

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Medical Subventions

50MM – Remodelling of the Tuen Mun Polyclinic Building for the establishment of an ophthalmic centre

Members are invited to recommend to Finance Committee the upgrading of **50MM** to Category A at an estimated cost of \$82.1 million in money-of-the-day prices for the remodelling of the Tuen Mun Polyclinic Building for the establishment of an ophthalmic centre.

PROBLEM

There is a pressing need to meet the increasing demand for ophthalmic services in the New Territories West (NTW) hospital cluster.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Health, Welfare and Food, proposes to upgrade **50MM** to Category A at an estimated cost of \$82.1 million in money-of-the-day (MOD) prices to remodel the Tuen Mun Polyclinic (TMPC) Building for the establishment of an ophthalmic centre.

PROJECT SCOPE AND NATURE

3. The scope of the project comprises -

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- (a) the refurbishment of the vacant premises of the TMPC Building for accommodating an ophthalmic centre with 12 consultation rooms, three operating theatres, a pharmacy and other supporting facilities;
- (b) the upgrading of the existing building services (including electrical and mechanical (E&M) installations) for the entire TMPC Building, including the construction of eight new plant rooms; and
- (c) landscaping and associated external works.

4. A site plan of the TMPC Building is at Enclosure 1. We plan to start the construction works in October 2003 for completion in January 2005.

JUSTIFICATION

5. At present, the Hospital Authority (HA) provides medical services for Yuen Long and Tuen Mun districts through its NTW hospital cluster, which comprises Tuen Mun Hospital (TMH), Pok Oi Hospital (POH), Castle Peak Hospital and Siu Lam Hospital. Yuen Long Yung Fung Shee Ophthalmic Centre (YLYFSOC), which is under the management of TMH, is the key ophthalmic out-patient clinic providing comprehensive ophthalmic services to residents in the NTW cluster and serves as a major referral centre for secondary and tertiary ophthalmic care of the region.

6. YLYFSOC was designed in the late 1970s with a planned total annual capacity of about 30 000 attendances / operations only. Over the years, the demand for ophthalmic services in the NTW cluster has grown tremendously. The total annual throughput of YLYFSOC in 2001-02 amounted to 106 954 specialist out-patient (SOP) attendances, 1 158 major operations, 531 intermediate operations and 2 843 minor operations, and was four times the originally planned capacity. Compared with the throughput of 71 728 SOP attendances, 912 major operations, 281 intermediate operations and 2 095 minor operations in 1996-97, service volume has increased by 50%. According to the latest projections of the Census and Statistics Department, the population in the NTW cluster will increase by 15% from 1 062 500 in 2002 to 1 216 800 in 2010. The existing facilities of YLYFSOC are grossly inadequate in terms of space, provision and design to cope

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with the high service demand and the present-day service requirements, not to mention the future service demand. For instance, with only four consultation rooms, two to three doctors have to share a consultation room in providing consultations and treatment to patients, thus compromising the privacy of patients. As there is only one operating theatre, the average waiting time for operations has been unreasonably long: 24 months for major operations and 26 months for intermediate / minor operations.

7. The expansion of YLYFSOC to cope with the increasing demand for ophthalmic services in the NTW cluster has been long overdue. In-situ expansion of YLYFSOC is not feasible as there are no vacant premises in the building where the centre is currently located. As vacant premises are available at the TMPC Building following the relocation of TMPC to TMH upon the completion of the Tuen Mun Ambulatory Care Centre under **35MM** “Tuen Mun Hospital – relocation of Tuen Mun Polyclinic” in end 2001, we therefore propose to refurbish the vacant premises at the TMPC Building for reprovisioning and expansion of YLYFSOC. The new ophthalmic centre will have 12 consultation rooms and three operating theatres with an annual handling capacity of around 120 000 SOP attendances, 2 300 major operations, 600 intermediate operations and 3 200 minor operations. In this connection, the planned out-patient capacity of the new ophthalmic centre can meet service demand at least up to 2010. To provide a comprehensive range of ophthalmic care, the centre will introduce new services such as day surgery, eye electrophysiological studies and low visual aid services. Tertiary ophthalmic care in the NTW cluster and secondary ophthalmic care in the Tuen Mun District would in future be provided by the new ophthalmic centre at the TMPC Building, while secondary ophthalmic care in the Yuen Long District would be provided by the new eye clinic to be set up at POH upon completion of project **5ME** “Redevelopment and expansion of Pok Oi Hospital” by end 2006. With the increase in the number of operating theatres in the new ophthalmic centre, the average waiting time for operations can be shortened to 12-13 months.

8. The TMPC Building was constructed in the 1970s and has not undergone major renovation since then. Although the ophthalmic centre would take up only about 76% of the construction floor area (CFA) of the TMPC Building, we need to upgrade the existing building services of the entire TMPC Building, including E&M installations, fire services installations, plumbing/drainage installations and lift services, in order to meet the current statutory requirements and standards. We also need to refurbish those floors in the TMPC Building to accommodate the new ophthalmic centre and to meet the operational needs of the centre. That apart, we

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shall conduct minimal touching up and repainting works to the other floors of the TMPC Building affected by the remodelling works of the new ophthalmic centre at an estimated cost of \$850,000. We have included this cost as part of the building cost in the project estimate in paragraph 9 below.

FINANCIAL IMPLICATIONS

9. We estimate the total cost of this project to be \$82.1 million in MOD prices, made up as follows -

	\$ million	
(a) Building	32.4	
(b) Building services	23.0	
(c) Landscaping and associated external works	5.2	
(d) Furniture and equipment (F&E) ¹	21.5	
(e) Contingencies	6.0	

Sub-total	88.1	(in September 2002 prices)
(f) Provisions for price adjustment	(6.0)	

Total	82.1	(in MOD prices)

The CFA of the new ophthalmic centre is 4 950 square metres. The estimated construction unit cost, represented by building and building services costs, is \$11,020 per square metre in September 2002 prices. The unit cost is comparable to that for other similar projects undertaken by the Government.

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¹ Based on an indicative list of furniture and equipment items and their estimated prices.

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

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 04	10.0	0.94300	9.4
2004 – 05	35.0	0.93003	32.6
2005 – 06	30.0	0.93003	27.9
2006 – 07	13.1	0.93003	12.2
	88.1		82.1

11. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2007. We will deliver the remodelling works under 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.

12. We estimate the annual recurrent expenditure arising from the project to be around \$5.5 million. With the implementation of the population-based funding mechanism, the provision of recurrent funding will no longer be facility-based. No separate resources will therefore be provided to HA to cover the recurrent consequences arising from this project.

13. HA has assessed the requirements for F&E for this project, and estimated the F&E cost to be \$21.5 million. The proposed F&E provision represents 36.0% of the total construction cost² of the remodelling project. This percentage is relatively high, as medical equipment items (including expensive surgical equipment) need to be acquired to support the new and expanded services in the new ophthalmic centre. Also, as this is a remodelling project, the construction cost is comparatively lower than the cost of constructing a new ophthalmic centre. All F&E items to be procured for the project are estimated not to exceed \$1 million per item. A list of the top five most expensive F&E items to be procured for the project is at Enclosure 2.

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² Represented by building, building services and external works costs.

PUBLIC CONSULTATION

14. HA consulted the Social Service Committee of the Tuen Mun District Council on 12 November 2002. Members of the Committee supported the proposed project. HA also consulted the Social Services, Housing and Publicity Committee of the Yuen Long District Council on 13 January 2003. While members of the Committee generally supported the proposed project, they raised concerns about the transportation problems to be encountered by Yuen Long residents in view of the long commuting distance between Yuen Long and the new ophthalmic centre. HA has reflected the concerns of the Yuen Long District Council to the Transport Department and requested the Department to consider enhancing the public transport service between Yuen Long and the new ophthalmic centre in Tuen Mun.

15. We consulted the Legislative Council Panel on Health Services on the proposal on 10 March 2003. While Panel members supported the proposed project, one member voiced concern about the transportation problems to be encountered by Yuen Long residents and urged that public transport service between Yuen Long and Tuen Mun be enhanced. HA will continue to follow up the public transport issue with the Transport Department.

ENVIRONMENTAL IMPLICATIONS

16. This is a non-designated project under the Environmental Impact Assessment Ordinance, and will not cause long-term adverse environmental 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.

17. At the planning and design stages, we have considered measures to reduce the generation of construction and demolition (C&D) materials. We will encourage the contractors to use non-timber formwork and recyclable materials for temporary works to minimise the generation of C&D materials. 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.

18. 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, reuse and recycling of C&D materials for monitoring purposes. We estimate that the project will generate about 2 145 cubic metres (m³) of C&D materials. Of these, we will deliver about 92 m³ (4.3%) to the recycling plant at Tuen Mun Area 38 for production of recycled aggregates, reuse 1 719 m³ (80.1%) as fill in public filling areas³ and dispose of 334 m³ (15.6%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$41,750 for this project (based on a notional unit cost⁴ of \$125/m³).

LAND ACQUISITION

19. The project does not require land acquisition.

BACKGROUND INFORMATION

20. The existing TMPC Building was built in the 1970s and is located in the Tuen Mun Town Centre. In February 1998, Finance Committee approved the upgrading of **35MM** “Tuen Mun Hospital – relocation of Tuen Mun Polyclinic” to Category A at an estimated cost of \$634.2 million in MOD prices. Upon completion of the relocation of TMPC to TMH under **35MM** in end 2001, the 2/F to 4/F and 6/F of the TMPC Building have been completely vacated while the 1/F and 5/F have been partially vacated. Facilities remaining in the TMPC Building include a renal dialysis centre and the Tuen Mun Community Nursing Service Centre run by HA, and a Social Hygiene Clinic run by the Department of Health.

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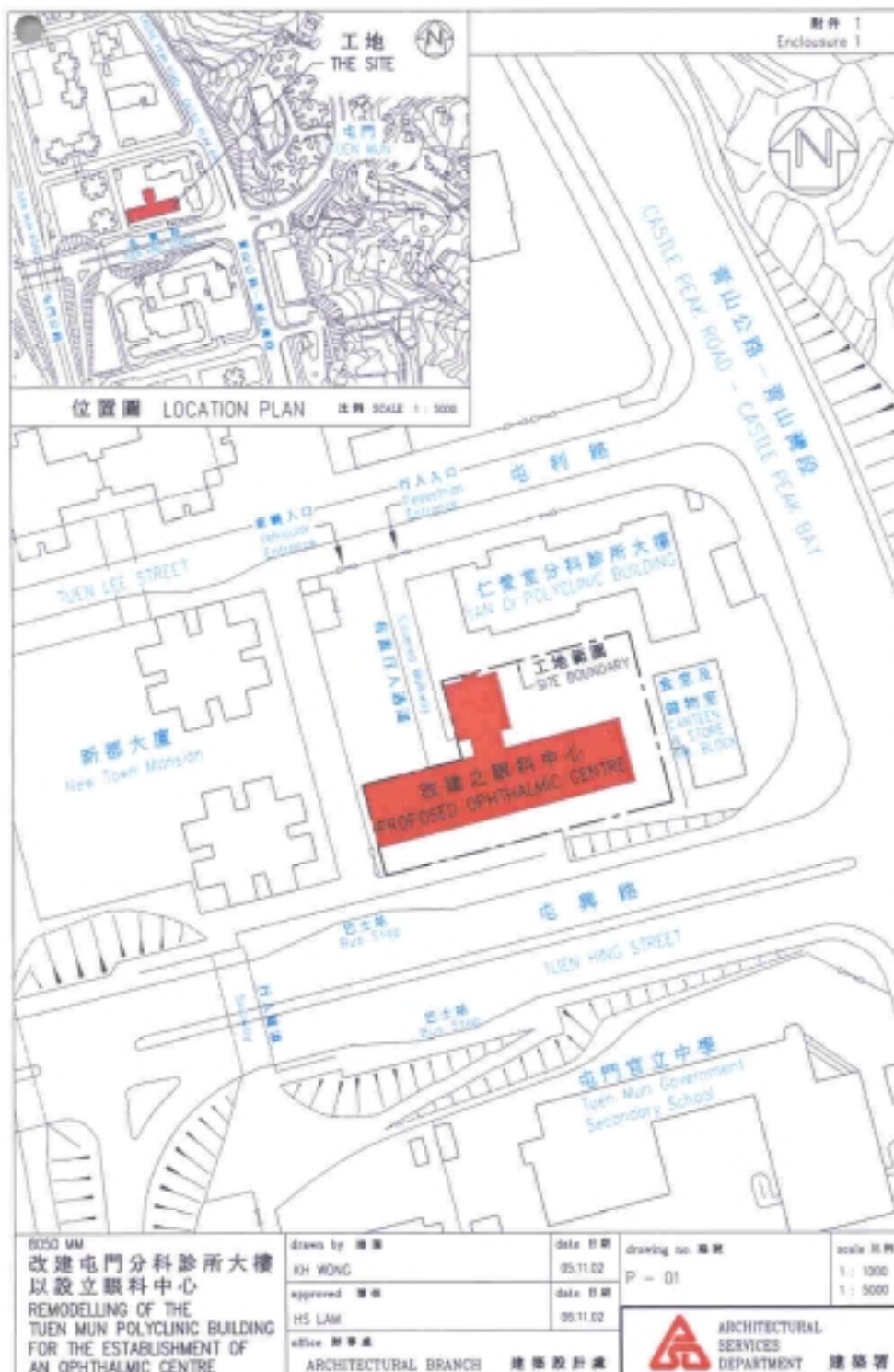
³ A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

⁴ 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 per 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.

21. We upgraded **50MM** to Category B in November 2002. D Arch S has completed the detailed design of the project with in-house staff resources and is now finalising the tender documents also with in-house resources.

22. We estimate that **50MM** will create some 115 jobs, comprising two professional staff, three technical staff and 110 labourers, totalling 1 450 man-months.

Health, Welfare and Food Bureau
April 2003



8050 MM
改建屯門分科診所大樓
以設立眼科中心
REMODELLING OF THE
TUEN MUN POLYCLINIC BUILDING
FOR THE ESTABLISHMENT OF
AN OPHTHALMIC CENTRE

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**50MM – Remodelling of the Tuen Mun Polyclinic Building for the
Establishment of an Ophthalmic Centre**

List of the five most expensive furniture and equipment items

Description	Qty	Unit cost (\$ million)	Total cost (\$ million)
Operation microscope system, with 3D compact video camera system	2	0.850	1.700
Multi-wavelength laser system	1	0.850	0.850
Digital ophthalmic imaging system and fundus camera	1	0.800	0.800
Ocular computerised tomogram	1	0.800	0.800
Vitrectomy system	1	0.800	0.800