

**Summary of issues discussed by the Environmental Impact Assessment
Subcommittee at the meeting on 24 October 2016**

The Environmental Impact Assessment Subcommittee (EIASC) discussed the following two EIA reports at the meeting on 24 October 2016

- (i) EIA report on “Hung Shui Kiu New Development Area”; and
- (ii) EIA report on “Kai Tak Multi-purpose Sports Complex”.

The major issues discussed are summarized in the following paragraphs -

(i) EIA report on “Hung Shui Kiu New Development Area”

Air pollution impact

2. A Member was of the view that the Government should explore the feasibility of providing other land with low rent for industries and other specified uses. With reference to the calculation of industrial and port backup emissions which had included and assumed uncontrolled emissions from concrete batching plants, he sought clarification from the Project Proponent about the current location and the future arrangement for the plant.

3. The Project Proponent explained that it was considered necessary to include different types of land use within the HSK NDA. He advised that after careful planning, the industrial zone and the special industry area assigned to the northern and western parts of the project area were separated from the residential area. New roads would be provided to connect the industrial area to the Kong Sham Western Highway and thereby reduce the movement of heavy goods vehicles through the residential areas.

Noise impacts

4. Considering that villages and the residential areas were sensitive receivers of air and noise, a Member suggested that on top of the use of low noise road surfacing and noise barriers, measures proactively addressing the noise source should be considered, such as restricting the heavy goods vehicles from using the district distributor roads D2, D4 and D5, particularly during

night time. Considering that the stage 3 developments surrounded the existing villages at the centre of the HSK NDA, he asked whether there would be any noise mitigation measures other than using quiet powered mechanical equipment (PME) during construction. He suggested the Project Proponent to consider maximizing the use of the precasting construction method.

5. The Project Proponent explained that heavy goods vehicles could make use of the Kong Sham Western Highway and the new primary distributor road P1. The ratio of heavy goods vehicles on roads D2, D4 and D5 were estimated at 1%, 2% and 4% respectively and would have low impact on the air quality and noise contribution of less than 1 decibel.

6. A Member was concerned that there would be residential sites and villages to the east and the west of road D2 respectively, the extensive use of low noise road surfacing and noise barriers might not be cost-effective. He strongly suggested the Project Proponent to consider restricting heavy goods vehicles from using road D2 during night time. The Project Proponent explained that as the existing Tin Ying Road would be removed which would increase the connectivity between Hung Shui Kiu (HSK) and TSW, sufficient replacement roads had to be provided in order to meet the traffic needs. Road D2, which was in fact the existing Ping Ha Road with existing users including heavy goods vehicles, was one of the main routes for replacing Tin Ying Road.

7. A Member suggested the Project Proponent to select trees species with dense branches reaching towards the ground level for tree planting along the roadside and central dividers. The Project Proponent advised that the tree species would be further explored during the detailed design stage.

Land contamination problems

8. The Project Proponent explained that various approaches had been undertaken to identify any potentially contaminated areas, including site surveys, helicopter reconnaissance and review of historical aerial photos. According to the site surveys, helicopter reconnaissance and desktop review, a severe land contamination problem was not expected. A Member reminded that contaminated soil must not be used or re-used for planting even after treatment.

Environmental sustainability issues

9. The Project Proponent explained that the district cooling system (DCS) provided centralized air conditioning by supplying chilled water to commercial buildings, government facilities and hospitals. The DCS could help save energy, reduce greenhouse gas emissions and free up roof space for other uses. As the DCS would involve the use of heat exchangers and pump house, detailed study should be conducted to ascertain whether the adoption of DCS would be more energy-efficient.

10. The Project Proponent explained that a series of feasibility studies on the adoption of the proposed green initiatives were planned to be conducted after completion of the HSK NDA Planning and Engineering Study. Members' suggestion for setting environmental targets for the design and construction of buildings would also be considered at that time.

Protection of the egrettry

11. A Member suggested that the Project Proponent should consider including features such as screening in the design of the riverside promenade to minimize the disturbances by human activities to the *ardeids* and other wildlife. The Project Proponent explained that as the majority of *ardeids* were recorded to have a northeastward flight path towards the foraging grounds at the TSW Main Channel and associated watercourses, the proposed developments that were spaced over 100 metres to the south of the egrettry were expected to have a low impact on the *ardeids*, especially when mitigation measures were deployed. Regarding the design of the riverside promenade, she advised that tree planting might be considered to provide screening and thereby reduce disturbance to *ardeids* and other wildlife.

12. A Member suggested making reference to the fishponds in the Deep Bay area and considering establishing small-scale intensively-managed fishponds in the vicinity of the egrettry to provide a stable food source for *ardeids* during the construction stage. The Project Proponent said that the *ardeid* flight path to the foraging grounds at the TSW Main Channel and associated watercourses were unobstructed and therefore it was considered unnecessary to provide additional food source to the *ardeids*.

Management of the open spaces and green belts

13. A Member suggested that green belts areas should be converted into local open spaces under the management of the Leisure and Cultural Services Department (LCSD). The Project Proponent explained that a review of green belts had been conducted during the revision of the Recommended Outline Development Plan, which included the conversion of some of the green belt areas into local open space, including a vegetated knoll at Tung Tau Tsuen.

Conservation of heritage

14. The Project Proponent explained that taking into account the public's aspiration, community farming area and farmers' market were proposed with the aim of promoting well-being and a healthy living style. While detailed implementation arrangements would be subject to further liaison with the relevant departments, she said that it was a planning intention to adopt a more innovative design to allow future residents in HSK NDA and nearby areas to engage in community farming.

15. A Member suggested that the heritage trail could help to promote heritage conservation and education, to strengthen ecological connectivity to the retention lake, and to enhance harmony between urban and rural areas.

Enhancing connectivity within the HSK NDA

16. The Project Proponent confirmed that the Green Transit Corridor (GTC) comprising of the pedestrian walkway, cycle tracks and EFTS would link the HSK Station to the residential areas. As the major part of the TSW Station was located outside the project area, the GTC would extend to connect to one end of the TSW Station. While confirming that enhancing the walkability between the residential areas and the HSK and TSW Stations was one of the planning intentions of the project, the Project Proponent said that the provision of covered walkway would be subject to further review and consultation with the Transport Department and in accordance with to the relevant guidelines during the detailed design stage.

Recommendations

17. Members agreed that a condition should be included to require the Project Proponent to reserve adequate power supply and land for the establishment of electric vehicle charging infrastructure.
18. Members agreed to strongly recommend the Project Proponent to consider restricting the use of roads D2, D4 and D5 by heavy goods vehicles, especially during night time to reduce the traffic noise impact on nearby residential areas.
19. The Project Proponent should endeavour to provide more information, including land uses and land surfaces with greater potential to cause land contamination. In order to comply with EPD's standards and requirements for handling land contamination issues, they would be required to conduct an initial evaluation followed by site investigation and thorough decontamination works for the project area.
20. Members supported to recommend the Project Proponent to consider using appropriate tree species that could provide better noise screening effect and facilitate the trapping of particulates, especially for road-side planting.
21. Members supported that a recommendation should be included to request the Project Proponent to devise a detailed landscape and planting plan for the HSK NDA, including setting up of a local stocking nursery, and to consult ACE on the plan.
22. Members agreed to recommend the Project Proponent to keep monitoring and managing the San Sang San Tsuen egrettry from now on, including the removal of *Mikania micrantha*, until completion of the project.
23. Members supported to strongly recommend the Project Proponent to explore additional functions of the heritage trail to promote heritage conservation and education, strengthen ecological connectivity to the retention lake, and enhance harmony between urban and rural areas.

24. Members supported to include a condition regarding the provision of an all-weather pedestrian walkway of appropriate walking distance between the residential area at the eastern part of the project area and the TSW Station.

25. As the DPs under Schedule 2 would have be required to undertake standalone EIAs and would require an EP for their construction and operation, Members agreed to allow more flexibility at this stage by using more generic terms in the conditions and recommendations.

26. Members agreed to recommend the Project Proponent to exercise better management and control over the proposed Refuse Collection Points to minimize odour nuisance.

27. Members agreed to recommend the Project Proponent to set environmental targets for the HSK NDA for achieving environmental sustainability. Members were of the view that the Project Proponent should set a more stringent target, for instance, achieving the “Platinum” rating under the BEAM Plus for New Buildings.

28. A Member proposed to conduct a detailed study to ascertain whether the proposed District Cooling System could bring about environmental benefits in terms of energy efficiency before taking forward the proposed green initiative.

(ii) EIA report on “Kai Tak Multi-purpose Sports Complex”

Landscape and tree planting

29. The Project Proponent explained that the soil specifications they adopted would meet higher standards than the General Specification adopted by the Architectural Services Department (ArchSD). They were adopting particular specification to enhance the performance of the product.

30. A Member asked the Project Proponent to confirm whether urban ecology would be considered as a planting strategy.

Turf grass management

31. The Project Proponent explained that the design of the retractable roof was not transparent but remained open most of the time, except for certain events in order to reduce noise impact. She explained that shadow analysis in different seasons had been conducted and reference of the top quality turfs in sport stadiums would be made drawn from other countries.

32. The Project Proponent confirmed that the EIA was conducted based on the assumption that turf grass would be established on site. They had not selected any grass species for turf establishment because there was a wide variety of turf grass that might be suitable to be grown in the local environment of Hong Kong. As such, trials would be conducted to assess the shade tolerance of different species of turf grass and their performance under circumstances of reduced air circulation.

Air quality and ventilation

33. To improve outdoor air quality for the health benefits of the venue users, especially the athletes given that many activities would be conducted outdoor, a Member suggested that measures such as tree planting for the purpose of screening dust and particulates could be adopted. The Project Proponent could control the air quality within the site by promoting the use of electric vehicles. He added that land should be reserved for the establishment of electric vehicle charging infrastructure in order to facilitate the users to travel into and around the site by electric private cars, buses and coaches.

34. The Project Proponent explained that they would explore ways to develop a sustainability strategy. Besides, the design in relation to building disposition with the aim to facilitating the provision of air ventilation and breezeway would be adopted.

Sustainability and management of carbon footprint

35. A Member considered it important to set a target for the long-term management of carbon footprint, including, but not limited to the architectural and structural design of the buildings.

36. The Project Proponent explained that a comprehensive study on sustainability was conducted which recommended the installation of natural lighting system in the buildings. Their target was to achieve the BEAM Plus (New Buildings) “Gold” rating in the aspects of water and energy conservation for all buildings of the project. Additionally, Life Cycle Costing had been conducted with a view to better manage the carbon footprint.

Visual impact

37. The Project Proponent explained that studies had been conducted to determine the appropriate scale, layout and height for the Main Stadium, which involved benchmarking against similar international stadia. Having considered the scale, layout and environmental impacts of the project, the proposed height of the Main Stadium in Kai Tak was 59 metres which was within the height restriction.

38. The Project Proponent explained that the project had provided connectivity to the Metro Park, and the landscape decks of the stadium were connected to the recreational waterfront and tied in to the waterfront promenade as well as Sung Wong Toi Park at the West of the site.

Recommendations

39. Members agreed that a condition would be imposed on the Project Proponent to devise detailed planting and landscape design plan in order to apply the concept of urban ecology and ecological connectivity. The plan should be provided to the ACE for comments prior to submission to the DEP for approval before commencement of construction works.

40. Members agreed to require the Project Proponent to devise a grass management plan for the public open space, the Main Stadium and the Public Sports Ground with a view to identifying and justifying the choices of grass species that would be planted, taking into account the shadow effect of the retractable roof on grass growth inside the Main Stadium, exploring the efficient use of water resources and minimizing the escape of residual fertilizers and pesticides into surface runoff. The plan should be provided to the ACE for comments prior to submission to the DEP for approval before commencement of construction works.

41. Members agreed that a condition would be imposed in which the Project Proponent had to ensure adequate power supply and provision of space for the establishment of electric vehicle charging infrastructure to facilitate the use of electric vehicles including, but not limited to, private cars, coaches and buses.

42. Members agreed to recommend the Project Proponent to continuously engage stakeholders prior to the setting up of CLGs before construction of the project.

43. The Project Proponent was required to implement the best practicable means (BPM) including, but not limited to, large scale planting, use of de-NOx paints and devices to actively filter air pollutants, so as to enhance the best air quality for the venue users, in particular athletes. The plan should be submitted to the DEP for approval before commencement of construction works.

44. Members agreed to recommend the Project Proponent to explore the use of quiet piling methods and avoid percussive piling for the construction of the project as far as practicable.

45. Members agreed that the Project Proponent should be recommended to set target for the life cycle carbon footprint of the project. Integrated design approach and renewable energy should be adopted to manage the life cycle carbon footprint of the project.

46. Members suggested that the Project Proponent should explore ways to minimize construction and demolition waste generated from the construction of the project, including the use of Building Information Modeling (BIM).

47. A Member suggested that the proposed architectural design and the materials used for construction of the Main Stadium should be reviewed with a view to harmonizing with the surrounding landscape.

Conclusions

48. The EIA Subcommittee deliberated the captioned EIA reports and recommended the full Council to endorse the EIA reports with conditions and recommendations.

**EIA Subcommittee Secretariat
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