ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITEE

HEAD 703 – BUILDINGS Education – Secondary 265ES – Extension of Lai Chack Middle School at Scout Path, Kowloon

Members are invited to recommend to Finance Committee to increase the approved project estimate for **265ES** from \$80.7 million by \$19.3 million to \$100.0 million in money-of-the-day prices.

PROBLEM

The approved project estimate (APE) of **265ES** is not sufficient to cover the cost of works under the project.

PROPOSAL

2. The Director of Architectural Services (D Arch S), with the support of the Secretary for Education, proposes to increase the APE for **265ES** from \$80.7 million by \$19.3 million to \$100.0 million in money-of-the-day (MOD) prices to meet the increased cost of construction works.

PROJECT SCOPE AND NATURE

3. The approved project scope of **265ES** involves the construction of an extension block to Lai Chack Middle School which will have the following facilities –

/(a)

- (a) an assembly hall (which can be used for a wide range of physical activities such as badminton, gymnastics and table-tennis);
- (b) a multi-purpose area;
- (c) a library;
- (d) three special rooms, including a multi-purpose room, a computer room and a computer-assisted learning room;
- (e) a green corner;
- (f) a cover to an existing walkway; and
- (g) ancillary facilities, including a lift and relevant facilities for the handicapped.

A site plan is at Enclosure 1. We plan to start construction in July 2009 for completion in December 2010.

JUSTIFICATION

- 4. invited tenders for construction We of the Upon closure of the tender period in October 2008 (main September 2008. contract returned in October 2008 and two nominated sub-contracts returned in December 2008), the recommended tender return was higher than the original The increased construction cost is due to estimate allowed in the APE. higher-than-expected tender rates submitted by the contractor arising from the unexpected drastic increase in prices of major construction materials from the date of the original project estimate to the date of tenders in October 2008, which exceeded the allowance that had been built in to cater for the increase in the project estimate.
- 5. We have reviewed the project in detail, and considered the option of re-tendering the contract with a view to securing a lower tender price. If we were to re-tender, an additional consultancy fee would be incurred and the project would be delayed by five to six months. Moreover, as the market's response to

/re-tender

re-tender action depends on many factors, it is not possible to guarantee that the re-tendered prices will be lower than the original tender. The proposed contract for this project provides for a contract price fluctuation (CPF) system¹. Under this system, if the price of materials falls during the construction period, the Government will pay less to the contractor and the actual expenditure will be lower than the revised APE. We therefore decide to keep the current tender results.

OVERALL REVIEW

6. Upon review of the financial position of the project, we consider it necessary to increase the APE of **265ES** from \$80.7 million by \$19.3 million to \$100.0 million in MOD prices in order to cover the additional costs under the project. A breakdown for the increase of \$19.3 million is as follows –

	Factors	Proposed increased amount in MOD price (\$ million)			
Additional costs associated with –					
(a)	Higher-than-expected tender price	15.4	79.8		
(b)	Provision for price adjustment	3.9	20.2		
	Tot	19.3	100.0		

A comparison of the cost breakdown of the APE and the revised project estimate for **265ES** in MOD prices, together with the explanation for the proposed increase, are at Enclosure 2. It is expected that the revised project estimate, if approved, will be sufficient to implement the project and further increase in APE will not be required.

/FINANCIAL

The CPF system allows for upward/downward adjustment to contract payments in accordance with movements in the cost of labour and materials in Government civil engineering and building contracts.

FINANCIAL IMPLICATIONS

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

Year	\$ million (MOD)
2009 – 10	36.6
2010 – 11	48.5
2011 – 12	11.2
2012 – 13	3.7
	100.0

8. The proposed increase in the APE will not give rise to additional recurrent expenditure.

PUBLIC CONSULTATION

- 9. We circulated an information paper on the present proposal on the increase in APE to the Legislative Council Panel on Education on 30 April 2009. Members did not have any comments on the proposal.
- 10. We consulted the Community Building Committee (CBC) of Yau Tsim Mong District Council on the extension project on 21 February 2008. Prior to the CBC consultation, we met the Estate Owners' Committee of the Victoria Towers (OC) upon its request to discuss their concerns including visual and traffic impact of the project. The views and objections of OC against the project were also presented by the respective District Council Member at the CBC meeting. The CBC discussed and eventually supported the project for which the funding was approved by the Finance Committee on 23 May 2008.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

11. The proposed increase in the APE will not give rise to any adverse environmental implications. There will not be any increase of construction waste generated.

HERITAGE IMPLICATIONS

12. The proposed increase in the APE 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.

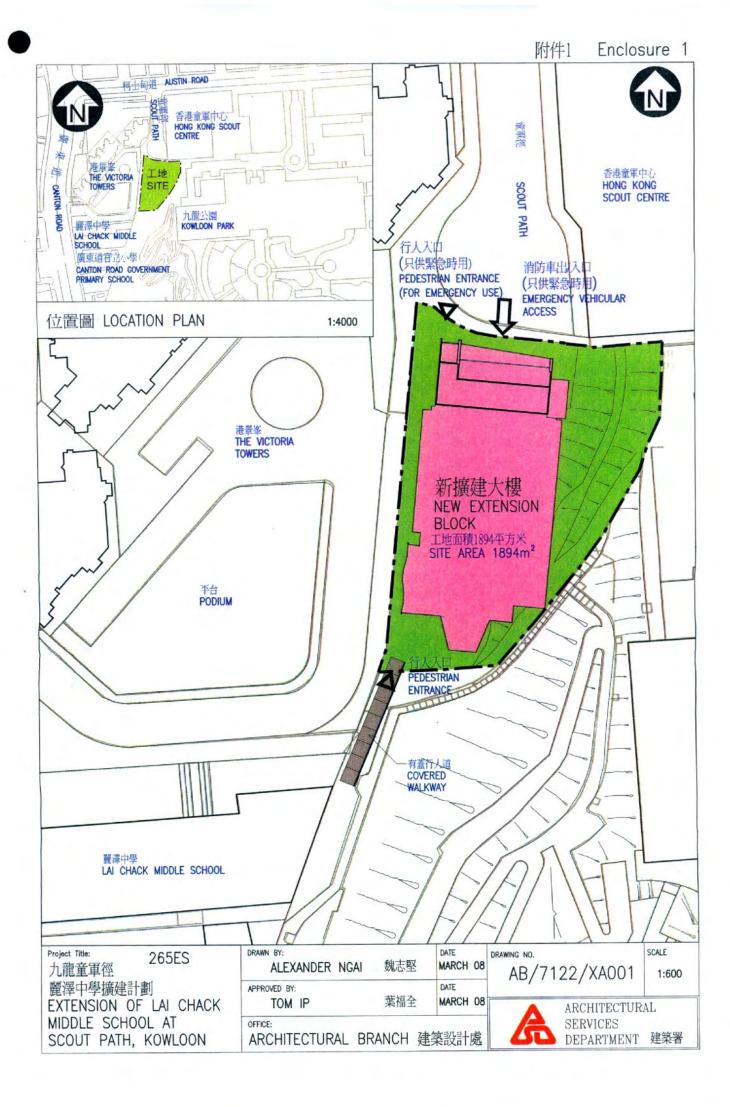
LAND ACQUISITION

13. The proposed increase in the APE does not require any land acquisition.

BACKGROUND

- 14. The Finance Committee approved in May 2008 the upgrading of **265ES** to Category A at an estimated cost of \$80.7 million in MOD prices.
- 15. The proposed increase in the APE will not involve any additional tree removal or planting proposals.
- 16. The proposed increase in the APE will not create additional jobs.

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A comparison of the APE and the latest project estimate in MOD prices is as follows –

		(A) Approved Estimate (\$million)	(B) Latest Estimate (\$million)	(B) – (A) Difference (\$million)
(a)	Site formation and slope protection works	6.3	6.4	0.1
(b)	Piling	9.0	9.5	0.5
(c)	Building	31.0	43.3	12.3
(d)	Building services	7.9	9.7	1.8
(e)	Drainage	1.5	1.7	0.2
(f)	External works	4.5	5.0	0.5
(g)	Furniture and equipment	1.8	1.8	-
(h)	Consultants' fees	5.7	5.7	-
(i)	Contingencies	6.0	6.0	-
(j)	Provision for price adjustment	7.0	10.9	3.9
	Total	80.7	100.0	19.3

- 2. **As regards 1(a) (Site formation and slope protection works)**, the increase of \$0.1 million is due to higher-than-expected rates submitted by the contractor.
- 3. **As regards 1(b) (Piling)**, the increase of \$0.5 million is due to higher-than-expected rates submitted by the contractor.
- 4. **As regards 1(c)** (**Building**), the increase of \$12.3 million is mainly due to higher-than-expected rates submitted by the contractor. The higher-than-expected rates are attributable to an increase in construction material prices from the date of the original project estimate to the date of return of tenders for the construction of project. The construction cost indices published by the Census and Statistics Department show that there was a substantial rise in the material costs for galvanised mild steel (42%), steel reinforcement (30%), sand (46%) and aggregate (27%) in the same period. These price rises have inflated the prices of the reinforced concrete structure, the piping works and metal works in the school building.

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- 5. **As regards 1(d) (Building services)**, the increase of \$1.8 million is due to higher-than-expected rates submitted by the contractor in particular the increase in the cost of copper products.
- 6. **As regards 1(e)** (**Drainage**), the increase of \$0.2 million is due to higher-than-expected rates submitted by the contractor. The higher-than-expected rates are attributable to the increase in the material costs for galvanised mild steel, steel reinforcement, sand and aggregate, which have inflated the prices of the metal drain pipes, reinforced concrete base for the sub-soil drain pipes in drainage works.
- 7. **As regards 1(f) (External works)**, the increase of \$0.5 million is due to higher-than-expected rates submitted by the contractor. The higher-than-expected rates are attributable to the increase in the material costs for galvanised mild steel, steel reinforcement, sand and aggregate, which have inflated the prices of the metal hoarding, metal fence, reinforced concrete slab and planter walls in external works.
- 8. **As regards 1(j) (Provision for price adjustment)**, the increase of \$3.9 million is mainly due to the higher–than-expected returned tender cost and the revised price adjustment factor for 2008. Detailed justification for the increase in the provision for price adjustment is given in Enclosure 3.

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Table 1 – Cash flow and price adjustment in original PWSC paper

Year	Original project estimate (\$ million, in Sept 2007 prices)	Original price adjustment factor #	Approved project estimate (\$ million, in MOD prices)	Price adjustment (\$ million)	
	X	Y	Z	A=Z-X	
2008 - 09	1.0	1.02575	1.0	0	
2009 - 10	27.6	1.06293	29.3	1.7	
2010 - 11	35.2	1.10545	38.9	3.7	
2011 - 12	7.7	1.14967	8.9	1.2	
2012 - 13	2.2	1.19566	2.6	0.4	
Total	73.7		80.7	7.0	

Table 2 – Revised cash flow and provision for price adjustment due to revised project estimate (PE) and latest adjustment factor

Year	Revised PE (\$ million, in Sept 2007 prices)	Revised PE (\$ million, in Sept 2008 prices)	Latest price adjustment Factor ***	Revised PE (\$ million, in MOD prices)	Revised provision for price adjustment (\$ million)	Net increase in provision for price adjustment
	a	b	c	d	e	(\$ million)
2009 - 10	33.2	35.4	1.03500	36.6		
2010 - 11	43.0	45.9	1.05570	48.5		$\mathbf{f} = (\mathbf{e} - \mathbf{A})$
2011 - 12	9.7	10.4	1.07681	11.2	e = d - a	I = (e - A)
2012 - 13	3.2	3.4	1.09835	3.7		
Total	89.1			100.0	10.9	3.9

Notes

[#] Price adjustment factors adopted in June 2008 are based on the projection of prices for public sector building and construction output to increase by 2.5% in 2008 and 4.0% per annum over the period from 2009 to 2014.

^{*} Revised PE (in September 2007 price) is multiplied by 1.06725 to convert to September 2008 price.

^{***} The price adjustment factors adopted in June 2009 are based on the movement of prices for public sector building and construction output which increased by 8.0% in 2008 and is assumed to increase by 2.0% per annum over the period from 2009 to 2013 and by 3.0% per annum over the period from 2014 to 2019.