

For discussion on
24 November 2000

Legislative Council Panel on Transport
Lantau North-South Road Link

PURPOSE

This paper briefs Members on the latest position of the project Lantau North-South Road Link between Tai Ho Wan and Mui Wo.

BACKGROUND

2. At the panel meetings on 28 July 1999 and 26 May 2000, Members discussed the project Lantau North-South Road Link between Tai Ho Wan and Mui Wo.

3. To recapitulate, Tung Chung Road is a substandard one-lane village road with sharp bends and steep gradients. The opening of the Lantau Link and the new airport has stimulated the traffic demand between north and south Lantau and exacerbated the traffic situation on Tung Chung Road. We need to introduce improvements to the north-south access of Lantau to alleviate the safety and capacity problems of Tung Chung Road. After reviewing the road network, the topography and the traffic demand in Lantau, we considered that a new north-south road link between Tai Ho Wan and Mui Wo would be feasible in terms of traffic engineering. The road link will be a single two-lane carriageway. After carrying out site investigation and preliminary design in close consultation with the Director of Environmental Protection (DEP), we have chosen from 17 possible combinations of various alignment options an overland alignment of about 6 km long, connecting the North Lantau Highway at Tai Ho and Ngan Kwong Wan Road in Mui Wo. The alignment is shown at the **Annex**. The total cost of the project is estimated to be in the order of \$1.3 billion.

4. As required under the Environmental Impact Assessment Ordinance (EIAO), the Highways Department (HyD) submitted the Environmental Impact Assessment (EIA) Report to the Director of Environmental Protection (DEP) in November 1999. DEP subsequently

informed HyD that the report did not meet the requirements of the study brief and the Technical Memorandum under the EIAO because he considered that many potentially serious adverse environmental issues have not been resolved.

LATEST POSITION

5. Following further close liaison with DEP, HyD produced a revised EIA report, which included more information and a series of additional mitigation measures to alleviate the environmental impact of the project, and resubmitted the EIA report in September 2000.

6. DEP replied on 13 November 2000 that the revised EIA Report is not acceptable. DEP takes the view that the project would result in potential adverse environmental impacts. These include substantial habitat loss of woodland, adverse impact on areas of ecological significance including Tai Ho Bay and Tai Ho Stream which is a designated Site of Special Scientific Interest (SSSI) being recognised as one of the most ecologically valuable fresh water streams in HK, and disturbance to ecologically valuable fauna and bird species.

7. We recognise that the project is extremely environmentally sensitive and we have all along endeavoured to identify a most suitable alignment having regard to all relevant factors. The Transport Bureau and HyD consider that the proposed overland alignment between Mui Wo and Tai Ho appears to be most promising in terms of finding a compromise solution to the traffic requirements and environmental impact. EPD, the statutory authority on environmental impact assessment, however, has concluded that this proposed overland option along Tai Ho Valley is environmentally unacceptable.

ALTERNATIVE ALIGNMENTS

8. Apart from the alignment between Mui Wo and Tai Ho, we have studied the feasibility of other options. Back in November 1996, we had already carried out a feasibility study on the improvement of Tung Chung Road to 2-lane standard with an additional climbing lane at the uphill sections. We found that widening of the road along the existing alignment (on-line widening) would not meet traffic engineering safety standards, as

the gradient would remain steep. A meandering alignment (off-line widening) would resolve the gradient problems but its sharp bends across the Tung Chung valley would have serious environmental impacts on 13 hectares of natural woodland and 20 hectares of Country Park. The proposed widening and improvement schemes were presented to the Country Parks Committee (CPC) under the Country and Marine Parks Board (CMPB) in March 1997. The CPC expressed concern on the impacts of the works to the Country Park, and advised that other alternative north-south routes should also be considered.

9. We have also considered the option of constructing a single tube 2-lane 2-way tunnel under Tung Chung Road. We found that the tunnel would need to be about 4 km long and the project would cost about \$3 billion to construct and \$80 million each year to operate and maintain. However, such a long length of single tube 2-lane 2-way tunnel would be very undesirable from the traffic safety and tunnel maintenance point of view. If a twin tube tunnel is to be built to overcome the traffic safety and tunnel maintenance problems, the project cost would increase to about \$5 billion. Moreover, an interchange with South Lantau Road will need to be provided at the southern end of the tunnel and this would affect either the village area at Tong Fuk or Cheung Sha.

INTERIM MEASURES FOR TUNG CHUNG ROAD

10. With the exception of the North Lantau Highway and the roads in the airport, Discovery Bay and Tung Chung New Town, all other roads on Lantau, including Tung Chung Road, are closed roads where access by motor vehicles is regulated by a closed road permit system.

11. In addition to being a closed road, Tung Chung Road has also been designated as a prohibited zone in view of its substandard conditions. Apart from franchised buses running on routes in the area, Lantau taxis and emergency vehicles, other motor vehicles using Tung Chung Road south of Shek Mun Kap between 7.30 a.m. and 7.00 p.m. are required to possess Tung Chung Road Prohibited Zone Permits (the permit). Goods vehicles with a gross vehicle weight of above 5.5 tonnes are not allowed to use Tung Chung Road. The permits are issued to local residents, companies and public utilities providing various services (e.g. delivery of perishable/bulky goods, repair and maintenance, school bus service) or carrying out works in Lantau, government departments, etc. on a need basis.

12. During the interim period before the completion of the new north-south road link, we will continue to carry out local improvement works at various locations along Tung Chung Road to enhance its safety. For instance, the sections at Pak Kung Au and near Cheung Sha Catchwater have just been widened to 2 lanes. Such works however will not result in any significant increase in the capacity of the road due to geographical constraints and the ultimate solution lies in a new North-south Link. To ensure road safety, therefore, we have to maintain the Tung Chung Road permit system in order to regulate the traffic throughput.

13. TD has also been reviewing the traffic situation and the permit system on an on-going basis. According to the results of a recent survey on traffic flows on Tung Chung Road, TD considers that the prohibition hours could be relaxed on a trial basis from 7:30 am - 7:00 pm to 8:00 am - 6:00 pm. Depending on the utilization of Tung Chung Road, there is the possibility that there would be an increase in traffic delays in the morning peak hours. TD intends to consult the Islands District Council on the implementation of this proposed relaxation and other measures to enhance safety. TD will continue to closely monitor the situation and would carefully review the results of the trial.

14. In the meantime, Transport Department has also developed a contingency plan to deal with incidents which would affect the use of Tung Chung Road. This includes public announcement and the strengthening of alternative ferry service between Central/Mui Wo and Tung Chung/Mui Wo. A contract was also signed between TD and the Tug Boat Association on the provision of emergency ferry service. Following the opening of Discovery Bay Tunnel, passengers could choose to use its bus services to Discovery Bay and from there by ferry to Mui Wo in an emergency.

THE WAY FORWARD

15. We remain of the view that a safe road connection between northern and southern Lantau Island is needed. The Administration is committed to building an environmentally acceptable road that can both meet the needs of Lantau residents and support the conservation of the island's ecologically important areas. Our study on the Mui Wo-Tai Ho Road is a clear indication of our wish to find a solution. A single two-lane overland connecting road between the northern and southern shores will fit

into the rural country character of a large part of the island.

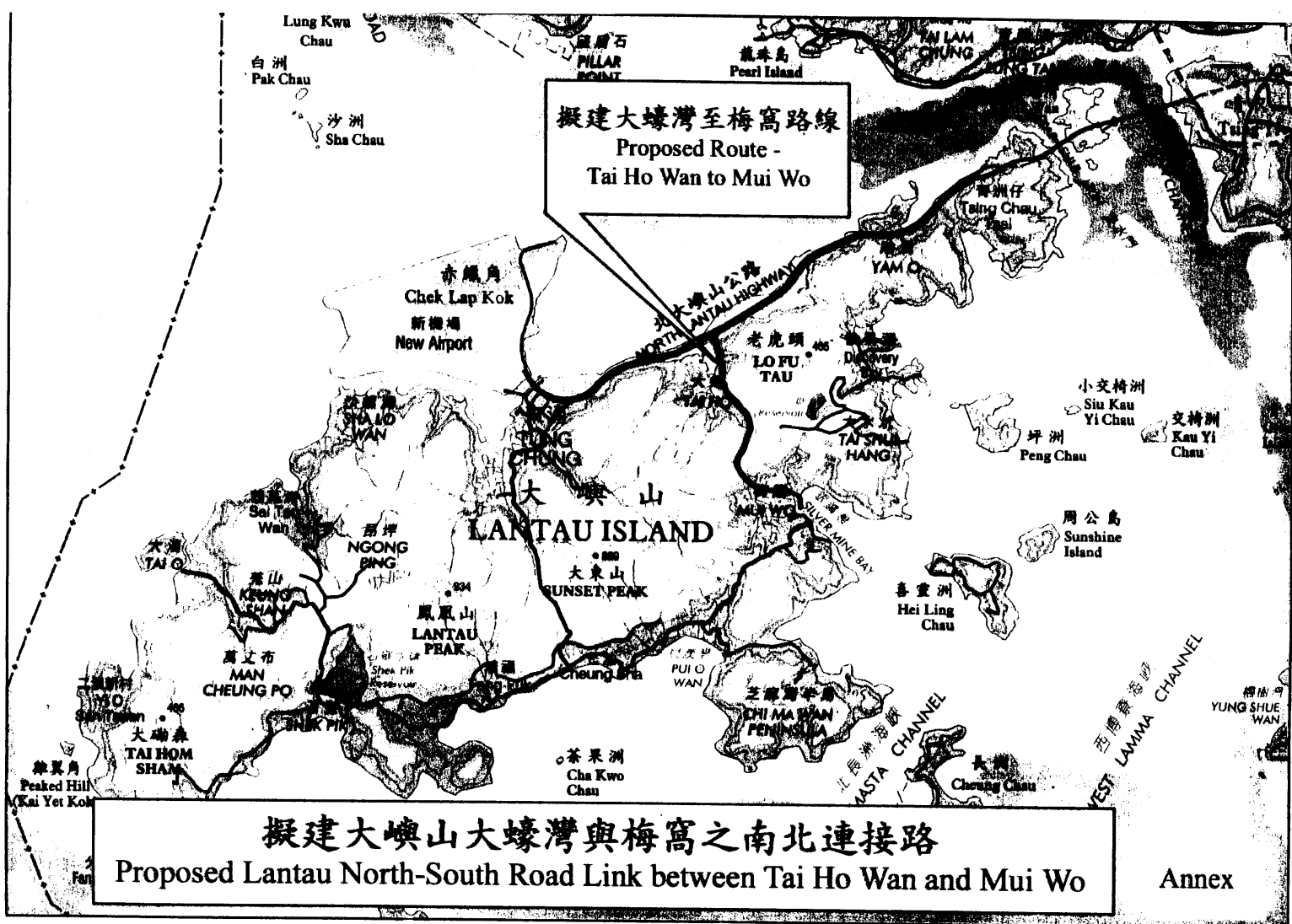
16. As we cannot identify an acceptable simple solution, we will have to look for a solution involving long tunnels. The safety requirements for a long tunnel require a twin tube tunnel which will provide capacity much higher than the demand arising from the rural countryside development in South Lantau. We are proceeding urgently to examine the best alignment for the alternative option, together with EPD and PlanD, with a view to identifying an environmentally acceptable and safe solution to address the transportation needs of Lantau residents.

17. We hope to come up soon with the proposed route for further discussion with the local community. The project was originally planned for completion in 2004. The search for an alternative option will prolong the completion date of the project. A new timetable can only be determined when the new alignment is settled.

ADVICE SOUGHT

18. Members are requested to note the content of the paper.

Transport Bureau
Government Secretariat
November 2000



Lung Kwa Chau
白洲 Pak Chau
沙洲 Sha Chau

擬建大嶼灣至梅窩路線
Proposed Route -
Tai Ho Wan to Mui Wo

赤鱗角
Chek Lap Kok
新機場
New Airport

大嶼山
LANTAU ISLAND
大東山
SUNSET PEAK

擬建大嶼山大嶼灣與梅窩之南北連接路
Proposed Lantau North-South Road Link between Tai Ho Wan and Mui Wo

Annex