

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Open spaces

371RO – Local open space in Area 14 (Mouse Island), Tuen Mun

Members are invited to recommend to Finance Committee the upgrading of **371RO** to Category A at an estimated cost of \$31.4 million in money-of-the-day prices for the construction of a local open space in Area 14 (Mouse Island), Tuen Mun.

PROBLEM

We need to provide more public open space in Tuen Mun District.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Home Affairs, proposes to upgrade **371RO** to Category A at an estimated cost of \$31.4 million in money-of-the-day (MOD) prices for the construction of the local open space in Area 14 (Mouse Island), Tuen Mun.

PROJECT SCOPE AND NATURE

3. The project site is about 4 700 square metres in size and the scope of the project comprises –

/(a)

- (a) a maritime theme garden of around 1 000 square metres, which includes a lighthouse, extensive soft landscaping and sitting out facilities;
- (b) a tai-chi area;
- (c) two children's play areas designed for two age groups;
- (d) slope stabilisation works for Mouse Island; and
- (e) ancillary facilities including store room, cleansing room and a meter room.

———— A site plan is at the Enclosure. We plan to start the construction works in October 2002 for completion in March 2004.

JUSTIFICATION

4. The Siu Lun area in Tuen Mun has a population of about 83 000 (consisting of 15 000 from Siu Lun Court, 13 000 from Handford Garden, Tsui Ning Garden and Goodview Garden, 35 000 from Yau Oi Estate and 20 000 from On Ting Estate). Apart from the Siu Lun Sports Ground, which is 1.3 hectares in size and comprises an 11-a-side natural grass pitch and a six-lane running track of 100 metres in length, there are at present only one small garden of about 3 200 square metres, namely, Ki Lun Kong Public Park provided by the Leisure and Cultural Services Department, and three gardens of 2.5 hectares in size in On Ting Estate, Yau Oi Estate and Siu Lun Court provided by the Housing Department. The existing recreational facilities are well patronised by the residents. The provision of this additional local open space would meet local demand for additional recreational facilities.

5. Within the project site is a knoll (Mouse Island) of about ten metres in height with a lighthouse at the top of it. The knoll was traditionally treated as a landmark by local fishermen. In view of this unique historical background, local residents and the Tuen Mun District Council are keen to preserve the knoll and to conserve the natural topographical features and mature trees there. To ensure public safety, slope stabilisation works for the knoll is required.

/FINANCIAL

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$31.4 million in MOD prices (see paragraph 7 below), made up as follows –

	\$ million	
(a) Site formation	1.3	
(b) Slope stabilisation works	2.5	
(c) Building	0.9	
(d) Building services	3.0	
(e) Drainage and external works	17.7	
(f) Soft landscaping works	0.9	
(g) Furniture and equipment ¹	0.1	
(h) Consultants' fees ² for –	2.5	
(i) Contract administration	0.6	
(ii) Site supervision	1.9	
(i) Contingencies	2.9	
Sub-total	31.8	(in September 2001 prices)
(j) Provision for price adjustment	(0.4)	
Total	31.4	(in MOD prices)

Due to inadequate in-house staff resources, D Arch S proposes to engage consultants to undertake contract administration and site supervision of the project.

/7.

¹ Based on the furniture and equipment provided in existing recreational facility of similar scale (e.g. **324RO** "District open space in Area 40, Tseung Kwan O").

² The consultants' fees form an optional part of the lump-sum price quoted by the consultants selected to carry out the detailed design and tender documentation mentioned in paragraph 15 of the paper. Subject to Members' approval to upgrade **371RO** to category A, D Arch S will direct the necessary works to be carried out.

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

Year	\$ million (Sept 2001)	Price adjustment factor	\$ million (MOD)
2002 – 03	2.0	0.98625	2.0
2003 – 04	16.8	0.98378	16.5
2004 – 05	9.0	0.98378	8.9
2005 – 06	2.5	0.98378	2.5
2006 – 07	1.5	0.98378	1.5
	31.8		31.4

8. We derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2002 to 2007. We will deliver the works through 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. D Arch S considers the estimated project cost reasonable as compared with similar parks built by the Government.

9. We estimate the additional annual recurrent expenditure arising from this project to be \$388,100.

PUBLIC CONSULTATION

10. We circulated the design and layout of the project to the Tuen Mun District Council on 7 March 2002. Members of the Council supported the implementation of the project. We consulted the Legislative Council "Subcommittee to follow up the outstanding capital works projects of the former municipal councils" on the proposed upgrading of this project to Category A on 7 March 2002 and Members did not raise any objection to the proposal.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

11. The project will not cause any 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 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.

12. At the planning and design stages, we have considered measures to reduce the generation of construction and demolition (C&D) materials. D Arch S has introduced more prefabricated building elements into the project designs to reduce temporary formwork and construction waste. We will use suitable excavated materials for filling within the project site to minimise off-site disposal. 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.

13. 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. The contractor will be required 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 2 000 cubic metres (m³) of C&D materials. Of these, we will reuse about 610 m³ (30.5%) on site, 1 300 m³ (65%) as fill in public filling areas³, and dispose of 90 m³ (4.5%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$11,250 for this project (based on a notional unit cost⁴ of \$125/m³).

/LAND

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.

LAND ACQUISITION

14. The project does not require land acquisition.

BACKGROUND INFORMATION

15. D Arch S engaged a consultant to complete a topographical survey on behalf of the former Regional Council at a cost of \$6,000. We upgraded **371RO** to Category B in October 2001. We also engaged a term contractor in March 2002 to carry out site investigation and consultants in April 2002 to carry out detailed design and tender documentation for the project at a total cost of \$2.8 million. We charged this amount to block allocation **Subhead 3100GX** "Project feasibility studies, minor investigations and consultants' fees for items in Category D of the Public Works Programme". The term contractor has completed the site investigation. The consultants have also completed the detailed design of the project and are now preparing the tender documents.

16. We estimate that the project will create 40 jobs with a total of 630 man-months comprising two professional staff, three technical staff and 35 labourers.

Home Affairs Bureau
May 2002