

## **ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE**

### **HEAD 706 – HIGHWAYS**

#### **Transport – Roads**

#### **720TH – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – Stage 2**

Members are invited to recommend to the Finance Committee the upgrading of **720TH**, entitled “Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – Stage 2” to Category A at an estimated cost of \$4,320.0 million in money-of-the-day prices.

### **PROBLEM**

We need to widen the section of Fanling Highway between Tai Hang and Wo Hop Shek Interchange to mitigate the existing traffic congestion and to cope with the anticipated growth in traffic demand.

### **PROPOSAL**

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **720TH** to Category A at an estimated cost of \$4,320.0 million in money-of-the-day (MOD) prices for widening of the Fanling Highway between Tai Hang and Wo Hop Shek Interchange.

**/PROJECT .....**

**PROJECT SCOPE AND NATURE**

3. Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling includes the widening of Tolo Highway between Island House Interchange and Tai Hang (Stage 1) and the widening of Fanling Highway between Tai Hang and Wo Hop Shek Interchange (Stage 2, i.e. **720TH**).

4. The proposed scope of works under **720TH** includes —

- (a) widening of a section of Fanling Highway between Tai Hang and Wo Hop Shek Interchange of about 3 kilometres (km) long from a dual 3-lane carriageway to a dual 4-lane carriageway, with standard hard shoulders added on both directions;
- (b) widening of a slip road of about 250 metres (m) long connecting the Jockey Club Road to Fanling Highway southbound at Wo Hop Shek;
- (c) realignment of a section of Tai Wo Service Road West of about 1.2 km long between Tai Hang and Nam Wa Po;
- (d) realignment of a section of Tai Wo Service Road East of about 1 km long between Kiu Tau and Tong Hang Tung;
- (e) demolition of the existing Kiu Tau Vehicular Bridge and Nam Wa Po Footbridge;
- (f) construction of a vehicular bridge (cum walkway) of about 400 m long at Kau Lung Hang as reprovisioning of the existing bridges mentioned in (e) above;
- (g) demolition and reprovisioning of five existing footbridges at Tai Hang, Tai Wo, Kiu Tau, Ho Ka Yuen and Wo Hop Shek;

/ (h) .....

- (h) installation of noise barriers along the roads as follows -
  - (i) vertical noise barriers of about 5.1 km long (ranging from 3 m to 8 m high); and
  - (ii) single-leaf cantilever noise barriers of about 350 m long (6 m high with 3 m or 4.5 m cantilever).
- (i) provision of a traffic control and surveillance system (TCSS); and
- (j) associated road, geotechnical, landscaping, drainage, watermains, road lighting, and electrical and mechanical (E&M) works, traffic aids and environmental mitigation measures.

A plan, with cross-section and artist's impression illustrations, showing the proposed Fanling Highway widening and noise barriers/footbridge is at Enclosure 1.

5. We have completed the detailed design of the project. Subject to the funding approval of the Finance Committee (FC), we plan to commence the construction works in July 2013 for completion of the major works in 2018.

## JUSTIFICATION

### Phased Improvement of Tolo Highway/Fanling Highway

6. Tolo Highway and Fanling Highway form a major trunk road serving the north New Territories. In recent years, traffic flow at some road sections of the two highways during peak hours has approached their design capacities. We have been progressively carrying out improvement works, implementing the concerned road widening projects in phases in order to mitigate congestion at present and cope with the anticipated increase in traffic flow in the future.

7. The section of Tolo Highway from Ma Liu Shui to Island House Interchange was widened to a dual 4-lane carriageway in 2003. Furthermore, we are widening the section of Tolo Highway between Island House Interchange and Tai Hang from dual 3-lane to dual 4-lane carriageway (Stage 1). Up till now, the works have in general been progressing smoothly, and are scheduled for completion in 2014.

8. The works we now propose is a continuation of the Stage 1 works to widen the section of Fanling Highway between Tai Hang and Wo Hop Shek Interchange to form a continuous dual 4-lane major trunk road linking Sha Tin and Fanling to serve the north New Territories.

### Coping with Future Traffic Growth

9. According to the traffic forecast, with the increase in traffic volume in the concerned districts, if the proposed Stage 2 works are not carried out, the traffic at the section of Fanling Highway between Tai Hang and Wo Hop Shek Interchange will be operating beyond capacity, leading to congestion. In view of that, it would be necessary to implement the proposed project to provide adequate road capacity.

10. The projected traffic volume to capacity (v/c) ratios<sup>1</sup> of Fanling Highway between Tai Hang and Wo Hop Shek Interchange during peak hours without and with the proposed project are shown in the following table respectively –

Year	2011	2018	2021
v/c ratio <u>without</u> the project	0.96	1.16	1.18
v/c ratio <u>with</u> the project	–	0.86	0.89

When v/c ratio is close to 1.2, travelling speed on the road would slow down and the traffic flow would become unstable. Under such circumstances, any minor traffic accidents may seriously affect the traffic condition. Hence, we need to implement the proposed project as soon as possible.

/Linking .....

<sup>1</sup> Volume to capacity (v/c) ratio is an indicator which reflects the performance of a road. A v/c ratio equal to or less than 1.0 means that a road has sufficient capacity to cope with the volume of vehicular traffic under consideration and the resultant traffic will flow smoothly. A v/c ratio above 1.0 indicates the onset of congestion; that above 1.2 indicates more serious congestion with traffic speeds deteriorating progressively as a result of further increase in traffic.

Linking with Liantang/Heung Yuen Wai Boundary Control Point

11. The proposed project will also match with the implementation of the Liantang/Heung Yuen Wai Boundary Control Point (LT/HYW BCP) project (**Item 5019GB** undertaken by the Civil Engineering Development Department (CEDD)). The proposed connecting road<sup>2</sup> of the LT/HYW BCP project will link to the widened Fanling Highway via an interchange, connecting the BCP to the major road network and reaching out to the rest of Hong Kong, so as to cater for the traffic generated by the commissioning of the BCP. The two projects have to be carried out concurrently to ensure the smooth construction of the interchange between the two projects.

Further Improvement Works

12. We propose to take the opportunity of the project to carry out further improvement works, so as to enhance road safety.

*Adding Hard Shoulders*

13. Hard shoulder was not a standard requirement in highway design when the Fanling Highway was constructed some 20 years ago. Similar to the Stage 1 works of the widening of Tolo Highway under construction, we plan to construct full-width hard shoulders up to current standard along Fanling Highway in the Stage 2 works to enhance road safety.

*Extension of the TCSS*

14. Fanling Highway forms part of the major trunk road Route 9 with heavy traffic. To ensure smooth traffic and road safety, we need to monitor road condition for timely actions in case of emergencies or traffic congestion. Therefore, we propose to extend the TCSS to cover this section of the highway in order to enhance the efficiency and effectiveness of traffic and incident management. The TCSS system includes the installation of variable message signs, closed circuit televisions, and variable speed limit signs, etc.

*/ Reconstruction .....*

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<sup>2</sup> The proposed connecting road of the LT/HYW BCP project (**Item 5019GB**) is a 11km long trunk road linking the LT/HYW BCP with Fanling Highway through the construction of an interchange near Wo Hop Shek. The road widening works of a section of Fanling Highway (about 1 km long) within the interfacing areas between this project and LY/HYW BCP project will be entrusted to CEDD to ensure smooth implementation of the interfacing works.

*Reconstruction and Improvement of Vehicular Bridges*

15. The project also include a new vehicular bridge (cum walkway) at Kau Lung Hang, as a replacement to the existing Kiu Tau Vehicular Bridge and Nam Wa Po Footbridge to be demolished to make way for the road widening. The existing Kiu Tau Vehicular Bridge spans over Fanling Highway but does not continue to cross over East Rail. At present, local people living on the eastern side of East Rail have to cross under East Rail through an underpass with limited headroom in order to reach Fanling Highway. This renders the access of large vehicles impossible, causing inconvenience to the residents. The proposed new Kau Lung Hang Vehicular (cum walkway) Bridge will span over both Fanling Highway and East Rail, providing a standard vehicular and pedestrian connection to the areas east of East Rail, thus effectively resolving the traffic problem mentioned above.

*Reconstruction and Improvement of Footbridges*

16. In addition, the five existing footbridges across Fanling Highway will be demolished and reconstructed due to their inadequate span to accommodate the widened road. Covers will be added to the new footbridges to provide the pedestrians a more comfortable walking environment.

17. Summing up the points stated in paragraphs 6 to 16 above, the project will widen and improve the concerned Fanling Highway in an all-round manner, thus forming a continuous dual 4-lane major trunk road linking Sha Tin and Fanling. Adequate traffic capacity in north New Territories will be provided in solving the foreseeable traffic congestion and meeting the need of future development. The project will connect the LT/HYW BCP to the major road network to cater for the traffic flow generated after the commissioning of the BCP. Fanling Highway will also be improved to meet with current road standards and strengthen the traffic control and surveillance. In response to the needs of the local residents, vehicular and pedestrian linkages between the highway and the rural roads in the vicinity will be increased and improved to facilitate the residents to commute.

**FINANCIAL IMPLICATIONS**

18. We estimate the cost of the proposed project to be \$4,320.0 million in MOD prices (please see paragraph 23 below), broken down as follows –

/\$ million .....

	\$ million
(a) Roads, drains and waterworks	1,022.2
(i) construction of carriageway (including widening of about 3 km long of Fanling Highway, realignment of about 1.2 km long of Tai Wo Service Road West and about 1 km long of Tai Wo Service Road East)	674.0
(ii) drainage and waterworks	314.6
(iii) public lighting facilities	33.6
(b) Geotechnical works	35.1
(i) retaining walls	19.7
(ii) slopeworks	15.4
(c) Vehicular bridges and footbridges	676.2
(i) demolition of Kiu Tau Vehicular Bridge and Nam Wa Po Footbridge and construction of vehicular bridge at Kau Lung Hang (cum walkway)	221.0
(ii) demolition and re-provisioning of 5 footbridges	455.2
(d) Noise barriers	973.6
(i) vertical noise barriers of about 5.1 km long (ranging from 3 m to 8 m high)	911.1
(ii) single-leaf cantilever noise barriers of about 350 m long (6 m high with 3m or 4.5 m cantilever)	62.5
(e) TCSS	87.5

/(f) .....

	<b>\$ million</b>
(f) Landscaping works	50.7
(g) Consultants' fee for	23.2
(i) contract administration	7.2
(ii) management of resident site staff	14.4
(iii) environmental monitoring and audit (EM&A) programme	1.6
(h) Remuneration of resident site staff	287.2
(i) Electrical and Mechanical Services Trading Fund (EMSTF) charges <sup>3</sup>	1.3
(j) Contingencies	223.7
Sub-total	3,380.7 (in September 2012 prices)
(k) Provision for price adjustment	939.3
Total	4,320.0 (in MOD prices)

19. In respect of paragraph 18(a) above, the estimated cost of \$1,022.2 million (in September 2012 prices) for constructing the roads, drains and waterworks covers the widening of about 3 km long of Fanling Highway from a dual 3-lane carriageway to a dual 4-lane carriageway, with standard hard shoulders added on both directions; realignment of about 1.2 km long of Tai Wo Service Road West and about 1 km long of Tai Wo Service Road East; and associated utility diversion, road pavements, street furniture, traffic aids, drainage, waterworks and temporary traffic arrangement measures.

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<sup>3</sup> Since the establishment of the EMSTF on 1 August 1996 under the Trading Funds Ordinance (Cap. 430), the EMSTF charges government departments for design and technical consultancy services for E&M installations provided by Electrical and Mechanical Services Department. The services rendered for this project include checking consultants' submissions on all E&M installations and providing technical advice to the Government on all E&M works and their impacts on the project.



20. In respect of paragraph 18(c) above, the estimated cost of \$676.2 million (in September 2012 prices) for constructing the vehicular bridges and footbridges covers the construction of a vehicular bridge (cum walkway) across Fanling Highway and East Rail at Kau Lung Hang and five footbridges, and demolition of one existing vehicular bridge and six existing footbridges.

21. In respect of paragraph 18(d) above, the estimated cost of \$973.6 million (in September 2012 prices) for constructing the noise barriers covers the installation of vertical noise barriers of about 5.1 km long (ranging from 3 m to 8 m high) and single-leaf cantilever noise barriers of about 350 m long (6 m high with 3 m or 4.5 m cantilever).

22. A breakdown of the estimated consultants' fees and RSS costs by man-months is at Enclosure 2.

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

<b>Year</b>	<b>\$ million (Sept 2012)</b>	<b>Price adjustment factor</b>	<b>\$ million (MOD)</b>
2013 – 2014	285.5	1.06225	303.3
2014 – 2015	404.7	1.12599	455.7
2015 – 2016	558.7	1.19354	666.8
2016 – 2017	631.1	1.26516	798.4
2017 – 2018	677.0	1.34107	907.9
2018 – 2019	502.6	1.41147	709.4
2019 – 2020	285.3	1.48205	422.8
2020 – 2021	35.8	1.55615	55.7
	<hr/> 3,380.7 <hr/>		<hr/> 4,320.0 <hr/>

24. We have derived the MOD estimate on the basis of the Government's latest forecast of the trend rate of change in the prices of public sector building and construction output for the period 2013 to 2021. Upon funding approval, we will deliver the project under standard re-measurement contract because the quantities of earthworks and foundation works of noise barriers and vehicular bridges/footbridges involved will vary depending on actual ground conditions. The contract will provide for price adjustments.

25. We estimate the annual recurrent expenditure arising from this project to be about \$10.3 million.

## **PUBLIC CONSULTATION**

26. The Highways Department (HyD) consulted the Traffic and Transport Committee (T&TC) of the North District Council in 2008, and the T&TC of the Tai Po District Council in 2008 and 2009, and obtained their support of this project. Subsequently, HyD regularly reported to these District Councils (DCs) the progress of the project.

27. We gazetted the road scheme for the proposed works of the proposed project under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 3 and 10 July 2009. During the statutory objection period, 130 objections were received. The concerns were mainly related to land resumption, reprovisioning of existing footbridges and the impact to the objectors' businesses. In response to the issues raised in the objections, we amended the works limit and the layout of the proposed footbridges/vehicular bridge. We gazetted the amendment scheme on 28 May and 4 June 2010. We received 8 objections during the statutory objection period, in which similar concerns with those received during the first gazette were raised. We further modified the layout of the proposed vehicular bridge at Kau Lung Hang in response to the objections received. Details of the objections and the Administration's response are at Enclosure 3.

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28. Having considered the unresolved objections and the modification, the Chief Executive-in-Council authorised the proposed works of this project under the Ordinance on 5 July 2011. The authorization notice of this project and its modification plan were gazetted on 29 July 2011.

29. We have consulted the Advisory Committee on the Appearance of Bridges and Associated Structures<sup>4</sup> on the proposed aesthetic design of the noise barriers, vehicular bridge, footbridges and retaining walls of this project. The Committee accepted the proposed aesthetic design.

30. We consulted the Legislative Council Panel on Transport on our plan to submit the funding application for Stage 2 construction works on 19 April 2013. The Panel supported the Administration to seek funding from the Public Works Sub-committee.

## ENVIRONMENTAL IMPLICATIONS

31. This project is a designated project under the Environmental Impact Assessment (EIA) Ordinance (Cap. 499). The Director of Environmental Protection approved the EIA report for this project in July 2000, and issued the environmental permit for the construction and operation of the project in December 2008.

32. According to the EIA report, the environmental impact of the project can be controlled within the criteria under the EIA Ordinance. During construction, we will implement the mitigation measures and EM&A programme according to the requirements of the environmental permit.

33. At the planning and design stages, we have minimised the generation of construction waste through the road alignment design. In addition, we will require the contractor to reuse inert construction waste as far as possible, in order to minimise the disposal of inert construction waste at public fill reception facilities<sup>5</sup>. At the construction stage, we will require the contractor to submit for approval a plan setting out the waste management measures.

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<sup>4</sup> The Advisory Committee on the Appearance of Bridges and Associated Structures, which comprises representatives of the Hong Kong Institute of Architects; the Hong Kong Institution of Engineers; the Hong Kong Institute of Planners; an academic institution; Architectural Services Department; Highways Department; Housing Department and Civil Engineering and Development Department, is responsible for vetting the design of bridges and other structures associated with the public highway system, including noise barriers and semi-enclosures, from the aesthetic and visual impact points of view.

<sup>5</sup> 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 license issued by the Director of Civil Engineering and Development.

34. We estimate that the proposed project will generate in total about 377 140 tonnes of construction waste. Of these, we will reuse about 68 360 tonnes (18.1%) of inert construction waste on site and deliver about 298 470 tonnes (79.2%) of inert construction waste to public fill reception facilities for subsequent reuse. We will dispose of the remaining 10 310 tonnes (2.7%) of non-inert construction waste at landfills. The total cost for accommodating construction waste at public fill reception facilities and landfill sites for this project is estimated to be \$9.35 million (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne<sup>6</sup> at landfills).

## HERITAGE IMPLICATIONS

35. This project 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 ACQUISITION

36. We had reviewed the design of the Stage 2 works to minimise the resumption of land. However, we still need to resume about 18 611.9 m<sup>2</sup> and 579.56 m<sup>2</sup> of agricultural land and building land respectively for the proposed works. Acquisition and clearance of the required land will affect a "Chi Tong (祠堂)", 8 village houses and 5 domestic structures, involving 79 persons. Eligible lot owners of the Chi Tong and village houses to be resumed will be offered compensation in accordance with the prevailing policy, while the remaining affected households will be offered public housing (including Interim Housing) or ex-gratia allowances, where eligible. There are 150 non-domestic structures on private land and 63 non-domestic structures on Government land to be cleared. We will deal with clearance issues arising from the clearance of these structures in accordance with the prevailing land policies. The proposed road works also require the clearance of shrine, crops, cultivation, miscellaneous permanent items (such as fences, walls and wells, etc.) on both agricultural land and Government land. Ex-gratia allowances will be paid to genuine cultivators. The land acquisition and clearance costs are estimated to be \$154.9 million, and will be charged to **Head 701 – Land Acquisition**. A breakdown of the land resumption and clearance costs is at Enclosure 4.

/TRAFFIC .....

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<sup>6</sup> 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<sup>3</sup>), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

## TRAFFIC IMPLICATION

37. We have conducted traffic impact assessment for the project, including the traffic impact during the construction period. According to the findings of the assessment, with the implementation of appropriate temporary traffic arrangements (TTAs), the project will not cause significant impact on the traffic network in the concerned area.

38. We will implement TTAs to facilitate the Stage 2 construction works, involving lane closures, traffic diversions and other arrangements. To minimise the adverse traffic impact on Tolo Highway and Fanling Highway caused by the works, we will endeavour to maintain the same number of traffic lanes in each direction of the existing carriageway during peak hours in the construction period.

39. We will consult the relevant DCs prior to the implementation of major TTAs. HyD will regularly report to the relevant DCs the planning and operation of the TTAs.

## BACKGROUND

40. We upgraded **720TH** to Category B in September 1998.

41. In December 1998, we upgraded part of **720TH** to Category A as **735TH** "Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling - studies and preliminary design" at an approved project estimate (APE) of \$27.8 million in MOD prices. We engaged consultants in February 1999 to undertake the investigation and preliminary design for the project. The consultants completed the work in September 2000.

42. In December 2000, we upgraded part of **720TH** to Category A as **751TH** "Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling - detailed design and ground investigation" at an APE of \$71.9 million in MOD prices. We engaged consultants in March 2001 to undertake the detailed design and ground investigation works.

43. We first gazetted the road scheme for the project under the Ordinance on 26 April 2002. Thereafter, the programme of the project was put under further review as the traffic condition was considered acceptable then and there was no urgent need to implement the project. Taking into consideration the on-going increase in traffic flow in the north New Territories, we resumed planning for the project in January 2007. Part of **720TH**, i.e. the Stage 1 construction works, was upgraded to Category A as **843TH** at an APE of \$4,486.9 million in February 2009.

44. Of the about 2 070 trees within the project boundary of Stage 2, about 460 trees will be preserved. The proposed works will involve the removal of about 1 610 trees, including about 1 560 trees to be felled and about 50 trees to be transplanted within the project site. All trees to be removed are not trees of important species<sup>7</sup>. We will incorporate planting proposals as part of the proposed works, including an estimated quantity of about 530 heavy standard trees, 350 seedlings and 32 100 shrubs which cover approximately 27 500 m<sup>2</sup> of planting

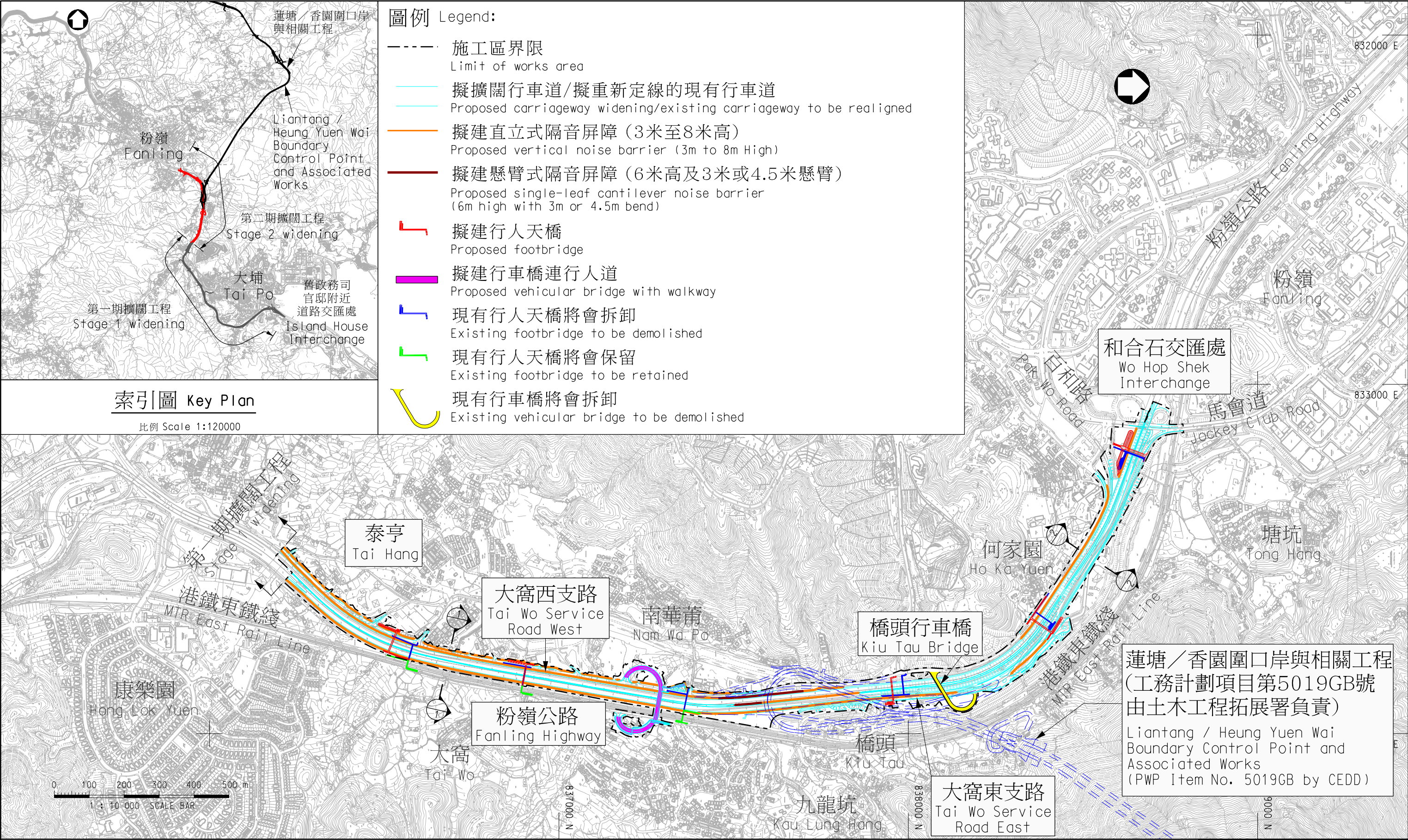
45. We estimate that the proposed Stage 2 construction works will create about 995 jobs (190 for professional/technical staff and 805 for labourers) providing a total employment of about 56 190 man-months.

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Transport and Housing Bureau  
May 2013

<sup>7</sup> An “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 tree, tree 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 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 (m) (measured at 1.3 m above ground level), or with height/canopy spread equal or exceeding 25 m.

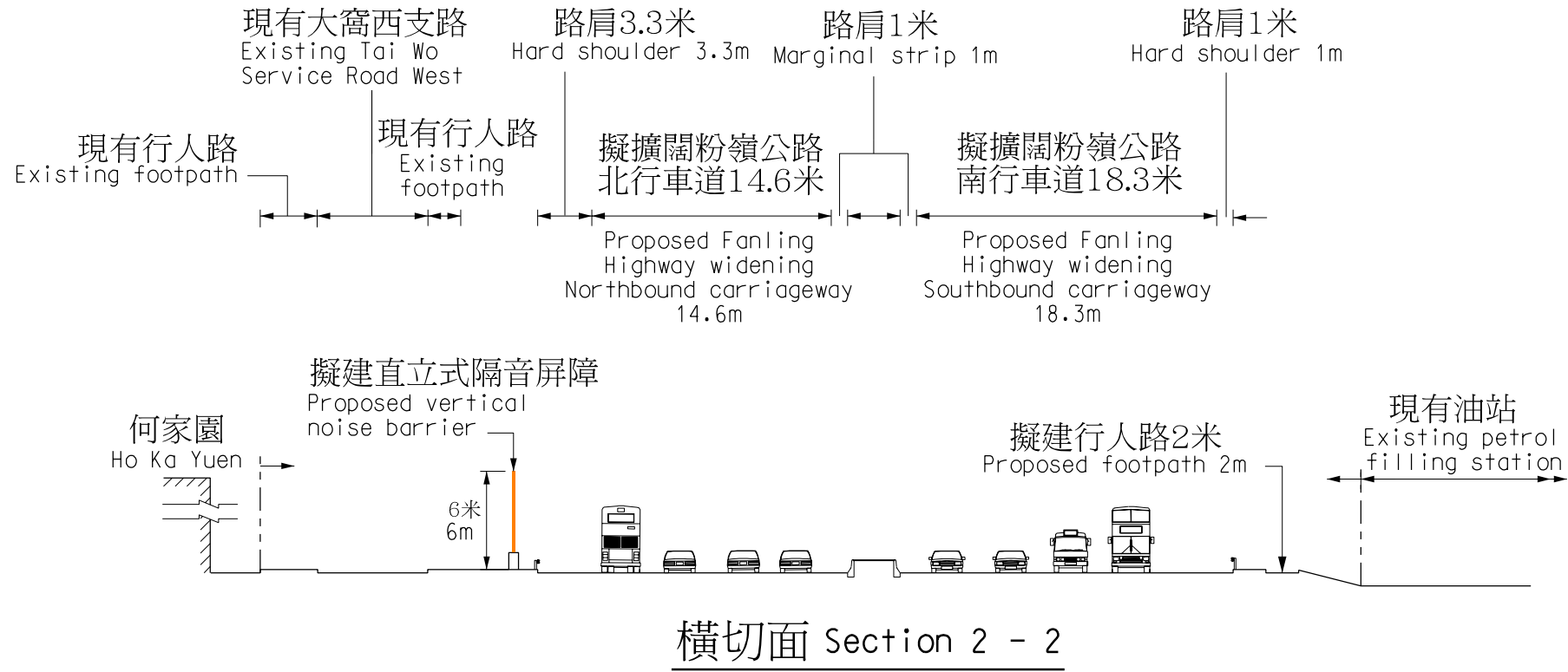
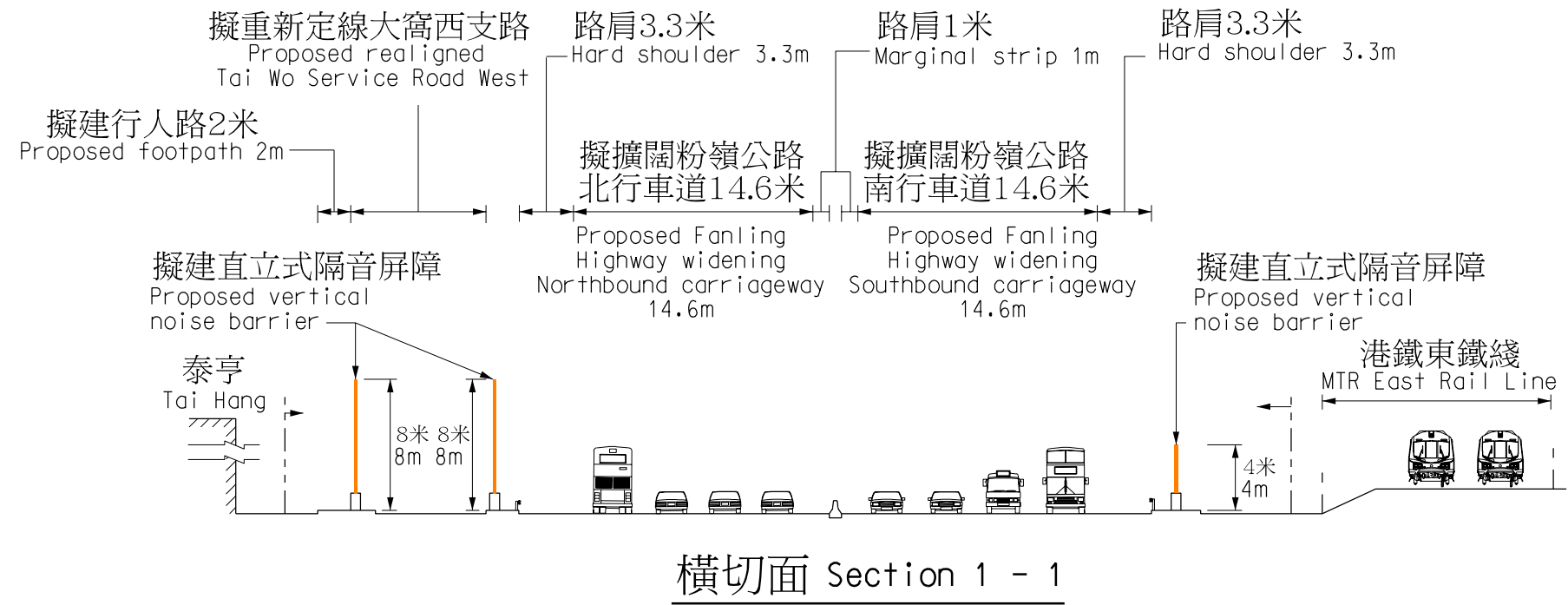




工務計劃項目第6720TH號  
舊政務司官邸附近道路交匯處與粉嶺之間的吐露港公路/粉嶺公路擴闊工程 - 第二期 - 平面圖  
PWP Item no. 6720TH  
Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2 - Layout Plan



圖例 Legend:  
|> |<| 施工區界限  
Limit of works area



工務計劃項目第6720TH號  
舊政務司官邸附近道路交匯處與粉嶺之間的吐露港公路/粉嶺公路擴闊工程 - 第二期 - 切面圖  
PWP Item no. 6720TH  
Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2 - Sections

圖則編號 drawing no. HMW6720TH-SK0338	比例 scale 示意圖 DIAGRAMMATIC
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工務計劃項目第6720TH號  
 舊政務司官邸附近道路交匯處與粉嶺之間的吐露港公路/粉嶺公路擴闊工程 - 第二期 - 擬擴闊粉嶺公路的構思圖  
 PWP Item no. 6720TH  
 Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2  
 - Artist's Impression of Proposed Widening of Fanling Highway

圖則編號 drawing no. HMW6720TH-SK0339	比例 scale 示意圖 DIAGRAMMATIC
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工務計劃項目第6720TH號  
舊政務司官邸附近道路交匯處與粉嶺之間的吐露港公路/粉嶺公路擴闊工程 - 第二期 - 擬興建隔音屏障及行人天橋的構思圖  
PWP Item no. 6720TH  
Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling - Stage 2  
- Artist's Impression of Proposed Noise Barriers and Footbridges

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**720TH – Widening of Tolo Highway/Fanling Highway  
between Island House Interchange and Fanling – Stage 2**

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

			<b>Estimated man- months</b>	<b>Average MPS* salary point</b>	<b>Multiplier (Note 1)</b>	<b>Estimated fee (\$ million)</b>
(a)	Consultants' fees for contract administration (Note 2)	Professional	-	-	-	3.6
		Technical	-	-	-	3.6
					Sub-total	7.2
(b)	Resident site staff costs (Note 3)	Professional	1,590	38	1.6	167.1
		Technical	3,750	14	1.6	134.5
					Sub-total	301.6
	Comprising –					
	(i)	Consultants' fee for managing resident site staff				14.4
	(ii)	Remuneration of resident site staff				287.2
(c)	Environmental monitoring and audit programme	Professional	-	-	-	0.8
		Technical	-	-	-	0.8
					Sub-total	1.6
<b>Total</b>						<b>310.4</b>

\* 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 pt. 38 = \$65,695 per month and MPS pt. 14 = \$22,405 per month.)

2. The consultants' staff cost for contract administration is calculated in accordance with the existing consultancy agreement for the design and construction of **720TH**. The construction phase of the assignment in respect of Stage 2 works will only be executed subject to Finance Committee's approval to upgrade the **720TH** to Category A.
3. The actual man-months and actual costs will be only known after completion of the construction works.

**Roads (Works, Use and Compensation) Ordinance  
720TH – Widening of Tolo Highway/Fanling Highway  
between Island House Interchange and Fanling – Stage 2**

**Details of the Objections and the Administration's Response**

The objections are divided into Groups A to F. The gist of the six groups of cases is set out below –

**Group A – 61 nos. of objections related to the structures in Tai Hang Village, Tai Po proposed to be resumed under the Stage 2 works**

2. The concerns of the objectors are mainly related to the reprovisioning and compensation arrangements arising from the need for land resumption resulting from the project. The Administration explained to the objectors about the compensation options and resite arrangement for their houses according to the prevailing policy. Regarding the request for erection of “Pai Lau”, the Highways Department would coordinate and liaise with concerned departments. However, the objectors maintained their objections, after noting the Administration's response.

**Group B – 16 nos. of objections related to the houses in Tai Hang Village, Tai Po in the vicinity of the project**

3. The objectors were mainly concerned about impact of noise and air quality on the residents, as well as vibration impact on the structural safety of the houses. Such impact would be caused by the close proximity of the future realigned Tai Wo Service Road West (TWSRW). They were also concerned that the chance of success for future applications for Small House Grant (SHG) might be affected. In response, the Administration explained that an environmental impact assessment report had been prepared in accordance with the Environmental Impact Assessment Ordinance and the Scheme would comply with the required environmental standards. Furthermore, the Administration clarified that all applications for SHG would be processed according to the current established policy. However, the objectors maintained their objections, after noting the Administration's response.

**Group C – 12 nos. of objections related to the proposed Tai Wo Footbridge (TWFB)**

4. The objectors were mainly concerned about the proximity of the proposed TWFB, which would affect the existing vehicular access of their private lots, affect their privacy, create littering nuisance, and affect the safety of residents. Some objectors suggested the Administration to replace the ramp of the footbridge by a lift, while one objector suggested to change the straight ramp to a folded ramp.

5. After careful consideration, the Administration accepted the proposal to amend the layout of the proposed straight ramp to folded ramp which would reduce the extent of land resumption and maintain the existing vehicular access. The revised layout was reflected in the Amendment Scheme.

6. The Administration also pointed out that opaque panels to be erected on the footbridge and noise barriers between the footpath and the objectors' houses could relieve their concerns on possible impact on privacy, littering nuisance and personal safety. However, the objectors maintained their objections after noting the Administration's response.

**Group D – 5 nos. of objections related to the adverse impact on the existing/potential houses in Yuen Leng due to the Kau Lung Hang Vehicular Bridge (KLHVB)**

7. Being concerned about the adverse impact on the existing / future houses in Yuen Leng by the project, the objectors either requested for full (instead of partial) resumption of their lot, or to avoid or reduce the extent of resumption. In response, the Administration explained that the design of the KLHVB would comply with relevant safety standards and follow the principle of minimum land resumption.

8. Where feasible, the objector's request for reduction in land resumption was accepted and had been reflected in the Amendment Scheme. The Administration also explained that as the project was required to conduct noise monitoring for existing houses only, the requests to conduct post-construction noise monitoring for their future houses in the concerned lots could not

be entertained. However, the objectors maintained their objections after noting the Administration's response.

**Group E – 26 nos. of objections related to the long walking distance in using the KLHVB**

9. Most of the objectors were mainly concerned about the long walking distance in using the proposed KLHVB (cum walkway) and requested for the reprovisioning of the existing Nam Wa Po Footbridge (NWPFB).

10. In response, the Administration agreed to revise the layout of the KLHVB (cum walkway) with the revision reflected in the Amendment Scheme, so as to shorten the walking distance. The objectors were also informed that the walkway on KLHVB was intended to replace the existing NWPFB, and no reprovisioning of the existing NWPFB would be necessary. Upon amendment of the KLHVB layout, 12 objectors further requested an additional staircase branching from the KLHVB for access to the bus stop on the Tai Po bound of TWSRW. The Administration received objections again requesting the same additional staircase branching from the KLHVB for access to the bus stop on the Tai Po bound of TWSRW after gazettal of the Amendment Scheme. After detailed consideration, the Administration proposed to entertain the request and incorporate the additional staircase into the Scheme as a modification item. After being informed of the modification, 16 objections were withdrawn unconditionally, while the remaining objections were maintained.

**Group F – 18 nos. of objections related to the adverse impact of the project on business operations or opportunity to use the land**

11. The objectors mainly objected to the resumption of their land since the operation of their workshops or business areas would be adversely affected, and was dissatisfied that the Administration did not make any reprovisioning arrangement for resumption of their land. Some objectors requested the Administration to resume the whole of their lots, while some of them requested the Administration to re-provide vehicular access to their remaining lots after resumption. The objectors were also concerned about the vehicular accessibility to their workshops or concerned lots during and after the construction, and requested the Administration to provide more space for the parking of vehicles and loading/unloading of goods.

12. In response, the Administration amended the proposed limit of works area and the design of the proposed Kiu Tau Footbridge so that it would be sited further away from the objectors' businesses. This also allowed vehicular access. Such changes were reflected in the Amendment Scheme. However, the request for additional parking and loading/unloading space would not be entertained as the Administration had to follow the principle of minimum land resumption in the design of the road scheme. The Administration also explained to the objectors about the procedures to claim compensation and their right to submit a claim. After noting the Administration's response, four objections were withdrawn unconditionally, while the remaining objections were maintained.

13. Having considered the unresolved objections and the modification, the Chief Executive-in-Council authorised the proposed works of this project under the Ordinance on 5 July 2011. The authorization notice of this project and its modification plan was gazetted on 29 July 2011.



**720TH – Widening of Tolo Highway/Fanling Highway  
between Island House Interchange and Fanling – Stage 2**

**Breakdown of land resumption and clearance cost**

	\$ million
<b>(I) Estimated Resumption Cost</b>	<b>135.7</b>
(a) Agricultural Land Ex-gratia Compensation 75 Agricultural lots [with a total area of 200 336 square feet (ft <sup>2</sup> ) or 18 611.9 square metres (m <sup>2</sup> )] will be resumed  200 336 ft <sup>2</sup> x \$395 per ft <sup>2</sup> (Zone C) (Please see Notes below)	79.1
(b) Building Land Ex-gratia Compensation and relevant compensation allowance 9 building lots [with a total area of 6 238 ft <sup>2</sup> or 579.56 m <sup>2</sup> ] will be resumed.	56.6
<b>(II) Estimated Clearance cost</b>	<b>5.1</b>
(a) Ex-gratia allowance of crop compensation	2.8
(b) Ex-gratia allowance for farm structures and miscellaneous permanent improvements to farms	0.2
(c) Ex-gratia allowances for miscellaneous indigenous villager matters e.g. removal of graves and shrines and Tun Fu ceremonies	0.16
(d) Ex-gratia allowance for domestic occupiers and business undertakings	1.90
<b>(III) Interest and Contingency Payment</b>	<b>14.1</b>
(a) The interest payment on various ex-gratia compensation For private land @0.001 %	0.0007
(b) Contingency on the above costs @ 10%	14.1
<b>Total</b>	<b>154.9</b>

Notes:

1. There are four ex-gratia compensation zones, namely Zone A, B, C and D, for land resumption in the New Territories as approved by ExCo in 1985 and 1996. The boundaries of these zones are shown on the Zonal Plan for Calculation of Compensation Rates. The land to be resumed in the project “PWP Item No. **720TH** – Widening of Tolo Highway/Fanling Highway between Island House Interchange and Fanling – Stage 2” is a agricultural land currently lies within Compensation Zone “C”.
2. In accordance with G.N. 1568 dated 15 March 2013 on the revised ex-gratia compensation rates for resumed land, the ex-gratia compensation rate of agricultural land for “Zone C” is 50% of the Basic Rate at \$790 per square foot, i.e. \$395 per square foot.
3. Owners of building land will be offered compensation on professional valuation plus ex-gratia compensation. Eligible lot owners with houses to be resumed (i.e. 1 Chi Tong and 8 village houses) will be offered compensation in accordance with the prevailing policy.