

For discussion  
on 19 December 2001

PWSC(2001-02)89

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

**HEAD 707 - NEW TOWNS AND URBAN AREA DEVELOPMENT**  
**Hong Kong Island and Islands Development**  
**Civil Engineering - Land development**  
**677CL –Wan Chai development phase II, engineering works**

Members are invited to recommend to Finance  
Committee –

- (a) the upgrading of part of **677CL**, entitled “Wan Chai development phase II, engineering works: consultants’ fees and site investigation”, to Category A at an estimated cost of \$111.1 million in money-of-the-day (MOD) prices; and
- (b) the retention of the remainder of **677CL** in Category B.

### **PROBLEM**

We need to carry out detailed design and site investigation works for the proposed Wan Chai development phase II (WDII), which aims to provide land for the construction of the North Hong Kong Island Line (NIL), Central-Wan Chai Bypass (CWB), Island Eastern Corridor Link (IECL) and other infrastructural facilities.

**/PROPOSAL .....**

**PROPOSAL**

2. The Director of Territory Development (DTD), with the support of the Secretary for Planning and Lands and the Secretary for Transport, proposes to upgrade part of **677CL** to Category A at an estimated cost of \$111.1 million in MOD prices for site investigation and engaging consultants to carry out detailed design for WDII.

**PROJECT SCOPE AND NATURE**

3. The scope of **677CL** comprises –
- (a) reclamation of about 28.5 hectares of the seabed along the existing coastline from Lung King Street to the breakwater east of the Causeway Bay Typhoon Shelter, including construction of vertical seawalls;
  - (b) construction of roads, bridges, footbridges, subways, public transport interchanges, necessary transport facilities, stormwater culverts, drains and sewers;
  - (c) construction of cooling water pumping systems for future developments and reprovisioning of the existing cooling water pumping systems at the new waterfront;
  - (d) construction of a marina promenade north of the Royal Hong Kong Yacht Club;
  - (e) reprovisioning of Wan Chai ferry pier and public landing steps at the new waterfront;
  - (f) reprovisioning of the government helipad and associated works northeast of the Hong Kong Convention & Exhibition Centre Extension;
  - (g) hinterland drainage improvement works associated with the reclamation works mentioned in item (a) above;
  - (h) reprovisioning of the existing cross-harbour water mains from the west to the east of the existing MTR Tsuen Wan Line cross-harbour tunnel;

- (i) upgrading of the existing Wan Chai East sewage outfall;
- (j) landscaping works at roadside amenity areas and reclaimed land; and
- (k) implementation of an environmental monitoring and audit (EM&A) programme for works mentioned in items (a) to (j) above.

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

- (a) site investigation works; and
- (b) detailed design and preparation of tender documents for the engineering works described in paragraphs 3(a) to 3(j) above.

\_\_\_\_\_ A plan showing the proposed extent of reclamation and the infrastructural works  
\_\_\_\_\_ to be constructed under WDII is at Enclosure 1. The alignment of the NIL, CWB  
\_\_\_\_\_ and IECL is shown at Enclosure 2. An overview of the proposed land uses for  
WDII is at Enclosure 3.

## JUSTIFICATION

5. We need to implement the proposed WDII to provide the necessary land for the construction of the NIL, CWB, IECL and other necessary ground level road connections.

6. According to the findings of the Second Railway Development Study, the NIL is required to provide an alternative direct link for travellers from North West New Territories and Tseung Kwan O areas to Hong Kong Island, thus relieving the pressure of the MTR Island Line (Causeway Bay section) and Tsuen Wan Line (Nathan Road section). The NIL will be an extension of the existing MTR Tung Chung Line from the Hong Kong Station along the northern shore of Hong Kong Island to the Fortress Hill Station of the existing MTR Island Line.

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7. The CWB and IECL will serve as a strategic Trunk Road linking the Rumsey Street Flyover with the Island Eastern Corridor, to relieve the traffic pressure on the existing Connaught Road Central/Harcourt Road/Gloucester Road corridor on the Hong Kong Island. At present, traffic congestion regularly occurs along these roads throughout the day. In particular, the volume/capacity (v/c) ratio<sup>1</sup> of Gloucester Road/Harcourt Road can reach 1.1 during peak hours of the day. We envisage that without the CWB and IECL, the v/c ratio on the most critical section of Gloucester Road during the peak hours would exceed 1.4 in 2011. With the completion of the CWB and IECL, the v/c ratio of the most critical section of Gloucester Road could be reduced to 0.9, and thus traffic congestion could be relieved.

8. We also need to construct ground level road connections for linking the Trunk Road with the existing road network in Wan Chai and with the ground level roads from Central. The new roads will cater for the direct traffic between the new reclamation areas in Central and Wan Chai, without having to route through the already very congested Harcourt Road/Gloucester Road corridor, or even the roads in the hinterland. These roads are also needed for access to the new waterfront on completion of the reclamation.

9. Apart from providing land for the construction of transport infrastructure, the proposed development will also help improve the water quality of the harbour along the waterfront of Wan Chai, particularly that of the Causeway Bay Typhoon Shelter. We shall make use of the reclamation to eliminate the embayments of stagnant water and divert the drainage culverts for discharging away from the Typhoon Shelter. We shall also make use of the new land formed along the waterfront to create a new waterfront promenade from Central to Wan Chai, and provide relevant leisure facilities for public enjoyment. We shall improve access to the promenade by building footbridges/pedestrian walkways linking the hinterland and the waterfront.

10. To meet the target operation timeframe for the NIL and the Trunk Road by 2011, we have to commence the reclamation works in March 2004. To tie in with the reclamation programme, we need to start the detailed design for WDII in April 2002 for completion in February 2004.

**/FINANCIAL .....**

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

**FINANCIAL IMPLICATIONS**

11. We estimate the capital cost of the project to be \$111.1 million in MOD prices (see paragraph 12 below), made up as follows –

	<b>\$ million</b>	
(a) Site investigation works	28.0	
(b) Consultants' fees for	72.7	
(i) supervision of site investigation	4.0	
(ii) detailed design	62.0	
(iii) preparation of tender documents	6.7	
(c) Contingencies	10.1	
Sub-total	110.8	(in September 2001 prices)
(d) Provision for price adjustment	0.3	
Total	111.1	(in MOD prices)

Due to insufficient in-house resources, DTD proposes to engage consultants to supervise the site investigation works and to carry out the detailed design and prepare tender documents. A breakdown by man-months of the estimate for consultants' fees is at Enclosure 4.

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

Year	<b>\$ million (Sept 2001)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2002 – 2003	38.5	0.99700	38.4

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2003 – 2004	65.4	1.00398	65.7
2004 – 2005	6.9	1.01101	7.0
	<hr/>		<hr/>
	110.8		111.1
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13. 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 2002 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 actual ground conditions. The contract will not provide for price adjustments as the contract period will not exceed 21 months.

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

## **PUBLIC CONSULTATION**

15. We consulted the LegCo Panel on Planning, Lands and Works, Town Planning Board, Wan Chai District Council, Eastern District Council, professional bodies and other concerned parties in early 2000 on a number of development options with regard to the alignment of the Trunk Road, extent of reclamation and the land use proposals at the reclaimed area and adjoining hinterland. The option with least reclamation was generally preferred. The current development proposals have taken into consideration comments received during consultation.

16. We consulted the Town Planning Board on the current proposals on 24 August 2001. The Board agreed that the concerned district councils should be consulted again on the proposals.

17. We consulted the Eastern District Council on 6 September 2001 and members had no objection to the proposals. We consulted the Wan Chai District Council on 18 September 2001 and 20 November 2001. After we explained further on the aspects that the project would benefit the Wan Chai District, the members supported the proposed reclamation and roadworks. Nevertheless, they were concerned about the reprovisioning of the existing sports and recreation facilities from west of the Wan Chai Sports Ground to the site north of the Sports Ground. They urged the Government to consider accommodating the reprovisioned sports and recreation facilities at the Comprehensive Development Area site (shown in red at Enclosure 3). They also sought a reprovisioning site as large as the existing one. We are considering the District Council's proposal.

18. We further consulted the LegCo Panel on Planning, Lands and Works on 7 December 2001. Members did not raise objection to the proposal.

## **ENVIRONMENTAL IMPLICATIONS**

19. This project is a designated project (DP) under Schedule 3 of the Environmental Impact Assessment (EIA) Ordinance and requires an EIA report to be approved under the EIA Ordinance. The proposed reclamation, roads, marina, cross-harbour water mains and sewage outfall are DPs under Schedule 2 of the EIA Ordinance for which environmental permits are required for construction.

20. The Director of Environmental Protection approved the EIA report for the project in August 2001 on condition that DTD would –

- (a) make available to the public the environmental monitoring and audit data and reports on a designated website; and
- (b) report back the results of the trial test for the proposal of using geosynthetic containers for confined disposal of contaminated mud from the Causeway Bay Typhoon Shelter.

DTD shall comply with these two conditions.

21. The proposed consultancy will not give rise to any adverse environmental impacts. We will implement standard environmental pollution control measures to control the environmental impacts of the associated site investigation works.

22. The proposed site investigation works and consultancy will generate only a minimal amount of construction and demolition material (C&DM). We will plan and design the works to minimise the generation of C&DM during construction, and to re-use/recycle C&DM as much as possible.

### **LAND ACQUISITION**

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

### **BACKGROUND INFORMATION**

24. We included **677CL** in Category B of the Public Works Programme in September 2000.

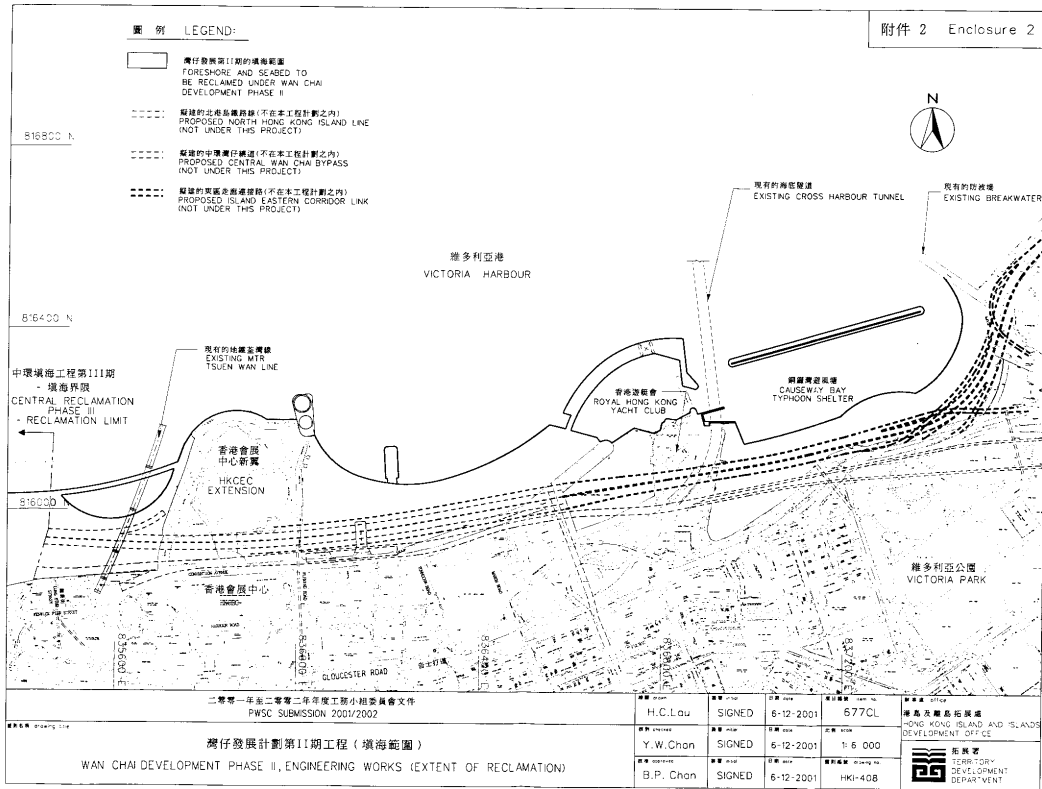
25. In March 1999, the Finance Committee approved the upgrading of part of **439CL** to Category A as **652CL**, “Wan Chai development phase II - comprehensive feasibility study and site investigation” at an estimated cost of \$60 million in MOD prices. We completed the comprehensive feasibility study in August 2001.

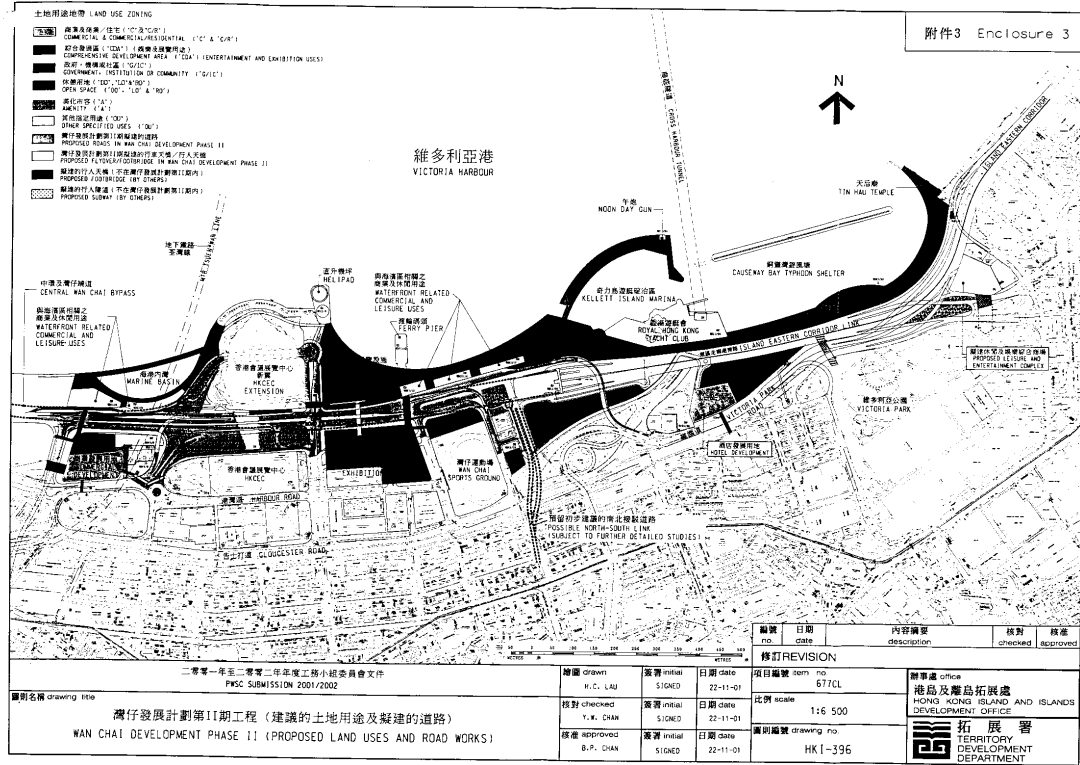
26. We estimate that the proposed site investigation and detailed design works will create some 104 new jobs comprising 57 professional/technical staff and 47 labourers, totalling 1 440 man-months.

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附件3 Enclosure 3

編號	日期	內容摘要	核對	核准
no	date	description	checked	approved
修訂 REVISION				

二零零一年至二零零二年年度工程小組委員會文件  
 PWSC SUBMISSION 2001/2002

圖則名稱 drawing title  
 灣仔發展計劃第II期工程 (建議的土地用途及擬建的道路)  
 WAN CHAI DEVELOPMENT PHASE II (PROPOSED LAND USES AND ROAD WORKS)

繪圖	W. C. LAU	簽署	initial	日期	date	項目編號	com no
核對	Y. W. CHAN	簽署	initial	日期	date	比例	scale
核准	B. P. CHAN	簽署	initial	日期	date	圖則編號	drawing no
							HK I-396

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 DEVELOPMENT  
 DEPARTMENT

677CL – Wan Chai development phase II, engineering works

**Breakdown of the estimate for consultants' fees**

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier	Estimated fees (\$ million)
(a) Supervision of site investigation	Professional	18	38	1.7	1.8
	Technical	66	14	1.7	2.2
(b) Detailed design	Professional	235	38	2.4	34.1
	Technical	596	14	2.4	27.9
(c) Preparation of tender documents	Professional	31	38	2.4	4.5
	Technical	47	14	2.4	2.2
<b>Total consultants' staff costs</b>					72.7

\* MPS = Master Pay Scale

**Notes**

- (1) A multiplier of 2.4 is applied to the average MPS point to estimate the full staff costs including the consultants' overheads and profit, as the staff will be employed in the consultants' offices. A multiplier of 1.7 is applied in the case of site staff supplied by the consultants. (At 1.4.2001, MPS pt. 38 = \$60,395 per month and MPS pt. 14 = \$19,510 per month)
- (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.