

**For information**

**Legislative Council Panel on Planning, Lands and Works  
126CD - Drainage improvement in East Kowloon – Package B phase 2**

**PURPOSE**

This paper briefs Members on the Administration's proposal to upgrade **126CD** "Drainage improvement in East Kowloon – Package B phase 2" to Category A, at an estimated cost of about \$191 million in money-of-the-day (MOD) prices, for the drainage improvement works in Shun Lee, Kwun Tong and Yau Tong.

**PROJECT SCOPE**

2. The scope of the proposed works in Shun Lee, Kwun Tong and Yau Tong comprises -

- (a) construction of about 3.7 kilometres (km) of stormwater drains with diameter ranging from 600 millimetres (mm) to 2100 mm; and
- (b) ancillary works.

3. We plan to commence construction in mid 2007 for completion in early 2011. A site plan showing the locations of the proposed works is at **Enclosure**.

**JUSTIFICATION**

4. The drainage catchment area of East Kowloon covers major residential, industrial and commercial districts in parts of Tsim Sha Tsui, Hung Hom, To Kwa Wan, Kowloon City, San Po Kong, Wong Tai Sin, Kwun Tong and Yau Tong. We developed the existing drainage systems decades ago to meet the flow requirements and standards at that time. Flooding records show that parts of the existing drainage systems are found inadequate to abate flooding, thereby causing nuisance to the public and disruption to traffic. We have completed a comprehensive assessment of the drainage systems in this catchment area and concluded that the existing drainage systems require improvement to alleviate the flooding risks in the districts and to meet the community's increasing expectation for better flood protection.

5. To bring early improvement to the flooding problems and minimise possible disruption to traffic, we have planned to carry out the drainage improvement works in packages. Package A and Package B phase 1, covering Tsim Sha Tsui, To Kwa Wan, Hung Hom, Kowloon City, San Po Kong, Wong Tai Sin and Yau Tong (Ko Chiu Path only), commenced in May 2005 and May 2006 respectively and are now in progress. The proposed works under Package B phase 2 is the last package of the drainage improvement works in East Kowloon, covering Shun Lee, Kwun Tong and Yau Tong.

6. Upon completion of the proposed works, the standard of flood protection in Shun Lee, Kwun Tong and Yau Tong would be raised generally to a design return period<sup>1</sup> of one in 50 years.

## FINANCIAL IMPLICATIONS

7. We estimate the cost of the proposed works to be about \$191 million (in MOD prices), made up as follows -

	<b>\$ million</b>
(a) Drainage works at	154
i) Shun Lee	4
ii) Kwun Tong	105
iii) Yau Tong	45
(b) Consultants' fees for	17
i) contract administration	1
ii) site supervision	16
(d) Environmental mitigation measures	3
(c) Contingencies	17
Total :	191 (in MOD prices)

8. We estimate the annual recurrent expenditure arising from the proposed project to be about \$130,000.

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<sup>1</sup> "Return period" means the average number of years during which a certain severity of flooding will occur once, statistically. A longer return period means a rarer chance of occurrence of a more severe flooding.

## **PUBLIC CONSULTATION**

9. We consulted the Traffic and Transport Committee of Kwun Tong District Council for the proposed works on 7 September 2006. The members supported the implementation of the proposed drainage improvement works.

## **ENVIRONMENTAL IMPLICATIONS**

10. The proposed drainage improvement works is not a designated project under the Environmental Impact Assessment Ordinance. We completed the Environmental Review (ER) for the proposed works in February 2004 which concluded that there would be no insurmountable impacts on the air quality, water, waste management, visual impacts and ecology aspects.

11. For short-term impacts during construction, we will control noise, dust and site run-off within established standards and guidelines through the implementation of mitigation measures, such as the use of temporary noise barriers and silenced construction plants to reduce noise generation, water-spraying to reduce emission of fugitive dust, and strict control on diversion of sewage flows in the works contracts. We will incorporate a relevant clause into the works contract to require the contractor to carry out the recommended environmental mitigation measures as recommended in the ER to control pollution and disposal of contaminated soil in accordance with the relevant regulations during construction.

12. We have considered ways in the planning and design stages to reduce the generation of construction and demolition (C&D) materials where possible. In addition, we will require the contractor to reuse inert C&D materials including excavated soil for backfilling on site or in other suitable construction sites as far as possible, in order to minimise the disposal of C&D materials to public fill reception facilities<sup>2</sup>. We will encourage the contractor to maximise the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimise the generation of construction waste.

13. We will also require the contractor to submit a waste management plan (WMP) for approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill and C&D waste to public fill reception facilities and landfills respectively through a trip-ticket system. We will require the contractor to separate public fill from C&D waste for disposal at appropriate

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<sup>2</sup> Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

14. We estimate that the project will generate about 137 800 tonnes of C&D materials. Of these, we will reuse about 57 000 tonnes (41%) on site and deliver about 79 400 tonnes (58%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of about 1 400 tonnes (1%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$2.3 million for this project (based on an unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne<sup>3</sup> at landfills).

## **TRAFFIC IMPLICATONS**

15. We have recently worked out the traffic arrangements for the proposed drainage improvement works. To minimise possible disruption to traffic during construction, we have completed the traffic impact assessment (TIA) for the proposed works. The TIA has concluded that the proposed works would not cause unacceptable traffic impact. During construction, we will maintain smooth traffic flow through implementing temporary traffic management measures as far as possible and displaying notice boards on site to explain the reason of temporary traffic arrangements and the expected completion date of the concerned section of works. In addition, telephone hotlines will be set up for public enquiries or complaints. Construction works in busy road sections will be carried out in non-peak hours and/or by night works.

16. We will also establish a Traffic Management Liaison Group (TMLG) under the contract to discuss, scrutinise and agree on the proposed temporary traffic management measures. Representatives from the Transport Department, Hong Kong Police Force, Highways Department, District Offices and various public transport operators will be invited to attend the TMLG meetings and every temporary traffic arrangement has to be agreed by the TMLG before implementation. The TMLG will take into account all the relevant factors, such as site restrictions, existing and future traffic conditions, pedestrian safety, access to buildings/shop fronts and provision of emergency vehicles access, while considering the temporary traffic arrangements.

## **BACKGROUND**

17. In September 2000, we completed a comprehensive review of the

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<sup>3</sup> The estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m<sup>3</sup>), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

drainage systems in East Kowloon under **80CD** “Drainage master plan study in Sai Kung, East Kowloon and Southern Lantau” (the Study). The Study identified that some of the existing drainage systems in East Kowloon are inadequate to meet the required flood protection standard and recommended a programme of drainage improvement works to tackle the flooding problem in the areas.

18. In April 2002, we included **126CD** in Category B of the public works programme for the drainage improvement works in East Kowloon. We planned to implement the works in three packages. Package A comprises the drainage improvement works in Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin and Yau Tong (Ko Chiu Path only). Package B phase 1 comprises drainage improvement works in Hung Hom, Kowloon City and San Po Kong. Package B phase 2 comprises drainage improvement works in Shun Lee, Kwun Tong and Yau Tong.

19. In April 2003, we engaged consultants to undertake site investigations, surveys, TIA study and detailed design for the project at a cost of \$13 million in MOD prices. We have charged this amount to block allocation **Subhead 4100DX** “Drainage works, studies and investigations for items in Category D of the Public Works Programme”. The consultancy commenced in June 2003.

20. In July 2004, we upgraded part of **126CD**, i.e. Package A, to Category A as **134CD** entitled “Drainage improvement in East Kowloon – Package A” at an estimated cost of \$251.5 million in MOD prices for carrying out the drainage improvement works in Tsim Sha Tsui, To Kwa Wan, Wong Tai Sin and Yau Tong (Ko Chiu Path only). The construction works commenced in May 2005 for completion in October 2008.

21. In January 2006, we upgraded the second part of **126CD** to Category A as **142CD** entitled “Drainage improvement in East Kowloon – Package B phase 1” at an estimated cost of \$242 million in MOD prices for carrying out the drainage improvement works in Hung Hom, Kowloon City and San Po Kong. The construction works commenced in May 2006 for completion in January 2010.

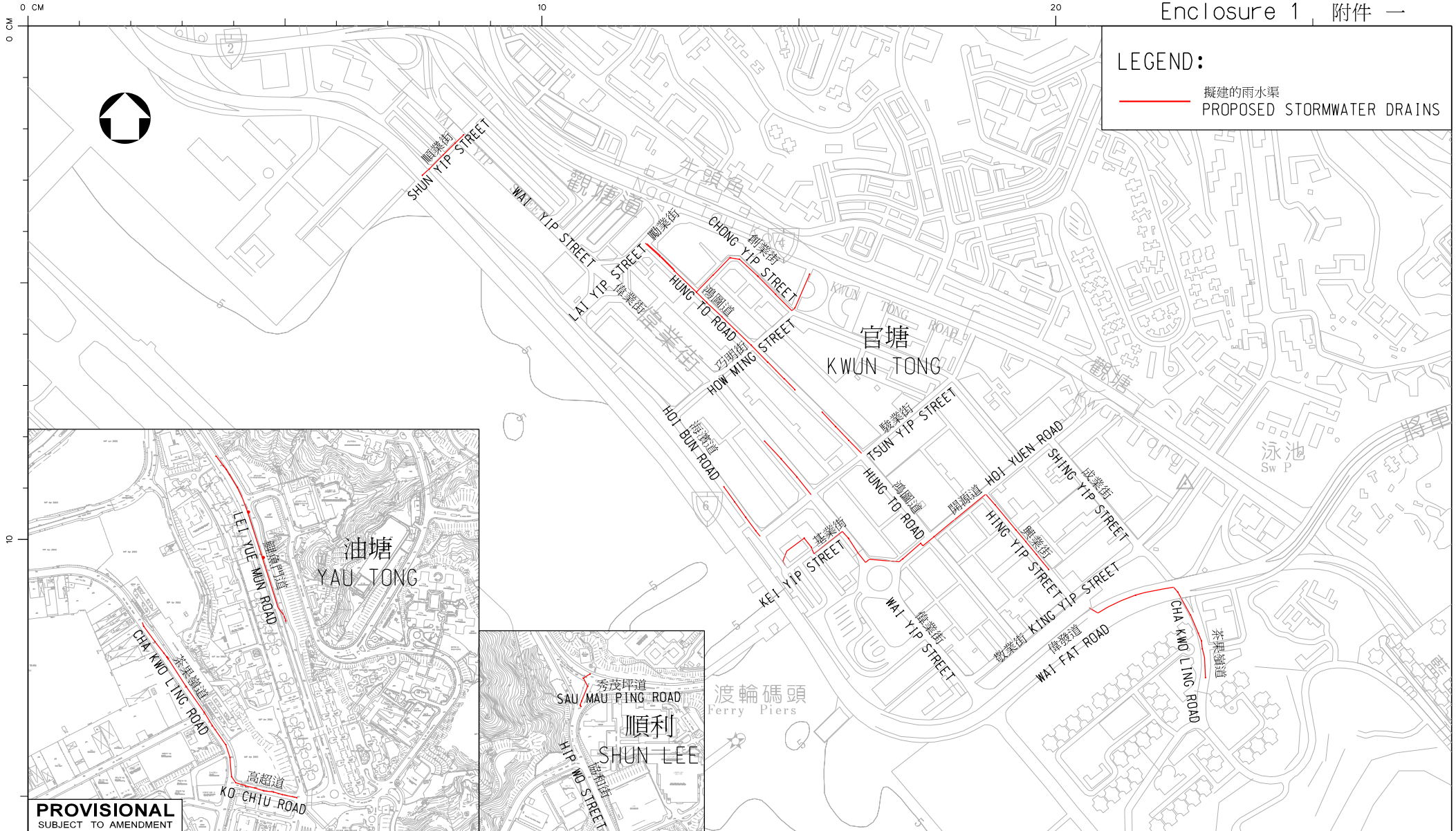
22. The proposed drainage works will not involve any removal of trees or planting proposals.

23. We estimate that the proposed works will create about 87 jobs (71 for labourers and another 16 for professional/technical staff) providing a total employment of 3 754 man-months.

## **WAY FORWARD**

24. Members are invited to support our proposal for upgrading of **126CD** for consideration by the Public Works Subcommittee with a view to seeking funding approval of the Finance Committee in early 2007.

**Environment, Transport and Works Bureau  
November 2006**



**LEGEND:**

— 擬建的雨水渠  
PROPOSED STORMWATER DRAINS

**PROVISIONAL**  
SUBJECT TO AMENDMENT

圖則名稱 drawing title  
工務計劃項目編號126CD -  
東九龍雨水排放系統改善計劃 - B部分第二期  
PWP ITEM NO.126CD -  
DRAINAGE IMPROVEMENT IN EAST KOWLOON - PACKAGE B PHASE 2

繪畫 drawn	SIGNED C.K.LAM	日期 date	24.OCT.06
核對 checked	SIGNED K.H.TSE	日期 date	03.NOV.06
批核 approved		日期 date	
部門 office	工程管理部 PROJECT MANAGEMENT DIVISION		

圖則編號 drawing no.	比例 scale
DPM/126CD/1806	1 : 1000
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