

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Subventions – Miscellaneous

5QJ – Renovation of the Wu Kwai Sha Youth Village of YMCA, Ma On Shan

Members are invited to recommend to Finance Committee the upgrading of **5QJ** to Category A at an estimated cost of \$25.2 million in money-of-the-day prices for re-roofing the residential cottages containing asbestos in the Wu Kwai Sha Youth Village of the Chinese Young Men's Christian Association of Hong Kong, Ma On Shan.

PROBLEM

The roof sheets of the 42 residential cottages in the Wu Kwai Sha Youth Village of the Chinese Young Men's Christian Association of Hong Kong (YMCA) contain asbestos which may be hazardous to health.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Home Affairs, proposes to upgrade **5QJ** to Category A at an estimated cost of \$25.2 million in money-of-the-day (MOD) prices for the replacement of the roof sheets containing asbestos of the 42 cottages in the Wu Kwai Sha Youth Village of YMCA, Ma On Shan.

/PROJECT

PROJECT SCOPE AND NATURE

3. The project scope comprises the following –
- (a) demolition and clearance of the asbestos roof sheets of the 42 residential cottages;
 - (b) provision of new roof sheets; and
 - (c) consequential reinstatement works.

— A site plan is at the Enclosure. We plan to start works on site in October 2003 for completion by April 2004.

JUSTIFICATION

4. The Wu Kwai Sha Youth Village is one of the most popular and well-utilised non-government holiday camps subvented by the Leisure and Cultural Services Department. In the 2001-02 financial year, 171 133 people used the residential facilities of the Youth Village, representing a utilisation rate of about 90.1%¹. The number of non-residential users during the same period was around 156 000, which is 100% of its capacity.

5. The 42 residential cottages of the Youth Village were built in the 1960s when asbestos was commonly applied to roofing materials. It is now widely accepted that asbestos may be hazardous to health. In order to ensure a safe environment for users and staff of the Youth Village, D Arch S conducted a material sampling of the roof sheets to verify the presence of asbestos. It was confirmed that the roof sheets contain asbestos of a low risk type and present no imminent health hazard if left undisturbed. However, given that they have been in use for over 30 years, weathering over the years would have caused natural wear and tear to the roofs. It is therefore considered necessary to replace the roof sheets with alternative materials before they deteriorate and cause health hazard to users and staff of the Youth Village.

/6.

¹ The utilisation rate is calculated on the basis of the following formula –

$$\frac{\text{No. of hours booked}}{\text{No. of hours available for booking}} \times 100\%$$

6. The camp will be completely closed during the removal of the asbestos roof sheets. The roof sheets will be removed and disposed of by an asbestos abatement specialist contractor in strict accordance with the current legislative requirements. The required environmental precautionary measures for removing and disposing these low risk type asbestos are as follows –

- (a) to enclose the site against unauthorised entry;
- (b) to sufficiently wet the roof sheets to minimise dust level during their removal;
- (c) to monitor the dust level during the whole process;
- (d) to wrap all removed roof sheets with polythene sheets and dispose of them at a landfill to be designated by the Environmental Protection Department; and
- (e) to completely decontaminate the site.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$25.2 million in MOD prices (see paragraph 8 below), made up as follows –

	\$ million	
(a) Building	18.8	
(b) Building services	4.2	
(c) Contingencies	2.3	
	<hr/>	
Sub-total	25.3	(in September 2002 prices)
(d) Provisions for price adjustment	(0.1)	
	<hr/>	
Total	25.2	(in MOD prices)
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8. Subject to approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 2004	17.5	0.99250	17.4
2004 – 2005	5.3	0.99250	5.3
2005 – 2006	2.5	0.99250	2.5
	25.3		25.2

9. We derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2006. We will deliver the works through a fixed-price lump-sum contract because the contract period will be less than 21 months and we can clearly define the scope of works in advance, leaving little room for uncertainty. Under the contract, the main contractor will be required to employ a registered specialist contractor to carry out asbestos abatement works. D Arch S considers the estimated project cost reasonable as compared with similar renovation works carried out by the Government.

10. The project will not give rise to any additional annual recurrent expenditure.

PUBLIC CONSULTATION

11. We consulted the Legislative Council "Subcommittee to follow up the outstanding capital works projects of the former municipal councils" on the proposed upgrading of this project to Category A on 7 March 2002. Members did not raise any objection to the proposal.

12. On 12 June 2002, we sought the endorsement of the Public Works Subcommittee on a proposal to implement the proposed works in phases over 27 months from October 2002. Members expressed concern about the safety issues of the phased implementation whereby part of the camp would remain open during the removal of the asbestos roof sheets in specific locations.

13. The Director of Leisure and Cultural Services, together with D Arch S and the camp management, have explored various implementation approaches and concluded that it was possible to implement the project in one go and have the entire camp closed during the removal of asbestos roof sheets. This approach could shorten the duration of the project, enhance works efficiency and further reduce the risk of contamination. The works, however, cannot start until September 2003 when the camp management has fulfilled its obligation to meet the confirmed bookings for the camp. D Arch S would take over the 42 cottages in September for site preparation works. The camp could then be completely closed in October 2003 for the dismantling of asbestos roof sheets for all cottages. The bulk of the camp not affected by the consequential reinstatement works (such as canteen, audio-visual rooms, classrooms, assembly halls, sports ground and ball courts) would be reopened in November 2003. During closure of the camp, the staff working at the camp will be temporarily re-deployed to other government-subsidized camps managed by YMCA.

14. The Sha Tin District Council (STDC) at its meetings on 20 June and 5 September 2002 agreed to the proposed implementation programme in paragraph 13 above with the work start date deferred to October 2003 and completion date to April 2004.

ENVIRONMENTAL IMPLICATIONS

15. The project will not cause any long-term environmental adverse impact. During construction, 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. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities. The removal, collection and disposal of asbestos-containing material will be in full compliance with the Air Pollution Control Ordinance, Waste Disposal Ordinance and Waste Disposal (Chemical Waste) (General) Regulation. Periodic reports would be posted at the entrance of the project site to inform the public of the dust levels within the site during the period of asbestos roof sheets removal, as agreed with STDC.

16. At the planning stage, we have considered measures to reduce the generation of construction and demolition (C&D) materials. D Arch S will use prefabricated roofing system to reduce temporary formwork and construction waste. In addition, we will require the contractor to use metal site hoardings and signboards, so that these materials can be recycled or reused in other projects.

17. D Arch S 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. D Arch S will ensure that the day-to-day operations on site comply with the approved WMP. D Arch S will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. D Arch S will require the contractor to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal and reuse of C&D materials for monitoring purposes. We estimate that the project will generate about 184 cubic metres (m³) of C&D materials. As the materials to be removed in this project are largely the roof sheets containing asbestos and the false ceiling tiles which are due for replacement, reuse of any of them on site is virtually impossible. As such, we will reuse about 37 m³ (20%) of these C&D materials as fill in public filling areas², and dispose of 147 m³ (80%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$18,375 for this project (based on a notional unit cost³ of \$125/m³).

LAND ACQUISITION

18. The project does not require land acquisition.

BACKGROUND INFORMATION

19. We upgraded **5QJ** to Category B in November 2001. We employed a consultant to carry out asbestos survey in February 2002 to confirm the extent of the presence of asbestos at a cost of \$24,225. We charged this amount to **Head 176 Subhead 503** "Subvention to Non-government Organisation Camps". The consultant has completed the survey. D Arch S is finalising the tender documentation for the project with in-house staff resources.

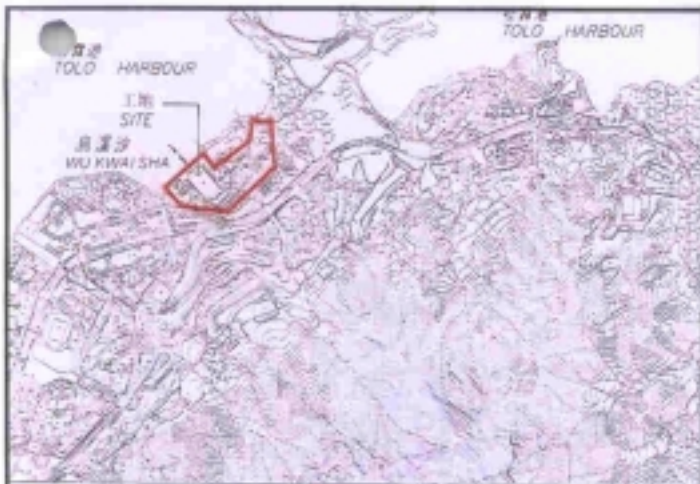
20. We estimate that the project will create some 45 jobs comprising three professional/technical staff and 42 labourers, totalling 340 man-months.

Home Affairs Bureau
February 2003

² A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

³ This estimate has taken into account the cost for 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 are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

附件 Enclosure



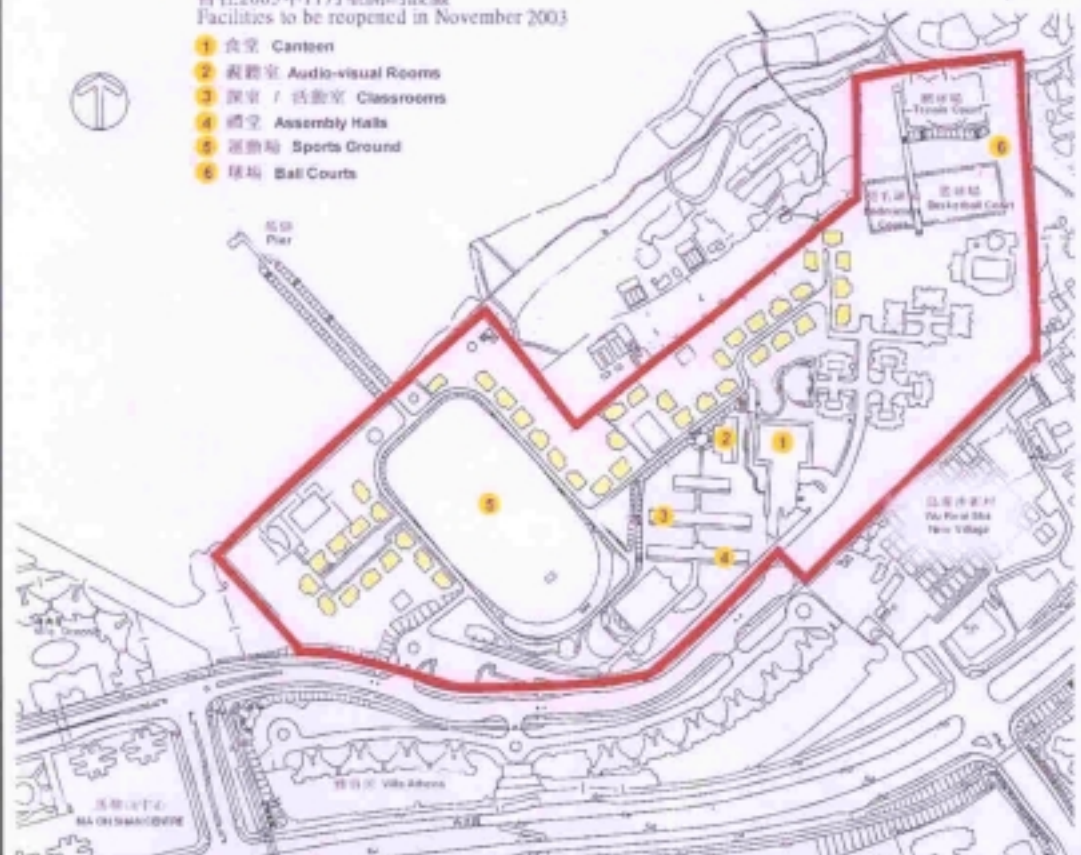
位置圖 LOCATION PLAN

比例 SCALE 1 : 30000

舊屋 Residential Cottages

會在2003年11月重開的設施
Facilities to be reopened in November 2003

- 1 食堂 Canteen
- 2 視聽室 Audio-visual Rooms
- 3 課室 / 活動室 Classrooms
- 4 禮堂 Assembly Halls
- 5 運動場 Sports Ground
- 6 球場 Ball Courts



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 中華基督教青年會和山馬路沙青年新村翻新工程
 RENOVATION OF THE
 WU KWAI SHA YOUTH VILLAGE
 OF YMCA, MA ON SHAN

drawn by	date
approved	date
office	

ARCHITECTURAL BRANCH

drawing no.	scale
AB/6582/XA101	1 : 4000

ARCHITECTURAL SERVICES DEPARTMENT