

ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 707 – NEW TOWNS AND URBAN AREA DEVELOPMENT

Recreation, Culture and Amenities – Sports facilities

259RS – Cycle tracks connecting North West New Territories with North East New Territories

Members are invited to recommend to the Finance Committee –

- (a) the upgrading of part of **259RS**, entitled “Cycle tracks connecting North West New Territories with North East New Territories – Tuen Mun to Sheung Shui section (Stage 1)”, to Category A at an estimated cost of \$295.4 million in money-of-the-day prices; and
- (b) the retention of the remainder of **259RS** in Category B.

PROBLEM

As part of our efforts to improve the quality of living in Hong Kong by developing a comprehensive cycle track network in the New Territories (shown at Enclosure 1), we need to proceed with the construction of the first stage of the Tuen Mun to Sheung Shui section of the New Territories cycle track network.

/PROPOSAL

PROPOSAL

2. The Director of Civil Engineering and Development, with the support of the Secretary for Development, proposes to upgrade part of **259RS** to Category A at an estimated cost of \$295.4 million in money-of-the-day (MOD) prices for the construction of Stage 1 works of Tuen Mun to Sheung Shui section of the New Territories cycle track network.

PROJECT SCOPE AND NATURE

3. The part of **259RS** (the Stage 1 works) which we propose to upgrade to Category A comprises –

Portion A

- (a) construction of a new cycle track about 1 kilometre (km) in length along Kam Tin River and a resting station near Kam Tin River in Yuen Long;
- (b) construction of a new cycle track about 1.5 km in length along Sheung Yue River and Shek Sheung River and a resting station near Sheung Yue River in Sheung Shui;
- (c) construction of associated footpaths and decking of existing nullah about 30 metres (m) in length near Kam Tin River;

Portion B

- (d) improvement works to about 4.5 km in length of selected sections of existing cycle tracks in Tuen Mun, Tin Shui Wai and Yuen Long, including widening to current standards and provision of additional road signs;
- (e) provision of three entry/exit hubs and three resting stations along the existing cycle tracks in Tuen Mun, Yuen Long and Tin Shui Wai;

/Associated

Associated Works

- (f) provision of supporting facilities including cycle rental/repair kiosks, cycle parking spaces, route maps, information boards, first aid stations, refreshment kiosks and toilets at the proposed entry/exit hubs and resting stations along the existing/new cycle tracks;
- (g) associated landscaping, traffic aids, road lighting and ancillary works; and
- (h) provision of necessary environmental mitigation measures and implementation of an environmental monitoring and audit (EM&A) programme for the works mentioned in 3(a) to (g) above.

4. A plan showing the proposed Stage 1 works and the alignment of remaining works of Tuen Mun to Sheung Shui section is at Enclosure 2. Plans showing the typical layout of the entry/exit hubs, as illustrated by the one at Tin Fuk Road in Tin Shui Wai, and that of the resting stations, as illustrated by the one at Long Tin Road in Yuen Long, are at Enclosure 3 and Enclosure 4 respectively.

5. Subject to funding approval of the Finance Committee (FC), we plan to commence the construction of the proposed Stage 1 works in September 2013 for completion by end 2016.

6. We will retain the remainder of **259RS** in Category B, which mainly covers the construction of a new cycle track about 13.5 km in length between Kam Tin River in Yuen Long and Sheung Yue River in Sheung Shui. Funding for the remainder of **259RS** will be sought to dovetail with the implementation programme of the project.

JUSTIFICATION

7. The Government has been incorporating provision of cycle tracks in the planning and development of new towns, such as Sha Tin, Tai Po, Fanling, Sheung Shui, Tin Shui Wai, Yuen Long and Tuen Mun. These cycle tracks,

/particularly

particularly the one connecting Sha Tin and Tai Po along Tolo Highway, have become attractions to the public for leisure/recreational purpose. However, despite their popularity, the existing cycle tracks are mostly confined to individual areas. Access to some of them is not convenient due to lack of proper connection with public transport services. Moreover, while some supporting facilities are provided, they turned out to be inadequate to meet the increasing demand and higher expectation for a quality city life. There is also strong aspiration for linking the cycle tracks together to form a continuous cycle track network and for improving the access to the cycle tracks and their supporting facilities. We have been making efforts to address the community aspiration so as to enhance the recreational value of the cycle tracks for better enjoyment of the public.

8. In view of the considerable length of the proposed cycle track from Tuen Mun to Ma On Shan, we are implementing it in phases so as to bring forward the completion of individual sections for early enjoyment of the public. Works of the first phase covering the eastern section between Sheung Shui and Ma On Shan commenced in May 2010 and are scheduled for completion in end 2013. The second phase covering the western section from Tuen Mun to Sheung Shui will be implemented in stages. The proposed Stage 1 works will form part of the western section from Tuen Mun to Sheung Shui.

FINANCIAL IMPLICATIONS

9. We estimate the cost of the project to be \$295.4 million in MOD prices (please see paragraph 10 below), broken down as follows –

	\$ million
<u>Portion A</u>	
(a) New cycle track along Kam Tin River, and a resting station nearby	12.6
(b) New cycle track along Sheung Yue River and Shek Sheung River, and a resting station nearby	45.0
(c) Associated footpaths and decking of existing nullah near Kam Tin River	25.0

/Portion B

	\$ million
<u>Portion B</u>	
(d) Improvement to existing cycle tracks in Tuen Mun, Tin Shui Wai and Yuen Long	13.7
(e) Entry/exit hubs and resting stations in Tuen Mun, Tin Shui Wai and Yuen Long	50.0
<u>Associated Works</u>	
(f) Supporting facilities including cycle rental/repair kiosks, cycle parking spaces, route maps, information boards, first aid stations, refreshment kiosks and toilets	39.1
(g) Associated landscaping, traffic aids, road lighting and ancillary works	12.1
(h) Environmental mitigation measures and EM&A programme for works in (a) to (g) above	3.2
<u>Others</u>	
(i) Consultants' fee for	2.6
(i) contract administration	1.6
(ii) management of resident site staff	1.0
(j) Remuneration of resident site staff	24.0

/(k)

		\$ million	
(k) Contingencies		22.7	
	Sub-total	<u>250.0</u>	(in September 2012 prices)
(l) Provision for price adjustment		45.4	
	Total	<u>295.4</u>	(in MOD prices)

Owing to insufficient in-house resources, we propose to engage consultants to undertake the contract administration and site supervision of the proposed Stage 1 works. A breakdown of the estimate for the consultants' fees and resident site staff costs by man-months is at Enclosure 5.

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

Year	\$ million (Sept 2012)	Price adjustment factor	\$ million (MOD)
2013 – 2014	36.0	1.06225	38.2
2014 – 2015	75.3	1.12599	84.8
2015 – 2016	75.3	1.19354	89.9
2016 – 2017	41.4	1.26516	52.4
2017 – 2018	14.0	1.34107	18.8
2018 – 2019	7.4	1.41147	10.4
2019 – 2020	0.6	1.48205	0.9
	<u>250.0</u>		<u>295.4</u>

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 for public sector building and construction output for the period 2013 to 2020. Subject to funding approval, we will deliver the works under a standard re-measurement contract because the quantities may vary depending on actual site conditions. The contract will provide for price adjustment.

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12. We estimate the annual recurrent expenditure arising from this project to be \$5.6 million.

PUBLIC CONSULTATION

13. We consulted the Environment, Hygiene and District Development Committee of the Tuen Mun District Council, the Traffic and Transport Committee of the Yuen Long District Council, and the North District Council on the proposed cycle track network from Tuen Mun to Ma On Shan under the original scope of **259RS** on 13 July, 21 September and 26 July 2007 respectively and obtained their support. On 27 May 2008, we briefed the Legislative Council Panel on Development on the proposed implementation plan for developing a comprehensive cycle track network for the New Territories broadly comprising a backbone section and branching off sections. Members supported the proposal.

14. We gazetted the proposed works for the whole western section of the cycle track network from Tuen Mun to Sheung Shui (i.e. the proposed Stage 1 works and remaining works) under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) on 6 June 2008 and received 12 objections. We held meetings with the objectors. One of the objections was withdrawn but the other 11 objections remained unresolved. As the objections were mainly against the cycle track between San Tin Tsuen Road and Pak Shek Au Interchange¹, we gazetted an amendment on 30 April 2009 to exclude this section of works and the associated works from the proposed works and land resumption limits so that part of the works could start earlier. Despite gazettal of the amendment and subsequent meetings with the original 11 objectors, their objections remained unresolved. On 3 November 2009, the Chief Executive in Council authorised the proposed works with the amended scope as described above. The authorisation notice was gazetted on 15 January 2010.

15. We reported the progress of **259RS** to the Environment, Hygiene and District Development Committee of the Tuen Mun District Council, the Traffic and Transport Committee of the Yuen Long District Council and the Traffic and Transport Committee of the North District Council (NDCT&TC) on 23 November 2012, 22 November 2012 and 14 January 2013 respectively. We also informed

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¹ This section falls within the remaining works.

the District Councils of our proposal to proceed with construction of the proposed Stage 1 works of Tuen Mun to Sheung Shui section. Members generally supported the proposed Stage 1 works². We also consulted various cyclist groups on the proposed Stage 1 works on 15 March 2012 and 8 January 2013 and obtained their support.

16. We consulted the Legislative Council Panel on Development on the proposed Stage 1 works on 23 April 2013. Members generally supported the proposed Stage 1 works.

ENVIRONMENTAL IMPLICATIONS

17. Portion A works comprising items (a) to (c) in paragraph 3 above, which involve construction of new cycle tracks and resting stations along Kam Tin River, Sheung Yue River and Shek Sheung River, are part of the designated project of the cycle track works from Sha Po Tsuen in Yuen Long to Shek Sheung River in Sheung Shui under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). An environmental permit is required for the construction and operation of the works for this section of cycle tracks and the associated facilities. Portion B works comprising items (d) and (e) in paragraph 3 above, which involve improvements to existing cycle tracks and construction of entry/exit hubs and resting stations in Tuen Mun, Tin Shui Wai and Yuen Long, are not designated projects under the EIA Ordinance (Cap. 499) and an environmental permit is not required for the construction and operation of these cycle tracks and associated facilities. Works items (f) to (h) in paragraph 3 above are associated works to the works in both Portion A and Portion B. Details of their environmental implications are set out below –

/(a)

² The original scope of the Stage 1 works includes a proposed cycle bridge across Shek Sheung River. However, several new domestic structures in Tsung Pak Long have recently been built in the vicinity of the proposed cycle bridge. NDCT&TC requested us to provide a toilet at the proposed resting station near Sheung Yue River and to shift the proposed cycle bridge across Shek Sheung River away from Tsung Pak Long as shown in Enclosure 2. After reviewing the need for toilet facilities for the cyclists, we proposed to NDCT&TC at its meeting on 11 March 2013 that, subject to satisfactory completion of the Environmental Impact Assessment (EIA) Ordinance procedures and funding approval, we would add a toilet to the resting station adjacent to Sheung Yue River as part of the remaining works. We also proposed to omit the originally proposed cycle bridge across Shek Sheung River from the proposed Stage 1 works and, subject to satisfactory completion of the EIA Ordinance procedures and Roads (Works, Use and Compensation) procedures and funding approval, we would construct the proposed cycle bridge at the revised location as part of the remaining works. NDCT&TC supported our above proposals.

(a) Portion A

On 12 March 2009, the EIA report for the designated project of the cycle tracks running from Sha Po Tsuen in Yuen Long to Shek Sheung River in Sheung Shui, within which Portion A is located, was approved without conditions under the EIA Ordinance (Cap. 499). It indicated that the works for this section of cycle tracks, after the adoption of appropriate mitigation measures, would comply with all environmental legislation and standards with no unacceptable residual impacts. The environmental permit will take into account the recommendations of the approved EIA report and any changes since its approval to control the construction and operation of the works.

(b) Portion B

For Portion B works, we completed an Environmental Review (ER) report in November 2008, which was accepted by the Director of Environmental Protection in February 2009. The ER report indicated that, with implementation of the proposed mitigation measures for the construction and operation phases, these works would not cause adverse environmental impacts.

18. We will incorporate into the works contract the mitigation measures recommended in the EIA and ER reports and required in the environmental permit to control pollution arising from construction works to within established standards and guidelines. Furthermore, we will implement the EM&A programme recommended in the EIA and ER reports. We have included \$3.2 million (in September 2012 prices) in the project estimate for implementing the environmental mitigation measures and EM&A programme.

19. At the planning and design stages, we have considered the levels, layouts and construction sequence of the proposed Stage 1 works of Tuen Mun to Sheung Shui section in order 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) on site or in other suitable construction sites as far as

/possible

possible, in order to minimise the disposal of inert construction waste to public fill reception facilities³. 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 means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that 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 at public fill reception facilities and landfills respectively through a trip-ticket system.

21. We estimate that the project will generate in total about 10 940 tonnes of construction waste. Of these, we will reuse about 5 960 tonnes (54.5%) of inert construction waste on site and deliver 3 050 tonnes (27.9%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 1 930 tonnes (17.6%) 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 \$323,600 for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁴ at landfills).

HERITAGE IMPLICATIONS

22. The proposed Stage 1 works of Tuen Mun to Sheung Shui section 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

³ 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.

⁴ 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 cubic metre (m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

LAND ACQUISITION

23. The proposed Stage 1 works of Tuen Mun to Sheung Shui section will not involve any land resumption of private land. We will clear about 41 244 square metres of Government Land. No domestic structure will be affected while some flimsy structures including storage, gates, fences and containers, etc. need to be cleared. Clearance of crops, cultivation and miscellaneous permanent items will also be required. Ex-gratia allowance will be paid to genuine cultivators in line with established policy. The estimated cost of land clearance is \$1.1 million which will be charged to **Head 701 – Land Acquisition**. A breakdown of the estimate for land clearance cost for the proposed Stage 1 works is at Enclosure 6.

BACKGROUND INFORMATION

24. We upgraded **259RS** to Category B in January 2006.

25. In June 2009, the FC approved upgrading part of **259RS** as **271RS** “Cycle tracks connecting North West New Territories with North East New Territories – Sheung Shui to Ma On Shan” at an estimated cost of \$230.3 million in MOD prices for construction of the part of the New Territories cycle track network linking Sheung Shui, Fanling, Tai Po, Sha Tin and Ma On Shan. We commenced the works in May 2010, which are currently scheduled for completion in end 2013.

26. We engaged consultants to carry out investigation and detailed design for the proposed Stage 1 works of Tuen Mun to Sheung Shui section under **259RS** in September 2006. We have charged the cost of about \$ 2.15 million to **Subhead 7100CX** “New towns and urban area works, studies and investigations for items in Category D of the Public Works Programme”. We have substantially completed the detailed design of the proposed Stage 1 works of Tuen Mun to Sheung Shui section.

27. There are 1 186 trees within the project boundary of the proposed Stage 1 works of Tuen Mun to Sheung Shui section, of which 523 trees will be preserved, 460 trees will be felled and 203 trees will be transplanted within the

/project

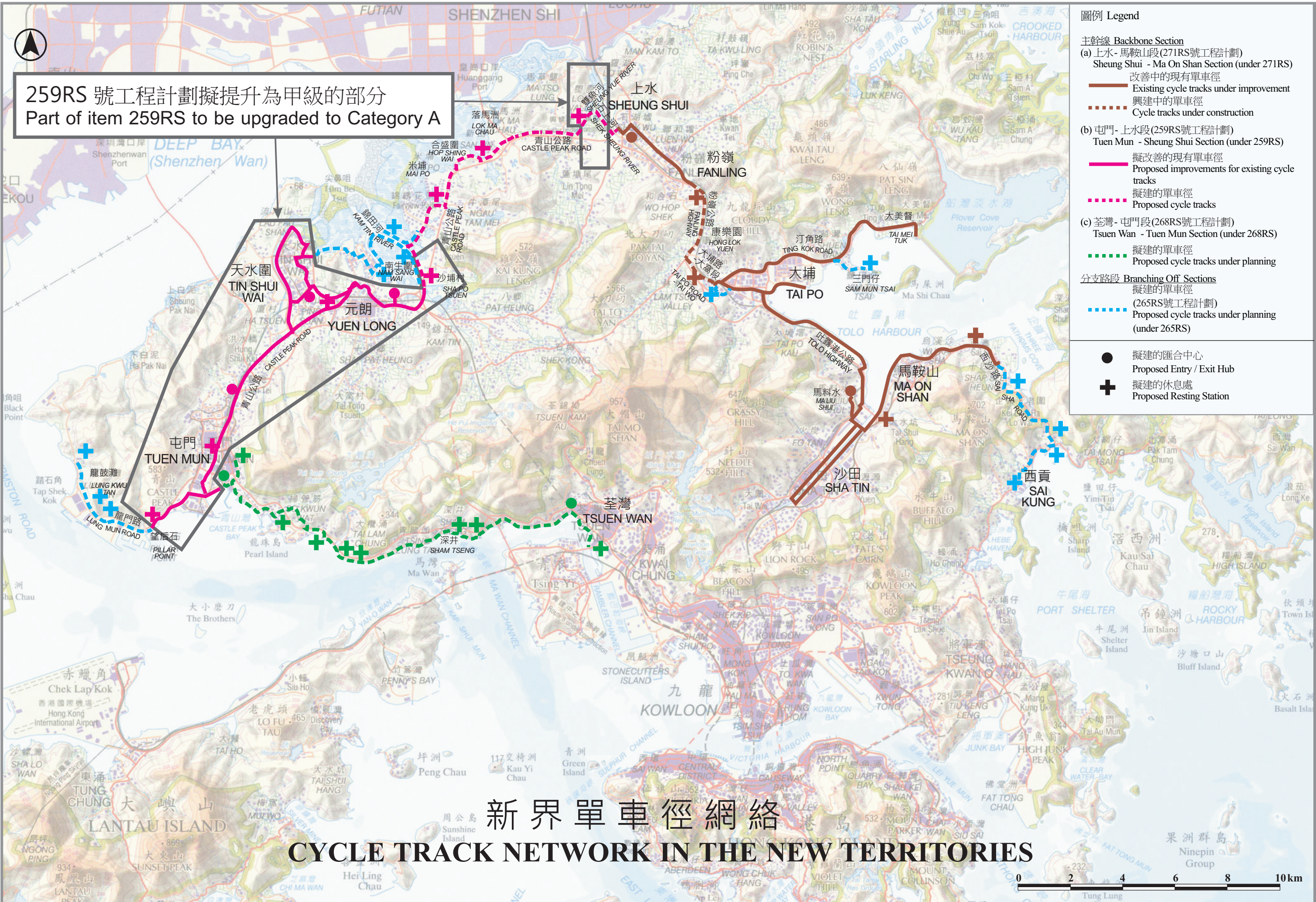
project site. All trees to be removed and transplanted are not important trees⁵. We will incorporate planting proposals as part of the project, including about 530 trees and 14 000 shrubs along the cycle tracks and inside the supporting facilities.

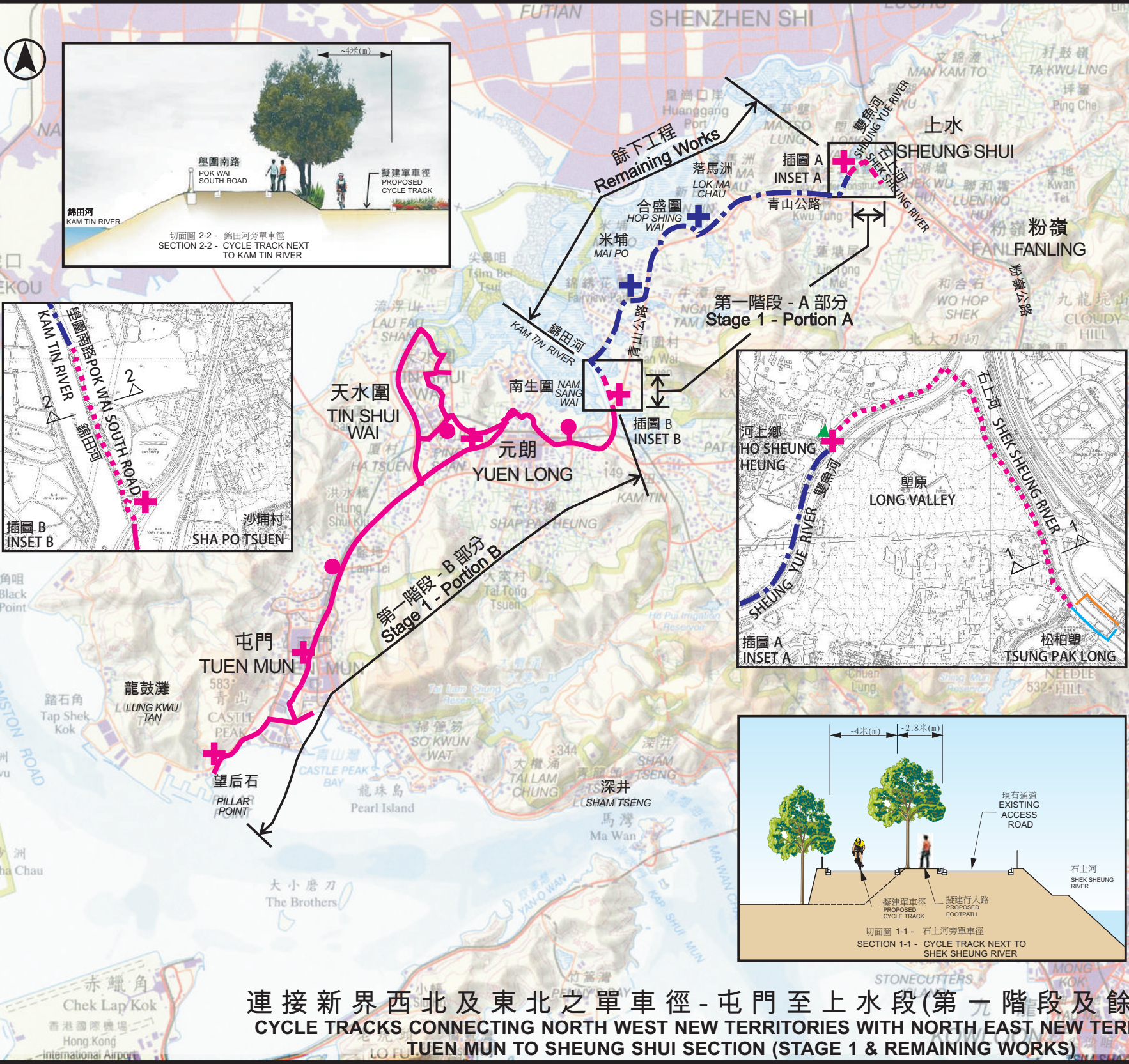
28. We estimate that the proposed Stage 1 works of Tuen Mun to Sheung Shui section will create about 100 jobs (83 for labourers and another 17 for professional/technical staff), providing a total employment of 3 450 man-months.

Development Bureau
May 2013

⁵ “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 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/canopy spread equal to or exceeding 25 m.





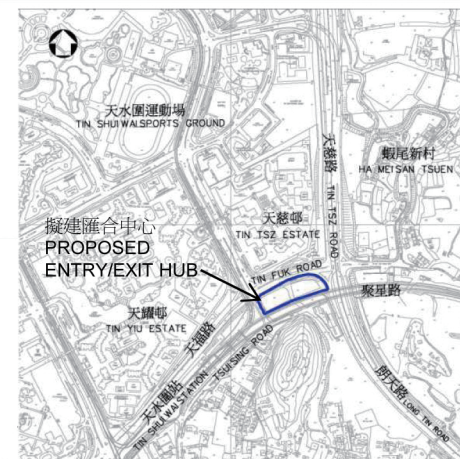
連接新界西北及東北之單車徑 - 屯門至上水段(第一階段及餘下工程)
CYCLE TRACKS CONNECTING NORTH WEST NEW TERRITORIES WITH NORTH EAST NEW TERRITORIES - TUEN MUN TO SHEUNG SHUI SECTION (STAGE 1 & REMAINING WORKS)



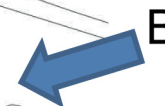
側面圖 A SIDE VIEW A



側面圖 B SIDE VIEW B



位置圖 LOCATION PLAN



平面圖 LAYOUT PLAN

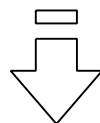
位於天水圍天福路的匯合中心
ENTRY / EXIT HUB AT TIN FUK ROAD, TIN SHUI WAI



LONG TIN ROAD
朗天路



PLANTER
花槽



CYCLE
PARKING
SPACES
單車停泊位

SHELTER AND BENCH
有蓋座椅

EXISTING CYCLE TRACK
現有單車徑



RESTING STATION AT LONG TIN ROAD, YUEN LONG
元朗朗天路休息處

Enclosure 5 to PWSC(2013-14)16

259RS (Part) – Cycle tracks connecting North West New Territories with North East New Territories

Breakdown of the estimates for consultants' fees and resident site staff costs (in September 2012 prices)

		Estimated man- months	Average MPS* salary point	Multiplier (Note 1)	Estimated fees (\$ million)
(a) Consultants' fees for contract administration (Note 2)	Professional	--	--	--	1.0
	Technical	--	--	--	0.6
				Sub-total	1.6
(b) Resident site staff costs (Note 3)	Professional	120	38	1.6	12.6
	Technical	347	14	1.6	12.4
				Sub-total	25.0
Comprising –					
(i) Consultants' fees for management of resident site staff					1.0
(ii) Remuneration of resident site staff					24.0
Total					26.6

* 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 now, MPS salary point 38 = \$65,695 per month and MPS salary point 14 = \$22,405 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 **259RS**. This cost will be only incurred upon Finance Committee's approval to upgrade the proposed Stage 1 works to Category A.
3. The actual man-months and actual costs will be known after completion of the construction works.

Enclosure 6 to PWSC(2013-14)16

259RS (Part) – Cycle tracks connecting North West New Territories with North East New Territories

Breakdown of the land clearance costs

		\$ million
Estimated clearance cost		1.04
(a) Ex-gratia allowance of crop compensation	0.67	
(b) Ex-gratia allowance for miscellaneous permanent improvements to farms	0.28	
(c) Ex-gratia allowances for miscellaneous indigenous villagers matters, e.g. “Tun Fu” ceremonies	0.09	
		<hr/>
	Total	1.04
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		(say 1.1)