Confirmed Minutes of the 80th Meeting of the Environmental Impact Assessment Subcommittee of the Advisory Council on the Environment held on 23 July 2003 at 4:00pm

Present:

Mr. Otto POON, BBS (Chairman)
Mr. LIN Chaan-ming
Dr. NG Cho-nam
Mrs. Mei NG, BBS
Prof. WONG Tze-wai
Miss Petula POON (Secretary)

Absent with Apology:

Prof. HO Kin-chung (Deputy Chairman)
Mr. Peter Y C LEE

In Attendance:

Mrs. Shirley LEE	Acting Assistant Director (Environmental Assessment & Noise), Environmental Protection Department (EPD)
Mr. C C LAY	Assistant Director (Conservation), Agriculture, Fisheries and Conservation Department (AFCD)
Mr. Eddie CHENG	Executive Officer (E), Environment, Transport and Works Bureau (ETWB)

In Attendance for Agenda Item 3:

Mr. Paul TANG	Deputy Secretary (Transport) 1, ETWB
Mr. Raymond HO	Principal Assistant Secretary (Transport) 7, ETWB
Mrs. Candy YEUNG	Assistant Secretary (Transport) 6C, ETWB
Mr. Patrick LAI	Senior Engineer (Transport Planning) 2, ETWB
Mr. P K CHAN	Chief Engineer/Railway (2), Highways Department (HyD)
Mr. C S CHUNG	Senior Engineer/Lok Ma Chau (1), HyD
Mr. K K LEE	Director, East Rail Extensions, Kowloon-Canton Railway Corporation (KCRC)
Mr. Richard KWAN	Environmental Manager, KCRC
Mr. Y K CHAN	Senior Nature Conservation Officer/North, AFCD

In Attendance for Agenda Item 4:

Mr. Lawrence CHUNG	Cable Car Manager, MTRC

Mr. Paul GRIGG	Senior Construction Engineer, MTRC
Miss Rowena CHAN	Assistant Environmental Engineer, MTRC
Dr. Anne WATKER-ZERIS	Director, Mott Connell Limited
Ms. Hannah JOHNSON	Engineer, Mott Connell Limited
Mr. Joshua MOORE	Ecologist, Mott Connell Limited

****

Action

Agenda Item 1: Confirmation of Minutes of the 79th Meeting held on 2 July 2003

The Chairman informed Members that the draft minutes of the last meeting would be circulated to Members for confirmation once ready.

Agenda Item 2: Matters Arising

2. The Chairman informed Members that there were no matters arising from the last meeting.

Agenda Item 3 : Public Transport Interchange at Lok Ma Chau Terminus of the Sheung Shui to Lok Ma Chau Spur Line
(ACE-EIA Paper 6/2003)

3. The Chairman welcomed the project proponent team to the meeting. He informed the project proponent that the discussion of the proposal should be regarded as informal and the Subcommittee would not draw any conclusion or make any recommendation on the matter. Mr. Paul Tang then started off the presentation and Mr. P K Chan briefed Members on the proposal.

Ecological impact and mitigation measures

4. A Member expressed dissatisfaction with the project, as the use of road-based transport to take commuters to the Lok Ma Chau Terminus was not environmentally friendly. He said that the concept of using viaduct at Lok Ma Chau area was to elevate human activities from ground level so as to minimize the impact of the railway on ecologically sensitive areas. The PTI which would be situated on the ground level would compromise such a design. In response, Mr. Paul Tang explained that the Spur Line would remain the key carrier of commuters to the Lok Ma Chau Terminus, and road-based transport would play a supplementary role only. They would try their best to maintain a balance between the concerns of the commuters, the railway, and road-based transport modes and, as requested by the Legislative Council Panel on Transport Subcommittee on Matters Relating to Railways, give commuters a choice.

Action

5. In reply to a Member's enquiry on the ecological value of the proposed fishpond enhancement area, Mr. Richard Kwan pointed out that the 3 ha of fishpond enhancement area would be integrated into the Lok Ma Chau wetland compensation area. Thus, the ecological value of the fishpond enhancement area should be assessed in conjunction with the Lok Ma Chau wetland compensation area rather than individually on its own. However, the management of the fishpond enhancement area had yet to be sorted out between the Government and KCRC. Another Member said that the management of the fishpond enhancement area and the wetland compensation area should be integrated. In reply to the Chairman's enquiry, Mr. K K Lee clarified that the 3 ha of fishpond had not been enhanced previously.

6. In response to a Member's enquiry, Mr. Richard Kwan explained that since only the northern section of the access road would be widened, mitigation measures would be provided for that part of the road only. Their consultants advised that according to the environmental review, the provision of low guide barriers and an underpass could direct wildlife from one side of the road to the other.

7. A Member said that while the mitigation measures for the loss of fishpond and reedbed were adequate, the provision of only one underpass was insufficient to address the impact of fragmentation caused by upgrading the emergency access road to a station access road. The traffic arising from the upgrading would sterilize a big strip of land and affect the movement of wildlife. In response, Mr. Richard Kwan admitted that fragmentation would be unavoidable if the road was upgraded, and the underpass could not completely restore the original environment. Having regard to the size of the area and the length of the access road, their ecological consultants considered that one underpass would be sufficient. The Member said that it would be difficult to assess whether one underpass was sufficient as he had no idea of the kinds of animals that would be using the underpass but he demanded that sufficient channels for crossing the road should be provided.

Future expansion of Lok Ma Chau Terminus

8. Noting that the PTI would take up the space reserved for the future expansion of the Lok Ma Chau Terminus, a Member asked whether the future expansion of Lok Ma Chau Terminus would be affected. In response, Mr. P K Chan clarified that the PTI would be built on ground level whereas the future expansion of the Lok Ma Chau Terminus would occupy the space above it.

Action

Wastewater treatment

9. In response to a Member's question, Mr. K K Lee confirmed that that the wastewater treatment facility was designed to handle the effluent discharged from the Terminus. Mr. Richard Kwan added that the wastewater treatment facility was subject to detail design. The additional effluent arising from vehicles runoff and the increased number of passengers would be taken care of during detail design of the project. Mr. P K Chan supplemented that the number of commuters would be limited by the maximum capacity of the Terminus and the wastewater treatment facility would be designed up to that level. According to the zero-discharge policy, the treated effluent from the terminus would be discharged through the reedbed to achieve final polishing. Water from nearby river would be pumped into the reedbed for treatment in order to offset the residual loading discharge from the terminus and the effluent eventually discharged would meet the zero-discharge policy. Furthermore, petrol interceptors would be installed to prevent vehicle runoff from discharging into the reedbed and nearby waters directly.

10. In reply to a Member's question on the loss of 0.35 ha of reedbed, Mr. Richard Kwan explained that according to previous calculations, 2.8 ha of reedbed would be required to provide polishing capability for the treated effluent. As there were altogether 5 ha of reedbed in the area, the area was larger than the minimum requirement. The Member requested the project team to provide more information on wastewater treatment facility and the eventual loading of the reedbed. Mr. K K Lee agreed to provide such information once available. KCRC

Traffic volume and air quality

11. A Member wondered how the environmental impacts of the proposal was assessed if the types of vehicles using the PTI, and the volume of traffic involved were unknown. She feared that with the increase in traffic volume and emissions from idling engines at the PTI, it would be difficult to meet the Air Quality Objectives. Another Member commented that if the PTI operated 24 hours a day, the impact on the environment would be severe. In response, Mr. Paul Tang said that whether the Terminus would be open 24 hours a day had yet to be discussed with the Shenzhen side. Only three types of vehicles would likely use the PTI, namely franchised buses, public light buses and taxi. The traffic volume of the road would be controlled as it would still be a restricted road and due to the small size of the PTI, the traffic volume would not be large. They had made certain assumptions on the traffic volume while assessing the environmental impacts, but he believed that the traffic volume would not reach the estimated level. Also, it was possible

that vehicles using the PTI would be required to use liquefied petroleum gas which would have less impact on the air quality.

12. In response to a Member's question, Mr. P K Chan said that although the Government had yet to decide on the type of vehicles that would use the PTI, KCRC had assessed the air quality impacts based on a worst-case scenario. The finding was that the Air Quality Objectives could still be complied with.

13. In reply to a Member's question on whether the PTI would be used by vehicles crossing the border, Mr. K K Lee confirmed that the road leading to the PTI would not be connected to the Shenzhen side and vehicles using the PTI could not cross the border. The Member said that since the traffic of the PTI would be limited, it was worth considering integrating the PTI into the Lok Ma Chau Terminus rather than letting it to occupy a new footprint. Mr. Paul Tang had reservation on the suggestion since it would delay the opening of the Spur Line, and the construction of an underground PTI had its own environmental impacts. For instance, an underground PTI would need a very sophisticated ventilation system.

14. Noting that phase 2 of the Lok Ma Chau Terminus would partly deck over the PTI, a Member asked whether that would affect the air quality, as the PTI would become indoor by then. In response, Mr. P K Chan explained that although the PTI would by then be partly covered, it would not become an enclosed compartment, as it would be opened on two sides with a headroom of about 10 metre.

15. In response to a Member's enquiry, Mr. P K Chan said that the widening of the access road would be entrusted to KCRC as one of the essential public infrastructure works items.

Financial viability

16. A Member commented that while heavy traffic volume would affect the environment, on the other hand, the proposal would not be financially justified if the traffic volume were too light. He therefore enquired about the estimated optimal traffic volume of the PTI in terms of environmental and financial viability. In reply, Mr. Paul Tang said that they would establish a traffic volume that would be environmentally acceptable with mitigation measures being taken. As the PTI would be a Government project, it would not be subject to a stringent financial viability test.

Ancillary facilities

Action

17. A Member remarked that since vehicles using the PTI would need ancillary facilities, the footprint of the PTI would likely turn out to be larger than estimated. In reply, Mr. Paul Tang pointed out from a policy perspective that in view of the environmental impacts, the chance of increasing the footprint of the PTI was very small.

Recycling and renewable energy

18. In response to a Member's suggestion of providing underground waste sorting/recycling facilities in the PTI and promoting the use of renewable energy, Mr. K K Lee said that the suggestions would be considered during the detail design stage.

Landscaping

19. In response to a Member's call for more assessment on landscape impacts, Mr. Richard Kwan said that the environmental review had assessed the initial feasibility of the proposed PTI. The landscape impacts would be dealt with at later stages of the project.

Conclusion

20. The Chairman thanked the presentation team and requested it to consider Members' views. He said that Members were in general disappointed with the provision of road-based transport to take commuters to the Lok Ma Chau Terminus, as it would compromise the objective as well as the design of the Spur Line. The Subcommittee would not mind if the project proponent would convey the message to the relevant Legislative Council Panels. A Member suggested and Mr. K K Lee agreed to consider arranging a site visit to the wetland compensation area in winter. KCRC

Agenda Item 5 : Tung Chung to Ngong Ping Cable Car – Ngong Ping Stream Diversion

21. The Chairman welcomed the project proponent team to the meeting. He informed the project proponent that Members would discuss the proposed stream diversion on an informal basis. Mr. Lawrence Chung started off the presentation with the background of the stream diversion and Dr. Anne Watker-Zeris briefed Members on further details of the proposal. Mr. Lawrence Chung also displayed to Members a map showing the layout of the theme village and the stream diversion.

22. In response to the Chairman's enquiry, Mr. Lawrence Chung clarified that the site of the Cable Car Terminus and the theme village was divided into three zones. Zone A was for commercial activities including

food outlets. Zone B1 was for commercial activities excluding food outlet. Zone B2 was basically a landscaping area and no commercial activities would be allowed. In reply to a Member's enquiry, Dr. Anne Watker-Zeris confirmed that the details presented at the meeting were included in the project profile submitted to EPD.

Retaining the stream

23. In response to the Chairman's question about the layout of the theme village before stream diversion was considered, Mr. Lawrence Chung said that the original concept was to retain the stream. However, it was found out during design development that if the stream were to be retained, it had to be widened and its ecological value would be lost. Furthermore, the widened stream would take up a large area leaving limited space for the theme village.

24. A Member asked whether efforts had been made to minimize the extent of the diversion and whether the straight-line alignment of the diverted stream was designed to reduce cost. The Chairman suggested reducing the extent of the diversion to minimize the impacts on the environment. Another Member informed the meeting that MTRC had previously briefed him on Drainage Services Department (DSD)'s requirements to widen the stream to withstand the 1-in-50 year rainfall event. Under the circumstances, he would support the stream diversion rather than keeping it in its original location since the latter would need to convert the stream into a concrete channel. Mr. Paul Grigg informed Members that the cost of diverting the stream would be higher than keeping it in its original location. Thus, the project proponent would avoid diversion as far as possible. If the stream were to be retained, it had to be widened and handrails had to be provided on both sides. As a result, it would take up a lot of space, making it very difficult to design the layout of the theme village.

Design of the diverted stream

25. In reply to the Chairman's enquiry on the design of the diverted stream, Mr. Lawrence Chung said that the stream would be constructed with gabion walls and base so that soil could be put there for plantation purpose and the stream would look natural.

26. In response to the Chairman's observation that the diverted stream was wider than the original stream, Mr. Lawrence Chung explained that the stream was subject to frequent flooding and the villagers were very concerned about that. The diverted stream, which would be 7m wide, was designed to withstand a 1-in-50 year rainfall event. Ms. Hannah

Johnson advised that due to the topography of the land, the diverted stream had to be 7m wide.

27. A Member queried the starting point of the diversion and asked whether DSD had accepted the design of the new stream. In response, Mr. Lawrence Chung explained that the diversion did not start from the project boundary because they wanted to minimize the affected area and avoid affecting the villagers. DSD had accepted the routing of diversion as well as the proposal of using gabion walls for the stream. In addition, MTRC had agreed to be responsible for maintaining the landscaped areas along the diverted stream while DSD would take up other maintenance responsibilities of the diverted stream.

28. In response to a Member's enquiry on the stream located at the southeastern part of the site, Mr. Lawrence Chung and Ms. Hannah Johnson clarified that it was a sloping drainage ditch which was very narrow and slightly eroded. The project proponent would increase its capacity and channelize it. In reply to the Chairman's enquiry, Ms. Hannah Johnson confirmed that the drainage ditch would be slightly realigned and the details could be found in the project profile.

Plantation and landscaping

29. In response to a Member's question on the plantation of the diverted stream, Mr. Paul Grigg explained that vegetation would be planted at the margin of the watercourse rather than in the watercourse. They had informally discussed the design with DSD and the department had agreed in principal that small plantations could be planted at the margin of the watercourse and boulders could be placed in the watercourse if simulation results indicated that the stream could still handle a 1-in-50 year rainfall event.

Construction impact

30. A Member wondered whether there would be a time when the new stream was not yet ready while the flow of the old stream had to be stopped. He also enquired about the construction phase impacts. In reply, Mr. Paul Grigg explained that since they would work upward from downstream, the old stream would not be affected. The stream diversion would take place during dry season and major construction works would not commence until stream diversion was completed.

31. In reply to the Chairman's enquiry, Mr. Paul Grigg said that the construction of the new stream would be completed in three months' time but they would need more time for the landscaping measures.

Ecological impact

32. In response to a Member's enquiry about the spotting of rare species and Romer's tree frogs in the affected stream, Mr. Lawrence Chung said that Romer's tree frogs had not been spotted in the affected area but some of them might be found further down stream, which was rather far away from the affected area. Dr. Anne Watker-Zeris confirmed that from surveys and investigations that were conducted, only the common brown tree frogs were found in the area. Other rare plants or trees had not been found. The Member pointed out that it was very difficult to locate Romer's tree frogs in the wrong seasons. He also asked whether any amphibian surveys had been conducted. In reply, Mr. Joshua Moore said that they had conducted ecological surveys earlier the year and another survey was conducted three weeks ago. In addition, they had made reference to ecological surveys conducted in connection with the Ngong Ping Sewage Treatment Works EIA and the baseline survey conducted for the Ngong Ping to Tung Chung Cable Car project. Dr. Anne Watker-Zeris supplemented that a lot of ecological surveys had been conducted for the Cable Car project and there were many seasons of baseline information for the area.

33. In reply to a Member's question on the enhancement of biodiversity, Dr. Anne Watker-Zeris said that with vegetations along the stream, the number of fauna and flora species in the area would increase and the landscape would also be enhanced. In her view, the most important objective was to retain the existing environment as far as possible and satisfy other necessary statutory requirements. The project profile contained more information on the long-term benefit of the project.

Theme village

34. A Member commented that the design of the theme village had been changing from time to time and it had now evolved into a project with several different themes rather than a single theme. In response, Mr. Lawrence Chung said that their aim was to develop the theme village as a low profile contemporary tourist attraction and there would not be any exciting theme park activity there. Another Member reminded Members that the design of the them village was outside the remit of the EIA Subcommittee.

35. In reply to the Chairman's query on the need for the theme village, Mr. Lawrence Chung said that the number of visitors going to Ngong Ping area had been decreasing and they needed to add some tourist attractions to make the Cable Car System financially viable. They would,

nevertheless, preserve the tranquility of the area, and the buildings would harmonize with the environment. They had obtained advice and assistance from the Po Lin Monastery in designing the Monastic Centre of the theme village.

Concerns of green groups

36. In response to a Member's question on whether MTRC was aware of the concerns of green groups and whether those concerns had been addressed, Dr. Anne Watker-Zeris said that they had been discussing with green groups for many months and fully understood their concerns which included-

(a) the reasons for the changes;
(b) whether it was possible to retain the stream as originally planned;
(c) whether sufficient ecological surveys had been conducted; and
(d) the detailed design of the stream such as the use of gabion walls and boulders in the stream.

The above concerns had been addressed and their views taken on board as far as possible.

Public transport interchange

37. A Member commented that the only solution for avoiding the stream diversion was to shift the theme village to one side of the stream. In his view, the area occupied by the PTI was an ideal site for the theme village. He considered that the demand for other modes of transport would decrease upon the commencement of the Cable Car system and there was no need for a large PTI. He also expressed concern about the visual impact of the PTI and feared that it would become an eyesore. Mr. Lawrence Chung agreed that the bare concrete of the PTI might not blend with the environment. He informed Members that in fact they had discussed with the Government for using part of the site of the PTI for building the theme village but without success. Finally, it was agreed that the PTI would be entrusted to them for improving the landscape. Another Member suggested putting the PTI underground. A Member pointed out that the construction of an underground PTI would involve a lot of engineering works and might have impacts of its own.

Recreational facilities

38. In response to a Member's suggestion of introducing other kinds of recreational facilities such as bicycle links, Mr. Lawrence Chung said that they would encourage visitors to make use of the trail created for

the project to enjoy the natural environment after visiting the theme village. Dr. Anne Watker-Zeris added that the trail was designed to enable visitors to move out of the theme village and took a stroll in the country parks.

Clean fuel

39. A Member suggested requiring vehicles making use of the PTI to use clean fuel such as fuel cells. Another Member pointed out that vehicles using fuel cells might have difficulty going uphill to Ngong Ping.

Conclusions

40. The Chairman thanked the presentation team for briefing Members on the proposed stream diversion. He said that while Members had given views, the project still had to go through the normal procedures under the EIA Ordinance. Mrs. Shirley Lee drew Members' attention that they could send their views on the project profile to DEP within 14 days.

(A copy of the project profile was distributed to each Member at this juncture.)

Agenda Item 5 : Monthly Updates of Applications under Environmental Impact Assessment Ordinance

41. Members noted the updates.

Agenda Item 6 : Any Other Business

Tentative items for discussion at the 81st meeting

42. The Chairman informed Members that according to the project proponent, the EIA report on "Outlying Island Sewerage Stage 1 Phase 2 Sok Kwu Wan Sewage Treatment Works and Submarine Outfall" would be submitted to the EIA Subcommittee for the meeting on 24 September 2003. The meeting scheduled for 19 August 2003 would be cancelled since some Members would be out of town and there was no urgent matter for discussion.

43. The Chairman pointed out that in the past few months, some projects that had been discussed at the Subcommittee had new developments that Members were not aware of or just heard about it in an informal way. He would raise that with the ACE Chairman in due course.

Agenda Item 7: Date of Next Meeting

Action

44 The next meeting was scheduled for 24 September 2003.

EIA Subcommittee Secretariat
July 2003