ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

Education Subventions

19EA – Redevelopment of Yuen Long Chamber of Commerce Primary School at Castle Peak Road, Yuen Long

Members are invited to recommend to Finance Committee the upgrading of **19EA** to Category A at an estimated cost of \$81.8 million in money-of-the-day prices for the redevelopment of Yuen Long Chamber of Commerce Primary School at Castle Peak Road, Yuen Long.

PROBLEM

We need to redevelop Yuen Long Chamber of Commerce Primary School to enable the school to convert into whole-day operation.

PROPOSAL

2. The Secretary for Education and Manpower (SEM), on the advice of the Director of Architectural Services (D Arch S), proposes to upgrade **19EA** to Category A at an estimated cost of \$81.8 million in money-of-the-day (MOD) prices for redeveloping Yuen Long Chamber of Commerce Primary School from a 12-classroom primary school into a 24-classroom primary school.

PROJECT SCOPE AND NATURE

- 3. The proposed project consists of the demolition of the existing classroom block and special room building, conversion works to the existing school block constructed under the School Improvement Programme (SIP block) and the construction of new blocks. The scope of the project comprises
 - (a) Demolition of the existing classroom block and special room building.
 - (b) Temporary accommodation of facilities in the SIP block and the site of the original special room building.
 - (c) Construction of a six-storey new classroom block and a six-storey new assembly hall block of 7 122 square metres in construction floor area (CFA) to accommodate
 - (i) New facilities
 - (A) 12 classrooms;
 - (B) two special rooms;
 - (C) a small group teaching room;
 - (D) a guidance activity room;
 - (E) a staff room;
 - (F) a conference room;
 - (G) an assembly hall;
 - (H) a multi-purpose area;
 - (I) two basketball courts (one at ground level and one at the rooftop of the assembly hall block); and
 - (J) ancillary accommodation, including a lift and relevant facilities for the handicapped; and
 - (ii) Facilities reprovisioned from the existing buildings

- (A) 12 classrooms;
- (B) a special room;
- (C) a staff room;
- (D) a staff common room;
- (E) a student activity centre; and
- (F) a library.
- (d) Conversion works within the SIP block to provide
 - (i) three special rooms;
 - (ii) three small group teaching rooms; and
 - (iii) two interview rooms.
- (e) Provision of a green corner¹.

The redevelopment project will meet the planning target of providing two square metres of open space per student. A site plan is at Enclosure 1 and computer rendering drawings of the site are at Enclosure 2. The school sponsor plans to start the demolition works in September 2003 and the construction works for the new blocks in November 2003 for completion in August 2005.

JUSTIFICATION

- 4. The Yuen Long Chamber of Commerce Primary School currently operates 12 AM classes and 12 PM classes from primary 1 to primary 6 consisting of some 950 students. The existing school buildings to be demolished and the SIP block were built in early 1950s and 1998 respectively, comprising the following facilities
 - (a) 12 classrooms;
 - (b) three special rooms;

/(c)

The green corner is a designated area inside the campus to enable students to develop an interest in horticulture and natural environment. The green corner may include a green house, a weather station and planting beds.

- (c) a small group teaching room;
- (d) two interview rooms;
- (e) a staff room;
- (f) a staff common room;
- (g) a student activity centre; and
- (h) a library.
- 5. The existing school buildings do not have certain facilities considered essential by today's accommodation standards. It is not commensurate with the prevailing standard design for a public sector primary school. The facilities that are currently not available are certain special rooms (including a language room and a general studies room), a guidance activity room and an assembly hall. The area of the existing music room and computer-assisted learning room is 38% and 67% below the standard provisions respectively.
- 6. In line with our established policy, we propose to convert the school into whole-day operation and to improve the school's environment and facilities to the latest standard design and schedule of accommodation for a primary school as far as practicable. We believe these improvement measures will contribute positively to the effectiveness of teaching and learning. Upon completion of the project, the school will have the facilities referred to in paragraph 3(c) to (e) above.
- 7. With no vacant premises in the district for decanting during the construction of the new blocks under **19EA**, the school sponsor would make use of the site of the original special room building to provide six classrooms and a small library (at a cost of \$1 million in September 2002 prices) and alter some existing rooms in the SIP block² into three classrooms and two special rooms (at a cost of \$1.2 million in September 2002 prices) for the temporary accommodation of students. This ensures that teaching and learning activities of the school will not be disrupted. Upon completion of the new blocks, the school sponsor will fit out the SIP block (at a cost of \$3 million in September 2002 prices) to accommodate the facilities in paragraph 3(d) above to meet current standards and requirements of a 24-classroom whole-day school.

/FINANCIAL

The SIP block was completed in 1998 under phase 1 of the SIP at a cost of \$17.4 million in MOD prices. It currently accommodates three classrooms, an interview room, a staff room, a student activity centre and a library.

FINANCIAL IMPLICATIONS

8. The school sponsor estimates the capital cost to be \$81.8 million in MOD prices (see paragraph 9 below). D Arch S has examined and endorsed the cost estimate, made up as follows –

		\$ m	illion	
(a)	Demolition		2.8	
(b)	Temporary accommodation of facilities		2.2	
(c)	Piling		17.6	
(d)	Building		30.4	
(e)	Building services		11.6	
(f)	Alteration to the SIP block for permanent accommodation of facilities		3.0	
(g)	Drainage and external works		6.2	
(h)	Furniture and equipment (F&E) ³		2.8	
(i)	Consultants' fees for –		3.2	
	(i) Contract administration	1.6		
	(ii) Site supervision	1.3		
	(iii) Out-of-pocket expenses	0.3		
(j)	Contingencies		8.0	
	Sub-total		87.8	(in September
(k)	Provision for price adjustment		(6.0)	2002 prices)
	Total		81.8	(in MOD prices)
				/The

Based on an indicative list of F&E items required by the school compiled on the basis of a survey on the serviceability of the existing F&E.

The school sponsor proposes to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for consultants' fees by man-months is at Enclosure 3. The CFA of the new blocks under **19EA** is 7 122 square metres. The estimated construction unit cost of the new blocks, represented by the building and building services costs, is \$5,897 per square metre of CFA in September 2002 prices. D Arch S considers this comparable to similar school projects built by the Government.

9. Subject to approval, the school sponsor will phase the expenditure as follows –

Year	\$ million (Sept 2002)	Price adjustment factor	\$ million (MOD)
2003 – 04	4.0	0.94300	3.8
2004 – 05	69.3	0.93003	64.5
2005 – 06	12.5	0.93003	11.6
2006 – 07	2.0	0.93003	1.9
	87.8		81.8

- 10. We have derived the MOD estimates on the basis of the Government's latest forecast of trend labour and construction prices for the period 2003 to 2007. The school sponsor will deliver the demolition and construction works through two fixed-price lump-sum contracts because it can clearly define the scope of works in advance, leaving little room for uncertainty.
- 11. The cost of F&E is estimated to be \$2.8 million. It is less than the standard F&E provision for a new 24-classroom primary school for conversion of existing bi-sessional school into whole-day operation as we have taken into account the serviceability of the F&E of the existing school in estimating the amount required. We will adopt the same practice for all school projects for redevelopment of existing schools.

12. The annual recurrent expenditure of the school is about \$19.1 million. Upon redevelopment, it is estimated to be \$19.6 million.

PUBLIC CONSULTATION

- 13. As the proposed redevelopment project is carried out within the existing school boundary, we consider public consultation not necessary.
- 14. The school sponsor has consulted the parents and teachers of Yuen Long Chamber of Commerce Primary School on the proposed redevelopment project. They supported the proposal.

ENVIRONMENTAL IMPLICATIONS

15. The school sponsor engaged a consultant to conduct a Preliminary Environmental Review (PER) for **19EA** in June 2000. The PER concluded that the new school premises would not be subject to adverse environmental impacts provided that the school sponsor implements the following environmental mitigation measures to keep the road traffic noise impact within the limits recommended in the Hong Kong Planning Standards and Guidelines –

	Mitigation measures	Estimated cost \$ million (in Sept 2002 prices)
(a)	Provision of insulated windows and air-conditioning to 20 classrooms from the 2/F to 5/F at the northern façade of the new classroom block	2.0
(b)	Provision of insulated windows and air- conditioning to four classrooms from the 2/F to 5/F at the eastern façade of the new classroom block	0.3
(c)	Provision of insulated windows and air- conditioning to one special room on the 2/F at the western façade of the new assembly hall block	0.1

The school sponsor has included the cost of the above mitigation measures as part of the building services works in the project estimate.

- During construction, the school sponsor will control noise, dust and site run-off nuisances to within established standard and guidelines through the implementation of mitigation measures in the relevant contracts. These include the use of silencers, mufflers, acoustic lining or shields for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.
- 17. At the planning and design stages, the school sponsor has considered measures to reduce the generation of construction and demolition (C&D) materials. The school sponsor has introduced more pre-fabricated building elements into project design to reduce temporary formwork and construction waste. These include dry wall partitioning and proprietary fittings and fixtures. The school sponsor will use suitable excavated materials for filling within the site to minimise off-site disposal. In addition, the school sponsor will require its contractor to use metal site hoardings and signboards so that these materials can be recycled or reused in other projects.
- 18. The school sponsor will require its 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. school sponsor will ensure that the day-to-day operations on site comply with the approved WMP. The school sponsor will control the disposal of public fill and C&D waste to designated public filling facilities and landfills respectively through a trip-ticket system. The school sponsor will require its contractor to separate public fill from C&D waste for disposal at appropriate facilities. The school sponsor will record the disposal, reuse and recycling of C&D materials for monitoring purposes. The school sponsor estimates that the project will generate about 8 000 cubic metres (m³) of C&D materials. Of these, the school sponsor will reuse about 1 600 m³ (20%) on site, 5 200 m³ (65%) as fill in public filling areas⁴, and dispose of 1 200 m³ (15%) at landfill. The notional cost of accommodating C&D waste at landfill sites is estimated to be \$150,000 for this project (based on a notional unit cost⁵ of \$125/m³).

/LAND

A public filling area is a designated part of a development project that accepts public fill for reclamation purposes. Disposal of public fill in a public filling area requires a licence issued by the Director of Civil Engineering.

This estimate has taken into account the cost for developing, operating and restoring the landfill 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 are likely to be more expensive) when the existing ones are filled. The notional cost estimate is for reference only and does not form part of this project estimate.

LAND ACQUISITION

19. This project does not require land acquisition.

BACKGROUND INFORMATION

- 20. We consulted the Legislative Council Panel on Education on 20 January 2003 on our latest plan for building secondary and primary schools. The project is one of the planned projects. The Panel had no objection to our proposed plan.
- We upgraded **19EA** to Category B in October 2001. The school sponsor engaged consultants to carry out the PER in June 2000, topographical survey in October 2002, detailed design in January 2003, site investigation in April 2003 and tender documentation in May 2003 for the project. We will charge the Government's contribution of \$4 million to block allocation **Subhead 8100QX** "Alterations, additions, repairs and improvements to education subvented buildings". The consultants engaged by the school sponsor have completed the PER, topographical survey, detailed design and site investigation and are finalising the tender documents.
- We estimate that the project will create some 85 jobs comprising 15 professional/technical staff and 70 labourers, totalling 1 850 man-months.

Education and Manpower Bureau June 2003





電腦繪製的工地模擬圖(西北面) COMPUTER RENDERING DRAWING OF THE SITE (NORTH-WESTERN VIEW)



電腦繪製的工地模擬圖(東南面) COMPUTER RENDERING DRAWING OF THE SITE (SOUTH-EASTERN VIEW)

Job title

19EA REDEVELOPMENT OF YUEN LONG CHAMBER OF COMMERCE PRIMARY SCHOOL AT CASTLE PEAK ROAD, YUEN LONG 元朗青山公路元朗爾會小學重建計劃

A4 210 x 297

19EA – Redevelopment of Yuen Long Chamber of Commerce Primary School at Castle Peak Road, Yuen Long

Breakdown of the estimate for consultants' fees(Note 1)

				Estimated man- months	Average MPS* salary point	Multiplier (Note 2)	Estimated fee (\$ million)
(a)	Co	nsultants' staff cos	ts				
	(i)	Contract administration (Note 3)	Professional Technical	- -	_ _	<u>-</u>	1.1 0.5
	(ii)	Site supervision (Note 4)	Technical	42.3	14	1.6	1.3
						Sub-total	2.9
(b)		t-of-pocket benses					
	oth	nography and er direct enses					0.3
	•					Sub-total	0.3
						Total	3.2

^{*} MPS = Master Pay Scale

Notes

- 1. The figures are based on estimate prepared by the school sponsor. D Arch S has examined the figures and considered them reasonable.
- 2. A multiplier of 1.6 is applied to the average MPS point to estimate the cost of resident site staff supplied by the consultants. (As at 1 October 2002, MPS point 14 is \$19,195 per month.)

- 3. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of 19EA. The assignment will only be executed subject to Finance Committee's approval to upgrade 19EA to Category A.
- 4. The consultants' staff cost for site supervision is based on the estimate prepared by the school sponsor. We will only know the actual man-months and actual costs after completion of the works.
- 5. Out-of-pocket expenses are the actual costs incurred. The consultants are not entitled to any additional payment for overheads or profit in respect of these items.