

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 - BUILDINGS

Public Safety – Fire services

118BF – Fire station-cum-ambulance depot in area 87, Tseung Kwan O

Members are invited to recommend to Finance Committee the upgrading of **118BF** to Category A at an estimated cost of \$96.8 million in money-of-the-day prices for the construction of a 5-bay fire station-cum-ambulance depot in area 87, Tseung Kwan O.

PROBLEM

Emergency vehicles from the existing Sub-divisional Fire Station and Ambulance Depot in Po Lam, Tseung Kwan O are not able to respond to emergencies in Pak Shing Kok, Siu Chik Sha and Tai Chik Sha areas within the approved graded response time limits for fire services¹ and for ambulance services².

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Security, proposes to upgrade **118BF** to Category A at an

/estimated

¹ According to the current approved fire-fighting policy, fire calls in built-up, dispersed risk and remote areas should be met within a response time of 6, 9 and 23 minutes respectively. The area to be served by this fire station is in the built-up area category.

² The emergency ambulance service has adopted a 12-minute response time (including a 2-minute activation time and a 10-minute travel time) as its performance target, replacing its previously approved 10-minute travel time target, with effect from 1 November 1998.

estimated cost of \$96.8 million in money-of-the-day (MOD) prices for the construction of a 5-bay fire station-cum-ambulance depot in area 87, Tseung Kwan O.

PROJECT SCOPE AND NATURE

3. The project comprises the construction of a 4-storey fire station-cum-ambulance depot on a site of about 3 186 square metres. This new depot will have -

- (a) a 5-bay appliance room;
- (b) offices with a gross floor area (GFA) of about 170 square metres;
- (c) an exercise room;
- (d) a lecture room;
- (e) storage areas for the storage of foam concentrate, hoses, etc.;
- (f) barracks for on-duty operational fire and ambulance staff;
- (g) a drying room;
- (h) a canteen;
- (i) an open drill yard with gross area of about 1 100 square metres; and
- (j) a fuel filling facility.

A site plan is attached at the Enclosure for Members' reference. We plan to start the construction works in October 2000 for completion by May 2002.

JUSTIFICATION

4. According to the Tseung Kwan O Development Programme Phase III, large scale residential and industrial developments will be built in Pak Shing Kok, Siu Chik Sha and Tai Chik Sha. Upon completion of the development by

2007, the total population in the area will be about 85 000. In addition, 104.5 hectares of land has been zoned for industrial use and another 38.5 hectares for locating potentially hazardous installations in the southern part of the area.

5. The existing Tseung Kwan O Sub-divisional Fire Station and Ambulance Depot at Po Lam are about 6 kilometres away from Pak Shing Kok, Siu Chik Sha and Tai Chik Sha. Fire appliances and ambulances turning out from this station/depot take more than 12 minutes in both cases to reach these areas. This does not meet the approved 6-minute approved graded response time and the 12-minute response time for fire and emergency ambulance services respectively. This situation will become worse as the area is developed. Consequently, we need to ensure the provision of a fire station-cum-ambulance depot in area 87, Tseung Kwan O by 2002 to tie in with the population intake and new town developments. Delay in implementing the project could compromise public safety and adversely affect the standard of emergency services.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$96.8 million in MOD prices (see paragraph 7 below), made up as follows -

	\$ million	
(a) Site formation	0.3	
(b) Piling	5.1	
(c) Building	37.0	
(d) Building services	13.3	
(e) Drainage and external works	13.2	
(f) Furniture and equipment	9.8	
(g) Contingencies	6.2	
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Sub-total	84.9	(at December 1998 prices)
(h) Provision for price adjustment	11.9	
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Total	96.8	(in MOD prices)
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The construction floor area of **118BF** is 3 713 square metres. The construction unit cost, represented by building and building services costs, is \$13,547 per square metre at December 1998 prices. The construction unit cost is comparable to that for other fire stations built by the Government.

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

Year	\$ million (Dec 1998)	Price Adjustment factor	\$ million (MOD)
2000 - 01	5.1	1.05814	5.4
2001 - 02	47.7	1.11104	53.0
2002 - 03	21.1	1.16660	24.6
2003 - 04	5.5	1.22493	6.7
2004 - 05	5.5	1.28617	7.1
	84.9		96.8

8. We derived the MOD estimates on the basis of Government's latest forecast of trend labour and construction prices for the period 2000 to 2005. We will tender the works under a fixed-price lump-sum contract because the contract period will be shorter than 21 months and we can clearly define the scope of works in advance, leaving little room for uncertainty.

9. We estimate the additional annually recurrent expenditure for the project to be \$19.4 million.

PUBLIC CONSULTATION

10. We consulted the District Development Committee of the former Sai Kung Provisional District Board in December 1998. Members of the Committee supported the project.

ENVIRONMENTAL IMPLICATIONS

11. The Director of Environmental Protection completed an Environmental Review (ER) for the project in October 1997 and concluded that an Environmental Impact Assessment would not be necessary. As the project site is located within the 250-metre consultation zone of the Tseung Kwan O Stage II/III Landfill, the ER concluded that a Qualitative Landfill Gas (LFG) Risk Assessment Study (the Study) would be required. D Arch S completed the Study in January 2000, which concluded that the potential LFG hazard will not adversely affect the feasibility of the project. The Study also recommended some preventive measures such as provision of a fixed automatic gas detection and alarm system to facilitate detection and monitoring of LFG during operation of the station, as well as a Monitoring Programme and Emergency Response Plan for both construction and operation stages. D Arch S will implement all the measures recommended in the Study.

12. We will control noise, dust and site run-off nuisances during construction through the implementation of appropriate mitigation measures in the relevant contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, wheel washing facilities, dust suppression equipment, and the provision of temporary drainage within the site and adequate maintenance of any existing site drainage. The Director of Fire Services will implement mitigation measures to minimise noise nuisance during the operation of the fire station. These measures include the use of volume adjustable devices controlling the sound level of the public address system, sirens of fire appliances and ambulances and wig-wag signals. These facilities will only be used when necessary.

13. We estimate that a total of some 6 000 cubic metres of construction and demolition (C&D) materials will be generated under this project, including 1 500 cubic metres of C&D waste to be disposed of at landfills and 4 500 cubic metres of public fill to be delivered to public filling areas. We have considered in the planning and design stages ways of reducing the generation of C&D material as much as possible. We will require the contractor to submit to the D Arch S for approval a waste management plan with appropriate mitigation measures including allocation of an area for waste segregation. We will ensure that the day-to-day operations on site comply with the plan submitted. We will require the contractor to re-use excavated material as filling materials on site or at other sites as far as possible. To further minimize the generation of C&D materials, we will require the contractor to use metal hoarding. We will also require the contractor to separate public fill from C&D waste for disposal at appropriate

locations and to sort the C&D waste by category on site to facilitate re-use/recycling. We will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip ticket system, and record the disposal, re-use and re-cycling of C&D materials for monitoring purposes.

LAND ACQUISITION

14. The project does not require any land acquisition.

BACKGROUND INFORMATION

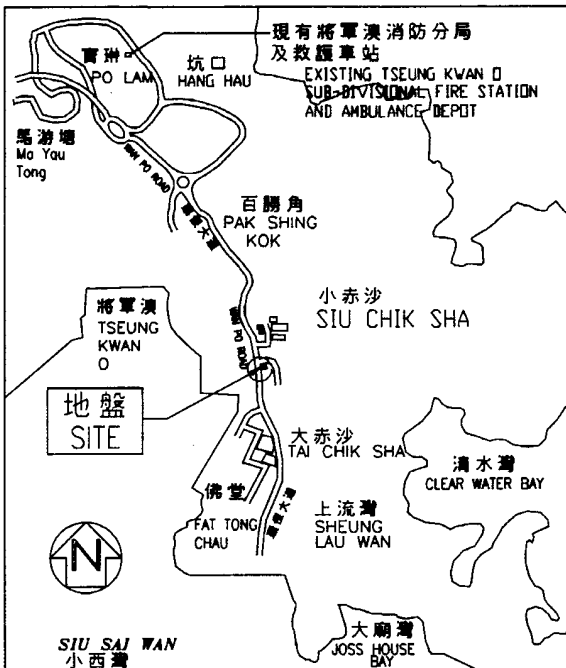
15. We upgraded **118BF** to Category B in March 1996. We originally planned to build a stand-alone 4-bay standard sub-divisional fire station and a 4-bay standard ambulance depot in area 87, Tseung Kwan O with a total site area of 3 750 square metres. To optimise the site utilisation and to enhance the cost effectiveness of the project, we have amalgamated two stand-alone buildings into a single structure, reducing the site area by 564 square metres to 3 186 square metres. We also tried to identify compatible joint users to further enhance the utilisation of the site but we have been unable to find any. We considered the possibility of using an alternative site but the Director of Planning has advised that there are no other "Government/Institution/Community" sites suitable for the development of a fire station-cum-ambulance depot within this area. Under these circumstances, given the size of the proposed site is the smallest possible area which can meet the requirements of a fire station-cum-ambulance depot, we consider that the proposal represents the best use of the site.

16. D Arch S has completed site investigations and substantially completed the detailed design for the project. He is finalising tender documents using in-house staff resources.

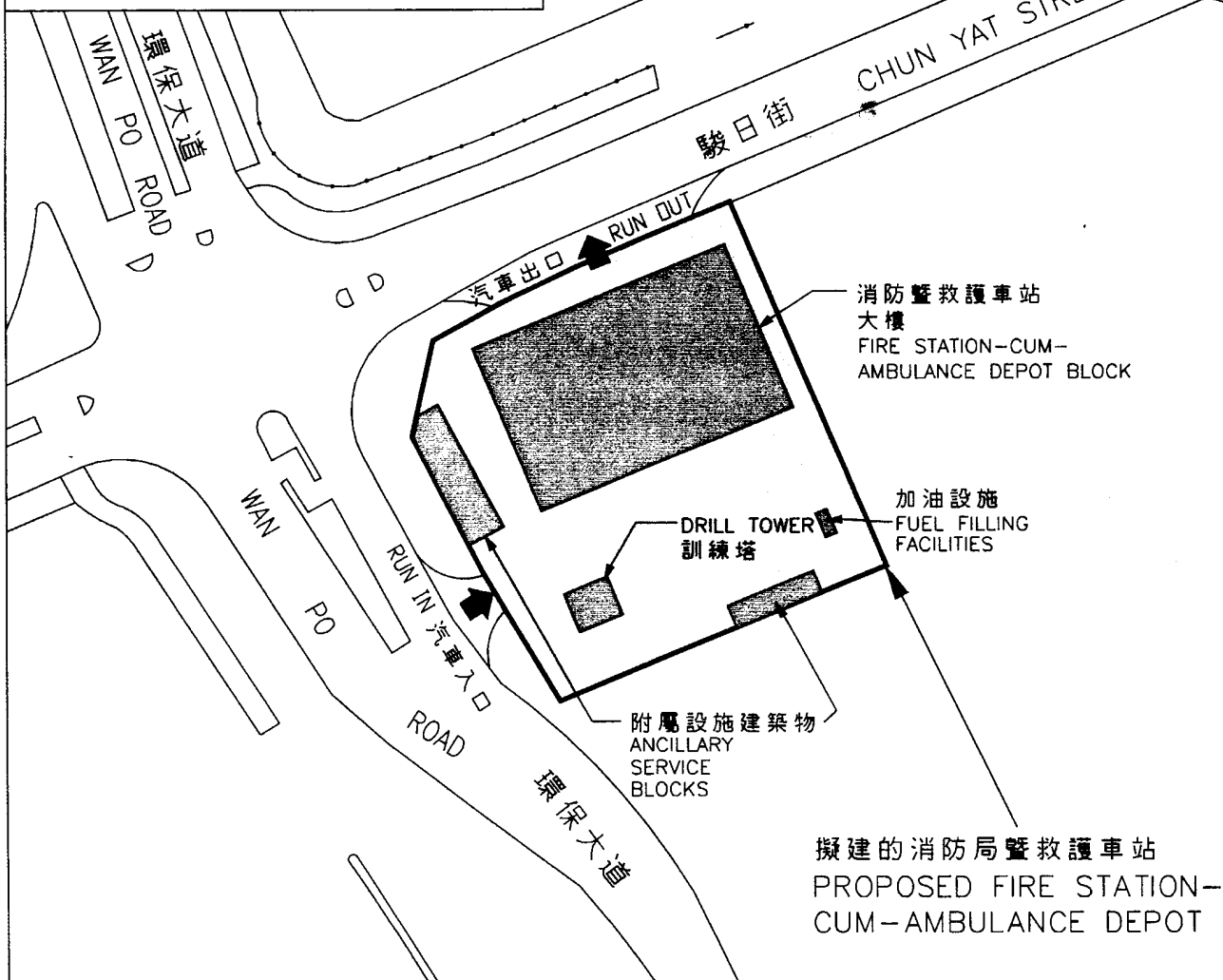
17. We estimate that the proposed works will create some 126 new jobs for two professional staff, four technical staff and 120 labourers during the construction period.

Security Bureau
March 2000

附件一
ENCLOSURE 1 TO PWSC
(1999-2000) 105




位置圖 LOCATION PLAN 比例 SCALE 1:75000



擬建的消防局暨救護車站
PROPOSED FIRE STATION-CUM-AMBULANCE DEPOT

CAD Ref. UNNAMED-101000

title 118BF 將軍澳第87區的 消防局暨救護車站 FIRE STATION-CUM- AMBULANCE DEPOT IN AREA 87, TSEUNG KWAN O	drawn by A. TSANG	date 11/99	drawing no. AB/5173W/XA101	scale 1:1000
	approved JOIE TAM	date 11/99		
	office ARCHITECTURAL BRANCH			 ARCHITECTURAL SERVICES DEPARTMENT