For discussion on 12 January 2012 TFHK/03/2012

Island Eastern Corridor Boardwalk-Cycleway Feasibility Study

PURPOSE

The purpose of this paper is to understand and promote the feasibility of incorporating the Harbourfront Cycleway into the Island Eastern Corridor Boardwalk proposed in the Hong Kong Island East Harbour-front Study.

BACKGROUND

2. The Hong Kong Island East Harbour-front Study (HKIEHS) placed especial emphasis on the need for "connectivity" and "accessibility to the harbourfront".

3. A key proposal of the HKIEHS was that the creation of a continuous accessible harbourfront area around North Point is best served by the erection of a 2-kilometre public boardwalk under the existing Island Eastern Corridor. The proposal offers movement only on foot, not by bicycle.

4. Reference is made to the presentation made by Hong Kong Cycling Alliance to the Harbourfront Commission, on 7 September 2011, proposing a Harbourfront Cycleway from Kennedy Town to Heng Fa Chuen. This paper addresses only the Island Eastern Corridor section of that cycleway.

Locality

5. It is further noted that, at present, the Fortress Hill-North Point area has extremely poor connectivity to the harbour because of the blocking effect of the IEC. The layout of the area also constrains the surface movement of people along essentially two roads, whether on foot, in a public or private motor vehicle or by bicycle. This exposes all cyclists to busy and fast traffic conditions that may deter some from passing through this area at all.

Boardwalk proposal

6. The boardwalk, as proposed in the HKIEHS, provides a public space for leisure through pedestrian access to the harbourfront. It thus meets the basic need to provide harbour access, but is less effective in satisfying Harbour Planning Guidelines objectives such as connectivity, as it is mainly attractive for leisure strolling. To someone who wants to get to a prized fishing spot, or to photograph a particular view, or meet a friend halfway, the 'walking' aspect may be considered an impediment. As such, the diversity and vibrancy of the boardwalk, in the currently proposed format, are likely to be diminished: if people who want come together to sing, chat, play mahjong etc are put off by the long walk, and choose to meet elsewhere, the two-kilometre stretch of walkway will be occupied mainly by strollers, giving it a one-dimensional feel.

The Harbourfront Cycleway from Kennedy Town to Heng Fa Chuen

7. The Harbourfront Cycleway is proposed to run from Kennedy Town to Heng Fa Chuen, and will benefit Hong Kong in several ways: primarily, it will provide connectivity and accessibility between harbourfront locations, enabling full and productive use of the waterfront and making possible the emergence of a distinct identity for the harbourfront; it will serve as a leisure facility for Hong Kong people to enjoy and which offers health, social, environmental and economic benefits; it will be a practical transport route on Hong Kong island, enabling safe, pollution-free individual movement between district centres, reducing demand on roads and public transport; and as a tourism draw it will enable overseas visitors to appreciate Hong Kong's most highly regarded asset, but which they can currently barely access – Victoria Harbour.

8. The HKIEHS Stage 2 Proposals recognise the "general public request for a continuous cycle track along the waterfront promenade".

The Harbourfront Cycleway on the IEC Boardwalk

9. The Harbour Planning Guidelines (HPGs), under 'Physical Linkage', state that:

"Sustainable transport modes should also be considered, where appropriate, to facilitate access of pedestrians to the harbourfront."

Cycling is probably the most sustainable transport of all, in its multiple benefits and minimal impacts, and likely the only practicable transport mode that could be applied along the boardwalk.

10. We consider the proposal for a boardwalk under the IEC to be an outstanding opportunity to more fully meet the requirements of the HPGs by incorporating a cycleway along its two-kilometre length, on the landward side. Explicit support for the inclusion of the cycleway as part of the boardwalk has come not only from thousands of members of the public but also from representatives across the political spectrum.

11. HPG Land Use Planning objectives encourage 'Vibrancy and diversity' and prioritise 'Recreation and leisure'. This section of the cycleway would meet those criteria and address all of the concerns with the existing pedestrian-only proposal outlined above:

- It will allow convenient movement along the length of the boardwalk, smoothing the loading to lessen clustering of people near inland access points. It will attract people wishing to undertake an activity at a particular point along its length, or just away from the crowds.
- It will be a worthwhile short cycle ride by itself.
- It provides a vital link in the Cycleway as a whole, bypassing the congested and unpleasant ride along King's Road / Java Road, as well as neatly bypassing the only substantial waterfront private property along the northern shore of the island.

12. The full 2-kilometre length of the boardwalk would be travelled in approximately seven minutes by bike, non-stop at a leisurely pace, or 30 minutes' continuous walking.

Engineering and implementation

A nine-metre wide IEC boardwalk

13. In the HKIEHS Stage 2 report, it is proposed that the boardwalk should run under the IEC and be 5 metres wide typically, mostly between the main pairs of support columns. After surveying at several locations, we find that the clear space between columns under the IEC is typically 9.7 metres.

14. The nine-metre width is sufficient to accommodate the entire boardwalk – the original pedestrian-only form, 5 metres wide, and the cycleway, at 4 metres wide.

15. Increasing the width of the boardwalk to 9.7 metres at a small comparative cost will ensure future design flexibility such that a cycleway could be implemented either at its inception or at a later stage.

16. Whilst it is possible for the boardwalk to occupy the clear physical width of 9.7 metres along most of its length, further investigation and clarification is required regarding the additional loading placed onto the existing IEC pile caps by the boardwalk together with its pedestrian and cycle users.

17. The Harbour Planning Guidelines require that:

"Public space for recreation and leisure uses should be created wherever possible."

and also that:

"A continuous promenade of adequate width should be provided along the entire harbour-front areas, as far as is practicable, to accommodate such leisure activities as strolling and jogging, pedestrian circulation, ... Cycle tracks should be encouraged where there is sufficient width."

18. The creation of a 5-metre boardwalk under the IEC, between support pillars that are generally almost twice that width apart, would seem to contradict this HPG by not utilising potential space that, by virtue of its location – under the shadow of the roadway, landward of the pedestrian boardwalk, bounded by the support pillars and utilising the concrete pile caps, would be unlikely to provide significant other benefit or opportunity, and just as completely complies with the important constraints under the Protection of the Harbour Ordinance.

19. A cost analysis has not yet been carried out for the increased width boardwalk, however it is reasonable to assume that it would be much less than the proportionate increase in width (5 metres to 9.7 metres).

20. Certainly it would be advantageous to build in the cycleway, or capacity for it, from the outset, rather than retrofitting it.

Design variations

21. Several road junctions and other locations will require some variation to the standard width boardwalk-cycleway. Most such instances can be satisfactorily addressed with reference to the HKIEHC proposals.

Tong Shui Road exit

22. The HKIEHS proposal envisages the boardwalk narrowing to a 3-metrewidth "swing-out" section around the slip road of the Tong Shui Road exit of the IEC. From our survey, the available fully supported width around this slip road could be approximately 6.5 metres, routing over pile caps outside of the IEC support columns. Using cantilever beams, it would be possible to increase to continue the full width boardwalk.

23. The widened boardwalk around the Tong Shui slip road will need to be addressed with regards to the Protection of the Harbour Ordnance in the same way that the pedestrian-only boardwalk proposal would have been.

Man Hong Street exit

24. At the Man Hong Street exit, the slip roads are higher than at Tong Shui Road, and the entire boardwalk can pass right underneath them.

Ferry Pier Intersections at North Point

25. At North Point Ferry Piers, the arrangement proposed in the HKIEHS could be followed, namely at-grade intersections, offering all boardwalk users access inland and to the ferry services. Cyclists would be required to dismount when crossing the major pedestrian thoroughfares to the ferries. A similar arrangement would be applicable at North Point DG Vehicular Ferry Pier.

Western end of boardwalk

26. The proposed western start of the boardwalk is at Oil Street, on the reclamation adjacent to the rising Central–Wanchai Bypass. We suggest that, to provide connectivity – for all boardwalk users – with the new public areas of the Wanchai Development Phase II, consideration be given to beginning the

cycleway/boardwalk under the IES near its start at Causeway Bay Typhoon Shelter, adjacent to Victoria Park Road. It would then skirt around the rising Central–Wanchai Bypass, on the reclaimed land.

27. This arrangement would avoid the difficulties associated with the cycleway and pedestrian connective routes continuing north-eastward on land and turning under the IEC at Hing Fat Street, Watson Road or Oil Street. Routing through this densely occupied area of Causeway Bay / Tin Hau would be undesirable for both the cycleway, due to possible limited street capacity, and pedestrians, who would lose contact with the waterfront while they followed inland streets.

28. It might be necessary to enable access by small marine vessels to the small section of Causeway Bay Typhoon Shelter east of this section of the IEC, adjacent to Tung Lo Wan Fire Station. HKIEHS suggests the use of bascule bridges for such access, and this may be appropriate here.

Other links inland

29. The HKIEHS proposes connectivity with the hinterland at Tong Shui Road and North Point Ferry Piers, as well as the start of Hoi Yu Street, all of which are intersections with existing piers, or on land. It might be beneficial to include linkages at City Garden and/or Provident Centre, for cycle and pedestrian access by residents of those developments.

FURTHER ACTION

30. We request that this Taskforce support the undertaking of detailed loading calculations and a cost comparison for the boardwalk, then to be made publicly available, if possible.

31. We request that this Taskforce support the inclusion in the next stage of design the widening of the boardwalk to approximately 9.7 metres with a view to including the cycleway on the landward side.

32. We request the advice of the Taskforce on how to integrate planning of the western start of the boardwalk proposed herein and the boardwalk as whole, which are in separate planning zones.

33. Members are invited to express any further views on the above proposals.

Hong Kong Cycling Alliance January 2012