

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 711 – HOUSING

Civil Engineering – Land development

757CL – Roads and drains in Area 16 and Area 58D, Sha Tin

Members are invited to recommend to the Finance Committee the upgrading of **757CL** to Category A at an estimated cost of \$224.5 million in money-of-the-day prices for the provision of infrastructure to support the proposed public housing development in Area 16 and Area 58D, Sha Tin.

PROBLEM

We need to provide infrastructure to support the proposed public housing development in Area 16 and Area 58D, Sha Tin.

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Transport and Housing, proposes to upgrade **757CL** to Category A at an estimated cost of \$224.5 million in money-of-the-day (MOD) prices for the provision of infrastructure to support the proposed public housing development in Area 16 and Area 58D, Sha Tin.

/PROJECT

PROJECT SCOPE AND NATURE

3. The scope of **757CL** comprises –
- (a) widening and realignment of a section of Kwei Tei San Chuen Road to a single two-lane carriageway with associated retaining walls, slopeworks, footpaths and crossing facilities;
 - (b) widening of a section of Wong Chuk Yeung Street from Kwei Tei San Chuen Road to Wo Sheung Tun Street to a single two-lane carriageway with associated slopeworks, laybys, footpaths and crossing facilities; and
 - (c) ancillary works including drainage, sewerage, water supply system and landscaping works.

———— A site plan showing the proposed works is at Enclosure 1.

4. Subject to funding approval of the Finance Committee, we plan to commence the construction works in late 2015 for completion in mid-2018.

JUSTIFICATION

5. Public rental housing (PRH) will be developed at a site straddles Area 16 and Area 58D, Sha Tin to address the increasing demand for public housing. The proposed PRH development is expected to be completed in 2018-19 and will provide about 4 800 flats for a population of about 13 500.

6. To support the proposed PRH development, it is necessary to improve the infrastructure in the vicinity such as widening of the existing Kwei Tei San Chuen Road and Wong Chuk Yeung Street, and provision of drainage, sewerage and water supply system. A section of the existing Kwei Tei San Chuen Road of about 250 metres (m) long, which is about 3.3 m to 5.6 m wide at present, will be realigned and widened to a standard single two-lane carriageway of about 7.9 m wide. After the realignment, the land occupied by the existing Kwei Tei San Chuen Road will form part of the proposed PRH development. Further, we will widen a section of Wong Chuk Yeung Street of about 300 m long from the current width of about 3.2 m to 7.5 m to a single two-lane carriageway of about 7.3 m to 7.9 m wide. To facilitate the access of local residents and vehicles, laybys, crossing facilities and footpath will also be provided.

/7.

7. Timely completion of the infrastructure is necessary to tie in with the scheduled completion of the proposed PRH development in 2018-19. Upon completion of the construction works, the roads and the associated infrastructure will be handed over to relevant government departments for management and maintenance.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$224.5 million in MOD prices (please see paragraph 10 below), broken down as follows –

		\$ million
(a)	Widening and realignment of a section of Kwei Tei San Chuen Road	98.0
	(i) Roadworks	8.4
	(ii) Slopeworks	89.6
(b)	Widening of a section of Wong Chuk Yeung Street	14.8
	(i) Roadworks	12.6
	(ii) Slopeworks	2.2
(c)	Ancillary works including drainage, sewerage, water supply system and landscaping works	38.7
(d)	Consultants' fees for	2.5
	(i) contract administration	1.9
	(ii) management of resident site staff	0.6
(e)	Remuneration of resident site staff	17.6
(f)	Contingencies	<u>16.1</u>
	Sub-total	187.7 (in September 2014 prices)
(g)	Provision for price adjustment	<u>36.8</u>
	Total	<u>224.5 (in MOD prices)</u>

9. In view of insufficient in-house resources, we propose to engage consultants to undertake the contract administration and site supervision for the proposed works. A breakdown of the estimates for consultants' fees and resident site staff costs by man-months is at Enclosure 2.

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

Year	\$ million (Sept 2014)	Price adjustment factor	\$ million (MOD)
2015 – 2016	1.9	1.05725	2.0
2016 – 2017	49.9	1.12069	55.9
2017 – 2018	79.9	1.18793	94.9
2018 – 2019	45.0	1.25920	56.7
2019 – 2020	6.9	1.33475	9.2
2020 – 2021	4.1	1.40483	5.8
	<hr/> 187.7 <hr/>		<hr/> 224.5 <hr/>

11. 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 from 2015 to 2021. Subject to funding approval, we will deliver the 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 adjustment.

12. We estimate the annual recurrent expenditure arising from the proposed works to be about \$1.2 million.

/PUBLIC

PUBLIC CONSULTATION

13. The Government consulted the Traffic and Transport Committee of the Sha Tin District Council on 10 September 2013 and Members supported the proposal.

14. We gazetted the proposed road works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 10 January 2014. One objection from 19 objectors was received. The objectors mainly objected to the resumption of the private land required for the proposed PRH development, and thus the proposed road and drainage works under **757CL**, which is designed for supporting the PRH development. At the objection resolving meeting in April 2014, the Government explained to the objectors that the lot would not be required for the road and drainage works under **757CL** but for the proposed PRH development. Despite the Government's explanation, the objectors maintained their objection.

15. Having considered the unresolved objection, the Chief Executive-in-Council authorised the scheme in accordance with the Ordinance without modification on 6 January 2015. The notice of authorisation was gazetted on 13 February 2015.

16. We consulted the Legislative Council Panel on Housing on 2 February 2015. Members supported submitting the funding proposal to the Public Works Subcommittee for examination.

ENVIRONMENTAL IMPLICATIONS

17. This is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have undertaken to carry out a Preliminary Environmental Review (PER) for the project. The PER concluded that with the implementation of the recommended monitoring and mitigation measures, the project will not cause any long-term adverse environmental impact. We have included in the project estimate the cost of implementing suitable monitoring and mitigation measures during the construction.

/18.

18. For controlling the short-term environmental impacts caused by the proposed works during construction, mitigation measures will be implemented under the works contract. These measures include proper treatment of any contaminated soils if identified on site, regular watering of the exposed site area to reduce emission of fugitive dust, the use of movable noise barriers and quiet plant to reduce noise generation, and the use of trucks with cover or enclosed containers for waste transportation.

19. At the planning and design stages, we have considered the alignment, design level and construction method of the proposed works so as to reduce the generation of construction waste where possible. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil and rock fill) 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 facilities¹. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste and the use of non-timber formwork to further reduce the generation of construction waste.

20. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate mitigation measures 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 the non-inert construction waste on site for disposal at appropriate facilities. Besides, we will control the disposal of inert and non-inert construction waste at public fill reception facilities and landfills respectively through a trip-ticket system.

/21.

¹ 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.

21. We estimate that the proposed works will generate about 167 100 tonnes of construction waste in total. Of these, we will reuse about 105 700 tonnes (63%) and deliver about 59 500 tonnes (36%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 900 tonnes (1%) 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 \$1.8 million for this project (based on a unit charge rate of \$27 per tonne for disposal at public fill reception facilities, and \$125 per tonne for disposal at landfills as stipulated in the Waste Disposal (Charges for Disposal of Construction Waste) Regulation).

HERITAGE IMPLICATIONS

22. The proposed works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, site of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

TRAFFIC IMPLICATIONS

23. The proposed works will not cause any significant traffic impact. Temporary traffic arrangements will be implemented to facilitate the construction works which will require a temporary partial road closure. We will display publicity boards on site giving details of the temporary traffic arrangements and the anticipated completion dates of individual section of works. In addition, we will set up a telephone hotline to respond to public enquiries or complaints.

LAND ACQUISITION

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

BACKGROUND INFORMATION

25. We upgraded **757CL** to Category B in September 2012.

26. We engaged consultants in March 2013 to undertake the detailed design and site investigation for the proposed works at an estimated cost of \$4.7 million under the block allocation **Subhead B100HX** “Minor housing development related works, studies and investigations for items in Category D of the Public Works Programme”. We have completed the detailed design for the proposed works mentioned in paragraph 3 above.

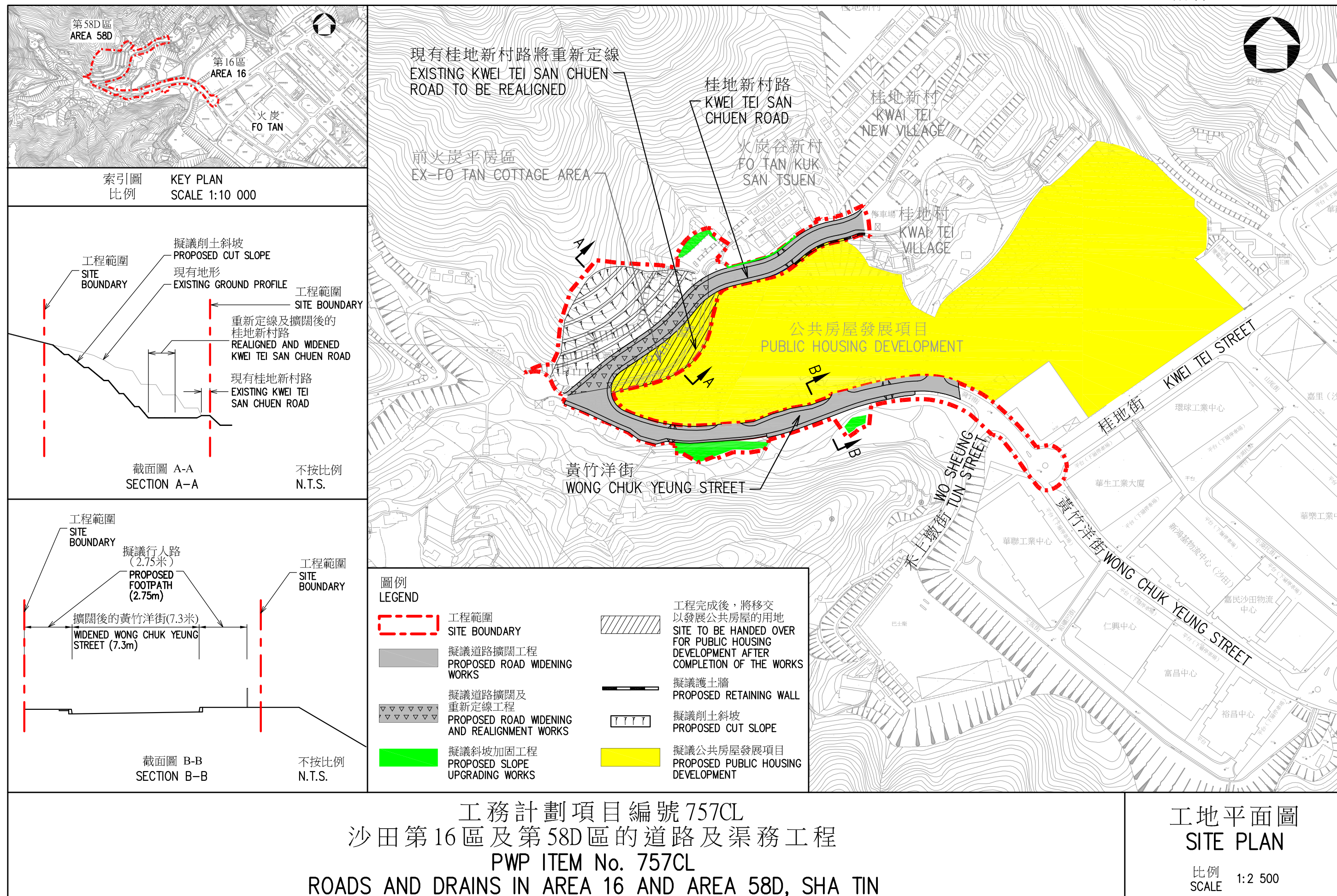
27. The proposed works will involve the removal of 91 trees including 89 trees to be felled and two trees to be transplanted within the project site. All the trees to be removed and transplanted are not important trees². We will incorporate planting proposal as part of the project, including a total of 89 trees and about 60 500 shrubs.

28. We estimate that the proposed works will create about 240 jobs (190 for labourers and another 50 for professional or technical staff) providing a total employment of 2 800 man-months.

Transport and Housing Bureau
May 2015

² “Important trees” 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 an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the 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 a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height or canopy spread equal to or exceeding 25 m.



Enclosure 2 to PWSC(2015-16)16

757CL – Roads and drains in Area 16 and Area 58D, Sha Tin

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2014 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fee (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	--	--	--	1.5
	Technical	--	--	--	0.4
	Sub-total				1.9
(b) Resident site staff (RSS) costs (Note 3)	Professional	77	38	1.6	8.8
	Technical	240	14	1.6	9.4
	Sub-total				18.2
Comprising –					
(i) Consultants' fees for management of RSS				0.6	
(ii) Remuneration of RSS				17.6	
				Total	20.1

* MPS = Master Pay Scale

Notes

1. A multiplier of 1.6 is applied to the average MPS salary point to estimate the cost of RSS cost supplied by the consultants (as at now, MPS point 38 = \$71,385 per month and MPS point 14 = \$24,380 per month).
2. The consultants' staff cost for the contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **757CL**. The construction phase of the assignment will only be executed upon Finance Committee's approval to upgrade **757CL** to Category A.
3. The actual man-months and actual costs will only be known after completion of the construction works.