

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

### **HEAD 702 - PORT AND AIRPORT**

#### **Air and Sea Communications – Port works**

#### **113AP - West Tuen Mun Port Development Feasibility Study**

Members are invited to recommend to Finance Committee the upgrading of **113AP** to Category A at an estimated cost of \$24.9 million in money-of-the-day prices for carrying out an integrated planning and engineering study and associated site investigation works to assess the feasibility of port development at West Tuen Mun.

### **PROBLEM**

We need to conduct a study on the feasibility of West Tuen Mun as a possible site for future container terminals and port facilities.

### **PROPOSAL**

2. The Director of Civil Engineering (DCE), with the support of the Secretary for Economic Services, proposes to upgrade **113AP** to Category A at an estimated cost of \$24.9 million in money-of-the-day (MOD) prices to engage consultants to undertake the planning and engineering study and associated site investigation works for assessing the feasibility of port development at West Tuen Mun.

### **PROJECT SCOPE AND NATURE**

3. The scope of **113AP** comprises -

/(a) .....

- (a) An integrated planning and engineering feasibility study of West Tuen Mun as a site for future container terminals and port facilities, including –
  - (i) a Planning Study;
  - (ii) a Traffic Impact Assessment;
  - (iii) a Marine Impact Assessment;
  - (iv) an Environmental Impact Assessment;
  - (v) a Drainage Impact Assessment;
  - (vi) a Sewerage Impact Assessment;
  - (vii) a Preliminary Engineering Design;
  - (viii) a Project Cost and Implementation Study;
  - (ix) an Archaeological Survey; and
  - (x) Supervision of Associated Site Investigation Works.
  
- (b) Associated site investigation works

A site plan showing the proposed study area of West Tuen Mun is at Enclosure 1.

## **JUSTIFICATION**

4. The sites originally designated for container terminals CT10 and CT11 at Penny's Bay, Northeast Lantau have now been taken over by the Disney theme park project. With the loss of these container terminal sites, we need a reappraisal of our port development strategy to assess alternative sites for container terminal development to meet future demand. Additionally, we can take the opportunity to explore whether the proposed container terminals immediately to the south of Northeast Lantau, CT12 and CT13, can be relocated in order to give more flexibility in planning Northeast Lantau as a major tourism/recreation area.

5. With the rapid growth of river trade in Hong Kong in recent years and its proximity to the Pearl River Delta ports, the strategic location of West Tuen Mun has become increasingly prominent. The cross boundary road links at the North Western New Territories now under consideration will improve significantly the accessibility of West Tuen Mun to and from Shenzhen and Zhuhai. The Mainland Authorities are planning to dredge the Tonggu Waterway. This would open up an alternative marine access to West Tuen Mun which in turn would greatly enhance the latter's potential for port facilities. The Port Development Strategy Third Review in 1998 has concluded that West Tuen Mun could be considered as an alternative location for port facilities subject to confirmation by a separate feasibility study. The study is therefore essential to confirm the feasibility of port development at West Tuen Mun and to provide pointers to future port development and to provide input into the planning of Northeast Lantau.

6. Due to insufficient in-house resources, DCE proposes to engage consultants to undertake the study and to supervise the associated site investigation works.

## FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$ 24.9 million in MOD prices (see paragraph 8 below), made up as follows -

	<b>\$million</b>
(a) Consultants' fees -	15.5
(i) Planning Study, Project Cost and Implementation Study, and Archaeological Survey	4.8
(ii) Traffic Impact Assessment, Marine Impact Assessment, Environmental Impact Assessment, Drainage Impact Assessment, and Sewerage Impact Assessment	7.7

/(iii) .....

		<b>\$million</b>	
	(iii) Preliminary Engineering Design and Supervision of Site Investigation	3.0	
	(b) Site investigation works	5.0	
	(c) Contingencies	2.0	
	Sub-total	22.5	(at December 1998 prices)
	(d) Provision for price adjustment	2.4	
	Total	24.9	(in MOD prices)

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

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

<b>Year</b>	<b>\$ million (Dec 1998)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2000 – 2001	7.0	1.05814	7.4
2001 – 2002	9.9	1.11104	11.0
2002 – 2003	5.6	1.16660	6.5
	22.5		24.9

9. We have derived the MOD estimate on the basis of the Government's latest forecast of trend labour and construction prices for the period from 2000 to 2003. We will award the proposed consultancy on a lump-sum basis with provision

/for .....

for inflation adjustments as the consultancy period will exceed 12 months. We will carry out the site investigation works under a term contract on a re-measurement basis due to uncertainty of ground conditions. The term contract will provide for inflation adjustments as the contract period exceeds 21 months.

10. The proposed consultancy study and site investigation works will not give rise to any recurrent expenditure.

### **PUBLIC CONSULTATION**

11. As and when proposals for future container terminals and port facilities in the West Tuen Mun area are developed, we will consult all relevant parties including the Port and Maritime Board and the Tuen Mun District Council.

12. We issued an information paper on the proposed study to Members of the Legislative Council Panel on Economic Services. We have not received any feedback to date.

### **ENVIRONMENTAL IMPLICATIONS**

13. If the West Tuen Mun Port is to be developed, the project will be a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499) and an environmental permit is required for the construction and operation of the project. As part of the consultancy study, an EIA report will be prepared to meet the requirements under the EIA Ordinance including the Technical Memorandum on the EIA Process and the EIA study brief.

14. The proposed consultancy study and associated site investigation works will not result in any long term environmental impacts. The site investigation works will generate only a small quantity of construction and demolition material (C&DM). We shall require the consultants to recommend measures to minimize the generation of C&DM for incorporation into the future construction contract documents.

**/LAND ACQUISITION .....**

**LAND ACQUISITION**

15. The proposed consultancy study and site investigation works do not require any land acquisition.

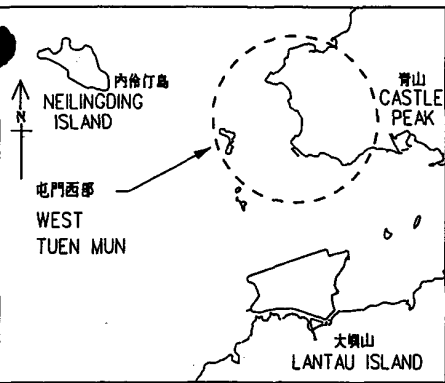
**BACKGROUND INFORMATION**

16. We included **113AP** in Category B of Public Works Programme in December 1999.

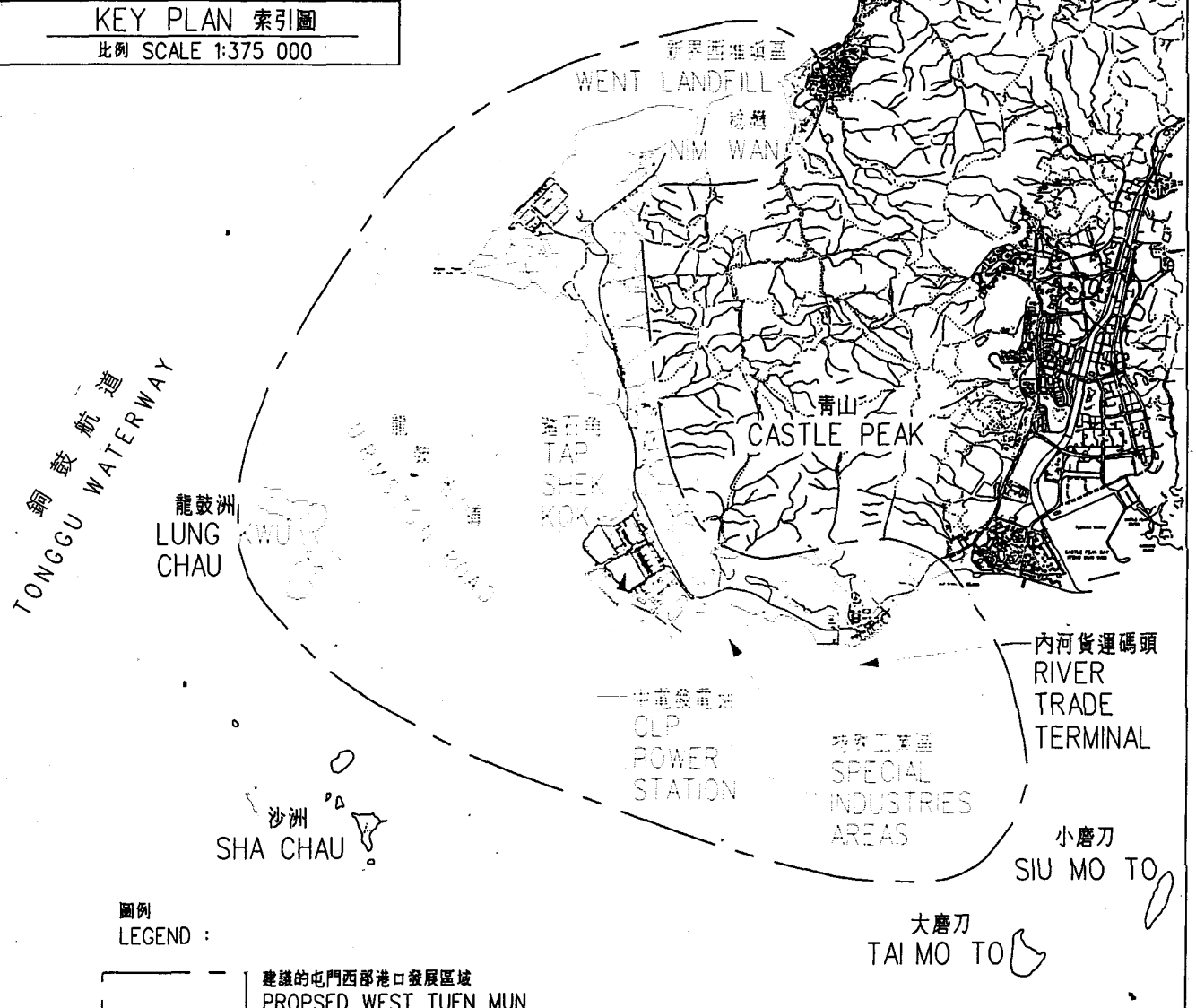
17. We plan to start the proposed consultancy study and site investigation works in July 2000 for completion in mid 2002.

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Economic Services Bureau  
January 2000

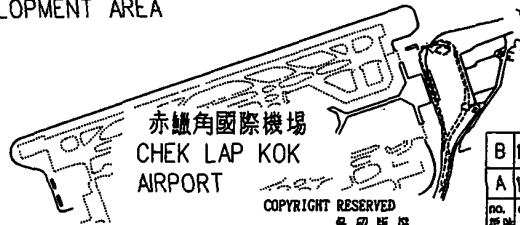


KEY PLAN 索引圖  
比例 SCALE 1:375 000



圖例  
LEGEND :

 建議的屯門西部港口發展區域  
PROPOSED WEST TUEN MUN PORT DEVELOPMENT AREA




titl 圖則名稱  
PROPOSED LOCATION OF WEST TUEN MUN PORT DEVELOPMENT  
建議的屯門西部港口發展位置圖

	name 姓名	initial 簡字	date 日期
designed 設計	Y T WONG	(SIGNED)	15.12.99
drawn 繪圖	W K WONG	(SIGNED)	15.12.99
checked 核對	Y T WONG	(SIGNED)	15.12.99
approved 核准	A. GORMLEY	(SIGNED)	15.12.99
office	PROJECT MANAGEMENT BRANCH CIVIL ENGINEERING OFFICE 土木工程處 工程管理科		

no. 圖號	date 日期	description 說明	checked 核對	approved 核准
B	17.1.00	TONGGU WATERWAY ADDED	(SIGNED) (Y. T. WONG)	(SIGNED) (P. H. FUNG)
A	13.1.00	SCALE REVISED	(SIGNED)	(SIGNED)

drawing no. 圖則圖號	scale 比例
PMB 81B	1:75 000

 CIVIL ENGINEERING DEPARTMENT HONG KONG  
土木工程處

c:\drawings\westtuenmun\pmb81b

**113AP - West Tuen Mun Port Development Feasibility Study**

**Breakdown of estimate for consultant's fees**

Consultants' staff costs			Estimated man months	Average MPS salary point	Multiplier factor	Estimated fee (\$ million)
(a)	Planning Study, Project Cost and Implementation Study, and Archaeological Survey	Professional	22	40	2.4	3.31
		Technical	29	16	2.4	1.46
(b)	Traffic Impact Assessment, Marine Impact Assessment, Environmental Impact Assessment, Drainage Impact Assessment, and Sewerage Impact Assessment	Professional	34	40	2.4	5.12
		Technical	52	16	2.4	2.62
(g)	Preliminary Engineering Design and Supervision of Site Investigation	Professional	12	40	2.4	1.81
		Technical	24	16	2.4	1.21
<b>Total consultants' staff costs</b>						15.53

**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. (At 1.4.98, MPS pt. 40 = \$62,780 p.m. and MPS pt. 16 = \$21,010 p.m.).
2. The figures given above are based on estimates prepared by the Director of Civil Engineering. We will only know the actual man months and actual fees when we have selected the consultants through the usual competitive lump sum fee bid system.