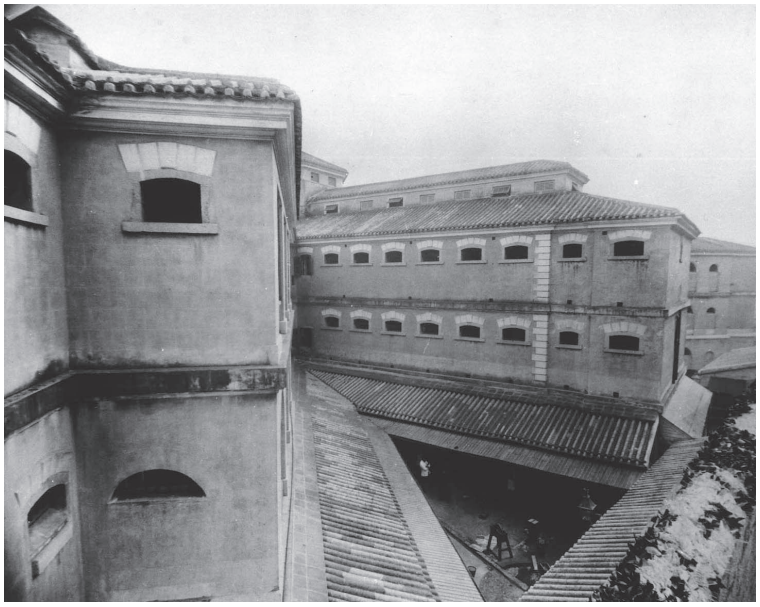
1877 Elevation



1887 Plan

1858 Victoria Gaol



1858 Victoria Gaol

At the end of each wing was a block of '*privies for night use on each floor*', connected to the main building by a small bridge. The radiating angled wings each had an Inspectors Lobby, with the southwest arm having a Cook House and Veranda, and the southeast wing having a Gaol Hospital for 20 patients, veranda, and attached privies.

It is unclear whether the buildings were actually constructed with separate cells, as the first recorded attempt at using a '*separate system*' was in 1878.[26] It is possible that by the time the complex was being constructed it had been decided to avoid use of the solitary confinement system, as by the 1850s it was being called into question in Britain. It was thought that the lack of human contact and stimulation seemed to cause madness in many prisoners. By the end of the 19th Century it had been abandoned.

While the plans of the buildings do not include elevations, a set of photographs taken from Chancery Lane in 1895[27] are likely close to the original construction. All of the buildings were constructed of brick with external render, having windows with large block segmental arches. On the main east, west and south wings the building corners have quoins, as well as shallow clerestories above the main roof. All roofs were timber with Chinese tile. On all but the extended east wing, the ground floors of the buildings had tiled shed roofs out into the yard, providing shade. These areas would be a constant cause of concern to the local residents, as they allowed for full view of the prisoners from the adjacent Chancery Lane. A plan of 1877 shows the line of site from a first floor house looking over the perimeter wall.[28] The far east wing did not have this feature; rather it had large arch-headed openings with keystones. This wing and the adjacent wing of the 'T' building are all that remain of this complex today, now known as D Hall (building number 14).

A plan of 1887 shows the distinct separation of the Central Police Station, now with its Barrack, Inspectors Quarters and Superintendents Quarters; the Magistracy; and the Victoria Gaol. The Gaol follows for the most part the proposed drawings of 1858, with a T-shaped main building (containing cells) having radiating diagonal wings to the southeast and southwest. The Gaol also includes a small central building square in plan; a narrow block to the northeast; and a small L-shaped building to the southeast. The use of these buildings is unclear.

[26] Blue Book Report for Hong Kong Legislative Council, 1878

[27] HK PRO: Photo 01-16-429, 430

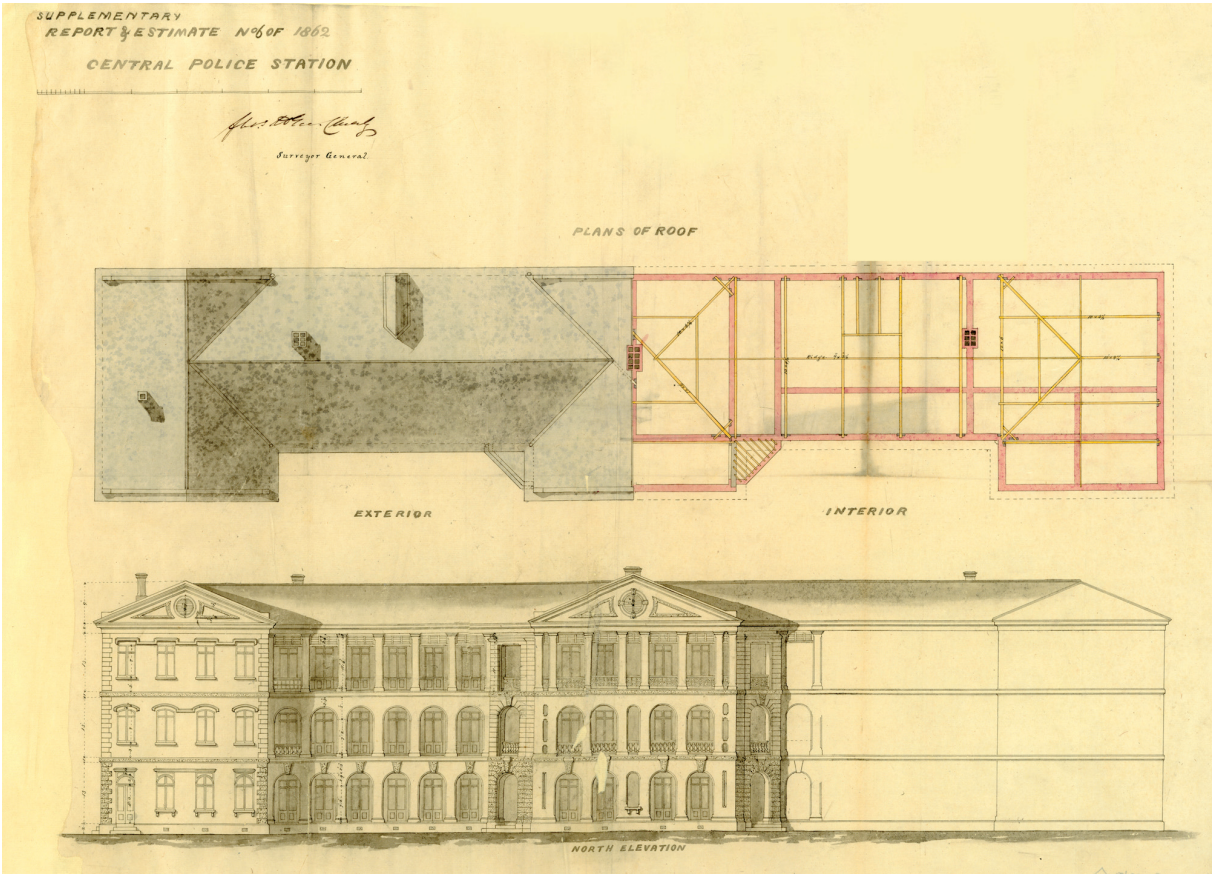
[28] HK PRO: CO-129-178p208

2.3.3 Growth of the Central Police Station (1862 – 1912)

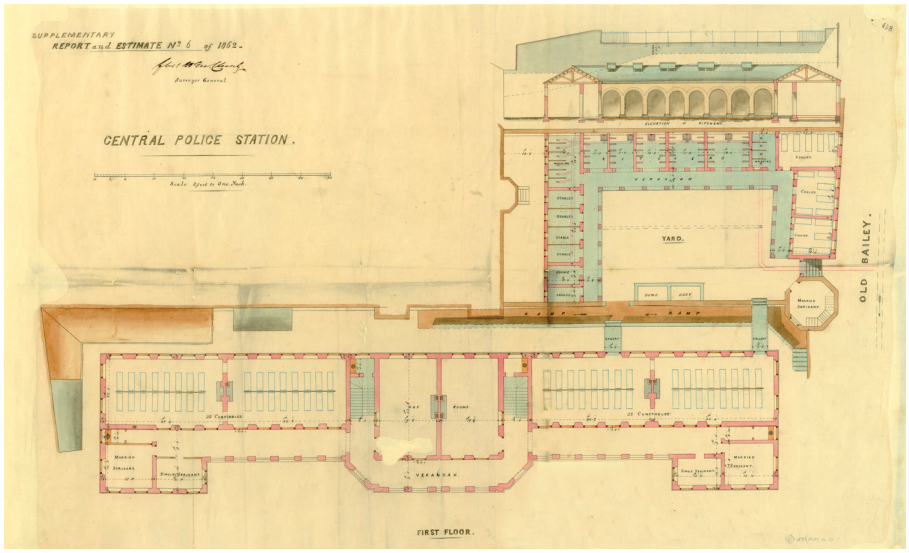
Following years of criticism of the lack of space and inadequate accommodation for the prison, Sir Hercules Robinson made an attempt to amend the situation and recommended the construction of a new gaol on Stonecutter's Island. Upon completion in 1864 all of the prisoners were removed here, and the Victoria Gaol site was seemingly freed up for alternative use. Seizing the opportunity, the government commissioned the movement of the Central Police Station to the site. It had previously been located on Queen's Road, firstly in a temporary structure near Pottinger Street from the 1840s, and from 1857 at No. 5 Station at the junction of Wellington Street. When the new gaol had been started three years earlier there had been suggestion that a Barrack Block and Officer's Quarters be the first buildings constructed, and drawings of 1862 show the new buildings on the area previously occupied by Gaols A, B, and C, the northern gatehouse, and a workshed in the space to the west of the Governor's House.

The main building of the proposal was the Barrack Block, a three storey rectangular building running east-west across the centre of the site (building number 3). The principle layout of the building remained the same on all three floors, with two long narrow rooms running either side of a central block with chamfered north projecting bay, and projecting bays to the north at either end housing small rooms. Each floor had a veranda along the whole north façade which was accessed by double doors with glass panels. Those on the ground and first floor had arched openings with turned stone balusters at the first floor, while the second floor had rectangular openings with pilasters between, flat stone baluster screens and timber sun screens. The building was topped by a gabled roof with connecting gables at each bay, having pediments with circular windows; all roofs were Chinese pan and rolled tiles.

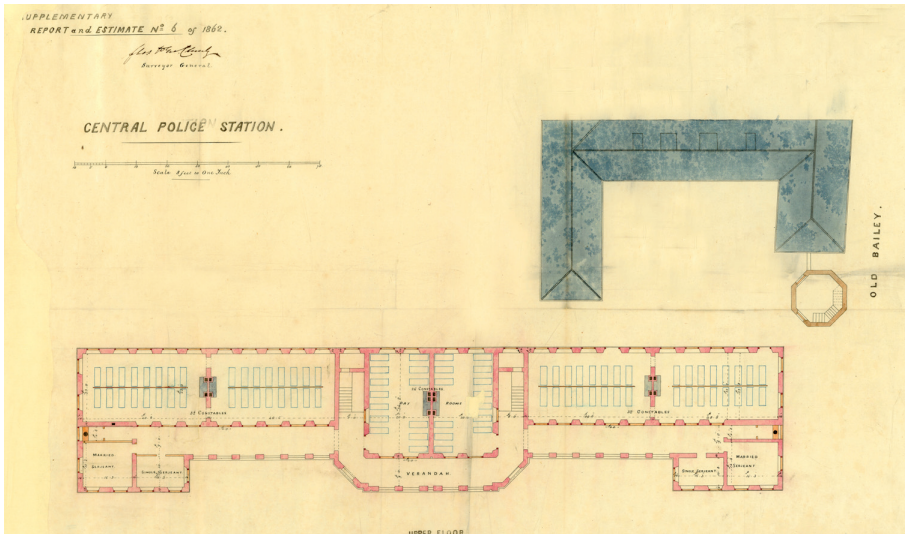
On the ground floor the centre bay was occupied by four offices (Superintendent, two clerks, coroner) each serviced by a fireplace at the central corner. To the west were a Clothing Store, Wash Room, Indian and Chinese Interpreters Rooms, Clerks,



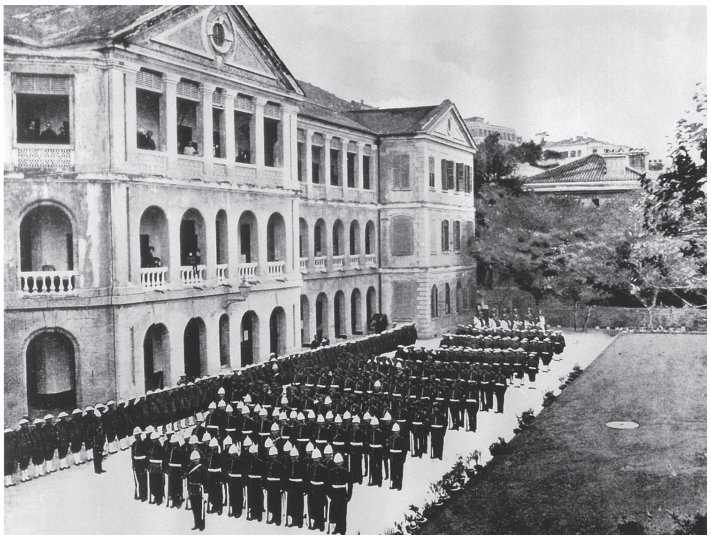
1862 plan of Barrack elevation signed by Charles St George Cleverly (NA:MPGG 1/118)



1862 plan of first floor of Barrack signed by Charles St George Cleverly (NA:MPGG 1/118)



1862 plan of upper floor of Barrack signed by Charles St George Cleverly (NA:MPGG 1/118)



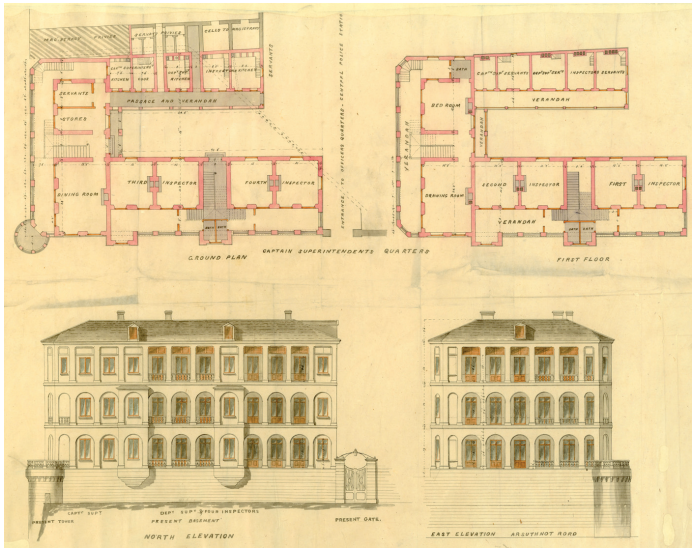
The Barrack Block, pre 1904

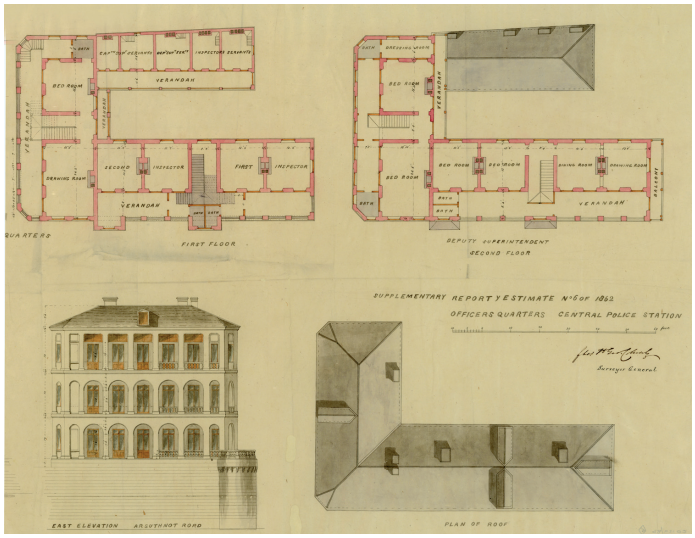
Waiting Room, and Reserve and Charge Room, with a dorm for 16 constables. In the east bay projection were Single and Married Sergeants Rooms, while the east wing housed a dorm for 32 constables. On the first and second floors the layout was similar, though at each floor in the east and west bays was a dorm for 32 Constables (with central dividing wall having fireplaces and partition walls running east to west), the central bay had two day rooms, and the projecting end bays and rooms for single and married sergeants. There was a staircase running either side of the central bay and a privy at the east and west end of each floor.

To the southwest of the Barrack Block was a ramp, under which were constructed two urinals, six privies, and two dust rooms. To the southeast was a group of 5 cells, with a privy room, urinals, and dust rooms.

These cells would have been for persons arrested but not convicted. South of the ramp, in the area adjacent to the Governor's House was a single storey stable yard of the same style, with arched veranda on the inner walls. On the west side were six stables and a washing room; on the south side were 5 kitchens and another washing room, and on the east wing were three rooms for 'coolies', with space for 5 – 6 each. This plan also shows the octagonal turret on the west edge of the site (which was present from at least 1851), for the first time given a function as quarters for married sergeants.

Also constructed at this time was a three storey block of Officers Quarters at the northeast of the site (building number 4). The proposed drawings only vary slightly to what was built and are of the same style as the Barrack block.





1862 plans of Officers Quarters signed by
Charles St George Cleverly (NA:MPGG 1/118)

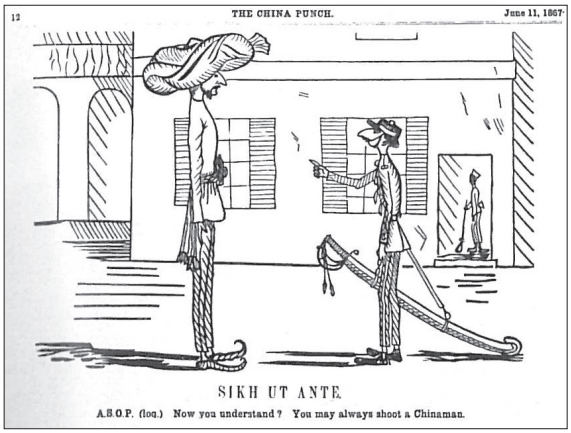
The main difference is that, unlike the proposal, the top floor of the buildings had arched openings at the verandas rather than rectangular openings with sun shades. The building was L-shaped in plan, and was partially built over the basement of the previous guardhouse (the drawings refer to 'present basement'). The north wing contained a three room accommodation for two inspectors at each floor (four in total), each accessed by a central staircase and having a bath at the north side; the second floor was accommodation for the Deputy Superintendent and had a Dining and Drawing Room, two Bedrooms and two Baths. The east wing was the house of the Captain Superintendent, and had a Dining Room, Servants Quarters and Store Room at ground floor, Drawing Room and Bedroom at first floor, and two more Bedrooms (one with Dressing Room) and two bathrooms at Second Floor, with verandas on the east façade at each floor.

To the south of the block was an adjacent two storey building with veranda on the north side, which housed a kitchen each for the Captain Superintendent, Deputy Superintendent, and Inspectors, as well as Servants privies and two cells to the Magistracy, located at the south of the block. On the first floor were servants' rooms.

The full set of drawings was a 'Supplementary Report and Estimate No. 6 of 1862',[29] and was signed off by the second Surveyor General of Hong Kong, Charles St George Cleverly (1819 – 1897). Cleverly was responsible for public infrastructure (including public works), town planning, land auction, and building construction approval. He was born in Co. Cork, Ireland though is believed to have been raised in South Kensington in England, the son of a shipyard owner who produced a large fleet for the East India Trading Company. Though Cleverly oversaw numerous works during his stint as Surveyor General, he is most noted for his involvement with Government House. The mansion, located on Government Hill, was constructed 1851 – 5 for a total cost of £14,940. Cleverly Street in the Sheung Wan district is named after him.

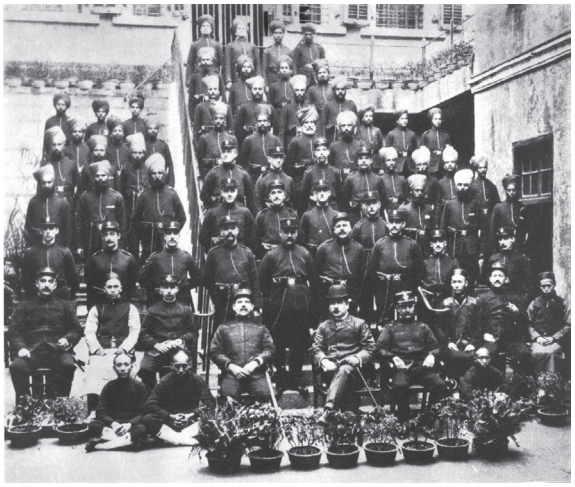
In 1864 the whole of the new buildings were constructed, with the original intended use to be as a Police Headquarters and the Central Police Station. The three storey building is located virtually in the centre of the site, with its western edge along the boundary of Old Bailey Street, and its eastern side facing the Magistracy. This building could have potentially marked the beginning of a much larger Central Police Station at the site, but in 1866 Hercules' successor made the decision to remove the prisoners from Stonecutter's Island back to Victoria Gaol. Thus, the Barrack Block immediately became the first real separation of the site into the Victoria Gaol at the south side and the Central Police Station to the north.

Upon the completion of the barracks there were also changes within the Police Force. In 1867 the British Authorities began recruiting for the police direct from India, as previously the Indians recruited in Hong Kong, having arrived as soldiers, were not appropriate for the job. The recruitment brought in two major groups, one in 1867 and one the next year. All of these new officers were inspected by the Governor at the Central Police Station. These Indian officers were a topic of much interest in the country and were publicly noted as being trained to deal with Chinese convicts in a particular way. A comic from the China Punch of 1867 shows the Chinese opinion.



In 1872 Sir Arthur Kennedy assumed the government and was instructed to reform the Police Force, which had become corrupt. Within one year he had removed over 100 men from the force. As with the recruitment of officers direct from Indian a few years before, Kennedy though it best to recruit direct from Europe as well, as he observed that '*discharged sailors, and men of that class, made very indifferent constables*.' A system was set up whereby Kennedy obtained from the United Kingdom an appropriate group of men, and that from time to time Crown Agents would recruit an appropriate number of officers to fill vacancies. He also looked into the question of hiring more '*well-conducted*' Chinese, and his expansion of the Chinese branch of the force was thought to be a valuable guide in detecting and preventing crime. As of 1880, the Police Force employed a total of 610 officers and men – 125 Europeans, 315 Chinese, and 171 Sikhs.

[29] National Archives (Kew): MPGG1/118-001 to 005a,b



1905 Police Force

With a rapidly expanding police force, there was a constant need for extension to the site. As early as 1893 there was a proposal for an extension for the police on a piece of land to the north of the Magistracy '*which is unoccupied at present except by some buildings in a more or less dilapidated condition*'.[30] This project included the erection of a drying room and additional bathroom accommodation to the south of the 1862 Officers quarters. A contract was entered into with Mr A Hok for the work, which was completed in 1896. It is also known that prior to 1895 the Superintendent's House (building number 10) was constructed, as it can be seen in a photograph of this date. Judging by evidence of a blocked archway at ground floor level, it is possible that this building would have formed a point of connection between the police and prison on the site.

Not every building project went smoothly. One of the most drawn out building works at the site began in 1897 and was not completed until six years later. The proposal for new officer's quarters at the prison was made in 1896 to the Hong Kong Legislative Council, and as of the Public Works report for the following year, the plot of land at the corner of Arbuthnot and Hollywood Road had been acquired and it was '*hoped that before long a commencement may be made with the erection of the buildings'*. The land was on the east side of what formed the entrance to the site, and was stepped down some distance from the north retaining wall. In 1899 a contract for the preparation of the site and construction of the buildings was let. However, '*owing the configuration and irregular shape of the site, the work of preparing it for building on has been somewhat troublesome'*. [31] This was not the only trouble to occur on site. From 1900 – 1902 the buildings were under construction, and despite intended completion by the end of the first year, the 'dilatoriness' of the contractor left the buildings unfinished. Progress was extremely slow and it seemed that the buildings were only constructed at a rate of one floor per year. The buildings were finally completed in 1903 and occupied by the Gaol staff during the early part of the year. There were three main blocks of buildings, all of which are 3 storeys in height, with coolie quarters either wholly or partially detached. The Public Works Report of 1903 gives the following description of the buildings:

'No.1 Block contains six sets of married quarters - 3 sets of 4 rooms and 3 sets of 3 rooms - with separate kitchen, bath-room and servant's accommodation.

No.2 block is for Indian Warders and contains two dormitories (28 beds each), two large mess-rooms, a recreation room and 6 bath-rooms, whilst 2 cook-houses, 2 cook's rooms and latrine accommodation are provided in a separate building.

No.3 Block is for European Warders and contains two dormitories (20 beds each), a large mess and recreation room, a common room, 4 bath-rooms, 2 wcs and 2 lavatories. In a small detached building are the kitchen and coolie quarters.

The buildings are all of Canton red brick, plastered externally, and roofed with double pan and roll tiling. Balconies are provided on all the main blocks, being constructed of cement concrete, with iron beams, pillars and railings, and supported on massive stone corbels. The floors of all rooms are hardwood, and the joists being supported on iron beams where required. The ceilings and cornices are of wood. The staircases are of stone with iron balusters and rails. All bath-room floors are of cement concrete. The compounds are surfaced with concrete and iron railings are provided for protection around the various retaining walls which form the site into terraces.'

Like many of the other buildings on the site these were a perfect example of adapting British design into the climate of Hong Kong. Balconies were attached at all floor levels, while wooden louvers attached to doors and windows provided ventilation, wind shielding and sun shading. Today only two of these buildings still remain.

When it seemed that there was no more available space for the construction of new build facilities, the existing buildings were expanded. Such was the case with the Barrack Block, constructed some forty years earlier and in 1906 extended by a full floor. This caused the removal of the original timber trusses and tiles of the roofs, as well as the north pediments, though '*the*

[30] Hong Kong Public Works Report, 1893
[31] Hong Kong Public Works Report, 1900

old roof principals, etc. were used as far as possible and new ones provided where necessary'.[32] The project provided additional accommodation of two dormitories for Indian Constables (18 beds each); two for European Constables (16 beds each), one for Lance Sergeants (5 beds) and two for Sergeants (2 beds each). Also included were a library, mess-room, billiard-room, and three small rooms for servants. The construction of the building was carried out to match the existing structure almost exactly; the walls were red brick plastered externally, and wide veranda was included at the north side. The floors of the rooms were laid with hardwood boarding on joists, while the veranda was cement concrete on rolled joists; all beams throughout were rolled steel. In addition to the construction of a new storey, several parts of the old building were strengthened in various ways to provide the necessary support. The total expenditure of the strengthening works was $7,579, while the new build came to a total cost of $33,000.

Even this extended accommodation did not provide enough space for the police station, and in 1911 extension took a much more rapid and temporary turn with the erection of matsheds to provide for an increase to the police force. These were located in the parade ground north of the Barrack Block.

2.3.4 Overcrowding at the Gaol

From very early on there were numerous issues with the sanitary conditions, punishments, and overcrowding at the Gaol. Often these problems overlapped, and issues in one area would fuel further problems in another. In the 1880 Governor's Report on the Blue Book, a detailed account is given for the remission of sentences in the 1860s, which included the institution that prisoners be branded and deported, and flogged if they returned to the colony. This system of harsh punishment was intended to deter crime, and therefore free up space in the gaol. Under the new system 529 prisoners were branded and 110 flogged. May, who at this time was Police Magistrate, expressed the opinion that this was not fair or legal – a decision which was agreed upon by the Attorney General Sir Julian Paunceforte, and led to the passing of an Executive Order to cease unauthorized branding and flogging. Soon after the above decision was made,

> *'some highly respectable and very influential European residents held an indignation meeting and memorialised the Government in favour of branding and flogging Chinese criminals instead of returning to Sir Hercules Robinson's system, which, they pointed out, would involve the cost of a new goal, and was, in their opinion, unsuited to the Chinese race, a race that they conceived to be incorrigibly bad'.*[33]

The report of the Gaol Committee of 1877 takes a slightly more understanding perspective of the Chinese prisoners. They cite language barriers as a major problem, as a lack of communication produced an inability to understand the character, disposition and history of Chinese people, making any attempt to '*cultivate their higher faculties and to improve their moral condition… hopeless*'. The suggestion of the committee was to make the life of the prisoners, especially Chinese, as distasteful as possible through hard labour and strict physical discipline, while still maintaining some level of reason and humanity. This was to be accomplished through various punishments. For breaches of the Gaol Regulations, prisoners would be given solitary confinement for 2 days on a diet of bread or rice and water, or would suffer flogging. For prisoners under sentences from the Supreme Court and the Magistracy, prisoners would be given one or more of the following punishments:

1. Shot-drill with 32 lb, 24 lb, and 18lb shot
2. The crank
3. Oakum-picking with stone-carrying as an alternative punishment
4. Stone-breaking and dressing
5. Mat-making
6. Clothes Cleaning
7. Carpenter
8. Blacksmith's work
9. Gaol cleaning and scavenging
10. Cooking
11. Office serving and service
12. Washing
13. Hospital attendance
14. Clerical labour
15. Solitary confinement (partial).

As described above, solitary confinement was still used as a form of punishment in 1877. However, just one year later, a Blue Book report describes building being converted to use for the 'separate system.' At this time, two large basement halls in the Gaol (the building is unclear) were divided off for use as 46 individual cells. Further separation of cells occurred in 1880, with the Blue Book report describing '*The conversion of some of the large association wards in the Gaol into cells on the separate system*' at a cost of £1,242.

[32] Hong Kong Public Works Report, 1906

[33] 1889 Governor's Report on the Blue Book

From 1879 the police were no longer responsible for providing the Gaol with guards, and the Police Force was permanently separated from the Gaol system. From this time on, everything from building works to gaol regulations were under the control of the Superintendent of Gaols, and were held up to a Gaol Committee, who had to make an annual report to the Governor. These were published as part of the Blue Book, as well as summarised versions being included in the Hong Kong Government Gazette; this information provides a valuable resource for the understanding of how the gaol system operated.

Overcrowding continued to be an issue, and in 1892 it was proposed that there be an extension of the Gaol. Public opinion on the extension was varied, however, and on 6th January 1893 a letter was written by members of the Chinese community stating that it was unnecessary. They claim that '*the accommodation provided by the existing buildings is ample, so much that the prisoners have more space allowed them than they have ever had when not in prison…they are far better off in gaol than out of it*.' They go on to say that the Gaol *'is already looked upon as a paradise by many a rascal, and … any extension of the Gaol will certainly lead to an influx of bad characters from China*.' [34]

The response to the letter, made by Governor Sir W Robinson, expressed the opinion that the extension is definitely needed, mostly because '*Her Majesty's Government have not been influenced by any desire to lessen the punitive character of imprisonment… they have pressed for prison extension, mainly because…they believe that the cellular system is the only practicable basis of a deterrent prison discipline*.' The response given proposes that the 92 existing separate cells be maintained for European prisoners and some Chinese, 51 of the existing three prisoner cells be divided off into 102 separate cells, and a new site should be acquired adjoining the Gaol. This totals 344 separate cells for '*the more criminal type'* and 60 three-prisoner cells for the *'non-criminal or petty criminal'.*[35]

Despite opposition, a proposal was made in 1894 for the construction of two blocks of buildings in a site on the corner of Old Bailey and Staunton Street, to the west of the present Gaol. The drawings and estimates were approved, and a contract for the work was given to Mr Foo Sik. At the end of 1894, it was reported that the old buildings on the site had been demolished and the excavation of the trenches was in progress.

The 1896 Public Works Report describes the work as follows:

> *'The new buildings in Old Bailey have been completed and were handed over to the Superintendent of the Gaol on the 20th December, 1895. These buildings consist of two main blocks three stories in height having basements under the northern portions. The blocks contain 155 separate cells and are connected by a covered way. In the basements ample store and bath-room accommodation has been provided. A portion of the site has been utilised for the erection of a workshop and workshed with storeroom adjoining. The whole of the site is surrounded by a high masonry wall, and communication with the existing Gaol premises situated on the east side of Old Bailey has been provided by the construction of a subway under Old Bailey. Gas and water have been laid on at convenient places throughout the premises.'*

As early as 1894 the Superintendent of the Gaol, H B Lethbridge made a request to the Governor for more space for female prisoners, stating that the accommodation in Wyndham Street was inadequate, as it only comprised of two associated wards and two punishment cells. This meant that '*in order to keep prisoners on remand separate from convicted prisoners, all classes of convicted prisoners must be placed together in one ward'.*[36] There is further reference to an exercise yard of only 24' x 9'. This was likely a separate house outside the main prison which was used for the purpose. In response, Block F of the gaol (the east wing of D Hall, building number 15) was converted into use as a Female Prison, consisting of 5 associated cells and 8 separate cells, of which 2 are punishment cells, with necessary bathroom accommodation. A shelter had been erected in the yard for washing clothes. The female prisoners were moved into their new accommodation in October, 1896. With the female prisoners now at Victoria Gaol, it was necessary for a Matron to be near to the prison block, and so in the same year a house was built for the Matron in the Prison Yard adjoining the Chief Warder's Quarters. The house consisted of two rooms with bathroom, pantry and cook house accommodation. This building cannot be clearly seen on any historic maps, and likely does not exist in any form today.

[34] The Hong Kong Government Gazette, 28th January, 1893

[35] The Hong Kong Government Gazette, 3rd June, 1893

[36] Hong Kong report of the Superintendent of Victoria Gaol for 1893

Just a year later, in 1897, the radial layout of the prison began to be eradicated, firstly with the demolition of D Wing (which projected in an oblique direction into the southwest yard) in order to expand yard space. Using recycled materials from its demolition, 89 association cells within the main prison building were converted into separate cells, with most of the labour being supplied by prisoners. Prior to these works, the prison had 248 separate cells and 115 association cells; after the works there were a total of 427 separate and 26 association cells.[37] Also at this time, a system of mains and hydrants were installed throughout the 'old' and 'new' gaol premises to aid in fire control. The demolition of D Wing opened up the west yard substantially, and within it was constructed a *'large two-storied workshop…the upper floor of which is used as a printing shop while the ground floor is devoted to mat making. The workshop was much needed, and has rendered possible a useful extension of industrial labour'.*[38] There was also the extension and remodelling of the wash house yard (in the southeast corner) during this time.

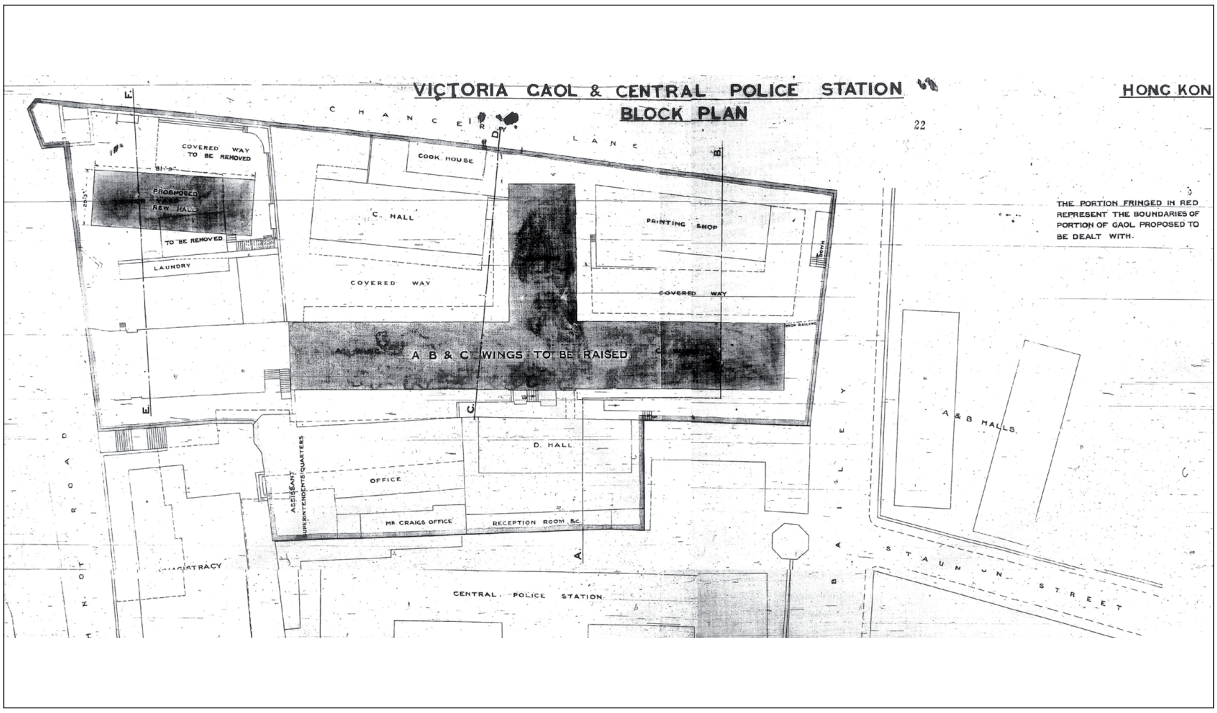
In 1901, a new block of cells was proposed which required the demolition of the remaining angular wing in the southeast yard of the main prison. The new building, called C Hall, was completed within the year, but could not be opened for use as special Gaol locks ordered from England had not arrived. In addition to these works, a remaining portion of the unoccupied yard here was re-surfaced in concrete and roofed over. The total cost of works was $16,959.06.[39]

Another new block of cells was proposed in 1910 (B Hall, building number 12), a site for which was obtained by *'pulling down the old offices and a portion of the hospital immediately within the inner entrance gates'.*[40] (This refers to the gateway on the ground floor of the Assistant Superintendent's Building which separated the Central Police Station from Victoria Gaol. The block was to contain 78 cells and, judging by descriptions of both buildings and a plan of 1914, it would appear that this block was likely of the same design as the one built in 1901. The building was three stories in height, constructed of Canton bricks with lime mortar and pointed cement mortar. The roof was constructed of pan tiling laid on hardwood rafters, while the ground floor was of cement concrete finished with a layer of 1" think granolithic. The upper floors were laid with two layers of hardwood boarding with felt between; the stairs were timber and ran from ground to top floor. As with the 1901 block, the locks for the cell doors were of a special type manufactured in England and shipped over.

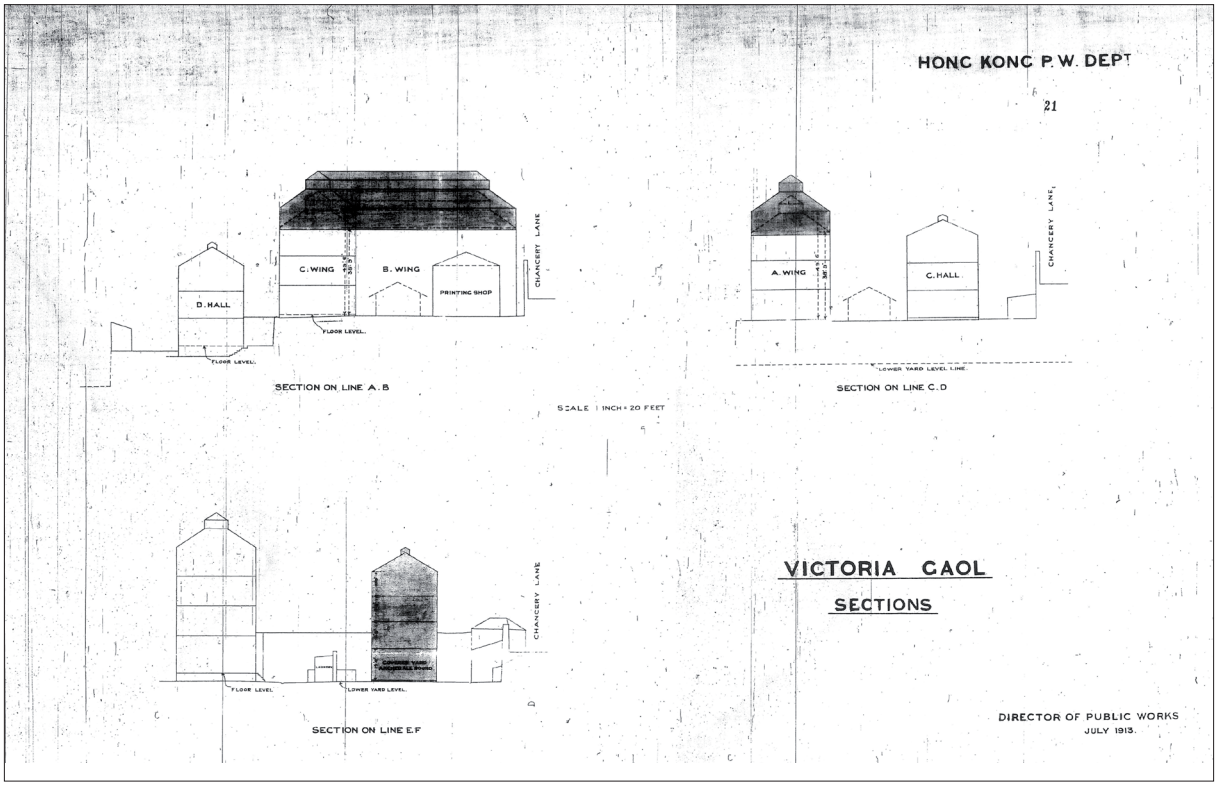
Despite continued extension of the goal site, overcrowding was an ongoing problem. In a letter to the Governor dated 4 July, 1914 it is reiterated that in September of the previous year a number of prisoners undergoing short sentences were released due to severe overcrowding in the gaol. However, these releases did little to help as the number of prisoners increased due to an influx of Chinese to the colony, as well as changes in opium and banishment laws. From 1858, the right to prepare and sell opium was granted to the person with the highest bid or tender. As of 1914 the government placed all control with the Import and Export Department, and the raise in price encouraged smuggling of the drug and selling in illegal opium divans. The 1914 letter reports that on a given day no less than 60 prisoners in the Gaol had been admitted for the smoking of opium in a divan. Another rise in prisoners was due to alterations to the Banishment Ordinance, whereby persons pending enquiries into their cases were detained. In order to provide further accommodation, a recommendation is made here that *'a new hall be erected on pillars over the Lower Yard, which is on a different level from the main portion of the prison, and that an additional storey should be added to A, B, and C wings'.*[41] This extension would raise the capacity from 630 to 789 if there were four prisoners in each association cell. The works were estimated at a cost of $65,000.

On 6 March, 1914 a call to tender was put in the Government Gazette for works including 'new hall and extensions to main hall of the Victoria Gaol' under the direction of A F Churchill, Director of Public Works. In 1915 a contract was let to Messrs. Sang Lee & Co. for a block of 78 cells, as described in the recommendation above (E Hall, building number 15). The block was of the same design as those built in 1901 and 1910, described above. It was built in the southeast corner of the gaol, with sundry sheds being demolished to make way for the new building. Prison labour was used for the demolition as well as other tasks such as woodworking; as the work was carried out in the Prison Yard, special fences were erected in the area to close of the construction site. A separate entrance was created at Arbuthnot Road for the delivery of materials, and an Indian Sentry stood guard 24 hours a day. The building was constructed of Canton brick with an open ground floor of reinforced concrete piers and beams that created an open yard.

37 Hong Kong report of the Superintendent of Victoria Gaol for 1897
38 Report of the Superintendent of Victoria Gaol for the year 1898
39 Hong Kong Public Works Report, 1901
40 Hong Kong Public Works Report, 1910
41 Hong Kong PRO: CO 129/402



1913 plan



1913 elevations

Prisoners watching TV in the covered yard (date unknown)

Prisoners playing ping pong in the covered yard (date unknown)

This supported three upper floors. As with the other two gaols, the locks were imported from England, and their late arrival postponed the use of the building to 1916.

The only other major construction work to occur within the prison site in the early 20th century was covering over the lower yard adjoining Arbuthnot Road. The Public Works report of 1917 describes the construction of a concrete platform here, which was done to provide additional space for prisoners obtaining exercise. A reinforced concrete platform approximately 90' long by 55' wide was supported on a steel framework. A corrugated iron roof was also installed, which was supported on steel trusses and stanchions, while a reinforced concrete staircase was built to connect the lower yard to the new platform. This space would later be used for various recreational activities, such as watching television or playing ping pong. In order to construct this new yard, some buildings in the lower yard were demolished and the surface of the yard was landscaped into regular gradients. In conjunction with this work, the Laundry was enlarged and altered, with two large boilers being erected adjacent.

Other minor works included the installation of electric bells (610 points) in 1918 for just under $5,000, and the installation of trough closets in 1917 for a total of just over $3,800: '*Ranges of trough closets and urinals were erected in the upper and lower yards for the use of prisoners. Water flushed apparatus was also installed in the yards for the use of the European and Indian Officers on duty. The trough closets and urinals are flushed automatically, water being optained for this purpose from Glenealy Nullah. A water closet was also installed in the Prison Hospital for the use of the patients.*' [42]

While the Gaol was constantly growing, the rest of the site was also seeing major changes in the first half of the 20th century. Development at this time was punctuated by two major building programmes: the New Magistracy was constructed 1912 – 14, and the Police Station Headquarters was built 1916 – 19.

[42] Public Works Report, 1918

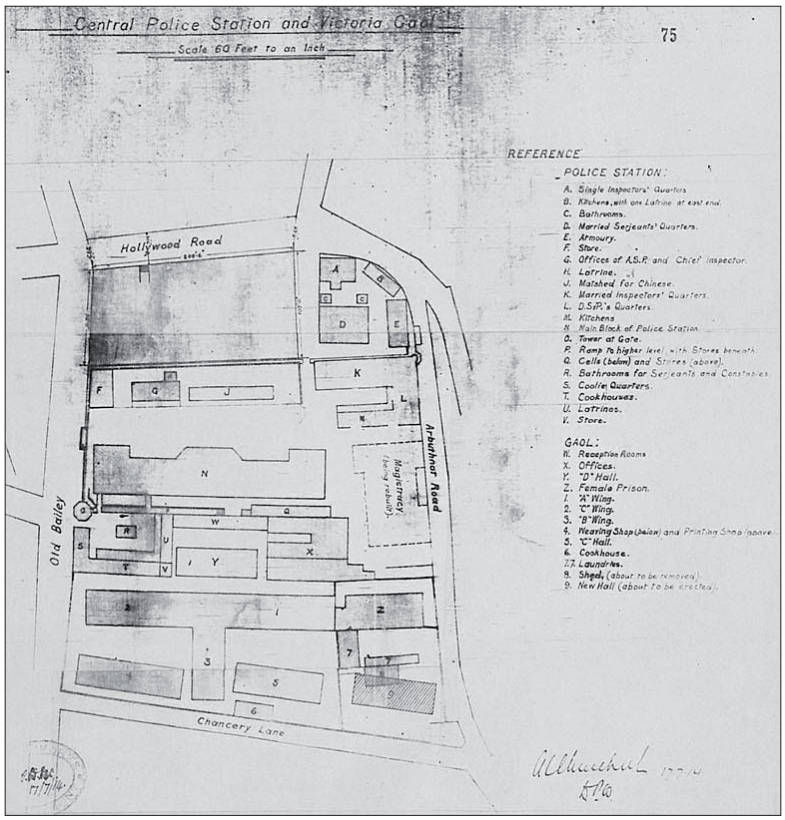
2.3.5 The New Central Magistracy (1910 – 1914)

Plans for a new Magistracy were considered as early as 1910, and a Public Works report for 1911 states that, while preliminary plans for the building had been prepared, new requirements of the building necessitated the preparation of new plans. A contract for the demolition of the old Magistracy and construction of new foundations was let to Messrs. Kang On & Co. at end of January, 1912, and the work began immediately to start excavation for deep basements. However, the land was found to be mostly rock and difficult to excavate which caused major delays, as did the necessity for repairs to the retaining wall on Arbuthnot Road. It was found that the wall was in *'such a defective condition as to be inadequate for the support of the new building.'* [43] The wall was therefore almost completely disassembled and rebuilt in lime and cement mortar, with the old stone facing being reused. Despite these obstacles, actual construction of the building began in May of that year under Kwong On & Co.

The construction of the Magistracy was completed in 1913. The original estimate for the work had been for $106,000; the actual expenditure was some $10,000 less. The Hong Kong Magistracy was opened for its first judicial sessions on 26 April 1915.

A Public Works report of 1914 gives a highly detailed description of the final design and construction of the site, which is repeated here:

New Magistracy - The building occupies the site of the Old Magistracy, adjoining the Central Police Station and the Gaol, its principal front being towards Arbuthnot Road, and, in addition to providing the accommodation required in connection with the Magistrate's department, it contains quarters for 2 married Police Officers and 30 Indian Police. The level of the site is, on average, 21 feet above Arbuthnot Road and, as the land to the eastward of Arbuthnot Road falls sharply away, the building occupies a conspicuous and commanding position. It contains in all four stories, the lowermost of which is, owing to the configuration of the site, a partial basement.



1914 plan of site

[43] Public Works Report, 1913

Front (east) elevation of the Magistracy on Arbuthnot Road

The *accommodation is as follows:*

Partial Basement – 7 store rooms ranging from 27′ x 14′ to 15′6″ x 14′; two small strong rooms for records; 2 prisoner's waiting rooms; 3 cells, each 13′ x 12′6″; 4 rooms for servants, averaging about 15′ x 9′; a kitchen and latrines.

Ground Floor – First Court, 50′ x 30′; Second Court 35′ x 25′; hall, 36′ x 14′; two magistrates′ rooms, each 20′ x 13′ with lavatories attached; two witnesses′ rooms, each 16′ x 10′ also with lavatories attached; two offices for the clerical staff, each 20′ x 12′6″; a fines office 15′ x 13′ and lavatories for the staff.

First Floor – Upper parts of Courts (the Courts occupy two storeys in height); two solicitors′ rooms each 20′9″ x 13′4″ with lavatories attached; a dormitory and mess-room for Indian Police the former capable of accommodating 12 men; a small room for a non-commissioned Police Officer; two kitchens and a lavatory.

Second Floor – Two sets of quarters, containing 3 rooms each, besides bath-room, stores, kitchen and servants′ quarters, for married Police Officers; a dormitory for Indian Police (18 men) and a large lavatory.

The basement and ground floor extend over the entire site, but, at the level of the first floor, a central well, measuring 36′ x 14′ which is situated over the hall on the ground floor, is introduced around with the two upper floors are arranged. A staircase entered from Arbuthnot Road is provided for the use of the Magistrates and Solicitors, whilst separate staircases are provided for access to the Police Officers′ Quarters, the Indian Police Quarters, the servants′ quarters and the basement. Stairs from the basement to the dock are also provided in each Court. A large concrete canopy is provided along the south front to project the doorways entering the First Court, thus enabling them to be kept open during rainy weather. The Courts extend practically the full height of two storeys (23′) having barrel-shaped ceilings of reinforced concrete in which are provided large exhaust ventilators.

The hall on the ground floor is lighted by a large skylight which derives its light from the central well.

The walls are of Canton red brick in lime mortar, faced externally in the case of the Arbuthnot Road front with Amoy bricks. The pillars of the verandas are concrete monoliths and the principal features of the building are finished in finely moulded cement concrete. The entrance doorway in Arbuthnot Road has finely-dressed granite jambs, arch, architrave and pediment.

The floors are of reinforced concrete throughout, carried generally on reinforced concrete beams. Those of the Courts, offices and rooms are finished generally with teak flooring boards nailed to fillets let into the cement concrete, whilst those of the verandas, hall, lavatories, etc. are finished generally with tiling. All floors in the basement are finished with a later of granolithic. The roof is covered with double pan and roll tiling supported on steel trusses, except in the case of the veranda, which has a flat roof of reinforced concrete, finished with a layer of ruberoid. All staircases are of concrete with cast iron nosings to the steps. On the top floor, the partitions are extensively constructed of reinforced concrete.

The walls of the hall are lined with glazed tiles for a height of 17′10″, those of the fines office for a height of 3′6″ and those of the lavatories for varying heights. The walls of the Courts are panelled with teak generally 4 feet high, but increate to 9 feet around the benches. The whole of the benches and fittings generally are of teak, carved and panelled. Above the panelling, the walls of the Courts are relieved with pilasters, panelling and ornamental plasterwork which extend also to the barrel-shaped ceilings. Water closets are installed throughout and the building is fully fitted up with electric light, fans, and bells. The basement is, where possible, lighted by prismatic pavement lights over sunk areas which are lined with white glazed tiles.

The building which is four storeyed is situated near the junction of Arbuthnot road and Wyndham street and contains, in the basement, prisoner's waiting room, strong-rooms, store-rooms, cells and servants quarters; on the ground floor, two Police Courts, rooms for Magistrates and their clerks and for witnesses; on the first floor, Chief Clerk's offices and quarters for Indian Police Constables; on the second floor, two flats for European Police Inspectors and further quarters for Indian Police.

The Magistrate's Court remained fairly intact in its first twenty years, though in 1938 extensive alterations were carried out on the top floor. A third court was inserted along with Magistrate's Office, witnesses' room and fines office, while separate accommodation was provided for the Probation Officer, with a room for juvenile offenders and waiting rooms. At the ground floor the entrance hall was relaid with cork flooring, and alterations were made to the fines office.

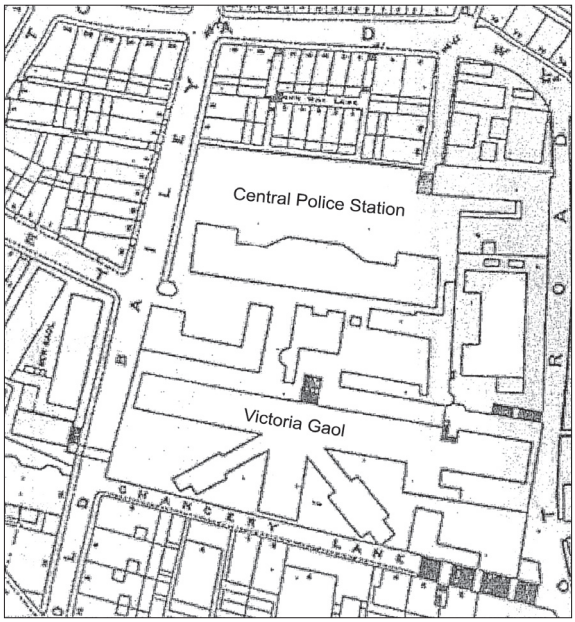
2.3.6 Central Police Station Headquarters Block

Plans to built a major extension to the Central Police Station were prompted by the Governor in 1913, who in a despatch to the Secretary of State (also signed by the Officer of Works, A Churchill) requested quarters for 94 Chinese and 50 Indian Police, a war store, officers' mess room, gymnasium, reading and rest rooms. In 1914, a plot of land to the north of the site was obtained by resuming Inland Lot 3, at a cost of approximately $244,360. This plot occupied the area between Hollywood Road and the northern boundary wall of the police station, with the site entrance (Approach Road) to the east and Old Bailey Street to the west, and was to provide the site for the Central Police Station Headquarters Block. A plan of 1901 shows the site occupied by a group of 18 buildings arranged around a central lane.

Drawings for the building were despatched in 1916, by which point A W Chatham is listed as Director of Public Works. It has been suggested that the only untitled signatory on the plans, Leslie Ross, was the architect of the scheme. It is therefore possible that the designer was British architect Leslie Owen Ross, born 1882.

There has been speculation into the reason Ross was in Hong Kong; it is thought that Sir Aston Webb (designer of the Hong Kong Law Courts) would have employed several young British architects to his staff, Ross being one of them.[44]

[44] The Central Police Station Compound, Historical Research Report, The Oval Partnership, June 2003



1901 plan

By 1916 a contract had been let to Messrs. Sang & Lee Co for the demolition of a number of old buildings occupying the site (marked F, G and J on the plan of 1914), including the Chief Inspectors Office and a Stores building. By the end of the year these were gone and the foundations for the new building were completed. The following year a contract was given to Messrs. Kien On & Co. for the erection of the 'superstructure', with estimates of approximately $184,300. Contracts for the provision of steelwork in floor girders and roofs were made, but the work was delayed when this did not arrive. By the end of the year the building had only been completed to main floor level. The whole of the steelwork was finally delivered late in 1917. A Public Works report of 1918 states that 'during the period of suspension, everything possible was done in preparing joinery, stonework, and other materials with a view to expediting the completion of the building'. By the end of 1918, the building was practically completed, with the Upper and Main floors being occupied and only the Basement and Sub-basement needing further work.

With work having begun in 1916, the Central Police Station Headquarters was completed in 1919 at a total cost of $227,633. The building was designed to occupy the site in two ways: at a more domestic, two storey-height scale on the south façade facing the Parade Ground, while being a much more dramatic four-storey building at the north, public façade. Both façades featured verandas, though those on the south side are much larger and stretch the length of the building. The north side provided the main public entrance from Hollywood Road. The whole of the building was Classical in style, built of Canton red

Detail view of the north façade on Hollywood Road

brick and rendered in cement plaster on the north elevation. The remaining faces of the building were finished in Formosa facing bricks with architectural details such as quoins picked out in cement plaster. The main central halls at ground and first floor were of an ornate style, with a grand granite staircase accessing all floors.

The building provided a range of facilities for the police force, including offices and various officers' rooms. The barrack accommodation here allowed for the removal of the Indian policemen of the 2nd floor of the Magistracy. The spaces within the Headquarters Block included:

Sub-Basement – Garage, Sikh Temple, Mahommedan Mosque, Dressing Room, Gymnasium, Recreation Room and Lavatories.

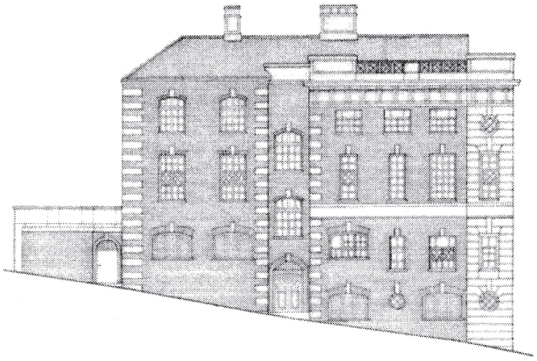
Basement – Four Recreation Rooms for European Inspectors, Sergeants and Constables, Gallery to Gymnasium, Indian Mess Room, Kitchen, Bathrooms, extensive Chinese bathrooms, lavatories and latrines, European lavatory, three Store-rooms and Armoury and Latrines.

Main Floor – Seven offices, ranging from 38' x 16' 3" to 36' x 28', two detenction rooms, two small rooms for finger-print records and lavatories.

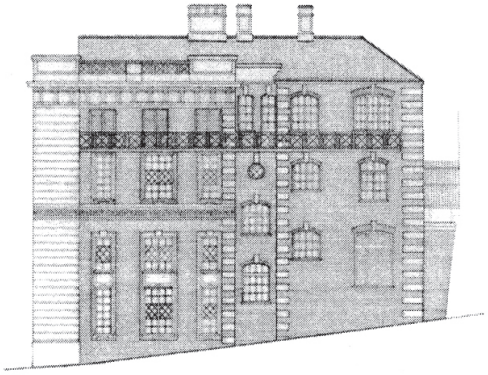
Upper Floor – Six rooms, ranging from 28' x 16' 3" to 52' x 33', for occupation as Dormitories and Mess Rooms for 20 Indian and 182 Chinese Constables, besides kitchens, sculleries and store-rooms. [45]

The building was constructed in a colonial, Classical style, and shares several similarities with the new Magistracy. The north façade follows the Greek orders and features fluted coloumns and greek key patterns, and throughout the building are found repeating patterns of circular windows and architectural features, and lattice ironwork. Without question, both this building and the Magistracy provided a much more dramatic, overpowering façade to the public than to the interior of the complex.

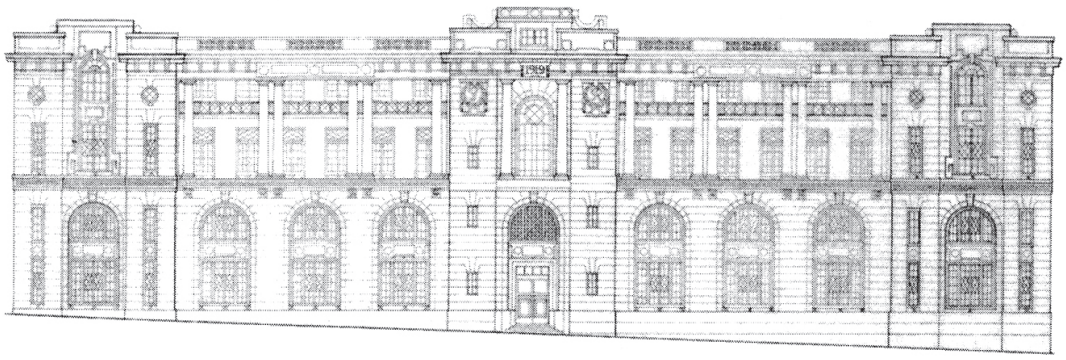
[45] Public Works Report, 1919



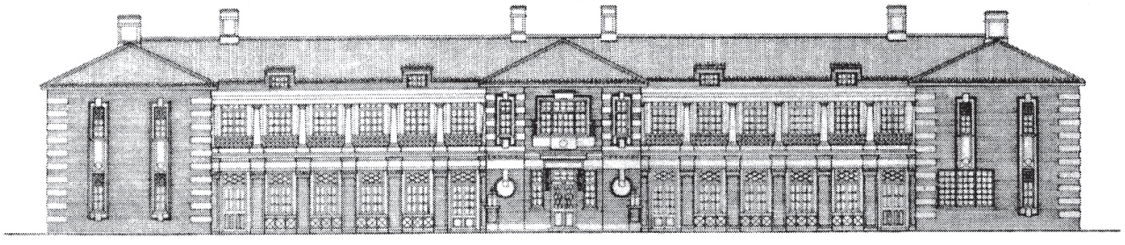
East elevation



West elevation



North elevation



South elevation

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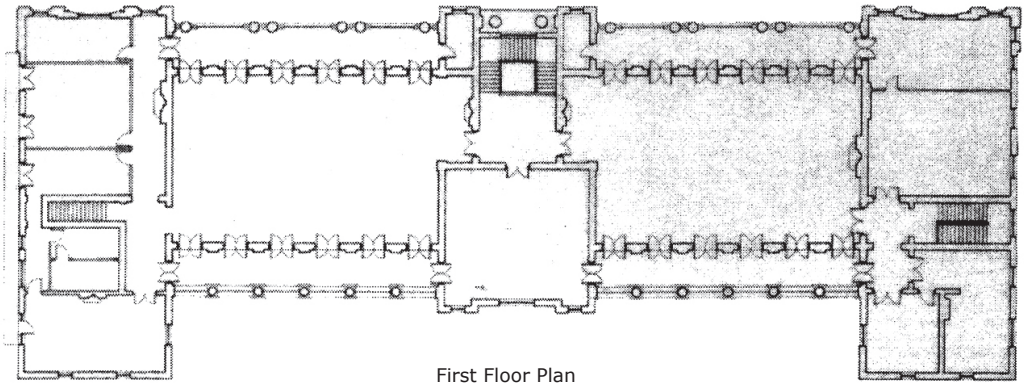
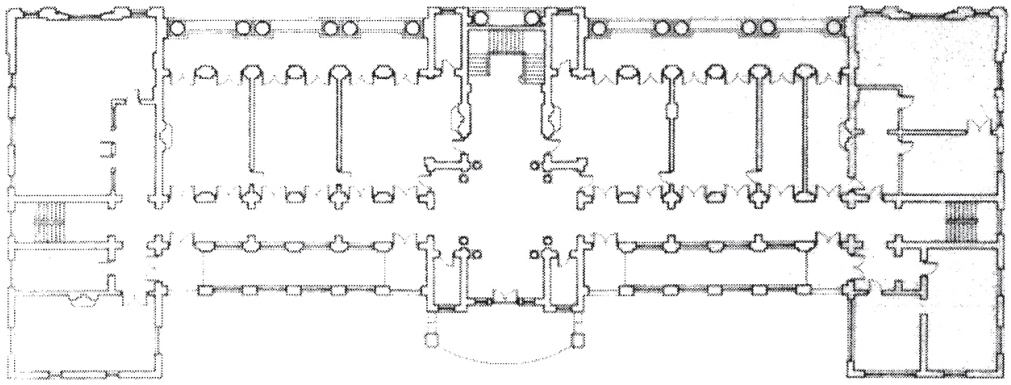
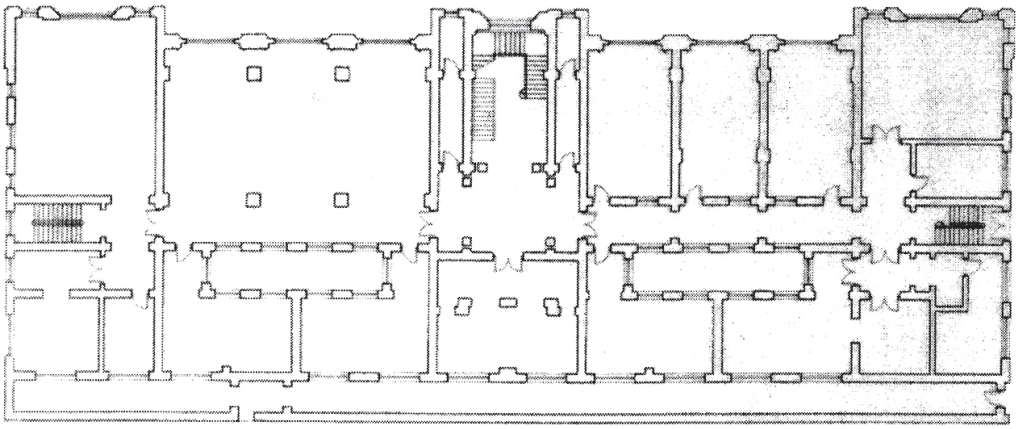
Editors: Wong Wah Sang, Amy Liu



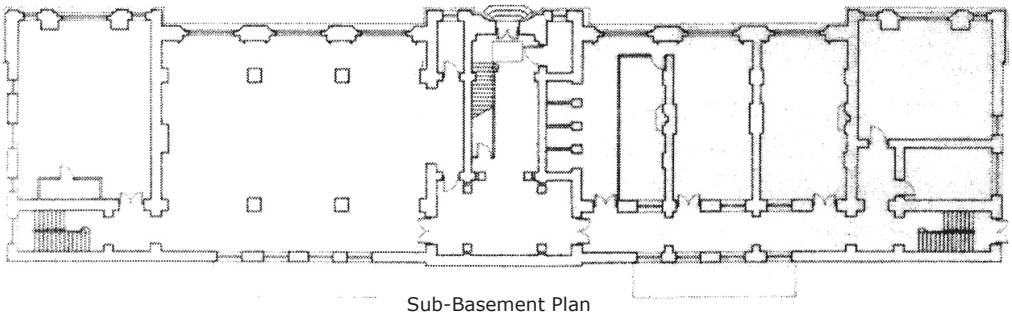
First Floor Plan



Ground Floor Plan



Basement Plan



Sub-Basement Plan

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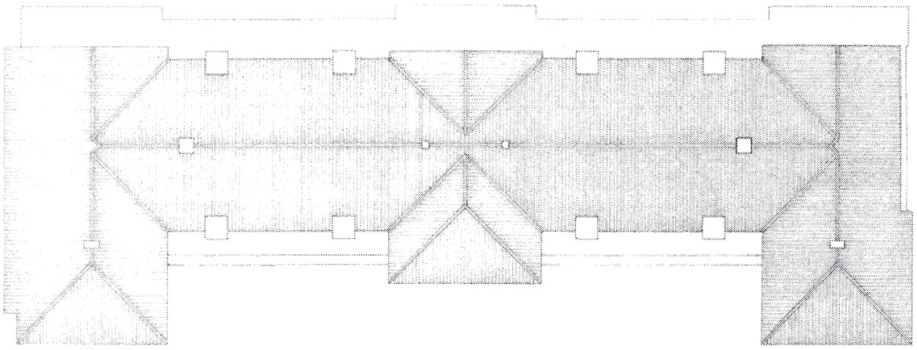
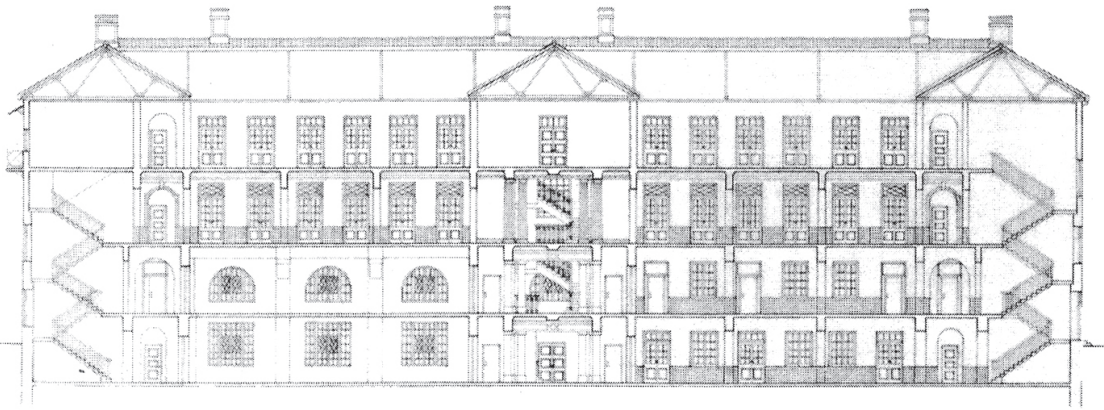
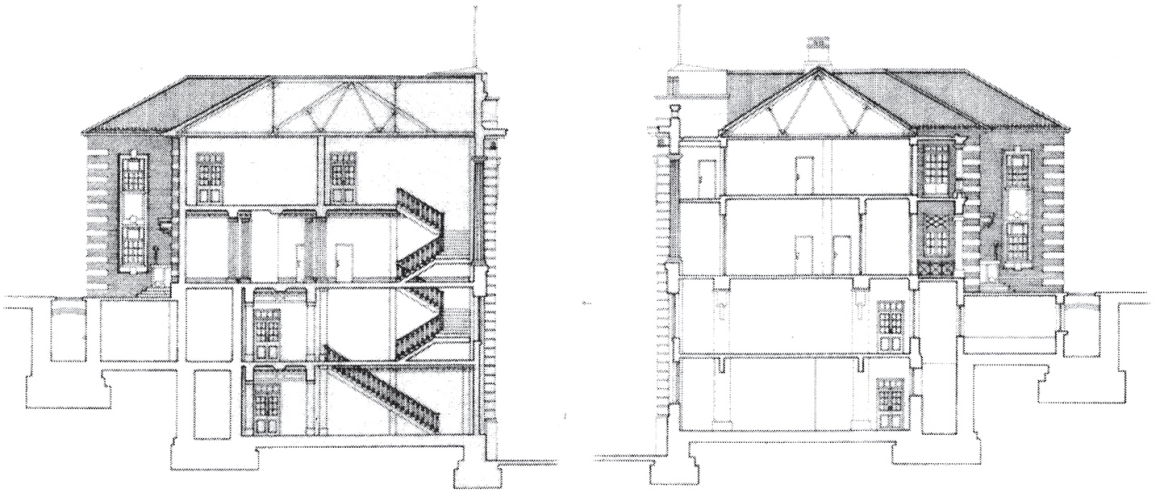


Roof plan



Longitudinal Section



Transverse Section

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2.3.7 Early 20th Century

Building Works

Following the major works of the early 20th century, further expansion of the site seemed nearly impossible. The land on all sides had become increasingly built-in, and the vacant plot to the north which provided a space for the new Police Headquarters Block was the last of the land available in the adjacent area which could be incorporated into the complex. Yet constant minor works and alterations continued throughout the site. These ranged from updating the ground floor of the Warders Quarters in 1917 *(New hardwood floors, coated with solignum, were laid on 4" of cement concrete in the three ground floor rooms)*,[46] to the installation of alarms from the main prison hall to the Assistant Superintendents and Warder's Quarters.

In 1924 a contract was let to Messrs. Yee Lee & Co. for the construction of a new Armoury & Store (building number 2) for the Central Police Station, located in the northwest corner of the site just south of the new Headquarters Block. The building was a two-storey brick structure 60' long by 30' wide containing Equipment Store, Outfit Room, Monthly Store, and Strong Room on the Ground Floor, which was partially open to the east providing a veranda onto the Parade Ground. The first floor housed an Equipment Store, Armoury, Workshop (for the repair of arms) and Magazine. All window openings were fitted with iron grilles and angle iron frames with wire mesh to prevent guns and munitions being passed through the windows onto the street. Expanded metal partitions were also erected to provide further security to the Arms Stores. Less than ten years later in 1933 further storage space was necessary, and the ground floor veranda was closed in.

Another addition to the Parade Ground was made in 1927, in the form of a Garage for Prison 'motor vans' and Police cars. In order to provide space for the construction of the garage, the south wing of the Officers' Quarters (building number 4) was demolished. This single storey block had previously housed servants quarters and kitchens. As further accommodation for vehicles, the open yard at the rear of the Barrack Block (building number 3) was covered over to form a shelter for Police motorcycles.

In the same year there were alterations to the Superintendent's House (building number 10) to accommodate the Accounts Office. The work included reconstruction and alterations at ground floor level.

It is possible that at this time the ground floor archway of the building was filled in; the blocked opening is still visible today. This opening likely formed an earlier linking point between the Central Police Station to the north of the site and the Prison to the south.

From 1928 – 9 several alterations took place on the site. Three large rooms on the first floor of the Barrack Block were converted into offices by the erection of glazed partitions to provide accommodation for the Criminal Investigation Department. The wood floor of the Printing Shop (F Hall, building number 17) was removed and a new one of reinforced concrete was constructed by Messrs. Sang Lee & Co. Other more major works were also undertaken, though it is unknown exactly in which buildings these changes took place. The 'Male Hospital' was rebuilt at this time, and is described as being a three-storey building with the following accommodation: on the Ground Floor: Chief Warder's Office, Armoury, Record Room, Mortuary, and General Store. On the First Floor: Operating Theatre Suite, Medical Officer's office and subsidiary rooms, bathrooms and space for sick parades.

On the Second Floor: ward of twenty beds and another of ten beds, an Isolation Ward of one bed. It is possible that this building was C Hall (building number 13), as later photographs show the second floor of this building in use as a hospital.

Also at this time there is record of a new Reception Block, which was two floors and contained the following accommodation: - Ground Floor, Reception and Registration Room, Bath House and Disinfecting Room; First Floor – Visiting Rooms, Solicitors Rooms, Clothes Store and Photographic Room. Again, it is unclear which building this is describing; it may be one of several small structures south of the Barrack Block which are visible in a plan of 1936. It is also possible that this building is the Ablutions Block (building number 8), which was constructed at an unknown date but is certainly visible on the 1936 plan.

In 1929 sketch plans were prepared for the construction of a new Printing Shop in the southwest corner of the site, which required the demolition of the previous Printing Shop built in 1897 and altered in 1917. A contract was let to Messrs. Kien On & Co, with the price of works totalling just over $42,000.

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[46] Public Works Report, 1917

C Hall in use as a hospital (date unknown)

1936 plan

The new building was two stories, the lower one being a covered yard and the upper one providing a large space for the print works (now with new motors, wiring and switch gear).

Changes in the Prison System

Aside from the earlier attempt to provide prison accommodation at Stonecutters Island and to a hulk anchored between there and Lai Chi Kok, Victoria Gaol had remained the only prison in Hong Kong for almost a century. In the 1930s, however, the ever growing population of Hong Kong led to such large numbers of prisoners that major steps had to be taken. Victoria Gaol was referred to as being unsuitable for both prisoners and staff, with the site being '*crowded in on all sides by tall buildings with their windows looking down into many parts of the prison and occupied for the most part by the poorer class of Chinese… the rabbit warren which constituted the prison itself, had had a most adverse effect on the mentality of the staff'.*[47] Thus, in 1932, a new prison at Lai Chi Kok was constructed for female prisoners, with another new prison being built at Stanley in 1937. All prisoners at Victoria Gaol were thus transferred to the above two prisons, and Victoria Gaol was closed.

Following the transfer of prisoners Stanley held 2,215; and was considered to be grossly overcrowded. It was thought that much of the overcrowding was due to the provision of food and accommodation for prisoners. The 1938 Prisons report describes the return of Chinese prisoners to Hong Kong following banishment, so that they will be re-imprisoned on contravention of the Deportation Ordinance. One such prisoner, upon being questioned about why he returned only to be put in gaol, responded 'with a wave of the hand round the Printers Shop where he is employed "*Where can I do better than this?".*[48] In the same report, the prison system is referred to as a heaven to the *'starved, filthy, ragged, scabious creatures, many with dysentery and enteritis and the awful derelicts of opium and heroin addiction*'. In summary, it was thought within the Prisons Department that the massive influx of prisoners was due to lack of better opportunity outside. In response, it was thought that a reorganisation of the prison system was necessary, including the cutting down of prisoners to be admitted, the introduction of a system of classification and segregation, and a programme of productive hard labour.

This reorganisation began in 1938, firstly with the segregation of Chinese first offenders from previous offenders, with further classification between long and short term prisoners. Work outside the prison (between 250 and 300 men) was carried out by short term prisoners, and included the following in 1939:

- ◇ Clearing and preparing the site for a new Isolation Block for convicted lepers
- ◇ Construction of a rifle range
- ◇ Levelling a parade ground for Indian staff
- ◇ Breaking stone for a new septic tank
- ◇ Construction of steps to Chinese and Indian beaches
- ◇ Trenching and preparation of vegetable gardens at Stanley and Lai Chi Kok

Work inside the prison in the printing shop, carpentering, tinsmithing, coir industries, and concrete block making (with two machines from England) were carried out by those on long term sentences.

47 Ibid.

48 Ibid.

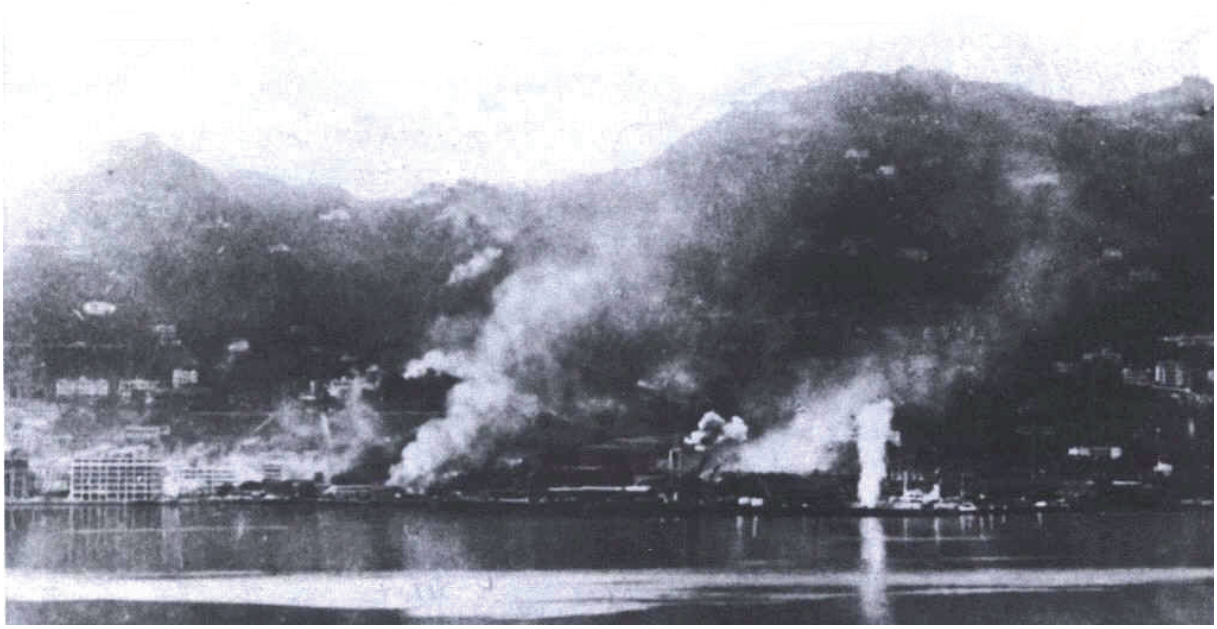
In 1939, alterations took place at Victoria Gaol to convert part of it into a Remand Prison, though it is unclear exactly which part of the prison was converted. One part of the works included the conversion of one floor from cells to living quarters for Indian Warders. On October 16, 1939, Victoria Gaol was reopened for the use, and as such housed remand prisoners, debtors, destitutes, and persons awaiting deportation. The Remand Prison was staffed by one Principal Officer, four European officers and 15 Indian warders. There was accommodation for 166 prisoners, who carried out all their own domestic tasks except for cooking (done by six first offenders trained at Stanley Prison). Despite the transfer of some prisoners, there was still massive overcrowding at Stanley Prison.

2.3.8 World War II and Japanese Occupation

Hong Kong had seen little effect from the 'Great War' in the 1910s. The major areas of concern came later, when the Anglo-Japanese Alliance (signed in 1902 and intended to ally Britain and Japan) expired in 1923 and was not renewed. The risk of invasion by the Japanese increased with the War of Resistance Against Japan, which began in 1931 and reflected a decades-long attempt by Japan to politically and economically dominate China. Numerous 'incidents' – small scale battles between the two countries – had been a common occurrence for several years but never resulted in full scale battle. However, in 1937, Japan and China merged into the much larger conflict of the Second World War, and Hong Kong was suddenly under threat.

The British Government had not ignored the indefensible position of Hong Kong, and had begun to build defences. Starting in 1936, the *Gin Drinkers* Line (so named for Gin Drinkers Bay in nearby Kwai Chung) was constructed along the peaks between New Kowloon and New Territories. It was a defensive line including bunkers, fortified concrete machine gun posts, trenches and artillery batteries. Many of the defences were built by Prison labour, provided by the short term prisoners described above. The Prison Department was asked to carry out various tasks, such as Air Raid Precautions and camouflaging the boundary of Stanley Prison at the request of the military authorities. At the Central Police Station, a subway to the south of the Headquarters Block was partially converted into an air-raid shelter, and concrete defences were constructed on Pottinger Street.

War broke out in 1939 and shortly afterward all the male officers of the Prison Department volunteered fro duty with the fighting forces. European officers formed an auxiliary unit of the Hong Kong Volunteer Defence Corps, in which they were trained under army instructors, while Indian officers formed a Special Guard Company that would only be called into duty in case of emergency. Retired officer Lieutenant Commander W H L Harrison came to Hong Kong from Kenya to fill the now vacant post of Superintendent of Prisons, though soon after he was called back into active duty with the Royal Navy. Chief Warder H Barrett took over the post afterward.



Japanese Attack

Despite a number of precautions carried out in Hong Kong, including the provision of some troops from Canada and India, there was no attempt to send ample reinforcements to Hong Kong.

A letter from Churchill (Prime Minister) to General Ismay, Commander-in-Chief of the Far East stated that:

> *'if Japan goes to war with us there is not the slightest chance of holding Hong Kong or relieving it. It is most unwise to increase the loss we shall suffer there. Instead of increasing the garrison it ought to be reduced to a symbolic scale. Any trouble arising there must be dealt with at the Peace Conference after the war. We must avoid frittering away our resources on untenable positions'.* [49]

The Japanese attack on Hong Kong began on 8 December 1941, just hours after the Japanese attack on Pearl Harbour. British, Canadian and Indian forces were commanded by General Maltby and supported by the Hong Kong Volunteer Defence Forces. The Japanese forces outnumbered by three to one, and the Hong Kong forces were not as well trained; Gin Drinkers Line was breached on 11 December when the evacuation to Hong Kong Island began, and Kowloon was taken two days later. Kong, and set up Prisoners of War camps at Shamshuipo, Yokohama, Fukuoka, and Osaka, with Allied nationals (civilians) interred at Stanley Internment Camp.

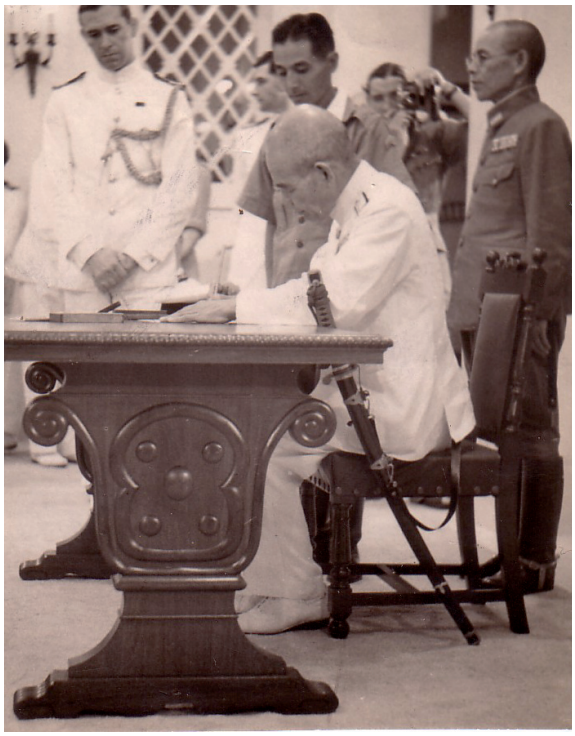
During an aerial bombardment of the island on 15 December 1941, the Central Police Station and Victoria Gaol had suffered severe damage. During this assault, a stick of bombs hit the Headquarters Block, destroying the Ground Floor and Basement, as well as external brickwork to the Store & Armoury. Another bomb hit at the corner of Arbuthnot Road and Wyndham Street, damaging the front of the Magistracy and the officers quarters at the northeast corner of the site. At the same time, two officers commanding the Police Reserve, who replaced regular policemen that had been called to war time duty, were killed.

The next day another bomb fell in the Parade Ground, killing a Police Inspector, destroying most of the underground tunnels, and damaging the front elevation of the Barrack Block. It was then decided that the Central Police Station should be evacuated to the Gloucester Hotel in Wan Chai, which also came under fire soon after.

[49] Welsh, Frank (1993) A History of Hong Kong, referencing L Amery, Life, vol. 11, p. 305

Japanese forces entered the island 18 December and on 25 December the Governor of Hong Kong surrendered in person at the Japanese headquarters, located in the Peninsula Hotel. Isogai Rensuke became the first Japanese governor of Hong. The Japanese military used the Central Police Station site during their 3 years and 8 month occupation, and it is likely that they made minimal repairs to only the buildings they wished to use, or indeed the buildings that were easily repaired. The known use of the buildings by the Japanese is minimal. The Armoury and Store (building number 2) was certainly used as stables for Japanese mounted guards (thus it has since acquired the name Stable Block). The Magistracy continued use through the occupation as the Hong Kong Civil Prison.

In 1945, the United States retaliated against Japan with the bombing of Hiroshima and Nagasaki. Less than a week later the Japanese surrendered on 15 August and British sovereignty was restored. It has been suggested[50] that the terms of Japanese surrender were signed in the Area Superintendent of Police's Office on the main floor of the new Headquarters Block. However, photographs of the event show an interior space much grander than any at the Central Police Station. Soon after, prisoners of War were released and the British Government put back into power. A cenotaph in the Central district commemorates both the defence of Hong Kong, as well as those who died during the war.



Japanese Surrender

[50] Oval Partnership

Reconstruction and Reopening of Victoria Gaol

From October 1945 – March 1946, surveys and inspections of the bomb damaged Victoria Prison were carried out by the Public Works Department and the Military, in order to assess the repairs necessary to make the site usable. While a list of the buildings suitable for repair and reuse was provided with a sketch plan, the plan is difficult to read and makes no real sense when compared with contemporary maps. This is perhaps due to the confusing nature of the site, as described in a letter from Chief Officer Jillott to Colonel Rouse of the Works Department: *'I went over the Victoria Gaol again this morning…that's about the 4th time and I got just as lost and confused in the rambling place'.*

Another letter, dated 6 March 1946 and written by Major J T Burdett (officer in charge of Stanley Prison) describes the damage in some detail, noting that further problems have arisen due to neglect, rain and climate. The 'original prison', likely the remaining wings of the 1858 radial plan prison, were described as being unsuitable for further use as a prison, while the remand prison (the buildings of which are unknown) could be put into a good state of repair and used to accommodate 150 prisoners. Despite the possibility of using these buildings, Burdett reports that there would still need to be extensive repairs for roofing, the installation of sanitary arrangements and kitchen, new locks on cell doors and renewal of electric lighting and bells, and goes on to describe the poor condition of the prison:

> *'The atmosphere of the prison is most depressing. The buildings are so arranged that the interiors are in a constant state of gloom, and I should say that in many of the rooms and corridors it would be necessary to use electric light during the day. Cell windows are small. In the winter the prison would be an ice well and draughty. In the summer there would be an insufficiency of fresh air. I am of the opinion that the Victoria Remand Prison is not a suitable prison in which to confine remand prisoners. It should be remember that they are on remand, and not convicted. The prisoners should therefore be entitled to the few amenities as regards accommodation which a prison establishment is able to offer prisoners'.*[51]

The Main Hall (building number 15 and other blocks since demolished) seems to have been substantially destroyed by bombing, though materials and debris were removed during the Japanese occupation. Only the lower part of the staircase remained (from ground to first floor) and a wall had been built separating the east and west wing of what is now D Hall. The roof of west wing D Hall, which was likely part of the Remand Prison, was in a fair state of repairs but the reinforced concrete roof was leaking badly and in need of repair. It is thought that B Hall (building number 13) had a substantial bomb hit in the northwest corner, which was repaired. It is likely that the remaining buildings of the 1858 Prison, except for D Hall, were demolished at this time.

For the majority of buildings, most of the necessary repairs seemed to include cleaning, the fitting of glass, repairs to roofs, and installation of sanitary fittings. The General Office (building number 19), A Hall (building number 12), and C Hall (building number14) were all either newly built or substantially rebuilt post-war. Following the necessary works, the Victoria Gaol and Central Police Station were reopened for use in 1946.

F Hall exterior

[51] HK PRO: HKRS125 3 – 4

One of the first buildings to be repaired and put back into use was the Magistracy, which was used throughout 1946 as a tribunal for war crimes trials. Many Japanese Army officers were tried and convicted there. Further repairs were made to the site over the next few years.

In 1948, bomb damage to the previous Printing Hall was repaired, so that while some of the fabric here is of an early date, most of it likely dates to the post-war reconstruction. Following repairs, F Hall was transferred to the Norona Printing Company (the Government printers of that time) to use as a printing workshop. At this time, F Hall was separated from the rest of the Prison by a security wall and the Bailey Street entrance created for use by the Printing Works.

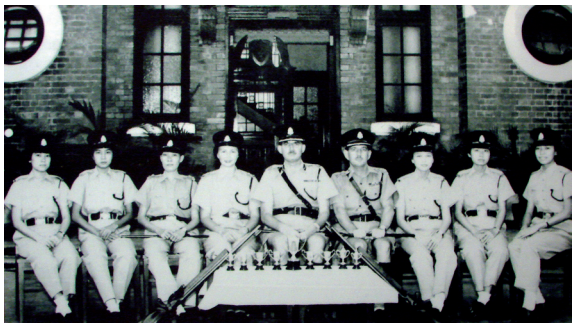
Some time later, in 1956, F Hall returned to Prison use and the ground floor was converted into use as an office and reception centre, becoming F Hall (building number 18).

Reception

F Hall elevation

2.3.9 Late 20th Century

Following the War, the Central Police station and Victoria Gaol saw a number of organisational changes. In 1949, the first woman was allowed into the police force. Just two years later nine women constables were allowed into the force. When first recruited, these officers were regarded as a novelty, and were dressed in smart uniforms with white gloves and given jobs such as traffic control.



Women Officers in the 1950s

The gaol was never used as a convict prison again. There were few major alterations, and those that took place were either to meet the needs of the growing area around the site or the change in use within it. In 1961 the junction of Arbuthnot Road and Wyndham Street was proposed, which required the demolition of some of the prison buildings, and the rebuilding of part of the retaining wall. The buildings demolished were the Central Police Station laundry, Divisional Emergency and Contractor's Stores and the quarters for Single Inspector's Cooks and Boys. The ground floor of the Police Barrack was used for various public offices, one being the Report Room. The Armoury & Store was used for the Traffic Police. The Parade Ground was converted into use as a carpark, a change in use which substantially detracted from the original character of the site.

Headquarters Block in the 1970s following conversion of the Parade Ground to a car park

Traffic Police outside of the Barrack Block (date unknown)

The Police Report Room located on the ground floor of the Barrack Block (date unknown)

Exterior of the Report Room (date unknown)

Changing technology also became a cause for alteration. By 1947 a Radio Control Room was operating from the top floor of the Barrack Block, though the insecure nature of its position meant that in 1951 part of the basement of the Headquarters Block was being altered for the inclusion of a radio control room. A plan of 1958 shows the proposed layout of the Hong Kong Island District Operations Room to be inserted into the Ground Floor of the Barrack Block, which proposed to '*use all the space currently occupied by the present ops room plus inspectors' canteen, lounge, dining room, kitchen and central station storeroom*'.[52] By the 1970s the District Command and Control Centre had been established, with the old gymnasium in the Headquarters Block receiving a mezzanine, and an aerial mast being installed at the top of the building.

Radio Control Room

Other changes at the site in the late 20th century included the introduction of new window sashes to accommodate air conditioning units (which was also cause for the blocking in of some of the verandas, notably in buildings 4 – 7), metal replacement windows, petrol pumps, metal security gates, and several rounds of redecoration and repainting. It was in the 1980s that the site took on the symbolic blue colour scheme of the police, now seen decorating everything from balustrades to window sashes. In 1981steelwork designs for a new laundry facility adjacent to D Hall were drawn up. The following year alterations were carried out in the Ablutions Block and Barrack Block (kitchens inserted at first floor, timber partition screens inserted).

One of the few major changes was the design of a new single storey building containing a row of cells at the south of the Barrack Block, designed by C K Hui of the Architectural Services Department and constructed in 1984.

While the site was only undertaking minor change and alterations in the post-war period, the area around the site changed drastically. From the 1950s until today, the whole of Hong Kong because a perpetual building site, with high rises being built at a rapid rate. Many of the three or four storey buildings surrounding the site on all sides were demolished in order to make way for new multi-storey apartment blocks and office buildings. The skyline of the city changed rapidly and within 50 years Hong Kong was a completely different kind of city.

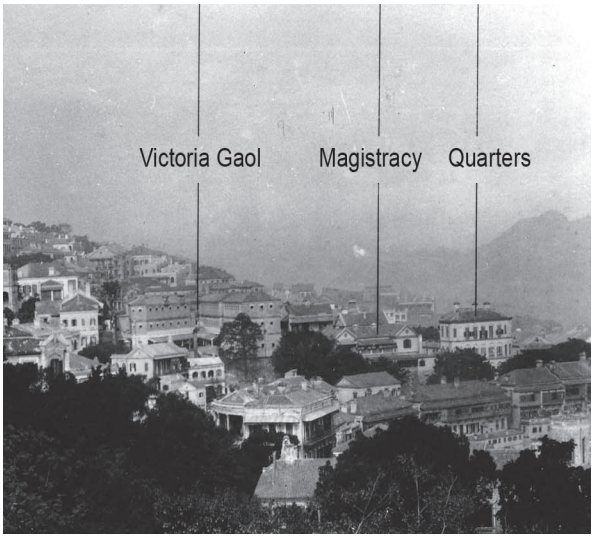
Immigration and 'We Care'

The use of the site for a Remand Prison meant that it was of a low security nature, and as early as 1947 the site was being used for immigration purposes: cells 11 and 12 at the Central Police Station were being used as depots for the purpose of the Immigration Ordinance. Within twenty years the site was being used more progressively for the Immigration Office. Following the Vietnam War in 1975, Hong Kong was declared a port of first asylum for Vietnamese refugees and remained as such through the 1980s. Victoria Gaol quickly became the head of Immigration in Hong Kong, and many of the buildings were converted for use under this purpose; for example the Magistracy was closed in 1979 and subsequently used as offices for the Immigration Department and Police officers' associations. The use of the Prison as a centre for immigration soon morphed into use as an institution for accommodating discharged inmates prior to repatriation or deportation, especially following the 1989 decision for the mandatory repatriation of Vietnamese boat people.

During the late 20th Century another major change occurred - in 1989 the first Chinese Commissioner was appointed. Li kwan Ha became the first, changing almost 150 years of British control of the Police. All Commissioners since have been Chinese.

The last detention centre in Hong Kong for Vietnamese migrants was closed in 1998, however, the site continued use for immigration detainment. People awaiting deportation or held for illegal immigration were interred at Victoria Gaol, though in much more comfortable surroundings than the prison was designed for. Women were allowed to stay with their children and were given space to carry out crafts and other recreational tasks. The lower courtyard was converted into use as a Tennis Court and play area for the children, and the whole of the prison took on less strict confinement.

[52] HK PRO: HKRS478-2-57



1895 plan

1969 aerial view

2008 aerial view

In the 1980s the prison took a much more relaxed view towards the care and treatment of prisoners. In 1981, the sanctions of dietary and corporal punishments were removed from Prison Rules, ending over 100 years of sometimes severe punishment. This was merely the start of a more humane system of penal organisation. As a means of displaying this changing attitude, the "Prisons Department" was renamed as "Correctional Services Department" thus reflecting the expanding programme of activities and emphasis on offenders' rehabilitation. In 1984 Bauhinia House (building number 20) was converted into use as the first half-way house specifically for female offenders; later on the site a half-way house was instituted for teenage boys and runaways.

The aims of the Correctional Services Department only picked up speed in the 1990s, and in 1999 they adopted a new service emblem highlighting the changing attitudes. The design of the emblem centres on the motto "We Care 管教關懷助更生", the goal of which was to encourage team work and rehabilitation of offenders through the process of custody and care. Stickers baring the logo can be found throughout F Hall, the only area that would have been opened to the public for visiting purposes. Further to this campaign, the following year the department replaced the the Chinese terms 釋囚 and 刑釋人士 (Discharged prisoners) with 更生人士 or 更生者 (Rehabilitated persons) and in 2004 launched the the "Continuing Care Project" (延展關懷計劃), wherein supervisees needing support after expirary of statutory designation were able to obtain voluntary follow ups with NGOs.

We Care

Tennis court

2.3.10 Designation and Decommissioning

Despite the continued use of the site for immigration and rehabilitation purposes, the Central Police Station and Victoria Gaol were becoming less important within the Correctional Services Department, with new facilities being built across Hong Kong. In 1995, propelled by fears that the site would be severely altered for new use or allowed to fall into severe disrepair, the Antiquities and Monuments Office decided to add the Central Police Station Compound, Magistracy and Victoria Gaol to the list of Declared Monuments in Hong Kong.

In 2003, the government decided to develop the site for tourism use, with tender originally scheduled for early 2004. Almost immediately the Central Police Station Heritage Taskforce (CPSHT) was formed to provide public opinion about the conservation and future use of the site. The Taskforce includes the following groups:

- Hong Kong Institute of Architects
- Hong Kong People's Council for Sustainable Development
- Conservancy Association
- Central and Western District Development Concern Association
- American Institute of Architects (Hong Kong Chapter)
- Action Group for the Protection of Central Police Station Historical Compound
- LIVE. Architecture Programme, Department of Architecture, The Chinese University of Hong Kong

The CPSHT was mainly concerned with the conservation of the site and the level of public involvement. In September 2004, the Taskforce published a survey on website and in local newspapers asking the public to express their views, with the result (out of 328 responses) being that the CPS should receive respect and attention in terms of conservation. In the same month, the group sent letters to the Chief Executive and the Secretary for Economic Development and Labour expressing their views. One of their suggested models was the Citizen-Envisioned Participatory Assessment Model (CEPAM), which has the following guiding principles:

1. "Heritage First" principle: put heritage conservation and the enhancement of heritage value in the center of any development considerations
2. The China Principle: to conform to the Principle for the Conservation of Heritage Sites in China, which was approved by the State Administration of Cultural Heritage of the Chinese Central Government

One of the most debated issues of the site was the preservation of F Hall. The Antiquities Advisory Board (AAB) had named 18 structures on the site as historical buildings, and provided a formal set of guidelines for all of these 18 structures except for F Hall. The Central and Western District Council (C&W DC) suggested that this building be preserved, and that any future development would deny its demolition. In response, the Antiquities and Monuments Office pointed out that, with the whole of the site being named a Declared Monument, however, any demolition works would require approval from the Antiquities Authority, who would then consider the cultural value of the buildings as compared to the benefits gained from possible demolition.

The prison was officially decommissioned in 2006, and soon after it held the "Victoria Prison Decommissioning Open Day'. The prison was opened to the public for three days, during which F Hall, D Hall, E Hall, the Kitchen and part of the Laundry were open. The day was a success and in the following year the C&W DC organised another six open days as a 'Journey to the History of Victoria Prison'.

In 2008 The Hong Kong Intitute of Architects and the Hong Kong Institute of Planners organised the Hong Kong & Shenzhen Bi-City Biennale of Urbanism/ Architecture, named Refabricating City. The theme of the biennale was intended to highlight architecture and urban spaces *'fabricated through the interweaving of buildings'*.[53] A number of displays were set up throughout almost the whole of the site, featuring contributions from various organisations, universities, individuals, and architecture and planning firms. In addition to being the first architectural biennale in Hong Kong, Refabricating City was also the first public use of the site in its history; members of the public were not only able to view the site but also to interact with it. The site was chosen as the venue 'as an attempt to demonstrate how a heritage site can be sympathetically reinvigorated to enhance the cultural life of the city.'

[53] All quotes referring to Refabricating City were taken from the brochure prepared for and available at the event

The Hong Kong Tourist Board includes the site in its HK Walk, specifically the Central & Western District. The walk here is described as a 'Journey Through Time', with the Former Central Police Station Compound, Former Central Magistracy, and Victoria Prison Compound forming part of the walk. The site is described as 'a testimony to Hong Kong's colonial heritage'. [54]

2006 Decommissioning Ceremony held in the Prison Yard

[54] Hong Kong Tourist Board website. Accessed on 18 March, 2008. http://www.discoverhongkong.com/eng/attraction/hkwalks/pdf/central.pdf

2.3.11 Summary Timeline

Given here is a summary timeline, with dates relating to the site or to relevant information. For ease of reference, items relating to specific areas of the site have been colour coded as follows:

- ◇ Central Police Station (red)
- ◇ Central Magistracy (green)
- ◇ Victoria Prison (blue)

1841 Hong Kong colonised

Sire Henry Pottinger signs Nanking Treaty and ends Opium War

Captain William Caine of the 26th Cameronians appointed Magistrate, head of police, and head of gaol
The Magistrate's House built on the site

A Central Police Station housed temporarily on Queen's Road

1844 Colonial Police Force established

1845 Charles May appointed Superintendent of Police

Magistrate's House converted into a Debtor's Prison and Gaoler's Residence.
Three cell blocks (Gaols A, B and C) constructed at the north of the site

c.1847 The first Magistracy is constructed on the site

1851 Retaining wall is built around the site
Two guardhouses are built to the north of the site adjoining the retaining wall
Gaol C receives a second storey and semi-circular lavatory.

1852 A treadwheel is constructed on the site as a form of punishment

1856 The 1851 guardhouses are demolished and new ones built in their place
A new Gaoler's House is constructed
The original Debtor's Gaol is demolished and a new one constructed

1858 All of the earlier buildings except the Magistracy and Governor's house are demolished, and a 'radial plan' prison is built on the south side of the site

1864 A new prison at Stonecutter's Island is constructed by Sir Hercules Robinson, and all prisoners from Victoria Gaol are transported there

A large Barrack Block (building number 3) and Officers Quarters (building number 4) are constructed

1866 All the prisoners from Stonecutter's Island are transferred back to Victoria Gaol

1867 The Police Force directly recruits officers from India

1872 Sir Arthur Kennedy becomes Magistrate, and removes 100 corrupt officers from duty

1878 Two large basement rooms in one of the Gaol buildings are converted into 46 individual cells

1879 The Police Force and the Gaol system are permanently divided

1894 Two new cell blocks are constructed outside of the site, on the corner of Old Bailey and Staunton Street, with an underground subway connecting them to Victoria Gaol

Pre 1895 The Superintendent's House (building number 10) constructed sometime before this date

1896 Part of the prison (west wing of D Hall, building number 14) is converted to use as a Female Prison

Drying room and bathroom accommodation built just north of the Magistracy

1897 The southwest wing of the prison is demolished, and a building used as printing shop and mat making area is constructed
The materials from the demolition are used to create 179 individual cells in existing rooms within the gaol buildings

1901 The southeast wing of the prison is demolished, and a new block of 78 cells constructed

1903 Further Officers' Quarters at the junction of Hollywood Road and Arbuthnot are completed (buildings 6, 7)

1906 The Barrack Block (building number 3) is expanded by added another storey

1910 Another new block of 78 cells in constructed (B Hall, building number 12)

1911 Matsheds are erected in the Parade Ground to provide extra accommodation for officers

1913 The original magistracy was demolished, and on the same site a new Magistracy is constructed

1915 A further block of 78 cells was constructed using prison labour (E Hall, building number 15)

1916 The construction of a new Central Police Station Headquarters Block at the north of the site is completed

1917 The southeast lower yard is covered over with a concrete platform and steelwork roof (building number 14) and the Laundry was enlarged

Trough closets are installed

1918 Electric bells and alarms are installed

1925 A new Armoury & Store (building number 2) is completed

1927 The south wing of the Officers' Quarters (building number 4) is demolished, and a garage for prison and police vehicles is constructed in its place (building number 5)

Alterations are carried out in the Superintendant's House (building number 10) to accommodation offices

1929 Three rooms on first floor of Barrack Block (building number 3) are converted into offices

The 'Male Hospital' is rebuilt, in an unknown building (perhaps C Hall, building number 13)

A new Reception Block was constructed, possibly the Ablutions Block (building number 8)

The old Printing Shop is demolished and a new one constructed in its place (building number 17)

1931 The Chinese War of Resistance Against Japan begins

1932 A new female prison is constructed at Lai Chi Kok

1933 The ground floor veranda of the Armoury & Store is filled in

1936 A defensive line is built between the mountains of New Kowloon and the New Territories in preparation for war with Japan

1937 Stanley Prison is constructed, and all prisoners from Victoria Gaol transferred
Victoria Gaol is closed

1938 Extensive alterations are carried out in the top floor of the Magistracy

1939 Parts of Victoria Gaol are converted into use as a Remand Prison; remand prisoners, debtors, destitutes and persons awaiting deportation are transferred here from Stanley Prison

Male officers volunteer for the Hong Kong Volunteer Defence Corps

1941 The Battle of Hong Kong takes place, with the Japanese first bombing and then entering Hong Kong

Britain surrenders Hong Kong to Japan on 25 December

1941–5 Hong Kong is held under Japanese Occupation, and the Central Police Station is used as Police Headquarters for the Japanese forces

1945 On 15 August Japan surrenders Hong Kong

1945–6 The buildings of the site are repaired and rebuilt following extensive bomb damage

The Magistracy is used as a tribunal for war crimes trials

1947 A Radio Control Room operates from the top floor of the Barrack Block (building number 3)

1948 Bomb damage to the Printing Hall repaired

1949 The first woman is allowed into the Police Force

1956 The Printing Hall is renamed F Hall, with the ground floor converted into use as a Reception Block (building number 17)

1961 Part of the northeast corner of the site is redeveloped to create a new junction for Arbuthnot Road and Wyndham Street

1974 The gymnasium in the Central Police Station Headquarters Block (building number 1) has a mezzanine floor built in to accommodate a District Command and Control Centre

1975 Hong Kong declared a port for Vietnamese refugees

1979 The Magistracy closes and is converted into use for the Immigration Department and Police Officers' Associations.

1981 Steelwork designs for a new Laundry facility are drawn up

Dietary and Corporal Punishments banned

1982 Alterations carried out in the Ablutions Block (building number 8) and the Barrack Block (building number 3)

1984 A single storey block of cells is constructed adjacent to the south wall of the Barrack Block

Bauhinia House (building number 19) converted into use as a half-way house for female offenders

1995 The Central Police Station, Magistracy, and Victoria Gaol are named Declared Monuments by the Antiquities and Monuments Office

1999 The Correctional Services Department (previously Prisons Department) adopts the logo of 'We Care'

2003 The Central Police Station Heritage Taskforce is formed in response to a plan for developing the site into tourist and other facilities

2006 The site is officially decommissioned
A Decommissioning Open Day is held

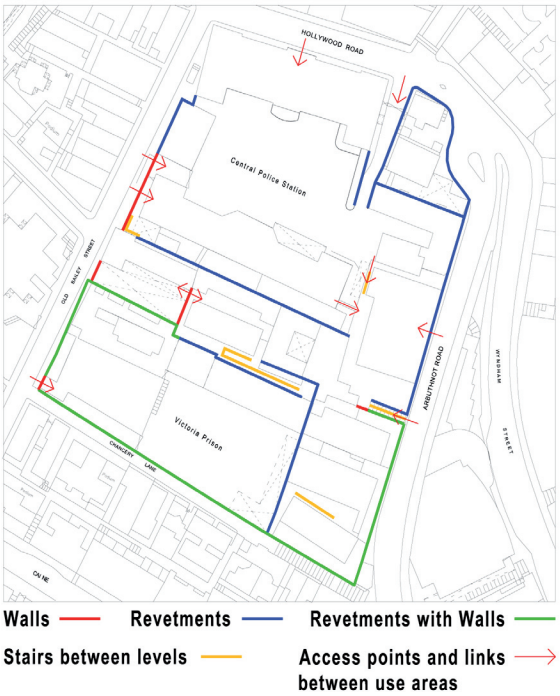
2008 The first public opening of the whole site is done in conjunction with the Refabricating City exhibition, a Hong Kong and Shenzhen Bi-City Bienalle of Urbanism/Architecture

2.4 DESCRIPTION OF THE SITE

The following section provides a brief description of the site, including its layout, division of spaces, access and circulation, landscape, and a summary analysis of the surrounding areas. The individual buildings within the site will not be described in any detail here, as they have been included in a separate gazetteer of the site.

2.4.1 Layout and Access

The Central Police Station and Victoria Prison site occupies a single block in the Central (Wan Chi) area of Hong Kong. It is set upon a large outcrop of natural granite, and as such there is little workable material below the surface. There is a gradual fall across the site from south to north and a much steeper fall along the east boundary with Arbuthnot Road. The site has been terraced with battered granite revetments to form three level platforms which are aligned east to west across the site. There is one small platform in the north east corner of the site. Access between the different levels is via staircases and shallow stepped ramps.



Plan of the walls, revetments and various points of access

Plan of terraces on the site. Light blue is the lowest, then dark blue, green and red as the highest.

Plan of site showing different areas

The rampted staircase giving access from one terrace to another, located between C Hall to the north and D Hall to the south

The site is divided into three use areas: the Central Police Station in the northern half of the site, the Victoria Prison in the southern half, and between these, on the eastern boundary of the site, the Central Magistracy. Each use area has its own entrances and access points, with the Central Police Station also has access routes into the Central Magistracy and the Victoria Prison, either at ground level or in the form of bridges. The Victoria Prison is surrounded on all but part of the north side by high walls constructed in granite; the buildings form the boundary in the middle section of the north wall.

The main entrance to the Central Police Station is a steeply sloped drive leading from Hollywood Road at the east end of the Headquarters block; this was formerly known as Pottinger Street. There are also two secondary entrances onto the site from Old Bailey Street, and a further doorway entrance from Hollywood Road which enters directly into the Headquarters Block (building number 1). The Victoria Prison entrance is at the south end of Old Bailey Street at the junction with Chancery Lane; this entrance opens onto an alleyway adjacent to F Hall (building number 17). South of the Central Magistracy building is a gateway at street level with a flight of granite steps leading up to the ground floor level of the building.

The pavement outside the Headquarters Block on Hollywood Road, including the steps leading up to the main entrance

View of the main entrance ramp (Pottinger Street) from inside the site

This staircase and parts of the boundary wall are some of the earliest parts of the site still in existence today. There is also a central doorway in the retaining wall below the Magistracy which is entered into from Arbuthnot Road, though this has never been opened to the public, rather it was a judge's entrance.

East Magistracy door at street level on Arbuthnot Road

East gate at street level on Arbuthnot Road located just to the south of the Magistracy

2.4.2 Views

The building types and construction vary throughout the site, with an obvious division between prison structures and police structures. While all of the buildings on the site are mainly utilitarian, those within the Victoria Prison site are more notably designed for function and the accommodation of prisoners than the police buildings. The prison buildings also bear much less evidence of their Hong Kong location, being of the same plain and basic design as cell blocks found throughout the world. In contrast, the police buildings are more responsive to the climate and surroundings, as they feature verandas with sunshades and balconies. In many cases the buildings have retained their Chinese tile roofs; this is often the only evidence of a connection to local architecture and construction.

The Magistracy and Central Police Station Headquarters are the most public buildings, being accessible and having visible façades on public elevations of the site. As such, the outward facing fronts of the buildings are highly decorative in comparison to the rest of the site. Both are Classical in style and feature elements such as pilaster, columns and pediments. These public façades are in great contrast to the inward facing elevations. The Magistracy has a plain brick, very residential façade to the north, south and west, which is completely contrary to the commanding east front with the large and dominating retaining wall beneath.

View of the north façade of the Headquarters Block on Hollywood Road

The Headquarters Block takes a slightly more decorative approach on its inside elevation, though this is likely due to its visibility from the Parade Ground. Aside from some repetitious design features, it is difficult to tell that the two-storey domestic scale building on the Parade Ground is the same as the large, four-storey public building visible from Hollywood Road. In fact, this building in many ways detracts, at least form the north perspective of the site, from the steeply terraced geography of the site. It is unfortunate though, that due to the construction of high rise buildings immediately adjacent to the north, as well as busy traffic, that the façade is only visible in a restricted way from the side streets.

View of the south façade of the Headquarters Block facing the Parade Ground

East façade of the Magistracy on Arbuthnot Road. The east end of D Hall is visible in the distance.

The western edge of the site on Old Bailey Street takes on a more small scale, domestic approach. There are no large retaining walls at the northwest end; the brick façades of the Headquarters Block, Armoury & Store and Ablutions Block, as well as the rendered elevation of the Barrack Block, would almost blend inconspicuously into the townscape were it not for flashes of barbed wire and high fencing. The Ablutions block is particularly notable for its view from the popular shops of Staunton Street, as its west façade and adjacent wall have been painted bright red and appear as a residential building. Toward the southern end of this wall the tone changes as the retaining wall appears, and at the southernmost end is the old public entrance to the prison, neither friendly nor architecturally remarkable.

West façade of the Ablutions Block as viewed from Staunton Street

View of Old Bailey Street looking south

The public prison entrance at the south end of Old Bailey

The eastern side of the site on Arbuthnot Road has a similar circumstance to the western side, as it is domestic to the north and more foreboding to the south. In the northeast corner of the site are some of the earliest prison buildings, with 1864 officers' quarters (building number 4) and the 1903 officers' quarters (buildings 6 & 7) at a lower level on the Hollywood Road side. These structures, though set above and behind a modern retaining wall, are of such a style and construction that they do not necessarily appear to be part of a prison complex. Further to the south is the Magistracy, discussed previously, which is set on a much more notable retaining wall and therefore begins to create the barrier between the public and the site. This is further pressed at the south end of the site, where the buildings behind are barely visible from ground level and the retaining wall is the most dominating aspect.

The northeast corner of the site at the junction of Arbuthnott and Hollywood

The south edge of the site along Chancery Lane is the only elevation of the site which is dedicated to the prison side, and this is clearly obvious in the construction of a large retaining wall which runs from eastern to western edge. The wall is varied in style and construction (with obvious parts being early and others being repaired or replaced later), and retains the vestiges of prison use in the form of barbed wire, concrete buttresses topped with broken glass, and signs informing people that there is 'No Parking Against Prison Wall', or there is 'No Climbing'. At the east end of the wall are a run of large granite steps, which is some of the earliest structure on the site.

Arbuthnot Road looking south

The historic steps on Chancery Lane

The security wall on Chancery Lane

2.4.3 Open Spaces

There are three open spaces on the site: the Parade Ground, prison yard and a small area south of the Central Magistracy building. All of these spaces have been modified at least once, either for use or due to condition. The Parade Ground has also been used to support temporary matshed accommodation and was converted into use as a carpark in the 1970s. The prison yard has the most likelihood of archaeological remains beneath, having once been the site of the 'radial plan' prison, and has since been used as badminton or volleyball courts for inmates.

Plan showing the open spaces

Each of the open spaces has some form of vegetation, with many of the trees being of historic interest and adding to the character of the site. A tree survey of the main eleven trees on the site was carried out in October 2007 (this is included as an Appendix). This survey gives the location, species, size, and health of the trees. Given here are the identification number, tree type, and condition:

1	Bombax ceiba	Poor
2	Ficus Virens	Acceptable
3	Nageia nagi	Acceptable
4	Celtis sinesis	Below Average
5	Mangifera indica	Good
6	Aleurites moluccana	Good
7	Aleurites moluccana	Good
8	Plumeria rubra	Good
9	Araucaria cunninghamii	Below Average
10	Ficus miocrocarpa	Good
11	Dracaena marginata	Poor

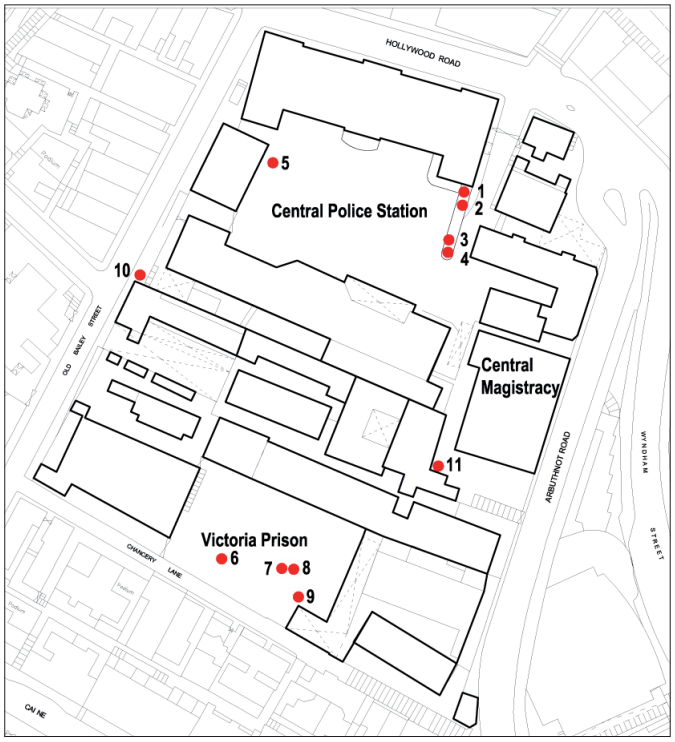
These spaces and the trees within them are a welcome rarity in Central. With the surrounding area being filled to excess with large tower blocks containing offices, restaurants, shops and apartments, there is little space left for trees or open areas that exist within the urban context. In most cases, the nearby open spaces are used as either public parks or playgrounds, or in a much larger non-urban context such as the Hong Kong Zoological and Botanical Gardens. In other cases like the 'Sitting-out Areas' (one nearby off of Pottinger Street, another off of Graham Street) seems swallowed up by the surrounding buildings.

2.4.4 Surrounding Area

The Central Police Station site is located in the Central and Western District of Hong Kong, in an area known as the Mid-levels. Central is a popular tourist, shopping, and dining destination, and in a 2001 survey was recorded as having the second highest income and third lowest population in Hong Kong. Central is also one of the oldest districts in the city, and was the first area of planned urban development; historically Western was the principal European business district. There are few historic buildings that survive in the area immediately around the site, with some of the more notable structures being:

- Man Mo Temple, also a Declared Monument (Hollywood Road)
- St Paul's College and Church (Glenealy)
- Hong Kong Cathedral of the Immaculate Conception (Caine Road)
- Dr. Sun Yat-sen's Museum (Caine Road)

Another interesting historic building nearby is the old Dairy Building located at the corner of Wyndham Street and Lower Albert Road. The dairy was originally built in 1892, but was later extended and altered in 1917. The building has been renovated in recent years and is currently home to the Fringe Club and the Foreign Correspondants' Club. What makes the building interesting are the remarkable number of similarities between this building and the Central Police Station Headquarters Block, built around the same time. Both buildings are neo-classical in style, and use Formosa red facing brick with stone quoins (on the south façade of the Headquarters Block). Many of the architectural design features are extremely similar – including the plain disc panels at window openings, Greek key borders, and wreath roundels. It could indeed be argued that they were designed by the same architect and/or cast in the same moulds.



Tree plan

Trees 1 - 4

In addition to these buildings which are in good repair, there are also a few buildings in the surrounding area which clearly have historic beginnings, but have since been drastically altered. For example, there is a pair of stepped, three-storey terraced buildings on Wellington Street which clearly retain their upper storeys but whose ground floor has been completely destroyed to insert a shop and a take-away restaurant. On the side elevation of the end building is a doorway with pilasters and above the doorhead, a circle decoration with inscribed 'X' – much like the decoration found in the Headquarters Block.

The area surrounding the site is of a completely different character and in many ways at odds with that of site. To the south of the site are the rising tower blocks of residential flats which carry up the side of the mountain and tower over the site. Of some interest is the historic Cathedral of the Immaculate Conception, though apart from this the streets are full of modern high rises.

To the north of the site is the open-air Graham Street Market, with the historic stepped street (Pottinger) running directly north of the main entrance to the site. This street would have originally run from the site to the harbour, and retains much of the original stone steps today. It provides an interesting culture clash; small independently run market stalls line either side, while modern signs and buildings also rise overhead.

St Paul's College, Glenealy

Though full of high-rise commercial buildings (especially immediately adjacent to the site), this area remains at ground level one of the most small-scale and typically Chinese parts of the city.

The historic stepped Pottinger Street with market stalls either side

Mid-levels escalator

Fringe Club

Detail of the Headquarters Block north entrance. Note the architectural features similar to those of the Fringe Club.

View of the central bay of the Headquarters Block showing brick and render similar to the Fringe Club.

The Central Street Market covers the area of Peel Street, Graham Street and Gage Street, and includes over 100 independent stall operators spread among other small-scale shops such as butchers and fish mongers.

This area has been home to small shops and markets since 1841, when it was called Middle Bazaar. In direct contrast, the area is also home to expensive antiques markets along Hollywood Road and the Mid-Levels escalator along Cochrane Street.

Soho and Lan Kwai Fong

SoHo, named for its location south of Hollywood road, covers the area to the west of the site, either side of Staunton Street and Elgin Street. The area contains a number of bars, restaurants, art galleries, antique stores and nightclubs, as well as blocks of residential housing. Staunton, Shelly, and Elgin Streets now form what has been called Hong Kong's new 'alternative café culture', and is a known hangout for ex-pats visiting the various ethnic restaurants and little antique stores. However, despite its notable amount of modern commercial buildings and lively nightlife, the area still retains some of its past heritage in the form of traditional shops and three to four storey buildings.

Prior to the 1990s this are was little known and barely visited. It was the construction of the Mid-Levels Escalator that brought popularity to the area, as it runs straight through the eastern edge of SoHo along Shelley Street. The Central-Mid-levels Escalator was built in 1993 with the intention of connecting the residential areas to the south of the island with the (geographically) lower commercial and business areas to the north of the island in Western and Central District. The escalator stems from Central (near Central Market) at Connaught Road and stretches nearly halfway up Victoria Peak, ending at Conduit

Wellington Street

Road. The escalator is 800 meters in length and is the longest outdoor covered escalator system in the world. The escalator runs downhill from 6 am to 10 am and uphill from 10:20 am to midnight everyday.

To the east of the site is the Lan Kwai Fong district. If Soho is the interesting but quaint area of Central with small cafes and boutique shops, then this is the busy, bustling tourist centre of drinking, clubbing, and dining. Historically, Lan Kwai Fong was an area dedicated to small-level market trade, a characteristic that changed only in the late 1970s and 1980s when investment brought in nightclubs and ethnic restaurants.

Wellington Door

Headquarters Detail

Since then, the area has progressively and steadily grown to be one of the most popular spots in Hong Kong. The area is basically confined to the L-shpaed Lan Kwai Fong Street, which meets D'Aguilar Street.

2.5 OWNERSHIP AND MANAGEMENT

The site was officially decommissioned in 2006, and since then has not been in use for any permanent function. The site is owned, managed and maintained by the Hong Kong government.

2.6 GAPS IN OUR KNOWLEDGE

There are certainly gaps which occur within the understanding of the history of the site. The pre-colonial history of the site is difficult to trace and the history of the whole of Hong Kong requires more research than is necessary. Given the nature and needs of this report, however, it is thought that an assessment of the site from Colonisation onwards is sufficient.

Given the past use of the site, the amount and type of evidence for the Gaol and Prison history is significant. A remarkable amount of information is available with regards to the running of the prison. This includes numbers and types of prisoners, penal diet and punishments, clothing allowance for both prisoners and staff, gaol regulations, staff employees, medical records and government correspondence, all of which are available through the Hong Kong University Digital Initiatives project, or through the Hong Kong PRO. However, most of these records only exist into the 1940s, and afterwards little evidence is available. Particular areas in the history remain unclear, such as the use of Victoria Gaol as a Remand Prison (specifically which buildings were converted for this function) and the use of the buildings during the Japanese occupation.

There are also a number of records with regards to building works. However, as many of the building names and uses have changed over time it is not always clear which works projects are referring to which structures. Some works descriptions run for pages while others are barely mentioned, making the creation of a clear and precise history difficult for some phases of construction.

In terms of archaeology, it is possible that earlier building foundations or other historic evidence survive below the historic buildings, but this is unknown as there have been no archaeological investigations carried out at the site.

Therefore, any layout of previous buildings relies solely on historic maps, and there are major gaps which occur between the dates of these maps and plans.

While almost all of the site was accessible during a number of site visits, there were still spaces which were not open or unsafe to enter. All of the buildings, except for Bauhinia House, were inspected, though within some of the other buildings there were either locked doors, or the presence of an architectural exhibition blocked views or access into some rooms. Despite this, it is felt that an accurate understanding of the buildings was formed.

3

SIGNIFICANCE

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3 SIGNIFICANCE

3.1 INTRODUCTION

The following section will assess the significance of the Central Police Station Compound and Victoria Prison, as it existed at the time of this report (March 2008). The assessment of significance is based on conservation principles and ideals intended to maintain and protect the built heritage, and stems from concepts in James Semple Kerr's Conservation Plan, Informed Conservation (Kate Clark) and English Heritage's Conservation Principles: Policies and Guidance. The assessment has been made only after thorough documentary and on-site research used to determine significance based on traits such as history, association to people or events, architectural features, rarity, construction type, statutory designations and so on. There will be reference to various aspects of the site, specifically:

- ◇ Local, Regional and National
- ◇ Historical
- ◇ Townscape
- ◇ Architectural
- ◇ Archaeological
- ◇ Technological
- ◇ Associative
- ◇ Collections and Archives
- ◇ Cultural
- ◇ Individual buildings

At the end of each of the above, there will be a highlighted summary of the significance of the section.

3.2 LOCAL AND REGIONAL SIGNIFICANCE

The site has formed an important part of the local landscape since the construction of its first building in the 1840s. To the local population it has always formed a symbol of law and order, placed directly in the centre of Hong Kong and being a constant visual reminder of the presence of the Police in the colony. When the site was developing throughout the 19th and early 20th century, its local and regional significance were tied more to the intangible ideals of government than to the physical construction and architecture; the structures were essentially not greatly different to the other colonial structures being built throughout Hong Kong. As time progressed, however, the majority of historic buildings throughout Hong Kong were demolished to make way for more modern high rise structures.

The survival of the site is due to its continued use as a prison and police station, and its survival is what makes it of such great local and regional importance today.

In 1995, the Central Police Station compound, Former Central Magistracy, and Victoria Prison compound were named Declared Monuments. Today, they are three of 82 Declared Monuments in Hong Kong, with only 26 total on Hong Kong Island. This low number is evidence of the rarity of important historic buildings here. The Central Police Station is interesting because of its date of construction and because it has survived. It is also significant for its historic and cultural ties to the community.

The buildings here are not necessarily of international heritage significance. The style and construction of the buildings is basically typical of British buildings, with some alterations employed to account for variations in climate and necessity of function. However, the buildings on the site are of great regional significance as some of the last remaining evidence of the colonial era. The buildings here are particularly notable for their contrast to the surrounding areas and throughout most of Hong Kong, as new buildings which were constructed from the mid 20th century onward no longer had much resemblance to traditional British architecture.

When, in 2003, the government announced a proposal for conversion of the Headquarters Block and Magistracy into food plazas, a museum and art gallery, there was an immediate public outcry against the possible misuse of the buildings. The Central Police Station Heritage Taskforce (CPSHT) was formed, and immediate steps were taken to encourage the protection of the site, including the writing of letters to Chairman of the Home Affairs Panel, public workshops, and setting up a website describing the value of the site. A pamphlet produced by the Concern Group for the Preservation of Hong Kong's Historic Buildings rather emotionally proclaimed 'Let's Join Hands to Protect the Central Police Station Compound.' The pamphlet then continued on to say '*These century-old historical monuments are a testimony to Hong Kong's development, imbued with the collective memory of Hong Kong citizens, and an invaluable heritage of ours and our descendants'*. The scope of the response and support for the pressure group is an indication of the extent of cultural significance of the site.

In 2006 the site was decommissioned, and in March of that year a series of events was held as part of 'Victoria Prison Decommissioning Open Day'. Performances took place, a farewell parade was held, and the site was opened up as a kind of museum, with displays of department vehicles and other items recently used at the site. The events were a success, and the public visited the site en masse. The holding of such ceremonies and indeed the large number of visitors was indicative of a public interest and affinity for the site.

The site is significant locally and regionally for its representation of colonial history, its historic ties with many of the local population (as inmates, employees, visitors, etc.), and its sheer survival as an historic building.

3.3 HISTORICAL SIGNIFICANCE

A Centre of Law and Order

At the time of its colonisation in 1841, Hong Kong was a small and undeveloped series of coastal villages which through British rule saw major development both physically and administratively. These changes had a profound effect on the site. Just three months after Hong Kong was proclaimed as part of 'Her Majesty's dominions', Captain William Caine of the 26th Regiment of Foot was appointed Chief Magistrate. In the following year the Treaty of Nanking was passed (making Hong Kong a Crown Colony) and the first major British building in Hong Kong was constructed at the site, originally intended for use as the residence and offices of Caine. The need for a prison must have been pressing, though, and regardless of the inadequacies of the structure it was converted for use as the first Victoria Gaol. This immediate need for a prison demonstrates the importance (to the British government) of introducing law and order to Hong Kong. The new Gaol was placed in a position overlooking the centre of the colony.

Early Hong Kong was reported to be a hotbed of crime (especially gang related), which necessitated the constant expansion of the gaol site. The creation of a central site for law and order was further solidified when the first Central Magistracy was constructed, and when the Barrack Block and officers quarters were built in 1864, thus introducing the police force to the site. Despite an obvious lack of space the function of the site remained constant; a prison and police station located in a dominant position on a stone outcrop in the centre of Hong Kong. Over time the growth and expansion continued, with barely a year passing that new buildings were not constructed or at least proposed.

Numerous prisons were built elsewhere throughout Hong Kong island, Kowloon and the New Territorities, yet the function of the site continued; whether by means of habit or as an intentional attempt to keep the penal system in the public eye. Indeed, only two years after the construction of a new gaol at Stonecutter's Island, all the prisoners transferred from Victoria Prison to go there were transferred right back. This continued use is one of its greatest points of significance, as various physical aspects of the site combined with its survival in such a central location are key for understanding the relationship between the residents of Hong Kong and this manifestation of an essentially British penal system.

Early alterations and expansion were in response to a basic need for more facilities, or as a means of applying varied prison practice. In the mid 19th century a treadwheel was installed, and in the late 19th century large, open cells were being converted into use in the 'separate system'. In contrast, many later alterations for ventilation, lighting and so on are a sign of progressive thinking and the call for more humane accommodation. For example, dry earth toilet facilities were installed to reduce filth and smell, while cells were provided with ventilation slots in the early 20th century. With the reversion of Victoria Prison into first a Remand Prison and later an immigration centre, the alterations continued. Note, for example, the creation of a tennis court in the lower yard for children, as well as the conversion of F Hall into a reception centre, with communal cells for mothers and children on the first floor. The evolution of the spaces here are indicative of 150 years of progressive use, and are significant to the history and understanding of Hong Kong, its penal system, and government rule.

The site is significant in that it is a clear physical representation of the history of law and order in Hong Kong from 1841-2006.

Early Prison Life

From its early start the site was the beginning of the centre of law and order in the colony, and it was greatly affected by the ways in which the British penal system worked. Early forms of punishment included oakum-picking, breaking stone, and in extreme cases lashing; all popular in Victorian prisons and workhouses throughout England. A number of devices were directly imported from England, such as the tread wheel that arrived in 1852. The application of the British system to a colonial prison created an interesting dichotomy: punishments, diets and conditions considered to be severe and inappropriate in Britain were luxurious in comparison to other Chinese prisons. Early reports and records are proof of

a constant imbalance of opinion between government officials, often with the Colonial Surgeon finding conditions deplorable: '*It is a filthy, disgusting place, badly ventilated and altogether unfit for occupation by a human being*' [1] while others were concerned over the inability of conditions to deter crime:

> *'The human system of English prison discipline, so opposite to the cruel and oppressive character of Chinese goal management, renders some punishment beyond that of imprisonment a positive necessity to the Colony. It can readily be understood that imprisonment with hard labour in the Gaol of Victoria... would scarcely operate as a prevention of crime'.*[2]

The arguments were especially clear with regards to clothing and food, with new clothes being produced each year and all prisoners being bathed with soap twice a week. The diet of the prisoners was often better than that of the 'coolies', and the 1859 Gaol Regulations call for three meals a day, at least two hot, with typical meals including rice, fish, and vegetables for Chinese prisoners and beef or pork, bread, vegetables, tea and sugar for all other prisoners. Such 'good' treatment would have been previously unheard of in China, though it continued to come under questioning by government officials.

The Victoria Prison (southern) part of the site is historically significant for its representation of the development of the prison and treatment of prisoners, which is directly represented within the building fabric.

Hong Kong Police Force

There appears to have been an irregular police force of sorts from the outset of Hong Kong. In 1843 all the Europeans who could be regarded as having the rank of a gentleman (43 in all) were appointed as Magistrates, and at this stage they outnumbered the actual police by 3 to 2. The force was put onto a better footing by Charles May, an Inspector with the Metropolitan Police in London, who was recruited in 1845. However shortage of funds made it a dubious force for good with all the policemen initially being Indian or European, as there was apparently a great deal of distrust toward the Chinese and their ability to hold a place in the force. Chinese recruitment began in 1847, but only on a small scale.

The development of the police force was erratic and was the subject of various corruption scandals. Low level corruption appears to have been endemic throughout the force's existence – perhaps this is the case with all police forces – but was shown in a more serious light in the years after 1969 when Commissioner Charles Sutcliffe found that the previous Chief Superintendent of police had been receiving bribes of several million dollars and a general series of resignations and dismissals followed.

However, despite the endemic corruption the police force appears to have been tolerated by the whole community and the provision of justice was seen to be reasonably impartial. An American is quoted in the "Friend of China" periodical of July 1845 when reporting on the hanging of a British seaman '*It is only in the colonies of Hong Kong and Macao that a European would be executed for the murder of a Chinese*'. This is, perhaps, an over optimistic view of how the forces of law and order were perceived and clearly many disputes between Chinese were settled without any recourse to the British legal system. However the site in general with the magistracy, police and prison represents in the most immediate way the presence and enforcement of law and order in Hong Kong from the start of the colonial period until the final abandonment of the site for police and prison use in 2005.

The Central Police Station (northern) area of the site is significant as it shows the development and growth of the police force, and the accommodation thought necessary to house the different ranks and separate ethnic groups.

3.4 TOWNSCAPE SIGNIFICANCE

Through an assessment of historic photographs of the Central Police Station, one of the most striking characteristics is the relatively unchanged scale of the site as compared with the rapid growth of the surrounding area. Photographs of the 19th century to the mid 20th century show the site set against the backdrop of the nearby mountains to the south with the harbour visible out to the north. This perception was altered, however, with the sudden development of dense high rises on all sides of the site in the 1960s, which since then has neither stopped nor slowed. Comparatively the site has maintained its original design of single- to four- storey buildings, making it one of the few remaining sections of low rise buildings left in the centre of Hong Kong.

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1 HK PRO: CO 129/38: 89-95
2 HK PRO: CO 129/182: 189

The site thus provides some impression of the scale and density of the colony prior to the 1960s and is significant in terms of understanding the history of the development of the city.

The combination of low-rise development and open spaces is a significant reminder of the appearance of Hong Kong pre 1960.

Retaining Wall

Another key characteristic is the high granite retaining wall, which is a defining feature of the site. From the first use of the site as a prison there has been a necessity for security – both as a defensive measure for the security of the police force and the Magistracy as well as to keep prisoners securely within. The site occupies a complete city block so that all passers by using the four surrounding streets (Hollywood Road, Chancery Lane, Old Bailey Street and Arbuthnot Road) are immediately aware of the site despite being virtually impossible to see what was within. The retaining walls are some of the earliest structures on site, including the ground floor of exterior walls of Bauhinia House as well as the run of steps on Chancery Lane and the steps to the south of the Magistracy. The only major losses to the walls are below the Magistracy on Arbuthnot Road, which was dismantled and rebuilt in lime and cement mortar using the same facing stones during the construction of the New Magistracy, and the wall at the corner of Hollywood Road, Arbuthnot Road, and Wyndham Street, which was demolished to create a new road junction.

The walls are highly significant to the streetscape; they define the perimeters of the site and are indicative of the nature of its use. The loss of these walls would be a serious loss to the history and character of the area. Though it will inevitably be necessary to create new entrances to allow pedestrians access across the site, it would be desirable to maintain as far as possible the sense of enclosure and separation from the surrounding streets as is compatible with the new use.

The high walls enclosing the site are highly significant as the most immediate signal of the power of the police force and the security of the Gaol. They are also some of the earliest built fabric on the site, and some of the earliest colonial structure within Hong Kong.

Courtyards and Trees

The two large open courtyard spaces and to a lesser extent the trees they contain are significant. By the standards of this part of the city centre, as open spaces they are substantial in size. Even more interesting is that they have been essentially private (or at least non-public) spaces. Any other comparably sized open spaces, with the exception of the garden of the Governor's residence, are public and full of people and traffic. These spaces will under any new use be opened up to become public – but it would be desirable to maintain something of the private character. It would be especially important to keep these areas free of motor vehicles – though photographs show the Parade Ground used for this purpose for many years the effect is detrimental to the atmosphere and character of the open space.

The two courtyards have very different characters. The police yard is very much a parade ground with the buildings addressing the space and set around it in a formal and designed manner, the buildings themselves being clearly designed architectural statements. There would need to be little difference in tone between the parades and ceremonies shown in the historic photographs of the area and any new public entertainment put on in this space under its new use. The exercise yard of the prison has a very different feel. The surrounding buildings do not address the yard in any architectural way and the south wall is high and forbidding. The adjacent buildings are strictly functional with no decorative features. This is a utilitarian place, not a place for ceremonies. These differences in character are significant for understanding how the two spaces worked, especially with regards to social and cultural perspectives.

The trees in both courtyards are significant in that so few trees survive in this area of central Hong Kong. The trees in the prison yard are more impressive due to their location; bringing nature into such a bleak space must have redeemed its character for many of the prison inmates. The trees in the police parade ground are modest by comparison but they do definitely add to the character of the space and should be retained.

The two courtyards and their trees are both significant spaces reflecting the different uses of the two areas and also as a reminder of the open spaces that existed in the city through until the mid 20th Century.

The courtyards are significant for their historic uses and relationship to the site; the Parade Ground is an important aspect of the Central Police Station and the prison yard is representative of the life of prisoners. The open spaces and trees are notable for their rarity in the surrounding area.

Public Façade

Both the Police Headquarters Building and the Magistracy present designed faces to the public road. These are impressive buildings that show the dignity of their functions, with the high basement storey of the buildings continuing the line of the outer granite wall and maintaining the fortified feeling. The scale is large to create a feeling of power and authority with impressive entrances – but this is achieved in a way that integrates the wall into the design of the façade. Adding to the authoritative presence, both buildings maintain a classical façade that mimics grand government buildings both in Hong Kong and in Britain. Architectural details like the fasces are symbolic of legal power while the GR on the façade of the Police Headquarters remind the public of their colonial ties to Britain. Despite the continued hemming in of the site with high rises on all sides, the buildings still have a strong presence and present a bold face to pedestrians at ground level and even coming up to the site on the mid-levels escalator. Both these buildings create very significant presence on the adjacent streets and will be familiar to every resident of Hong Kong.

The street façades of the Police Headquarters and the Magistracy are both significant reminders of the authority of the state.

In direct contrast to the Police Headquarters Block and the Magistracy, the remaining public façades of the site take on the role of being either domestic in scale – like the south end of Old Bailey Street and the northeast corner of the site – or an obvious representation of prison accommodation. The domestic-scale buildings (especially Old Bailey) are important for understanding the deliberate design of the Police accommodation blocks to both fit in with the surrounding area and provide the most habitable accommodation possible on such a site. The prison building façades are notable for their utilitarian design and the way in which they relate to the boundary wall, as the buildings seem to have been designed in the best way possible to separate the prisoners from the outside world (and vice versa) while still allowing the public to realise that this was a prison site.

The public façade of the prison and domestic-scale police buildings are important for understanding the intended relationships between the site and the city outside its walls.

3.5 ARCHITECTURAL SIGNIFICANCE

The significance of each individual building will be discussed in more detail in section 3.11, with a brief summary given here.

This site is complex in design and layout, made complicated through years of expansion and alteration. The buildings here are of a utilitarian nature and at the prison in particular they have been fitted in to maximise the use of space and to create operational convenience; this is especially true of buildings such as A Hall (building number 11), C Hall (building number 13). For the Magistracy and Police Station the design is only marginally less convoluted, with the parade ground creating at least some atmosphere or order and the exterior façades of the two main buildings having a more thoughtful approach to architectural design. Still, the significance of the buildings on site lies less in architecture and more in the historic and cultural references.

In the widest sense these buildings are architecturally significant as they represent the only surviving group of late 19th and early 20th Century buildings left in the city centre. Whilst they would not have been in any sense remarkable in the Hong Kong of the 1950s their very survival makes them significant as an architectural group. There are, of course, numerous 19th and early 20th Century buildings that have survived the massive redevelopment (including the nearby Fringe Club), but this is the only site where there are a concentration of historic buildings. Additionally, the site's group value is added to by the wide range of styles and building types here, with the earliest buildings dating to 1858 (D Hall – building number 14) and the latest historic structures constructed in the 1940s (with many alterations afterwards). The buildings therefore display changing attitudes to design and materials while still working together to create a cohesive site.

The majority of the earlier buildings on site are clearly of a colonial style. The earliest buildings (the Barrack Block and the officers' quarters at the northeast corner) have a classical design inspiration combined with interior layout typical of Victorian Britain. Other features such as the sue of red brick in English Bond and the importation of metalworks such as locks shows constant connections with Britain. However, the use of Chinese tiles for the roofs, as well as the provision of verandas and balconies is clearly an attempt to adapt the building to the realities of the climate. This was obviously an ongoing issue. In the late 19th and early 20th century many of the cell blocks were being designed in a style similar to those in Britain, and the lack of consideration for heat and

ventilation was apparent: public works documents described changes to cells to improve ventilation as early as 1914 and 1928.

In the case of the Police Headquarters and the Magistracy, these buildings are clearly British in style and were either designed by an architect from Britain or one who was trained there. The classical style and various detailing are directly indicative of colonial rule and indeed of important government structures as well. Both of these buildings display an interesting use of the sloping characteristic of the site. The Police Headquarters has a strong street-facing façade of four storeys, finished in cement render and covered in symbolic detailing. Conversely, its courtyard-facing façade is of a much more domestic scale, only two storeys in height with brick construction and very little architectural detail. The Magistracy similarly has two different faces. The public façade designed very much in a style to signify the power of the court and makes interesting use of the granite retaining wall as a basement, making the building appear to be set atop a large cliff and demonstrating the fortified nature of the site. However, its interior elevation is much more conventional and at a smaller scale.

The officer's quarters at the north east corner of the site (buildings number 6, 7) are less significant architecturally though they still make an interesting contribution to the streetscape. The original outer wall of the compound has been demolished at this point to allow for the realignment of the road and the new concrete wall that has replaced it is a poor substitute for the original. The houses are built in painted brick and stucco under Chinese tiles roofs. The windows are all in painted timber in a variety of styles. The most notable features of the houses are the cast iron and stone balconies which articulate the façades and add style to them. The houses are simple in design and detail and are presumably the work of a surveyor working in Hong Kong. Their interest lies more in their history, townscape value and the message they have to give about the make up of the police force than in their architectural value.

The gaol blocks are essentially utilitarian buildings put up to serve a purpose with no intention to spend more money than was strictly necessary. They are inevitably solid – you need to keep the prisoners in. The earlier blocks are built of painted stuccoed brickwork on granite bases; the later blocks are all in brick.

All the blocks have flat concrete slab roofs with the exception of E Hall which still has a pitched tiled roof.

The architecture of the Magistracy, the Police Headquarters, the Barrack and the domestic accommodation all have some significance. The other buildings on the site are essentially utilitarian and their significance lies in the historical and cultural value rather than in the architectural quality.

3.6 ARCHAEOLOGICAL SIGNIFICANCE

Little research has been undertaken to find out the prehistoric and pre-colonial use of the site, and it is unlikely that any evidence would be found. Rather, the focus of the research here has been on colonial and later use. The site has been occupied as a prison and police station for over 150 years, and in that time a significant amount of alteration has taken place; the constant demolition of old buildings and construction of new will have inevitably left some traces of below ground archaeology, especially in the area of the south courtyard where the original Magistrate's House (later Debtor's Gaol) was located. The assessment of historic documents such as Public Works reports suggests that in many cases the new buildings required substantial excavation for the introduction of new foundations, though alternatively some of the buildings appear to have been constructed on earlier foundations, for example Dormitory Blocks A & B (building number 4), built on the earlier foundation of an 1840s Guard House.

The open courtyards of the prison would have been used for various purposes, with some of the hard labour and punishment taking place in these areas. There is certainly potential for finding evidence of these functions. Of some interest is the possibility of burials somewhere within the precinct walls of the Gaol. It has been suggested that following the hanging of murderers Chung Kum-sow, Kwok Cuok-la, Ung Apow and Lam Ayow, Governor Davis ordered that their bodies be buried within the grounds of the Gaol, in order to discourage crime by way of Chinese beliefs relating to burials. At this point it is unknown where the burials may be located, if they still remain, or indeed if the event occurred, though it is an area of potential.

There are references to underground tunnels at the site, with one specific historic reference vaguely describing tunnels from the Barrack Block to the quarters; this is perhaps the subway that was later converted into an air raid shelter during the Japanese

bombings in WWII. It is likely that many of these tunnels were destroyed during the bombing of Hong Kong in WWII. Another more accurate report gives details of a tunnel connecting the site to the new A and B Blocks built on the west side of Old Bailey Street: '*communication with the existing Gaol premises situated to the east side of the Old Bailey has been provided by the construction of a subway under Old Bailey*'. This can be dated to 1896 and may still exist. There is also evidence in the building fabric for tunnels – at the end of the Ladder Store in C Hall is a blocked archway, which likely led into a now-blocked tunnel at some stage.

The above-ground, or buildings archaeology, of the site is also of significance. Alterations have occurred within many of the buildings over the history of the site and these changes are often clearly evident in the fabric of the building. Blocked archways exist in the Laundry area leading into D Hall, as well as on the front façade of the Assistant Superintendent's Office, and Dormitory Blocks A and B (D S Ps Quarters and Married Inspectors Quarters) have open arcades which have since been blocked. These are just a few examples of the various alterations which are evident in building fabric. In some cases seemingly poor examples of repair in the complex are actually important evidence of the historic management of the site; often minor repair and sometimes large scale construction was carried out by prisoners.

Examples of this can be found with the replacement of tiles in the Entrance Hall of the Central Magistracy, as well as with poor stone repair with cement mortar throughout the site.

Mortar detail

Less permanent archaeological evidence at the site provides an insight into the way in which the prison was used. These include examples such as: the bolting of tables and benches to the floor to avoid prisoners using them for use as weapons; the use of plastic stick-on hooks throughout the prison for the same reason; signs in kitchens and mess rooms relating to the various menus and issues of health; posters in the hospital areas relating to malaria and other disease; pencil writing in foreign languages on the walls of one of the hospital wards; and so on. There are several pieces of historic evidence such as this which, though not part of the buildings themselves, provide an understanding of the site. It is not necessary to retain this evidence though it should be recorded.

Alternately, it may be interesting to keep in situ the more permanent objects such as room and door signs, or the combination lock safe doors and gun racks into the armoury.

The below ground archaeological potential has not been properly assessed but the sheer scale of alterations makes the site archaeologically significant. There is also potential archaeological significance in the building alterations.

3.7 TECHNOLOGICAL SIGNIFICANCE

There is not much at the site that is significant within British construction, though the application of many of the materials and techniques used is significant within the history and context of Hong Kong. The original Gaol building was the first structure of British design and materials to be built in Hong Kong. The use of brick and stone was a new introduction to the area, which previously relied mostly on timber framing and matsheds, though of course there was nothing that had not been commonplace in mainland China for many centuries. While the early prison building no longer exists, the surrounding precinct wall is still in place including the south east corner which was incorporated into Bauhinia House.

The design of the 1858 'radial plan' prison is of some note, as it shows the flow of information from America to Britain to Hong Kong. While there were many of these radial plans built in the US and Europe in the mid 19th century, they were a rarity in Asia until the prison here was built. It is possible that the seeming success of the radial plan in Hong Kong affected the rest of Asia: 20 years later Japan decided that radial plan would form their 'model prison' and the first one, Miyagi *sujkian* was built 1879 – 82 by a British

architect. Between 1888 and 1929 Japan constructed 21 similar prisons. China was then influenced by Japan, through the scholar Ogawa Jijuruo, who designed Peking First Prison (1909) and Hubei First Prison (1910). China then went on to construct 39 of these types of prisons by 1918. So, while the use of radial plan was of no rarity across the world, it is notable that Victoria Prison was the first radial plan to be used in Asia, and possibly went on to influence many more. [3]

Throughout the early construction of buildings at the site, ranging from the Barrack and officer's quarters in 1864 to the Magistracy in 1919, some materials and techniques used were being introduced to Hong Kong due to a previous lack of experience of the materials and their properties. The Magistracy was constructed with steel truss roofs, which would have been fairly uncommon at this time, and it is possible that this is one of the earliest buildings in the colony to use the material. Three years later The Central Police Station Headquarters employed the same construction. However, importing the steel delayed the project some 2 years as the consignments of steelwork arrived late; it is possible these shipments were diverted for use by the British during WWI. Other materials which would have been new to the colony were Portland cement for mortar and render, reinforced concrete floors, Granolithic, and ruberoid.

The early misunderstandings of Chinese workers in the building trade led to difficulties in accurate tenders for work and completion of jobs. In 1844 the Land Officer comments that:

> *'almost all contracts hitherto entered into with Chinamen have been obliged to be finished by the government, for the works were taken at far too low an estimate, and the consequence was when the parties found they would become losers, both contractor and security decamped, and in some instances they were imprisoned'.* [4]

The British understood the need for alterations in typical design and construction and adapted the buildings for the very different climate. This included the use of verandas with sun shades and the covering of roofs with Chinese rolled tiles.

Fittings such as locks were not being manufactured to what was regarded as 'an acceptable standard', and so were shipped in from abroad. A record for the construction of B Hall states that '*the locks for cell doors are of the special type manufactured for such purposes and were obtained from England*,' while another record notes the same for locks used in E Hall. It is likely that other materials were shipped in, such as the cast iron balustrades and balconies.

The Central Police Station and Victoria Gaol were two of the first places to receive new electronic and technological installations in Hong Kong. In 1895, the Central Police Station is noted as being in '*direct telephonic communication*' with a number of government offices, including the Post Office, Public Works Office, and Sanitary Board Office. In 1898 a system of mains hydrants was installed throughout the old and new gaol buildings '*for the purposes of fire extinction*', and the Magistracy was fitted in 1914 with electric light, fans, and bells (the remainder of the gaol was fitted with electric bells in 1919). In 1947 a Radio Control Room was operating from '*the top floor of one of the barrack blocks*', and by 1951 the basement of the Headquarters Block had been altered to provide a new Control Room. This division within the police continued to grow, eventually becoming the District Command and Control Centre within the old gymnasium (in the Headquarters Block) in the mid 1970s.

There is some modest significance in the use of unfamiliar materials and construction techniques in the buildings. There may have been interest in the early use of technology such as telephones and electric light but little trace remains of these early installations.

3.8 ASSOCIATIVE

William Caine

Caine was one of the earliest officials in Hong Kong, starting first as Chief Magistrate in 1841, then as colonial secretary from 1854 – 9, and as acting governor between May and September 1859. As the first Chief Magistrate, Caine was tasked with setting up a prison and police force, which proved to be a difficult task considering the poor state of law and order in the previously ungoverned colony. His home and offices (later the first Gaol on the site) was one of the first buildings to be constructed by the British. Though it later proved not to have been the best course of action, Caine recruited ex-servicemen to the police force – a necessity in the political climate of the time. Caine is notable for his early involvement in Hong Kong, and Caine Road, nearby to the site in the Mid-Levels, was named after him.

There are several other notable prison and police officials. Early on, Charles May (1845 – 62) and William Quin (1862 – 6) acted as Captain-Superintendents

[3] Johnston, Forms of Constraint
[4] HK PRO: (CO 129.7, 23 July 1844)

and had great influence on the running of the police force, including May's work to forge a loyal 171-strong force, to build stations at Central, Aberdeen and Stanley, and to construct the first gaol in Hong Kong. He was later promoted to Chief Magistrate. Other officials in later years are important; of note is Li Kwan Ho, the first Chinese person to serve as the Commissioner of the Royal Hong Kong Police (1989 – 94). Following his placement, this position has since been held by a Chinese officer.

Charles St George Cleverly

The Barrack Block and officers quarters of 1864 were all built under the supervision of Charles St George Cleverly (1819 – 1897), the second Surveyor General in Hong Kong. As such, Cleverly was responsible for public infrastructure (including public works), town planning, land auction, and building construction approval. Though Cleverly oversaw numerous works during his stint as Surveyor General, he is most noted for his involvement with Government House (1851 – 5). Cleverly Street in the Sheung Wan district is named after him.

There are many important people who were involved with the construction and management of the prison and police force, with each official leaving their mark in some way or another. These various associations are of some significance to the colonial and later history of Hong Kong and the site.

Japanese Occupation

On 15 December 1941 a Japanese aerial bombardment caused severe damage to Hong Kong, and preceded the land invasion of Hong Kong island. The Police Reserve, charged with protecting the Central Police Station, installed concrete strong points at the main Hollywood Road entrance as well as converting an underground subway into an air raid shelter. The Japanese occupation of Hong Kong lasted 3 years and 8 months, and in that time the Central Police Station was cleared of debris and used by the Japanese military. In January 1942 both Indian and Chinese members (not British) of the Hong Kong police were recruited into the Kempeitai, a reformed group of military police headed by the Japanese gendarmerie; they also went on to take over all police stations. The Police were organised into five new divisions: East Hong Kong, West Hong Kong, Kowloon, New Territories, and Water Division with the headquarters in the Supreme Court Building.

Headed by General Rensuke Isogai, the Japanese ruled over Hong Kong with martial law and established a military government composed of the departments of politics, civilian, economy, judiciary, and navy. Some 7,000 British soldiers and civilians were kept in prisoner-of-war or internment camps, though it is unclear whether Victoria Gaol was at any time used as one of these camps, if it was abandoned due to bomb damage, or if it remained in use as a general prison and remand prison. Following the American bombing of Hiroshima and Nagasaki in August 1945, the Japanese surrendered. The Magistracy also played an important role following the war, as it was used for the trial and conviction of may Japanese for war crimes.

There is some significance that the site witnessed the effects of Japanese occupation, and that the Japanese police force used the site as a Headquarters. There is the possibility that the surrender of the Japanese forces occurred here, and it is known that the Magistracy was used for war crime trials.

3.9 ARCHIVES, COLLECTIONS ETC

There is a vast wealth of information relating to the site, whether in the form of articles and books or in the primary sources of archives and public records including maps, plans and other various historic reports. The information currently available is scattered throughout different locations in Hong Kong. A collection of relevant books and theses are held at the Hong Kong University Library, survey maps and some plans are held at the Hong Kong Lands Department, various plans and records are at the Hong Kong Public Record Office, while further information is available at Ancient Monuments Office, Hong Kong Police Museum, and elsewhere. Despite the scattered nature of this material, it still forms a valuable resource for understanding the physical development as well as the social, cultural and historical aspects of the site.

One of the most useful sources of information is that found through the Hong Kong Univeristy Library's Digital Initiatives. Available online for Hong Kong are the Sessional Papers (1884 – 1940), Administrative Reports (1879 – 1939), Hong Kong Hansard (1890 – 1941), and the Hong Kong Government Gazette (1853 – 1941). From these documents one can gather substantial information about a number of topics. Public Works records describe everything from window replacement to detailing the construction of numerous buildings, while the Gazette has articles pertaining to the diet and treatment of the prisoners, the main members of the police force, and the number of criminal offences and booked criminals in a year.

While large amounts of information are not held in one place and therefore do not form a 'collection' as such, they should be considered when assessing the significance of the Central Police Station. The existence of such a wide range of documents allows for a complete understanding of the site and therefore provides a more complete assessment of significance. Inevitably the considerations of this material when writing this Conservation Management Plan has been relatively superficial. A great deal more research work could be done on the detailed history of the site.

The wealth of archive material from original sources all adds to the significance of the site and the potential for understanding its development and history.

3.10 CULTURAL SIGNIFICANCE

Assessing Cultural

The assessment of cultural significance is always a difficult task, and it is here compounded by the assessment being carried out by non-residents of Hong Kong. A basic assessment of the obvious issues is given below. However, for a full and detailed assessment of the cultural significance of the site it will be necessary to consult with people who are permanent long-term residents of Hong Kong who can better interpret the nuances of society's view of the site and its buildings.

Colonial Ties

Since its early establishment in 1842, the site has had a strong presence in Hong Kong and has played an important part in the history and development of the colony. From a very early stage it was used both as the Magistracy and the Prison, perched atop a natural stone outcrop overlooking the harbour and the growing colony around it. This location at the centre of the city gave the advantage of dominating the landscape, with vast stone walls creating a visual separation between the site and the rest of the city. This visual and political vantage point allowed the government to display its authority, and made the site the centre of law and order in Hong Kong for several decades. Today, it forms one of the few remaining examples of colonialism in Hong Kong.

The location of the site would have also created a physical presence in the city centre that made it a feature for most of the citizen's lives; a fact that was further predicated by the vast number of people who were imprisoned or employed there. The community association increased and changed over time, as the site became the Central Police Station and later had offices relating to immigration, traffic authority, courts, and so on. It is likely that most citizens of Hong Kong, throughout the history of the site's use, would have either been into the site or known someone who had worked or been imprisoned there, or at the least would have walked by the site and known of its existence. As the area around the site has grown into popular parts of the city this last likelihood increases; Lan Kwai Fong and Soho are visited by vast numbers of tourists and residents on a daily basis who inevitably experience the site in some form.

Crime and Punishment

The establishment of a prison in Hong Kong marked the introduction of British authority, the assertion of which was performed through trial, conviction, and punishment. Many corporal punishments were often carried out within full view of the public. Sentences such as hangings and floggings were (at least early on) performed outside the walls of the prison in order to form an example. While this practice was later stopped, the prison itself was still the site for executions and various types of punishment, taking place both inside and outside. Cranking and tread-wheeling were conducted in front of each prison cell in upper D Hall while flogging was carried out in the basement here. Capital punishments were conducted in the parade ground and later in another open space – always in view of the inmates and guards.

Punishments ranged from the physical to psychological and included oakum picking, stone breaking, flogging, branding, and so on. Punishments were also a reflection of social and cultural paradigms. The practice of queue cutting was undertaken for some time: long lengths of hair were cut off as a form of punishment for misbehaviour or as a means of denying suicide (prisoners could use the hair to hang themselves). The act was violent for its superstitious qualities, as this hair was thought to contain some element of strength or power.

The use of the site is very descriptive of political beliefs in terms of ethnicity and sex. From the first set of published Gaol Regulations, it was made clear that the different types of prisoners were to be kept very separate. These rules of 1853 established that prisoners were to be classified and treated according to class; and different classes were not to be allowed to associate or to be confined together.

In addition to the distribution of classes, men and women were to be kept separate: '*male and female prisoners shall always be so confined as to prevent the former from seeing or conversing or holding intercourse with the latter*.' The only means of entering the female ward was by means of a set of keys held only by the matron, and the only men allowed access were the surgeon and superintendent, who had to be escorted by the matron.

Further separation took place throughout the prison. High level officers were brought in from India and Britain, and were provided with separate accommodation until very late in the history of the prison and police station. When the Police Headquarters building was constructed, there was a Sikh Temple and Mahommedan Mosque, as well as separate recreation rooms, lavatories and bathrooms, mess halls and dormitories for Europeans, Chinese and Indians. There was also a separation for married and single inspectors and sergeants, from as early as 1864. The quarters built at the northeast of the site first in 1864 and then further buildings in 1903 were representative of a very domestic scale of life at the site, being in the form of houses rather than barracks and provided as housing for married sergeants and single inspectors.

This constant separation according to married status, race, religion, sex, conviction, etc. has always been a characteristic of the site and is palpable in the signage still found throughout. It is further echoed by the continued separation of prison from police station from magistracy; each abutting the other in extremely close proximity but still very physically delineated one from the next. These divisions are an important part of understanding the site and its use over time.

Asylum and Immigration

In the 1970s and 80s, Hong Kong was declared a port of first asylum of Vietnamese refugees following the Vietnam War in 1975. Victoria Prison became a transit and repatriation centre, with all new asylum seekers passing through the gates of site at some point. The prison later developed into an institution for accommodating discharged inmates prior to repatriation or deportation. This is an important stage in the use of the site, as it altered the perception of management and use.

'We Care'

Throughout the 1980s and 90s Victoria Prison adopted the perspective of 'We Care' – a managing principle which saw the prison more as a rehabilitation centre than a detention centre. Female inmates shared cells with their children, who had sports areas in the lower yard. Prisoners were also allowed to partake in workshops and crafts, and the general idea was to create a more calm, relaxed atmosphere. At the time of this report, it was noted that throughout the whole area of the F Hall courtyard were stickers with the above logo 'We Care', presumably placed only in this building as a means of informing both prisoners and the public who visited them of the newfound beliefs towards prison life. Early in the management of the prison extreme punishment was typical and Chinese officers were unheard of; by the point of decommisioning the site had taken on the role of rehabilition centre and all but the highest officers were Chinese. These stages in the history of the site is extremely important for its means of displaying change of use and attitudes.

Much of the significance of the site lies within the many cultural associations, ranging from the early colonial period up to the 'We Care' campaign in the 21st century. These cultural elements are often visible in the physical fabric of the site, and form an important element in the history and understanding of both the site and Hong Kong.

3.11 INDIVIDUAL BUILDING SIGNIFICANCE

In addition to assessing the significance of the whole site, it is necessary to define the significance of individual buildings. Each building will also be given a designation of significance, as defined by the parameters below.

High Significance

High Significance defines buildings, spaces or features that are of such great cultural value that significant alteration, deterioration or demolition would be a great loss to local, regional or national heritage and would diminish the value of the estate. Buildings, or spaces within them, of high significance would be limited to:

- 'Repairs that meet high conservation standards'
- Alterations to meet fire and health and safety legislation
- Removal of inappropriate or intrusive features
- Reinstatement of original elements where sufficient evidence exists
- Change to provide disabled access
- Essential changes to use necessary to ensure the long term viability of the building
- Replacement of services

Medium Significance

Medium Significance is used to describe buildings, spaces or features which retain a level of cultural importance that require maintenance and conservation to be a priority, though with the realisation that alteration is possible.

Buildings, structures or spaces with medium significance will be limited to:

- ◇ Internal changes to layouts to allow new or improved uses
- ◇ External alterations to elevations to form new windows and doors of appropriate design
- ◇ Extensions that are necessary to support new uses of a suitable scale and design and where they would not compromise the integrity of the building concept

Low Significance

Low significance is used to describe buildings, spaces or features where there is little cultural heritage present. Major alteration or loss would be acceptable if it were to benefit the site or another building or feature of higher significance. Buildings or spaces where the significance is low or intrusive and affects the overall quality of the historic character.

Changes that would be acceptable would include:

- ◇ External or internal alterations necessary to maintain a viable use, subject to planning and legislative constraints.
- ◇ Salvage of any remaining historic features or useful building materials and their reuse.
- ◇ Demolition of a building or structure and clearance of the site or replacement with a new building.

The following descriptions of significance for individual buildings on the site are the same descriptions found in the Gazetteer. They are repeated here as a means of reference, and to reiterate the importance of the buildings within the Significance section of the Conservation Management Plan.

Central Police Headquarters Block 1

Significance - High : Type A Building

This building is one of the grandest on the site, and along with the Magistracy forms the public façade of the Central Police Station complex; the building gave the site, for the first time, a public face for the Police Department. The construction employed technology which was still developing in Hong Kong (such as the use of steel trusses), and has notable details such as spine corridors, first floor dormitories open to the roof, and interesting joinery and plaster details which remain largely intact. The exterior design of the north façade is of a grand and public nature, echoing Classicism, with a more domestic and small-scale and Art Deco- style Classicism to the south. Elements such as 'GR' display the strong colonial connections that still existed in the early 20th century, while other features such as the fasces were employed as a symbol of law and order. The interior is largely complete including hardwood floors, joinery and fittings, and there is a grand Entrance Hall at ground floor as well as decorative central staircase and lobbies on each floor (which is unique to any other building on the site). This is one of the few buildings on the site that there may be evidence of an actual architect – namely Leslie Owen Ross of Britain. The original use of the building is interesting, as it ranged from dormitories to offices and religious spaces and therefore reflects the nature of the Police force in the 1920s. There is also a significant relationship to the surrounding area; the nearby old Dairy Building (now the Fringe Club and Foreign Correspondence Club) on Wyndham Street shares many of the same details and materials and is of the same style; these two buildings are evidence of design styles of the time.

In any future development, it would be possible to reinstate original doors and windows, and it is suggested that modern partitions and suspended ceilings be removed. The external appearance on Hollywood Road and the Parade Ground should be maintained as much as possible.

Armoury and Store 2

Significance - Medium

The main significance of this building is connected to the overall appearance and group value of the Parade Ground. Though constructed approximately six years later, this building repeats, at a much more simplistic and small scale level, the design and materials of the Headquarters Block south façade. The west façade is also of some interest as it merges well with the rest of buildings on Old Bailey Street side of the Central Police Station, thus creating the most domestic public face of the site. There are few notable architectural features, with the exception of the king post truss timber roof. The east-facing colonnade is a notable survival which allows for an understanding of the original design of the building, which would have had a verandah here (it was infilled in 1933). Historically, this is one of only a few buildings whose use during the Japanese Occupation is known, and the function of Stableblock at this time has remained in the continued reference to the building as such.

It would be acceptable in future development to unblock the east elevation and reinstate the original verandah.

Barrack Block 3

Significance - High

(External porch north façade - medium; single storey cell block on south façade - intrusive) : Type B Building

The Barrack Block is one of the earliest buildings on the site, and is part of a group (along with building number 4) which forms the first construction phase of the Central Police Station at this site. It is important for the physical division it provides between the police and the prison on the site, as well for its group value with other buildings on the Parade Ground, forming the largest and most notable façade within the open space. The design of the building is simple and utilitarian though also impressive in its scale and in the regular and uncompromising way that it has been carried through. Whilst the design inspiration may be classical and western the design shows a real attempt to adapt the building to the realities of climate, and elements such as verandahs and sun shades relate the building to its surroundings. The internal design made good use of the space, and design drawings provide evidence of the original function and layout of all the floors. The drawings also indicate that the building was designed by Surveyor General Charles Cleverly, an important figure in early Hong Kong history. Despite the loss of the original roof and pediments due to the 1905 addition of another storey, the way in which the new floor blends into building shows respect to the original design; the same can be said for repairs done following war damage. There is a remarkable amount of surviving fabric here, including staircases, third floor ceilings, granite floors, and timber fittings in the ground floor Armoury. Historically, the building would have played a major role and backdrop to any ceremonies held in the Parade Ground, and was used for functions such as the first Radio Control Room as well as housing some of the public offices such as the Report Room.

It would be acceptable to open up the ground floor arcade, remove suspended ceilings, reinstate original windows and doors, and unblock any blocked openings. It would also be acceptable to remove the single storey block cell to the south of the building, which was constructed in the 1980s and detract from the building externally.

Dormitory Blocks A and B 4

Significance - High : Type B Building

These buildings are some of the earliest on the site and are part of a group along with the Barrack Block (building number 3) which forms the first construction phase of the Central Police Station at this site. Also significant is the inclusion at basement level of the north wing of granite revetments and corbels which would have formed part of the Guard Houses of 1856, making this the only known evidence (aside from the retaining walls) of the earliest prison compound. These buildings form an interesting contrast to the Barrack Block by providing a view to the variance in accommodation between low- and high-level officers.

Corbel detail

The design of these buildings is classical and western in style, but makes a conscious effort in adapting to the environment, as well as employing local materials such as Chinese tiles to the roofs. The design and use of the buildings is also unique to the site for their domestic scale, as the internal layout basically formed a series of individual flats or houses within. Design drawings indicate that the building was designed by Surveyor General Charles Cleverly. Despite the loss of the south wing of kitchens and servants quarters, it is still possible to get a clear understanding of how the buildings worked. It is also unfortunate that some of the windows have been blocked for various purposes including air conditioning, though notably the original balustrades and many of the balconies remain.

It would be acceptable to reinstate the original windows, open up the enclosed verandahs, and remove the internal suspended ceilings.

Garage 5

Significance - Low

This building is not of any architectural significance, though the site is important for the original kitchen and servants block which would have been located there. It is possible that the foundations for these buildings remains in situ. The design of the building is of no particular architectural or structural interest, though it is the only example of a steel framed, timber clad garage on the site and there may be some significance to the rarity of carports of this type in Hong Kong. Its historic use as a garage for police and prison vehicles ties it into the function of the site and the early use of automobiles by these authorities, however, this significance does not override the detrimental view that the garage has within the Parade Ground area.

It would be acceptable to remove this building in future development if it were to provide space for a more viable function.

Dormitory Block C 6

Significance - Medium : Type B Building

This building forms a group with Dormitory Block D (building number 7) which is evidence of the constant expansion of police accommodation as well as the continued attempt to design buildings of a domestic scale within the site. The design of this building clearly mimics that of the earlier officers' quarters just to the south, and as such they are important for their mix of classical western design and Chinese elements such as verandahs and tile roofing. It also echoes the domestic scale of the earlier quarters, both internally and externally. Historically, this building would have been constructed on the east side of Pottinger Street, which has since become merely a ramped entrance to the site – thus making them an interesting reference to the original street layout of the area. There is a substantial survival of original fabric, including staircases, joinery and plaster details, and despite the blocking of windows and other modern alterations the building is still readable in its original layout and use. The survival of the original toilet blocks is notable, though the loss of other buildings within the original group of four (demolished in the 1960s for road works) built here is unfortunate.

It would be acceptable to remove the concrete link bridge between Block B and C, as well as to clear out the modern insertion of corrugated metal roofs and other temporary structure to the east.

Dormitory Block D 7

Significance - Medium : Type B Building

This building forms a group with Dormitory Block C (building number 6) which is evidence of the constant expansion of police accommodation as well as the continued attempt to design buildings of a domestic scale within the site. The design of this building clearly mimics that of the earlier officers' quarters to the south, and as such they are important for their mix of classical western design and Chinese elements such as verandahs and tile roofing. It also echoes the domestic scale of the earlier quarters, both internally and externally. Historically, this building would have been constructed on the east side of Pottinger Street, thus making them an interesting reference to the original street layout of the area. It also provides part of the front elevation of the site on Hollywood Road, which provides the public with a reference to the historic buildings within. There is a substantial survival of original fabric, including joinery details, and despite modern alterations the building is still readable in its original layout and use.

It would be acceptable to remove the suspended ceilings and reinstate the ground floor balcony original windows and French Doors.

Ablutions Block D 8

Significance - Medium : Type B Building

This building, along with the Armoury & Store (building number 2) and the west elevation of the Headquarters Block and Barrack Block forms the west façade of the site as visible from Old Bailey Street, and is evidence of the conscious effort made to keep the elevation of the buildings here to a more domestic scale (especially this building, clearly visible from Staunton Street). The building is interesting for its location on the site, as it is in a position which would be more suited to fall within use by the prison, but instead was used by the police. As such, there is a bridge which connects this building to the Barrack Block, thus forming the only internal connection between the police and prison side. This was also the site of the original stables, coolies quarters and kitchens for the Barrack, and it is possible that some of the earlier archaeological evidence remains beneath. There are notable architectural features, such as the decorative cast iron columns on the balconies and the ground floor covered area, the decorative archway in the cross passage, and the timber King post truss roof. Historically, the building would have been the first substantial sanitary block built on the site.

It would be acceptable to reinstate the original

windows and doors, and to remove suspended ceilings. While the cast iron columns should be retained, it would be acceptable to remove the collection of steel and corrugated iron structures to the south of the building.

Central Magistracy 9

Significance - High : Type A Building

This building, along with the Headquarters Block, is one of the most significant on the site both historically and architecturally. The building provides a very public face to the east, and its design is interesting for the contrast in styles throughout. The south and west side of the building are of small scale and domestic, and especially the south façade is relatively open and welcoming. The east elevation is completely in contrast as it is massive and forbidding, with the lower storey made of battered granite pierced only by the central door and six high level circular windows. The design of the building is clearly intended to provide both adequate space for judicial functions, as well as giving over the to the comfort to those in power – the Magistrates rooms are highly detailed and are some of the most luxurious on the site. There is a substantial level of survival here, with staircases and lobbies, doors, windows, fireplaces, ironmongery, fixtures and fittings and many of the timber floors intact; though these are unfortunately in poor condition. A very comprehensive public works report of 1919 gives a full description of the building, thus providing an accurate description of its original design and function. Unlike many of the other buildings on the site, there is little alteration made here to adjust to the style, material, or climate of China; it is a building which could have been lifted from Britain and set on the site. As such, this is a piece of colonial architecture designed to signify the importance and the power of the court.

The building is also notable simply for its location on the site – it is completely separate from the prison and the police yet it also provides a kind of 'all-in-one' service tying the other two functions together; this is highly unique both in Hong Kong and elsewhere in the world. Historically, this has always been the site of the Magistracy and while this building is a later construction, it provides evidence of the original layout of the site. It is also important for its connection with the Japanese occupation, as the courts would have been used for the trial and sentencing of many Japanese for war crimes.

It would be acceptable to remove the suspended ceilings and plantrooms form the ends of the courtrooms, as well as reorganising services.

Assistant Superintendent's Quarters 10

Significance - Medium : Type B Building

Though some sources have referred to the building as being constructed in 1914, a photograph of 1895 shows the roofline behind the Magistracy; it is therefore important as it is one of the earliest buildings on the site. The building is also notable for its similarities to the Officers Quarters of 1864 (indeed it is possible that it was built shortly after these buildings), thus displaying a domestic scale and residential qualities – the only building in the Victoria Prison part of the site to do so.

Pediment

The pediment on the gable end is of the same style as those which once featured on the top floor of the Barrack Block (lost when a fourth floor was added in 1905) and were part of the original Magistracy, making the pediment here the only remaining physical evidence of this design element on the site. This building is also important for its location and historic use as the main entrance to the prison; the blocked-up archway entrance and steps are still clearly visible today. The use of the building is interesting, as from an early stage it was used as quarters and offices for the Superintendent of the prison – a use which only diminished in the mid 20th century when the ground floor was converted into the Accounts Office. The important architectural features include the verandahs and balconies, blocked central arch, first

and second floor rooms (which include a high survival of features such as moulded architraves, panelled reveals, skirting boards, etc), glazed and panelled doors, and early wooden staircases. Also of some importance is the internal revetment on the south wall.

It would be acceptable to remove the modern partitions and suspended ceilings, and to reinstate the original windows and French Doors. It would also be acceptable, if function and space allowed, to reopen the original ground floor arched entrance in order to provide a clearer understanding of the original access and+ circulation routes of the site.

A Hall 11

Significance - Low : Type B Building

A Hall is one of the later buildings on the site, likely constructed as part of the post- WWII repairs and alterations. While it has little architectural value, it is also of a scale and design which blends well with the surrounding buildings and does not detract from the adjacent buildings, especially the Ablutions Block and the Barrack Block. The building is only really notable as an example of post-war practicality and functional design. Its historic uses have always been as offices, and therefore are not of particular note. Of some interest is the granite revetment on the north wall, though this is an earlier feature of the site and not necessarily tied to the 1945 build.

Given the low importance of the building and the lack of architectural features, it would be possible to carry out significant levels of alteration.

Granite revetment

B Hall 12

Significance - Medium : Type B Building

Though B Hall was originally constructed to mimic the designs of an earlier cell block constructed in 1901, it is the earliest example of a small-scale prison cell block of this style on the site as the earlier block was destroyed in WWII. It is also important as it provided a blue print for a similar cell block to be constructed 5 years later (E Hall). The building is typical of British and other prison buildings of the time, with central atrium and cell blocks lining either side of balconies on each level. Originally, the building would have had locks which were produced specifically for the purpose and shipped across from England. There is some evidence that these were replaced following WWII. There is a substantial amount of original building fabric, though the original roof was replaced with a flat concrete one after WWII and the public works records of 1914 describe the insertion of the large openings above the doors and the insertion of metal grilles to provide ventilation. These metal grilles and the wire mesh remain, though glass louvers have since been removed. There are few exceptional architectural features, however it is notable that the style and construction of the building blends well with the surrounding brick structures and, being the earliest brick building in this area of the site, it would have provided the basis for later adjacent structures.

As the building has little potential for future use in its present state, it would be acceptable to make significant alterations. However, as much as possible, the original features and layout of the building should be retained.

C Hall 13

Significance - Low

Though some sources date this building to 1914, it is possibly the 1929 rebuild of the prison hospital (sources describe it as being constructed adjacent to the interior prison entrance – which would have been the old Assistant Superintendent's Quarters), and was most likely extensively altered following WWII. Like the surrounding structures, the building is of red brick and without any notable architectural features. However, its design and use of materials does allow it to blend with the adjacent buildings, thus making it unobtrusive. The internal enclosed courtyard is a feature unique to other prison buildings on the site, but is not of any particular significance. There are two notable features of the building that may have relation to earlier structures. The internal revetment on the south side of the structure is perhaps part of an earlier build, as may be the Ladder Store at

Ladder store with blocked archway

ground floor level. This storage space still retained (at the time of this report) a log of ladder removal and return – thus providing an interesting insight into the importance of keeping ladders closely under watch in a prison facility. Of further interest is a blocked granite archway at the end of the storage space, which may have once provided a link to the now-destroyed tunnels under the site.

Given the low importance of the building and the lack of architectural features, it would be possible to carry out significant levels of alteration.

D Hall 14

Significance - High : Type A Building

D Hall is historically important, being the earliest dateable prison structure remaining on the site. It is also the only remaining part of the 1858 'Radial Plan' prison constructed to designs which copied the work of British architects John Haviland and William Crawford, a design which is now of some rarity outside the United Kingdom and the United States. The east wing of the building is important for its continued function as a Female Prison (from 1898), while the west wing was later used as a hospital and mortuary. There is significant archival evidence relating to the building and its early uses, which form an important overall picture of the building's history. The building (along with the rest of the radial plan prison) would have been one of the most notable on site for some time, and as such would have been a constant reminder to Hong Kong of the consequences of crime. Even today the east wing is a visible structure from Arbuthnot Road. It is not necessarily of notable architectural design, though the internal layout is notable for its early relation to prisons with central corridor and cells either side, and the use of brick vaulting in both the cells and the corridors. Unfortunately much of the buildings has been altered. Some changes are known – such as the conversion from large cells into smaller 'separate' cells – while other changes are likely associated with WWII damage such as the replacement of the original pitched roof with a flat concrete one, or are of an unknown date. Of some note are the basement and vaulted lobby, granite floors, window and door ironwork, and the early staircase. Externally, the building forms one side of the south courtyard, and therefore is a highly visible building from within the site. It is also the only prison building to have a directly visible connection of styles and finishes to the early buildings in the Police Station Compound part of the site.

While some alteration for future use is necessary in a prison cell block, it would be best if the original elements of the external elevations of the building are retained as much as possible. The removal of later partitions and alterations would be acceptable.

E Hall 15

Significance - High : Type B Building

E Hall was constructed as a directly similar building to the earlier B Hall, and as such formed part of a larger group (along with a now demolished cell block previously in the south yard) of central corridor cell blocks on the site. The continued production of these 78 cell, three storey buildings is evidence of the continued attempt to rationalise and standardise prison accommodation. However, it is also evidence of the changing ideas in cell block design, as it responded to problems with the earlier blocks by having ventilation installed above the prison doors during construction rather than as a later alteration. It is also known that this building was constructed using prison labour, which provides an interesting social aspect to the structure. As with many of the prison buildings, the exterior is not of any particular note and is intended for the most part to blend in with the rest of the buildings on site. However, as this building is visible both from Arbuthnot Road and Chancery Lane, it would have provided a public face of the prison to the outside world. Most notable of the building is its high level of survival. It is probably the most complete building on site with regards to original features, which include a king post truss roof with Chinese tiles and the central staircases. Also surviving are the basement workshops, which provide some idea of how the prisoners lived during the 20th century.

This building provides a good example of prison architecture in the early 20th century, especially given its high level of survival. Therefore, while alteration is acceptable to provide new use, it would be recommended that part of this building be retained as an exemplar, as well as the overall layout and design being retained.

Workshops/Laundry 16

Significance - Low

Though this area of the site was covered over and turned into the Laundry and workshops in 1917, it is certain that much of the structure was repaired following WWII. There is little architectural merit, and the design is not of any particular note. The early use of a steel and concrete platform on the site is interesting, and provides insight into the care of prisoners – the building provided them with a more comfortable, indoor recreational area removed from sun and rain. The most notable aspect of the building is its social history, as it would have been used in part as a recreational area – pictures from the mid 20th century show crowded prisoners vying for view of a single television screen, as well as prisoners playing ping pong. However the actual space and the west revetment wall of the laundry area is of historical significance as they formed part of the original radial prison.

Given the low importance of the building, it would be plausible to carry out significant alterations to this part of the site.

F Hall 17

Significance - Medium

This southwest corner of the site is one of the most reworked areas of the Prison, though the function remained the same for some time. The earliest building in 1898 was a Printing Shop and weaving shed, and the printing aspect of the site continued through to 1956, when the building was converted into use as a Reception Centre. Little or none of the earlier buildings are thought to remain, as a public works order of 1931 describes the demolition of the old printing shop and construction of a new one. The layout of the building as a Reception Centre is notable, as the ground floor retains the original Prison Admissions area and Visitors Area, while the first floor has been built into large shared cells with a workshop area. This would have been intended as a prisoner 'dormitory', where mothers and children were allowed to stay together in one cell, and prisoners were allowed to do small arts and crafts at the bolted-down tables and benches. This building is also accessible through an enclosed gated space from the external entrance on Old Bailey Street; thus providing the prison with its only exterior public entrance. There are few architectural features of note, minus the original windows, doors, ironmongery and some moulded capitals and brick pilasters. More important is the social history of the building, which provided a role as the connection between the prison and the outside world. Therefore, it is likely that most of the public living memory associated with the prison will be tied to this building.

While the building has important social connections to the prison, the structure is 1930s and most of the internal fittings are from the 1956 refit. Therefore, it is possible to carry out significant alterations to the interior of the building without affecting its overall significance.

General Office 18

Significance - Intrusive

This building, likely constructed as part of the post-WWII alterations to the site, is of little architectural, social or other value. It is a modern single storey building constructed to fit the site and to serve a purpose as offices. While its location, materials and style do not detract from the surrounding buildings, they also do nothing to complement or to blend into the area.

Given the insignificant nature of the structure and the small outbuildings to the north, it would be possible to demolish them.

Bauhinia House 19

Significance - High : Type B Building

Though the actual construction of Bauhinia House likely occurred c.1858 (when it became a guard house over a workshed), the outer walls of the building are known to have existed on the site as early as 1851, forming a corner watch tower to the earliest Gaol compound. As such, these exterior walls form part of the early retaining walls and are some of the earliest features on the site. This makes the Bauhinia House of great importance. Also significant of the building is its location on the exterior of the walls; it would have been a very public structure and performed the early duty of lookout and still retains the blocked loopholes on exterior walls. The architectural design of the building is more Chinese than any other structure on the site, with granite walls, tile roof, and corbelled turret. The later use of the building is significant, as it became the first half-way house for female offenders in 1984.

The exterior elevations, overall design and materials of Bauhinia House should be retained as much as possible.

VULNERABILITIES

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4 VULNERABILITIES

4.1 INTRODUCTION

This section will address vulnerabilities existing within the site, by assessing any issues facing the heritage and any problems that may need to be solved in order to find a long term sustainable future of the site. These vulnerabilities will be based firstly on an understanding of the history, context, and significance of the site, and secondly on the potential for future development. In the following Section 5 Opportunities, some of the vulnerabilities here will also be assessed from the perspective of potential beneift associated with change. The vulnerabilities of the site are presented under the following areas:

- ◇ External to the site
- ◇ Enclosure of the site
- ◇ Failure to find a sustainable new use
- ◇ Inappropriate new uses may jeopardise the site's significance
- ◇ Any new use will mean alterations
- ◇ Open spaces

4.2 EXTERNAL TO THE SITE

The character of the area surrounding the site is one of dense urban buildings with little external space and with many of the buildings being very high rise. It is probably fair to say that little could be done by way of new buildings on adjacent sites that will have any further impact on the site itself. It is already surrounded and one is aware of the adjacent buildings both from the external spaces and when looking out of the windows of the buildings. To this extent the site is no longer really vulnerable to adjacent redevelopments as 'it has already happened'.

If there ever had been a case for moderated planning in the adjacent area to respect the historic significance of the low rise nature of the Old Police Station and Victoria Gaol site, the opportunity has long since been missed.

There is more concern over the extent to which the pavements around the site have been treated. The pavement is so narrow on the north side that the door to the Old Police Headquarters building is barely useable – the combination of the steps to the door projecting onto the pavement and the pedestrian safety rail on the side of the road make for the narrowest of remaining sections of pavement. The two historic access points into the site on the east side are the private entrance directly into the Magistracy and the rather older flight of steps just to the south of the Magistracy, which would have given access to the Assistant Superintendent's Quarters (building 10) and the public entrance of the Magistracy.

Both are unusable as there is no longer any pavement with the road coming right up to the wall of the buildings. There is a pavement in Old Bailey Street but the traffic is heavy in the street and vehicles regularly mount the pavement. The whole question of appropriate pedestrian access to the site is one that needs to be urgently addressed and will require the cooperation of the highway authority if it is to be adequately addressed.

The level of traffic around the site is high. The only vehicle access at present is from Pottinger Street and this can at best serve only the northernmost section of the site. Vehicles will inevitably be needed on the southern part of the site, both for construction traffic, emergency services and for servicing the new facilities that are provided. The levels suggest that access of Arbuthnot Road will be difficult and that access will need to be from the already congested Old Bailey Street.

4.3 ENCLOSURE OF THE SITE

The enclosing walls are a highly significant feature of the site and should be respected as far as this is consistent with new uses. There will be a considerable tension in achieving access to the site that is compatible with new public and commercial use but does not diminish this significance. The historic nature of the site is that it was both defensive by keeping the public out, and protective by stopping the inmates escaping. Striking a balance over the protection of this significance whilst allowing free access to the facilities on the site will require some ingenuity. Making the maximum use of existing historic openings coupled with new features such as bridges over the walls, whilst also keeping as much as possible of the original enclosure would seem to be the right way forwards. In instances where the introduction of new openings is unavoidable it would be best to utilise areas of the wall which have been altered already, such as the corner of Arbuthnot and Hollywood.

The subdivision within the site that distinguishes three main areas (the Police Station and its accommodation, the Magistracy and the Victoria Gaol) are all distinct areas with little communication between them. Clearly this must be compromised in

any new development and different use pattern, but any redevelopment should strive to acknowledge the original sub-division.

The desire to maintain the enclosure needs to be moderated in the light of the new public use which will seek to encourage the maximum of pedestrian traffic across the site both from north to south and also from east to west. This ease of access is likely to be essential if any commercial activity is to be a success on the site. Similarly it may well be necessary to open the site up more to vehicles for servicing requirements and for access by the statutory services – in particular the fire department.

The balance between the significance of the historic enclosure and the need to find new circulation patterns will be a challenging one to strike.

4.4 FAILURE TO FIND A SUSTAINABLE NEW USE

The failure to find a sustainable new use must be the biggest risk to the site at present. Very few buildings survive when they cannot be adapted to new uses in a sustainable way. This means that either the buildings need to be put to a use that generates a suitable income stream to maintain them or the buildings need to fall into some sort of public use where a subsidy is available to pay for their ongoing upkeep. There are, of course, a whole series of possibilities that offer a combination of the two approaches. It should be noted that whilst the immediate problem may be the capital needed to repair the buildings and to prepare them for a new use this, however big the challenge, is an immediate and short term problem. If the buildings are to have a long term future and are to be maintained in a way appropriate with their historic significance there needs to be a long term income stream to pay for ongoing maintenance and repair.

This site will not easily accommodate to new use patterns. The buildings are tightly grouped together and the site is subdivided in a way that will make access and servicing a challenge and many of the buildings are planned and built for very specific purposes. It is, perhaps, tempting to consider keeping the whole site as it is at present and to turn it essentially into a museum or a series of museums which can reflect the previous uses, 'Law and order', 'Policing', 'Crime and punishment', 'Colonial administration' are all themes that could be explored in the context of these spaces. But this is a large site and these are not themes that, however educational, are likely to be highly popular and bring in large numbers of visitors. Whilst there may well be an excellent case to use some of the space for the exploration of some or all of these themes the majority of the building on the site will need to be adapted to take new uses.

4.5 INAPPROPRIATE NEW USES MAY JEOPARDISE THE SITE'S SIGNIFICANCE

Finding a sustainable new use for the site and for the buildings on it is essential for the long term future. However, a balance will need to be struck of how much adaption is permitted to the various structures. The significance of the various buildings on the site does vary considerably but all are capable of some degree of alteration and adaptation without serious damage to their significance. Such adaptations and alterations will need to be made with sensitivity and, for the most part the basic built form of the buildings, their roof lines and openings need to be respected.

The work that is carried out needs to produce a site that is sufficiently interesting for the area in order to have a distinct identity and to remain as a clearly defined whole. If the site simply became an extension of the surrounding shopping streets, low rise, but in all other respects indistinguishable from them, then the specific significance of the place would have been entirely lost. The key will be trying to integrate new and interesting uses into the buildings whilst preserving not only the individual character of the buildings but the general character of the site as a whole.

4.6 ANY NEW USE WILL MEAN ALTERATIONS

Whatever use the buildings are put to, some degree of alteration will be necessary. This is the case for every historic building that remains in occupation. Indeed it is apparent how much the buildings on the site have already been altered to accommodate changing needs and standards. As a very minimum there will be a need for some work to protect the historic significance of the buildings and their contents. Fire precaution work would generally be seen as a priority for protecting any historic building – both physical fire separation and smoke detection and fire alarms. Security work is generally regarded as equally important. Keeping unwelcome visitors out and protecting the historic asset against fire, theft and vandalism is normally a primary concern of anyone caring for a historic site.

Changing standards of health and safety and a desire for universal access to sites are also drivers for change. Provision will need to be made for safe access to spaces for maintenance staff and for proper emergency escape for anyone inside the buildings.

It would be generally desirable when planning any new facility open to the general public to pay close attention to members of society who have mobility difficulties or other physical impairments. This will lead to the insertion of lifts and ramps and may require more adequate lighting to many areas. Where staff are working on a site, provision needs to be made for their health and well being with proper accommodation and facilities. If the site is opened up to public visits, then a whole raft of facilities is desirable from lavatories to information points, cloakrooms, education rooms, souvenir shops etc. Full provision will need to be made for safe access to all areas and inevitably the buildings will need to be rewired and have new lighting. There will also be an imperative for proper escape facilities with protected staircase and emergency lighting

Even if the minimum amount of change is contemplated to the use of the site with a view to displaying it as, in effect, a museum, there will still be a need for a large amount of physical intervention into the fabric of all the buildings. This is inevitable and occurs in every historic building. The skill lies in making these alterations in a way that does the minimum damage to the significance of the buildings and the site as a whole. Conservation, alteration and (to some extent) restoration of the fabric of these buildings is a necessity if they are to survive. However, controlling this change is essential if the significance of the buildings is not to be lost.

4.7 OPEN SPACES

The two courtyards are both significant spaces and a part of the history of the site. The open character of the two courtyards should be respected and the relationship of the courtyards to the adjacent buildings. There will, inevitably, be a pressure to look to the courtyards as a suitable site for new development. Any development that is proposed should take note of the essential open and simple character of the area. This should be maintained and the accumulation of semi-permanent structures and street furniture that will change the character of the space should be avoided.

The trees in these areas are also significant, not least as trees are a rarity in this part of the city. The trees are a significant part of the character of the courtyards and should be protected form either accidental damage or damage as a result of new development.

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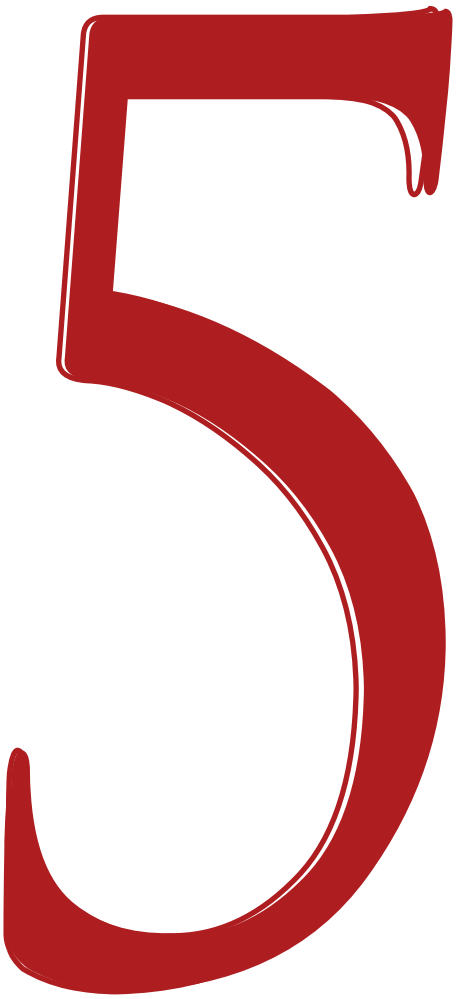

OPPORTUNITIES

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5 OPPORTUNITIES

5.1 INTRODUCTION

As seen in the previous sections of this document, an historic site such as the Central Police Station compound is rich in heritage and has high levels of significance, which can produce a number of issues and vulnerabilities with regards to its conservation and use. However, such an interesting site can also provide several beneficial opportunities in its future management and even within possible redevelopment. This section will set out the opportunities available for the site, based on an understanding of the sensitive nature of both historic fabric and cultural associations, as well as considering the necessity of development in order to conserve and sustain the site in the future. The opportunities provided here are addressed under the following major topics:

- ◇ As an exemplar of conservation work
- ◇ Opportunities through redevelopment
- ◇ As an education resource
- ◇ As a space to provide cultural and leisure facilities
- ◇ As an exemplar of a 'not for profit' developer/landlord
- ◇ Through a linkage between Lan Kwai Fong and SoHo
- ◇ As an opportunity for training craft skills

5.2 AS AN EXEMPLAR OF CONSERVATION WORK

There is a very real opportunity to use the proposed work on the Old Police Station site as an exemplar of good conservation in action.

There is little challenge in conserving a building or group of buildings where the original uses are to be maintained or where the building is to be used as some sort of museum. The work in such a situation begins with a thorough understanding of the significance of the building(s) and the scope of the work is likely to be the careful repair and conservation of the building fabric together with the careful integration of such modern services as are essential for the ongoing use. The work can be more or less well done and the attention to detail can be more or less scholarly – but essentially the use and the disposition of spaces remain the same or revert to their original patterns.

In contrast, the challenge of conservation work on a site like the Old Police Station is much greater. Understanding the significance of the buildings is once again the essential starting point, which is the primary purpose of this Conservation Management Plan.

However, the buildings have to be found new uses that can give the site a viable economic future. Once it is decided that the site cannot be retained as a museum of Law and Order, appropriate new uses must be found. Finding such uses and integrating them into the fabric of the buildings on the site without diminishing the significance of the site and its buildings is the real challenge for the conservationist.

Would a use as a 'Museum of Law and Order' be an appropriate way forwards? This would make the restoration and conservation of these buildings a relatively simple affair. Yet it seems highly unlikely that such a future use would be economically viable or particularly popular with visitors. The site is large and has many buildings; far too large indeed for this sort of museum. Several of the buildings, for example the various cell blocks (particularly B Hall and E Hall), tell much the same story and there is no obvious way that interest could be provided for the visitor in all these similar spaces.

The key to the future of this site (as for most sites where major changes of use are necessary and where there are historic buildings to be conserved) is to find sustainable new uses that can be integrated into the site whilst preserving its overall significance and doing the minimum damage to the significance of individual buildings. This inevitably means accepting a degree of change to the site as a whole and to individual buildings in particular.

The vision for the site must be to deliver repaired and conserved buildings where the degree of alteration is sufficient to allow new enterprises to flourish, but where the overall appearance of the site and the significance of individual buildings remains undiminished. The site should be a viable economic concern with either no need or an acceptable need for ongoing subsidy – but despite these changes it should still be possible to use the site as a major educational resource to illuminate the history of law and order, crime and punishment over the complete period of Hong Kong's history.

If this can be achieved on the Old Police station site then it should be possible to use it as en exemplar of how good conservation can work. It should show that there is a sensible middle way that runs between the extremes of total demolition and redevelopment on the one hand and strict preservation of every detail of the historic building and site on the other.

5.3 OPPORTUNITIES FOR REDEVELOPMENT

Across the site, there are a number of buildings with varying historic, architectural, social, and other significance. This is, of course, recognised in the way that the buildings have been categorised; the four key buildings being listed as 'Type A', while ten buildings have been listed 'Type B' and the rest are identified as non-historic. In this Conservation Management Plan an attempt has been made to consider the significance of the individual buildings and structures on the site and to give some guidance as to the degree of alteration that might be acceptable.

The most significant buildings - the Police Headquarters, the Barrack Block, the Magistracy and the earliest prison building ,'D' Hall - all have exteriors that are imposing and which form a key part of the site. Dramatic changes that affect their external appearance will need to be very carefully considered and will in most cases be inappropriate. Even on these four buildings, however, this cannot be taken as an incontrovertible position. A case could be made, for example, to recreate the pitched roof with the double pan and roll tiles in place of the modern flat concrete roof of 'D' Hall. Similarly it would be a straightforward decision to decide to change the windows of the Barrack Block, where inappropriate modern insertions have been made – but no one is likely to agree to the removal of the twentieth century added upper floor.

Even in the most significant buildings the qualities of the internal spaces vary. They all have spaces that are essential to the character and previous use of the building that should be conserved and be left as unaltered as is possible. However, all these buildings have spaces where recent alterations, the loss of original fabric, or simply the secondary nature of the original accommodation mean that the spaces are much less significant. Here a much greater degree of alteration will be possible to accommodate new uses. This will vary from modest alterations to accommodate mechanical and electrical plant to more radical insertions such as new lifts and fire compartmentation. In places, it may be desirable to consider removing some of the historic fabric to accommodate new and appropriate uses – to open up several smaller rooms to create a large space for a new use. Each case must, of course, be judged on its merits – "*how much will this particular change compromise the significance of the building?*" – but there are very few buildings, however historically significant, that cannot tolerate some degree of change if it is carefully thought through.

If a modest degree of change is possible in the most significant buildings it follows that more radical change may be contemplated in the buildings of lower significance. The cell blocks may be a good example of this. Undoubtedly these blocks are fundamental to understanding the previous prison use of the site and the conditions that were considered appropriate for prisoners. However, despite the fact that the cell blocks were built at different times, subsequent alterations have tended to obscure the differences in design and the four blocks ('C', 'E', and the two wings of 'D' Hall) all present much the same spectacle to the visitor. Clearly some of these cells must be maintained to show what the site was about and the characteristic open landings and central staircase need to be on show – but there would seem to be little case for maintaining all four of these blocks in this condition. If they are to have viable new uses then it seems inevitable that some opening up between cells will be necessary to improve the available space. It will also be necessary to provide better arrangements for fire escape. New uses for prison blocks is entirely possible. One exemplary redevelopment is the conversion of the historic prison in Oxford, England into a hotel, where three cells have been used to form each unit of guest accommodation - two cells being knocked together to form a bedroom and the third providing the en-suite bathroom. This level of intervention may be necessary if the buildings are to find sustainable new uses.

There are also some areas of the site where new development may be acceptable. There is, for example, a good size area to the north of 'F' Hall and to the south of the Ablutions Block which has a collection of modern buildings and some temporary structures that are of little significance. This should provide a possible site and may well be one of the spaces to help deal with vehicle access onto the site. Similarly the space between 'D' and 'E' Halls at present occupied by the Laundry and the workshop sheds is a possible site for redevelopment. The raised platform that was created to provide an extension to the yard area is a twentieth century insertion which does not appear to have any special significance in the overall story of the Victoria Prison. This too offers a possible site for some modern development and a further place for new access arrangements to be implemented.

If new development is contemplated on the site it needs to be carried out in such a way that it is complementary to the historic buildings, as well as being either subsidiary to the existing buildings

or markedly different in design and character. The new development should not make it more difficult to understand the historic layout and usage of the site. Minor alterations should generally be discreet and visually unobtrusive. Larger interventions should clearly distinguish between new fabric and the original.

5.4 AS AN EDUCATIONAL RESOURCE

There is a real opportunity to use the site as a valuable educational resource. Laid out on this site are the full workings of Law and Order. The police detected and apprehended the potential criminal, the Magistracy judged between the guilty and the innocent, and the prison provided punishment for those found guilty. What is more the site has been in existence since the very foundation of Hong Kong when the first Magistrates House was built in 1842. It is an excellent tale to tell with a wealth of human stories about the successes and failures of the system: the prevalence of crime, the potential for corruption in a poorly paid police force, the genuine attempts to achieve some sort of justice, and the different points of view over the suitability of the prison accommodation. Some saw it as a stinking hole unfit for human beings while others saw it as far too lenient a regime. In addition to providing an interesting illustration of the history and development of law and order, the police force and the changing nature of the prison facilities; it also can serve as a starting point for many present concerns over law and order in society.

Any new development and new use for the site should be completed with the educational possibilities in mind. While the site may not be appropriate for Museum use in its entirety, this is not to say that some museum use would not be possible and indeed desirable. It may not be necessary to enter all the buildings but it should be possible for the interested visitor to enter some of the key spaces. Attention needs to be given from the initial planning of the development as to how the site as a whole can be interpreted to visiting groups, be they tourists or visiting school parties. The latter may well be a key target audience – this site with the right degree of interpretation and the sort of spaces that schools need for educational visits (education rooms, space to leave bags, toilet facilities, etc.) could be a fine way of bringing the history of the development of Hong Kong to a wide audience.

It is suggested that, for the educational opportunities to be maximised, the planning of the interpretation of the site needs to be carried out alongside the physical planning of the alterations to the building and site. If this is done then the possibilities for the educational use of the site would seem to be exceptionally good.

5.5 AS A SPACE TO PROVIDE CULTURAL AND LEISURE FACILITIES

Within the background brief for commissioning this Conservation Management Plan, The Hong Kong Jockey Club has suggested that there is a lack of cultural facilities in this area of Hong Kong that are of a suitable scale for use by local and amateur groups. There are world class theatres, galleries and concert halls available but much less provision at the smaller scale that will be suitable for newly emerging artists and companies for amateur groups.

The site would seem to be ideally placed for the provision of such facilities. This would provide a public focus and use pattern that will be more appropriate to general public appreciation than complete commercial usage. The buildings will convert most easily for office use or as small retail outlets. The present cellular form is unlikely to be a problem for this sort of use and the difficulties will be confined to practical considerations of servicing and health and safety, fire etc. This sort of use pattern is less likely to be conducive to a general use of the site or buildings and office space in particular may be at odds with large numbers of people using the site.

The site with its open spaces will ideally provide a resource for all the users of the area, be they residents, workers, or visitors. The open spaces are a scarce resource in this part of the city and appropriate use should be encouraged. This could be done by simply turning the buildings over to shops and cafes – though too much retail use would risk losing the character of the buildings and the compounds in which they sit. The ideal use pattern will be to have a mix of functions where nothing predominates to the exclusion of other activities. If this can be achieved with a mix of cultural spaces with appropriate shopping and restaurants, then this will be a real vindication of the involvement of a 'not for profit' organization in the redevelopment of the site

To create even a small scale performance space, concert hall or gallery there needs to be a substantial floor area and a good floor to ceiling height. There may be some difficulty in finding spaces of appropriate size within the present layout of the existing buildings. Some spaces could be used as they stand (for example the larger court in the Magistracy) and other areas could possibly be cleared within the existing buildings (for example reopening the old double height gymnasium in the police Headquarters).

Other areas may be more contentious and will have to be approached on the basis of seeing that there is a benefit that outweighs any loss. An example here might be the possibility of creating a larger open space by removing some of the interior of the Barrack Block. This might allow the insertion of some large scale cultural facilities into the existing building shell. This would be relevant if the fabric to be lost is either a modern insertion or where it is replicated in its entirety in another part of the building.

5.6 AN EXEMPLAR OF A 'NOT FOR PROFIT' DEVELOPER/LANDLORD

Even the wealthiest local authority or charitable organisation is unlikely to be willing to embark on a development which has an unlimited need for future subsidy. Even if the new development is clearly of public benefit, ongoing subsidies are likely to become subject to political scrutiny as fashions and ideas change. There is a difficult balance to strike when completing this sort of development. The new enterprise, or in this case collection of individual enterprises, needs to be a commercial success. There is, of course, a good case for some degree of cross subsidy with commercial enterprises paying sufficient rent to cross subsidize the more cultural activities. However, this will not be possible if the whole site is not a success while being seen as a place where people wish to come. Appropriate cultural and leisure activities on the site have the potential for brining in more visitors – which make the commercial enterprises, the shops and cafes, more likely to succeed. If the formula works this can be a virtuous circle that benefits all parties.

It is a difficult balancing act to pull off. If the cultural activities fail to attract the right crowds the commercial activities may begin to fail and rental incomes collapse. Under these circumstances it is difficult to resist pressure to allow the commercial activities to expand into new and more lucrative (and most probably less appropriate) activities that will change the character of the site. If, on the other hand, the commercial activities are too successful they will exert great pressure on the management of the site to allow them to expand and alter the accommodation they occupy.

If the site is to remain financially viable while retaining its historic and cultural significance it will need careful ongoing management. This management will need to be sensitive to the needs of a wide variety of stakeholders whilst also being willing to exert a firm control over the pressure for change that will, if left unchecked, gradually erode the character of the site and of individual buildings.

There are various models for management of such a site that combines the interests of the occupiers with those of their immediate neighbours, the users of the site and the wider public. Essentially this means providing a legal framework for the operation of a 'not for profit' company which can permit the involvement of stakeholders without losing the overall control of the site. Finding an appropriate model for Hong Kong may be a challenge for The Hong Kong Jockey Club (if they do become the developers of the site) but if this can be achieved on this site then it has a good chance of providing an exemplar of how such buildings and sites can be managed within the Hong Kong environment

5.7 A LINKAGE BETWEEN SOHO AND LAN KWAI FONG

The whole nature of the site throughout the last 160 years has been its closure to anyone other than the inmates and prison or police officials. The granite wall around the site with minimal openings is very much a defining feature, though it does make a significant impediment to circulation in this area of the city, particularly from east to west. One does not wish to lose the enclosed nature of the site as this is undoubtedly part of its historic and cultural significance. There are, however, real possibilities for improving public access into the site generally and improving the east west linkage in particular.

The two districts, SoHo to the west and Lan Kwai Fong to the east, are both very busy leisure areas of the city. Improving the linkage between these two districts across the Old Police Station site will be good for both the surrounding areas and will also provide an excellent reason for large numbers of pedestrians to enter and cross the site. If a linkage can be made into the site from the mid levels escalator system this too will provide an easy way to enter the site and a good route to the SoHo area.

5.8 AN OPPORTUNITY FOR TRAINING IN CRAFT SKILLS

During work on the repair and conservation of the buildings on the site, there will be an opportunity for exercising some of the building industry and conservation skills that are no longer much in demand in the wider building industry. There will be the need for stone masons, bricklayers, carpenters, ironworkers, decorative plasterers, conservation joiners and other trades to carry out work that would not be normal on most building sites. Some of the work that has been carried out recently on the site has been unsympathetic to the historic structures and in some cases unsympathetic materials have been used. An example that is obvious for all to see

is the repairs to the granite walls around the site and to the historic steps to Chancery Lane.

Identifying skilled craftsmen who will bring traditional skills and a sympathetic approach to the work will be a singular task. However, it would be very good to see this extended to ensure that a wider audience is involved. At its simplest this may be to ensure that the architectural schools have the opportunity to visit the work, debate the issues and see examples of skilled repairs. There is certainly interest from this group already; a few years ago the Department of Architecture at the University of Hong Kong produced two volumes of measured drawings of historic buildings in Hong Kong. The buildings of the Central Police Station feature significantly in Volume 2. At a more detailed level it may be possible to involve the firms of contractors or building trade schools to provide some apprenticeships for interested trainees.

5.9 AN OPPORTUNITY FOR RE-EXAMINING CODES OF PRACTICE

A frequent problem when repairing, conserving and altering historic buildings to accommodate new uses is the conflict between modern building codes and the detail of the historic building. Obvious examples in the Old Police Station site are inadequate fire escapes and lack of fire separation, balustrades and handrails to stairs at incorrect heights, inadequate ventilation and poor access arrangements.

To achieve a sympathetic alteration to any historic building which maintains the significance of the building whilst making it as safe and as user-friendly as possible will generally require compromise. The normal approach is to complete risk assessments where items do not comply with standard codes of practice to try and find acceptable compromise solutions. This does require some flexibility on the part of those who are responsible for building codes.

Working on the buildings on this highly significant site would provide the ideal scenario for this approach to be trialled and to set a pattern that could be used as an example when work is carried out on other significant historic buildings.

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CONSERVATION POLICIES

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6 CONSERVATION POLICIES

These Conservation Policies are intended to act as a guide for any future development of the site and the individual buildings on the site. The policies are set out with a guidance note which gives the purpose of the policy. Inevitably these policies can only act as a guide and form a starting point for decisions about the future of the site and the individual buildings. There is always scope for more research which may change the view of any particular building or area of the site.

In particular the individual buildings will need to be considered in much greater detail as the detailed plans are drawn up for their development. The existing Conservation Policies for the individual buildings should be seen as providing broad guidance as to the things that must be conserved and those areas where change is permissible.

It should be noted that the Conservation Management Plan represents the opinions of the authors of the document. It does not have any statutory significance – although it is hoped that after appropriate consultation and discussion and potential amendment it may be possible to have an agreed document that all interested parties see as setting out policies for the future development of the site.

The significance of the site and of individual buildings on the site will change over a period of time and as the site is developed. It is important that the plan in its present form is seen as relevant to the situation in early 2008. The Conservation Management Plan will need to be regularly updated as changes are made to the site and the buildings on the site.

6.1 SITE WIDE POLICIES

6.1.1

The external granite walls around the site should be retained as much as is possible and should be carefully repaired using matching materials and appropriate craftsmen.

Reason for this policy: The walls around the site are one of the features that define the site and contribute to its significance. They are also a major townscape feature of the site. As far as possible the walls should be retained in their current form as a clear way of marking out the previous use of the site.

This policy applies to all walls around the site except the corner of Hollywood Road and Arbuthnot Road, which was extensively (and insensitively) altered in 1961 for a new road junction.

6.1.2

Any new penetrations that are made in the external wall of the site should be designed to minimise the loss of the wall and should attempt to keep the sense of enclosure that exists at present.

Reason for this policy: It will be essential to get some new access onto the site for emergency vehicles and to allow for appropriate delivery and collection of goods to the various enterprises that are expected to use the buildings. There will also be pressure to make the site more accessible for pedestrians from the Mid-Levels Escalator and to provide an east-west route from Lan Kwai Fong to SoHo. The need for the new openings is accepted but they should be designed to minimize the loss of the enclosed feel of the site at present.

6.1.3

The Pottinger Street entrance should be retained as the principal entrance to the site. Its use as a pedestrian entrance should be encouraged and its use as a vehicular entrance be minimised.

Reason for this policy: The Pottinger Street Entrance has continued, from the 1840s onward, to be the principal entrance onto the site for all users with the exception of prisoners and prison visitors. It is desirable in terms of historic significance that this remain one of or the principal entry to the site. It is also the natural route for anyone approaching the site up Pottinger Street. It may be that the entrance off the Mid-Levels Escalator becomes a more heavily used entry for pedestrians. The possibility of using the historic Pottinger Street entrance should nonetheless be retained. To make this a user friendly entrance for pedestrians (which means virtually all visitors to the site) the use of this entrance by vehicles should be limited by good management.

6.1.4

The entrance on the corner of Old Bailey Street and Chancery Lane should be retained as a pedestrian entrance.

Reason for this policy: The Old Bailey Street entrance has considerable significance as it was the only entrance to Victoria Prison other than the one from the Police compound. Virtually every prisoner, prison visitor and possibly many asylum seekers will have used this gate to enter and eventually to leave the prison site. The gate has significance to understanding the workings of the prison and the separation between the prison and police compounds. There is nothing particularly significant about the gate itself and the opening may reasonably be adapted to suit new uses – but an entrance at this point is a significant part of the layout and historic use of the site.

6.1.5

The granite steps and the arched opening in the wall that lead to the Magistracy building off Arbuthnot Road should be repaired and retained in their present form.

Reason for this policy: These steps and the entrance to the site to the Assistant Superintendents House and the Magistracy are very early features of the site. The steps appear on the earliest plans of the site and are as significant as the surrounding granite walls. Their use at present is difficult and dangerous as there is no footway at this point. The Local Authority should be encouraged to reinstate a footway to make this gate and steps once more into a viable site entrance.

6.1.6

The Local Authorities should be encouraged to repair and retain the steps at the east end of Chancery lane and to repair the steps and the paving of this street in an appropriate manner with skilled craftsmen and appropriate materials.

Reason for this policy: The steps at the east end of Chancery Lane are not part of the site but are very much associated with its history. As with the steps by the magistracy they appear on the earliest plans of the area. The granite used to build the steps is the same material as used on the walls and they would appear to be the original 19th Century work as would some of the associated granite paving. The steps and paving have been recently taken up to lay new piped services and the relaying and repair has been completed in a manner which is inappropriate for these historic townscape features.

6.1.7

The separation between the different compounds and the different levels of the site are all historically significant. These separating features should remain clear in any redevelopment of the site.

Reason for this policy: The walls separating the different sections of the site are generally all of historic significance in themselves, many being associated with the earliest builds of the Prison. The walls are not only of significance in themselves but they also demonstrate the division of the site into the distinct compounds with the Police Headquarters separated from the Magistracy and the Prison only being approached through a double gate from the south of the police compound. This separation of the site into different compounds should be noted and it would be desirable to retain the transition between different zones in any new development.

6.1.8

The Police Parade Ground should be preserved as an open space. It should remain free of unnecessary street furniture and should not have inappropriate activities (such as vending stalls, tables for alfresco dining, permanent stages, external screens etc). Despite its historic use by the police this space should not be used for parking vehicles. The surfaces of the parade ground should be appropriate to its former use.

Reason for this policy: The police Parade Ground is one of the most significant spaces on the site. It is a formal space that was used for parades and ceremonies. It may well be acceptable and even desirable to have events in the Parade Ground on an occasional basis with live performances, opera on screen, festivals, open air dinners etc. However, this occasional use should not be allowed to dominate the Parade Ground on a full time basis. If the area becomes permanently filled with the tables of surrounding restaurants this will, however pleasant the experience of sitting in the open air may be, diminish the significance of the space. Similarly despite the police using this space in latter years as a car park for their vehicles this would seem to be an inappropriate use for the space. It is suggested that vehicle access be managed to allow service access only at particular times of day and that for the majority of daylight hours this should be managed as pedestrian space. The resurfacing of this space should be preceded by some archaeological and historic research to determine what the original surface was likely to have been.

6.1.9

The Prison Yard should be preserved as an open space. It should remain free of unnecessary street furniture and inappropriate activities. The essential character of the space as a simple and rather bleak area should be retained to maintain the feel and significance of the prison use.

Reason for this policy: The Prison Yard is one of the most significant spaces on the site and its character should be preserved as far as possible. This would have been a space that was devoid of any form of street furniture indeed probably devoid of anything except the prisoners themselves. It was essentially a sombre space surrounded by the prison buildings and wall. It would change its character completely if commercial activity is allowed in here on anything other than the most occasional basis. Vehicle access should be restricted to emergency services and other essential service vehicles on a managed basis. The surface of the prison yard should be investigated by archaeologists to determine the likely make up of the earlier surfaces. Any resurfacing should reflect the character of the earlier surfaces.

6.1.10

The high buttressed wall on the south side of the Prison Compound should be repaired and maintained in its present configuration.

Reason for this policy: The high wall on the south side of the Prison Compound is a very significant feature of the site in general and prison in particular. This wall both reflects the extent of the work necessary to level the prison site and also send out strong messages about the difficulty of escaping from the prison. The wall should not be hidden or covered up in a way that makes it less easy to understand.

6.1.11

The prison site has a great deal of razor wire around it as well as some earlier broken glass set in concrete on top of the walls. Sample areas of this should be maintained in key areas as determined by the educational policy but the majority of it should be removed.

Reason for this policy: The razor wire and to a lesser extent the broken glass is a significant feature of the prison site and as such a good case could be made for keeping it on ground of historic and cultural significance. However it is dangerous material and is likely to be a real hindrance to both efficient repair work and the proper long term maintenance of the buildings. For this reason it is recommended that certain sections are kept in location to be agreed with the education policy for interpreting the site but that the remainder is all removed.

6.1.12

There are eleven trees on the site: four in the prison compound, five in the Parade Ground, one by the Magistracy and one south of the Ablutions Block. All the trees are significant and should be protected from damage during and development work and should be retained. Two are identified as in 'poor' condition and two others as 'below average'. If these trees are lost as a result of the development they should be replaced with appropriate specimens in similar locations.

Reason for this policy: The trees are a significant feature of the open spaces, particularly of the Parade Ground and of the Prison Yard. Every effort should be made to ensure that these trees are not damaged either by the building work or by the way the site is used after the development is complete

6.1.13

There are thought to be tunnels running under the site. There is obviously the tunnel which has been converted to an air-raid shelter to the south of the Police Headquarters Block, and the Ladder Store contains evidence of a tunnel in the form of a blocked archway. There is also a well documented tunnel (no longer visible) under Old Bailey Street joining the prison to the additional accommodation to the west of the site.

When planning any work on the site the possibility of tunnels should be borne in mind and tunnels that are located should as a minimum be carefully examined and recorded.

Reason for this policy: The fact that the tunnel under the Parade Ground exists and that there has been a well documented tunnel under the road lend credence to other tales of communication tunnels between the various buildings and areas of the site – although the rocky nature of the site and the changes in levels make the existence of tunnels seem unlikely from a practical point of view. There is also the distinct possibility that many of these tunnels were destroyed when the Parade Ground was bombed during WWII. If such tunnels are found they will add to the understanding of the history of the site and should certainly be carefully investigated and recorded even if they cannot be opened up.

6.1.14

The granite walls around the compound to the west of the site are significant as marking the extent of the overflow area of the Prison. The local authorities should be encouraged to regard these walls as historically and culturally significant and arrange for their repair and conservation.

Reason for this policy: The extension of the Prison took place in 1894 when an area west of Old Bailey Street was enclosed for the construction of two cell blocks. The new site was joined to the Victoria Gaol by a tunnel under the road. The cell blocks and the tunnel have disappeared but the wall is an effective reminder of the extent of the Goal at this point in history. Despite these walls being outside the site the Local Authorities should be encouraged to see them as a significant historic feature of the area.

6.1.15

There is a smaller open space immediately south of the Magistracy notable for the granite entrance steps and the fine canopy over the French windows into the main court. This open space is significant and should not be built in but should be preserved as a courtyard free of unnecessary clutter.

Reason for this policy: The open space by the Magistracy was originally the approach both to the court building and to the superintendent house. It is spoilt at present by the large forced draught chillers that have been sited here to provide air conditioning for the court. The mechanical plant should be removed and the courtyard should be maintained as a formal entrance to the site.

6.1.16

There should be careful consideration of those buildings which add to the surrounding streetscape and the wider townscape. Nothing should be done to these buildings that will affect the streetscape without careful consideration.

Reason for this policy: Various buildings make a significant contribution to the streetscape around the site. Obviously the Magistracy and the Police Headquarters dominate the streets immediately adjacent to them and nothing should be done to undermine their significance. However there are several other less significant buildings that make a highly significant contribution to the streetscape, particularly The Dormitory Blocks A, B, C and D at the north east corner of the site, the east end elevation of D Hall, Bauhinia House at the corner of Arbuthnot and Chancery Lane, the west elevations of the Barrack and Ablutions Blocks and most particularly the west elevation of the Armoury and Store. All of these building make a significant contribution to the townscape and nothing should be done to change these buildings without careful consideration of how these contribute to streetscape.

6.1.17

There are some modern buildings and structures on the site that can be cleared with no loss of significance. Such buildings should be photographed and recorded before any clearance takes place.

Reason for this policy: There are several modern small buildings and structures across the site which have minimal significance and where their removal may make the understanding of the site clearer or where they may aid other objectives such as vehicle access or new pedestrian routes. These include the General Office (building number 18) and outbuildings to the north, the single storey cellblock to the south of the Barrack Block, and the covered areas adjacent to E Hall (building number 15) and D Hall (building number 14) Where such buildings are to be cleared away they should be carefully recorded and the documents lodged in an appropriate archive.

6.1.18

It will be necessary to make some new vehicle routes into the site for emergency vehicles and to facilitate servicing the site. Such routes should be as discreet as possible consistent with allowing the necessary access.

Reason for this policy: It is thought to be essential to have access onto the site for emergency vehicles for fire fighting purposes and for ambulance and police. Other than this the new uses of the site are likely to generate the need for daily deliveries and for regular rubbish collection. Every attempt should be made to ensure that the vehicle routes are planned to minimise the disruption to the site and to minimize the impact on the historic division of the site into discreet compartments.

6.1.19

It will be desirable to make new pedestrian routes across the site. Such routes should respect the existing building pattern, the division of the site into discreet compounds and, as far as it is possible, the historic entrances to the site.

Reason for this policy: Opening up of the site to pedestrians will be very desirable for its new uses. However, these new routes should, as far as this is possible, work with the existing circulation patterns within the site and should not confuse the historic division of the site into the different sections with minimal and controlled openings between them. It may be desirable to mark the new openings and the transition between different site areas in some way in the new circulation patterns.

6.2 INDIVIDUAL BUILDING POLICIES

6.2.1

The conservation plan applies a classification to the significance of buildings on the site of High, Medium and Low significance (See section 3.11 of the Conservation Plan). This classification should be used for guidance when making decisions about the future uses of the buildings but it is not intended in any way to supersede the statutory designations of the buildings.

Reason for this policy: The statutory classification of the buildings only distinguishes those which are most significant (Category A) and lumps all the remaining structures on this site into the same Category B, or defines them as 'non-historic' structures. It was felt, on looking at the site in detail and considering the future possible uses and potential developments, that this was insufficient for detailed guidance and that within the category B the buildings ranged from those that were of considerable historic and cultural significance to modern structures of very little significance. The High, Medium and Low classifications in the Conservation Plan should be used for initial guidance pending more detailed investigations.

6.2.2

When deciding on the detailed alterations to any building or group of buildings it is recommended that more thorough investigation of the building is made as part of the detailed planning process.

Reason for this policy: The Conservation Management Plan is based on an initial survey of a part of the available documentation and limited site inspections. There is always more to learn about the history of any building and there is more to be learnt from detailed study of the building fabric, particularly where this can be coupled with some invasive examination of the fabric, and archaeological research. The Conservation Management Plan information and the Gazetteer should be seen as the starting point for decision making and for future investigations and not as a document that contains all the answers. In particular the Conservation Policies given below for the individual buildings should be seen only as 'Headline' polices that give the recommended general approach to the work on this building. More detailed polices should be formulated for each building as part of the design development of any scheme of repair and alteration.

6.2.3 Headquarters block

6.2.3.1

The external appearance of the Headquarters Block should be repaired, conserved and maintained to keep its appearance as it is at present, with the exception of the removal of several layers of exterior paint, and small modern accretions such as doors and windows and replacement with elements matching the original design.

Reason for this policy: This is a highly significant Class 'A' building and the external appearance should be preserved as close to the original design intentions as possible. Work should be limited to repair, cleaning and conservation of the original fabric and replacement of inappropriate modern elements.

6.2.3.2

The modern partitions and the inserted suspended ceilings should be removed from the internal spaces to revert to the original interior as far as this is possible.

Reason for this policy: The building has been altered to a considerable degree since its original build. The spaces have been divided with modern partitions and suspended ceilings have been inserted

in many spaces covering the original ceilings. These insertions could be beneficially removed to show the original design intentions

6.2.3.3

The entrance hall, the central staircase, the lobbies off the staircase and the cross passages should all be maintained in their present form and the original finishes be conserved or be reinstated where these have been removed.

Reason for this policy: These spaces are the most highly designed spaces in the building and have suffered less alteration than some of the other areas. These spaces should be kept unaltered.

6.2.3.4

The remaining original internal fittings, joinery, plasterwork, door and window fittings, floor finishes and the like should all be repaired and kept in-situ.

Reason for this policy: The internal fittings and finishes have survived to a considerable degree throughout the building. Care should be taken to ensure that such fittings are retained, conserved and repaired so that they can continue in use when the building is brought back into beneficial use.

6.2.3.5

Consideration should be given to the removal of the floor inserted in the original Gymnasium (to make a radio control room) to allow this to become a double height space as originally intended.

Reason for this policy: The two storey gymnasium had a floor inserted in 1974 to allow for a new and enlarged Radio Control Room. The insertion has changed the character of the original building. At present it reads as though all the spaces were built as offices. In fact the original use was very mixed; in addition to the gymnasium there were spaces for religious worship and sleeping accommodation as well as some office space. If a two storey space can be beneficially used this would be a good means of demonstrating the original mixed uses.

6.2.3.6

Some internal alterations will be necessary to allow the building to function for its new uses. These alterations should be made as discreetly as possible to preserve as much as possible of the original layouts and finishes.

Reason for this policy: It will be necessary to make a number of alterations to accommodate new uses. The most pressing of these will most probably be the need for improved fire compartmentation and fire escape. Depending on the new use there may be the need for a lift for disabled access. The necessary alterations should be completed in as discreet a way as possible.

6.2.3.7

The mechanical and electrical services in the building will need to be renewed. Care should be taken to investigate the present systems to decide what age and significance can be placed on these fitting and to decide if there is any merit in keeping some as exemplars.

Reason for this policy: It is unlikely that much will survive of the mechanical and electrical services from the original build – though this is not impossible. The historic services should be seen as a significant part of the building. The individual features such as light fittings, switches, sockets, taps, sanitary ware, etc. should all be considered as items of potential interest when decisions are made about the extent of any alteration work.

6.2.4 Armoury and Store

6.2.4.1

The external appearance of the Armoury to the west on Old Bailey Street as well as to the north and south is a key part of the streetscape of the area and should be repaired and retained unaltered.

Reason for this policy: The building presents an impressive face to old Bailey Street and is an important part of the streetscape. No changes should be allowed other than repair, cleaning and the replacement of inappropriate modern fittings.

6.2.4.2

The east face of the building to the Parade Ground has been considerably altered by the blocking of the original arcade. This might be beneficially removed.

Reason for this policy: The original east elevation would have had an open colonnade to the Parade Ground which would have echoed the open colonnades of both the Headquarters Block and the Barrack. The colonnade was filled in during 1933 apparently to make more internal space for the armoury. The filling has not been particularly well done and the open colonnade would be an attractive feature to reinstate.

6.2.4.3

There is little remaining of great significance in the interior of the Armoury and internal alterations to accommodate new uses will be acceptable.

Reason for this policy: The building was built as a storage space and as such there was little detail internally – the best feature is probably the king post truss roof. Original finishes and fittings should be retained where possible – but essentially this building will accommodate a fair degree of internal alteration provided this does not impact unduly on the external appearance.

6.2.5 Barrack Block

6.2.5.1

The external appearance of the Barrack Block should be repaired, conserved and maintained to keep its appearance as it is at present, with the exception of the removal of small modern accretions such as doors and windows and replacement with elements matching the original design.

Reason for this policy: This is a highly significant Class 'A' building and the external appearance should be preserved as close to the original design intentions as possible. Work should be limited to repair, cleaning and conservation of the original fabric and replacement of inappropriate modern elements. This is more important on the north façade of the building where it faces the parade Ground. The windows in the south elevation are more altered at present and whilst reinstatement to the original design is the preferred option there is more scope for minor alterations to the south elevation without affecting the significance of the building.

The large air conditioning unit and duct on the west façade of the building should be removed.

6.2.5.2

The modern partitions and the inserted suspended ceilings should be removed from the internal spaces to revert to the original interior as far as this is possible.

Reason for this policy: The building has been altered to a considerable degree since its original build. The spaces have been divided with modern partitions and suspended ceilings have been inserted in many spaces covering the original ceilings.

These insertions could be beneficially removed to show the original design intentions

6.2.5.3

The whole of the north arcaded passages at each floor level should be maintained as open circulation spaces. The two staircases should be repaired and be maintained as primary circulation between floors. Consideration should also be given to the possibility of opening up the ground floor arcaded passage.

Reason for this policy: These spaces are the most distinctive spaces in the building and have suffered less alteration than some of the other areas. These spaces should be kept unaltered.

6.2.5.4

The remaining original internal fittings, joinery, plasterwork, door and window fittings, floor finishes and the like should all be repaired and kept in-situ.

Reason for this policy: Despite a large amount of alteration work much of the internal fittings and finishes have survived throughout the building. Care should be taken to ensure that such fittings are retained, conserved and repaired so that they can continue in use when the building is brought back into beneficial use. This applies to all the remaining internal fixtures and fittings but particular note should be taken of the granite floor slabs, the plasterwork of the ceilings and the fittings in the ground floor armoury.

6.2.5.5

Some substantial internal alterations will be necessary to allow the building to function for any beneficial new uses. These alterations should be made as discreetly as possible to preserve the original layouts and finishes.

Reason for this policy: It will be necessary to make a number of alterations to bring this building back into effective use. The most pressing of these will most probably be the need for improved fire compartmentation and fire escape. There are long travel distances from the ends of the building to the central staircases and it may be necessary to introduce new internal escape stairs. Depending on the new use there may be the need for a lift for disabled access. The necessary alterations should be completed in as discreet a way as possible but it is accepted that there will be some loss of original fabric.

6.2.5.6

Consideration should be given to the more radical alteration to some parts of the building if this is necessary for sustainable new uses. If this is to be contemplated the radical alteration to some areas should be balanced by the faithful repair and restoration in others.

Reason for this policy: In seeking beneficial new uses for these buildings some flexibility will be necessary to ensure that appropriate new uses can be accommodated. The Barrack Block is a large building and the internal spaces are all much the same. It is not necessary to have every space fully restored to appreciate the significance of the building. Provided the external appearance remains unaltered and nothing affects the open arcades and the original staircases then there is probably scope for some more radical alterations to the internal layouts and finishes of one wing of the building.

6.2.5.7

The mechanical and electrical services in the building will need to be renewed, care should be taken to investigate the present systems to decide what age and significance can be placed on these fitting and to decide if any merit keeping as exemplars.

Reason for this policy: It is unlikely that much will survive of the mechanical and electrical services from the original build – though this is not impossible. The historic services should be seen as a significant part of the building. The individual features such as light fittings, switches, sockets, taps, sanitary ware, gas light fittings etc should all be considered as items of potential interest when decisions are made about the extent of any alteration work.

6.2.5.8

The open sided timber structure on the north east side of the Barrack Block should be retained as an interesting feature of the building related to the Parade Ground.

Reason for this policy: The exact purpose of this structure is not clear. It was probably covered accommodation for viewing the Parade Ground. It appears in several of the early photographs after the Police Headquarters has been built.

6.2.6 Dormitory Blocks A and B

6.2.6.1

The external appearance of these buildings should be retained unaltered except for the replacement of modern windows and removal of accretions such as the air-conditioning units.

Reason for this policy: These buildings are both early buildings on the site which remain relatively unaltered. They make a highly significant contribution to both the surrounding streetscape and the setting of the parade ground.

6.2.6.2

The filled in arcades on the façades should be opened up to restore the original appearance of the building. However from some of the early photographs of the site it is possible to see that some of the arcades had been filled in very early on in the life of the building particularly on the east elevation and this blocking in should be investigated to establish its age before any decision is taken to remove it.

Reason for this policy: The open arcades are an interesting part of the original design as an example of the attempted adaption of an obviously western housing design to the Hong Kong climate. The arcades match those on the Barrack block and there reinstatement would improve the appearance of the buildings from the surrounding streets. If the blocked arcades on the east elevation are of historical interest then these should be retained and repaired and the modern windows replaced with a more sympathetic design.

6.2.6.3

The interiors of these buildings should be kept intact as much as possible and the existing internal fittings and finishes should be respected except where obvious modern interventions should be removed.

Reason for this policy: The interiors survive to a considerable degree and every effort should be made when finding new uses for these buildings to keep as much as possible of the internal fixtures finishes and fittings.

6.2.6.4

The layout of these buildings should be respected with their separate access stairs and the disposition of the rooms.

Reason for this policy: The layout of these buildings survives to a great extent and they are indicative of the original purpose as units of accommodation of different standards for various levels of police officer. The layout of the rooms and stairs is all an important way of understanding the buildings and these layouts should be respected when any repair and reordering takes place to suit new uses.

6.2.6.5

The granite walls, revetments and corbels at basement level of the north wing should be carefully conserved as examples of the earliest guard house and enclosure of the prison.

Reason for this policy: The walls that have been incorporated into the lower floor of the north wing are the remains of the external wall of the early prison compound and of the guard house that was on the corner of the prison. As such these walls are significant historic survivals.

6.2.7 Garage

6.2.7.1

The Garage is of low significance and may be substantially altered to convert it to a new use or it could be demolished to create more open space.

Reason for this policy: The Garage has little significance as a building and could be removed if the site can be put to some more beneficial use or could be substantially altered.

6.2.7.2

In the event of the demolition of the Garage or its substantial remodelling the opportunity shall be taken to carry out an archaeological investigation of this area.

Reason for this policy: The Garage was built on the site of the kitchens and other domestic offices for Blocks A and B. If the garage is removed or the site is to be redeveloped then advantage should be taken of this to carry out a proper archaeological investigation of the site.

6.2.8 Dormitory Blocks C and D

6.2.8.1

The external appearance of these buildings should be retained unaltered except for the replacement of modern windows and removal of accretions such as the air-conditioning units.

Reason for this policy: These buildings make a highly significant contribution to the surrounding streetscape and they make a major contribution to the entrance to the site from Pottinger Street.

6.2.8.2

The internal details of the buildings, staircases, plasterwork, joinery should all be carefully repaired and conserved unless they are obviously modern interventions.

Reason for this policy: The interiors of these two houses survive to a considerable degree and every effort should be made when finding new uses for these buildings to keep as much as possible of the internal fixtures finishes and fittings.

6.2.8.3

The layout of these buildings should be respected with their separate access stairs and the disposition of the rooms.

Reason for this policy: The layout of thess buildings survive in their original form despite some modern insertions and alterations. The layouts are indicative of the original purpose as units of accommodation. The layout of the rooms and stairs is an important way of understanding the buildings and these layouts should be respected when any repair and reordering takes place to suit new uses.

6.2.8.4

The concrete link bridge between Blocks B and C should be removed and the temporary corrugated iron roofed structures east of the buildings should also be removed.

Reason for this policy: There is a good deal of modern clutter around these buildings that can beneficially be cleared away. Most of this appears to date from the reordering of the outer wall line at the junction of Hollywood Road and Arbuthnot Road. Removing the link bridge would benefit Block C by reinstating its original layout and entrances.

6.2.9 Ablutions Block

6.2.9.1

The external appearance of the Ablutions Block to the west on Old Bailey Street is a key part of the streetscape of the area and should be repaired and retained unaltered.

Reason for this policy: The building presents a domestic scale elevation looking onto Old Bailey Street, thus presenting an unobtrusive façade which blends well into the surrounding streetscape. The building is today representative of separation between police and prison. This elevation should be repaired and conserved, and no major extensions or alterations should take place to the building that would affect this façade.

6.2.9.2

Security measures on the north, south and the west façades of the building are historically significant but detract from the building and the site. The razor wire, barred gates and corrugated iron should be removed.

Reason for this policy: Razor wire and wire mesh fencing on all these façades have some historic significance to the site as a prison, but in future use would be forbidding and unattractive. It is recommended that this be removed. On the north façade, the balconies would benefit from the removal of metal gates and corrugated iron on the balustrades. The cast iron columns should be retained, and some of the prison bars at third floor level may be worth retaining for history and context. The external staircase on the north side should be replaced with a more appropriate option for both appearance and health and safety.

6.2.9.3

There is little remaining of great significance in the interior of the Ablutions Block and internal alterations to accommodate new uses will be acceptable.

Reason for this policy: The building was constructed as a series of small, shallow rooms, and as such is not necessarily well adapted to future purposes. If a suitable new use can be found which retains the original layout this is preferable, though this may be impossible and it is therefore acceptable to rearrange the interior to suit a new purpose. The cast iron columns found throughout the building and the decorative arched opening should, however, be retained.

6.2.9.4

The bridge links between the Barrack Block and the Ablutions Block are of historic significance and should be retained. The ground floor space between the buildings is of no significance and can be altered.

Reason for this policy: The bridge links between these buildings is significant as it is the only link between the Ablutions Block and the police station site, since the Ablutions Block lies more on the prison side of the site. While the bridges may need to be updated for health and safety reasons, they should be retained. The ground floor shed roofs and other various abutments to the Barrack Blocks are not as significant and could be removed to create a more viable open space between the buildings.

6.2.10 Central Magistracy

6.2.10.1

The external appearance of the Magistracy should be repaired, conserved and maintained to keep its appearance as it is at present, with the exception of the removal of several layers of paint, the removal of air conditioning units. There are a series of small modern accretions such as doors and windows which should be replaced with elements matching the original design.

Reason for this policy: This is a highly significant Class 'A' building and the external appearance should be preserved as close to the original design intentions as possible. Work should be limited to repair, cleaning and conservation of the original fabric and replacement of inappropriate modern elements. This is most important on the east façade of the building where it faces Arbuthnot Road.

The three doors and canopy above on the south façade are also important, while the west and north elevations have fewer notable architectural features and are more open to alteration.

6.2.10.2

Modern partitions and other insertions, and the plantrooms at the ends of the courtrooms should be removed.

Reason for this policy: The building has been altered to a considerable degree on the first floor, most notably in the alterations of 1938. Spaces on the first and second floor have been divided with modern partitions and suspended ceilings have been inserted in many spaces covering the original ceilings; these insertions could be beneficially removed to show the original design intentions. Two ground floor rooms have had flush timber panelling introduced which should be removed. The inserted plantrooms within the courtrooms disrupt the understanding of the original space and should be removed.

6.2.10.3

The Magistrates' and Solicitors' Rooms (2 each on the ground and first floors) and the Courtrooms are historically significant and should be conserved and retained as much as possible.

Reason for this policy: These spaces are the most distinctive spaces in the building as they are representative of the function of the building and have a high-quality and decorative design which is not common for the site. Many of the finishes are in poor condition, however, with some of the floorboards rotting and the walls suffering from damp. These spaces should be repaired and conserved in their original state, and a new use found which respects the original layout. The courtrooms should, under all circumstances, retain their original layout, especially as double-storey height spaces.

6.2.10.4

The remaining original internal fittings, joinery, plasterwork, door and window fittings, floor finishes and the like should all be repaired and kept in-situ.

Reason for this policy: Despite some alteration work much of the internal fittings and finishes have survived throughout the building. Care should be taken to ensure that such fittings are retained, conserved and repaired so that they can continue to function when the building is brought back into beneficial use. This applies to all the remaining internal fixtures and fittings but particular note should be taken of the wall and floor tiles in the Main Lobby, staircases, exterior balconies and associated ironmongery, decorative doorcases and window surrounds (for example on the west façade), and any other notable remaining features.

6.2.10.5

Some internal alterations will be necessary to allow the building to function for any beneficial new uses. These alterations should be made as discreetly as possible to preserve the original layouts and finishes.

Reason for this policy: It will be necessary to make a number of alterations to bring this building back into effective use. These include the updating of fire compartmentalisation and escape, as well as the possibility of needing a lift for disabled access. The necessary alterations should be completed in as discreet a way as possible but it is accepted that there will be some loss of original fabric.

6.2.10.6

The mechanical and electrical services in the building will need to be renewed, care should be taken to investigate the present systems to decide what age and significance can be placed on these fitting and to decide if any merit keeping as exemplars.

Reason for this policy: It is unlikely that much will survive of the mechanical and electrical services from the original build – though this is not impossible. The historic services should be seen as a significant part of the building. The individual features such as light fittings, switches, sockets, taps, sanitary ware, gas light fittings etc should all be considered as items of potential interest when decisions are made about the extent of any alteration work. In several of the internal spaces electrical cables, air conditioning ducts and other mechanical services have been insensitively inserted. These alterations should be reversed and the new services inserted more discreetly.

6.2.11 Assistant Superintendent's Quarters

6.2.11.1

The external appearance of this building should be retained unaltered except for the replacement of modern doors and windows, and removal of accretions associated with the insertion of air conditioning.

Reason for this policy: This building, dated to pre-1895 construction, is early on the site and remains relatively unaltered on the exterior. This building also retains the only remaining vestige of the 1860s roof pediment, once present on the Barrack Block and old Magistracy. One exception to change is the possible opening of the blocked ground floor archway.

6.2.11.2

The blocked archway on the ground floor east façade is an historic opening into the Victoria Prison, and opening up the arch should be considered in order to restore the original appearance of the building.

Reason for this policy: This opening link was likely in place well into the 20th century, and may have been blocked as late as 1927 when the ground floor was altered to accommodate offices. If opened, it would reinstate the early route through the site and provide a better understanding of the history of use at the Victoria Prison.

6.2.11.3

The interiors of this building should be kept intact as much as possible and the existing internal fittings and finishes should be respected except where obvious modern interventions should be removed.

Reason for this policy: The interior survives to a considerable degree on the first and second floors and every effort should be made when finding new uses for these buildings to keep as much as possible of the internal fixtures finishes and fittings in these areas. This is the only building on site with panelled door reveals and detailing of this kind should be retained. It is, however, acceptable to remove all modern elements from the ground floor and attempt to return it to its original layout.

6.2.11.4

The granite walls and revetments should be carefully conserved as examples of early construction on the site and the enclosure of the prison.

Reason for this policy: The revetment that has been incorporated into the lower floor to the north is part of the early terracing of the site and separation of the prison. As such this revetment is a significant historic survival.

6.2.12 A Hall

6.2.12.1

Though not of any historic or architectural value, this building visually forms a group with the adjacent B and C Halls and forms part of the north boundary of the Victoria Prison. Therefore, any exterior alterations should respect the surrounding buildings.

Reason for this policy: Given the low significance of this building, it is possible to make alterations to the exterior such as window and door replacements. However, if this building remains, the height and materials should be retained so as not to detract from the surrounding buildings, especially B Hall to the south.

6.2.12.2

A Hall is of Low significance and may be substantially altered to convert it to a new use. If no new use can be found consideration could be given to demolishing this building, always provided that this was beneficial to the interpretation and significance of the adjacent buildings.

Reason for this policy: A Hall has little significance as an historic building and could be removed if the site can be put to some more beneficial use or could be substantially altered. The demolition of this building could be justifiable if a more suitable use for the site could be found, and if it would maintain other historic building on the site. Any new development would need to respect the height and materials of the adjacent buildings.

6.2.12.3

In the event of the demolition of A Hall or its substantial remodelling the opportunity shall be taken to carry out an archaeological investigation of this area.

Reason for this policy: A Hall was built on the site of the original Governor's House, likely demolished in the late 20th century. It was later the site of a small office building. If the building is removed or the site is to be redeveloped then advantage should be taken of this to carry out a proper archaeological investigation of the site.

6.2.13 B Hall

6.2.13.1

This building visually forms a group with the adjacent A and C Halls, and is the earliest 20th century cellblock on the site, forming the basis for the later construction of E Hall. Therefore, the exterior should be repaired, conserved and maintained to retain its original character.

Reason for this policy: While the reuse of the building may require some external alterations, it is recommended that these be kept to a minimum. The design and construction of this building is a good example of an early 20th century cellblock on the site and within Hong Kong, and its appearance should continue to be externally readable as a prison structure.

6.2.13.2

The roof has been replaced with a flat concrete slab in asphalt likely following damage sustained in the WWII bombings. It is not necessary to replace it with an earlier Chinese tile roof, and the present roof can be repaired with modern materials to the existing design.

Reason for this policy: Like many of the buildings on the site, post war damage was repaired with modern materials and construction. While this does not aid in the understanding of the original building, it has provided an adequate replacement and allows for a visual representation of change on the site. Therefore, the concrete roof here can be retained, especially as E Hall retains its original roof.

6.2.13.3

Substantial internal alterations may be necessary to allow the building to function for any beneficial new uses. These alterations should attempt to preserve the original layouts and finishes.

Reason for this policy: It will be necessary to make a number of alterations to bring this building back into effective use, as its internal cellblock layout is not conducive to most other uses. Changes will include the updating of fire compartmentalisation and escape, as well as the possibility of needing a lift for disabled access. The necessary alterations should be completed in a way that will respect the original design and retain the original layout when possible, though it is understood that there will be a loss of historic fabric.

6.2.13.4

In the event of substantial internal alteration, an archaeological recording of the building interior should take place.

Reason for this policy: Given the importance of the building as an early 20th century cellblock on the site, it is recommended that any substantial removal of internal fabric be preceded by an archaeological recording of the building.

6.2.14 C Hall

6.2.14.1

Though not of historic or architectural value, this building visually forms a group with the adjacent A and B Halls and forms part of the north boundary of the Victoria Prison. It is also adjacent to the significant Assistant Superintendent's House. Therefore, any exterior alterations should respect the surrounding buildings.

Reason for this policy: Given the low significance of this building, it is possible to make alterations to the exterior such as window and door replacements. However, if this building remains, the height and materials should be retained so as not to detract from the surrounding buildings, especially B Hall to the west and the Assistant Superintendent's Quarters to the east.

6.2.14.2

C Hall is of Low significance and may be substantially altered to convert it to a new use.

Reason for this policy: C Hall has little significance as an historic building and could be substantially altered internally to suit a new purpose. If the arched opening on the ground floor of the Assistant Superintendent's House is to be opened, this building could be adapted to form an interesting link between the police area and the prison area of the site.

6.2.14.3

Though of low significance, some of the interior spaces are interesting 'snapshots' of prison life in the 21st century. Therefore, in the event of substantial internal alteration, an archaeological recording of the building interior should take place.

Reason for this policy: Spaces such as the workshops and kitchens, though not historically or architecturally important, do provide an insight into the workings of the prison and are therefore of some social importance. It is therefore recommended that any substantial alteration to these spaces is preceded by an archaeological recording of the spaces, including portable, temporary objects such as kitchen equipment and signage.

6.2.14.4

The granite revetments should be carefully repaired and conserved as examples of early construction on the site and the enclosure of the prison.

Reason for this policy: The revetments that have been incorporated into the lower floor on the north and south are part of the early terracing of the site and separation of the prison. As such this revetment is a significant historic survival and should be retained.

6.2.14.5

The ground floor Ladder Store to the south may have formed part of an earlier tunnel system.

Reason for this policy: Refer to policy 6.1.13 for further information.

6.2.15 D Hall

6.2.15.1

The external appearance of D Hall should be repaired, conserved and maintained to keep its appearance as it is at present, with the exception of the removal of small modern accretions such as doors and windows and replacement with elements matching the original design.

Reason for this policy: This is a highly significant Class 'A' building and the external appearance should be preserved as close to the original design intentions as possible. Work should be limited to repair, cleaning and conservation of the original fabric and replacement of inappropriate modern elements. This is more important on the south façade of the building where it faces the Prison Yard. The upper floor windows are more altered at present, though they can remain if more suitable to a new function.

6.2.15.2

The modern single storey shed to the west of the building is neither important nor beneficial to the understanding of D Hall. It should therefore be removed.

Reason for this policy: This structure was installed in the late 20th century and is of unremarkable design and materials which detract from the adjacent historic building. If removed it will provide more open space and a more appropriate view of the Prison Yard. However, this is the site of the original central tower of the 1858 'radial plan' prison, and if the building is removed or the site is to be redeveloped then advantage should be taken of this to carry out a proper archaeological investigation.

6.2.15.3

The remaining early internal fittings, joinery, door and window fittings, floor finishes and the like should all be repaired and kept in-situ.

Reason for this policy: Despite a large amount of alteration work some internal fittings have survived, such as the timber doors in the hospital area of the west wing and ironmongery throughout. Care should be taken to ensure that such fittings are retained, conserved and repaired so that they can continue to function when the building is brought back into beneficial use. This applies to all the remaining internal fixtures and fittings but particular note should be taken of the granite floor slabs and staircase, the supporting corbels in the basement of the east wing, and the brick vaulted ceilings in the basement and ground floor.

6.2.15.4

Substantial internal alterations may be necessary to allow the building to function for any beneficial new uses. These alterations should be made as discreetly as possible to preserve the original layouts and finishes.

Reason for this policy: It may be necessary to make a number of alterations to bring this building back into effective use. The most pressing of these will most probably be the need for improved fire compartmentation and fire escape. There are long travel distances from the ends of the building to the single staircase at the west end and it may be necessary to introduce new internal escape stairs. Depending on the new use there may be the need for a lift for disabled access. The early layout of the prison did not make use of the 'separate system' throughout, and many of the cells were much larger, open spaces. The re-opening of these cells could provide more viable space for a new use. The necessary alterations should be completed in as discreet a way as possible but it is accepted that there will be some loss of original fabric.

6.2.15.5

The roof has been replaced with a flat concrete slab covered in asphalt likely following damages sustained in the WWII bombings. The redevelopment of the building would be an opportunity to recreate the pitched roof with the double pan and roll tiles.

Reason for this policy: Like many of the buildings on the site, post war damage was repaired with modern materials and construction. As one of the most significant buildings on the site the reinstatement of the original roof finish on D Hall would aid in the understanding of the building. However the current concrete roof has provided an adequate replacement and allows for a visual representation of change on the site. The concrete roof could be retained if it was thought not to be appropriate to reinstate the original roof form.

6.2.16 E Hall

6.2.16.1

The external appearance of E Hall should be retained with the fabric repaired, conserved and maintained to keep its appearance as it is at present, with the exception of the removal of small modern accretions

Reason for this policy: This is a significant building mostly due to its survival almost completely intact, and the external appearance should be preserved as close to the original design intentions as possible. Work should be limited to repair, cleaning and conservation of the original fabric and replacement of inappropriate modern elements.

6.2.16.2

The remaining original internal fittings, joinery, door and window fittings, floor finishes and the like should all be repaired and kept in-situ where possible.

Reason for this policy: This building is the best and most complete example of a 20th century cellblock on the site, and may be the most complete building generally. Despite minor alteration work, mostly associated with services, much of the internal fittings and finishes have survived throughout the building. Care should be taken to ensure that such fittings are retained, conserved and repaired so that they can continue in use when the building is brought back into beneficial use.

6.2.16.3

Some internal alterations may be necessary to allow the building to function for any beneficial new uses. These alterations should be kept to a minimum and should attempt to preserve the original layouts and finishes.

R**eason for this policy:** It may be necessary to make a number of alterations to bring this building back into effective use, as its internal cellblock layout is not conducive to many other uses. Changes will include the updating of fire compartmentalisation and escape, as well as the possibility of needing a lift for disabled access. The necessary alterations should be completed in a way that will respect the original design and retain the original layout when possible, though it is understood that there will be a loss of historic fabric.

6.2.16.4

The infilling to the open arcaded undercroft should be removed and the original screen walls be reinstated.

Reason for this policy: The undercroft of the building is unique as a similar space does not appear elsewhere on the site, and as such the space should be retained. However, there are no significant fixtures or fittings that need to be kept in-situ.

6.2.17 Laundry and Workshop

6.2.17.1

The laundry area, the single story workshops and the steel structure supporting the upper level are all considered to be of low significance and could be demolished to make way for the new development.

Reason for this policy: The site is the original work yard as shown on early photographs and the building of the steel structure is a relatively modern insertion to provide more space at the level of the main prison yard. The structure covers a good deal of both D & E Halls and as such does not aid the interpretation of these buildings.

6.2.17.2

If demolition of the workshops and support structure is carried out there should be a full recording of the area by photographs, measured drawings etc.

Reason for this policy: This area, though of no architectural significance does have some social significance and represents an aspect of prison and as such should be recorded.

6.2.17.3

If the laundry structure is demolished care shall be taken to avoid any damage to the adjacent D & E blocks or the external wall to Arbuthnot Road.

Reason for this policy: The adjacent buildings and external wall are all of high significance.

6.2.17.4

If the structure is demolished the site may provide a suitable space for redevelopment and access provided any such development does not prejudice the understanding of the adjacent D and E halls.

Reason for this policy: There is a need to find some vehicular access to the site to allow the whole site to be brought back into beneficial view. This area represents one of the few possibilities for such access.

6.2.17.5

If the structure is demolished there should be a thorough archaeological investigation of the area as a part of any redevelopment.

Reason for this policy: This area was a prison work yard for a considerable period and there may be interesting archaeological remains on the site.

6.2.18 F Hall

6.2.18.1

F Hall, whilst being of little architectural significance is of some social significance and the external form of the building should be repaired and retained removing obvious modern additions.

Reasons for this policy: F Hall has been noted by the AMO as potential development site. Whilst is has no architectural significance and little historic significance it does have considerable social significance as the entrance and exit to the Victoria Gaol for prisoners and their visitors. For this reason it may be desirable to consider keeping the exterior of the building more or less in its present form.

6.2.18.2

The internal spaces of F Hall should be carefully recorded and then they may be modified to suit new uses.

Reason for this policy: The interior of F Hall has been altered to a large degree on several previous occasions. The large open cages on the first floor are of limited interest in the terms of the prison development and do make the space virtually impossible to use for any other purpose. To find a beneficial new use these structures can be removed after they have been properly recorded.

6.2.18.3

The entrance in the southwest corner of the site should be retained and should be returned to its earlier appearance.

Reason for this policy: This entrance is significant as the main entrance to Victoria Gaol.

6.2.19 General Office

6.2.19.1

The General Office is of Low significance and may be substantially altered to convert it to a new use or it could be demolished to create more open space.

Reason for this policy: The General Office is a modern building that has little significance and could be removed if the site can be put to some more beneficial use or could be substantially altered.

The demolition of this building and the small outbuildings to the north and west could provide a substantial area for possible future development and/or for vehicle access.

6.2.19.2

In the event of the demolition of the General Office or its substantial remodelling the opportunity shall be taken to carry out an archaeological investigation of this area.

Reason for this policy: The General Office was built on the site of the original west wing of the 1858 'radial plan' prison, demolished following extreme levels of bomb damage suffered in WWII. If the building is removed or the site is to be redeveloped then advantage should be taken of this to carry out a proper archaeological investigation of the site.

6.2.20 Bauhina House

6.2.20.1

The exterior of Bauhina House should be retained in its present form other than the removal of obvious modern features and should be carefully repaired and conserved.

Reason for this policy: Bauhina House is one of the earliest structures on the site and one of the most public. The external walls probably date from 1851 and the rest of the building from circa 1858.

The historic fabric of this building should be preserved and its historic streetscape significance should be recognised.

6.2.20.2

The interior of Bauhina House should be altered with caution after proper investigation of the historic fabric.

Reason for this policy: It is likely that a good deal of the building remains from the original build. This should be carefully evaluated before any repair or alterations are undertaken.

6.2.20.3

The doorway, windows and loopholes should all be considered for reopening if a beneficial use can be found for the building.

Reason for this policy: This building is a very significant feature on the corner of Arbuthnot Road and Chancery Lane. It has been disused for some time and it would be good for the long term future of the building for it to have some beneficial use. The doorway offers one opportunity to provide some access to the site.

6.3 MANAGEMENT POLICIES

6.3.1

A management company or other appropriate framework will be set up on completion of the repair and alteration works to ensure the ongoing site wide management and control.

Reason for this policy: The site will need to be actively managed if the significance of the site is to be maintained. This will require active management by a group that has the firm control of potential alterations to the buildings and to the site layout. The management will need to regulate the way that vehicles access the site and ensure that all events held on the site are appropriate for and compliment the history and cultural significance of the site.

6.3.2

The management of the site will take into consideration the views of all appropriate interest groups when making decisions about the future of the site.

Reason for this policy: This is a site of great historic and cultural significance and it is important that all those groups who have a legitimate interest in the future of the site have a chance to express their views as to its ongoing management and future uses. The policy is not intended to bind the management company to following or acting on all concerns of groups who are consulted. However, the management company will consider all such views and will provide clear reasons for the basis of its decision making.

6.3.3

In the planning for future work on the site an education policy will be an immediate priority. This should plan for the future interpretation of the site and decide at an early stage of the work how the site will be interpreted for future visitors and what space or spaces will be needed to carry out this work. Such spaces will be provided as part of the reordering and replanning of the site.

Reason for this policy: The interpretation of the significance of the site must be one of the key objectives when considering the best way to conserve and repair the buildings. The education policy will highlight those features of the site that need to be preserved and shown as a means of clear interpretation and will also help reinforce the possibility of more radical change in other areas.

6.3.4

When planning any work across the site the possibilities of archaeological remains will be carefully considered. Desk top studies of potential archaeology should be a necessity for any work on the buildings. Where any excavation work is planned this should either be investigated by archaeologists in advance or as a minimum they should have a watching brief for all below ground work.

Reason for this policy: The site has been in continuous use sine 1842 and there have been many alterations to the buildings in this period, particularly of the Victoria Gaol site. There is likely to be evidence in some buildings of earlier structures that have been incorporated into lower levels of the newer buildings. There will also be the remnants of earlier buildings below most of the non built on areas of the gaol. The careful examination of these early footings and foundations will add considerably to the understanding of the development of the site and will contribute to the judgement of the significance of standing structures.

6.4 LEGAL FRAMEWORK

6.4.1

The site is a Designated Historic Monument and as such is protected under the law from unauthorised alteration or demolition. Nothing in this Conservation Plan is intended to challenge the legal status of the site as a Designated Historic Monument. Permission will be sought through the Antiquities and Monuments Office for any alterations or demolitions that are proposed.

Reason for this policy: There is no intention to challenge the legal position of the site designation. The policies set out in this Conservation Plan are intended to act as a more detailed guide to what may or may not be permissible to alter when adapting the site for new uses to give the site and the buildings a sustainable future. The intention will be to seek early consultation on all proposed work with the AMO and other interested parties. Proper permission will, of course, be sought for all work as the detailed planning proceeds.

6.4.2

Four Buildings that have been designated as Type 'A' on the site – The Police Headquarters, The Magistracy, The Barrack Block and the west wing of 'D' Hall. The Type 'A' designation is for buildings of high heritage significance where the inside and outside of the building should be conserved. Nothing in this Conservation Plan is intended to challenge the Listed Status of these buildings. Permission will be sought through the Antiquities and Monuments Office for any alterations that are proposed.

Reason for this policy: There is no intention to challenge the legal position of the buildings that have been classified as Type 'A'. The Conservation Management Plan agrees that these are the most significant structures on the site. The policies set out in this Conservation Plan are intended to act as a more detailed guide to what may or may not be permissible to alter when adapting these Type 'A' buildings for new uses to give them a sustainable future. The intention will be to seek early consultation on all proposed work with the AMO and other interested parties. Proper permission will, of course, be sought for all work as the detailed planning proceeds.

6.4.3

A further ten buildings are listed as Type 'B' – effectively the majority of the remaining buildings on the site. Type 'B' designation is for buildings of lesser heritage significance where the exterior should be conserved but internal alterations may be made for adaptive reuse. Nothing in this Conservation Plan is intended to challenge the Listed Status of these buildings. Permission will be sought through the Antiquities and Monuments Office for any alterations that are proposed.

Reason for this policy: There is no intention to challenge the legal position of the buildings classified as Type 'B'. The policies set out in this Conservation Plan are intended to act as a more detailed guide to how much alteration may be permissible when adapting these buildings for new uses to give the whole site a sustainable future. The intention will be to seek early consultation on all proposed work with the AMO and other interested parties. Proper permission will, of course, be sought for all work as the detailed planning proceeds.

6.5 CONSERVATION MANAGEMENT PLAN

6.5.1

It is intended that this Conservation Management Plan will be used as a policy document by the developers of the site. The intention is that this document will be formally accepted as a strategic policy document by the original developers of the site and by the management company that takes on responsibility for the long term future of the site.

Reason for this policy: The Conservation Management Plan needs to have the backing of all interested parties if it is to be a useful and effective document for the replanning and future management of the site. For this reason it is recommended that it be adopted as a policy document by the appropriate organisations.

6.5.2

For the Conservation Management Plan to remain relevant it will need to be regularly amended. In adopting this plan as a policy document it is agreed that the Plan will be updated and amended at regular interval. Reconsidering the plan at five year intervals will be the target for the ongoing management of the site.

Reason for this policy: The Conservation Management Plan is relevant to the circumstances prevailing in spring 2008. As time passes and particularly as work is carried out to the site and buildings the plan will need to be reviewed and amended to reflect these changed circumstances. Unless the plan is regularly amended it will soon cease to have much relevance to the ongoing management of the site.

6.5.3

It is intended that the Conservation Management Plan will be accessible to any interested party. It is intended to make a copy of the plan available on an appropriate website so that it is freely available to all who wish to read it or consider its recommendations.

Reason for this policy: The Conservation Management Plan is not intended to be a private document and should be available for any interested party to consult. Informed debate about the future of the site and the amount of alteration to be permitted is to be welcomed. The simplest way of making the Conservation management Plan widely available is to post it on the internet. This will be done as soon as a final version of the Plan is agreed with the key stakeholders.

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7

CONCLUSION

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7 CONCLUSION

That this site is of high cultural and historic significance is beyond doubt. This has, of course, already been recognised by the designation of the entire site and of specific buildings as being of Historic Interest. This Conservation Management Plan attempts to take the analysis of the significance of the site and the significant features of specific buildings to a more detailed level than the descriptions given with the designations. The starting point is understanding the history of the development and use of the site. This is already well understood and there is a mass of original documentation. In the time available for the preparation of this Conservation Management Plan, only a proportion of this material has been examined in detail. It is likely that there is a good deal more to be uncovered about the history of the site from material in archives in Hong Kong and in the UK. More will also be learnt as work proceeds on the site and there are opportunities for a detailed examination of the fabric of standing buildings and a recording of the archaeology of previous buildings and structures.

The significance of the whole site has been considered along with the significance of the individual buildings. In many ways the two are inseparable and changes to the one will reflect upon the other. However, whilst the high significance of the site is reinforced by the analysis in the Conservation Management Plan there is also an acknowledgement that some change to the nature of the site and of individual buildings is inevitable. The Conservation Policies within this report are not about stopping change but about managing it in a way that maintains the historic and cultural significance of the site. This does not only mean during the capital works programme necessary to repair and alter the buildings for new uses – but also setting up a management system that will provide for the proper maintenance and control of the site into the future.

The document considers the 'Vulnerability' of the significance of the site to change and also considers briefly the 'Opportunities' that any work on the site will provide. The most serious threat to most historic buildings and sites is that they have no beneficial use and that there is little incentive to spend money keeping the buildings in good repair, properly maintained and available for members of the public to enjoy. There are a few situations where it may be possible to keep a building unaltered and treat it as a monument or museum (though even here there is increasing pressure for modern facilities and modern services to maintain acceptable environmental conditions).

Few buildings or sites are appropriate for such treatment and almost all of them will require ongoing subsidy from a local authority or charity. The conclusion of this study is that it would be inappropriate to try and conserve the site in its entirety as a museum or monument to the history of Law and Order in Hong Kong. This is an interesting subject and relevant in educational terms – but the site is large and it is very difficult to see how the whole site could be put to good use in this way.

If the conclusion is that the site needs to have a good deal of redevelopment to accommodate new uses, it also recognises the high historic, cultural and architectural significance of the whole site and of some of the individual buildings. It is suggested that as a starting point for considering any redevelopment there should be the formulation of an education policy for the interpretation and display of the site. It may be possible to use some of the space for an appropriate museum and there are some spaces where it would be good to ensure that public access remains readily available. Some buildings are more crucial to the interpretation of the site than others. When the redevelopment of the site is considered in detail the possibilities for the interpretation of the significance of the site can in this way be fully considered and be designed within.

There will be many pressures for change to accommodate new uses. The site has been a very enclosed space and much of its interest and significance rests on this enclosure. In any new development there will be a need for more vehicle access to service the buildings and considerably more public access will be needed into and across the site. There will be pressure to alter buildings to accommodate fire regulations, to provide new mechanical and electrical services, to allow for the security of individual tenancies, and to achieve more convenient spaces. If the site is to have a long term future all these changes will need to be accommodated – but if the site is to retain its significance these changes must be managed to ensure that significance is preserved.

The Conservation Polices are a series of clear statements of what should and what should not be done to the site as a whole and to the individual buildings. The list is by no means exhaustive but it sets out a framework and gives headline policies for each major structure on the site. The Conservation Policies also set out a framework for the future management of the site to ensure that its significance is maintained. The intention is that all these policies

should be relevant to whomever has responsibility for the site: the Hong Kong Government as the current owner of the site or any other agency or developer who takes on the future development and long term management of this site and these buildings.

The Conservation Management Plan recognises that there will need to be significant alterations to some areas of the site and to some of the buildings and that this will be the price of securing the long term future. Some of the buildings, the cell blocks in particular, cannot be sensibly used for other purposes without major alteration. The proposal here is that one cell block (E Hall is suggested) be conserved as an exemplar but that others be allowed substantially more freedom to complete internal alterations. In other buildings, which may be of high significance in themselves, it will be appropriate to decide on the most significant areas to conserve, repair and restore, whilst accepting that some secondary areas of the same building may be more significantly altered.

There are seldom perfect answers when conserving historic buildings. Good conservation work is often the management of change and making decisions about the least damaging way of doing things. The Old Police Station Site is a rich complex with a great deal of cultural, historical, social and architectural significance. This Conservation Management Plan attempts to provide a guidance framework for this decision making. There will, as detailed management and design decision are made, be a need to extend the information in this plan. The more significant individual buildings will probably warrant a separate and more detailed Conservation Plan where the elements of each individual space are analysed. This will allow informed design decisions to be made about the extent of the historic fabric that remains and how it can best be conserved.

Finally it is recognised that there will need to be some new construction on the site. The extent of this and the purpose for which it will be used has not been addressed as part of the Conservation Management Plan. Two possible areas that could take new development without major detriment to the site are identified – the present Laundry area and the site of the offices and other modern structures to the north of F Hall. Both these areas could either tolerate some new building and/or could be used to solve the problem of vehicular access to the site. It should be recognised, however, that any redevelopment or new construction on the site should respect the historic significance of what is a very interesting site with great future potential.

The guidance given on the future use of the site by the AMO recognises that new building will be needed and suggests that the prison yard and F Hall are both sites that could accommodate further development. Using this as a basis The Hong Kong Jockey Club have been in discussion with architects Herzog & de Meuron who have an unparalleled track record in the development of cultural facilities.

The Conservation Management Plan has deliberately started from the beginning as though no new proposals had been considered. The Conservation Policies are written with no reference to the possible scheme to redevelop the south part of the site. Any proposals for redevelopment will need to be judged against the Conservation Policies and if the development is to be seriously considered there will need to be mitigating factors that outweigh any loss of cultural heritage significance.

8

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136 Nathan Road
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In advance of assigning status as Declared Monuments or as Historic Buildings of interest, the Antiquities and Monuments Office produced a set of documents outlining the history and giving an architectural appraisal of all the buildings on the site. These have been referenced throughout the Conservation Management Plan.

Hong Kong Jockey Club
Several photographs, maps and plans used in the creation of an exhibition for the HKJC were made available.

Hong Kong Public Records Office
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The Old Central Police Station and Victoria Prison, Hong Kong

CONSERVATION MANAGEMENT PLAN

June 2008

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Annex B

Supporting Information for Noise Impact Assessment

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B1 : Preliminary Construction Programme

No.	Activity Description	2012												2013							
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
I	**Existing Buildings** [1]																				
1	Phase 1 & Site Wide Structure	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y										
II	**New Building** [2]																				
2	Foundation	Y	Y	Y	Y	Y	Y	Y													
3	Excavation and Lateral Support (ELS)								Y	Y	Y	Y	Y	Y							
4	Basement / Superstructure Construction														Y	Y	Y	Y	Y	Y	Y

Notes:

[1] Phases 2 to 4 are A&A works for existing buildings mainly under indoor environment with minimal noise impact and therefore is not included in the construction noise impact assessment.

[2] Noise impact from curtain wall installation and fitting out works for the new buildings are expected to be minimal and therefore is not included in the construction noise impact assessment.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-1 : Construction Plant Inventory - Unmitigated

No.	Activities	Plant	TM / EPD[1] / BS 5228 ref.	No. of PME	On-time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)[2]
I)	**Existing Buildings**							
1	**Phase 1 & Site Wide Structure**		**Sub-total SWL for Phase 1 & Site Wide Structure = 121**					
	Demolition							
		Breaker, hand-held, mass < 10kg	CNP 023	4	50%	108	111	**121**
		Breaker, excavator mounted (pneumatic)	CNP 027	1	75%	122	121	
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	CNP 068	2	50%	105	105	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	
	Excavation and Lateral Support (ELS)							
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	**118**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	110	112	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	104	106	
		Water pump (electric)	CNP 281	3	50%	88	90	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	
		Compactor, vibratory	CNP 050	2	50%	105	105	
		Crane, mobile/barge mounted (diesel)	CNP 048	2	50%	112	112	
		Grout mixer	EPD/PME/14	1	75%	90	89	
		Grout pump	EPD/PME/15	1	75%	105	104	
II)	**New Building**							
2	**Foundation**				**Sub-total SWL for Foundation = 120**			
	Piling							
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	**116**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	110	112	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	104	106	
		Grout mixer	EPD/PME/14	1	75%	90	89	
		Grout pump	EPD/PME/15	1	75%	105	104	
		Crane, mobile/barge mounted (diesel)	CNP 048	2	50%	112	112	
		Crane, tower (electric)	CNP 049	1	75%	95	94	
	CAP							
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	**120**
		Saw, circular, wood	CNP 201	2	50%	108	108	
		Bar bender and cutter (electric)	CNP 021	2	75%	90	92	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	1	50%	111	108	
		Concrete lorry mixer	CNP 044	2	50%	109	109	
		Concrete pump, stationary/lorry mounted	CNP 047	2	50%	109	109	
		Poker, vibratory, hand-held	CNP 170	4	50%	113	116	
		Compactor, vibratory	CNP 050	2	40%	105	104	
		Water pump (electric)	CNP 281	2	50%	88	88	
		Air Compressor, air flow > 30m3/min	CNP 003	1	75%	104	103	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	
		Crane, tower (electric)	CNP 049	1	75%	95	94	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	CNP 068	1	50%	105	102	

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-1 : Construction Plant Inventory - Unmitigated

No.	Activities	Plant	TM / EPD[1] / BS 5228 ref.	No. of PME	On-time %	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)[2]
3	**Excavation and Lateral Support (ELS)**					**Sub-total SWL for ELS =**		**118**
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	**118**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	110	112	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	104	106	
		Water pump (electric)	CNP 281	3	50%	88	90	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	
		Compactor, vibratory	CNP 050	2	50%	105	105	
		Crane, mobile/barge mounted (diesel)	CNP 048	2	50%	112	112	
		Grout mixer	EPD/PME/14	1	75%	90	89	
		Grout pump	EPD/PME/15	1	75%	105	104	
4	**Basement / Superstructure Construction**					**Sub-total SWL for Basement / Superstructure Works =**		**120**
		Excavator/loader, wheeled/tracked	CNP 081	2	75%	112	114	**120**
		Saw, circular, wood	CNP 201	2	50%	108	108	
		Bar bender and cutter (electric)	CNP 021	2	75%	90	92	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	1	50%	111	108	
		Concrete lorry mixer	CNP 044	2	50%	109	109	
		Concrete pump, stationary/lorry mounted	CNP 047	2	50%	109	109	
		Poker, vibratory, hand-held	CNP 170	4	50%	113	116	
		Compactor, vibratory	CNP 050	2	40%	105	104	
		Water pump (electric)	CNP 281	2	50%	88	88	
		Air Compressor, air flow > 30m3/min	CNP 003	1	75%	104	103	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%	95	95	
		Crane, tower (electric)	CNP 049	1	75%	95	94	
		Crane, mobile/barge mounted (diesel)	CNP 048	1	50%	112	109	
		Dump truck, 5.5 tonne < gross vehicle weight < 38 tonne	CNP 068	1	50%	105	102	

Notes:

[1] SWLs of EPD/PME items refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

BS - British Standard BS 5228:2009, Part 1 Noise and Vibration Control on Construction and Open Sites

[2] The figures are rounded-up to a whole number.

Annex B2-2 : Summary of Predicted Noise Levels during Daytime Period - Unmitigated

	NSR Location	EIAO-TM Noise Criteria, dB(A)	Predicted Construction Noise Level (dB(A))																				Max. CNL, dB(A)
			2012												2013								
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
N1	Amber Lodge	75	**86**	**86**	**86**	**86**	**86**	**86**	**86**	**85**	**85**	**85**	**79**	**79**	**79**	**81**	**81**	**81**	**81**	**81**	**81**	**81**	**86**
N2	Ho Fook Building	75	**87**	**87**	**87**	**87**	**87**	**87**	**87**	**86**	**86**	**86**	**80**	**80**	**80**	**82**	**82**	**82**	**82**	**82**	**82**	**82**	**87**
N3	Old Bailey Street Police Married Quarters	75	**86**	**86**	**86**	**86**	**86**	**86**	**86**	**85**	**85**	**85**	**81**	**81**	**81**	**83**	**83**	**83**	**83**	**83**	**83**	**83**	**86**
N4	Cambridge Villa	75	**87**	**87**	**87**	**87**	**87**	**87**	**87**	**86**	**86**	**86**	**84**	**84**	**84**	**86**	**86**	**86**	**86**	**86**	**86**	**86**	**87**
N5	Chancery House	75	**89**	**89**	**89**	**89**	**89**	**89**	**89**	**87**	**87**	**87**	**86**	**86**	**86**	**88**	**88**	**88**	**88**	**88**	**88**	**88**	**89**
N6	Chancery Mansion	75	**89**	**89**	**89**	**89**	**89**	**89**	**89**	**87**	**87**	**87**	**86**	**86**	**86**	**88**	**88**	**88**	**88**	**88**	**88**	**88**	**89**

Note:

[1] **Bold** value indicates exceedance of noise criteria of 75 dB(A) for residential premises.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3a Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N1 Amber Lodge

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	44	-41	3	84	84	84	84	84	84	84	84	84	84											
II	**New Building**																									
2	Foundation	120	50	-42	3	81	81	81	81	81	81	81														
3	Excavation and Lateral Support (ELS)	118	50	-42	3								79	79	79	79	79	79								
4	Basement / Superstructure Construction	120	50	-42	3														81	81	81	81	81	81	81	
	Predicted Noise Level during Daytime Period, dB(A)					86	86	86	86	86	86	86	85	85	85	79	79	79	81	81	81	81	81	81	81	86

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3b Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N2 Ho Fook Building

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	38	-40	3	85	85	85	85	85	85	85	85	85	85											
II	**New Building**																									
2	Foundation	120	46	-41	3	82	82	82	82	82	82	82														
3	Excavation and Lateral Support (ELS)	118	46	-41	3								80	80	80	80	80	80								
4	Basement / Superstructure Construction	120	46	-41	3														82	82	82	82	82	82	82	
	Predicted Noise Level during Daytime Period, dB(A)					87	87	87	87	87	87	87	86	86	86	80	80	80	82	82	82	82	82	82	82	87

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3c Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N3 Old Bailey Street Police Married Quarters

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	52	-42	3	82	82	82	82	82	82	82	82	82	82											
II	**New Building**																									
2	Foundation	120	40	-40	3	83	83	83	83	83	83	83														
3	Excavation and Lateral Support (ELS)	118	40	-40	3								81	81	81	81	81	81								
4	Basement / Superstructure Construction	120	40	-40	3														83	83	83	83	83	83	83	
Predicted Noise Level during Daytime Period, dB(A)						86	86	86	86	86	86	86	85	85	85	81	81	81	83	83	83	83	83	83	83	86

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3d Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N4 Cambridge Villa

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	57	-43	3	81	81	81	81	81	81	81	81	81	81											
II	**New Building**																									
2	Foundation	120	30	-37	3	86	86	86	86	86	86	86														
3	Excavation and Lateral Support (ELS)	118	30	-37	3								84	84	84	84	84	84								
4	Basement / Superstructure Construction	120	30	-37	3														86	86	86	86	86	86	86	
	Predicted Noise Level during Daytime Period, dB(A)					87	87	87	87	87	87	87	86	86	86	84	84	84	86	86	86	86	86	86	86	87

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3e Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N5 Chancery House

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	57	-43	3	81	81	81	81	81	81	81	81	81	81											
II	**New Building**																									
2	Foundation	120	23	-35	3	88	88	88	88	88	88	88														
3	Excavation and Lateral Support (ELS)	118	23	-35	3								86	86	86	86	86	86								
4	Basement / Superstructure Construction	120	23	-35	3														88	88	88	88	88	88	88	
	Predicted Noise Level during Daytime Period, dB(A)					89	89	89	89	89	89	89	87	87	87	86	86	86	88	88	88	88	88	88	88	89

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B2-3f Construction Airborne Noise Impact Assessment - Unmitigated

NSR: N6 Chancery House

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	121	57	-43	3	81	81	81	81	81	81	81	81	81	81											
II	**New Building**																									
2	Foundation	120	23	-35	3	88	88	88	88	88	88	88														
3	Excavation and Lateral Support (ELS)	118	23	-35	3								86	86	86	86	86	86								
4	Basement / Superstructure Construction	120	23	-35	3														88	88	88	88	88	88	88	
	Predicted Noise Level during Daytime Period, dB(A)					89	89	89	89	89	89	89	87	87	87	86	86	86	88	88	88	88	88	88	88	89

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-1 : Summary of Predicted Fixed Plant Noise Levels due to the Operation of the Proposed Development (During Day-time & Evening Time Periods)

NSRs		Predicted Fixed Plant Noise Level (dB(A))	Predicted PA Noise Level (dB(A))	Cumulative Predicted Noise Level (dB(A))	Noise Criteria (dB(A))
		Day-time & Evening Time Periods	Day-time & Evening Time Periods	Day-time & Evening Time Periods	Day-time & Evening Time Periods
N1	Amber Lodge	42	53	53	59
N2	Ho Fook Building	48	50	52	59
N3	Old Bailey Street Police Married Quarters	49	55	56	59
N4	Cambridge Villa	45	52	53	54
N5	Chancery House	49	53	54	54
N6	Chancery Mansion	50	51	54	54

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2a Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N1 Amber Lodge

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	148.0	5	-51.4	3	0	28
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	148.0	5	-51.4	3	0	28
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	155.5	5	-51.8	3	0	36
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	164.0	5	-52.3	3	-10	20
5	Genset	G/F plant room of Old Bailey Wing	84	1	107.0	0	-48.6	3	-10	28
6	Transformer	West louvre of transformer room of Ablution Block	75	2	90.0	3	-47.1	3	-10	24
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	90.0	6	-47.1	3	-10	27
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	38.0	0	-39.6	3	-10	38
9		East louvre of Police Headquarters at lower courtyard	85	1	66.0	0	-44.4	3	-10	34
								Predicted Façade Noise Level (dB(A)) =		**42**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2a Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	41.0	0	-40.2	3	-10	44
2			91	1	61.0	0	-43.7	3	-10	40
3			91	1	66.0	0	-44.4	3	0	50
4			91	1	81.0	0	-46.2	3	0	48
5	PA system	Upper courtyard	86	1	122.0	0	-49.7	3	-10	29
6			86	1	138.0	0	-50.8	3	0	38
						Predicted Façade Noise Level (dB(A)) =				**53**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log(2π(d2)^2)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2b Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N2 Ho Fook Building

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	107.0	5	-48.6	3	-10	21
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	107.0	5	-48.6	3	-10	21
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	120.0	5	-49.6	3	-10	28
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	131.0	5	-50.3	3	-10	22
5	Genset	G/F plant room of Old Bailey Wing	84	1	40.5	0	-40.1	3	-10	37
6	Transformer	West louvre of transformer room of Ablution Block	75	2	22.0	3	-34.8	3	0	46
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	31.0	6	-37.8	3	-10	36
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	33.0	0	-38.4	3	-10	40
9		East louvre of Police Headquarters at lower courtyard	85	1	83.0	0	-46.4	3	-10	32
									Predicted Façade Noise Level (dB(A)) =	**48**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2b Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	43.0	0	-40.7	3	-10	43
2			91	1	71.0	0	-45.0	3	-10	39
3			91	1	32.5	0	-38.2	3	-10	46
4			91	1	67.5	0	-44.6	3	-10	39
5	PA system	Upper courtyard	86	1	66.5	0	-44.4	3	-10	35
6			86	1	93.0	0	-47.4	3	0	42
						Predicted Façade Noise Level (dB(A)) =				**50**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log(2π(d2)^2)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2c Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N3 Old Bailey Street Police Married Quarters

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	97.0	5	-47.7	3	0	32
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	97.0	5	-47.7	3	0	32
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	111.0	5	-48.9	3	0	39
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	124.0	5	-49.9	3	-10	23
5	Genset	G/F plant room of Old Bailey Wing	84	1	27.5	0	-36.8	3	-10	40
6	Transformer	West louvre of transformer room of Ablution Block	75	2	20.0	3	-34.0	3	0	47
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	31.0	6	-37.8	3	-10	36
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	69.0	0	-44.8	3	-10	33
9		East louvre of Police Headquarters at lower courtyard	85	1	109.5	0	-48.8	3	-10	29
									Predicted Façade Noise Level (dB(A)) =	**49**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2c Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	76.0	0	-45.6	3	0	48
2			91	1	97.0	0	-47.7	3	0	46
3			91	1	55.0	0	-42.8	3	0	51
4			91	1	84.5	0	-46.5	3	0	47
5	PA system	Upper courtyard	86	1	50.0	0	-42.0	3	-10	37
6			86	1	88.0	0	-46.9	3	0	42
						Predicted Façade Noise Level (dB(A)) =				**55**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log($2\pi(d2)^2$)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2d Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N4 Cambridge Villa

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	64.0	5	-44.1	3	0	36
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	64.0	5	-44.1	3	0	36
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	77.0	5	-45.7	3	0	42
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	90.0	5	-47.1	3	-10	26
5	Genset	G/F plant room of Old Bailey Wing	84	1	43.0	0	-40.7	3	-10	36
6	Transformer	West louvre of transformer room of Ablution Block	75	2	64.0	3	-44.1	3	-10	27
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	60.5	6	-43.6	3	-10	30
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	112.0	0	-49.0	3	-10	29
9		East louvre of Police Headquarters at lower courtyard	85	1	129.0	0	-50.2	3	-10	28
									Predicted Façade Noise Level (dB(A)) =	**45**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2d Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	112.0	0	-49.0	3	-10	35
2			91	1	118.0	0	-49.4	3	-10	35
3			91	1	84.5	0	-46.5	3	-10	37
4			91	1	96.0	0	-47.6	3	-10	36
5	PA system	Upper courtyard	86	1	34.0	0	-38.6	3	0	50
6			86	1	60.0	0	-43.5	3	0	45
						Predicted Façade Noise Level (dB(A)) =				**52**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log(2π(d2)^2)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2e Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N5 Chancery House

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	33.0	5	-38.4	3	0	41
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	33.0	5	-38.4	3	0	41
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	42.5	5	-40.5	3	0	47
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	54.0	5	-42.6	3	-10	30
5	Genset	G/F plant room of Old Bailey Wing	84	1	67.0	0	-44.5	3	-10	32
6	Transformer	West louvre of transformer room of Ablution Block	75	2	90.0	3	-47.1	3	-10	24
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	80.5	6	-46.1	3	-10	28
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	126.0	0	-50.0	3	-10	28
9		East louvre of Police Headquarters at lower courtyard	85	1	125.5	0	-50.0	3	-10	28
									Predicted Façade Noise Level (dB(A)) =	**49**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2e Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	123.0	0	-49.8	3	-10	34
2			91	1	118.0	0	-49.4	3	-10	35
3			91	1	91.0	0	-47.2	3	-10	37
4			91	1	93.0	0	-47.4	3	-10	37
5	PA system	Upper courtyard	86	1	44.5	0	-40.9	3	0	48
6			86	1	33.0	0	-38.4	3	0	51
						Predicted Façade Noise Level (dB(A)) =				**53**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log(2π(d2)^2)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-2f Operational Noise Impact Assessment - Fixed Plant (During Day-time & Evening Time Periods)

NSR: N6 Chancery House

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	3	33.0	5	-38.4	3	0	41
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	3	33.0	5	-38.4	3	0	41
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	3	35.0	5	-38.9	3	0	49
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	3	40.0	5	-40.0	3	-10	33
5	Genset	G/F plant room of Old Bailey Wing	84	1	86.0	0	-46.7	3	-10	30
6	Transformer	West louvre of transformer room of Ablution Block	75	2	109.0	3	-48.7	3	-10	22
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	95.0	6	-47.5	3	-10	26
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	143.0	0	-51.1	3	-10	27
9		East louvre of Police Headquarters at lower courtyard	85	1	134.0	0	-50.5	3	-10	27
									Predicted Façade Noise Level (dB(A)) =	**50**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage.
The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

Annex B3-2f Operational Noise Impact Assessment - PA system

No.	Item	Location	Max. Allowable SPL, dB(A) [3]	Quantity	Minimum Distance from site boundary to NSR (d2),m [4]	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$)
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A)	
Day-time & Evening Time Periods (between 0700 to 2300 hours)										
1	PA system	Lower courtyard	91	1	135.0	0	-50.6	3	-10	33
2			91	1	126.0	0	-50.0	3	-10	34
3			91	1	111.0	0	-48.9	3	-10	35
4			91	1	100.0	0	-48.0	3	-10	36
5	PA system	Upper courtyard	86	1	62.0	0	-43.8	3	0	45
6			86	1	40.0	0	-40.0	3	0	49
						Predicted Façade Noise Level (dB(A)) =				**51**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance correction for SWL = -10*log($2\pi(d2)^2$)

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door

[4] Detailed design of the PA system is not yet available at this stage. The speaker clusters are expected to be operated during some special occasions during daytime and evening time periods only (until 23:00 hours).

The maximum allowable SWLs of the PA system were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable SWLs:

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-3 : Summary of Predicted Fixed Plant Noise Levels due to the Operation of the Proposed Development (During Night-time Period)

NSRs		Predicted Fixed Plant Noise Level (dB(A))	Noise Criteria (dB(A))
		Night-time Period	Night-time Period
N1	Amber Lodge	42	50
N2	Ho Fook Building	48	50
N3	Old Bailey Street Police Married Quarters	48	50
N4	Cambridge Villa	43	49
N5	Chancery House	48	49
N6	Chancery Mansion	49	49

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4a Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N1 Amber Lodge

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	148.0	3	-51.4	3	0	27
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	148.0	3	-51.4	3	0	27
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	155.5	3	-51.8	3	0	34
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	164.0	3	-52.3	3	-10	19
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	90.0	3	-47.1	3	-10	24
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	90.0	6	-47.1	3	-10	27
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	38.0	0	-39.6	3	-10	38
9		East louvre of Police Headquarters at lower courtyard	85	1	66.0	0	-44.4	3	-10	34
									Predicted Façade Noise Level (dB(A)) =	**41**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4b Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N2 Ho Fook Building

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	107.0	3	-48.6	3	-10	19
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	107.0	3	-48.6	3	-10	19
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	120.0	3	-49.6	3	-10	26
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	131.0	3	-50.3	3	-10	21
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	22.0	3	-34.8	3	0	46
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	31.0	6	-37.8	3	-10	36
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	33.0	0	-38.4	3	-10	40
9		East louvre of Police Headquarters at lower courtyard	85	1	83.0	0	-46.4	3	-10	32
									Predicted Façade Noise Level (dB(A)) =	**48**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4c Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N3 Old Bailey Street Police Married Quarters

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	97.0	3	-47.7	3	0	30
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	97.0	3	-47.7	3	0	30
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	111.0	3	-48.9	3	0	37
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	124.0	3	-49.9	3	-10	21
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	20.0	3	-34.0	3	0	47
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	31.0	6	-37.8	3	-10	36
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	69.0	0	-44.8	3	-10	33
9		East louvre of Police Headquarters at lower courtyard	85	1	109.5	0	-48.8	3	-10	29
								Predicted Façade Noise Level (dB(A)) =		**48**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4d Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N4 Cambridge Villa

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	64.0	3	-44.1	3	0	34
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	64.0	3	-44.1	3	0	34
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	77.0	3	-45.7	3	0	40
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	90.0	3	-47.1	3	-10	24
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	64.0	3	-44.1	3	-10	27
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	60.5	6	-43.6	3	-10	30
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	112.0	0	-49.0	3	-10	29
9		East louvre of Police Headquarters at lower courtyard	85	1	129.0	0	-50.2	3	-10	28
									Predicted Façade Noise Level (dB(A)) =	**43**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4e Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N5 Chancery House

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	33.0	3	-38.4	3	0	40
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	33.0	3	-38.4	3	0	40
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	42.5	3	-40.5	3	0	45
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	54.0	3	-42.6	3	-10	28
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	90.0	3	-47.1	3	-10	24
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	80.5	6	-46.1	3	-10	28
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	126.0	0	-50.0	3	-10	28
9		East louvre of Police Headquarters at lower courtyard	85	1	125.5	0	-50.0	3	-10	28
								Predicted Façade Noise Level (dB(A)) =		**48**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B3-4f Operational Noise Impact Assessment - Fixed Plant (During Night-time Period)

NSR: N6 Chancery House

No.	Item	Location	Max. Allowable SWL, dB(A) [5]	Quantity	Distance from source to NSR (d2),m	Corrections For				Predicted Noise Level (dB(A) $L_{eq, 30min}$) [4]
						Quantity dB(A) [1]	Distance dB(A) [2]	Façade dB(A)	Barrier dB(A) [3]	
Night-time Periods (between 2300 to 0700 hours)										
1	Chilled Water Pumps	West louvre of chilled water pump room on the roof of Arbuthnot Wing	72	2	33.0	3	-38.4	3	0	40
2	Condenser Water Pump	West louvre of condenser water pump room on the roof of Arbuthnot Wing	72	2	33.0	3	-38.4	3	0	40
3	Cooling Tower	Cooling towers on the roof of Arbuthnot Wing	80	2	35.0	3	-38.9	3	0	47
4	Chiller	East louvre of chiller room on the roof of Arbuthnot Wing	75	2	40.0	3	-40.0	3	-10	31
5	Genset [6]	G/F plant room of Old Bailey Wing	-	-	-	-	-	-	-	-
6	Transformer	West louvre of transformer room of Ablution Block	75	2	109.0	3	-48.7	3	-10	22
7		South louvre of exhaust air duct for transformer room of Ablution Block	75	4	95.0	6	-47.5	3	-10	26
8	Fan	West louvre of Police Headquarters at lower courtyard	85	1	143.0	0	-51.1	3	-10	27
9		East louvre of Police Headquarters at lower courtyard	85	1	134.0	0	-50.5	3	-10	27
									Predicted Façade Noise Level (dB(A)) =	**49**

Notes:

[1] Correction for quantity = 10*log(Quantity)

[2] Distance attenuation for SWL = $-10*\log(2\pi(d2)^2)$

[3] Reference was made from IND-TM, a negative correction of 10dB(A) will be applied for noise source totally screened by barrier or building such that none will be visible when viewed from any window, door or other opening of the NSR.

[4] Detailed design of the plant rooms is not yet available at this stage. Only 2 cooling towers, associated chillers, condensed water pumps and chilled water pumps are expected to be operated during the night-time period between 2300 and 0700 hours. Transformer and fan are expected to be operated for 24 hours daily.

The maximum allowable SWLs of the plant room louvers/equipment were determined by adopting standard acoustics principles. The following formula was used for calculating the maximum allowable

SPL = Max SWL – DC + FC - BC

where

SPL	Sound Pressure Level, in dB(A)
Max. SWL	Maximum Allowable Sound Power Level, in dB(A)
DC	Distance Attenuation, in dB(A)
FC	Facade Correction, in dB(A) (i.e. 3 dB(A))
BC	Barrier Correction, in dB(A)

[5] The sound power level (SWL) of the equipment shall not exceed the specified Maximum Allowable SWL in order to archive the noise criteria. Acoustic treatment, such as intake & discharge silencers, acoustic enclosure, acoustic louver and discharge cowl will be installed as appropriate to achieve the required SWL.

[6] Genset will be only operated during the day-time and evening time period.

Key

- Representative Noise Sensitive Receiver
- Project Site
- Louvres of Plant Rooms
- PA System
- Cooling Towers

NSR	Description
N1	Amber Lodge
N2	Ho Fook Building
N3	Old Bailey Street Police Married Quarters
N4	Cambridge Villa
N5	Chancery House
N6	Chancery Mansion

Building Index	
01	Police Headquarters
02	Armoury
03	Barrack Block
04	Married Inspector's Quarters and Deputy Superin Tendents House
06	Married Sergeants' Quarters
07	Single Inspectors' Quarters
08	Ablutions Block
09	Central Magistracy
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
OBW	Old Bailey Wing
AW	Arbuthnot Wing

Figure B3-1

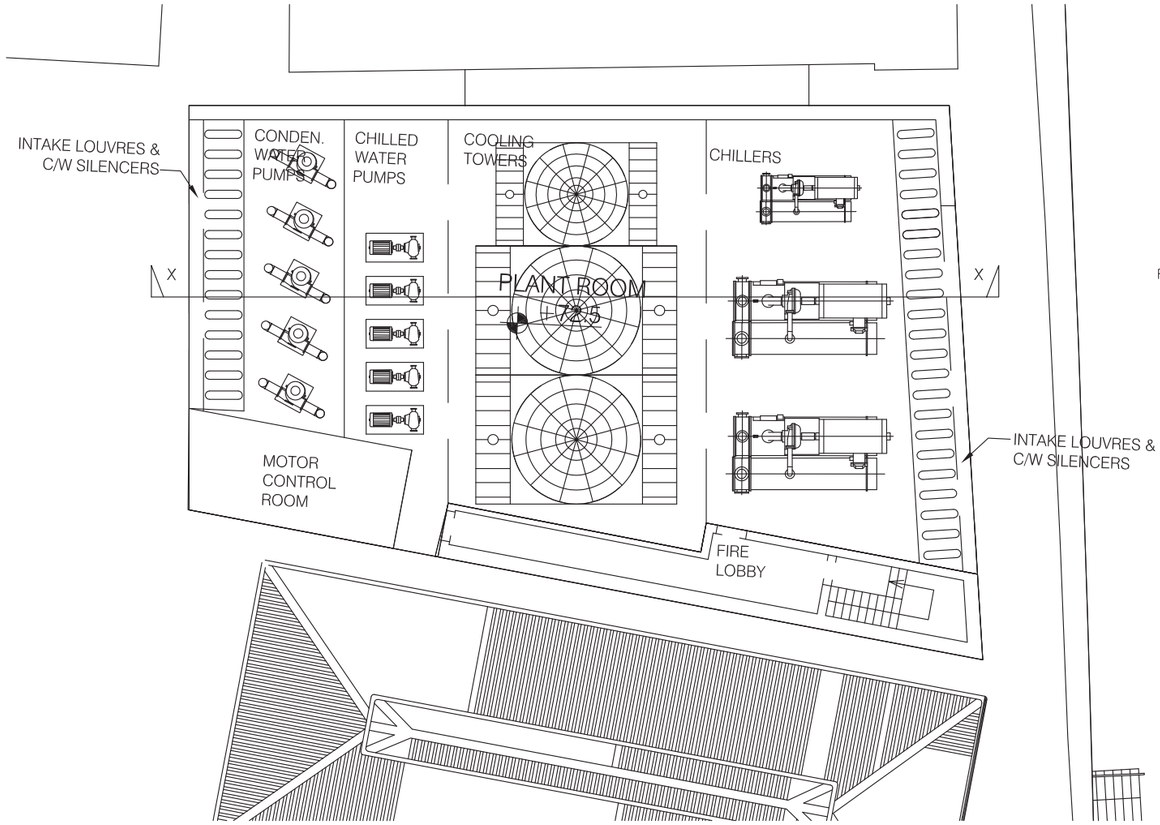
Locations of Fixed Plant Noise Sources

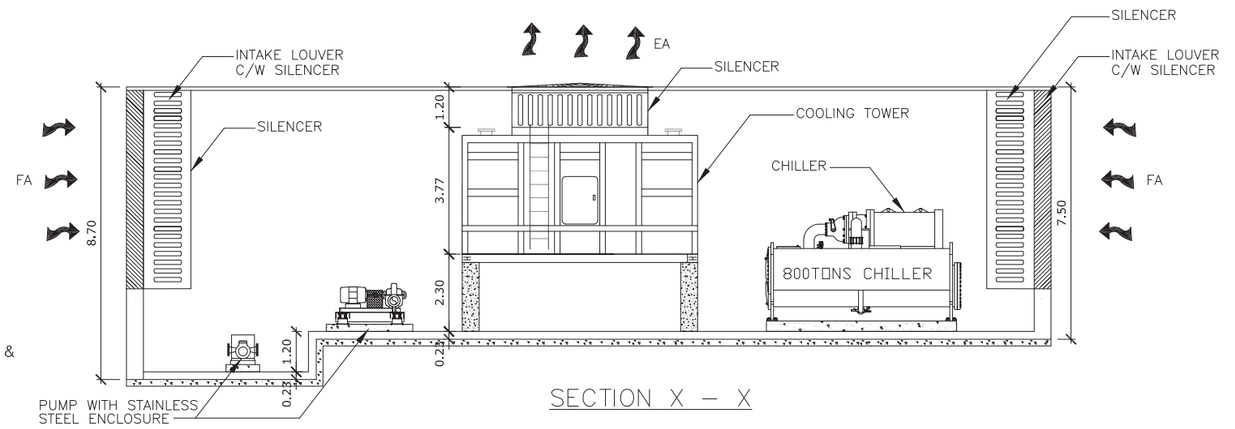
File: 0095646_fixed plant noise sources.mxd
Date: 19/11/210

Environmental Resources Management

ERM

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





SECTION X – X

Figure B3-2

Roof Layout Plan of Arbuttnot Wing

FILE: 0095646I
DATE: 19/11/2010

Environmental Resources Management

ERM

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

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-1 : Construction Plant Inventory - Mitigated

No.	Activities	Plant	TM / EPD[1] / BS 5228 ref.	No. of PME	On-time %	Type of Noise Control (Barrier/Enclosure)[3]	Noise reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)[2]	Groups[4]	
I)	**Existing Buildings**											
1	**Phase 1 & Site Wide Structure**						**Sub-total SWL for Phase 1 & Site Wide Structure = 107**					
	Demolition											
		Breaker, hand-held, mass < 10kg	CNP 023	4	50%	Noise Barrier	-5	108	106	**107**	**A**	**107**
		Hydraulic breaker, excavator mounted	BS D8 12	1	75%	Noise Barrier	-5	106	100		**A**	
		Dump truck	BS D9 39	2	50%			103	103		**B**	**103**
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95		**A**	
	Excavation and Lateral Support (ELS)											
		Tracked Excavator/loader	BS D3 97	2	75%	Noise Barrier	-5	105	102	**106**	**A**	**106**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	Noise Insulation Sheet	-10	110	102		**A**	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	Enclosure	-10	104	96		**A**	
		Water pump (electric)	CNP 281	3	50%			88	90		**A**	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95		**A**	
		Compactor, vibratory	CNP 050	2	50%			105	105		**B**	**105**
		Mobile crane (62kW)	BS D7 114	2	50%			101	101		**C**	**102**
		Grout mixer	EPD/PME/14	1	75%	Noise Barrier	-10	90	79		**C**	
		Grout pump	EPD/PME/15	1	75%	Noise Barrier	-10	105	94		**C**	
II)	**New Building**											
2	**Foundation**						**Sub-total SWL for Foundation = 106**					
	Piling											
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95	**103**	**A**	**103**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	Noise Insulation Sheet	-10	110	102		**A**	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	Enclosure	-10	104	96		**A**	
		Grout mixer	EPD/PME/14	1	75%	Noise Barrier	-10	90	79		**B**	**94**
		Grout pump	EPD/PME/15	1	75%	Noise Barrier	-10	105	94		**B**	
		Mobile crane (62kW)	BS D7 114	2	50%			101	101		**C**	**102**
		Crane, tower (electric)	CNP 049	1	75%			95	94		**C**	
	CAP											
		Tracked Excavator/loader	BS D3 97	2	75%	Noise Barrier	-5	105	102	**106**	**A**	**106**
		Saw, circular, wood	CNP 201	2	50%	Noise Barrier	-10	108	98		**A**	
		Bar bender and cutter (electric)	CNP 021	2	75%	Noise Barrier	-10	90	82		**A**	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	1	50%	Noise Barrier	-5	111	103		**A**	
		Concrete lorry mixer	CNP 044	2	50%	Noise Barrier	-5	109	104		**B**	**106**
		Concrete pump, stationary/lorry mounted	BS D6 36	2	50%	Noise Barrier	-5	106	101		**B**	
		Poker, vibratory, hand-held	BS D6 40	4	50%	Noise Barrier	-5	98	96		**B**	
		Compactor, vibratory	CNP 050	2	40%			105	104		**C**	**105**
		Water pump (electric)	CNP 281	2	50%			88	88		**C**	
		Air Compressor, air flow > 30m3/min	CNP 003	1	75%	Enclosure	-10	104	93		**C**	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95		**C**	
		Crane, tower (electric)	CNP 049	1	75%			95	94		**D**	**103**
		Mobile crane (62kW)	BS D7 114	1	50%			101	98		**D**	
		Dump truck	BS D9 39	1	50%			103	100		**D**	
3	**Excavation and Lateral Support (ELS)**						**Sub-total SWL for ELS = 106**					
		Tracked Excavator/loader	BS D3 97	2	75%	Noise Barrier	-5	105	102	**106**	**A**	**106**
		Drill rig, rotary type (diesel)	EPD/PME/12	2	75%	Noise Insulation Sheet	-10	110	102		**A**	
		Air Compressor, air flow > 30m3/min	CNP 003	2	75%	Enclosure	-10	104	96		**A**	
		Water pump (electric)	CNP 281	3	50%			88	90		**A**	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95		**A**	
		Compactor, vibratory	CNP 050	2	50%			105	105		**B**	**105**
		Mobile crane (62kW)	BS D7 114	2	50%			101	101		**C**	**102**
		Grout mixer	EPD/PME/14	1	75%	Noise Barrier	-10	90	79		**C**	
		Grout pump	EPD/PME/15	1	75%	Noise Barrier	-10	105	94		**C**	
4	**Basement / Superstructure Construction**						**Sub-total SWL for Basement / Superstructure Works = 106**					
		Tracked Excavator/loader	BS D3 97	2	75%	Noise Barrier	-5	105	102	**106**	**A**	**106**
		Saw, circular, wood	CNP 201	2	50%	Noise Barrier	-10	108	98		**A**	
		Bar bender and cutter (electric)	CNP 021	2	75%	Noise Barrier	-10	90	82		**A**	
		Breaker, hand-held, mass > 20kg and < 35kg	CNP 025	1	50%	Noise Barrier	-5	111	103		**A**	
		Concrete lorry mixer	CNP 044	2	50%	Noise Barrier	-5	109	104		**B**	**106**
		Concrete pump, stationary/lorry mounted	BS D6 36	2	50%	Noise Barrier	-5	106	101		**B**	

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-1 : Construction Plant Inventory - Mitigated

No.	Activities	Plant	TM / EPD[1] / BS 5228 ref.	No. of PME	On-time %	Type of Noise Control (Barrier/Enclosure)[3]	Noise reduction, dB(A)	Unit SWL, dB(A)	SWL, dB(A)	Total SWL, dB(A)[2]	Groups[4]	
		Poker, vibratory, hand-held	BS D6 40	4	50%	Noise Barrier	-5	98	96		**B**	
		Compactor, vibratory	CNP 050	2	40%			105	104		**C**	**105**
		Water pump (electric)	CNP 281	2	50%			88	88		**C**	
		Air Compressor, air flow > 30m3/min	CNP 003	1	75%	Enclosure	-10	104	93		**C**	
		Generator, super silenced, 70dB(A) at 7m	CNP 103	1	100%			95	95		**C**	
		Crane, tower (electric)	CNP 049	1	75%			95	94		**D**	**103**
		Mobile crane (62kW)	BS D7 114	1	50%			101	98		**D**	
		Dump truck	BS D9 39	1	50%			103	100		**D**	

Notes:

[1] SWLs of EPD/PME items refer to the document prepared by the Noise Control Authority (http://www.epd.gov.hk/epd/english/application_for_licences/guidance/files/OtherSWLe.pdf)

BS - British Standard BS 5228:2009, Part 1 Noise and Vibration Control on Construction and Open Sites

[2] The figures are rounded-up to a whole number.

[3] Noise barrier for mobile PME -5dB(A)

Noise barrier for stationary PME -10dB(A)

Noise encloure -10dB(A)

Noise Insulation Sheet -10dB(A)

[4] Either Group A, B, C or D will be undertaken at any one time.

Annex B4-2 : Summary of Predicted Noise Levels during Daytime Period - Mitigated

	NSR Location	EIAO-TM Noise Criteria, dB(A)	Predicted Construction Noise Level (dB(A))																				Max. CNL, dB(A)
			2012												2013								
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
N1	Amber Lodge	75	71	71	71	71	71	71	71	71	71	71	67	67	67	67	67	67	67	67	67	67	71
N2	Ho Fook Building	75	72	72	72	72	72	72	72	72	72	72	67	67	67	68	68	68	68	68	68	68	72
N3	Old Bailey Street Police Married Quarters	75	72	72	72	72	72	72	72	71	71	71	69	69	69	69	69	69	69	69	69	69	72
N4	Cambridge Villa	75	73	73	73	73	73	73	73	73	73	73	71	71	71	72	72	72	72	72	72	72	73
N5	Chancery House	75	75	75	75	75	75	75	75	74	74	74	73	73	73	74	74	74	74	74	74	74	75
N6	Chancery Mansion	75	75	75	75	75	75	75	75	74	74	74	73	73	73	74	74	74	74	74	74	74	75

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3a Construction Airborne Noise Impact Assessment - Mitigated

NSR: N1 Amber Lodge

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	44	-41	3	69	69	69	69	69	69	69	69	69	69											
II	**New Building**																									
2	Foundation	106	50	-42	3	67	67	67	67	67	67	67														
3	Excavation and Lateral Support (ELS)	106	50	-42	3								67	67	67	67	67	67								
4	Basement / Superstructure Construction	106	50	-42	3														67	67	67	67	67	67	67	
Predicted Noise Level during Daytime Period, dB(A)						71	71	71	71	71	71	71	71	71	71	67	67	67	67	67	67	67	67	67	67	71

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3b Construction Airborne Noise Impact Assessment - Mitigated

NSR: N2 Ho Fook Building

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	38	-40	3	71	71	71	71	71	71	71	71	71	71											
II	**New Building**																									
2	Foundation	106	46	-41	3	68	68	68	68	68	68	68														
3	Excavation and Lateral Support (ELS)	106	46	-41	3								67	67	67	67	67	67								
4	Basement / Superstructure Construction	106	46	-41	3														68	68	68	68	68	68	68	
	Predicted Noise Level during Daytime Period, dB(A)					72	72	72	72	72	72	72	72	72	72	67	67	67	68	68	68	68	68	68	68	72

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3c Construction Airborne Noise Impact Assessment - Mitigated

NSR: N3 Old Bailey Street Police Married Quarters

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	52	-42	3	68	68	68	68	68	68	68	68	68	68											
II	**New Building**																									
2	Foundation	106	40	-40	3	69	69	69	69	69	69	69														
3	Excavation and Lateral Support (ELS)	106	40	-40	3								69	69	69	69	69	69								
4	Basement / Superstructure Construction	106	40	-40	3														69	69	69	69	69	69	69	
	Predicted Noise Level during Daytime Period, dB(A)					72	72	72	72	72	72	72	71	71	71	69	69	69	69	69	69	69	69	69	69	72

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3d Construction Airborne Noise Impact Assessment - Mitigated

NSR: N4 Cambridge Villa

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	57	-43	3	67	67	67	67	67	67	67	67	67	67											
II	**New Building**																									
2	Foundation	106	30	-37	3	72	72	72	72	72	72	72														
3	Excavation and Lateral Support (ELS)	106	30	-37	3								71	71	71	71	71	71								
4	Basement / Superstructure Construction	106	30	-37	3														72	72	72	72	72	72	72	
Predicted Noise Level during Daytime Period, dB(A)						73	73	73	73	73	73	73	73	73	73	71	71	71	72	72	72	72	72	72	72	73

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3e Construction Airborne Noise Impact Assessment - Mitigated

NSR: N5 Chancery House

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	57	-43	3	67	67	67	67	67	67	67	67	67	67											
II	**New Building**																									
2	Foundation	106	23	-35	3	74	74	74	74	74	74	74														
3	Excavation and Lateral Support (ELS)	106	23	-35	3								73	73	73	73	73	73								
4	Basement / Superstructure Construction	106	23	-35	3														74	74	74	74	74	74	74	
	Predicted Noise Level during Daytime Period, dB(A)					75	75	75	75	75	75	75	74	74	74	73	73	73	74	74	74	74	74	74	74	75

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Conservation and Revitalization of the Central Police Station Compound (CPS)

Annex B4-3f Construction Airborne Noise Impact Assessment - Mitigated

NSR: N6 Chancery House

No.	Activity Description	SWL dB(A)[2]	Distance m	Corr. for distance dB(A)[1][2]	Corr. for façade dB(A)	Predicted Construction Noise Level (dB(A)) 2012 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2013 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Max. CNL dB(A)
I	**Existing Buildings**																									
1	Phase 1 & Site Wide Structure	107	57	-43	3	67	67	67	67	67	67	67	67	67	67											
II	**New Building**																									
2	Foundation	106	23	-35	3	74	74	74	74	74	74	74														
3	Excavation and Lateral Support (ELS)	106	23	-35	3								73	73	73	73	73	73								
4	Basement / Superstructure Construction	106	23	-35	3														74	74	74	74	74	74	74	
	Predicted Noise Level during Daytime Period, dB(A)					75	75	75	75	75	75	75	74	74	74	73	73	73	74	74	74	74	74	74	74	75

Notes:

[1] Distance Correction for PMEs = $10*\log(2*PI*r^2)$

[2] The figures are rounded-up to a whole number.

Annex C

Sewerage Impact Assessment Report

The Hong Kong Jockey Club Charities Trust

Central Police Station Conservation and Revitalisation Project

Preliminary Sewerage Impact Assessment (SIA) Report

Revision 1 | October 2010

Ove Arup & Partners Hong Kong Ltd
Level 5, Festival Walk
80 Tat Chee Avenue
Kowloon Tong, Kowloon
Hong Kong
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Job number 209674

ARUP

Contents

Appendices

1 Introduction

The objective of this Sewerage Impact Assessment (SIA) is to assess the sewerage impact associated with the proposed Central Police Station Conservation and Revitalisation Project.

2 Project Outline and Description

The Central Police Station (CPS) Compound is a valuable heritage site and proposed to be revitalised to become a lively and integral part of the local community which will combine a dynamic arts, heritage and cultural offer with an independent and unique shopping and dining experience.

Project Title	:	Central Police Station Conservation and Revitalisation
Proponent	:	The Hong Kong Jockey Club Charities Trust
Nature and Description	:	Arts and Cultural Facilities with Retail Provision
Site Area	:	14339m^2
Percentage of Paved Area	:	100% (Existing)
Level to be filled up	:	Existing levels to be maintained

3 Site Description

The location of the Site is shown in Figure 1. The Site 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.

The Site comprises three Declared Monuments designated under the Antiquities and Monuments Ordinance in 1995. They are:

- Central Police Station located at platform level of approx.+45mPD;
- Central Magistracy located at platform level of approx. +45mPD; and
- Victoria Prison Compound located at platform level of approx. +50 to 55mPD.

4 Existing Sewerage System

With reference to DSD drainage record plan, the existing sewers in the vicinity of the Site comprising:

- An existing 225mm diameter sewer running along Hollywood Road with a 150mm diameter connection serving the lower site;
- An existing 225mm diameter sewer running along Arbuthnot Road and then connecting to the existing 225mm diameter sewer running along Hollywood Road;
- Existing 150mm diameter sewers running along Chancery Lane and connecting to the existing 225mm diameter sewers running along Arbuthnot Road and Old Bailey Street; and
- An existing 225mm diameter sewer running along Old Bailey Street with 150mm diameter connections serving the upper site and lower site respectively and then connecting to the existing 225mm diameter sewer along Hollywood Road.

A record of the existing sewerage system in the vicinity of the Site is shown in Figure 2.

5 Proposed Sewage Generation and Sewerage Impact

5.1 Predicted Sewage Generation

The estimate of sewage generation for the proposed development is estimated based on the proposed numbers of sanitary fitments to be installed as advised by our building services consultant and the Method of Discharge Units from Plumbing Engineering Services Design Guide 2002.

The sewage estimation for the proposed development is shown in Table B1 of Appendix B and summarized as Table 5.1 below.

Table 5.1 – Summary of Peak Flow Calculation

Descriptions	Design Peak Flow (L/s)
Lower Platform	24.80
Upper Platform	25.45
Total	50.25

Due to the topographical arrangement of the existing historical buildings including the Central Police Station and Central Magistracy at the lower platform and the Victoria Prison at the upper platform, we proposed to maintain two existing sewerage connection points (FMH7031329 at Hollywood Road for lower

platform buildings and FMH7031357 at Old Bailey Street for upper platform buildings) for the project. Having considered the objective to avoid new sewer laying passing through the existing historical buildings and to minimize excavation works for new sewer laying adjacent to the existing historical buildings, we considered that maintaining at least two existing sewerage connection points are ncecesary.

Due to the absence of the as-built record for the existing sewerage system within the CPS, site investigation will be conducted to identify the existing sewerage arrangement and conditions during the detailed design stage. It is our intention to maintain two sewerage connection points for the project. However, the exact numbers and locations of sewerage connection points should be determined after completion of the site investigation including manholes inspection, CCTV survey etc for subsequent discussion and agreement with DSD and EPD during the detailed design stage.

The capacity calculation for the existing sewerage connection points using Colebrook-White Equation is shown in Table 5.2 below.

The existing sewerage connection points are adequent in capacities to intercept the peak sewage flows from the Site.

Table 5.2 – Capacity checking for the existing sewerage connection points

		Existing Sewer from DSD Record Plan (ks = 1.5mm)					
Existing Upstream Manhole	**Existing Downstream Manhole**	**Pipe Size (mm)**	**Length (m)**	**US IL (mPD)**	**DS IL (mPD)**	**Gradient (1:x)**	**Pipe Capacity (L/s)**
FMH7031329	FMH7031330	150	9.5	36.24	35.05	8	54.9
FMH7031330	FMH7031331	150	5.0	35.05	34.43	8	54.9
FMH7031357	Existing 225mm sewer	150	5	47.30	46.55	7	58.7

5.2 Capacity Checking of Existing Public Sewers

In order to assess the impact on the existing sewers associated with the development, the software "HydroWorks" was used for hydraulic analysis of the existing public sewers.

The estimation of sewage generation in the vicinity of the Site is based on the assumptions as below:

1) The projected population (2016) as based on the latest Territorial Population and Employment Data Matrix (TPEDM) 2006;

2) Flow factor for projected population is assumed to be 370L/person/day as per DSD Sewerage Manual Table 2;

3) Global peaking factor with stormwater allowance is adopted as per DSD Sewerage Manual Table 3.

The projected population (2016) and the resulted sewage estimation are shown in Table B2, B3 and Figure 4 of Appendix B.

The hydraulic performance of the existing sewers under design flows of 2016 is shown in the HydroWorks results in Appendix B and summarised in Table 5.3 as follows.

1. The predicted hydraulic gradeline level for the existing sewer is below the soffit level of the sewer except at the existing pipes (between Manhole FMH7029914 to FMH7031327) along Hollywood Road.
2. There is no flooding under the peak flow condition because sufficient freeboard of over 300mm is allowed in the sewers.

Table 5.3 – Freeboard at Various Sewerage Manhole Locations

Node Reference	Ground Level (m AD)	Max Level (m AD)	Free-board (m)
FMH7029541	35.35	32.68	2.67
FMH7029914	35.47	34.17	1.30
FMH7029949	35.06	34.32	0.74
FMH7029915	35.83	34.75	1.08
FMH7031331	36.49	35.46	1.03
FMH7031328	37.91	36.40	1.51
FMH7031327	38.81	37.28	1.53
FMH7031325	44.77	43.04	1.73
FMH7031323	46.89	44.80	2.09
FMH7031322	47.54	46.03	1.51
FMH7031321	49.57	47.74	1.83
FMH7031320	51.73	50.14	1.59
FMH7031319	54.12	53.15	0.97
FMH7031318	56.83	55.86	0.97
FMH7031316	59.68	58.58	1.10
FMH7031315	59.94	58.95	0.99
FMH7031313	60.15	59.10	1.06
FMH7031471	60.39	59.21	1.18
FMH7031472	60.56	59.30	1.26
FMH7031312	61.25	59.65	1.61
FMH7031449	50.04	48.17	1.87
FMH7031301	50.75	49.05	1.70
FMH7031519	52.34	50.88	1.46
FMH7031457	52.48	51.01	1.47
FMH7031295	53.10	51.79	1.31
FMH7031294	53.20	51.87	1.33
FMH7031293	54.29	52.82	1.48
FMH7041287	57.07	54.74	2.33
FMH7041286	60.59	58.59	2.00
FMH7041309	61.41	59.03	2.38
FMH7031368	62.97	61.67	1.30

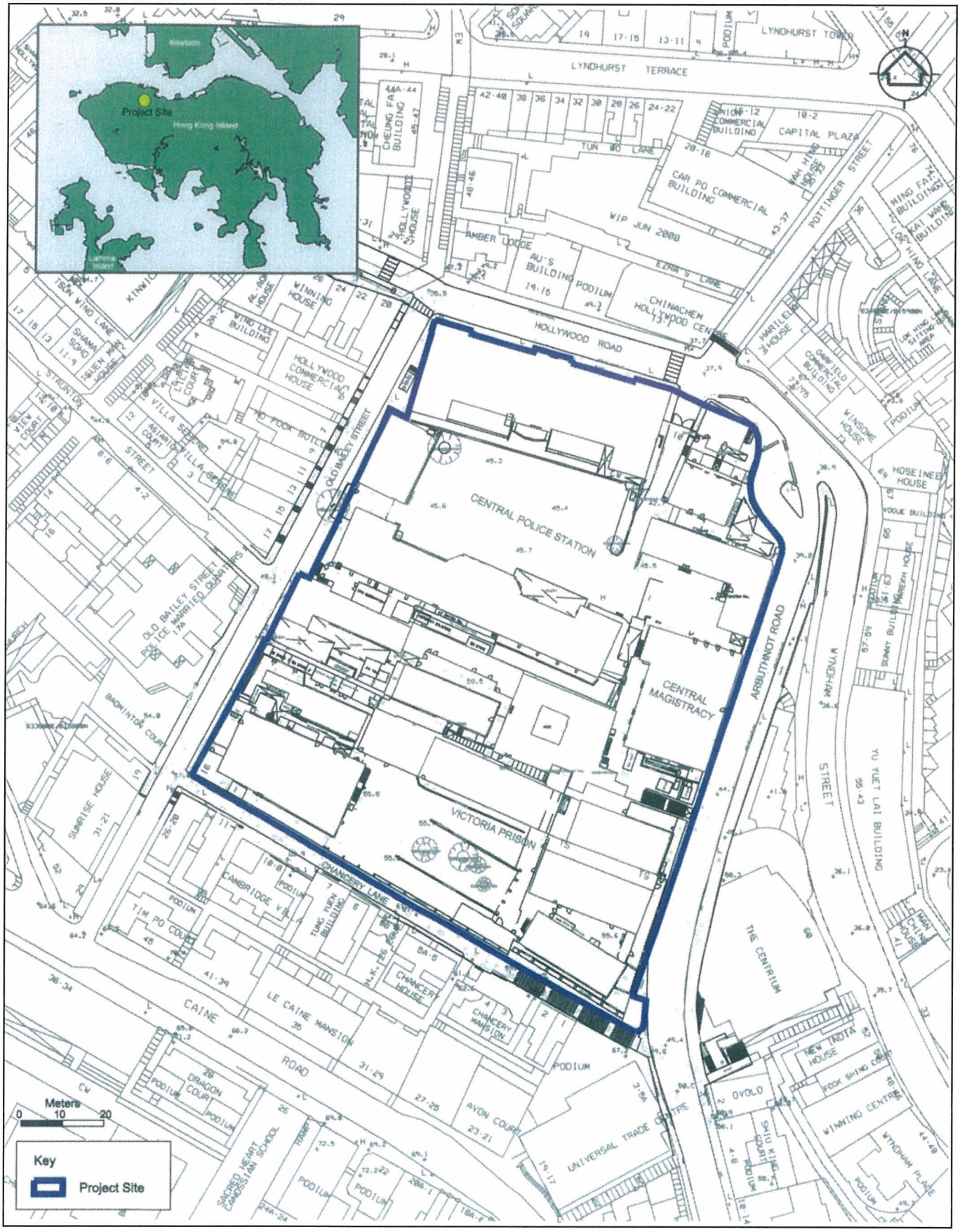
Node Reference	Ground Level (m AD)	Max Level (m AD)	Free-board (m)
FMH7031367	64.63	63.33	1.30
FMH7031366	65.18	64.01	1.17
FMH7031365	67.91	66.65	1.26
FMH7031364	68.20	67.56	0.64
FMH7031363	68.35	67.76	0.59
FMH7031361	68.81	68.17	0.64
FMH7029979	35.48	33.90	1.58
FMH7029540	35.81	34.64	1.17
FMH7031358	41.25	40.18	1.07
FMH7031509	42.72	41.65	1.07
FMH7031508	43.21	42.22	0.99
FMH7031510	44.02	43.03	0.99
FMH7031356	48.26	47.11	1.15
FMH7031354	52.65	51.19	1.46
FMH7031353	55.39	54.67	0.72
FMH7031352	56.67	54.98	1.69
FMH7031351	56.82	55.19	1.64
FMH7031350	57.16	55.93	1.23
FMH7031349	57.85	57.36	0.49
FMH7031348	58.18	57.67	0.51
FMH7031347	58.58	58.12	0.46
FMH7031346	59.61	58.69	0.92
FMH7031345	62.25	60.06	2.19
FMH7031344	56.93	55.24	1.69
FMH7031338	60.36	58.94	1.42
FMH7031337	62.35	60.96	1.39
FMH7046963	56.82	55.70	1.12
FMH7031341	58.05	56.70	1.35
FMH7031340	58.69	57.60	1.09
FMH7031339	61.09	60.20	0.89
FMH7031448	61.1	60.38	0.72

6 Conclusion

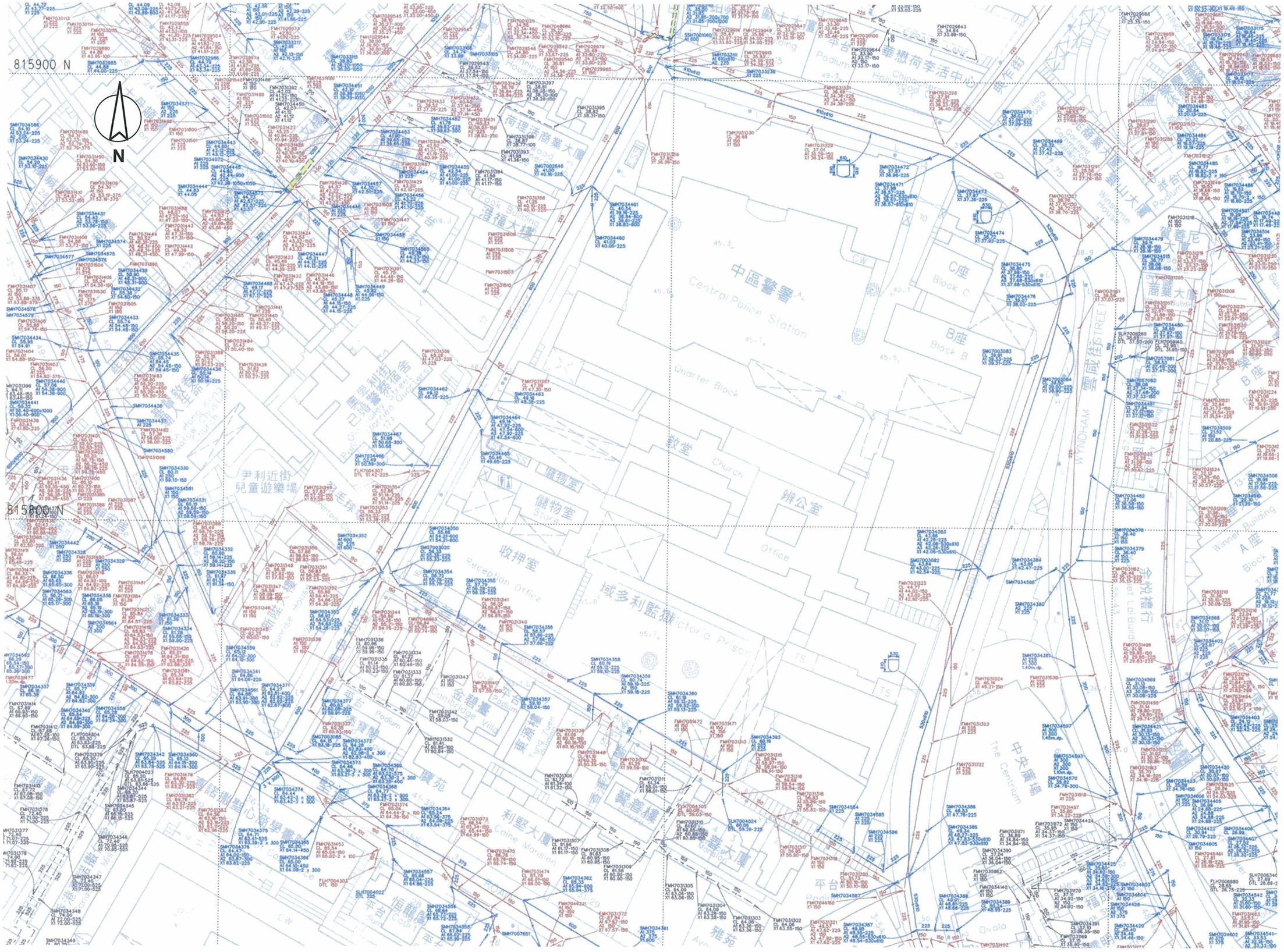
The proposed development will generate a peak flow of 50.25L/s. The hydraulic analysis concluded that there is sufficient freeboard allowed in the existing 225mm diameter public sewers along Hollywood Road, Old Bailey Road and Arbuthnot Road and no improvement to the existing public sewer is required as a result of the proposed development. Thus no adverse sewerage impact is anticipated to be resulted from the Project.

Appendix A

Figures

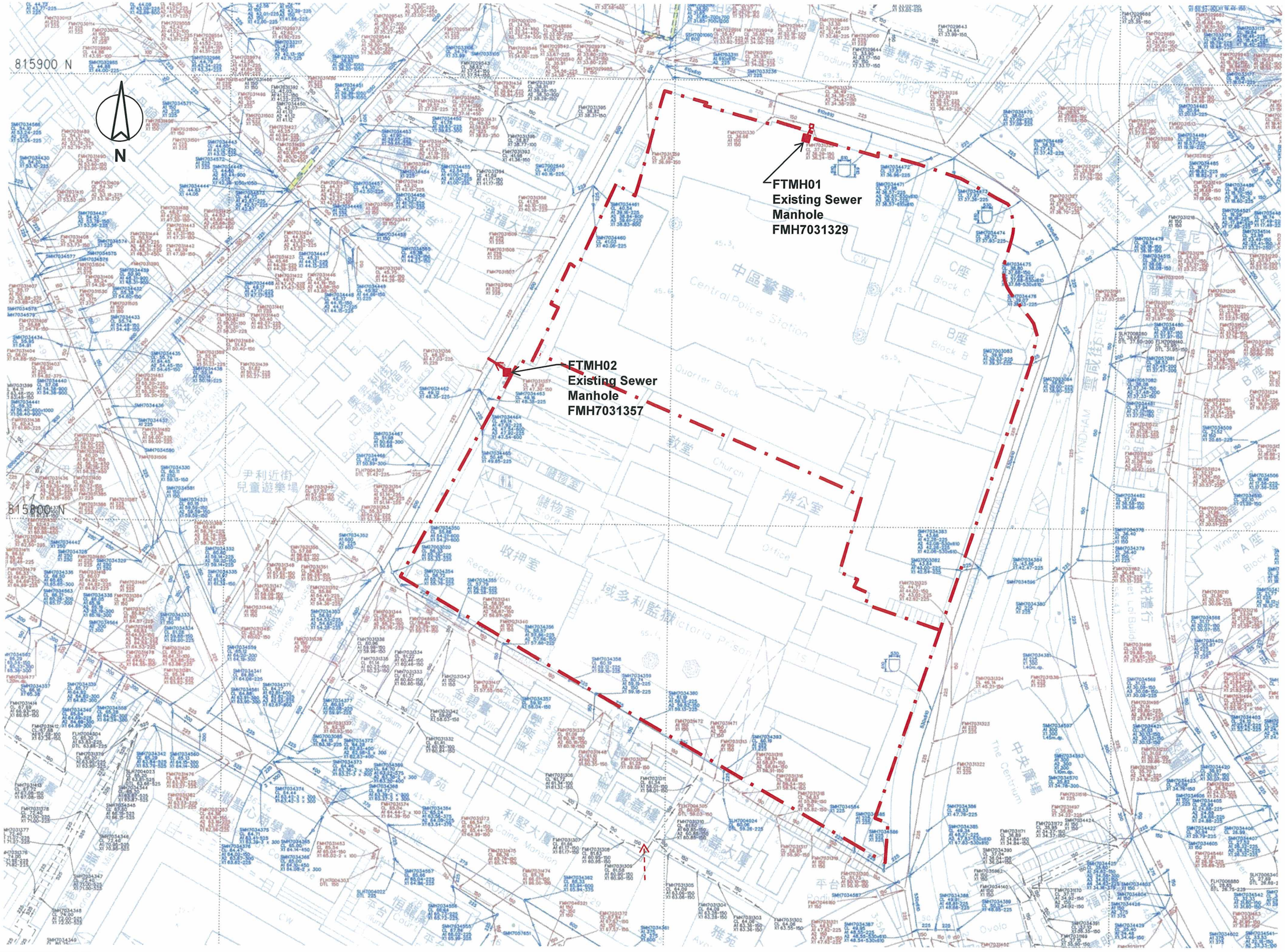


Site Location Plan **Figure 1**



Existing Drainage and Sewerage System

Figure 2



Proposed Sewerage Connection Points

Figure 3

Appendix B

Calculation

Project : Central Police Station Compound Conservation and Revitalization

Table B1 - Estimation of Sewage Discharge Flow (Based on Sanitary Fittings and Method of Discharge Unit)

1) The peak design flow is assessed by applying a frequency of use K factor to the total sum of the discharge units and by using the following equation.

Peak Design Flow $Q = K\sqrt{\sum DU}$ (From Plumbing Engineering Services Design Guide 2002)

Where
Q = Peak Design Flow (l/s)
K = Frequency of use = 1.0 (From Table 6 of Plumbing Engineering Services Design Guide 2002 for Congested Usage)
∑DU = Sum of discharge units (From Table 5 of Plumbing Engineering Services Design Guide 2002)

The preliminary estimation of sewage discharge flow and schedule of sanitary fitment for each buildings are listed below.

2) Schedule of Sanitary Fitment and Estimation of Peak Design Flow

Location	Level/Total No. of Sanitary Fitment	W.C.	Wash Hand Basin	Urinal	Sink	Cleansing Point	Remark
Building 1	L/G Floor 2	6	6	2	-	2	
(Lower Platform)	L/G Floor 1	3	4	2	25	2	Sinks were allowed for Lounge & Restaurant
	G/F	-	-	-	10	2	Sinks were allowed for Café Bar
	1/F	6	8	4	-	2	
Building 2	G/F	4	2	1	-	2	
(Lower Platform)							
Building 3	1/F	9	7	2	-	2	
(Lower Platform)	2/F	9	7	2	-	2	
	3/F	9	7	2	-	2	
Building 4		-	-	-	-	-	No Sanitary Fitment provided in the Building
(Lower Platform)							
Building 6	G/F	1	1	-	-	1	
(Lower Platform)	1/F	1	1	-	-	1	
Building 7	1/F	1	1	-	-	1	
(Lower Platform)							
Building 8	G/F	4	2	-	-	2	
(Lower Platform)							
Building 9	L/G	4	4	-	-	2	
(Lower Platform)	G/F	9	9	3	-	2	
	1/F	5	4	-	-	2	
	2/F	6	7	2	-	2	
Total		77	70	20	35	29	
Discharge Unit, DU		1.8	0.3	0.4	1.3	0.2	
Sub-total Discharge Unit		138.6	21	8	45.5	5.8	
Total Discharge Unit ∑DU		218.9					
Peak Design Flow for Lower Platform, Q (l/s)		14.80					
Pump Flow for Central Plant (L/s)		10					
Total Peak Design Flow for Lower Platform (l/s)		***24.80***					
Building 10 & 13	1/F	7	5	2	5	2	Sinks were allowed for Gallery/Café
(Upper Platform)	2/F	3	3	-	-	-	
Building 11	G/F	4	4	-	-	2	
(Upper Platform)	1/F	2	2	-	-	2	
Building 12		-	-	-	-	-	No Sanitary Fitment provided in the Building
(Upper Platform)							
Building 14	Level 50.6	9	9	3	-	-	
(Upper Platform)	Level 55.6	8	9	2	-	-	
	Level 62.5	4	4	-	-	-	
Building 15	Level 50.6	-	-	-	-	-	
(Upper Platform)	Level 55.6	3	3	1	-	-	
	Level 62.5	3	3	1	-	-	
Arbuthnot Wing	Level 50.15	10	10	4	-	-	
(Upper Platform)	Level 55.49	4	4	-	-	-	
F Hall	Level 56.2	8	6	3	-	-	
(Upper Platform)	Level 61.0	13	13	4	-	-	
Old Bailey Wing	Level 50.6	8	8	2	6	-	
(Upper Platform)	Level 55.6	6	6	3	-	-	
	Level 62.5	9	9	5	-	-	
Total		101	98	30	11	6	
Discharge Unit, DU		1.8	0.3	0.4	1.3	0.2	
Sub-total Discharge Unit		181.8	29.4	12	14.3	1.2	
Total Discharge Unit ∑DU		238.7					
Peak Design Flow for Upper Platform, Q (l/s)		15.45					
Pump Flow for Central Plant (L/s)		10					
Total Peak Design Flow for Upper Platform (l/s)		***25.45***					

ARUP

Ove Arup & Partners Calculation Sheet

Job No. : 209674 Sheet : 1

Job Title: Central Police Station Conservation and Revitalisation Project

Made by : HWC Date : October 10

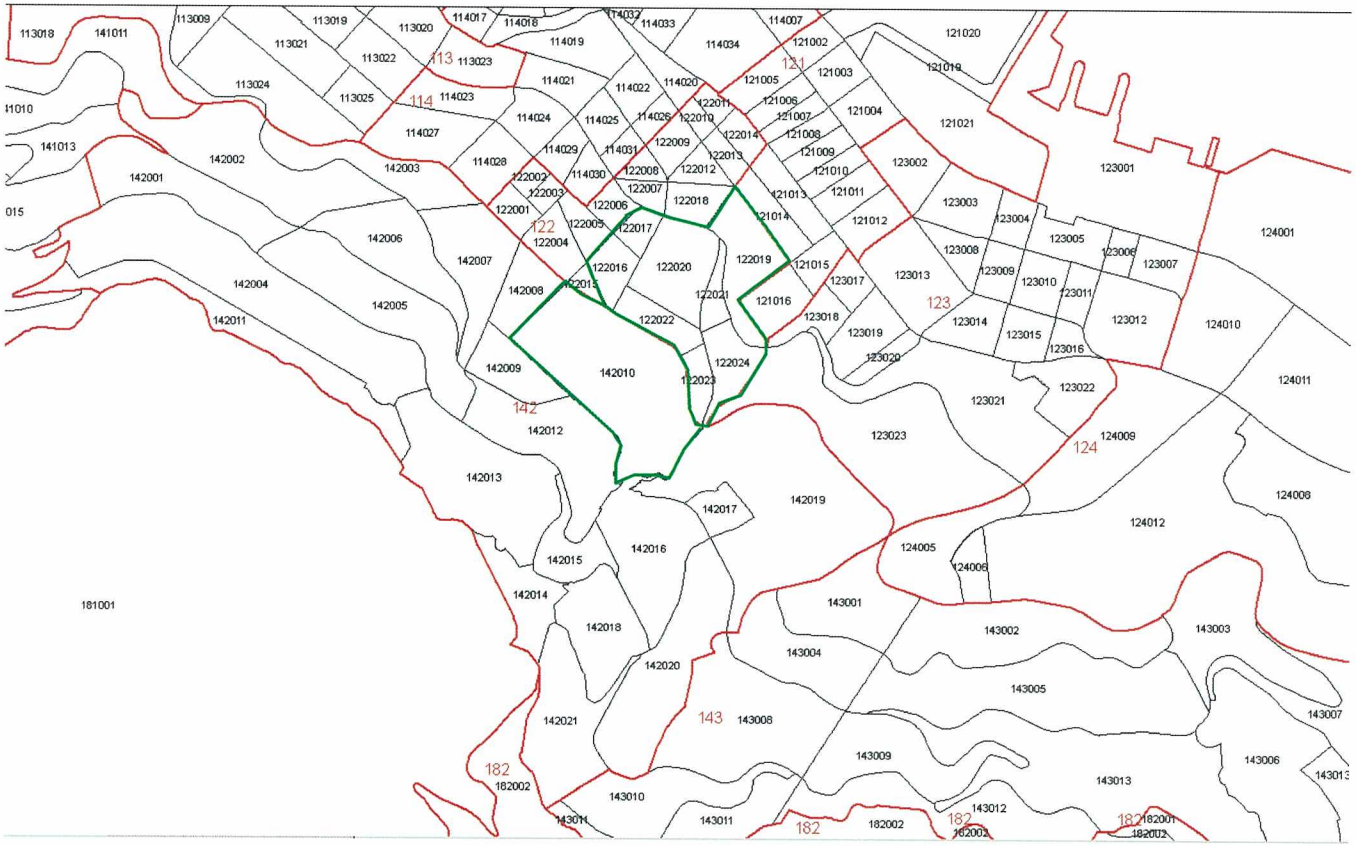
Table B2 **Sewage Flows Estimation in the vicinity of CPS to Year 2016**
(Based on TPDEM 2006)

Manhole	GFA of Zone to Manhole	Total GFA of Zone	Percentage of GFA	Total Population of Zone @2016	Street Block Number	Population	Cumulate Population	Flow Factor (l/h/day)	ADWF (l/d)	ADWF (l/s)	Peak Factor	Peak Flow (l/s)	Peak Flow (m3/s)
7031361	2910	237625	1.2%	5384	142010	66	66	370	24395	0.28	8	2.26	0.002
7031363	3206	237625	1.3%	5384	142010	73	139	370	26877	0.31	8	2.49	0.002
7041309	13960	237625	5.9%	5384	142010	316	455	370	117031	1.35	8	10.84	0.011
7041286	5681.5	237625	2.4%	5384	142010	129	584	370	47630	0.55	8	4.41	0.004
7041287	464	21704	2.1%	739	122023	16	599	370	5846	0.07	8	0.54	0.001
7031293	3956	21704	18.2%	739	122023	135	734	370	49838	0.58	8	4.61	0.005
7031295	5118	21704	23.6%	739	122023	174	908	370	64477	0.75	8	5.97	0.006
7031519	4706	21704	21.7%	739	122023	160	1069	370	59287	0.69	8	5.49	0.005
7031301	7460	21704	34.4%	739	122023	254	1323	370	93982	1.09	8	8.70	0.009
7031312	13827	50078	27.6%	774	122022	214	214	370	79072	0.92	8	7.32	0.007
7031315	2393	50078	4.8%	774	122022	37	251	370	13685	0.16	8	1.27	0.001
7031319	709	50078	1.4%	774	122022	11	262	370	4055	0.05	8	0.38	0.000
7031321	22664	50078	45.3%	774	122022	350	1935	370	129608	1.50	8	12.00	0.012
7031325	19478.5	38957	50.0%	104	122021	52	1987	370	19240	0.22	8	1.78	0.002
7031327	5820	76466	7.6%	104	122019	8	1994	370	2929	0.03	8	0.27	0.000
7031331	Sewage Flow from CPS Site Lower Platform											24.80	0.025
7031448	2454	50078	4.9%	774	122022	38	38	370	14034	0.16	8	1.30	0.001
7031341	3084	50078	6.2%	774	122022	48	86	370	17636	0.20	8	1.63	0.002
7031337	3081	50078	6.2%	774	122022	48	48	370	17619	0.20	8	1.63	0.002
7031338	1866	50078	3.7%	774	122022	29	76	370	10671	0.12	8	0.99	0.001
7031345	11817	33708	35.1%	448	122016	157	157	370	58110	0.67	8	5.38	0.005
7031354	12463	33708	37.0%	448	122016	166	485	370	61287	0.71	8	5.67	0.006
7031508	3865	17511	22.1%	448	122017	99	584	370	36586	0.42	8	3.39	0.003
7029979	1282	17511	7.3%	448	122017	33	616	370	12135	0.14	8	1.12	0.001
7031356	Sewage Flow from CPS Site Upper Platform											25.45	0.025

Notes:

1) Projected population @ year 2016 for each street block number refers to Table B3.
2) Gross Floor Area (GFA) for each existing buildings refers to Figure 4.
3) Flow factors refer to DSD Sewerage Manual Table 2.
4) Peak factor with stormwater allowance refer to DSD Sewerage Manual Table 3.

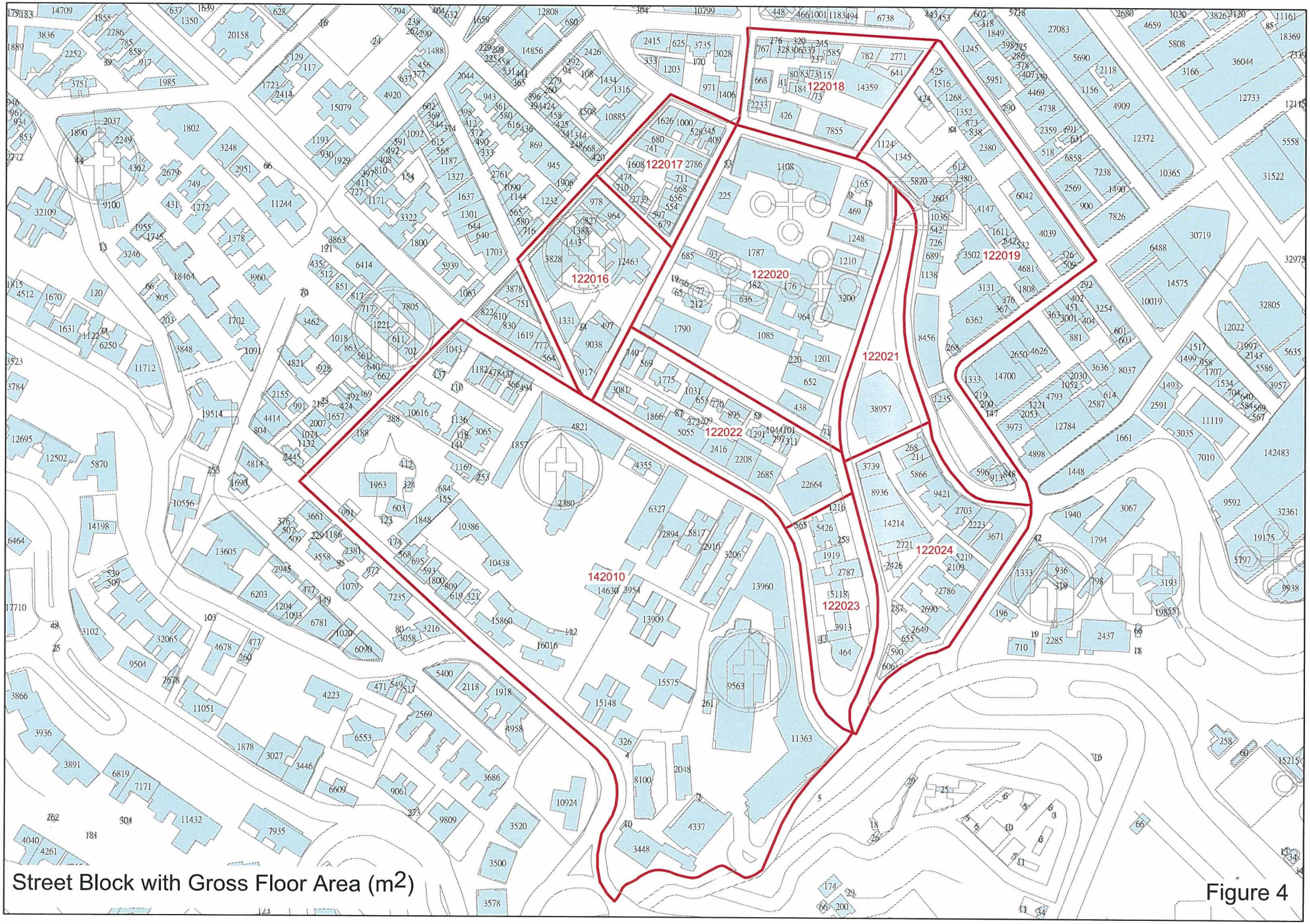
Table B3 - TPU Zone Map with Projected Population



Source : TPDEM 2006

TPU zone boundary
Street block zone boundary
Your selected zone

Street Block No.	Population				
	2006	Annual Growth Rate	2006 - 2011	Annual Growth Rate	2011 - 2016
122016	382	2.5%	432	0.7%	448
122017	382	2.5%	432	0.7%	448
122019	89	2.5%	101	0.7%	104
122020	89	2.5%	101	0.7%	104
122021	89	2.5%	101	0.7%	104
122022	660	2.5%	746	0.7%	774
122023	630	2.5%	712	0.7%	739
122024	749	2.5%	847	0.7%	879
142010	5230	0.4%	5333	0.2%	5384



Street Block with Gross Floor Area (m^2)

Figure 4

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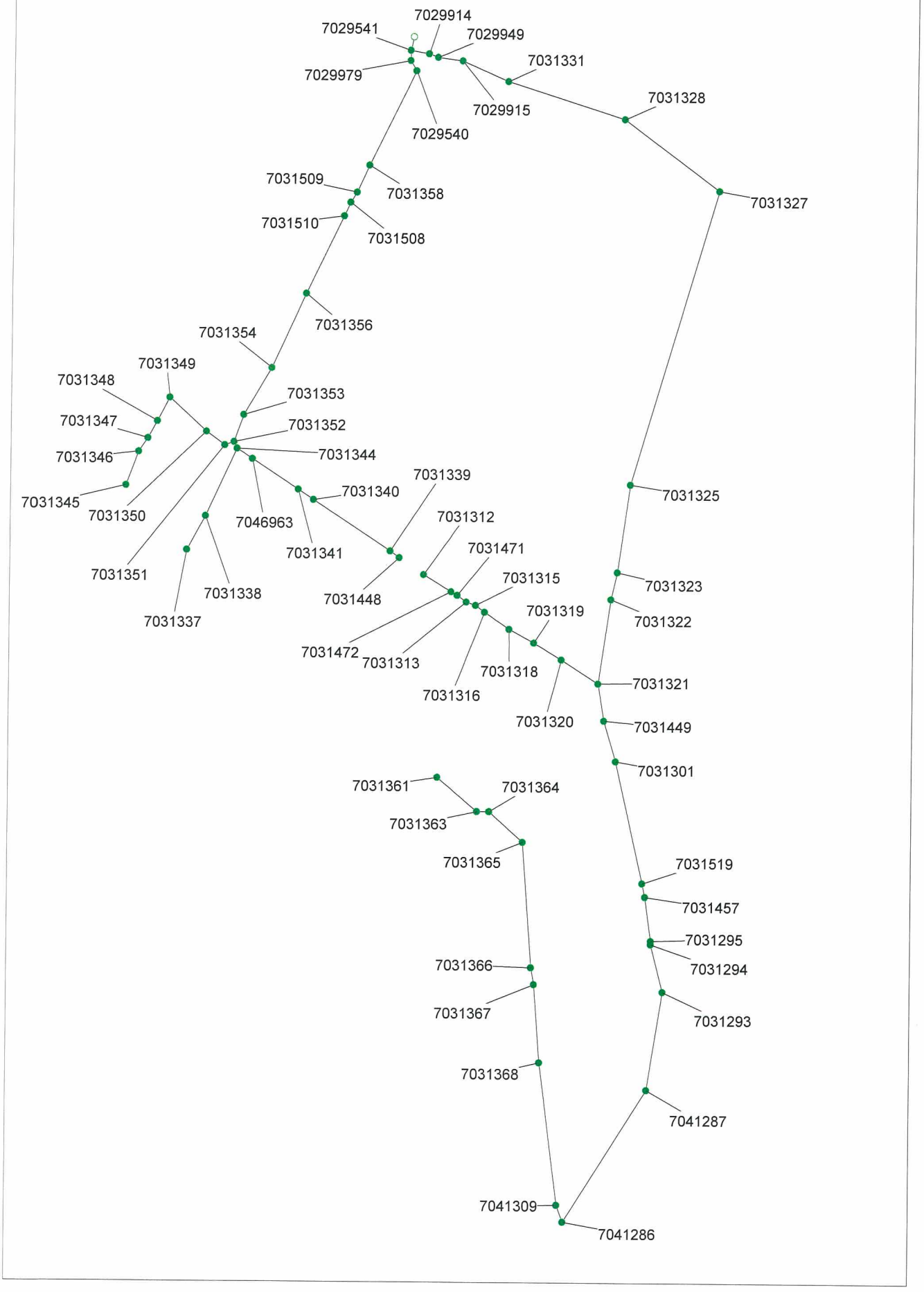

Start of run configured for MS Windows Produced on 20/10/2010 at 18:23

HydroWorks(tm) SIM

Summary results from Simulation

Version 5.1.075 dated September 2000

Licence Number - WS02520001PM

♀

Message 253: Run finished for event 1.

♀

Summary results for event 1 - CPS (2009-11-16)
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State:
Runoff:
Rainfall:
DWF:
Inflows: ...\cps.qin Constant point inflow - duration 60 min.
Levels:
RTC:
Results: ...\r0000025.spr

Using Wallingford Procedure runoff routing model.

Total rainfall = 0.0 m3
Total runoff = 0.0 m3
Total inflow = 2028.6 m3
Total outflow = 2028.6 m3
Total lost = 0.0 m3

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********** Node data **********

Node Reference	Ground Level (m AD)	Max Level (m AD)	Flood Volume (m3)	Flood Depth (m)	Flood Area (m2)	Max Stored (m3)	Inflow (m3)	Vol Balance (m3)
7029541	35.350	32.679	0.0	0.000	0.0	0.1	0.0	0.000
7029914	35.470	34.172	0.0	0.000	0.0	0.4	0.0	0.000
7029949	35.060	34.322	0.0	0.000	0.0	0.3	0.0	0.000
7029915	35.830	34.750	0.0	0.000	0.0	0.5	0.0	0.000
7031331	36.490	35.455	0.0	0.000	0.0	1.1	367.5	0.000
7031328	37.910	36.402	0.0	0.000	0.0	0.2	0.0	0.000
7031327	38.810	37.276	0.0	0.000	0.0	0.5	0.0	0.000
7031325	44.770	43.036	0.0	0.000	0.0	0.1	29.4	0.000
7031323	46.890	44.802	0.0	0.000	0.0	0.1	0.0	0.000
7031322	47.540	46.032	0.0	0.000	0.0	0.1	0.0	0.000
7031321	49.570	47.742	0.0	0.000	0.0	0.1	176.4	0.000
7031320	51.730	50.142	0.0	0.000	0.0	0.0	0.0	0.000

7031319	54.120	53.147	0.0	0.000	0.0	0.0	0.0	0.000
7031318	56.830	55.857	0.0	0.000	0.0	0.0	0.0	0.000
7031316	59.680	58.577	0.0	0.000	0.0	0.0	0.0	0.000
7031315	59.940	58.954	0.0	0.000	0.0	0.0	14.7	0.000
7031313	60.150	59.095	0.0	0.000	0.0	0.1	0.0	0.000
7031471	60.390	59.213	0.0	0.000	0.0	0.1	0.0	0.000
7031472	60.560	59.301	0.0	0.000	0.0	0.1	0.0	0.000
7031312	61.250	59.645	0.0	0.000	0.0	0.1	102.9	0.000
7031449	50.040	48.174	0.0	0.000	0.0	0.1	0.0	0.000
7031301	50.750	49.048	0.0	0.000	0.0	0.1	132.3	0.000
7031519	52.340	50.876	0.0	0.000	0.0	0.1	73.5	0.000
7031457	52.480	51.010	0.0	0.000	0.0	0.1	0.0	0.000
7031295	53.100	51.794	0.0	0.000	0.0	0.1	88.2	0.000
7031294	53.200	51.869	0.0	0.000	0.0	0.1	0.0	0.000
7031293	54.290	52.815	0.0	0.000	0.0	0.1	73.5	0.000
7041287	57.070	54.736	0.0	0.000	0.0	0.1	14.7	0.000
7041286	60.590	58.592	0.0	0.000	0.0	0.1	58.8	0.000
7041309	61.410	59.027	0.0	0.000	0.0	0.1	161.7	0.000
7031368	62.970	61.671	0.0	0.000	0.0	0.0	0.0	0.000
7031367	64.630	63.328	0.0	0.000	0.0	0.0	0.0	0.000
7031366	65.180	64.013	0.0	0.000	0.0	0.0	0.0	0.000
7031365	67.910	66.647	0.0	0.000	0.0	0.0	0.0	0.000
7031364	68.200	67.557	0.0	0.000	0.0	0.0	0.0	0.000
7031363	68.350	67.760	0.0	0.000	0.0	0.0	29.4	0.000
7031361	68.810	68.165	0.0	0.000	0.0	0.0	29.4	0.000
7029979	35.480	33.897	0.0	0.000	0.0	0.1	14.7	0.000
7029540	35.810	34.636	0.0	0.000	0.0	0.1	0.0	0.000
7031358	41.250	40.178	0.0	0.000	0.0	0.1	0.0	0.000
7031509	42.720	41.649	0.0	0.000	0.0	0.1	0.0	0.000
7031508	43.210	42.216	0.0	0.000	0.0	0.1	44.1	0.000
7031510	44.020	43.026	0.0	0.000	0.0	0.1	0.0	0.000
7031356	48.260	47.106	0.0	0.000	0.0	0.1	367.5	0.000
7031354	52.650	51.191	0.0	0.000	0.0	0.1	88.2	0.000
7031353	55.390	54.671	0.0	0.000	0.0	0.0	0.0	0.000
7031352	56.670	54.978	0.0	0.000	0.0	0.1	0.0	0.000
7031351	56.820	55.185	0.0	0.000	0.0	0.0	0.0	0.000
7031350	57.160	55.928	0.0	0.000	0.0	0.0	0.0	0.000
7031349	57.850	57.358	0.0	0.000	0.0	0.0	0.0	0.000
7031348	58.180	57.666	0.0	0.000	0.0	0.0	0.0	0.000
7031347	58.580	58.120	0.0	0.000	0.0	0.0	0.0	0.000
7031346	59.610	58.687	0.0	0.000	0.0	0.0	0.0	0.000

Node Reference	Ground Level (m AD)	Max Level (m AD)	Flood Volume (m3)	Flood Depth (m)	Flood Area (m2)	Max Stored (m3)	Inflow (m3)	Vol Balance (m3)
7031345	62.250	60.056	0.0	0.000	0.0	0.0	73.5	0.000
7031344	56.930	55.238	0.0	0.000	0.0	0.0	0.0	0.000
7031338	60.360	58.940	0.0	0.000	0.0	0.0	14.7	0.000
7031337	62.350	60.957	0.0	0.000	0.0	0.0	29.4	0.000
7046963	56.820	55.704	0.0	0.000	0.0	0.0	0.0	0.000
7031341	58.050	56.704	0.0	0.000	0.0	0.0	29.4	0.000
7031340	58.690	57.604	0.0	0.000	0.0	0.0	0.0	0.000
7031339	61.090	60.204	0.0	0.000	0.0	0.0	0.0	0.000
7031448	61.100	60.376	0.0	0.000	0.0	0.0	14.7	0.000

A %% indicates water lost from the system.

********** Link data **********

Link Reference	D/S Node	Pipe Len (m)	Pipe Hgt (mm)	Sed Dpth (mm)	P.Full Flow (m3/s)	Upstream < Invert Level (m AD)	Max Depth (m)	Max Flow (m3/s)	Max Vel (m/s)	Total Flow (m3) >	Downstream < Invert Level (m AD)	Max Depth (m)	Max Flow (m3/s)	Max Vel (m/s)	Total Flow (m3) >
7029541.1	OF	3	600	0	3.516	32.580	0.099	0.138	4.503	2028.6	31.600	0.099	0.138	4.503	2028.6
7029914.1	7029541	6	225	0	0.077	33.820	0.283	0.092	2.222	1352.4+	33.650	0.202	0.092	2.441	1352.4
7029949.1	7029914	2	225	0	0.056	34.000	0.256	0.092	2.228	1352.4+	33.970	0.202	0.092	2.441	1352.4
7029915.1	7029949	9	225	0	0.078	34.260	0.445	0.092	2.183	1352.4+	34.000	0.329	0.092	2.211	1352.4+
7031331.1	7029915	16	225	0	0.040	34.380	1.034	0.092	2.054	1352.4+	34.260	0.495	0.092	2.172	1352.4+
7031328.1	7031331	40	225	0	0.098	36.230	0.164	0.067	2.151	984.9	34.380	1.077	0.067	1.490	984.9x
7031327.1	7031328	37	225	0	0.055	36.760	0.494	0.067	1.582	984.9+	36.230	0.202	0.067	1.778	984.9
7031325.1	7031327	92	225	0	0.118	42.910	0.124	0.067	2.971	984.9	36.840	0.439	0.067	1.591	984.9x
7031323.1	7031325	26	225	0	0.120	44.680	0.121	0.065	2.982	955.5	42.910	0.126	0.065	2.824	955.5
7031322.1	7031323	18	225	0	0.120	45.910	0.121	0.065	2.986	955.5	44.680	0.122	0.065	2.938	955.5
7031321.1	7031322	25	225	0	0.120	47.620	0.121	0.065	2.987	955.5	45.910	0.122	0.065	2.943	955.5
7031320.1	7031321	14	150	0	0.061	50.100	0.042	0.008	2.000	117.6	47.920	0.042	0.008	2.000	117.6
7031319.1	7031320	10	150	0	0.085	53.110	0.037	0.008	2.381	117.6	50.100	0.042	0.008	1.999	117.6
7031318.1	7031319	9	150	0	0.085	55.820	0.037	0.008	2.381	117.6	53.110	0.037	0.008	2.380	117.6
7031316.1	7031318	9	150	0	0.085	58.540	0.037	0.008	2.367	117.6	55.890	0.037	0.008	2.367	117.6
7031315.1	7031316	3	150	0	0.055	58.910	0.044	0.008	1.873	117.6	58.540	0.044	0.008	1.873	117.6
7031313.1	7031315	3	150	0	0.028	59.040	0.055	0.007	1.199	102.9	58.940	0.055	0.007	1.199	102.9
7031471.1	7031313	3	150	0	0.031	59.160	0.053	0.007	1.269	102.9	59.040	0.055	0.007	1.199	102.9
7031472.1	7031471	2	150	0	0.033	59.250	0.051	0.007	1.315	102.9	59.160	0.053	0.007	1.268	102.9
7031312.1	7031472	10	150	0	0.029	59.590	0.055	0.007	1.207	102.9	59.250	0.051	0.007	1.315	102.9
7031449.1	7031321	11	225	0	0.092	48.060	0.114	0.045	2.222	661.5	47.620	0.122	0.045	2.040	661.5
7031301.1	7031449	13	225	0	0.120	48.950	0.098	0.045	2.691	661.5	48.060	0.114	0.045	2.217	661.5
7031519.1	7031301	38	225	0	0.100	50.780	0.096	0.036	2.225	529.2	48.950	0.098	0.036	2.151	529.2
7031457.1	7031519	3	225	0	0.099	50.920	0.090	0.031	2.095	455.7	50.780	0.096	0.031	1.915	455.7
7031295.1	7031457	13	225	0	0.113	51.710	0.084	0.031	2.300	455.7	50.920	0.090	0.031	2.094	455.7
7031294.1	7031295	1	225	0	0.137	51.800	0.069	0.025	2.399	367.5	51.710	0.084	0.025	1.854	367.5
7031293.1	7031294	15	225	0	0.115	52.740	0.075	0.025	2.163	367.5	51.800	0.075	0.025	2.163	367.5
7041287.1	7031293	29	225	0	0.118	54.670	0.066	0.020	2.039	294.0	52.740	0.075	0.020	1.730	294.0
7041286.1	7041287	48	225	0	0.129	58.530	0.062	0.019	2.111	279.3	54.750	0.062	0.019	2.111	279.3
7041309.1	7041286	6	225	0	0.124	58.970	0.057	0.015	1.886	220.5	58.530	0.062	0.015	1.666	220.5
7031368.1	7041309	42	150	0	0.031	61.630	0.041	0.004	1.009	58.8	59.930	0.041	0.004	1.009	58.8
7031367.1	7031368	28	150	0	0.038	63.290	0.038	0.004	1.119	58.8	61.630	0.041	0.004	1.009	58.8
7031366.1	7031367	5	150	0	0.058	63.980	0.033	0.004	1.377	58.8	63.290	0.038	0.004	1.118	58.8
7031365.1	7031366	38	150	0	0.041	66.610	0.037	0.004	1.164	58.8	63.980	0.033	0.004	1.376	58.8
7031364.1	7031365	13	150	0	0.041	67.520	0.037	0.004	1.168	58.8	66.610	0.037	0.004	1.164	58.8
7031363.1	7031364	4	150	0	0.035	67.720	0.040	0.004	1.069	58.8	67.520	0.037	0.004	1.168	58.8
7031361.1	7031363	16	150	0	0.025	68.130	0.035	0.002	0.641	29.4	67.720	0.040	0.002	0.535	29.4
7029979.1	7029541	2	225	0	0.125	33.800	0.097	0.046	2.797	676.2	33.650	0.097	0.046	2.797	676.2
7029540.1	7029979	4	225	0	0.200	34.560	0.076	0.045	3.811	661.5	33.800	0.097	0.045	2.734	661.5
7031358.1	7029540	32	225	0	0.191	40.100	0.078	0.045	3.696	661.5	34.560	0.076	0.045	3.807	661.5
7031509.1	7031358	9	225	0	0.185	41.570	0.079	0.045	3.625	661.5	40.100	0.078	0.045	3.691	661.5
7031508.1	7031509	3	225	0	0.200	42.140	0.076	0.045	3.812	661.5	41.570	0.079	0.045	3.620	661.5
7031510.1	7031508	5	225	0	0.185	42.950	0.076	0.042	3.532	617.4	42.140	0.076	0.042	3.553	617.4
7031356.1	7031510	25	225	0	0.185	47.030	0.076	0.042	3.541	617.4	42.950	0.076	0.042	3.528	617.4
7031354.1	7031356	25	225	0	0.186	51.140	0.051	0.017	2.521	249.9	47.030	0.076	0.017	1.432	249.9
7031353.1	7031354	16	225	0	0.214	54.630	0.041	0.011	2.228	161.7	51.140	0.051	0.011	1.631	161.7
7031352.1	7031353	8	225	0	0.087	54.920	0.058	0.011	1.347	161.7	54.630	0.058	0.011	1.347	161.7
7031351.1	7031352	2	225	0	0.155	55.150	0.035	0.005	1.258	73.5	54.920	0.058	0.005	0.612	73.5
7031350.1	7031351	8	150	0	0.047	55.890	0.038	0.005	1.398	73.5	55.150	0.035	0.005	1.582	73.5
7031349.1	7031350	15	150	0	0.048	57.320	0.038	0.005	1.409	73.5	55.890	0.038	0.005	1.398	73.5
7031348.1	7031349	8	150	0	0.030	57.620	0.046	0.005	1.088	73.5	57.320	0.046	0.005	1.088	73.5
7031347.1	7031348	6	150	0	0.043	58.080	0.040	0.005	1.330	73.5	57.620	0.046	0.005	1.088	73.5
7031346.1	7031347	5	150	0	0.053	58.650	0.037	0.005	1.476	73.5	58.080	0.040	0.005	1.330	73.5

Link Reference	D/S Node	Pipe Len (m)	Pipe Hgt (mm)	Sed Dpth (mm)	P.Full Flow (m3/s)	Upstream < Invert Level (m AD)	Upstream Max Depth (m)	Upstream Max Flow (m3/s)	Upstream Max Vel (m/s)	Upstream > Total Flow (m3)	Downstream < Invert Level (m AD)	Downstream Max Depth (m)	Downstream Max Flow (m3/s)	Downstream Max Vel (m/s)	Downstream > Total Flow (m3)
7031345.1	7031346	11	150	0	0.055	60.020	0.036	0.005	1.509	73.5	58.650	0.037	0.005	1.475	73.5
7031344.1	7031352	3	225	0	0.140	55.200	0.038	0.006	1.327	88.2	54.920	0.058	0.006	0.735	88.2
7031338.1	7031344	21	150	0	0.065	58.910	0.030	0.003	1.221	44.1	55.300	0.030	0.003	1.221	44.1
7031337.1	7031338	12	150	0	0.064	60.930	0.027	0.002	0.936	29.4	58.910	0.030	0.002	0.814	29.4
7046963.1	7031344	6	150	0	0.039	55.670	0.034	0.003	0.978	44.1	55.300	0.034	0.003	0.978	44.1
7031341.1	7046963	16	150	0	0.039	56.670	0.034	0.003	0.981	44.1	55.670	0.034	0.003	0.978	44.1
7031340.1	7031341	6	150	0	0.061	57.580	0.024	0.001	0.554	14.7	56.670	0.034	0.001	0.327	14.7
7031339.1	7031340	18	150	0	0.059	60.180	0.024	0.001	0.551	14.7	57.580	0.024	0.001	0.554	14.7
7031448.1	7031339	3	150	0	0.037	60.350	0.026	0.001	0.489	14.7	60.180	0.024	0.001	0.551	14.7

+ after total flow indicates a pipe/channel surcharged by flow and depth at that end.
x after total flow indicates a pipe/channel surcharged by depth only at that end.

NOTE :
(i) maximum elevations, depths, volumes, velocities and discharges are selected from the values at each time increment and will be in general more extreme than the maximum values in the hydrograph files.
(ii) maximum elevations, velocities and discharges are not necessarily calculated at the same time.
(iii) max. velocity is not calculated for a pipe if either the water level does not exceed 5% of the pipe depth or the discharge is less than 0.001 m3/s.

End of run 0 mins (elapsed) Produced on 20/10/2010 Last page

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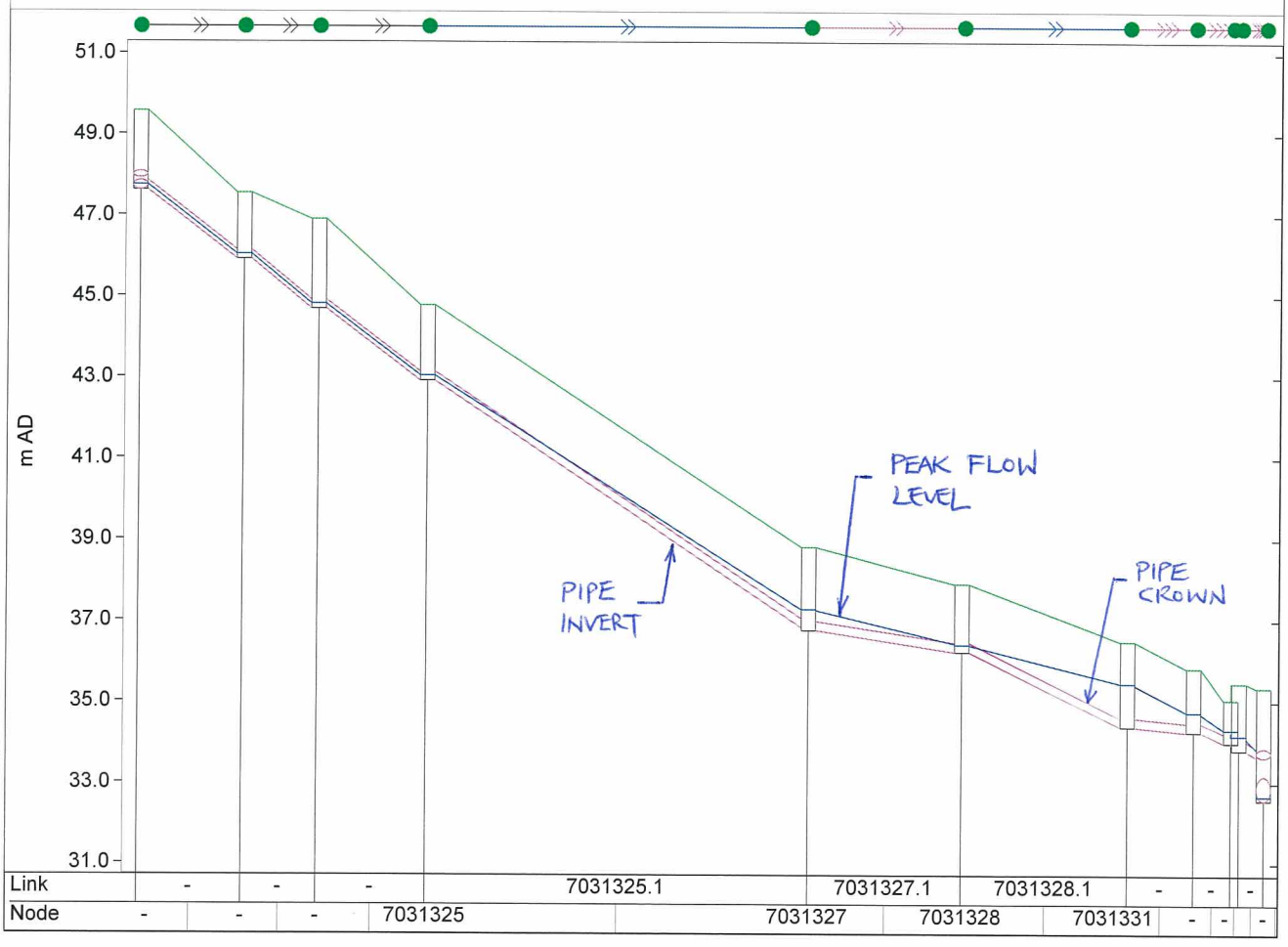
Time (hr) 0:00:00



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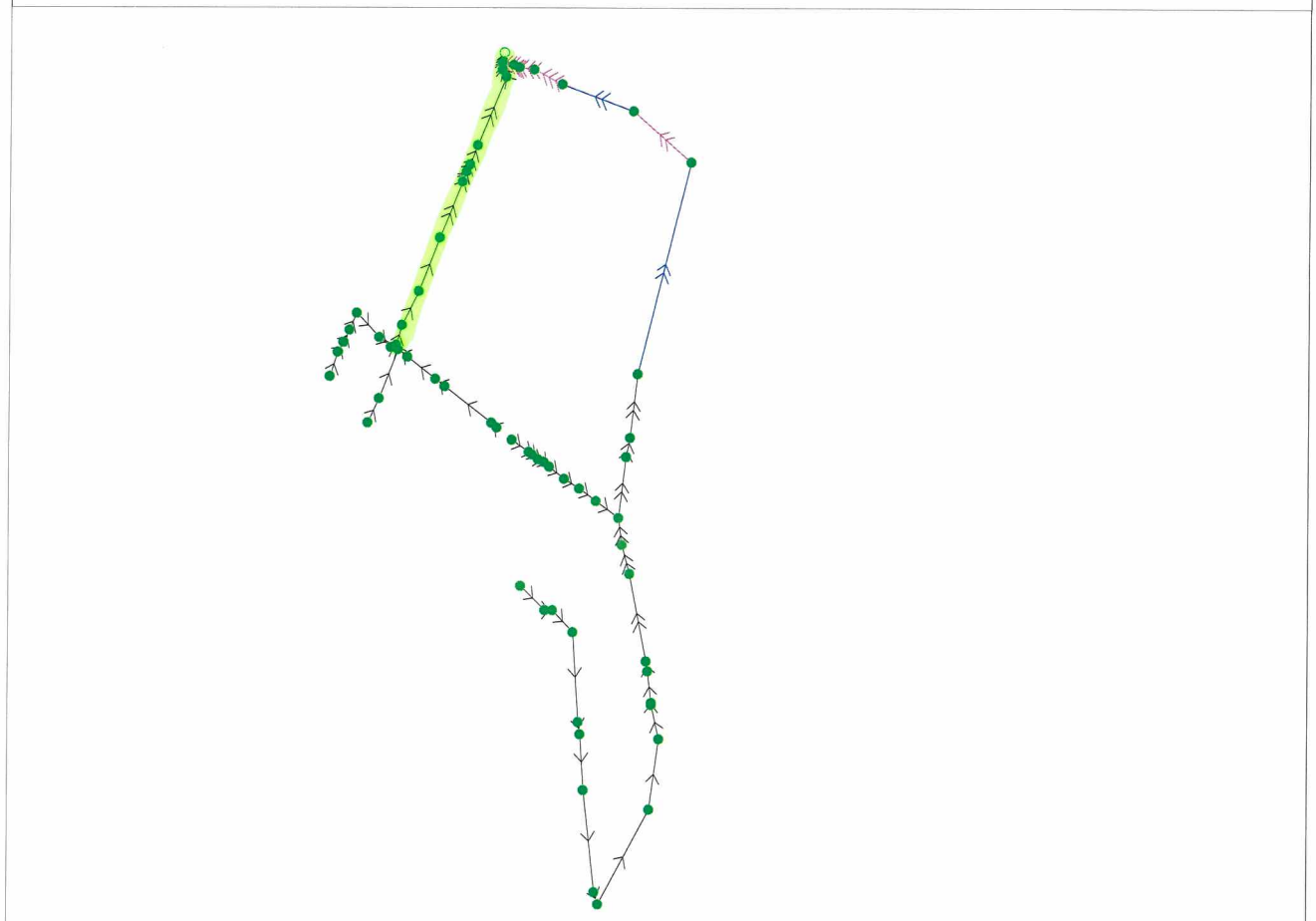
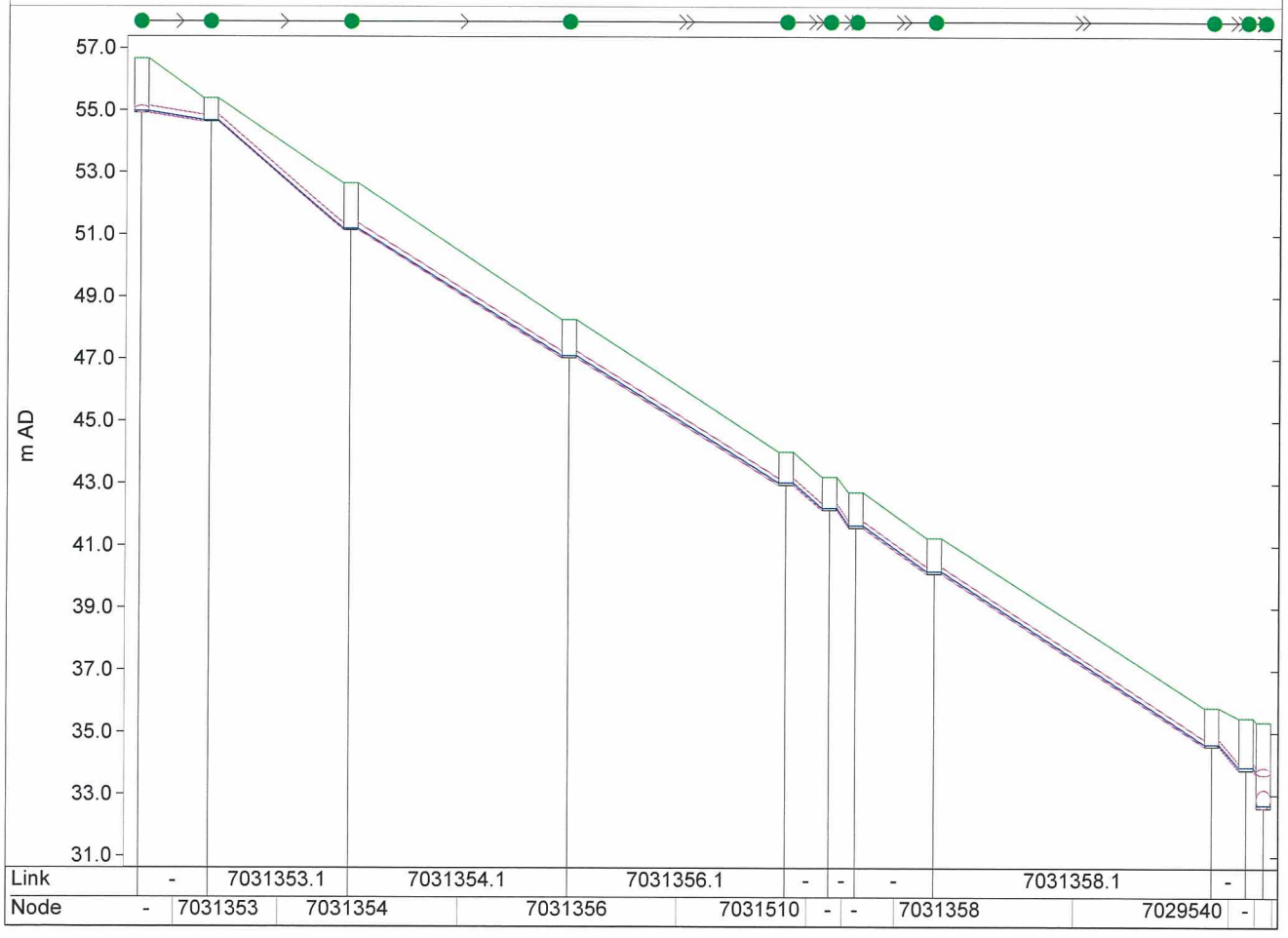
Maxima





Annex D

Key Assumptions

Annex D Key Assessment Assumptions, Limitation of Assessment Methodologies and related Prior Agreement(s) with the Director

Environmental Aspects	Key Assessment Assumptions	Limitation of Assessment Methodologies	Prior Agreement(s) with the Director of Environmental Protection
Cultural Heritage	The assessment was based on the following document: i) Conservation Management Plan prepared for the Site in 2008 ii) Ground Radar Survey taken on Site in 2010 iii) Built Heritage Survey within and around the Site iv) AMO's database on heritage resources The construction of the new buildings assumes the use of non-percussive piling method.	On built heritage resources, past alterations at the existing buildings limit the exposure of all original heritage features on Site and hence the assessment can only be undertaken based on heritage features currently identified on Site. Details of mitigation measures to the heritage features are subject to detailed design and full-scaled survey before the construction work commence. The assessment and mitigation measures will also be controlled under the AM Ordinance. Due to access constraint, archaeological investigation cannot be performed at this stage. Hence, the archaeological impact assessment was undertaken based on the best available desktop information. Further archaeological investigation will be carried out during the detailed design stage to verify the assessment.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM and have been discussed with AMO throughout the course of the Study and presented in the Draft EIA Report circulated in September 2010.
Landscape and Visual	The assessment was based on the latest preliminary design of the Project and detailed tree survey on Site, and followed the requirements stipulated in the EIA Study Brief, EIAO-TM and EIAO Guidance Note No. 8/2002	Assessment of Sensitivity of Receivers and the Magnitude of Change of Project works are inherently subjective. Design changes and additional mitigation measures introduced during detail design stage may affect the evaluated impacts of the Project.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM and presented in the Draft EIA Report circulated in September 2010.
Construction Noise	In accordance with the EIAO, the methodology outlined in the GW-TM has been used for the assessment of construction noise. Sound power level (SWL) of the equipment was taken from Table 3 of the GW-TM and BS5228 was reference for those without information provided. It was assumed that all PME items required for a particular construction activity would be located at the notional or probable source position of the work site where such activity is to be performed. The assessment was based on the cumulative SWL of PME likely to be used for each location taking into account the tentative construction programme. The sound pressure level of each construction task was calculated, depending on the number of plant and distance from receivers. The noise levels at NSRs were then predicted by adding up the SWLs of all concurrent construction tasks.	The prediction of construction noise impact was based on the methodology described in the GW-TM under the NCO. There would be limitations of the methodology such as the accuracy of the predictive base data for future, e.g. plant inventory, SWL of PMEs and effectiveness of noise barriers. In carrying out the assessment, realistic worst case assumptions have been made in order to provide a conservative assessment of noise impacts. The construction noise impact was assessed based on conservative estimates for the types and quantities of plant and construction methods.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM. It was stated in the EIA Report that the construction plant inventory has been vetted and confirmed by the Engineer as being practicable in completing the works within the scheduled timeframe.
Fixed Plant Noise	Calculate the maximum allowable SWLs as the compliance criteria for each fixed noise sources has been determined.	The choice of fixed plant items may be refined during the detailed design stage. Nevertheless, the maximum allowable SWLs have already been stated in the EIA Report and will be included in the contract specification for the future equipment contractor/supplier. The maximum allowable SWLs of PA system to be used in the open courtyards have been stated in the EIA Report. Such SWLs together with the requirement of noise monitoring during the events will be included in the contract specification for the future event organizer.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM.
Air Quality	The dust assessment has been based on the predicted material handling volume. The estimated vehicle generated by the Project has been based on the findings of the Traffic Impact Assessment The chimney emission information was based on the field survey data.	Detailed data pertaining chimney emission could not be obtained from the chimney operators and hence pose a limitation to the assessment. Nevertheless, as explained in the Air Quality section, it is unlikely that the chimney emissions will pose adverse impact on the Site.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM.

Environmental Aspects	Key Assessment Assumptions	Limitation of Assessment Methodologies	Prior Agreement(s) with the Director of Environmental Protection
Water Quality	The quantity of sewage generated from the Project operation was estimated based on the gross floor area of the proposed uses within the Site. The capacity of handling sewage from the Site was based on the findings of the sewerage impact assessment (SIA)	The proposed uses may change in future and the number of visitors cannot be accurately predicted at this stage. However, the assessment has already assumed a reasonably worst case scenario.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM. The SIA Report was submitted to EPD on 16 October 2010 and DSD on 1 November 2010. Replies from EPD on 9 November 2010 and DSD on 24 November 2010 indicated no comment and no in-principle objection, respectively, on the SIA Report.
Waste Management	The analysis of the works activities, proposed future uses and waste generation from the Project, and the waste management proposal have been devised based on the best understanding of the anticipated construction programme and the number of future visitors to the Site.	The waste quantities estimated under this EIA are subject to change due to potential changes to construction programme and the uncertainties of the number of visitors. However, further refinement of the estimated waste quantities would not affect the assessment conclusion provided that the recommended mitigation measures are implemented properly.	Relevant requirements have been stipulated in the EIA Study Brief and the EIAO-TM.

Annex E

Implementation Schedule

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
Construction Phase							
1. Cultural Heritage							
S3.9.1 & S3.6.2	S3.2.1	***Comprehensive Survey, Impact Assessment of Historic Features of the Monuments and Identification of Character Defining Elements*** In order to provide appropriate mitigation measures for historic features of the monuments, the relevant comprehensive survey, impact assessment and protection schedule will be conducted during the detailed design stage when closer access to all parts of the buildings will be made possible and when further ground investigations will have been carried out. Closer access at all levels inside and outside the buildings will clarify the condition of the fabric and features and finishes, and the further ground investigations will clarify any strengthening work required. The design and coordination of the services requirements and their integration into each building will be carried during the detailed design stage. The detailed design development of the historic buildings, with the required interventions, strengthening and integrated services for new adaptive uses, will be carried out by the conservation design team and agreed with AMO. For those historical features of significant cultural heritage value will be defined as the character defining elements of the monuments. All the character defining elements (CDE) will be well preserved in-situ and repaired in accordance with the work methodologies approved by the AMO.	To compile comprehensive data for subsequent impact assessment and design on appropriate conservation measures to be adopted	Conservation Architect	Whole Site	During detailed design	International Building Conservation Practices
S3.9.1	S3.2.2	***Archival Record*** A detailed cartographic drawings and photographic records showing the existing condition of all the buildings and identified CDE should be conducted and submitted to the AMO before the construction stage for approval. The archival recording shall compile of a full inventory list together with the protection schedule of the historical features of the monuments, and identify the character defining elements (CDEs) of the monuments from the surveyed significant historical features. All the CDEs must be preserved, repair and maintained properly, and the inventory list shall be updated after the construction and include in the Conservation Management Plan (CMP).	To provide an archival record of the site and a detailed reference for future restoration works	Conservation Architect	Whole Site	During detailed design	
S3.9.1	S3.2.3	***Repair and Restoration of Historic Buildings and Structures*** A restoration proposal with detailed work methodologies of the repair and conservation treatments to different kinds of historic building fabrics and historical features should be worked out by the Conservation Architect and submitted to the AMO for approval.	For statutory approval	Project Proponent and Design Team	Whole site	During detailed design	
S3.9.1	S3.2.4	***Addition and alteration (A&A) Works Proposal*** A detailed proposal of the A&A works by means of plans, drawings, photos, specifications, method statements and/or other formats of presentation shall be submitted to the AMO during the detailed design stage for approval.	To ensure the full compliance of the conservation guidelines and approaches as mentioned in the EIA report is followed.	Project Proponent, Design Team and Contractor(s)	Whole site	During detailed design	-
S3.6.1	S3.2.5	***Detailed Structural Assessment*** 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 historic features, particular the CDE, and mitigation measures will be considered.	To ensure that the impact to the historic fabric of the buildings is minimal due to the floor strengthening proposal	Structural Engineer of the Design Team	Whole site	During detailed design	-
S3.9.1	S3.2.6	*Archaeological Investigation* An archaeological investigation will be conducted to obtain field data for subsequent detailed impact assessment. The archaeological investigation will focus on areas with archaeological potential that may potentially be impacted by the Project (i.e. proposed new development that involves excavation work in archaeological potential areas) and the investigation is considered feasible to be carried out in the detailed design phase. These areas are identified on Figure 3.1.	To obtain field data for subsequent detailed impact assessment	Qualified Archaeologist employed by the Project Proponent	Area with archaeological potential	During detailed design stage	Antiquities and Monuments (AM) Ordinance (Cap. 53)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	To mitigate any identified impacts on the archaeological resources	Project Proponent and Design Team	To be advised	During detailed design and construction	Antiquities and Monuments (AM) Ordinance (Cap. 53)
S3.9.1	S3.2.7	***Heritage Operational Strategy and Manuals*** Detailed Heritage Operational Strategies and Manuals will be developed by the design team and CPS Ltd's advisors for each building and for the management and circulation of the Site (such as distribution of goods and services into and across the Site, control of visitors, etc.) for AMO's approval. To facilitate the future maintenance and repair of the built heritage in the Site at the operation stage, one set of the approved method statement of the repair works to the historic features and historic buildings together with the contact details of the respective work contractors engaged in the project shall be included in the Heritage Operational Manual as part of the heritage maintenance guidelines for the reference of site management and maintenance agents.	To manage the operation o f the Site	Project Proponent	Whole site	During detailed design stage	-
S3.9.2	S3.3.1	*Vibration Monitoring* A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	To minimize the vibration impacts from the on-site construction activities during construction stage	AP and Design Team	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	Antiquities and Monuments (AM) Ordinance (Cap. 53)
S3.9.2	S3.3.3	*Compliance of the Approved Measures and Auditing* Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, sub-contractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures. Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A 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 work commencement. The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.	To check the compliance and effectiveness of the strategies and mitigation measures mentioned in the EIA report	ET & Project Proponent	Whole site	Prior to and during construction	Strategies and Mitigation Measures stated in the EIA Report
S3.9.3	S3.3.4	*Archival Recording* An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of as-built drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set	To provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments and to be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site	Project Proponent	Whole Site	During detailed design, construction and prior to operation	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.					
S3.9.3	S3.4.1	Regular audit is recommended for checking the compliance and effectiveness of the strategies and mitigation measures mentioned in Sections 3.7.4 and 3.7.5 should be conducted. 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. The management team shall ensure the audit to be carried out by an experience building conservation expert in order to investigate the site practice and work methodologies of th work contractors, the tenants and any other stakeholders of the Site with respect of conservation works, site interpretation of cultural heritage, and any related works in the operation phase. To facilitate the future maintenance and management of the monuments, one set of the approved method statement/work methodology of the repair and conservation works to the historic features of the monuments (particular the CDEs) and contract details of the respective work contractors engaged in the repair and conservation works of the Project should be included in the Heritage Operation Manual for the reference of site management and maintenance agents. An updated copy of the Heritage Operation Manual and the associated guidelines should be submitted to AMO at least one week before the opening of the Site.	To check the compliance and effectiveness of the strategies and mitigation measures mentioned in the EIA report	ET & Project Proponent	Whole site	During operation	Strategies and Mitigation Measures stated in the EIA Report
S3.7.3	-	The general mitigation measures to be used during the detailed design phase will include: • Prior identification and recording of all the significant features, finishes, fittings, structures, and contents in the existing buildings, and the site ("historic features", and assessment of their heritage significance level for shortlist of the CDE of the monuments • After assessing their existing condition and vulnerability during construction, a full inventory list of historic features together with a schedule of protection works for all these identified items ("protection schedule") shall be submitted to the AMO for approval prior to the construction stage. • Preparation of a detailed precautionary and monitoring measures to preserve or secure items and finishes remaining in situ during construction. • Preparation of a detailed proposal of protection measures to the exteriors and interiors of the buildings to be put in place before the enabling and investigation works during design stage or before the construction operations. Ensuring the responsible contractor understands the significance and vulnerabilities of the building structures, constructions, features and finishes prior to starting the work to avoid overloading or inappropriate storage or construction activities.	To minimize impacts on the built structures	Design Team	Whole site	During detailed design	-
S3.7.3	-	*General Construction Methods* Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing) , a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the	To minimize impacts from modification/refurbishment works on the existing historic buildings and structures	Project Team and Contractor(s)	Whole site	During construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure.					
S3.7.1 & 3.7.2	-	Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose: • one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and • an updated inventory list of the historic features together with the cross referenced location plans and photo records. One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.	To implement and update the CMP for long term caring of the heritage site(s) and sustainability of the adaptive reuses	Project Proponent and AP	Whole site	During detailed design, construction, post-construction and operation	-
S3.7.3	-	*Passageway under A Hall and B Hall* A comprehensive study will be carried out for the Ground Improvement and Excavation and Lateral Support (ELS) systems to be adopted using results from ground investigation work and trial pits to prevent damage and adverse effect to structural integrity to existing historic buildings during the course of the passageway construction under A Hall and B Hall on site. ELS design, construction sequence, method statement and monitoring proposal of the proposed passageway will be submitted to the authorities (Buildings Department, Geotechnical Engineering Office and Antiquities and Monuments Office) for approval before commencement of work on site.	To protect the existing historic buildings and structures from damage due to the passageway construction under A Hall and B Hall	Design Team	Proposed Passageway under A Hall and B Hall	During detailed design stage	Antiquities and Monuments (AM) Ordinance (Cap. 53); Building Ordinance
2. Landscape & Visual							
S4.7.2	-	*Detailed Design Considerations* Aesthetic treatment of the proposed visible structures, including their form, textures, finishes and colours, are to be compatible with/complement structures in the vicinity of the Project Site while fitting with the revitalized CPS philosophy. Sensitive landscape treatments are to be considered within the confines of the conservation of the CPS character. The building footprint is to be reduced to the minimal practical size.	To reduce building footprint and visibility of structures	Design Team	Whole site	During detailed design	-
S4.7.27	-	*In-situ Tree Protection - Cordon Zone (CZ)* Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.	Protect the soil and roots from disturbance and shied the tree from undesirable construction incursions	Contractor(s)	Whole site	During construction	-
S4.7.2	-	*In-situ Tree Protection - Advanced & Phased Root Pruning* All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter >20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig	To reduce construction activity impact and shock on the tree	Trained Arborist or Horticulturist Contractor	Whole site	During construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.					
S4.7.2	-	*In-situ Tree Protection - Foliage cleansing system* A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.	To reduce damage to trees from dust accumulating on the foliage that might impair respiration and photosynthesis	Landscape Contractor	Whole site	During construction	-
S4.7.2	S4	*In-situ Tree Protection - Monthly inspection* Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (*http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf*) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected trees, must be reported to the authorized person or the tree expert within two days.	To ensure the trees onsite are being sufficiently protected	Trained Arborist or Horticulturist Contractor	Whole site	During construction	-
S4.7.2	-	*Light Control* Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.	To minimize glare impact to adjacent VSRs.	Contractor(s)	Whole site	During construction and operation	-
S4.7.2	S4	*Compensatory Tree Planting* A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth. The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation. Pursuant to the "Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation", the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (*Table 4.3*), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggested:: - *Bauhinia* 'Blakeana' a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring. - *Bauhinia purpure*, a native evergreen with lighter purple flowers from late autumn to early winter. - *Bauhinia variegata*, an exotic deciduous species, with pale pinkish flowers in spring to early	To compensate for loss of trees due to the Project	Landscape Contractor	At identified compensatory tree planting location at the Parade Ground	During detailed design and construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		summer often when the tree has little or no leaves.					
S4.7.2	-	*Vertical Greening* Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible. As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the exiting wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.	To reduce landscape and visual impact of proposed new structures and facilities	Landscape Contractor	Inner Southern Wall	During detailed design and construction	-
S4.7.2	-	***New Custom Paving*** New, Porous, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	To enhance the landscape and visual appearance	CPS Ltd/ Site Management Company	Whole site	During detailed design and construction	-
S4.7.2	S4	*In-situ Tree Protection - Quarterly inspection* Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (*http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf*) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	To reduce the loss of and protect existing trees	Trained Arborist or Horticulturist contractor	Whole site	During post construction and operation	-
3. Noise							
S5.9	-	The following site practices should be followed during the construction of the Project: • Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase; • Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase; • Mobile plant, if any, will be sited as far away from NSRs as possible; • Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum; • Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and • Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m^{-2} and have no openings or gaps.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	A Practical Guide for the Reduction of Noise from Construction Works
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	To minimize the construction noise impact	Contractor(s)	Whole Site	During construction	-
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	To ensure compliance with the noise criterions at the NSRs; ensure the recommended mitigation measures are properly implemented during the construction stage	ET (monitoring; ET, IEC and Contractor for site audits	Whole Site	During construction	Environmental Impact Assessment Ordinance
4. Air Quality							
S6.8.1	-	Dust control measures stipulated in the *Air Pollution Control (Construction Dust) Regulation* will be implemented during the construction phase to control the potential fugitive dust emissions.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	Air Pollution Control (Construction Dust) Regulation
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	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 (Old Bailey Wing and Arbuthnot Wing) will be constructed.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	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.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	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.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	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.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	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.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Area for Demolition Work	During construction	-
S6.8.1	-	ULSD will be used for all construction plant on-site.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	To minimize adverse dust emission generated from various construction activities of the works sites	Contractor(s)	Whole Site	During construction	-
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on-site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	To minimize adverse dust emission generated from various construction	Contractor(s)	Whole Site	During	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
			activities of the works sites			construction	
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	To minimize adverse dust emission generated from various construction activities of the works sites; to ensure appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period	Environmental Team (ET) & Independent Environmental Checker (IEC), Contractor	Whole Site	During construction	Environmental Impact Assessment Ordinance
5. Water Quality							
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in *Appendix A1* of *ProPECC PN 1/94*. All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	To control site runoff and drainage; prevent high sediment loading	Contractor(s)	Whole Site	During construction	ProPECC PN 1/94 TM standard under the WPCO
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	To control site runoff and drainage; prevent high sediment loading	Contractor(s)	Whole Site	During construction	-
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of *ProPECC PN 1/94*. Particular attention will be paid to the control of silty surface runoff during storm events.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	ProPECC PN 1/94
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	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.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	Waste Disposal Ordinance
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	Waste Disposal Ordinance or Waste Disposal (Chemical Waste) (General) Regulation requirements
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The stomwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	To minimize water quality impacts	Contractor(s)	Whole Site	During construction	-
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	To minimize water quality impacts	ET, IEC and Contractor	Whole Site	During construction	-
6. Waste Management							
S8.5	S6.3.1 & Table 6.1	*General* The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	To ensure the contractor(s) is qualified in waste management in accordance with the various ordinances	Contractor(s)	Whole Site	During construction	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes WBTC No 5/99, Trip-ticket System for Disposal of Construction and Demolition Material
S8.5	-	*Management of Waste Disposal* The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid "chit" which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	Waste Disposal (Charges for Disposal of Construction Waste) Regulation
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	DEVB TC(W) No. 6/2010
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated/recycled and disposed of will be established during the construction phase.	To ensure proper management of waste disposal	Contractor(s)	Whole Site	During construction	-
S8.5	S6.3	*Reduction of Construction Waste Generation* C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	To reduce the quantity of construction wastes; to minimize impacts resulting from C&D material	Contractor(s)	Whole Site	During construction	-
S8.5	S6	*Chemical Waste* The contractor will register as a chemical waste producer with the EPD.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation
S8.5	S6	Containers used for storage of chemical waste shall: • Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; • Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and • Display a label in English and Chinese in accordance with instructions prescribed in *Schedule 2* of the *Regulations*.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	Storage areas for chemical waste shall: • Be clearly labelled and used solely for the storage of chemical waste; • Be enclosed on at least 3 sides; • Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal; to ensure proper chemical waste	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
		the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; • Have adequate ventilation; • Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and • Be arranged so that incompatible materials are appropriately separated.	management				and Storage of Chemical Wastes
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	To ensure chemical waste are collected by a qualified contractor properly	Contractor(s)	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6 & Table 6.1	*General Refuse* General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	To minimize impacts resulting from collection and transportation of general refuse for off-site disposal	Contractor(s)	Whole site	During construction	-
S8.5	S6	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.	To facilitate recycling on site	Contractor(s)	Whole site	During construction and operation	-
S8.5	S6	*Staff Training* 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.	To ensure waste management practices are carried out by the site staff properly	Contractor(s)	Whole site	Commence-ment of construction	-
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	To ensure wastes are being managed in accordance with the recommended good construction site practices	ET, IEC and Contactor	Whole site	During construction	-
Operation Phase							
1. Cultural Heritage							
S3.7.4	-	Establishment of the Heritage Operational Strategy and Manual with plans and guidelines on maintenance, visitors control, future operators/users, further development or alternation and risk management. The CPS Ltd. Shall be assisted by the competent person(s) in the conservation management and the related field. The Heritage Operational Manual shall also include a chart showing the organisation and structure of the CPS Ltd as well as the role and responsibilities of each member in respect of conservation management. The Heritage Operation Strategy and Manual shall be submitted to AMO for Approval before the operation stage of the Project	To develop appropriate operational policies, an appropriate operational management team, appropriate guidelines and manuals for user, and provide adequate resources during the operational stage for the Site	Design Team and the CPS Ltd	Whole site	Prior operation	-
S3.7.5	-	Establishment of the Interpretation Strategies and Plan. A detailed interpretation plan shall be submitted to the AMO for approval prior to the construction of the facilities related to the site interpretation. (e.g. directional signs, display areas and visitor centre).	To outline initial interpretive strategies to communicate a sense of value to users and inspire them to become actively involved in the process	Design Team and the CPS Ltd	Whole site	Prior operation	-
3.9.2	S7.4	Regular audit during Project operation is recommended 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 shall be agreed with AMO prior to operation commencement.	To check the compliance and effectiveness of the mitigation measures recommended before and during operation stage	The CPS Ltd	Whole site	Prior to and during operation	Sections 3.7.4 and 3.7.5 of the EIA Report

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Measure & Main Concerns to be Addressed	Who will Implement the Measure	Location of the Measure	When to Implement the Measure	What Standard or Requirement the Measure will Achieve
2. Landscape & Visual							
S4.7.2	S8.2	*In-situ Tree Protection - Quarterly inspection* Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (*http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf*) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	To reduce the loss of and protect existing trees	Trained Arborist or Horticulturist contractor	Whole site	During post construction and operation	-
S4.7.2	S8.3	*Soft Landscape Maintenance* After completion of the Project, the preserved, newly planted trees and other vegetation onsite will be maintained on a long term basis by a professional horticultural contractor.	To minimize landscape and visual impact during operation stage	Landscaper Contractor	Whole site	During operation	-
S4.7.2	S8.3	*Architectural Maintenance* The retained buildings as well as the newly built structures and new paving should be maintained such as to preserve their visual amenity at a standard similar to that on Day 1 of Operation. Such hard landscape maintenance will be covered by the Conservation Management Plan and Operational Phase Manual of the Project.	To minimize landscape and visual impact during operation stage	The CPS Ltd	Whole site	During operation	-
S4.7.2	S8.3	*Light Control* Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs. Lighting at the two new buildings and the food and beverage/ retail users within the retained buildings will be turned to night-mode (ie dimmer) after 11pm. Only limited lighting will be on for safety/emergency purposes elsewhere in the Site.	To minimize light impact on adjacent VSRs	The CPS Ltd	Whole site	During operation	-
3. Noise							
S5.9	-	The following site practices should be followed during the operation of the Project: • 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; • Develop and implement a regularly scheduled plant maintenance programme so that plant items are properly operated and serviced. The programme shall be implemented by properly trained personnel. • Good management practices shall be in place, including noise monitoring, setting up a complaint hotline, and distributing advance notice to nearby NSRs. Good management practices shall 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 Leq(30min) noise measurement before and during the event shall 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) shall be implemented; and • The requirements of not exceeding the total sound power level and noise monitoring for each independent event shall be specified in the event organisers' contract document.	To minimize the fixed plant noise impact	Contractor(s) and Event Organizer(s)	Whole Site	During operation	-
4. Air Quality							
S6.8.2	-	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	To minimize the potential kitchen fumes or stack emissions during operation stage	The CPS Ltd	Kitchens on-site	During operation	-

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		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.					
6. Waste Management							
S8.5	S6	*Chemical Waste* The contractor will register as a chemical waste producer with the EPD.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation
S8.5	S6	Containers used for storage of chemical waste shall: • Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; • Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and Display a label in English and Chinese in accordance with instructions prescribed in *Schedule 2* of the *Regulations*.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	Storage areas for chemical waste shall: • Be clearly labelled and used solely for the storage of chemical waste; • Be enclosed on at least 3 sides; • Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; • Have adequate ventilation; • Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and Be arranged so that incompatible materials are appropriately separated.	To minimize impacts resulting from collection and transportation of chemical waste for off-site disposal; to ensure proper chemical waste management	Contractor(s)	Whole Site	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	To ensure chemical waste are collected by a qualified contractor properly	Contractor(s)	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S8.5	S6	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.	To facilitate recycling on site	Contractor(s)	Whole site	During construction and operation	-
S8.5	S6	*Food and Beverage Waste* 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. Once the proposed Organic Waste Treatment Facility (OWTF) at Siu Ho Wan is available, the management office of the CPS should consider segregate the food waste from the café and restaurants and delivered to the OWTF for treatment.	To minimize impacts resulting from collection and transportation of food and beverage wastes for off-site disposal	Contractor(s)	Whole site	During operation	-