

For discussion  
on 7 June 2001

## **Legislative Council Panel on Security**

### **PRISON DEVELOPMENT PLAN**

#### **PURPOSE**

At the Panel's meeting on 7 December 2000, members were briefed on the accommodation problems faced by the Correctional Services Department (CSD) and consulted on the concept of co-location of penal institutions. This paper addresses the various concerns raised by members and provides further information on a proposed prison development plan revolving round the concept of co-location, including the possible site options. Members' views are sought.

#### **BACKGROUND**

2. CSD is running a total of 11,000 penal places. In order to alleviate the current prison overcrowding problem and meet the forecast growth in penal population, it is estimated that some 3,800 additional penal places will need to be provided by 2024. If we follow the traditional institution-by-institution approach, five new prisons (including an expansion project proposed for the Lai Chi Kok Reception Centre) will be required, attracting a building cost of about \$5 billion and recurrent manning by some 1,600 additional CSD staff. Separately, on-going redevelopment projects would have to be pursued to upgrade the archaic and outdated facilities in the 24 existing institutions to ensure safe custody of prisoners and to meet their rehabilitation needs.

3. As an alternative to the traditional approach, we have been considering a long-term prison development plan with a view to co-locating all penal institutions at one place. The plan can replace the 24 existing institutions and obviate the need for the five prison projects originally envisaged, equally providing a total of 15,000 places to meet the existing demand and forecast growth in penal population until 2024. It will comprise a number of stand-alone penal institutions co-located in a large prison complex.

4. At the meeting held on 7 December 2000, concerns were raised by members that any mass commotion or disorder could spread more easily in a large prison complex and would be difficult to control. There were also concerns that the proposed prison complex might not be able to provide an environment conducive to the rehabilitation of different types of offenders, in particular young offenders and those convicted of minor crimes, and might give rise to adverse psychological impact on them. There was a suggestion of a middle-of-the-road approach, i.e. co-locations of a smaller scale at a few existing sites suitable for redevelopment and expansion (partial co-locations). Further information on our proposed prison development plan was also sought.

## **RESPONSE TO MEMBERS**

### **Security And Rehabilitation Concerns**

5. On security management, there are possible measures that may be put in place in the physical design and penal management to ensure adequate security control in the proposed prison complex. They are set out in **Annex A**.

6. There are also feasible measures that may be put in place in a large prison complex to meet the rehabilitation needs of different types of offenders and to avoid possible adverse psychological impact on young offenders and those convicted of minor crimes. These are set out in **Annex B**.

### **Suggestion Of Partial Co-Locations**

7. We have carefully considered the suggestion of partial co-locations. Our study shows that, while partial co-locations would obviate the need to find a 120-hectare site (which is necessary for the full co-location approach) and alleviate the perceived security and management concerns related to the operation of a large prison complex, it would erode the benefits which could be derived from full co-location and create other problems. For instance -

- (a) Prison development in a few sites instead of one would greatly reduce the extent of the sharing of common facilities and infrastructure. Additional capital works would be required. Operational efficiency and effectiveness due to economy of scale would be undermined significantly. In particular, the pooling of a maximum number of staff for standby duties, which could achieve

greatest flexibility and shortest response time in case of emergency, would be significantly reduced.

- (b) To enable in situ redevelopment for partial co-locations, re-provisioning of existing penal facilities and decanting of prisoners would be inevitable. Such an exercise would give rise to day-to-day security, logistics and prison management problems. Additional staff are required to ensure satisfactory penal operations during the transitional period.
- (c) There would be practical difficulties in arranging decanting of prisoners for three or four expansion projects at the same time, and proceeding with partial co-locations in three or four sites simultaneously. The whole development project would therefore take a protracted period of time to complete.
- (d) Higher capital costs will result, owing to more extensive works programme, transitional staff requirements and the protracted construction period. The loss of operational efficiency and effectiveness would translate into long-term reduction in recurrent savings which would otherwise be available.

8. We have in any case examined all existing prison sites to explore their potential for expansion and redevelopment. The findings are summarised in **Annex C**. In a nutshell, the penal sites on Hong Kong Island and urban Kowloon, as well as Pik Uk in Sai Kung have little potential for redevelopment given the physical site constraint and the relevant land use compatibility and planning considerations. The other penal sites (except Hei Ling Chau) could only offer limited scope for expansion due to physical constraint around the sites such as steep topography (e.g. Ma Po Ping/Tong Fuk on Lantau) and reservoir dams (e.g. Tai Lam in West New Territories). The total developable area of each of the five expandable locations ranges from 12 hectares (at Lo Wu in North District) to 25 hectares (at Shek Pik on Lantau). A map showing the potential sites for partial co-locations is at **Annex D**.

9. Furthermore, we have for illustration purposes worked out the possible cost implications of partial co-locations (which would provide the same 15,000 penal places as full co-location) along the following lines. To achieve a meaningful degree of economy of scale in penal operations, we have assumed developing the new prison institutions in three phases at three separate sites of about 72, 33 and 25 hectares in size. On this basis and taking the possible combination of sites to be Kong Nga Po, Hei Ling Chau and Shek Pik

respectively, the whole capital project would cost about \$29.6 billion and take at least 20 years to complete.<sup>1</sup> On a recurrent basis, some 400 staff on top of the existing CSD establishment at an annual cost of \$120 million would be required to service the 3,800 additional penal places. In contrast, the full co-location arrangement would incur less capital investment (\$27.5 billion for Kong Nga Po or \$28.1 billion for Hei Ling Chau), and require no additional CSD staffing (see paragraph 11 below). Apart from the higher costs incurred, operational efficiency and effectiveness can hardly be optimal in a partial co-location arrangement.

## **PRISON DEVELOPMENT PLAN**

### **Full Co-location of Penal Institutions**

10. Given the above considerations, we are of the view that the partial co-location arrangement would only bring about limited scope of benefits when compared with the full co-location arrangement. The measures set out in **Annexes A** and **B** can effectively address the security and rehabilitation concerns perceived in penal operations in the latter arrangement. We therefore favour the full co-location arrangement in formulating our long-term prison development plan. The following paragraphs provide further information on this approach.

### **Construction Programme, Costs and Savings**

11. A fast-track construction programme for the proposed prison complex accommodating a penal population of 15,000 would take 12 years to complete, although spacing out of the project, say by three phases over 20 years or so, may be considered<sup>2</sup>. Subject to detailed study, the total capital investment is estimated at about \$27.5 billion (for Kong Nga Po) and 28.1 billion (for Hei Ling Chau) depending on the selected site (see the following paragraphs). Taking full account of economy of scale, use of new technology, special design and layout of the proposed prison complex and improvement in penal

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<sup>1</sup> If Hei Ling Chau, Kong Nga Po and Shek Pik are taken to provide 72, 33 and 25 hectares of land respectively, the total capital cost is about \$29 billion, while the recurrent staffing implications and the construction time will be roughly the same.

<sup>2</sup> If the prison complex is not built in one go but spaced out in three phases over an extended period of time, CSD would require additional staff in the transition to run the partially completed prison complex and the remaining institutions scattered in the territory in parallel. The capital cost would increase depending on the extent of spacing out.

management, CSD would be able to run the 15,000 new penal places within its existing establishment of 6,386 staff. In other words, some 1,600 additional staff (at an annual recurrent cost of \$0.5 billion) otherwise required under the traditional approach to cover the 3,800 additional penal places could be avoided (see paragraph 2 above).

### **Location Search**

12. Based on CSD's operational requirements, the site must be large enough and developable to form some 120 hectares of level land. To meet the needs of daily management as well as emergency response, the site should also be readily accessible by convenient and land-based transports. Given these and other requirements, we have adopted the broad search criteria as set out at **Annex E**.

13. Accordingly, we have identified two site options for further consideration, namely Kong Nga Po and Hei Ling Chau. A map showing the two site options is at **Annex F**.

### **Preliminary Assessment of Site Options**

14. We have attempted a preliminary assessment of the two site options. Key considerations and findings are summarised below (with details tabulated at **Annex G**). We must emphasise that such assessment is not definitive and is subject to detailed feasibility study to be carried out should any site be finally selected.

### **General Description and Engineering Considerations**

15. The Kong Nga Po site is land-based, partly falling within the Frontier Closed Area (FCA). Formation of extensive land through excavation and levelling of hills is feasible.

16. The Hei Ling Chau site is island-based and requires the provision of a fixed crossing with the inland to meet the operational needs of CSD. The major part (114 hectares) of the required site would be acquired through reclamation, as cutting mountains to form a large platform would not be cost-effective. Implementation of this site option may help address the critical problem of inadequate public filling sites.

17. Provision of infrastructure, including water supply, drainage and sewage treatment, is required for both sites.

### **Operational effectiveness**

18. Ready accessibility of the proposed prison complex, including availability of convenient public transport services, is of paramount importance to facilitate the following activities in the daily penal operation -

- visits by families, friends and non-government organisations, which are conducive to prisoners' rehabilitation;
- court attendance of remands and legal visits by lawyers;
- supply of rations and daily necessities;
- transportation of raw materials and finished products for the correctional services industries, which are an integral part of the rehabilitation services; and
- medical transfers in emergency cases.

19. We should also ensure prompt response to major incidents by the emergency support services, including the Police, the Fire Services Department and CSD reinforcement staff. Close proximity to, or ready accessibility by, the emergency support contingents is therefore an important consideration.

20. Generally speaking, accessibility by land-based transport is a prerequisite to meet the above operational needs. In the case of Hei Ling Chau, a fixed link to Lantau and ancillary access roads are possible and necessary.

### **Planning, Environmental and Other Considerations**

21. Part of the Kong Nga Po site lies within the FCA. At present, it has only low development potential as access to and major developments in the FCA are restricted. However, the long-term development potential of the FCA should not be undermined or overlooked. Indeed, it is one of the areas covered in a current "Study on HK 2030: Planning Vision and Strategy" which is scheduled for completion in 2002. Separately, the Railway Development Strategy 2000 has recommended a cross-boundary Regional Express Line (REL) which may traverse the area east of Kong Nga Po, and the spin-off effect may

provide opportunities for the place to be considered for development into a boundary town. That said, the FCA covers an area of some 2,700 hectares. The proposed prison complex (120 hectares), if materialised, would only occupy a small proportion of the land in the FCA.

22. In a like vein, if a fixed link to Lantau and extensive site formation works were made available for Hei Ling Chau, the island could also offer certain development potential and opportunities.

### **LAI CHI KOK RECEPTION CENTRE**

23. The Lai Chi Kok Reception Centre is the only remand facility for male adults. It has been operating at an average occupancy rate of more than 130% in the past decade. As one of our policy initiatives, we are committed to the planning of an expansion project for providing 400 additional places in phases starting 2003/2004. \$910 million<sup>3</sup> has been earmarked to fund the expansion project in the Public Works Programme. The need for the project would, however, be obviated if all penal institutions were to be co-located at one place. It is therefore necessary to arrive at an early decision on whether the concept of co-location should be further pursued and, if so, to map out the implementation timetable. Otherwise, we may need to consider proceeding with the expansion project to cope with the overcrowding problem.

### **ADVICE SOUGHT**

24. Subject to detailed feasibility study, we are of the view that either Kong Nga Po or Hei Ling Chau may be an appropriate site for the proposed prison complex to meet the needs of our long-term prison development plan. Members are invited to give further views on the concept of co-location of all penal institutions at one place, and on the possible choice of site for such a development.

Security Bureau  
May 2001

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<sup>3</sup> At the price level of December 1999.

**Security management in the proposed prison complex**

To ensure adequate security management and control in the proposed prison complex, the following measures may be put in place in the physical design and penal management –

- (a) The penal institutions in the proposed prison complex will be divided into several clusters. Each cluster will have its own boundary wall and contain a penal population of about 3,000, which is similar to the size of the current penal population in the Stanley prison area (2,894 penal places). Moreover, each individual institution within a cluster will have its own perimeter walls or fences and hold a manageable size of prisoners, say from 400 to 800. Within each institution, the unit management concept would be applied, such that each unit, with say 25-30 prisoners, would be separated from the others in work, accommodation and recreation.
- (b) In the event of an emergency, the situation would be confined to a small number of prisoners within an institution. The physical separation of the institutions or clusters and established contingency measures would further and effectively prevent the spread of mass behaviour and unrest to other institutions or clusters in the prison complex.
- (c) Inmates in one institution are not within sight of those in other institutions. Possible spreading of noises generated by inmates in mass behaviour could be prevented through careful and tailored design to reduce or even eliminate sound transmission. Other measures to prevent spread of mass behaviour include proper location of exercise and accommodation areas, installation of windows of special size and angle, application of the ventilation system and tactical use of the public address system.



- (d) Adequate number of observation towers, equipped with electronic optical devices may be built at strategic locations in the prison complex, notably at the boundary walls, to ensure close surveillance of prisoner movement, including possible escapes and unrest.
- (e) We will make the best use of advanced technology in the installation of electric security lock systems, intrusion detection systems, etc in the new penal institutions to provide useful means for swift separation of different inmate groups especially during mass indiscipline of inmates or other emergency situations.
- (f) By co-locating all penal institutions at a single site, the maximum number of CSD staff will be pooled together for standby duties and can be deployed to deal with emergency situations in the most flexible manner within the shortest possible time.

**Effective rehabilitation programmes for different types of offenders**

Under the local law and the relevant international conventions, different categories of inmates (e.g. males, females, convicted prisoners, remands, adults, and youths) are separated from each other. Inmates that are subject to different rehabilitation programmes (such as the Detention Centres and Training Centres programmes for young offenders, the Drug Addiction Treatment Centres programme for drug addicts, or different programmes according to the security risks of prisoners) are also separated accordingly. The current independent and separate operation of different institutions would continue in the proposed prison complex.

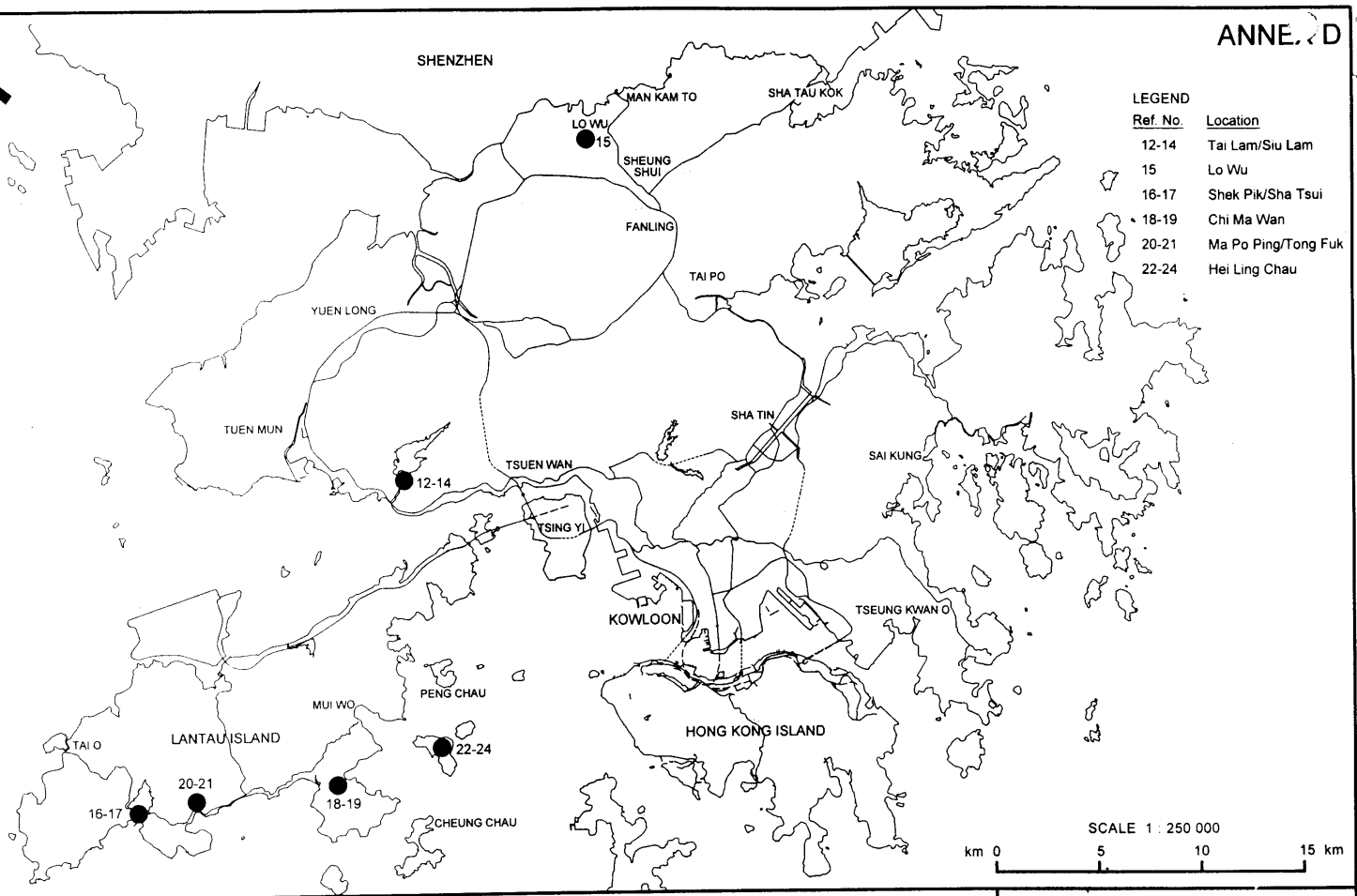
2. To avoid possible adverse psychological impact on young offenders and those convicted of minor crimes, the following measures may be put in place -

- (a) The overall environment in the proposed prison complex can be improved by means of soft landscaping and warmer architectural design.
- (b) Each institution will be physically separated from one another with adequate buffer area.
- (c) The layout and design of each institution will be dedicated to the specific nature and function of the rehabilitation programmes operated in the institution. For example, in the minimum security institutions such as Training Centres and Detention Centres for young offenders and Drug Addiction Treatment Centres for drug addicts, a more open environment can be provided to facilitate inmates' recreational, gardening and green-house farming activities.

3. Most importantly, the proposed prison complex will see provision of adequate and modern facilities for education and vocational training, family visits, parent-inmates activities and programmes run by non-government organizations, in order to meet the rehabilitation needs of different types of inmates.

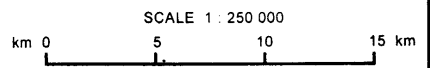
**Potential for Expansion of 24 Existing Prison Sites for Smaller Scale Co-location**

Institution	(a)	(b)	(a) + (b)	Remarks
	Existing Size (hectares)	Potential for Expansion (Max. Usable Area) (hectares)	Total Area (hectares)	
<b>Hong Kong Island</b>				
1 Victoria Prison	0.25	0	0.25	) Sites 1-9 are on Hong Kong Island or in urban Kowloon. Potential for enlargement and redevelopment is very limited given the physical site constraint, land use compatibility and planning considerations. Even for sites 2 and 3, the existing area is already fully utilised. To demolish the facilities and rebuild a complex for co-location will not have significant gain in penal accommodation and is therefore not cost effective.
2 Stanley Prison	)	)	)	
3 Tung Tau Correctional Institution	) 35	) 0	) 35	
4 Pak Sha Wan Correctional Institution	)	)	)	
5 Ma Hang Prison	3.5	0	3.5	
6 Tai Tam Gap Correctional Institution	1.5	0	1.5	
7 Cape Collinson Correctional Institution	3	0	3	
<b>Kowloon</b>				
8 Lai King Training Centre	5.5	0	5.5	)
9 Lai Chi Kok Reception Centre	2.2	0	2.2	)
<b>New Territories</b>				
10 Pik Uk Prison	) 4	) 0	) 4	) Site character essentially urban as for sites 1-9 above. The same considerations apply.
11 Pik Uk Correctional Institution	)	)	)	
12 Tai Lam Correctional Institution	) 13	)	)	) Limited developable space. Steep topography; extensive site formation works required. Close to Tai Lam Chung Reservoir Dam; dam risk assessment required. Close proximity to existing country park. Possible expansion close to Tai Lam Chung Pre-Chlorination Plant; hazard assessment required.
13 Tai Lam Centre for Women	)	1.4	17.9	
14 Siu Lam Psychiatric Centre	) 3.5	)	)	
15 Lo Wu Correctional Institution	) 4.6	) 8	12.6	) Limited developable space. Close to a planned new town development. Near Sheung Shui Water Treatment Works; hazard assessment required. Densely vegetated.
<b>Lantau</b>				
16 Shek Pik Prison	) 18	) 7	25	) Limited developable space. Reclamation required, as existing site is constrained by steep terrain around. Close to Shek Pik Reservoir Dam; dam risk assessment required. Close proximity to existing country park. Connection road linking the main South Lantau Road required upgrading works to improve access.
17 Sha Tsui Detention Centre	)	)	)	
18 Chi Ma Wan Correctional Institution	) 13	) 9	22	) Limited developable space. Possible expansion formed on steep terrain. Major road project and substantial geotechnical works required to improve land-based transportation and access. Close proximity to existing country park. Involvement of substantial private land.
19 Chi Man Wan Drug Addiction Treatment Centre	)	)	)	
20 Ma Po Ping Prison	) 9.75	) 3.5	13.25	) Limited developable space. Steep topography; extensive site formation works required. Major road project is required to improve land-based transportation and access. Close proximity to existing country park. Densely vegetated.
21 Tong Fuk Centre	)	)	)	
<b>Hei Ling Chau</b>				
22 Hei Ling Chau Drug Addiction Treatment Centre	)	)	)	) <b>Sufficient developable space (from reclamation) for co-location.</b>
Hei Ling Chau Drug Addiction Treatment Centre (Annex)	) 18	) 124	142	
23 Hei Ling Chau Correctional Institution	)	)	)	
24 Lai Sun Correctional Institution	)	)	)	



LEGEND

Ref. No.	Location
12-14	Tai Lam/Siu Lam
15	Lo Wu
16-17	Shek Pik/Shu Tsui
18-19	Chi Ma Wan
20-21	Ma Po Ping/Tong Fuk
22-24	Hei Ling Chau



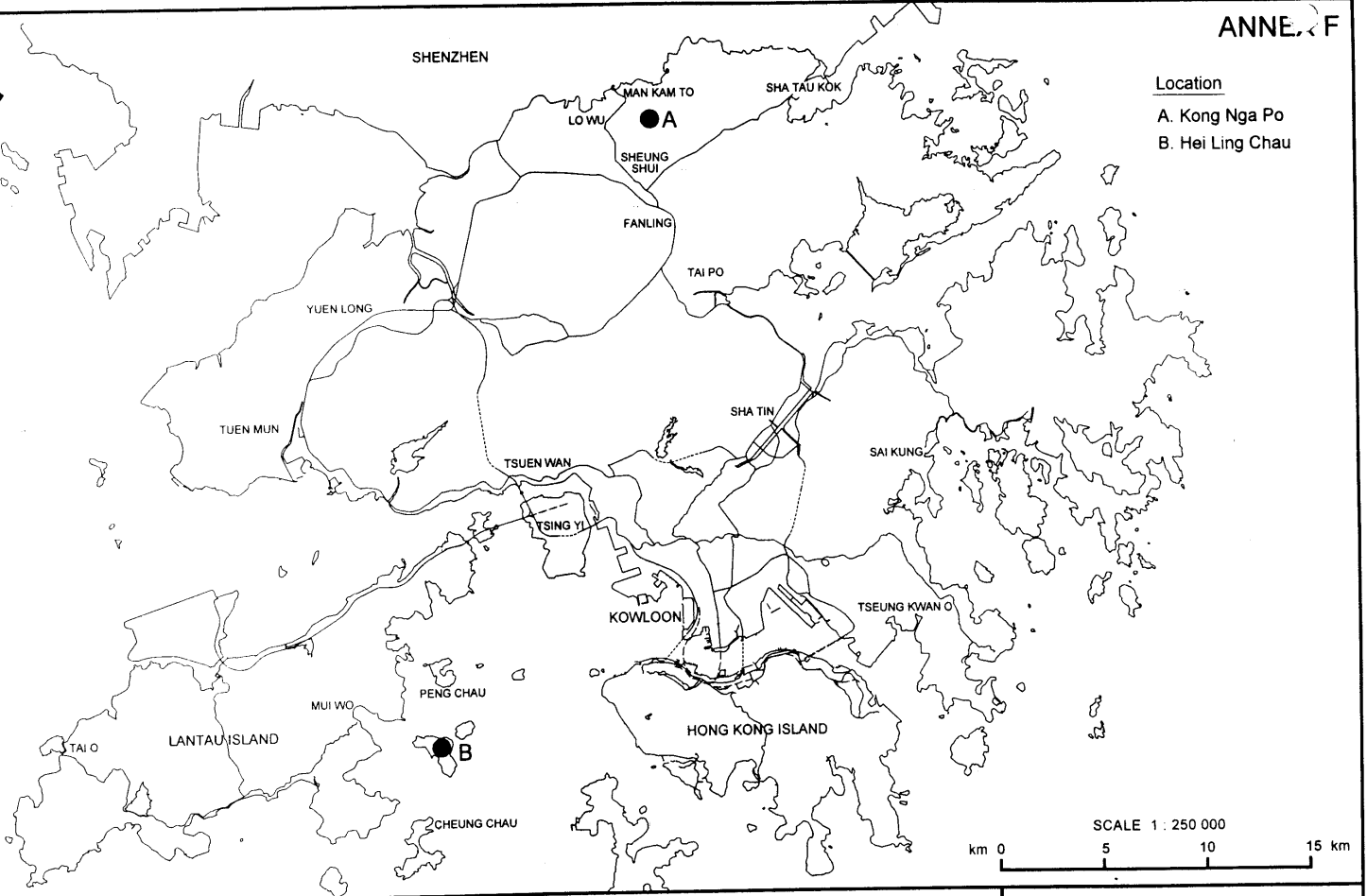
### Potential Sites for Partial Co-locations

PLAN No. PSS / 01 / 21
BASE PLAN No. HM 200C
DATE 30. 3. 2001

**Broad Location Search Criteria**

1. Level land as far as possible to allow a contiguous development.
2. Avoid private land as far as possible
3. Avoid villages, burial and fung shui grounds as far as possible.
4. Avoid Ramsar Site\* and Country Parks.
5. Avoid wetland as far as possible.
6. Avoid Sites of Special Scientific Interest and, as far as possible, archaeological sites.
7. Avoid proposed Country Parks that are at advanced stage of planning.
8. Avoid developed areas and agreed new development areas and be as far away as possible from planned and potential development areas.
9. Preferably land-based. If not possible, then island with fixed crossing.

\* “Wetland of International Importance” as listed under the Convention on Wetlands of International Importance (the Ramsar Convention).



Location  
A. Kong Nga Po  
B. Hei Ling Chau

SCALE 1 : 250 000  
km 0 5 10 15 km

Site Locations

PLAN No. PSS / 01 / 22

BASE PLAN No. HM 200C

DATE 30. 3. 2001

## **Co-location of Penal Institutions**

### **Main Considerations of Site Options**

	<b>Kong Nga Po</b>	<b>Hei Ling Chau</b>
Site Description and General Engineering Considerations	<ul style="list-style-type: none"> <li>• Land-based site in North district, part of which falling within the Frontier Closed Area.</li> <li>• Site formation through excavation and levelling of hills.</li> <li>• Infrastructure provision required, including water supply, drainage and sewage treatment systems.</li> </ul>	<ul style="list-style-type: none"> <li>• Isolated island opposite to Lantau.</li> <li>• Site formation principally through reclamation as cutting mountain would not be cost effective and would generate huge amount of surplus fill.</li> <li>• Infrastructure provision required, including water supply, drainage and sewage treatment systems.</li> </ul>
Operational Effectiveness	<ul style="list-style-type: none"> <li>• Readily accessible by land-based transport links.</li> <li>• Travelling time for court attendance in city centre is about 40 minutes.</li> <li>• New Territories North Police Region Emergency Units can reach the site from their designated patrol areas within 15 minutes of receiving a request for assistance. In major incidents, reinforcements from Police Tactical Units could arrive in a measured response within 30 minutes.</li> <li>• Fire Services take 7 minutes to reach the site.</li> </ul>	<ul style="list-style-type: none"> <li>• A fixed crossing (with special engineering design to avoid closure during inclement weather) to Lantau and ancillary access roads are necessary and possible.</li> <li>• Road accessibility would also rely on the Tsing Ma Bridge.</li> <li>• Travelling time for court attendance in city centre would be about 95 minutes.</li> <li>• New Territories South Police Region Emergency Units would respond from their designated patrol areas (Lantau, Kwai Tsing, Tsuen Wan). It could take up to 1½ hour to provide sufficient manpower to deal with an incident on site. In major incidents reinforcements from Police Tactical Units could arrive in a measured response within 1½ hour. Marine Region would require between 1 and 2 hours to transfer Police Tactical Units from a Police controlled pier to the island.</li> <li>• Fire Services from Mui Wo would take 16 minutes.</li> </ul>

	<b>Kong Nga Po</b>	<b>Hei Ling Chau</b>
Planning, Environmental and Other Considerations	<ul style="list-style-type: none"> <li>• At present, Kong Nga Po, with a part falling within the Closed Area, has only low development potential as access to and major development in the Closed Area are restricted.</li> <li>• The long term development potential of the boundary area is being examined in the Study on Hong Kong 2030: Planning Vision and Strategy which is scheduled for completion in 2002.</li> <li>• Natural and ‘Fung Shui’ woodland, as well as wet and dry agricultural land will be affected.</li> <li>• Environmental Impact Assessment and Cultural Heritage Impact Assessment required.</li> </ul>	<ul style="list-style-type: none"> <li>• Hei Ling Chau and Sunshine Island are proposed for conservation in the Study on South West New Territories Development Strategy Review due to the presence of ecologically important habitats (notably for the rare Bogadek’s Burrowing lizard) and the natural landscape values of the islands. Reclamation may compromise the conservation.</li> <li>• Environmental Impact Assessment, Cultural Heritage Impact Assessment and Marine Archaeological Investigation required.</li> </ul>
Resumption and clearance	<ul style="list-style-type: none"> <li>• Land resumption and clearance required. It takes time to resolve the issues of village clearance, removal of graves, compensation etc.</li> </ul>	
Capital investment	<ul style="list-style-type: none"> <li>• Total capital investment cost is about \$27.5 billion.</li> </ul>	<ul style="list-style-type: none"> <li>• Total capital investment is about \$28.1 billion.</li> </ul>