

# Appendix 4.6 Habitat Evaluation

#### Table 1 Ecological Evaluation of Woodland

Criteria	Description
Naturalness	Largely natural
Size	Large in size (Approx. 357.4ha)
Diversity	High floristic diversity and moderate fauna diversity for those around Aberdeen Country Park;
	Low for other fragmented woodlands
Rarity	Besides from a few uncommon woodland bird species, most of the fauna species recorded are common in Hong Kong. Rare plant species of <i>Uvaria calamistrata, Castanopsis carlesii, Gleditsia fera</i> and <i>Gleditsia australis</i> were recorded in the woodland of Aberdeen Country Park and Nam Fung Road fung shui wood SSSI.
Re-creatability	Woodland requires longer time to be re-established
Fragmentation	No significant fragmentation at woodland around Aberdeen Country Park (including Nam Fung Road fung shui wood SSSI) and Nam Long Shan;
	Those isolated woodland areas along the alignment are fragmented by various urban land uses.
Ecological linkage	Woodlands around Aberdeen Country Park are ecologically linked with the adjoining habitats;
	No significant ecological linkage were observed for other scattered woodlands
Potential value	Secondary woodland could be further enhanced in ecological value through natural succession.
Nursery/ breeding ground	Nursery and breeding ground for various fauna species but no significant breeding population for conservation concerned species was identified.
Age	Over 50 years
Abundance/ Richness of wildlife	Moderate abundance of wildlife
Ecological value	Ranging from moderate-low (fragmented woodlands), moderate (woodland edge of un- fragmented woodland) gradually to high (core habitat of un-fragmented woodlands)

# Table 2 Ecological Evaluation of Degraded Woodland

Criteria	Description
Naturalness	Modified habitats comprising native vegetation and exotics
Size	Approx.2.2 ha
Diversity	Moderate-low for both floral and faunal species
Rarity	This habitat is not rare in Hong Kong; ardeid species roosting at this habitat are common in Hong Kong.
Re-creatability	Can be re-created by tree planting
Fragmentation	Fragmented throughout the Assessment Area
Ecological linkage	Potential ecological linkage with adjacent woodlands
Potential value	Can be improved by proper planting for ecological enhancement.
Nursery/ breeding ground	Nursery and breeding ground for various fauna species but no significant breeding population for conservation concerned species was identified. A patch of degraded woodland near Wong Chuk Hang nullah was utilized by ardeid as night roosting ground.
Age	Over 30 years
Abundance/ Richness of wildlife	Low abundance of wildlife

# Consultancy Agreement No. NEX/2301 South Island Line (East) Environmental Impact Assessment



Criteria	Description
Ecological value	Moderate-low

Table 3Ecological Evaluation of Plantation

Criteria	Description
Naturalness	Man made habitat by planting exercise
Size	Approx. 65.4ha
Diversity	Moderate diversity for plant species as a variety of amenity species is present but low diversity for fauna.
Rarity	The habitat and species recorded are common in Hong Kong.
Re-creatability	Re-created by planting
Fragmentation	Scattered within the Assessment Area
Ecological linkage	Ecologically linked with adjacent woodlands
Potential value	As these areas are for amenity purpose, ecological potential is low.
Nursery/ breeding ground	No significant breeding population for conservation concerned species was identified.
Age	Over 20 years
Abundance/ Richness of wildlife	Low abundance of wildlife
Ecological value	Low

#### Table 4 Ecological Evaluation of Shrubland

Criteria	Description
Naturalness	Naturally established through natural succession
Size	Approx. 94.2ha
Diversity	Low in flora and fauna diversity.
Rarity	The habitat type is common and no rare species were identified.
Re-creatability	Re-creatable
Fragmentation	Limited fragmentation
Ecological linkage	Ecologically linked with adjacent woodlands and hillside grassland
Potential value	Could develop into woodland through natural succession
Nursery/ breeding ground	Potential breeding ground for various fauna species but no significant breeding population of conservation concerned species was identified.
Age	No available information
Abundance/ Richness of wildlife	Moderate-low in wildlife abundance
Ecological value	Moderate-low



## Table 5Ecological Evaluation of Marsh

Criteria	Description
Naturalness	Modified habitat, originated from wasteland
Size	Approx. 0.3ha
Diversity	Low flora and fauna species diversity
Rarity	Not rare
Re-creatability	Re-creatable
Fragmentation	No fragmentation
Ecological linkage	No ecological linkage observed
Potential value	Marsh developed from wasteland, ecological potential is low
Nursery/ breeding ground	May provide nursery or breeding ground for amphibians and dragonflies
Age	Young (less than 10 years)
Abundance/ Richness of wildlife	Low abundance of wildlife.
Ecological value	Low

# Table 6 Ecological Evaluation of Agricultural Land

Criteria	Description
Naturalness	Man made habitat for crop production
Size	Approx 0.2ha
Diversity	Low
Rarity	Common
Re-creatability	Re-creatable
Fragmentation	No fragmentation
Ecological linkage	No ecological linkage observed
Potential value	Low, as this habitat is not for ecological land use when cultivation activities are active.
Nursery/ breeding ground	No record of nursery or breeding ground was found during the study
Age	Young
Abundance/ Richness of wildlife	Low fauna abundance
Ecological value	Low



## Table 7 Ecological Evaluation of Hillside Grassland

Criteria	Description
Naturalness	Semi-natural, disturbed by hill fires
Size	Approx. 21.6ha
Diversity	Low
Rarity	Not rare
Re-creatability	Maintained by hill fires
Fragmentation	No fragmentation
Ecological linkage	Not ecologically linked with area or species of conservation concern
Potential value	Low, natural succession is always hindered by frequent hill fires.
Nursery/ breeding ground	No record of nursery or breeding ground was found during the study
Age	No available information
Abundance/ Richness of wildlife	Low fauna abundance
Ecological value	Low

#### Table 8 Ecological Evaluation of Stream

Criteria	Description
Naturalness	Mostly natural but partially modified at downstream section for drainage purpose
Size	Approx. 3.5ha
Diversity	Moderate diversity for both flora and fauna
Rarity	Not rare but number of this habitat type is declining in Hong Kong
Re-creatability	Natural stream is difficult to be re-created.
Fragmentation	No fragmentation
Ecological linkage	Ecologically linked with adjacent habitats
Potential value	This natural habitat is difficult to be further enhanced for their steep topography and remote location.
Nursery/ breeding ground	Breeding and nursery grounds for aquatic species.
Age	Over 50 years
Abundance/ Richness of wildlife	Low abundance for aquatic and terrestrial fauna.
Ecological value	Moderate



## Table 9 Ecological Evaluation of Drainage Channel

Criteria	Description
Naturalness	Man-made habitat
Size	Around 1km in length
Diversity	Low diversity for both flora and fauna species
Rarity	Common habitat, ardeid species foraging at the drainage channel are common in Hong Kong wetland.
Re-creatability	Re-creatable
Fragmentation	No fragmentation
Ecological linkage	Limited ecological linkage
Potential value	Low, but can be improved by proper channel enhancement measures such as grasscrete, or gabions
Nursery/ breeding ground	Not a significant breeding ground for wildlife.
Age	At least 30 years
Abundance/ Richness of wildlife	Low
Ecological value	Low

# Table 10 Ecological Evaluation of Open Field

Criteria	Description
Naturalness	Man-made habitat
Size	Approx. 4.7ha
Diversity	Low
Rarity	Not rare
Re-creatability	Re-creatable
Fragmentation	Fragmented throughout the Assessment Area
Ecological linkage	No significant ecological linkage
Potential value	Ecological potential of open field is low
Nursery/ breeding ground	No record of nursery or breeding ground was found during the study
Age	Around 10 years
Abundance/ Richness of wildlife	Low
Ecological value	Very Low



## Table 11 Ecological Evaluation of Wasteland

Criteria	Description
Naturalness	Disused man-made habitat
Size	Approx. 0.9ha
Diversity	Low
Rarity	Not rare
Re-creatability	Re-creatable
Fragmentation	Fragmented throughout the Assessment Area
Ecological linkage	No significant ecological linkage
Potential value	Low, as these areas are always not for ecological land use
Nursery/ breeding ground	No record of nursery or breeding ground was found during the study
Age	Around 10 years
Abundance/ Richness of wildlife	Low
Ecological value	Very Low

#### Table 12 Ecological Evaluation of Developed Area

Criteria	Description
Naturalness	Man-made habitat
Size	Large (approx. 396.9ha)
Diversity	Low
Rarity	Not rare; Only species adapted to anthropogenic environment could be found in this habitat, all of those are common and widespread in Hong Kong
Re-creatability	Re-creatable
Fragmentation	Largely continuous
Ecological linkage	No ecological linkage
Potential value	Low, as these areas are always not for ecological use
Nursery/ breeding ground	Low potential as breeding / nursery grounds for wildlife
Age	N/A
Abundance/ Richness of wildlife	Low
Ecological value	Very Low