

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Sports facilities

242RS – Tseung Kwan O Sports Ground

Members are invited to recommend to Finance Committee the upgrading of **242RS** to Category A at an estimated cost of \$293.1 million in money-of-the-day prices for the construction of Tseung Kwan O Sports Ground.

PROBLEM

There are insufficient sports and recreational facilities in Tseung Kwan O (TKO). Besides, Hong Kong needs a sports ground equipped with the necessary warm-up and sufficient ancillary facilities for holding large scale international athletic events.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **242RS** to Category A at an estimated cost of \$293.1 million in money-of-the-day (MOD) prices for the construction of TKO Sports Ground.

PROJECT SCOPE AND NATURE

3. The project site is about 58 810 square metres in size and located in Area 45, TKO between Wan Po Road and Po Hong Road. The scope of **242RS** comprises –

/(a)

(a) Main Sports Ground

- (i) track and field provisions conforming to the International Association of Athletics Federations (IAAF) standards, including an eight-lane 400-metre all-weather synthetic running track, a javelin-throw circle, high jump take-off runways and pits, long jump and triple jump runways and pits, pole-vault runway and landing area, steeple chase facilities, a hammer and discus cage, and a shot-put throwing area;
- (ii) an 11-a-side natural turf football pitch conforming to the Federation Internationale de Football Association standards; and
- (iii) a covered spectator stand with a seating capacity of about 3 500, including a VIP section of 250 seats, and space for the provision of a temporary removable spectator stand with 1 500 seats.

(b) Secondary Sports Ground

- (i) warm-up track and field facilities up to IAAF specifications, including a loop of at least 300-metre running track together with a 120-metre straight track and facilities for field events (i.e. long jump, triple jump, pole-vault, high jump, shot-put, discus and hammer throw, javelin-throw and steeple chase); and
- (ii) a 7-a-side natural turf football pitch surrounded by the warm-up loop of running track mentioned in item (b)(i) above.

(c) Ancillary Facilities

- (i) vehicle parking spaces for 60 private cars and 10 coaches, a lay-by for taxis and two bicycle parking areas;
- (ii) entrance plaza with landscaped areas, a ticketing office, a main entrance foyer and associated facilities;

/(iii)

- (iii) modifications (including the provision of lift) to the existing footbridge near the entrance plaza; and
- (iv) ancillary facilities including changing rooms, toilets, doping control, first-aid, weight-lifting and massage rooms, administration offices, control and security rooms, press and interview facilities, store rooms, maintenance and service yards, refuse collection chambers, electrical and mechanical plant rooms, and an administration block near the secondary sports ground to accommodate the necessary facilities for organisation of events and conferences as well as holding of training exercises.

———— A site plan is at Enclosure 1. We plan to start the construction works in December 2005 for completion in December 2008.

JUSTIFICATION

4. TKO is a fast developing new town with a current population of 331 300 which will be increased by about 16% to about 383 500 in 2013. As a reference, the Hong Kong Planning Standards and Guidelines suggests that a sports ground should be provided for a population of 200 000 to 250 000. Although there is currently the Sai Kung Tang Siu Kin Sports Ground in the Sai Kung district, it is located in Sai Kung town, geographically separated from TKO. Therefore, there is a need to provide a sports ground in TKO. This also ties in with the planning objective of developing TKO new town into a self-contained community.

5. The population profile in TKO is relatively young. According to the latest 2001 Population Census, there is a significant percentage of children and young adults in TKO. About 52% of TKO's population is below 34 years of age. This forms a strong potential user base for the proposed sports facilities. There are also 47 secondary and primary schools in TKO which could make use of the sports ground for organising athletic meets and other sports activities. The sports ground will be well served by public transportation including the Mass Transit Railway. It could also be readily used by others outside the TKO area.

6. Currently, we manage a total of 52 natural turf football pitches in Hong Kong. They are very popular with an average usage rate of almost 100%. At present, there are only one artificial turf football pitch and one hard-surfaced football pitch in Po Tsui Park, and one hard-surfaced football pitch in Po Hong Park. Both parks are located at the northern part of TKO. The artificial turf pitch has an average usage rate of 92% whereas the two hard-surface pitches have an average usage rate of 88% during peak hours in 2004. We expect that the proposed natural turf football pitches of the new sports ground (an in-field 11-a-side natural turf football pitch in the main sports ground and a 7-a-side natural turf football pitch in the secondary sports ground), which is located at the southern part of the densely populated TKO new town, will be heavily patronised for football activities.

7. The proposed scope of the TKO Sports Ground (TKOSG) includes a secondary sports ground and other necessary event organisation and athletic facilities designed and built to IAAF standards suitable for holding international/regional track and field competitions. Apart from serving as the venue for large scale international athletics competitions, the TKOSG will also enable the Hong Kong Amateur Athletic Association to organise sports clinics on athletics on a regular basis with a view to raising the sports standard of athletics in Hong Kong. The TKOSG will become the regular base of training for track and field events in Hong Kong. Local major cross-district and inter-school sports/athletics events will be able to use this venue.

8. In normal periods when there are no large scale athletics events which will make use of both the main and secondary sports grounds, each of the facilities can be operated independently and can be used simultaneously by different parties. The provision of the track and field facilities in the secondary sports ground will therefore provide additional opportunities for sports associations, schools, etc., to conduct athletics programmes/training when the main sports ground is being used for athletic meets or football matches. The function rooms of the sports ground will also be used for local recreation and sports programmes such as yoga, social dances, table-tennis, tai-chi and judo, etc.

9. As the TKOSG would enable the sports community to organise major athletics events as well as providing a base for athletic training, the completion of this project would be a major improvement to Hong Kong's athletic venue facilities and a significant step forward in the promotion of sports in Hong Kong. The sports ground will become a much welcomed sports facility in Hong Kong.

/FINANCIAL

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be \$293.1 million in MOD prices (see paragraph 11 below), made up as follows –

	\$ million	
(a) Site formation	1.6	
(b) Piling	30.3	
(c) Main sports ground facilities	22.7	
(d) Secondary sports ground facilities	10.8	
(e) Spectator stand (including the ancillary facilities below)	82.7	
(f) Administration block	29.0	
(g) Building services	50.0	
(h) Drainage	7.0	
(i) External works	22.9	
(j) Soft landscaping works	5.0	
(k) Furniture and equipment ¹	3.2	
(l) Consultant's fee for contract administration	4.1	
(m) Contingencies	25.7	
	<hr/>	
Sub-total	295.0	(in September 2004 prices)
(n) Provision for price adjustment	(1.9)	
	<hr/>	
	293.1	(in MOD prices)
	<hr/>	

/We

¹

Based on an indicative list of items required including office furniture and equipment, hand tools, machinery, recreation and sports supplies/equipment and specialist supplies/equipment.

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

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

Year	\$ million (Sept 2004)	Price adjustment factor	\$ million (MOD)
2005 – 06	4.7	0.99000	4.7
2006 – 07	58.4	0.98753	57.7
2007 – 08	147.4	0.99123	146.1
2008 – 09	77.8	0.99990	77.8
2009 – 10	5.7	1.01515	5.8
2010 – 11	1.0	1.03241	1.0
	295.0		293.1

12. 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 2005 to 2011. The contract will provide for price adjustments because the contract period will exceed 21 months.

13. We propose to adopt the Design-and-Build (DB) approach for implementation of the TKOSG project. The selected contractor will be responsible for both the design and construction works. We anticipate that by tapping the private sector's expertise and ideas, this mode of development will help inject more innovation and diversity into the work project. We will continue monitoring the project with input from the concerned organisations.

14. We have prepared a conceptual layout for the project (see Enclosure 1) for the reference of the tenderers. As the project will be implemented through the DB approach, the design is to be prepared by the selected contractor in accordance with the conditions and requirements of the contract.

15. We estimate the annually recurrent expenditure arising from this project to be \$6.8 million.

PUBLIC CONSULTATION

16. On 13 August 2002, we consulted the Culture, Recreation and Sports Committee of Sai Kung District Council on the proposed development of a district-based sports ground. Members supported the proposal. In April 2004, the Sai Kung District Council was informed of the proposed upgrading of the TKOSG. Members strongly supported the proposed upgrading of the project scope. On 10 August 2004, the Culture, Recreation and Sports Committee of Sai Kung District Council was further consulted on details of the upgrading proposal, and Members rendered strong support to the project.

17. On 23 November 2004, we updated Sai Kung District Council on the latest planning progress of the project and consulted Members on the proposed DB mode of implementation, together with a conceptual layout (which would serve as a reference for inviting tenders). The Sai Kung District Council rendered strong and full support to the project proposal, noting that the detailed design would only be available at a later date from the successful bidder after the contract has been awarded. They also urged the Government to implement the project early.

18. We also consulted the Hong Kong Amateur Athletic Association, the organiser of major athletics events in Hong Kong, which also strongly supported the proposed development of the TKOSG, and advised that the proposed scope of the sports ground would be suitable for holding international and regional athletics competitions.

19. We consulted the Legislative Council Panel on Home Affairs at its meeting on 14 January 2005. Members indicated agreement in principle to the proposed development of the TKOSG. They were informed that the TKOSG would provide a new facility suitable for holding international athletics events, including the 2009 East Asian Games (EAG). They sought supplementary information on the overall venue arrangements for hosting the 2009 EAG. In response to this, we are arranging to present a supplementary paper to the Panel on Home Affairs to provide additional information.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

20. The project is not a designated project under the Environmental Impact Assessment Ordinance. We have completed a preliminary environmental review (PER) in August 2003. 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. Operational noise impacts will be controlled through proper design of the loudspeakers such as using directional loudspeakers which only point towards the sports venue, lower power output loudspeakers, and restricted use of temporary sound amplification system. We have included in the project estimates the cost to implement all necessary measures to mitigate the environmental impacts.

21. At the planning stage, we will require the contractor to fully consider measures to reduce the generation of construction and demolition (C&D) materials and to reuse/recycle such materials as much as possible. We will require the contractor to introduce more prefabricated building elements into the project design 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.

22. 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 and C&D waste to designated public filling 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.

23. We estimate that the project will generate about 46 000 cubic metres (m³) of C&D materials. Of these, we will reuse about 25 000 m³ (54.4%) on site, 18 000 m³ (39.1%) as fill in public filling areas², and dispose of 3 000 m³ (6.5%) at landfills. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$375,000 for this project (based on a notional unit cost³ of \$125/m³).

LAND ACQUISITION

24. The project does not require any land acquisition.

BACKGROUND INFORMATION

25. We upgraded **242RS** to Category B in May 2002. We engaged consultants in February 2002 and November 2003 to carry out PER and topographical survey respectively, and also a term contractor in November 2003 to carry out site investigation at a total cost of \$800,000. We have 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 consultants and the term contractor have completed the PER, topographical survey and site investigation.

26. The proposed construction of TKOSG may involve removal of 20 trees, which will be replanted within the project site or be transplanted elsewhere (subject to finalisation of design). All trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the project, including estimated quantities of 180 trees, 10 000 shrubs and 6 500 square metres of grassed area.

/27.

2 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 and Development.

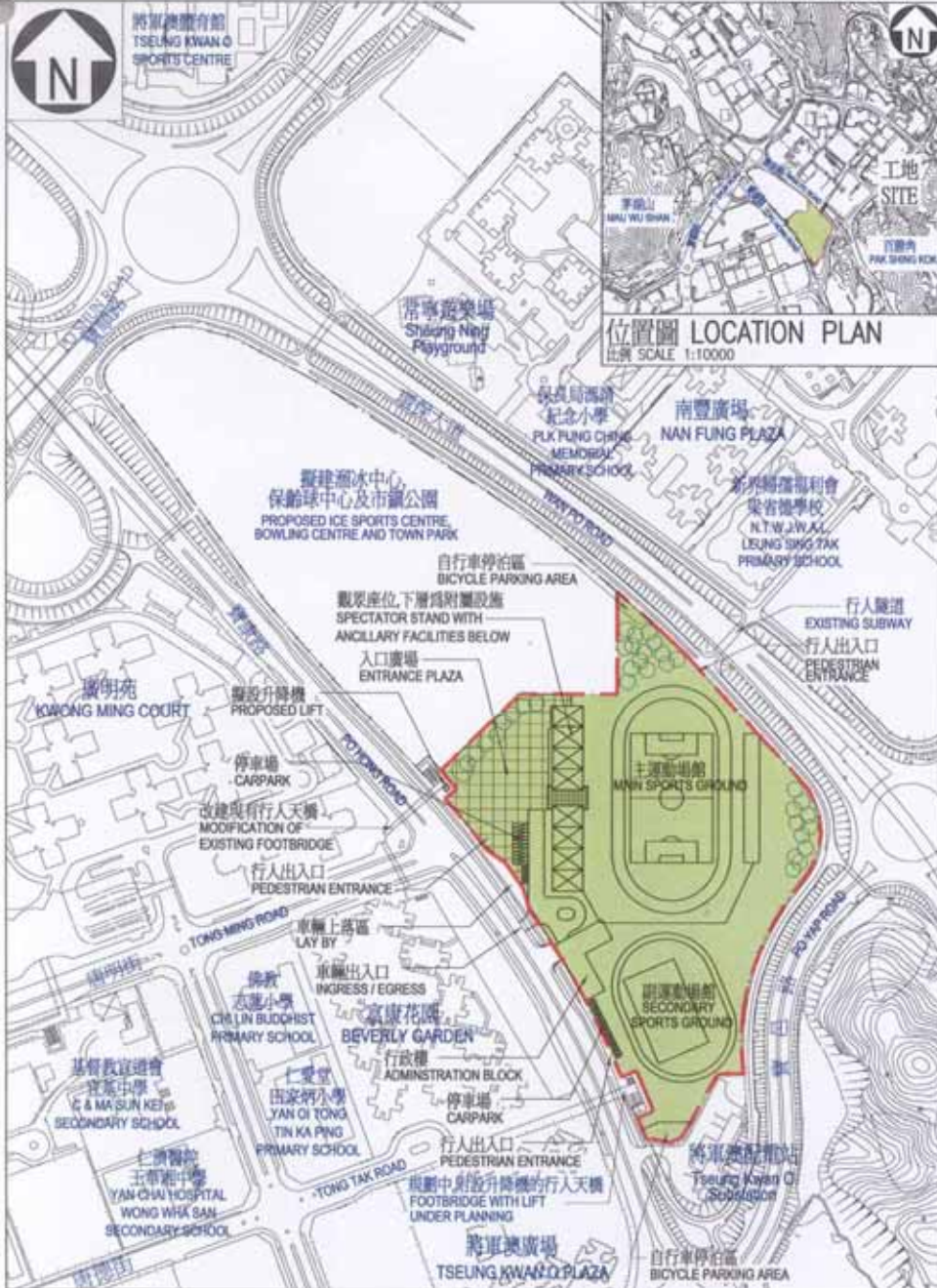
3 This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which 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.


4 Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria –

- (a) trees over 100 years old;
- (b) trees of cultural, historical or memorable significance;
- (c) trees of precious or rare species;
- (d) trees of outstanding form; or
- (e) trees with trunk diameter exceeding one metre (measured at one metre above ground level).

27. We estimate that the proposed works will create about 185 jobs (160 for labourers and another 25 for professional/technical staff) providing a total employment of 3 850 man-months.

Home Affairs Bureau
January 2005



title 242 RS 將軍澳運動場 TSEUNG KWAN O SPORTS GROUND	drawn by TF LAM	date OCT 2004	drawing no. AB/5586/XA101	scale 1:4000
	approved P FUNG	date OCT 2004	 ARCHITECTURAL SERVICES DEPARTMENT	
	office PROJECT MANAGEMENT BRANCH			

242RS – Tseung Kwan O Sports Ground

Breakdown of the estimate for consultant's fees

Consultant's staff costs		Estimated man-Months	Average MPS* salary point	Multiplier <small>(Note 1)</small>	Estimated fee (\$ million)
Contract administration <small>(Note 2)</small>	Professional	26.7	38	2.0	2.9
	Technical	33.3	14	2.0	1.2
				Total	4.1

*MPS = Master Pay Scale

Notes

1. A multiplier of 2.0 is applied to the average MPS point to estimate the full staff costs including the consultant's overheads and profit, as the staff will be employed in the consultant's office. (As at 1 January 2005, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month.)
2. We will only know the actual man-months and actual fees after we have selected the consultant through the usual competitive bidding system.