For discussion **PWSC(2008-09)56**
on 7 January 2009

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS
Recreation, Culture and Amenities – Mixed amenity packages
49RG – Public library and indoor recreation centre in Area 3, Yuen Long

Members are invited to recommend to Finance Committee the upgrading of **49RG** to Category A at an estimated cost of $875.0 million in money-of-the-day prices for the construction of a public library and indoor recreation centre in Area 3, Yuen Long.

PROBLEM

There are insufficient recreational and library facilities in Yuen Long District to meet local needs.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Home Affairs, proposes to upgrade **49RG** to Category A at an estimated cost of $875.0 million in money-of-the-day (MOD) prices for the construction of a public library and indoor recreation centre in Area 3, Yuen Long.

PROJECT SCOPE AND NATURE

3. The project site occupies an area of about 6 800 square metres (m^2) at Ma Tin Road, Yuen Long. The proposed scope of works under **49RG** includes —

/District …..

District Library

(a) A district library to replace the existing substandard district library (Yuen Long Public Library) on 1/F, Yuen Long Government Offices, Kiu Lok Square, Yuen Long. The facilities in the proposed district library include –

(i) adult lending library, children's library, quick reference section, newspapers and periodicals section, multimedia library, computer and information centre, extension activities room, coffee corner, exhibition area and students' study room;

(ii) cloakroom, book drop, public area for self-charging terminals, Internet workstations, online access catalogues and photocopying service, babycare room, public toilets;

(iii) readers' advisory desks, customer service counter, computer equipment rooms, security control room; and

(iv) general accommodation and ancillary facilities for staff including book processing room, book sorting room, staff changing room, toilet facilities, etc.

Central Reserve Stack

(b) A central reserve stack for library materials of the library system to replace the existing temporary one at rented premises in Yu Chui Shopping Centre, Yu Chui Court, Sha Tin;

Indoor Recreation Centre

(c) An indoor recreation centre with –

(i) a main games arena with space for up to two basketball courts or two volleyball courts or eight badminton courts, as well as a spectator stand;

/(ii) …..

(ii) a children's play room, a table-tennis room, a multi-purpose activity room and a fitness room; and

(iii) ancillary facilities including a babycare room, a first aid room, toilet and changing facilities, a management office, a booking office, a conference room, parking spaces and a loading and unloading area.

A site plan is at Enclosure 1. An artist's impression of the proposed development is at Enclosure 2. We plan to start construction in June 2009 for completion in May 2012.

JUSTIFICATION

Public Library

4. Yuen Long District is presently served by two district libraries (Tin Shui Wai Public Library and Yuen Long Public Library), one small library and ten mobile library stops. Tin Shui Wai Public Library is an interim district library with a floor area of 1 570 m^2 at rented premises in Kingswood Ginza, Tin Shui Wai. It will be replaced by a major library with a floor area of about 6 200 m^2 under another project near Tin Shui Wai Station of Mass Transit Railway (MTR) by mid 2012 to serve the population of Yuen Long District.

5. Yuen Long Public Library is a district library with a floor area of 1 540 m^2 on 1/F, Yuen Long Government Offices. Its floor area is below the latest standard space requirement for a district library of 2 900 m^2. The library was opened in 1984 and its present floor area is unable to meet the heavy demand for public library service from the local community. Constrained by its small area, the existing Yuen Long Public Library can offer only a limited capacity in terms of library facilities provided to the public. Considering the increasing demand in library service for more library materials and to cope with the wider use of information technologies to support the infrastructure and operation of the library, there is an increased demand for larger floor area to accommodate the facilities.

/6. …..

6. The Hong Kong Planning Standards and Guidelines (HKPSG) suggests a district library be provided for every 200 000 population and the guidelines of the Leisure and Cultural Services Department suggest a major library for a population of 400 000. According to the Planning Department, the population of Yuen Long District would increase from 563 800 in 2009 to 650 200 in 2016. To meet the high demand of the growing population in Yuen Long District for library services, there is a need to replace the existing Yuen Long Public Library by a standard district library in addition to the provision of a major library in Tin Shui Wai and other library services provided. The proposed new district library, with a floor area of some 2 900 m^2, would provide a full range of library services and facilities to better meet the needs of the local residents.

Central Reserve Stack

7. In addition to the standard district library, it is proposed that a central reserve stack, with a floor area of some 3 100 m^2, be included in the project with a view to replacing the existing one at Yu Chui Shopping Centre, Yu Chui Court, Sha Tin which is a rented premises of about 3 040 m^2. Currently, some 500 000 library materials of Hong Kong Public Libraries are stored in the central reserve stack there. The stored materials include the collections for the "Libraries@neighbourhood - Community Libraries Partnership Scheme" which provide special block loan services for community libraries and the block loan services for schools. With the rapid development of library collections and the fast growth of public library service, it is necessary to secure additional storage space for the central reserve stack. The relocation of the central reserve stack from the rented premises at Sha Tin to the project site can accommodate the increasing amount of closed stack library materials and minimise the Government's rental expenditure.

Indoor Recreation Centre

8. Based on the HKPSG, Yuen Long District, with a projected population of 563 800 in 2009, should have eight sports centres. At present, there are only four in the district with one additional sports centre near Tin Shui Wai Station of MTR under construction and two sports centres in Area 101, Tin Shui Wai and Kam Tin/Pat Heung respectively under planning. The proposed project will help alleviate the shortfall of sports centres in the district.

/9. …..

9. Yuen Long District has a relatively high proportion of people of working age and also a relatively high proportion of young people, especially in the Yuen Long New Town area. This results in a keen demand for recreational and sports facilities. In view of the anticipated increase in population, we anticipate that the provision of a new sports centre in Yuen Long New Town would be welcomed by local residents.

FINANCIAL IMPLICATIONS

10. We estimate the capital cost of the project to be $875.0 million in MOD prices (see paragraph 11 below), made up as follows –

			$ million	
(a)	Piling		101.5	
(b)	Building		383.0	
(c)	Building services		90.9	
(d)	Drainage		7.0	
(e)	External works		57.4	
(f)	Additional energy conservation measures		23.4	
(g)	Consultants' fees for –		21.9	
	(i) Contract administration	10.8		
	(ii) Site supervision	11.1		
(h)	Furniture and Equipment[1]		39.7	
(i)	Contingencies		66.3	
	Sub-total		791.1	(in September 2008 prices)
(j)	Provision for price adjustment		83.9	
				/**$ million**…..

[1] The estimated cost of furniture and equipment is based on an indicative list of items required, including recreation and sports equipments, office furniture, first aid equipments, mobile racks, etc.

	$ million	
Total	875.0	(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 by man-months is at Enclosure 3. The construction floor area (CFA) of **49RG** is about 15 970 m^2. The estimated construction unit cost, represented by the building and the building services costs, is $29,674 per m^2 of CFA in September 2008 prices. We consider this comparable to similar projects built by the Government.

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

Year	**$ million (Sept 2008)**	**Price adjustment factor**	**$ million (MOD)**
2009 – 10	70.0	1.04000	72.8
2010 – 11	325.9	1.08160	352.5
2011 – 12	320.6	1.12486	360.6
2012 – 13	48.0	1.16986	56.2
2013 – 14	15.0	1.21665	18.2
2014 – 15	11.6	1.26532	14.7
	791.1		875.0

12. 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 2009 to 2015. We will deliver the piling and building works through two lump-sum contracts because we can clearly define the scope of the works in advance. The contracts will provide for price adjustments.

/13. ……

13. We estimate the additional annual recurrent expenditure arising from this project to be $33.650 million.

PUBLIC CONSULTATION

14. We consulted the Town Planning and Development Committee of the Yuen Long District Council (YLDC) on 18 September 2002 and the Culture, Recreation and Sports Committee of YLDC on 10 January 2006, 5 September 2006 and 8 May 2007 on the scope of the project. Members supported the project and urged its early implementation.

15. We consulted the District Facilities Management Committee of YLDC on the design of the project on 5 September 2008. Members reiterated their strong support for the project and urged its early implementation.

16. We circulated an information paper to the Legislative Council Panel on Home Affairs on 9 December 2008. Members did not raise any objection to the submission of the funding proposal to the Public Works Subcommittee.

ENVIRONMENTAL IMPLICATIONS

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project has very little potential of giving rise to adverse environmental impact.

18. 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 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 site, and the provision of wheel-washing facilities.

/19. ……

19. We have considered measures in the planning and design stages 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 on site (e.g. use of excavated materials for filling within the site) or in other suitable construction sites as far as possible, in order to minimise the disposal of inert construction waste to public fill reception facilities[2]. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.

20. 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 to public fill reception facilities and landfills respectively through a trip-ticket system.

21. We estimate that the project will generate in total about 25 906 tonnes of construction waste. Of these, we will reuse about 3 774 tonnes (14.6%) of inert construction waste on site and deliver 19 066 tonnes (73.6%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 3 066 tonnes (11.8%) 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 $898,032 for this project (based on a unit cost of $27/tonne for disposal at public fill reception facilities and $125/tonne[3] at landfills).

/ENERGY ..…

---

[2] 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.

[3] 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/m^3), nor the cost to provide new landfills (which is likely to be more expensive), when the existing ones are filled.

ENERGY CONSERVATION MEASURES

22. The project has adopted various forms of energy efficient features, including –

(i) water cooled chiller;

(ii) automatic demand control of chilled water circulation system;

(iii) automatic condenser tube cleaning equipment;

(iv) automatic demand control of supply air;

(v) demand control of fresh air supply with carbon dioxide sensor;

(vi) heat wheels for heat energy reclaim of exhaust air;

(vii) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensor and daylight sensor;

(viii) light-emitting diode (LED) type exit sign;

(ix) heat pump for space heating and dehumidification; and

(x) automatic on/off switching of lighting and ventilation fan inside the lift.

23. For renewable energy technologies, we will install photovoltaic system and solar hot water system for environmental benefits.

24. For greening features, we will provide landscape in the appropriate area on the main roof and terraces for environmental and amenity benefits.

25. For recycled features, we will install rainwater recycling system for landscape irrigation with a view to conserving water.

/26. …...

26. The total estimated additional cost for adoption of the above features and for achievement of the highest standard of building environmental assessment rating is around $23.4 million, which has been included in the cost estimate for this project. There will be about 10.4% energy savings in the annual energy consumption.

HERITAGE IMPLICATIONS

27. 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

28. The project does not require any land acquisition.

BACKGROUND INFORMATION

29. We upgraded **49RG** to Category B in February 2007. We engaged an architectural consultant in February 2008 to undertake the detailed design and site investigation. We engaged a quantity surveying consultant in December 2007 to prepare the tender documents. The total cost of the above consultancy services and works is about $8.4 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". The architectural consultant has completed the preliminary design and site investigation. The quantity surveying consultant is preparing the tender documents.

/30. …..

30. The proposed works will affect seven trees growing within the project site. They will be replanted within the site. All trees to be replanted are not important trees[4]. We will incorporate planting proposals as part of the project, including estimated quantities of 330 trees and 7 300 shrubs.

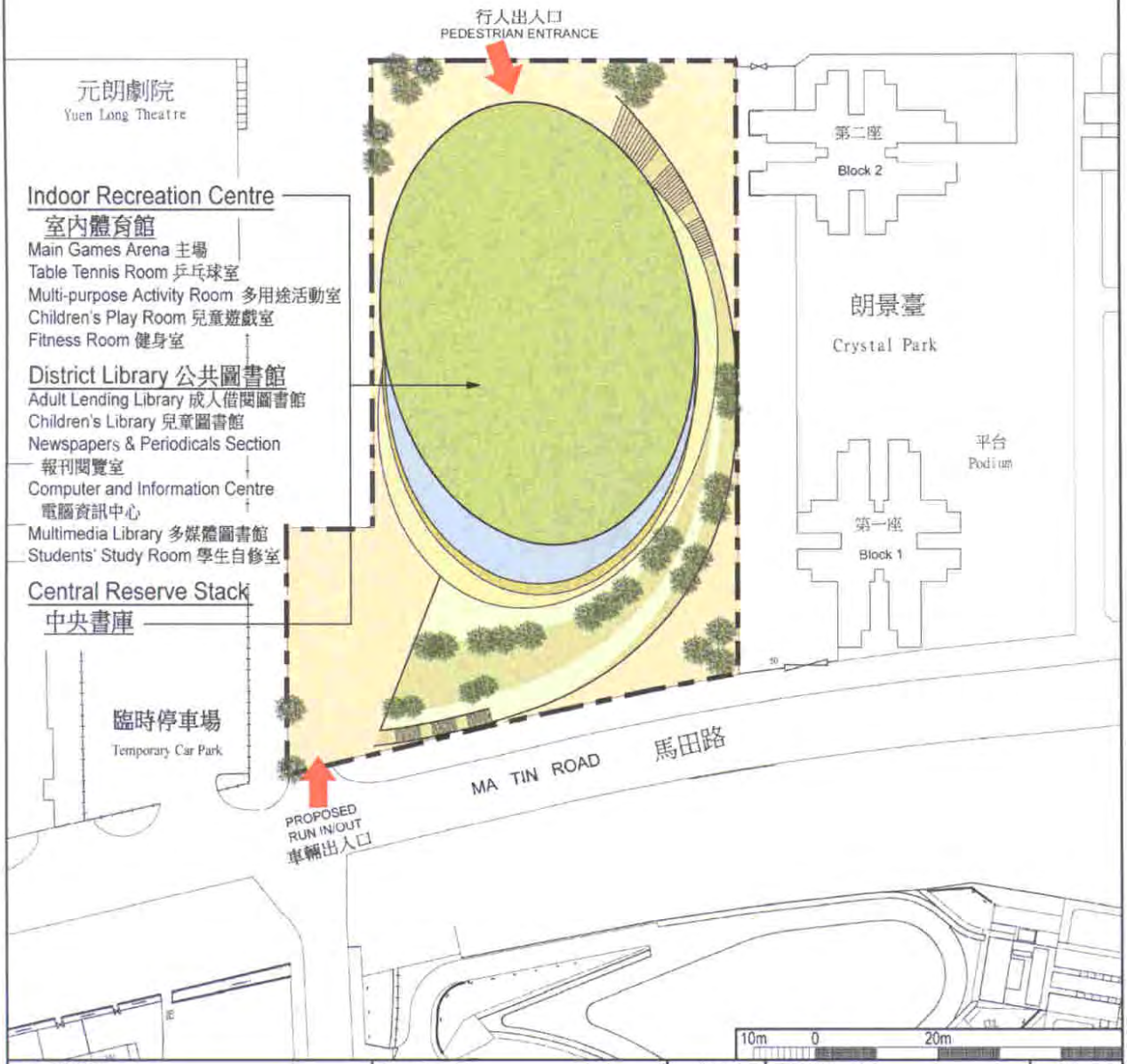
31. We estimate that the proposed works will create about 445 jobs (400 for labourers and another 45 for professional/technical staff) providing a total employment of 11 700 man-months.

Home Affairs Bureau
December 2008

---

[4] "Important trees" refer 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) trees 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, trees growing in unusual habitat; or
(e) trees with trunk diameter equal or exceeding 1.0 metre (measured at 1.3 metres above ground level), or with height/canopy spread equal or exceeding 25 metres.



title 49 RG PUBLIC LIBRARY & INDOOR RECREATION CENTRE IN AREA 3, YUEN LONG 元朗第3區 公共圖書館及體育館	drawn by CINDY CHAN	date OCT 08	drawing no. SK-4-1
	checked by DAPHNE LI	date OCT 08	scale 1:1000
	office ARCHITECTURAL BRANCH		ARCHITECTURAL SERVICES DEPARTMENT

PERSPECTIVE VIEW FROM
NORTH-WESTERN DIRECTION
(ARTIST'S IMPRESSION)

49RG
PUBLIC LIBRARY & INDOOR
RECREATION CENTRE
IN AREA 3, YUEN LONG
元朗第3區
公共圖書館及體育館

drawn by	CINDY CHAN	date	OCT 08
approved by	DAPHNE LI	date	OCT 08
office	ARCHITECTURAL BRANCH		

drawing no.	scale
SK-4-2	NTS

ARCHITECTURAL
SERVICES
DEPARTMENT

附件二 ENCLOSURE 2

49RG – Public library and indoor recreation centre in Area 3, Yuen Long

Breakdown of the estimate for consultants' fees

Consultants' staff costs			Estimated man-months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee ($ million)
(a)	Contract administration (Note 2)	Professional	–	–	–	10.8
(b)	Site supervision (Note 3)	Professional	30	38	1.6	2.9
		Technical	258	14	1.6	8.2
					Total	21.9

* MPS = Master Pay Scale

Notes

1. 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 April 2008, MPS point 38 = $60,535 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 **49RG**. The assignment will only be executed subject to Finance Committee's approval to upgrade **49RG** 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.