(ACE-EIA Paper 6/2003)

For information

Public Transport Interchange at Lok Ma Chau Terminus of the Sheung Shui to Lok Ma Chau Spur Line

Purpose

This paper is to inform members of the proposed Public Transport Interchange **(**PTI) project at the Lok Ma Chau Terminus of the Sheung Shui to Lok Ma Chau Spur Line (Spur Line) and to brief members on the key findings of the environmental review which describes the likely environmental impacts and the proposed mitigation measures.

Background

2. The Spur Line railway scheme was authorized by the Chief Executive-in-Council on 11 June 2002. Construction of the Spur Line is in progress and will be completed by mid-2007. In association with the railway works funded by the KCRC, the Government has to provide funding for the construction of the associated Essential Public Infrastructure Works (EPIW). In considering Government's funding request for the EPIW in January 2003, the LegCo Panel on Transport Subcommittee on Matters Relating to Railways strongly requested that there should be suitable provision of transport facilities at the Lok Ma Chau (LMC) Terminus for the operation of other road-based public transport modes in order to give commuters a choice and to provide business opportunities for the transport trades concerned. After careful examination of the land, traffic, environmental and security implications and the legitimate expectations of the travelling public and the transport trades concerned, we decided that a PTI should be provided and informed LegCo of our plan to provide a PTI adjacent to the LMC Terminal building, using an area reserved for the future expansion of the LMC Terminus.

Scope

3. A PTI of about 6 200 m^2 is proposed taking into account the efficient

operation of the public transport services to the control point and the environmental constraints. The proposed PTI is to be located at the ground level to the east side of the LMC terminal building. A drawing showing the proposed PTI location and access road alignment is at Annex A. Annex A

4. The proposed PTI will not affect the operation of the LMC Terminus nor our policy objective of using railways as the backbone of our public transport system. To cope with the additional traffic generated by the PTI, the access road to the LMC Terminus has also to be further upgraded from 6.75 m wide to 7.3 m wide.

Location

5. The major part of the proposed PTI will fall within the original LMC Terminus footprint. Only 0.35 hectare (ha) of the adjoining 5 ha reedbed area, which provides wastewater polishing function, will be required.

6. In finalizing the plan, we have considered two other alternative sites for the PTI. One option is to locate the PTI within the southern portion of the LMC terminal building. This option will totally avoid the encroachment of the terminus onto the adjoining reedbed. However, this option would be far from desirable for the operation of the PTI and would involve substantial alterations to the terminal building layout causing significant delay to the completion of the Spur Line. Furthermore, the difference in environmental impact between this option and our preferred plan described at paragraph 3 would be very small. Another option is to locate the PTI outside the LMC Terminus but this would take up a larger area of the wetland. Therefore, locating the PTI on the east side of the terminal building represents the most viable option.

Environmental Review

7. KCRC has conducted an environmental review to assess the likely environmental impacts associated with the design changes of incorporating the proposed PTI in the Spur Line scheme. The findings of the assessment are summarized in the following paragraphs.

(a) Ecological impact

8. The PTI requires an extension of the LMC terminus footprint east onto an area designated for a reedbed and will cause a direct loss of 0.35 ha of the reedbed. The widening of the access road to the LMC Terminus and the shifting of a 150 m

section of the access road by 5 m adjacent to the proposed New Huanggang Boundary Bridge will result in a direct loss of 0.1 ha of fishpond. There will also be some indirect loss of habitat due to disturbance arising from traffic movements at the PTI and along the access road.

9. The Spur Line Environmental Impact Assessment report approved by EPD on 11 March 2002 has stated that due to the existing levels of disturbance, most of the largest and disturbance sensitive species are absent from this area. To mitigate the disturbance to other species of conservation importance present in the area and the direct habitat loss, the Environmental Review has proposed an enhancement of 3 ha of the existing fishponds contiguous to the Ecological Compensation Area for the Spur Line project.

10. Extension of the LMC Terminus to accommodate the PTI will cause insignificant fragmentation of habitat. The fragmentation effect due to increased traffic using the access road will be mitigated by provision of a wildlife corridor including an underpass beneath the access road near the LMC Huanggang Boundary Bridge in order to permit east-west movements of mammals through the Lok Ma Chau area. Low guide barriers will be formed along the access road in this location in order to keep wildlife off the road and to direct them into the underpass.

11. With due regard that the proposed PTI falls within Wetland Conservation Area (WCA) and the access road to the PTI lies in both WCA and the surrounding Wetland Buffer Area (WBA), the ecological impacts identified in the Environmental Review are considered to be acceptable with the proposed mitigation measures.

(b) Water Quality – Reedbed Performance

12. The PTI requires an extension of the LMC terminus footprint east onto an area designated for a reedbed, which will further polish the treated effluent from the terminus wastewater treatment facilities before discharging into the Shenzhen River in order to meet the Deep Bay "zero discharge" policy, when the LMC Terminus is in operation. There will be a reduction of 0.35 ha of the effective reedbed area due to the construction of the PTI. As 5 ha of reedbed is originally available, the loss of 0.35 ha would still meet with the minimum requirement of 27,470 m^2 of reedbed for water polishing as set out in the Reedbed Design Report for the LMC Terminus. Therefore, the encroachment of the station footprint onto the reedbed will not adversely affect its performance to an unacceptable level.

(c) Traffic Noise Impact

13. Some of the existing dwellings along the access road including the Lok Ma Chau Road will be subject to traffic noise from the traffic generated by the PTI. Direct noise mitigation measure including 0.8 m high roadside concrete parapet wall or a combination of a shorter section of the concrete parapet together with using low noise road surfacing has been proposed to ensure the noise criteria under the Technical Memorandum can be met.

(d) Air Quality Impact

14. The Environmental Review has considered the emission from the traffic generated by the PTI and shows that the air sensitive receivers along the access road including the Lok Ma Chau Road would not be subjected to any exceedance in the Air Quality Objectives during operation phase.

Way Forward

15. The Environmental Review concluded that with the proposed mitigation measures, the residual impact from the operation of the PTI in LMC Terminus and the associated traffic would not result in unacceptable environmental impact. Before the commencement of the construction of the PTI and the widening of the access road, an application will be submitted under the Environmental Impact Assessment Ordinance for a variation of the environmental permit issued for the Spur Line project so that necessary mitigation measures for the PTI would be fully incorporated into the permit.

Environment, Transport and Works Bureau
July 2003