For discussion on 10 November 2014

Lantau Development Advisory Committee
Traffic and Transport Subcommittee
Paper No.10/2014

# **Lantau Development Advisory Committee Traffic and Transport Subcommittee**

#### **Construction of an East-West Coastal Road in North Lantau**

#### **Purpose**

This paper provides an introduction concerning the proposal of an east-west coastal road in North Lantau to the Traffic and Transport Subcommittee of the Lantau Development Advisory Committee ("LanDAC").

## Background

2. Among the traffic and transport related views and proposals received by LanDAC, there are two suggestions concerning the construction of a coastal road linking Tai O and Tung Chung and one other suggestion concerning the construction of a highway connecting Tai O, Yi O and Fan Lau Village (please refer to "Transport infrastructure proposals in support of development plans for Lantau" in Group C of Annex 1 to Paper No. 04/2014 which quoted Item 4.16 in Working Group Paper No. 1/2014 and Items 4.2 and 4.3 in Working Group Paper No. 2/2014). This paper provides the relevant information about the proposals.

#### **Proposed Alignment**

3. The above proposals involve the construction of a coastal road linking Tung Chung, Sha Lo Wan, Tai O and Fan Lau. The coastal road is to route through San Tau, Sha Lo Wan, San Shek Wan, Sham Shek Tsuen, Sham Wat, Tai O, Yi O and Fan Lau. Please see **Annex 1** for the

proposed alignment. As shown on **Annex 1**, the proposed alignment can be separated into <u>the northern section</u> and <u>the southern section</u> with Tai O as the dividing point. The northern section runs between Tai O and Tung Chung whereas the southern one from Tai O to Fan Lau.

## Villages along the Proposed Alignment

## Distance between villages

4. The table below lists the distance between villages via village access roads:

From	То	Approximate	
		Distance	
Tung Chung	San Tau	1.9 km	
San Tau	Sha Lo Wan	2.8 km	
Sha Lo Wan	San Shek Wan	1.4 km	
San Shek Wan	Sham Shek Tsuen	0.6 km	
Sham Shek Tsuen	Sham Wat	1.1 km	
Sham Wat	Tai O	3.3 km	
Tai O	Yi O	5.0 km	
Yi O	Fan Lau	3.5 km	

5. As shown from the table above, the length of the northern section of the village access roads is about 11.1 km and that of the southern section is about 8.5 km. The total length is about 19.6 km.

## Population distribution

6. According to the Projections of Population Distribution 2013-2021 published by the Planning Department in 2013, the projected total population of San Tau, San Shek Wan, Sha Lo Wan, Sham Shek Tsuen, Sham Wat, Yi O and Fan Lau in 2014 is 1 200 whereas Tai O is 2 400.

7. The estimated population and transport connection of the above villages are tabled below:

Village	Estimated	Transport Connection	
	Population		
San Tau and	200	village access roads	
San Shek Wan			
Sha Lo Wan	700	ferry and village access roads	
Sham Shek	200	Sham Wat Road and village	
Tsuen and		access roads	
Sham Wat			
Tai O	2 400	Tai O Road (including bus	
		services), ferry and village	
		access roads	
Yi O	50	village access roads	
Fan Lau	50	village access roads	

8. Photos of the villages and village access roads are at **Annex 2**. As seen from the Annex, villages north of Tai O are mostly small and quiet villages scattering across San Tau, Sha Lo Wan and Sham Wat. Cottages are the main structures in these villages. Villages south of Tai O are mostly dilapidated houses and ruins. Agricultural land in the area is mainly covered by shrubs and weeds similar to the adjacent Lantau North Country Park and Lantau South Country Park.

#### Traffic conditions in the area

- 9. Among the villages mentioned above, only Tai O and Sham Wat are provided with vehicular accesses such as Tai O Road and Sham Wat Road at present. Tai O Road has a width of about 6.8 metres whereas the section of Sham Wat Road near Sham Wat is about 3.5 metres in width. All the remaining villages are only accessible by pedestrian links.
- 10. Daytime bus routes serving Tai O include Route nos. 1, 11 and 21, for access to Mui Wo, Tung Chung and Ngong Ping respectively. For overnight service, Route no. N1 provides one-way service from Mui Wo to Tai O every night. Details of the bus services in Tai O are at **Annex 3**. Tai O is also linked by ferries going to Tuen Mun via Sha Lo Wan and

Tung Chung. Details of the ferry service are at **Annex 4**. Although there is a vehicular access to Shum Wat, there is no bus service at the moment due to its topographic conditions.

- 11. Villages north of Tai O are linked by village access roads collectively known as the Tung O Ancient Trail. They are accessible on foot with Sha Lo Wan also by ferry.
- 12. For villages south of Tai O, although there is no vehicular access, they are accessible by a walking trail (i.e. the Lantau Trail). The Lantau Trail, which connects Tai O, Yi O and Fan Lau, is a walking trail mainly along the coast. According to a notice issued by the Agriculture, Fisheries and Conservation Department on 15 March 2013, as farmland rehabilitation within private lots in Yi O Kau Tsuen and Yi O San Tsuen is in progress, the land owners do not allow unauthorised access to those villages. Portion of the Lantau Trail Section 7 passing through those villages will therefore be affected by works and has to be diverted. Visitors to Fan Lau, Kau Ling Chung or Tai O are required to choose alternative routes (See **Annex 5**).

## Benefits and Implications of the Construction of an East-west Coastal Road in North Lantau – the Northern Section

## Savings in travelling time

13. According to the rough estimation done in the past, the length of the carriageway of the coastal road linking Tung Chung and Tai O is about 9.7 km, of which about 5.16 km and 0.75 km is elevated road and tunnel respectively. Based on the above figures, assuming the speed limit of the coastal road is 50 km/h, the travelling time from Tai O to Tung Chung will be about 12 minutes, which is 33 minutes less than travelling via Tai O Road, Keung Shan Road, South Lantau Road and Tung Chung Road at present.

#### Construction cost and time

14. It is estimated that the total cost (including design, investigation and

construction) will be \$4.7 billion (at 2012 price level excluding recurrent costs upon completion). It will take about 8.5 years for construction from project creation to completion. The above figures are preliminary estimations and the accurate figures will only be available upon the creation of project and the commencement of detailed design.

## Impacts on the environment/ heritage sites

15. According to the Revised Concept Plan for Lantau (see **Annex 6**), the proposed coastal road will affect the existing country parks and rural areas and its route will overlap with Tung O Ancient Trail. It is necessary to conduct detailed study to ascertain its impacts on the environment and heritage sites.

## <u>Implications for transport and tourist facilities</u>

16. The proposed coastal road may increase the numbers of coaches and tourists visiting Tai O. Consideration should be given to the handling capacity of the tourist facilities at Tai O.

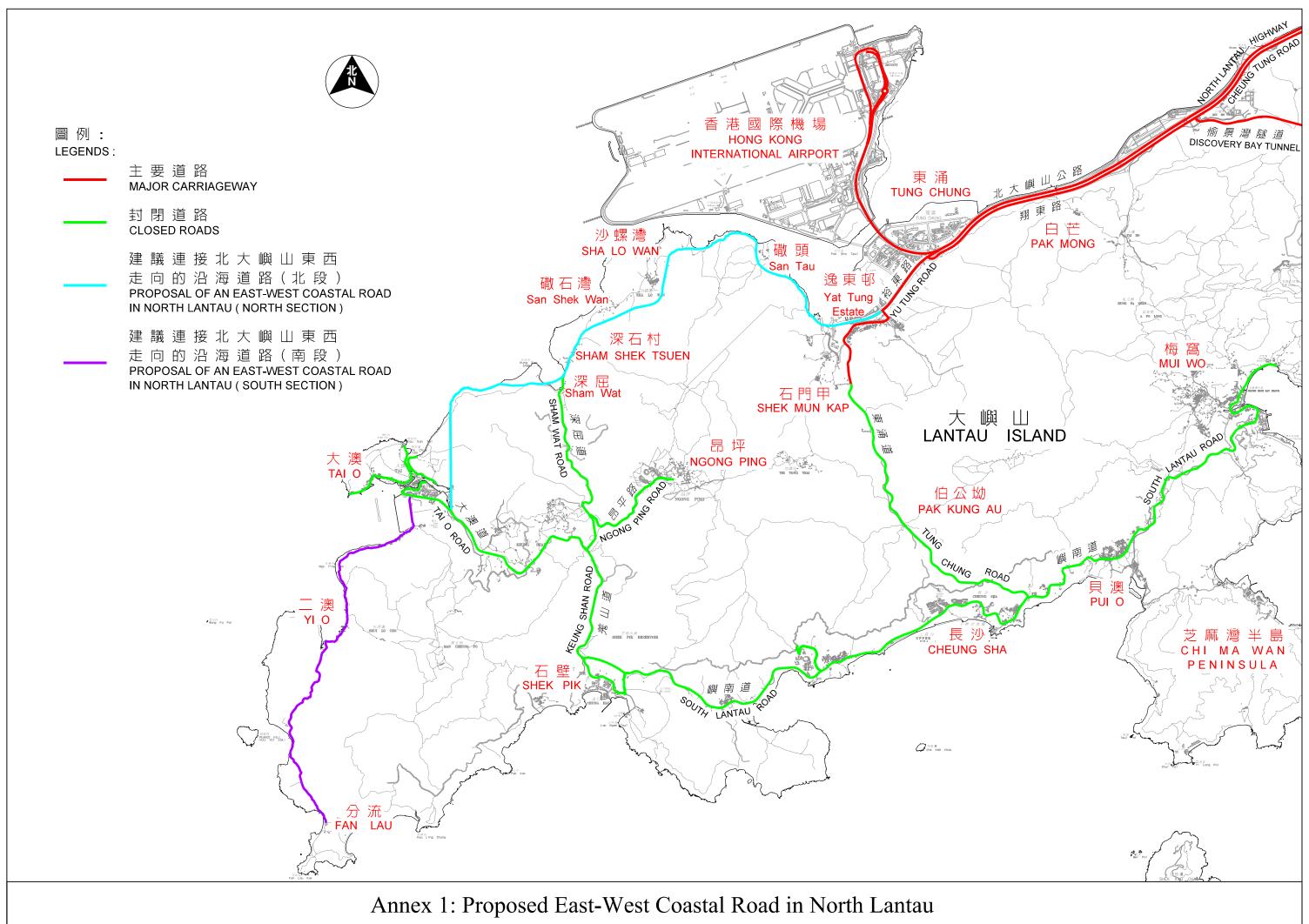
## Benefits and Implications of the Construction of an East-west Coastal Road in North Lantau – the Southern Section

17. Since there has been no estimation on the Southern Section made before, there is no analysis similar to the one for the Northern Section. Based on preliminary observations, the implications of the Southern Section will be similar to those of the Northern Section, whereas there will be an even smaller population to be served.

## **Advice Sought**

18. Members are invited to note the paper and give their views at the meeting.

## Transport Department November 2014



## Annex 2



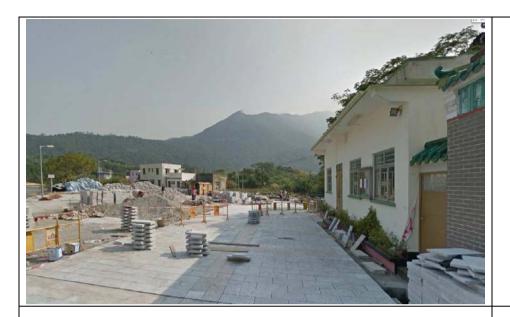
Environment inside San Tau Village



Environment inside San Tau Village



Village access road to San Tau Village



Environment inside Sha Lo Wan Tsuen



Village access road to Sha Lo Wan



Environment inside San Shek Wan Tsuen



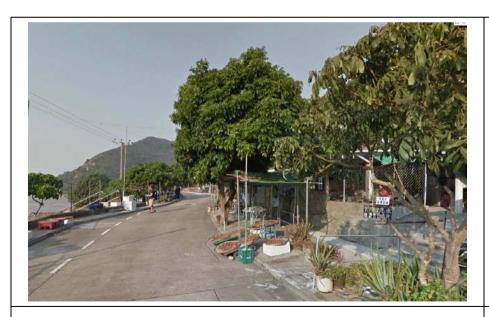
Village access road to San Shek Wan



Environment inside Sham Shek Tsuen



Village access road to Sham Shek Tsuen



Environment inside Sham Wat Village



Village access road to Sham Wat



Environment inside Tai O Village



Village access road to Tai O



Environment inside Yi O Village



Environment inside Yi O Village



Village access road to Yi O



Environment inside Fan Lau Tsuen



Environment inside Fan Lau Tsuen

## **Bus Routes Serving Tai O (3 Routes in total)**

## New Lantao Bus Company (1973) Limited

Route	Place of	Place of	Headway (mins.)		Full Fare on	Full Fare on
	Departure	Destination	Weekdays <sup>(1)</sup>	Holidays <sup>(2)</sup>	Weekdays (\$) (1)	<b>Holidays (\$)</b> (2)
1	Mui Wo	Tai O	20 - 60	20 - 60	\$10.7	\$17.7
11	Tung Chung	Tai O	5 - 40	5 - 50	\$11.8	\$19.2
	Town Centre					
21	Ngong Ping	Tai O	Mondays to Fridays: 20 trips	29 trips daily	\$6.6	\$14.0
			Saturdays: 23 trips			
N1	Mui Wo	Tai O	1 One-way trip to Tai O (3)		\$16.0	\$27.0

<sup>(1)</sup> Weekdays refer to Mondays to Saturdays.

<sup>(2)</sup> Holidays refer to Sundays and public holidays.

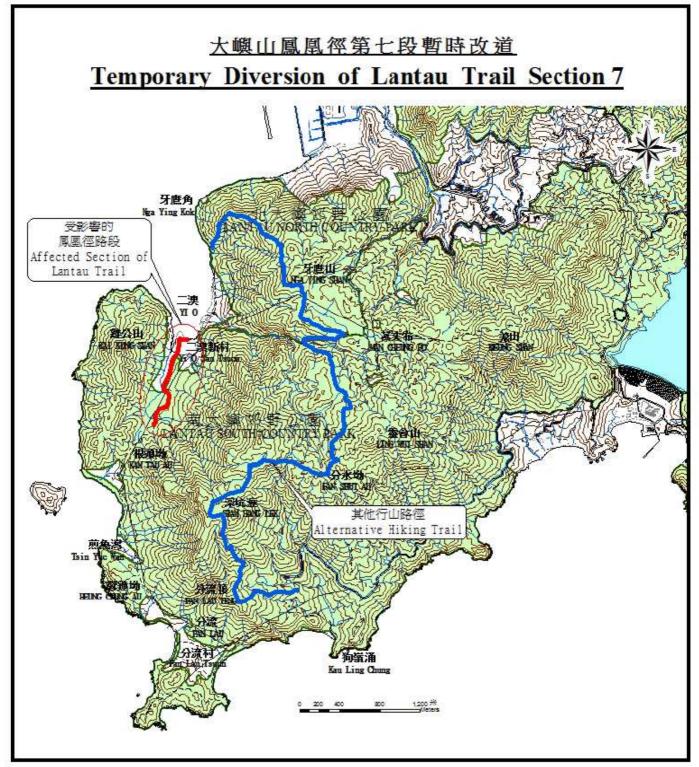
<sup>(3)</sup> Overnight service, departing at Mui Wo at 3:45a.m. daily.

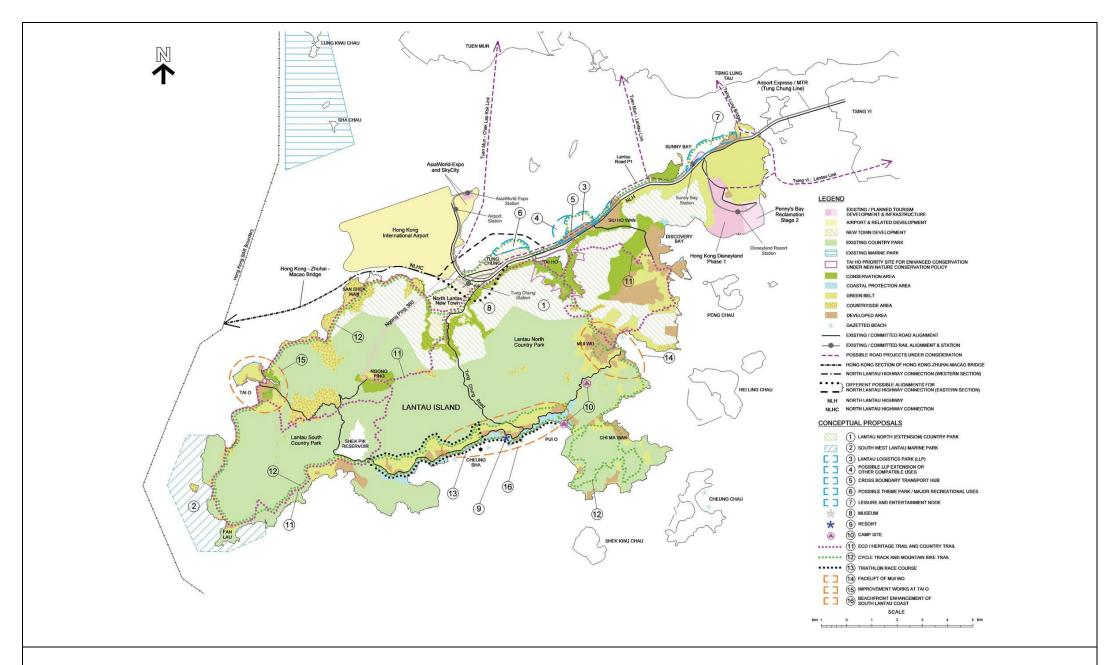
## Annex 4

## Ferry Route Serving Tai O

Route	Current Full Fare (Adult Single)		Service	
	Weekdays <sup>1</sup>	Sundays and	Number of Trips	Journey
		Public Holidays		Time
				(mins.)
Tai O - Sha Lo	Ordinary ferry: \$20	Ordinary ferry: \$25	Weekdays (Mondays to Fridays): 3 round trips between Tuen Mun	50
Wan - Tung	Fast ferry: \$25	Fast ferry: \$30	and Tai O, 4 round trips between Tuen Mun and Tung Chung	
Chung - Tuen				
Mun			Weekdays (Saturday): 4 round trips between Tuen Mun and Tai O,	
			3 round trips between Tuen Mun and Tung Chung	
			Sundays and public holidays: 5 round trips between Tuen Mun and	
			Tai O, 2 round trips between Tuen Mun and Tung Chung	

<sup>&</sup>lt;sup>1</sup> Mondays to Saturdays (except public holidays)





Annex 6 Revised Concept Plan