Appendix 6

ECOLOGICAL REVIEW

Ecological Review of Ki Lun Shan Study Area
April 2026

1. Introduction

This is a desktop review of the ecological situation of the subject site, undertaken to demonstrate that no eco-sensitive receivers are anticipated. This initial review is based on information from a landscape resources survey (Appendix 2 of this Application submission), and with reference to the Government's proposed Agriculture Park. Subject to approval of the planning application, it will be possible to carry out a more detailed ecological analysis.

2. Site Ecology – Bases River and Wetland

The subject site is located at Kwu Tung South within the Northern Metropolis, adjacent to the Beas River (also known as Sheung Yue River). This river has been channelised and is not listed among the 33 ecologically important streams.

The site does not fall within any sensitive areas, such as existing or gazette proposed country park, conservation area, existing or gazette proposed marine park or marine reserve, site of cultural heritage, or Site of Special Scientific Interest (SSSI). Furthermore, no ecological hotspot has been recorded or identified within the subject site.

Little potential ecologically sensitive receivers to be included:

- Lam Tsuen Country Park – approximately 1.9 km south of the subject area.
- Long Valley Nature Park – approximately 1.8 km northeast of the subject area.
- Long Valley (38 ha) has been identified as a Priority Site for Enhanced Conservation under the "New Nature Conservation Policy" and opened to the public in late 2024. The Nature Park is a man-made wetland containing wet farmland and marshes, with approximately 341 bird species recorded. It is separated from the subject site by the San Tin Highway.
- Kwu Tung Reservoir – around 350 m from the subject area, located uphill and used mainly for irrigation.

3. Relevant Reference – Site Landscape Resources

A total of eight habitat types within the 12.8ha site has been identified and classified (Table 1). These habitat types are typical in the northern New Territories. Woodland is dominant (3.6 ha) within the subject site, while the smallest category is rivers and streams (0.2 ha). The 1.5 ha of farmland will be removed, while rivers, streams, and ponds will be retained as far as possible as water features to enhance on-site landscaping. This approach will help to minimise disturbance to aquatic-related wildlife.

4. Relevant Reference – Government Proposed Agriculture Park (Chapter 10, Report on Preliminary Technical Study, Engineering Feasibility Study for the Establishment of an Agriculture Park – Feasibility Study, CEDD, 2017)

No significant ecologically sensitive issues were identified in this study, and none is anticipated within the proposed subject site.

5. Adjoining EIA

5.1 Adjoining EIAs

According to the EPD's EIA website, there are three Environmental Impact Assessments (EIAs) in this part of the New Territories:

- The Sheung Shui to Lok Ma Chau Spur Line (EIA-044/2000)
- North East New Territories New Development Areas (EIA-213/2013)
- Technical Study on Partial Development of Fanling Golf Course Site – Feasibility Study (EIA-282/2022)

The Spur Line EIA is outdated, and both it and the other EIAs are located more than 1.5 km from the subject area. Therefore, they are considered irrelevant for reference.

5.2 Adjoining Planning Rezoning/Applications

There are two rezoning cases from 2023 located at Kam Hang Road, Kam Tsin, near Fanling Highway. These sites are 1.6 km from the subject area and do not involve any ecological issues.

6. Birds Observations

Bird observations from eBird (an online bird-record database) for the Beas River near the subject area, covering the period December 2024 to February 2025, recorded 45 species, of which 15 were wetland-dependent (**Table 2**). The Greater Painted Snipe — an uncommon waterbird often used as an indicator of ecological value in freshwater habitats — was among the species recorded.

The presence of several waterbird species suggests that the ecological value of the Beas River is low to moderate. More generally, the presence of a range of common terrestrial wildlife in the surrounding area suggests that the subject area is a typical lowland environment in Hong Kong, with no species of high conservation importance or biodiversity "hotspots" expected.

7. Avoidance, Minimization and Compensation

According to the available information, habitats at the Site, including mainly secondary woodland, grassland, agricultural land, ponds and marshes, rivers and streams, as well as disturbed land including villages and open storage areas. The Site does not fall within any sensitive areas, such as country park, conservation area, marine park or marine reserve, site

of cultural heritage or site of special scientific interest (SSSI). Beas River, where the Site is located on its both sides, is a channelised river and not listed as one of the ecologically important streams. The ecological value of the Site is considered low to moderate. Nevertheless, mitigation measures will be adopted in accordance with the principle of "avoidance, minimization and compensation" during the design and implementation of the Proposed School to address any potential ecological impacts arising from the Project.

While the farmlands will be removed and most of the trees within the Site will be felled to facilitate the construction of the Proposed School, the future landscape design will incorporate suitable water features to enhance the landscaping of the Site as far as practicable, subject to detail design. To avoid the potential ecological impacts, the Beas River will be retained and excluded from the subject site. The project design will incorporate a clear no-go buffer to prevent direct encroachment onto the Beas River and its riparian zone of a min of 10m on both riversides. A permanent physical boundary corresponding to the future school site boundary will be established to separate these no-go areas from the campus and to prevent access by students and staff. During the construction phase, any such ecologically relatively more sensitive areas falling within or adjacent to the works site will be clearly fenced off and provided with warning signage to prohibit entry by workers and construction plant. Early delineation of site boundaries, restriction of works areas, and careful construction staging (e.g. fencing off sensitive zones the very beginning and keeping them untouched until the final landscaping works) will help ensure that natural watercourses, remnant wetlands, woodland edges, and wildlife movement corridors (if any) remain unaffected.

To minimise unavoidable disturbances to nearby areas, good site practices will be implemented throughout both the construction and operational phases. During construction, the Contractor will be required to adopt low-noise machinery, maintain equipment in good condition, implement proper dust suppression measures, and schedule works to minimize unnecessary nighttime disturbance. Silt and runoff control measures will also be put in place to protect the Beas River from water quality deterioration. During the operational phase, the school design will incorporate wildlife-friendly elements such as non-reflective façade materials to avoid bird-strike risks, and directional and shielded lighting to avoid illumination spill into riparian and wooded areas.

Other than tree compensation, no significant residual ecological impacts requiring compensation are anticipated to arise from the Project. Nevertheless, the proposed planting of predominantly native species will further soften habitat edges and strengthen ecological linkages within the surrounding area.

Collectively, these measures will help ensure that the residual ecological impacts of the project are of low significance and consistent with the principle of avoidance, minimisation, and compensation.

8. Conclusions

Based on the available information, the Beas River has a low to moderate ecological value due to the presence of waterbirds. For other habitats within the subject area, no relevant ecological data are available. However, the habitat plan indicates that there are no high-value habitats, such as freshwater marshes or fung shui woods, present. Furthermore, there are no identified ecological hotspots in the area. Therefore, any terrestrial ecological issues, if present, are expected to be insignificant

References:

Appendix 2 – LMP under this Application
Ebird obs
10 Dec 2024 https://ebird.org/checklist/S208696257
11 Jan 2025 https://ebird.org/checklist/S208783743
3 Feb 2025 https://ebird.org/checklist/S211780122

Table 1. Habitats of the subject site extract from the Appendix 2

Habitat type	Area (ha)
Secondary woodland	3.6
Grassland	2.2
Agricultural land	1.5
Rivers and streams	0.2
Ponds and marshes	1.2
Disturbed areas	1.4
Village	2.2
Open storage	0.5
Total	12.8

Table 2. A checklist of bird species recorded at Beas River between Dec 2024 and February 2025 (Based on three checklists available on ebird). A total of 45 bird species. The Greater Painted Snipe is an uncommon species and is often used as an indicator of the ecological value of freshwater habitats. (Remark: * = Wetland dependent species).

	Bird species	10/12/24	11/1/25	3/2/25
1	Spotted Dove (*Spilopelia chinensis*)	+	+	+
2	Greater Coucal (*Centropus sinensis*)			+
3	Asian Koel (*Eudynamys scolopaceus*)	+		
4	White-breasted Waterhen (*Amaurornis phoenicurus*)	+	+	+
5	Black-winged Stilt (*Himantopus himantopus*)			+
6	Greater Painted Snipe (*Rostratula benghalensis*)	+	+	+
7	Common Snipe (*Gallinago gallinago*)	+	+	
8	Common Sandpiper (*Actitis hypoleucos*)			+
9	Green Sandpiper (*Tringa ochropus*)		+	+
10	Wood Sandpiper (*Tringa glareola*)		+	+
11	Common Greenshank (*Tringa nebularia*)	+	+	+
12	Little Egret (*Egretta garzetta*)	+	+	+
13	Chinese Pond Heron (*Ardeola bacchus*)	+	+	
14	Eastern Cattle Egret (*Bubulcus coromandus*)			+
15	Great Egret (*Ardea alba*)		+	+
16	Grey Heron (*Ardea cinerea*)	+	+	+
17	Black Kite (*Milvus migrans*)			+
18	Common Kingfisher (*Alcedo atthis*)			+
19	Black-winged Cuckooshrike (*Coracina melaschistos*)			+
20	Hair-crested Drongo (*Dicrurus hottentottus*)		+	+

21	Red-billed Blue Magpie (*Urocissa erythroryncha*)		+	+
22	Grey Treepie (*Dendrocitta formosae*)	+		+
23	Collared Crow (*Corvus torquatus*)		+	
24	Common Tailorbird (*Orthotomus sutorius*)		+	+
25	Eastern Red-rumped Swallow (*Cecropis striolata*)		+	
26	Chinese Bulbul (*Pycnonotus sinensis*)	+	+	
27	Red-whiskered Bulbul (*Pycnonotus jocosus*)	+	+	+
28	Yellow-browed Warbler (*Phylloscopus inornatus*)		+	
29	Dusky Warbler (*Phylloscopus fuscatus*)	+		
30	Swinhoe's White-eye (*Zosterops simplex*)			+
31	Rufous-capped Babbler (*Stachyridopsis ruficeps*)	+		+
32	Masked Laughingthrush (*Pterorhinus perspicillatus*)	+	+	+
33	Black-collared Starling (*Gracupica nigricollis*)	+	+	+
34	Crested Myna (*Acridotheres cristatellus*)	+	+	+
35	White's Thrush (*Zoothera aurea*)			+
36	Grey-backed Thrush (*Turdus hortulorum*)		+	+
37	Oriental Magpie Robin (*Copsychus saularis*)	+	+	+
38	Red-breasted Flycatcher (*Ficedula parva*)			+
39	Daurian Redstart (*Phoenicurus auroreus*)			+
40	Amur Stonechat (*Saxicola stejnegeri*)			+
41	Eurasian Tree Sparrow (*Passer montanus*)		+	+
42	Grey Wagtail (*Motacilla cinerea*)	+	+	+
43	Eastern Yellow Wagtail (*Motacilla tschutschensis*)			+
44	White Wagtail (*Motacilla alba*)	+	+	+
45	Olive-backed Pipit (*Anthus hodgsoni*)		+	+