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ACE-EIA Paper 1/2015 For advice on 18 May 2015

Environmental Impact Assessment Ordinance (Cap. 499) Environmental Impact Assessment Report Comprehensive Development and Wetland Protection near Yau Mei San Tsuen

PURPOSE

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) report for the proposed "Comprehensive Development and Wetland Protection near Yau Mei San Tsuen" (hereafter known as "the Project") submitted under Section 6(2) of the Environmental Impact Assessment Ordinance (EIAO) (Application No. EIA-227/2015). Asia King Development Limited (hereafter known as "the Applicant") and their consultants will present the EIA report at the meeting of EIA Subcommittee. The Project constitutes a designated project under Item P.1, Part I, Schedule 2 of the EIAO i.e. "A residential or recreational development, other than New Territories exempted houses within Deep Bay Buffer Zone 1 or 2".

ADVICE SOUGHT

2. Members' views are sought on the findings and recommendations of the EIA report.

NEED FOR THE PROJECT

3. The Project site is near to Yau Mei San Tsuen in Mai Po, Yuen Long, and is zoned "Other Specified Uses (Comprehensive Development and Wetland Protection

Area)" [OU(CDWPA)] [1] on the approved Mai Po and Fairview Park Outline Zoning Plan (OZP) No. S/YL-MP/6. The Project is to provide a residential development of 70 houses and a "Wetland Restoration Area" (WRA) in line with the planning intention.

ENVIRONMENTAL BENEFITS

- 4. The EIA report states that the key environmental benefits of the Project include:
 - (i) Increase in area of wetland within the site from 3.0ha to 3.8ha through the proposed WRA;
 - (ii) Enhancement of ecological function of the site through proper design and active management of the proposed WRA, which will be located next to other wetland habitats outside the Project site, thus contributing to the maintenance and enhancement of wildlife value and microhabitat diversity of the Deep Bay wetland system; and,
 - (iii) Enhancement of landscape quality through provision of the WRA, planting of new trees throughout the development and buffer planting around the residential development.

DESCRIPTION OF THE PROJECT

5. The Project is to provide a residential development and a WRA at a site which is about 8.1ha in size and falls within the Deep Bay Buffer Zone 2 [2]. The site surroundings are largely urbanized with existing residential developments including Fairview Park in the west and Palm Springs / Royal Palms in the north. Yau Pok Road runs along the southern boundary of the site (see **Figure 1**).

6. Under the Project, the residential development part (4.3ha, 53% of total site

The planning intention of "OU(CDWPA)" zone as stated in the Notes of the OZP is to "allow the consideration of comprehensive low-density residential development or redevelopment provided that all the existing continuous and contiguous fish ponds within the zone are protected and conserved".

² The boundaries of Deep Bay Buffer Zone 1 and 2 are stipulated in Town Planning Board Guidelines No. 12A. The planning intention of Deep Bay Buffer Zone 2 is "primarily to give added protection for the conservation of Mai Po Nature Reserve and Inner Deep Bay and to enhance the visual appearance and landscape features within the Buffer Zone 2 area."

area) will mainly provide 70 houses (3-storey) and a club house. They will be confined to the agricultural land in the southern part of the site (see **Figure 2**). For the WRA part (3.8ha, 47% of total site area), it will be formed by improving the degraded fish ponds, marsh, seasonally wet grassland in the northern part of the site, reedbed in the eastern part of the site, and a strip of agricultural land at the northeastern part of the site (see <u>Figure 3</u>).

CONSIDERATION OF ALTERNATIVES

- 7. The EIA report sets out the various development options that have been considered, including alternative layouts, construction methods and sequence of works in order to avoid and minimize potential environmental impacts. The recommended option (see <u>Figure 2</u>) has taken into account various site constraints including the need for protection of fish ponds and preserving the flight path of waterbirds along the eastern boundary of the site, and the environmental benefits to be derived. It recommends putting all houses in the southern part making up of agricultural land, while retaining all the ponds in the northern part and the reedbed in the eastern part for provision of the WRA.
- 8. The key approaches adopted in the Project by the Applicant to avoid and minimize environmental impacts are summarized below:

Avoidance of Impacts

- (i) To avoid loss of wetland habitats by locating the development away from ponds, marsh, seasonally wet grassland and reedbed within the site.
- (ii) To avoid blocking the flight path of waterbirds, no residential development will be provided along the eastern boundary of the site, which abuts other wetlands outside the site.
- (iii) To avoid urbanizing the whole area by locating residential development on the existing agricultural land in the southern part of the site.
- (iv) To avoid bird strikes, opaque and non-reflective materials with colour blending in with the surrounding environment will be used for all temporary noise barriers during construction phase and fence walls during operation phase.

Minimization of Impacts

- (i) To minimize disturbance to the Deep Bay wetland system outside the Project site, construction of the residential area will be carried out after construction of the WRA, which will serve as a buffer.
- (ii) To minimize disturbance to flight path of waterbirds and to improve connection between the Ngau Tam Mei Drainage Channel and the Deep Bay wetland system, an ecological corridor will be maintained at the northeastern part of the site. In addition, a wetland and visual buffer will be provided along the northern and eastern edge of the residential area.
- (iii) To minimize construction noise impacts on sensitive receivers, alternative construction methods such as the use of continuous flight auger will be employed instead of percussive piling.
- (iv) To minimize water quality impact during construction, peripheral drainage channel with sand / silt traps and sedimentation basins will be installed on site for surface runoff.

SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT

Ecological Impact

- 9. The site is zoned "OU(CDWPA)", thus all the existing fish ponds must be protected. The site consists of agricultural land (60.1%; 4.9ha), pond (14.9%; 1.2ha), marsh (11.6%; 0.9ha), seasonally wet grassland (8.7%; 0.7ha), reedbed (2.4%, 0.2ha) and grassland/shrubland (2.3%, 0.2ha). The ecological values of different habitats within the existing site are considered to be "Low" to "Low to Moderate". The fish ponds are abandoned and degraded. The agricultural land only provides marginal suitable habitats for birds and amphibians. With the provision of 3.8ha of wetland habitats within the WRA (see **Figure 3**), there will be a 0.8ha net increase in area ^[3] functioned as wetland. Loss of ecological function of the agricultural land for residential development will be compensated by the enhanced WRA within the site.
- 10. With the residential development limited to the agricultural land in the southern part of the site, implementation of the WRA, and a long-term commitment to

There are 3.0ha of existing wetland habitat within the Project site, comprising ponds, marsh, reedbed and seasonally wet grassland.

manage the area, the project will bring moderately significant ecological benefits, as compared to the existing abandoned fish ponds, marshes, seasonally wet grassland and reedbed at the site.

- 11. The Applicant shall ensure long-term management of the WRA under the Project. Separate from the statutory EIA process, the Applicant will seek approval from relevant government departments on the long-term arrangements of funding and management of the WRA. One of the Applicant's options is to provide an upfront lump sum contribution to the Environment and Conservation Fund (ECF).
- 12. The EIA report concludes that with the proposed ecological enhancement and mitigation measures in place, there would not be adverse residual ecological impacts arising from the development.

Water Quality and Sewerage Impact

13. The EIA report recommends all sewage arising from the residential development to be discharged to public sewer as a permanent solution. As it is likely that public sewer will not be available at the time of occupation of the residential development, the Applicant will provide a sewage treatment plant using Membrane Bioreactor and Reverse Osmosis technologies on-site to treat the sewage generated from the development, as an interim measure.

Landscape and Visual Impact

14. The Project is expected to bring positive landscape and visual impacts as a result of the buffer plantings and provision of the WRA.

Other Environmental Impacts

15. Other environmental impacts including air quality, noise, waste, fisheries and cultural heritage have been satisfactorily addressed in the EIA report. With the implementation of the recommended mitigation measures, the Project will comply with the relevant requirements under the Technical Memorandum on EIA Process.

ENVIRONMENTAL MONITORING AND AUDIT

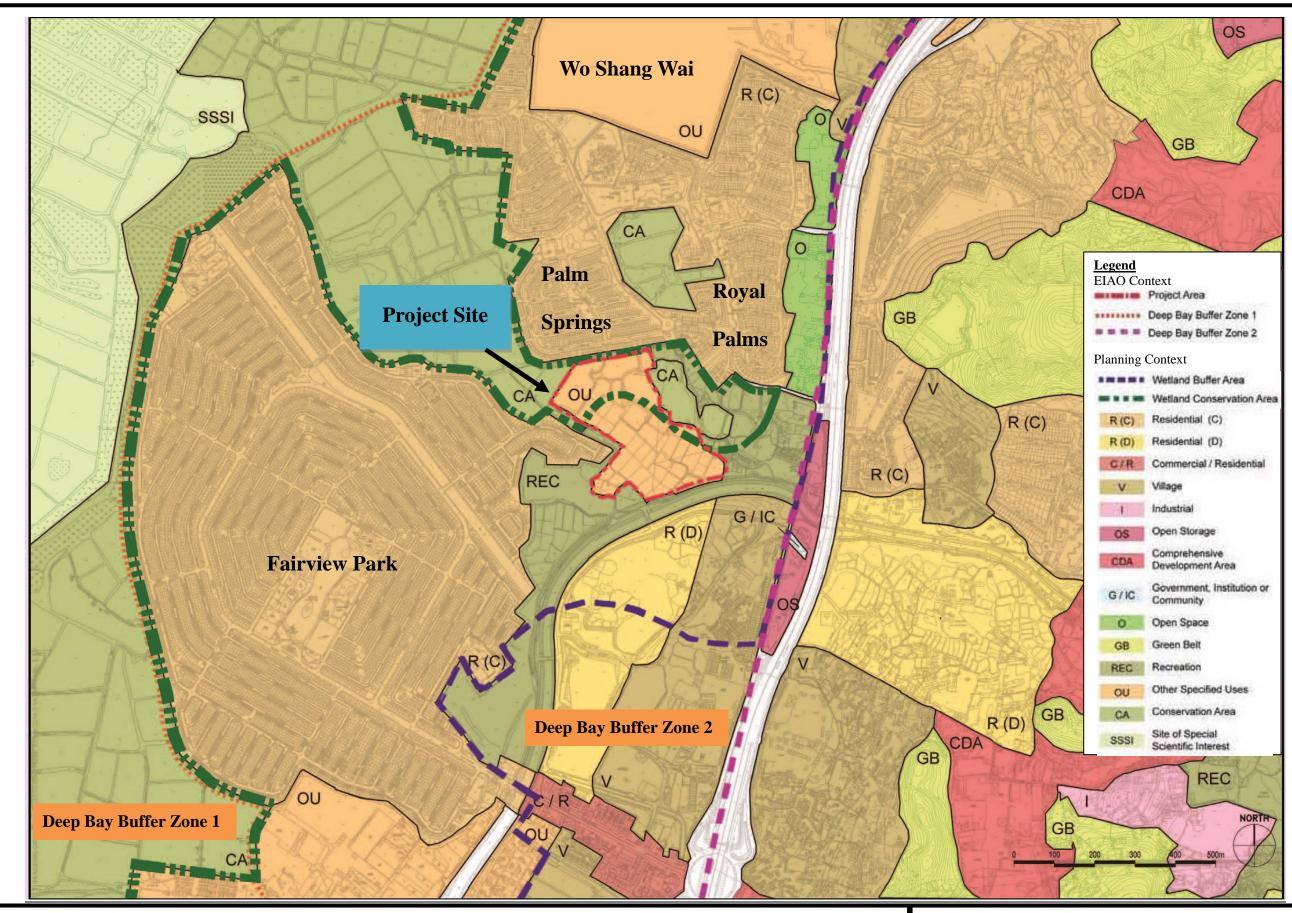
16. The EIA report includes an Environmental Monitoring and Audit (EM&A) Manual which recommends an EM&A programme during the construction and

operation phases of the Project. Key EM&A requirements will cover ecological aspects during both construction and operation phases, in particular monitoring of wildlife species within the WRA.

PUBLIC CONSULTATION

17. Following the advice of the Environmental Protection Department (EPD) that the EIA report is suitable for public inspection, the Applicant has made the EIA report, EM&A Manual and Executive Summary available for public inspection under the EIAO from 25 March 2015 to 23 April 2015. During the inspection period, EPD has received a total of 10 public comments. The main concerns raised by the public are related to ecological issues arising from the Project. These main concerns will be summarized in a gist to be provided separately.

May 2015
Environmental Assessment Division
Environmental Protection Department



Project Title: Comprehensive Development and Wetland Protection near Yau Mei San Tsuen

Figure 1: Project Location

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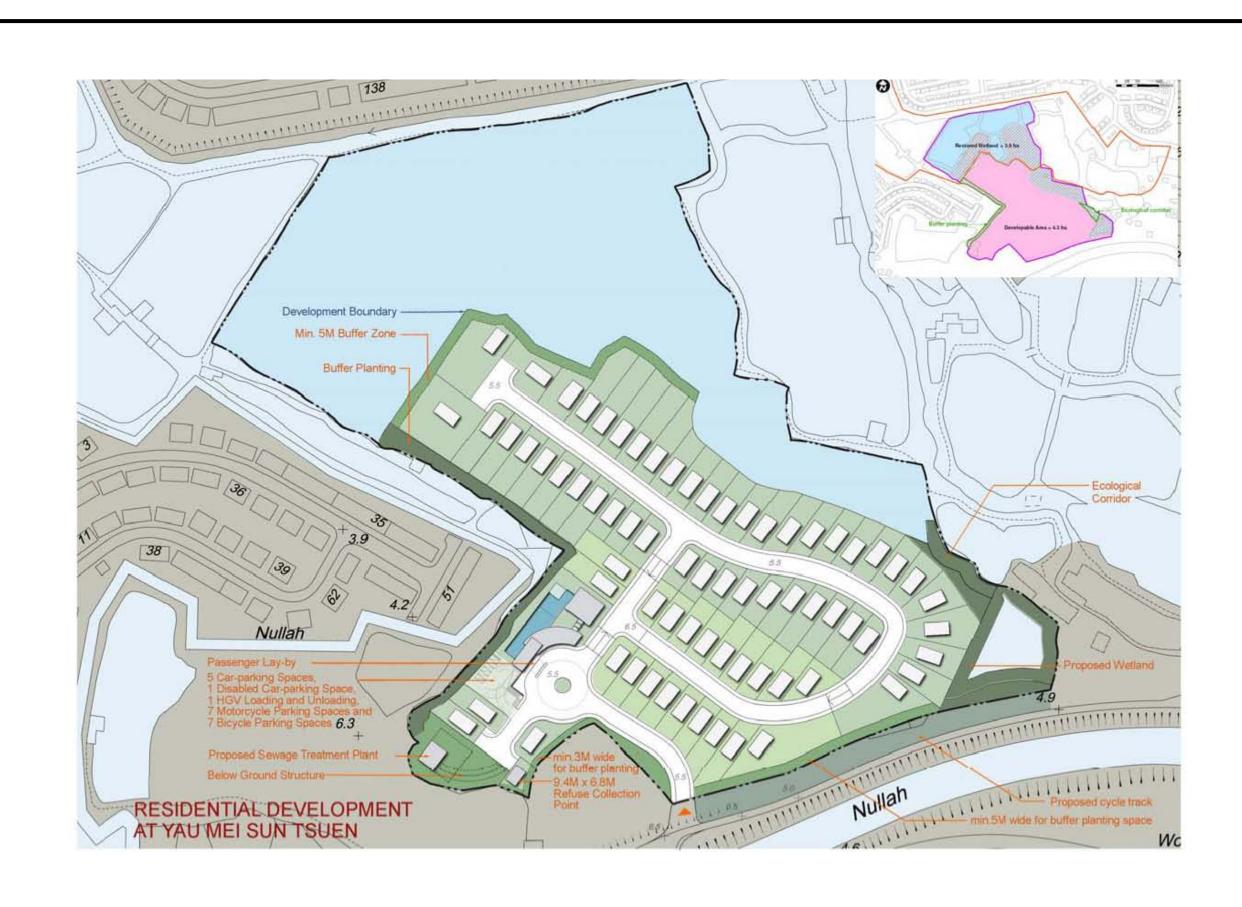




Figure 2: Layout of the Recommended Option

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Figure 3: Layout of the proposed Wetland Restoration Area

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