

For discussion
on 18 April 2007

PWSC(2007-08)6

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Civil Engineering – Land development

725CL – Demolition of Cheung Sha Wan police married quarters, a school and a medical clinic

Members are invited to recommend to Finance Committee the upgrading of **725CL** to Category A at an estimated cost of \$28.0 million in money-of-the-day prices for the demolition of buildings at Cheung Sha Wan police married quarters, a school and a medical clinic.

PROBLEM

We need to remove the existing buildings and structures at a site in Cheung Sha Wan for further developments.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Housing, Planning and Lands, proposes to upgrade **725CL** to Category A at an estimated cost of \$28.0 million in money-of-the-day (MOD) prices for the demolition of buildings and structures at Cheung Sha Wan police married quarters, a school and a medical clinic near the junction of Cheung Sha Wan Road and Tonkin Street, and the formation of site for further developments.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **725CL** comprises –
- (a) demolition of five residential blocks, one school building and one medical clinic;
 - (b) removal of the ground floor slab and all external paving areas within the site boundary;
 - (c) removal of the existing underground services and tanks;
 - (d) removal of the pile caps and the cutting off of the portion of piles at one metre below the pile caps;
 - (e) demolition of the existing boundary wall and fence, and erection of a chain-link fence along the site boundary; and
 - (f) formation of the site to the existing level of the external paving.

— A site plan is at Enclosure 1.

4. We plan to start the proposed works in September 2007 for completion by December 2008.

JUSTIFICATION

5. The site (about 16 700 square metres) is currently occupied by the Cheung Sha Wan police married quarters, a school and a medical clinic. The police married quarters and the clinic have been vacated since early 2003, and the school ceased operation in September 2006.

6. In accordance with the prevailing Cheung Sha Wan Outline Zoning Plan, the site is zoned “R(A)” and “G/IC” in part for future housing and school developments. Based on the latest planning by Housing Department and Education and Manpower Bureau, the proposed public housing and school developments at the cleared site are scheduled for completion by 2013.

/7.

7. To cater for the above planned future developments, we need to commence the demolition and the associated site formation works in September 2007 for completion by December 2008.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$28.0 million in MOD prices (see paragraph 9 below), made up as follows –

	\$ million	
(a) Building demolition works	9.9	
(b) External demolition works	9.0	
(c) Site formation works	4.0	
(d) Consultants' fees	2.8	
(i) contract administration	0.6	
(ii) site supervision	2.2	
(e) Contingencies	<u>2.1</u>	
Sub-total	27.8	(in September 2006 prices)
(f) Provision for price adjustment	0.2	
Total	<u>28.0</u>	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimates for consultants' fees by man-months is at Enclosure 2. The total floor area to be demolished is about 46 300 square metres (m²). The estimated unit cost for building demolition works is \$214 per m² of floor area in September 2006 prices. We consider this unit cost reasonable as compared with other similar projects undertaken by the Government.

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

Year	\$ million (Sept 2006)	Price adjustment factor	\$ million (MOD)
2007 – 08	2.0	0.99900	2.0
2008 – 09	20.0	1.00649	20.1
2009 – 10	4.5	1.01656	4.6
2010 – 11	1.3	1.02672	1.3
	27.8		28.0

10. We have derived the MOD estimates on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period from 2007 to 2011. We will tender the proposed works on a lump-sum contract because the scope of the works can be clearly defined. The proposed works will not be subject to price adjustment because the construction period will not exceed 21 months.

11. The proposed project has no recurrent financial implications.

PUBLIC CONSULTATION

12. We consulted the Housing Committee of the Sham Shui Po District Council on 25 January 2007. Members have no objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance. We engaged a consultant to conduct a Preliminary Environmental Review (PER) for **725CL** in November 2006. The PER concluded and the Director of Environmental Protection agreed that with the implementation of the proposed mitigation measures in the PER, the project will not have any adverse environmental impacts. We have included in the project estimates the cost of implementing the mitigation measures.

/14.

14. During demolition, we will control noise, dust and site run-off nuisances to within the established standards and guidelines through the implementation of mitigation measures in the relevant contract. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, provision of wheel-washing facilities, and treating the site run-off to acceptable levels before discharging. We completed an asbestos survey and identified small quantities of potential asbestos containing materials (ACM) on site. We will remove and dispose of all ACM in accordance with the Air Pollution Control Ordinance and the Waste Disposal Ordinance.

15. We have considered suitable measures including selective demolition and on-site sorting in the planning and design stages to reduce the generation of construction and demolition (C&D) materials where possible. In addition, we will require the contractor to reuse inert C&D materials on site or in other suitable construction sites as far as possible (e.g. use suitable excavated materials for filling within the site, use metal site hoardings and signboards so that these materials can be recycled or reused in other projects), in order to minimise the disposal of C&D materials to public fill reception facilities¹. We will encourage the contractor to maximise the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimise the generation of construction waste.

16. We will require the contractor to submit a waste management plan (WMP) for approval. The WMP 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 WMP. We will control the disposal of public fill and C&D waste to designated public fill reception facilities and landfills respectively through a trip-ticket system. We will require the contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

17. We estimate that the project will generate about 44 200 tonnes of C&D materials. Of these, we will reuse about 10 400 tonnes (23.5%) on site and deliver 32 500 tonnes (73.5%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of 1 300 tonnes (3.0%) at landfills. The total cost for

/accommodating

accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$1.04 million for this project (based on a unit cost of \$27/tonne for

¹ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

disposal at public fill reception facilities and \$125/tonne² at landfills).

LAND ACQUISITION

18. The project does not require any land acquisition.

BACKGROUND INFORMATION

19. We upgraded **725CL** to Category B in October 2006.

20. We engaged consultants to carry out PER, investigation studies and detailed design of the demolition works in November 2006 and February 2007 respectively. We engaged a quantity surveying consultant to prepare tender documents in March 2007. The total cost of these works is \$900,000. We charged this amount to block allocation **Subhead B100HX** "Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme". The consultants have completed the PER, investigation studies and detailed design. The quantity surveying consultant is finalising the tender documents.

21. The proposed works will not involve any tree removal or planting proposals.

22. We estimate that the proposed works will create about 22 jobs (19 for labourers and another 3 for professional/technical staff) providing a total employment of 260 man-months.

Housing, Planning and Lands Bureau
April 2007

² This estimate has taken into account the cost of developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills, (which is likely to be more expensive) when the existing ones are filled.

725CL – Demolition of Cheung Sha Wan police married quarters, a school and a medical clinic

Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(i) Contract administration (Note 2)	Professional	-	-	-	0.6
	Technical	-	-	-	-
(ii) Site supervision (Note 3)	Professional	15	38	1.6	1.3
	Technical	31	14	1.6	0.9
				Total	2.8

*MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to arrive at the cost of resident site staff supplied by the consultants. (As at 1 January 2006, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the provision of contract administration and quantity surveying services for **725CL**. The assignment will only be executed subject to Finance Committee's approval to upgrade **725CL** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual fees after completion of the works.