

**Environmental Impact Assessment Ordinance (Cap. 499)
Environmental Impact Assessment Report**

**Feasibility Study for Housing Development at
Whitehead & Lee On in Ma On Shan, Sha Tin**

Purpose

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) Report for the Feasibility Study for Housing Development at Whitehead & Lee On in Ma On Shan, Sha Tin, submitted under Section 6(2) of the Environmental Impact Assessment Ordinance (EIAO). The Territory Development Department (TDD) and their consultants will make a presentation.

Advice Sought

2. Members' views are sought on the findings and recommendations of the EIA report. The Director of Environmental Protection will take into account the comments from the ACE and the public when he makes his decision on the approval of the EIA report under the EIAO.

Need for the Project

3. The Study is to formulate a feasible option for the proposed housing and recreational development in the formed lands located in (i) the Whitehead Peninsula (i.e. the former Whitehead Detention Centre), (ii) the proposed Ma On Shan (MOS) Rail Wu Kai Sha Station (WKSS) site, and also (iii) the private land (Lok Wo Sha) in between. The study area is about 60 ha, and the preferred development option (Figure 1) identified in the Study will produce about 6,800 residential units (for an estimated population of about 17,400) and about 11 ha of recreational facilities, together with the supporting infrastructures (including a district distributor, Road D1).

Description of the Project

4. The Study is a Designated Project (DP) under Item 1, Schedule 3 of the Environmental Impact Assessment Ordinance (EIAO), i.e. *engineering*

feasibility study of urban development projects with a study area covering more than 20 ha or involving a total population of more than 100 000. The proposed Road D1 is identified as a district distributor, and is therefore a DP under Item A.1, Schedule 2 of the EIAO. Completion of the overall development is tentatively scheduled for 2008.

5. The preferred development option identified in the Study is shown in the attached Figure 1 (i.e. the Master Layout Plan (MLP) extracted from the EIA report). The proposed development projects mainly include:

- ♦ WKSS site (Plot ratio = 5.0, building height = 40-48 storeys)
- ♦ Lok Wo Sha site (Plot ratio = 3.0, building height = 10-32 storeys)
- ♦ Whitehead headland (Plot ratio = 0.8, building height = 3-7 storeys)
- ♦ about 11 ha of recreational facilities such as water recreation centre, visitor/heritage/ecological centers, themed dining and botanical garden
- ♦ the district distributor (i.e. Roads D1(E), D1(N), & D1(W), collectively called as Road D1).

Specific Environmental Aspects to Highlight

Ecology

6. The EIA identified that the Starfish Bay is of conservation importance as it is one the few large size sand flats in Hong Kong. To avoid any potential impact on the Starfish Bay, the EIA recommended to preserve the waterfront area and plantation area along the Bay and these areas are also proposed to be zoned as “Conservation Area” under the Ma On Shan Outline Zoning Plan (MOS OZP). Furthermore, to minimize the discharge of stormwater runoff arising from the new development in Lok Wo Sha and Whitehead headland into the Bay, the new drainage network will be diverted to the northern and western shores of the Whitehead peninsula where the stronger water current in Tolo Harbour could dilute and assimilate any pollutants more effectively.

7. The EIA also concluded that the terrestrial habitats found within the study area are disturbed and surrounded by developed/urbanized areas, and therefore post little ecological constraint to the proposed development. However, the secondary woodlands on site are of moderate ecological values and constitute a moderate constraint to the development. Most species of surveyed terrestrial fauna in the study area are mainly inhabitants of disturbed areas. Bird species of conservation importance are all found in the headland plantations or secondary woodlands. To minimize the loss in secondary woodland and headland plantations, the EIA recommended to preserve about 1.98 ha of secondary woodland (in 4 patches) and 7.05 ha of plantation areas (including the eastern and western sides of the headland areas). The eastern and western sides of the headland plantation areas are also proposed to be zoned as

“Conservation Area” under the MOS OZP. To fully compensate for the potential loss in 0.48 ha of secondary woodland and 8.19 ha of plantation areas, about 2.94 ha of woodland extension/compensation and 5.73 ha of landscape planting are recommended in the EIA study.

Noise

8. With the road layout and building design/layout arrangement as proposed in the EIA report, all the planned noise sensitive uses located within Lok Wo Sha and Whitehead peninsula will comply with the relevant noise standards stipulated in the Technical Memorandum (TM) on EIA Process. Therefore, noise barriers will not be required for the proposed road D1.

9. For the Kowloon-Canton Railway Corporation (KCRC)’s WKSS site, it has already been stipulated in the current MOS OZP and the relevant land use plan for residential development purpose. As the site is sandwiched by the Sai Sha Road and the Trunk Road T7, it will be exposed to traffic noise impacts from these heavily trafficked roads. Although different development layouts have been tested, it is expected that about 3% (69 units) of the overall residential units will still be exposed to traffic noise impact of about 71 – 72 dB(A). To mitigate the impact, different types of direct mitigation measures (Table 3.6.5 of the EIA report) in accordance with the TM on EIA process have been considered and evaluated. The EIA concluded that all the direct mitigation measures have been exhausted and found to be not practicable. As a last resort, indirect mitigation measures in the form of window insulation and air conditioning will be provided to abate the residual noise impact. The EIA proposed this requirement will be dealt with by the developer through the land grant and lease conditions.

10. The potential train noise impact arising from the MOS rail on the WKSS site would be fully mitigated by a section of semi-enclosure or central plenum along the rail viaduct. The scope and extent of these mitigation measures will be further reviewed in the detailed design stage upon finalisation of the housing layout. Rail noise is also controllable under the Noise Control Ordinance.

Visual Impact

11. The existing view of Tolo Harbour currently enjoyed by residents in one of the nearby private housing development (i.e. Monte Vista) will be obstructed by the proposed WKSS development. Although the plot ratio of WKSS development has already been decreased from 8.0 to 5.0 and one of its residential block located close to Monte Vista has also been deleted to increase horizontal separation between the 2 developments, there will still be substantial visual impact on Monte Vista due to the proximity and massing of the WKSS

development.

12. The overall visual impact of the Project will be reduced by architectural treatment of buildings, applying visual corridor, and using gradation concepts with development intensities decreasing from south to north. With these mitigation measures in place, it is concluded that the overall visual impact arising from the Project as a whole is “acceptable with mitigation measures”.

Cultural Heritage

13. Site surveys conducted during the EIA study stage have identified the To Tau Tsuen area and part of the Lok Wo Sha area as potential archaeological sites. For any future development (including Road D1) falling within the identified areas, further archaeological investigations should be carried out. Built heritages in the To Tau Tsuen and the Wu Kai Sha Village will also be preserved in-situ.

Air Quality

14. The EIA has considered the cumulative operational impacts due to traffic emissions from the adjacent road networks and stack emissions from the Tai Po Industrial Estate. The predicted cumulative impact at the nearby air sensitive uses are generally only within 50% of the relevant criteria stipulated in the TM on EIA Process, while the worst case is predicted to be about 60%.

Environmental Monitoring and Audit (EM&A)

15. An EM&A programme has been proposed in the EM&A Manual submitted together with the EIA report.

Comments received so far from the Public during the Public Inspection Period

16. The TDD has made the EIA report, EM&A Manual and Executive Summary available for public comment under the EIAO on 31 October 2002. Members will be briefed about any comments received from the public at the meeting.

November 2002
Environmental Protection Department