# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT New Territories West Development Civil Engineering - Land development 225CL - Hung Shui Kiu development, stage II - remaining engineering infrastructure and site formation works

Members are invited to recommend to Finance Committee -

- (a) the upgrading of part of **225CL**, entitled "Hung Shui Kiu development, stage II engineering infrastructure north of Castle Peak Road, phase 2", to Category A at an estimated cost of \$16.8 million in money-of-the-day prices; and
- (b) the retention of the remainder of **225CL**, retitled "Hung Shui Kiu development, stage II remaining works" in Category B.

#### **PROBLEM**

We need to form land for district open space and construct roads, drains and sewers to support the development at Hung Shui Kiu.

/PROPOSAL ....

#### **PROPOSAL**

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **225CL** to Category A at an estimated cost of \$16.8 million in money-of-the-day (MOD) prices for the construction of roads, drains and sewers, and formation of a site for a district open space to support the development at Hung Shui Kiu.

## PROJECT SCOPE AND NATURE

- 3. The scope of the part of **225**CL we propose to upgrade to Category A comprises (coloured pink on the site plan at Enclosure 1) -
  - (a) site formation of about 0.6 hectare (ha) of land for a district open space (DOS) in Area 1 of Hung Shui Kiu;
  - (b) construction of about 650 metres of roads including Roads L6a in Area 1 and Roads L12, L12a and L13 in Areas 4 and 5;
  - (c) associated drainage and sewerage works;
  - (d) landscaping works; and
  - (e) implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in paragraphs (a) to (d) above.

We plan to start the proposed works in November 2001 for completion in May 2003.

4. The remainder of **225CL**, to be retained in Category B, comprises the construction of Roads L14 and L15, widening and reconstruction of Tan Kwai Tsuen Road and the northern section of Tin Ha Road and site formation for a local open space in Area 3 of Hung Shui Kiu (coloured green on the site plan at Enclosure 1).

#### **JUSTIFICATION**

5. The rural town of Hung Shui Kiu has an area of about 63 ha. It is situated half-way along the Yuen Long – Tuen Mun corridor and straddles both sides of Castle Peak Road. Since 1980, several private housing developments, accommodating 4 000 people, have been completed in Area 2 (south of Castle Peak Road) and Areas 1, 4 and 9A (north of Castle Peak Road) of Hung Shui Kiu.

- 6. There are planned private and public housing developments respectively in Areas 12 and 13 which will accommodate 18 000 people by 2007. Areas 4 and 5 are zoned for private residential developments. But there are no proper internal access roads connecting Areas 4 and 5 to Tin Ha Road and Tin Sam Road.
- 7. To provide the essential infrastructure for future residential developments in Hung Shui Kiu, we plan to construct Roads L12, L12a and L13, carry out associated drainage and sewerage works, and form land in Area 1 for the development of a DOS to meet the population intake of future residential developments.

#### FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$16.8 million in MOD prices (see paragraph 9 below), made up as follows -

	\$ million							
(a)	Site formation works		2.8					
(b)	Roadworks		5.6					
(c)	Drainage and sewerage works		4.0					
(d)	Landscaping works		1.0					
(e)	EM&A programme		0.4					
(f)	Consultants' fees for -		1.7					
	(i) Construction stage	0.2						
	(ii) Resident site staff costs	1.5						
(g)	Contingencies		1.5					
	Sub-total		17.0	(in September 2000 prices)				
(h)	Provision for price adjustment		(0.2)					
	Total		16.8	(in MOD prices)				
				/Owing				

Owing to insufficient in-house resources, DTD proposes to employ consultants to carry out the construction supervision. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 2.

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

Year	\$ million (Sept. 2000)	Price adjustment factor	\$ million (MOD)
2001 – 2002	2.5	0.98000	2.5
2002 - 2003	12.0	0.97976	11.8
2003 - 2004	2.0	0.98759	2.0
2004 – 2005	0.5	0.99549	0.5
	17.0		16.8

- 10. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period from 2001 to 2005. We will tender the proposed works under a standard remeasurement contract because the quantities of earthworks involved may vary according to the actual ground conditions. The contract will not provide for inflation adjustment as the contract period will not exceed 21 months.
- 11. We estimate the annually recurrent expenditure arising from this project to be \$630,000.

## **PUBLIC CONSULTATION**

12. We consulted the Environmental Improvement Committee of the then Yuen Long District Board on the proposed works during the period from end 1996 to early 1997. We also consulted the then Yuen Long District Board on the proposed works on 24 October 1996, 19 December 1996 and 17 February 1997. Members of the Board and the Committee supported the proposed works. On 13 February 1998, we consulted the Environmental Improvement and District Development Committee of the then Tuen Mun Provisional District Board on the proposed works. Members had no objection to the proposed works.

- 13. We gazetted the road scheme under the Roads (Works, Use and Compensation) Ordinance (RO) on 29 January 1999 and received 56 objections. Of these, 55 objections were related to the resumption of their land and the remaining one was related to access to the objector's lot. We explained the road scheme to the objectors and 14 of them subsequently withdrew their objections. To address the concerns of some of the objectors, we revised the road scheme and gazetted the amended scheme under the RO on 23 June 2000. We received three objections to the revised scheme. These objectors, who objected to the resumption of their land, refused to withdraw their objections. We could not accede to the objectors' request of re-aligning the proposed roads as it would inevitably affect other private land. On 12 December 2000, the Chief Executive in Council overruled the objections on the grounds of public interest and authorized the proposed roadworks without modification.
- 14. On 8 January 2001, the LegCo Panel on Planning, Lands and Works discussed and supported the proposed works.

## **ENVIRONMENTAL IMPLICATIONS**

- 15. We completed an Environmental Impact Assessment (EIA) study in February 1998 to assess the environmental impacts of the construction and operation of the project. The EIA report concluded that the project would not have long-term adverse environmental implications. For short-term impacts during construction, we will control noise, dust and site run-off nuisance in compliance with the established standards/guidelines through the implementation of appropriate monitoring and mitigation measures in the works contract. These measures will include frequent watering of the site and the provision of wheel-washing facilities to reduce emission of fugitive dust, the use of silent construction plant to reduce noise generation, and other procedures as recommended in Environmental Protection Department's Recommended Pollution Control Clauses.
- 16. We have considered in the planning and design stages ways to minimize the generation of construction and demolition (C&D) materials by giving due consideration to designing the level and layout of the roadworks. We estimate that about 7 500 cubic metres (m³) of C&D materials will be generated from the execution of the project. Of these, about 150 m³ (2.0%) will be reused on site, about 7 250 m³ (96.7%) will be reused as fill in public filling areas and about 100 m³ (1.3%) will be disposed of at landfills.

- 17. We will require the contractor to submit a waste management plan for approval. The plan will include appropriate mitigation measures to avoid or reduce the production of C&D materials. We shall require the contractor to ensure that the day-to-day operations on site comply with the approved plan. We will control the disposal of public fill and C&D waste to designated public filling areas and landfills respectively through a trip-ticket system. We will record the disposal of C&D materials for monitoring purposes.
- 18. To compensate for the loss of the existing 97 trees affected by the proposed works, we will provide a planting area of about 320 square metres (m²) in Area 1 as landscaping works. We will plant about 20 trees and shrubs and will use hydroseeding to protect formed slopes as appropriate. In addition, the Leisure and Cultural Services Department will also provide landscape planting for the proposed DOS at Area 1.

## LAND ACQUISITION

19. We will resume about 1.76 hectares of agricultural land and 230.4 m<sup>2</sup> of building land for the project. The land acquisition and clearance will affect 100 households involving 329 people and 121 structures. The Director of Housing will offer eligible families accommodation in public housing in accordance with the established rehousing policy. We will charge the cost of land acquisition and clearance, estimated at \$65 million, to Head 701 – Land Acquisition.

## **BACKGROUND INFORMATION**

We upgraded **225CL** to Category B in October 1986.

## Stage I

- We upgraded parts of **225CL** to Category A, as **317CL** "YL-TM corridor engineering works at Hung Shui Kiu, stage I, phase 1, site formation for schools" and **346CL** "YL-TM corridor engineering works for commercial/residential area at Hung Shui Kiu, stage I, phase 2", in July 1988 and January 1990 respectively for the implementation of the two phases of the stage I engineering works for Hung Shui Kiu. We completed the stage I works in July 1991.
- We also upgraded part of **253CL** "YL-TM corridor engineering works for Hung Shui Kiu and Ping Shan" as **672CL** "Roads and associated engineering works for Hung Shui Kiu North", which is a related road improvement project in Hung Shui Kiu, to Category A in June 2000. We commenced the works in November 2000 for completion in February 2003 (coloured yellow on the site plan at Enclosure 1).

#### Stage II

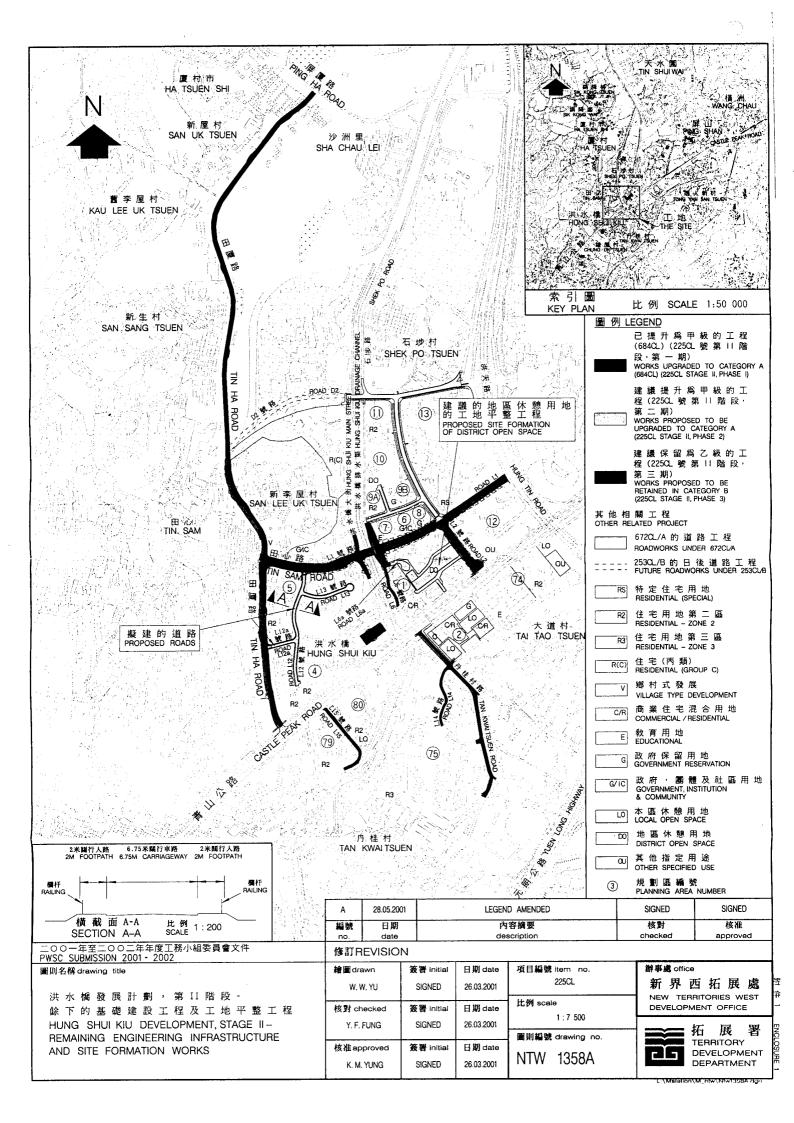
- We engaged consultants in January 1996 to carry out an EIA study for the stage II works and the design for phase 2 of the stage II works. We have charged the cost of \$1.27 million for the EIA study and the detailed design to block allocation **Subhead 7100CX** "New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme." The consultants have completed the detailed design and drawings.
- We upgraded part of **225CL** to Category A, as **684CL** "Hung Shui Kiu development, stage II engineering infrastructure north of Castle Peak Road, phase 1" in March 2001. We will commence the phase 1 works in July 2001 for completion in May 2004 (coloured blue on the site plan at Enclosure 1).

## Job opportunities

25. We estimate that the project will create some 30 jobs comprising 10 professional/technical staff and 20 labourers, totalling 470 man-months.

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Planning and Lands Bureau May 2001



225CL – Hung Shui Kiu development, stage II - remaining engineering infrastructure and site formation works

## Breakdown of estimate for consultants' fees

Consultants' staff costs  (a) Consultants' fees for			Estimated man- months	Average MPS* salary point	Multiplier factor	Estimated fees (\$ million)
co	nstruction stage					
(i)	contract	Professional	0.7	38	2.4	0.10
	administration	Technical	1.0	14	2.4	0.05
(ii	) preparation of as-	Professional	0.1	38	2.4	0.01
	built drawings	Technical	0.8	14	2.4	0.04
` ′	esident site staff	Professional	7.2	38	1.7	0.70
	sts	Technical	24.7	14	1.7	0.80
Total consultants' staff costs					1.70	

<sup>\*</sup> 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 profits as the staff will be employed in the consultants' offices. A multiplier factor of 1.7 is applied to the average MPS point in the case of resident 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 figures given above are based on estimates prepared by the Director of Territory Development. The consultancy works for this project have been included as part of an existing consultancy agreement for the design and construction of engineering works for Hung Shui Kiu. We will only know the actual man-months and fees when we have appointed the resident site staff.