Feasibility Study for Housing Development at Whitehead & Lee On in Ma On Shan, Sha Tin Environmental Impact Assessment Study Project Profile

A. Basic Information

A.1 Project Title

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

A.2 Purpose and Nature of Project

The Territorial Development Strategy Review pointed out that the housing supply capacity of the currently approved town plans and development programmes would be insufficient to meet the estimated housing demand generated from the projected territorial population of up to 8.1 million in 2011.

It was also estimated that a shortfall of both public and private housing would occur between 2001/02 and 2004/05 due to the long development lead-time and that an overall long term production target of 85,000 housing units per year should be established. In response to the estimated shortfall in housing supply, potential sites in the Sha Tin area have been identified by Government to have the potential to boost the production of housing units. The Whitehead & Lee On sites are included.

The project is an engineering feasibility study to confirm that the Whitehead & Lee On sites would be suitable for housing development to accommodate a total no of 14,400 flats for a maximum population of 41,000. The study will assess and ensure that no adverse impacts would result and mitigation measures would be proposed to reduce such impacts to within acceptable standards if required.

A.3 Name of Project Proponent

NT East Development Office, Territory Development Department

A.4 Location and Scale of Project and History of Site

The study area is about 60 hectares. It covers the peninsula between Wu Kai Sha and the Starfish Bay on the northern coast of Ma On Shan. The Starfish

Bay to the east of the Study Area is a site of special scientific interest (SSSI). A site location pan (Drawing No. STZ0006) is attached in Appendix A.

The Whitehead site was previously used as a Vietnamese Detention Camp. The camp site is now vacant. It is zoned "U" on the Ma On Shan Outline Zoning Plan No. S/MOS/5.

A.5 Number and Types of Designated Projects to be Covered

The project covered in the Project Profile is a Designated Project under section 1 of Schedule 3 of the EIAO:-

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.

A.6 Name and Telephone Number of Contact Persons

B. Outline of Planning and Implementation Programme

B.1 Feasibility Study

It is intended to invite consultancy and to start the study in June 1999. The study would last for six months and the study findings will be submitted to CPLD in December 1999.

B.2 Housing Development at Whitehead & Lee On

Subject to endorsement of CPLD on the development proposal, the same consultant would complete the PPFS for site formation and infrastructure before May 2000 for inclusion in the 2000 RAE. Detailed design for infrastructure would start in December 2000 for construction to commence in early 2002. As regards to the building works, the Whitehead site would be sold to developers in 2003 and population intake would take place in around 2007. The necessary infrastructure would be completed in 2005 before in-take of population.

C. Possible Impacts on the Environment

The study would examine the following impacts on the environment from the housing development:-

- C.1 Ecological impact on the existing woodland and shrubland covering an approximate area of 8 ha.
- C.2 Water quality impact around the Whitehead area including Lok Wo Sha Beach, the Starfish Bay and the Nai Chung Coast.
- C.3 The natural coast line around the site will not be affected by the proposed development. During construction, activities on the site could result in excessive noise and other short-term adverse impacts on air quality and water quality. The study would assess and recommend appropriate control measures to be taken to prevent such adverse impacts. It is important to ensure that sediments would not be resulted in the Starfish Bay so as to affect the bay ecology, and untreated site runoff should be prevented from entering the bay.
- C.4 The future housing development could be subject to railway noise arising from the Ma On Shan Rail. Mitigation measures would be proposed from the railway project to reduce the noise impact to acceptable levels and they would not be examined under this study.
- C.5 The future housing development could be subject to the noise and vehicular emission from the adjacent highway network. Mitigation measure would be proposed under the study if necessary.
- C.6 The visual impact of the development proposal on the surrounding environment.
- C.7 The Sai O archaeological site is located some 800 m away from the site. Restrictions would be proposed to limit the use of heavy construction and excavation plant in close vicinity of the archaeological site.
- C.8 The impact on the sewerage infrastructure. The Ma On Shan Sewage Pumping Station in Area 108 is situated at the north-eastern end of Lee On Estate. It is connected to the Sha Tin Ma On Shan Sewage Treatment Works by a rising main. The additional loading on the pumping station and rising main and the need for upgrading or additional provision of sewers would need to be examined.

D. Major Elements of the Surrounding Environment

D.1 During the construction stage of the infrastructural and building works of the housing development, the existing and planned sensitive receivers which might be affected include:-

- To Tau
- Lok Wo Sha and Wu Kwai Sha New Village
- Lee On Estate
- Proposed residential development at Lee On Station
- The YMCA Youth Camp at Wu Kwai Sha
- Li Po Chun United World College
- Symphony Bay residential development
- Cheung Muk Tau Village
- Residential development (STTL446) in Area 108
- D.2 During the construction stage and the future occupation of the housing development, the sensitive parts of the natural environment which might be affected include:-
 - The headlands to the east and west of the Whitehead Peninsula are zoned as CCA (Preserved Headland). They are covered with natural woodland and shrub-woodland. These headlands are areas of high ecological value.
 - The areas zoned as OU (Water Sports Centre) on the west side of the site and OU (Beach and Beach Hinterland) on the east. These areas are earmarked for recreational activities.
 - The adjacent waterbodies of Tolo Harbour and Starfish Bay which are of ecological importance due to marine biota of interest and high sensitivity to pollution.
- D.3 Major elements of the surrounding environment which might affect the housing development:-
 - The proposed Trunk Road T7 and the proposed widening of Sai Sha Road which are scheduled for completion in 2003.
 - The proposed Ma On Shan Railway.
 - The site is outside 1 km consultation zone of Water Treatment Works at Kwun Hang.
 - The future Lee On Railway Station at the "OU" site to the south of Whitehead.

E. Environmental Protection Measures to be Incorporated in the Design and Any Further Environmental Implications

E.1 Measures to minimize environmental impacts:

- (i) During construction stage of the project, all control measures applicable to construction works.
- (ii) To preserve the headlands to the east and west sides of the Whitehead peninsula as extensive as practicable.
- (iii) To provide buffer zone with proper landscaping for the area adjacent to Sai Sha Road so as to minimize noise and vehicular emission impacts from the road.
- (iv) To provide measures to further reduce the noise impact on the residents including necessary installation and modification to the building design.

E.2 Possible severity, distribution and duration of environmental effects:

- (i) During construction, site activities could result short-term adverse impact on air quality, water quality and noise on the adjacent sensitive receivers and natural environment.
- (ii) the permanent environmental effects should be reduced to acceptable standards.

E.3 Further implications:

- (i) Similar large scale housing developments at Sai Sha & Shap Sz Heung (to the east of the subject site) have been proposed by a private developer.
- (ii) No public consultation regarding the proposed housing development has been conducted to date.
- (iii) It is envisaged that the adjacent villagers would be concerned of the possible high rise and high density housing development and its impacts. Sha Tin District Board members would wish to retain the area for recreational use.
- (iv) Both RSD and Hong Kong Tourist Association have expressed interest in developing the Whitehead site for recreational use. RSD has considered the western coast to be suitable for converting to beaches for public entertainment. There is no such beach in the NENT available to the public.

F. Use of Previously Approved EIA Report

- F.1 Trunk Road T7 in Ma On Shan EIA Study, Final Assessment Report, Environmental Monitoring and Audit Manual, (EIAO ref. EIA 137/BC).
- F.2 The following may be used as reference:

The Railway Development Study Phase II (Part1), Feasibility Study from Tai Wai to MOS and KCR Extension to Tsimshatsui, December 1997.

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