For discussion
on 18 December 2013

PWSC(2013-14)31

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING
Civil Engineering – Land development
742CL – Main engineering infrastructure in association with the proposed developments in Area 56, Tung Chung

Members are invited to recommend to Finance Committee the upgrading of **742CL** to Category A at an estimated cost of $54.8 million in money-of-the-day prices for the design and construction of the engineering infrastructure in association with the proposed developments in Area 56, Tung Chung.

PROBLEM

We need to provide supporting infrastructure for the new public housing development in Area 56, Tung Chung.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Transport and Housing, proposes to upgrade **742CL** to Category A at an estimated cost of $54.8 million in money-of-the-day (MOD) prices for the design and construction of the engineering infrastructure in association with the proposed developments in Area 56, Tung Chung.

/**PROJECT** …..

PROJECT SCOPE AND NATURE

3. The scope of **742CL** comprises –

(a) the design and construction of a new carriageway, footpaths and a cycle track so as to connect the southern part of the proposed Road L16 with the proposed housing developments in Area 56, Tung Chung, including cul-de-sac, run in/run out and road side lay-bys;

(b) the design and construction of ancillary works including drainage, sewerage, water supply system and landscaping works; and

(c) implementing necessary environmental mitigation measures for the works mentioned in (a) and (b) above.

A site plan showing the proposed works is at Enclosure.

4. Subject to funding approval of the Finance Committee, we plan to commence the construction works in June 2014 for completion in February 2016.

JUSTIFICATION

5. The Hong Kong Housing Authority (HA) is implementing a public housing development in Area 56, Tung Chung, which will provide about 3 600 flats and can accommodate a population of about 10 000. The public housing development is anticipated to be completed by end 2016.

6. To support the above-mentioned housing development, the provision of ancillary infrastructure, including a section of Road L16, drainage, sewerage and water supply system, are required. To tie in with the scheduled completion and population intake of the public housing development in 2016, there is a need to provide the infrastructure in a timely manner.

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7. The proposed infrastructure works will be in close proximity to the new public housing development. In view of the limited vehicular access and works areas, it is desirable to entrust the design and construction of the infrastructure works to HA for implementation. This arrangement will ensure better co-ordination of the proposed works and the adjoining public housing development. Upon completion of the construction works, HA will hand over the facilities to the relevant departments for management and maintenance.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be $54.8 million in MOD prices (please see paragraph 9 below), broken down as follows –

		$ million	
(a)	Roadworks including a new carriageway, footpaths and a cycle track	16.6	
(b)	Drainage and sewerage	10.8	
(c)	Water supply system	6.6	
(d)	Other associated works (including landscaping works)	4.3	
(e)	Environmental mitigation measures	0.3	
(f)	On-cost payable to HA[1]	6.1	
(g)	Contingencies	4.4	
	Sub-total	49.1	(in September 2013 prices)
(h)	Provision for price adjustment	5.7	
	Total	54.8	(in MOD prices)

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[1] On-cost payable to HA for the entrustment of the design and construction of the proposed works will be 15.8% of the estimated construction cost.

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

Year	$ million (Sept 2013)	Price adjustment factor	$ million (MOD)
2014 – 2015	14.7	1.06000	15.6
2015 – 2016	26.0	1.12360	29.2
2016 – 2017	8.4	1.19102	10.0
	49.1		54.8

10. We have derived the MOD estimates 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 2014 to 2017. Subject to funding approval, HA will deliver the proposed works under a standard re-measurement contract because the quantities of works may vary depending on actual site conditions. The contract will provide for price adjustments.

11. We estimate the annual recurrent expenditure arising from the proposed works to be about $344,000.

PUBLIC CONSULTATION

12. We consulted the Traffic and Transport Committee of Islands District Council on the proposed works on 24 November 2008. Members supported the proposal. We also consulted the Islands District Council on the public housing development in Area 56, Tung Chung on 16 February 2009 and 20 June 2011.

13. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 28 September 2012 and received no objection. The Secretary for Transport and Housing authorised the proposed works without modification under the Ordinance on 21 January 2013 and the notice of authorisation was gazetted on 25 January 2013.

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14. We consulted the Legislative Council Panel on Housing on the proposed works on 4 November 2013. Members supported the proposed works.

ENVIRONMENTAL IMPLICATIONS

15. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project will not cause any long-term environmental impacts. HA will implement the standard pollution control measures promulgated by the Director of Environmental Protection during construction works.

16. We have included provision in the project estimate to implement suitable mitigation measures to control short-term environmental impacts during construction. HA will specify in the relevant contract the requirement for the contractor to implement mitigation measures to control noise, dust, and site run-off nuisances during construction within the level specified under the published standards and guidelines. These include the use of silencers, mufflers, acoustics lining or shields for noisy construction activities, frequent cleaning and watering of the site, etc.

17. At the planning and design stages, HA has considered measures, such as optimising the roadworks design and reuse of signboards to reduce the generation of construction waste where possible. In addition, HA will require the contractor to reuse inert construction waste (e.g. excavated soil) 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[2]. HA will encourage the contractor to maximise the use of recycled/recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.

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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 (Cap. 354N). Disposal of inert construction waste in public fill reception facilities requires a license issued by the Director of Civil Engineering and Development.

18. At the construction stage, HA 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. HA will ensure that the day-to-day operations on site comply with the approved plan. HA will require the contractor to separate the inert portion from non-inert construction waste on site for disposal at appropriate facilities. HA 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. HA estimates that the project will generate in total about 7 000 tonnes of construction waste. Of these, HA will reuse about 140 tonnes (2%) of inert construction waste on site and deliver about 6 650 tonnes (95%) of inert construction waste to public fill reception facilities for subsequent reuse. HA will dispose of the remaining 210 tonnes (3%) 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 about $0.2 million for this project (based on a unit cost of $27 per tonne for disposal at public fill reception facilities and $125 per tonne[3] at landfills).

HERITAGE IMPLICATIONS

20. The project will not involve 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

21. The proposed works do not require any land acquisition.

BACKGROUND INFORMATION

22. We included **742CL** in Category B in January 2009.

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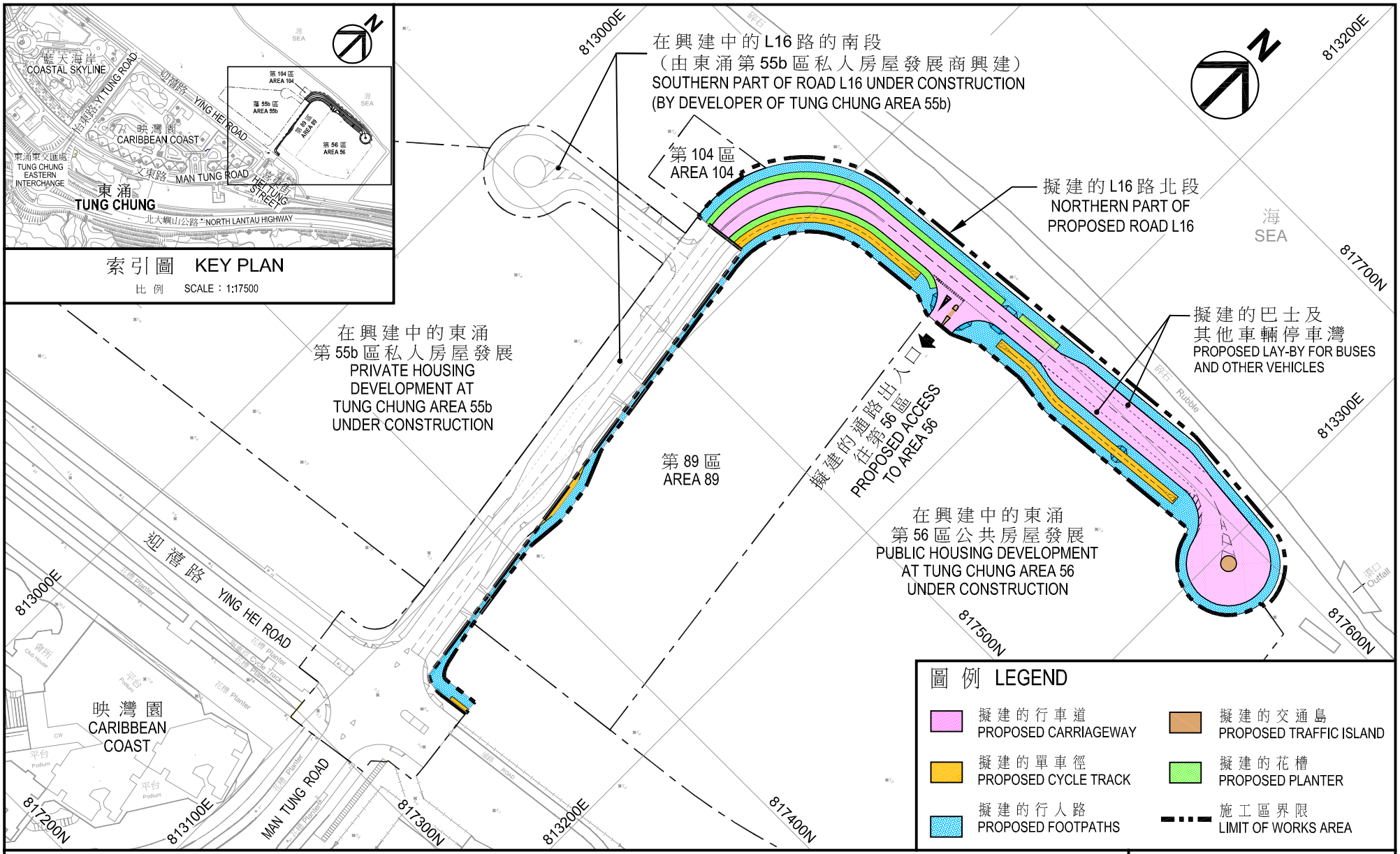
[3] This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at $90 per m^3), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

23. No old and valuable trees have been identified in the site. The proposed works will not involve any tree removal. HA will incorporate planting proposal as part of the project, including estimated quantities of 24 trees and 4 800 shrubs.

24. We estimate that the proposed works will create about 58 jobs (42 for labourers and another 16 for professional/technical staff) providing a total employment of 855 man-months.

Transport and Housing Bureau
December 2013



工務計劃項目第742CL號
與東涌第56區的建議發展項目有關的主要基礎建設工程
PWP ITEM NO. 742CL
MAIN ENGINEERING INFRASTRUCTURE IN ASSOCIATION WITH
THE PROPOSED DEVELOPMENTS IN AREA 56, TUNG CHUNG

工地平面圖
SITE PLAN

比例 SCALE 1 : 2000

附件
Enclosure