ITEM FOR PUBLIC WORKS SUBCOMMITTEE OF FINANCE COMMITTEE

HEAD 706 – HIGHWAYS Transport – Roads 829TH – Improvement and extension of Kam Pok Road

Members are invited to recommend to the Finance Committee the upgrading of **829TH** to Category A at an estimated cost of \$148.6 million in money-of-the-day prices for the improvement and extension of Kam Pok Road.

PROBLEM

We need to provide a direct route connecting Tai Sang Wai to Castle Peak Road (Tam Mi) so as to improve road safety and relieve traffic at the junction of Fairview Park Boulevard and Kam Pok Road in Yuen Long.

PROPOSAL

2. The Director of Highways, with the support of the Secretary for Transport and Housing, proposes to upgrade **829TH** to Category A at an estimated cost of \$148.6 million in money-of-the-day (MOD) prices for the improvement and extension of the existing Kam Pok Road to provide a new single two-lane access road between the Tai Sang Wai area and Castle Peak Road (Tam Mi).

/PROJECT

PROJECT SCOPE AND NATURE

- 3. The scope of **829TH** comprises
 - (a) construction of a new section of single two-lane carriageway of approximately 490 metres (m) in length and 10.3 m in width with associated footpaths of 2 m in width connecting the existing Kam Pok Road to Castle Peak Road (Tam Mi);
 - (b) improvement of a section of Kam Pok Road of approximately 145 m in length (east of Pok Wai South Road) to a single two-lane carriageway of 10.3 m in width with associated footpaths of 2 m in width;
 - (c) improvement of a road section of approximately 155 m in length between Yau Pok Road and Man Yuen Road to a single two-lane carriageway of 7.3 m in width with associated footpaths of 2 m in width;
 - (d) construction of sections of cycle tracks of 360 m in length and 3.5 m in width along a section of Kam Pok Road; and
 - (e) ancillary works including drainage, water supplies, slope and landscaping works, construction of vertical noise barriers and provision of lighting.

A layout plan showing the proposed works is at Enclosure 1.

4. We have completed the detailed design of the proposed works. Subject to the approval of the Finance Committee, we plan to commence the construction works in May 2011 for substantial completion and opening to traffic in December 2012 and full completion in March 2013¹.

/JUSTIFICATION

¹ Landscaping works and installation of an irrigation system and noise barriers will be conducted between December 2012 and March 2013.

JUSTIFICATION

- 5. At present, the bulk of the traffic from Tai Sang Wai (mainly heavy good vehicles generated by the open storage and port back-up operations in the area) usually gain access to the external road network via the Fairview Park Boulevard Roundabout of San Tin Highway through Kam Pok Road (a private single two-lane road) and Fairview Park Boulevard (a private dual two-lane road), which is the shortest route. While there are roads connecting Tai Sang Wai and areas to the south of Fairview Park Boulevard, through which traffic can gain access to the external road network, they are mostly sub-standard single-lane unpaved village roads which are grossly inadequate for carrying traffic with a high composition of heavy goods vehicles. This has given rise to the following issues
 - (a) There have been conflicts between the residents of Fairview Park, villagers of San Tin and operators of the nearby warehouses / container yards over the use of Fairview Park Boulevard. The owners of Fairview Park claimed that only Fairview Park residents and those who had been given permission by them had the right of way through the Fairview Park Boulevard; and
 - (b) The large volume of container and heavy goods vehicle traffic generated by the open storage and port back-up operations using the Fairview Park Boulevard, which is designed for use mainly by residential traffic, has given rise to safety concerns.
- 6. Moreover, according to the relevant approved Outline Zoning Plan, the existing open storage and port back-up sites in Tai Sang Wai will be phased out and converted into residential and/or recreational developments. The existing sub-standard roads will not be able to cope with the traffic flow from the existing road junction at Fairview Park Boulevard and Kam Pok Road arising from future developments in Tai Sang Wai². There may also be disputes on whether the future traffic from the new developments in Tai Sang Wai can access the external road network via Fairview Park Boulevard. Therefore, there is a need to provide an additional route for direct access from the Tai Sang Wai area to the external road network.

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On completion of the future development in the area in the long term, this junction will be operating beyond its capacity by 36% in the peak hours.

7. With the completion of the project, there will be a direct and convenient alternative link between the existing open storage and port back-up sites in Tai Sang Wai and Castle Peak Road (Tam Mi), in addition to the existing Fairview Park Boulevard. Also, the project will reduce the amount of traffic going through the Fairview Park Boulevard / Kam Pok Road junction³ and help meet the anticipated traffic demand arising from the developments of the Tai Sang Wai area. As heavy goods vehicles from Tai Sang Wai are expected to use the new road for accessing the external road network due to shorter travelling time, the volume of heavy goods vehicle traffic on Fairview Park Boulevard should reduce. This will help segregate residential and freight traffic, improve road safety and resolve the issue arising from concerns over the right of way of Fairview Park Boulevard.

FINANCIAL IMPLICATIONS

8. We estimate the capital cost of the project to be \$148.6 million in MOD prices (please see paragraph 9 below), broken down as follows –

		\$ million	
(a)	Road and drainage works	26.3	
(b)	Underground box structure and piling works for road formation	48.1	
(c)	Noise barriers	30.7	
(d)	Landscaping works	11.1	
(e)	Associated road lighting, slope and water works	6.7	
(f)	Contingencies	10.1	
	Sub-total	133.0	(in September 2010 prices)
(g)	Provision for price adjustment	15.6	
			/ \$ million

With the new road to handle traffic between Tai Sang Wai and Castle Peak Road (Tam Mi), the junction at Fairview Park Boulevard and Kam Pok Road is expected to be able to operate with a 15% reserve capacity at peak hours in the long term.

\$ million

Total 148.6 (in MOD prices)

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

Year	\$ million (Sept 2010)	Price adjustment factor	\$ million (MOD)
2011 – 12	25.0	1.04250	26.1
2012 – 13	60.0	1.09463	65.7
2013 – 14	30.0	1.14936	34.5
2014 – 15	10.0	1.20682	12.1
2015 – 16	8.0	1.27169	10.2
	133.0		148.6

- 10. We have derived the MOD estimate 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 2011 to 2016. We will implement the works under a standard re-measurement contract because the quantity of geotechnical works is subject to variation depending on the actual ground conditions. We will provide for price adjustments in the contract.
- 11. We estimate that the annual recurrent expenditure arising from this project to be \$1.1 million.

PUBLIC CONSULTATION

12. We consulted the San Tin Rural Committee (STRC) and the Traffic and Transport Committee of the Yuen Long District Council on 20 July 2009 and 24 July 2009 respectively on the proposed works. Members of both Committees supported the implementation of the project.

- 13. We circulated an information paper on the project to the Legislative Council Panel on Transport at the meeting on 17 December 2010. Members did not raise any objection.
- 14. We consulted the Advisory Committee on the Appearance of Bridges and Associated Structures⁴ (ACABAS) on the aesthetic design of the noise barriers on 19 October and 21 December 2010. The Committee accepted the proposed aesthetic design. An artist's impression of the noise barriers is at Enclosure 2.
- 15. We gazetted the proposed works under the Roads (Works, Use and Compensation) Ordinance (Cap. 370) (the Ordinance) on 25 September 2009. We received eight objections of which seven remained unresolved and one was withdrawn conditionally. Details of the unresolved objections ⁵ and the Administration's response are at Enclosure 3.
- 16. Having considered the unresolved objections, the Chief Executive-in-Council authorized the proposed works under the Ordinance on 5 October 2010 and the notice of authorization was gazetted on 12 November 2010.

ENVIRONMENTAL IMPLICATIONS

17. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). We have conducted an Environmental Review (ER) for the project. The findings of the ER indicate that the project will not cause long-term adverse environmental impacts with implementation of the proposed mitigation measures.

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⁴ The ACABAS (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 enclosures, from the aesthetic and visual impact points of view.

⁵ Under the Ordinance, an objection that is withdrawn unconditionally is treated as if the objector has not lodged the objection. An objection which is not withdrawn or withdrawn with conditions is treated as an unresolved objection and will be submitted to the Chief Executive-in-Council for consideration.

- 18. We will incorporate the environmental mitigation measures recommended in the ER Report into the works contract to control pollution arising from construction works within established standards and guidelines. measures include the use of quiet construction plant and temporary noise barriers to mitigate noise generation from construction activities; frequent cleaning and watering of the site and provision of wheel-washing facilities to reduce dust nuisance; and adoption of good site practices set out in the Recommended Pollution Control Clauses issued by the Environmental Protection Department. mitigating the traffic noise impact during construction of the project, we will provide noise barriers to protect the sensitive receivers located in the vicinity as proposed in the ER Report. Furthermore, we will implement the Environmental Monitoring and Audit (EM&A) programme recommended in the ER Report. have included in the project estimate the cost for implementation of the environmental mitigation measures recommended in the ER Report and the EM&A programme.
- 19. At the planning and design stages, we have considered measures to reduce the generation of construction waste where possible (e.g. using metal site hoardings and signboards so that these materials can be recycled or reused in other projects). In addition, we will require the contractor to reuse inert construction waste (e.g. suitable excavated materials and demolition materials) 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 facilities⁶. 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.
- 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 the 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.

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Output of 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.

We estimate that the project will generate about 24 000 tonnes of construction waste in total. Of these, we will reuse about 2 000 tonnes (8.3%) of inert construction waste on site and deliver about 19 000 tonnes (79.2%) of inert construction waste to public fill reception facilities for subsequent reuse. In addition, we will dispose of about 3 000 tonnes (12.5%) 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 \$0.9 million for this project (based on a unit cost of \$27 per tonne for disposal at public fill reception facilities and \$125 per tonne⁷ at landfills).

HERITAGE IMPLICATIONS

22. The 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

23. We have reviewed, in collaboration with District Lands Officer/Yuen Long, the design of the project so as to minimise the extent of land acquisition. A total of 35 private agricultural lots will be affected and the total area to be resumed is about 15 939 square metres (m²). No building lot will be resumed. There are 95 structures to be cleared within the private land, of which no domestic structure is involved. The project also involves clearance of about 7 955 m² of Government land with ten non-domestic structures. Clearance of crops, wells, fences, gates and irrigation pipes on both private and Government land will also be required. Ex-gratia allowance will be paid to the affected cultivators. We will charge the cost of land resumption and clearance estimated at \$54 million to **Head 701 - Land Acquisition**. A breakdown of the land acquisition and clearance cost is at Enclosure 4.

BACKGROUND INFORMATION

24. We upgraded **829TH** to Category B in January 2008.

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⁷ 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 m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are filled.

- 25. We engaged consultants in January 2010 to undertake the detailed design for the project at an estimated cost of \$1 million in MOD prices under **Subhead 6100TX** "Highway works, studies and investigations for items in Category D of the Public Works Programme". We have substantially completed the design of the project.
- 26. Of the 104 trees within the project boundary, 70 trees will be felled and 34 trees will be transplanted off-site. None of the affected trees are important trees⁸. We will incorporate planting proposals as part of the project, including planting of about 101 trees and 278 000 shrubs which totals to approximately 7 980 m² of planting area.
- We estimate that the proposed works will create about 152 jobs (132 for labourers and another 20 for professional/technical staff) providing a total employment of 3 009 man-months.

Transport and Housing Bureau January 2011

^{8 &}quot;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 –

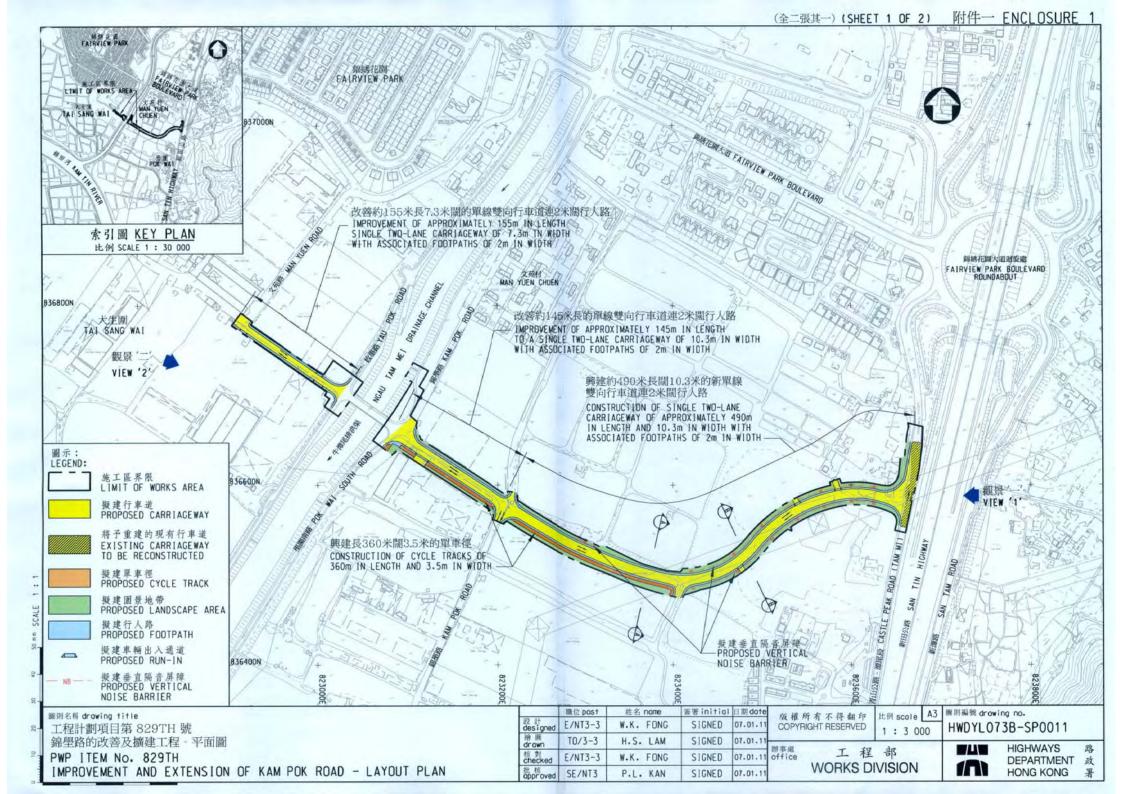
⁽a) trees of 100 years old or above;

⁽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 important persons or events;

⁽c) trees of precious or rare species;

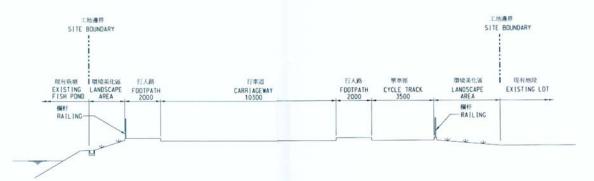
⁽d) trees of outstanding form (taking account of overall tree size, shape and any special features), e.g. trees with curtain-like aerial roots, trees growing in unusual habitat; or

⁽e) trees with trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with height/canopy spread equal to or exceeding 25 m.

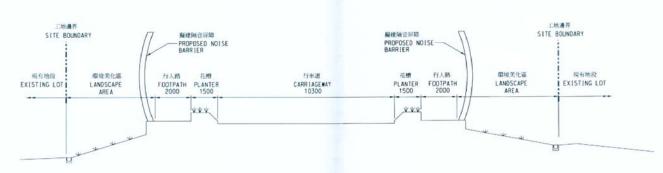


NOTES:

- 1. 除特別註明外,所有量度均以凝米為單位。 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
- 2. 所有水平均以米為單位並在香港主水平基準上。 ALL LEVELS ARE IN METRE ABOVE HONG KONG PRINCIPAL DATUM.



切面圖 SECTION A-A



切面圖 SECTION B-B

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HIGHWAYS DEPARTMENT 政 HONG KONG

IMPROVEMENT AND EXTENSION OF KAM POK ROAD - SECTIONS

WORKS DIVISION



Objections under the Roads (Works, Use and Compensation) Ordinance in respect of 829TH – Improvement and Extension of Kam Pok Road

Objection No. 1

The objector owns a piece of land along Castle Peak Road (Tam Mi) where he operates his business. He has no objection to the implementation of the project but requested the provision of a run-in (from either the new road or Castle Peak Road (Tam Mi)) for gaining vehicular access to his lot as he claimed that there are two existing vehicular accesses to his lot. That said, the objector admitted that the existing vehicular access via adjacent private lots to his lot was only paved by him after gazettal of the project in September 2009 and that the other vehicular access was constructed by him without obtaining necessary approval from concerned Government departments.

2. Given the circumstances, the Administration has advised the objector that his request for the provision of a run-in for gaining vehicular access to his lot was not justified and would not be entertained. In response to our explanation, the objector maintained his objection. Hence, the objection is unresolved.

- 3. The objector represents a group of villagers of Pok Wai and his major concerns are that the new road would affect vehicular access to his land located next to the new road; the new road would cause noise nuisance to Pok Wai village; and the Administration should compensate for the loss of land within the Village Type Development zone (V-Zone) due to construction of the new road by re-zoning equivalent land in the vicinity as V-Zone.
- 4. The Administration has responded to the objector that a run-in would be provided on the new road in front of his lot and that noise barriers would be provided on both sides of the new road within the V-Zone to mitigate traffic noise due to the project as shown on the gazettal documents. The expansion of the V-Zone would require amendments to the Outline Zoning Plan and the approval of the Town Planning Board (TPB).
- 5. In response to our explanation, the objector indicated that he has no objection to the implementation of the project but maintained his objection for the reason that the Government should compensate for the loss of land within the V-Zone due to construction of the new road. Hence, the objection is unresolved.

Objection No. 3

- 6. The objector represents a group of villagers of Pok Wai and his major concerns are that the new road would cause noise nuisance to Pok Wai village and that the new road would require resumption of land within the V-Zone. In response, the Administration has advised the objector that noise barriers would be provided on both sides of the new road within the V-Zone to mitigate traffic noise due to the project as shown on the gazettal documents and that the issue of compensation for the loss of land within the V-Zone would require amendments to the Outline Zoning Plan and the approval of the TPB.
- 7. In response to the Administration's explanation, the objector maintained his objection for the reason that the Government should compensate for the loss of land within the V-Zone due to construction of the new road. Hence, the objection is unresolved.

- 8. The objector's major concerns are that there is no imminent need for the construction of the new road; the new road would cause noise nuisance to Pok Wai village; and the new road would require resumption of land for the construction of small house within the V-Zone, affecting the construction of small houses by indigenous villagers.
- 9. The Administration has advised the objector that the new road would provide a new access for Tai Sang Wai and Pok Wai and also tie in with village type and comprehensive developments in the area in the long term. Noise barriers would be provided on both sides of the new road within the V-Zone to mitigate traffic noise due to the project as shown on the gazettal documents. The project would also include construction of other basic infrastructures, such as sewers and water mains, which would facilitate V-type development.
- 10. Subsequent to a meeting with representatives from relevant government departments, the objector confirmed that his land within the V-Zone would not be affected by the project. Notwithstanding the above, the objector maintained his objection. Hence, the objection is unresolved.

Objection No. 5

- 11. The objector's major concerns are that the new road would require resumption of land within the V-Zone which would not be beneficial to Pok Wai; the provision of noise barriers on both sides of the new road within the V-Zone would affect vehicular access to a piece of land located next to the new road owned by him; and the project would require resumption of most part of another piece of land owned by him leaving behind only a very small parcel of land which would not be of any use for future development and he requested the Government to resume the whole of the land.
- 12. In response, the Administration has advised the objector that the new road would provide a new access for Tai Sang Wai and Pok Wai, and also for village type and comprehensive developments in the area in the long term. A run-in would be provided on the new road in front of his lot as shown on the gazettal documents. According to the established practice for land resumption, resumption of private land for the implementation of Government projects would be kept to a minimum as far as possible and based on the land required for the project. The remaining parcel of land owned by him would be bigger than 0.01 acre, and under the existing land resumption policy, his request for resumption of the whole lot could not be entertained.
- 13. In response to the Administration's explanation, the objector maintained his objection. Hence, the objection is unresolved.

- 14. The objector is a company which is concerned about resumption of part of the land currently used by it as storage yard. However, it would consider withdrawing the objection on the condition that there would be fair compensation for the resumption of the company's land and that a run-in abutting the new road for vehicular access to the remaining land would be provided.
- 15. In response, the Administration has advised the objector that resumption of private land for the implementation of government projects would be kept to a minimum as far as possible and based on the land required for the project, and that there is no objection to providing a run-in abutting the new road for vehicular access to the remaining land. The objector subsequently advised that it would be prepared to withdraw the objection subject to a run-in abutting the new road for vehicular access to the remaining land being provided, and that ex-gratia compensation rates for the resumed land being not less than the fair open market value at the time of resumption. As withdrawal of the objection is conditional, the objection is considered unresolved.

Objection No. 7

- 16. The objectors are village representatives (VRs) of Pok Wai and are mainly concerned about the fact that the Administration has not fully addressed the earlier 11 requests put forward by both the Chairman of the San Tin Rural Committee (STRC) and the VRs of Pok Wai, in particular the request for compensation for the loss of land within the V-Zone due to construction of the new road.
- 17. The Administration has responded to the objectors that both the STRC (with the objectors themselves being members of the Committee) and the Traffic and Transport Committee of the Yuen Long District Council at the meetings held on 20 July 2009 and 24 July 2009 respectively supported the implementation of the project. Since then, the Administration has followed up closely the 11 requests with some of them already included in the project and some being handled by concerned Government departments separately. The issue of compensation for the loss of land within the V-Zone would require amendments to the Outline Zoning Plan and the approval of the TPB. Indeed, the objectors indicated on a previous occasion that they agreed that the V-Zone issue be handled separately in order not to delay the project. In response to the explanation, the objectors maintained their objection. Hence, the objection is unresolved.

- 18. The objector was mainly concerned about resumption of part of the land he has currently rented for business under a tenancy agreement. The objector advised that the land resumption would significantly affect the investments he has put in over the years. Nevertheless, he would offer to the land owner to continue to rent the remaining land for his business and that he would maintain his objection unless a run-in on the new road for gaining vehicular access to the remaining land would be provided.
- 19. The Administration has responded to the objector that it did not receive any objection from the concerned land owner. The Administration has also pointed out that his request for the provision of a run-in on the new road would not be accepted as the proposed run-in would be located at the road bend and very close to Castle Peak Road (Tam Mi), which would be undesirable and unsatisfactory from the road safety point of view. If the objector considered that he was eligible for any type of ex-gratia compensation, he could make his application to the Lands Department under the "Ex-gratia Allowances Payable for Land Resumptions and Clearances" arrangements under the department. In response to the explanation, the objector maintained his objection. Hence, the objection is unresolved.

829TH – Improvement and Extension of Kam Pok Road

Breakdown of the estimated land resumption and clearance costs

breakdown of the estimated land resumption and clearance costs			
(I)	Estimated resumption cost		\$ million 47.1
	Agricultural land ex-gratia compensation	47.1	
	35 agricultural lots (with a total area of 15 939 square metre (m²)) will be resumed		
	15 939 m ² x \$2,954.72 per m ² (please see Notes below)		
(II)	Estimated clearance cost		1.98
(a)	Ex-gratia allowance for crop compensation	1.45	
(b)	Ex-gratia allowance for farm structures and miscellaneous permanent improvements to farms	0.05	
(c)	Ex-gratia allowance for occupiers and business undertakings	0.48	
(III)	Interest and Contingency Payment		4.91
(a)	The interest payment on various ex-gratia compensation for private land	0.000245	
(b)	Contingency on the above costs	4.91	
		Total	53.99
Note	es		(say 54.00)

Notes

- 1. There are four ex-gratia compensation zones, namely Zones A, B, C and D, for land resumption in the New Territories as approved by Executive Council 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 **829TH** is agricultural land within Compensation Zone "C".
- 2. In accordance with Government Notice 6085 dated 14 September 2010 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 \$549 per square foot, i.e. \$274.50 per square foot (or \$2,954.72 per m²). The above figures may be subject to adjustment following the review of the rates.