

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Recreation, Culture and Amenities – Cultural facilities

59RE – Construction of an Annex Building at the Ko Shan Theatre

Members are invited to recommend to the Finance Committee the upgrading of **59RE** to Category A at an estimated cost of \$683.2 million in money-of-the-day prices for the construction of an annex building at the Ko Shan Theatre.

PROBLEM

We need to construct an annex building at the Ko Shan Theatre to provide a medium-sized theatre and facilities for rehearsals, training and other activities related to Cantonese opera to complement the existing facilities at Ko Shan Theatre for supporting and promoting this traditional art form in the community.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **59RE** to Category A at an estimated cost of \$683.2 million in money-of-the-day (MOD) prices for the construction of an annex building at the Ko Shan Theatre.

/PROJECT.....

PROJECT SCOPE AND NATURE

3. The project site is located at the existing tennis courts in the Ko Shan Road Park and occupies an area of 4 000 square metres (m²). The proposed scope of works under **59RE** includes—

- (a) an auditorium with a seating capacity of 600 and a stage equipped with a fly tower;
- (b) one large and two smaller rehearsal rooms;
- (c) three practice rooms with sound insulation;
- (d) an exhibition hall;
- (e) a photographic studio;
- (f) a resource centre;
- (g) a multi-purpose function room;
- (h) a tea house;
- (i) a souvenir shop; and
- (j) other supporting and ancillary facilities.

———— A site plan is at Enclosure 1 and an artist's impression of the annex building is at
———— Enclosure 2, and the floor plans and sectional drawing of the building are at
———— Enclosures 3 to 9. Subject to the funding approval by the Finance Committee, the construction works are expected to start in December 2010 for completion in June 2013.

/JUSTIFICATION.....

JUSTIFICATION

Policy Objectives of Promoting the Development of Cantonese Opera

4. Cantonese opera is an emblem of our local culture and a major performing art form of high artistic, cultural and heritage values in Hong Kong as well as in Southern China. The Government is committed to promoting the preservation and development of Cantonese opera. The proposed project is in line with the commitment made by the Government in the 2006-07 Policy Address to identify new venues to support the development of traditional Chinese and other performing arts. In the 2007-08 Policy Address, the Government has undertaken to actively preserve and promote Cantonese opera as part of Hong Kong's valuable intangible cultural heritage and a refined yet popular art form. On 30 September 2009, Cantonese opera was inscribed onto the United Nations Educational, Scientific and Cultural Organization (UNESCO) Representative List of the Intangible Cultural Heritage of Humanity.

Provision of Performance Venues for Cantonese Opera

5. To further promote and support the development of Cantonese opera, the Government is developing performance venues of different sizes to meet the long-term development needs of Cantonese opera in Hong Kong. The projects in the pipeline include —

- (a) conversion of the Yau Ma Tei Theatre and the Red Brick Building into a Xiqu Activity Centre with a small theatre (about 300 seats. Conversion works started in July 2009 and scheduled for completion within 2011);
- (b) construction of an annex building at the Ko Shan Theatre (scheduled for completion in 2013) comprising a medium-sized theatre (about 600 seats) and a large and two smaller rehearsal rooms (this is the funding proposal in the current submission); and
- (c) building a large-sized theatre (about 1 200 to 1 400 seats), a small-sized theatre (about 400 seats) and rehearsal facilities in the Xiqu Centre (scheduled for completion in 2015) in the West Kowloon Cultural District.

6. The proposed new 600-seat auditorium at the annex building of the Ko Shan Theatre is suitable for medium-scale performances, experimental productions and performances by budding troupes. In addition to the auditorium, performing troupes have indicated that supporting facilities such as rehearsal and practice rooms are also instrumental to a successful performance. Hence, provisions have been made to accommodate these facilities in the annex building. Together with the existing 1 031-seat theatre, it is expected that the new medium-sized auditorium will further enhance the Ko Shan Theatre's function as a dedicated venue for Cantonese opera for both established and budding Cantonese opera artists/performing troupes for performances, training, rehearsals and research.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$683.2 million in MOD prices (please see paragraph 8 below), broken down as follows –

	\$ million
(a) Site works	7.1
(b) Slope works	10.4
(c) Foundation and basement	60.8
(d) Building	220.8
(e) Building services	130.6
(f) Drainage	11.3
(g) External works	14.8
(h) Stage equipment ¹	42.2
(i) Furniture and equipment ²	4.4
(j) Additional energy conservation measures	18.7
	/\$ million....

¹ Stage equipment includes stage lighting, stage machineries, audio and visual equipment, etc.

² The estimated cost of furniture and equipment is based on an indicative list of items including stanchions, display board and liquid crystal display (LCD) projector, etc.

		\$ million	
(k)	Consultants' fees	15.0	
	(i) contract administration	14.1	
	(ii) management of resident site staff	0.9	
(l)	Remuneration of resident site staff	9.8	
(m)	Contingencies	54.1	
	Sub-total	600.0	(in September 2009 prices)
(n)	Provision for price adjustment	83.2	
	Total	683.2	(in MOD prices)

We propose to engage consultants to undertake contract administration and site supervision of the project. A detailed breakdown of the estimate for consultants' fees and resident site staff costs by man-months is at Enclosure 10. The construction floor area (CFA) of **59RE** is 14 180 m². The estimated construction unit cost, represented by the building and the building services costs, is \$24,781 per m² of CFA in September 2009 prices. We consider this comparable to that of similar projects built by the Government.

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

Year	\$ million (Sept 2009)	Price adjustment factor	\$ million (MOD)
2010 – 11	6.0	1.02700	6.2
2011 – 12	100.0	1.06551	106.6
2012 – 13	210.0	1.10813	232.7
2013 – 14	140.0	1.15246	161.3
2014 – 15	90.0	1.19856	107.9
2015 – 16	30.0	1.24650	37.4

/Year.....

Year	\$ million (Sept 2009)	Price adjustment factor	\$ million (MOD)
2016 – 17	24.0	1.29636	31.1
	<hr/> 600.0 <hr/>		<hr/> 683.2 <hr/>

9. We have derived the MOD estimates on the basis of the Government's latest forecast of trend rate of change in the prices of public sector building and construction output for the period 2010 to 2017. We will deliver the construction works through a lump-sum contract because we can clearly define the scope of the works in advance. The contract will provide for price adjustments.

10. We estimate the annual recurrent expenditure arising from this project to be \$18.3 million. The capital and recurrent costs of the project would be partly recovered from the relevant users on a subsidised fees basis, and would be taken into account in setting the new fee and in conducting future fee review exercises where appropriate.

PUBLIC CONSULTATION

11. We consulted the Kowloon City District Council (KCDC) on 30 June 2005, 27 October 2005 and 23 February 2006 on the project scope. We also consulted the Leisure and District Facilities Management Committee of KCDC on 2 April 2009 and 25 June 2009 on the conceptual design. Members supported the project and urged for its early implementation.

12. Furthermore, we have consulted the Cantonese Opera Advisory Committee (COAC), the terms of reference of which are to advise the Government on matters relating to the promotion, preservation, study and development of Cantonese opera. The COAC has formed a Venue Sub-Committee and invited representatives of the Chinese Artists Association of Hong Kong and the Hong Kong Academy for Performing Arts to attend the Sub-Committee / working group meetings to provide users' comments on the detailed design and layout of the annex building. COAC strongly supported the proposal and urged for early implementation of the project. Comments received during the consultation have been incorporated into the detailed design and layout as appropriate.

/13.

13. While the annex building at the Ko Shan Theatre will be a dedicated venue for Cantonese opera with priority venue hiring policy for Cantonese opera performances, it will also be open for other arts and community events. It is anticipated that other performing troupes, district arts bodies and schools will welcome the new theatre and the ancillary facilities for holding various arts and community activities.

14. We arranged a site visit for Members of the Legislative Council Panel on Home Affairs on 7 May 2010. During the visit, Members have provided some constructive suggestions. We will consider these suggestions when we take the project forward. We consulted the Panel on 14 May 2010. Members expressed general support for the project.

ENVIRONMENTAL IMPLICATIONS

15. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). It will not cause long-term adverse environmental impact. We have included in the project estimate the cost to implement suitable mitigation measures to control short-term environmental impacts.

16. During construction, we will control noise, dust and site run-off nuisances to within established standards and guidelines through the implementation of mitigation measures in the contract. 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 site, and the provision of wheel-washing facilities to prevent dust nuisance.

17. During planning and design stages, we have 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, we will require the contractor to reuse inert construction waste (e.g. excavated materials for backfilling) on site or in other suitable construction sites as far as possible, in order to minimize the disposal of inert construction waste to public fill reception facilities³. We will encourage the contractor to maximize the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimize the generation of construction waste.

/18.

³ Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of inert construction waste in public fill reception facilities requires a licence issued by the Director of Civil Engineering and Development.

18. We will also 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. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. We 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.

19. We estimate that the project will generate in total about 70 512 tonnes of construction waste. Of these, we will reuse about 20 448 tonnes (29%) of inert construction waste on site and deliver 48 274 tonnes (68.5%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of the remaining 1 790 tonnes (2.5%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites is estimated to be \$1.5 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁴ at landfills).

ENERGY CONSERVATION MEASURES

20. This project has adopted various forms of energy efficient features including –

- (a) water cooled chillers (evaporative cooling tower);
- (b) demand control for ventilation system for carpark;
- (c) automatic condenser tube cleaning equipment;
- (d) demand control of fresh air supply with carbon dioxide sensors;
- (e) heat wheel for heat energy reclaim of exhaust air;
- (f) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy and daylight sensors;

/(g)

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

- (g) compact fluorescent lamps with electronic ballast and lighting control by occupancy sensors;
- (h) light-emitting diode (LED) type exit signs;
- (i) automatic on/off switching of lighting and ventilation fan inside the lift; and
- (j) services-on-demand control for escalators.

21. For renewable energy technologies, we will install a photovoltaic system and solar bollard park light to provide renewable energy for environmental benefits.

22. For greening features, we will provide landscape on part of the roofs and terraces for environmental and amenity benefits. The external wall will also be partially screened by vertical greening.

23. For recycled features, we will install a rainwater recycling system for landscape irrigation with a view to conserving water. Besides, bleed-off water of cooling tower system will be collected for toilet flushing.

24. The total estimated additional cost for adopting the energy conservation measures is around \$18.7 million (including \$2.8 million for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 7.9% energy savings in the annual energy consumption with a payback period of about eight years.

HERITAGE IMPLICATIONS

25. 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

26. The project does not require any land acquisition.

/ BACKGROUND

BACKGROUND INFORMATION

27. We upgraded **59RE** to Category B in April 2008. We engaged an architectural consultant to undertake the detailed design and site investigation in December 2008 and a quantity surveying consultant to prepare tender documents in January 2009. The total cost of the above consultancy services and works is about \$20.2 million. We have charged this amount to block allocation **Subhead 3100GX** “Project feasibility studies, minor investigations and consultants’ fees for items in Category D of the Public Works Programme”. Detailed design and site investigation have been completed and the tender documents are being finalised.

28. This project would require the removal of the existing tennis courts in the Ko Shan Road Park. We have consulted KCDC on where the tennis courts should be reprovisioned within the district. We will in due course seek necessary funding resources from the appropriate authority to implement the reprovisioning project.

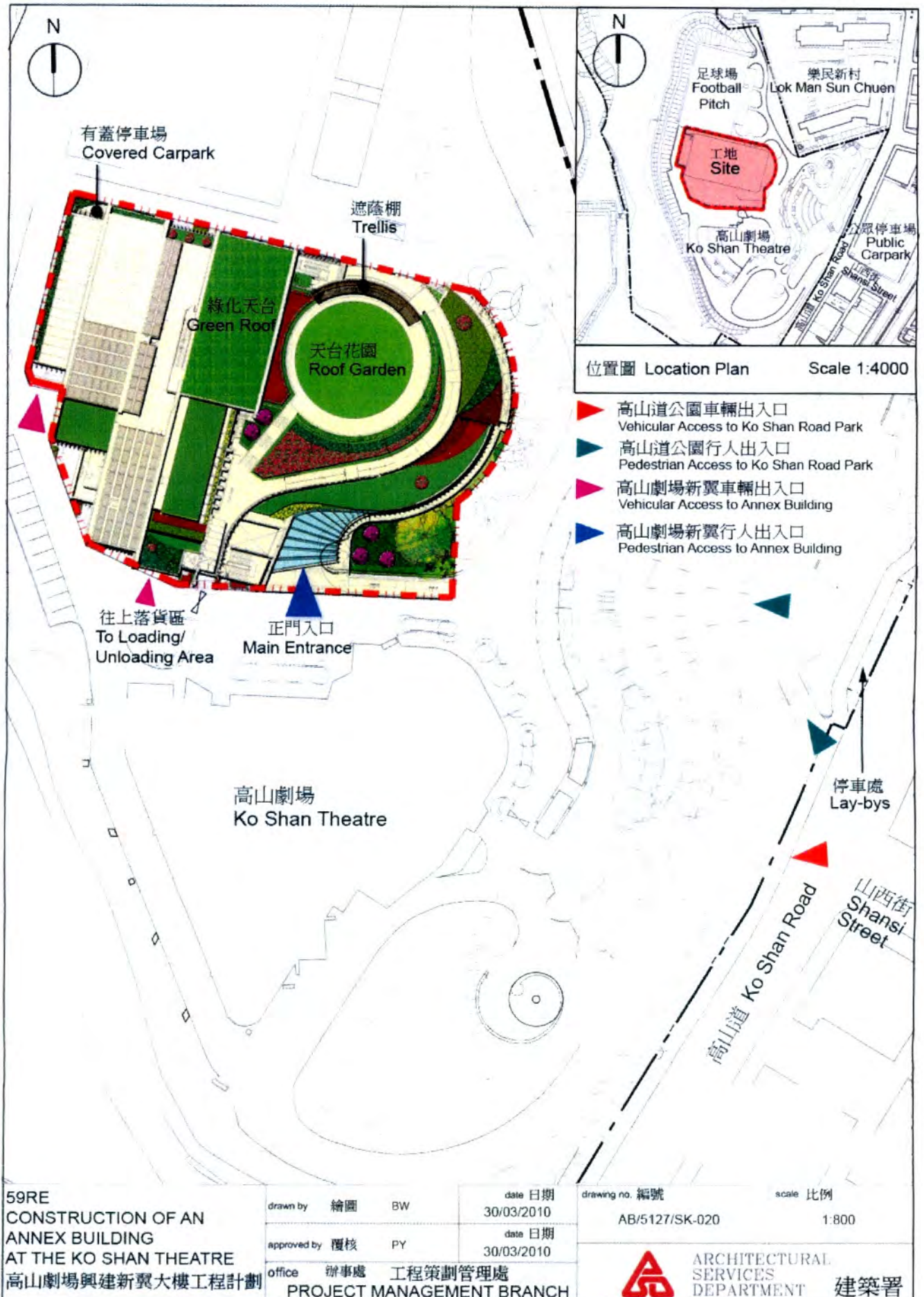
29. The proposed works will involve removal of 39 trees including 22 trees to be felled, 16 trees to be transplanted and one tree to be replanted within the project site. All trees to be removed are not important trees⁵. We will incorporate planting proposals as part of the project, including estimated quantities of 76 trees and 145 000 shrubs, ground covers and climbers.

30. We estimate that the proposed works will create about 320 jobs (285 for labourers and another 35 for professional/technical staff) providing a total employment of 9 200 man-months.

Home Affairs Bureau
May 2010

⁵ An “important tree” refers 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) tree 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, tree growing in unusual habitat; or
- (e) trees with trunk diameter equal or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.





AERIAL PERSPECTIVE OF
THE ANNEX BUILDING
(ARTIST'S IMPRESSION)
高山劇場新翼鳥瞰圖

59RE
CONSTRUCTION OF AN ANNEX BUILDING
AT THE KO SHAN THEATRE
高山劇場興建新翼大樓工程計劃

drawn by 繪圖 BW

date 日期
30/03/2010

drawing no. 編號

scale 比例

AB/5127/SK-019

NTS

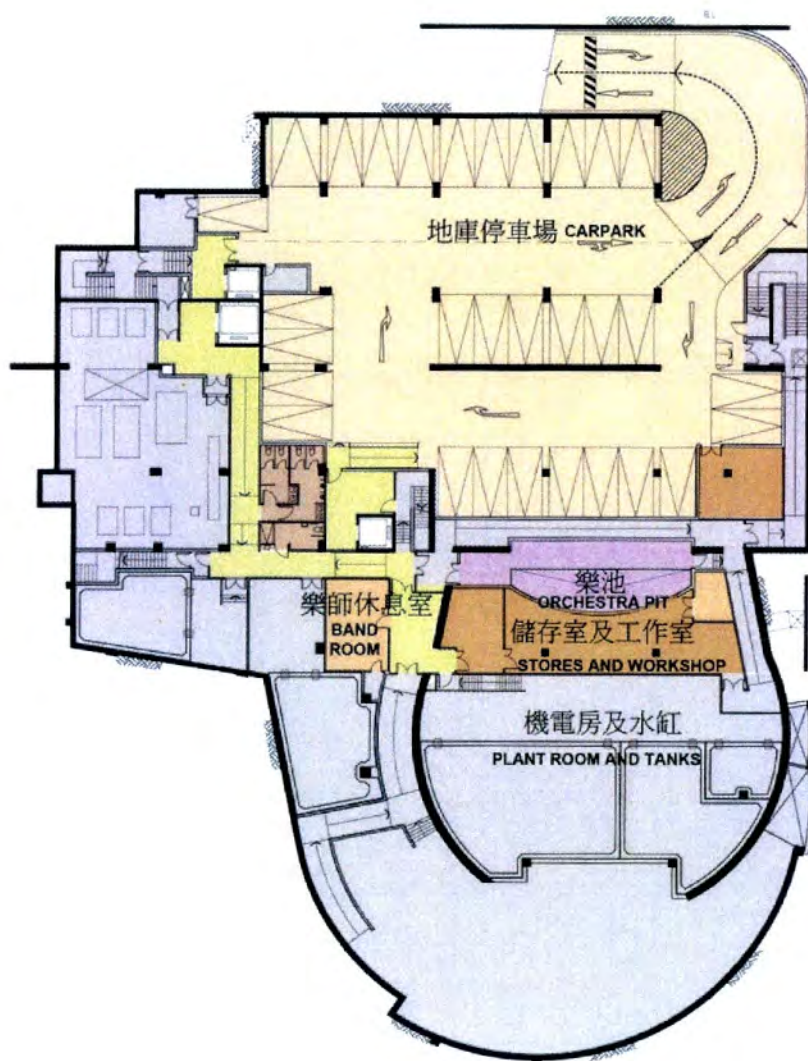
approved by 覆核 PY

date 日期
30/03/2010

office 辦事處 工程策劃管理處
PROJECT MANAGEMENT BRANCH



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BASEMENT PLAN 地庫平面圖

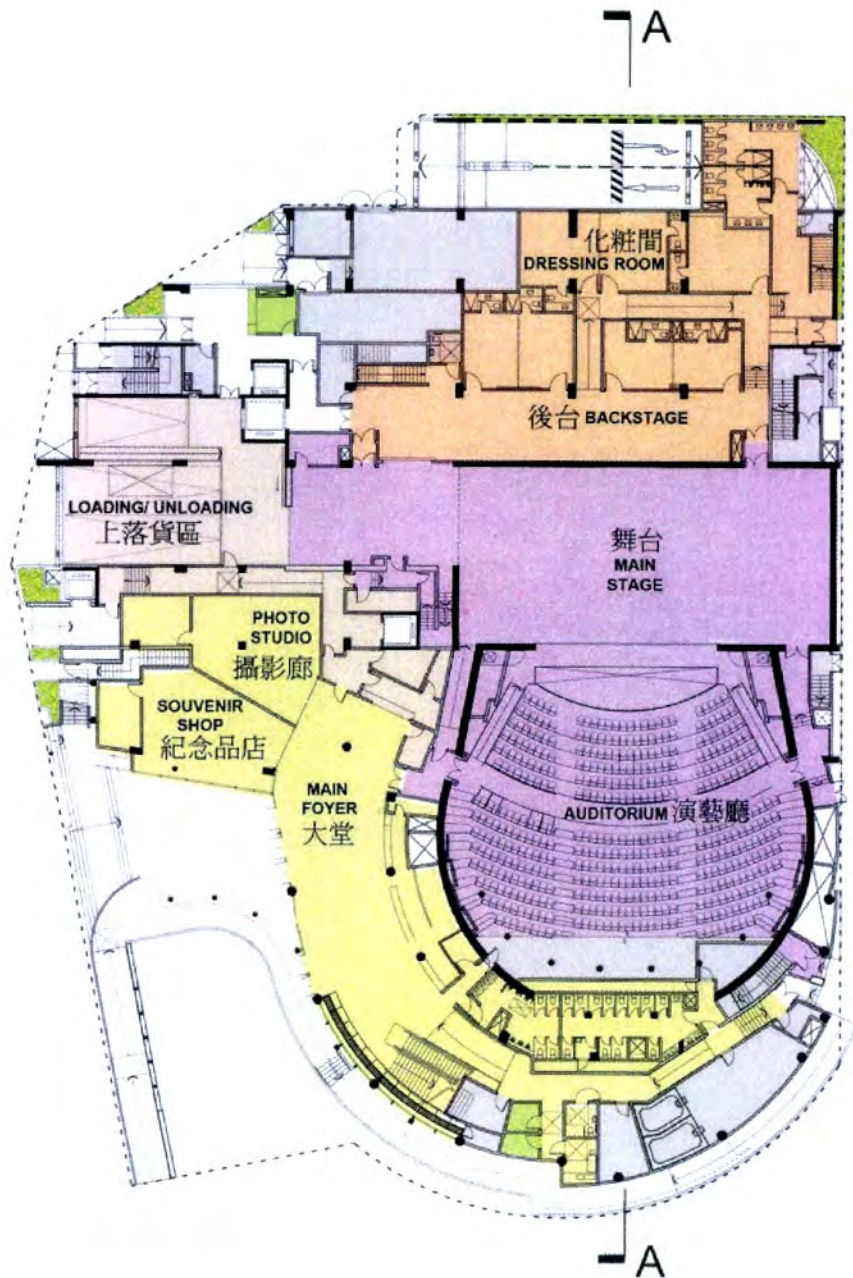
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approved by 覆核	PY	date 日期	30/03/2010
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GROUND FLOOR PLAN 地面平面圖

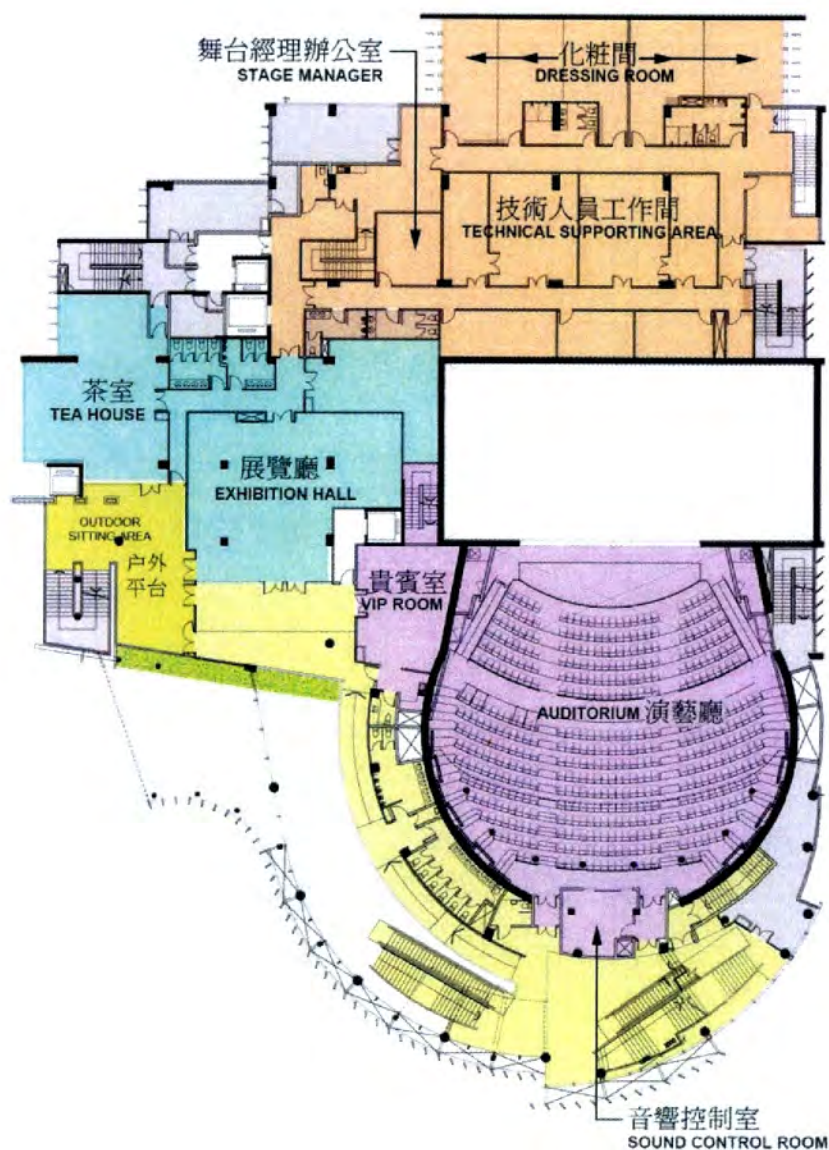
59RE
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drawn by 繪圖	BW	date 日期	30/03/2010
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office 辦事處 工程策劃管理處 PROJECT MANAGEMENT BRANCH			

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FIRST FLOOR PLAN 一樓平面圖

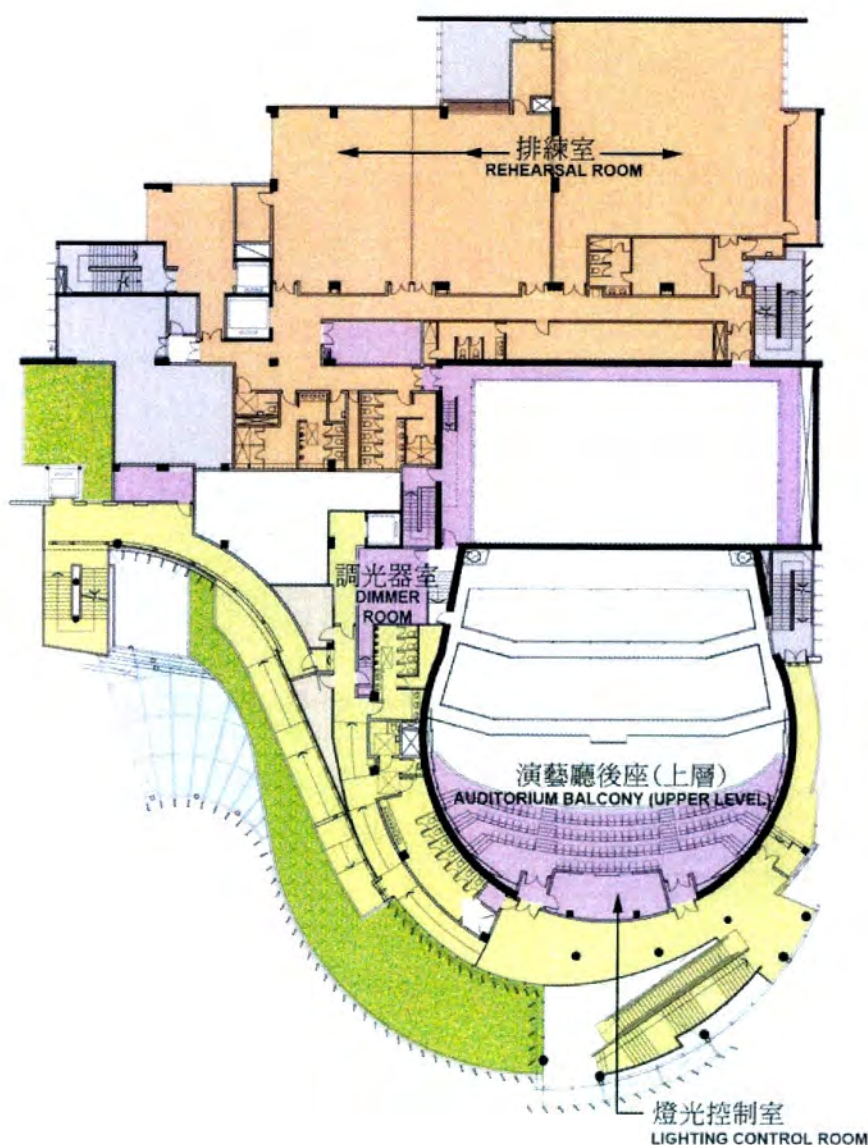
59RE
CONSTRUCTION OF
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高山劇場興建新翼大樓工程計劃

drawn by 繪圖	BW	date 日期	30/03/2010
approved by 覆核	PY	date 日期	30/03/2010
office 辦事處	工程策劃管理處 PROJECT MANAGEMENT BRANCH		

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AB/5127/SK-023	1:500



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SECOND FLOOR PLAN 二樓平面圖

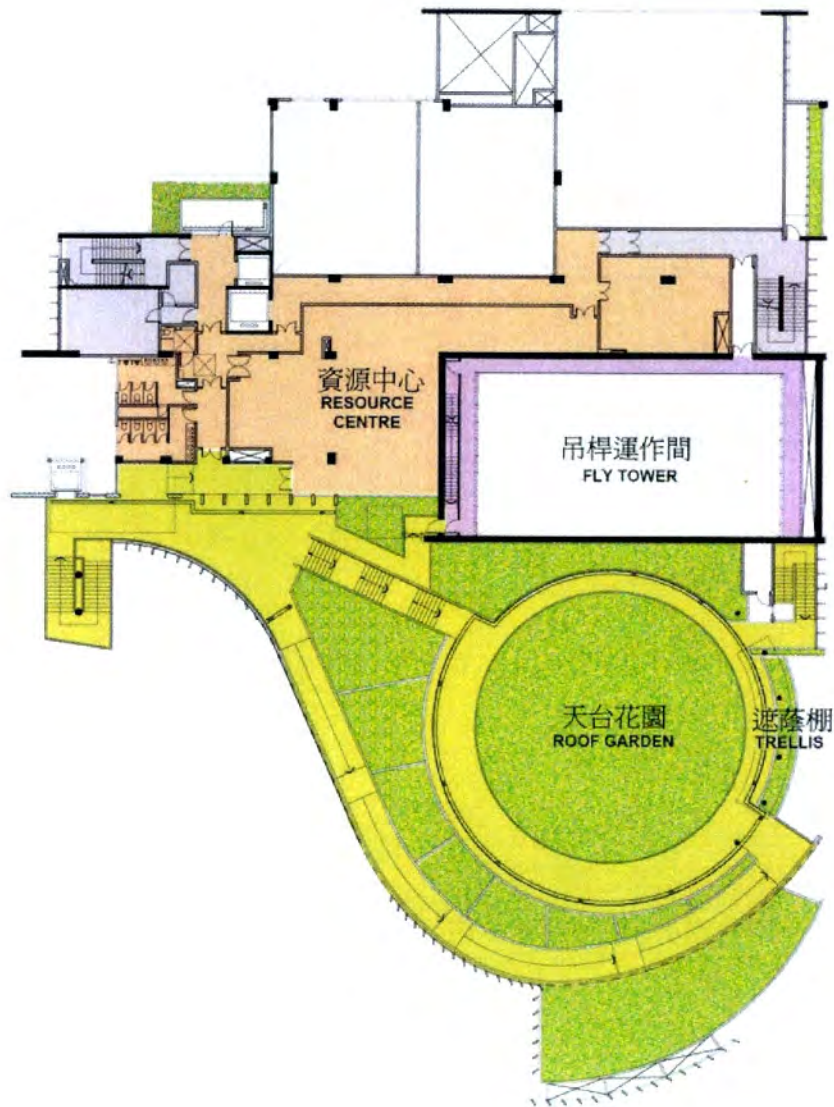
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THIRD FLOOR PLAN 三樓平面圖

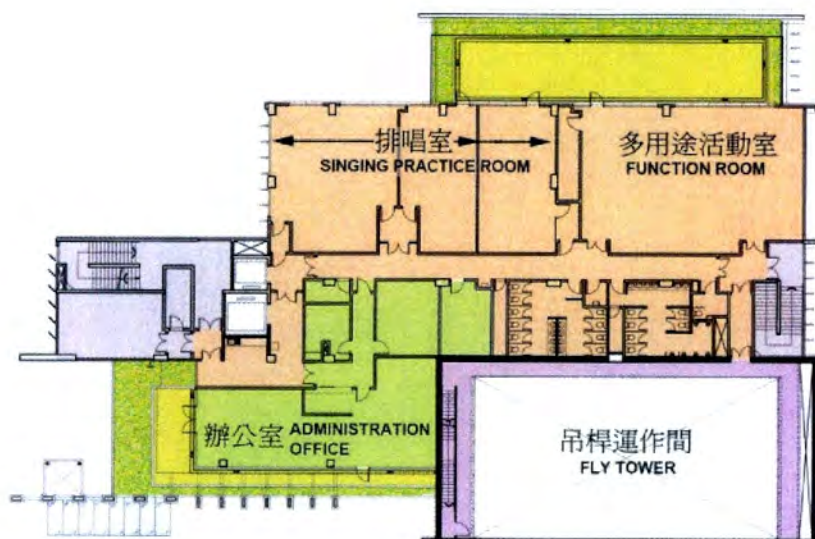
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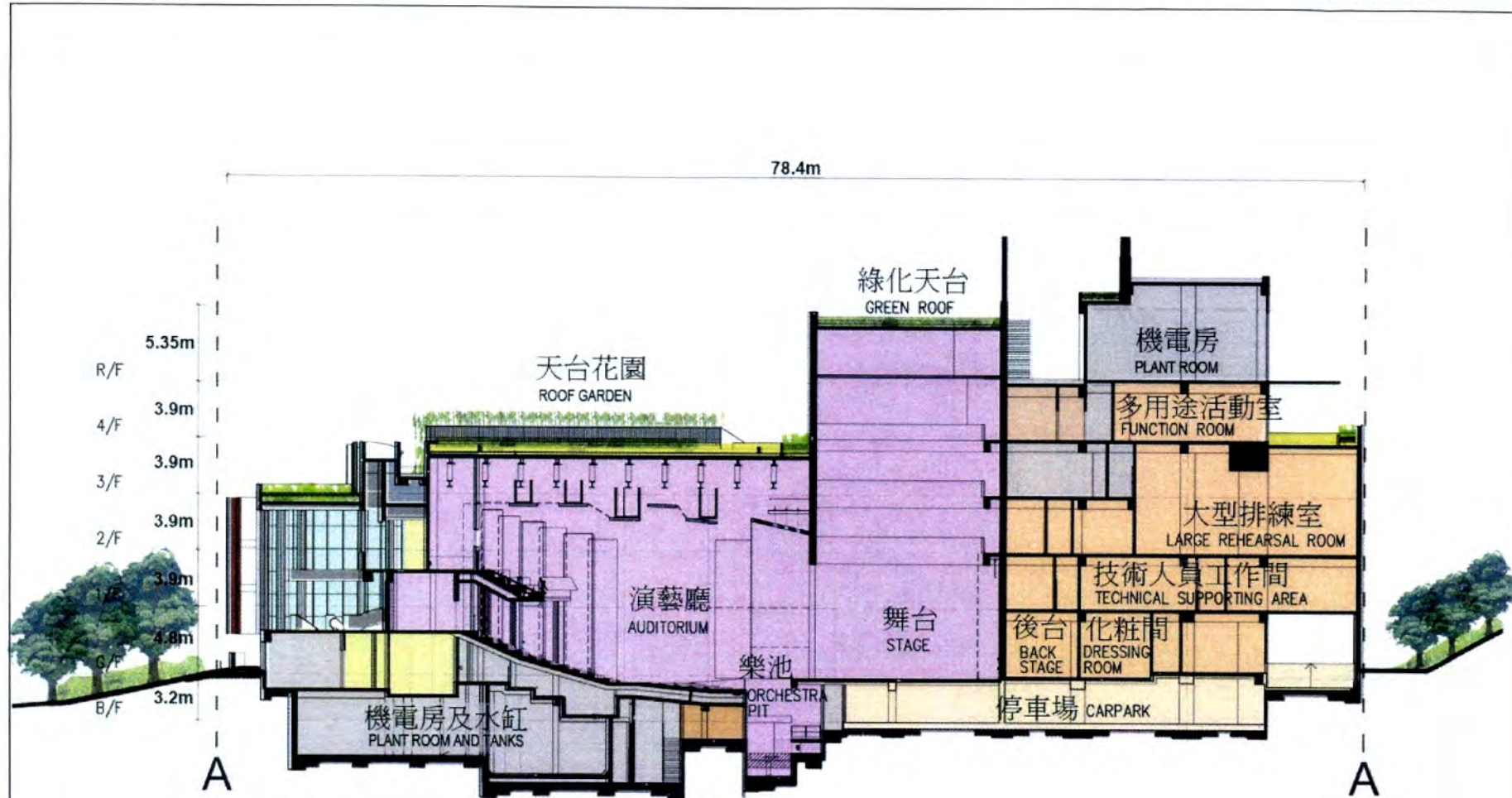
FOURTH FLOOR PLAN 四樓平面圖

59RE
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office 辦事處	工程策劃管理處						
	PROJECT MANAGEMENT BRANCH						



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SECTION A-A
剖面圖 A-A

59RE
CONSTRUCTION OF AN ANNEX BUILDING
AT THE KO SHAN THEATRE
高山劇場興建新翼大樓工程計劃

drawn by 繪圖 BW
approved by 覆核 PY
office 辦事處 工程策劃管理處
PROJECT MANAGEMENT BRANCH

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scale 比例
1:400



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Enclosure 10 to PWSC(2010-11)7

59RE – Construction of an Annex Building at the Ko Shan Theatre

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2009 prices)

		Estimated man-months	Average MPS [*] salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a)	Consultants' fees				
	for contract	Professional	—	—	9.3
	administration ^(Note 2)	Technical	—	—	4.8
				Sub-total	14.1
(b)	Resident site staff				
	costs ^(Note 3)	Professional	12	1.6	1.1
		Technical	303	1.6	9.6
				Sub-total	10.7
Comprising —					
(i)	Consultants' fees for management of resident site staff				0.9
(ii)	Remuneration of resident site staff				9.8
				Total	24.8

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of resident site staff supplied by the consultants. (As at now, MPS point 38 = \$57,280 per month and MPS point 14 = \$19,835 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **59RE**. The construction phase of the assignment will only be executed subject to Finance Committee's approval to upgrade **59RE** to Category A.
3. The consultants' staff cost for site supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the construction works.