

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

402RO – District open space in Area 9, Tsing Yi

Members are invited to recommend to Finance Committee the upgrading of **402RO** to Category A at an estimated cost of \$175.9 million in money-of-the-day prices for the development of a district open space in Area 9, Tsing Yi.

PROBLEM

We need to provide more public open space in Kwai Tsing District.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **402RO** to Category A at an estimated cost of \$175.9 million in money-of-the-day (MOD) prices for the development of a district open space in Area 9, Tsing Yi.

PROJECT SCOPE AND NATURE

3. The project site, with a total area of about 5.6 hectares (ha), is located in Area 9, Tsing Yi. The scope of **402RO** includes –

- (a) a waterfront promenade;
- (b) a jogging trail with fitness stations;

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- (c) an 11-a-side artificial turf soccer pitch;
- (d) two basketball cum volleyball courts;
- (e) a fitness corner with elderly fitness stations;
- (f) children play areas with play equipment for different age groups;
- (g) landscaped areas for sitting-out and gateball activities;
- (h) cycling and skateboarding areas and a bicycle kiosk;
- (i) a hard-paved area for multi-purpose activities such as tai chi playing;
- (j) car parking spaces for private cars, motorcycles and coaches; and
- (k) a service building with ancillary facilities, including toilets with changing facilities, office and store rooms.

_____ A site plan showing the conceptual layout of the proposed open space is at Enclosure 1. We plan to start the construction works in November 2007 for completion in October 2009.

JUSTIFICATION

4. Tsing Yi New Town is a densely populated residential area with high-rise residential developments such as Cheung On Estate, Cheung Fat Estate, Tsing Yi Estate, Cheung Hong Estate, Cheung Ching Estate, Ching Tai Court, Ching Nga Court, Ching Wang Court, Villa Esplanada and Tierra Verde. It has a current population of around 200 000.

5. As a reference, the Hong Kong Planning Standards and Guidelines suggests a provision of about 40 ha of public open space for the current population in the Tsing Yi New Town. At present, there are about 55 ha of public open space in Tsing Yi, including about 28 ha of open space provided by the Housing Department. In considering the development of new leisure projects, we also take into account other factors including the views of the Kwai Tsing District Council, the changing needs of the community and the utilisation rates of existing facilities. The utilisation rate of existing leisure facilities in Tsing Yi is very high and there is continuous demand for active outdoor recreation and sports facilities. The existing basketball courts and soccer pitches in the area are well patronised.

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In 2006, the utilisation rate of the in-field 11-a-side natural turf soccer pitch at Tsing Yi Sports Ground is as high as 100%. The hard-surfaced soccer pitch and basketball court in Tsing Yi Park are also well patronised by the public. There are no gateball facilities provided by the Leisure and Cultural Services Department in Tsing Yi area. Further provision of outdoor sports facilities supported with some passive landscaped areas and sitting-out facilities for the enjoyment of nearby residents would be highly welcome.

6. There are a number of private and public housing estates in the vicinity of the project site, namely, Cheung On Estate, Cheung Fat Estate, Ching Tai Court, Ching Nga Court and Villa Esplanada. The total population of these estates is about 54 000. There are also two secondary schools and three primary schools nearby. It is expected that the proposed district open space, which will be within walking distance of 5 to 20 minutes from these estates, would become a popular leisure venue for the local residents and will further improve the living environment.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$175.9 million in MOD prices (see paragraph 8 below), made up as follows –

	\$ million
(a) Site works	5.1
(b) Building	18.5
(c) Building services	16.2
(d) Drainage works	7.1
(e) External works	83.1
(f) Soft landscaping works	18.0
(g) Consultants' fees for	7.8
(i) contract administration	3.2
(ii) site supervision	4.6
(h) Furniture and equipment ¹	0.7

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¹ Based on the furniture and equipment provided in existing/planned facilities of similar scale (e.g. office furniture, litter bins and portable signages, etc).

		\$ million
(i)	Contingencies	16.3
	Sub-total	172.8 (in September 2006 prices)
(j)	Provision for price adjustment	3.1
	Total	175.9 (in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for the consultants' fees by man-months is at Enclosure 2. We consider the estimated project cost reasonable as compared with similar projects undertaken by the Government.

8. Subject to approval, we will phase the expenditure as follows –

Year	\$ million (Sept 2006)	Price adjustment factor	\$ million (MOD)
2007 – 08	3.0	0.99900	3.0
2008 – 09	48.0	1.00649	48.3
2009 – 10	60.0	1.01656	61.0
2010 – 11	39.0	1.02672	40.0
2011 – 12	22.8	1.03699	23.6
	172.8		175.9

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2007 to 2012. We will award the contract on a lump-sum basis because we can clearly define the scope of the works in advance, leaving little room for uncertainty. The contract will not provide for price adjustment because the contract period will not exceed 21 months.

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10. We estimate the annual recurrent expenditure arising from this project to be \$8.5 million.

PUBLIC CONSULTATION

11. We consulted the Recreation and Culture Committee (RCC) of the Kwai Tsing District Council on 14 October 2004 on the scope of the project. Members supported the project. We consulted the RCC on the conceptual layout of the project on 5 October 2006. Members expressed support and urged for its early implementation.

12. We circulated an information paper to the Legislative Council Panel on Home Affairs on 12 March 2007. Members did not raise any objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

13. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project will have no long-term environmental impact.

14. 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 contracts. 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.

15. We have considered measures in the planning and design stages to reduce the generation of construction and demolition (C&D) materials where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert C&D materials on site or in other suitable construction sites as far as possible, in order to minimise the disposal of C&D materials to public fill reception facilities² (e.g. using excavated materials for filling within the site). We will encourage the contractor to maximise the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimise the generation of construction waste.

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2 Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

16. We 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. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill, C&D materials and C&D waste to public fill reception facilities and landfills respectively through a trip-ticket system. We 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.

17. We estimate that the project will generate about 21 398 tonnes of C&D materials. Of these, we will reuse about 6 456 tonnes (30.2%) on site, and deliver 13 174 tonnes (61.5%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of 1 768 tonnes (8.3%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$576,698 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne³ at landfills).

LAND ACQUISITION

18. The project does not require any land acquisition.

BACKGROUND INFORMATION

19. We upgraded **402RO** to Category B in September 2005. We engaged an architectural consultant to carry out topographical survey in August 2006 and the detailed design in October 2006. We employed a term contractor to carry out the site investigation in January 2007 and a quantity surveying consultant to prepare the tender documents in February 2007. We charged the total cost of \$5.1 million to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The architectural consultant has completed the topographical survey and the detailed design of the project. The term contractor has completed the site investigation. The quantity surveying consultant is preparing the tender documents.

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3 This estimate has taken into account the cost of 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 is likely to be more expensive) when the existing ones are filled.

20. The proposed development of the district open space will involve the removal of two trees to be replanted within the project site. All trees to be transplanted are not important trees⁴. We will incorporate planting proposals as part of the project, including estimated quantities of 400 new trees, 150 000 shrubs and 3 000 m² of grassed area.


21. We estimate that the proposed works will create about 140 jobs (125 for labourers and 15 for professional/technical staff) providing a total employment of 2 600 man-months.

Home Affairs Bureau
April 2007

4 “Important trees” refer to trees in the Register of Old and Valuable Trees, or any trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.



402RO DISTRICT OPEN SPACE IN AREA 9, TSING YI 青衣第9區地區休憩用地	drawn by	Ada Cheung	date	28-3-2007	drawing no.	AB/5412/XA001	scale	1:2500
	approved by	Jimmy Yeung	date	28-3-2007				
	office	ARCHITECTURAL BRANCH			 ARCHITECTURAL SERVICES DEPARTMENT			

Enclosure 2 to PWSC(2007-08)12

402RO – District open space in Area 9, Tsing Yi

Breakdown of the estimate for consultants' fees

Consultants' staff costs		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Contract administration (Note 2)	Professional	–	–	–	1.9
	Technical	–	–	–	1.3
(b) Site supervision (Note 3)	Technical	160	14	1.6	4.6
Total :					<hr/> 7.8 <hr/>

*MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1 January 2007, MPS point 14 = 18,010 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **402RO**. The construction stage of the assignment will only be executed subject to Finance Committee's approval to upgrade **402RO** to Category A.
3. We will only know the actual man-months and actual costs after completion of the construction works.