

For discussion
on 11 January 2006

PWSC(2005-06)40

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 705 – CIVIL ENGINEERING

Civil Engineering – Land development

688CL – Site formation for primary school at Inverness Road, Kowloon City

Members are invited to recommend to Finance Committee the upgrading of **688CL** to Category A at an estimated cost of \$42.2 million in money-of-the-day prices to carry out the site formation and associated infrastructure works for the primary school development at Inverness Road, Kowloon City.

PROBLEM

We need to carry out site formation works and provide associated infrastructure for the construction of a primary school at Inverness Road, Kowloon City.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Education and Manpower, proposes to upgrade **688CL** to Category A at an estimated cost of \$42.2 million in money-of-the-day (MOD) prices to carry out the site formation and associated infrastructure works for the primary school development at Inverness Road, Kowloon City.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **688CL** comprises –
- (a) formation of about 4 000 square metres of school platform, construction of retaining walls and associated slope and drainage works;
 - (b) landscaping works; and
 - (c) environmental mitigation measures.

———— The proposed works are shown on the plan at Enclosure 1.

4. Subject to the Finance Committee's funding approval, we plan to start the proposed works in June 2006 for completion by December 2007.

JUSTIFICATION

5. It is Government's policy to implement whole-day primary schooling for virtually all students by the 2007/08 school year. Upon completion of the site formation works, we plan to construct a 24-classroom school premises for converting an existing bi-sessional primary school for whole-day operation. The primary school project is meant to provide new school premises for an existing bi-sessional school to switch to whole-day operation and as such the school development would not materially affect the existing supply of primary school places.

FINANCIAL IMPLICATIONS

6. We estimate the capital cost of the project to be \$42.2 million in MOD prices (see paragraph 7 below), made up as follows –

	\$million
(a) Site formation	11.2
(b) Retaining walls and slope works	25.0

/(c)

		\$million	
(c)	Drainage works	1.6	
(d)	Landscaping works	0.2	
(e)	Environmental mitigation measures for paragraphs 6(a) – (d) above	0.4	
(f)	Contingencies	3.8	
	Sub-total	42.2	(in September 2005 prices)
(g)	Provision for price adjustment	0.0	
	Total	42.2	(in MOD prices)

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

Year	\$ million (Sept 2005)	Price adjustment factor	\$ million (MOD)
2006 – 2007	4.0	1.00125	4.0
2007 – 2008	28.0	1.00125	28.0
2008 – 2009	9.7	1.00125	9.7
2009 – 2010	0.5	1.00125	0.5
	42.2		42.2

8. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices for public sector building and construction output for the period from 2006 to 2010. We will tender the proposed works through a standard remeasurement contract because the quantities of the geotechnical and excavation works may vary depending on actual ground conditions. The contract will not provide for price adjustments as the contract period will not exceed 21 months.

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9. The proposed site formation works have no recurrent financial implications.

PUBLIC CONSULTATION

10. We consulted the Kowloon City District Council on 17 November 2005. Members of the Council supported the site formation works and associated infrastructure to serve the school development at Inverness Road for converting an existing bi-sessional primary school to whole-day operation.

11. At the Legislative Council Panel on Education on 24 October 2005, we briefed Members on our review of the School Building Programme. Members generally supported our recommendation to proceed with school projects, including the one covered in this submission, for converting existing bi-sessional primary schools to whole-day operation. We circulated to the Legislative Council Panel on Education an information paper on this site formation project on 12 December 2005. We have not received any adverse comments.

ENVIRONMENTAL IMPLICATIONS

12. The project is not a designated project under the Environmental Impact Assessment Ordinance. We completed a Preliminary Environmental Review (PER) in July 2000 and carried out a further study on detailed land contamination assessment as recommended by the PER. The latter study recommended the implementation of remedial works for the project to remove the contaminated materials on site. The removal work was completed in 2003. The PER concluded that other potential environmental impacts of the project could be controlled to within the established standards and guidelines or to an acceptable degree with the implementation of the recommended mitigation measures and careful planning and implementation of construction activities.

13. At the planning and design stage, we have given due consideration in designing the level and layout of the proposed works, so as to minimise the generation of construction and demolition (C&D) materials as far as possible. In addition, we will require the contractor to reuse inert C&D materials such as excavated soil 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. We will encourage the contractor to maximize the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimize the generation of construction waste.

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14. We will also require the contractor to submit a waste management plan (WMP) for our approval. The WMP will include appropriate mitigation measures to avoid, reduce, reuse and recycle C&D materials. We will require the contractor to ensure that the day-to-day operations on site comply with the approved WMP. We will also control the disposal of public fill and C&D waste to public fill reception facilities¹ 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 also record the disposal, reuse and recycling of C&D materials for monitoring purposes.

15. We estimate that the project will generate about 32 400 tonnes of C&D materials. Of these, we will reuse about 6 300 tonnes (19%) on site, deliver about 24 300 tonnes (75%) as fill in public fill reception facilities for subsequent reuse. In addition, we will dispose of about 1 800 tonnes (6%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be about \$900,000 for this project (based on an unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne² at landfills).

LAND ACQUISITION

16. The proposed works do not require land acquisition.

BACKGROUND INFORMATION

17. We upgraded **688CL** to Category B in September 2001.

/18.

¹ 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.

² 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.

18. We have engaged consultants to undertake the site investigation, land contamination assessment and detailed design for the proposed works at an estimated cost of \$1.4 million. We have charged the amount 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, land contamination assessment, detailed design and preparation of tender documents for the proposed works. The Housing Authority has removed the contaminated materials on site during the construction of Inverness Road Extension and the associated access road.

19. We plan to start the construction of the proposed whole-day primary school in early 2008 for completion in late 2009. Hence, we would need to start the site formation and associated infrastructure works in June 2006 for completion in December 2007. We will deploy in-house resources to supervise the proposed works.

20. The proposed works will involve the felling of 17 trees. All trees to be removed are not important trees³. We will incorporate planting proposals as part of the project, including estimated quantities of 28 trees.

21. We estimate that the proposed works will create about 75 jobs (65 for labourers and another 10 for professional/technical staff) providing a total employment of 970 man-months.

Education and Manpower Bureau
January 2006

³ Important trees include trees on the Register of Old and Valuable Trees, and any other trees which meet one or more of the following criteria –

- (a) trees over 100 years old;
- (b) trees of cultural, historical or memorable significance;
- (c) trees of precious or rare species;
- (d) trees of outstanding form; or
- (e) trees with trunk diameter exceeding 1 metre (measured at 1 metre above ground level).



圖例 LEGEND:

-  擬建的平台作為學校發展之用
PROPOSED PLATFORM FOR SCHOOL DEVELOPMENT
-  擬建的擋土牆
PROPOSED RETAINING WALLS
-  擬建的斜坡工程
PROPOSED SLOPE WORKS



821800N

821700N

821600N

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LOK FU PARK

藝術與科技教育中心
ARTS & TECHNOLOGY
EDUCATION CENTRE

嘉諾撒聖家書院
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延文禮士道

INVERNESS ROAD

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編號/日期 No./date	內容/類別 Description/Category	核對 Checked	核准 Approved
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名稱/Title
九龍城英文禮士道
小學工地平整工程
- 平面圖
SITE FORMATION FOR PRIMARY
SCHOOL AT INVERNESS ROAD,
KOWLOON CITY
- GENERAL LAYOUT

設計/Design	校核/Check	繪圖/Draw	日期/Date
設計/Design	校核/Check	繪圖/Draw	日期/Date
W. N. CHAN	SIGNED	09/12/05	
W. Y. HUJ	SIGNED	09/12/05	
W. K. KO	SIGNED	09/12/05	
W. Y. TANG	SIGNED	09/12/05	

辦事處/Office
土木工程處/土地工程部
LAND WORKS DIVISION
CIVIL ENGINEERING OFFICE

圖則編號/Drawing No.
LW 7477

比例/Scale
1 : 1,000
OR
AS SHOWN
或按圖示

 土木工程拓展署
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DEVELOPMENT DEPARTMENT