

## **Legislative Council Panel on Development**

### **5729CL – Disposal of Contaminated Sediment – Dredging, Management and Capping of Sediment Disposal Facility at Sha Chau**

#### **PURPOSE**

This paper briefs Members on the proposal to upgrade **729CL** “Disposal of Contaminated Sediment – Dredging, Management and Capping of Sediment Disposal Facility at Sha Chau” to Category A, at an estimated cost of \$770.9 million in money-of-day (MOD) prices, for the dredging, management and capping of a new sediment disposal facility at Sha Chau.

#### **PROPOSAL**

2. The scope of works under **729CL** comprises:
  - (i) forming and capping of a new sediment disposal facility in the sea-bed at East of Sha Chau (ESC);
  - (ii) on-site management of disposal activities; and
  - (iii) implementing an Environmental Monitoring and Audit (EM&A) programme.
  
3. We plan to commence the proposed works in June 2009 for completion in stages by July 2016. A layout plan showing the proposed works and the existing pits at ESC is at **Enclosure**.

#### **JUSTIFICATION**

4. Infrastructure projects such as the Cruise Terminal and Kai Tak Development, and the regular dredging of the harbour fairway and rivers will generate contaminated sediment. Since 1992, we have been disposing of contaminated sediment in sea-bed pits at ESC. The latest information indicates that the existing disposal pit at ESC for contaminated sediment disposal will be filled up in 2010. We need to make available a new disposal facility in time to dispose of the

contaminated sediment arising from various works within Hong Kong.

5. A territory-wide site search has been conducted for suitable sites in Hong Kong for the provision of a contaminated sediment disposal facility. Among the potential sites, most of them are found not suitable due to environmental, engineering and planning constraints. The site at ESC is found most preferred and can be developed almost immediately due to a proven track record of environmental performance of the existing disposal pits in the ESC area.

6. The proposed facility comprises four disposal pits each of which is about 2 million cubic metre in capacity giving an aggregate design capacity of about 8 million cubic metre. This facility is planned to be put into service for contaminated sediment disposal in stages from 2010 to 2014.

## FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$770.9 million in MOD prices, made up as follows -

	<b>\$ million</b>	
(a) Formation and capping of a new disposal facility	363.4	
(b) On-site management of disposal activities	58.7	
(c) Environmental Monitoring and Audit programme	183.9	
(i) Consultants' fees	14.8	
(ii) Sampling and testing	169.1	
(d) Contingencies	60.5	
Sub-total	666.5	(in September 2008 prices)
(e) Provision for price adjustment	104.4	
Total	770.9	(in MOD prices)

## ENVIRONMENTAL IMPLICATIONS

8. The proposed facility is a Designated Project under Schedule 2 of the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO) and an environmental permit is required for the construction and operation of the facility. We have completed an environmental impact assessment (EIA) for the project which concluded that the proposed works would not cause long-term environmental impacts. The Director of Environmental Protection (DEP) approved the EIA report under the EIAO in September 2005 and granted the Environmental Permit for the proposed works in September 2008. We will implement the recommendations of the EIA study in the construction and operation stages of the project to minimize the environmental impacts of this proposed facility.

9. For short-term impacts during construction, we will control noise and sediment dispersion due to dredging and disposal to levels within the established standards and guidelines through the implementation of mitigation measures and good construction practices.

10. The proposed works will not generate any construction waste.

11. We will reuse the clean sediment generated from this project for capping all the filled pits of the existing facility at ESC and the first two pits of this proposed new facility after they are fully filled. Surplus clean sediments will be disposed of at designated facilities suitable for disposal of clean sediment. In this connection, we estimate that there will be about 6.2 million cubic metre of dredged clean sediment to be disposed of off site. We will cap the last two pits by clean sediment generated from other projects.

12. We will implement on-site management of sediment disposal activities including guiding dumping barges to deposit the contaminated sediment in the correct way and in the correct position within the pit. We will also regulate the marine activity at the site to ensure its impacts are not significant. We will request the contractor to submit a method statement describing the full details of the on-site management of disposal operations. No works will be allowed on site until we approve this method statement.

13. We will implement an EM&A programme at an estimated cost of \$183.9 million (in September 2008 prices). It will ensure that environmental impacts arising from the proposed facility are kept within the established guidelines and the assumptions in the EIA. We have included this cost in the overall project estimate.

## **HERITAGE IMPLICATIONS**

14. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

## **PUBLIC CONSULTATION**

15. We have advised the Capture Fisheries Sub-Committee of the Advisory Committee on Agriculture and Fisheries at their meetings on 12 November 2007 and 25 February 2008 about the implementation of proposed works. Members raised no objection to the works.

16. We consulted the Tuen Mun District Council (TMDC) on 21 January 2008 and 28 February 2008. Members of the TMDC did not object to Government proceeding with the gazettal procedures for the proposed works but requested the Government to report back the public opinions collected during the gazetting of this proposed works.

17. We gazetted the proposed works under the Foreshore and Sea-bed (Reclamations) Ordinance on 20 March 2008 and did not receive any objection or public opinions during the objection period. The gazette for authorization of this proposed works was published on 13 June 2008. We reported the outcome of gazettal to the members of the Environment, Hygiene and District Development Committee (EHDDC) of the TMDC in November 2008 by means of circulating an information paper. Members had no further comment on the proposed works except that the Chairman of the EHDDC reminded us to reserve adequate capacity of the new facility for the disposal of sediment arising from maintenance works of the Tuen Mun River.

18. We regularly reported the progress of the proposed works to the Aquaculture Fisheries Sub-committee (AFS) of the Advisory Committee on Agriculture and Fisheries. Members requested at their meeting on 1 August 2008 for a briefing on the EIA for the proposed works, site selection and proposed dumping method. We briefed members on the requested information at their meeting on 5 December 2008. Members did not express objection to the project at the meeting. We will continue our close liaison with AFS as usual to keep Members informed about the progress of the proposed works.

## **STATUTORY CONTROL UNDER DUMPING AT SEA ORDINANCE**

19. The gazettal of the proposed works under the Foreshore and Sea-bed

(Reclamations) Ordinance will exempt dumping operations at the new facility from the control of Dumping at Sea Ordinance (Cap. 466) (DASO)<sup>1</sup>. In order to restore the regulatory control regime under the DASO at the new facility before dumping operation is to commence, we will initiate action to include the gazetted foreshore and sea-bed in Schedule 2 “Reclamation Areas Specified for the Purposes of Section 4(2)(a)” of the Dumping at Sea (Exemption) Order.

## LAND ACQUISITION

20. The proposed works do not require land acquisition.

## BACKGROUND INFORMATION

21. We included **729CL** in Category B in April 2007. We engaged a contractor to carry out site investigation in July 2007. We have charged the cost of about \$4.1 million in MOD prices to block allocation **Subhead 5101CX** “Civil engineering works, studies and investigations for items in Category D of the Public Works Programme”. We have completed the site investigation.

22. We have substantially completed the detailed design and tender documents using in-house staff resources. We schedule to commence works in June 2009 in order that this new facility will be available for receiving contaminated sediment by 2010.

23. The proposed works will not involve any tree removal or planting proposals.

24. We estimate that the proposed works will create about 69 jobs (54 for labourers and another 15 for professional/ technical staff) providing a total employment of 4 700 man-months.

## WAY FORWARD

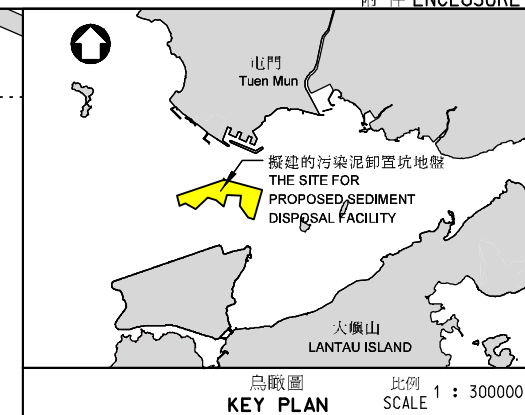
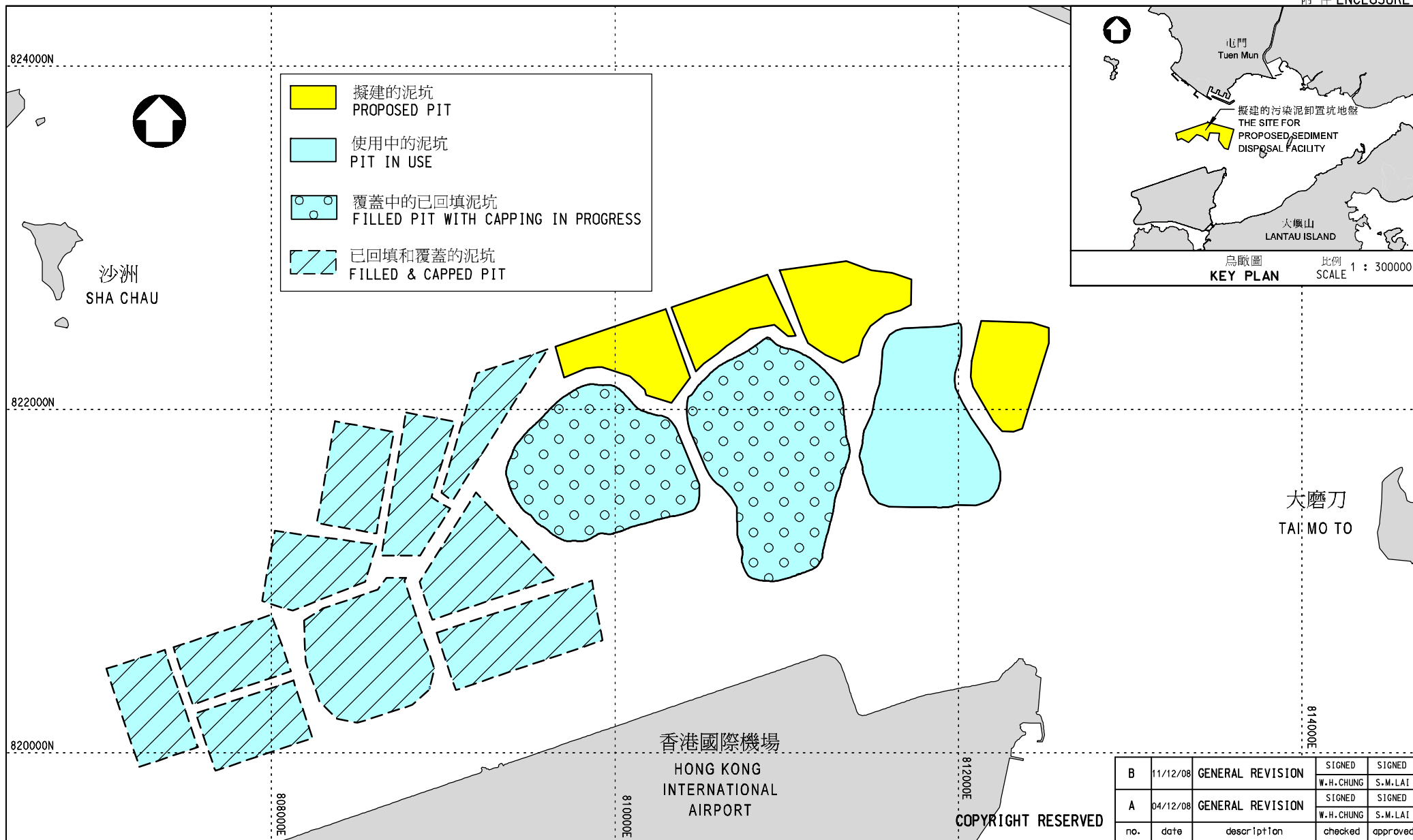
25. We intend to submit the proposal of upgrading **729CL** to Category A for consideration by the Public Works Sub-committee in January 2009, with a view to seeking funding approval from the Finance Committee in February 2009.

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<sup>1</sup> DASO controls the dumping of substances and articles from vessels, vehicles, aircraft, and marine structures in the sea and under the sea-bed and the related loading operations. All these operations require a permit to be issued by the DEP as the Authority under the DASO.

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Development Bureau  
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title  
 卸置污染泥料 -  
 沙洲污染泥卸置設施的挖掘、管理及覆蓋工程  
 DISPOSAL OF CONTAMINATED SEDIMENT - DREDGING, MANAGEMENT  
 AND CAPPING OF SEDIMENT DISPOSAL FACILITY AT SHA CHAU

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no.	date	description	checked	approved
B	11/12/08	GENERAL REVISION	SIGNED W.H.CHUNG	SIGNED S.M.LAI
A	04/12/08	GENERAL REVISION	SIGNED W.H.CHUNG	SIGNED S.M.LAI

drawing no. **FM10052-4B** scale **1:30000 OR AS SHOWN**



**CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**