

For information  
27 May 2003

**LEGISLATIVE COUNCIL  
PANEL ON SECURITY AND PANEL ON TRANSPORT**

**Tamar Development and Public Transport Services**

**INTRODUCTION**

This paper sets out the security considerations in the planning of the new development at Tamar vis-à-vis the alignment of the Shatin to Central Link (SCL) and other public transport services in the vicinity.

**BACKGROUND**

2. At its meeting on 7 May, the Public Works Sub-committee discussed and supported the Administration's proposal to upgrade the Tamar development project to Category A (PWP 63KA). The scope of the project includes the design and construction of the new Central Government Complex (CGC), Legislative Council Complex (LCC), an exhibition gallery and other compatible community facilities. In response to some Members' request, we undertook to provide a briefing regarding the implications of the Tamar development on the SCL in particular and on the public transport services in the vicinity in general.

**SECURITY CONSIDERATIONS**

*CGC and LCC at Tamar*

3. The CGC will accommodate the Government Secretariat or the headquarters of the Hong Kong Special Administrative Region (HKSAR) Government. It will comprise no less than two blocks for offices of the Chief Executive, the Chief Secretary for the Administration, the Financial Secretary and all Directors of Bureaux. The Executive Council Chamber and its Secretariat, Policy Bureaux, central supporting

offices and related ancillary facilities will also be accommodated in the CGC. The LCC will house the Legislature of the HKSAR. It will accommodate the Legislative Council Chamber, and offices of LegCo Members and the LegCo Secretariat. The importance and significance of the CGC and LCC warrant special considerations in terms of security requirements. It is necessary to safeguard the effective operation of both the Government and the Legislature of the HKSAR at all times, free from identified threats and security risks.

### ***Risk Assessment***

4. We have conducted an internal risk assessment of the possible location of railway facilities underneath the CGC and LCC. In line with established approach and methodology, the risk assessment involves identifying the likely kinds of threats and likelihood of attack, as well as assessing the resulting level of impact and the risk level.

5. The outcome of the risk assessment indicates that the main threats to the CGC and LCC could include sabotages and terrorist acts such as bombing, radiological, biological and chemical (RBC) attacks, hostage taking, assassination and technological information technology (IT) attacks. The likelihood of attacks for the CGC and LCC as stand-alone buildings is relatively “low”. However, the likelihood of attacks will become “moderate” with the presence of an underground railway station underneath the CGC and LCC, as the station will provide a convenient platform for launching an attack. At the same time, the level of “impact” of such attacks on the operation of the Government and the Legislature will be “major”, if not “catastrophic”. As a result, the risk level associated with any railway station underneath the CGC and LCC is regarded as “high”. The assessment concludes that the presence of any underground station and railway alignment will pose a high risk to the CGC and LCC. Therefore, such major underground facilities should be avoided in the first instance.

6. The risk assessment also highlights the fact that any major incident due to sabotage or terrorist act in the underground station or tunnel would necessitate evacuation of the whole or part of the CGC and LCC, thus imposing serious impacts on the effective operation of the Government and the Legislature. The Sarin nerve gas incident at the

Tokyo subway in 1995 illustrates the danger and possible chaos caused by RBC weapons. The anthrax incidents in the US further demonstrate that thorough cleansing of RBC contamination is no easy task and may take weeks, if not months, to complete. If the CGC and LCC were attacked, public confidence would also be seriously affected.

7. Further details of the assessment are set out at **Annex A**.

## **IMPLICATIONS ON RAILWAY FACILITIES**

8. Taking account of the risk assessment findings, we have decided not to allow for any railway station or tunnel, or other public transport facilities directly underneath the CGC and LCC. In this regard, the decision applies to any suggestion to divert the SCL to and provide an interchange railway station at the Tamar site.

### ***Shatin to Central Link***

9. According to the Government's Project Brief on the SCL, one of the stations of the SCL will be located at Admiralty, which will serve as an interchange station with the existing Island Line (IL) and Tsuen Wan Line (TWL). The Kowloon-Canton Railway Corporation (KCRC) had proposed in its SCL submission to locate this interchange station at the southern or GI/C portion of the Tamar site. We acknowledged the potential merits for such a proposal on transport grounds as it could serve the Tamar development more directly, and had examined the KCRC's detailed proposal and its interface with the Tamar development programme carefully, against the security requirement of not allowing any underground railway facilities directly underneath the footprint of the CGC and LCC. Nevertheless, we concluded that the SCL interchange station should remain at the location to the east of the existing Admiralty Station of the IL and TWL, as set out in the SCL Project Brief. The KCRC was advised of our decision formally in October 2002. The Corporation has since been planning for the SCL on this basis and is finalizing its schematic design accordingly.

10. Indeed, we have attempted to explore alternative options to accommodate the SCL Admiralty station at the Tamar site, which might strike a balance between the KCRC's proposal to locate the station at

Tamar and the need to divert the railway tunnel and station away from the direct footprints of the CGC and LCC on security grounds.

11. As indicated at the Tamar Site Plan (see **Plan 1**), the area of the Tamar site is about 4.2 hectares. It comprises two portions. The G/IC site in the southern portion of Tamar is about 2.2 hectares. This is for the proposed development of the CGC, LCC, an Exhibition Gallery and related facilities. The 'O' site or Open Space to the north of Tamar is about 2 hectares. We will build a Civic Place in accordance with the planning requirement. A waterfront promenade will be developed further beyond the northern boundary of the Tamar site. The Territory Development Department (TDD) will form 14.7 hectares of land for the promenade under its Central Reclamation Phase III (CR III) and Wan Chai Development Phase II projects.

12. In exploring possible options to accommodate an SCL station at Tamar, in addition to the Outline Zoning Plan (OZP) requirement to provide an open space of no less than 2 hectares, we have to also take into account the following major site constraints -

**(a) North Hong Kong Island Line**

Although there is no definite timetable for the North Hong Kong Island Line (NIL), we will need to maintain the reserve for a NIL railway station along the northern boundary of the Tamar site. Therefore, no buildings or structures will be allowed above the proposed reserve.

**(b) Drainage Reserve**

There is a drainage reserve close to the NIL reserve and underneath the existing Lung Wui Road. No buildings or structures are normally allowed below or immediately above the drainage reserve.

**(c) Phased Handover of Site**

We will have to hand over the Tamar site to the selected design-and-build (D&B) contractor in five phases. Area A

(yellow portion in **Plan 2**) should be made available upon the commencement of the D&B contract scheduled for early 2004. The TDD will occupy Areas B - E (northern part of the Tamar site) for works under the CRIII, and hand them over to the Tamar contractor by phases in 2004 and 2005. The detailed handover schedule is set out at Plan 2.

### *Further Examination of Alternative Options*

13. We have considered the following options but do not consider them acceptable on the following grounds.

(a) Build the SCL station using the NIL reserve north of Tamar

As in **Plan 3**, this option should have minimal impact on the land use requirements under the OZP or the on-going Tamar development programme, and is in compliance with the security requirement. Nevertheless, from the transport point of view, this is not an acceptable arrangement because a SCL station over 500m away from the existing Admiralty Station can hardly meet the Government's requirement for the SCL to interchange with the IL and TWL. There will also be insurmountable difficulties for the SCL alignment to continue and terminate at its Central West station which is an essential part of the SCL system.

(b) Build the SCL station in the GI/C site and the CGC/ LCC in the Open Space of the OZP

To meet the KCRC's proposed alignment and configuration of the SCL, the railway tunnel and station will cut across the GI/C site as in **Plan 4**. We could meet the security requirement by pushing the CGC and/or LCC to the north onto the Open Space of the OZP. However, the 'swap' of the land use of the GI/C site and Open Space will likely require rezoning, and hence statutory processes of gazetting and submissions to the Town Planning Board and the Executive Council. There is also no certainty that the Town Planning Board would agree to the rezoning proposal. In addition, the

necessary prior relocation and reprovisioning of the trunk sewer underneath the drainage reserve imply that we cannot start work in the area concerned until mid or late 2006. The possible need for rezoning of the OZP will entail a further delay of 13 months. Taking these factors into account, this is clearly not a viable option against our commitment to completing the Tamar development programme in 2007.

14. The current proposal that the KCRC has been working on, i.e. providing the SCL station at Admiralty is shown in **Plan 5**. The KCRC is still refining the location of the SCL station in the context of its review of the overall SCL scheme.

### ***North Hong Kong Island Line***

15. As for the NIL, we have decided to maintain a reserve near the waterfront to facilitate its future construction. However, Tamar is not designed as an interchange between the NIL and SCL. Passengers of the NIL can change at the Hong Kong Station with other lines of the Mass Transit Railway Corporation Limited (MTRCL) and at the proposed Exhibition Station with the SCL.

## **PUBLIC TRANSPORT PLAN**

16. The Tamar development is located north of Harcourt Road between Tim Wa Avenue and Tim Mei Avenue. To facilitate public access to the Tamar site, the follow public transport services are available or being planned -

### ***I. Railways***

- (a) Passengers can make use of the rail network to travel from various places in the territory to the MTR Admiralty Station. The MTRCL's Admiralty Station is situated south of Harcourt Road near the Tamar development. Under the Tamar project, a covered walkway will be constructed across Harcourt Road. With this pedestrian link, passengers can make use of the MTR lines and take about 5 minutes' walk from the Admiralty Station to the Tamar development.

- (b) The SCL's Admiralty station is in the vicinity of Harcourt Garden. At present, there is one footbridge along Tim Mei Avenue linking Citic Tower to entrances of the MTRCL's Admiralty Station at Rodney Street. Passengers from the SCL can use this 5-metre wide footbridge or the passage within Queensway together with the associated pedestrian link to access Tamar. Extra passenger linkage will be considered in the context of the SCL scheme.

## *II. Franchised Buses*

- (a) Apart from the railway networks, passengers can travel to the Tamar development by means of bus routes terminating at or passing the Admiralty East and West Public Transport Interchanges ("PTIs"), located at the immediate south of the Tamar site and the MTRCL's Admiralty Station. At present, there are 19 bus routes serving these two PTIs. Details of these bus routes are at **Annex B**. It requires about a 5-minute walk from either PTI to Tamar.
- (b) Passengers can also access the Tamar development by making use of 78 bus routes observing the en-route bus stops on Harcourt Road, Queensway, Cotton Tree Drive and Lung Wui Road, as these bus stops are within reasonable walking distance of up to 5-10 minutes from Tamar. Details of the 78 bus routes are at **Annex C**.

## *III. Other Transport Services*

In addition to the above, passengers can make use of taxi, trams and 3 green minibus ("GMB") services, which are actively operated in the Admiralty area, to travel to Tamar. Details of the GMB services are at **Annex D**.

17. Transport Department will review the provision of franchised bus and GMB services for access to the Tamar development taking into account the anticipated demand for such services nearer the time of the completion of the development, and will discuss with the

relevant operators to arrange for service adjustments and/or additional services as appropriate to cater for such demand.

## **THE WAY FORWARD**

18. We are committed to completing the construction of the new CGC and LCC under the Tamar development programme by 2007 through a design-and-build contract. We completed a prequalification exercise and prequalified five applicants in December 2002. Subject to the funding approval of the Finance Committee, we will issue the tender documents to the prequalified applicants in June 2003, with a view to selecting the successful tender and awarding the contract in early 2004 for project completion in 2007.

19. As an integral part of the Tamar development programme, we will also ensure that there will be convenient linkages between the Tamar site and public transport facilities in the vicinity. In addition to the two footbridges to facilitate pedestrian access between Tamar and the Admiralty Station of the MTRCL, we will also discuss with the KCRC the arrangement for pedestrian link between Tamar and its SCL station at Admiralty East.

Environmental, Transport and Works Bureau  
Security Bureau  
Administration Wing  
May 2003

**SUMMARY OF RISK ASSESSMENT OF RAILWAY FACILITIES  
VIS-À-VIS THE CENTRAL GOVERNMENT COMPLEX AND  
LEGISLATIVE COUNCIL COMPLEX AT TAMAR**

**INTRODUCTION**

The Government has decided to build a new Central Government Complex (CGC), Legislative Council Complex (LCC), Exhibition Gallery, Civic Place and associated facilities at Tamar. This note summarizes a risk assessment of the presence of any railway station or tunnel underneath the CGC and LCC.

**ASSESSMENT**

***Methodology***

2. We adopted an internationally accepted Australian Standard titled "Risk Management" (AS4360) as the risk assessment methodology. The process involves identifying the possible kinds of threats and assessing the likelihood of threats, the level of impact (consequence/harm caused) and the level of risk.

***Threats***

3. The more serious threats for the CGC and LCC include sabotages and terrorist acts, i.e. bombing, radiological, biological and chemical (RBC) attacks, hostage taking and assassination. There are also the threat of technological attacks such as cyber and surreptitious attacks. The presence of a possible underground station underneath the CGC and LCC will provide a convenient platform for people planning to launch an attack.

***Likelihood***

4. Experience in recent years shows that important government buildings or public premises are prominent targets for sabotages and terrorist acts. The probability of such attacks in Hong Kong is relatively low but could not be ruled out. Public transport facilities are also potential targets

for attack as reflected by the Sarin nerve gas incident in subway in Tokyo and the fire incident in subway in Taegu, South Korea. The probability of such threats in Hong Kong is also relatively low but the possibility exists. If the future CGC and LCC were to be located on top of major public transport or railway facilities, its attractiveness as a “target” will increase. As such, the overall likelihood of attack<sup>1</sup> is at least “moderate”<sup>2</sup>.

### ***Level of Impact***

5. An obvious impact of attacks will be physical damages. Some may argue that physical damages could be minimized or even completely prevented by appropriate structural enhancements or the use of advanced engineering technologies. However, with the development and advancement of science and technology, weapons of mass destruction (WMD) have become more and more sophisticated and powerful. One simply cannot realistically predict the scale of damage any future WMD may cause. Other than physical damages, the damage and adverse impact caused by chemical or biological hazards are even more difficult to ascertain. The impact may persist over a longer period of time.

6. Whenever government premises are under attack, there is always adverse effect on public confidence. Given the nature and special significance of the CGC and LCC, public confidence will be even more seriously affected should any attack occur.

7. Apart from physical damages, there will also be adverse impact on the operation of the Government and the Legislature. Any threats targeting at the CGC which houses the Head of the Government and Principal Officials, and/or the LCC that houses Legislators will have very serious impacts. For example, any bomb threat with some degree of credibility, even at the well-shielded underground station, could necessitate the evacuation of part or whole of the CGC and LCC. This will definitely

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<sup>1</sup> There are five levels of “likelihood of attack”, namely “rare”, “unlikely”, “moderate”, “likely” and “almost certain”.

<sup>2</sup> In assessing the likelihood above, we have not taken the political and other factors into consideration (or it is assumed to be neutral or nil). Any adverse factor will therefore only aggravate or increase the likelihood, thus the likelihood assessed is the minimum or the most optimistic level.

jeopardize the efficient and effective operation of the Government and the Legislature of HKSAR. As such, the level of impact<sup>3</sup> is classified as at least “major”, if not “catastrophic”.

### ***Risk Level***

8. Without other adverse factors, the most conservative estimation on the likelihood of attack for the CGC and LCC, with an underground railway station underneath, will be “moderate”. The impact would at least be assessed as “major”. The risk level<sup>4</sup> would be assessed as “high”.

## **CONCLUSION**

9. Due to their nature and significance, the CGC and LCC will be facing various types of threats. The presence of any underground station underneath the CGC and LCC will raise the risk level. It is therefore imperative that such risk factor should be avoided in the very first place.

10. One important lesson learnt from the “9.11 Attack” is that the threat is ever present, no matter how remote the likelihood. For risk management purpose, any factors that may contribute to the risk level should be avoided or eliminated as early and as far as possible.

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<sup>3</sup> There are five levels of impact, namely “insignificant”, “minor”, “moderate”, “major” and “catastrophic”.

<sup>4</sup> There are four levels of risk, namely “low”, “moderate”, “significant” and “high”.

**Details of 19 bus routes terminating at or passing  
the public transport interchanges at Admiralty East and Admiralty West**

<b>Route No.</b>	<b>Destinations</b>
37B	Chi Fu Fa Yuen - Central (Circular)
37X	Chi Fu Fa Yuen - Central (Circular)
43X	Wah Kwai Estate - Admiralty MTR Station (East)
590A	
621	Laguna City - Central (Hong Kong Station Public Transport Interchange)
70	Central (Exchange Square) - Aberdeen
70M	Tin Wan Estate - Admiralty MTR Station (East)
720	Aldrich Bay - Central (Gilman Street)
720A	Aldrich Bay - Admiralty (Circular)
75	Central (Exchange Square) - Wong Chuk Hang
90	Ap Lei Chau Estate - Central (Exchange Square)
90B	South Horizons - Admiralty MTR Station (East)
97	Lei Tung Estate - Central (Exchange Square)
M590	South Horizons - Central (Exchange Square) (Circular)
12S	Admiralty - Lower Peak Tram Station
930	Admiralty MTR Station (West) - Tsuen Wan Ferry Pier
M47	Admiralty MTR Station (West) - Wah Fu (North)
12A	Admiralty (Tamar Street) - Macdonnell Road
12M	Admiralty (Tamar Street) - Park Road

**Details of another 78 bus routes observing the en-route bus stops  
in the vicinity of the Tamar development**

<b>Route no.</b>	<b>Destinations</b>
101	Kwun Tong (Yue Man Square) - Kennedy Town
104	Pak Tin - Kennedy Town
109	Ho Man Tin - Central (Macau Ferry Pier)
111	Ping Shek - Central (Macau Ferry Pier)
113	Choi Hung - Kennedy Town (Belcher Bay Temporary Bus Terminus)
115	Kowloon City Ferry - Central (Macau Ferry Pier)
15	Central (Exchange Square) - The Peak
2	Aldrich Bay - Central (Macau Ferry Pier)
23	North Point Ferry Pier- Pokfield Road
23A	Lai Tak Tsuen - Robinson Road (Circular)
23B	Braemar Hill - Park Road (Circular)
25	Central (Central Ferry Piers) - Tin Hau Temple Road (Circular)
26	Lai Tak Tsuen - Hollywood Road (Circular)
262	Central (Exchange Square) - Ma Hang Estate
301	Hung Hom (Cross Harbour Tunnel Toll Plaza) - Sheung Wan
302	Tsz Wan Shan (North) - Sheung Wan
305	Mei Lam - Sheung Wan
309	Central (Exchange Square) - Shek O
46X	Tin Wan Estate - Wan Chai Ferry Pier (Circular)
601	Po Tat - Drake Street Bus Terminus
64	Central (Exchange Square) - Ma Hang Estate
641	Kai Yip - Central (Macau Ferry Pier)
66	Central (Exchange Square) - Ma Hang Estate
680	Lee On - Central (Macau Ferry Pier)
692	Hang Hau (North) - Central (Exchange Square)
781	Chai Wan (Hing Wah Estate) - Central (Exchange Square)
905	Lai Chi Kok - Wan Chai Ferry Pier
914	Sham Shui Po (Tonkin Street) - Causeway Bay (Tin Hau)
948	Causeway Bay (Tin Hau) - Cheung On Estate
M722	Yiu Tung Estate - Central (Hong Kong Station) (Circular)
N121	Ngau Tau Kok - Central (Macau Ferry Pier)
N680	Kam Ying Court - Central (Macau Ferry Pier)
N691	Sheung Tak - Central (Macau Ferry Pier)
1	Central (Man Kat Street Bus Terminus) - Happy Valley (Upper)
10	North Point Ferry Pier - Kennedy Town
11	Central (Central Ferry Piers) - Jardine's Lookout (Circular)
182	Yu Chui Court - Central (Macau Ferry Pier)
260	Stanley Prison - Central (Exchange Square)
307	Tai Po Central - Central (Central Ferry Piers)
37A	Chi Fu Fa Yuen - Admiralty (Circular)
40	Wah Fu (North) - Wan Chai Ferry Pier
40M	Wah Fu (North) - Wan Chai Ferry Pier
5	Causeway Bay (Whitfield Road) - Kennedy Town
511	Central (Central Ferry Piers) - Jardine's Lookout (Circular)

5A	Happy Valley (Lower) - Felix Villas
5B	Kennedy Town - Causeway Bay (Circular)
5C	Shek Tong Tsui (Queen's Road West) - Wanchai (Luard Road)
5X	Kennedy Town - Wan Chai Ferry Pier
6	Central (Exchange Square) - Stanley Prison
61	Central (Exchange Square) - Repulse Bay
619	Shun Lee - Central (Macau Ferry Pier)
681	Ma On Shan Town Center - Central (Hong Kong Station Public Transport Interchange)
681P	Yiu On - Sheung Wan
690	Hong Sing Garden - Central (Exchange Square)
6A	Central (Exchange Square) - Stanley Fort
6X	Central (Exchange Square) - Stanley Prison
780	Siu Sai Wan (Island Resort) - Central (Central Ferry Piers)
788	Siu Sai Wan (Island Resort) - Central (Macau Ferry Pier)
789	Siu Sai Wan (Island Resort) - Admiralty (Circular)
962	Tuen Mun (Lung Mun Oasis) - Causeway Bay (Moreton Terrace)
969	Tin Shui Wai Town Center - Causeway Bay (Moreton Terrace)
N6	Central (Exchange Square) - Stanley
N8X	Siu Sai Wan (Island Resort) - Central (Macau Ferry Pier)
N90	South Horizons - Central (Macau Ferry Pier)
N182	Kwong Yuen - Central (Macau Ferry Pier)
N962	Tuen Mun (Lung Mun Oasis) - Causeway Bay (Moreton Terrace)
N969	Tin Shui Wai Town Centre - Causeway Bay (Moreton Terrace)
E11	Causeway Bay (Tin Hau) - Airport (Ground Transportation Centre)
A11	North Point Ferry Pier - Airport (Ground Transportation Centre)
336	Lei Muk Shue - Sheung Wan
373	Sheung Shui - Sheung Wan
603	Lam Tin (North) - Central
934	Bayview Garden - Wan Chai
935	On Yam - Wan Chai
960	Kin Sang - Wan Chai Ferry Pier
961	Tuen Mun (Shan King) - Wan Chai (HKCECE)
968	Yuen Long (West) - Causeway Bay (Tin Hau)
N968	Yuen Long (West) - Causeway Bay (Tin Hau)

**Green Minibus Services operating in Admiralty**

<b>Route no.</b>	<b>Destinations</b>
24A	MTR Admiralty Station - Shiu Fai Terrace
24M	MTR Admiralty Station - Mount Butler
56	Mid-Levels (Robinson Road) - North Point (Marble Road)



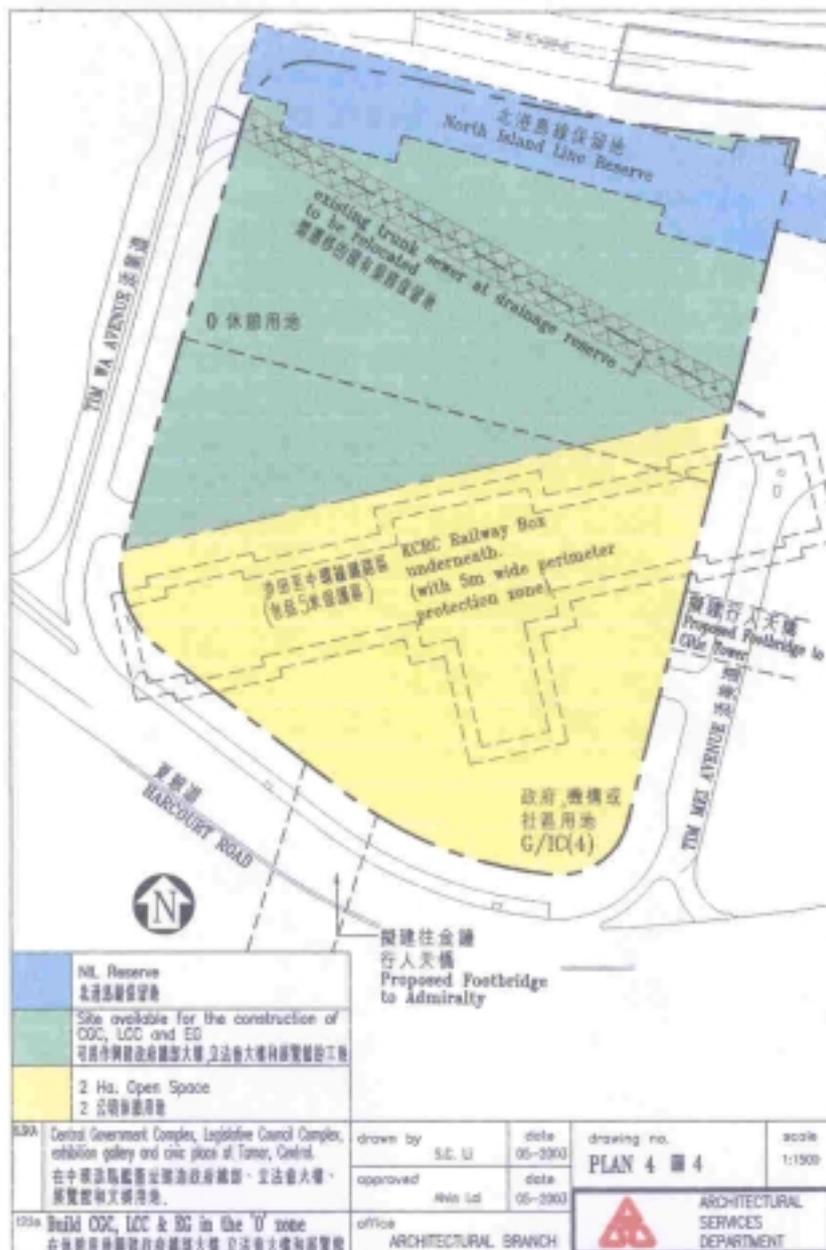


Legend	Area 區	Tentative Handover Date 預算移交日期
	A	02. 01. 2004
	B	01. 08. 2004
	C	30. 06. 2005
	D	31. 12. 2005
	E	30. 06. 2005

1/100 Central Government Complex, Legislative Council Complex, exhibition gallery and civic plaza at former, Central Government Buildings 立法會議事處暨政府總部、立法會大樓、 展覽館和文娛廣場	drawn by S.C. Li	date 05-2003	drawing no. <b>PLAN 2 圖 2</b>	scale 1:1000
	approved Wm. Lai	date 05-2005	ARCHITECTURAL SERVICES DEPARTMENT	
1/100 PROPOSED HANDOVER PLAN OF THE TOWER SITE 添馬鐵塔樓台層移交時間表	office ARCHITECTURAL BRANCH			





NL Reserve	北港島線保留地
Site available for the construction of CGC, LCC and EG	可供興建政府總部大樓、立法會大樓及展覽館的土地
2 Ha. Open Space	2 公頃休憩用地

139a Central Government Complex, Legislative Council Complex, exhibition gallery and civic place at Tamar, Central.  
 在中環添馬艦興建政府總部大樓、立法會大樓、展覽館和文娛用地。

139b Build CGC, LCC & EG in the 'U' zone.  
 在中環填地興建政府總部大樓、立法會大樓及展覽館。

擬建往金鐘  
 行人天橋  
 Proposed Footbridge to Admiralty

drawn by S.C. LI  
 approved N.W. LI  
 office ARCHITECTURAL BRANCH

date 05-2003  
 date 05-2003  
 drawing no. PLAN 4 圖 4  
 scale 1:1500  
 ARCHITECTURAL SERVICES DEPARTMENT



LEGEND:  
—— SCL CONFORMING SCHEME  
—— SCL REVISED SCHEME

