

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Support – Intra-governmental services

63GI – Joint-user complex and wholesale fish market in Area 44, Tuen Mun

Members are invited to recommend to Finance Committee the upgrading of **63GI** to Category A at an estimated cost of \$244.0 million in money-of-the-day prices for the construction of a joint-user complex and wholesale fish market in Area 44, Tuen Mun.

PROBLEM

We need to provide a facility for permanently reprovisioning the temporary Castle Peak wholesale fish market and providing community facilities in Tuen Mun District.

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Health, Welfare and Food, proposes to upgrade **63GI** to Category A at an estimated cost of \$244.0 million in money-of-the-day (MOD) prices for the construction of a joint-user complex and wholesale fish market in Area 44, Tuen Mun.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **63GI** includes -
- (a) Construction of a joint-user complex and wholesale fish market

Joint-user complex

- (i) a marine park management office with construction floor area (CFA) of about 400 square metres (m²) and other ancillary facilities including berthing space for 2 patrol vessels;
- (ii) a community hall comprising a multi-purpose hall with a seating capacity for 450 persons, a stage and ancillary store and other facilities with CFA of about 750 m², as well as a covered spectator stand of 1 000 seats for the dragon boat race;
- (iii) a refuse collection point (RCP) with CFA of about 600 m² and a public toilet with CFA of about 150 m²; and
- (iv) a marine refuse collection point with CFA of about 500 m².

Wholesale fish market

- (v) a wholesale fish market of CFA of about 5 300 m² comprising the following –
- (1) covered sorting / weighing, wholesaling and marshalling areas with CFA of about 1 500 m²;
- (2) a sea front of at least 100 m² in length for berthing of fishing vessels and a fish unloading area with CFA of about 500 m² for landing fish onto the market;

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- (3) market administration offices and ancillary facilities with CFA of about 900 m²; and
- (4) 40 lorry parking spaces, loading and unloading bays.

- (b) Demolition of the existing temporary Castle Peak wholesale fish market.

————— The location plan is at Enclosure 1 and illustrations of the complex (artist's
————— impression) are at Enclosure 2. After operation of the new wholesale fish market in Area 44, Tuen Mun, the existing temporary Castle Peak wholesale fish market in Area 27, Tuen Mun will be demolished. We plan to start the proposed construction works in October 2007 for completion of the new building in February 2010, to be followed by demolition works of the existing fish market for completion in September 2010.

JUSTIFICATION

4. The establishment of the joint-user complex and wholesale fish market would benefit the community by providing various facilities.

Improvement in environmental and hygienic conditions

5. When the Tuen Mun New Town started to develop in the 1970s, the original Castle Peak wholesale fish market located at Lo Shu Chau, Castle Peak Bay, was temporarily relocated to Tuen Mun Area 27 in 1973, where the existing Castle Peak wholesale fish market is situated. On the understanding that a suitable permanent location in Tuen Mun would be identified to accommodate the wholesale fish market, the temporary wholesale fish market was roofed by a wooden structure without any environmental mitigation measures, and without proper loading and lorry parking areas for loading and unloading of marine fish, which subsequently causes considerable environmental nuisance to nearby residents during its operation. Besides, the structure of the existing temporary market constructed in 1974 is reaching the end of its designed life. The local fishing community and the residents in the vicinity of the existing fish market have been urging the Government to move and re-provision the market since the 1990s. The proposed joint-user complex will be provided with proper facilities and environmental mitigation measures to ensure that the operation of the wholesale fish market will not bring unacceptable environmental problems.

6. The proposed RCP is planned to serve the western part of Tuen Mun. Specifically, the RCP will be used to hold waste collected from the wholesale fish market, the joint-user complex and the cleansing beats within the area, which is currently collected in the road-side bin sites at Wu Tai Circuit and the car park entrance at Butterfly Beach Park. This will help improve the hygienic condition of the two sites. To minimise impact to environment, the RCP in the joint-user complex will be finished with easy-to-clean material and will be provided with de-odourised scrubber system.

Addressing demand for community facilities

7. There are a number of public and private housing estates in and near Tuen Mun Area 44, including Siu Hei Court, Yuet Wu Villa, Pierhead Garden, Marina Garden, Miami Beach Towers, Wu King Estate and Richland Garden, with an estimated population of around 40 000. At present, there is no community hall in the area. The nearest community hall is the Butterfly Bay Community Centre which is about 10 minutes' walk away. It has recorded a high average utilisation rate of 93.3% in 2006, representing a rise of 22.3% over the past five years. As a result of the increase in population in Tuen Mun District from 489 000 in 2001 to 502 000 in 2006, the demand for community hall facilities from local residents is strong. The average utilisation rate of community halls in the district has increased from 71.9% in 2001 to 87.8% in 2006. There is a dire need for an additional community hall to provide Tuen Mun residents, especially the local community, with an additional venue for holding community activities, so as to help cultivate a sense of belonging among local residents.

8. The complex will also accommodate a dragon boat race spectator stand. Dragon Boat Race in Tuen Mun is a key annual district-wide event held at the Tuen Mun Typhoon Shelter. Each year, the event organiser needs to erect a temporary spectator stand for the race. There is a strong call from the local communities to take this opportunity to incorporate a permanent spectator stand into the joint-user complex in order to reduce the recurrent cost for organising the race and provide additional facilities for organising community activities so as to enhance the quality of life for the neighboring residents.

9. The architectural design of the complex will also endeavour to enhance and integrate with the surrounding environment. A landscaped podium garden will be provided in the complex for public enjoyment and to create a pleasant visual landscape.

/Accommodation

Accommodation of necessary government facilities

10. The waters around Sha Chau and Lung Kwu Chau is designated as a marine park for the purposes of managing and protecting the marine environment and resources, in particular the Chinese White Dolphin. The marine park is currently served by a temporary marine park management office at Gordon Hard Camp which provides a base for Marine Parks Wardens for patrolling the area and taking enforcement action. As the tenancy/lease of the temporary management office is due to expire, a permanent accommodation with water frontage and in the proximity to the marine park is necessary. The proposed joint-user complex is considered a suitable location for accommodating the marine park management office.

11. The amount of floating refuse collected in the north-western waters is observed to increase in the past few years. There is a need to provide a landing point to off-load refuse from marine refuse collection vessels for the north-western part of Hong Kong territory. The provision of the marine refuse collection point will enhance the efficiency in handling floating refuse as well as to improve the service in the general area.

FINANCIAL IMPLICATIONS

12. We estimate the capital cost of the project to be \$244.0 million in MOD prices (see paragraph 13 below), made up as follows –

	\$ million
(a) Site works	1.6
(b) Piling	44.6
(c) Building	82.6
(d) Building services	62.4
(e) Drainage	9.6
(f) External works	3.2

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	\$ million	
(g) Demolition works	5.0	
(h) Consultants' fees for	7.1	
(i) contract administration	3.0	
(ii) site supervision	4.1	
(i) Furniture and equipment ¹	1.0	
(j) Contingencies	21.0	
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Sub-total	238.1	(in September 2006 prices)
(k) Provision for price adjustment	5.9	
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Total	244.0	(in MOD prices)
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We propose to engage consultants to undertake contract administration and site supervision for the project. A detailed breakdown of the estimate for the consultants' fees by man-months is at Enclosure 3. The CFA of **63GI** is about 16 800 m². The estimated construction unit cost, represented by the building and the building services costs, is \$8,631 per m² of CFA in September 2006 prices. We consider the estimated project cost reasonable as compared with similar projects undertaken by the Government.

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¹ Based on an indicative list of furniture and equipment items required.

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

Year	\$ million (Sept 2006)	Price adjustment factor	\$ million (MOD)
2007 – 08	4.0	0.99900	4.0
2008 – 09	36.0	1.00649	36.2
2009 – 10	72.0	1.01656	73.2
2010 – 11	59.0	1.02672	60.6
2011 – 12	39.0	1.03699	40.4
2012 – 13	28.1	1.05514	29.6
	238.1		244.0

14. 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 2007 to 2013. We will award two contracts on a lump-sum basis because we can clearly define the scope of the works in advance. One contract is for the construction works of the new building. The other one is for the demolition works of the existing wholesale fish market. The contract for the construction works of the new building will provide for price adjustments because the contract period exceeds 21 months.

15. We estimate the annual recurrent expenditure arising from this project to be \$6.8 million.

/PUBLIC

PUBLIC CONSULTATION

16. In April 1997, the then Tuen Mun District Board (TMDB) agreed that the wholesale fish market should be re-located to Area 44. Having regard to the worries of some residents in Area 44, the then TMDB and the government departments studied a number of alternative sites and the Tuen Mun Provisional District Board agreed in January 1999 that Government should proceed with the design work of the complex at Area 44, pending completion of the Environmental Impact Assessment (EIA) Report. It was suggested that the wholesale fish market be shifted northward by 20 metres, thereby maximising the distance from Yuet Wu Villa. In September 2006, the Tuen Mun District Council (TMDC) was consulted again. TMDC maintained its support to the 1999 decision and urged for early implementation of the project. A working group was set up under the Environment, Hygiene and District Development Committee of TMDC in 2006 to oversee the construction and development of the joint-user complex and wholesale fish market and its environmental impacts.

17. The Government has made efforts in collating public views in the process of implementing the proposed development, including consulting the Tuen Mun Southwest Area Committee and attending residents forums to explain to the locals the nature, design and environmental mitigation measures as well as the benefits of the project. Local fishermen, fish traders and their associations considered the proposed site in Area 44 suitable and urged for early implementation of the project. The project has also been submitted for public inspection when going through relevant statutory processes, including that under the EIA Ordinance and the Town Planning Ordinance. The Town Planning Board approved the planning application for the proposed development under section 16 of the Town Planning Ordinance in February 2007.

18. We briefed the Legislative Council Panel on Food Safety and Environmental Hygiene and Panel on Home Affairs at the joint meeting on 8 May 2007. Members generally supported the project and proposed a number of nuisance mitigation measures as at Enclosure 4. We are taking follow-up actions with the relevant departments with a view to implementing the mitigation measures as far as practicable.

/ENVIRONMENTAL

ENVIRONMENTAL IMPLICATIONS

19. The project is a designated project under the EIA Ordinance (Cap. 499). An environmental permit is required for the construction and operation of the proposed project. We have completed the EIA Study for the proposed works in accordance with the EIA Ordinance. The EIA report was approved under the EIA Ordinance in March 2003. We will apply for an environmental permit under the EIA Ordinance and implement all environmental mitigation measures as recommended in the EIA report or that in the future environmental permit. A summary of recommended mitigation measures is at Enclosure 5. We have included \$300,000 in the consultants' fees for contract administration (see paragraph 12(h)) for conducting environmental monitoring during the first year of operation of the fish market.

20. During construction, we will require the contractor to 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 for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

21. We have considered measures (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects) in the planning and design stages to reduce the generation of construction and demolition (C&D) materials where possible. In addition, we will require the contractor to reuse inert C&D materials (e.g. using excavated materials for filling) on site or in other suitable construction sites as far as possible, in order to minimise the disposal of C&D materials to public fill reception facilities. We will encourage the contractor to maximise the use of recycled or recyclable C&D materials, as well as the use of non-timber formwork to further minimise the generation of construction waste.

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22. We will also require the 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. We will ensure that the day-to-day operations on site comply with the approved WMP. We will control the disposal of public fill, C&D materials and C&D waste to public fill reception facilities² and landfills respectively through a trip-ticket system. The contractor will be required to separate public fill from C&D waste for disposal at appropriate facilities. We will record the disposal, reuse and recycling of C&D materials for monitoring purposes.

23. We estimate that the project will generate about 25 410 tonnes of C&D materials. Of these, we will reuse about 14 630 tonnes (57.6%) on site, deliver 9 200 tonnes (36.2%) to public fill reception facilities for subsequent reuse. In addition, we will dispose of 1 580 tonnes (6.2%) at landfills. The total cost for accommodating C&D materials at public fill reception facilities and landfill sites is estimated to be \$445,900 for this project (based on a unit cost of \$27/tonne for disposal at public fill reception facilities and \$125/tonne³ at landfills).

LAND ACQUISITION

24. The project does not require any land acquisition.

BACKGROUND INFORMATION

25. We upgraded **63GI** to Category B in October 2003. We engaged a consultant to conduct an EIA in end 1999. We employed a consultant to carry out a topographical survey and a term contractor to carry out ground investigations in March 2006. We also employed consultants to prepare sketch and detailed design, tender documentation and to undertake a traffic impact assessment, underground utility mappings and a seabed survey for the project in 2006 and 2007. The total cost of these works is \$8.0 million. We 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 above investigations and consultancy services have been completed and the consultants are now finalising the tender documents.

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² Public fill reception facilities are specified in Schedule 4 of the Waste Disposal (Charges for Disposal of Construction Waste) Regulation. Disposal of public fill 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 of 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/m³), nor the cost to provide new landfills, (which is likely to be more expensive) when the existing ones are filled.

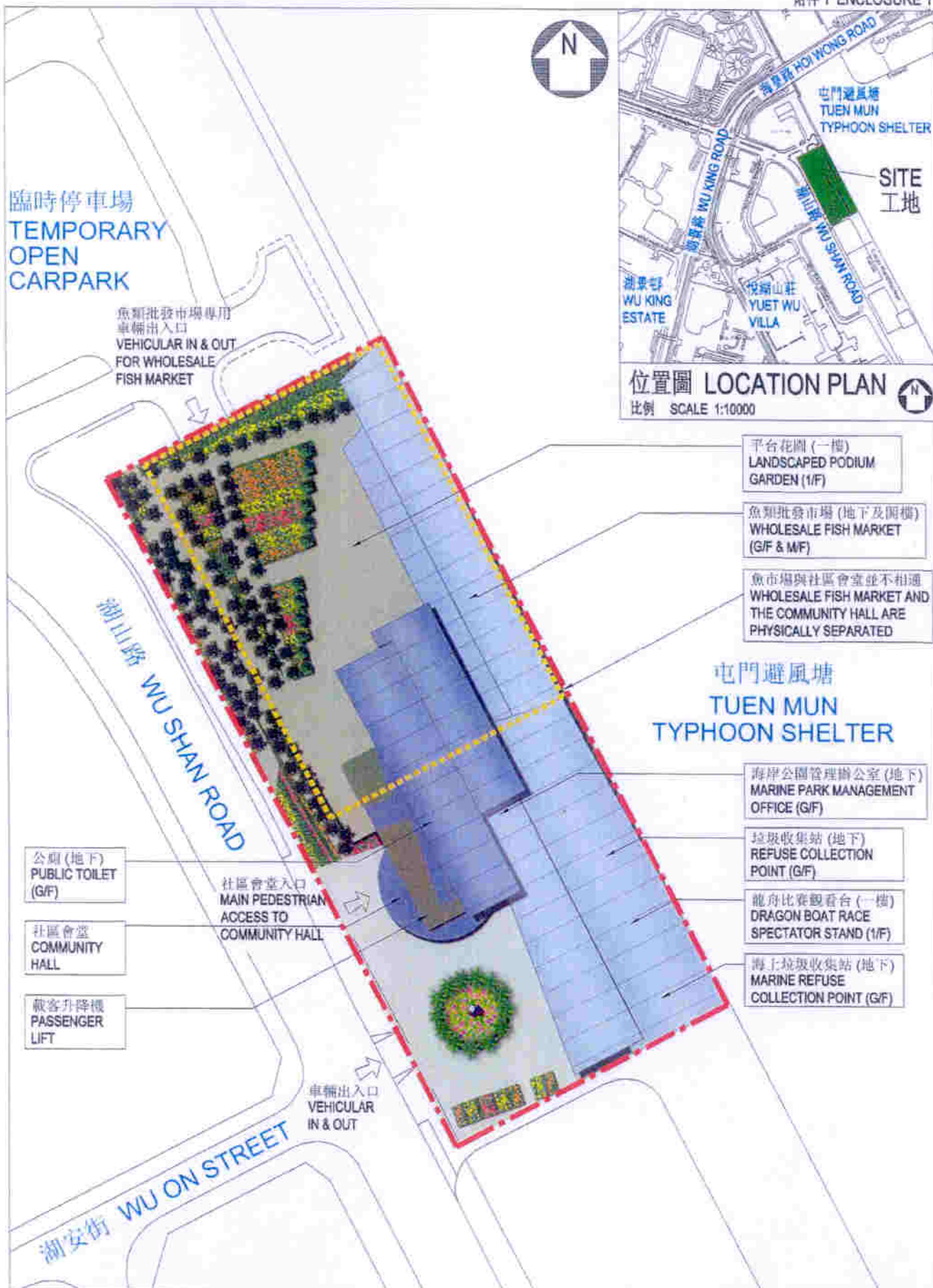
26. The proposed construction work will involve removal of 17 trees, including six to be transplanted elsewhere, nine to be replanted within the project site and two to be fallen. All these trees to be removed are not important trees⁴. We will incorporate planting proposals as part of the project, including estimated quantities of 150 trees and 12 000 shrubs.

27. We estimate that the proposed works will create about 123 jobs (109 for labourers and 14 for professional/technical staff) providing a total employment of 3 758 man-months.

Health, Welfare and Food Bureau
June 2007

⁴ "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) trees of cultural, historical or memorable significance e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of important persons 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 metre above ground level), or with height/canopy spread equal or exceeding 25m.



3063GI
屯門第四十四區聯用綜合大樓
及魚類批發市場
JOINT-USER COMPLEX &
WHOLESALE FISH MARKET
IN AREA 44, TUEN MUN

drawn by	KW CHAN	date	MAY,07
approved	JANETTE CHAN	date	MAY,07
office	ARCHITECTURAL BRANCH		

drawing no.	scale
AB/1840/XB001	1:1000
	
ARCHITECTURAL SERVICES DEPARTMENT	



從西南面望向聯用綜合大樓及魚類批發市場的構思圖
 VIEW OF THE JOINT-USER COMPLEX & WHOLESALE FISH MARKET FROM SOUTH-WESTERN DIRECTION (ARTIST'S IMPRESSION)



從東北面望向聯用綜合大樓及魚類批發市場的構思圖
 VIEW OF THE JOINT-USER COMPLEX & WHOLESALE FISH MARKET FROM NORTH-EASTERN DIRECTION (ARTIST'S IMPRESSION)

3063G1

屯門第四十四區聯用綜合大樓
 及魚類批發市場
 JOINT-USER COMPLEX &
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 IN AREA 44, TUEN MUN

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ARCHITECTURAL
 SERVICES
 DEPARTMENT

63GI – Joint-user complex and wholesale fish market in Area 44, Tuen Mun

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	-	-	-	2.5
	Technical	-	-	-	0.5
(b) Site supervision (Note 3)	Technical	141	14	1.6	4.1
Total :					7.1

*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 January 2007, MPS point 14 = \$18,010 per month.)
2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreements for **63GI**. The assignment will only be executed subject to Finance Committee's approval to upgrade **63GI** to Category A.
3. The consultants' staff cost for site supervision is based on the estimates prepared by the Director of Architectural Services. We will only know the actual man-months and actual costs after completion of the works.

63GI – Joint-user complex and wholesale fish market in Area 44, Tuen Mun

Nuisance Mitigation Measures Proposed by LegCo Panel on Food Safety and Environmental Hygiene and Panel on Home Affairs

- (i) Setting up a management committee comprising representatives from the market management, market users and the nearby residents to closely supervise the operation of the wholesale fish market and to follow up on environmental complaints about the operation of the wholesale fish market;
- (ii) Setting up a hotline for handling complaints about the operation of the wholesale fish market;
- (iii) Requiring fishing vessels associated with the operation of the wholesale fish market to use the eastern entrance of the typhoon shelter when they approach and leave the wholesale fish market during the early morning period as recommended in the EIA Report; and
- (iv) Establishing a registration system for market users and requiring them to comply with the conditions including the use of eastern entrance for approaching and leaving the wholesale fish market and not to use loudhailer and vessel horn except under emergency situation during the early morning period.

63GI – Joint-user complex and wholesale fish market in Area 44, Tuen Mun

Environmental Mitigation Measures in EIA Report

- (i) The building of the wholesale fish market will be a fully-enclosed design with openings along the waterfront to allow loading of fish stocks from vessels.
- (ii) The external wall of the wholesale fish market along Wu Shan Road and facing Yuet Wu Villa shall be a blank façade with no opening except for fixed windows and pedestrian entrance at street level which will be designed with double doors and a lobby so as to minimise outbreak of noise from the wholesale fish market.
- (iii) A minimum of 40 lorry parking spaces will be provided inside the wholesale fish market with access from the north side of the building.
- (iv) The junction at Wu Shan Road for vehicle access to the wholesale fish market will be designed to prohibit traffic from entering and leaving the building from the south of Wu Shan Road, so as to prevent traffic noise from affecting nearby residents.
- (v) The wholesale fish market building will be constructed with a 5-metre wide and 90-metre long canopy along the waterfront to provide screening for the noise emitted from loading / unloading activities and from berthed vessels.
- (vi) An induced draft ventilation system with extraction points located at the fish handling areas and lorry parking area will be installed to the wholesale fish market. The exhausts of the ventilation system will be vented from the waterfront side of the building. The induced draft ventilation system will be operated at a rate of no less than ten air changes per hour throughout the peak operating hours from 3:00 a.m. to 6:30 a.m.
- (vii) The building design of the wholesale fish market will include provision for a de-odourised scrubber system.
- (viii) A management committee will be set up by the operator of the wholesale fish market to closely supervise the operation of the wholesale fish market and to follow-up on environmental complaints about the operation of the wholesale fish market.

- (ix) An environmental monitoring and audit programme on odour nuisance and marine traffic noise will be conducted during the peak operating hours from 3:00 a.m. to 6:30 a.m. at a frequency of no less than once a week throughout the first 12 months of the operation of the wholesale fish market.