

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Civil Engineering – Land development

570CL – Demolition of buildings, structures and chimneys at Kennedy Town Comprehensive Development Area

Members are invited to recommend to Finance
Committee –

- (a) the upgrading of part of **570CL**, entitled
“Demolition of buildings, structures and chimneys
above ground at Kennedy Town incineration plant
and abattoir”, to Category A at an estimated cost of
\$66.6 million in money-of-the-day (MOD) prices;
and
- (b) the retention of the remainder of **570CL** in
Category B.

PROBLEM

We need to remove all buildings, structures and chimneys that are left vacant following the decommissioning of the incinerator plant and abattoir at Kennedy Town.

/PROPOSAL

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Housing, Planning and Lands, proposes to upgrade part of **570CL** to Category A at an estimated cost of \$66.6 million in MOD prices for the demolition of all buildings, structures and chimneys above ground at the Kennedy Town incineration plant and abattoir.

PROJECT SCOPE AND NATURE

3. The scope of works under **570CL** comprises demolition of all buildings, structures and chimneys and ground decontamination at Kennedy Town Comprehensive Development Area (KTCDA) site. The KTCDA site includes the Kennedy Town incineration plant (KTIP), an abattoir, a bus depot, a refuse collection point, a temporary car park and the Cadogan Street Temporary Garden.

4. The part of **570CL** proposed to be upgraded to Category A concerns the demolition of all buildings, structures and chimneys above ground within the KTIP and abattoir, which covers a site area of about 20 000 square metres. The scope of the part to be upgraded comprises -

- (a) removal, treatment and disposal of asbestos-containing materials (ACM) and dioxin-containing materials (DCM) in existing buildings, structures and chimneys;
- (b) demolition and removal of all buildings, structures and chimneys above existing ground and the piers down to seabed level within the site of KTIP and the abattoir; and
- (c) implementation of environmental mitigation, monitoring and audit for the proposed works mentioned in sub-paragraphs (a) and (b) above.

— A site plan showing the boundary of the proposed works is at Enclosure 1.

5. We plan to start the proposed works in September 2007 for completion by May 2009.

JUSTIFICATION

6. In accordance with the 1989 White Paper on “Pollution in Hong Kong – A Time to Act”, the municipal solid waste incinerators in Hong Kong were closed in phases and replaced by a system of transfer stations feeding large landfill sites. The KTIP ceased to operate in March 1993. The abattoir adjoining the KTIP was also closed in December 1999.

7. It was recommended in the “Planning and Engineering Feasibility Study for Redevelopment of Mount Davis Cottage Area, Kennedy Town Police Married Quarters, G/IC Site and KTCDA” (study completed in May 1999) that all buildings, structures and chimneys within the KTCDA site be demolished to facilitate further developments. The Administration is undertaking a review of the long-term land use of the KTCDA site and the adjoining areas.

8. As revealed from the Environmental Impact Assessment (EIA) and the subsequent site investigation, the buildings, structures and chimneys at the KTIP and abattoir are contaminated with ACM and/or DCM¹. The underground soil is contaminated with heavy metals and hydrocarbons. In accordance with the Environmental Permit (EP) issued by the Director of Environmental Protection, remediation of the site, including the ground decontamination, should be carried out and completed before any future permanent development.

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¹ According to the findings of the EIA Report, ACM and DCM exist only in the incinerators and/or buildings above ground. They are of limited volume and could be contained for removal.

9. We originally planned to commence the ground decontamination immediately after completion of the demolition works. However, based on the findings of the Mass Transit Railway Corporation Limited (MTRCL), the KTIP and abattoir site is the only piece of land available in the Western District, which is of sufficient size suitable for use as the major temporary works area for the construction of the Mass Transit Railway (MTR) West Island Line (WIL). MTRCL’s proposal to use the KTIP and abattoir site as the temporary works area in its WIL project is supported by the Central & Western District Council (C&WDC) (see paragraphs 20 & 21 below). Taking into account the above and the strong public aspiration for early implementation of the MTR WIL project, we consider it feasible to re-schedule the demolition and ground decontamination works, so that the MTRCL may use the subject site as a temporary works area for the WIL project. We therefore propose to implement the demolition and ground decontamination works in two stages.

10. Stage 1 works (the part proposed to be upgraded to Category A) involve the demolition of all buildings, structures and chimneys above existing ground and the piers down to seabed level within the site area, as shown at Enclosure 1. The existing bus depot, refuse collection point, temporary car park and the Cadogan Street Temporary Garden will not be affected by the Stage 1 works. Stage 2 works (the remainder of **570CL**) involve the implementation of ground decontamination within the whole KTCDA site, which will commence after this site is returned to Government by MTRCL upon completion of the WIL project.

FINANCIAL IMPLICATIONS

11. We estimate the capital cost of the demolition project to be \$66.6 million in MOD prices (see paragraph 13 below), made up as follows –

	\$ million
(a) Removal, treatment and disposal of ACM and DCM	9.5
(b) Demolition of existing buildings, structures, piers and chimneys	42.4
(c) Environmental mitigation measures	1.2

/(d)

		\$ million	
(d)	Consultants' fees	7.4	
	(i) construction supervision and contract administration	0.9	
	(ii) resident site staff costs	6.1	
	(iii) environmental monitoring and audit (EM&A) programme	0.4	
(e)	Contingencies	5.7	
	Sub-total	66.2	(in September 2006 prices)
(f)	Provision for price adjustment	0.4	
	Total	66.6	(in MOD prices)

12. We propose to engage consultants to undertake contract administration and site supervision of the proposed works and to implement an EM&A programme. A detailed breakdown of the estimates for consultants' fees by man-months is at Enclosure 2.

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

Year	\$ million (Sept 2006)	Price adjustment factor	\$ million (MOD)
2007 – 08	15.4	0.99900	15.4
2008 – 09	45.7	1.00649	46.0
2009 – 10	2.0	1.01656	2.0
2010 – 11	3.1	1.02672	3.2
	66.2		66.6

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14. We have derived the MOD estimates on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period from 2007 to 2011. We will tender the proposed works on a lump sum contract because the scope of the works can be clearly defined. The proposed works will not be subject to price adjustment because the construction period will not exceed 21 months.

15. We estimate the annual recurrent expenditure arising from the Stage 1 works to be about \$6,400.

PUBLIC CONSULTATION

16. We consulted the Food, Environment, Hygiene and Works Committee (FEHWC) of the C&WDC on 22 November 2001 and 22 July 2004 on the whole project. Members supported the implementation of the project.

17. At the C&WDC meeting on 20 January 2005, we presented a proposal of advancing the demolition works and deferring the ground decontamination works to a later stage. Members generally supported the proposal and passed a motion requesting the Government to start the demolition works as soon as possible.

18. At the FEHWC meeting on 27 July 2006, we reported the progress of the project. Members passed a motion strongly requesting the Government to carry out the demolition and ground decontamination works in one-go.

19. We organised a residents' forum in August 2006 with the assistance of the Central and Western District Office and attended three other residents' forums organised by individual C&WDC members / political parties between August and September 2006. Local residents were particularly concerned about the monitoring mechanism and precautionary measures to safeguard the health of local residents in view of the potential hazards. They requested the Government to closely monitor the environmental impact arising from the project.

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20. In consideration of the high priority given to the WIL project, the C&WDC, at its informal meeting on 16 November 2006, requested Civil Engineering and Development Department (CEDD) to carry out the demolition works first, deferring the ground decontamination works to after the completion of the WIL project.

21. At the FEHWC meeting on 15 March 2007, we presented the latest plan to carry out the project in two stages to facilitate the WIL project. Members had no objection to the proposal and urged early implementation of the demolition works.

22. We consulted the Housing Panel of the Legislative Council at its meeting on 7 May 2007. Members did not raise any objection to the proposed works.

ENVIRONMENTAL IMPLICATIONS

23. The project is a designated project under Schedule 2 to the EIA Ordinance (Cap. 499) and an EP is required for the project. The EIA report was approved by the Environmental Protection Department (EPD) in April 2002 and it concluded that the environmental impact of the project could be controlled to within the criteria under the EIA Ordinance and the Technical Memorandum on EIA Process.

24. An EP was issued by EPD in May 2002. Due to changes in implementation programme and some details of the proposed works to facilitate the WIL project, CEDD applied for and was granted a varied EP (VEP) in April 2007. We assessed that the changes will be environmentally acceptable with implementation of various mitigation measures to include providing a 200 millimetres (mm) thick temporary concrete paving over the site before its use as a works area for the WIL project, conducting regular inspection to the paving slab and surface drainage system to ensure their integrity, timely repairing any damaged

/paving

paving and drainage system to avoid exposure of the contaminated soil and release of contaminants into the environment, etc. We estimate the cost of implementing the environmental monitoring and mitigation measures for the demolition works to be \$1.2 million² (in September 2006 prices). We have included this cost in the project estimate.

25. We will require the contractor to implement measures to control noise, dust, site runoff nuisances and chemical waste treatment to within the established standards and guidelines through stipulating suitable provisions in the relevant contract. We will also implement an EM&A programme to ensure timely and effective implementation of the recommended mitigation measures.

26. We will require the contractor to adopt suitable measures including selective demolition and on-site sorting 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 on site or in other suitable construction sites as far as possible (e.g. use suitable excavated materials for filling within the site, use metal site hoardings and signboards so that these materials can be recycled or reused in other projects), in order to minimise the disposal of C&D materials to public fill reception facilities³. 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.

27. We will 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, and the remediation works to be carried out on different types of contaminated materials and wastes. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill, C&D materials 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 facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

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² This estimate does not include the cost in providing a 200mm thick temporary concrete paving, the construction of which will be carried out by MTRCL in its WIL project.

³ 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.

28. We estimate that the demolition project will generate about 62 600 tonnes of C&D materials. Of these, we will reuse or recycle about 24 600 tonnes (39.3%) on site or in other suitable sites, and deliver about 34 000 tonnes (54.3%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of about 4 000 tonnes (6.4%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be about \$1.4 million for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne⁴ at landfills).

LAND ACQUISITION

29. The proposed works do not require any land acquisition.

BACKGROUND INFORMATION

30. We upgraded **570CL** to Category B in September 2005.

31. We engaged consultants to carry out the EIA study and site investigation works in September 1999. The total cost of these works is \$1.8 million. We charged this amount to block allocation **Subhead B100HX** “Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme”. The consultants have completed the EIA study and site investigation works.

32. We engaged consultants to carry out the review and detailed design, to prepare the tender documents and to undertake construction supervision of the project in July 2002. The cost of carrying out the review and detailed design and preparing the tender documents is \$10.0 million. We charged this amount to block allocation **Subhead B100HX** “Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme”. The consultants have completed the detailed design and are finalising the tender documents.

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⁴ This estimate has taken into account the cost of 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/m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

33. The proposed works will involve removal of 32 trees. All trees to be removed are not important trees⁵ in which all of them are either adhering to the disused structures or with roots being contaminated. We will incorporate planting proposal as part of the project, including estimated quantities of 60 trees.

34. We estimate that the proposed works will create about 38 jobs (33 for labourers and another 5 for professional/technical staff) providing a total employment of 615 man-months.

Housing, Planning and Lands Bureau
May 2007

⁵ “Important trees” refer to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria –

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance e.g. Fung Shui tree, tree as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metre above ground level), or with height/canopy spread equal or exceeding 25 metres.

**570CL – Demolition of buildings, structures and chimneys at
Kennedy Town Comprehensive Development Area**

Breakdown of the estimate for consultants' fees (in September 2006 prices)

Consultants' staff costs		Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Construction supervision and contract administration (Note 2)	Professional	-	-	-	0.7
	Technical	-	-	-	0.2
(b) Resident site staff (Note 3)	Professional	26	38	1.6	2.3
	Technical	132	14	1.6	3.8
(c) Environmental monitoring and audit (EM&A) programme	Professional	-	-	-	0.4
				Total	<u>7.4</u>

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS point to arrive at the cost of resident site staff supplied by the consultants. (As at 1 January 2007, MPS point 38 = \$54,255 per month and MPS point 14 = \$18,010 per month.)
2. The consultants' staff cost for construction supervision and contract administration is calculated in accordance with the existing consultancy agreement for the provision of contract administration for **570CL**. The assignment will only be executed subject to Finance Committee's approval to part-upgrade **570CL** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Civil Engineering and Development. We will only know the actual man-months and actual fees after completion of the works.