香港青年協會
the hongkong federation of youth groups

Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp

Environmental Monitoring and Audit Baseline Monitoring Report

March 2011







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CONTENTS

Page

1. BASIC PROJECT INFORMATION 1
   1.1 Project Background 1
   1.2 Purpose of the Report 1
   1.3 Project Organisation and Management 1
2. SUMMARY OF WORK ACTIVITIES AND CONSTRUCTION STATUS 2
3. STATUS OF ENVIRONMENTAL PROTECTION AND SITE INSPECTIONS 2
   3.1 Air, Noise and Water Quality 2
   3.2 Landscape and Visual Environment 2
   3.3 Ecology 2
4. SUMMARY OF ENVIRONMENTAL PERMIT AND LICENSES 3
5. CONCLUSION 4

LIST OF TABLES

Table 3.1 Ecological Conditions of the Project Site during Baseline Monitoring
Table 4.1 Summary of status of Environmental Permits/Licenses

LIST OF FIGURES

Figure 1.1 Site Location Plan
Figure 1.2 Master Layout Plan
Figure 2.1 Photo of Other On-going Construction Activities (Renovation of Concourse) in the Existing Camp Site
Figure 3.1 Landscape Resources
Figure 3.2 Landscape Character Areas
Figure 3.3a Visual Sensitive Receivers (Index Map)
Figure 3.3b-c Visual Sensitive Receivers (Views)
Figure 3.4 Locations of Ecology Monitoring Locations
Figure 3.5 Photos of Chinese Fan-palm trees
Figure 3.6 Demarcation of Mangrove Compensatory Planting Location
Figure 3.7 Photos of Incense Trees to be Retained or Transplanted

LIST OF APPENDICES

Appendix A The Key Contact Persons, Phone Numbers and Key Personnel
Appendix B Project Organisation
Appendix C List of Landscape Resources (LRs)
Appendix D List of Landscape Character Areas (LCAs)
Appendix E Visually Sensitive Receivers (VSRs)

Executive Summary

Ecosystems Ltd. was appointed by The Hong Kong Federation of Youth Groups to undertake baseline monitoring prior to the commencement of construction works for the "Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp" (the Project).

This Baseline Monitoring Report has been prepared pursuant to Condition 4.3 of the Environmental Permit (EP-410/2010) and the Environmental Monitoring and Audit Manual for the Project.

According to the EM&A Manual, no quantitative measurement of air, water or noise parameters are required. Therefore no measurements were made during the baseline monitoring. No major construction activities were undertaken during baseline monitoring, and no signs of environmental degradation or pollution were observed at the Project site. Upon commencement of construction, weekly site audits will be implemented to ensure that that appropriate environmental protection and pollution control mitigation measures are properly implemented.

Baseline landscape and visual conditions were recorded. There is no major change at each Landscape Resource, Landscape Character Area and the view conditions of each Visual Sensitive Receiver compared to those described in the EIA study. The ecological conditions of the Project Site were inspected, with special attention to 1) bat roost site (Chinese Fan-palm trees) near existing dorms, 2) mangroves/compensatory mangrove planting and 3) incense Trees to be retained or transplanted. Observations were recorded and comments were made. The mangrove planting site was also demarcated on site during the baseline monitoring.

1. BASIC PROJECT INFORMATION

1.1 Project Background

1.1.1 The project "Phase III Redevelopment of The Hong Kong Federation of Youth Groups Jockey Club Sai Kung Outdoor Training Camp (hereinafter referred to as the "Project") is to redevelop the existing Jockey Club Sai Kung Outdoor Training Camp and increase the number of dormitories and canteen capacity in order to meet the increasing public demand. The Project Site is located at the southern extremity of Tai Mong Tsai, at the foothill of Cheung Shan and is accessed via Tai Mong Tsai Road. The Site Location Plan is shown in **Figure 1.1**

1.1.2 The redevelopment works include the following major components: construct seven dormitory buildings comprising a total of 19 units on the lower portion of the slope southeast of the existing buildings; construct a new canteen block at the centre of the camp comprising a dining hall, a cafeteria, activity rooms and a drop off point for arrival of visitors; construct of two platform decks for outdoor activities; and construct a new wastewater treatment and reuse system. The Master Layout Plan is shown in **Figure 1.2**.

1.1.3 An Environmental Impact Assessment (EIA) study has been undertaken under the EIA Ordinance (Cap. 499) to provide information on the nature and extent of environmental impacts arising from the construction of the Project and was approved without conditions (AEIAR-157/2010) on 17 December 2010. An Environmental Permit (EP-410/2010) (EP) for the Project was granted on 10 January 2011. Under the requirements of Condition 4 of EP, an EM&A programme as set out in the EM&A Manual is required to be implemented.

1.2 Purpose of the Report

1.2.1 This is the Baseline Monitoring Report of the Environmental Monitoring and Audit (EM&A) Programme for the Project. The report was prepared by the Environmental Team, Ecosystems Ltd. for the Project Proponent (also the Permit Holder), The Hong Kong Federation of Youth Groups, pursuant to Condition 4.3 of the Environmental Permit (EP-410/2010) and the Environmental Monitoring and Audit Manual issued for the Project. The report is to be submitted to the Works Contractor (to be appointed by the Project Proponent), the Engineer Representative (ER) and the Environmental Protection Department (EPD) for the Project.

1.2.2 This report presents the results of the baseline monitoring conducted during the month of March 2011 prior to commencement of work, which is anticipated to be mid-April 2011.

1.2.3 The contact person and telephone number of key personnel for the captioned project are shown in **Appendix A**.

1.3 Project Organisation and Management

1.3.1 The Project Proponent, The Hong Kong Federation of Youth Groups has commissioned Ecosystems Ltd. as the Environmental Team, which comprises the environmental team leader and the environmental technicians to undertake the environmental monitoring and audit work for this Project.

1.3.2 The Project Proponent has commissioned Allied Environmental Consultants Ltd. as the Independent Checker for the Project.

1.3.3 The Project Organisation is shown in **Appendix B**.

2. SUMMARY OF WORK ACTIVITIES AND CONSTRUCTION STATUS

2.1.1 Environmental site inspection was carried out in 8 and 15 March 2011. No works activities including site clearance, preparation, hoarding or site formation works related to the Project has been commenced. Other on-going construction activities not related to the Project included renovation of the concourse of the existing camp site (**Figure 2.1**).

3. STATUS OF ENVIRONMENTAL PROTECTION AND SITE INSPECTIONS

3.1 Air, Noise and Water Quality

3.1.1 According to the EM&A Manual, no quantitative measurement of air, water or noise parameters are required. Therefore no measurements were made during the baseline monitoring. Upon commencement of construction, weekly site audits will be implemented to ensure that that appropriate environmental protection and pollution control mitigation measures are properly implemented.

3.2 Landscape and Visual Environment

3.2.1 According to the EM&A Manual, baseline changes with respect to the landscape and visual environments should be carried out in reference to the recorded baseline conditions of the site as described in the EIA. The monitoring should in particular record changes of each landscape resource (LR), landscape character area (LCA) and the view conditions of each visually sensitive receiver (VSR). Parameters used to describe changes in each of the above should be the same as in the EIA.

3.2.2 Results of the baseline monitoring showed that there is no major change at each LR, LCA and the view conditions of each VSR compared to those described in the EIA study. Other than the minor renovation works at the concourse of the existing camp site (**Figure 2.1**), no new buildings, activities or disturbance such as residential development, construction, hillfires, clearance of vegetation, or changes of watercourses, which would otherwise changed the landform, vegetation cover, or views, were observed. **Figures 3.1 – 3.3** shows the LRs, LCAs and VSRs, while the lists and description are provided in **Appendice C, D** and **E** respectively.

3.3 Ecology

3.3.1 The EM&A Manual did not specify the baseline monitoring requirement for ecology. The ecological conditions of the Project Site were inspected during the baseline monitoring, with special attention to three locations where impact monitoring will be conducted: 1) Chinese Fan-palm trees near existing dorms, which was identified as a bat roost site during the EIA; (2) mangroves/compensatory mangrove planting site; and 3) The 8 nos. of Incense Tree to be retained or transplanted. **Figure 3.4** shows the locations of the three monitoring locations. Observations were recorded and comments and recommendations were made (Table 3.1). The mangrove planting site was also demarcated on site during the baseline monitoring.

Table 3.1 Ecological Conditions of the Project Site during Baseline Monitoring

Monitoring Locations	Observations/Comments/Recommendations
General environment, existing habitats	Similar to the ecobaseline during the EIA Study. Habitats with the Project Site remained intact. No signs of environmental degradation or pollution observed.
Chinese Fan-palm trees near existing dorms	Chinese Fan-palm trees in good conditions (**Figure 3.2**), but bats not observed. Probably temporarily left the roost site or had abandoned the site and found alternative roosts, which is a normal practice for the bats. The Chinese Fan-Palm trees will be surveyed again for bats during Impact monitoring.
Mangroves/compensatory mangrove planting site	Mangrove was in good conditions and fruiting. Kandelia droppers developed but were not yet ripen. Droppers for compensatory mangrove planting should be collected when droppers are mature. Vigorous algal growth along sand flat which is a seasonal phenomenon. Mangrove planting site has been fine-tuned to avoid those areas to minimise the impacts on new mangrove planting by smothering and demarcated on site with site staffs (**Figure 3.3**). It is anticipated that mangrove planting will be conducted in mid-late April 2011 and will be overseen by ET.
Incense Trees to be retained or transplanted.	The 5 no. of Incense Tree to be transplanted (T643, T644, T639, T766, T776) and 3 no. of Incense Tree to be retained (T976, T788, T758) were inspected. All except T776 were intact and in fair conditions, although most tree crowns were covered by climbers. T776 was dead. The major trunk was broken and rotten. It appeared to be damaged by typhoon or storms last year. Photos of the trees are provided in **Figure 3.4**. It is recommended that T776 should be fell instead of transplanted. It is anticipated that tree protection and transplantation will be commenced in mid-April 2011 by the landscape contractor prior to site clearance and will be monitored by the ET during impact monitoring.

4. SUMMARY OF ENVIRONMENTAL PERMIT AND LICENSES

4.1.1 ET has checked with the Project Proponent for the status of all environmental permits and licenses for this project as at March 2011, which is summarized in Table 4.1 below. ET will keep track of the application process of the outstanding permits/licenses to be applied by the Contractor(s) for the Project.

Table 4.1 Summary of status of Environmental Permits/Licenses

Description	Lincense/Permit No. #	Permit Holder	Date of Issue	Date of Expiry	Status/Remarks
Environmental Permit	Permit No. EP-410/2010	HKFYG	10-Jan-2011	-	Issued
Further Environmental Permit	-	Foundation Contractor	-	-	To be applied by Foundation Contractor

5. CONCLUSION

5.1.1 No quantitative measurement of air, water or noise parameters are required during the baseline monitoring or the future impact monitoring. No signs of environmental degradation or pollution were observed. Upon commencement of construction, weekly site audits will be implemented to ensure that that appropriate environmental protection and pollution control mitigation measures are properly implemented.

5.1.2 Baseline landscape and visual conditions were recorded. There is no major change at each Landscape Resource, Landscape Character Area and the view conditions of each Visual Sensitive Receiver compared to those described in the EIA study.

5.1.3 The ecological baseline conditions of the Site were inspected. Bats were not recorded in the Chinese Fan-palm trees. Bats may temporarily left the roost site or had abandoned the site which is a normal practice. The Chinese Fan-palm trees will be surveyed again for bats during Impact monitoring. The Compensatory mangrove planting site was demarcated on site. Mangrove planting in mid-late April will be overseen by the ET. One of the Incense Tree to be transplanted (T776) was found dead while the others were in fair conditions. It is recommended that T776 should be fell instead of transplanted. It is anticipated that tree protection and transplantation will be commenced in mid-April 2011 by the landscape contractor prior to site clearance and will be monitored by the ET during impact monitoring.

FIGURES

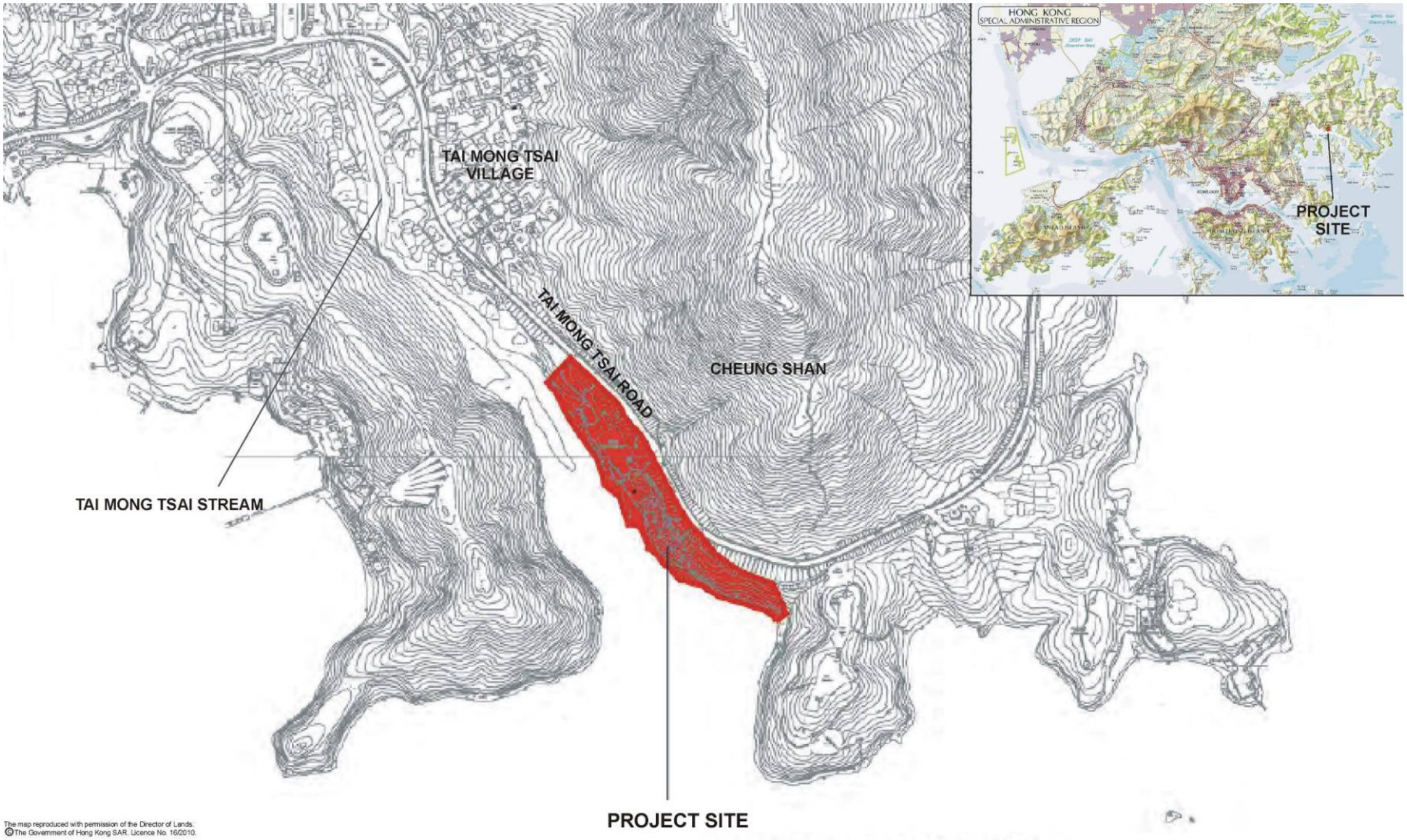


Figure 1.1 Site Location Plan

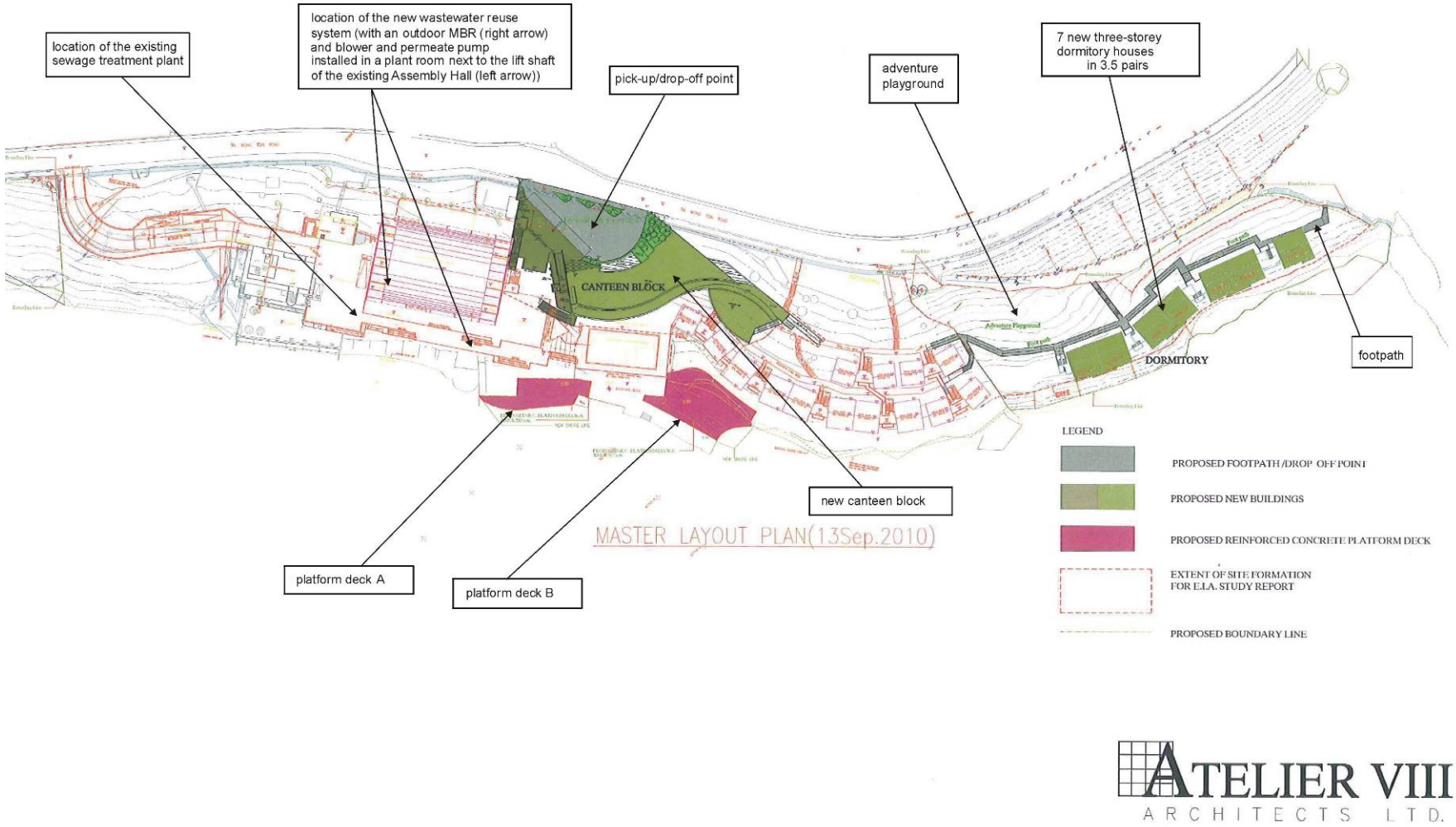


Figure 1.2 Master Layout Plan



Figure 2.1 Photo of Other On-going Construction Activities (Renovation of Concourse) in the Existing Camp Site

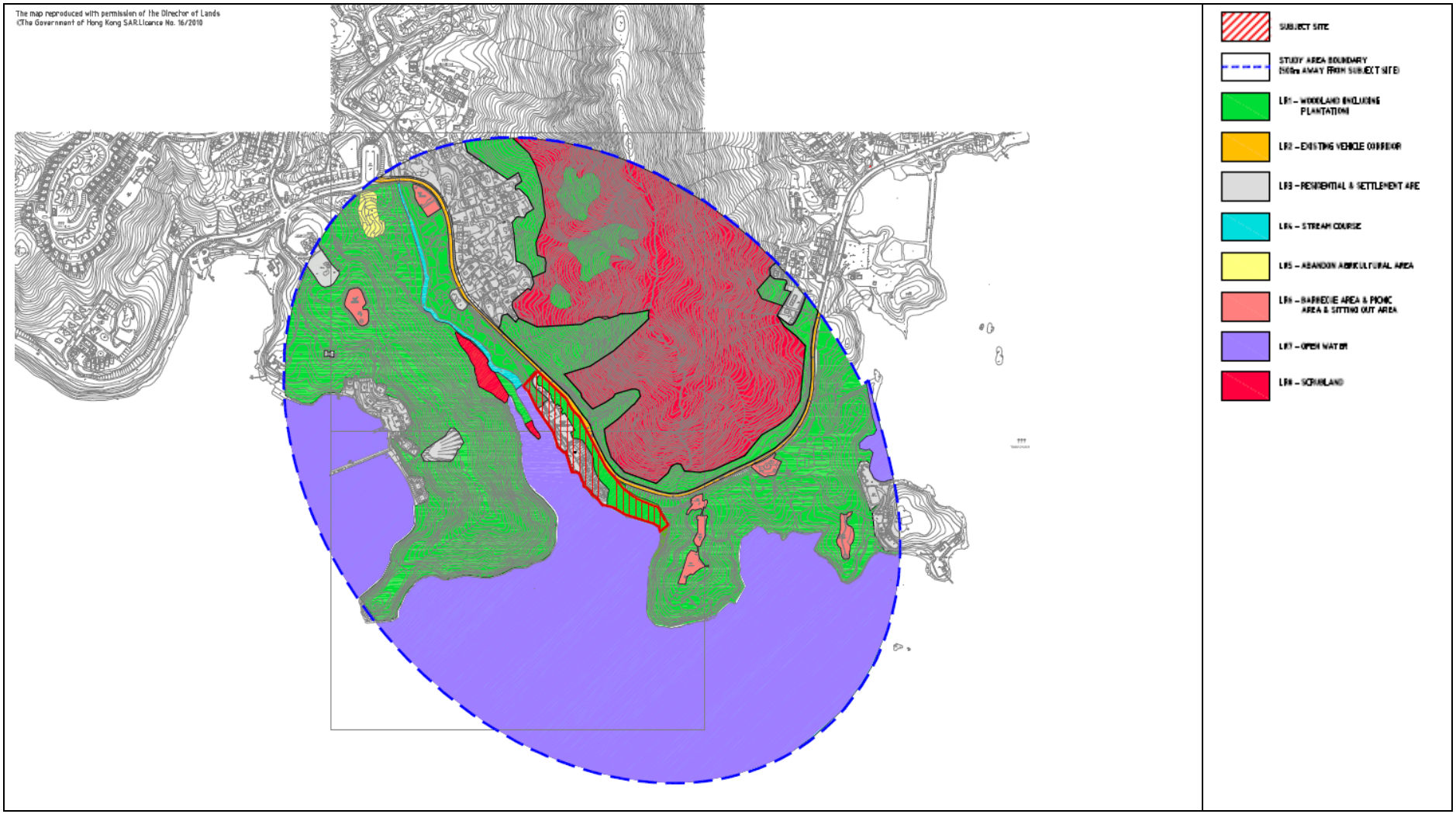


Figure 3.1 Landscape Resources

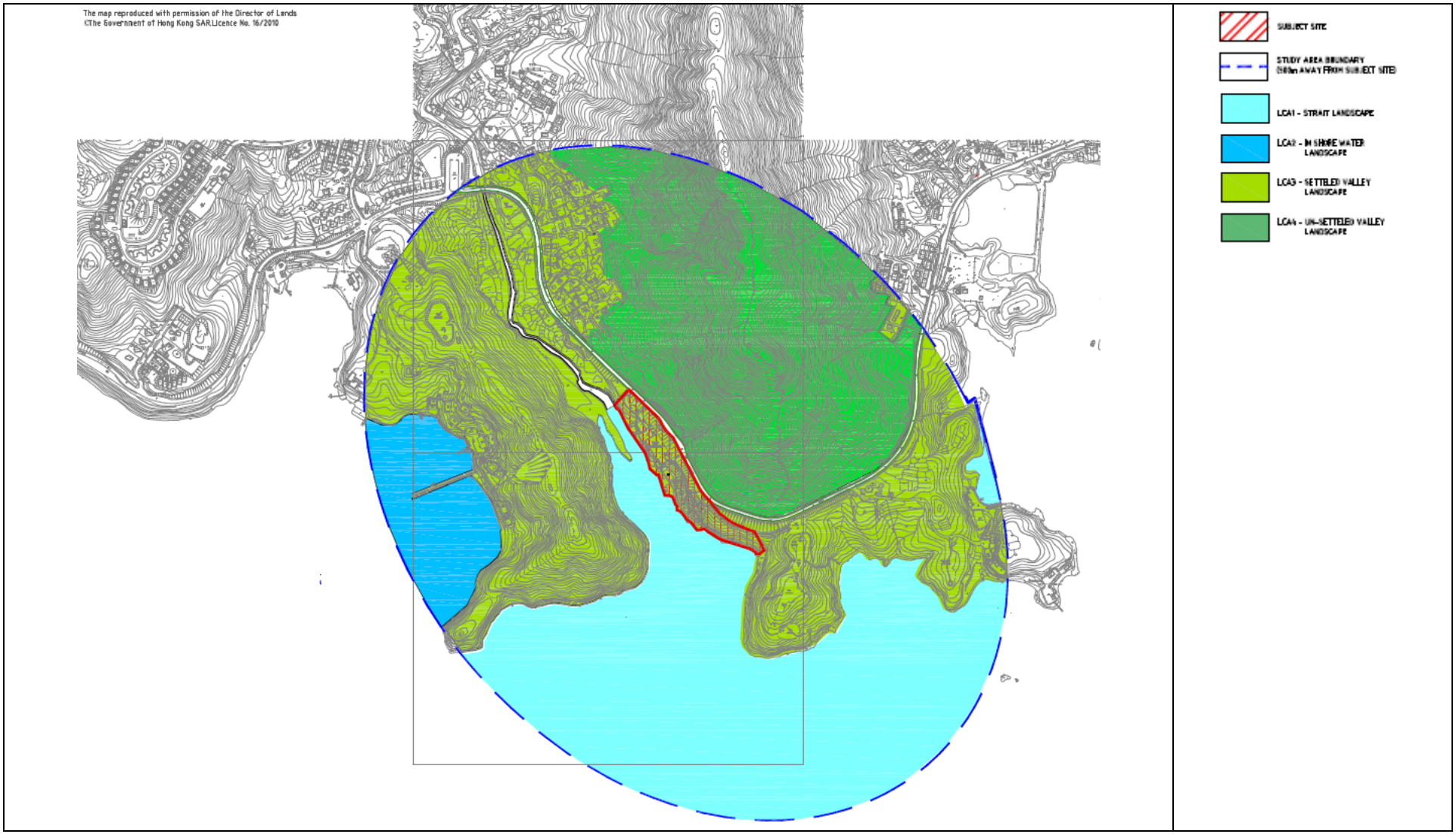


Figure 3.2 Landscape Character Areas

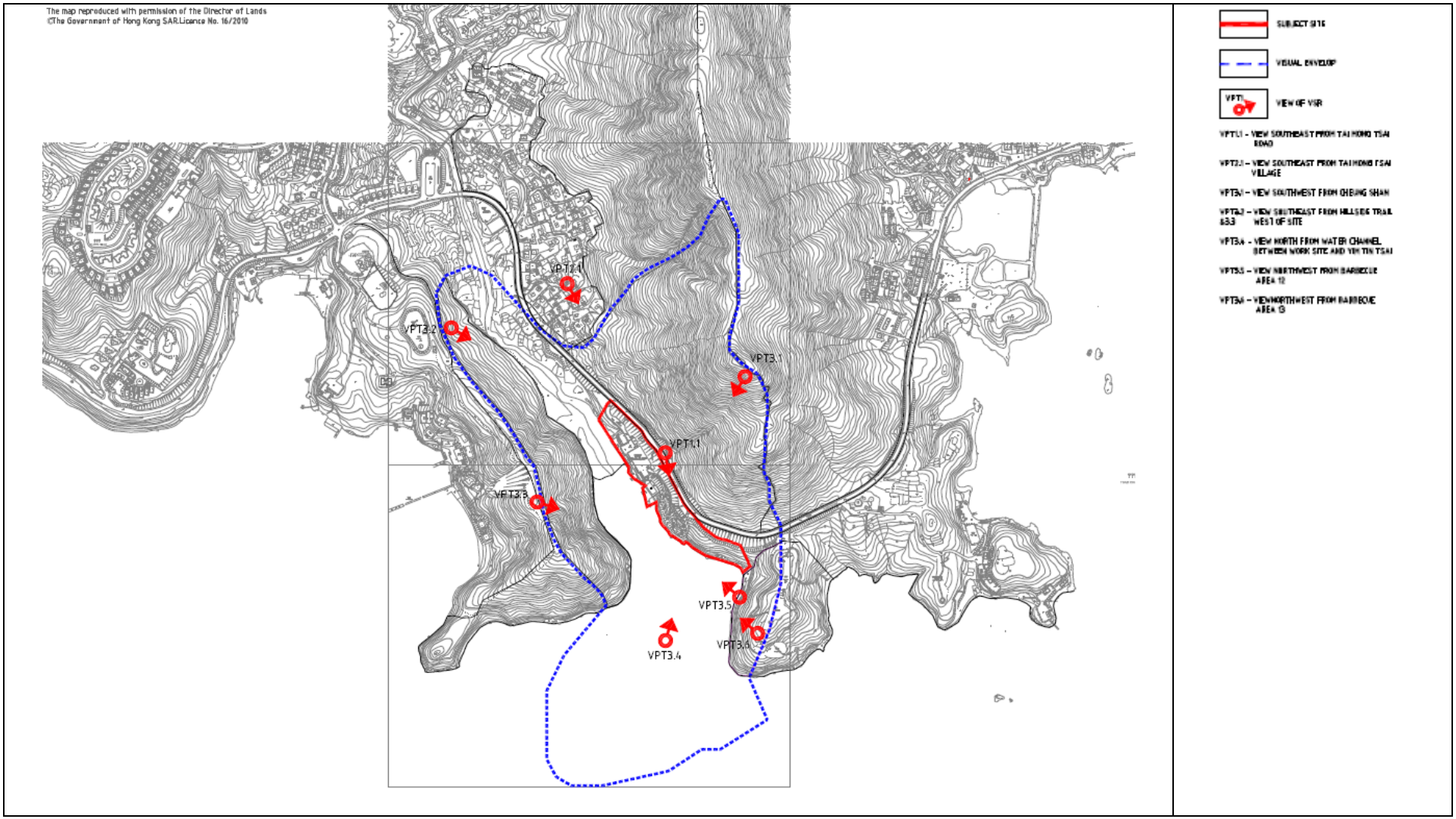


Figure 3.3a Visual Sensitive Receivers (Index Map)



VPT1.1- View southeast from Tai Mong Tsai Road



VPT2.1 View southeast from Tai Mong Tsai Village

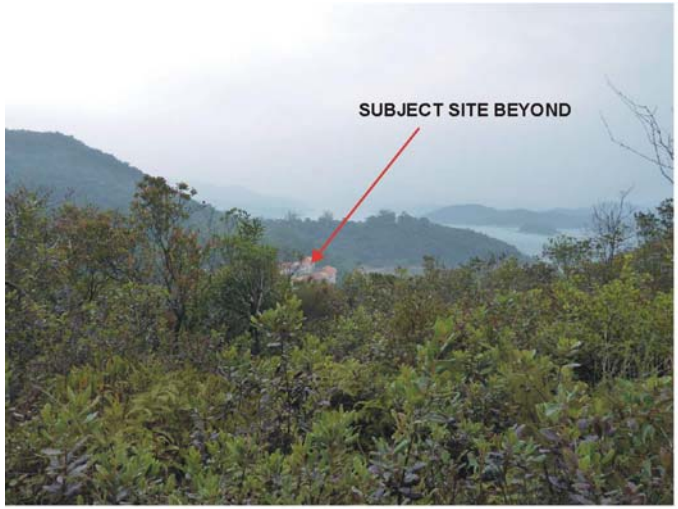


VPT 3.1 - View southwest from Cheung Shan



VPT 3.2 - View southeast from hillside trail west of site

Figure 3.3b Visual Sensitive Receivers (Views)



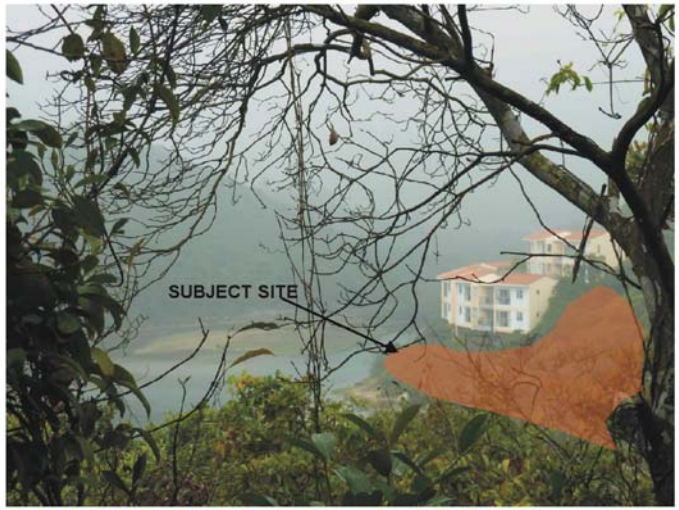
VPT3.3 - View southeast from hillside trail west of site



VPT 3.4 - View north from water channel between work site and Tim Tin Tsai



VPT 3.5 - View northwest from Barbecue Area 12



VPT 3.6 - View northwest from Barbecue Area 13

Figure 3.3c Visual Sensitive Receivers (Views)

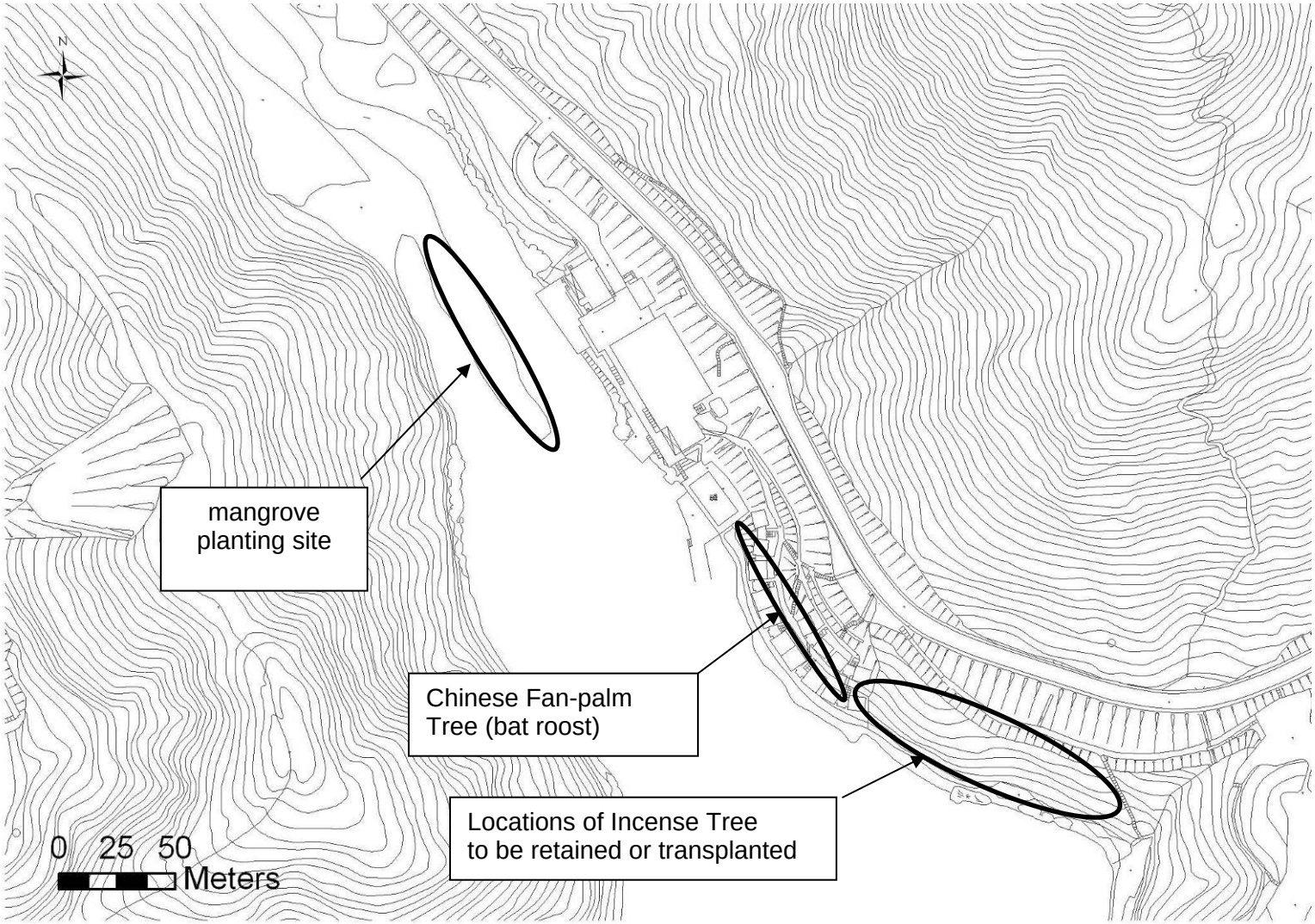


Figure 3.4 Locations of Ecology Monitoring Locations



Figure 3.5 Photos of Chinese Fan-palm trees

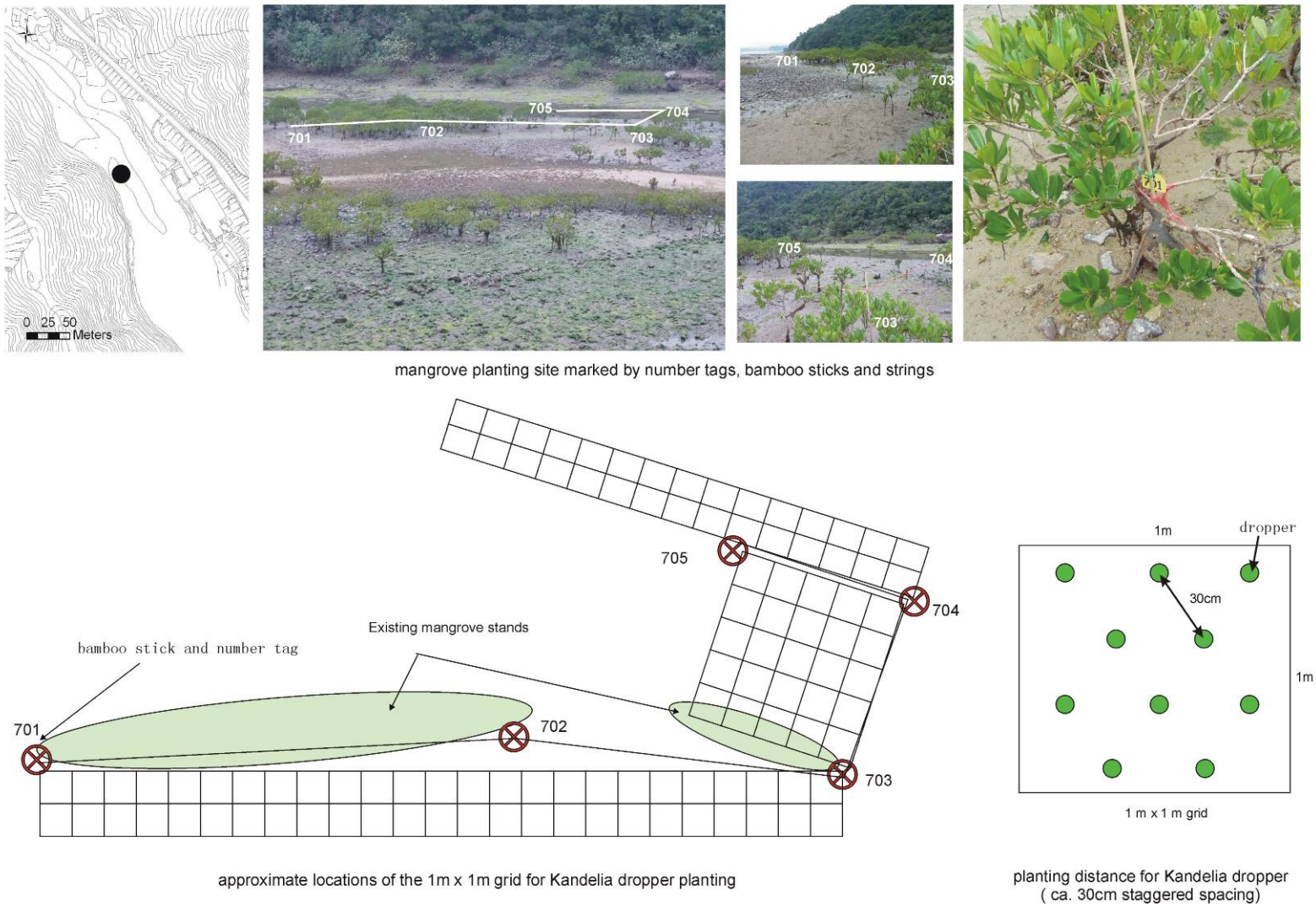


Figure 3.6 Demarcation of Mangrove Compensatory Planting Location

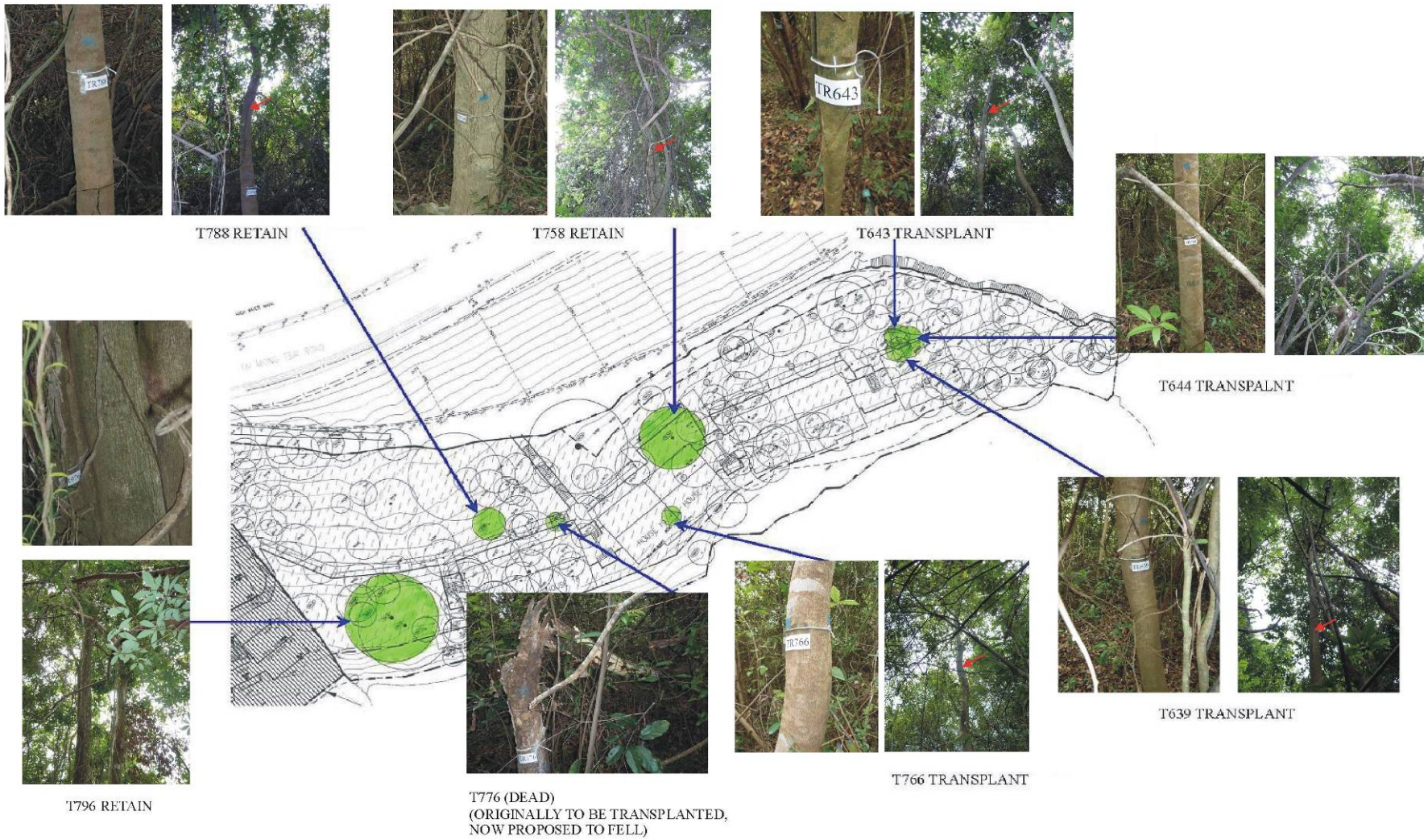


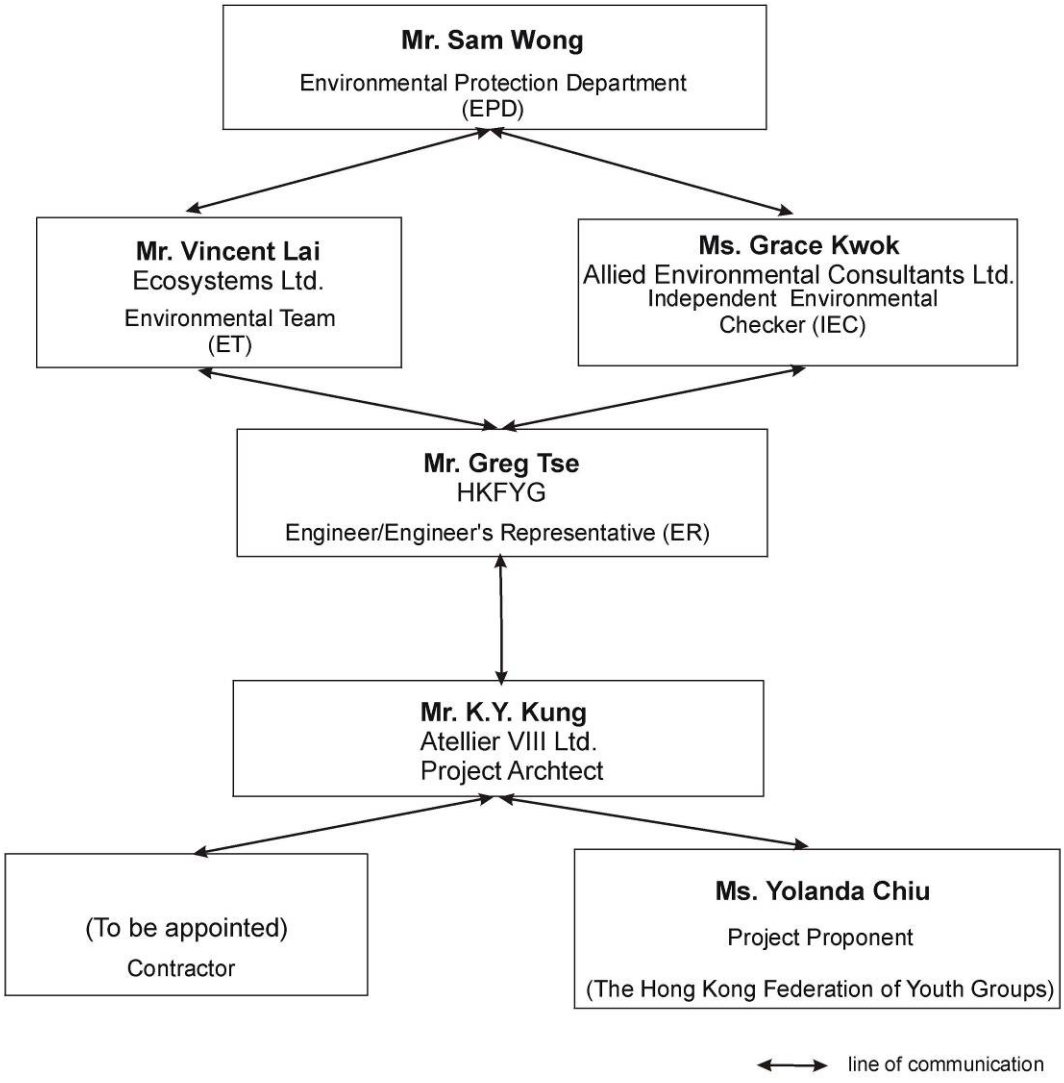
Figure 3.7 Photos of the Incense Trees to be Retained or Transplanted

Appendices

Appendix A The Key Contact Persons, Phone Numbers and Key Personnel

Company/Organisation	Name	Position	Telephone No.
The Hong Kong Federation of Youth Groups	Ms. Yolanda Chiu	Deputy Executive Director	37557134
The Hong Kong Federation of Youth Groups	Mr. Greg Tse	Engineer Representative	97811411
Atellier VIII Ltd.	Mr. K. Y. KUNG	Project Architect	28914296
Atellier VIII Ltd.	Ms. Stella LUK	Project Architect	28914296
Allied Environmental Consultants Ltd.	Ms. Grace Kwok	Independent Environmental Checker	28157028
Ecosystems Ltd.	Mr. Vincent LAI	Environmental Team Leader	25530468
Ecosystems Ltd.	Ms. Mee-Ling YAU	Deputy Environmental Team Leader	25530468

Appendix B Project Organisation



Appendix C List of Landscape Resources (LRs)

Landscape Resources			
LR	**Type**	**Description**	**Sensitivity**
LR1	Woodland (including plantation) Quantity: Large (approx. 42.86 ha)	Existing wooded area comprises the predominantly wooded hillsides of Cheung Shan.	High
LR2	Existing Vehicle Corridor Quantity: Low (approx. 0.98 ha)	Existing linear structure for vehicles of Tai Mong Tsai Road with roadside planting limited to a few roadside trees and toe planters.	Low
LR3	Residential and Settlement Area Quantity: Medium (approx. 8.28 ha)	Hard and soft landscape area within residential and settlement areas at Tai Mong Tsai Village, Tai Mong Tsai New Village and institution centre and campsites within the study area.	Medium
LR4	Stream Course Quantity: Medium (approx. 1.47 ha)	Existing natural stream course between the site and the peninsula opposite.	High
LR5	Abandoned Agricultural Area Quantity: Low (approx. 0.33 ha)	Abandoned agricultural area within the study area.	Low
LR6	Barbecue Area, Picnic Area & Sitting-Out Area Quantity: Low (approx. 1.13 ha)	Existing leisure area of Barbecue Sites, Picnic Area & Sitting-Out Area within the study area.	Medium
LR7	Open Water Quantity: Large (approx. 42.47 ha)	Existing open water to the west of the site within the study area.	High
LR8	Scrubland Quantity: Large (approx. 22.30 ha)	Existing scrubland located predominantly on the uplands of Cheung Shan.	High

Appendix D List of Landscape Character Areas (LCAs)

Landscape Character Areas			
LCA	**Name**	**Description**	**Quality / Sensitivity**
LCA1	Strait Landscape	This is an area of inshore coastal water enclosed by significant landforms on two sides, thereby creating a distinct sense of enclosure on those two sides. Characterised predominantly by their surrounding landforms and the muted hues and horizontality of their coastal waters, which also include small, isolated islands, passing vessels, and marine activities of all kinds, including anchorages, shipping lanes, ferry traffic and waterborne recreational activity. These features produce a natural, marine landscape with a distinct sense of enclosure	Large/High
LCA2	In-shore Water Landscape	This is an area of coastal water lying close to the shore and enclosed to a certain degree by nearby landmasses and islands, which create a sense of enclosure or containment. Whilst this landscape is characterized predominantly by the horizontality and muted hues of its coastal waters, it also includes small, isolated islands, outlying rocks and marine activities including ferry traffic and waterborne recreational activity. The result is a largely open, tranquil and natural landscape, which is punctuated by the colours and movement of human features and activities.	Medium/High
LCA3	Settled Valley Landscape	This refers to the foothills of Cheung Shan and nearby hill valleys located in close proximity to the coastline. While the valley sides are mostly wooded and therefore of good quality, the flatter valley floors near the coast and stream area are mostly settled with man-made features including villages, outdoor recreational centre/camps, roads, abandoned agricultural fields, barbeque pits and picnic sites and therefore is	Large/Medium

Landscape Character Areas			
LCA	**Name**	**Description**	**Quality / Sensitivity**
		considered as a landscape of moderately valued characteristics reasonably tolerant to change.	
LCA4	Un-settled Valley Landscape	This refers to the uplands and hillslopes of Cheung Shan lying at levels between 30 and 165mPD. Consisting of hillsides, knolls, ridges and spurs, it is covered in low scrub and grassland. Woodland can be found on the lower slopes and in sheltered gullies and ravines. Due to its remoteness, this landscape contains few human features and possesses a distinctly remote and exposed character.	Large/High

Appendix E Visually Sensitive Receivers (VSRs)

VSR	Key Visually Sensitive Receivers (VSRs)	Viewer Group	Max. Staying Time	Distance to the Project	Frequency and Duration of View and Sources of Impact Type of view	Sensitivity to Change (Low/Medium/High)
VSR1	VPT1.1 Travellers along Tai Mong Tsai Road	Passengers & Pedestrian	Approx. 2 min	Approx. 0 – 200m	-Full view towards the Project site. -Low frequency	Low
VSR2	VPT2.1 Tai Mong Tsai Village	Residents	24 hr depending on VSRs	Approx. 120m	-No view towards the Project site. -High frequency -View during day and night. Duration of view will vary depends on the activity of VSRs.	High
VSR3	VPT3.1 Hikers to the south of Cheung Shan	Visitors	Approx. 30 mins depending on VSRs	Approx. 10 – 200m	-Partial view to glimpse towards the Project site. -Low frequency	Medium
	VPT3.2 & 3.3 Hikers to the hillside trail west of site	Visitors	Approx. 30 mins depending on VSRs	Approx. 150 – 300m	-Limited view towards the Project site. -Low frequency	Medium
	VPT3.4 Visitors to the channel between Project site and Yim Tin Tsai	Visitors	Approx. 1-2 hrs depending on VSRs	Approx. 0 – 500m	-Full view towards the Project site. -Low frequency	Medium

VSR	Key Visually Sensitive Receivers (VSRs)	Viewer Group	Max. Staying Time	Distance to the Project	Frequency and Duration of View and Sources of Impact Type of view	Sensitivity to Change (Low/Medium/High)
	VPT3.5 Visitors at barbecue area 12	Visitors	Approx. 4 hrs depending on VSRs	Approx. 10 – 50m	-Partial view towards the Project site. -Low frequency	Medium
	VPT3.6 Visitors at barbecue area 13	Visitors	Approx. 4 hrs depending on VSRs	Approx. 100m	-Partial view towards the Project site. -Low frequency	Medium