# ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

## HEAD 708 – CAPITAL SUBVENTIONS AND MAJOR SYSTEMS AND EQUIPMENT

**Education Subventions** 

96EB - Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City

Members are invited to recommend to the Finance Committee the upgrading of **96EB** to Category A at an estimated cost of \$81.4 million in money-of-the-day prices as the capital grant from the Government for construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City.

#### **PROBLEM**

Munsang College (SSB) Limited (the School Sponsoring Body) needs to construct an assembly hall block for Munsang College (the School) to improve its learning and teaching environment.

## **PROPOSAL**

2. The Secretary for Education, on the advice of the Director of Architectural Services, proposes to upgrade **96EB** to Category A at a Government contributed portion to be capped at \$81.4 million in money-of-the-day (MOD) prices for the construction of a new assembly hall block at the School.

## PROJECT SCOPE AND NATURE

- 3. The scope of the project to be funded by government subvention includes the construction of a new assembly hall block to provide the following facilities
  - (a) an assembly hall including a stage, chair stores and dressing rooms;
  - (b) a covered playground;
  - (c) multi-purpose areas;
  - (d) a student activity centre;
  - (e) physical education stores; and
  - (f) ancillary facilities including changing rooms and toilets.
- 4. The capital grant from the Government is to cover the standard provision by making reference to that of a standard-design 30-classroom public sector secondary school. For those above-standard facilities (such as extra floor areas above the standard provision of the facilities listed in paragraph 3 above) and the gymnasium which is a non-standard facility, they will be funded by the School Sponsoring Body. On this basis, the School Sponsoring Body will, on top of the government capital subvention, contribute \$144.9 million in MOD prices to meet the cost of those facilities and the related consultancy fee. A comparison of the facilities at the proposed new assembly hall block with those of a standard-design public sector secondary school, as well as the non-standard facility to be provided, are at Enclosure 1.
- 5. The proposed works will be carried out within the School's existing campus with a site area of about 15 500 square metres (m²). The School will maintain the planning target of providing 2 m² of open space per student after the construction of the new block. A site plan, floor plans, sectional plans, artist's impressions and a barrier-free access plan for the project are at Enclosures 2 to 7.
- 6. Subject to the funding approval of the Finance Committee, the School Sponsoring Body plans to commence the works in the second quarter of 2019 for completion in the third quarter of 2021.

## **JUSTIFICATION**

- 7. It is the Government's plan to, based on the needs of the schools, improve the physical conditions and facilities of school premises not built according to the prevailing standards through reprovisioning and redevelopment. The School, operating 30 classes in the 2018/19 school year, first operated as a private school. The School has been sharing the hall facility with the Munsang College Primary School and the Munsang College Kindergarten on the same campus until 1978, when the School turned into an aided school. Since then, the School has been operating without its own assembly hall and has to rent the hall facility from the two private sections (i.e. Munsang College Primary School and Munsang College Kindergarten) from time to time. The high utilisation of the hall however has posed difficulties to the School in arranging large scale teaching and learning activities.
- 8. The School also falls short of physical education stores and ancillary facilities. Some of the existing facilities such as covered playground, multipurpose area and student activity centre are undersized as compared to prevailing standards. Construction of a new assembly hall block to house the aforementioned facilities is necessary to improve the teaching and learning environment of the School.
- 9. Construction of the proposed new assembly hall block would not require additional land resources from the Government. During the construction, the School will continue to operate within the existing school premises and the construction site will be separated from the school operation area to ensure safety of the school users. As the assembly hall block does not comprise classrooms, upon completion of the project, the overall supply of school places will not be affected.

## FINANCIAL IMPLICATIONS

10. The total amount of the capital grant to be provided by the Government is \$81.4 million in MOD prices (please see paragraph 14 below), broken down as follows –

# \$ million (in MOD price)

(a) Site formation 8.5

(b) Piling 6.8

			million AOD price)	
(c)	Building <sup>1</sup>		38.2	
(d)	Building services		13.3	
(e)	Drainage		0.7	
(f)	External works		2.3	
(g)	Additional energy conservation, green and recycled features		1.0	
(h)	Furniture and equipment (F&E) <sup>2</sup>		0.1	
(i)	Consultants' fees for  (i) contract administration  (ii) management of resident site staff (RSS)	1.2 0.1	1.3	
(j)	Remuneration of RSS		1.8	
(k)	Contingencies		7.4	_
	Total		81.4	_

The School Sponsoring Body has engaged consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and RSS costs by man-months is at Enclosure 8. On top of the capital grant from the Government, the School Sponsoring Body will share the professional consultants' fees and related cost, and bear the costs for those above-standard or non-standard facilities of **96EB**. Together with the School Sponsoring Body's top-up contribution of \$144.9 million in MOD prices, the total project cost estimate of **96EB** is \$226.3 million in MOD prices. The breakdown is at Enclosure 9.

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Building works cover construction works of substructure and superstructure of the building.

<sup>&</sup>lt;sup>2</sup> The estimated cost is based on an indicative list of F&E required.

- 12. The construction floor area (CFA) of the subvented portion of the new assembly hall block<sup>3</sup> of **96EB** is about 1 854 m<sup>2</sup>. Its estimated construction unit cost, represented by the building and building services costs, is \$27,778 per m<sup>2</sup> of CFA in MOD prices. We consider this comparable to that of similar projects built by the Government.
- 13. The capital grant to be provided by the Government will be capped at \$81.4 million in MOD prices. The School Sponsoring Body will be responsible for all additional funding requirements including any higher-than-expected final project cost. The Government and the School Sponsoring Body will share all savings arising from the lower-than-expected final project cost based on the contribution ratios between the Government and the School Sponsoring Body.
- 14. Subject to approval, the School Sponsoring Body plans to phase the expenditure in the coming financial years as follows –

# \$ million (in MOD prices)

Year	Capital grant under 96EB	Total estimated project cost to be incurred
2019 – 2020	_	27.3
2020 – 2021	-	63.4
2021 – 2022	34.8	89.0
2022 – 2023	33.1	33.1
2023 – 2024	13.5	13.5
	81.4	226.3

/15. .....

The CFA of the whole new assembly hall block (i.e. including both subvented and non-subvented portions) is about 4 530 m<sup>2</sup>.

- 15. The MOD estimates are derived on the basis of the Government's latest set of assumptions on the trend rate of change in the prices of public sector building and construction output for the period 2019 to 2024. The School Sponsoring Body will deliver the construction works through one lump-sum contract because the School can clearly define the scope of the works in advance. The contract will provide for price adjustments.
- 16. The cost of F&E for the project, estimated to be about \$0.1 million, will be borne by the Government according to the existing policy. We estimate the annual recurrent expenditure of the School to be \$68.5 million upon full commissioning of the new assembly hall block.

## **PUBLIC CONSULTATION**

- 17. We consulted the Housing and Infrastructure Committee of the Kowloon City District Council on 15 March 2018. Members supported this project.
- 18. We consulted the Legislative Council Panel on Education on 11 May 2018. Members of the Panel supported the project and did not raise any objection to the submission of the funding proposal to the Public Works Subcommittee. Supplementary information requested by Members was submitted to the Panel on 20 June 2018.

## **ENVIRONMENTAL IMPLICATIONS**

- 19. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term adverse environmental impacts. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.
- 20. During construction, the School Sponsoring Body will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the relevant contracts. These include the use of silencers, mufflers, acoustic lining or shields and the building of barrier wall for noisy construction activities, frequent cleaning and watering of the project site, and the provision of wheel-washing facilities.

- At the planning and design stage, the School Sponsoring Body has considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, the School Sponsoring Body will require the contractor to reuse inert construction waste (e.g. use of excavated materials for filling within the project site) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>4</sup>. The School Sponsoring Body will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, and the use of non-timber formwork to further reduce the generation of construction waste.
- 22. At the construction stage, the School Sponsoring Body will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation means to avoid, reduce, reuse and recycle inert construction waste. The School Sponsoring Body will ensure that the day-to-day operations on site comply with the approved plan. The School Sponsoring Body will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. The School Sponsoring Body will control the disposal of inert construction waste and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.
- The School Sponsoring Body estimates that the project will generate in total about 4 550 tonnes of construction waste. Of these, the School Sponsoring Body will reuse about 1 250 tonnes (27%) of inert construction waste on site and deliver about 2 680 tonnes (59%) of inert construction waste to public fill reception facilities for subsequent reuse. The School Sponsoring Body will dispose of the remaining 620 tonnes (14%) of non-inert construction waste at landfills. The total cost for disposal of construction waste at public fill reception facilities and landfill sites is estimated to be \$0.3 million for this project (based on a unit charge rate of \$71 per tonne for disposal at public fill reception facilities and \$200 per tonne at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N)).

/ENERGY .....

Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

## ENERGY CONSERVATION, GREEN AND RECYCLED FEATURES

- 24. This project will adopt various forms of energy efficient features and renewable energy technologies, in particular
  - (a) heat energy reclaim of exhaust air; and
  - (b) photovoltaic system.
- 25. For greening features, there will be landscaping garden and planters in the part of roofs and terraces for environmental and amenity benefits. The external wall will also be partially screened by vertical greening.
- 26. For recycled features, the School Sponsoring Body will adopt rainwater harvesting system for irrigation purpose.
- The total estimated additional cost for adoption of the above energy conservation measures, greening features and recycled features is around \$2.2 million (including \$0.2 million for energy efficient features), which has been included in the cost estimate of this project. The energy efficient features will achieve 6.0% energy savings in the annual energy consumption with a payback period of about nine years.

## HERITAGE IMPLICATIONS

28. This 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.

## LAND ACQUISITION

29. The project will not require any land acquisition.

/BACKGROUND .....

#### **BACKGROUND INFORMATION**

- 30. We upgraded **96EB** to Category B in September 2014. The School Sponsoring Body engaged consultants to undertake the detailed design and tender documentation in November 2015. We will charge the estimated cost of \$2.5 million for these services to block allocation **Subhead 8100QX** "Alterations, additions, repairs and improvements to education subvented building". The consultants have completed all of the above services except preparation of tender documents which are being finalised.
- 31. There are no existing trees within the project boundary. The proposed project therefore will not involve the removal of any trees. We will, nonetheless, incorporate planting proposals as part of this project including the planting of 230 shrubs and 32 351 groundcover and 59 climbers.
- 32. We estimate that the proposed works will create about 140 jobs (125 for labourers and 15 for professional/technical staff), providing a total employment of 2 100 man-months.
- 33. The total estimated cost of the project was adjusted to \$226.3 million in MOD prices, compared with \$220.9 million as mentioned in the discussion paper for the meeting of the Panel on Education held on 11 May 2018. The adjustment was brought about by the slight changes to the design of the proposed assembly hall block, including the minor modification of the design and/or installations at the covered playground, multi-purpose area, plant room and landscape garden at certain areas, as proposed by the School Sponsoring Body with a view to facilitating their daily maintenance and operation. The additional cost for these above-standard facilities will be borne by the School Sponsoring Body.

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Education Bureau October 2018

# 96EB – Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City

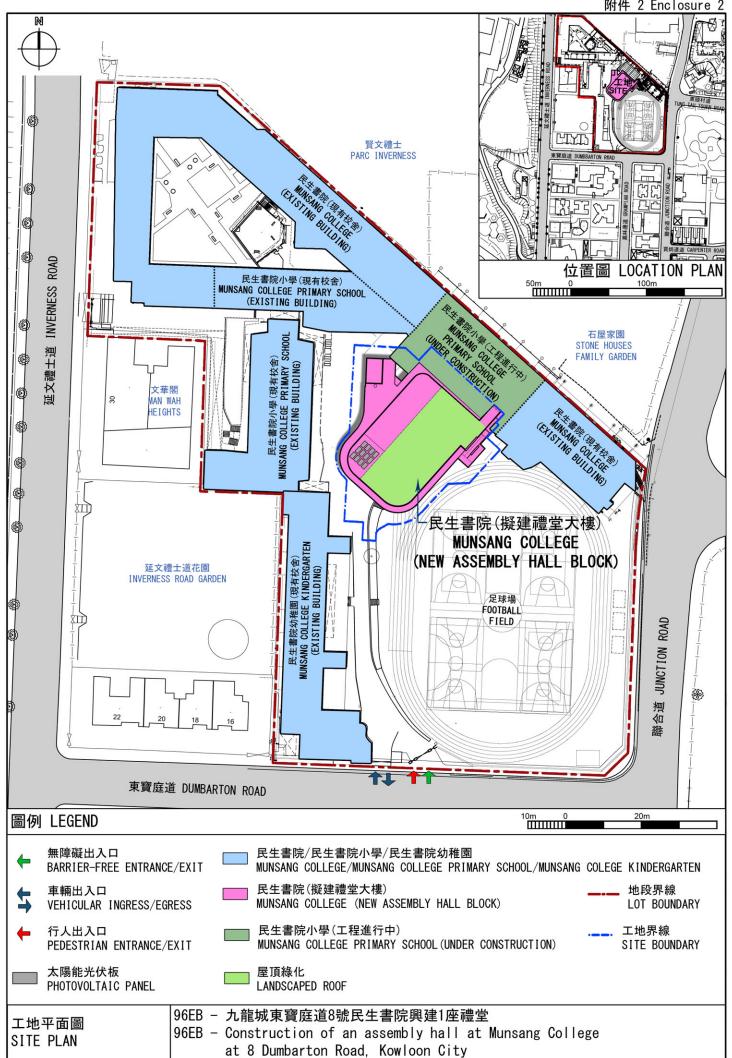
# (A) A comparison of the proposed facilities for Munsang College with those of a standard-design public sector secondary school

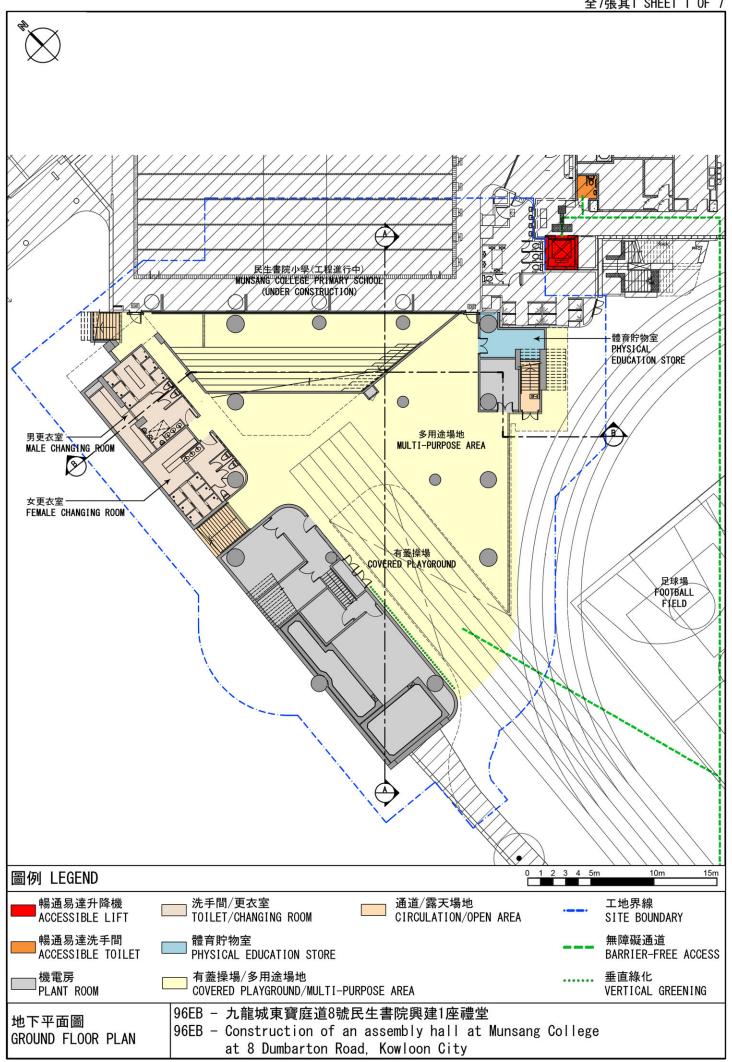
Assembly Hall and Physical Education Facilities	A 30-classroom standard-design public sector secondary school	96EB
(a) Assembly hall including a stage, chair stores and dressing rooms	1	1 note
(b) Covered playground	1	1 note
(c) Multi-purpose area	1	2
(d) Student activity centre	1	1 note
(e) Physical education store	1	4
(f) Ancillary facilities including changing rooms and toilets	Available	Available

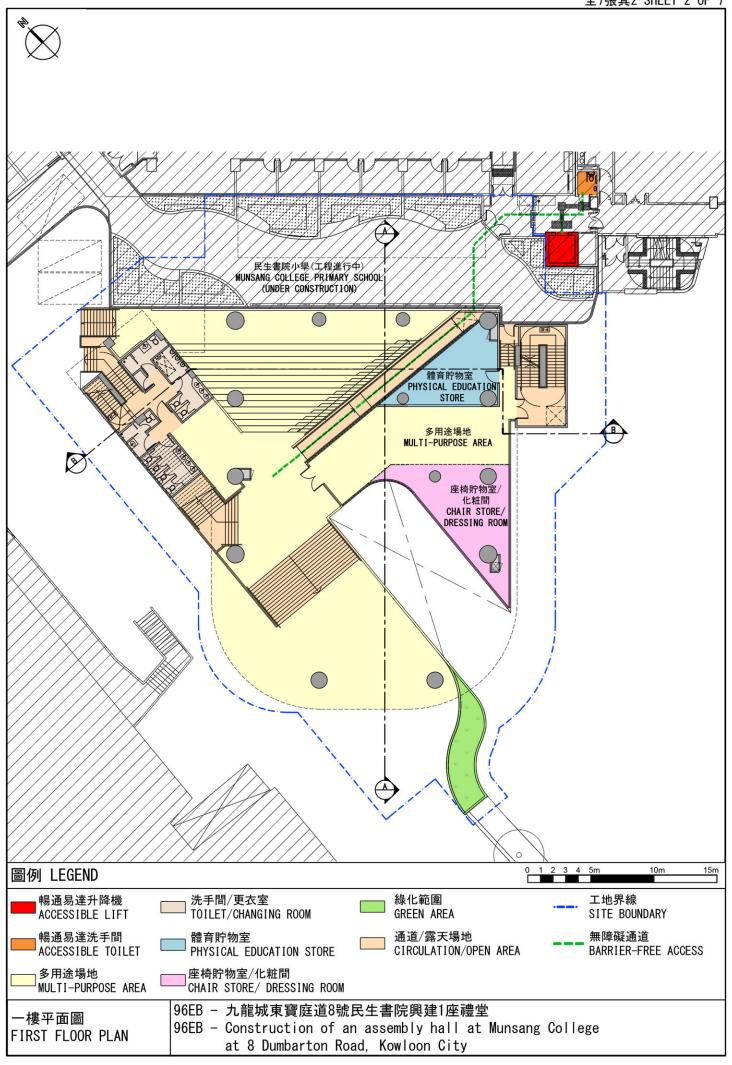
**note:** the floor area of the proposed facility exceeds the standard provision.

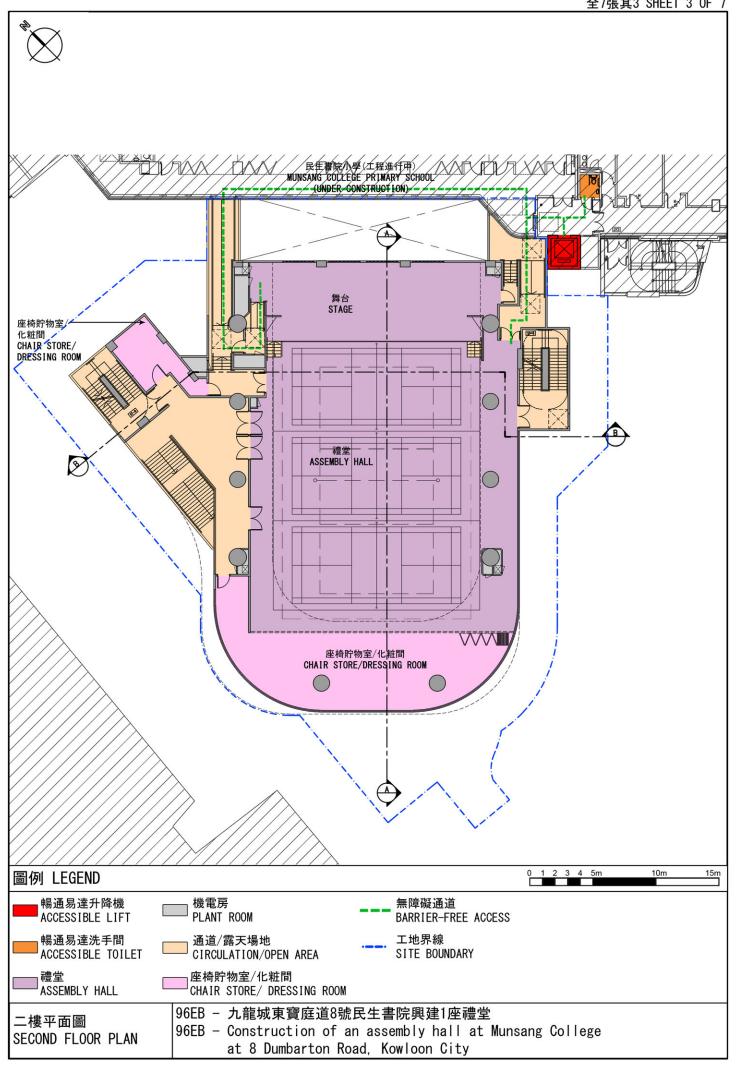
## (B) Other non-standard facility to be funded by the School Sponsoring Body

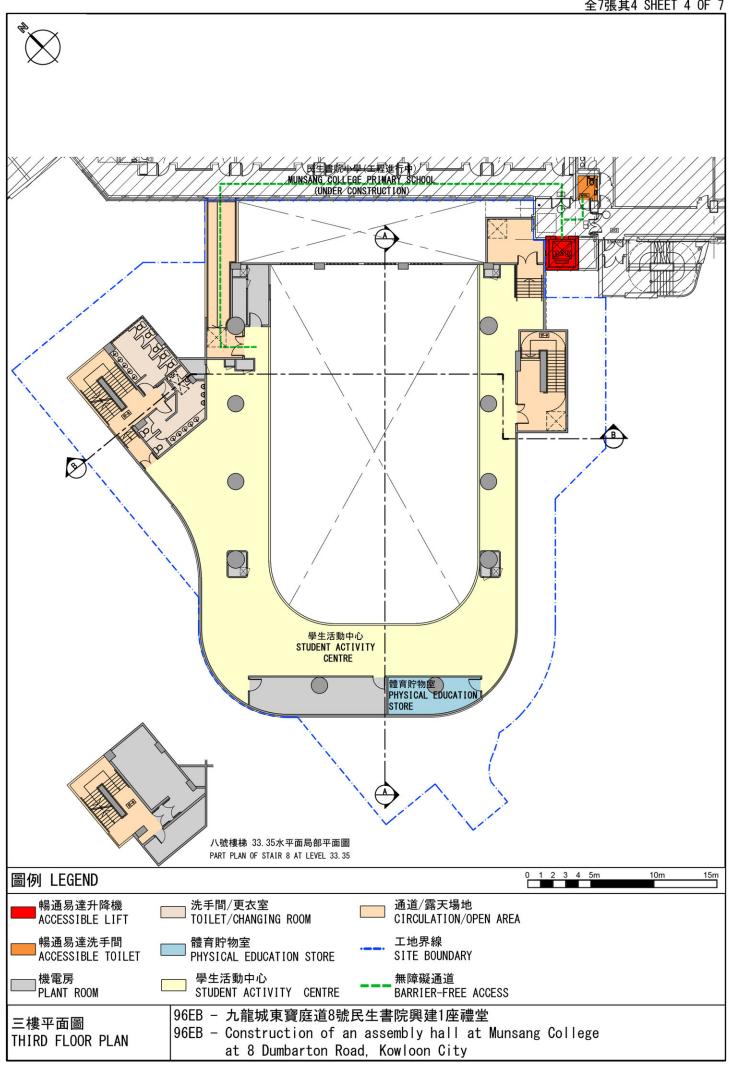
Facility	96EB	
(a) Gymnasium	1	

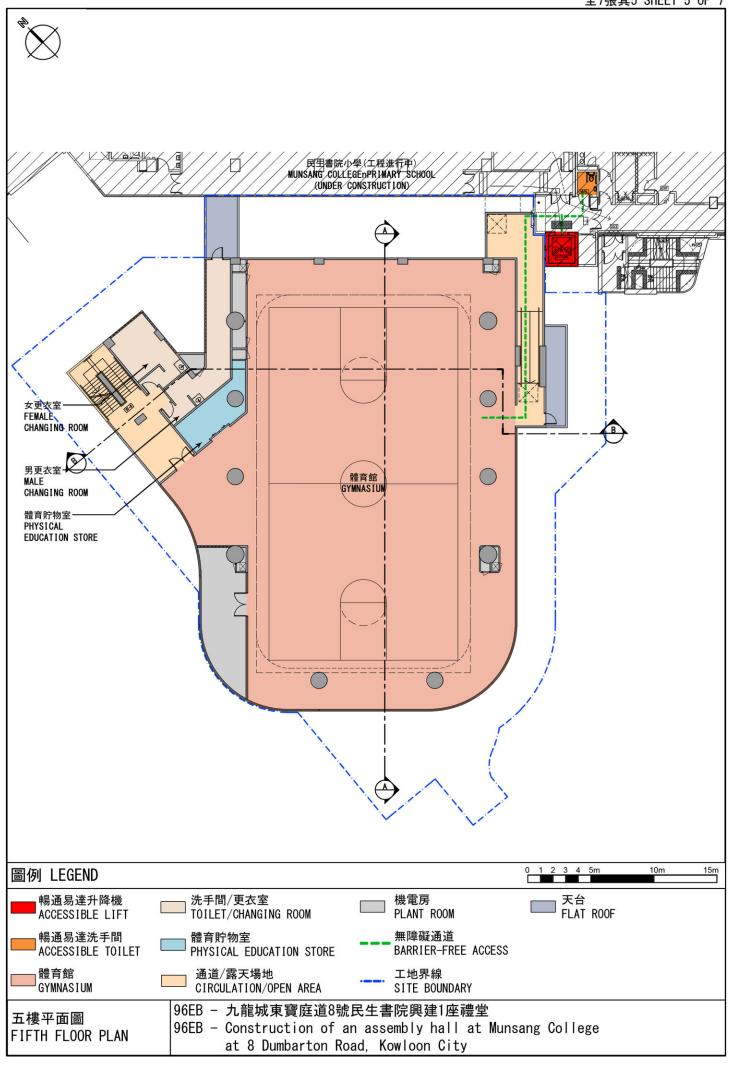


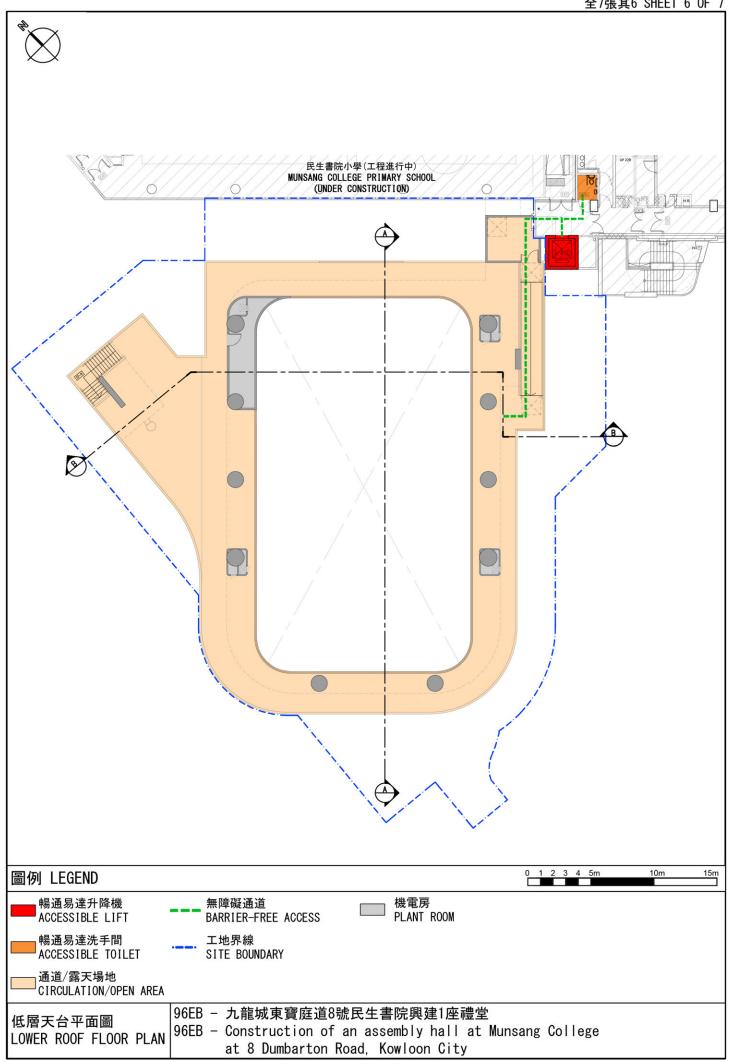


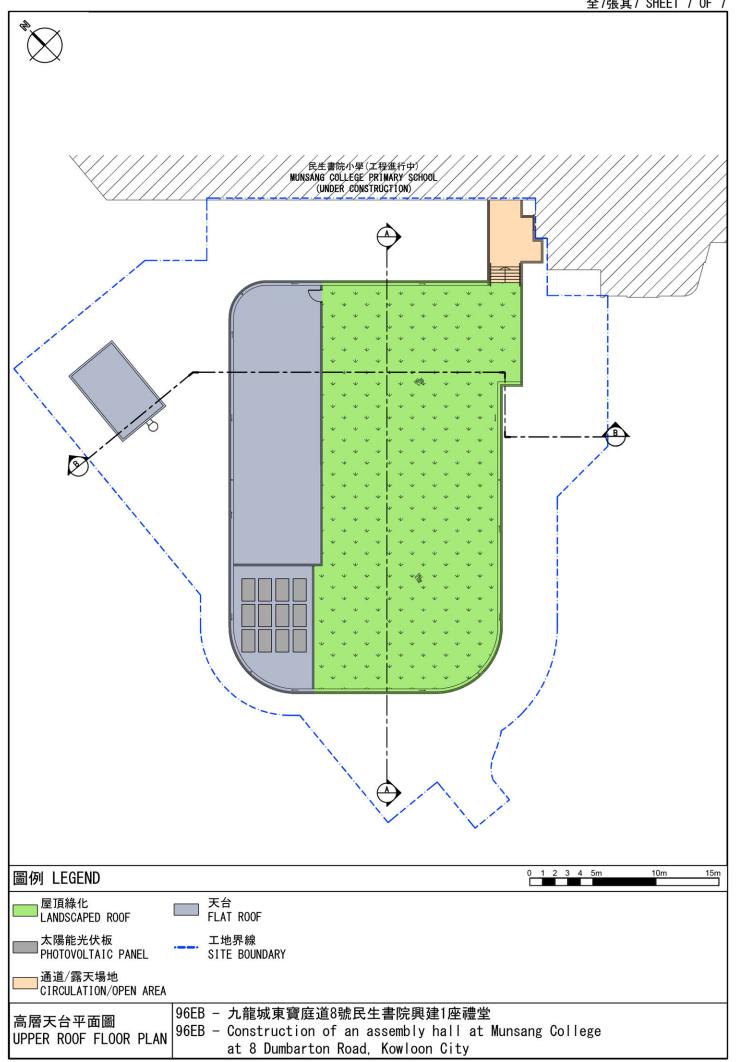


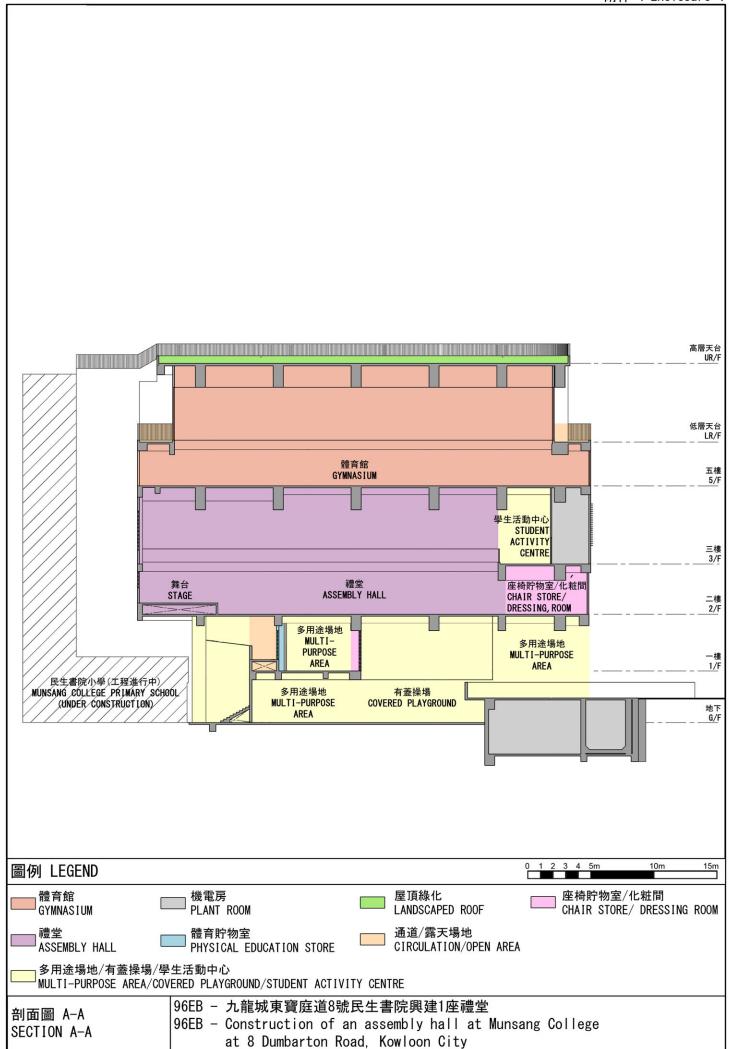


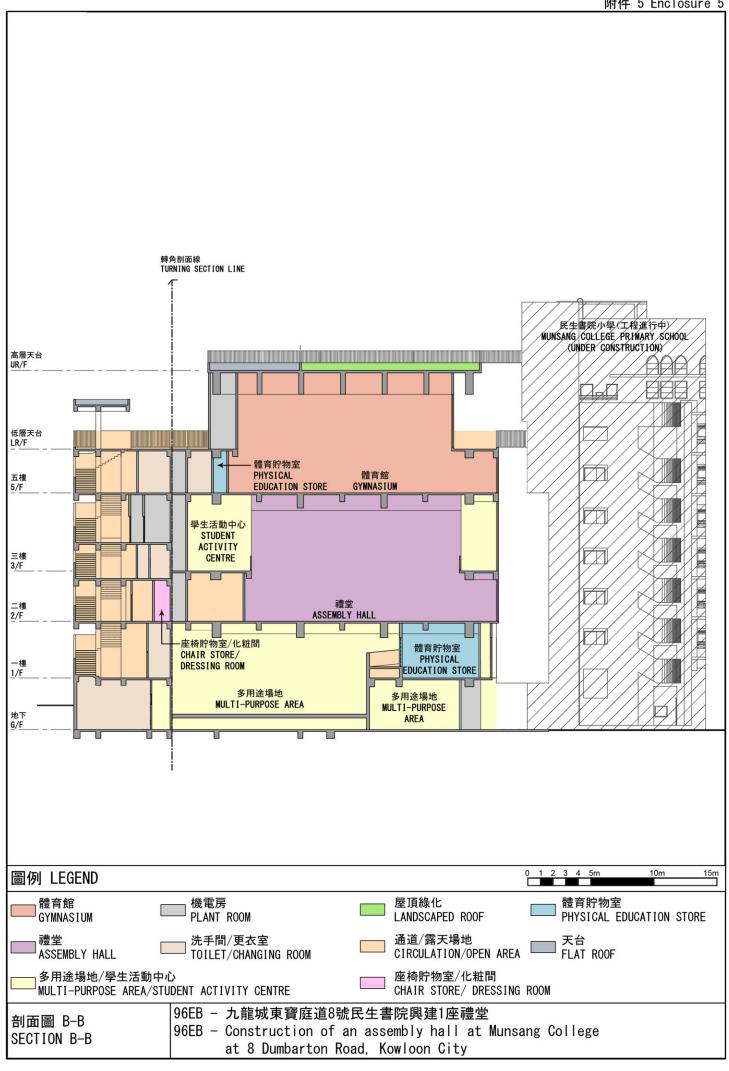














從足球場望向新禮堂大樓的構思透視圖 PERSPECTIVE VIEW FROM FOOTBALL FIELD

構思圖 ARTIST'S IMPRESSION 96EB - 九龍城東寶庭道8號民生書院興建1座禮堂

96EB - Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City



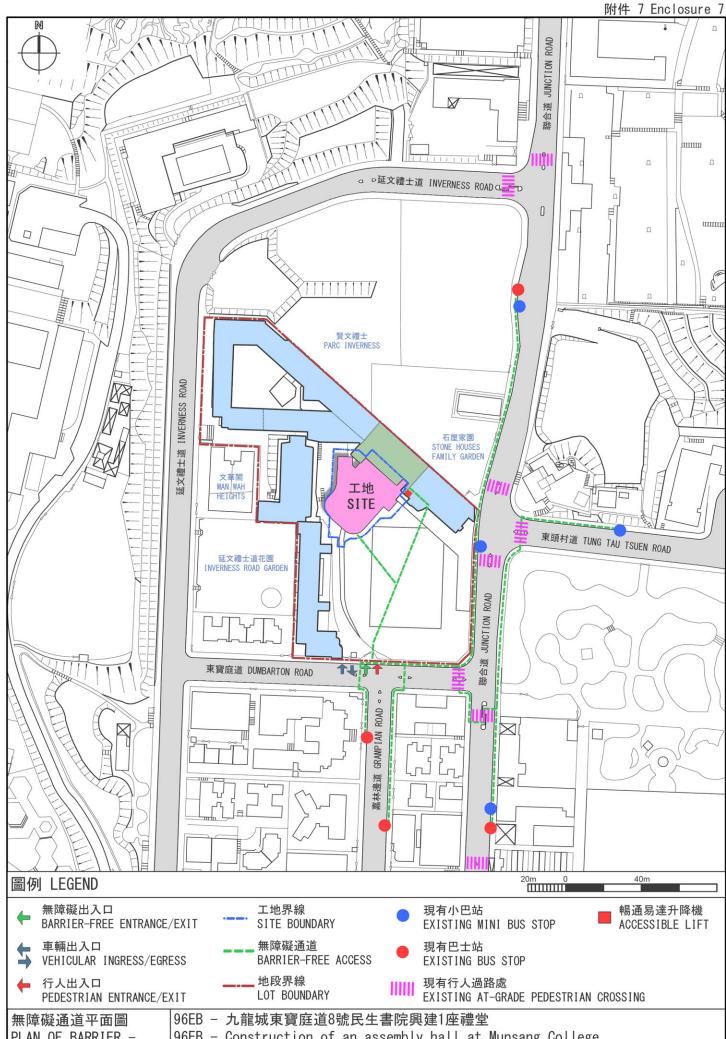
從東南面望向新禮堂大樓的構思鳥瞰圖

AERIAL VIEW FROM SOUTH-EASTERN DIRECTION

構思圖 ARTIST'S IMPRESSION 96EB - 九龍城東寶庭道8號民生書院興建1座禮堂

96EB - Construction of an assembly hall at Munsang College

at 8 Dumbarton Road, Kowloon City



PLAN OF BARRIER -FREE ACCESS

96EB - Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City

# 96EB – Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City

## Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2018 prices)

			Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees for	Professional	_	_	_	3.0
	contract administration (Note 2)	Technical	_	_	_	_
					Sub-total	3.0#
(b)	Resident site staff	Professional	_	_	_	_
	(RSS) costs (Note 3)	Technical	102	14	1.6	4.7
					Sub-total	4.7
	Comprising –  (i) Consultant's fees for management of RSS (Note 3)				0.2#	
	(ii) Remuneration of RSS				4.5#	
					Total	7.7

<sup>\*</sup> MPS = Master Pay Scale

#### **Notes**

- 1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS supplied by the consultants (as at now, MPS salary point 14 = \$28,725 per month).
- 2. The consultants' fees for contract administration are calculated in accordance with the existing consultancy agreement for the design and construction of **96EB**. The assignment will only be executed subject to FC's funding approval to upgrade **96EB** to Category A.
- 3. The actual man-months and actual costs will only be known after completion of the construction works.

#### Remarks

The cost figures in the Enclosure are shown in constant prices to correlate with the MPS salary point of the same year. The figures marked with # are shown in MOD prices in Enclosure 9. For the Government subvented portion, it is shown in MOD prices in paragraph 10 of the main paper.

# 96EB – Construction of an assembly hall at Munsang College at 8 Dumbarton Road, Kowloon City

## Breakdown of total project cost estimate of 96EB

			S million MOD price)
(a)	Site formation		19.9
(b)	Piling		15.7
(c)	Building		121.0
(d)	Building services		31.0
(e)	Drainage		1.6
(f)	External works		5.5
(g)	Additional energy conservation, green and recycled features		2.2
(h)	Furniture and equipment (F&E)		0.1
(i)	Consultants' fees for  (i) contract administration  (ii) management of resident site staff  (RSS)	3.4 0.2	3.6
(j)	Remuneration of RSS		5.1
(k)	Contingencies		20.6
	Total	-	226.3