

AUES JOB NO.: TCS01230/21

TUEN MUN - CHEK LAP KOK LINK Contract No. HY/2021/13– Provision of Remaining Compensation Tree Planting for the Tuen Mun – Chek Lap Kok Link Project

13<sup>th</sup> Monthly Environmental Monitoring and Audit (EM&A) Report–June 2023

PREPARED FOR WING HO YUEN LANDSCAPING CO., LTD

DateReference No.Prepared ByCertified By

7 July 2023 TCS01230/21/600/R0092v1

Martin Li Ben Tam (Environmental Consultant) (Environmental Team Leader)

Version	Date	Remarks
1	7 July 2023	First Submission



Our Ref: TCS01230/21/300/L0093

AECOM 8/F Grand Central Plaza Tower 2, 138 Shatin Rural Committee Road Shatin

Attn: Ms. Candy Lau

**10 July 2023** By Email

Dear Madam,

Re: Contract No. HY/2021/13 Provision of Remaining Compensation Tree Planting for the Tuen Mun – Chek Lap Kok Link Project Environmental Permit No.: EP-354/2009/D 13<sup>th</sup> Monthly Environmental Monitoring and Audit (EM&A) Report – June 2023

We write to certify the 13<sup>th</sup> Monthly Environmental Monitoring and Audit (EM&A) Report – June 2023 (TCS01230/21/600/R0092v1) in accordance with Condition 4.4 of the Environmental Permit no. EP-354/2009/D.

Should you have any queries or require further information, please feel free to contact us or the undersigned at Tel: 2959-6059 or Fax: 2959-6079.

Yours sincerely, For and on Behalf of Action-United Environmental Services & Consulting (AUES)

Ben Tam Environmental Team Leader

c.c.	ANew	R (IF	EC)				Mr. James Choi
	Wing	Но	Yuen	Landscaping	Со.,	Ltd	Mr. Joe Fung
	(Contr	actor	·)				

香港新界葵涌大連排道35-41號金基工業大廈20樓A室 Unit A, 20/F, Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, New Territories, Hong Kong

 Tel
 (852) 2959-6059

 Fax
 (852) 2959-6079

 Email
 info@fordbusiness.com



By email

By email



**Highways** Department 5th Floor, Ho Man Tin Government Offices 88 Chung Hau Street Ho Man Tin Kowloon

Your reference:

Our reference:

Date:

HKHYD203/50/108896

10 July 2023

Attention: Mr Eric Wong

**BY EMAIL & POST** (email: se4.mwsd@hyd.gov.hk)

Dear Sirs

Agreement No. HMWSD 6/2022 (EP) Environmental Project Office for Hong Kong-Zhuhai-Macao Bridge Hong Kong Ling Road, Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities & Tuen Mun-Chek Lap Kok Link - Investigation

Contract No. HY/2021/13 -

Provision of Remaining Compensation Tree Planting for the Tuen Mun - Chek Lak Kok Link Project 13th Monthly Environmental Monitoring and Audit Report - June 2023

We refer to the email of 7 July 2023, attaching a Monthly Environmental Monitoring and Audit Report – June 2023, prepared by the Environmental Team (ET) of the captioned.

We have no comment and hereby verify the captioned report in accordance with Clause 4.4 of the Environmental Permit no. EP-353/2009/K.

Should you have any queries, please do not hesitate to contact the undersigned or our Mr Alex Chan on 2618 2831.

Yours faithfully ANEWR CONSULTING LIMITED

Choi Jame Independent Environmental Checker

CPSJ/LCCR/CYCA/lsmt

Highway Department – Mr Nick Li (email: e10.mwsd@hyd.gov.hk) CC Highway Department – Mr Vincent Li (email: pc9.mwsd@hyd.gov.hk) AEUS – Mr Ben Tam (email: bentam@fordbusiness.com)





#### EXECUTIVE SUMMARY

ES01 This is the 13<sup>th</sup> Monthly EM&A Report presenting the monitoring results and inspection findings for the period from 1 to 30 June 2023 (hereinafter 'the Reporting Period').

#### SUMMARY OF EM&A ACTIVITIES FOR THE REPORTING PERIOD

- ES02 The EM&A activities conducted in the Reporting Period are summary in below:-
  - Landscape & Visual Monitoring (Establishment period) –1 events
- ES03 According to the approved Landscape and Visual plan, the planting works under the contract was commended on 21 June 2022 and completed on 15 December 2022.
- ES04 The two years Establishment Period for the compensation planting areas (Tuen Mun and Lantau) outside the TMCLKL Project site was commenced on 16 December 2022. According to the EM&A manual requirement, once per three months inspection should be conducted during the Establishment Period to monitor the compensation trees health condition. **One** establishment period inspection was conducted on 13 June 2023 for those compensation planting areas during this reporting period covering the 2<sup>nd</sup> quarter establishment period from 16 March to 15 June 2023.

#### **ENVIRONMENTAL COMPLAINT**

- ES05 In the Reporting Period, no environmental complaint was received.
- ES06 The statistical summary of environmental complaints is summarized in the following table.

Departing Devied	<b>Environmental Complaint Statistics</b>		
<b>Reporting Period</b>	Frequency Cumulative	Cumulative	
Since the Contract commencement	0	0	
June 2023	0	0	

#### NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

ES07 No environmental summons or successful prosecutions were recorded in the Reporting Period.

#### **REPORTING CHANGE**

ES08 Reporting changes were made in the Reporting Period due to the Establishment Period for the Contract commenced. Some not related sections were removed.

#### FUTURE KEY ISSUES

- ES09 The planting works for the Contract was completed on 15 December 2022. The two years establishment period for those planting area was commenced on 16 December 2022.
- ES10 According to the Project EM&A Manual requirement, monitoring for the planting works at a frequency of 3 months interval during the 24-month establishment period is required to make sure the establishment planting works is complied with EMIS requirement, and during the 12-month establishment period, the maintenance operations must be supervised by fully qualified Landscape Resident Site Staff (Registered Landscape Architect or Professional Member of the Hong Kong Institute of Landscape Architects). Subsequent to the 12-month establishment period supervised by the qualified Landscape Resident Site Staff, the supervision from the 13<sup>th</sup> to the 24<sup>th</sup> month would be continued by other members of the Project.
- ES11 All the planting works for the TM-CLKL Project was completed, the quantity of tree planting and the landscape planting area for the Project fulfil with the EIA Report and EP requirement.



#### TABLE OF CONTENTS

1	INTROD	UCTION	1
	1.1	PROJECT BACKGROUND	1
	1.2	REPORT STRUCTURE	1
	1.3	CONTRACT ORGANIZATION	1
2	SUMMA	RY OF ENVIRONMENTAL REQUIREMENTS UNDER THE CONTRACT	2
	2.1	GENERAL	2
	2.2	Environmental Aspects	2
	2.3	MONITORING SCHEDULE	4
3	LANDSC	CAPE AND VISUAL	5
	3.1	GENERAL	5
	3.2	LANDSCAPE AND VISUAL INSPECTION	5
	3.3	SUMMARY OF THE TREE PLANTING FOR TMCLK PROJECT	6
4	ENVIRO	NMENTAL COMPLAINT AND NON-COMPLIANCE	7
	4.1	ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION	7
5	CONCLU	JSIONS AND RECOMMENDATIONS	8
	5.1	Conclusions	8
	5.2	RECOMMENDATIONS	8

#### LIST OF TABLES

- TABLE 3-1
   DETAILS OF PROVISION OF REMAINING COMPENSATION TREE PLANTING WORKS AREAS
- TABLE 3-2
   Details of Establishment Inspection for the Project during the Reporting Period
- TABLE 3-3
   SUMMARY OF QUANTITY TREE PLANTING FOR TM-CLKL PROJECT
- TABLE 3-4
   SUMMARY OF LANDSCAPE PLANTING AREA FOR TM-CLKL PROJECT
- TABLE 4-1
   STATISTICAL SUMMARY OF ENVIRONMENTAL COMPLAINTS
- TABLE 4-2
   STATISTICAL SUMMARY OF ENVIRONMENTAL SUMMONS
- TABLE 4-3
   STATISTICAL SUMMARY OF ENVIRONMENTAL PROSECUTION

#### **LIST OF APPENDICES**

- APPENDIX A PROJECT LAYOUT PLAN
- APPENDIX B LAYOUT PLAN OF THE CONTRACT
- APPENDIX C ORGANIZATION OF THE CONTRACT
- APPENDIX D EVENT AND ACTION PLAN
- APPENDIX E MONITORING SCHEDULE
- APPENDIX F ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURES IMPLEMENTATION SCHEDULE (EMIS)
- APPENDIX G LAYOUT PLAN FOR THE PLANTING ZONE
- APPENDIX H CHECKLIST FOR LANDSCAPE AND VISUAL MONITORING
- APPENDIX I TREE PLANTING SCHEDULE FOR TM-CLKL PROJECT
- APPENDIX J CUMULATIVE STATISTICS OF COMPLAINT, SUMMON AND PROSECUTION



#### **1 INTRODUCTION**

#### 1.1 **PROJECT BACKGROUND**

- 1.1.1 According to the findings of the Northwest New Territories (NWNT) Traffic and Infrastructure Review conducted by the Transport Department, Tuen Mun Road, Ting Kau Bridge, Lantau Link and North Lantau Highway would be operating beyond capacity after 2016. This forecast has been based on the estimated increase in cross boundary traffic, developments in the Northwest New Territories (NWNT), and possible developments in North Lantau, including the Airport developments, the Lantau Logistics Park (LLP) and the Hong Kong – Zhuhai – Macao Bridge (HZMB). In order to cope with the anticipated traffic demand, two new road sections between NWNT and North Lantau – Tuen Mun – Chek Lap Kok Link (TM-CLKL) and Tuen Mun Western Bypass (TMWB) are proposed.
- 1.1.2 According to the requirements of the EIA Report, the TM-CLKL Project shall carry out landscape softworks including planting of 6300 trees within the project limits, amongst others. On completion of the planting works by the three other contracts, 5353 trees were accommodated within the project limits. The Landscape and Visual Plan (LVP) later prepared for this Project recommended the compensatory planting of remaining trees at locations outside the limits of the TM-CLKL Project.
- 1.1.3 Wing Ho Yuen Landscaping Co., Ltd (hereafter "WHY") is commissioned by the Highways Department (HyD) as the Main Contractor of the Contract No. HY/2021/13 –Provision of Remaining Compensation Tree Planting for the Tuen Mun Chek Lap Kok Link Project ((hereafter "the Contract") and this Contract is part of the Tuen Mun Chek Lap Kok Link (TM-CLK Link Project).TM-CLK Link Project is a Designated Project under Environmental Permit number EP-354/2009/D issued on 13 March 2015. The layout Plan of the Project and the Contract are showed in *Appendix A and B* respectively.
- 1.1.4 The planting works for the Contract No. HY/2021/13 was commenced on 21 June 2022. The entire compensation tree planting works for this Contract was completed on 15 December 2022. The two years establishment period for those planting area was commenced on 16 December 2022.
- 1.1.5 The construction works of the Contract mainly include:
  - a. Maintenance the compensation planting area of the Project during the establishment period.
- 1.1.6 This is 13<sup>th</sup> monthly EM&A report presenting the inspection findings for period from 1 to 30 June 2023.

#### **1.2 REPORT STRUCTURE**

- 1.2.1 The Monthly Environmental Monitoring and Audit (EM&A) Report is structured into the following sections:-
  - Section 1 Introduction
  - Section 2 Summary of Environmental Requirements under the Contract
  - Section 3 Landscape and Visual
  - *Section 4 Environmental Complaints and Non-Compliance*
  - Section 5 Conclusions and Recommendations

#### **1.3 CONTRACT ORGANIZATION**

1.3.1 The Contract organization and contact details of key personnel are shown in *Appendix C*.



#### 2 SUMMARY OF ENVIRONMENTAL REQUIREMENTS UNDER THE CONTRACT

#### 2.1 GENERAL

- 2.1.1 In accordance with the Project EM&A Manual requirements, the environmental aspects under the Project shall be included air quality, ecological, cultural heritage, landscape and visual, landfill gas and site inspection.
- 2.1.2 A summary of EM&A requirements under the contract are presented in the sub-sections below. Should non-compliance of the environmental quality criteria occurs, remedial actions will be triggered according to the Event and Action Plan which presented in *Appendix D*.

#### 2.2 ENVIRONMENTAL ASPECTS

#### <u>Air</u>

- 2.2.1 According to the Contract remaining duty is maintenance the compensation planting area of the Project outside TMCLKL boundary during the establishment period. No specific EM&A requirement for air quality related to the establishment of landscape softworks was identify.
- 2.2.2 The scopes of works under this Contract do not involve any of works listed under Section 4.4.1.1 of the approved EIA Report. Vehicles travel under this contract was carried out in paved area. Therefore, fugitive dust emission from the contract would be limited and no unacceptable air quality impact would be expected. No specific mitigation measure and monitoring would be required.

#### <u>Noise</u>

- 2.2.3 According to the Contract remaining duty is maintenance the compensation planting area of the Project outside TMCLKL boundary during the establishment period. No unacceptable noise impact would be expected from the contract. No mitigation measure would be required under the approved EIA Report. No specific EM&A requirement for noise impact related to the establishment of landscape softworks was identify.
- 2.2.4 Most of the works under this contract would be conducted manually, with limited use of PME for delivery material on site and watering the planting area along the road side. Therefore, no unacceptable noise impact would be expected. No specific mitigation measure and monitoring would be required.

#### Water Quality

2.2.5 No marine works will be undertaken under the Contract. Therefore, no water quality monitoring is required for the construction phase of the Contract..

#### **Ecology**

- 2.2.6 No marine works will be undertaken under the Contract and generated marine ecological impact, no dolphin monitoring is required for the construction phase of the Contract.
- 2.2.7 According to the scope of works under the Contract, no identified ecology aspect was related to the Contract, therefore no land base ecology monitoring and mitigation measure would be required.



#### Landscape and Visual

2.2.8 Monitoring of the planting works during the 24-month Establishment period after completion of the construction works should be carried out. Establishment Works Inspection should be carried out once every 3 months to make sure the establishment planting works is complied with EMIS requirement. The entire compensation tree planting works for this Contract was completed on 15 December 2022. The two years establishment period for those planting area was commenced on 16 December 2022. The summary of Establishment inspection for the Project is shown in *Table 2-1*.

	Establishment		Next Quarter of	
Contract Area	Monitoring Commenced	<b>Respond Party</b>	Establishment Monitoring	
HY/2012/07 (Zone 1, 3 & 4)	June 2020	HMWSD 2/2020 (HY)	Completed (Last quarter inspection was taken on 26 May 2022)	
HY/2012/07 (Zone 2)	June 2020	HY/2021/13	Completed (Last quarter inspection was taken on 25 April 2022)	
HY/2013/12	June 2020	HMWSD 2/2020 (HY)	Completed (Last quarter inspection was taken on 31 May 2022)	
HY/2017/10 (Zone 1-5)	February 2021	HMWSD 2/2020 (HY)	Completed (Last quarter inspection was taken on 13 Jan 2023)	
HY/2017/10 (Zone 6)	February 2021	HY/2021/13	Completed (Last quarter inspection was taken on 13 Jan 2023))	
Tuen Mun (Portion A) Tung Chung (Portion B) Penny's Bay (Portion C)	16 December 2022	HY/2021/13	16 June to 15 September 2023 (3 <sup>rd</sup> Quarter)	

#### Table 2-1 Summary of Establishment inspection for the Project

#### **Cultural Heritage**

2.2.9 According to the works area under the Contract, no cultural heritage zone is located. Therefore, no specific EM&A requirement for construction phase was identified.

#### <u>Landfill Gas</u>

2.2.10 According to work scope of the Contract, there is no works area lies within the 250m Consultation Zone around the closed Pillar Point Valley Landfill. Therefore, no landfill gas monitoring is required for the Contract.

#### Waste Management

2.2.11 According to the Contract remaining duty is maintenance the compensation planting area of the Project outside TMCLKL boundary during the establishment period. No specific EM&A requirement for Waste Management related to the establishment of landscape softworks was identify.



2.2.12 All planting area under this contract area are land-based, no dredged sediment, excavated C&D material, C&D waste, chemical waste and sewage would be generated under this Contract. Only limited level of dead plant would be generated from works during maintenance of the planting area and would be easily controlled by standard waste management practice. No specific mitigation measure would be required.

#### **Inspection and Audit**

2.2.13 According to the Contract remaining duty is maintenance the compensation planting area of the Project outside TMCLKL boundary during the establishment period. No construction works would be taken under this contract. Moreover, no potential environmental issue had been identified in the previous sections. No regular site inspections would be required.

#### 2.3 MONITORING SCHEDULE

2.3.1 The monitoring schedule for landscape &visual for the present reporting period is presented in *Appendix E*. Summary of Impact Environmental Requirements Under the Contract



#### 3 LANDSCAPE AND VISUAL

#### 3.1 GENERAL

3.1.1 According to the Project EM&A Manual requirement, monitoring for the planting works at a frequency of 3 months interval during the 24-month establishment period is required to make sure the establishment planting works is complied with EMIS requirement, and during the 12-month establishment period, the maintenance operations must be supervised by fully qualified Landscape Resident Site Staff (Registered Landscape Architect or Professional Member of the Hong Kong Institute of Landscape Architects). Subsequent to the 12-month establishment period supervised by the qualified Landscape Resident Site Staff, the supervision from the 13<sup>th</sup> to the 24<sup>th</sup> month would be continued by other members of the Project. The updated EMIS for the Contract is shown in *Appendix F*.

#### **3.2** LANDSCAPE AND VISUAL INSPECTION

3.2.1 The planting works under the contract was commenced on 21 June 2022. According to the approved landscape and visual plan, the planting areas under the Contract are summarized in *Table 3-1* and the layout plan for the planting zone is illustrated in *Appendix G*.

Works Area	Zone	Location	Proposed Use
Tuen Mun	Zone	Location	1 Toposed Ose
Portion A1		Slope 6NW-C/F 153	
Portion A2	Zone 1	Slope 6SW-A/F 25	
Portion A3	(Tuen Mun	Slope 5SE-B/F 89	Wester
Portion A4	Area)	Slope 5SE-B/F 70 Slope 5SE-D/F 73	Works area for compensation tree
Portion A5	7	Slope 6SW-C/FR 200	planting
Portion A6	Zone 2 (Siu Lam	Slope 6SW-C/F 233 Slope 6SW-D/FR 279	
Portion A7	Area)	Slope 6SW-D/FR 320	
Lantau			
Tung Chung	Zone 3	Slope 9SE-B/F 35	Works area for
Portion B	(Tung Chung Area)	Slope 9SE-B/F 56 Slope 9SE-B/F 74	compensation tree planting
Penny's Bay Portion C	Zone 4 (Penny's Bay Area)	Slope 10NW-D/F 86 Slope 10NW-D/F 88 Slope 10NW-D/FR 89 Slope 10NW-D/FR 90 Slope 10NW-D/F 93 Slope 10NE-C/F 4 Slope 10NE-C/F 5 Slope 10NE-C/F 6	Works area for compensation tree planting

Table 3-1Details of Provision of Remaining Compensation Tree Planting<br/>Works Areas

- 3.2.2 The planting works for the Contract was completed on 15 December 2022. The two years establishment period for those planting area was commenced on 16 December 2022.
- 3.2.3 In the Reporting Period, **one** establishment period inspection was conducted on 13 June 2023 for those compensation planting areas during this reporting period covering the  $2^{nd}$  quarter establishment period from 16 March to 15 June 2023. The details of Establishment inspection for the Project during the reporting period are shown in *Table 3-2* and the Establishment inspection checklist is shown in *Appendix H*.



Table 3-2Details of Establishment Inspection for the Project during the ReportingPeriod

Planting Area	Quarter of Establishment Monitoring	Inspection Date
Tuen Mun (Portion A)	16 March 44 15 Januar	13 June 2023
Tung Chung (Portion B)	16 March to 15 June 2023 (2 <sup>nd</sup> Quarter)	13 June 2023
Penny's Bay (Portion C)	2023 (2 "Quarter)	13 June 2023

#### 3.3 SUMMARY OF THE TREE PLANTING FOR TMCLK PROJECT

3.3.1 According to the requirements of the EIA Report and EP, the TM-CLKL Project shall carry out landscape softworks including planting of 6300 trees and provide at least 33 ha of landscape planting. All the planting works for the Project was completed. The compliance check for the quantity of tree planting and landscape planting area for the Project are summarized in *Table 3-3* and *Table 3-4* the tree planting schedule for TM-CLKL Project is illustrated in *Appendix I*.

 Table 3-3
 Summary of Quantity Tree Planting for TM-CLKL Project

Works Contract	Location	Total No. of Tree Planting (light standard to heavy standard size)	EIA Requirement	
HY/2012/07 (includes Entrusted Landscape Works to DC/2016/01)	Within TMCLK Project Boundary	1247	At least 6300 trees	
HY/2013/12	5 5	1109	(light standard to heavy standard size)	
HY/2017/10		2997	<b>y</b>	
HY/2021/13	Outside TMCLK Project Boundary	1066		
	Total:	6419	Comply	

Table 3-4	Summary of Landscape Planting Area for TM-CLKL Project
-----------	--

Works Contract	Location	Total Area of Landscape Planting (ha)	EIA Requirement
HY/2012/07 (includes Entrusted Landscape Works to DC/2016/01)	Within TMCLK Project Boundary	14.3	
HY/2013/12 HY/2017/10		5.3 14.4	At least 33 ha
HY/2021/13	Outside TMCLK Project Boundary	NA	
	Total:	33.9	Comply

3.3.2 According to the above summary, the quantity of tree planting and the landscape planting area for the TM-CLKL Project fulfil with the EIA Report and EP requirement.



#### 4 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

#### 4.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

- 4.1.1 In the Reporting Period, no environmental complaint, summons and prosecution under the EM&A Programme was lodged.
- 4.1.2 The statistical summary table of environmental complaint, summons and prosecution are presented in *Tables 4-1, 4-2 and 4-3* and the cumulative statistics of complaint, summons and prosecution are illustrated in *Appendix J*.

#### Table 4-1Statistical Summary of Environmental Complaints

	Environmental Complaint Statistics					
<b>Reporting Period</b>	Frequency Cumulative	Cumulativa	Complaint Nature			
		Cumulative	Air	Noise	Water	Others
June 2023	0	0	NA	NA	NA	NA

#### Table 4-2 Statistical Summary of Environmental Summons

	Environmental Summons Statistics				
<b>Reporting Period</b>	Frequency	Cumulative	Complaint Nature		
			Air	Noise	Water
June 2023	0	0	NA	NA	NA

#### Table 4-3 Statistical Summary of Environmental Prosecution

	Environmental Prosecution Statistics				
<b>Reporting Period</b>	Frequency	Cumulative	Complaint Nature		
			Air	Noise	Water
June 2023	0	0	NA	NA	NA

4.1.3 In the Reporting Period, no warning letter related to environmental issue was received from the EPD or HyD.



#### 5 CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 CONCLUSIONS

- 5.1.1 This is 13<sup>th</sup> monthly EM&A report presenting the inspection findings for the period of 1 to 30 June 2023.
- 5.1.2 The planting works for the Contract No. HY/2021/13 was commenced on 21 June 2022.
- 5.1.3 In the Reporting Period, no complaint was received by RE, the Contractor, ENPO or HyD.
- 5.1.4 No notifications of summons, or successful prosecution were received by the Contractor during the Reporting Period.
- 5.1.5 The planting works for the Contract was completed on 15 December 2022. The two years establishment period for those planting area was commenced on 16 December 2022.
- 5.1.6 There is no air quality, noise, water quality, ecology, cultural heritage and landfill gas monitoring was required for the contract.
- 5.1.7 **One** establishment period inspection was conducted on 13 June 2023 for those compensation planting areas during this reporting period covering the 2<sup>nd</sup> quarter establishment period from 16 March to 15 June 2023.
- 5.1.8 All the planting works for the TM-CLKL Project was completed, the quantity of tree planting and the landscape planting area for the Project fulfil with the EIA Report and EP requirement.

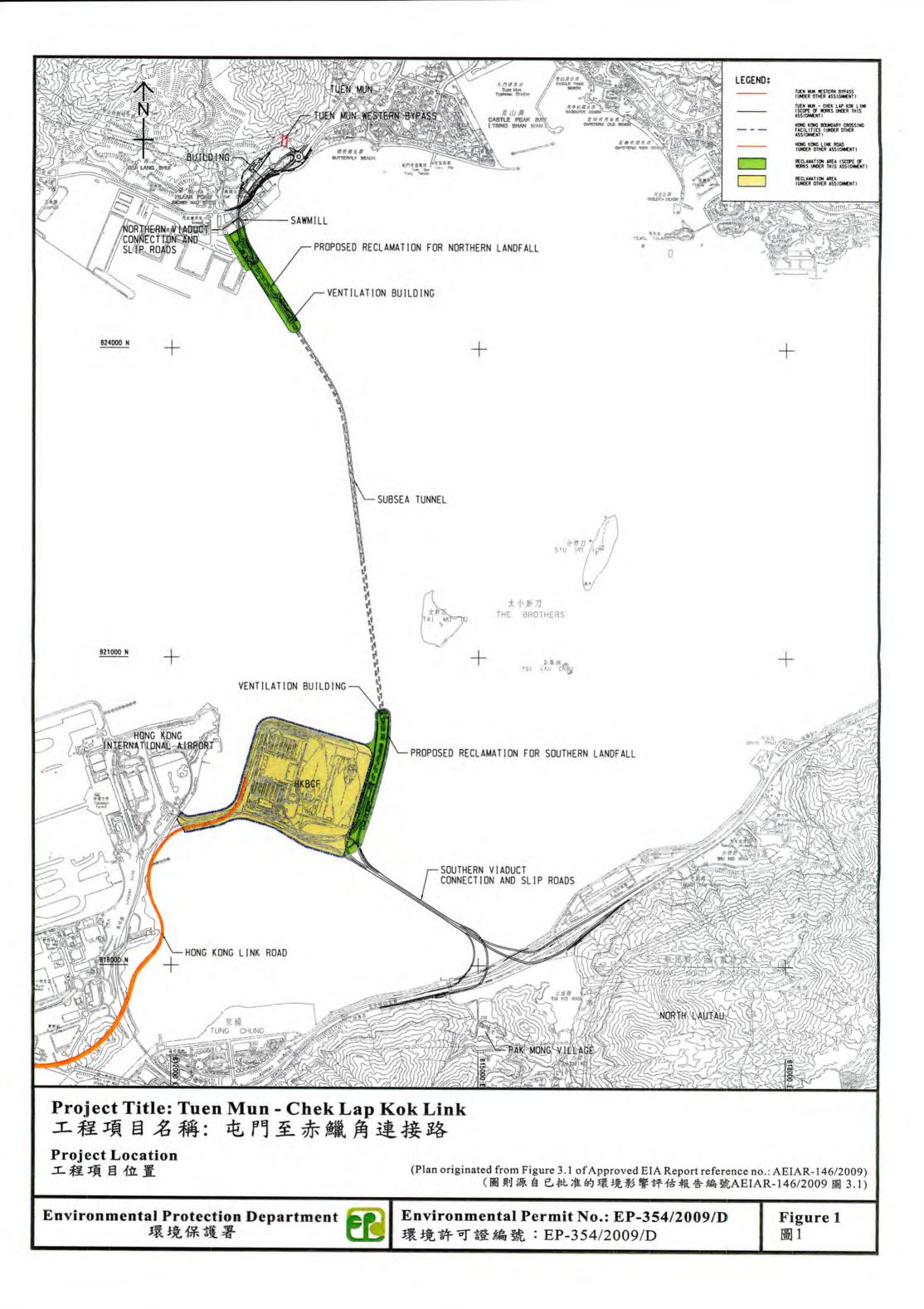
#### 5.2 **RECOMMENDATIONS**

- 5.2.1 According to the Project EM&A Manual requirement, monitoring for the planting works at a frequency of 3 months interval during the 24-month establishment period is required to make sure the establishment planting works is complied with EMIS requirement, and during the 12-month establishment period, the maintenance operations must be supervised by fully qualified Landscape Resident Site Staff (Registered Landscape Architect or Professional Member of the Hong Kong Institute of Landscape Architects). Subsequent to the 12-month establishment period supervised by the qualified Landscape Resident Site Staff, the supervision from the 13<sup>th</sup> to the 24<sup>th</sup> month would be continued by other members of the Project.
- 5.2.2 Proper maintenance for the planting area / planting tree should be provided during the establishment period.



Appendix A

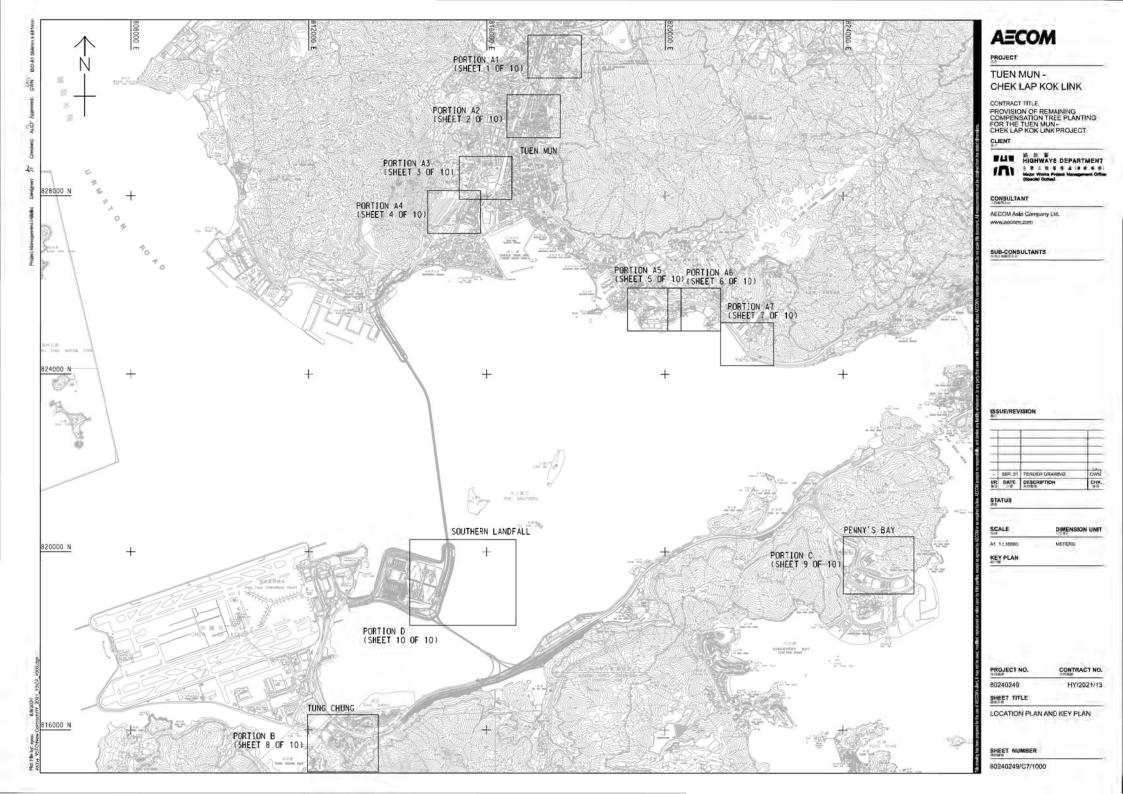
# **Project Layout Plan**





# **Appendix B**

### Layout Plan of the Contract

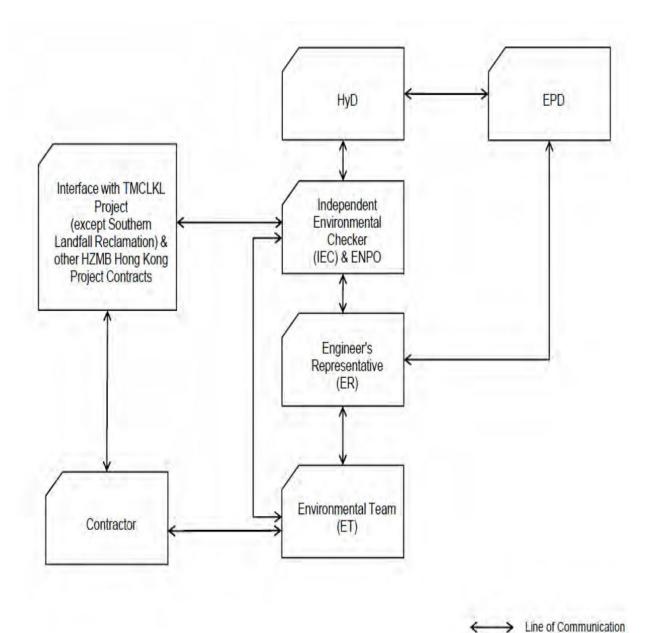




# Appendix C

### **Organization of the Contract**

**AUES** 



**Project Organization chart** 



Organization	Project Role	Name of Key Staff	Tel No	Fax No.
HyD	Employer	Mr. Marcus Cheng	2762 3628	3188 6614
AECOM	Senior Resident Engineer	Mr. Kelvin Leung	2293 6200	2293 6300
AECOM	Senior RLA	Ms. Candy Lau	2293 6200	2293 6300
ANewR Environmental Project Office Leader (ENPO Leader)		Mr. Louis Kwan	2618 2836	3007 8648
ANewR	Independent Environmental Checker (IEC)	Mr. James Choi	2618 2836	3007 8648
WHY	Project Manager	Mr. Joe Fung	2719 1313	2110 0581
WHY	Environmental Officer	Mr. Ivan Lau	2719 1313	2110 0581
AUES	Environmental Team Leader	Mr. Ben Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Mr. Martin Li	2959 6059	2959 6079

#### Contact Details of Key Personnel for the Contract HY/2021/13

Legend:

HyD (Employer) –Highways Department AECOM (Engineer) – AECOM Asia Co. Ltd. WHY (Main Contractor) –Wing Ho Yuen Landscaping Co., Ltd ANewR (ENPO and IEC) –ANewR Consulting Limited AUES (ET) – Action-United Environmental Services & Consulting



# Appendix D

### **Event and Action Plan**



EVENT ACTION		ACTI	ON	
LEVEL	ЕТ	IEC	ER	Contractor
Design Check	• Check final design conforms to the requirements of EP and prepare report.	<ul> <li>Check report.</li> <li>Recommend remedial design if necessary</li> </ul>	• Undertake remedial design if necessary	
Non- conformity on one occasion	<ul> <li>Identify Source</li> <li>Inform IEC and ER</li> <li>Discuss remedial actions with IEC, ER and Contractor</li> <li>Monitor remedial actions until rectification has been completed</li> </ul>	<ul> <li>Check report</li> <li>Check Contractor's working method</li> <li>Discuss with ET and Contractor on possible remedial measures</li> <li>Advise ER on effectiveness of proposed remedial measures.</li> <li>Check implementation of remedial measures</li> </ul>	<ul> <li>Notify Contractor</li> <li>Ensure remedial measures are properly implemented</li> </ul>	<ul> <li>Amend working methods</li> <li>Rectify damage and undertake any necessary replacement</li> </ul>
Repeated Non- conformity	<ul> <li>Identify Source</li> <li>Inform IEC and ER</li> <li>Increase monitoring frequency</li> <li>Discuss remedial actions with IEC, ER and Contractor</li> <li>Monitor remedial actions until rectification has been completed</li> <li>If nonconformity stops, cease additional monitoring</li> </ul>	<ul> <li>Check monitoring report</li> <li>Check Contractor's working method</li> <li>Discuss with ET and Contractor on possible remedial measures</li> <li>Advise ER on effectiveness of proposed remedial measures</li> <li>Supervise implementation of remedial measures</li> </ul>	<ul> <li>Notify Contractor</li> <li>Ensure remedial measures are properly implemented</li> </ul>	<ul> <li>Amend working methods</li> <li>Rectify damage and undertake any necessary replacement</li> </ul>

Note:

ET - Environmental Specialist, IEC - Independent Environmental Checker, ER - Engineer's Representative



Appendix E

# **Monitoring Schedule**

 $\hline Z: Jobs \ 2021 \ TCS01230 (HY \ 2021 \ 13) \ 600 \ Monthly \ Report \ 2023 \ June \ 2023 \ R0092 v1. \ docx$ 



Establishment Insp	pection Schedul	e for this Repo	rting Period
	Portion A	Portion B	Portion C

	Date	Portion A Tuen Mun Area	Portion B Tung Chung Area	Portion C Penny's Bay Area
Thu	1-June-23			
Fri	2-June-23			
Sat	3-June-23			
Sun	4-June-23			
Mon	5-June-23			
Tue	6-June-23			
Wed	7-June-23			
Thu	8-June-23			
Fri	9-June-23			
Sat	10-June-23			
Sun	11-June-23			
Mon	12-June-23			
Tue	13-June-23	$\checkmark$	$\checkmark$	$\checkmark$
Wed	14-June-23			
Thu	15-June-23			
Fri	16-June-23			
Sat	17-June-23			
Sun	18-June-23			
Mon	19-June-23			
Tue	20-June-23			
Wed	21-June-23			
Thu	22-June-23			
Fri	23-June-23			
Sat	24-June-23			
Sun	25-June-23			
Mon	26-June-23			
Tue	27-June-23			
Wed	28-June-23			
Thu	29-June-23			
Fri	30-June-23			

$\checkmark$	Monitoring Day		
	Sunday or Public Holiday		



#### Establishment Inspection Schedule for next Reporting Period

	Date	Portion A Tuen Mun Area	Portion B Tung Chung Area	Portion C Penny's Bay Area
Sat	1-July-23			
Sun	2-July-23			
Mon	3-July-23			
Tue	4-July-23			
Wed	5-July-23			
Thu	6-July-23			
Fri	7-July-23			
Sat	8-July-23			
Sun	9-July-23			
Mon	10-July-23			
Tue	11-July-23			
Wed	12-July-23			
Thu	13-July-23			
Fri	14-July-23			
Sat	15-July-23			
Sun	16-July-23			
Mon	17-July-23			
Tue	18-July-23			
Wed	19-July-23			
Thu	20-July-23			
Fri	21-July-23			
Sat	22-July-23			
Sun	23-July-23			
Mon	24-July-23			
Tue	25-July-23			
Wed	26-July-23			
Thu	27-July-23			
Fri	28-July-23			
Sun	29-July-23			
Mon	30-July-23			
Tue	31-July-23			

$\checkmark$	Monitoring Day
	Sunday or Public Holiday



# Appendix F

### **Environmental Mitigation and Enhancement Measures Implementation Schedule (EMIS)**

#### Contract No. HY/2021/13 Provision of Remaining Compensation Tree Planting for the Tuen Mun – Chek Lap Kok Link Project ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscap	e and Visu	al						
EIA reference EIA		Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or	Implementation Stages		
reference	reference			rigent	Requirement	D	С	0
10.9	7.6	Re-vegetation of affected woodland/shrubland with native species (OM1)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y
10.9	7.6	Tall buffer screen tree / shrub / climber planting where appropriate should be incorporated to soften hard engineering structures and facilities (OM2)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y
10.9	7.6	Streetscape elements (e.g. paving, signage, street furniture, lighting etc.) shall be sensitively designed in a manner that responds to the local context, and minimises potential negative landscape and visual impacts. Lighting units should be directional and minimize unnecessary light spill (OM3)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y
10.9	7.6	Structure, ornamental tree / shrub / climber planting should be provided along roadside amenity strips, central dividers and newly formed slopes to enhance the townscape quality and further greenery enhancement (OM4)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes shall be incorporated to all buildings, engineering structures and associated infrastructure facilities (OM5)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y

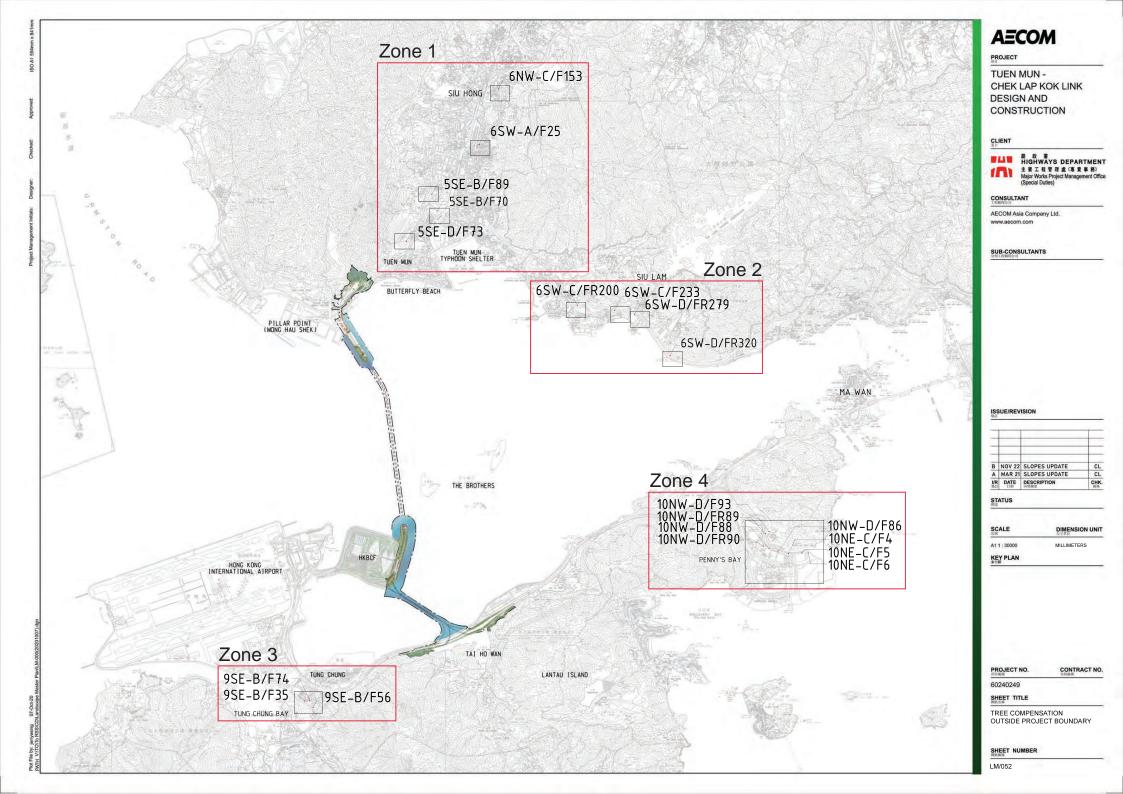
Legend: D=Design, C=Construction, O=Operation

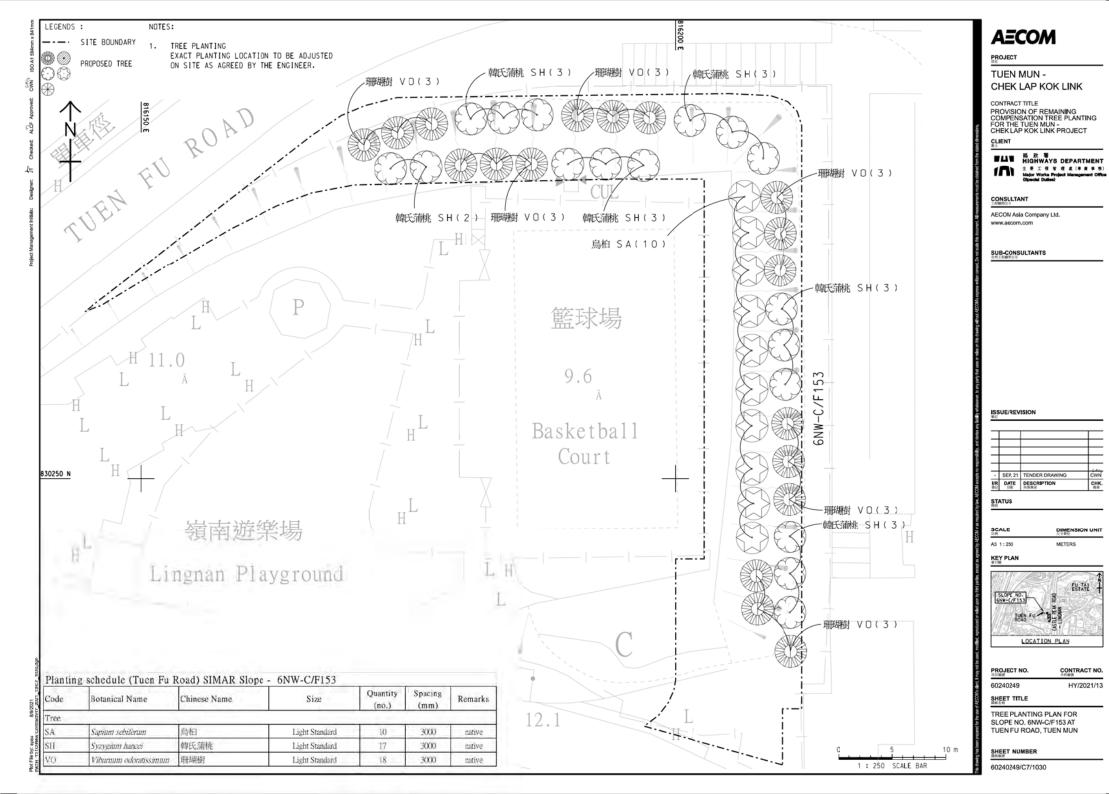
Note: Funding Agent for all mitigation measures will be the Highways Department of the Hong Kong SAR Government

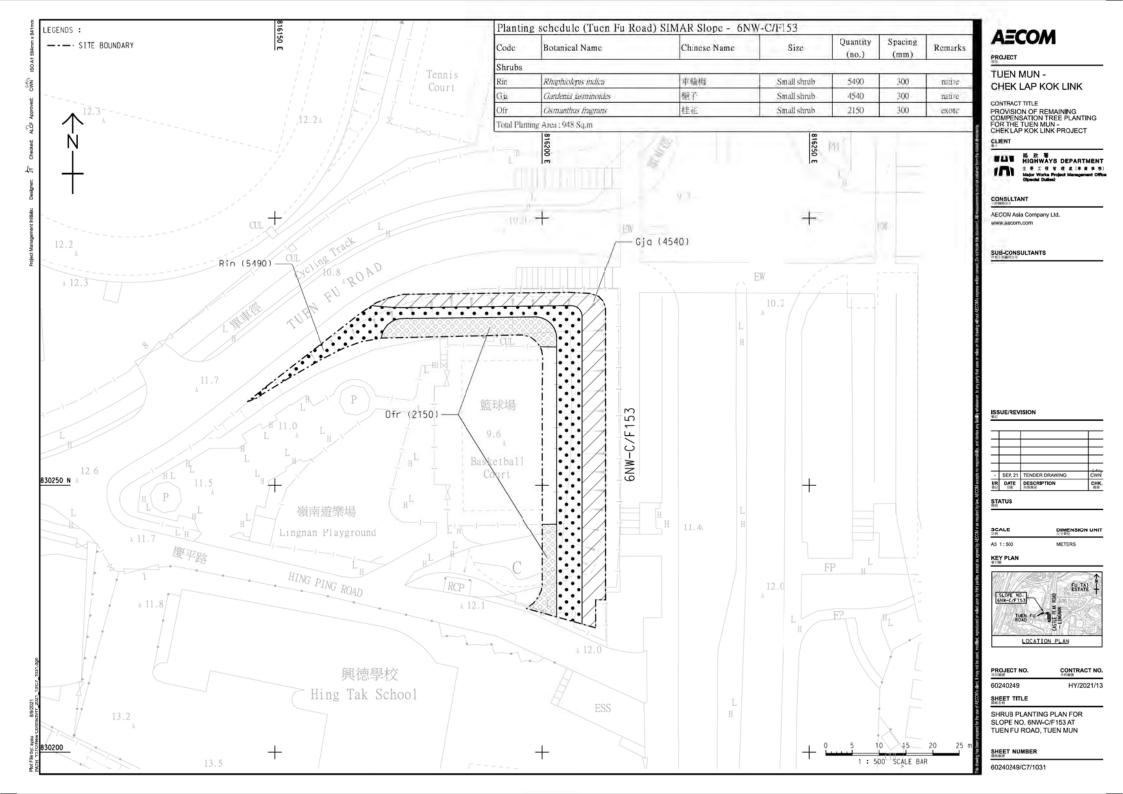


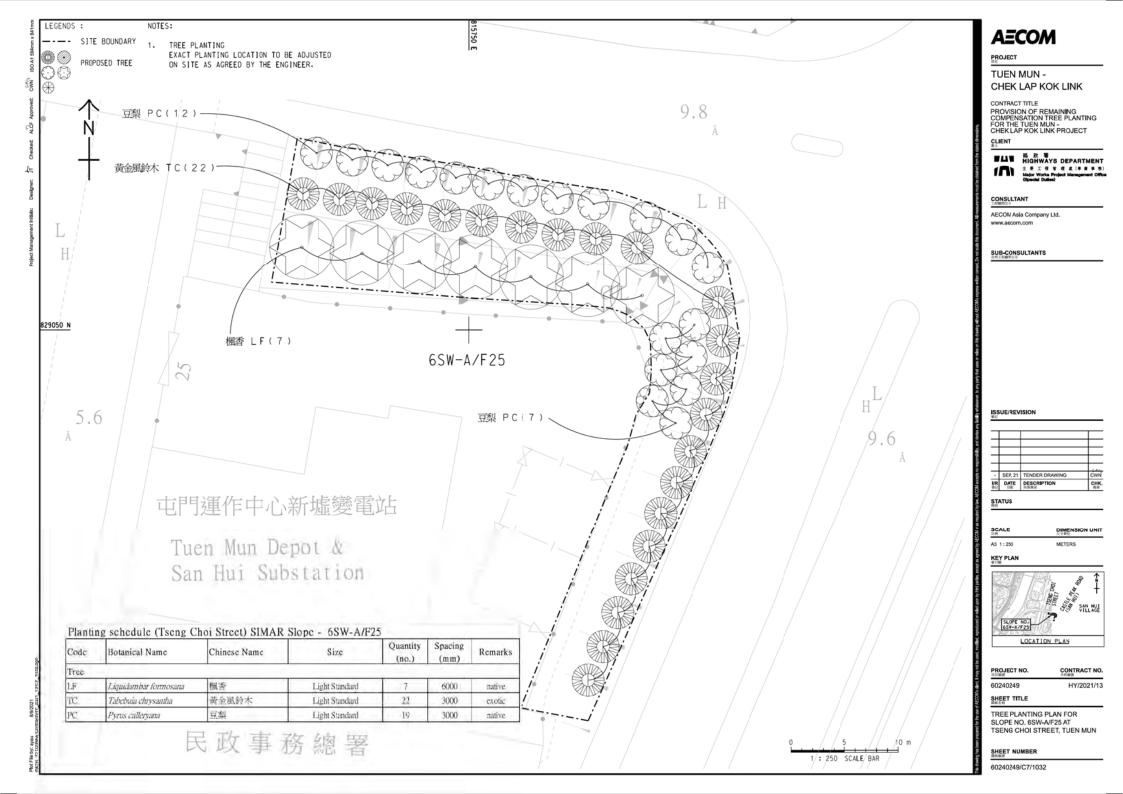
# Appendix G

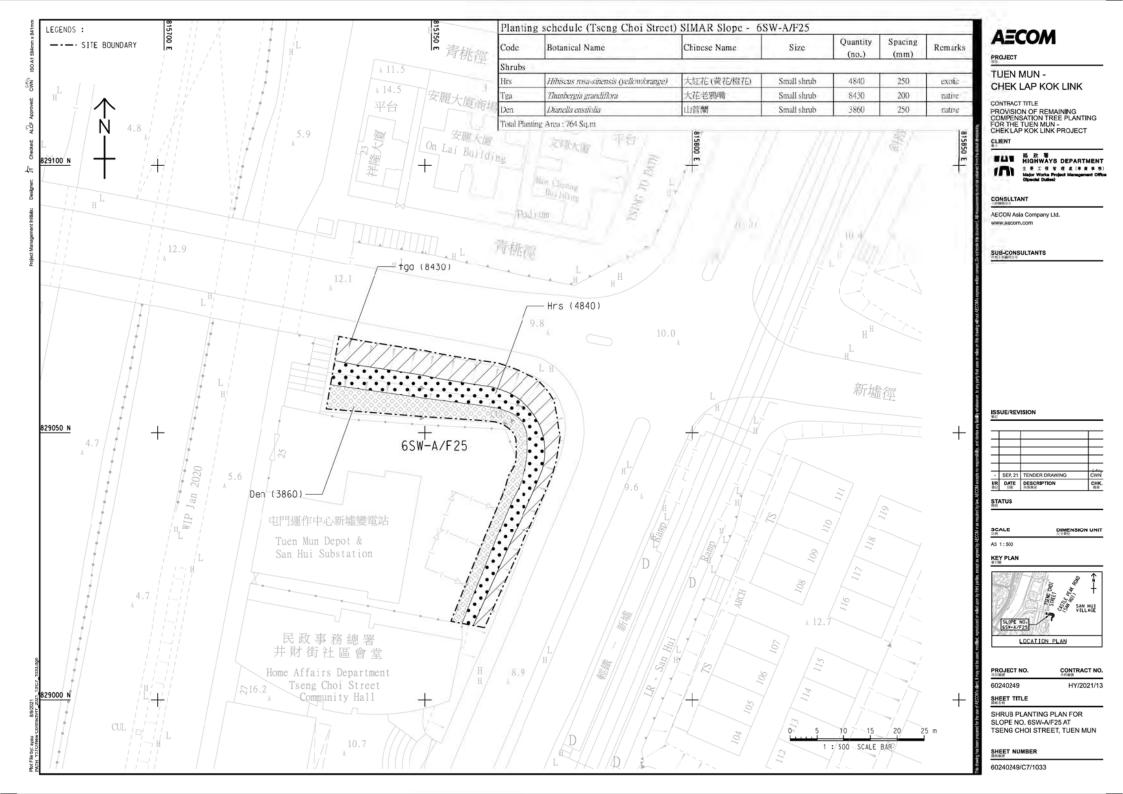
### Layout Plan for the Planting Zone

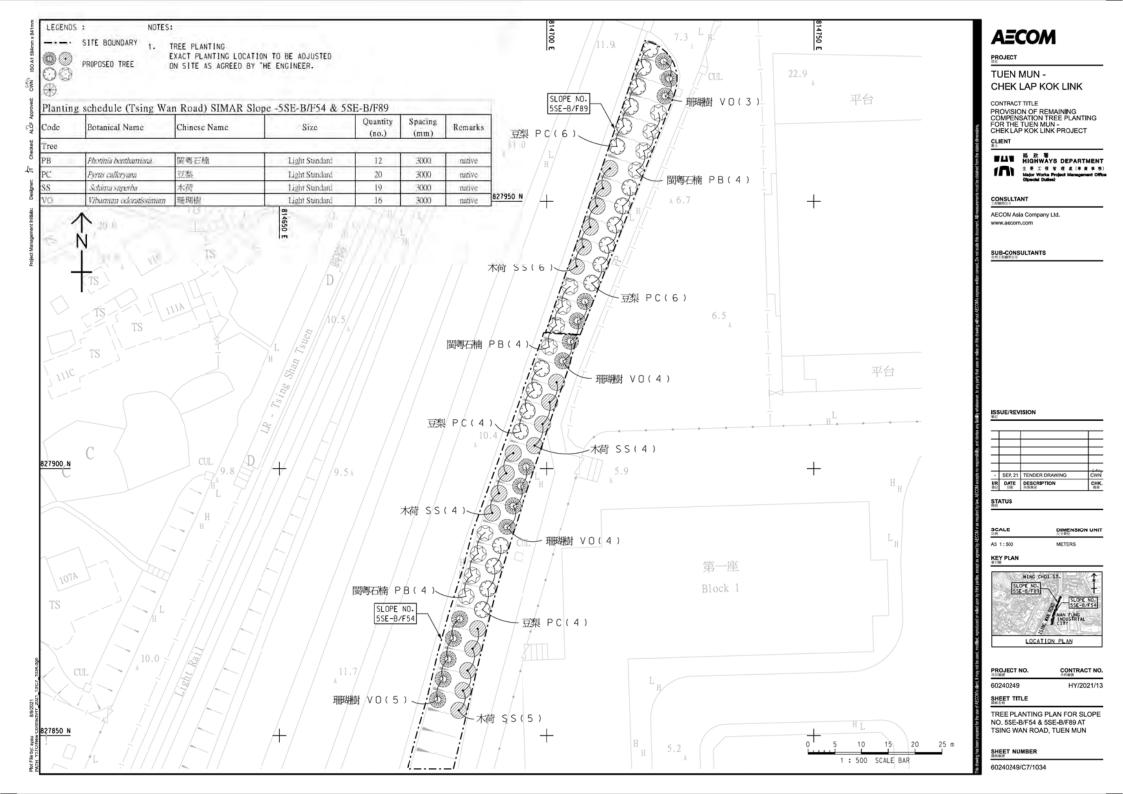


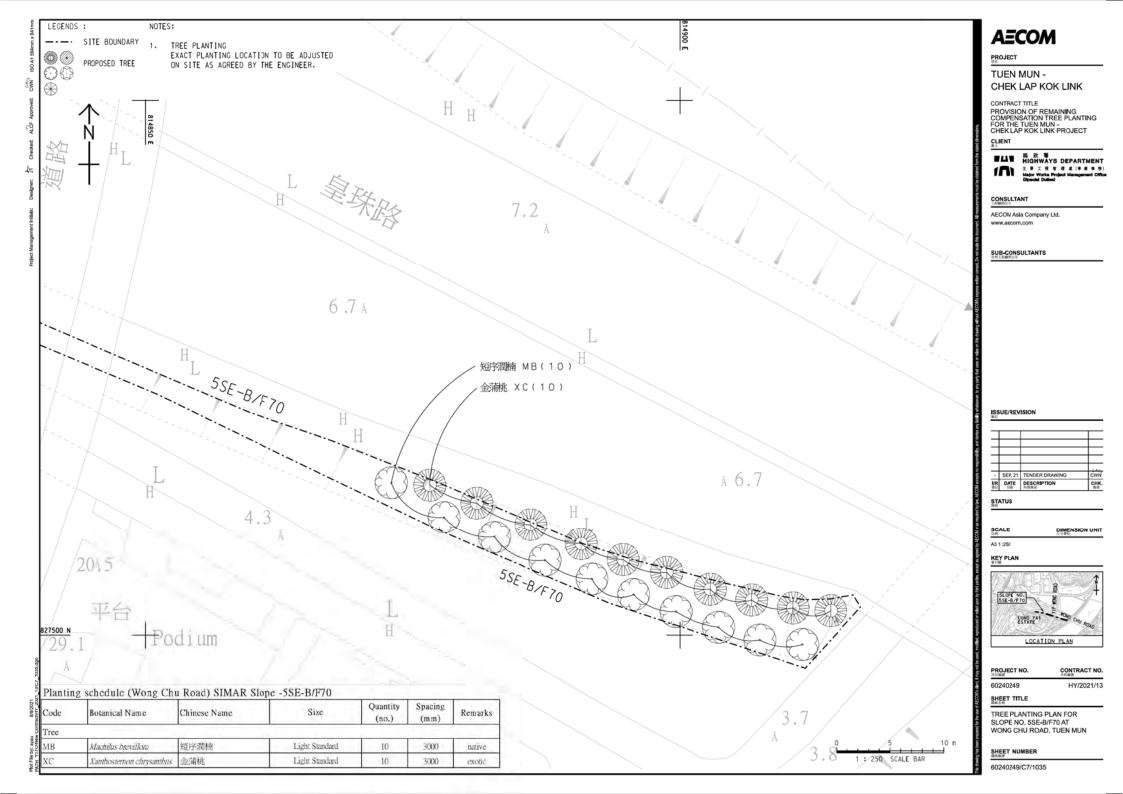


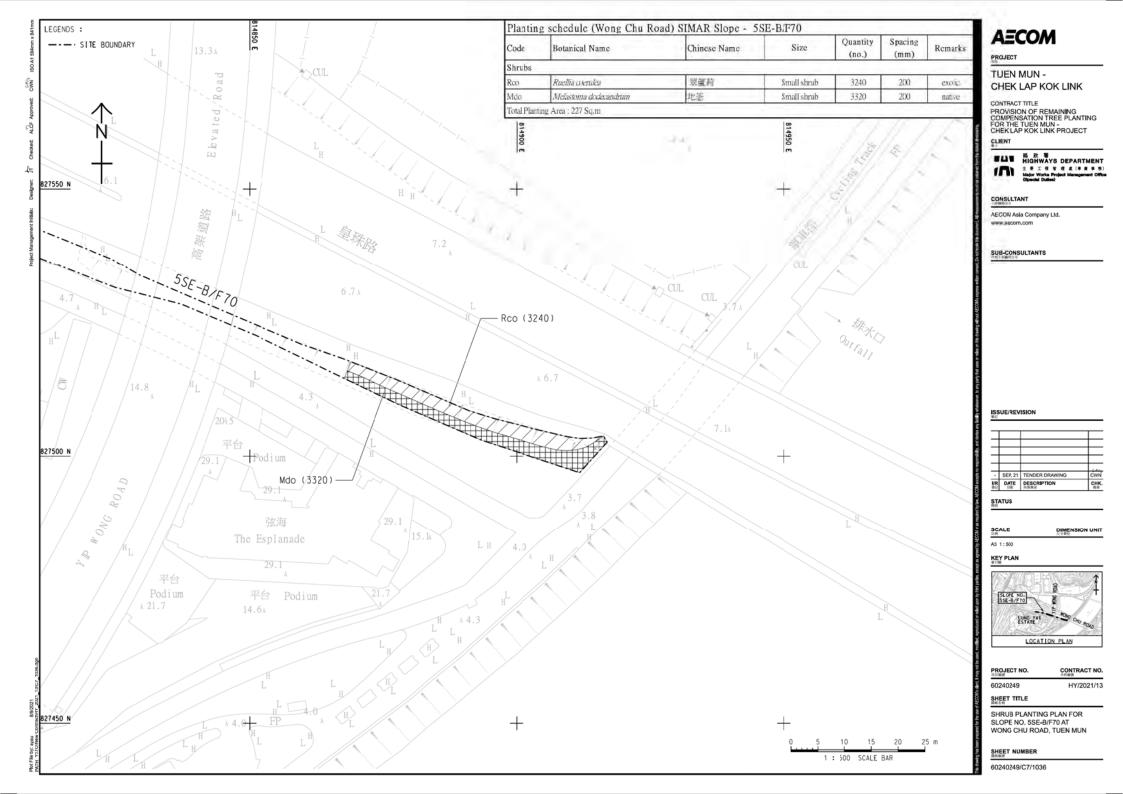


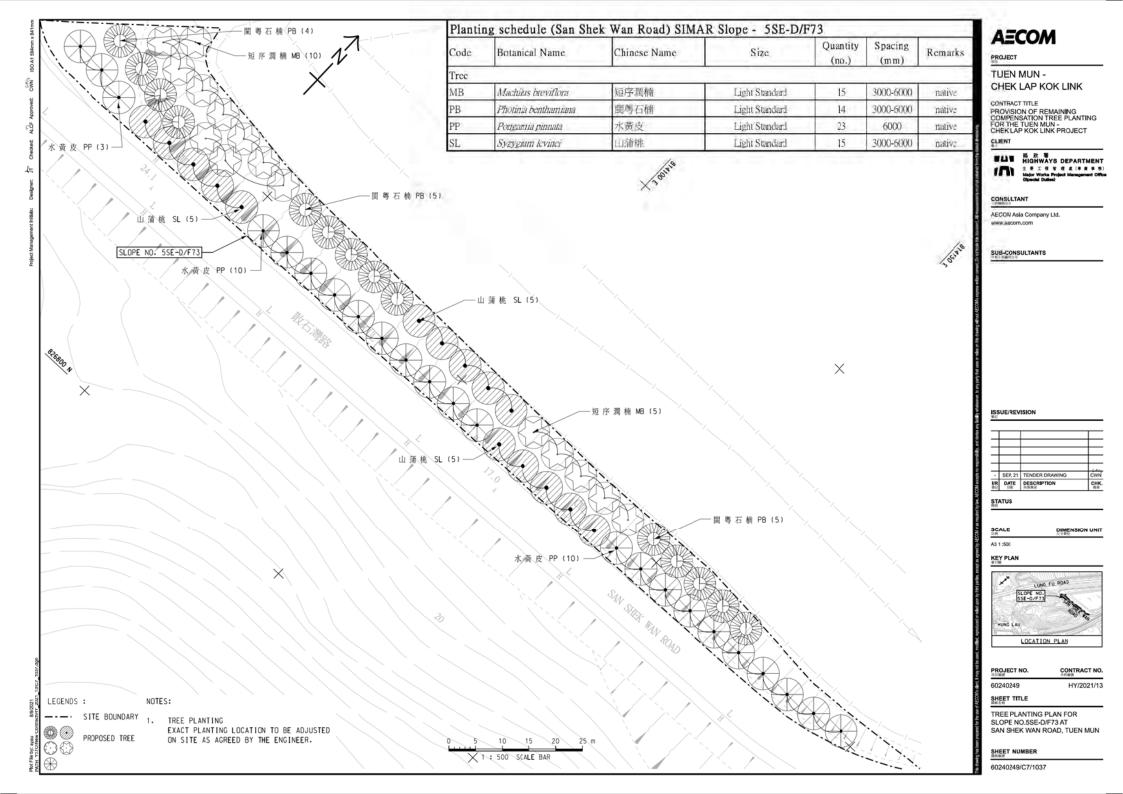


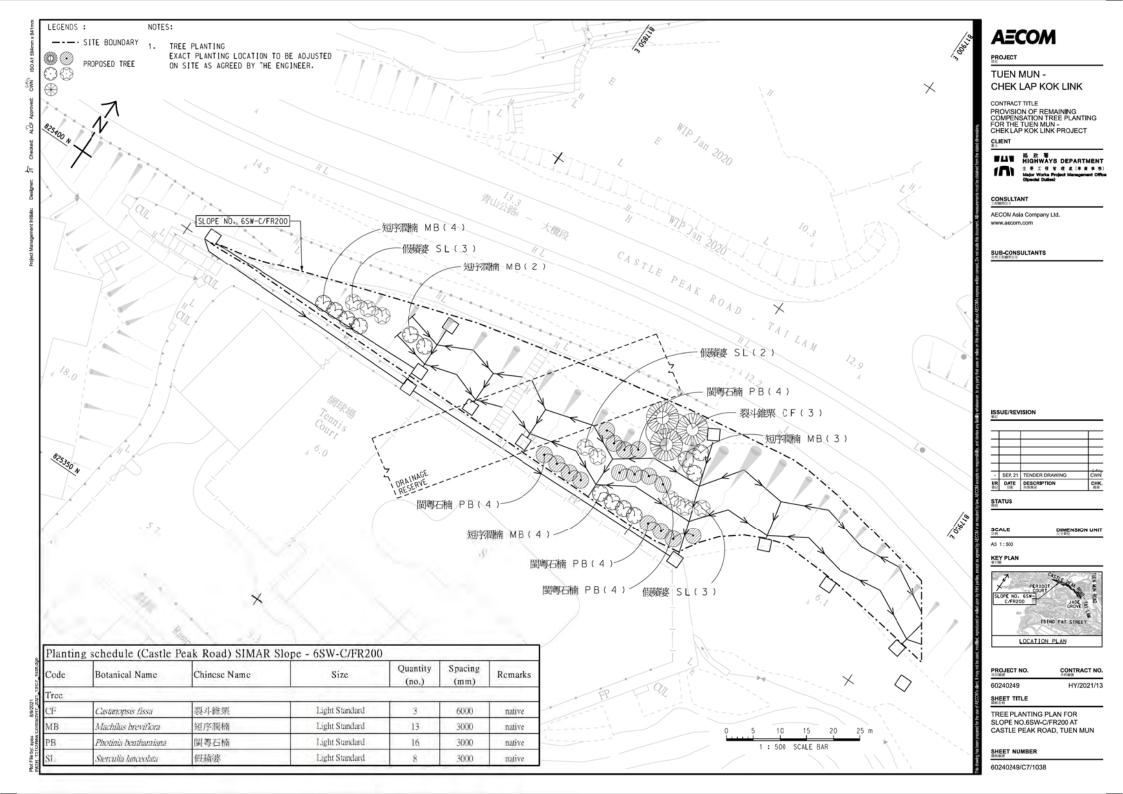


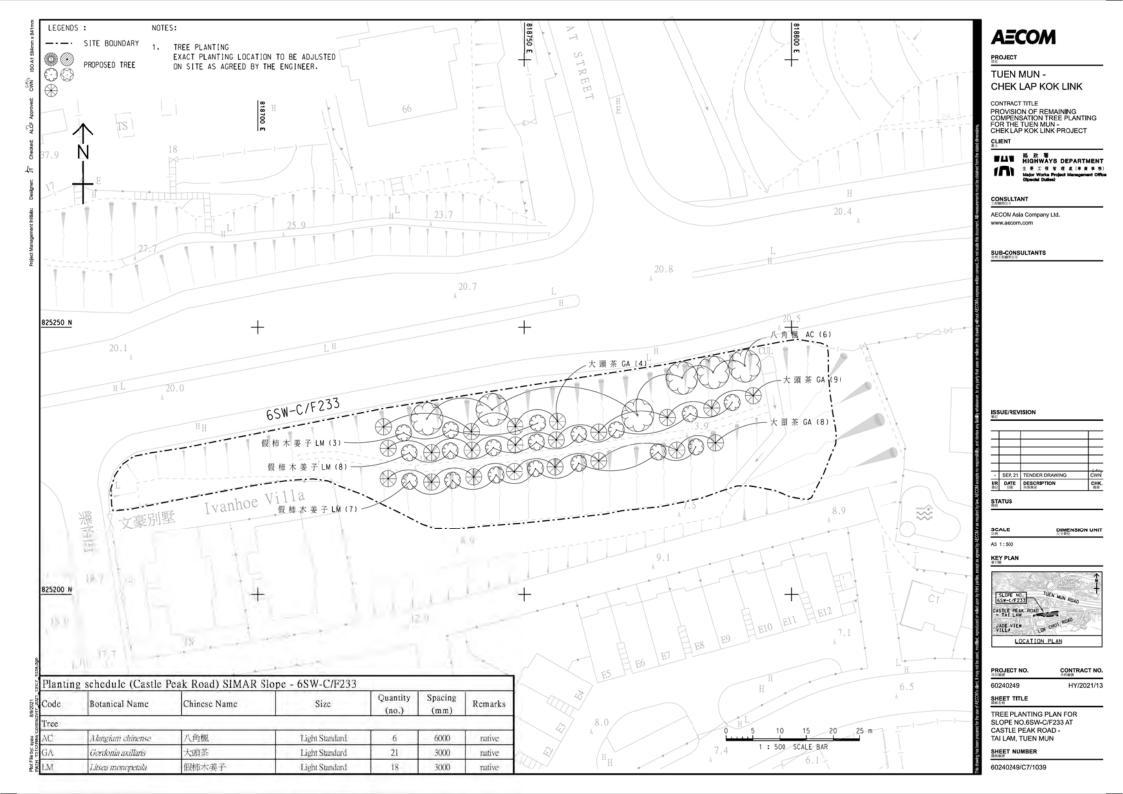


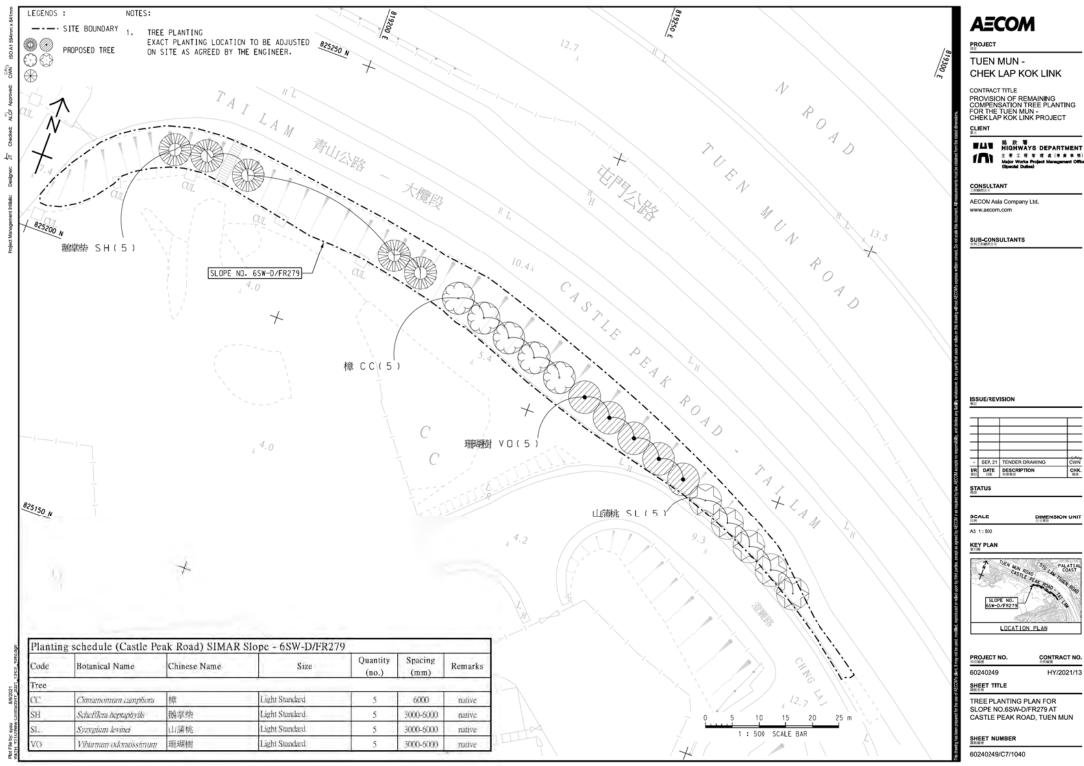






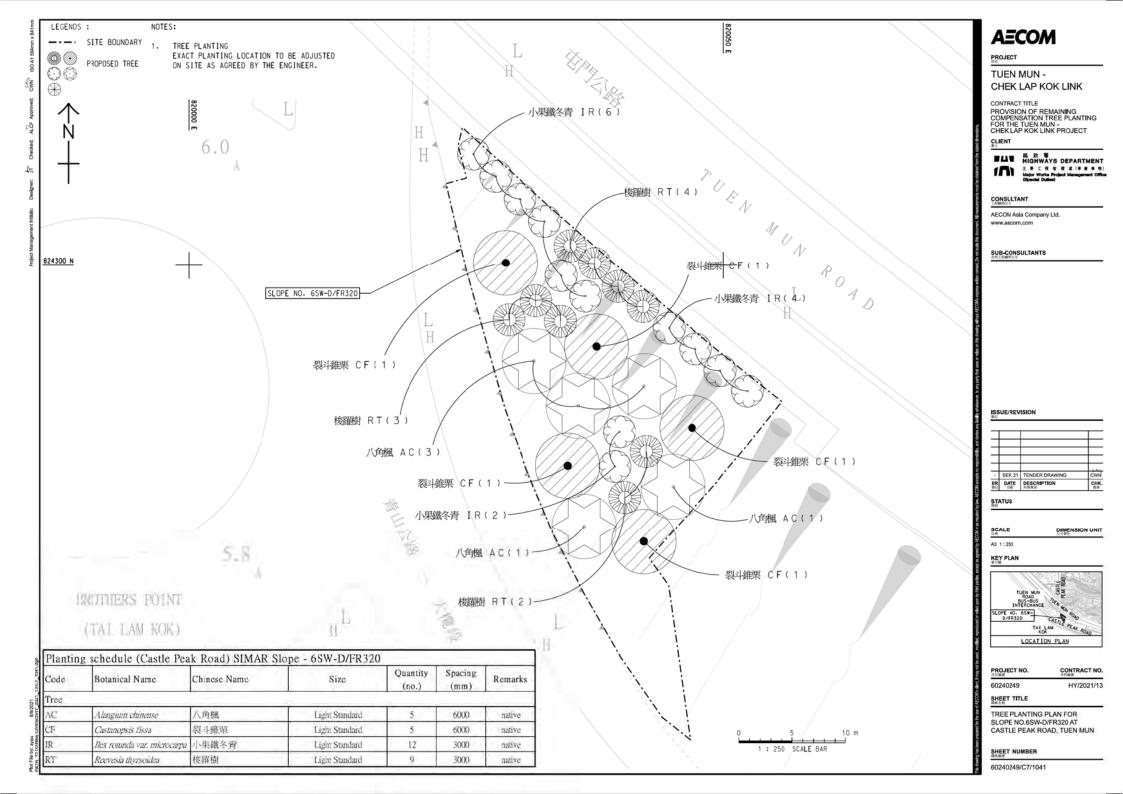


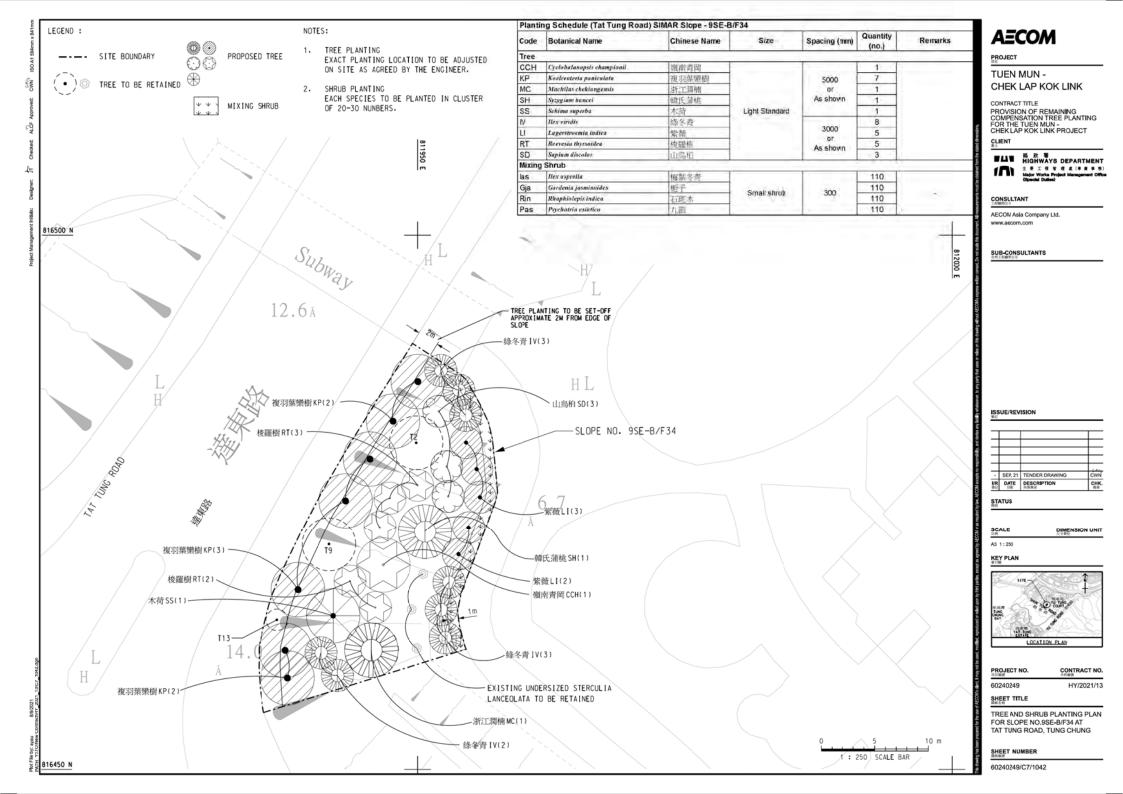


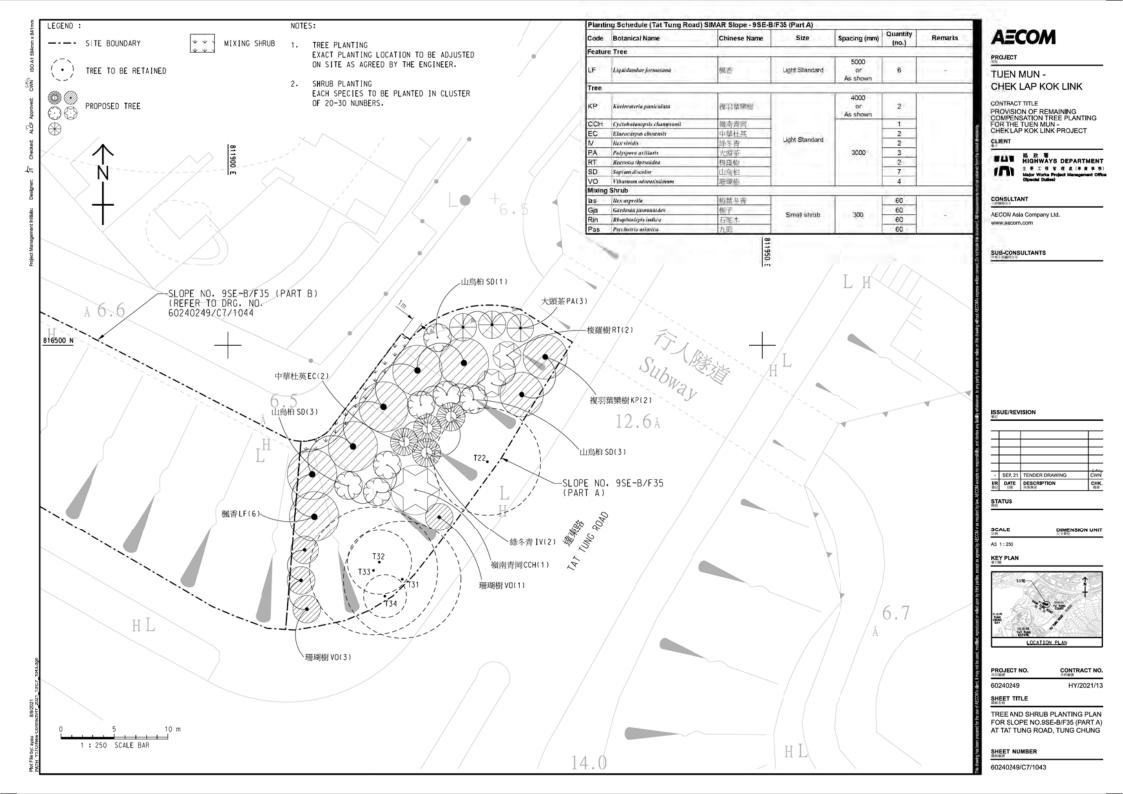


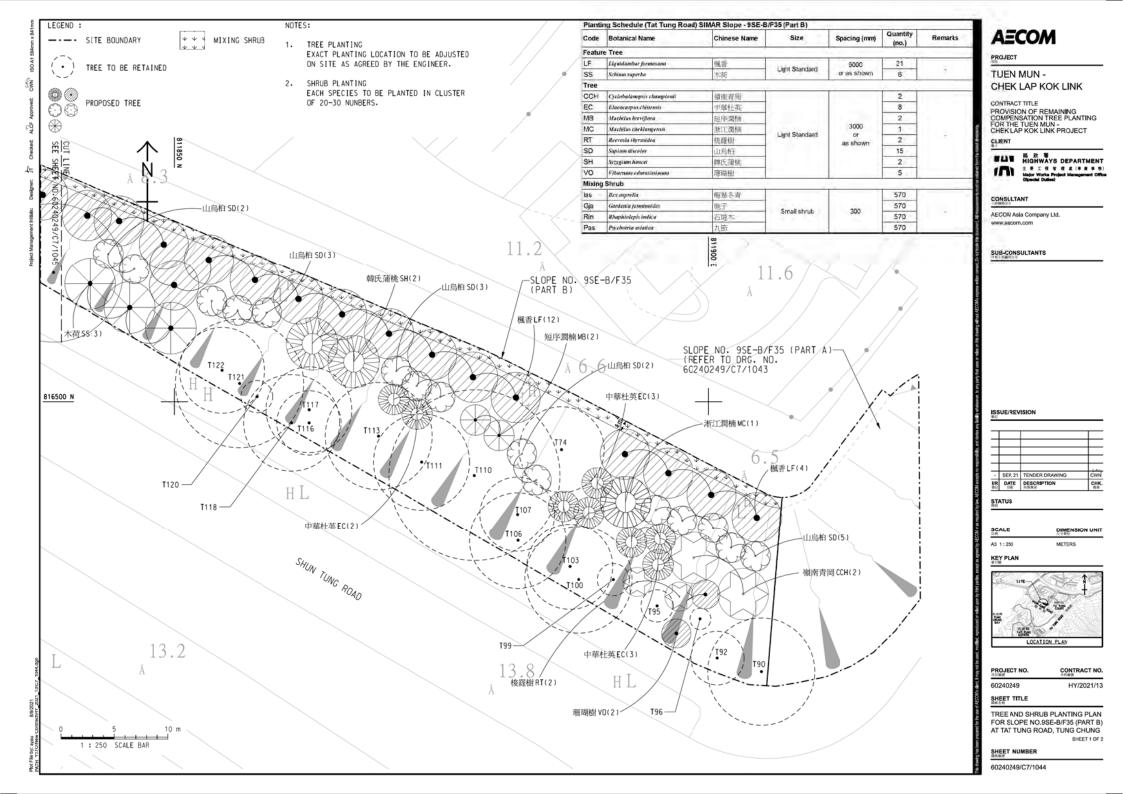
PALATI

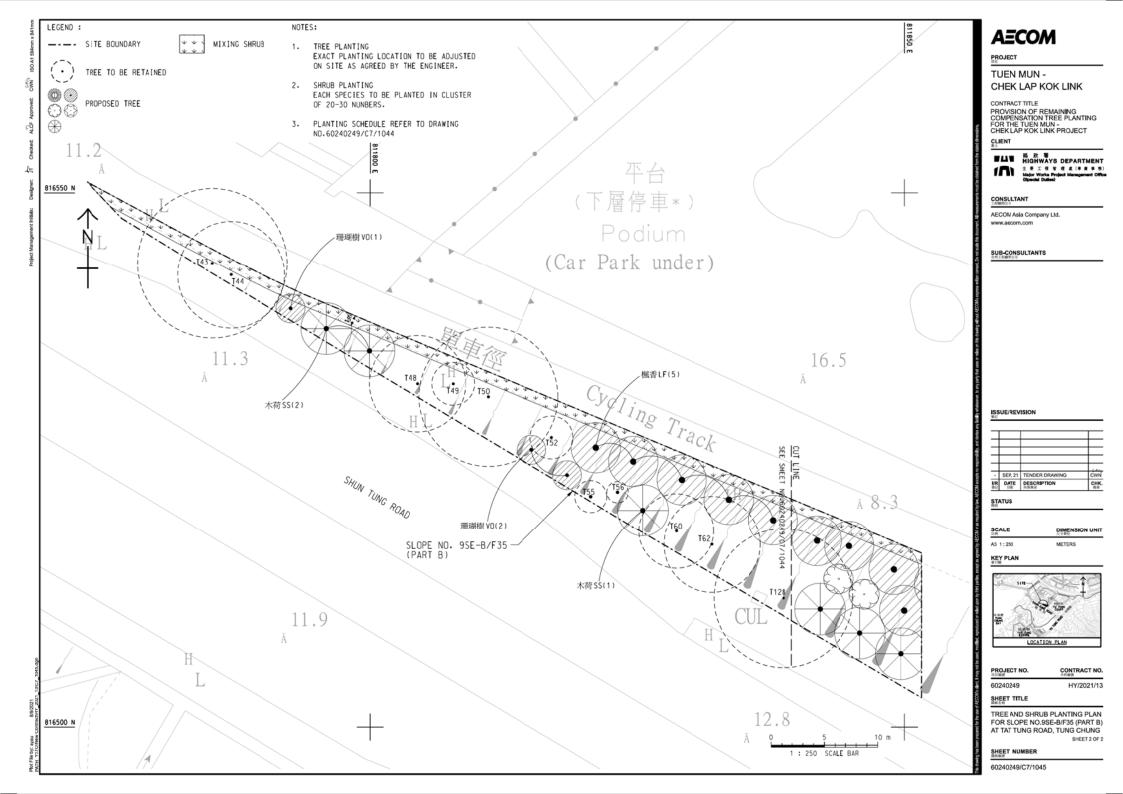
CWN CWN CHK.

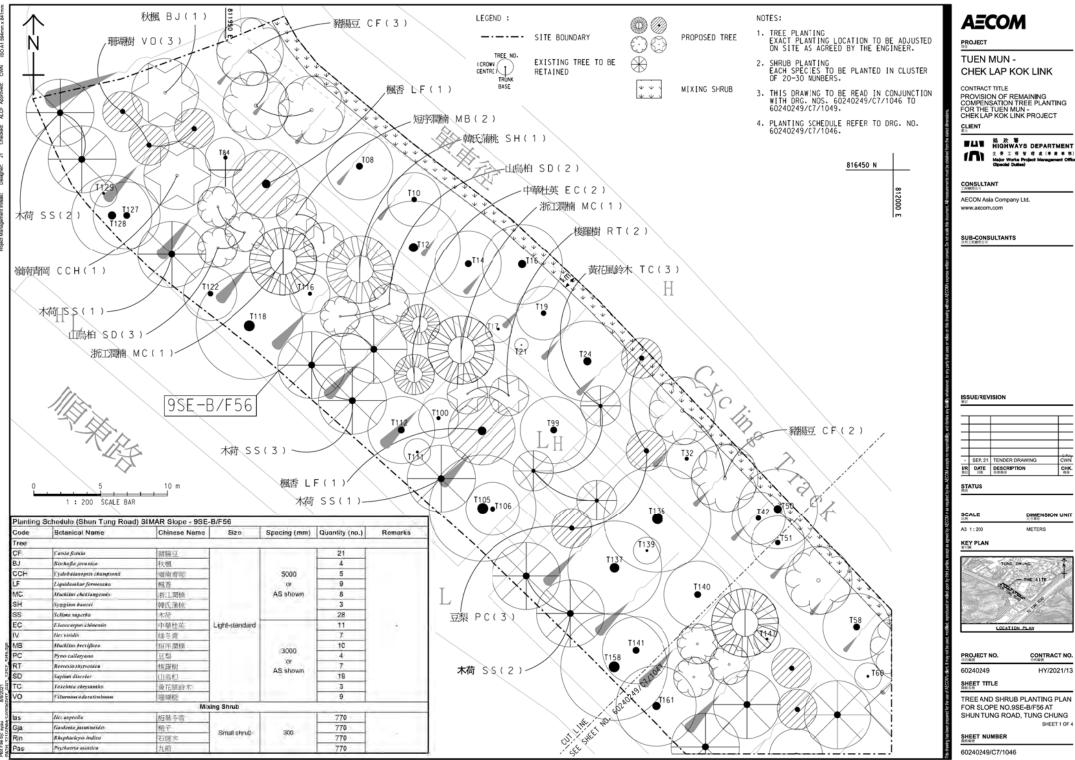




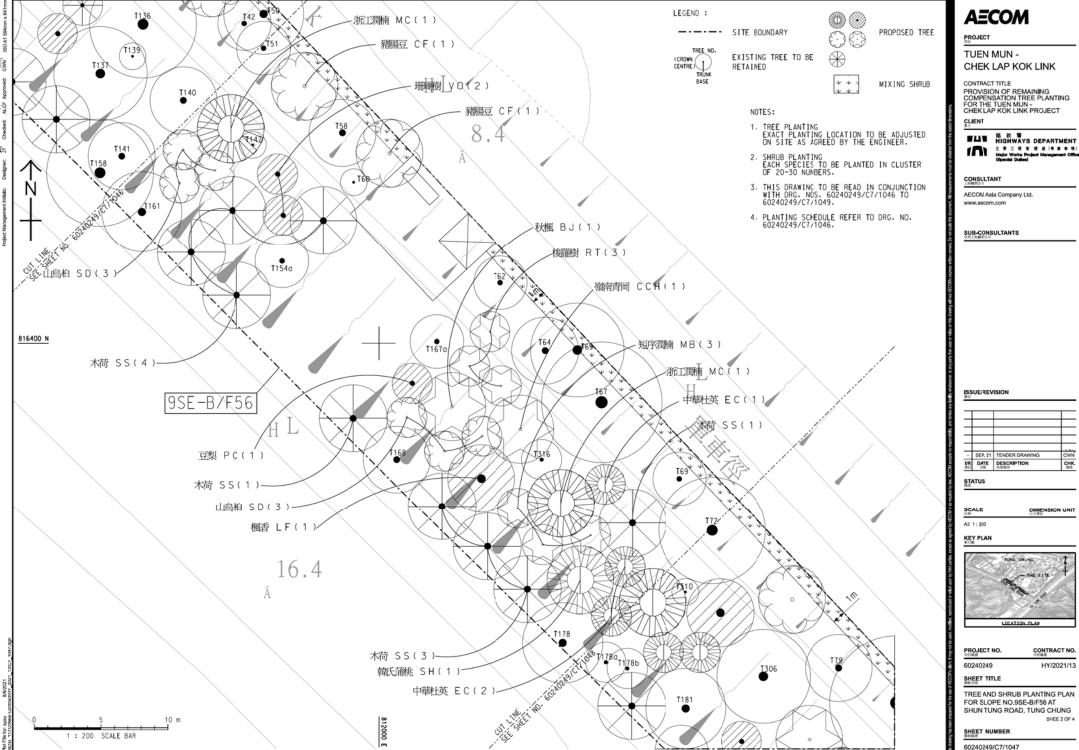








ŝ μĥ 占



CWN

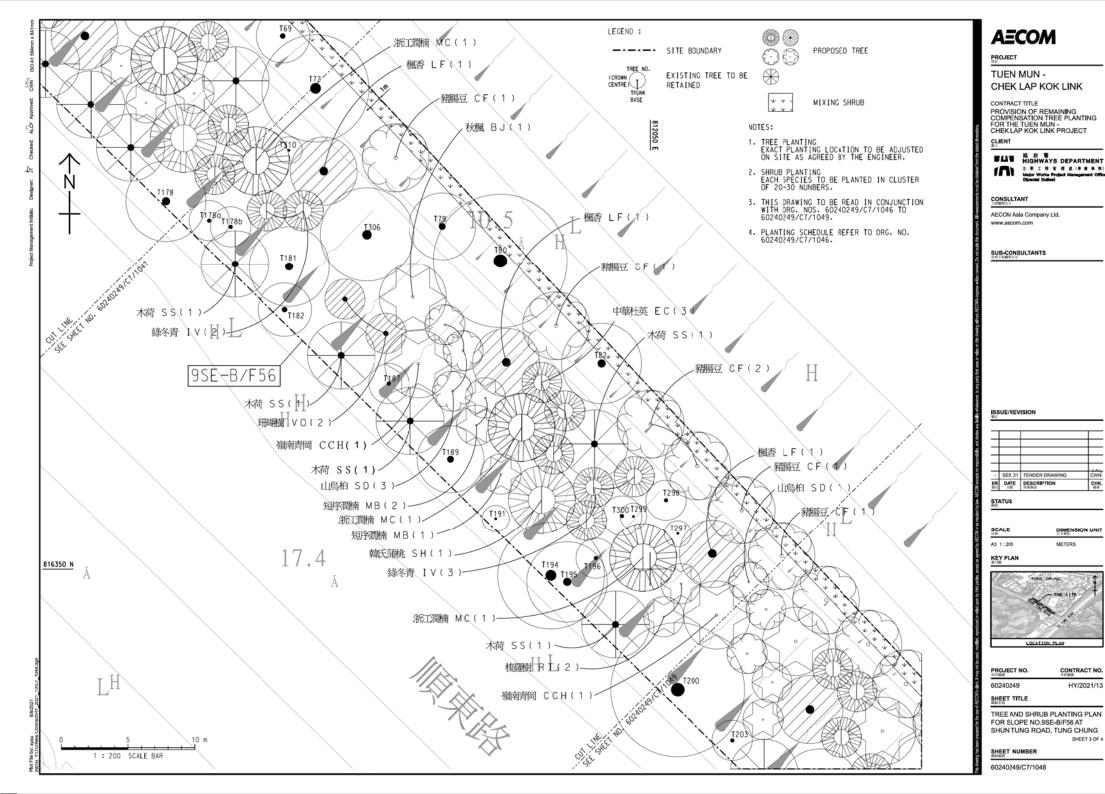
CHK.

DIMENSION UNIT

CONTRACT NO.

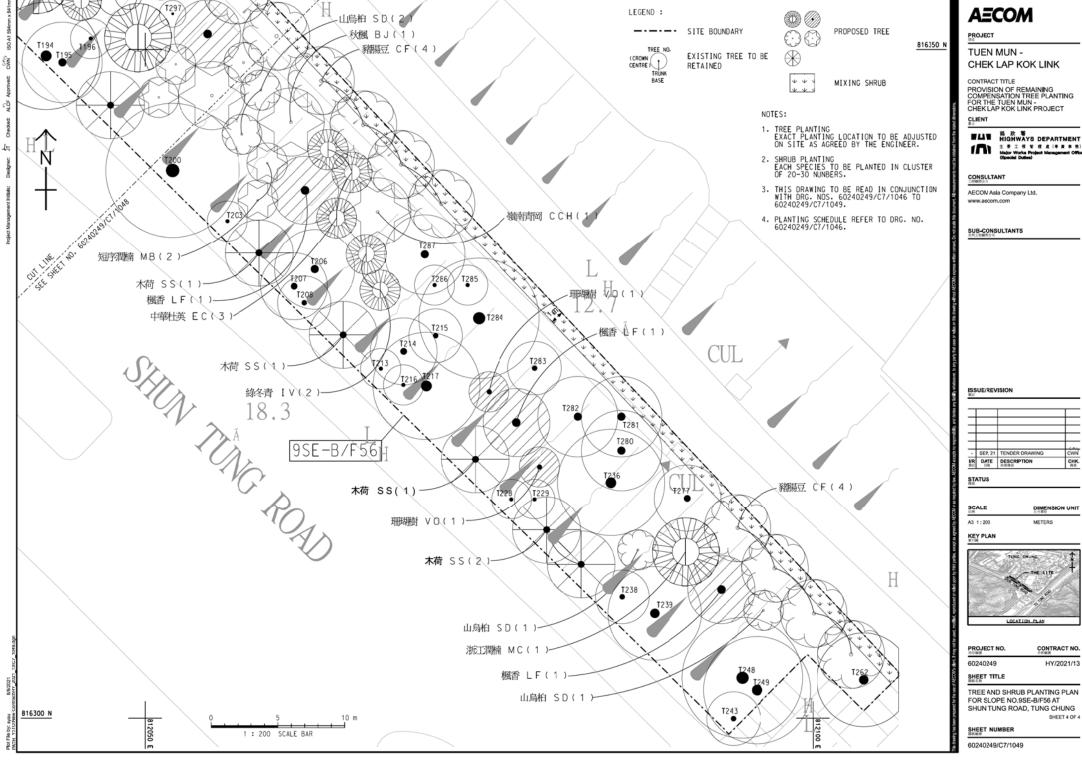
HY/2021/13

SHEE 2 OF 4



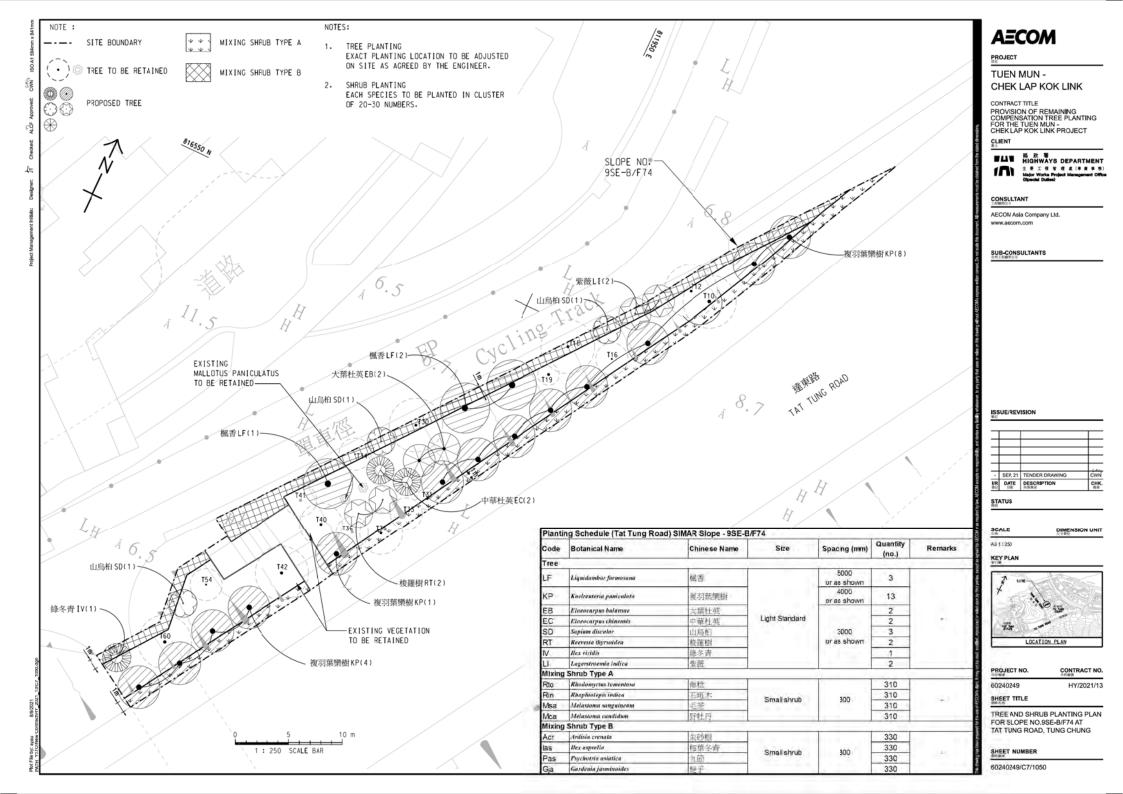
CWN

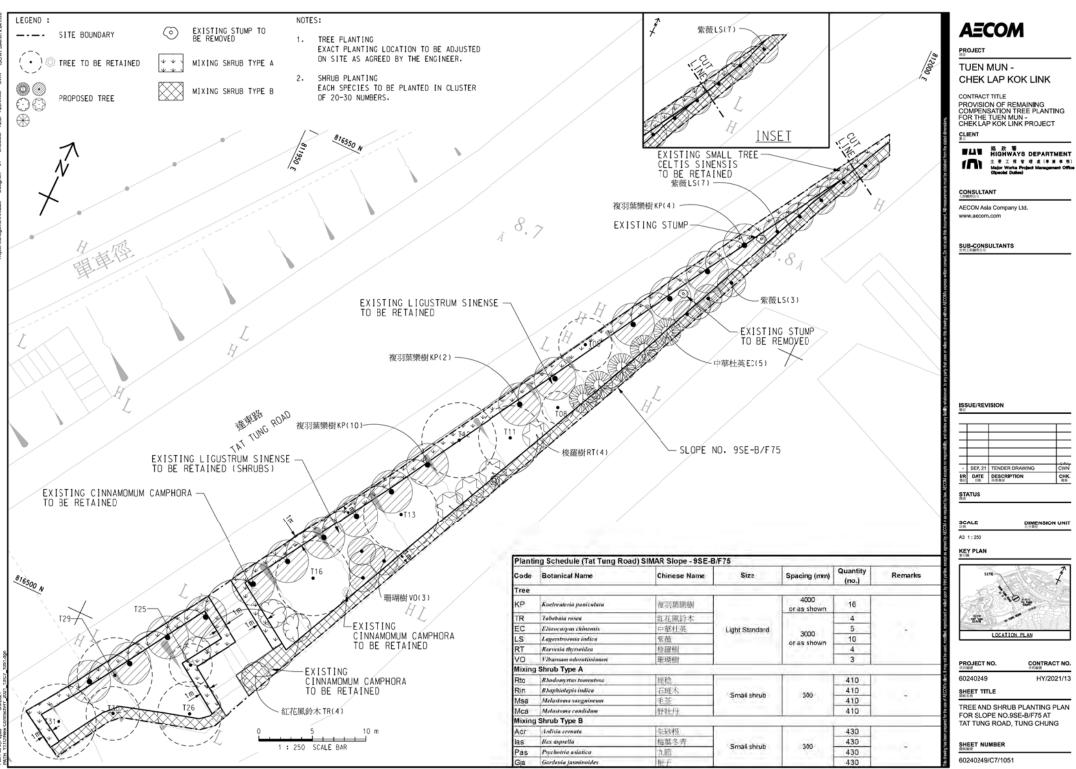
CHK.



CWN

CHK.





Project Management Initials: Designer: JT Checked: ALCF Approved: CVN

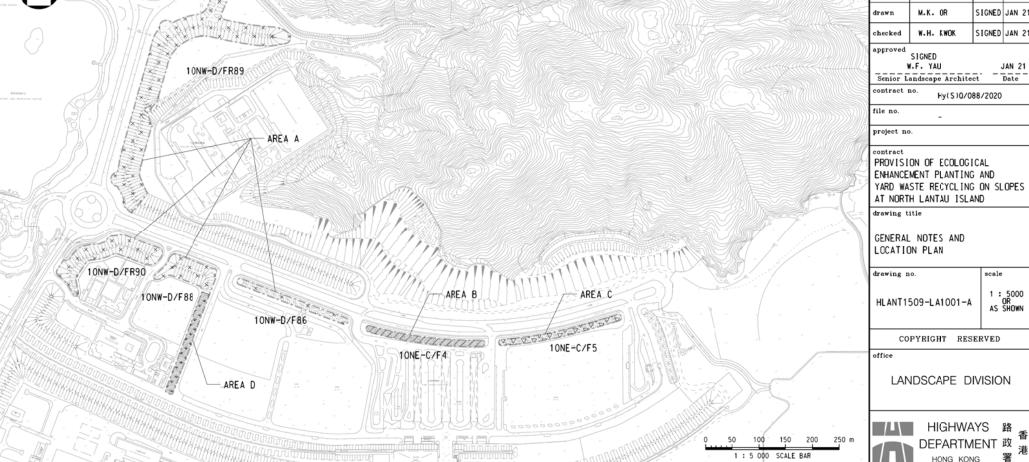
PCUCID/B mena u

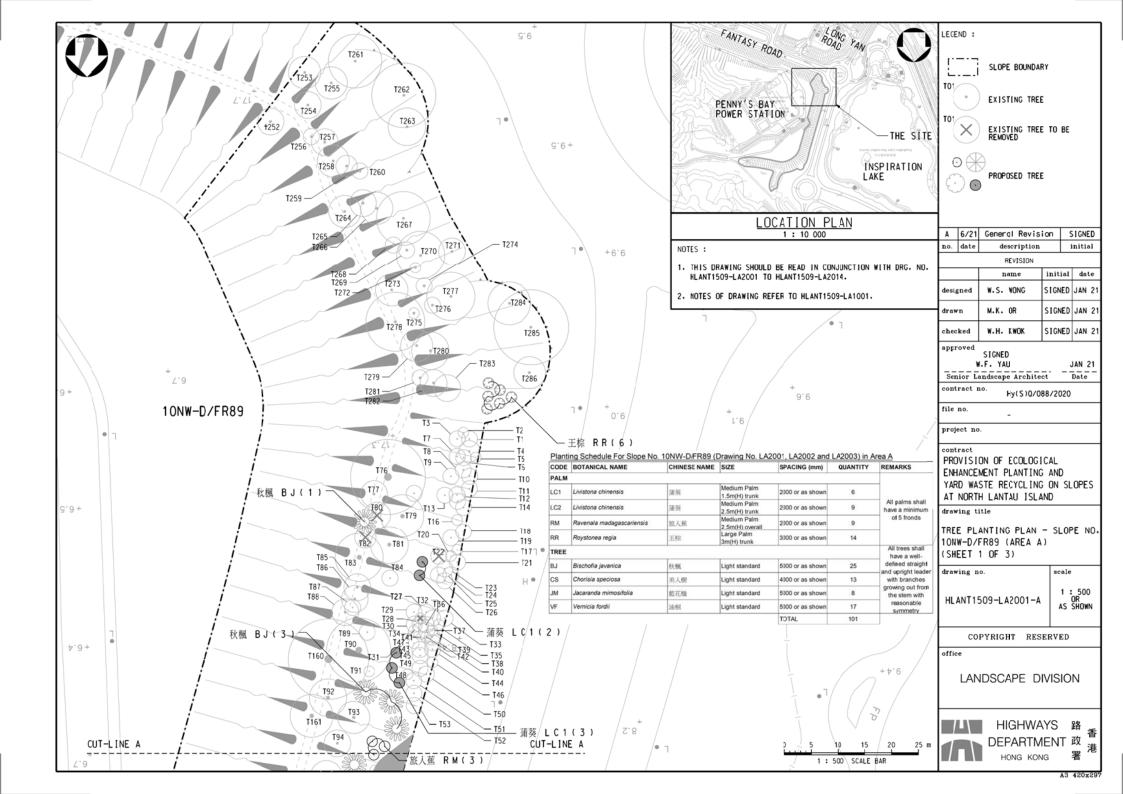
#### GENERAL NOTES :

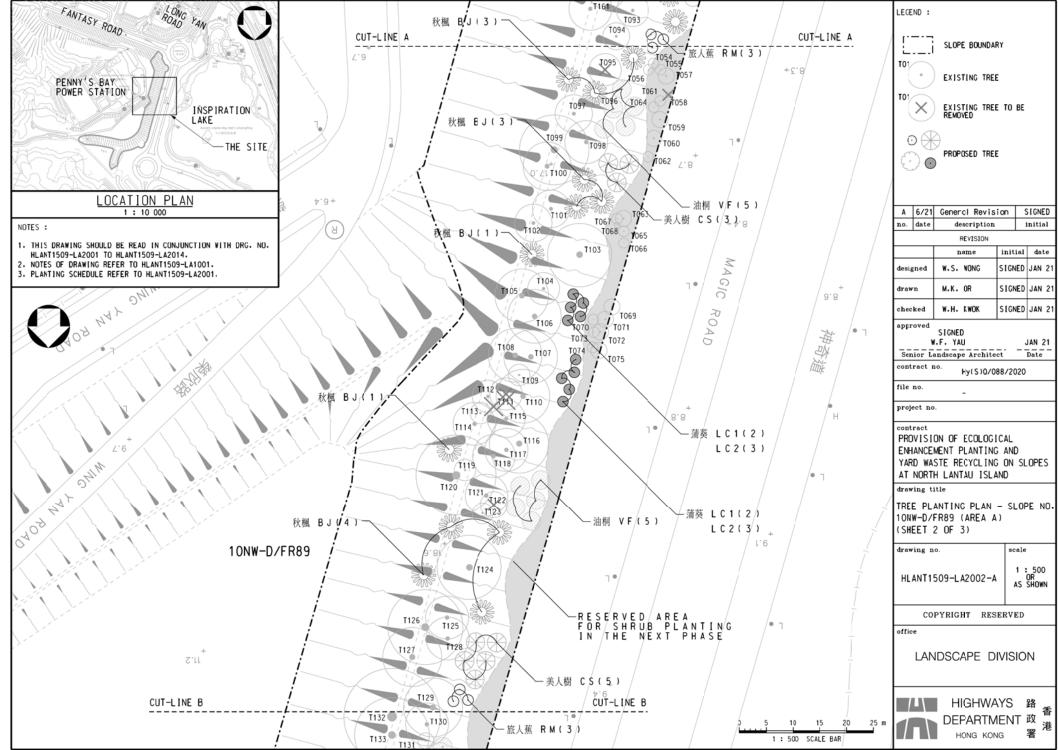
- THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRG. NO. HLANT1509-LA2001 TO LA2014.
   ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE.
   PLANTING TO SUIT EXISTING RETAINED TREES, SHRUBS.
   ALL NEW PLANT MATERIALS SHALL BE GROWN AND SUPPLIED IN CONTAINERS WITH APPROPRIATE SIZE AND FREE FROM PEST AND DISEASE.
   THE SETTING OUT OF TREE PLANTING LOCATIONS SHALL BE AGREED BY THE GOVERNMENT REPRESENTATIVES ON-SITE BEFORE PLANTING.
   ALL NEW PLANT WITH ADDRESS ONE DATE AND ADJUSTED ON SITE AS INSTRUCTED BY THE COVERNMENT
- ON-SITE BEFORE PLANTING.
   ACTUAL PLANTING LOCATION TO BE CONFIRMED AND ADJUSTED ON SITE AS INSTRUCTED BY THE GOVERNMENT REPRESENTATIVE.
   SITE CLEARANCE, GRASS CUTTING AND WEEDING TO BE ARRANGED PRIOR TO PLANTING.
   APPROPRIATE SOLI CONDITIONER. FERTILIZER, AND MULCHING SHALL BE APPLIED TO EACH EXCAVATED PLANTING HOLES PRIOR TO PLANTING.

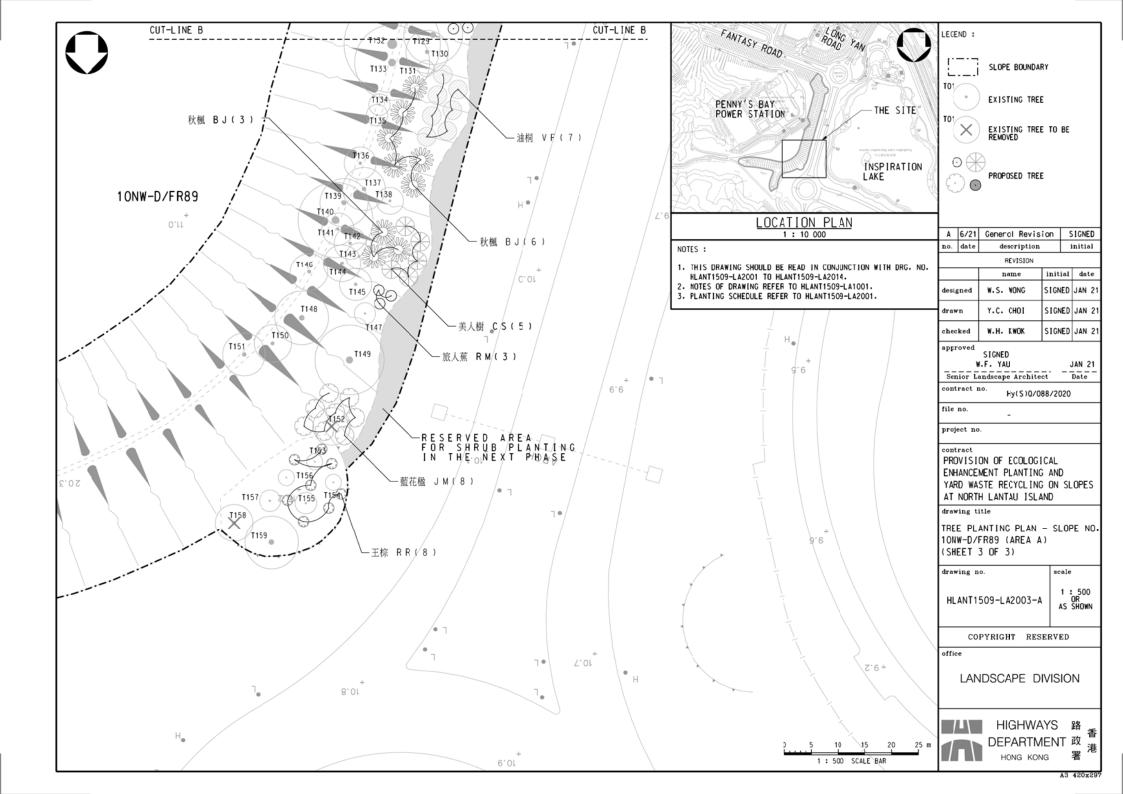
Sheet no.	Sheet Name
LA1001	General Notes and Location Plan
LA2001	Tree Planting Plan - Slope No. 10NW-D/FR89 (Page 1 of 3)
LA2002	Tree Planting Plan - Slope No. 10NW-D/FR89 (Page 2 of 3)
LA2003	Tree Planting Plan - Slope No. 10NW-D/FR89 (Page 3 of 3)
LA2004	Tree Planting Plan - Slope No. 10NW-D/FR90 (Page 1 of 1)
LA2005	Tree Planting Plan - Slope No. 10NW-D/F88 (Page 1 of 2)
LA2006	Tree Planting Plan - Slope No. 10NW-D/F88 (Page 2 of 2)
LA2007	Tree Planting Plan - Slope No. 10NW-D/F86 (Page 1 of 2)
LA2008	Tree Planting Plan - Slope No. 10NW-D/F86 (Page 2 of 2)
LA2009	Tree Planting Plan - Slope No. 10NE-C/F4 (Page 1 of 2)
LA2010	Tree Planting Plan - Slope No. 10NE-C/F4 (Page 2 of 2)
LA2011	Tree Planting Plan - Slope No. 10NE-C/F5 (Page 1 of 2)
LA2012	Tree Planting Plan - Slope No. 10NE-C/F5 (Page 2 of 2)
LA2013	Tree Planting Specification (Sheet 1 of 2)
LA2014	Tree Planting Specification (Sheet 2 of 2)

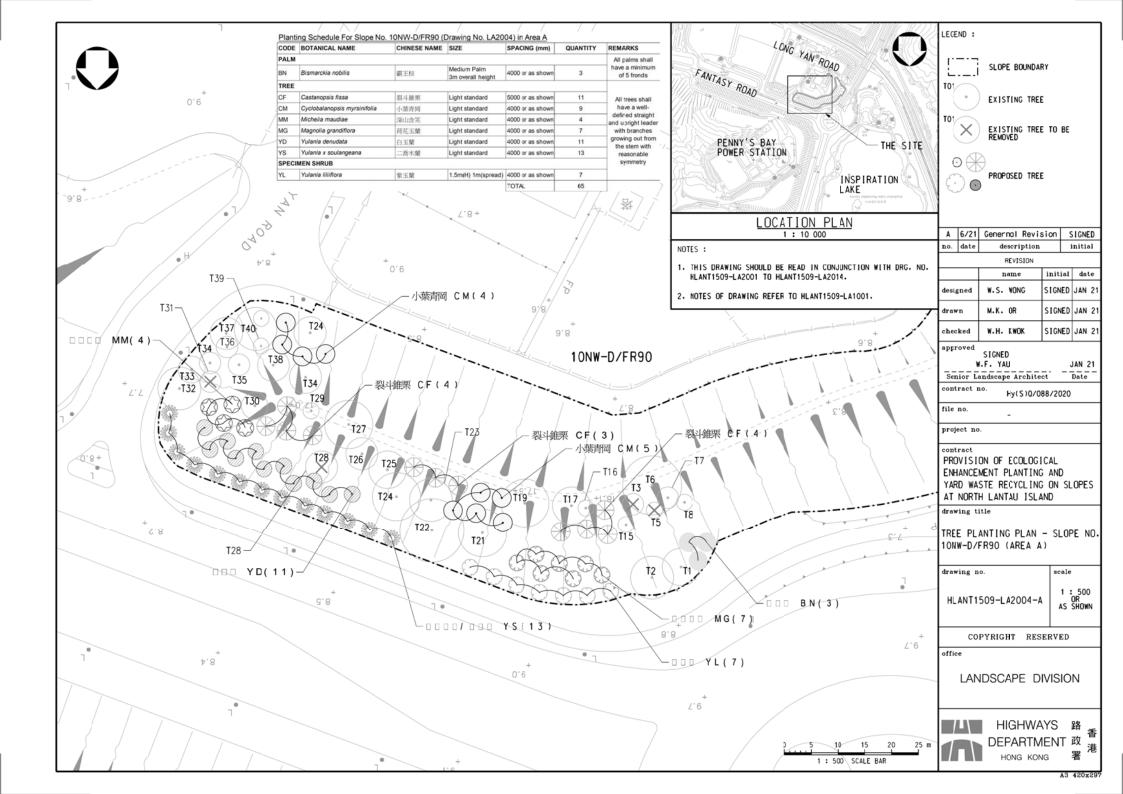
	LE	GEND	:				
	-	- SL	OPE BOUNDARY				
		PLANTING AREA A (SLOPE NO. 10NW-D/FR89,					
	× .	(SLOPE NO. 10NW-D/FR89, 10NW-D/FR90, 10NW-D/F88,					
			NW-D/FR90, TONW NW-D/F86)	-0/18			
		A PL	ANTING AREA B				
			ANTING AREA B LOPE NO. 10NE-C.	/F4)			
	a. a.	, PL	ANTING AREA C LOPE NO. 10NE-C	/F5)			
	4	PL (S	ANTING AREA D LOPE NO. 10NW-D.	/F881			
	A no.	6/21 date	General Revisi description	ion	SIGNED		
	10.	aute	REVISION		mitia		
	Ú.		name	initi	al date		
ÉKININ (1223)	desig	gned	W.S. WONG	SIGN	ED JAN 21		
	draw	'n	M.K. OR	SIGN	ED JAN 21		
	chec	ked	W.H. KWOK	SIGN	ED JAN 21		
	Ser	۷	SIGNED M.F. YAU andscape Archited		JAN 21 Date		
1578AN (((()))))))))))))))))))))))))))))))))	<u>}</u>		Hy(S)0/08	88/20	20		
	file	no.	-				
	proj	ect no					
	ENH YAR AT	IVISI IANCE D WA NORT	ON OF ECOLOGI MENT PLANTING STE RECYCLING H LANTAU ISLA	AND ON			
	GEN	GENERAL NOTES AND LOCATION PLAN					
2	draw	drawing no. scale					
	HL	HLANT1509-LA1001-A AS SHOWN					
		COPYRIGHT RESERVED					
	offic						
S		LAN	IDSCAPE DI	IVIS	ON		
//							

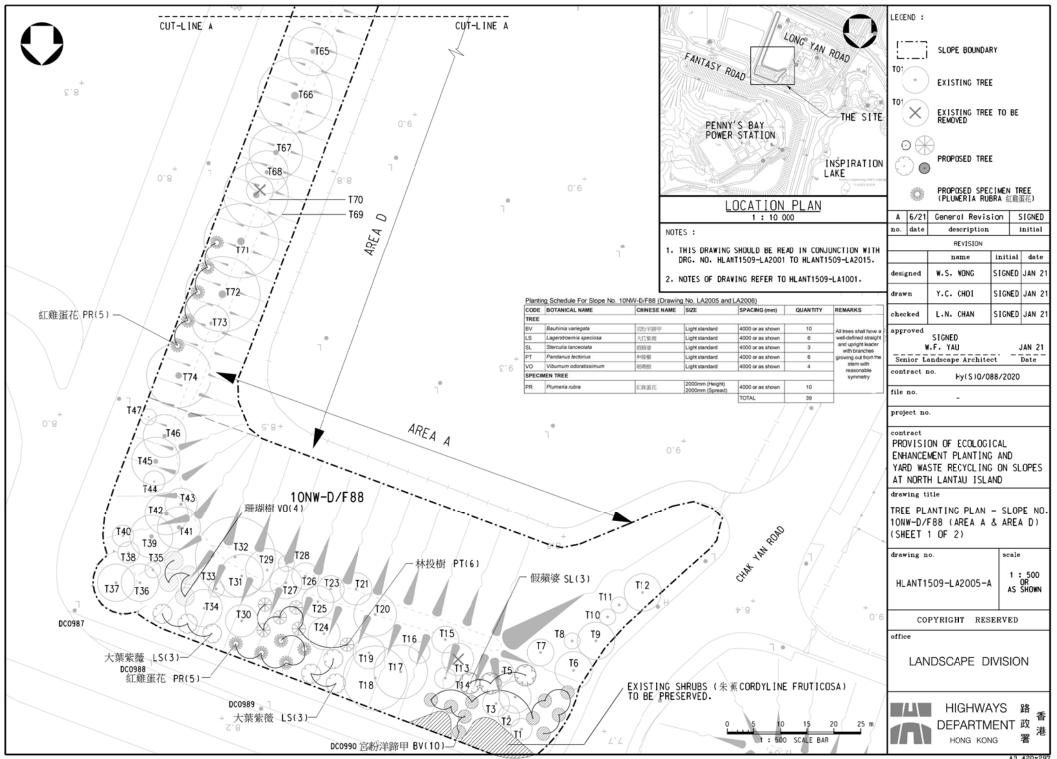




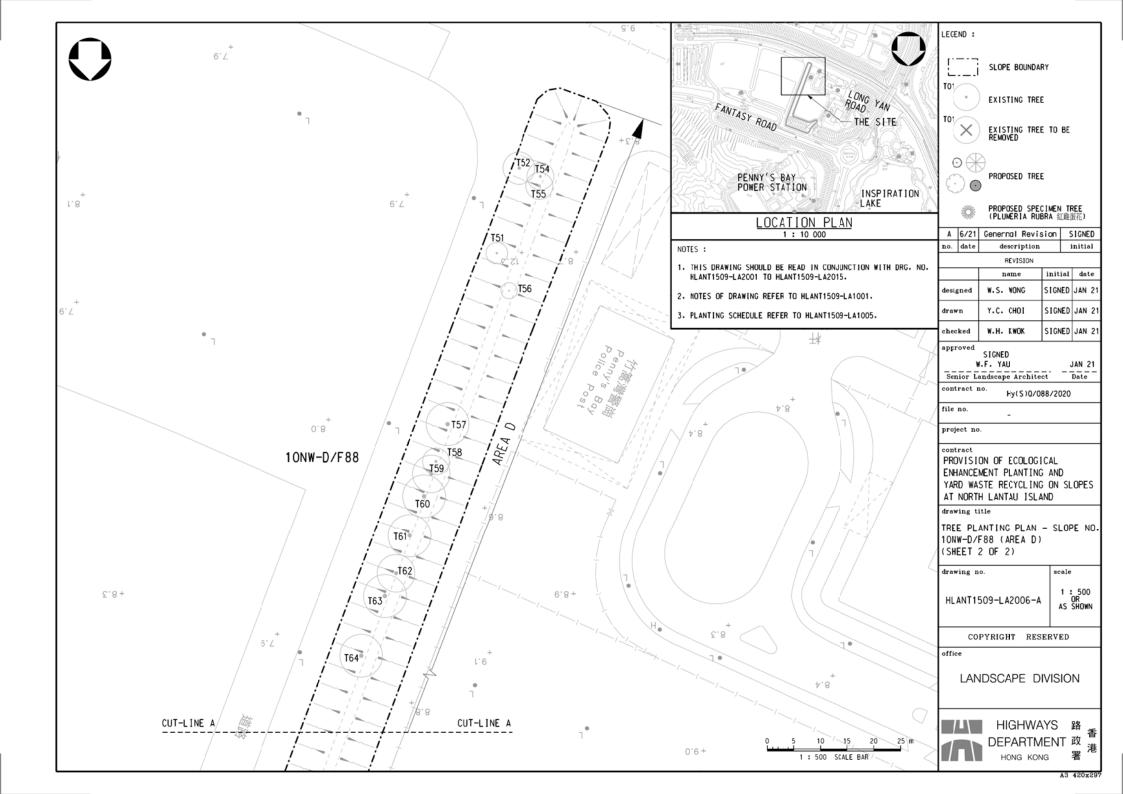


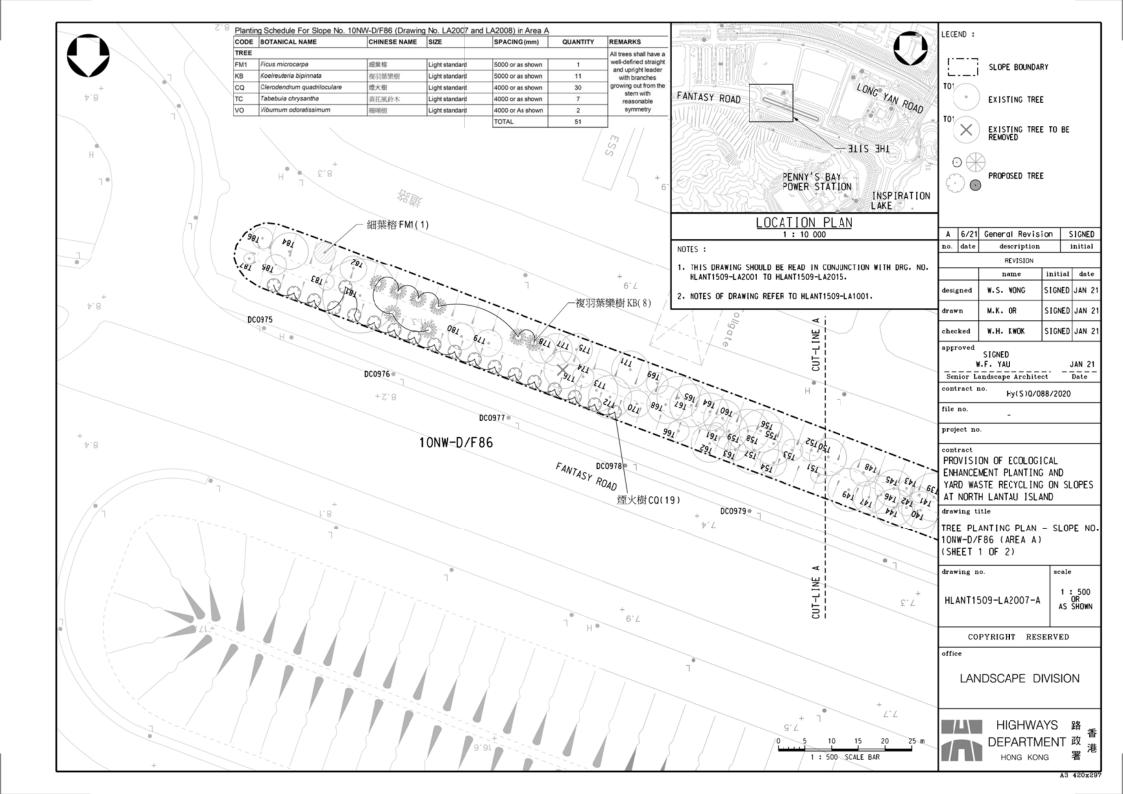


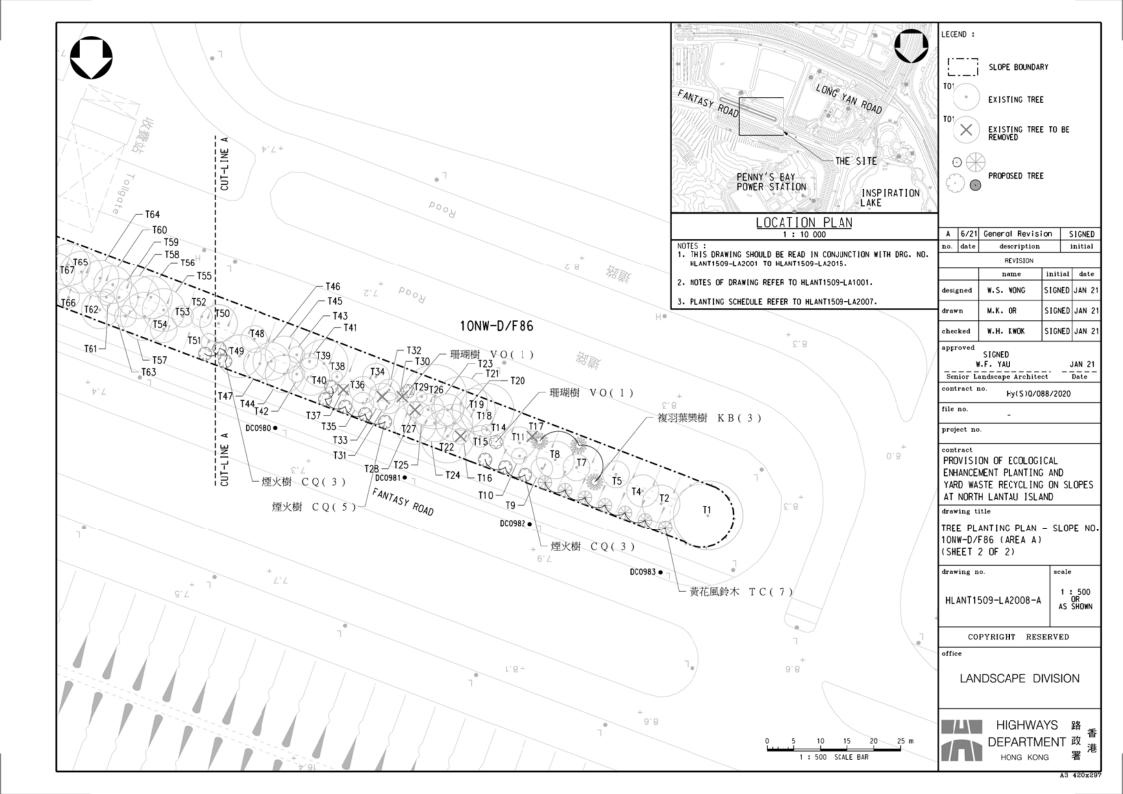


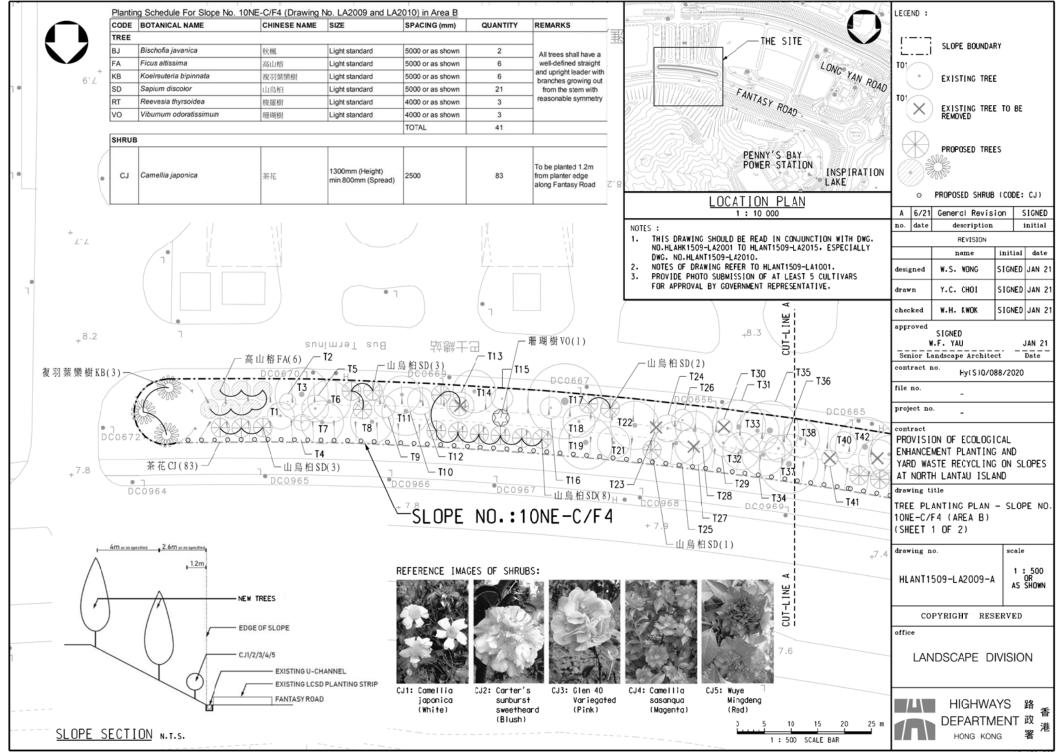


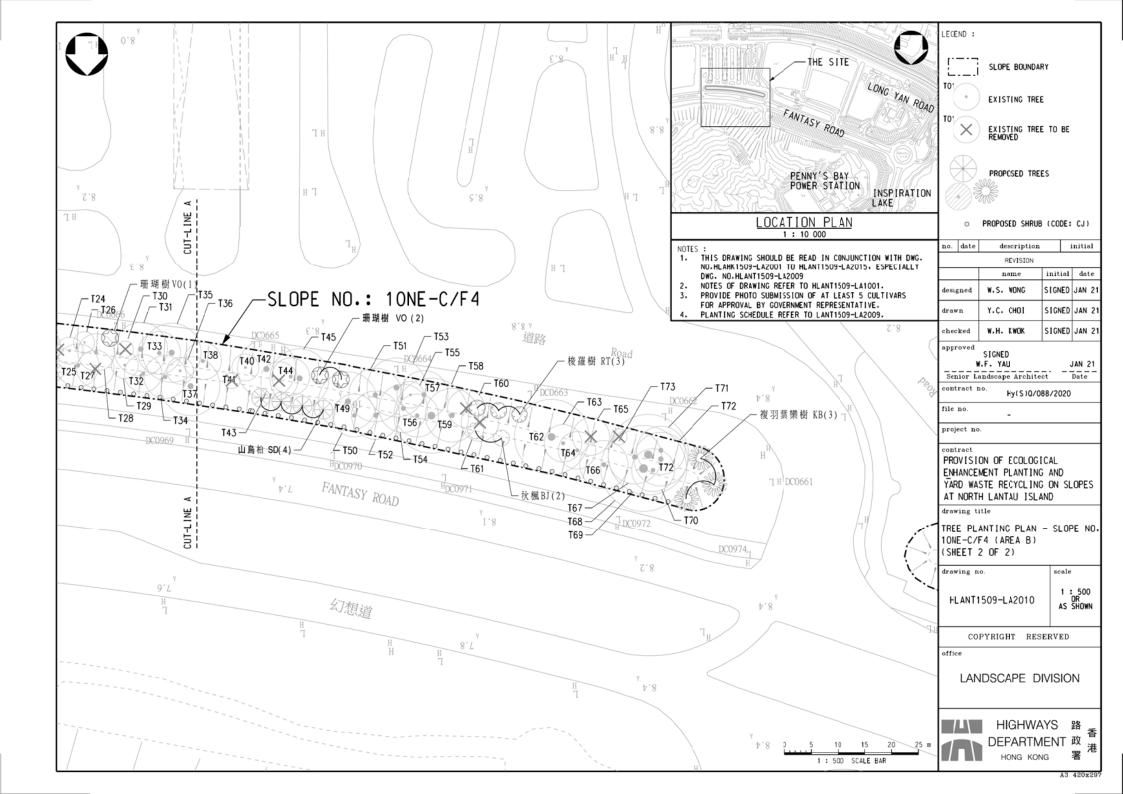
A3 420x297

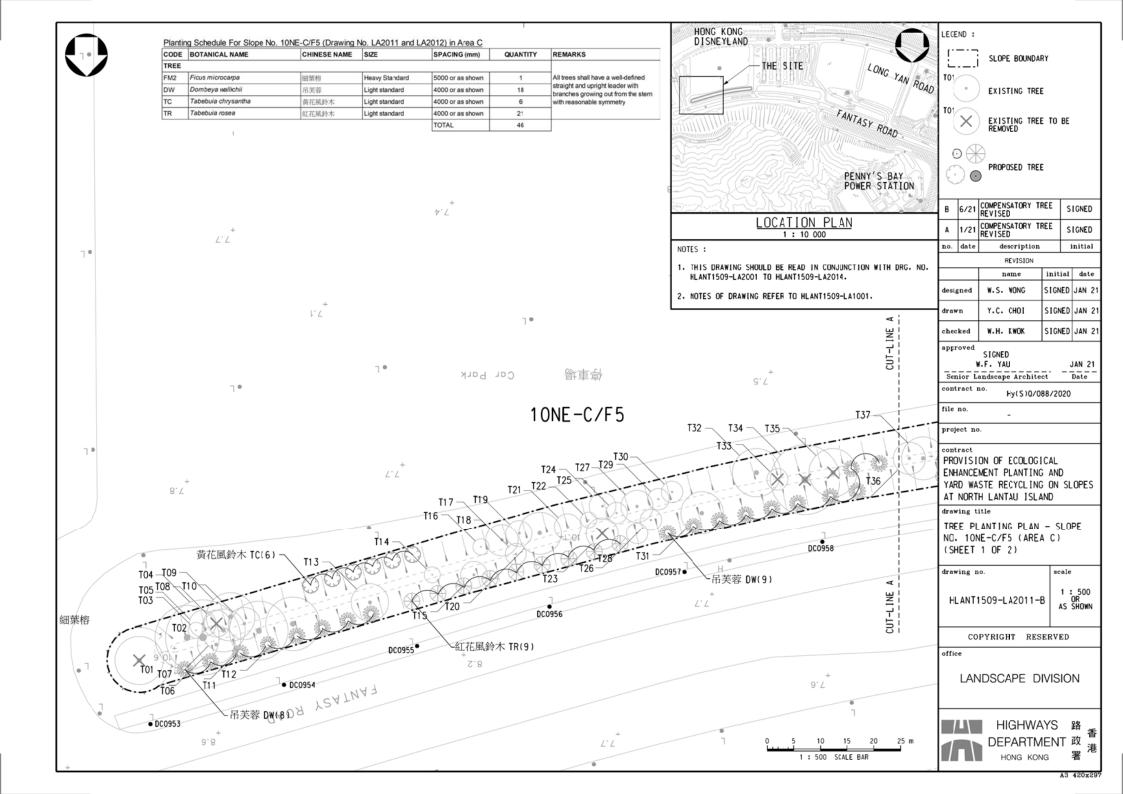


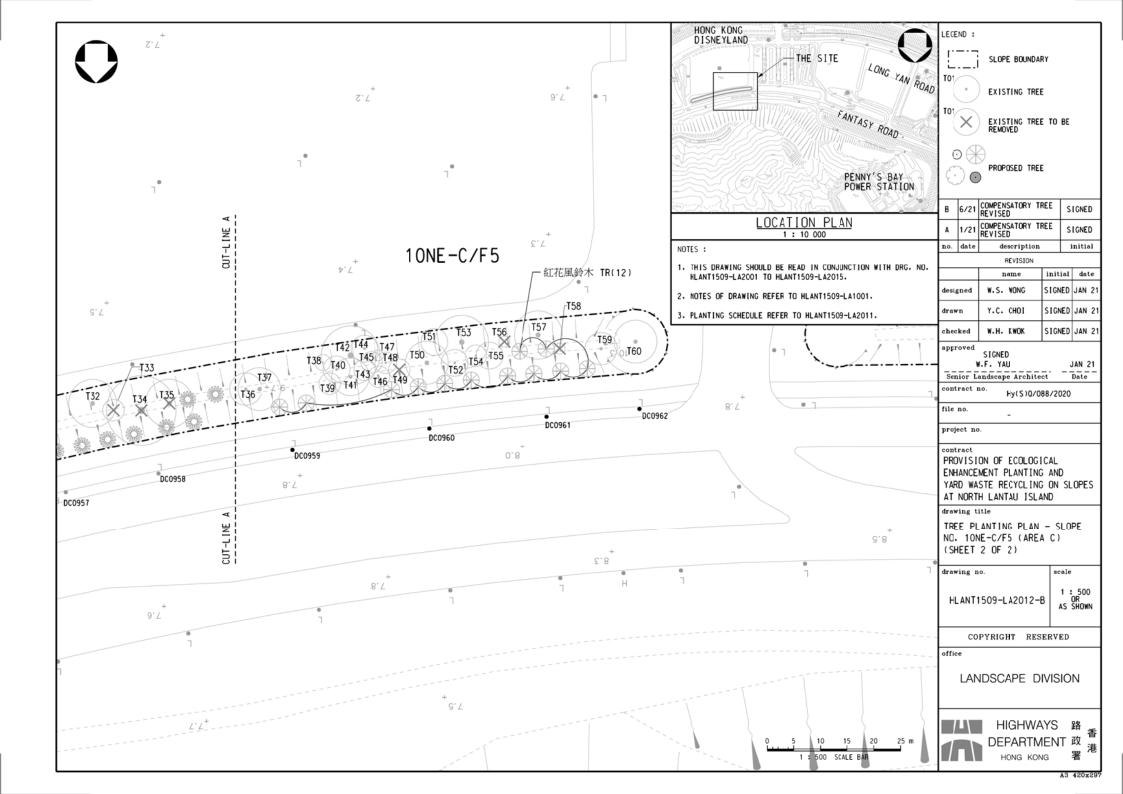














# **Appendix H**

## **Checklist for Landscape and Visual Monitoring**

Inspection Date:	13 June 2023	Inspected By:	AUES
Time:	9:30 – 16:00	Weather Condition:	Cloudy

### Participants: AECOM (RSS), ANewR (IEC), AUES (ET) Rep. & Contractor's Rep.

1	Zone 1: Planting Slope at Tuen Mun Area	N/A or not observed	Yes	No	Remarks / Photo
1.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
1.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		Ø		
1.3	Are trees or limb overhanging branches pruned?	$\blacksquare$			
1.4	Are pest and disease observed?			$\mathbf{\nabla}$	
1.5	Are litter and debris removed?		$\square$		
1.6	Are plants/ grasses overgrown?			Ø	
1.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		M		
1.8	Are planting locations and tree spacing matched with the approved planting plans?		Ø		
1.9	Are the planting species on site matched with the approved planting schedules (Annex B)?		V		
		Good	Fair	Poor	
1.10	Overall health condition of the plants?		$\mathbf{\nabla}$		_Obs, 1 to 5

2	Zone 2: Planting Slope at Siu Lam Area	N/A or not observed	Yes	No	Remarks / Photo
2.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		M		
2.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		Ø		
2.3	Are trees or limb overhanging branches pruned?	$\checkmark$			
2.4	Are pest and disease observed?			M	
2.5	Are litter and debris removed?		$\square$		
2.6	Are plants/ grasses overgrown?			Ø	
2.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		V		
2.8	Are planting locations and tree spacing matched with the approved planting plans?		Ø		
2.9	Are the planting species on site matched with the approved planting schedules (Annex B)?		Ŋ		

			Contract No. HY/2021/13 (Zone 1 to Zo		
		Good	Fair	Poor	
2.10	Overall health condition of the plants?		Ø		Obs, 6 to 9

3	Zone 3: Planting Slope at Tung Chung Area	N/A or not observed	Yes	No	Remarks / Photo
3.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		$\mathbf{N}$		
3.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		$\mathbf{N}$		
3.3	Are trees or limb overhanging branches pruned?	$\square$			
3.4	Are pest and disease observed?			$\mathbf{N}$	
3.5	Are litter and debris removed?		$\mathbf{\nabla}$		
3.6	Are plants/ grasses overgrown?			$\mathbf{N}$	
3.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		V		
3.8	Are planting locations and tree spacing matched with the approved planting plans?		M		
3.9	Are the planting species on site matched with the approved planting schedules (Annex B)?		V		
		Good	Fair	Poor	
3.10	Overall health condition of the plants?		$\mathbf{N}$		Obs 10 & 1

4	Zone 4: Planting Slope at Penny's Bay Area	N/A or not observed	Yes	No	Remarks / Photo
4.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?		V		
4.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?		M		
4.3	Are trees or limb overhanging branches pruned?	$\square$			
4.4	Are pest and disease observed?			$\mathbf{N}$	
4.5	Are litter and debris removed?		$\mathbf{N}$		
4.6	Are plants/ grasses overgrown?			$\mathbf{N}$	
4.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?		Ø		
4.8	Are planting locations and tree spacing matched with the approved planting plans?		M		
4.9	Are the planting species on site matched with the approved planting schedules (Annex B)?		V		
		Good	Fair	Poor	
4.10	Overall health condition of the plants?		$\mathbf{N}$		

5	General Document	N/A or not observed	Yes	No	Remarks / Photo
5.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?		Ø		

Follow up actions for previous Site Audit:

- 1. The wilted trees (T-024, T-026, T-048 & T-056: Machilus breviflora) in Zone 1 Slope 5SE-D/F73 were replaced.
- 2. The wilted tree (T-012: Syzygium jambos) in Zone 1 Slope 5SE-D/F73 was replaced.
- 3. The wilted trees (T-005, T-007 & T-008: Machilus breviflora) in Zone 2 Slope 6SW-C/FR200 were replaced.
- 4. The wilted tree (T-003: Michelia chapensis) in Zone 2 Slope 6SW-C/F233 was replaced.
- 5. The wilted tree (T-021: *Liquidambar formosana*) in Zone 3 Slope 9SE-B/F35 was replaced.
- 6. The wilted tree (T-007: Cassia javanica) in Zone 4 Slope 10NE-C/F6 was replaced.
- 7. The wilted tree (T-010: Prunus spp.) in Zone 4 Slope 10NE-C/F6 was replaced.

**Observations:** 

- 1. The trees (T-002 & T-003: Schima superba) in Zone 1 Slope 5SE-D/F73 were removed and waiting for replanting.
- 2. The trees (T-024, T-025 & T-027: Schima superba) in Zone 1 Slope 5SE-B/F89 were removed and waiting for replanting.
- 3. The tree (T-007: *Machilus chekiangensis*) in Zone 1 Slope 5SE-B/F89 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
- 4. The tree (T-018: *Tabebuia chrysantha*) in Zone 1 Slope 6SW-A/F25 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
- 5. The trees (T-032, T-038 & T-040: Sapium sebiferum) in Zone 1 Slope 6NW-C/F153 were removed and waiting for replanting.
- 6. The tree (T-003: Schefflera heptaphylla) in Zone 2 Slope 6SW-D/FR279 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
- 7. The tree (T-027: *Elaeocarpus sylvestris*) in Zone 2 Slope 6SW-C/F233 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
- 8. The trees (T-023, T-024, T-025 & T-039: *Machilus chekiangensis*) in Zone 2 Slope 6SW-C/FR200 were removed and waiting for replanting.
- 9. The tree (T-033: *llex rotunda var. microcarpa*) in Zone 2 Slope 6SW-C/FR200 was removed and waiting for replanting.
- 10. The tree (T-031: *Tabebuia chrysantha*) in Zone 3 Slope 9SE-B/F56 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
- 11. The tree (T-129: *Lagerstroemia speciosa*) in Zone 3 Slope 9SE-B/F56 became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.

Corrective Actions (if any):

- 1. Tree health condition, irrigation in particular, should be closely monitored and reviewed.
- 2. Removed tree should be replanted ASAP.
- 3. Regularly weeding should be provided.

**General Conclusion:** 

Total number of trees planted: 235 (Zone 1); 148 (Zone 2); 269 (Zone 3); and 414 (Zone 4)

Remark:

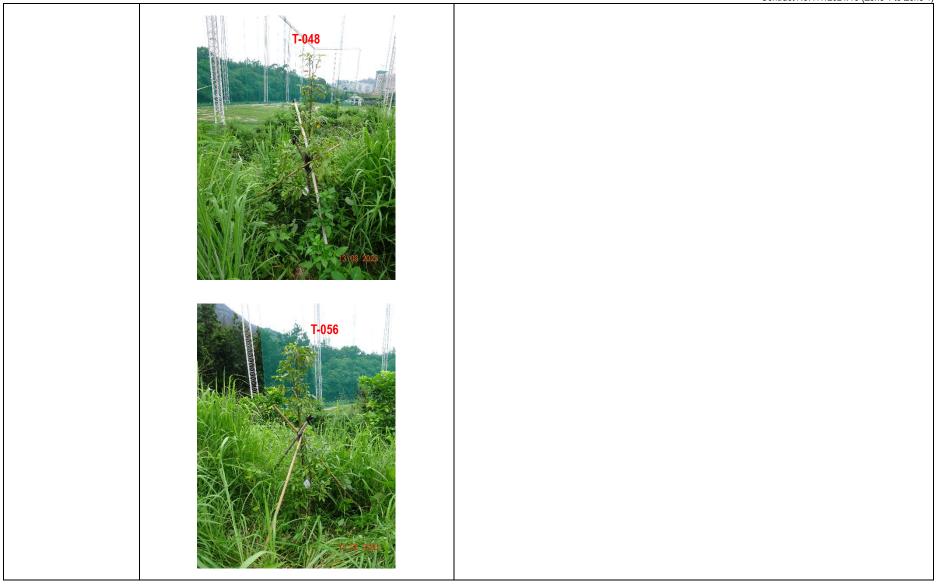
Establishment landscape monitoring for outbound planting area was commenced on 16 December 2022

Inspected by (ET's Representative):	Ben Tam	Title:	Environmental Consultant
Signature:	36	Date:	13 June 2023
Reviewed by (RSS Landscape Representative):	Candy Lau	Title:	Senior Resident Landscape Architect
Signature:	Candy Lau	Date:  Title:	20 June 2023
Contractor's Representative:	Joe Fung		Project Manager
Signature:	A	Date:	20 June 2023
Checked by (IEC's Representative):	Alex Chan	Title:	Environmental Consultant
Signature:	Am	Date:	28 June 2023

#### Contract No. HY/2021/13 Provision of Remaining Compensation Tree Planting for the Tuen Mun – Chek Lap Kok Link Project

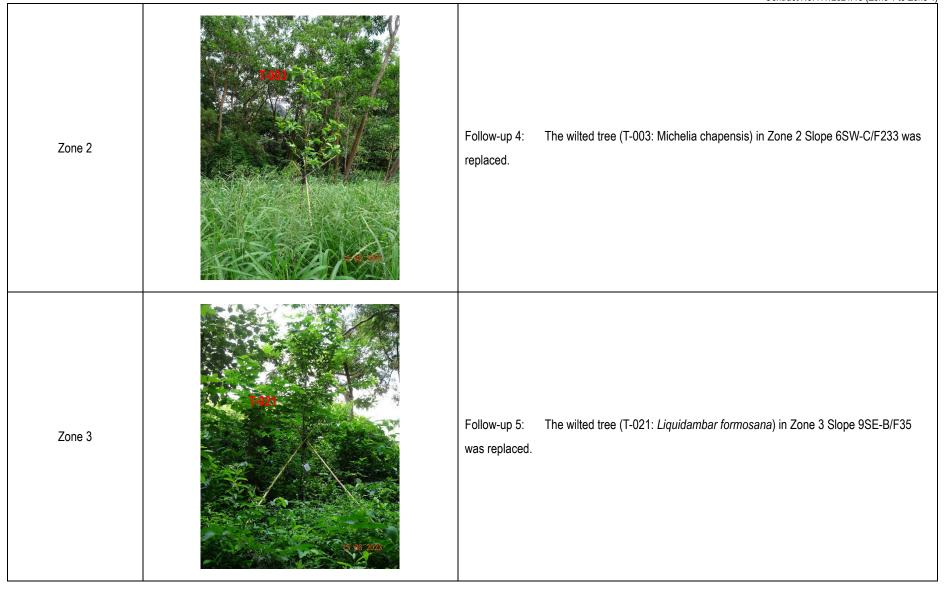
Location	Photo	Information
Zone 1	<image/>	Follow-up 1: The wilted trees (T-024, T-026, T-048 & T-056: Machilus breviflora) in Zone 1 Slope 5SE-D/F73 were replaced.

Contract No. HY/2021/13 Provision of Remaining Compensation Tree Planting for the Tuen Mun – Chek Lap Kok Link Project



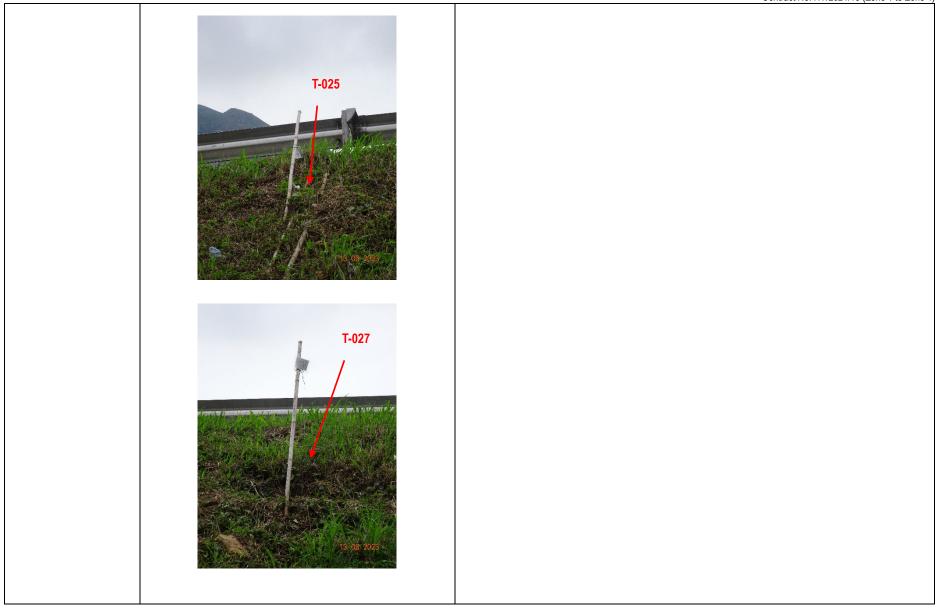
Zone 1	Follow-up 2: The wilted tree (T-012: Syzygium jambos) in Zone 1 Slope 5SE-D/F73 was replaced.
Zone 2	Follow-up 3: The wilted trees (T-005, T-007 & T-008: Machilus breviflora) in Zone 2 Slope 6SW-C/FR200 were replaced.

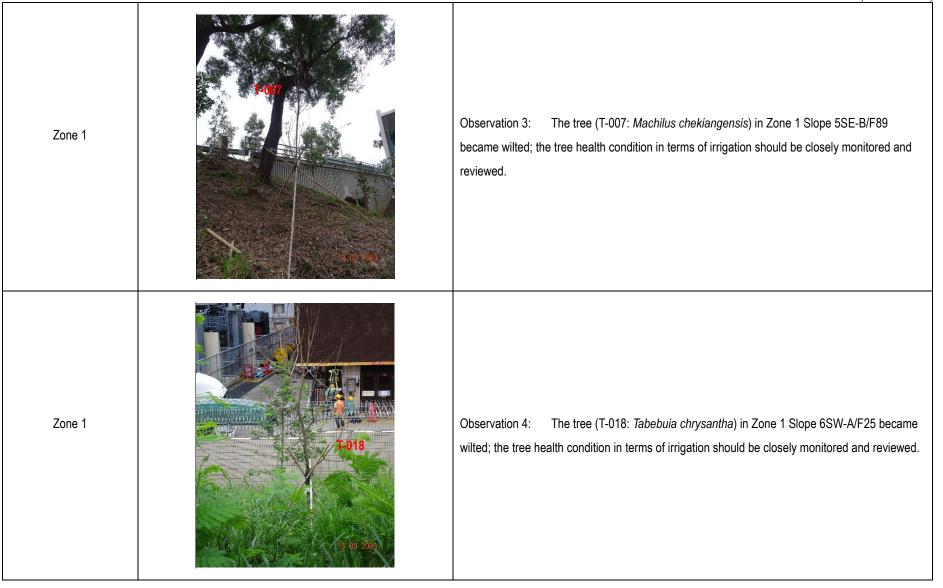


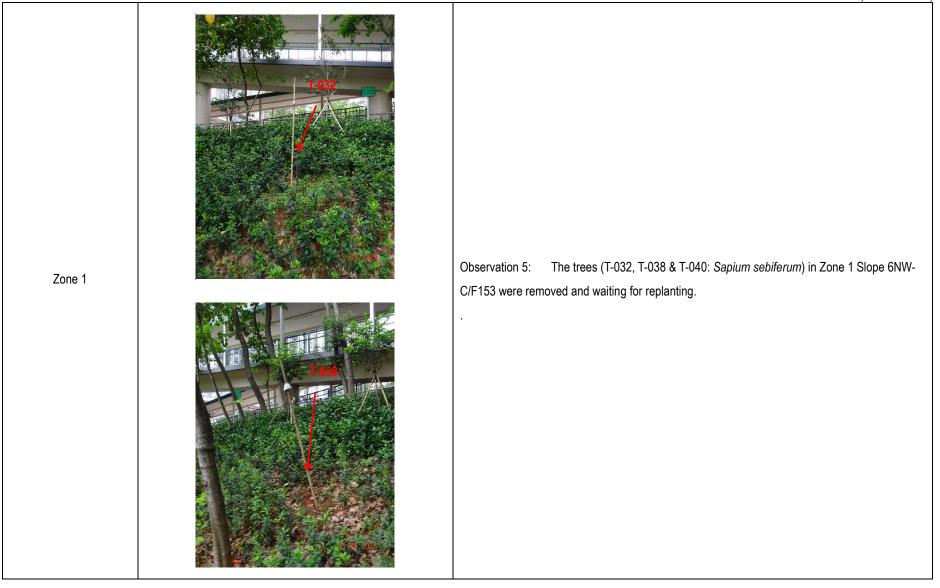




Zone 1		Observation 1: The trees (T-002 & T-003: <i>Schima superba</i> ) in Zone 1 Slope 5SE-D/F73 were removed and waiting for replanting.
Zone 1	T-024	Observation 2: The trees (T-024, T-025 & T-027: <i>Schima superba</i> ) in Zone 1 Slope 5SE- B/F89 were removed and waiting for replanting.



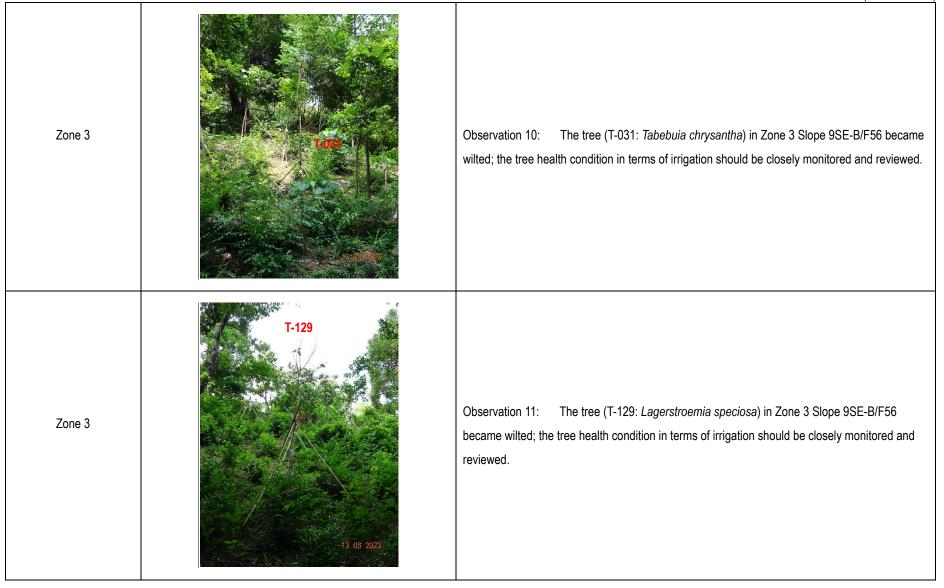












### Zone 1 Tuen Mun Area (General View)







### Zone 2 Siu Lam Area (General View)







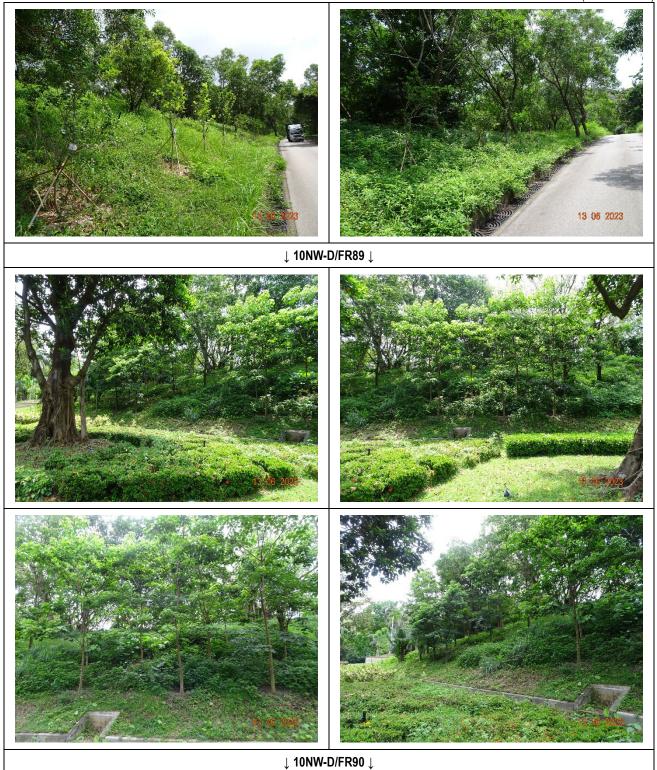
### Zone 3 Tung Chung Area (General View)





## Zone 4 Penny's Bay Area (General View)





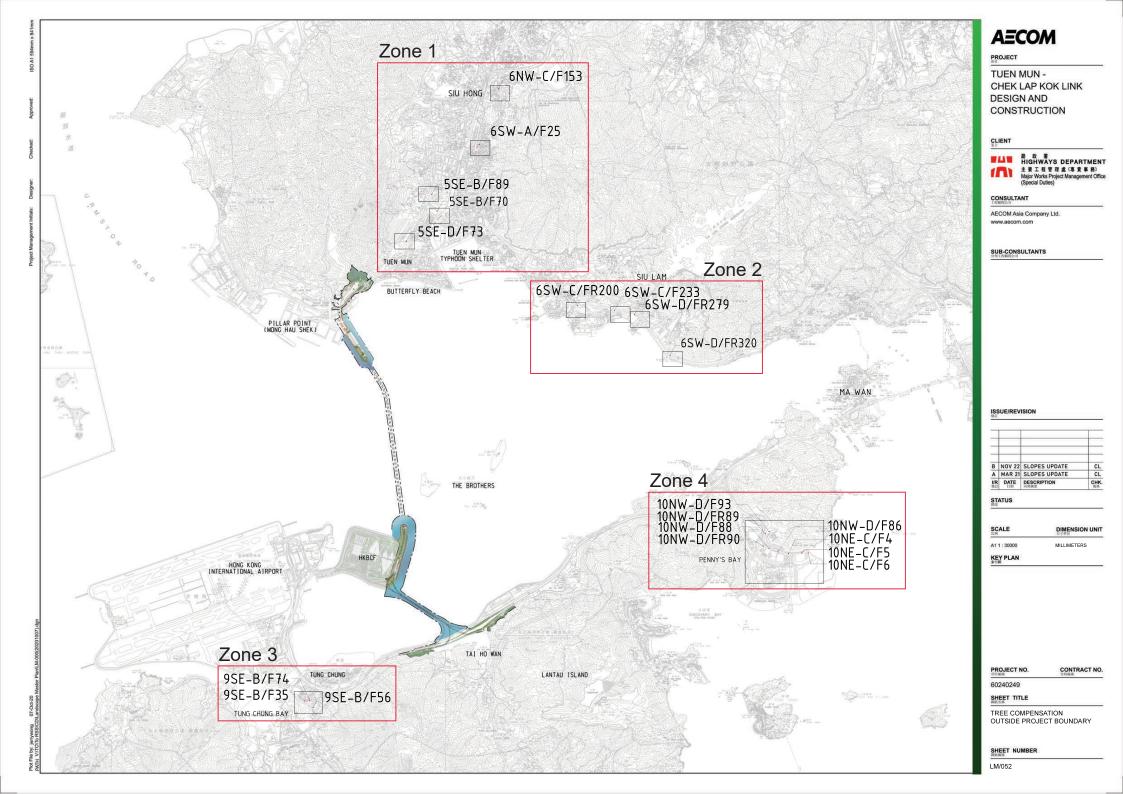


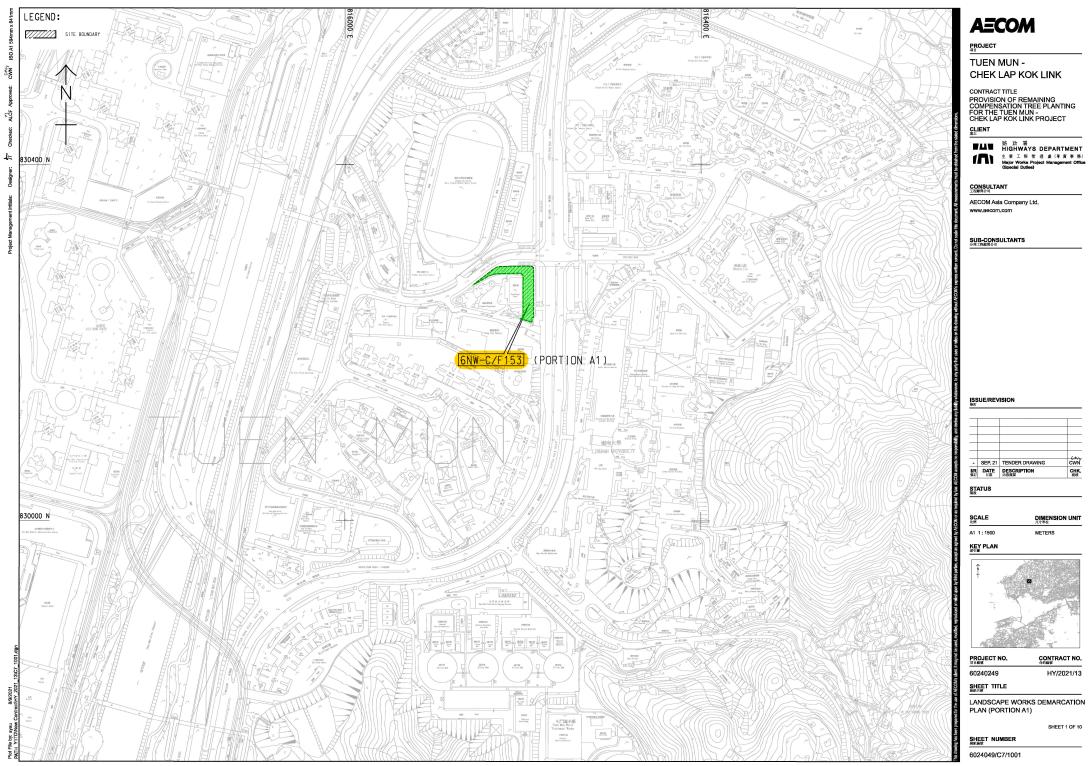




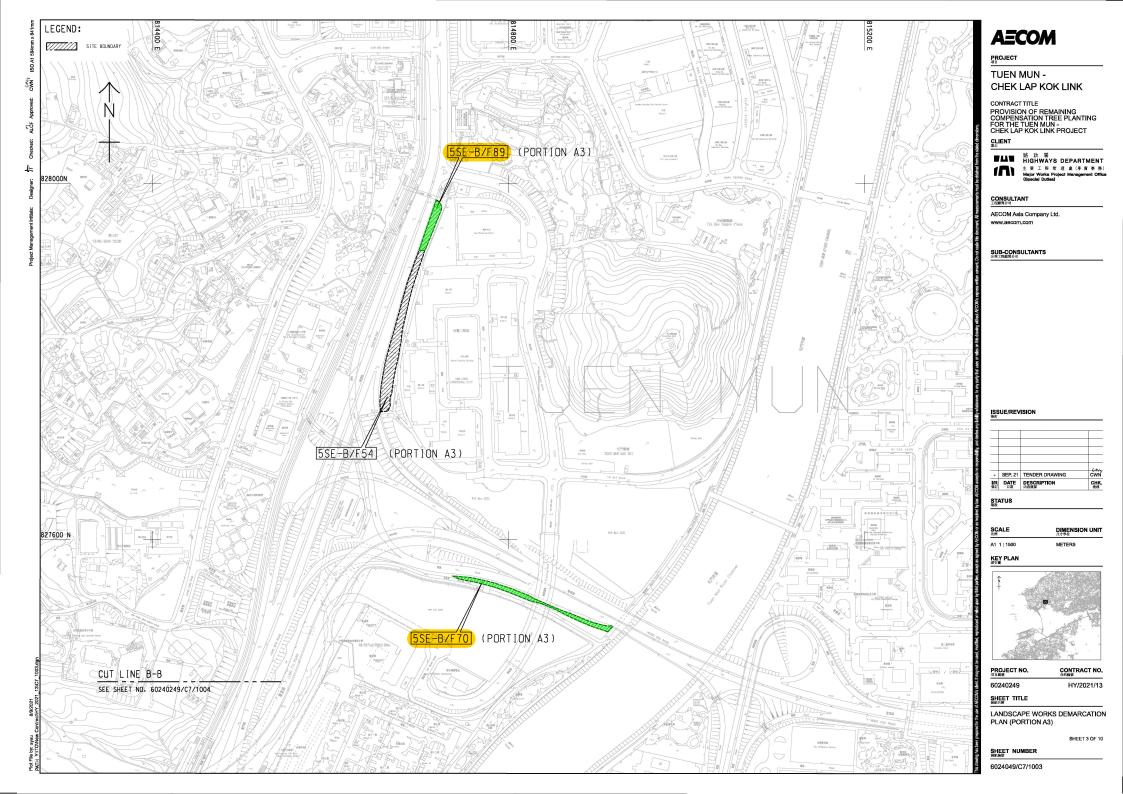


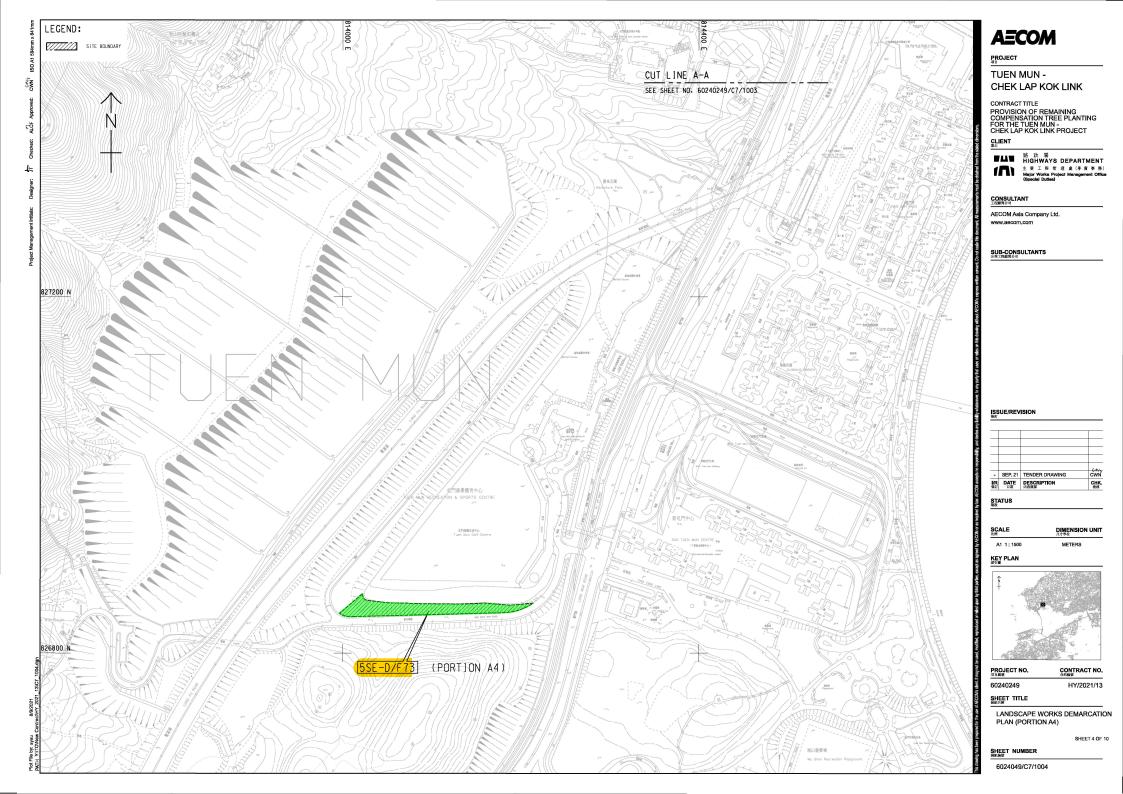
Appendix A Zoning Plan for Contract No. HY/2021/13

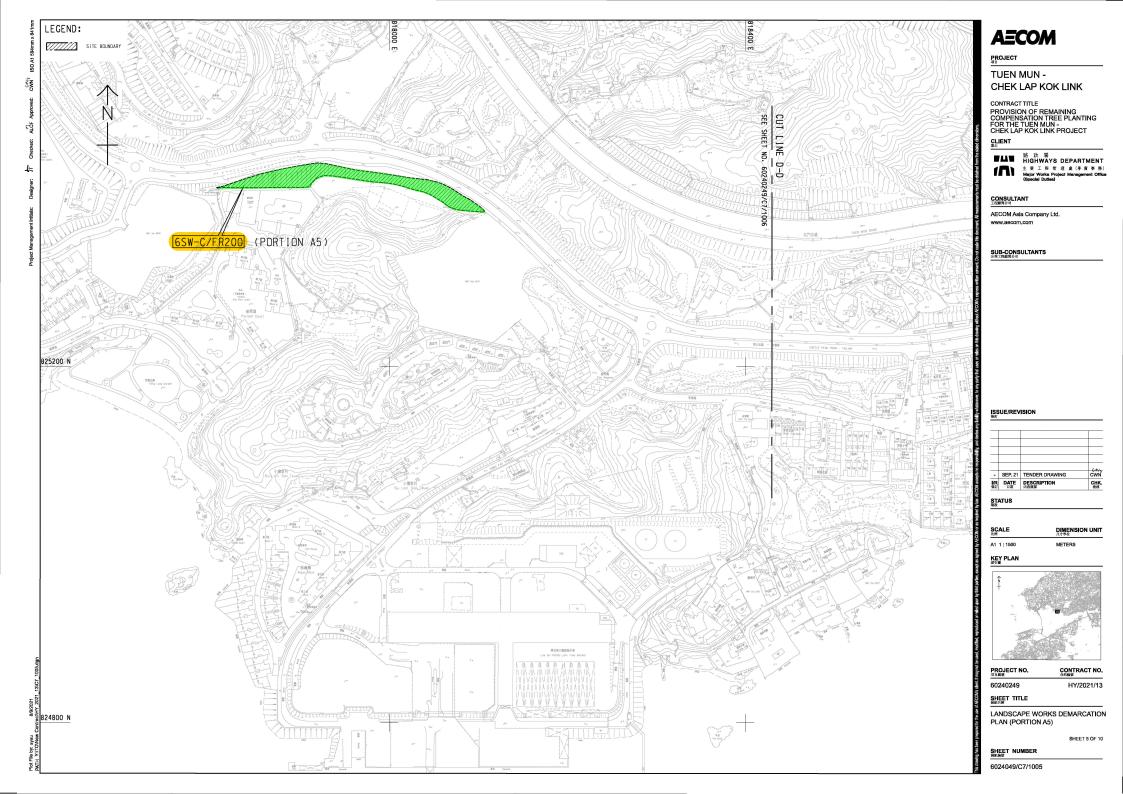






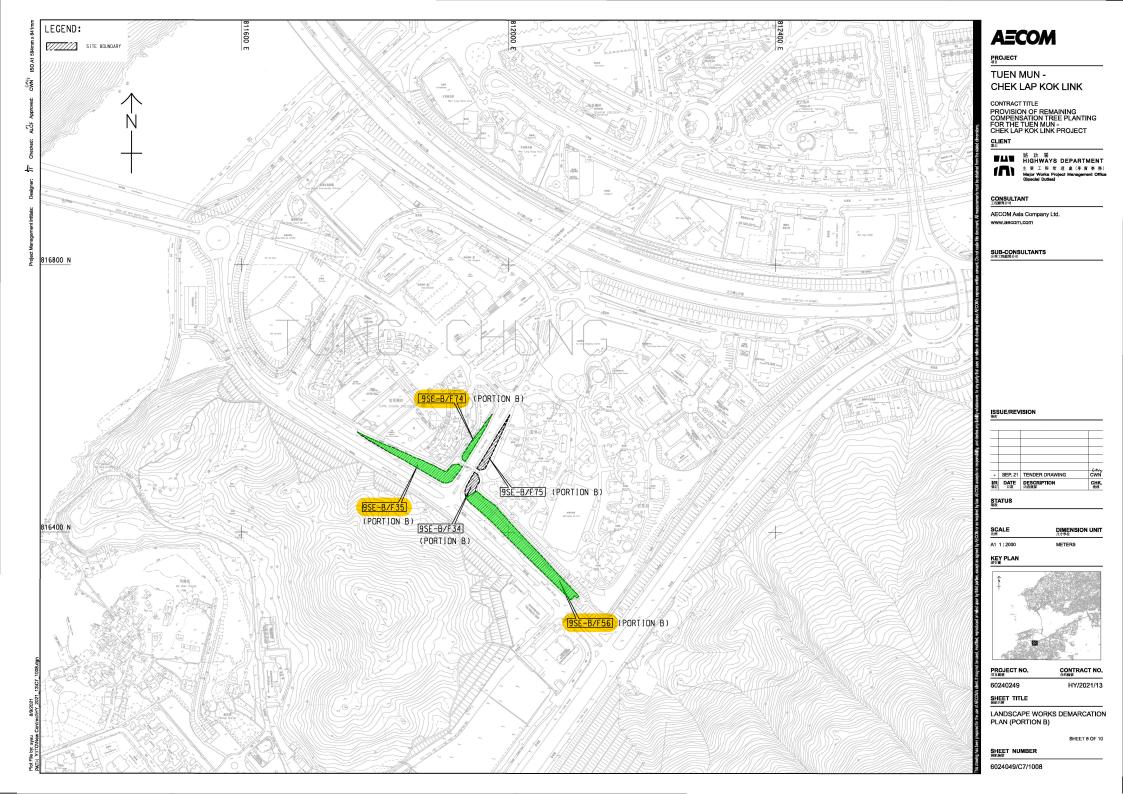


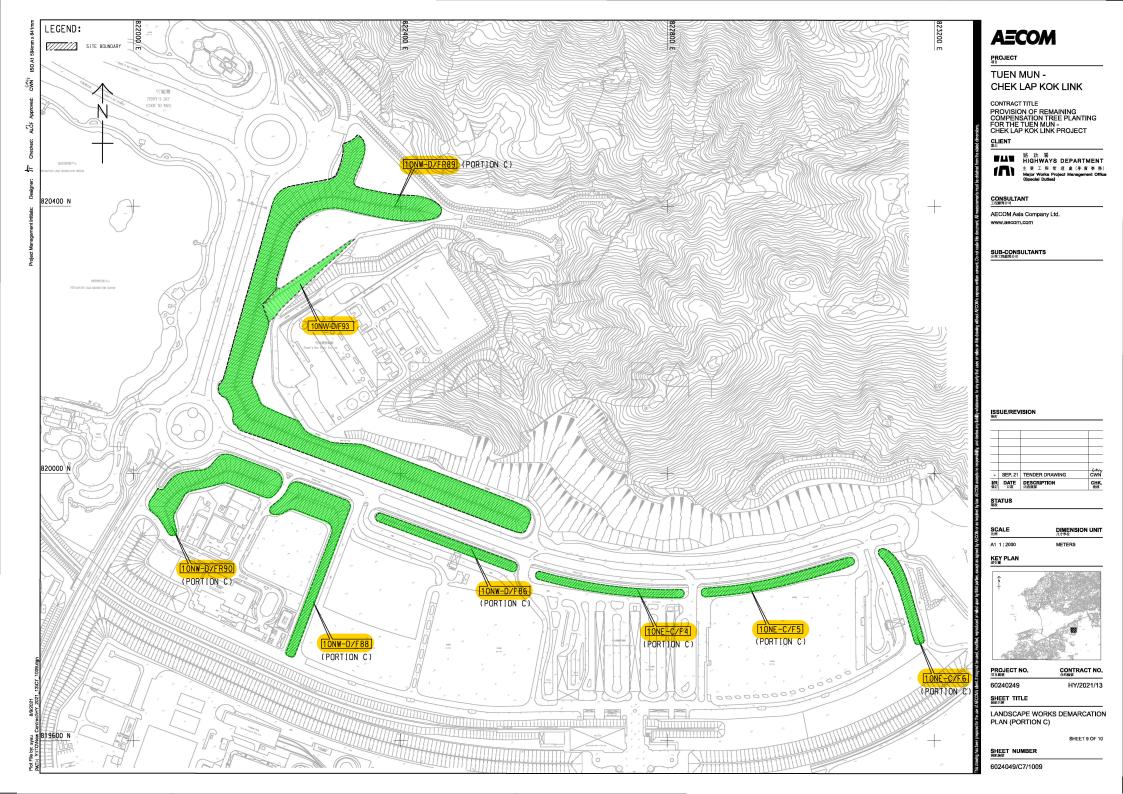












Appendix B Summary of tree Quantity for Contract No. HY/2021/13 (Zone 1 to Zone 4)

# Summary of Compensatory Trees under Contract No. HY/2021/13

Compensatory t	tree			<b>-</b>								<b>ty</b> (nos.)					-	de C		-
-			Т	Tuen Mu	in I	T		Siu	Lam	1	Т	ung Chui	ng		1	r	Penny	y's Bay	<del></del>	г
Botanical name	Chinese name	6NW-C/F 153	6SW- A/F25	5SE- B/F89	5SE- B/F70	5SE- D/F73	6SW- C/FR200	6SW- C/F233	6SW- D/FR279	6SW- D/FR320	9SE- B/F35	9SE- B/F56	9SE- B/F74	10NE- C/F6	10NW- D/F93	10NW- D/FR89	10NW- D/FR90	10NW- D/F88	10NW- D/F86	
Bauhinia variegata																		10	+	F
Bischofia javanica	秋楓											4				25				F
Bismarckia nobilis	霸王棕																3		+	t
Bridelia tomentosa	土密樹									5									+	F
Cassia fistula												1							+	F
Cassia javanica	節果決明											-		3					+	t
Castanopsis fissa	裂斗錐栗						3			5							11		+	F
Chorisia speciosa	美人樹															13			+	F
Cinnamomum camphora									5										+	t
Clerodendrum quadriloculare	煙火樹																		30	F
Cyclobalanopsis myrsinifolia	小葉青岡																9			F
Elaeocarpus balansae	大葉杜英												2				5		+	F
Elaeocarpus chinensis	中華杜英										10	11	2						+	t
Elaeocarpus sylvestris	山杜英							18					_						+	t
Dombeya wallichii	吊芙蓉							10											+	F
Ficus altissima	高山榕																		+	F
Ficus microcarpa	細葉榕																		1	t
llex rotunda var. microcarpa	小果鐵冬青					19	16			12	2	7	1		7				-	t
Jacaranda mimosifolia	藍花楹											-			-	8			+	t
Koelreuteria spp.	複羽葉欒樹																		11	t
Lagerstroemia indica	紫薇												2	3	23					F
Lagerstroemia speciosa	大花紫薇										15	12	3	3	2			6		F
Liquidambar formosana	楓香		7								27	9	3							F
Livistona chinensis												-				15				F
Machilus breviflora	短序潤楠				10	14	20				2	10							1	F
Machilus chekiangensis	浙江潤楠			7				21			1	8							1	F
Magnolia grandiflora	荷花玉蘭																7			F
Magnolia liliiflora	紫玉蘭														6				1	F
Michelia chapensis	樂昌含笑							6			3	5							1	F
, Michelia maudiae	深山含笑																4			F
Pandanus tectorius	林投樹																	6		ſ
Plumeria rubra	紅雞蛋花																	10		ſ
Polyspora axillaris	大頭茶										3									ſ
Pongamia pinnata	水黃皮					12														ſ
Prunus spp.	櫻		19	12								4		10						ſ
Ravenala madagascariensis	旅人蕉															9				ſ
Reevesia thyrsoidea	梭羅樹									9	4	7	2	3						ſ
Roystonea regia	王棕															14				Г
Sapium discolor	山烏桕																			Γ
Sapium sebiferum	烏桕	10									7	7			1					Γ
Schefflera heptaphylla	鵝掌柴								5											Γ
Schima superba	木荷			6		16					6	28								Γ
Sterculia lanceolata	假蘋婆						13							4				3		Г
Syzygium hancei	韓氏蒲桃	17									2	3								Г
Syzygium jambos	蒲桃					15			5											Г
Tabebuia chrysantha	黃金風鈴木		22									23							7	Г
Tabebuia rosea	紅花風鈴木																			Г
Vernicia fordii	油桐															17				Γ
Viburnum odoratissimum	珊瑚樹	18		5		16			5		11	9	13	13				4	2	Γ
Xanthostemon chrysanthus	金蒲桃				10														1	Γ
Yulania denudata	白玉蘭																11			ſ
Yulania x soulangeana	二喬木蘭																13			[
		45	48	30	20	92	52	45	20	31	93	148	28	39	39	101	58	39	51	ſ
	Sub-total			235				1	48			269					4	14		
	Total										10	)66								-

10NE-	10NE-
C/F4	C/F5
2	
	18
6	
0	-
	1
6	
0	
3	
21	
	6
	21
3	
0	
41	46
71	



# Appendix I

# **Tree Planting Schedule for TM-CLKL Project**

#### **Slope Planting**

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BRI,TOM,	Bridelia tomentoso *	土蜜樹	WHIP	1500-2000
GOR.AXI.	Gordonia axillaris *	大頭茶	WHIP	1500-2000
LIT.GLU.	Litsea glutinosa *	潺槁樹	WHIP	1500-2000
PHY.EMB.	Phyllanthus emblica *	餘甘子	WHIP	1500-2000
REE.THY.	Reevesia thyrsoidea *	梭羅樹	WHIP	1500-2000
TREE				
BAU.VAR.	Bauhinia variegata	宫粉羊蹄甲	LIGHT STANDARD/ STANDARD	4000
BOM.CEI.	Bombax ceiba	木棉	LIGHT STANDARD	4000-5000
BRI.TOM.	Bridelia tomentosa *	土蜜樹	LIGHT STANDARD	3000
CIN, BUR. (A)	Cinnamomum burmannii *	陰香	LIGHT STANDARD	4000
MEL.AZE.(A)	Melia azedarach	苦楝	LIGHT STANDARD	4000
PLU.RUB.	Plumeria rubra	雞蛋花	HEAVY STANDARD 2000 (H) X 2000 (S)	3500-4000
PALM		No.		
CAR.MIT.	Caryota mitis	短穗魚尾葵	2500(H) x 1500(S)	.2500
LIV.CHI.	Livistona chinensis	蒲葵	1500-2500(H) X 1500(S)	3500-4000
PHO.ROE.	Phoenix roebelenii	日本葵	2000(H) x 1500(S)	2000
WAS, ROB,	Washingtonia robusta	華盛頓葵	1500 - 2500(H) X 1500(S)	3500-4000
SHRUB				
CAL HAE.	Calliandra haematocephala	紅絨球	300(H) X 300(S)	1000
FIC.MIC.'GOL'	Ficus microcarpa 'Golden Leaf'	黄榕	300(H) X 300(S)	500
GAR.JAS.	Gardenia jasminoides *	白蟬	300(H) x 300(S)	500
GOR.AXI.	Gordonia axillaris *	大頭茶	500(H) X 500(S)	500
HIB.ROS.	Hibiscus roso-sinensis	大紅花	300(H) x 300(S)	1000
LIG.SIN.	Ligustrum sinense *	山指甲	300(H) x 300(S)	500
MEL.CAN.	Melastoma candidum *	野牡丹	300(H) X 300(S)	500
MEL.SAN.	Melastoma sanguineum *	毛葱	300(H) X 300(S)	500
NER.OLE.	Nerium oleander	灰竹桃	300(H) X 300(S)	1000
PIT.TOB.	Pittosporum tobira	海桐花	300(H) x 300(S)	500
PSY. ASI.	Psychotria asiatica *	九節	300(H) x 300(S)	500
RHO.SIM.	Rhododendron simsii *	紅杜鵰	300(H) x 300(S)	500
RHO.TOM.	Rhodomyrtus tomentosa *	桃金娘	300(H) X 300(S)	500
SCH.ARB.	Schefflera arboricola	八葉	300(H) x 300(S)	500
GROUNDCOV		1 2.970		
HYM.LIT.	Hymenocallis littoralis	蜘蛛蘭	300(H) X 300(S)	300
CLIMBER				
EPLAUR.	Epipremnum aureum	維羅	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500
FIC.PUM.	Ficus pumila *	薜荔	MIN. 3 SHOOTS PER PLANT, 300- 1000mm LONG	300
LON.JAP.	Lonicera japonica *	金銀花	MIN. 4 SHOOTS PER PLANT, 600mm LONG	500
PAR.DAL.	Parthenocissus dalzielii	爬墙虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300/500
HYDROSEEDI				
+	HYDROSEEDING	噴草	5	

#### NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION

4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2005 EDITION, CLAUSE 3.25(3).

5. \* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

6. + PLANT SPECIES INCLUDED IN THE ENTRUSTED LANDSCAPE WORKS TO CONTRACT NO. DC/2016/01.

#### **Roadside Planting**

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	
TREE					
BAU.BLA.	Bauhinia x blakeana * +	洋紫荊	HEAVY STANDARD	5000	
BAU.VAR.	Bauhinia voriegata	宫粉羊蹄甲	LIGHT STANDARD/ STANDARD/ HEAVY STANDARD	4000 - 5000	
GAR.SUB.	Garcinia subelliptica +	菲島福木	LIGHT STANDARD	4000-5000	
GRE.ROB.(H)	Grevillea robusta	銀棒	HEAVY STANDARD	5000	
LE.ROT.	llex rotundo	鐵冬青	HEAVY STANDARD	5000	
LAG.SPE.	Lagerstroemia speciosa	大花紫薇	HEAVY STANDARD	4000-4500	
PLU.RUB.	Plumeria rubra	雞蛋花	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000 4500	
TAB.IMP	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	5000	
VIB.ODO.	Viburnum odoratissimum * +	珊瑚樹	HEAVY STANDARD	5000	
XAN.CHR.	Xanthostemon chrysanthus +	金蒲桃	HEAVY STANDARD	5000	
PALM					
ARE.CAT.	Areca catechu +	檳榔	4000(H)	4000	
LIV.CHI.	Livístona chinensis	蒲葵	2500(H) x 1500(S)	3500-4000	
PHO.SYL.	Phoenix sylvestris	銀海棗	2000(H) x 1500(S)	4000	
SHRUB		·			
ALL.CAT.	Allamanda cathartica	軟枝黃蟬	300(H) X 300(S)	300/350	
DUR.REP.	Duranta repens	假蓮翹	300(H) x 250(S)	400	
COD.VAR.'AUC'	Codiaeum variegatum "Aucubaefolium" +	灑金榕	300(H) X 300(S)	300	
COD.VAR.'RED'	Codiaeum variegatum 'Red'≠	湿金榕(紅色)	300(H) X 300(S)	.300	
CYC.REV.	Cycas.revoluta	蘇鐵	400(H) x 500(S)	.500	
DRA.REF.	Dracaena reflexa	黃金百合竹	600(H)	500	
FIC.MIC.'GOL'	Ficus microcarpa 'Golden Leaf'	黃榕	300(H) X 300(S)	350/500	
GAR.JAS.	Gardenia jasminoides *	百鱓	300(H) x 300(S)	.500	
GOR.AXI.	Gordonia axillaris *	大頭茶	300(H) X 300(S)	350	
IXO.CHI.	Ixora chinensis * +	龍船花	300(H) x 300(S)	300	
LIG.SIN.	Ligustrum sinense *	山指甲	300(H) x 250(S)	400	
MELCAN.	Melastoma condidum *	野牡丹	300(H) X 300(S)	350	
MEL.SAN.	Melastoma sanguineum *	毛菍	300(H) X 300(S)	350	
NER.OLE.	Nerium oleander	夾竹桃	400(H) x 250(S) / 300(H) X 300(S)	400/500	
PIT.TOB.	Pittosporum tobira *	海桐花	300(H) x 300(S)	500	
RHA.IND.	Rhaphiolepis indica * +	車輪梅	300(H) x 300(S)	300	
RHO.TOM.	Rhodomyrtus tomentosa *	桃金娘	300(H) X 300(S)	350/500	
SCH.ARB.	Schefflera arboricola +	八葉	300(H) x 300(S)	350/ 500	
GROUNDCOVE	R				
ARA.DUR.	Arachis duranensis	金花生	100(H) x 200(S)	200	
ASP.DEN.	Asparagus densiflorus 'Sprengeri' +	非洲天門冬	200(H) x 300(S)	200	
нум.Lit.	Hymenocallis littoralis	蜘蛛蘭	300(H) X 300(S)	300	
NEP.AUR.	Nephrolepis auriculata * +	腎蕨	250(H) x 250(S)	150	
PHY.MYR.	Phyllanthus myrtifolius +	錫蘭葉下珠	300(H) x 300(S)	300	
TRA.SPA.	Tradescantia spathaceo	蚌花	200(H) x 300(S)	250	
WED.TRI.	Wedelia trilobata	三裂葉蟛蜞菊	200(H) x 150(S)	300	
CLIMBER					
EPI.AUR.	Epipremnum aureum +	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500/300	
FIC.PUM.	Ficus pumila *	薜荔	MIN. 3 SHOOTS PER PLANT, 300- 1000mm LONG	300	
PAR.DAL.	Parthenocissus dalzielii	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300	
HYDROSEEDIN	IG / GRASS			_	
	HYDROSEEDING	價草		1	
ANO COM	LA LA DECAMPA	A CONTRACTOR OF A CONTRACTOR	Whole piece turf		
AXO.COM.	Axonopus compressus +	地毯草(大葉草)	300(L)x300(W)x50(H)		



Agreement No. CE7/2011(HY) Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Planting Schedule (Contract 1 - HY/2012/07)

#### Slope Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BAU.VAR.	Bauhinia variegata	宮粉羊蹄甲	WHIP	1000
BRI.TOM.	Bridelia tomentosa *	土密樹	WHIP	1000-2000
GOR.AXI.	Gordonia axillaris *	大頭茶	WHIP	1000
LIT.GLU.	Litsea glutinosa *	潺槁木	WHIP	1000
MAL.PAN.	Mallotus paniculatus *	白楸	WHIP	1000
PHY.EMB.	Phyllanthus emblica *	餘甘子(油甘子)	WHIP	1000
SAP.DIS.	Sapium discolour *	山烏桕	WHIP	1000
TREE	La della conseguina da la della della			
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD	3000
BAU.VAR.(H)	Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	4000-4500
BRI.TOM.	Bridelia tomentosa *	土密樹	LIGHT STANDARD	3000
BOM.CEI.(L)	Bombax ceiba	木棉	LIGHT STANDARD	3000
BOM.CEI.(L)	Bombax ceiba	木棉	HEAVY STANDARD	4500-5000
CIN.BUR.	Cinnamomum burmannii *	陰香	LIGHT STANDARD	3000
CIN.BUR.	Cinnamomum burmannii *		HEAVY STANDARD	4500-5000
LIQ.FOR.	Liquidambar formosana *	楓香	LIGHT STANDARD	3000
LIT.GLU.(L)	Litsea glutinosa *	漏槁木	LIGHT STANDARD	3000
MAC.CHE.	Machilus chekiangensis *		LIGHT STANDARD	3000
REE.THY.	Reevesia thyrsoidea *		LIGHT STANDARD	3000
SCH.SUP.	Reevesia thyrsoidea * Schima superba *		LIGHT STANDARD	3000
and the second		木荷 (荷樹)		
STE.LAN.	Sterculia lanceolata *	假蘋婆	LIGHT STANDARD	3000
STE.LAN.	Sterculía lanceolata *	假蘋婆	HEAVY STANDARD	4500-5000
VIB.ODO.	Viburnum odoratissimum *	珊瑚樹	LIGHT STANDARD	3000
SHRUB		Thirt failer w?		500
DES.CHI.	Desmos chinensis *	假鷹爪	300(H) x 300(S)	500
ILE.ASP.	llex asprella *	梅葉冬青	300(H) x 300(S)	500
ILE.PUB.	llex pubescens *	毛冬青	300(H) x 300(S)	500
LIG.SIN.	Ligustrum sinense	山指甲	300(H) x 300(S)	350-500
MEL.CAN.	Melastoma candidum *	野牡丹	300(H) x 300(S)	350-500
MEL.SAN.	Melastoma sanguineum *	毛菍	300(H) x 300(S)	350-500
NER.OLE.	Nerium oleander	夾竹桃	300(H) x 300(S)	350
PSY.ASI.	Psychotria asiatica *	九節	300(H) x 300(S)	500
RHA.IND.	Rhaphiolepis indica *	車輪梅	300(H) x 300(S)	350-500
RHO.PUL.	Rhododendron pulchrum	紫杜鵑	300(H) x 300(S)	500
RHO.SIM.	Rhododendron símsií *	紅杜鵑	300(H) x 300(S)	500
SCH.ARB.	Schefflera arboricola	八葉木	300(H) x 300(S)	500
SCH.VAR.	Schefflera arboricola 'Variegata'	花葉八葉木	300(H) x 300(S)	500
GROUNDCOV	/ER			
NEP.AUR.	Nephrolepis auriculata *	腎蕨	300(H) x 300(S)	100-300
NEP.HIR.	Nephrolepis hirsutula *	毛葉腎蕨	300(H) x 300(S)	100-300
CLIMBER		THE REAL PROPERTY AND A DESCRIPTION OF A		
BAU.COR.	Bauhinia corymbosa	首冠藤	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
BOU.SPE.	Bougainvillea spectabilis	簕杜鵑	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-500
FIC.PUM.	Ficus pumila *	薜荔	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300
LON.JAP.	Lonicera japonica *	忍冬(金銀花)	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
PAR.DAL.	Parthenocissus dalzielii	爬墙虎	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300-1000
WED.TRI.	Wedelia trilobata	三裂葉蟛蜞菊	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300

#### **Roadside Planting**

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BRA.ACE.	Brachychiton acerifolius	槭葉蘋婆	HEAVY STANDARD	4500-5000
DEL.REG.	Delonix regia	鳳凰木	HEAVY STANDARD	N/A
GAR.SUB.	Garcinia subelliptica	菲島福木(福木)	LIGHT STANDARD	3000
MEL.CUM.	Melaleuca cajuputi subsp. cumingiana	白千層	HEAVY STANDARD	4000
STE.LAN.	Sterculia lanceolata *	假蘋婆	HEAVY STANDARD	5000
TAB.CHR.	Tabebuia chrysantha	黃花風鈴木	HEAVY STANDARD	5000
TAB.IMP.	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	5000
TER.MAN.	Terminalia mantaly	小葉欖仁	HEAVY STANDARD	5000
PALM				
ARC.ALE.	Archontophoenix alexandrae	假檳榔	3500(H) x 1500(S)	4000
CHR.LHT.	Chrysalidocarpus lutescens	散尾葵	1500(H)	2000
LIV.CHI.	Livistona chinensis	蒲葵	2000(H) x 1500(S)	2500
PHO.ROE.	Phoenix roebelenii	日本葵	2000(H) x 1500(S)	2500-3000
WOD.BIF.	Wodyetia bifurcata	狐尾椰子	2500(H) x 1500(S)	3500
SHRUB				
DUR.GOL.	Duranta repens 'Golden'	金連翹	300(H) x 300(S)	300
IXO.CHI.	Ixora chinensis *	龍船花	300(H) x 300(S)	300
IXO.COC.	Ixora coccinea	橙紅龍船花	300(H) x 300(S)	300
IXO.LUT.	Ixora coccinea 'Lutea'	黃花龍船花	300(H) x 300(S)	300
RHA.IND.	Rhaphiolepis indica *	車輪梅	300(H) x 300(S)	300
RHO.PUL.	Rhododendron pulchrum	紫杜鵑	300(H) x 300(S)	300
RHO.SIM.	Rhododendron simsii *	紅杜鵑	300(H) x 300(S)	300
SCH.ARB.	Schefflera arboricola	八葉木	300(H) x 300(S)	300
SCH.VAR.	Schefflera arboricola 'Variegata'	斑葉鵝掌藤 (花葉八葉木)	300(H) x 300(S)	300
GROUNDCO	VER			
ARA.DUR.	Arachis duranensis	金花生	100(H) x 200(S)	200
ASP.DEN.	Asparagus densiflorus 'Myersii'	狐尾天冬	300(H) x 300(S)	250
ASP.SPR.	Asparagus densiflorus 'Sprengeri'	非洲天門冬(天冬)	100(H) x 200(S)	200
CUP.HYS.	Cuphea hyssopifolia	細葉雪茄花	250(H) x 300(S)	250-300
DIA.VAR.	Dianella tasmanica 'Variegata'	花葉山菅蘭	250(H) x 250(S)	250
LAN.FLA.	Lantana camara 'Flava'	黃花馬纓丹	200(H) x 200(S)	200
LAN.MON.	Lantana montevidensis	小葉馬纓丹	200(H) x 200(S)	200
NEP.AUR.	Nephrolepis auriculata *	腎蕨	300(H) x 300(S)	100-300
OPH.JAP.	Ophiopogon japonicus *	沿階草	200(H) x 200(S)	200

#### NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.

4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).

5. \* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.



Agreement No. CE7/2011(HY) Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works Planting Schedule (Contract 3 - HY/2013/12) NING WORKS, 2006 EDITION. E 3.26(3). WEBSITE.

#### Northern Landfall - Roadside Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BAU.BLA	Bauhinia x blakeana *	洋紫荊	HEAVY STANDARD	4500-5000
BAU.VAR	Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	4500-5000
ELA.API	Elaeocarpus apiculatus	尖葉杜英	HEAVY STANDARD	6000
ELA.HAI	Elaeocarpus hainanensis	水石榕	HEAVY STANDARD	5000
GAR.SUB	Garcinia subelliptica	菲島福木	HEAVY STANDARD	3500-4000
GRE.ROB	Grevillea robusta	銀樺	HEAVY STANDARD	4500-5000
MEL.QUI	Melaleuca quinquenervia	白千層	HEAVY STANDARD	4500-5000
PLU.MUL	Plumeria rubra (multi-colour flower)	雞蛋花(多色花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PLU.RUB	Plumeria rubra (red flower)	雞蛋花(紅花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PLU.RUB(Y)	Plumeria rubra (yellow flower)	雞蛋花(黄花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PON.PIN	Pongamia pinnata *	水黃皮	HEAVY STANDARD	5000-6000
STE.LAN	Sterculia lanceolata *	假蘋婆	HEAVY STANDARD	4500-5000
TER.CAT	Terminalia catappa	欖仁樹	HEAVY STANDARD	5000-7000
VIB.ODO	Viburnum odoratissimum *	珊瑚樹	HEAVY STANDARD	4500-5000
XAN.CHR	Xanthostemon chrysanthus	金蒲桃	HEAVY STANDARD	5000
PALM				
ARE.CAT	Areca catechu	檳榔	3000(H) x 1500(S)	4000
HYO.LAG	Hyophorbe lagenicaulis	酒瓶椰子	2000(H) x 1500(S)	3000
LIV.CHI	Livistona chinensis	蒲葵	3000(H) x 2000(S)	4000-4500
ROY.REG	Roystonea regia	王棕	4000(H) x 2000(S)	4500-5000
WOD.BIF	Wodyetia bifurcata	狐尾椰子	3000(H) x 1500(S)	4500
SHRUB				
СМІ	Carmona microphylla	福建茶	300(H) x 300(S)	300
CRE	Cycas revoluta	蘇鐵	500(H) x 600(S)	N/A
DLU	Dypsis lutescens	散尾葵	2000(H) x 2000(S)	2000
JKA	Juniperus chinensis 'Kaizuca'	龍柏球	600(H) x 600(S)	N/A
ICH	Ixora chinensis *	龍船花	300(H) x 300(S)	300
ICO	Ixora coccinea	橙紅龍船花	300(H) x 300(S)	300
ILU	Ixora coccinea 'Lutea'	黃花龍船花	400(H) x 300(S)	300
IST	lxora stricta	細葉龍船花	250(H) x 250(S)	250
IWE	Ixora westii	粉紅龍船花	400(H) x 300(S)	300
рто	Pittosporum tobira	海桐	300(H) x 300(S)	350
РМА	Podocarpus macrophyllus *	羅漢松	600(H) x 500(S)	N/A
PAX	Polyspora axillaris *	大頭茶	300(H) x 300(S)	350
RIN	Rhaphiolepis índica *	車輪梅	300(H) x 300(S)	300-350
RPU	Rhododendron pulchrum	錦繡杜鵑	300(H) x 300(S)	350
RSI	Rhododendron simsii *	紅杜鵑	250(H) x 250(S)	350
RTO	Rhodomyrtus tomentosa *	桃金娘	300(H) x 300(S)	350
STA	Scaevola taccada *	草海桐	300(H) x 300(S)	350
SDA	Schefflera arboricola 'Dazzle'	黃金八葉	300(H) x 300(S)	350
SVA	Schefflera arboricola 'Variegata'	斑葉鵝掌藤 (花葉八葉木)	300(H) x 300(S)	300-350

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	
<b>GROUNDCO</b>	VER				
ADU	Arachis duranensis	蔓花生 (金花生)	100(H) x 200(S)	200	
АМҮ	Asparagus densiflorus 'Myersii'	狐尾天冬	300(H) x 300(S)	300	
ASP	Asparagus densiflorus 'Sprengeri'	非洲天門冬	100(H) x 200(S)	200	
СНҮ	Cuphea hyssopifolia	細葉萼距花	200(H) x 250(S)	250	
CRO	Catharanthus roseus	長春花	200(H) x 200(S)	200	
LFL	Lantana camara 'Flava'	黃花馬纓丹	200(H) x 200(S)	200	
LMO	Lantana montevidensis	小葉馬纓丹	200(H) x 200(S)	200	
NAU	Nephrolepis auriculata *	腎蕨	250(H) x 250(S)	200	
WTR	Wedelia trilobata	三裂葉蟛蜞菊	150(H) x 200(S)	200	
CLIMBER					
всо	Bauhinia corymbosa	首冠藤	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500	
QIN	Quisqualis indica	使君子	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500	
GRASS					
ACO	Axonopus compressus	大葉草(地毯草)	Whole piece turf 300(L)x300(W)x50(H)	1	

#### NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.

4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3). 5. \* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

5. SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBA



Agreement No. CE7/2011(HY) Tuen Mun - Chek Lap Kok Link - Northern Connection Tunnel Buildings, Electrical and Mechanical Works Planting Schedule (Contract 4 - HY/2017/10) EERING WORKS, 2006 EDITION. USE 3.26(3). JM WEBSITE.

#### Southern Landfall (Contract 1 - HY/2012/07)

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
GRE.ROB.	Grevillea robusta	銀樺	HEAVY STANDARD	4000-5000
			HEAVY STANDARD	
PLU.RUB.	Plumeria rubra	雞蛋花(紅)	2000(H) x 2000(S) -	4000-5000
		Government print by the first of the data unit of the	2500(H) x 2500(S)	
SHRUB				
RUS.EQU.	Russelia equisetiformis	爆仗竹	300(H) x 300(S)	250
GROUNDCO	VER			
PO.PES.	Ipomoea pes-caprae *	海灘牽牛	200(H) x 200(S)	200
	Lantana montevidensis	小葉馬纓丹	200(11) 200(2)	250
LAN.MON.		(鋪地臭金鳳)	200(H) x 200(S)	250
OPH.JAP.	Ophiopogon japonicus *	麥冬(沿階草)	150(H) x 200(S)	200
SYN.POD.	Syngonium podophyllum	白蝴蝶	100(H) x 200(S)	200
ГRA.SPA.	Tradescantia spathacea	蚌花	200(H) x 300(S)	250
ZEP.ROS.	Zephyranthes rosea	玫瑰蔥蓮	100(H) x 200(S)	150
CLIMBER				
MON.DEL.	Monstera deliciosa	龜背竹	MIN. 5 SHOOTS PER PLANT,	500
			300mm LONG	500
HYDROSEED	DING / GRASS			
	HYDROSEEDING	噴草	<u> </u>	1
ZOY.JAP.	Zoysia japonica	朝鮮草	300(L)x300(W)x50(H)	N/A

### Southern Landfall (Contract 4 - HY/2017/10)

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE	•			
CV	Callistemon viminalis	串錢柳	HEAVY STANDARD	4000-5000
GR	Grevillea robusta	銀樺	HEAVY STANDARD	4000-5000
			HEAVY STANDARD	
PRR	Plumeria rubra (red flower)	雞蛋花(紅花)	2000(H) x 2000(S) -	4000-5000
			2500(H) x 2500(S)	
			HEAVY STANDARD	
PRY	Plumeria rubra (yellow flower)	雞蛋花(黄花)	2000(H) x 2000(S) -	4000-5000
		of if is included beit ords area	2500(H) x 2500(S)	
			HEAVY STANDARD	
PLU.MUL	Plumeria rubra (multi-colour flower)	雞蛋花(多色花)	2000(H) x 2000(S) -	4000-5000
			2500(H) x 2500(S)	
GROUNDCC	VER			
IPE	Ipomoea pes-caprae *	海灘牽牛	150(H) x 200(S)	200
LMO	Lantana montevidensis	小葉馬纓丹 (鋪地臭金鳳)	200(H) x 300(S)	200
OJA	Ophiopogon japonicus *	麥冬(沿階草)	100(H) x 100(S)	100
SPO	Syngonium podophyllum	白蝴蝶	100(H) x 200(S)	200
TSP	Tradescantia spathacea 'dwarf'	矮蚌花	100(H) x 100(S)	100
WTR	Wedelia trilobata	三裂葉蟛蜞菊	150(H) x 200(S)	200
GRASS				
ZJA	Zoysia japonica	朝鮮草	300(L)x300(W)x50(H)	N/A

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.

4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).

5. \* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

6. THE PLANT SPECIES ALLOWED FOR PLANTING IN EACH ZONE STATED IN THE HONG KONG INTERNATIONAL AIRPORT (HKIA) APPROVED PLANT SPECIES LIST (Revision. 4.0.1: October 2015).

#### NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.

2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN A STAGGERED PATTERN.

3. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.

4. GRASS SEED AS GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, CLAUSE 3.26(3).

5. \* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

6. THE PLANT SPECIES ALLOWED FOR PLANTING IN EACH ZONE STATED IN THE HONG KONG INTERNATIONAL AIRPORT (HKIA) APPROVED PLANT SPECIES LIST (Revision. 4.0.1: October 2015).



Agreement No. CE7/2011(HY) Tuen Mun - Chek Lap Kok Link - Northern Connection Tunnel Buildings, Electrical and Mechanical Works Planting Schedule for Southern Landfall (Contract 1 – HY/2012/07 and Contract 4 – HY/2017/10)

#### Slope Planting

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	
TREE				
Bauhinia variegata	宮紛羊蹄甲	LIGHT STANDARD	4000	
Bischofia javanica *	秋楓	LIGHT STANDARD	5000	
Bridelia tomentosa *	土密樹	LIGHT STANDARD	3000	
Cassia fistula	豬腸豆	LIGHT STANDARD	5000	
Cassia javanica	節果決明	LIGHT STANDARD	5000	
Castanopsis fissa *	裂斗錐栗	LIGHT STANDARD	5000-6000	
Chorisia speciosa	美人樹	LIGHT STANDARD	4000	
Cinnamomum camphora *	樟	LIGHT STANDARD	6000	
Clerodendrum quadriloculare	煙火樹	LIGHT STANDARD	4000	
Cyclobalanopsis myrsinifolia *	小葉青岡	LIGHT STANDARD	4000	
Elaeocarpus balansae	大葉杜英	LIGHT STANDARD	3000	
Elaeocarpus chinensis *	中華杜英	LIGHT STANDARD	3000	
Elaeocarpus sylvestris *	山杜英	LIGHT STANDARD	3000	
Dombeya wallichii	吊芙蓉	LIGHT STANDARD	4000	
Ficus altissima	高山榕	LIGHT STANDARD	5000	
		LIGHT STANDARD/ HEAVY		
Ficus microcarpa *	細葉榕	STANDARD	5000	
llex rotunda var. microcarpa *	小果鐵冬青	LIGHT STANDARD	3000	
Jacaranda mimosifolia	藍花楹	LIGHT STANDARD	5000	
Koelreuteria spp.	複羽葉欒樹	LIGHT STANDARD	4000-5000	
Lagerstroemia indica	紫薇	LIGHT STANDARD	3000	
Lagerstroemia speciosa	大花紫薇	LIGHT STANDARD	4000	
Liquidambar formosana *	楓香	LIGHT STANDARD	5000-6000	
Machilus breviflora *	短序潤楠	LIGHT STANDARD	3000	
Machilus chekiangensis *	浙江潤楠	LIGHT STANDARD	3000-5000	
Magnolia grandiflora	荷花玉蘭	LIGHT STANDARD	4000	
Magnolia liliiflora	紫玉蘭	LIGHT STANDARD	3000	
Michelia chapensis *	樂昌含笑	LIGHT STANDARD	3000-6000	
Michelia maudiae *	深山含笑	LIGHT STANDARD	4000	
Pandanus tectorius *	林投樹	LIGHT STANDARD	4000	
Plumeria rubra	紅雞蛋花	2000mm (H) x 2000mm (S)	4000	
Polyspora axillaris *	大頭茶	LIGHT STANDARD	3000	
Pongamia pinnata *	水黄皮	LIGHT STANDARD	5000	
Prunus incisa	富士櫻	LIGHT STANDARD	3000	
Reevesia thyrsoidea *		LIGHT STANDARD	3000-4000	
Reevesia thyrsolaea * Sapium discolor *	梭羅樹	LIGHT STANDARD	5000	
Sapium aiscoior * Sapium sebiferum *	山烏柏	LIGHT STANDARD	3000	
	烏桕	LIGHT STANDARD	3000-6000	
Schefflera heptaphylla *	鵝掌柴			
Schima superba *	木荷	LIGHT STANDARD	3000-5000	
Sterculia lanceolata *	假顏婆	LIGHT STANDARD	3000-4000	
Syzygium hancei *	韓氏蒲桃	LIGHT STANDARD	3000-5000	
Syzygium levinei *	山蒲桃	LIGHT STANDARD	3000-6000	
Tabebuia chrysantha	黃金風鈴木	LIGHT STANDARD	3000-4000	
Tabebuia rosea	紅花風鈴木	LIGHT STANDARD	4000	
Vernicia fordii	油桐	LIGHT STANDARD	5000	
Viburnum odoratissimum *	珊瑚樹	LIGHT STANDARD	3000-6000	
Xanthostemon chrysanthus	金蒲桃	LIGHT STANDARD	3000	
Yulania denudata	白玉蘭	LIGHT STANDARD	4000	
Yulania x soulangeana	二喬木蘭	LIGHT STANDARD	4000	

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
PALM			
Bismarckia nobilis	霸王棕	Medium Palm 3m overall height	4000
Livistona chinensis	蒲葵	Medium Palm 1.5m & 2.5m(H) trunk	2000
Ravenala madagascariensis	旅人蕉	Medium Palm 2.5m(H) overall	2000
Roystonea regia	王棕	Large Palm 3m(H) trunk	3000

#### NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.

2. SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.

3.\* SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

AECOM Imagine II. Delivered.

Agreement No. CE7/2011(HY) Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Planting Schedule (Contract 7 - HY/2021/13)



# Appendix J

# **Cumulative Statistics of Complaint, Summon and Prosecution**



Table J-1	Statistical Summary of Environmental Complaints
-----------	---

	Environmental Complaint Statistics					
<b>Reporting Period</b>	Frequency	Cumulative	<b>Complaint Nature</b>			
			Air	Noise	Water	Others
June 2023	0	0	NA	NA	NA	NA
Cumulative since contract commencement	0	0	NA	NA	NA	NA

### Table J-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics				
	Frequency	Cumulative	<b>Complaint Nature</b>		
			Air	Noise	Water
June 2023	0	0	NA	NA	NA
Cumulative since contract commencement	0	0	NA	NA	NA

### Table J-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics				
	Frequency	Cumulative	<b>Complaint Nature</b>		
			Air	Noise	Water
June 2023	0	0	NA	NA	NA
Cumulative since contract commencement	0	0	NA	NA	NA