ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 703 – BUILDINGS

Quarters – Internal security

61JA – Redevelopment of departmental quarters for Customs and Excise Department at Tsing Chau Street and Lee Kung Street, Hung Hom

Members are invited to recommend to Finance Committee the upgrading of **61JA** to Category A at an estimated cost of \$275.0 million in money-of-the-day prices for the redevelopment of departmental quarters for Customs and Excise Department at Tsing Chau Street and Lee Kung Street, Hung Hom.

PROBLEM

There is a substantial shortfall of departmental quarters for married officers at the Inspectorate Grade or above of the Customs and Excise Department (C&ED).

PROPOSAL

2. The Director of Architectural Services, with the support of the Secretary for Security, proposes to upgrade **61JA** to Category A at an estimated cost of \$275.0 million in money-of-the-day (MOD) prices for the redevelopment of departmental quarters for C&ED at Tsing Chau Street and Lee Kung Street, Hung Hom.

PROJECT SCOPE AND NATURE

- 3. The project comprises
 - (a) demolition of two quarters blocks of seven storeys and ten storeys respectively at the site;
 - (b) design and construction of a 20-storey quarters block for provision of 80 E-grade quarters on top of a three-storey podium, with a total construction floor area (CFA) of 12 625 square metres (m²); and
 - (c) provision of ancillary facilities, including a management office, a multi-function room, 25 car-parking spaces and small-scale outdoor children playing fixtures.

A site layout plan is at Enclosure 1. We plan to start the demolition works in September 2009 and the construction works in June 2010 for completion in August 2012.

JUSTIFICATION

- 4. It is an established government policy to provide, subject to the availability of resources, departmental quarters for married disciplined services staff, including the married disciplined staff of C&ED.
- 5. Currently, there is a substantial shortfall in departmental quarters for married officers of C&ED at the Inspectorate Grade or above. As at 28 February 2009, 364 officers of C&ED at the Inspectorate Grade or above were eligible for departmental quarters, but only 266 departmental quarters were available. This represents a shortfall of 27%. Furthermore, around 180 officers at the Inspectorate Grade or above are still single and will add to the demand for departmental quarters when they get married. In the coming years, C&ED will continue to recruit staff at the Inspectorate Grade to fill vacancies and additional posts to support the implementation of new projects and initiatives. We, therefore, anticipate that the demand for departmental quarters for married officers in C&ED at the Inspectorate Grade or above will continue to rise and C&ED will be short of 136 departmental quarters (or 34%) in 2012 if the supply remains at the current level.

6. There is an existing departmental quarters site for C&ED at 9-11 Tsing Chau Street and 1-3 Lee Kung Street, Hung Hom. Currently, the site comprises two quarters blocks, providing a total of 30 departmental quarters for married officers of C&ED at the Inspectorate Grade or above. Constructed in the early 1960s, the buildings are old and substandard requiring frequent maintenance and repairs with many fittings and facilities beyond economical repair. We propose to redevelop the site to provide additional departmental quarters of present day standards. This redevelopment will ease the shortfall of departmental quarters through better utilization of the existing resources.

FINANCIAL IMPLICATIONS

7. We estimate the capital cost of the project to be \$275.0 million in MOD prices (see paragraph 8 below), made up as follows –

		\$ million
(a)	Site works	1.1
(b)	Demolition	11.0
(c)	Piling	38.2
(d)	Building	122.6
(e)	Building services	32.6
(f)	Drainage	1.1
(g)	External works	8.6
(h)	Additional cost of energy conservation measures	1.9
(i)	Noise abatement measures	2.0
(j)	Furniture and equipment ¹	5.8

/(k)

Based on an indicative list of furniture and equipment items required, including furniture and domestic appliances in quarters.

		\$ million		
(k)	Consultants' fees for contract administration and construction supervision	5.3		
(1)	Contingencies	21.6	-	
	Sub-total	251.8	(in September 2008 prices)	
(m)	Provision for price adjustment	23.2	- 1 /	
	Total	275.0	(in MOD prices)	

We propose to engage consultants to undertake contract administration and construction supervision of the project. A breakdown of the estimate for consultants' fees by man-month is at Enclosure 2. The CFA of the proposed quarters is 12 625 m². The estimated construction unit cost, represented by the building and the building services costs, is \$12,293 per m² of CFA in September 2008 prices. We consider this unit cost comparable to that of other similar projects of the Government.

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

	\$ million (Sept 2008)	Price adjustment factor	\$ million (MOD)
2009 – 10	3.0	1.03500	3.1
2010 – 11	34.0	1.05570	35.9
2011 – 12	98.0	1.07681	105.5
2012 – 13	55.0	1.09835	60.4
2013 – 14	34.0	1.12032	38.1
2014 – 15	27.8	1.15113	32.0
	251.8		275.0

- 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 from 2009 to 2015. We will tender the project as a design-and-build contract. We will deliver the works through a lump-sum contract with provision for price adjustments.
- 10. We estimate the annual recurrent expenditure arising from this project to be \$3.9 million.

PUBLIC CONSULTATION

- 11. We consulted the Housing and Infrastructure Committee of the Kowloon City District Council on the proposed project on 23 April 2009. The Committee supported the project.
- 12. We consulted the Legislative Council Panel on Security on 5 May 2009. Members had no objection to the project.

ENVIRONMENTAL IMPLICATIONS

- 13. As the project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499), there is no need to conduct an environmental impact assessment. We employed a consultant to conduct a Preliminary Environmental Review on the project which was completed in April 2009. The Director of Environmental Protection vetted the Preliminary Environmental Review, which concluded that subject to the provision of suitable noise abatement measures such as incorporation of appropriate building design to mitigate road traffic noise impact, incorporation of architectural fins, fixed glazing and installation of air-conditioners, the project will have no long term adverse environmental impact. We will require the contractor to carry out further environmental review to work out the exact package of noise abatement measures at the detailed design stage.
- 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 walls for noisy construction activities, frequent cleaning and watering of the site, and the provision of wheel-washing facilities.

- 15. 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 which 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 facilities². 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.
- 16. 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 inert construction waste 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.
- 17. We estimate that the project will generate in total about 21 340 tonnes of construction waste. Of these, we will reuse about 8 070 tonnes (37.8%) of inert construction waste on site and deliver 11 100 tonnes (52.0%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of 2 170 tonnes (10.2%) 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 \$570,950 for this project (based on a unit cost of \$27/tonne for disposal to public fill reception facilities and \$125/tonne³ at landfills).

/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.

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/m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

ENERGY CONSERVATION MEASURES

- 18. This project has adopted various forms of energy efficient features, including
 - (a) heat recovery fresh air pre-conditioners in air-conditioned spaces for heat energy reclaim of exhaust air;
 - (b) T5 energy efficient fluorescent tubes with electronic ballast and lighting control by occupancy sensors in the common areas of the quarters building;
 - (c) compact fluorescent lamps with electronic ballast and lighting control by daylight sensors;
 - (d) light-emitting diode (LED) type exit signs; and
 - (e) automatic on/off switching of lighting and ventilation fans inside lifts.
- 19. For renewable energy technologies, we will install a small scale solar photovoltaic system for corridor lightings.
- 20. For greening features, we will provide landscaping and a green roof in appropriate areas on the podium roof for environmental and amenity benefits.
- 21. For recycled features, we will provide a rainwater recycling system for irrigating the greenery.
- 22. The total estimated additional cost for adopting the energy conservation measures is around \$1.9 million (including about \$50,000 for energy efficient features), which has been included in the cost estimate for this project. The energy efficient features will achieve 3.5% energy savings in the annual energy consumption with a payback period at about 3.9 years.

HERITAGE IMPLICATIONS

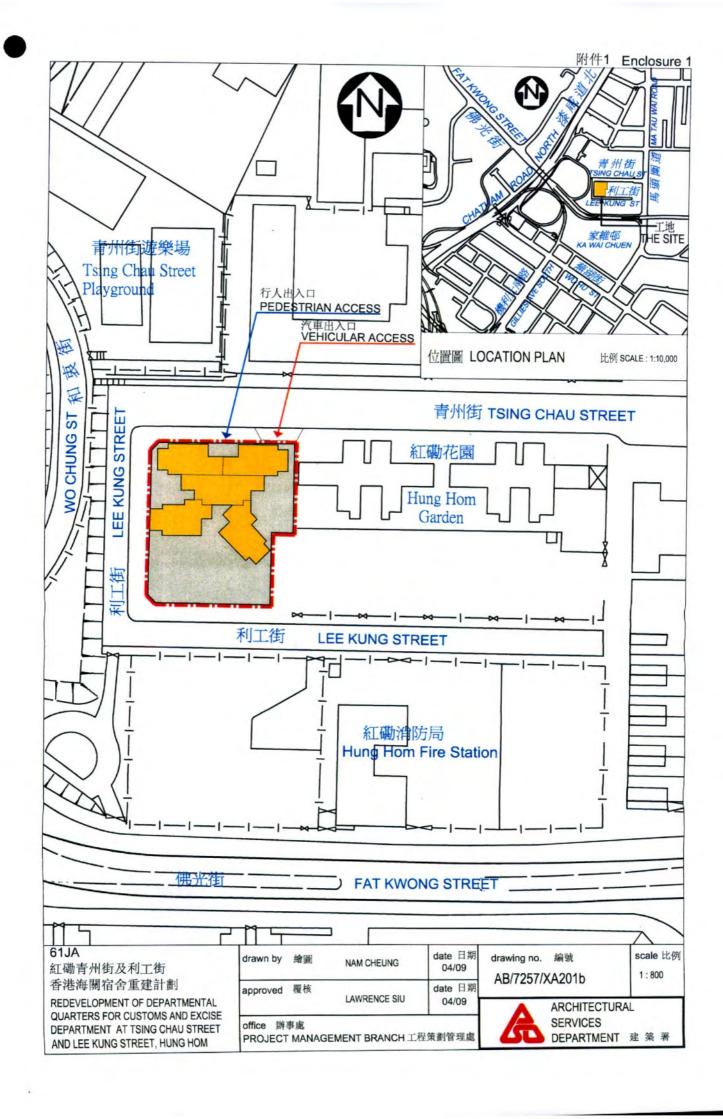
23. This project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interests and Government historic sites identified by the Antiquities and Monuments Office.

LAND ACQUISITION

24. The project does not require any land acquisition.

BACKGROUND INFORMATION

- 25. We upgraded **61JA** to Category B in June 2008. We engaged contractors to carry out ground investigations in November 2008 and a topographical survey in July 2008. We employed consultants to undertake a Preliminary Environmental Review in August 2008, a traffic impact assessment in August 2008, and asbestos investigations and utility mappings in October 2008. We also employed a quantity surveying consultant to prepare the tender document in March 2009. The total cost of these works and services is \$1.2 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 contractors have completed the ground investigations and topographical survey. The consultants have completed the Preliminary Environmental Review, the traffic impact assessment, the asbestos investigations and the utility mappings. The quantity surveying consultant is finalising the tender document.
- 26. The proposed works will not involve any removal of trees. We will incorporate planting proposals as part of the project, including an estimated quantities of 20 trees, 4 000 shrubs/ground covers and climbers.
- We estimate that the proposed works will create about 184 jobs (167 for labourers and another 17 for professional/technical staff providing total employment of 3 700 man-months.



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Breakdown of the estimate for consultants' fees (in September 2008 prices)

		Estimated man- Months	Average MPS* salary point	Multiplier	Estimated fee (\$ million)
Consultants' fees for contract administration (Note 1) and construction supervision (Note 2)	Professional Technical	-	-	-	1.6 3.7
				Total	5.3

* MPS = Master Pay Scale

Notes

- 1. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for **61JA**. The assignment will only be executed subject to Finance Committee's approval to upgrade **61JA** to Category A.
- 2. The consultants' staff cost for construction supervision is based on the estimate prepared by the Director of Architectural Services. We will only know the actual manmonths and actual costs after completion of the construction works.