

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Medical Subventions

8MA - Redevelopment of Caritas Medical Centre, phase 2

Members are invited to recommend to Finance Committee –

- (a) the upgrading of part of **8MA**, entitled “Redevelopment of Caritas Medical Centre, phase 2 – preparatory works” to Category A at an estimated cost of \$47.9 million in money-of-the-day prices; and
- (b) the retention of the remainder of **8MA** in Category B.

PROBLEM

Four of the seven buildings are dilapidated, substandard and cannot meet present-day requirements of a modern acute general hospital providing a full range of acute, rehabilitation and ambulatory care services. Despite phase 1 redevelopment, Caritas Medical Centre falls short of space for clinical use and treatment facilities to cope with the increasing service demand over the years.

/PROPOSAL

PROPOSAL

2. The Secretary for Health, Welfare and Food proposes to upgrade part of **8MA** to Category A at an estimated cost of \$47.9 million in money-of-the-day (MOD) prices for the preparatory works up to the pre-contract stage for the phase 2 redevelopment of CMC.

PROJECT SCOPE AND NATURE

3. The scope of **8MA** comprises –

- (a) preparatory works, including -
 - (i) site investigation; and
 - (ii) consultancy services for outline sketch design, detailed design, as well as tender documentation and assessment for the main works.
- (b) main works, including -
 - (i) demolition of the existing Wai Ming Block for the construction of a new ambulatory / rehabilitation building to accommodate 260 convalescent / rehabilitation beds and ambulatory care facilities on the site where Wai Ming Block is currently located;
 - (ii) site formation and excavation;
 - (iii) piling works;
 - (iv) refurbishment of seven out of 17 floors of Wai Oi Block to accommodate tele-health service, nurse specialist office, community nursing office, in-patient records store, maintenance department, central domestic services, security and transport services, a training and conference centre, a library, Red Cross School and staff changing facilities reprovisioned from Wai Ming Block, Wai On Block and Wai Yan Block;

/(v)

- (v) construction of two link bridges connecting Wai Shun Block with the proposed ambulatory and rehabilitation building and Wai Oi Block respectively;
- (vi) demolition of Wai On Block, Wai Tak Block and Wai Yan Block for the construction of a rehabilitation garden and external landscaping; and
- (vii) consultancy services for contract administration and site supervision of the main works.

4. We propose to upgrade the part of the project covering the preparatory works as described in paragraph 3(a) above to Category A at an estimated cost of \$47.9 million in MOD prices. The proposed preparatory works would commence in October 2003 for completion in mid-2006. The main works as described in paragraph 3(b) above are estimated to cost about \$1,200 million pending detailed design. We aim to seek funding for the main works in 2006-07 with a view to completing phase 2 redevelopment of CMC by 2010. The site plan of the existing CMC and the tentative site plan of CMC¹ upon completion of phase 2 redevelopment are at Enclosures 1 and 2 respectively.

JUSTIFICATION

Substandard building conditions

5. CMC was built in 1964. Except for Wai Shun Block (the new acute block built in 2002 under 7MA “Redevelopment of the Caritas Medical Centre” under phase 1 redevelopment of CMC), Wai Oi Block (built in 1988) and Wai Yee Block (built in 1964 and renovated in 1993), all four other hospital buildings (coloured pink on Enclosure 1) are old, dilapidated and substandard, and cannot meet the present-day requirements of a modern acute general hospital. All these buildings (i.e. Wai Ming Block, Wai On Block, Wai Tak Block and Wai Yan Block) have inadequate or even no emergency power supply. Wai Yan Block, Wai On Block and Wai Tak Block do not have automatic fire alarm system for fire

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¹ The site plan is tentative. This may be modified by the consultant in the light of findings under the preparatory works stage.

detection nor sprinkler system for fire protection. Wai Ming Block is only partially equipped with such systems. Such deficiencies pose potential risks to the safety of patients, staff and the public. The substandard building conditions of these blocks have also made it increasingly costly to maintain CMC in a serviceable condition.

Insufficient clinical space

6. Notwithstanding completion of phase 1 redevelopment, clinical space provision in CMC is still grossly inadequate to meet the increasing medical needs of residents in the Kowloon West (KW) cluster². Over the years, the demand for specialist out-patient (SOP) consultation services in the KW cluster has grown tremendously. The number of SOP attendances in CMC increased from 257 000 in 1996-97 to 345 000 in 2002-03, representing a 34.2% rise. To cope with service demand, CMC commissioned subspecialty clinics, an eye clinic, an eye day surgery suite as well as a psychiatric clinic, and introduced various allied health and supportive services. All these developments led to serious overcrowding in the SOP department in Wai Tak Block. Due to lack of space, doctors have to share consultation rooms, thus compromising patients' privacy. The existing facilities are grossly inadequate in terms of space, provision and design to meet the high service demand and present-day service requirements, not to mention the future service demand. According to the latest projections of the Census and Statistics Department, the population in the KW cluster will increase from 1 805 000 in 2002 to 2 068 000 in 2011, representing a 14.6% rise. We propose to increase the number of consultation rooms in the SOP department from 35 to 87 to cater for an increase in the annual handling capacity from 345 000 to 596 000 attendances.

Expansion of geriatric services

7. At present, the KW cluster has the second highest percentage (13.5%) of elderly population aged 65 or above among all clusters in the territory. About 65% of the patients of CMC come from the Sham Shui Po district, which has the highest percentage (16%) of elderly population aged 65 or above in the territory. According to the latest projections of the Census and Statistics

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² At present, HA provides public hospital services for Sham Shui Po, Mongkok, Wong Tai Sin, Kwai Tsing, Tsuen Wan and North Lantau districts through its KW hospital cluster, which comprises CMC, Kwong Wah Hospital, Our Lady of Maryknoll Hospital, Wong Tai Sin Hospital, Kwai Chung Hospital, Princess Margaret Hospital and Yan Chai Hospital.

Department, the elderly population aged 65 or above in the KW cluster will increase from 243 000 in 2002 to 290 000 in 2011, representing a 19.3% increase. For the Sham Shui Po district, the elderly population aged 65 or above is projected to increase by 19.3% from 57 000 in 2002 to 68 000 in 2011. With an ageing population which is more prone to chronic illnesses and disabilities, there is increasing demand for rehabilitation services in the KW cluster. At present, CMC runs a geriatric day hospital which is operated by a multi-disciplinary team of health care professionals to provide comprehensive day care programmes for the treatment, rehabilitation, and health maintenance of elderly patients. To cope with the increasing service demand, we propose to expand the capacity of the geriatric day hospital from the existing 40 places to 60 places to cater for an increase in annual attendances from around 10 000 to 15 000. We shall also increase the number of convalescent / rehabilitation beds from 242 to 260.

Expansion of ambulatory services

8. With the advent of new and innovative technologies in the surgical field, the international trend is to provide surgical services on ambulatory rather than in-patient basis. Development of ambulatory surgical services not only enhances cost-effectiveness but also improves patient satisfaction in terms of convenience and quality of care. In line with this development, we propose to set up an expanded day surgery centre with a pre-admission clinic and three designated operating theatres in CMC. By increasing the number of operating theatres in the day surgery centre from two to three, the number of operations the centre can handle each year will increase from 3 300 to 5 000. We shall also increase the number of day beds in CMC from 18 to 50. Some 42 of these day beds will be used for day procedures and post-operative recovery, and the remaining eight for day hospice care.

The Redevelopment Project

9. Except for acute services that are provided in Wai Shun Block and mentally handicapped services in Wai Yee Block, other services in CMC are scattered among four hospital blocks, namely, Wai Ming Block, Wai On Block, Wai Tak Block and Wai Yan Block. To enhance the operational efficiency of the entire hospital and to provide clinical space for expanded hospital services, we propose to demolish Wai Ming Block and to construct on the same site a new block to accommodate all ambulatory and rehabilitation services of CMC. The hospital services and facilities currently accommodated in Wai Ming Block

/(including)

(including in-patient wards, allied health services and stores) will be temporarily decanted to the other premises within CMC before eventual reprovisioning to the new ambulatory / rehabilitation block. The Hospital Authority (HA) will ensure that existing patient services will not be disrupted during the entire construction period. Upon completion of the new block, HA will demolish Wai On Block, Wai Tak Block and Wai Yan Block to make way for a rehabilitation garden, and reprovision the services and facilities currently accommodated in these blocks to the new ambulatory / rehabilitation block.

10. CMC is situated on a slope. Commuting among the various hospital blocks has always posed a problem for patients, hospital staff and the public. There is an operational need to link up Wai Shun Block, Wai Oi Block and the proposed ambulatory / rehabilitation block to facilitate inter-block commuting. We propose to construct two link bridges to connect Wai Shun Block with Wai Oi Block and the proposed ambulatory / rehabilitation block respectively.

11. At present, Wai Oi Block houses administrative offices and medical support and ancillary facilities such as microbiology and histopathology laboratory, in-patient pharmacy, central sterile supplies department, staff quarters, etc. To enhance operational efficiency of the entire hospital, we propose to turn Wai Oi Block into an administration block and to reprovision those frontline medical support and ancillary facilities to other clinical blocks. As the first step, we have, under phase 1 redevelopment, reprovisioned the hospital kitchen from Wai Oi Block to the new Wai Shun Block. Under phase 2 redevelopment, we propose to relocate the in-patient pharmacy from Wai Oi Block to the new ambulatory / rehabilitation block, and to refurbish the vacated areas and the vacant staff quarters in Wai Oi Block to accommodate facilities that will be reprovisioned from Wai Ming Block, Wai On Block and Wai Yan Block, including tele-health service, nurse specialist office, community nursing office, in-patient records store, maintenance department, central domestic services, security and transport services, a training and conference centre, a library, Red Cross School and supporting facilities.

12. Upon completion of the phase 2 redevelopment in 2010, CMC will have a capacity of 1 276 in-patient beds, 50 day beds and 60 geriatric day places. CMC will be able to handle 596 000 specialist out-patient attendances annually. The operational efficiency of the entire hospital will be enhanced through service realignment and improved connections among hospital buildings.

13. Before we can embark on the construction works for the phase 2 redevelopment of CMC as described in paragraph 3(b) above, we need to conduct site investigation as well as develop detailed design and prepare tender documents for the main works. HA does not have the expertise to undertake such specialist tasks in-house. We therefore propose to engage professional consultants to carry out these preparatory works.

14. In the light of the recent outbreak of the severe acute respiratory syndrome, there is a need to enhance the existing infectious disease facilities of the public hospital system. Under the preparatory works for the project, HA will request the professional consultants to incorporate in the design appropriate provisions to enable facilities in the new ambulatory / rehabilitation block to be used for handling infectious disease patients in the event of outbreak of infectious disease.

FINANCIAL IMPLICATIONS

15. HA, in consultation with the Director of Architectural Services, estimates the cost of the proposed preparatory works to be \$47.9 million in MOD prices, made up as follows -

		\$ million	
(a)	Consultants' fees for	49.5	
	(i) outline sketch plan	9.0	
	(ii) detailed design	27.0	
	(iii) tender documentation and assessment	13.5	
(b)	Site investigations	2.0	
	Sub-total	51.5	(in September 2002 prices)
(c)	Provision for price adjustment	(3.6)	
	Total	47.9	(in MOD prices)

/A

A breakdown by man-months of the estimate of consultants' fees is at Enclosure 3.

16. Subject to Members' approval, HA will phase the expenditure as follows –

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 2004	6.5	0.94300	6.1
2004 – 2005	38.0	0.93003	35.3
2005 – 2006	7.0	0.93003	6.5
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Total	51.5		47.9

17. We have derived the MOD estimate on the basis of the Government's latest forecasts of trend labour and construction prices for the period 2003 to 2006. HA will engage professional consultants through competitive bidding in line with prevailing government procedures. The competitive bidding will be carried out on the basis of fixed-price lump-sum fees. HA will tender the site investigation works under a fixed-price lump-sum contract without provision for price fluctuation, as the scope of works can be clearly defined in advance and the works period will not exceed 21 months.

18. The proposed preparatory works have no recurrent implications.

PUBLIC CONSULTATION

19. HA consulted the Sham Shui Po District Council on 11 March 2003 on the proposed redevelopment of CMC. The Council fully supported the proposal and urged HA to expedite the project so as to improve the provision of service by CMC.

20. We consulted the LegCo Panel on Health Services on 9 June 2003. Members did not object to the proposed redevelopment project. They urged HA to provide facilities for handling infectious disease in the new ambulatory / rehabilitation block.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

21. This is a non-designated project under the Environmental Impact Assessment Ordinance. Consultants engaged by HA completed a Preliminary Environmental Review (PER) for the proposed works of CMC in October 2001. The PER concluded and the Director of Environmental Protection agreed that the project would not cause long-term environmental impact and that an Environmental Impact Assessment was not necessary.

22. The proposed detailed design works will not cause any adverse environmental impact. HA will implement standard environmental pollution control measures to manage the environmental impact of the site investigation works. The site investigation works will only generate a minimal amount of construction and demolition (C&D) materials. HA will require the consultants of detailed design works to implement measures to minimise the generation of C&D materials and to reuse / recycle C&D materials as much as possible in the future implementation of construction contracts.

LAND ACQUISITION

23. The proposed preparatory works and main works do not require land acquisition.

BACKGROUND INFORMATION

24. CMC is an acute general hospital with 1 378 in-patient beds, 18 day beds and 40 geriatric day places. It runs a 24-hour accident and emergency department and provides a full range of acute, extended care, ambulatory and community medical services. Its clinical specialties include medicine, surgery, orthopaedics and traumatology, paediatrics, ophthalmology, mentally handicapped and intensive / coronary care.

25. Prior to 2002, CMC had eight hospital blocks, namely, Wai Yan Block (built in 1964), Wai Lok Block (built in 1965), Wai On Block (built in 1965), Wai Tak Block (built in 1966), Wai Mon Block (built in 1968), Wai Ming Block (built in 1978), Wai Oi Block (built in 1988) and Wai Yee Block (built in 1964 and renovated in 1993 with a capacity of 300 beds for the provision of medical services to mentally handicapped children). In November 1997, the

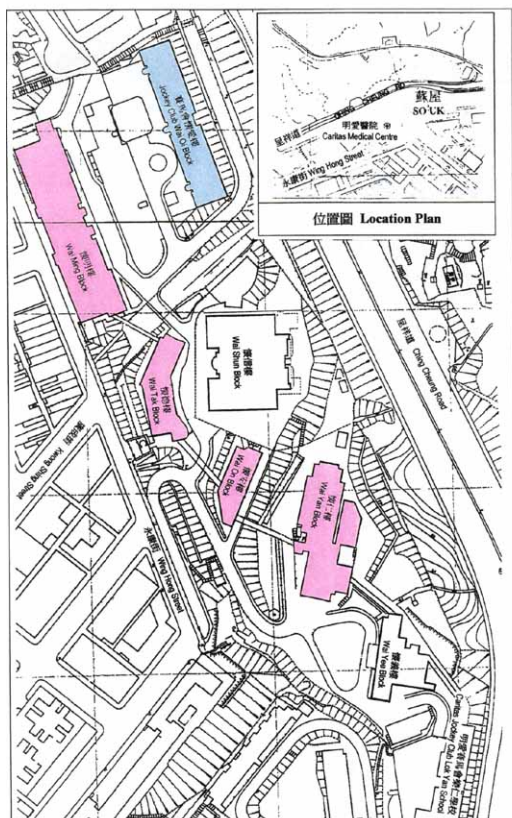
/Finance

Finance Committee approved funding of \$769.2 million in MOD prices for **7MA** to redevelop Wai Lok Block and Wai Mon Block into a 14-storey acute block for housing all facilities for the provision of acute services. Upon completion of phase 1 redevelopment of CMC under **7MA**, the new acute block, Wai Shun Block, was commissioned in early 2002.

26. Wai Ming Block currently accommodates rehabilitation, infirmary and hospice wards, as well as physiotherapy department, occupational therapy department, medical social service, electro-diagnostic unit, blood-taking centre, patient resource centre, Red Cross library, doctors' common room, in-patient medical records store, shroff office, tuck shop, general stores and carparks. Wai Tak Block accommodates the general out-patient department, SOP department, out-patient medical records store, out-patient X-ray department and out-patient pharmacy. Wai On Block accommodates Red Cross School, HA staff clinic, integrated clinic, tele-health clinic, diabetics centre, as well as clinical psychology, podiatry, speech therapy and dietetics department. Wai Yan Block accommodates the geriatric day hospital, prosthetics and orthotics department, and maintenance department.

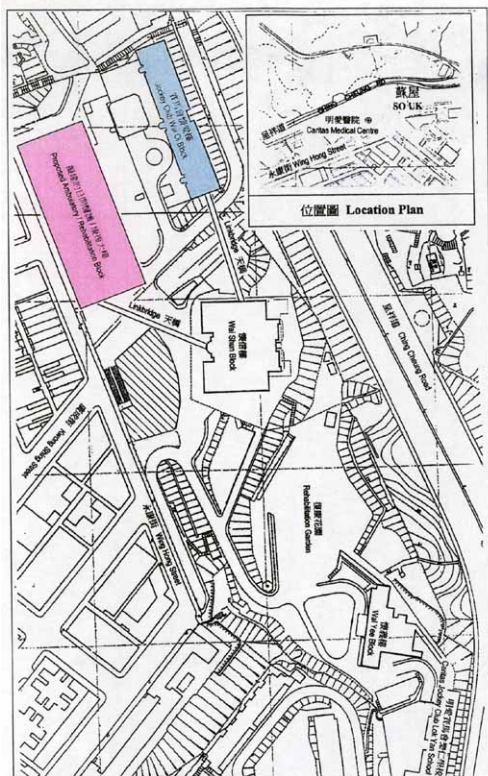
27. We estimate that the proposed preparatory works will create some 45 jobs, comprising 37 professional / technical staff and 8 labourers, totalling 700 man-months.

Health, Welfare and Food Bureau
June 2003



8008MA - Redevelopment of Caritas Medical Centre, phase 2
明愛醫院第二期重建計劃

Site Plan of Existing Caritas Medical Centre (N.T.S.) 明愛醫院現時平面圖 (不按比例)



8008MA - Redevelopment of Caritas Medical Centre, phase 2
明愛醫院第二期重建計劃

Site Plan of Caritas Medical Centre upon completion of Phase 2 Redevelopment (Tentative) (N.T.S.)
明愛醫院二期重建後平面圖 (初步) (不按比例)

8MA – Redevelopment of Caritas Medical Centre, phase 2**Breakdown of estimates for consultants' fees^(Note 1)**

Consultants' staff costs			Estimated man-months	Average MPS* salary point	Multiplier ^(Note 2)	Estimated fees (\$ million)
A. Outline Sketch Plan						
(a)	Architectural	Professional	18	38	2	2.1
		Technical	21	14	2	0.8
(b)	Building services	Professional	15	38	2	1.7
		Technical	18	14	2	0.7
(c)	Structural engineering	Professional	12	38	2	1.4
		Technical	15	14	2	0.6
(d)	Quantity surveying	Professional	3	38	2	0.4
		Technical	9	14	2	0.3
(e)	Project management	Professional	9	38	2	1.0
		Technical	-	-	-	-
Sub-total						9.0
B. Detailed Design						
(a)	Architectural	Professional	55	38	2	6.4
		Technical	65	14	2	2.5
(b)	Building services	Professional	55	38	2	6.4
		Technical	65	14	2	2.5
(c)	Structural engineering	Professional	30	38	2	3.5
		Technical	45	14	2	1.7
(d)	Quantity surveying	Professional	10	38	2	1.2
		Technical	20	14	2	0.8
(e)	Project management	Professional	17	38	2	2.0
		Technical	-	-	-	-
Sub-total						27.0

Consultants' staff costs			Estimate d man- months	Average MPS* salary point	Multiplier	Estimated fees (\$ million)
C. Tender Documentation						
(a)	Architectural	Professional	18	38	2	2.1
		Technical	36	14	2	1.4
(b)	Building services	Professional	15	38	2	1.7
		Technical	30	14	2	1.2
(c)	Structural engineering	Professional	12	38	2	1.4
		Technical	18	14	2	0.7
(d)	Quantity surveying	Professional	24	38	2	2.8
		Technical	32	14	2	1.2
(e)	Project management	Professional	9	38	2	1.0
		Technical	-	-	-	-
Sub-total						13.5
Total consultants' staff costs						49.5

* MPS = Master Pay Scale

Notes

1. The figures given above are based on estimate prepared by the HA. D Arch S has examined the figures and considered them reasonable. We will only know the actual man months and actual fees when we have selected the consultants through the competitive bidding system.
2. A multiplier of 2.0 is applied to the average MPS point to arrive at the full staff costs for the staff employed by the consultants. The staff costs include the consultants' overheads and profit. (As at 1 October 2002, MPS point 38 = \$57,730 per month and MPS point 14 = \$19,195 per month). A multiplier of 1.6 is applied in the case of site staff supplied by the consultants.