

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT New Territories East Development Transport - Roads 741TH – Tseung Kwan O Town Centre Link**

Members are invited to recommend to Finance Committee -

- (a) the upgrading of part of **741TH**, entitled “Tseung Kwan O Town Centre Link phase 2 – consultants’ fees and site investigation”, to Category A at an estimated cost of \$17.3 million in money-of-the-day prices; and
- (b) the retention of the remainder of **741TH** in Category B.

### **PROBLEM**

The existing road access to Tseung Kwan O (TKO) Area 86 will not be able to cope with future traffic demand.

### **PROPOSAL**

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands, proposes to upgrade part of **741TH** to Category A at an estimated cost of \$17.3 million in money-of-the-day prices for /site .....

site investigation and the engagement of consultants to undertake detailed design of the phase 2 of the proposed Town Centre Link (TCL) which will link TKO Area 86 with TKO Town Centre.

### PROJECT SCOPE AND NATURE

3. **741TH** is for the construction of about 1.37 kilometres of a dual 2-lane carriageway between its junctions with Wan Po Road and Road D1 at the TKO Town Centre, and includes -

- (a) about 570 metres of a dual 2-lane carriageway (including 130 metres long elevated road section and a roundabout) from Wan Po Road to the northwest corner of Area 86 (TCL phase 1) (see paragraph 20 below);
- (b) about 800 metres of a dual 2-lane elevated carriageway (including 50 metres long at-grade road section) from the northwest corner of Area 86 to Road D1 (TCL phase 2);
- (c) footpaths and cycle tracks;
- (d) associated geotechnical, drainage and landscaping works;
- (e) environmental mitigation measures; and
- (f) an environmental monitoring and audit (EM&A) programme for works mentioned in paragraphs (a) to (e) above.

4. The part of the project we now propose to upgrade to Category A comprises -

- (a) detailed design of the works described in paragraphs 3(b) to 3(f) above in respect of TCL phase 2;
- (b) associated site investigation; and
- (c) preparation of tender documents and assessment of tenders for TCL phase 2.

— A site plan showing details of the works is at Enclosure 1. We plan to start the proposed detailed design and associated work in August 2001 for completion in April 2004.

## JUSTIFICATION

5. TKO Area 86 will be developed in phases to accommodate about 21 500 housing flats for a population of about 57 600 people between 2004 and 2013.

6. The Tseung Kwan O Area 86 Planning Study completed in 1998 identified that a new direct road link connecting Area 86 to TKO Town Centre was required to serve the proposed development at Area 86. At present, vehicular traffic between TKO Town Centre and Area 86 has to route through Wan Po Road which is the only access to town centre for Area 86 and the nearby TKO Industrial Estate. We estimate that the roundabout at the junction of Wan Po Road/Road D4/Chiu Shun Road will be overloaded during the peak hours with a volume/capacity (v/c) ratio<sup>1</sup> of 1.07 in 2006. To help relieve traffic congestion on Wan Po Road, it is necessary to construct the proposed TCL as an alternative road link.

7. Upon completion of the proposed work at paragraph 4 above in April 2004, we plan to start the construction works for TCL phase 2 in May 2004 for completion in May 2007 at an estimated project cost of \$510 million. With the proposed TCL in place, the projected v/c ratio at the junction of Wan Po Road/Road D4/Chiu Shun Road will be 0.56 in 2011 during the peak hours.

8. Due to insufficient in-house resources, DTD proposes to engage consultants to supervise the site investigation works and to carry out the detailed design, preparation of tender documents and assessment of tenders.

## FINANCIAL IMPLICATIONS

9. We estimate the capital cost of the project to be \$17.3 million in MOD prices (see paragraph 10 below), made up as follows -

/(a) .....

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<sup>1</sup> A volume/capacity ratio equals to or less than 1.0 means that the road has sufficient capacity to cope with the volume of vehicle traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; above 1.2 indicates more serious congestion with traffic speeds progressively deteriorating with further increases in traffic.

		<b>\$ million</b>	
(a)	Site investigation	5.0	
(b)	Consultants' fees for	9.7	
	(i) detailed design	8.2	
	(ii) preparation of tender documents and assessment of tenders	1.0	
	(iii) supervision of site investigation	0.5	
(c)	Contingencies	1.5	
	Sub-total	16.2	(in September 2000 prices)
(d)	Provision for price adjustment	1.1	
	Total	17.3	(in MOD prices)

\_\_\_\_\_ A breakdown by man-months of the estimate for the consultants' fees is at Enclosure 2.

10. 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>
2001 - 2002	2.0	1.02550	2.1
2002 - 2003	9.2	1.05627	9.7
2003 - 2004	4.0	1.08795	4.4
2004 - 2005	1.0	1.12059	1.1
	16.2		17.3

11. We have derived the MOD estimates on the basis of the Government's latest forecasts of trend labour and construction prices for the period from 2001 to 2005. We will award the proposed consultancy on a lump sum basis with provision for price adjustments as the consultancy period will exceed 12 months. We will tender the site investigation works under a standard remeasurement contract because the quantities of works involved may vary depending on the actual ground conditions. The contract for the site investigation works will not provide for price adjustments as the contract period will not exceed 21 months.

12. The proposed site investigation works and consultancy have no recurrent financial implications.

### **PUBLIC CONSULTATION**

13. We consulted the Housing and Development Committee of the Sai Kung District Council on 2 May 2000 on the layout plan of Siu Chik Sha, TKO in which the proposed TCL has been included. The Committee had no objection to the proposed TCL. We will consult the Sai Kung District Council again in May 2001 on the findings of the Environment Impact Assessment (EIA).

14. We circulated an information paper on this project to the LegCo Panel on Planning, Lands and Works in January 2001. We have not received any request for discussion or questions on the project.

### **ENVIRONMENTAL IMPLICATIONS**

15. The project is a designated project under Schedule 2 of the EIA Ordinance and an environmental permit is required for the construction and operation of the project. An application for approval of an EIA study report will be submitted to the Director of Environmental Protection under the EIA Ordinance. We are currently preparing the EIA report to meet the requirements under the EIA ordinance and the Technical Memorandum on the EIA Process and the study brief.

16. The proposed consultancy for detailed design and site investigation works will not cause any adverse environmental implication. We will incorporate into the detailed design and works contract all the mitigation measures and the EM&A programme recommended in the EIA study and ensure their timely implementation.

17. We estimate about 40 cubic metres of construction and demolition (C&D) materials will be generated from the proposed site investigation works. Of these, all are inert C&D materials, which will be reused as fill in public filling areas<sup>2</sup>, and no C&D waste will be generated. We will require the consultants to fully consider measures to minimize the generation of C&D materials and to reuse/recycle C&D materials as much as possible in the future implementation of the construction works.

## LAND ACQUISITION

18. The proposed site investigation works and consultancy services do not require any land acquisition.

## BACKGROUND INFORMATION

19. We included **741TH** in Category B in December 1999.

20. MTRCL has commenced the construction of the TKO Extension Line which includes a station at Area 86. As a section of the tracks will cross the junction of Wan Po Road/TCL phase 1, we need to develop detailed design for TCL phase 1 early in order to address the interface issues with MTRCL's track laying works. We engaged consultants to start the investigation and detailed design for the TCL phase 1 in March 2000 for completion in August 2003 and will charge the cost of \$2.95 million to the block allocation **Subhead 7100CX** "New Towns and urban area works, studies, and investigations for items in Category D of the Public Works Programme".

21. MTRCL will commission the station at Area 86 in December 2005. To tie in with this date, we plan to start construction of TCL phase 1, which connects this station to Wan Po Road, in August 2003 for completion in end 2005. We will put forward separate submissions to the PWSC for funding the construction of TCL phase 1 and phase 2.

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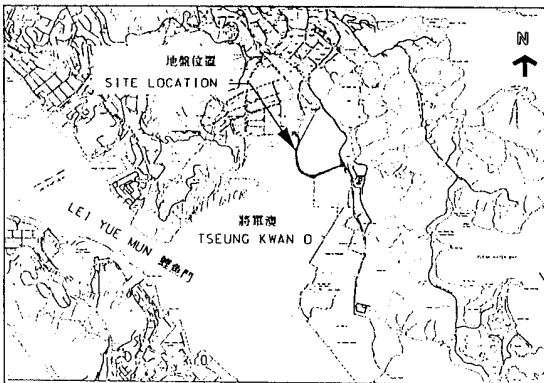
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<sup>2</sup> A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

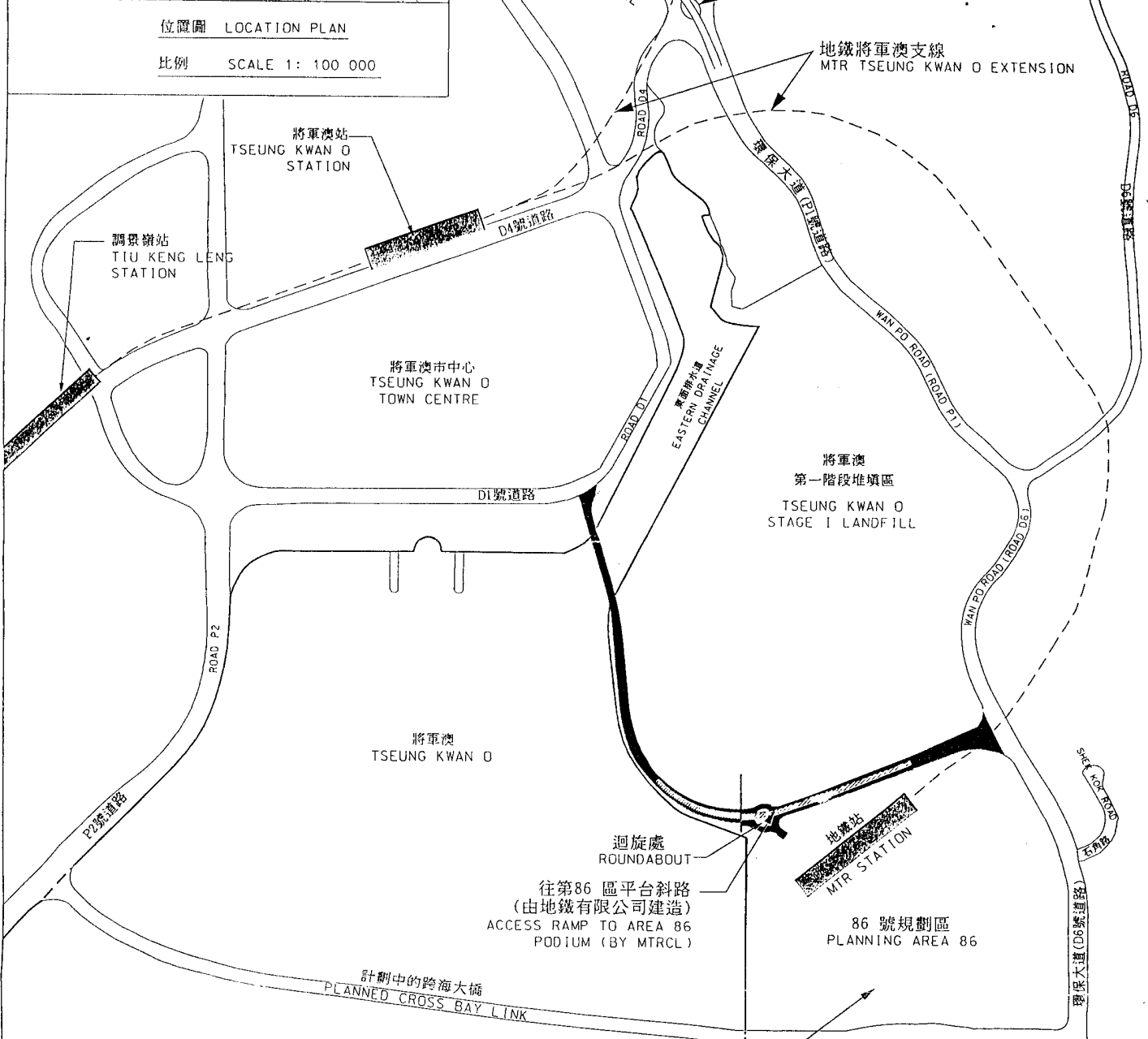
22. We estimate that the proposed site investigation and detailed design works will create some 16 jobs comprising six professional/technical staff, and 10 labourers, totalling 250 man-months.

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Planning and Lands Bureau  
February 2001



位置圖 LOCATION PLAN  
比例 SCALE 1: 100 000



圖例 LEGEND

擬建道路工程 PROPOSED ROADWORKS

- 將軍澳市中心連接路第一期工程  
TSEUNG KWAN O TOWN CENTRE LINK PHASE 1
- 將軍澳市中心連接路第二期工程  
TSEUNG KWAN O TOWN CENTRE LINK PHASE 2

綜合發展區下的  
地鐵將軍澳支線車廠  
DEPOT FOR MTR TSEUNG KWAN O EXTENSION  
UNDER COMPREHENSIVE DEVELOPMENT AREA

將軍澳工業邨  
TSEUNG KWAN O  
INDUSTRIAL ESTATE

B	4-01-2001	取消規劃區界線、圖例及文字修正 Deletion of Planning Area Boundary, and amendment of legend and text	Av.	Dkt
A	5-12-2000	文字修正 Text amended	Av.	Dkt
編號 no.	日期 date	內容摘要 description	核對 checked	核准 approved
修訂 REVISION				

二〇〇〇年至二〇〇一年度工務小組委員會文件 P.W.S.C. SUBMISSION 2000-2001 項目編號 ITEM No. 741TH

圖則名稱 drawing title 將軍澳市中心連接路 TSEUNG KWAN O TOWN CENTRE LINK	繪圖 drawn H W SHIU	簽署 initial HWS	日期 date 11-11-00	比例 scale 1:9000	辦事處 office 新界東拓展處 NT EAST DEVELOPMENT OFFICE
	核對 checked A WONG	簽署 initial AW	日期 date 11-11-00		
	核准 approved K C LEUNG	簽署 initial KCL	日期 date 11-11-00	圖則編號 drawing no. TK2273 <sup>B</sup>	



741TH – Tseung Kwan O Town Centre Link

**Breakdown of estimates for consultants' fees**

Consultants' staff costs			Estimated man-months	Average MPS* salary point	Multiplier factor	Estimated fee (\$ million)
(a)	Detailed design	Professional	45	38	2.4	6.2
		Technical	44	14	2.4	2.0
(b)	Preparation of tender documents and assessment of tenders	Professional	4	38	2.4	0.6
		Technical	8	14	2.4	0.4
(c)	Supervision of site investigation	Professional	3	38	1.7	0.3
		Technical	6	14	1.7	0.2
<b>Total consultants' staff costs</b>						9.7

\* MPS = Master Pay Scale

**Notes**

1. A multiplier factor of 2.4 is applied to the average MPS point to arrive at the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier factor of 1.7 is applied to the average MPS point in the case of site staff supplied by the consultants. (At 1.4.2000, MPS pt. 38 = \$57,525 p.m. and MPS pt. 14 = \$19,055 p.m.)
2. The figures given above are based on estimates prepared by the Director of Territory Development. We will only know the actual man-months and fees when we have selected the consultants through the usual competitive lump sum fee bid system.