

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 711 - HOUSING Civil Engineering - Land development 571CL - Site formation at Lung Wah Street

Members are invited to recommend to Finance Committee the upgrading of **571CL** to Category A at an estimated cost of \$117.5 million in money-of-the-day prices to carry out site formation and associated infrastructure works for housing development at Lung Wah Street, Kennedy Town.

### PROBLEM

We need to form building platforms and provide associated infrastructure for a housing development at Lung Wah Street, Kennedy Town.

### PROPOSAL

2. The Director of Civil Engineering (DCE), with the support of the Secretary for Housing and Secretary for Planning and Lands, proposes to upgrade **571CL** to Category A at an estimated cost of \$117.5 million in money-of-the-day (MOD) prices to carry out site formation and associated infrastructure works for a housing development at Lung Wah Street, Kennedy Town.

### PROJECT SCOPE AND NATURE

3. The scope of **571CL** comprises -
- (a) formation of about 0.6 hectares (ha) of building platforms;

/(b) .....

- (b) construction of about 340 metres (m) of retaining walls, slope improvement works and debris barriers;
- (c) construction of a pedestrian staircase about 90 m in length;
- (d) associated drainage works;
- (e) diversion of about 500 m of watermains with diameters ranging from 600 millimetres (mm) to 1 000 mm; and
- (f) landscaping works including transplanting of 17 trees.

— A site plan showing the proposed works is at Enclosure 1. We plan to start the construction works in September 2001 for completion in June 2003.

#### **JUSTIFICATION**

4. The site at Lung Wah Street is planned for private housing development and scheduled for disposal in 2003-2004. In order to facilitate urban renewal in the Western District, we intend to earmark the site for rehousing purposes when the opportunity arises. In response to the Government's intention of establishing an escalator link system in the Western District, the Hong Kong Housing Society (HKHS) has submitted a proposal to comprehensively develop the site together with two other sites at Kwun Lung Lau and at Forbes Street. A location plan of the three sites is at Enclosure 2. The planned housing developments will incorporate a public open space and a covered public pedestrian walkway system including escalators linking the three sites to the proposed Kennedy Town Mass Transit Railway station.

5. The site formation works at Lung Wah Street are scheduled to be completed by mid 2003 to ensure the timely delivery of development platforms for flat production. About 710 flats for a population of about 1 900 will be produced.

#### **FINANCIAL IMPLICATIONS**

6. We estimate the capital cost of the project to be \$117.5 million in MOD prices (see paragraph 7 below), made up as follows -

/(a) .....

	<b>\$ million</b>	
(a) Site formation works	4.2	
(b) Retaining walls, slope improvement works and debris barriers	79.1	
(c) Pedestrian staircase	0.2	
(d) Associated drainage works	2.3	
(e) Watermain diversion works	6.1	
(f) Landscaping works	1.0	
(g) Environmental mitigation measures	0.5	
(h) Consultants' fees	9.9	
(i) for construction stage	1.3	
(ii) site staff cost	8.6	
(i) Contingencies	7.7	
Sub-total	111.0	(in September 2000 prices)
(j) Provision for price adjustment	6.5	
Total	117.5	(in MOD prices)

Owing to insufficient in-house resources, DCE proposes to engage consultants to carry out the construction supervision. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 3.

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7. Subject to approval, we will phase the expenditure as follows -

Year	\$ million (Sept. 2000)	Price adjustment factor	\$ million (MOD)
2001 - 2002	21.2	1.02550	21.7
2002 - 2003	61.4	1.05627	64.9
2003 - 2004	28.1	1.08795	30.6
2004 - 2005	0.3	1.12059	0.3
	111.0		117.5

8. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period 2001 to 2005. We will tender the proposed works through a standard remeasurement contract because the quantities of the geotechnical works and the foundation works of the retaining structures may vary depending on actual ground conditions. The contract will not provide for price adjustments as the contract period will not exceed 21 months.

9. The proposed works have no additional recurrent financial implications.

## **PUBLIC CONSULTATION**

10. We presented the recommendations of the "Integrated Planning and Engineering Feasibility Study for Housing Development at Lung Wah Street" (the Study) to the then Central and Western Provisional District Board on 13 May 1999. Members expressed concerns over the environmental and traffic impacts arising from the development, and the loss of existing vegetation. We explained that the environmental review and traffic impact assessment had shown that with adequate mitigation measures, the impacts would be acceptable. For the traffic impact, we advised Members that we would convert the existing priority junction at Lung Wah Street/Smithfield to a signalised junction. Regarding the loss of vegetation, we advised that we had conducted a tree survey and had identified no rare or special species. Compensatory planting would, however, be provided

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within the site. Members also suggested that more community facilities and public open space should be provided. We responded that we would provide about 1 300 square metres of public open space at Smithfield as part of the proposed development.

11. We gazetted the amendments to the draft Kennedy Town and Mount Davis Outline Zoning Plan No. S/H1/7 on 21 January 2000 under the Town Planning Ordinance. During the plan exhibition period, we received one objection related to the Lung Wah Street site from the Central and Western District Council (C&W DC). The objection was on the grounds of traffic and environmental impacts arising from the proposed works and the subsequent development. The Town Planning Board considered the objection on 7 April 2000 and 23 June 2000 and decided not to propose any amendment to the Plan to meet the objection. The Chief Executive in Council approved the draft Kennedy Town and Mount Davis Outline Zoning Plan on 19 September 2000.

12. We presented the detailed design of the project to the C&W DC on 14 December 2000. District Councillors reiterated their objection previously lodged with the Town Planning Board. We explained that the proposed development would not cause unacceptable traffic impact to the district and that Highways Department had already completed the junction improvement works as recommended in the Study. We confirmed that environmental mitigation measures would be stipulated in the contract including the provision of temporary noise barriers and monitoring stations to keep noise levels within established standards and guidelines. We also presented our tree felling proposal and replanting/transplanting schemes to District Councillors. We also made a joint site visit with some District Councillors on 19 January 2001 to inspect the conditions of the trees. After review, we advised the C&W DC that one additional tree would be transplanted and one preserved.

13. We consulted the C&W DC on the comprehensive development scheme of Lung Wah Street, Kwun Lung Lau and Forbes Street on 15 February 2001. Although the C&W DC had no objection in general to the scheme, some District Councillors considered that the site area of the Lung Wah Street development should be trimmed down to preserve an old banyan tree at its center as well as to provide a larger open space for the local community.

14. We consulted the Legislative Council's Panel on Housing on 5 March 2001. Members enquired about the details of the proposed works near an existing stream course and expressed concern over slope safety as a previous landslide had occurred near Kwun Lung Lau. We explained that the proposed

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works would involve the construction of debris barriers in the form of concrete columns albeit the likelihood of debris fall was low. Members also enquired whether the site would be used for rehousing. We explained that the site was intended to facilitate urban renewal in the Western District by providing rehousing flats. A Member raised the concerns of the C&W DC over the preservation of trees, particularly the old banyan tree at the center of the site. We explained that due to the central location of trees in the development, the preservation of the trees would considerably reduce the development area for residential blocks. In view of the steep terrain of the site and large size of the old banyan tree, the likelihood of successful transplantation was also low. We however undertook to revert to C&W DC and respond to their concerns over the preservation of the trees.

15. We have subsequently carried out an in-depth review of the development scheme with a view to preserving the old banyan tree whilst maintaining the development potential of the site. After detailed examination, we concluded that the old banyan tree could be preserved by reducing the development area and increasing the building height. The impact of this proposal has been carefully considered and found to be acceptable. The platform for retaining the existing old banyan tree is about 0.05 ha and the estimated additional cost for preserving the tree is \$7 million. We have made arrangements for the C&W DC to be briefed on 12 April 2001 on the revised development scheme to preserve the old banyan tree.

## **ENVIRONMENTAL IMPLICATIONS**

16. The project is not a designated project under the Environmental Impact Assessment Ordinance. Nevertheless, we completed a Preliminary Environmental Review (PER) in February 1999 for the proposed site formation and associated infrastructure works. The Director of Environmental Protection has agreed to the environmental mitigation measures recommended in the PER. These, which include the provision of temporary noise barriers and watering for dust suppression, will contain the short-term environmental impacts within established standards and guidelines. We have included \$0.5 million in the project estimate for the implementation of these mitigation measures. The project will not cause any long term environmental impact.

17. At the planning and design stages, we have considered measures to reduce the generation of construction and demolition (C&D) materials. We have optimised the design of building platforms and will reuse suitable excavated material for filling within the site to minimise off-site disposal.

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18. We estimate that the project will generate about 31 500 cubic metres (m<sup>3</sup>) of C&D materials. Of these, we will reuse about 3 000 m<sup>3</sup> (9.5%) on site, 28 000 m<sup>3</sup> (88.9%) as fill in public filling areas<sup>1</sup> and dispose of 500 m<sup>3</sup> (1.6%) at landfills.

19. We will require the contractor to submit a waste management plan for approval. The waste management plan will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will ensure that the day-to-day operations on site comply with the approved waste management plan. To further minimise the generation of C&D material, we will encourage the contractor to use non-timber formwork and recyclable material for temporary works. We will control the disposal of public fill and C&D waste to a designated public filling facility and landfills respectively through a trip-ticket system. The contractor will be required to separate reusable materials from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

## LAND ACQUISITION

20. The proposed works do not require any land acquisition.

## BACKGROUND INFORMATION

21. In April 1998, we included a new item under the block allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme" at an estimated cost of \$6 million in MOD prices for engaging consultants to undertake an "Integrated Planning and Engineering Feasibility Study for Housing Development at Lung Wah Street". In October 1999, we included **571CL** into Category B of the Public Works Programme.

22. In January 2000, we included another new item under the block allocation **Subhead B100HX** at an estimated cost of \$9.4 million in MOD prices for engaging consultants to carry out the detailed design and associated site investigation works for the project under Agreement No. CE 69/99 "Site formation at Lung Wah Street - Design and Construction". The consultants have now completed the detailed design for the proposed works.

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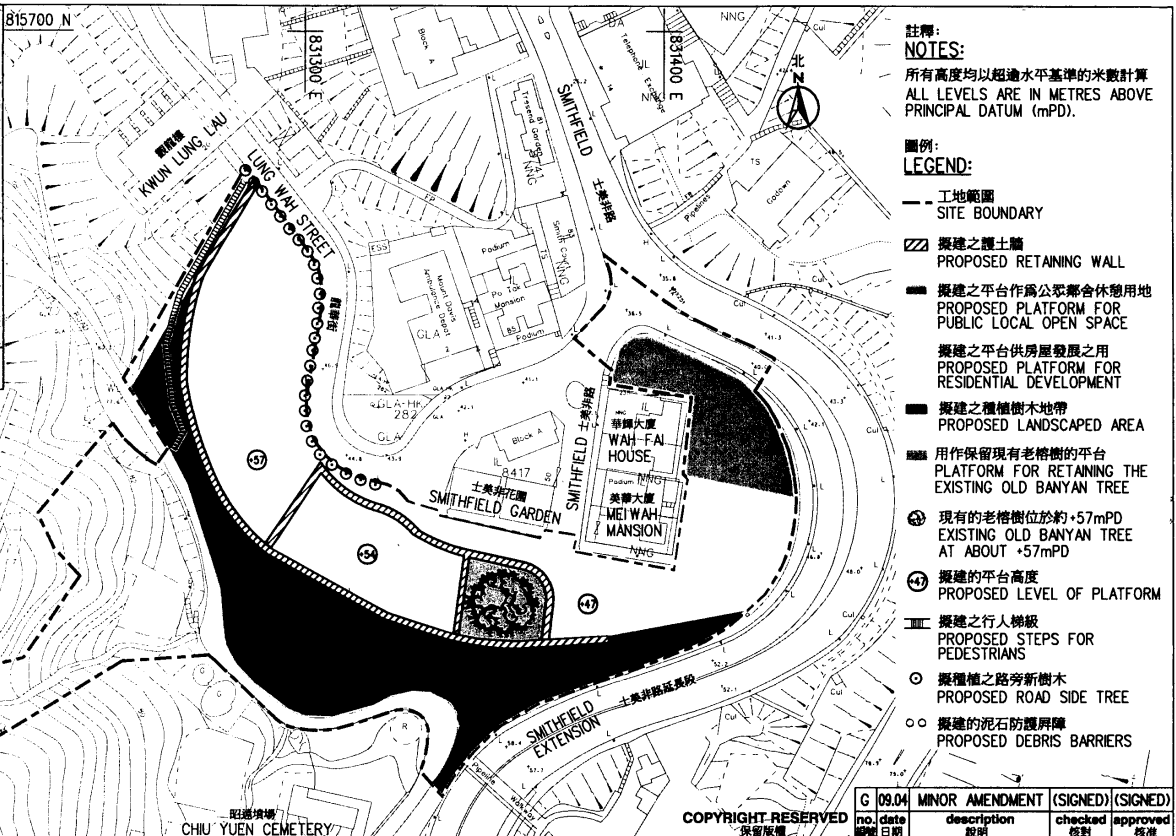
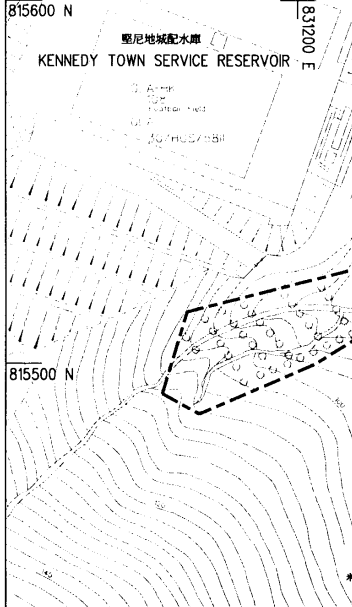
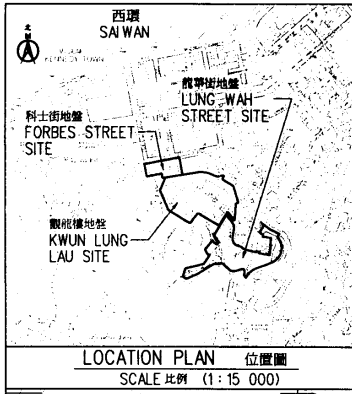
<sup>1</sup> A public filling area is a designated part of a development project that accepts public fill for reclamation purpose. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

23. We estimate that the project will create some 130 jobs comprising 30 professional/technical staff, and 100 labourers, totalling 2 440 man-months.

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Housing Bureau  
April 2001





title 圖則名稱  
SITE FORMATION AT LUNG WAH STREET - SITE PLAN  
龍華街地盤平整工程 - 工地平面圖

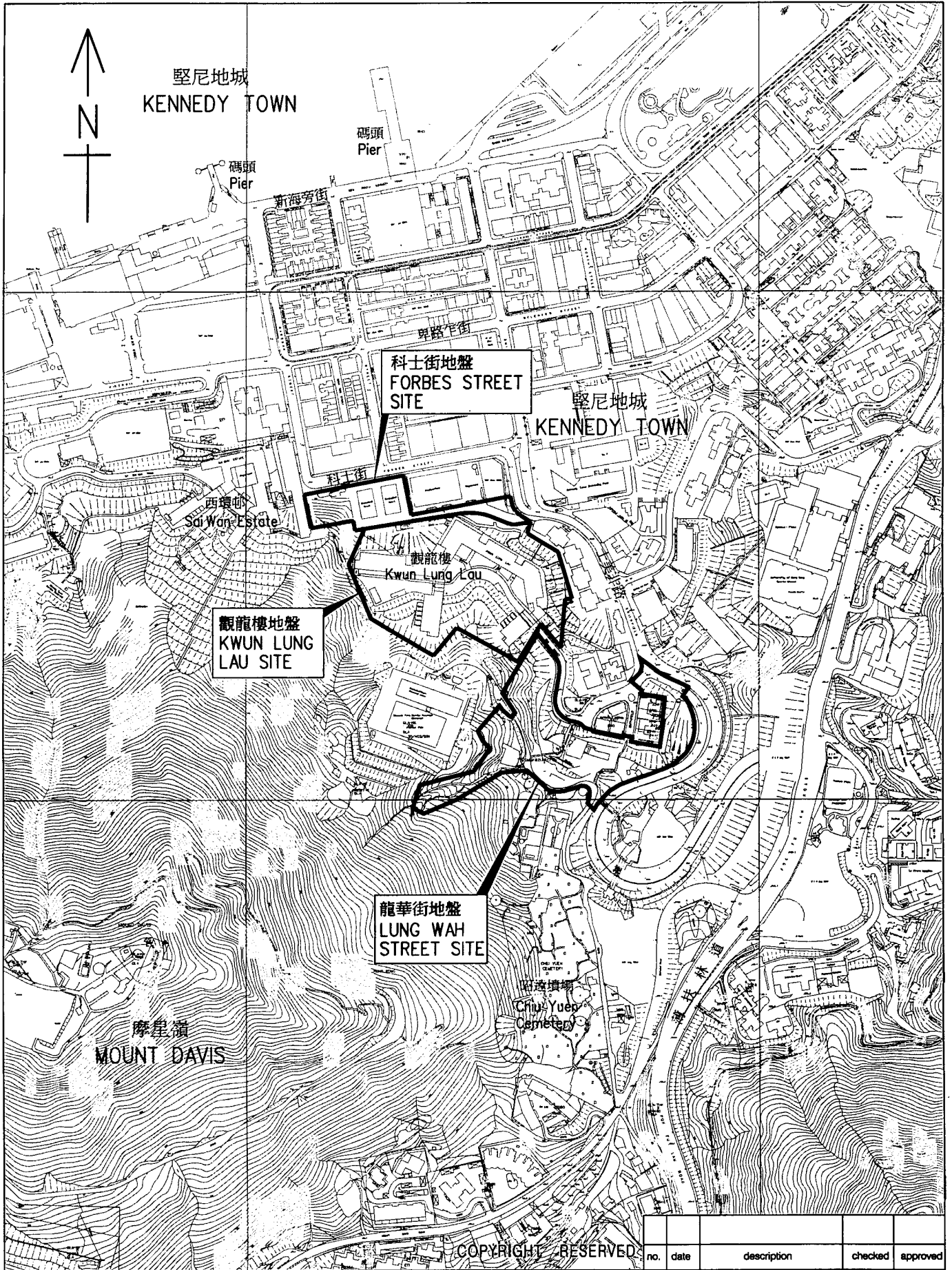
no. 號碼	date 日期	description 說明	checked 校對	approved 核准
G 09.04		MINOR AMENDMENT	(SIGNED)	(SIGNED)
designed 設計	WT LEUNG	(SIGNED)	23-02-01	
drawn 繪圖	WK WONG	(SIGNED)	23-02-01	
checked 校對	WT LEUNG	(SIGNED)	23-02-01	
approved 核准	A PANG	(SIGNED)	23-02-01	

office HOUSING SITES DIVISION  
CIVIL ENGINEERING OFFICE  
土木工程處 房屋用地部

drawing no. 圖則編號  
HSD 48G

scale 比例  
1:1500

CIVIL ENGINEERING DEPARTMENT HONG KONG  
土木工程處 香港




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title  
 LOCATION PLAN OF  
 LUNG WAH STREET,  
 KWUN LUNG LAU AND  
 FORBES STREET SITES  
 龍華街、觀龍樓及科士街地盤位置圖

	name	initial	date
designed	W T LEUNG	(SIGNED)	16-03-01
drawn	W K WONG	(SIGNED)	16-03-01
checked	W T LEUNG	(SIGNED)	16-03-01
approved	ALICE PANG	(SIGNED)	16-03-01
office	HOUSING SITES DIVISION CIVIL ENGINEERING OFFICE		

no.	date	description	checked	approved

drawing no. **HSD 50** scale 1:5 000

 CIVIL ENGINEERING DEPARTMENT HONG KONG

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**B571CL – Site Formation at Lung Wah Street****Breakdown of estimate for consultants' fees**

<b>Consultants' staff costs</b>		<b>Estimated man-months</b>	<b>Average MPS * salary point</b>	<b>Multiplier factor</b>	<b>Estimated fee (\$ million)</b>
(a) Contract administration	Professional	7.0	38	2.4	1.0
	Technical	7.0	14	2.4	0.3
(b) Site supervision by resident site staff of the consultants	Professional	39.0	38	1.7	3.8
	Technical	148.0	14	1.7	4.8
<b>Total consultants' staff costs</b>					9.9

\* MPS = Master Pay Scale

**Notes**

1. A multiplier factor of 2.4 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultant's offices. A multiplier factor of 1.7 is applied to the average MPS point in the case of site staff supplied by the consultants (At 1.4.2000, MPS pt. 38 = \$57,525 p.m. and MPS pt. 14 = \$19,055 p.m.)
2. The above figures are based on estimates prepared by the Director of Civil Engineering. The consultancy works for this project have been included as part of Agreement No. CE 69/99 "Site Formation at Lung Wah Street – Design and construction", The assignment will only be triggered subject to Finance Committee's approval to upgrade **571CL** to Category A.