

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 \$88.3 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

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¹ According to the current approved fire-fighting policy, fire calls in congested built-up, less congested built-up, dispersed risk, highly dispersed risk and remote areas should be met within a response time of 6, 6, 9, 15 and 23 minutes respectively.

² The emergency ambulance service adopts a 12-minute response time (including a 2-minute activation time and a 10-minute travel time) as its performance target.

of the Secretary for Security, proposes to upgrade **118BF** to Category A at an estimated cost of \$88.3 million³ 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 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 Enclosure 1 for Members' reference. We plan to start the construction works in October 2000 for completion by May 2002.

/ **JUSTIFICATION**

³ We have adjusted the project estimate downwards by \$8.5 million, as compared with \$96.8 million in PWSC(1999-2000)105, to reflect the use of price adjustment factors and tender price index for building works updated as from 1 April 2000.

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, all land in Area 87 has been granted/allocated for the development of the Tseung Kwan O Industrial Estate. Also, about 104 hectares of land has been zoned for industrial use and another 37 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 graded response time for fire and emergency ambulance services. This situation will become worse as the Pak Shing Kok, Siu Chik Sha and Tai Chik Sha areas are developed. We estimate that by 2002, the industrial developments at Tai Chik Sha and Pak Shing Kok will be graded in terms of fire risk category, as a “less congested built-up” area and a “dispersed risk” area, and require response times of 6 and 9 minutes respectively. As a result, we need to ensure the provision of a fire station-cum-ambulance depot in Area 87, Tseung Kwan O by 2002. 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 \$88.3 million in MOD prices (see paragraph 7 below), made up as follows -

	\$ million
(a) Site formation	0.3
(b) Piling	4.9
(c) Building	35.7
(d) Building services	12.6

/ (e)

	\$ million	
(e) Drainage and external works	12.6	
(f) Furniture and equipment	9.8	
(g) Contingencies	5.9	
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Sub-total	81.8	(at December 1999 prices)
(h) Provision for price adjustment	6.5	
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Total	88.3	(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 \$13,008 per square metre at December 1999 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 1999)	Price Adjustment factor	\$ million (MOD)
2000 - 01	4.9	1.00000	4.9
2001 - 02	45.7	1.04500	47.8
2002 - 03	20.5	1.10770	22.7
2003 - 04	5.4	1.17416	6.3
2004 - 05	5.3	1.24461	6.6
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	81.8		88.3
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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 would 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

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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.

16. We submitted a paper (referenced PWSC(1999-2000)105) to the Public Works Subcommittee on 29 March 2000 proposing to upgrade the project to Category A. At the meeting, Members noted that the proposed project could not make full use of the development potential of the site and asked if the Government had considered the feasibility of incorporating field offices of the Social Welfare Department (SWD) or storage space for other disciplined services into the project. We withdrew the paper pending clarification on these points.

17. For operational and security reasons, fire stations and ambulance depots have to be located on the ground floor and lower levels of a building with an exclusive open drill yard, and vehicle and pedestrian access completely segregated from the other non-Fire Services Department developments above the building. Owing to the need to provide separate access, the inclusion of joint users will inevitably lead to enlargement of the building footprint and the area of the site. Any such enlargement has to be fully justified. Examples of joint developments include Homantin Government Offices above the Ambulance Depot, and the commercial development above the Tsim Sha Tsui Ambulance Depot.

18. In line with the Government's policy of optimising site development potential, the Government Property Agency (GPA) had in 1996 examined the possibility of incorporating quarters or office space with the proposed fire station and ambulance depot site in Area 87, Tseung Kwan O. However, there was no demand for such space at this location because it is in an industrial area far away from the town centre. Besides, there are two GIC projects under planning in Areas 15 (Community Hall cum Social Welfare Complex) and 44 (Government Joint-user Complex) of Tseung Kwan O which are more conveniently located for government facilities to serve the public. Consequently, we reduced the site area from 3 750 square metres to 3 186 square metres which, as advised by D Arch S, is the minimum required for the development.

19. On 22 April 1997, the Property Strategy Group (PSG) chaired by the Secretary for the Treasury considered **118BF** and five other fire station/ambulance depot projects (sub-divisional fire stations in Area 52 of Tuen Mun and Victoria Road and fire stations cum ambulance depots in Sha Tau Kok, Kowloon Tong and Braemar Hill) which equally could not make full use of site development potentials. PSG decided to allow the projects to proceed, on condition that all other alternative sites in the catchment areas had been considered and that the proposed development on the selected sites represented the best possible solution. Since then, we have submitted the Tuen Mun and Victoria Road sub-divisional fire station projects to the Finance Committee meetings held on 13 June 1997 and 27 February 1998 respectively and obtained approval to proceed with the projects.

20. In the light of Members' advice on 29 March, GPA has reviewed the feasibility of incorporating an SWD field office or a storage facility for disciplined services into the scope of **118BF**.

21. SWD has a Social Security Field Office at the Po Lam Estate in Tseung Kwan O and a sub-office in Sai Kung to serve the residents in the two districts. Although the main office in Tseung Kwan O has inadequate office accommodation, additional space would be provided in a planned welfare complex in Tseung Kwan O Area 15. As an interim arrangement, required office space will be provided in the old Kai Tak Airport Building. The welfare complex in Area 15 will provide better access to the residential areas in the district.

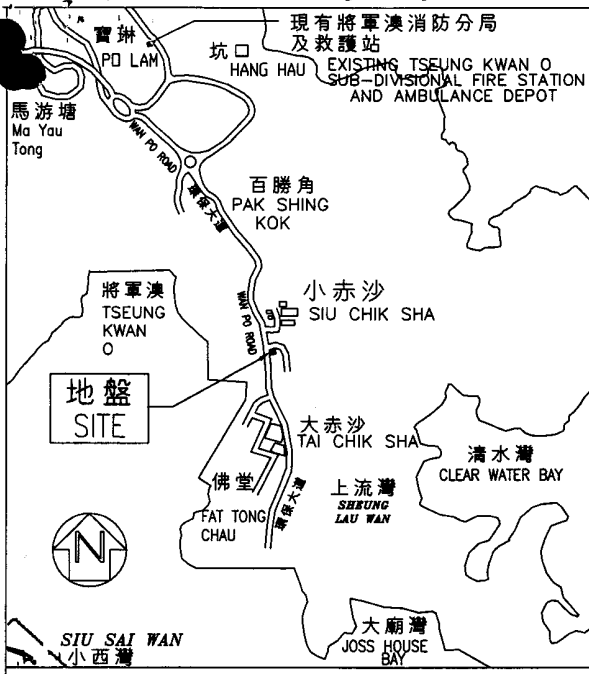
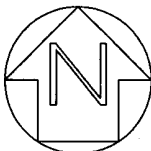
22. GPA has consulted other disciplined services concerning their storage requirements and is unable to identify any accommodation needs suitable for inclusion in this project. In considering this possibility, GPA has noted that to add additional floors to the fire station building would be exceptionally demanding in terms of extra land requirements and building costs. This is largely due to the need to provide adequate service areas for the additional accommodation, such as lifts, lobbies and loading and unloading areas, in addition to FSD's operational requirements as set out in paragraph 17.

23. 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.

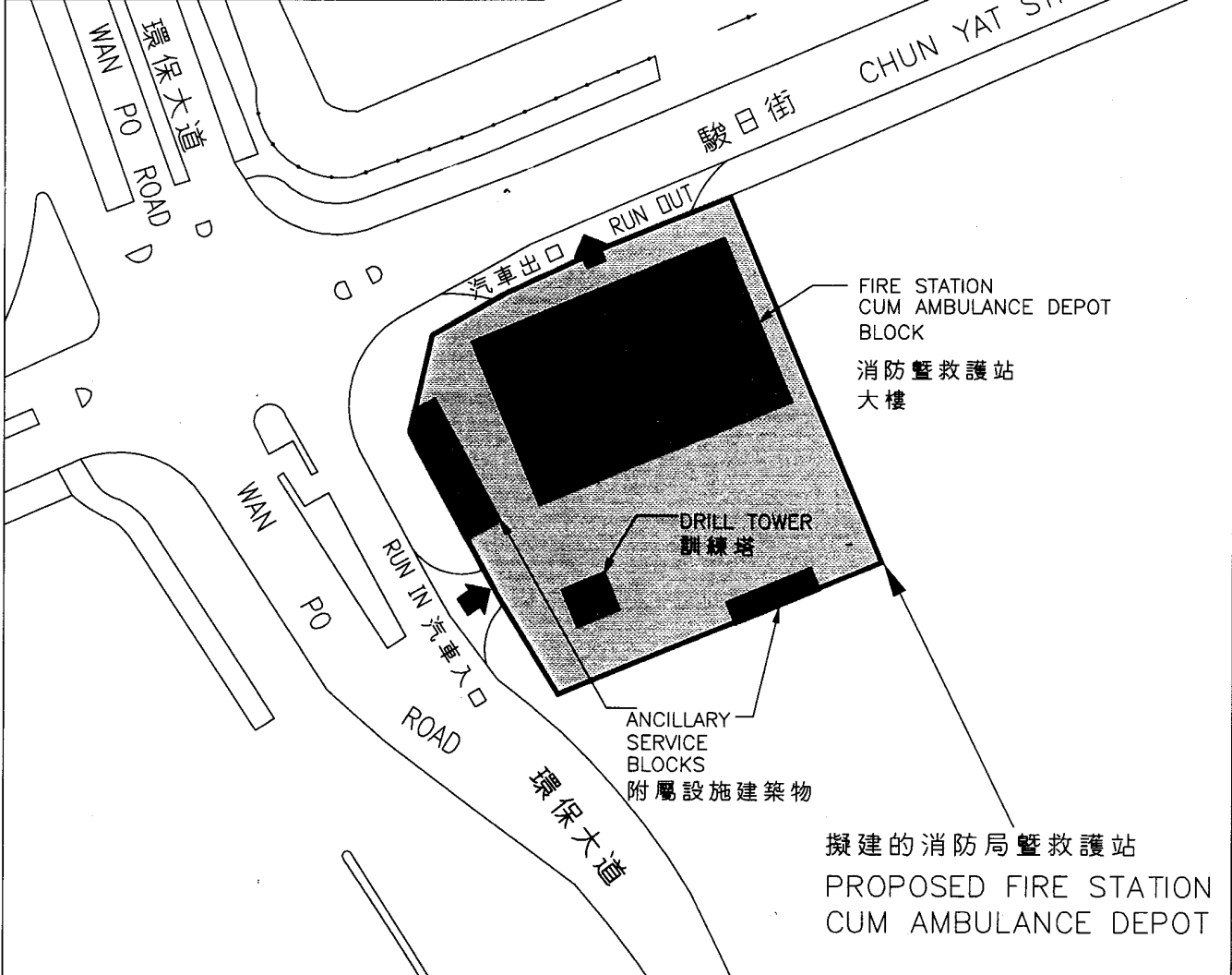
24. We estimate that the proposed works will create some 126 new jobs for two professional staff, four technical staff and 120 labourers during the construction period.

Security Bureau
April 2000

(PWSC0248/WIN10)




位置圖 LOCATION PLAN 比例 SCALE 1:75000



擬建的消防局暨救護站
PROPOSED FIRE STATION
CUM AMBULANCE DEPOT

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title 118BF 將軍澳第八十七區 消防局暨救護站 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