

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 705 - CIVIL ENGINEERING

#### Recreation, Culture and Amenities - Sports facilities

#### **236RS – Provision of a multi-purpose grass pitch on Sai Tso Wan former landfill**

Members are invited to recommend to Finance Committee the upgrading of **236RS** to Category A at an estimated cost of \$39.9 million in money-of-the-day prices for the construction of a multi-purpose grass pitch on Sai Tso Wan former landfill.

### PROBLEM

Hong Kong does not have enough natural grass pitches for sports and recreational activities. In particular, we only have two public venues available for baseball training and competition, neither of which were purpose-built to cater for this sport.

### PROPOSAL

2. The Director of Environmental Protection (DEP), with the support of the Secretary for Home Affairs and the Director of Leisure and Cultural Services, proposes to upgrade **236RS** to Category A at an estimated cost of \$39.9 million in money-of-the-day (MOD) prices for the construction of a multi-purpose grass pitch on the former landfill site at Sai Tso Wan.

### PROJECT SCOPE AND NATURE

3. The proposed multi-purpose grass pitch will occupy a platform of about three hectares within the Sai Tso Wan landfill. The proposed scope of the works comprises the following -

/(a) .....

- (a) construction of a natural grass pitch for football and baseball, a children's play area and a picnic area;
- (b) provision of a service building for a management office, changing rooms, stores and machinery;
- (c) development of ancillary facilities including a 25-lot car park and a 2-lot coach park; and
- (d) upgrading of the existing access road, connecting the site with Sin Fat Road, to become a 2-way single lane each way access road.

We intend to invite tenders for the construction of the above facilities in May 2001. We plan to start construction in January 2002 for commissioning in November 2002. The facility will be open to the public shortly afterwards. A layout plan showing the proposed facilities is at the Enclosure.

#### **JUSTIFICATION**

4. We aim to make available a wide choice of sports and recreational facilities to the community. Currently, there are 55 natural grass soccer pitches under the management of the Leisure and Cultural Services Department. The average utilisation rate for these pitches is about 98%, with peak-time demand exceeding the availability of venues. We expect that the demand for this type of facility will continue to be high.

5. We expect that the usage rates for a pitch at Sai Tso Wan, which has excellent public transport links, would be high, especially as we propose to design the facility not only as a football pitch, but as a venue for the development of baseball in Hong Kong.

6. In 1996, the then Royal Hong Kong Jockey Club (HKJC) offered to make available a \$300 million donation towards the development of sporting and recreational facilities on four landfill sites following the restoration of the sites in question (see paragraph 23 below). The Sai Tso Wan site was one of those chosen by the HKJC and by the then Provisional Urban Council for development. HKJC has earmarked \$31.3 million for this project.

#### **FINANCIAL IMPLICATIONS**

7. We estimate the capital cost of the proposed works to be \$39.9 million in MOD prices (see paragraph 8 below), made up as follows -

/(a) .....

		<b>\$ million</b>	
(a)	Site preparation	2.4	
(b)	Site facilities	6.2	
(c)	Service building and pump room	10.2	
(d)	Hard and soft landscaping	9.5	
(e)	Furniture and equipment	3.2	
(f)	Independent design and construction supervision (see paragraph 10 below)	1.5	
(g)	Environmental mitigation measures	2.0	
(h)	Contingencies	2.6	
	Sub-total	37.6	(in September 2000 prices)
(i)	Provision for price adjustment	2.3	
	Total	39.9	(in MOD prices)

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

<b>Year</b>	<b>\$ million (Sept 2000)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2002 – 2003	33.3	1.05627	35.2
2003 – 2004	4.3	1.08795	4.7
	37.6		39.9

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2002 to 2004. We will tender the proposed works on a fixed-price lump-sum basis in the form of a "design-build-and-operate" (DBO) contract using a single

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contractor for all three phases. This form of contract not only gives a high degree of certainty over project costs but also ensures unity of responsibility for the contracted services. The successful contractor will be responsible for the detailed design and construction works and will also operate and maintain the facility within the scope and guidelines set by the Government.

10. During the Design and Build stage of the contract, we will require the contractor to appoint an independent third party to ensure that the facility complies with these performance requirements. The cost of employing the independent third party will be about \$1.5 million in September 2000 prices. This is included in the estimated project cost.

11. We will request the HKJC to contribute a fixed sum of \$31.3 million<sup>1</sup> (from the \$300 million donation ear-marked by the HKJC for recreational developments on former landfill sites) towards the overall project cost for the construction of the facility. This is calculated on a “pro-rata” basis in accordance with the estimated costs of recreational developments on the four landfill sites. The Government will bear the balance of the total project cost, which will be \$8.6 million. In practice, the Government will fund the entire project cost before seeking reimbursement from the HKJC against actual payments.

12. Should there be cost savings on this or any of the other former landfill projects, this will not affect the HKJC’s commitment to donating the full sum of \$300 million. The net effect of any savings would therefore be to reduce the Government’s funding commitment in respect of one or more of these projects.

13. We estimate the annually recurrent expenditure arising from this project to be \$3.6 million.

## **PUBLIC CONSULTATION**

14. We have regularly briefed the Kwun Tong District Council (formerly the Kwun Tong Provisional District Board) on progress with this project. In September 2000, we consulted the Culture, Recreation and Sports Committee of the Kwun Tong District Council. Members of the Committee supported the project.

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<sup>1</sup> The HKJC have capped their donation and will not provide for price escalation.

15. We consulted the LegCo Panel on Home Affairs on this project on 14 November 2000. Members noted the progress with the proposal and raised no objection.

## ENVIRONMENTAL IMPLICATIONS

16. The DEP completed a Preliminary Environmental Review (PER) for **236RS** in February 2000 and concluded that an Environmental Impact Assessment would not be required.

17. The Sai Tso Wan landfill has been fully restored and is presently under close monitoring<sup>2</sup>. Notwithstanding this, we will require measures to be incorporated into the design of the facility to properly address landfill gas (LFG) issues. For example, all the proposed building foundations will be constructed on top of the landfill surface and a gap will be left underneath the proposed buildings to ensure good ventilation and to avoid any potential accumulation of LFG. In addition, we will adopt preventive measures such as the provision of ventilation at enclosed spaces, the installation of an automatic gas detection and alarm system to facilitate the early detection of LFG. Furthermore, we will implement a Routine Monitoring Programme and draw up an Emergency Response Plan for both the construction and operation stages of the facility.

18. We will control noise, dust, and site run-off during construction through the implementation of appropriate mitigation measures which will be specified in the contract. These will include the use of silencers, mufflers and an on-site movable barrier to reduce noise; frequent cleaning and watering of the site; the provision of wheel washing facilities, dust suppression equipment and temporary drainage within the site; and adequate maintenance of all the existing site drainage.

19. We estimate that the cost of providing the above mitigation measures will be about \$2.0 million in September 2000 prices. We have included this cost in the overall project estimate.

20. We estimate that about 14 500 cubic metres (m<sup>3</sup>) of construction and demolition (C&D) materials will be generated by the project. Of these, about 14 400m<sup>3</sup> (99.3%) will be reused on site and 100m<sup>3</sup> of C&D wastes (0.7%) will be disposed of at landfills. This project will not generate any inert C&D materials for

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<sup>2</sup> Restoration of the landfill was completed in May 1998 and since then, the Landfill Restoration Contractor has been responsible for the maintenance and operation of the completed restoration facilities, including environmental monitoring and audit.

reuse as fill in public filling areas. We will require the contractor to implement necessary measures to minimise the generation of C&D materials and to reuse and recycle such materials. Through the “cut and fill” approach, we will make use of the excavated material as filling material on site thereby eliminating the need for disposing any public fill at public filling areas. We will control the disposal of C&D wastes at designated landfills through a trip-ticket system and record the disposal, reuse and recycling of C&D materials for monitoring purposes.

## LAND ACQUISITION

21. The project does not require any land acquisition.

## BACKGROUND INFORMATION

22. In 1995, in order to make good use of restored former landfill sites, we identified several locations including those mentioned in paragraph 23 below, which might be suitable for the development of recreational facilities.

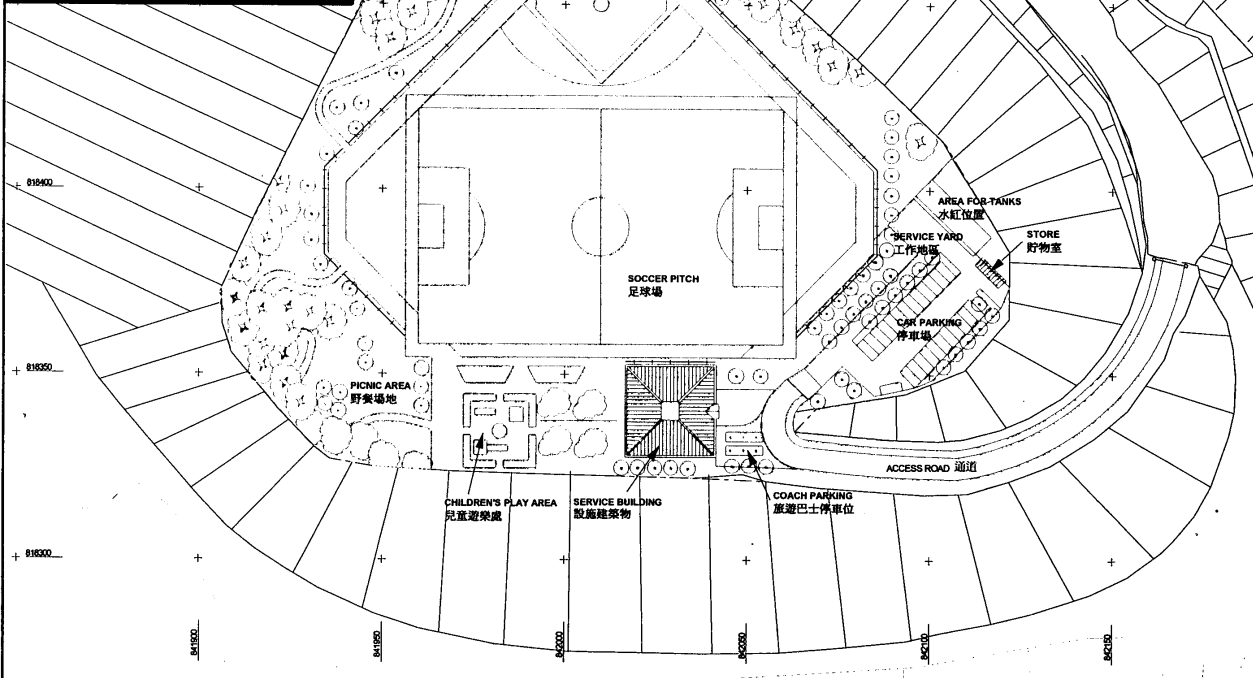
23. In 1996, the HKJC agreed in principle to donate \$300 million towards the development of facilities on four of these sites, at Sai Tso Wan, Tseung Kwan O, Shuen Wan and Jordan Valley.

24. The preparation work for the facilities on the three sites at Tseung Kwan O, Shuen Wan and Jordan Valley are in progress.

25. In 1997 and 1998, the HKJC undertook preliminary feasibility studies and drew up initial designs for these facilities. Since then, we have employed consultants, funded by the HKJC’s donation, to address technical and environmental issues for the development and management of the sites for public recreational use.

26. We upgraded project **236RS** to Category B in September 2000.

27. We estimate that the implementation of the proposed facility will create some 70 new jobs (four professional staff, six technical staff and 60 labourers) during the Design and Build stage, and 10 new jobs (one professional staff member, six technical staff and three labourers) during the Operation stage.



- LENGEND 圖例:**
- WOODLAND STRUCTURE PLANTING 林地綠化
  - TREES 樹木
  - SPECTATOR STAND 觀景台
  - FOOTPATH 行人小徑
  - ENTRANCE GATE 入口大閘
  - PROTECTIVE FENCING 保護圍

Note:  
Modular steel structure will be adopted for construction of the Service Building

註:  
組件式鐵建築物將會被採用於建造設施建築物

Environmental Protection Department  
香港環境保護署

**SAI TSO WAN LANDFILL AFTERUSE**  
晒草灣堆填區修復後用途

**AFTERUSE LAYOUT PLAN**  
修復後用途之藍圖

Drawing No.: 97293/STW01B

Soil Motion Engineering Limited  
香港土力工程有限公司