

## ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

### HEAD 705 - CIVIL ENGINEERING

#### Air and Sea Communications - Port works

#### 238LP - Reconstruction of Tai Lam Chung Pier, Tuen Mun

Members are invited to recommend to Finance Committee the upgrading of **238LP** to Category A at an estimated cost of \$52.3 million in money-of-the-day prices for the reconstruction of Tai Lam Chung Pier at Siu Lam, Tuen Mun.

### PROBLEM

The existing Tai Lam Chung Pier at Siu Lam, Tuen Mun is in poor condition. There is not enough working space or lifting equipment to accommodate the increasing number of Police vessels in the Tai Lam Chung Marine Police Base (TLCMPB).

### PROPOSAL

2. The Director of Civil Engineering, with the support of the Secretary for Security, proposes to upgrade **238LP** to Category A at an estimated cost of \$52.3 million in money-of-the-day (MOD) prices for the reconstruction of the existing Tai Lam Chung Pier including the provision of more working space and lifting equipment for the TLCMPB.

### PROJECT SCOPE AND NATURE

3. The scope of the project comprises -

/(a) .....

- (a) demolition of the existing pier and slipway;
- (b) construction of a solid pier about 95 metres long and 14 metres wide with a 6.5-ton crane;
- (c) reclamation of an area of about 600 square metres (m<sup>2</sup>);
- (d) construction of a solid finger pier about 20 metres long and 3.6 metres wide with a 30-ton marine travel hoist;
- (e) construction of two pillars; and
- (f) associated electrical and mechanical (E&M) installation works.

We plan to start the construction works in April 2001 for completion in January 2003.

## JUSTIFICATION

4. The existing Tai Lam Chung Pier was built in the 1950s to facilitate construction work for the Tai Lam Chung Reservoir. It was subsequently taken over by the Police to support operations in the western waters of the territory and form the TLCMPB. Currently, other departments like Agriculture, Fisheries and Conservation Department, Civil Engineering Department, Customs and Excise Department, Department of Health and Marine Department also make use of the pier on a frequent basis. Because of normal wear and tear, the pier is now in poor condition and beyond economic repair. Its condition is deteriorating with widespread reinforcement corrosion and concrete spalling. It is approaching the end of its serviceable life. If we do not replace it, it will pose risks to the pier users.

5. Consequent to the modernization of the Police fleet commencing in 1980, more bigger vessels have been brought in for service. At present, a total of 16 medium size vessels together with 31 small boats are stationed in the TLCMPB. As there is no other marine police base in the western waters and the existing pier has only one berth, substantial expansion is required to fully meet the operational requirements of the Police. We therefore propose to replace the existing pier with a larger one with four berths. We will provide floating pontoons as temporary reprovisioning of the existing pier during the construction period.

6. The existing fixed crane with a 3 ton capacity at the pier has been in use for over 20 years and is also approaching the end of its serviceable life. We propose to replace it with a larger crane with a 6.5 ton capacity to serve the loading/unloading requirements of larger vessels.

7. The existing slipway has been put out of use because it is too cumbersome in operation and too small to serve the increasing number of small boats. In order to create more space for maintenance of small boats, we propose to demolish the slipway and reclaim an area of about 600 m<sup>2</sup>. We will construct a solid finger pier equipped with a 30-ton marine travel hoist for lifting of these boats.

8. We also need to construct two pillars to secure the existing floating pontoons for mooring of small boats. These boats have a lower freeboard and if left alongside the main pier, may be susceptible to damage.

9. In addition to the Police, the user departments mentioned in paragraph 4 above also support the proposed project.

**FINANCIAL IMPLICATIONS**

10. We estimate the capital cost of the project to be \$52.3 million in MOD prices (see paragraph 11 below), made up as follows -

	<b>\$ million</b>
(a) Demolition of the existing pier and slipway	0.7
(b) Construction of a solid pier with a 6.5-ton crane	16.8
(c) Reclamation of an area of about 600 m <sup>2</sup>	3.8
(d) Construction of a solid finger pier with a 30-ton marine travel hoist	4.4
(e) Construction of two pillars	0.3

/(f) .....

		<b>\$ million</b>	
(f)	Provision of temporary floating pontoons	2.8	
(g)	Associated E&M installation works including a service charge of \$0.9 million charged by Electrical and Mechanical Services Trading Fund (EMSTF) <sup>1</sup>	18.9	
(h)	Contingencies	2.2	
	Sub-total	49.9	(in September 2000 prices)
(i)	Provision for price adjustment	2.4	
	Total	52.3	(in MOD prices)

11. 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	16.0	1.02550	16.4
2002 – 2003	31.8	1.05627	33.6
2003 – 2004	2.1	1.08795	2.3
	49.9		52.3

/12. ....

<sup>1</sup> Since the establishment of EMSTF on 1 August 1996 under the Trading Funds Ordinance, government departments are charged for design and technical consultancy services for electrical and mechanical installations provided by EMSTF. Services rendered in this project include project management for contract administration for the provision of electrical and mechanical facilities for construction.

12. We have derived the MOD estimate on the basis of the latest Government's forecast of the trend of labour and construction prices for the period 2001 to 2004. We will carry out the proposed civil engineering works under a remeasurement contract because the quantities of the dredging and reclamation works may vary according to the actual site conditions. The contract will not provide for inflation adjustments as the contract period does not exceed 21 months. The associated E&M installation works will be carried out through the EMSTF under a separate lump sum contract without provision for inflation adjustments.

13. We estimate the annually recurrent expenditure arising from this project to be \$1.1 million.

### **PUBLIC CONSULTATION**

14. The existing pier is not available for public use and the impact of the project on Tuen Mun District as a whole would not be significant. We have nevertheless sought views from a few local village representatives in June 2000. They had no particular view on the proposed project.

15. We gazetted the project under the Foreshore and Sea-bed (Reclamations) Ordinance on 31 March 2000 and received no objection during the two-month statutory period. The project was authorised on 16 June 2000 under the Ordinance.

16. We circulated an information paper on the proposed works to the LegCo Panel on Security in mid October 2000 and offered to discuss this if necessary. We have not received any request for discussion or questions on the project.

### **ENVIRONMENTAL IMPLICATIONS**

17. The project is not a designated project under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). We completed a Preliminary Environmental Review (PER) for the project in August 2000. The PER concluded and the Director of Environmental Protection agreed that the project would not result in long term environmental impacts and an Environmental Impact Assessment Study would not be

/necessary .....

necessary. For short term water quality impact during construction, we shall implement measures including the use of closed grab dredgers, erection of silt curtain to enclose the dredging site and avoidance of concurrent dredging works at the pier foundation area and at the filling area to ensure compliance with established standards and guidelines. We shall include in relevant works contract standard pollution control clauses for dust, noise and site run-off nuisance during construction. We estimate the cost of implementing the above mitigation measures to be \$0.5 million. We have included this cost in the overall project estimate.

18. We have considered in the planning and design stages ways to reduce the generation of construction and demolition material (C&DM) as far as possible. We estimate that about 7 600 cubic metres of C&DM consisting of broken concrete and pell mell rubble will be generated and reused as filling material on site. The fenders from the old pier will be reused in the repair of other existing government piers in Hong Kong. No construction and demolition waste disposal is required.

#### **LAND ACQUISITION**

19. This project does not require land acquisition.

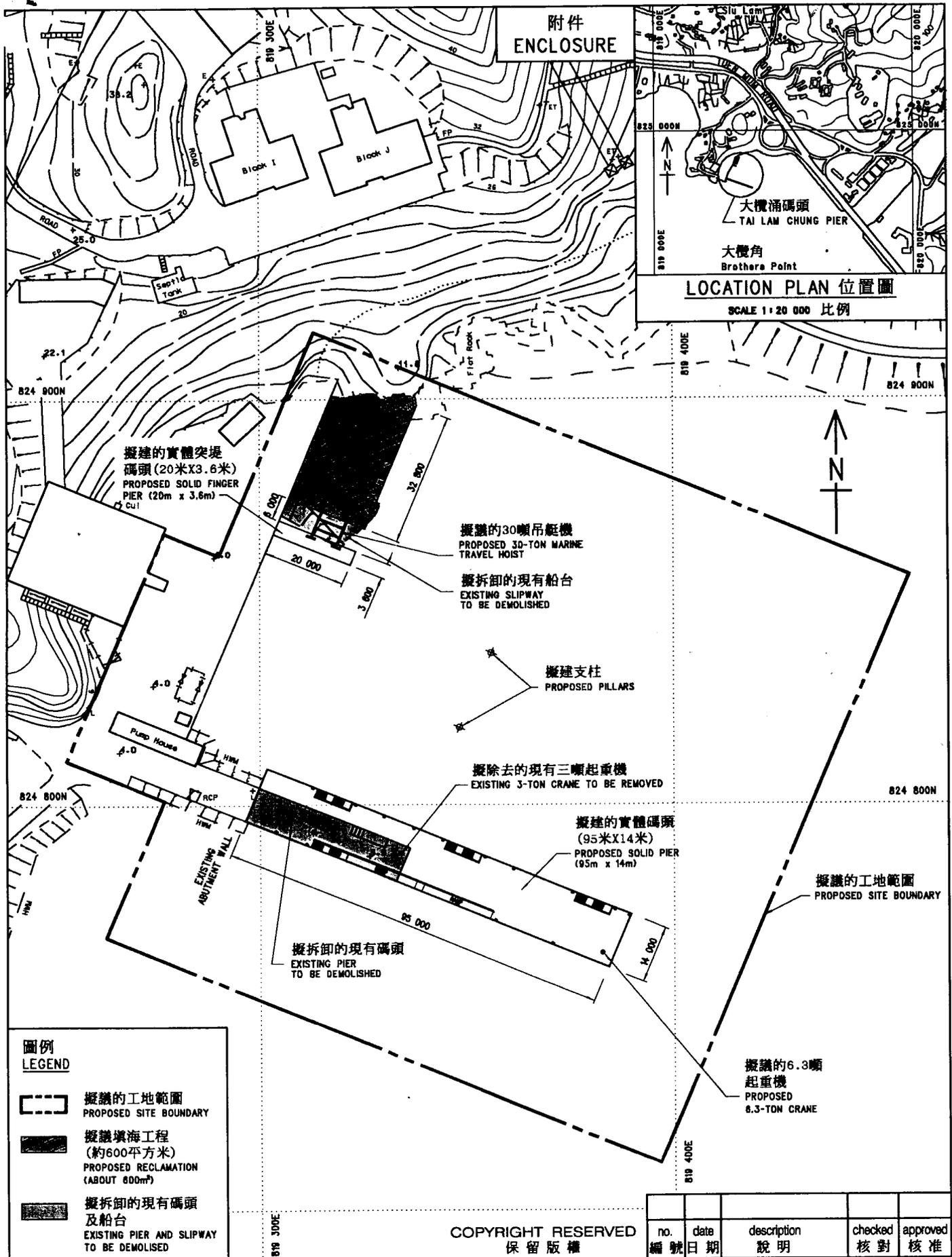
#### **BACKGROUND INFORMATION**

20. We included this project in Category B of the Public Works Programme in December 1999.

21. We estimate that the project will create some 50 jobs comprising ten professional/technical staff and 40 labourers, totalling 945 man-months.

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Security Bureau  
November 2000



附件  
ENCLOSURE

LOCATION PLAN 位置圖

SCALE 1:20 000 比例

擬建的實體突堤  
碼頭(20米X3.6米)  
PROPOSED SOLID FINGER  
PIER (20m x 3.6m)  
Cu1

擬建的30噸吊艇機  
PROPOSED 30-TON MARINE  
TRAVEL HOIST

擬拆卸的現有船台  
EXISTING SLIPWAY  
TO BE DEMOLISHED

擬建支柱  
PROPOSED PILLARS

擬拆除的現有三噸起重機  
EXISTING 3-TON CRANE TO BE REMOVED

擬建的實體碼頭  
(95米X14米)  
PROPOSED SOLID PIER  
(95m x 14m)

擬拆卸的現有碼頭  
EXISTING PIER  
TO BE DEMOLISHED

擬議的工地範圍  
PROPOSED SITE BOUNDARY

擬議的6.3噸  
起重機  
PROPOSED  
6.3-TON CRANE

圖例  
LEGEND

- 擬議的工地範圍  
PROPOSED SITE BOUNDARY
- 擬議填海工程  
(約600平方米)  
PROPOSED RECLAMATION  
(ABOUT 600m²)
- 擬拆卸的現有碼頭  
及船台  
EXISTING PIER AND SLIPWAY  
TO BE DEMOLISHED

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no. 編號	date 日期	description 說明	checked 核對	approved 核准

title 名稱  
屯門大欖涌碼頭重建工程  
- 總平面圖  
RECONSTRUCTION OF  
TAI LAM CHUNG PIER,  
TUEN MUN  
- GENERAL LAYOUT

	name 姓名	initial 簡簽	date 日期
designed 設計	Y K AU	SIGNED	9.10.2000
drawn 繪畫	P K CHEN	SIGNED	9.10.2000
checked 核對	F P MA	SIGNED	9.10.2000
approved 核准	F M LUK	SIGNED	9.10.2000
office TECHNICAL SERVICES DIVISION 工程技術部 CIVIL ENGINEERING OFFICE 土木工程處			

drawing no. 圖則編號  
**TS 1288**

scale 比例  
1:1 250

CIVIL ENGINEERING  
DEPARTMENT 香港  
HONG KONG 土木工程署