

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 705 – CIVIL ENGINEERING

Civil Engineering – Multi-purpose

35CG – Greening master plan for Kowloon West – studies and works

36CG – Greening master plan for Hong Kong Island – studies and works

40CG – Greening master plan for Kowloon East – studies and works

Members are invited to recommend to Finance
Committee –

- (a) the upgrading of part of **35CG**, part of **36CG**
and part of **40CG**, entitled “Greening master
plans for remaining urban areas in Kowloon and
on Hong Kong Island – consultancy study and
site investigation”, to Category A at an
estimated cost of \$51.5 million in money-of-
the-day prices; and
- (b) the retention of the remainder of **35CG**, **36CG**
and **40CG** in Category B.

/PROBLEM

PROBLEM

We need to establish a greening framework to improve the living environment of Hong Kong by developing greening master plans (GMPs) for the remaining urban areas¹ in Kowloon and on Hong Kong Island.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for the Environment, Transport and Works, proposes to upgrade parts of **35CG**, **36CG** and **40CG** to Category A at an estimated cost of \$51.5 million in money-of-the-day (MOD) prices to develop GMPs for the remaining urban areas in Kowloon and on Hong Kong Island.

PROJECT SCOPE AND NATURE

3. The scopes of **35CG**, **36CG** and **40CG** comprise development of GMPs, detailed design and implementation of greening works for urban areas in Kowloon West, on Hong Kong Island and in Kowloon East respectively.

4. The parts of **35CG**, **36CG** and **40CG** which we now propose to upgrade to Category A comprise the development of GMPs for all the remaining urban areas in Kowloon and on Hong Kong Island.

5. The scope of works for the parts of the above three items that we propose to upgrade includes –

- (a) consultancy for the development of GMPs;
- (b) consultancy for the detailed designs of the short-term greening measures as recommended in the respective GMPs; and
- (c) associated site investigation works.

/6.

¹ The remaining urban areas cover Sham Shui Po, Cheung Sha Wan, Kowloon City, Kowloon Tong, Hung Hom and Ho Man Tin in Kowloon West; North Point, Quarry Bay, Shau Kei Wan, Chai Wan, Sai Ying Pun, Kennedy Town and Aberdeen on Hong Kong Island; and Wong Tai Sin, Diamond Hill, San Po Kong, Kowloon Bay, Ngau Tau Kok, Kwun Tong and Lam Tin in Kowloon East.

6. Plans showing the proposed study areas are at Enclosures 1, 2 and 3. Photographs showing the impact of some completed greening works under GMPs for Tsim Sha Tsui and Central are at Enclosure 4.

7. We plan to start the proposed consultancy study and site investigation works in September 2007 for completion by June 2009.

JUSTIFICATION

8. The Administration has been actively promoting greening in order to improve our living environment. There is in particular a close relationship between greening and improvement of air quality. Green plants can help act as a sponge by sequestering carbon dioxide in the atmosphere while releasing breathable oxygen. They can improve air quality by intercepting particulate matters and absorbing gaseous contaminants such as sulphur dioxide and nitrogen oxides in the atmosphere as well as help lower urban temperature. We therefore propose to develop and implement GMPs for urban areas such that by concerted effort on both the greening and anti-air pollution fronts, we can improve the general environment.

9. A GMP seeks to define comprehensively the greening framework of an area by studying into its characteristics and particular needs as well as providing a guide to the planning, design and implementation of works.

10. In recognition of the fact that greening opportunities arise under different time frames, GMPs will embody a full spectrum of short, medium and long-term measures. Short-term measures are those conforming to the district layout, posing no direct conflict with existing land use and/or traffic arrangements and can be implemented within one to two years. Greening opportunities associated with urban renewal or redevelopments are classified as medium-term measures. Long-term measures depict the ultimate greening vision in the area which may be achieved over a long period of time with various concerted efforts to overcome constraints such as land availability, congested underground installations and by deployment of ambitious and innovative methods such as tree corridors alongside highways, roof/podium gardens and vertical greening.

11. The public's response to the greening initiative was supportive. In the 2006-07 Policy Agenda, the Administration committed to developing GMPs for a vast majority of urban areas in around four years. However, there was strong demand to expedite our greening works. After critically reviewing the available resources, we now propose to develop GMPs for all the remaining urban areas in Kowloon and on Hong Kong Island by mid-2009, which is 18 months ahead of our original programme.

12. To draw up a GMP for an area, extensive effort and substantial manpower resources will be required. In addition, rich technical knowledge in multi-disciplinary fields and sound professional judgment are necessary to develop high quality and sustainable designs which can meet the expectations of stakeholders. Taking into account constraints of in-house staffing resources and the public demand to complete the GMPs as soon as possible, we need to engage consultants to carry out the development and detailed design of GMPs in order to meet the needs within the desired timeframe. Furthermore, it is anticipated that site investigation works would be required to verify the feasibility of the recommended planting proposals in the GMPs.

13. Building on District Councils' positive response, we would continue using the Enhanced Partnering Approach to collect more views from stakeholders prior to working out the GMPs. This would include consulting the District Councils or their relevant sub-committees at the outset, conducting focus forums for members of public in the locality, etc, which would not only help the consultants to understand the characteristics of the district, identify suitable locations and local constraints, establish the greening theme in a more cost effective manner, but would also help achieve consensus, partnership and sense of belonging in developing GMPs.

/FINANCIAL

FINANCIAL IMPLICATIONS

14. We estimate the capital cost of the project to be \$51.5 million in MOD prices (see paragraph 15 below), made up as follows –

	\$ million				
	35CG	36CG	40CG	Total	
(a) Consultants' fees	13.4	8.1	13.3	34.8	
(i) Development of GMPs for areas mentioned in paragraph 4	10.1	6.1	10.0		
(ii) Detailed design of short-term greening measures	3.3	2.0	3.3		
(b) Site investigation works	4.9	3.0	4.9	12.8	
(c) Contingencies	1.3	0.8	1.3	3.4	
Sub-total	19.6	11.9	19.5	51.0	(in September 2006 prices)
(d) Provision for price adjustment	0.2	0.1	0.2	0.5	
Total	19.8	12.0	19.7	51.5	(in MOD prices)

_____ A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 5.

/15.

15. Subject to approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2006)			Price adjustment factor	\$ million (MOD)		
	35CG	36CG	40CG		35CG	36CG	40CG
2007 – 2008	1.4	0.9	1.4	0.99900	1.4	0.9	1.4
2008 – 2009	9.3	5.6	9.2	1.00649	9.4	5.6	9.3
2009 – 2010	7.6	4.6	7.6	1.01656	7.7	4.7	7.7
2010 – 2011	0.8	0.5	0.8	1.02672	0.8	0.5	0.8
2011 – 2012	0.5	0.3	0.5	1.03699	0.5	0.3	0.5
	19.6	11.9	19.5		19.8	12.0	19.7

16. We have derived the MOD estimates based on Government's latest forecast of trend rate of change in the prices for public sector building and construction output from 2007 to 2012. The consultancy mentioned in paragraph 5 above will be awarded on a lump-sum basis with provision for price adjustment where the consultancy period exceeds 12 months. We will engage term contractor(s) to carry out site investigation works mentioned in paragraph 5 above.

17. The proposed development of GMPs and associated site investigation works will not give rise to any recurrent expenditure.

/PUBLIC

PUBLIC CONSULTATION

18. We consulted the Legislative Council Panel on Planning, Lands and Works (PLW Panel) at its meeting on 27 March 2007 on the proposal to develop GMPs for the remaining urban areas in Kowloon and on Hong Kong Island. While requesting the Administration to consider accelerating the programme for developing GMP for areas in the New Territories (NT), Members generally supported the present proposal. Regarding GMPs for the NT districts, we are aware of the aspiration of the general public. Our preliminary investigation indicates that the existing green coverage ratio of NT is about 74% (i.e. green coverage area/total area of NT districts) while that of the urban districts is about 46% only. Despite the existing greening conditions of NT districts, we consider that the development of these GMPs should not be compromised. We intend to focus on those areas of NT with higher population density, and will develop the GMPs for these areas as early as practicable.

19. We consulted the following seven District Councils (DCs) where GMPs will be developed within their boundaries, viz. Sham Shui Po DC, Kowloon City DC, Central and Western DC, Eastern DC, Southern DC, Kwun Tong DC and Wong Tai Sin DC. The following feedbacks were received -

- (a) Sham Shui Po DC – We consulted the Sham Shui Po DC by circulation of an information paper to members on 23 March 2007. No adverse comment has been received on our proposal to develop GMPs for Sham Shui Po District.
- (b) Kowloon City DC - We consulted the Food and Environmental Hygiene Committee of the Kowloon City DC on 12 April 2007. The Committee has indicated support to our proposal to develop GMPs for Kowloon City District.
- (c) Central & Western DC - We consulted the Central & Western DC on 3 May 2007. The Central & Western DC generally supported our proposal to develop GMPs for the remaining areas of Central & Western District.
- (d) Eastern DC - We consulted the Eastern DC by circulation of an information paper to members on 29 March 2007. No adverse comment has been received on our proposal to develop GMPs for Eastern District.

/(e)

- (e) Southern DC - We consulted the Southern DC by circulation of an information paper to members on 3 April 2007. The Southern DC has indicated support to our proposal to develop GMPs for Southern District.
- (f) Kwun Tong DC – We consulted the Kwun Tong DC by circulation of an information paper to members on 23 March 2007. The Kwun Tong DC has indicated support to our proposal to develop GMPs for Kwun Tong District.
- (g) Wong Tai Sin DC - We consulted the Wong Tai Sin DC on 8 May 2007. The Wong Tai Sin DC has indicated support to our proposal to develop GMPs for Wong Tai Sin District.

ENVIRONMENTAL IMPLICATIONS

20. This is not a designated project under the Environmental Impact Assessment Ordinance. The project will not cause any adverse long term environmental impact. For the short term environmental impacts arising from the proposed minor site investigation works, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contract.

21. The proposed site investigation works will only generate small amounts of construction and demolition (C&D) materials. We will require the consultants to fully consider measures to minimise the generation of C&D materials and to reuse/recycle C&D materials as much as possible in the future implementation of the construction projects.

LAND ACQUISITION

22. The proposed consultancy and site investigation works do not require any land acquisition.

BACKGROUND INFORMATION

23. We upgraded **35CG** and **36CG** to Category B in September 2005 and also upgraded **40CG** to Category B in March 2007.

/24.

24. In July 2005, we briefed the PLW Panel on the general approach in development and implementation of GMPs for urban districts. We then informed the Members of the commissioning of two consultancy studies in developing GMPs for Tsim Sha Tsui and Central respectively on a pilot basis together with six pilot schemes in Tsim Sha Tsui under the block allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”. Members generally welcomed the proposal and put forward comments for the Administration to consider.

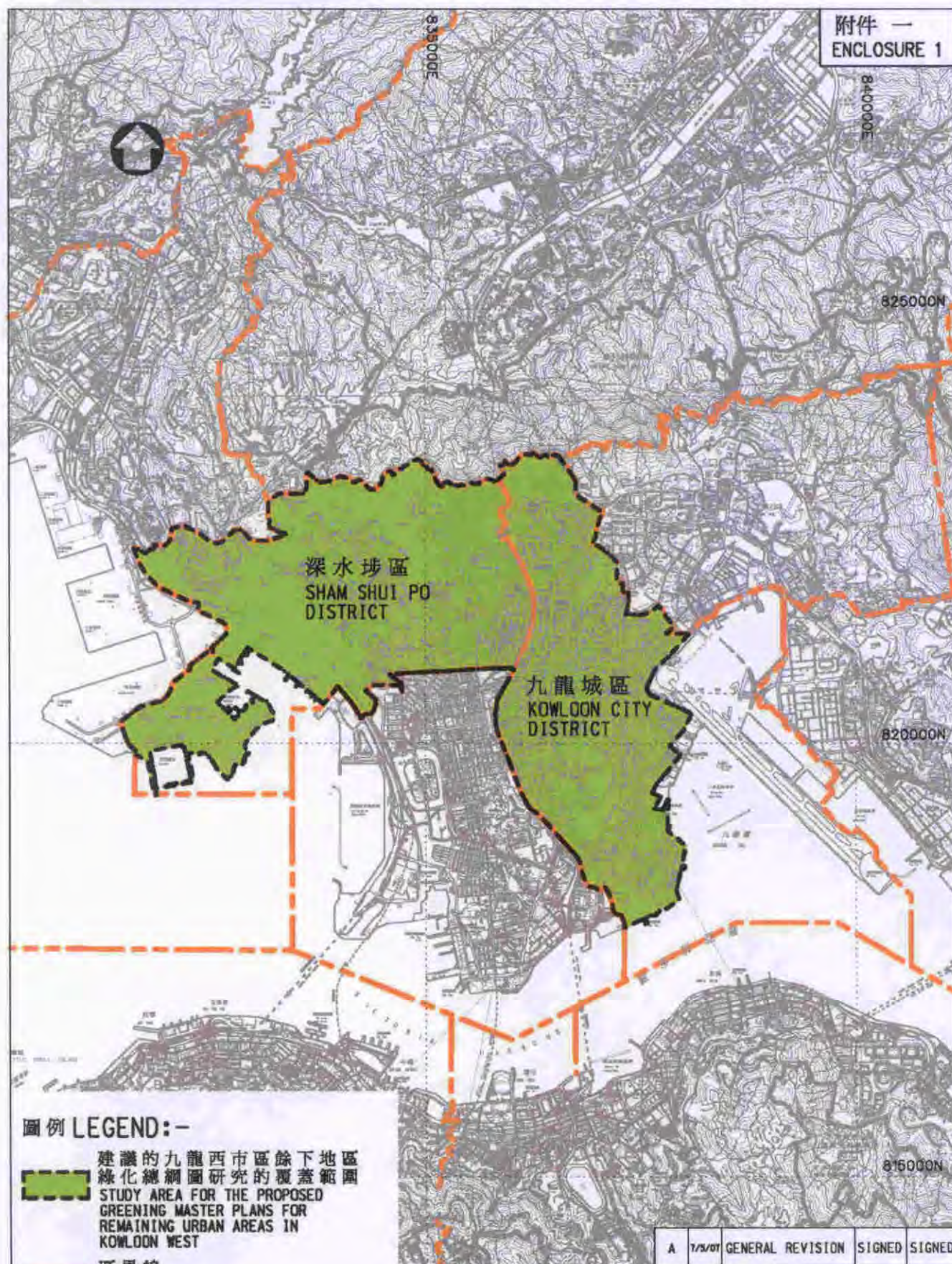
25. In April 2006, we upgraded parts of **35CG** and **36CG** to Category A as **37CG** “Greening master plans for Kowloon West and Hong Kong Island – works for Tsim Sha Tsui and Central” at an estimated cost of \$38.4 million in MOD prices. The greening works were substantially completed in March 2007.

26. In December 2006, we further upgraded parts of **35CG** and **36CG** to Category A as **38CG** “Greening master plans for Mong Kok/Yau Ma Tei and Sheung Wan/Wan Chai/Causeway Bay – consultancy studies and site investigation” at an estimated cost of \$18.1 million in MOD prices. The consultancy studies started in January 2007 and are in progress for completion in early 2008.



27. The proposed consultancy study and site investigation works will not involve any tree removal. We will take into consideration the need for tree preservation during the planning and design stages of projects.

28. We estimate that the proposed consultancy studies and site investigation works will create about 58 jobs (11 for labourers and another 47 for professional/technical staff) providing a total employment of 650 man-months.

Environment, Transport and Works Bureau
May 2007



圖例 LEGEND:-

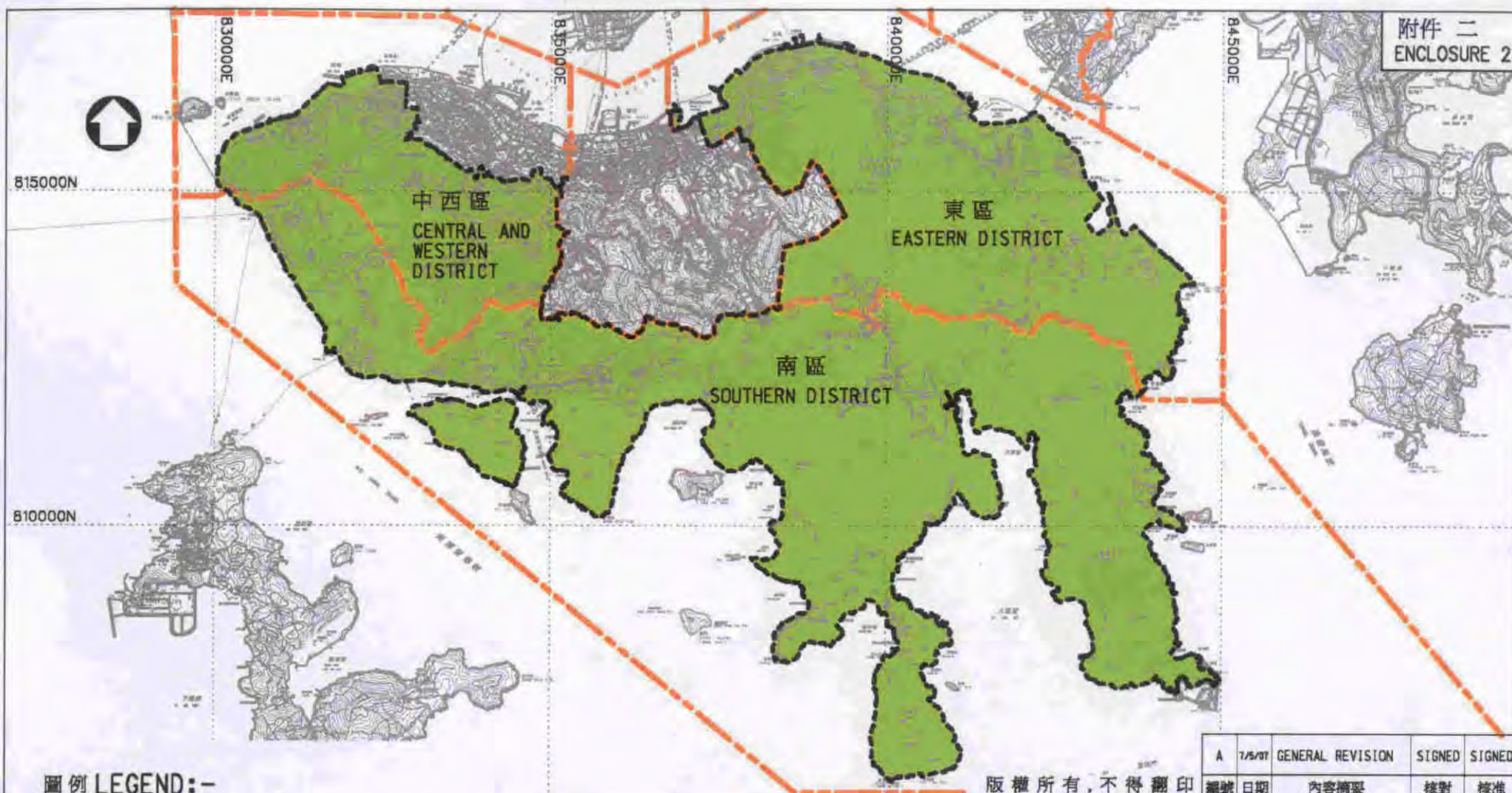
-  建議的九龍西市區餘下地區綠化總綱圖研究的覆蓋範圍
STUDY AREA FOR THE PROPOSED GREENING MASTER PLANS FOR REMAINING URBAN AREAS IN KOWLOON WEST
-  區界線
DISTRICT BOUNDARY

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名稱 title
工務計劃項目第35CG號
九龍西綠化總綱圖 -
研究及工程
PWP ITEM No. 35CG
GREENING MASTER PLAN FOR
KOWLOON WEST - STUDIES & WORKS

姓名 name	簽署 Initial	日期 date
繪圖 drawn	S. S. CHING	SIGNED 23.04.07
校對 checked	H. K. LAM	SIGNED 23.04.07
批准 approved	P. M. CHAN	SIGNED 23.04.07
辦事處 office	土地工程處 LAND WORKS DIVISION	

A	7/3/07	GENERAL REVISION	SIGNED	SIGNED
編號 no.	日期 date	內容摘要 description	校對 checked	核准 approved
圖則編號 drawing no.			比例 scale	
LW 8172A			1:60000	
 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT				



圖例 LEGEND:-

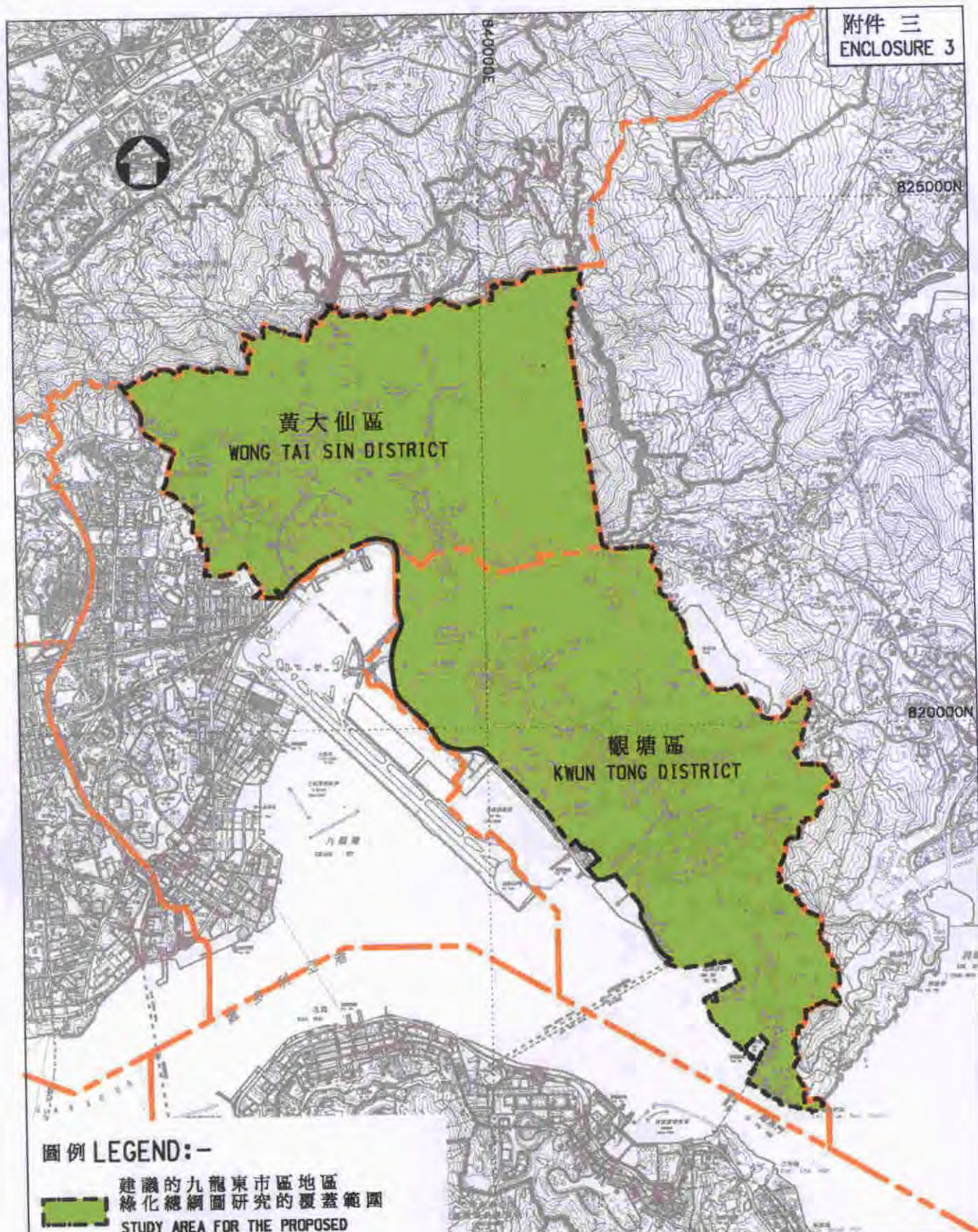
- 建議的香港島市區餘下地區
綠化總綱圖研究的覆蓋範圍
STUDY AREA FOR THE PROPOSED GREENING MASTER
PLANS FOR REMAINING URBAN AREAS ON HONG KONG
ISLAND
- 區界線
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名稱 title
工務計劃項目第36CG號
香港島綠化總綱圖 -
研究及工程
PWP ITEM No. 36CG
GREENING MASTER PLAN FOR
HONG KONG ISLAND -
STUDIES & WORKS

	姓名 name	簽署 Initial	日期 date
繪圖 drawn	S. S. CHING	SIGNED	23.04.07
校對 checked	H. K. LAM	SIGNED	23.04.07
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圖則編號 drawing no.			比例 scale	
LW 8174A			1:80000	
 土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT				



圖例 LEGEND:-

-  建議的九龍東市區地區綠化總綱圖研究的覆蓋範圍
STUDY AREA FOR THE PROPOSED GREENING MASTER PLANS FOR URBAN AREAS IN KOWLOON EAST
-  區界線
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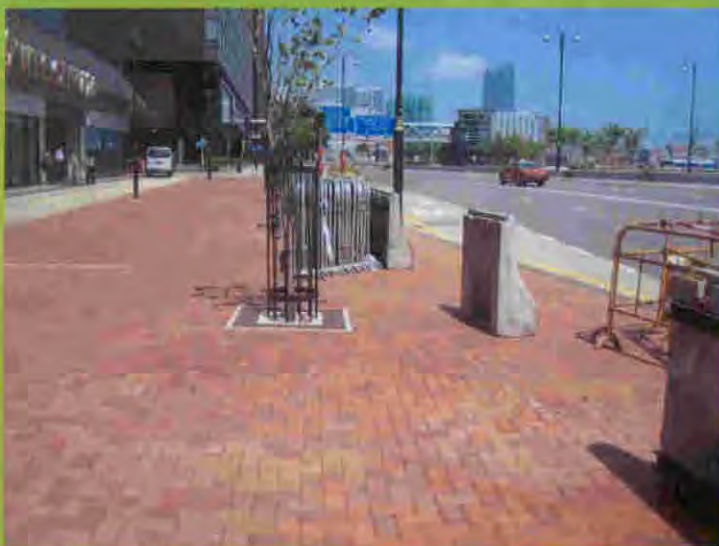
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九龍東綠化總綱圖 -
研究及工程
PWP ITEM No. 40CG
GREENING MASTER PLAN FOR
KOWLOON EAST - STUDIES & WORKS

	姓名 name	簽署 initial	日期 date
繪圖 drawn	S. S. CHING	SIGNED	23.04.07
校對 checked	H. K. LAM	SIGNED	23.04.07
核准 approved	P. M. CHAN	SIGNED	23.04.07
辦事處 office	土地工程部 LAND WORKS DIVISION		

A	1/5/07	GENERAL REVISION	SIGNED	SIGNED
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		土木工程拓展署 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT		

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之一 Page 1 of 14



Before 前



After 後

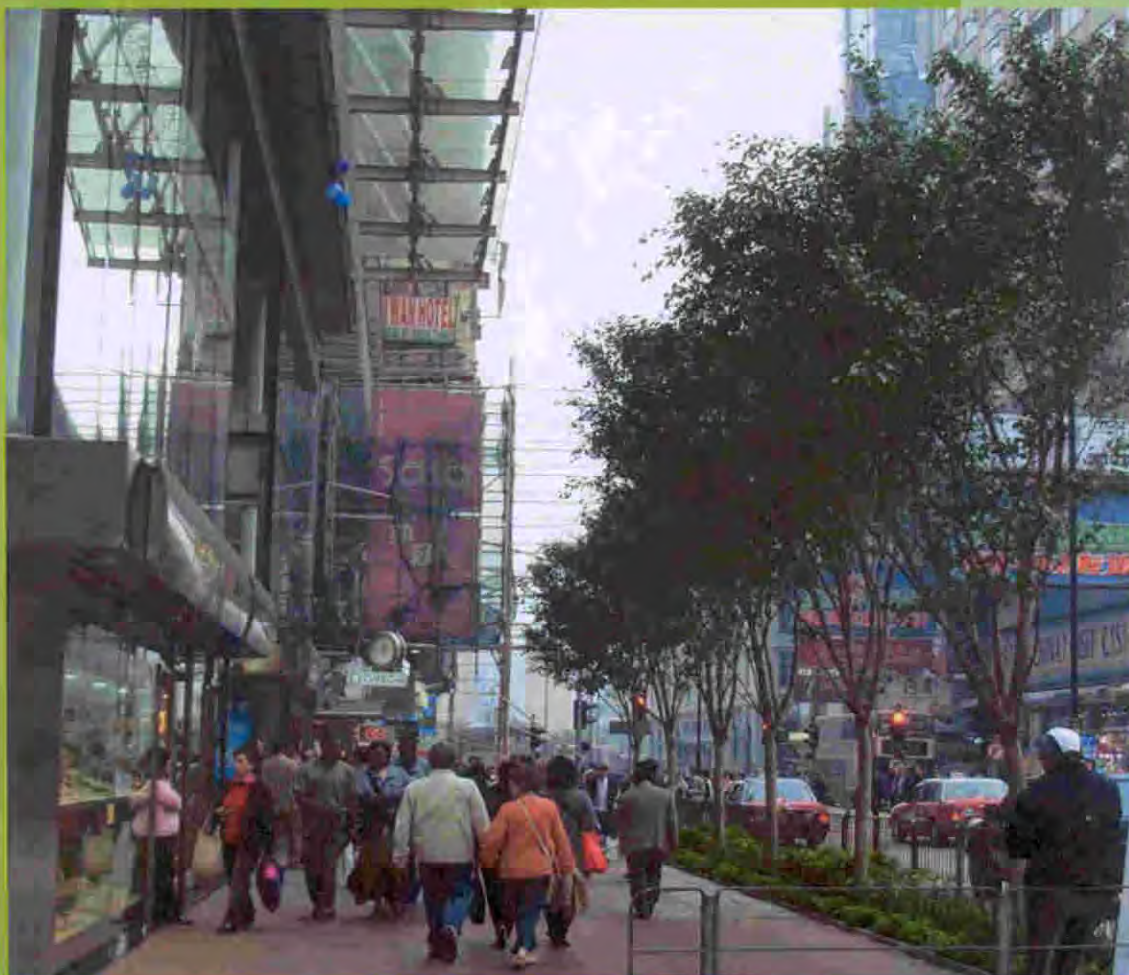
Salisbury Road adjacent to Wing On Plaza
梳士巴利道永安中心

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之二 Page 2 of 14



Before 前



After 後

Nathan Road near Mody Road
彌敦道近麼地道

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之三 Page 3 of 14



Before 前



After 後

Nathan Road near Austin Road
彌敦道近柯士甸道

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之四 Page 4 of 14



Before 前

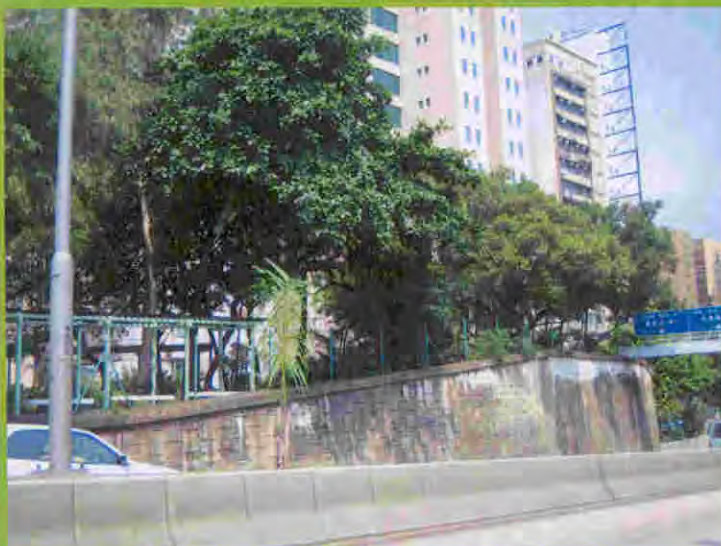


After 後

Nathan Road Central Median near Austin Road
彌敦道近柯士甸道

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之五 Page 5 of 14



Before 前



After 後

Kowloon Park Drive
九龍公園徑

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之六 Page 6 of 14



Before 前



After 後

Jordan Road near Canton Road
佐敦道近廣東道

Completed Greening Works in Tsim Sha Tsui
尖沙咀已完成的綠化工程

附件四 Enclosure 4
頁十四之七 Page 7 of 14



Before 前



After 後

Jordan Road George V Park
佐敦道佐治五世公園

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之八 Page 8 of 14



Before 前

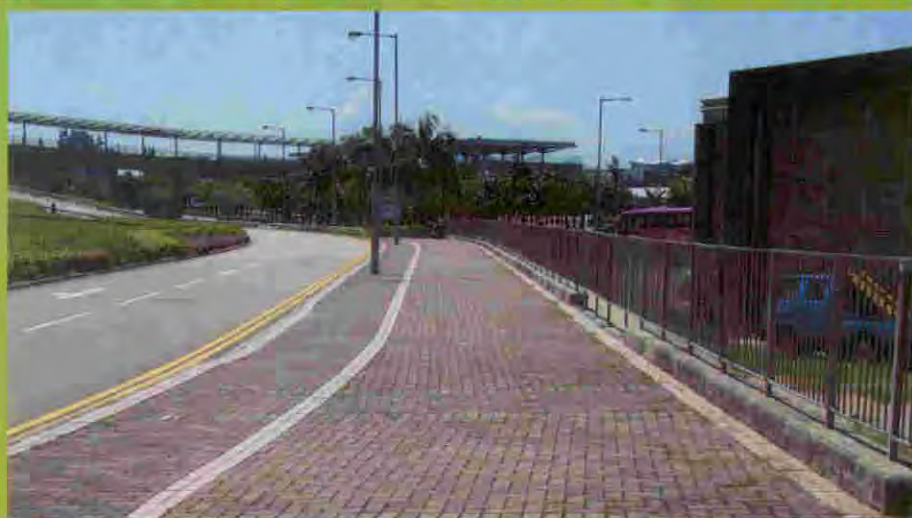


After 後

Connaught Road Central
干諾道中

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之九 Page 9 of 14



Before 前



After 後

Man Po Street near IFC
民寶街近國際金融中心

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
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Before 前



After 後

Pier No. 3
中環三號碼頭

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之十一 Page 11 of 14



Before 前



After 後

Pier No. 7
中環七號碼頭

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之十二 Page 12 of 14



Before 前



After 後

Man Fai Street
民輝街

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之十三 Page 13 of 14



Before 前



After 後

Central Bus Terminus
中環巴士總站

Completed Greening Works in Central
中環已完成的綠化工程

附件四 Enclosure 4
頁十四之十四 Page 14 of 14



Before 前



After 後

Near Harbour Building
近海港政府大樓

35CG-Greening master plan for Kowloon West – studies and works**Breakdown of the estimates for consultants' fees for greening master plans for remaining urban areas in Kowloon West**

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier (Note)	Estimated fee (\$ million)
(a) Development of GMPs for remaining urban areas in Kowloon West					
(i) Review of current greening status and collation of background information	Professional	8.8	38	2.0	1.0
	Technical	18.2	14	2.0	0.7
(ii) Formation of conceptual GMPs	Professional	20.0	38	2.0	2.2
	Technical	20.9	14	2.0	0.8
(iii) Development of recommended GMPs	Professional	32.3	38	2.0	3.5
	Technical	14.9	14	2.0	0.5
(iv) Preliminary design of short-term greening works	Professional	10.1	38	2.0	1.1
	Technical	8.9	14	2.0	0.3
Sub-total					10.1
(b) Detailed design of short-term greening works					
	Professional	24.5	38	2.0	2.7
	Technical	18.0	14	2.0	0.6
Sub-total					3.3
Total					13.4

* MPS = Master Pay Scale

Note

A multiplier of 2.0 is applied to the average MPS salary point before arriving at full cost including overheads and profits as the staff concerned will be employed by the consultants (as at 1.1.2007, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month)

36CG-Greening master plan for Hong Kong Island – studies and works

Breakdown of the estimates for consultants' fees for greening master plans for remaining urban areas on Hong Kong Island

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier (Note)	Estimated fee (\$ million)
(a) Development of GMPs for remaining urban areas on Hong Kong Island					
(i) Review of current greening status and collation of background information	Professional	5.4	38	2.0	0.6
	Technical	11.0	14	2.0	0.4
(ii) Formation of conceptual GMPs	Professional	12.2	38	2.0	1.3
	Technical	12.5	14	2.0	0.5
(iii) Development of recommended GMPs	Professional	19.6	38	2.0	2.1
	Technical	9.0	14	2.0	0.3
(iv) Preliminary design of short-term greening works	Professional	6.1	38	2.0	0.7
	Technical	5.3	14	2.0	0.2
Sub-total					6.1
(b) Detailed design of short-term greening works					
		Professional	14.7	38	1.6
		Technical	11.0	14	0.4
Sub-total					2.0
Total					8.1

* MPS = Master Pay Scale

Note

A multiplier of 2.0 is applied to the average MPS salary point before arriving at full cost including overheads and profits as the staff concerned will be employed by the consultants (as at 1.1.2007, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month)

Enclosure 5 to PWSC(2007-08)21
(Page 3 of 3)

40CG-Greening master plan for Kowloon East – studies and works

Breakdown of the estimates for consultants' fees for greening master plans for urban areas in Kowloon East

Consultants' staff costs			Estimated man-months	Average MPS* salary point	Multiplier (Note)	Estimated fee (\$ million)
(a) Development of GMPs for urban areas in Kowloon East						
(i) Review of current greening status and collation of background information	Professional		8.8	38	2.0	1.0
	Technical		18.1	14	2.0	0.7
(ii) Formation of conceptual GMPs	Professional		19.9	38	2.0	2.2
	Technical		20.3	14	2.0	0.7
(iii) Development of recommended GMPs	Professional		32.1	38	2.0	3.5
	Technical		14.7	14	2.0	0.5
(iv) Preliminary design of short-term greening works	Professional		10.0	38	2.0	1.1
	Technical		8.8	14	2.0	0.3
Sub-total						10.0
(b) Detailed design of short-term greening works						
	Professional		24.5	38	2.0	2.7
	Technical		18.0	14	2.0	0.6
Sub-total						3.3
Total						13.3

* MPS = Master Pay Scale

Note

A multiplier of 2.0 is applied to the average MPS salary point before arriving at full cost including overheads and profits as the staff concerned will be employed by the consultants (as at 1.1.2007, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month)