



AUES JOB No.: TCS01137/20

TUEN MUN - CHEK LAP KOK LINK
CONTRACT NO. HMWSD 2/2020 (HY) –
ESTABLISHMENT OF LANDSCAPE SOFTWORKS FOR
THE TUEN MUN - CHEK LAP KOK LINK

FINAL ENVIRONMENTAL MONITORING AND AUDIT
(EM&A) REPORT FOR ESTABLISHMENT
MONITORING OF PROJECT'S BOUNDARY AREA
(JUNE 2020 TO JANUARY 2023)

PREPARED FOR
HONG KONG LANDSCAPING CO., LTD.

Date	Reference No.	Prepared By	Certified By
24 April 2023	TCS01137/20/600/R0091v1	 Martin Li (Environmental Consultant)	 Ben Tam (Environmental Team Leader)

Version	Date	Remarks
1	24 April 2023	First Submission

Our Ref: TCS01137/20/300/L0092

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

Attn: Ms Candy Lau

1 June 2023
By Email

Dear Madam,

Re: Contract No. HMWSD 2/2020 (HY)
Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link
Environmental Permit No.: EP-354/2009/D
Final Environmental Monitoring and Audit (EM&A) Report for Establishment Monitoring of Project's Boundary Area

We write to certify the Final Environmental Monitoring and Audit (EM&A) Report for Establishment Monitoring of Project's Boundary Area (TCS01137/20/600/R0091v1) 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. ANewR (IEC) Mr. James Choi By email
Hong Kong Landscaping Co., Ltd Mr. S.C. Wong By email
(Contractor)



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

Your reference:

Our reference: HKHYD203/50/108830

Date: 1 June 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 the Hong Kong-Zhuhai-Macao Bridge
Hong Kong Link Road, Hong Kong-Zhuhai-Macao Bridge Hong Kong
Boundary Crossing Facilities & Tuen Mun-Chek Lap Kok Link – Investigation

Contract No. HMWSD 2/2020 (HY)
Establishment of Landscape Softworks for Tuen Mun – Chek Lap Kok Link
Final Environmental Monitoring and Audit (EM&A) Report for
Establishment Monitoring of Project's Boundary Area (June 2020 to January 2023)

We refer to the email of 24 April 2023 attaching a Final Environmental Monitoring and Audit (EM&A) Report for Establishment Monitoring of Project's Boundary Area (June 2020 to January 2023) prepared by the Environmental Team (ET) of the captioned.

We have no comment and hereby verified the captioned report in accordance with Clause 4.4 of the Environmental Permit no. EP-352/2009/D and Clause 5.4 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 Ricky Lau on 2618 2831.

Yours faithfully
ANewR CONSULTING LIMITED

James Choi
Independent Environmental Checker

CPSJ/LCCR/lsm

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

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EXECUTIVE SUMMARY

- ES01 The TM-CLKL had been commissioning at the end of 2020 and the major construction works under the Project had been completed at the end of March 2021. According to the Project EM&A Manual requirement, establishment monitoring works will be undertaken for a period of two years after the commission of the project
- ES02 The planting area under TM-CLK Project was constructed by three different Contract - HY/2012/07, HY/2013/12 and HY/2017/10.
- ES03 This is the Final EM&A report under the Contract HMWSD 2/2020 (HY) presenting the establishment monitoring results and inspection findings during the establishment period for TM-CLK Project's boundary from **June 2020 to January 2023**.

SUMMARY OF EM&A ACTIVITIES FOR THE REPORTING PERIOD

- ES04 During the establishment period, establishment inspection which supervised by the RLA was conducted quarterly. Total **8** inspections were conducted for the planting area under the Contract HY/2012/07, HY/2013/12 & HY/2017/10 respectively.
- ES05 The 24-month establishment period for the planting area under the Contract HY/2012/07 and the Contract HY/2013/12 were completed at the end of May 2022. Furthermore, the 24-month establishment period for the planting area under the Contract HY/2017/10 was completed at the end of January 2023.

ENVIRONMENTAL COMPLAINT

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

Reporting Period	Environmental Complaint Statistics	
	Frequency	Cumulative
June 2020 to January 2023	0	0

NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

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

CONCLUSION

- ES08 The condition of the planted tree is satisfaction. Moreover, the species and quantity of tree planted in those areas are complied with the approved Landscape & Visual Plan / Planting Schedule.
- ES09 The entire establishment monitoring for the planting area within the TMCLKL Project boundary was completed. The quantity of tree planting and the landscape planting area for the TM-CLKL Project fulfil with the EIA Report and EP requirement.
- ES10 Reporting for those compensation tree planting areas outside the Project's boundary can be referred to the Monthly Report for the Contract HY/2021/13.

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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 Hong Kong Landscaping Co., Ltd. (hereafter “HKL”) is commissioned by the Highways Department (HyD) as the Main Contractor of the Contract No. HMWSD 2/2020 (HY) – Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link ((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.
- 1.1.3 The TM-CLKL had been commissioning at the end of 2020 and the major construction works under the Project had been completed at the end of March 2021. According to the Project EM&A Manual requirement, establishment monitoring works had been conducted for a period of two years after the commission of the project.
- 1.1.4 The planting area under TM-CLK Project was constructed by three different Contract - HY/2012/07, HY/2013/12 and HY/2017/10. The layout Plan of the Project and the zoning plan for each Contract are showed in [Appendix A and B](#) respectively.
- 1.1.5 The major works during the establishment period mainly include:-
a. Maintenance the approx. 33ha planting area of the Project during the establishment period.
- 1.1.6 This is the **Final** EM&A report under the Contract HMWSD 2/2020 (HY) presenting the establishment monitoring results and inspection findings during the establishment period for TM-CLK Project’s boundary from **June 2020 to January 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 Monitoring Requirements for the Establishment Period
Section 3 Summary of Establishment Period Monitoring
Section 4 Compliance of Tree planting for TMCLK Project
Section 5 Environmental Complaints and Non-Compliance
Section 6 Conclusions

1.3 CONTRACT ORGANIZATION

- 1.3.1 The Contract organization and contact details of key personnel are shown in [Appendix C](#).

2 SUMMARY OF MONITORING REQUIREMENTS FOR THE ESTABLISHMENT PERIOD**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 In this report, it was only focus on the aspect “landscape and visual” under the EM&A requirements during the establishment period. 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***Landscape and Visual***

2.2.1 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.

2.2.2 For the planting area under the Contract HY/2012/07, the first 6-month establishment period inspection and maintenance will be taken by the original Contract's ET and the main Contractor under the contract. For another Contract HY/2013/12 and HY/2017/10, the first 12-month establishment period inspection and maintenance was taken by the original Contract's ET and the main Contractor under the contract. After the first 6 month or year establishment period, the maintenance and inspection works had been handover to the contract HMWSD 2/2020 (HY) and the Contract HY/2021/13. The summary of establishment period for the Project is shown in *Table 2-1*.

Table 2-1 Summary of Establishment Period for the Project

Planting Area under the Contract	Establishment Period	
	Commenced	Completed
HY/2012/07 (Zone 1 – 4)	June 2020	May 2022
HY/2013/12 (Zone 1 – 5)	June 2020	May 2022
HY/2017/10 (Zone 1 – 6)	February 2021	January 2023

3 SUMMARY OF ESTABLISHMENT PERIOD MONITORING

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 13th to the 24th month would be continued by other members of the Project. The EMIS for the Contract is shown in [Appendix E](#).
- 3.1.2 According to the contract arrangement, the establishment period under the planting area of the Contract HY/2012/07 and the Contract HY/2013/12 were commenced in June 2020. The establishment period under the planting area HY/2017/10 was commenced in February 2021.
- 3.1.3 All the establishment inspection method including checklist and zoning plan under this Contract was follow the methodology prepared by original Contract's ET which approved by EPD.
- 3.1.4 Total **8** establishment inspections were conducted for each planting area respectively. The details of Establishment inspection checklist for the Project during the establishment period can refer to the relative Monthly EM&A Reports and summary of the establishment inspection are shown in [Table 3-1 to 3-3](#).

Table 3-1 Summary of the Establishment inspection for the Planting Area under the Contract HY/2012/07

Zoning	Quarter of Establishment Inspection							
	1 st (Jun to Aug 20)	2 nd (Sep to Nov 20)	3 rd (Dec 20 to Feb 21)	4 th (Mar to May 21)	5 th (Jun to Aug 21)	6 th (Sep to Nov 21)	7 th (Dec 21 to Feb 22)	8 th (Mar to May 22)
(Zone 1, 3 & 4)	16 & 21 Jun 20	8 & 9 Oct 20	26 Jan & 9 Feb 21	4 May 21	16 Aug 21	23 Nov 21	25 Feb 22	26 May 22
Respond Party	ET of the Contract HY/2012/07		ET of the Contract HMWSD 2/2020 (HY)					
(Zone 2)	16 & 21 Jun 20	8 & 9 Oct 20	19 Feb 21	18 May 21	10 Aug 21	8 Nov 21	22 Dec 21	25 Apr 22
Respond Party	ET of the Contract HY/2012/07		ET of the Contract HY/2017/10					ET of the Contract HY/2021 /13

Table 3-2 Summary of the Establishment inspection for the Planting Area under the Contract HY/2013/12

Zoning	Quarter of Establishment Inspection							
	1 st (Jun to Aug 20)	2 nd (Sep to Nov 20)	3 rd (Dec 20 to Feb 21)	4 th (Mar to May 21)	5 th (Jun to Aug 21)	6 th (Sep to Nov 21)	7 th (Dec 21 to Feb 22)	8 th (Mar to May 22)
(Zone 1 to 5)	17 & 26 Aug 20	30 Nov 20	25 Feb 21	14 May 21	18 Aug 21	16 Nov 21	24 Feb 22	31 May 22
Respond Party	ET of the Contract HY/2013/12				ET of the Contract HMWSD 2/2020 (HY)			

Table 3-3 Summary of the Establishment inspection for the Planting Area under the Contract HY/2017/10

Zoning	Quarter of Establishment Inspection							
	1 st (Feb to Apr 21)	2 nd (May to Jul 21)	3 rd (Aug to Oct 21)	4 th (Nov 21 to Jan 22)	5 th (Feb to Apr 22)	6 th (May to Jul 22)	7 th (Aug to Oct 22)	8 th (Nov 22 to Jan 23)
(Zone 1 to 5)	4, 5 & 9 Mar 21	27 & 30 July 21	20 & 24 Sep 21	20 & 22 Dec 21	12 Apr 22	17 May 22	20 Oct 22	13 Jan 23
Respond Party	ET of the Contract HY/2017/10						ET of the Contract HMWSD 2/2020 (HY)	
(Zone 6)	4, 5 & 9 Mar 21	27 & 30 July 21	20 & 24 Sep 21	20 & 22 Dec 21	25 Apr 22	21 Jul 22	20 Oct 22	13 Jan 23
Respond Party	ET of the Contract HY/2017/10				ET of the Contract HY/2021/13			

- 3.1.5 The 24-month establishment period for the planting area under the Contract HY/2012/07 and the Contract HY/2013/12 were completed at the end of May 2022. Furthermore, the 24-month establishment period for the planting area under the Contract HY/2017/10 was completed at the end of January 2023.
- 3.1.6 Further to the TM-CLK – Northern Connection opened to the public on 27 December 2020, road enhancement measures at the Lung Fu Road Roundabout were proposed by Transport Department (TD) and subsequently Leisure and Cultural Services Department (LCSD) reviewed the site condition at various locations and requested some landscape amendments for enhancement of safe work condition to be carried out during their routine maintenance of vegetation. Given that the quantity of tree planting remains unchanged and the landscape area in the vicinity would not be reduced, EPD reviewed the information and had no comment on the minor landscape modifications. The information on the landscape modifications at Lung Fu Road, Lung Mun Road and in the vicinity is shown in [Appendix F](#).
- 3.1.7 The entire establishment monitoring for the planting area within the TMCLKL Project boundary was completed. The condition of the planted tree is satisfaction. Moreover, the species and quantity of tree planted in those areas are complied with the approved Landscape & Visual Plan / Planting Schedule.

4 COMPLIANCE OF TREE PLANTING FOR TMCLK PROJECT

4.1 SUMMARY OF THE TREE PLANTING FOR THE PROJECT

- 4.1.1 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 4-1](#) and [Table 4-2](#) the tree planting summary and planting area for TM-CLKL Project is illustrated in [Appendix G & H](#) respectively.

Table 4-1 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 (light standard to heavy standard size)
HY/2013/12		1109	
HY/2017/10		2997	
HY/2021/13	Outside TMCLK Project Boundary	1066	
Total:		6419	Comply

Table 4-2 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	At least 33 ha
HY/2013/12		5.3	
HY/2017/10		14.4	
HY/2021/13	Outside TMCLK Project Boundary	NA	
Total:		33.9	Comply

- 4.1.2 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.
- 4.1.3 Reporting for those compensation tree planting areas outside the Project's boundary can be referred to the Monthly Report for the Contract HY/2021/13.

5 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

5.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

5.1.1 In the Reporting Period, no environmental complaint, summons and prosecution under the EM&A Programme was lodged.

5.1.2 The statistical summary table of environmental complaint, summons and prosecution are presented in *Tables 5-1, 5-2 and 5-3*.

Table 5-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics					
	Frequency	Cumulative	Complaint Nature			
			Air	Noise	Water	Others
June 2020 to January 2023	0	0	NA	NA	NA	NA

Table 5-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics				
	Frequency	Cumulative	Complaint Nature		
			Air	Noise	Water
June 2020 to January 2023	0	0	NA	NA	NA

Table 5-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics				
	Frequency	Cumulative	Complaint Nature		
			Air	Noise	Water
June 2020 to January 2023	0	0	NA	NA	NA

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

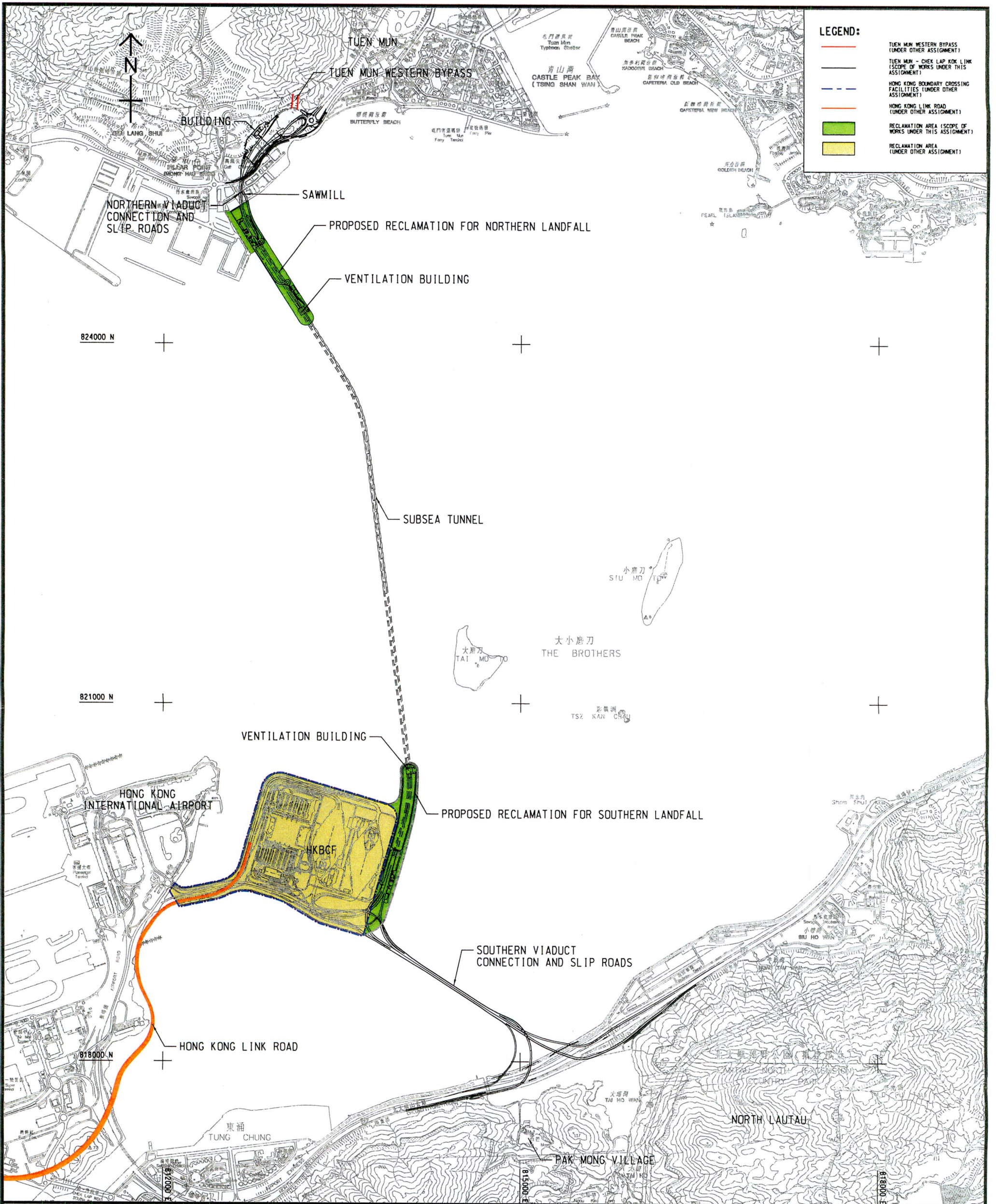
6 CONCLUSIONS

6.1 CONCLUSIONS

- 6.1.1 This is the Final EM&A Report summarized the monitoring results and inspection findings for the establishment monitoring of Project's boundary area for the establishment period of **June 2020 to January 2023**.
- 6.1.2 During the establishment period, establishment inspection which supervised by the RLA was conducted quarterly. Total **8** inspections were conducted for the planting area under the Contract HY/2012/07, HY/2013/12 & HY/2017/10 respectively.
- 6.1.3 The 24-month establishment period for the planting area under the Contract HY/2012/07 and the Contract HY/2013/12 were completed at the end of May 2022. Furthermore, the 24-month establishment period for the planting area under the Contract HY/2017/10 was completed at the end of January 2023.
- 6.1.4 The condition of the planted tree is satisfaction. Moreover, the species and quantity of tree planted in those areas are complied with the approved Landscape & Visual Plan / Planting Schedule.
- 6.1.5 The entire establishment monitoring for the planting area within the TMCLKL Project boundary was completed. The quantity of tree planting and the landscape planting area for the TM-CLKL Project fulfil with the EIA Report and EP requirement.
- 6.1.6 In the Reporting Period, no environmental complaint was received.
- 6.1.7 No notifications of summons, or successful prosecution were received during the Reporting Period.

Appendix A

Project Layout Plan



Project Title: Tuen Mun - Chek Lap Kok Link

工程項目名稱：屯門至赤鱘角連接路

Project Location

工程項目位置

(Plan originated from Figure 3.1 of Approved EIA Report reference no.: AEIAR-146/2009)
(圖則源自已批准的環境影響評估報告編號AEIAR-146/2009圖3.1)

Environmental Protection Department
環境保護署



Environmental Permit No.: EP-354/2009/D
環境許可證編號：EP-354/2009/D

Figure 1
圖1

Appendix B

Zoning Plan for the Project

Contract No. HMWSD 2/2020 (HY)

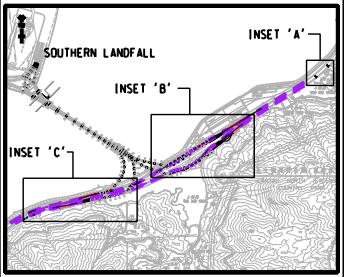
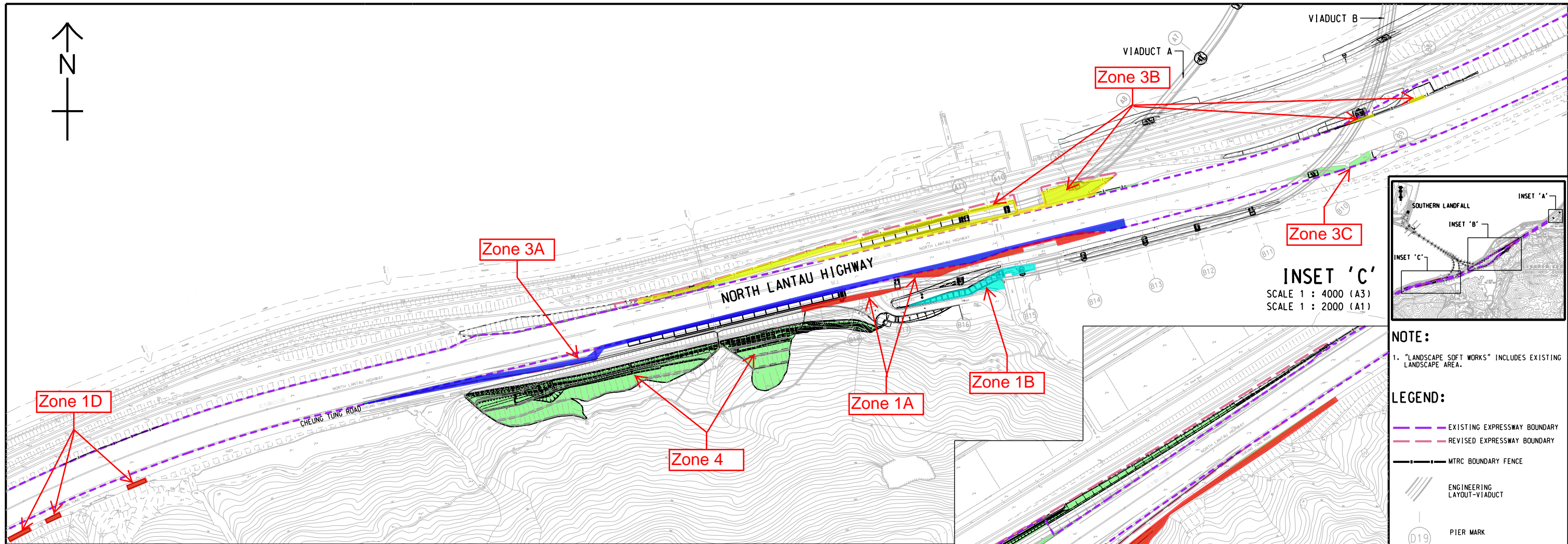
Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link

Final Environmental Monitoring and Audit (EM&A) Report for Establishment

Monitoring of Project's Boundary Area (June 2020 to January 2023)



Zoning Plan under Contract HY/2012/07



NOTE:
1. "LANDSCAPE SOFT WORKS" INCLUDES EXISTING LANDSCAPE AREA.

- LEGEND:**
- EXISTING EXPRESSWAY BOUNDARY
 - REVISED EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - D19 PIER MARK
 - LANDSCAPE SOFT WORKS (PORTION A)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
A	18/08/20	ADDENDUM NO.1	KW	CL	CL
-	03/08/20	LANDSCAPE WORKS DEMARCATION PLAN	KW	CL	CL

CLIENT
HIGHWAYS DEPARTMENT
 主要工程管理處(專責事務)
 Major Works Project Management Office
 (Special Duties)

AECOM

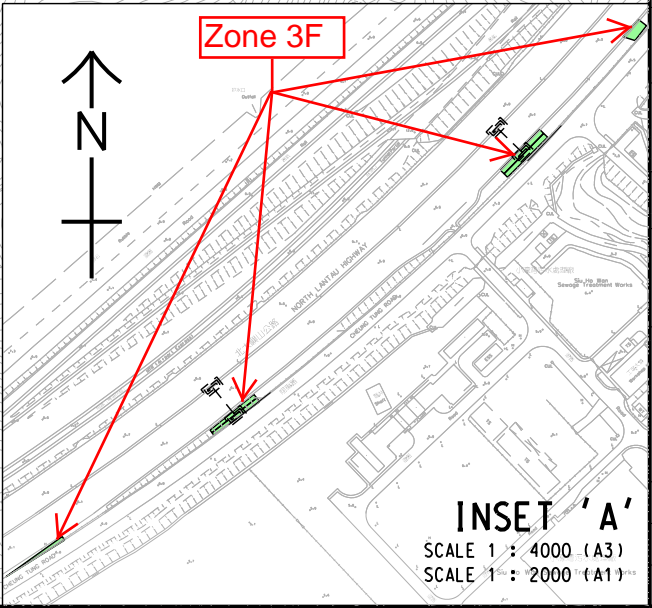
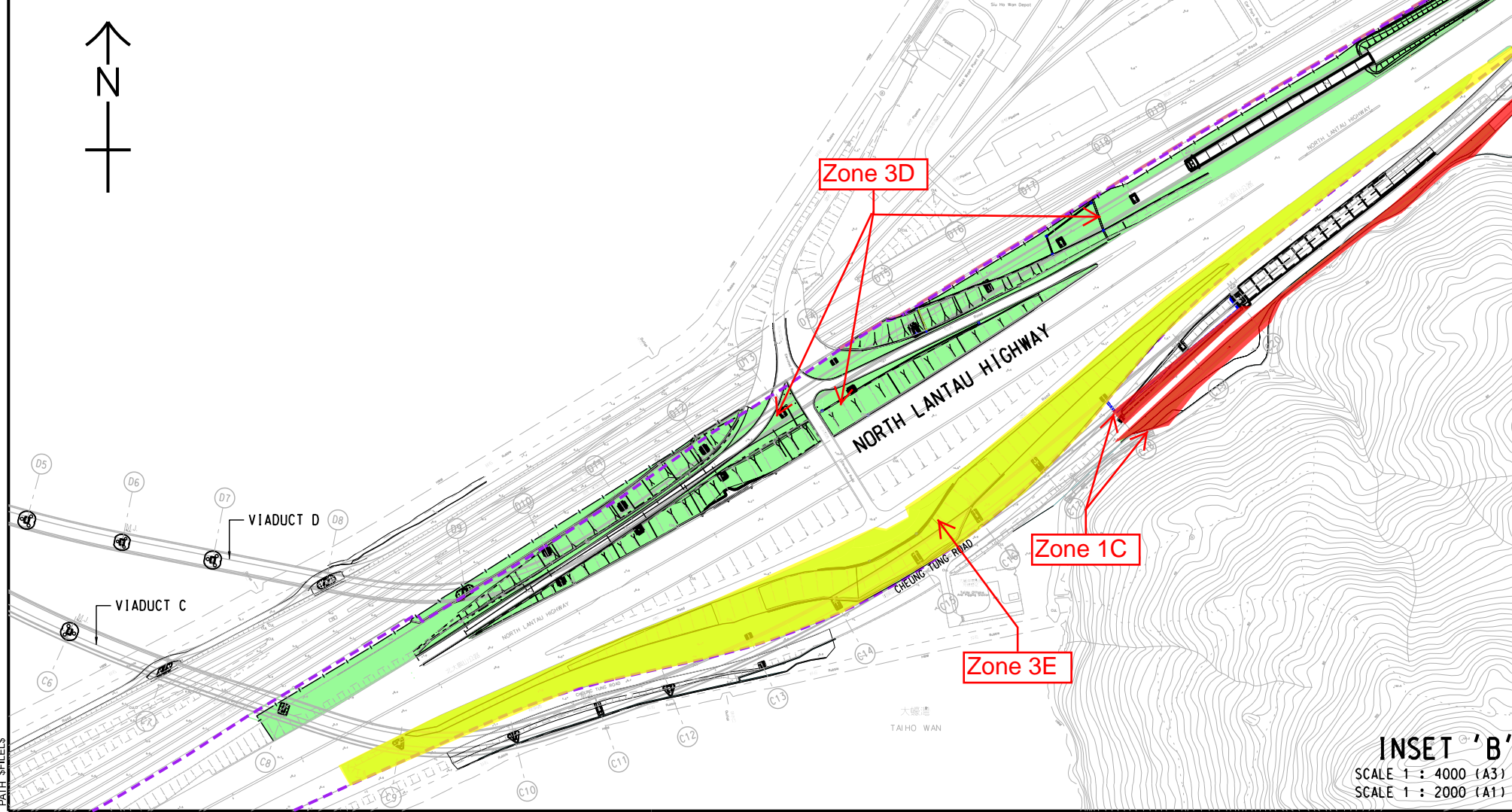
PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWS2 2/2020(HY)

CONTRACT TITLE
ESTABLISHMENT OF LANDSCAPE SOFTWORKS FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT

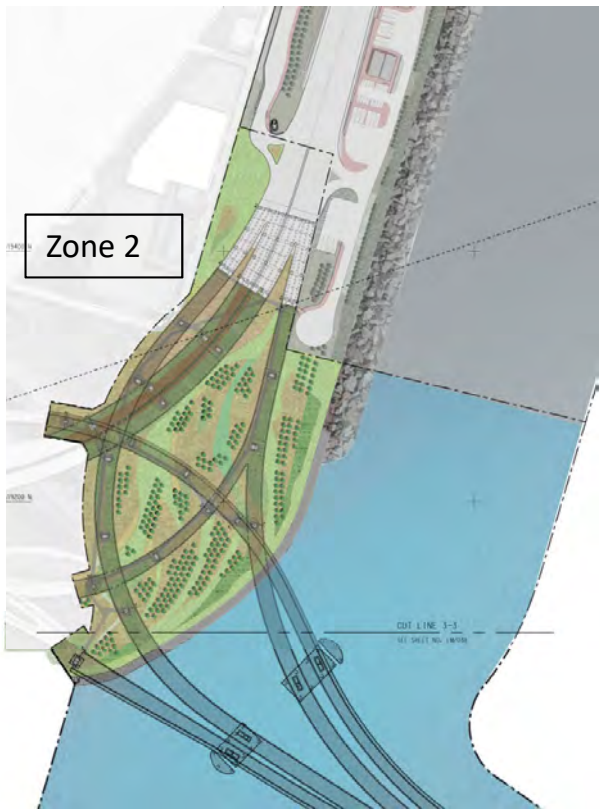
TITLE
LANDSCAPE WORKS DEMARCATION PLAN (PORTION A)

DRAWING REFERENCE	SCALE 1:2000(A1)	SCALE 1:4000(A3)
DRAWN JW	PREPARED CL	APPROVED CL
SKETCH NO.	REV.	A



INSET 'B'
 SCALE 1 : 4000 (A3)
 SCALE 1 : 2000 (A1)

INSET 'A'
 SCALE 1 : 4000 (A3)
 SCALE 1 : 2000 (A1)



ZONING PLAN – LANDSCAPE WORKS MONITORING (ESTABLISHMENT WORKS)

Contract No. HMWSD 2/2020 (HY)

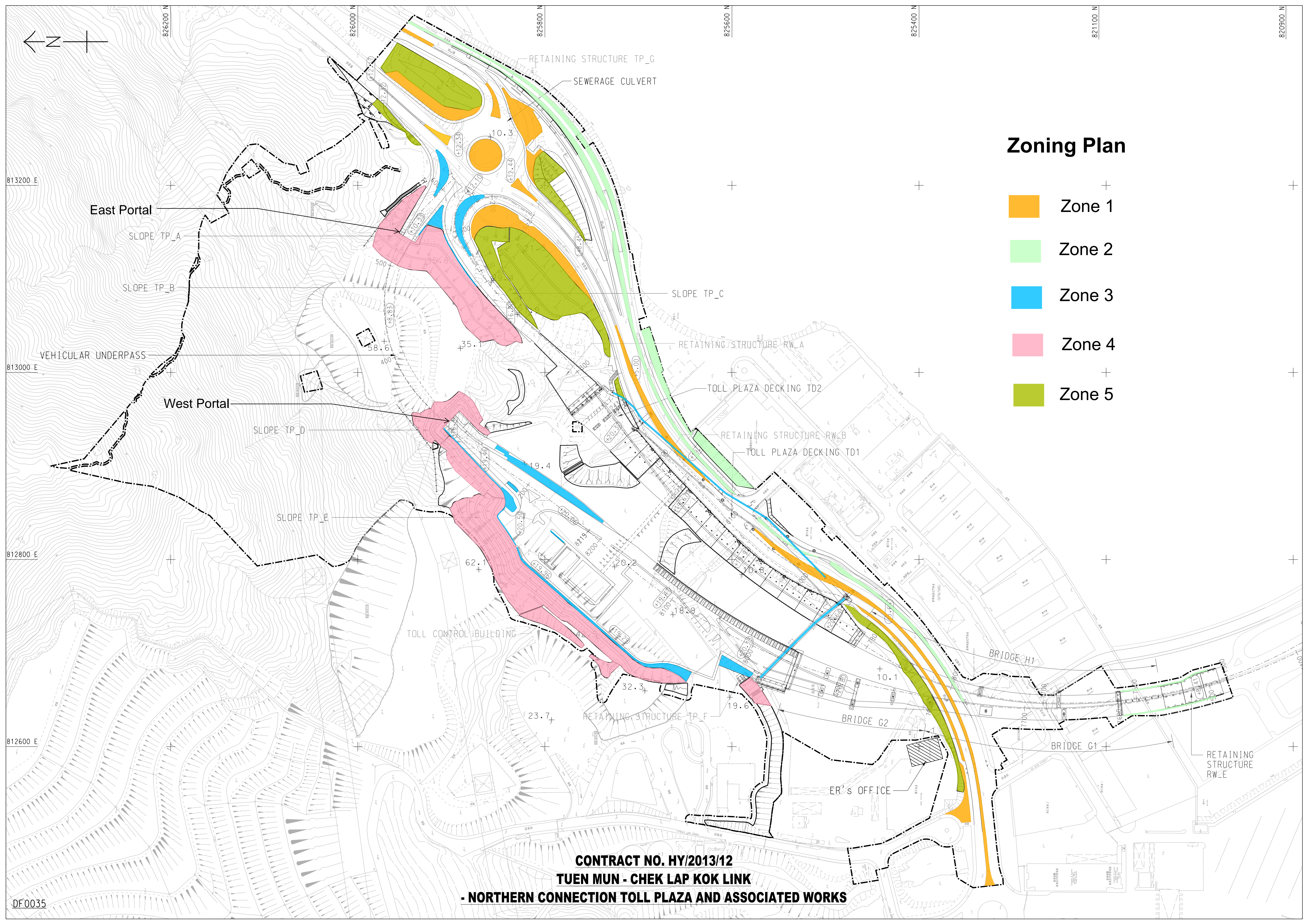
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Monitoring of Project's Boundary Area (June 2020 to January 2023)

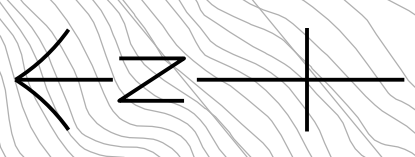


Zoning Plan under Contract HY/2013/12



Zoning Plan

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5



813200 E
813000 E
812800 E
812600 E

826200 N
826000 N
825800 N
825600 N
825400 N
821100 N
820900 N

East Portal

SLOPE TP_A

SLOPE TP_B

VEHICULAR UNDERPASS

West Portal

SLOPE TP_D

SLOPE TP_E

RETAINING STRUCTURE TP_G

SEWERAGE CULVERT

10.5

35.1

62.1

32.3

23.7

SLOPE TP_C

RETAINING STRUCTURE RW_A

TOLL PLAZA DECKING TD2

RETAINING STRUCTURE RW_B

TOLL PLAZA DECKING TD1

TOLL CONTROL BUILDING

RETAINING STRUCTURE TP_F

19.6

BRIDGE G2

BRIDGE H1

BRIDGE G1

RETAINING STRUCTURE RW_E

ER'S OFFICE

CONTRACT NO. HY/2013/12

TUEN MUN - CHEK LAP KOK LINK

- NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

DF0035

Contract No. HMWSD 2/2020 (HY)

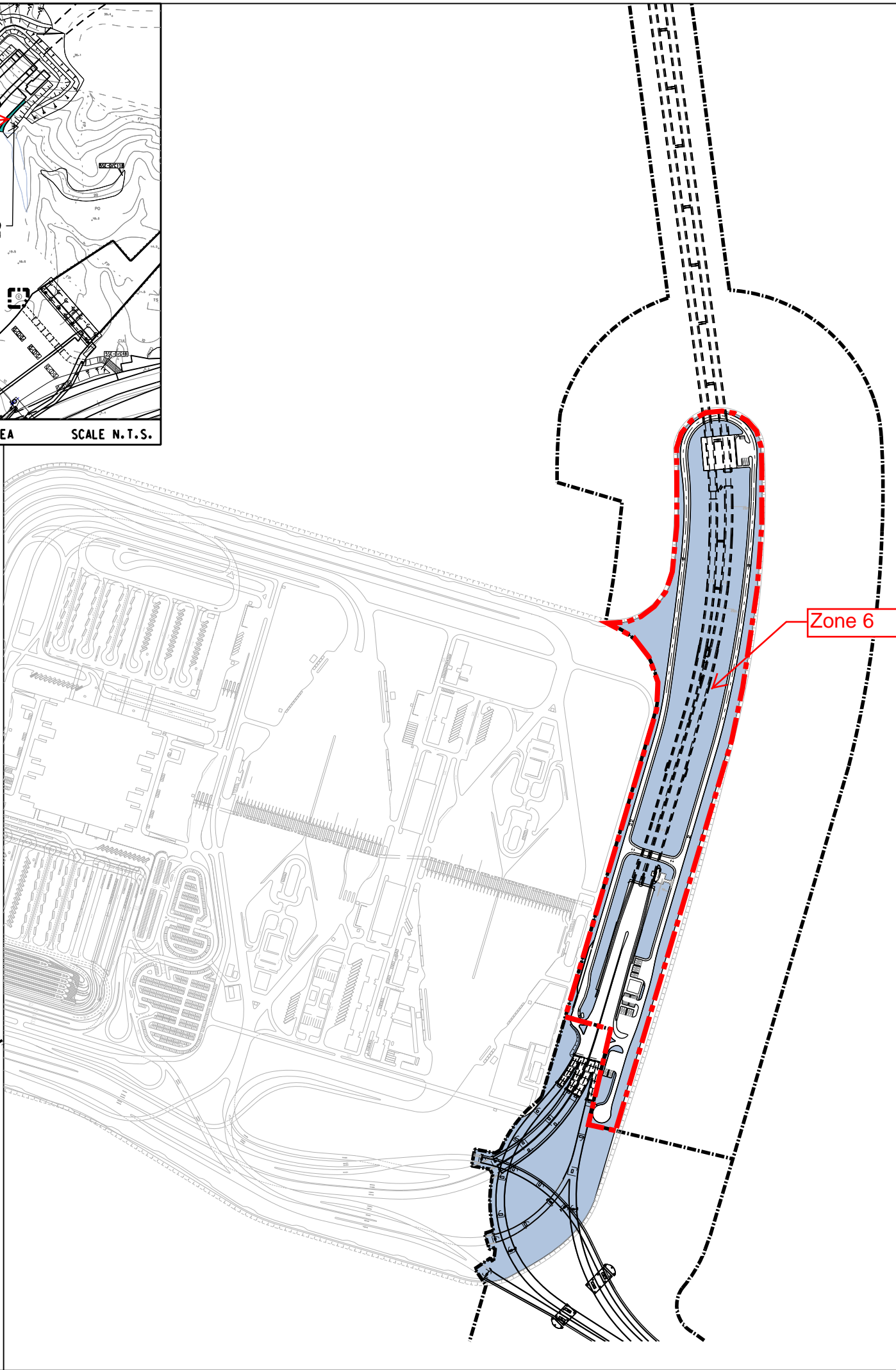
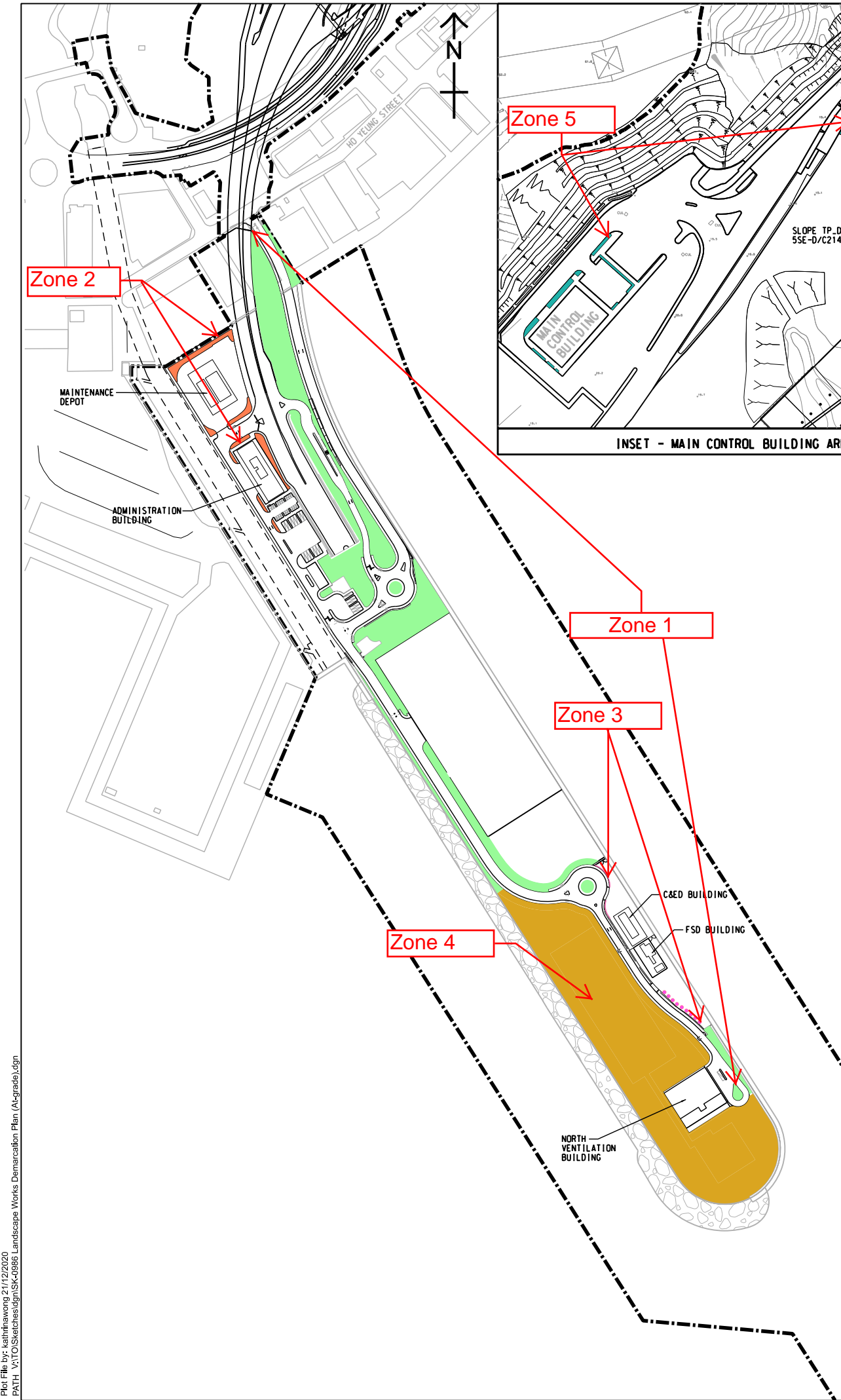
Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link

Final Environmental Monitoring and Audit (EM&A) Report for Establishment

Monitoring of Project's Boundary Area (June 2020 to January 2023)



Zoning Plan under Contract HY/2017/10



FOR INFORMATION

REV.	DATE	DESCRIPTION	CHK.	PREP.	DRAWN

CLIENT

HIGHWAYS DEPARTMENT
 主要工程管理處(專責事務)
 Major Works Project Management Office
 (Special Duties)

AECOM Imagine it. Delivered.

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL - BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

PROJECT NO. 60240249 CONTRACT NO. HY/2017/10

SCALE N.T.S. DATE 21 DEC. 2020

AMENDMENT TO WORKING DRAWING NO.
 60240249/C4/

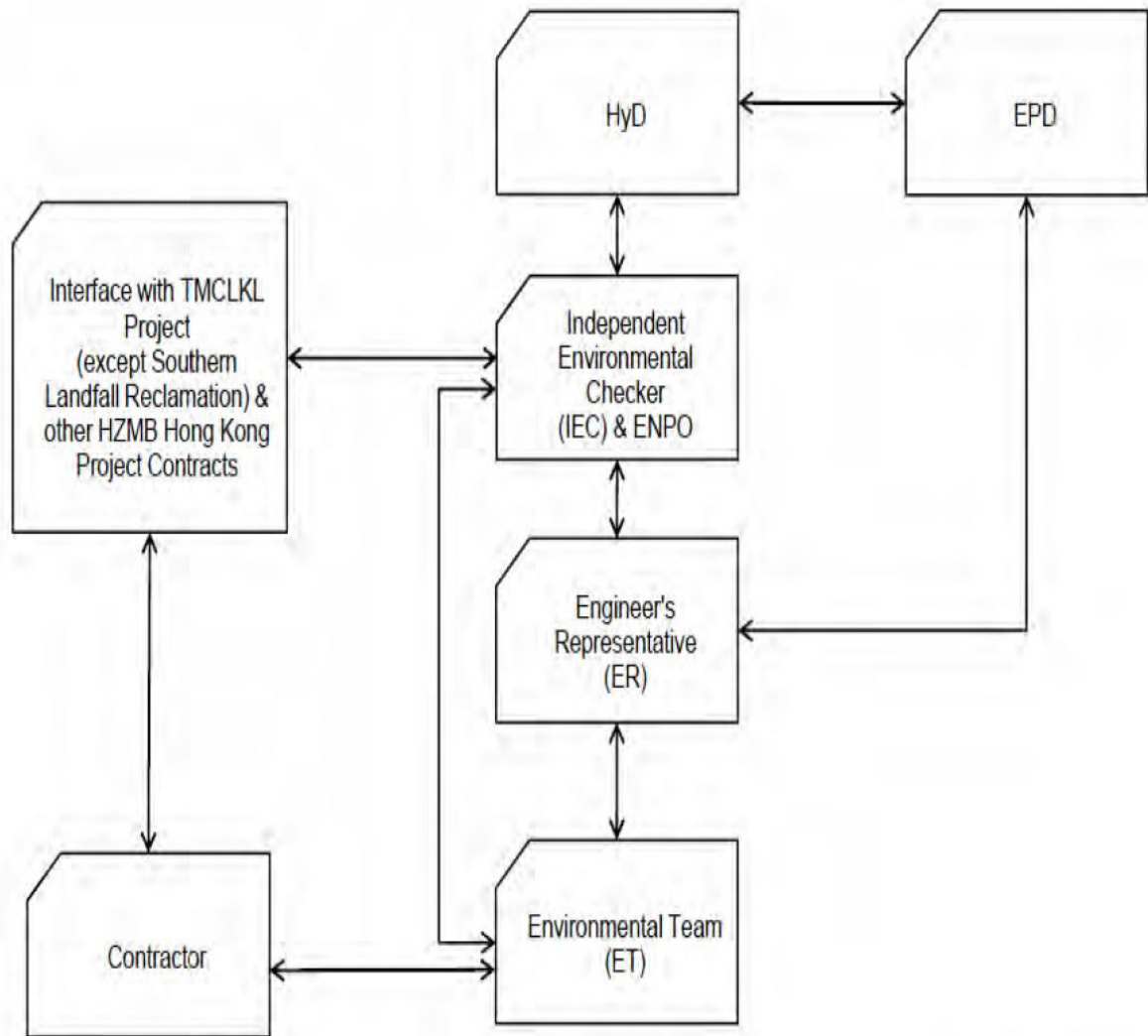
CHECKED	PREPARED	DRAWN
CL	CD	KW

SKETCH TITLE
ZONING PLAN - LANDSCAPE WORKS MONITORING (ESTABLISHMENT WORKS)

SKETCH NO.
 60240249/C4/SK/0986

Appendix C

Organization of the Contract



↔ Line of Communication

Project Organization chart

Contact Details of Key Personnel for the Contract HMWSD 2/2020 (HY)

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	2218 7399
AECOM	Senior Resident Landscape Architect	Ms. Candy Lau	2293 6200	2218 7399
AECOM	Senior Resident Engineer (S&E)	Mr. K P Wong	2293 6200	2218 7399
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
HKL	Project Manager	Mr. S.C. Wong	2388 6332	2385 7911
AUES	Environmental Team Leader	Mr. Ben Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Miss Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Mr. Martin Li	2959 6059	2959 6079

Legend:

HyD (Employer) –Highways Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

HKL (Main Contractor) – Hong Kong Landscaping Co., Ltd.

ANewR (ENPO and IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Appendix D

Event and Action Plan

Event and Action Plan for Landscape and Visual Impact

EVENT ACTION LEVEL	ACTION			
	ET	IEC	ER	Contractor
Design Check	<ul style="list-style-type: none"> Check final design conforms to the requirements of EP and prepare report. 	<ul style="list-style-type: none"> Check report. Recommend remedial design if necessary 	<ul style="list-style-type: none"> Undertake remedial design if necessary 	
Non- conformity on one occasion	<ul style="list-style-type: none"> Identify Source Inform IEC and ER Discuss remedial actions with IEC, ER and Contractor Monitor remedial actions until rectification has been completed 	<ul style="list-style-type: none"> Check report Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise ER on effectiveness of proposed remedial measures. Check implementation of remedial measures 	<ul style="list-style-type: none"> Notify Contractor Ensure remedial measures are properly implemented 	<ul style="list-style-type: none"> Amend working methods Rectify damage and undertake any necessary replacement
Repeated Non-conformity	<ul style="list-style-type: none"> Identify Source Inform IEC and ER Increase monitoring frequency Discuss remedial actions with IEC, ER and Contractor Monitor remedial actions until rectification has been completed If nonconformity stops, cease additional monitoring 	<ul style="list-style-type: none"> Check monitoring report Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advise ER on effectiveness of proposed remedial measures Supervise implementation of remedial measures 	<ul style="list-style-type: none"> Notify Contractor Ensure remedial measures are properly implemented 	<ul style="list-style-type: none"> Amend working methods Rectify damage and undertake any necessary replacement

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

Appendix E

Environmental Mitigation and Enhancement Measures Implementation Schedule (EMIS)

CONTRACT NO. HMWSD 2/2020 (HY)
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK
ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual									
EIA reference	EM&A Manual reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Existing trees on boundary of the Project Area shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas. (Tree protection measures will be detailed at Tree Removal Application stage) (CM1)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Trees unavoidably affected by the works shall be transplanted where practical. Trees will be transplanted straight to their final receptor site and not held in a temporary nursery. A detailed Tree Transplanting Specification shall be provided in the Contract Specification. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme (CM2)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone) (CM4)	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A

CONTRACT NO. HMWSD 2/2020 (HY)
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK
ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual									
EIA reference	EM&A Manual reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Recycle/Reuse all felled trees and vegetation, e.g. mulching (CM9)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		N/A
10.9	7.6	Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process under ETWBTC 3/2006 (CM10)	All areas/detailed design/ during Construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
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	✓ maintenance agent : HyD
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	✓ maintenance agent : HyD & LCSD
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	All areas/detailed design/ during Construction/ post construction	Design Consultant/ Contractor	TMEIA	Y	Y	Y	N/A

CONTRACT NO. HMWSD 2/2020 (HY)
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK
ENVIRONMENTAL MITIGATION AND ENHANCEMENT MEASURE IMPLEMENTATION SCHEDULE

Landscape and Visual									
EIA reference	EM&A Manual reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		minimize unnecessary light spill (OM3)							
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	✓ maintenance agent : HyD & LCSD
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	N/A
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	N/A

Remarks:

- ✓ Compliance of Mitigation Measures
- <> Compliance of Mitigation Measures but need improvement.
- × Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Contractor
- △ Deficiency of Mitigation Measures but rectified by Contractor
- N/A Not Applicable in Reporting Period

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 F

Minor Landscape Modification at Lung Fu Road, Lung Mun Road and in the Vicinity

Minor Landscape Modifications at Lung Fu Road, Lung Mun Road and in the Vicinity

Background

Tuen Mun – Chek Lap Kok Link (“TM-CLKL”) – Northern Connection was opened to the public on 27 December 2020. Further to the road enhancement measures at the Lung Fu Road Roundabout proposed by Transport Department (TD) and the consequent landscape amendments as reported in July 2021, Leisure and Cultural Services Department (LCSD) reviewed the site condition and requested some landscape amendments.

The planting and the establishment period were completed according to the LCSD’s approved planting proposal. As LCSD reviewed the various roadside planting on site, LCSD requested some landscape amendments for the enhancement of safe work condition for their routine maintenance of vegetation. The landscape amendments proposed by LCSD at the Lung Fu Road Roundabout and the roadside planters in the vicinity would be slightly different from the approved Landscape and Visual Plan, however, the landscape amendments are considered minor.

Minor landscape amendments compared to the approved Landscape and Visual Plan

- (i) The surrounding planters of the Lung Fu Road Roundabout would be modified, resulting in minor rearrangement of trees within the planters;
- (ii) The plant species for roadside planters are proposed to be changed to smaller size species to enhance the safe work condition. The quantity of tree planting remains unchanged; and
- (iii) The landscape area at the Lung Fu Road Roundabout and planters in the vicinity would not be reduced.

The Lung Fu Road Roundabout and planters in the vicinity in the approved Landscape and Visual Plan and the proposed arrangements are juxtaposed in the following pages.

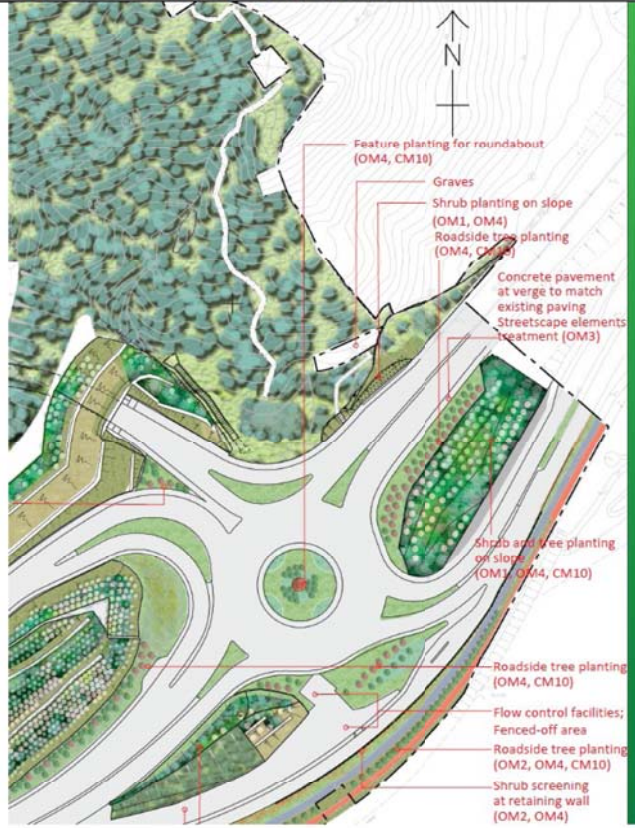
Establishment period for the trees at the Lung Fu Road Roundabout and Planters in the Vicinity

The trees planted at the Lung Fu Road Roundabout together with the other planting works implemented under Contract No. HY/2013/12 have undergone the 24-month establishment period monitoring as required in the Environmental Monitoring and Audit (“EM&A”) Manual which the monitoring was ended on 31 May 2022.

The proposed road enhancement works at the Lung Fu Road Roundabout will commence after 31 May 2022. The landscape amendment works proposed by LCSD will be carried out during their routine maintenance of vegetation, after the fully completed monitoring of the planting works required under the EM&A Manual. Therefore, the associated planting works due to the road enhancement works at the Lung Fu Road Roundabout and due to LCSD’s proposed landscape amendments would not be subject to the monitoring tasks under the EM&A Manual.

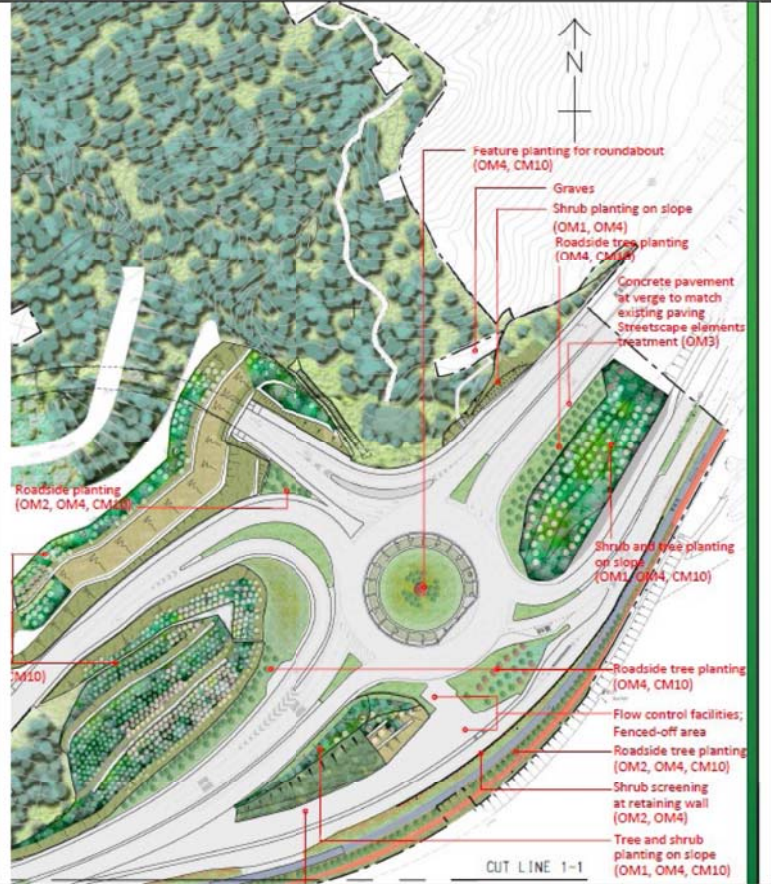
(i) The surrounding planters of the Lung Fu Road Roundabout would be modified, resulting in minor rearrangement of trees within the planters.

Lung Fu Road Roundabout arrangement in the approved Landscape and Visual Plan



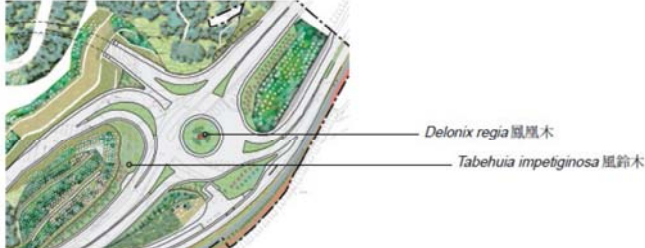

Extracted from the approved Landscape and Visual Plan, Drawing no. C3/LM/030.


Proposed road enhancement arrangement at the Lung Fu Road Roundabout



The proposed road enhancement arrangement at the Lung Fu Road Roundabout would result in a slightly different outlook and tree arrangement at the planters in the vicinity.

(ii) The plant species for roadside planters are proposed to be changed to smaller size species to enhance the safe work condition. The quantity of tree planting remains unchanged.

<p>Lung Fu Road roundabout arrangement in the approved Landscape and Visual Plan</p>	<p>Proposed road enhancement arrangement at the Lung Fu Road Roundabout</p>
	
<p>Extracted from the approved Landscape and Visual Plan, Drawing no. Figure 4.2.</p>	<p>The species of tree planting within the surrounding roadside planters are proposed to be changed to smaller species. The quantity of tree planting remains unchanged.</p>



Legend:
 Compensatory Planting Area (in ha):
 HY/2012/07 (C1)
 HY/2012/08 (C2)
 HY/2013/12 (C3)
 HY/2017/10 (C4)
 Potential Development Area (PDA)

Compensatory Planting Area (in ha)
 HY/2012/07: Approx. 14.41 ha
 HY/2012/08: Nil
 HY/2013/12: Approx. 5.35 ha
 HY/2017/10: Approx. 14.37 ha
 Total: Approx. 34.13 ha

Number of Compensatory Trees (CM10):

Planting Area No.	Area (ha)	Tree No.	Tree Species
C3_PA01	0.0625	21	Tabebuia impetiginosa
C3_PA06	0.0153	3	Tabebuia impetiginosa
C3_PA06	0.0153	3	Livistona chinensis
C3_PA09	0.0820	3	Tabebuia impetiginosa
C3_PA09	0.0820	3	Sterculia lanceolata
C3_PA10	0.9820	12	Delonix regia
C3_PA10	0.9820	11	Livistona chinensis
C3_PA12	0.0820	8	Melaleuca cajuputi subsp. cumingiana
C3_PA12	0.0820	4	Garcinia subelliptica

AECOM

PROJECT: TUEN MUN - CHEK LAP KOK LINK

CLIENT: TUN MUN - CHEK LAP KOK LINK

DATE: 15/03/2017

SCALE: 1:500

PROJECT NO.: 10000000000000000000

REVISION NO.: 00000000000000000000

DESIGN NO.: 00000000000000000000

CONTRACT NO.: 00000000000000000000

PROJECT NO.: 10000000000000000000

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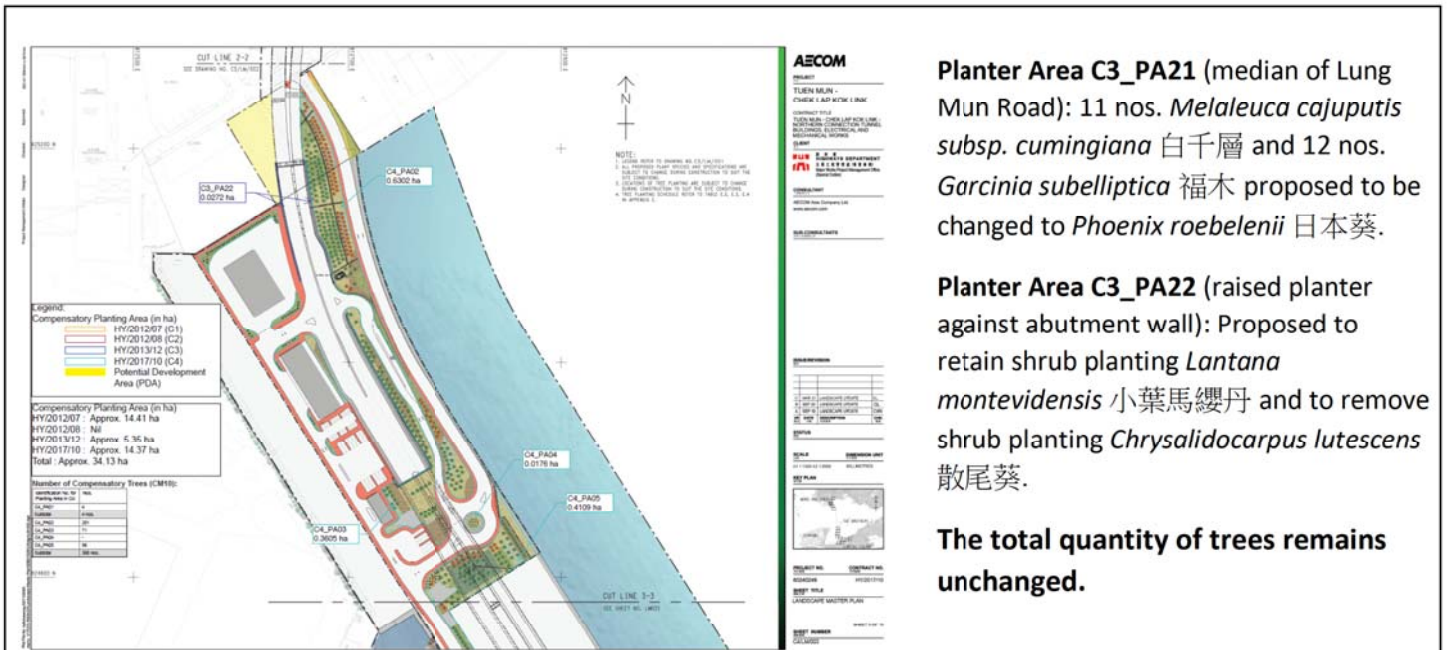
Planter Area C3_PA01 (roadside of Lung Fu Road): 21 nos. *Tabebuia impetiginosa* 風鈴木 proposed to be changed to *Phoenix roebelenii* 日本葵.

Planter Area C3_PA06 (roadside of Lung Mun Road): 3 nos. *Tabebuia impetiginosa* 風鈴木 and 3 nos. *Livistona chinensis* 蒲葵 proposed to be transferred to the adjacent planter within the same Planter Area C3_PA06.

Planter Area C3_PA09 (roadside of Tuen Mun Chek Lap Kok Tunnel Road): 3 nos. *Tabebuia impetiginosa* 風鈴木 and 3 nos. *Sterculia lanceolata* 假蘋婆 proposed to be changed to *Phoenix roebelenii* 日本葵.

Planter Area C3_PA10 (roadside of Tuen Mun Chek Lap Kok Tunnel Road): 12 nos. 風鈴木 and 11 nos. *Livistona chinensis* 蒲葵 proposed to be changed to *Phoenix roebelenii* 日本葵.

Planter Area C3_PA12 (median of Lung Mun Road): 8 nos. *Melaleuca cajuputi subsp. cumingiana* 白千層 and 4 nos. *Garcinia subelliptica* 福木 proposed to be changed to *Phoenix roebelenii* 日本葵.



Planter Area C3_PA21 (median of Lung Mun Road): 11 nos. *Melaleuca cajuputis subsp. cumingiana* 白千層 and 12 nos. *Garcinia subelliptica* 福木 proposed to be changed to *Phoenix roebelenii* 日本葵.

Planter Area C3_PA22 (raised planter against abutment wall): Proposed to retain shrub planting *Lantana montevidensis* 小葉馬纓丹 and to remove shrub planting *Chrysalidocarpus lutescens* 散尾葵.

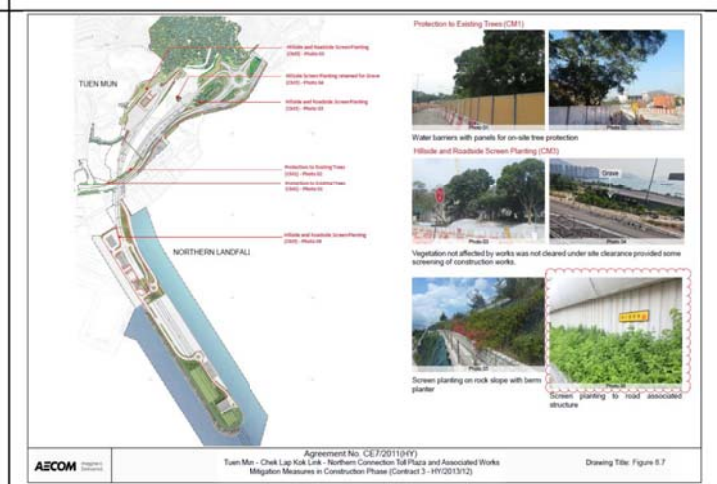
The total quantity of trees remains unchanged.



Extracted from the approved Landscape and Visual Plan, Drawing no. Figure 4.2.



The species of tree planting within the surrounding planters are proposed to be changed to smaller size species. The quantity of tree planting remains unchanged.



<p>Extracted from the approved Landscape and Visual Plan, Drawing no. Figure 8.7.</p>	<p>Planter Area C3_PA22 (raised planter against abutment wall in Photo 06): Proposed to retain shrub planting <i>Lantana montevidensis</i> 小葉馬纓丹 and to remove shrub planting <i>Chrysalidocarpus lutescens</i> 散尾葵.</p>
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(iii) The landscape area at the Lung Fu Road Roundabout and planters in the vicinity would not be reduced.

<p>Lung Fu Road roundabout arrangement in the approved Landscape and Visual Plan</p>	<p>Proposed road enhancement arrangement at the Lung Fu Road Roundabout</p>
<p>Extracted from the approved Landscape and Visual Plan, Drawing no. C3/LM/001.</p>	<p>The landscape area at the Lung Fu Road Roundabout due to the proposed roadway arrangement would not be reduced.</p>

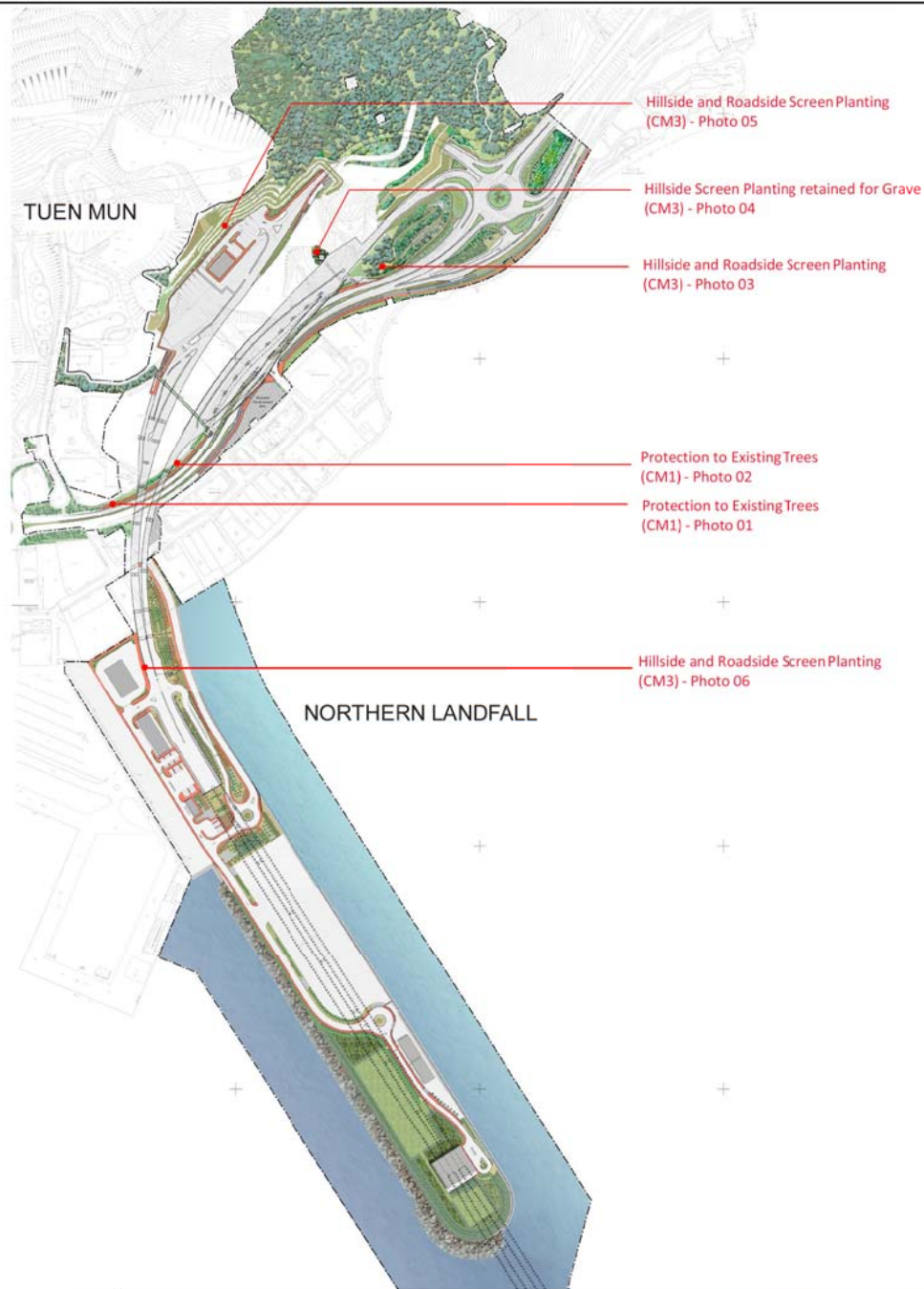


Key Plan



— *Delonix regia* 鳳凰木

— *Phoenix roebelenii* 日本葵



Protection to Existing Trees (CM1)



Water barriers with panels for on-site tree protection

Hillside and Roadside Screen Planting (CM3)



Vegetation not affected by works was not cleared under site clearance provided some screening of construction works.



Screen planting on rock slope with berm planter



Screen planting to road associated structure

Agreement No. CE7/2011(HY)

Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works
Mitigation Measures in Construction Phase (Contract 3 - HY/2013/12)

Drawing Title: Figure 8.7

Table E.1

Tuen Mun - Chek Lap Kok Link (TM-CLKL)

Summary of Tree Felling & Tree Compensation Quantity

	Tree Quantity as in EIA Report (Approx. no.)					Tree Quantity as in Tree Removal Applications (no.)					** Tree Compensation Quantity as in Tree Removal Applications (no.) (CM10)				*** Tree Planting Quantity as in Approved Planting Proposals (no.)				Transplanted Tree Planting Quantity as in Approved Planting Proposals/ as in Landscape and Visual Plan (no.)	
	* Fell	Undersirable Species (Weed Tree)	**** Transplant	***** Retain	** Tree Compensation	* Fell (Living Tree)	Dead Tree	Undersirable Species (Weed Tree)	**** Transplant	***** Retain	Heavy Standard	Standard	Light Standard	Whip	Heavy Standard	Standard	Light Standard	Whip	**** Transplant	
EIA Report (Year 2009)	3460	480	100	1360	6300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tree Removal Application and Compensatory Planting Proposal (Ref. A35-03) (approved on 8 January 2013)	-	-	-	-	-	2293	701	652	182	2554	2965	0	893	0	-	-	-	-	-	
HY/2012/07	C1 - Supplementary Tree Removal Applications	-	-	-	-	886	28	0	8	154	372	44	298	90	-	-	-	-	-	
	C1 - Adjustments made from the approved Tree Removal Application (Ref. A35-03) through Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-76	-136	-	-	-	-	-	-	-	-	-	
	C1 - Missing Tree Report	-	-	-	-	-168	0	0	-33	-86	-144	0	0	0	-	-	-	-	-	
	C1 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	557	25	665	143	11	
HY/2012/08	C2 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	C2 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HY/2013/12	C3 - Supplementary Tree Removal Applications	-	-	-	-	1688	103	341	24	40	24	-	207	359	-	-	-	-	-	
	C3 - Adjustments made from the approved Tree Removal Application (Ref. A35-03) through Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-7	-705	-	-	-	-	-	-	-	-	-	
	C3 - Missing Trees on site	-	-	-	-	-217	-30	-205	-14	-261	-	-	-	-	-	-	-	-	-	
	C3 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	250	-	859	411	24	-	
HY/2017/10	C4 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	2997	-	-	-	-	
	C4 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
HY/2014/10	C5 - Supplementary Tree Removal Applications	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	C5 - Approved Planting Proposal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Sub-Total	3460	480	100	1360	6300	4482	802	788	84	1560	3217	44	1398	449	3804	25	1524	554	35
	Total	* 3460	480	**** 100	1360	** 6300	*4482	802	788	**** 84	1560	** 5108	44	1398	449	3804	25	1524	554	**** 35

Notes:

- * The tree felling quantity stated in the EIA report and in the Tree Removal Applications varied. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, the trees required to be felled for the construction of works became more accurate. In addition, the trees in Year 2009 were likely to have grown to sizes that require the process of tree removal application which also contributed to the variation in the tree felling quantity.
- ** The tree compensation quantity stated in the EIA report and in the Tree Removal Applications varied. Mitigation Measure 'CM10' in Table 10.9 of the EIA report: "Compensatory tree planting shall be provided to the satisfaction of relevant Government departments. Required numbers and locations of compensatory trees shall be determined and agreed separately with Government during the Tree Felling Application process ...". The required number for Tree Compensation as listed in "Tree Compensation Quantity as in Tree Removal Applications" was agreed with the relevant Government departments through the applications "Tree Preservation and Removal Proposals". The locations and tree species were subsequently agreed with the relevant Government departments through the submissions on detailed planting design proposals. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, the tree compensation quantity and quality as appropriate for the different environmental conditions of the site and the **Design Considerations** as listed in **Section 2** were agreed with the relevant Government departments.
- *** Through the detailed planting design proposals, the quantity of tree planting exceeds the required tree compensation quantity in the Tree Removal Applications.
- **** The possible change of condition of the trees to be transplanted and the development of the Project design contributed to the variation in the transplant tree quantity in the EIA and in the Landscape and Visual Plan. Missing transplant trees, 47 nos., were recorded from the initial tree surveys before works commenced. In Contract No. HY/2012/07, 18 nos. transplant trees could be retained on site instead of transplanting.
- ***** The quantity of trees to be retained in the EIA report and in the Tree Removal Applications varied. The quantity in the EIA report was estimated in an early design stage of the Project and with the development of the Project design, either civil, site formation or slope designs, and the possible change of condition of the trees, the retained tree quantity became more accurate in the Tree Removal Applications.
- To satisfy the tree compensation requirement, the higher quantity from the approved EIA report was used, i.e. 6,300 nos. instead of 5108 nos. from the tree removal applications. In order to meet 6,300 nos., compensatory tree planting outside the project boundary is necessary. Information on tree planting outside the project boundary is described in **Section 3.3** and in **Appendix E.3**.

Summary of Tree Compensation - Approved EIA Report and Landscape and Visual Plan Comparison (Table E.1i)

Description	Approved EIA Report (nos.)	Landscape and Visual Plan (nos.)	
		Within Project Boundary	Outside Project Boundary
Nos. of Compensatory Tree Planting	6,300 approx. (Tree Size: Light Standard, Heavy Standard)	5,353	1,040
Total	6,300	6,393 (Tree Size: Light Standard - Heavy Standard)	

Summary of Tree Transplant - Approved EIA Report and Landscape and Visual Plan Comparison (Table E.1ii)

Description	Approved EIA Report (nos.)	Landscape and Visual Plan (nos.)		Remarks
		Within Project Boundary	Outside Project Boundary	
Nos. of Tree Transplant	100	35	0	47 nos. transplant trees surveyed as missing on site; 18 nos. transplant trees retained on site in Contract No. HY/2012/07; 35 nos. actual transplant trees.
Total	100	35		100

Table E.3
Tuen Mun - Chek Lap Kok Link - Northern Connection Toll Plaza and Associated Works
Contract No. HY/2013/12 (Contract 3)
Tree Planting Schedule

BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)	QUANTITY (nos.)	IDENTIFICATION NO. FOR PLANTING AREA IN CONTRACT 3																					
					PA01	PA02	PA03	PA04	PA05	PA06	PA07	PA08	PA09	PA10	PA11	PA12	PA13	PA14	PA15	PA16	PA17	PA18	PA19	PA20	PA21	PA22
WHIP																										
<i>Bauhinia variegata</i>	宮粉羊蹄甲	WHIP	1000	52	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Bridelia tomentosa</i>	土密樹	WHIP	1000	93	-	-	-	-	-	-	-	-	-	68	25	-	-	-	-	-	-	-	-	-		
<i>Gordonia axillaris</i>	大頭茶	WHIP	1000	140	-	-	-	-	-	-	-	-	-	18	52	-	-	-	70	-	-	-	-	-		
<i>Litsea glutinosa</i>	潺槁樹	WHIP	1000	38	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-		
<i>Melilotus paniculatus</i>	白楸	WHIP	1000	38	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-		
<i>Phyllanthus emblica</i>	餘甘子	WHIP	1000	38	-	-	-	-	-	-	-	-	-	-	38	-	-	-	-	-	-	-	-	-		
<i>Sapium discolor</i>	山烏柏	WHIP	1000	12	-	-	-	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	-		
			Subtotal	411	0	0	0	0	0	0	0	0	0	86	255	0	0	0	70	0	0	0	0	0		
TREE (HEAVY STANDARD)																										
<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD	4000-4500	41	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Bombax ceiba</i>	木棉	HEAVY STANDARD	4500-5000	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Brachychiton acerifolius</i>	槭葉蘋婆	HEAVY STANDARD	4500-5000	36	-	-	-	-	-	-	-	-	-	-	-	-	-	18	-	-	-	-	-	-		
<i>Cinnamomum burmannii</i>	陰香	HEAVY STANDARD	4500-5000	23	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Sterculia lanceolata</i>	假蘋婆	HEAVY STANDARD	4500-5000	10	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Delonix regia</i>	鳳凰木	HEAVY STANDARD	N/A	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Melaleuca cajuputi subsp. cumingiana</i>	白千層	HEAVY STANDARD	4000	32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16	-	-		
<i>Tabebuia chrusantha</i>	黃花風鈴木	HEAVY STANDARD	4500-5000	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-	-	-		
<i>Tabebuia impetiginosa</i>	風鈴木	HEAVY STANDARD	4500-5000	13	3	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Terminalia mantaly</i>	小葉欖仁	HEAVY STANDARD	4500-5000	8	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			Subtotal	166	93	0	1	0	0	10	8	0	0	0	0	0	0	18	4	0	0	0	16	0		
TREE (LIGHT STANDARD)																										
<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD	3000	225	-	-	-	-	-	8	-	-	34	180	-	-	-	-	-	-	-	-	3	-		
<i>Bridelia tomentosa</i>	土密樹	LIGHT STANDARD	3000	81	-	-	-	-	-	-	-	-	15	46	-	-	-	-	-	-	-	-	20	-		
<i>Bombax ceiba</i>	木棉	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-		
<i>Cinnamomum burmannii</i>	陰香	LIGHT STANDARD	3000	51	-	-	-	-	-	-	-	-	-	43	2	-	-	-	-	-	-	6	-	-		
<i>Liquidambar formosana</i>	楓香	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-		
<i>Litsea glutinosa</i>	潺槁樹	LIGHT STANDARD	3000	19	-	-	-	-	-	-	-	-	-	19	-	-	-	-	-	-	-	-	-	-		
<i>Machilus chekiangensis</i>	浙江潤楠	LIGHT STANDARD	3000	61	-	-	-	-	-	-	-	-	17	44	-	-	-	-	-	-	-	-	-	-		
<i>Reevesia thyrsoidea</i>	梭羅樹	LIGHT STANDARD	3000	36	-	-	-	-	-	4	-	-	7	25	-	-	-	-	-	-	-	-	-	-		
<i>Schima superba</i>	木荷(荷樹)	LIGHT STANDARD	3000	32	-	-	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	-	-	-		
<i>Sterculia lanceolata</i>	假蘋婆	LIGHT STANDARD	3000	53	-	-	-	-	-	-	-	-	6	30	3	-	-	-	-	-	-	-	14	-		
<i>Vitum odoratissimum</i>	珊瑚樹	LIGHT STANDARD	3000	74	-	-	-	-	-	-	-	-	16	58	-	-	-	-	-	-	-	-	-	-		
<i>Garcinia subelliptica</i>	福木	LIGHT STANDARD	3000	14	-	-	-	-	-	-	-	-	-	-	-	-	3	7	-	-	4	-	-	-		
			Subtotal	710	0	0	0	0	0	12	0	0	114	522	5	0	0	3	7	0	0	4	43	0		
PALM																										
<i>Archontophoenix alexandrae</i>	假檳榔	HEAVY STANDARD 3500(H) X 1500(S)	4000	58	-	-	-	-	-	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<i>Livistona chinensis</i>	蒲葵	LIGHT STANDARD 2000(H) X 1500(S)	2500	10	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		LIGHT STANDARD																								
<i>Phoenix roebelenii</i>	日本葵	HEAVY STANDARD 2000(H) X 1500(S)	2500-3000	139	34	-	18	-	-	-	-	-	10	42	-	12	-	-	-	-	-	-	-	23		
		LIGHT STANDARD 2500(H) X 1500(S)	3500	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	-		
			Subtotal	233	34	0	18	0	0	10	58	0	10	42	0	12	0	26	0	0	0	0	0	23		
			Contract 3 Total	1520	127	0	19	0	0	32	66	0	210	819	5	12	18	103	7	0	0	20	43	16		

- NOTE:
- All proposed plant species and specifications are subject to change to suit the site conditions.
 - Locations of tree planting area subject to change to suit the site conditions.
 - The standards of trees follow General Specification for Civil Engineering Works Clause 3.11-3.16; the sizes are also subject to the special feature according to species.
 - The palms are accounted as heavy or light standard trees according to species and sizes for tree compensation accounting purpose.
 - Refer to drawing nos. C3/LM/001, C3/LM/002 in Appendix D for the locations of planting area in Contract 3.

Tree Size	C3	
Whip	411	
Subtotal	411	411
Light Standard	859	
Standard	0	
Heavy Standard	250	
Subtotal	1109	1109
Total	1520	

Legend:

- Compensatory Planting Area (in ha)
- HY/2012/07 (C1)
- HY/2012/08 (C2)
- HY/2013/12 (C3)
- HY/2017/10 (C4)
- Potential Development Area (PDA)

Compensatory Planting Area (in ha)
 HY/2012/07 : Approx. 14.41 ha
 HY/2012/08 : Nil
 HY/2013/12 : Approx. 5.35 ha
 HY/2017/10 : Approx. 14.37 ha
 Total : Approx. 34.13 ha

Number of Compensation Trees (CM10):

Identification No. for Planting Area in C3:	Nos.	Identification No. for Planting Area in C4:	Nos.
C3_PA01	127	C4_PA01	4
C3_PA02	-		
C3_PA03	19		
C3_PA04	-		
C3_PA05	-		
C3_PA06	32		
C3_PA07	66		
C3_PA09	210		
C3_PA10	819		
C3_PA11	5		
C3_PA13	18		
C3_PA14	103		
Subtotal	1399 nos.	Subtotal	4 nos.



LEGEND

- Site Boundary
- New Tree Planting
- Transplanted Trees
- Existing Trees and Shrubs (at-grade)
- Proposed Shrub, Ground cover, Grass Planting
- Existing Woodland Tree Groups
- Proposed Tree planting for slope
- Proposed Tree and Shrub Mix Planting

AECOM

PROJECT
 TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
 TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

CLIENT
 路政署
 HIGHWAYS DEPARTMENT
 主要工程管理處(傳訊事務)
 Major Works Project Management Office
 (Special Duties)

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 德和建築師行

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK
D	JUN 22	ROUNDABOUT UPDATE	GL
C	MAY 21	ROUNDABOUT UPDATE	CL
B	SEP 20	LANDSCAPE UPDATE	CL
A	SEP 19	LANDSCAPE UPDATE	CWN
IR	DATE	DESCRIPTION	CHK

STATUS

SCALE
 A1 1:1000 A3 1:2000
 DIMENSION UNIT
 MILLIMETRES

KEY PLAN

PROJECT NO.
 60240249

CONTRACT NO.
 HY/2013/12

SHEET TITLE
 LANDSCAPE MASTER PLAN

SHEET NUMBER
 C3/LM/001

SHEET 1 OF 15

Plot File by: \\aifm\engineering\091112020
 PART 4_VT\CD\15_HSS\CD\landscape\Master_Plan\20201029\C3\LM\001_M-200.dgn

Appendix G

Tree Planting Summary for TMCLK Project

Slope Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BRL.TOM.	<i>Bridelia tomentosa</i> *	土蜜樹	WHIP	1500-2000
GOR.AXL.	<i>Gordonia axillaris</i> *	大頭茶	WHIP	1500-2000
LIT.GLU.	<i>Litsea glutinosa</i> *	潺槁樹	WHIP	1500-2000
PHY.EMB.	<i>Phyllanthus emblica</i> *	餘甘子	WHIP	1500-2000
REE.THY.	<i>Reevesia thyrsoidea</i> *	梭羅樹	WHIP	1500-2000
TREE				
BAU.VAR.	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD/ STANDARD	4000
BOM.CEL.	<i>Bombax ceiba</i>	木棉	LIGHT STANDARD	4000-5000
BRL.TOM.	<i>Bridelia tomentosa</i> *	土蜜樹	LIGHT STANDARD	3000
CIN.BUR.(A)	<i>Cinnamomum burmannii</i> *	陰香	LIGHT STANDARD	4000
MEL.AZE.(A)	<i>Melia azedarach</i>	苦楝	LIGHT STANDARD	4000
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花	HEAVY STANDARD 2000 (H) X 2000 (S)	3500-4000
PALM				
CAR.MIT.	<i>Caryota mitis</i>	短穗魚尾葵	2500(H) x 1500(S)	2500
LIV.CHL.	<i>Livistona chinensis</i>	蒲葵	1500-2500(H) X 1500(S)	3500-4000
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) x 1500(S)	2000
WAS. ROB.	<i>Washingtonia robusta</i>	華盛頓葵	1500 - 2500(H) X 1500(S)	3500-4000
SHRUB				
CAL.HAE.	<i>Calliandra haematocephala</i>	紅絨球	300(H) X 300(S)	1000
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) X 300(S)	500
GAR.JAS.	<i>Gardenia jasminoides</i> *	白蟬	300(H) x 300(S)	500
GOR.AXL.	<i>Gordonia axillaris</i> *	大頭茶	500(H) X 500(S)	500
HIB.ROS.	<i>Hibiscus rosa-sinensis</i>	大紅花	300(H) x 300(S)	1000
LIG.SIN.	<i>Ligustrum sinense</i> *	山指甲	300(H) x 300(S)	500
MEL.CAN.	<i>Melastoma candidum</i> *	野牡丹	300(H) X 300(S)	500
MEL.SAN.	<i>Melastoma sanguineum</i> *	毛萼	300(H) X 300(S)	500
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) X 300(S)	1000
PIT.TOB.	<i>Pittosporum tobira</i>	海桐花	300(H) x 300(S)	500
PSY. ASI.	<i>Psychotria asiatica</i> *	九節	300(H) x 300(S)	500
RHO.SIM.	<i>Rhododendron simsii</i> *	紅杜鵑	300(H) x 300(S)	500
RHO.TOM.	<i>Rhodomyrtus tomentosa</i> *	桃金娘	300(H) X 300(S)	500
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	500
GROUND COVER				
HYM.LIT.	<i>Hymenocallis littoralis</i>	蜘蛛蘭	300(H) X 300(S)	300
CLIMBER				
EPLAUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500
FIC.PUM.	<i>Ficus pumila</i> *	藤荔	MIN. 3 SHOOTS PER PLANT, 300- 1000mm LONG	300
LON.JAP.	<i>Lonicera japonica</i> *	金銀花	MIN. 4 SHOOTS PER PLANT, 600mm LONG	500
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300/500
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUND COVER 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, 2006 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.	<i>Bauhinia x blakeana</i> * +	洋紫荊	HEAVY STANDARD	5000
BAU.VAR.	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD/ STANDARD/ HEAVY STANDARD	4000 - 5000
GAR.SUB.	<i>Garcinia subelliptica</i> +	菲島福木	LIGHT STANDARD	4000-5000
GRE.ROB.(H)	<i>Grevillea robusta</i>	銀樺	HEAVY STANDARD	5000
ILE.ROT.	<i>Ilex rotunda</i>	鐵冬青	HEAVY STANDARD	5000
LAG.SPE.	<i>Lagerstroemia speciosa</i>	大花紫薇	HEAVY STANDARD	4000-4500
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000
TAB.IMP.	<i>Tabebuia impetiginosa</i>	風鈴木	HEAVY STANDARD	5000
VIB.ODO.	<i>Viburnum odoratissimum</i> * +	珊瑚樹	HEAVY STANDARD	5000
XAN.CHR.	<i>Xanthostemon chrysanthus</i> +	金蒲桃	HEAVY STANDARD	5000
PALM				
ARE.CAT.	<i>Areca catechu</i> +	檳榔	4000(H)	4000
LIV.CHL.	<i>Livistona chinensis</i>	蒲葵	2500(H) x 1500(S)	3500-4000
PHO.SYL.	<i>Phoenix sylvestris</i>	銀海棗	2000(H) x 1500(S)	4000
SHRUB				
ALL.CAT.	<i>Allamanda cathartica</i>	軟枝黃蟬	300(H) X 300(S)	300/350
DUR.REP.	<i>Duranta repens</i>	假蓮艷	300(H) x 250(S)	400
COD.VAR.'AUC'	<i>Codiaeum variegatum</i> 'Aucubaefolium' +	灑金榕	300(H) X 300(S)	300
COD.VAR.'RED'	<i>Codiaeum variegatum</i> 'Red' +	灑金榕 (紅色)	300(H) X 300(S)	300
CYC.REV.	<i>Cycas revoluta</i>	蘇鐵	400(H) x 500(S)	500
DRA.REF.	<i>Draena reflexa</i>	黃金百合竹	600(H)	500
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) X 300(S)	350/500
GAR.JAS.	<i>Gardenia jasminoides</i> *	白蟬	300(H) x 300(S)	500
GOR.AXL.	<i>Gordonia axillaris</i> *	大頭茶	300(H) X 300(S)	350
IXO.CHL.	<i>Ixora chinensis</i> * +	龍船花	300(H) x 300(S)	300
LIG.SIN.	<i>Ligustrum sinense</i> *	山指甲	300(H) x 250(S)	400
MEL.CAN.	<i>Melastoma candidum</i> *	野牡丹	300(H) X 300(S)	350
MEL.SAN.	<i>Melastoma sanguineum</i> *	毛萼	300(H) X 300(S)	350
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	400(H) x 250(S) / 300(H) X 300(S)	400/500
PIT.TOB.	<i>Pittosporum tobira</i> *	海桐花	300(H) x 300(S)	500
RHA.IND.	<i>Rhapuolepis indica</i> * +	車輪梅	300(H) x 300(S)	300
RHO.TOM.	<i>Rhodomyrtus tomentosa</i> *	桃金娘	300(H) X 300(S)	350/500
SCH.ARB.	<i>Schefflera arboricola</i> +	八葉	300(H) x 300(S)	350/ 500
GROUND COVER				
ARA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) x 200(S)	200
ASP.DEN.	<i>Asparagus densiflorus</i> 'Sprengerii' +	非洲天門冬	200(H) x 300(S)	200
HYM.LIT.	<i>Hymenocallis littoralis</i>	蜘蛛蘭	300(H) X 300(S)	300
NEP.AUR.	<i>Nephrolepis auriculata</i> * +	腎蕨	250(H) x 250(S)	150
PHY.MYR.	<i>Phyllanthus myrtifolius</i> +	錫蘭葉下珠	300(H) x 300(S)	300
TRA.SPA.	<i>Tradescantia spathacea</i>	蚌花	200(H) x 300(S)	250
WED.TRI.	<i>Wedelia trilobata</i>	三裂葉蟛蜞菊	200(H) x 150(S)	300
CLIMBER				
EPLAUR.	<i>Epipremnum aureum</i> +	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500/300
FIC.PUM.	<i>Ficus pumila</i> *	藤荔	MIN. 3 SHOOTS PER PLANT, 300- 1000mm LONG	300
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600- 1000mm LONG	300
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-
AXO.COM.	<i>Axonopus compressus</i> +	地毯草(大葉草)	Whole piece turf 300(L)x300(W)x50(H)	-

Slope Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
WHIP				
BAU.VAR.	<i>Bauhinia variegata</i>	宮粉羊蹄甲	WHIP	1000
BRI.TOM.	<i>Bridelia tomentosa</i> *	土密樹	WHIP	1000-2000
GOR.AXL.	<i>Gordonia axillaris</i> *	大頭茶	WHIP	1000
LIT.GLU.	<i>Litsea glutinosa</i> *	潺槁木	WHIP	1000
MAL.PAN.	<i>Mallotus paniculatus</i> *	白楸	WHIP	1000
PHY.EMB.	<i>Phyllanthus emblica</i> *	餘甘子(油甘子)	WHIP	1000
SAP.DIS.	<i>Sapium discolor</i> *	山烏柏	WHIP	1000
TREE				
BAU.VAR.(L)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD	3000
BAU.VAR.(H)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD	4000-4500
BRI.TOM.	<i>Bridelia tomentosa</i> *	土密樹	LIGHT STANDARD	3000
BOM.CEL.(L)	<i>Bombax ceiba</i>	木棉	LIGHT STANDARD	3000
BOM.CEL.(L)	<i>Bombax ceiba</i>	木棉	HEAVY STANDARD	4500-5000
CIN.BUR.	<i>Cinnamomum burmannii</i> *	陰香	LIGHT STANDARD	3000
CIN.BUR.	<i>Cinnamomum burmannii</i> *	陰香	HEAVY STANDARD	4500-5000
LIQ.FOR.	<i>Liquidambar formosana</i> *	楓香	LIGHT STANDARD	3000
LIT.GLU.(L)	<i>Litsea glutinosa</i> *	潺槁木	LIGHT STANDARD	3000
MAC.CHE.	<i>Machilus chekiangensis</i> *	浙江潤楠	LIGHT STANDARD	3000
REE.THY.	<i>Reevesia thyrsoidea</i> *	梭羅樹	LIGHT STANDARD	3000
SCH.SUP.	<i>Schima superba</i> *	木荷(荷樹)	LIGHT STANDARD	3000
STE.LAN.	<i>Sterculia lanceolata</i> *	假蒺藜	LIGHT STANDARD	3000
STE.LAN.	<i>Sterculia lanceolata</i> *	假蒺藜	HEAVY STANDARD	4500-5000
VIB.ODO.	<i>Viburnum odoratissimum</i> *	珊瑚樹	LIGHT STANDARD	3000
SHRUB				
DES.CHI.	<i>Desmos chinensis</i> *	假鷹爪	300(H) x 300(S)	500
ILE.ASP.	<i>Ilex asprella</i> *	梅葉冬青	300(H) x 300(S)	500
ILE.PUB.	<i>Ilex pubescens</i> *	毛冬青	300(H) x 300(S)	500
LIG.SIN.	<i>Ligustrum sinense</i>	山指甲	300(H) x 300(S)	350-500
MEL.CAN.	<i>Melastoma candidum</i> *	野牡丹	300(H) x 300(S)	350-500
MEL.SAN.	<i>Melastoma sanguineum</i> *	毛荃	300(H) x 300(S)	350-500
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	350
PSY.ASI.	<i>Psychotria asiatica</i> *	九節	300(H) x 300(S)	500
RHA.IND.	<i>Rhaphiolepis indica</i> *	車輪梅	300(H) x 300(S)	350-500
RHO.PUL.	<i>Rhododendron pulchrum</i>	紫杜鵑	300(H) x 300(S)	500
RHO.SIM.	<i>Rhododendron simsii</i> *	紅杜鵑	300(H) x 300(S)	500
SCH.ARB.	<i>Schefflera arboricola</i>	八葉木	300(H) x 300(S)	500
SCH.VAR.	<i>Schefflera arboricola</i> 'Variegata'	花葉八葉木	300(H) x 300(S)	500
GROUNDCOVER				
NEP.AUR.	<i>Nephrolepis auriculata</i> *	腎蕨	300(H) x 300(S)	100-300
NEP.HIR.	<i>Nephrolepis hirsutula</i> *	毛葉腎蕨	300(H) x 300(S)	100-300
CLIMBER				
BAU.COR.	<i>Bauhinia corymbosa</i>	首冠藤	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
BOU.SPE.	<i>Bougainvillea spectabilis</i>	簕杜鵑	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-500
FIG.PUM.	<i>Ficus pumila</i> *	薜荔	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300
LON.JAP.	<i>Lonicera japonica</i> *	忍冬(金銀花)	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-1000
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 1000mm LONG	300-1000
WED.TRI.	<i>Wedelia trilobata</i>	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.	<i>Brachychiton acerifolius</i>	槭葉蘋婆	HEAVY STANDARD	4500-5000
DEL.REG.	<i>Delonix regia</i>	鳳凰木	HEAVY STANDARD	N/A
GAR.SUB.	<i>Garcinia subelliptica</i>	菲島福木(福木)	LIGHT STANDARD	3000
MEL.CUM.	<i>Melaleuca cajuputi subsp. cumingiana</i>	白千層	HEAVY STANDARD	4000
STE.LAN.	<i>Sterculia lanceolata</i> *	假蒺藜	HEAVY STANDARD	5000
TAB.CHR.	<i>Tabebuia chrysantha</i>	黃花風鈴木	HEAVY STANDARD	5000
TAB.IMP.	<i>Tabebuia impetiginosa</i>	風鈴木	HEAVY STANDARD	5000
TER.MAN.	<i>Terminalia mantaly</i>	小葉欖仁	HEAVY STANDARD	5000
PALM				
ARC.ALE.	<i>Archontophoenix alexandrae</i>	假檳榔	3500(H) x 1500(S)	4000
CHR.LHT.	<i>Chrysalidocarpus lutescens</i>	散尾葵	1500(H)	2000
LIV.CHI.	<i>Livistona chinensis</i>	蒲葵	2000(H) x 1500(S)	2500
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) x 1500(S)	2500-3000
WOD.BIF.	<i>Wodyetia bifurcata</i>	狐尾椰子	2500(H) x 1500(S)	3500
SHRUB				
DUR.GOL.	<i>Duranta repens</i> 'Golden'	金連翹	300(H) x 300(S)	300
IXO.CHI.	<i>Ixora chinensis</i> *	龍船花	300(H) x 300(S)	300
IXO.COC.	<i>Ixora coccinea</i>	橙紅龍船花	300(H) x 300(S)	300
IXO.LUT.	<i>Ixora coccinea</i> 'Lutea'	黃花龍船花	300(H) x 300(S)	300
RHA.IND.	<i>Rhaphiolepis indica</i> *	車輪梅	300(H) x 300(S)	300
RHO.PUL.	<i>Rhododendron pulchrum</i>	紫杜鵑	300(H) x 300(S)	300
RHO.SIM.	<i>Rhododendron simsii</i> *	紅杜鵑	300(H) x 300(S)	300
SCH.ARB.	<i>Schefflera arboricola</i>	八葉木	300(H) x 300(S)	300
SCH.VAR.	<i>Schefflera arboricola</i> 'Variegata'	斑葉鵝掌藤 (花葉八葉木)	300(H) x 300(S)	300
GROUNDCOVER				
ARA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) x 200(S)	200
ASP.DEN.	<i>Asparagus densiflorus</i> 'Myersii'	狐尾天冬	300(H) x 300(S)	250
ASP.SPR.	<i>Asparagus densiflorus</i> 'Sprengeri'	非洲天門冬(天冬)	100(H) x 200(S)	200
CUP.HYS.	<i>Cuphea hyssopifolia</i>	細葉雪茄花	250(H) x 300(S)	250-300
DIA.VAR.	<i>Dianella tasmanica</i> 'Variegata'	花葉山菅蘭	250(H) x 250(S)	250
LAN.FLA.	<i>Lantana camara</i> 'Flava'	黃花馬纓丹	200(H) x 200(S)	200
LAN.MON.	<i>Lantana montevidensis</i>	小葉馬纓丹	200(H) x 200(S)	200
NEP.AUR.	<i>Nephrolepis auriculata</i> *	腎蕨	300(H) x 300(S)	100-300
OPH.JAP.	<i>Ophiopogon japonicus</i> *	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)

Drawing No.: Figure 6.2

Northern Landfall - Roadside Planting

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
BAU.BLA	<i>Bauhinia x blakeana</i> *	洋紫荊	HEAVY STANDARD	4500-5000
BAU.VAR	<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD	4500-5000
ELA.API	<i>Elaeocarpus apiculatus</i>	尖葉杜英	HEAVY STANDARD	6000
ELA.HAI	<i>Elaeocarpus hainanensis</i>	水石榕	HEAVY STANDARD	5000
GAR.SUB	<i>Garcinia subelliptica</i>	菲島福木	HEAVY STANDARD	3500-4000
GRE.ROB	<i>Grevillea robusta</i>	銀樺	HEAVY STANDARD	4500-5000
MEL.QUI	<i>Melaleuca quinquenervia</i>	白千層	HEAVY STANDARD	4500-5000
PLU.MUL	<i>Plumeria rubra</i> (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	<i>Plumeria rubra</i> (red flower)	雞蛋花(紅花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PLU.RUB(Y)	<i>Plumeria rubra</i> (yellow flower)	雞蛋花(黃花)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-4500
PON.PIN	<i>Pongamia pinnata</i> *	水黃皮	HEAVY STANDARD	5000-6000
STE.LAN	<i>Sterculia lanceolata</i> *	假蒺藜	HEAVY STANDARD	4500-5000
TER.CAT	<i>Terminalia catappa</i>	欖仁樹	HEAVY STANDARD	5000-7000
VIB.ODO	<i>Viburnum odoratissimum</i> *	珊瑚樹	HEAVY STANDARD	4500-5000
XAN.CHR	<i>Xanthostemon chrysanthus</i>	金蒲桃	HEAVY STANDARD	5000
PALM				
ARE.CAT	<i>Areca catechu</i>	檳榔	3000(H) x 1500(S)	4000
HYO.LAG	<i>Hyophorbe lagenicaulis</i>	酒瓶椰子	2000(H) x 1500(S)	3000
LIV.CHI	<i>Livistona chinensis</i>	蒲葵	3000(H) x 2000(S)	4000-4500
ROY.REG	<i>Roystonea regia</i>	王棕	4000(H) x 2000(S)	4500-5000
WOD.BIF	<i>Wodyetia bifurcata</i>	狐尾椰子	3000(H) x 1500(S)	4500
SHRUB				
CMI	<i>Carmona microphylla</i>	福建茶	300(H) x 300(S)	300
CRE	<i>Cycas revoluta</i>	蘇鐵	500(H) x 600(S)	N/A
DLU	<i>Dyopsis lutescens</i>	散尾葵	2000(H) x 2000(S)	2000
JKA	<i>Juniperus chinensis</i> 'Kaizuca'	龍柏球	600(H) x 600(S)	N/A
ICH	<i>Ixora chinensis</i> *	龍船花	300(H) x 300(S)	300
ICO	<i>Ixora coccinea</i>	橙紅龍船花	300(H) x 300(S)	300
ILU	<i>Ixora coccinea</i> 'Lutea'	黃花龍船花	400(H) x 300(S)	300
IST	<i>Ixora stricta</i>	細葉龍船花	250(H) x 250(S)	250
IWE	<i>Ixora westii</i>	粉紅龍船花	400(H) x 300(S)	300
PTO	<i>Pittosporum tobira</i>	海桐	300(H) x 300(S)	350
PMA	<i>Podocarpus macrophyllus</i> *	羅漢松	600(H) x 500(S)	N/A
PAX	<i>Polyspora axillaris</i> *	大頭茶	300(H) x 300(S)	350
RIN	<i>Raphiolepis indica</i> *	車輪梅	300(H) x 300(S)	300-350
RPU	<i>Rhododendron pulchrum</i>	錦繡杜鵑	300(H) x 300(S)	350
RSI	<i>Rhododendron simsii</i> *	紅杜鵑	250(H) x 250(S)	350
RTO	<i>Rhodomyrtus tomentosa</i> *	桃金娘	300(H) x 300(S)	350
STA	<i>Scaevola taccada</i> *	草海桐	300(H) x 300(S)	350
SDA	<i>Schefflera arboricola</i> 'Dazzle'	黃金八葉	300(H) x 300(S)	350
SVA	<i>Schefflera arboricola</i> '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)
GROUND COVER				
ADU	<i>Arachis duranensis</i>	蔓花生(金花生)	100(H) x 200(S)	200
AMY	<i>Asparagus densiflorus</i> 'Myersii'	狐尾天冬	300(H) x 300(S)	300
ASP	<i>Asparagus densiflorus</i> 'Sprengeri'	非洲天門冬	100(H) x 200(S)	200
CHY	<i>Cuphea hyssopifolia</i>	細葉萼距花	200(H) x 250(S)	250
CRO	<i>Catharanthus roseus</i>	長春花	200(H) x 200(S)	200
LFL	<i>Lantana camara</i> 'Flava'	黃花馬纓丹	200(H) x 200(S)	200
LMO	<i>Lantana montevidensis</i>	小葉馬纓丹	200(H) x 200(S)	200
NAU	<i>Nephrolepis auriculata</i> *	腎蕨	250(H) x 250(S)	200
WTR	<i>Wedelia trilobata</i>	三裂葉蟛蜞菊	150(H) x 200(S)	200
CLIMBER				
BCO	<i>Bauhinia corymbosa</i>	首冠藤	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500
QIN	<i>Quisqualis indica</i>	使君子	MIN. 4 SHOOTS PER PLANT, 600mm LONG	300-500
GRASS				
ACO	<i>Axonopus compressus</i>	大葉草(地毯草)	Whole piece turf 300(L)x300(W)x50(H)	-

NOTE:

1. ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS.
2. SHRUB / GROUND COVER 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 Tunnel Buildings, Electrical and Mechanical Works
Planting Schedule (Contract 4 - HY/2017/10)

Drawing No.: Figure 6.3

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

CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) X SPREAD (S)	SPACING (mm)
TREE				
GRE.ROB.	<i>Grevillea robusta</i>	銀樺	HEAVY STANDARD	4000-5000
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花(紅)	HEAVY STANDARD 2000(H) x 2000(S) - 2500(H) x 2500(S)	4000-5000
SHRUB				
RUS.EQU.	<i>Russelia equisetiformis</i>	爆竹竹	300(H) x 300(S)	250
GROUNDCOVER				
IPO.PES.	<i>Ipomoea pes-caprae</i> *	海灘牽牛	200(H) x 200(S)	200
LAN.MON.	<i>Lantana montevidensis</i>	小葉馬纓丹 (鋪地臭金鳳)	200(H) x 200(S)	250
OPH.JAP.	<i>Ophiopogon japonicus</i> *	麥冬(沿階草)	150(H) x 200(S)	200
SYN.POD.	<i>Syngonium podophyllum</i>	白蝴蝶	100(H) x 200(S)	200
TRA.SPA.	<i>Tradescantia spathacea</i>	蚌花	200(H) x 300(S)	250
ZEP.ROS.	<i>Zephyranthes rosea</i>	玫瑰蔥蓮	100(H) x 200(S)	150
CLIMBER				
MON.DEL.	<i>Monstera deliciosa</i>	龜背竹	MIN. 5 SHOOTS PER PLANT, 300mm LONG	500
HYDROSEEDING / GRASS				
-	HYDROSEEDING	噴草	-	-
ZOY.JAP.	<i>Zoysia japonica</i>	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).

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

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

Slope Planting

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

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

NOTE:

- ALL PROPOSED PLANT SPECIES AND SPECIFICATIONS ARE SUBJECT TO CHANGE DURING CONSTRUCTION TO SUIT THE SITE CONDITIONS AND MARKET AVAILABILITY.
- SIZE OF TREES SHALL REFER TO THE GENERAL SPECIFICATION FOR CIVIL ENGINEERING WORKS, 2006 EDITION.
- * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

Appendix H

Planting Area for the Project

Contract No. HMWSD 2/2020 (HY)

Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link

Final Environmental Monitoring and Audit (EM&A) Report for Establishment

Monitoring of Project's Boundary Area (June 2020 to January 2023)



Planting Area under Contract HY/2012/07

Contract No. HY/2012/07 (C1) Landscape Area Checking for EP Condition 2.9

Area Code	Location	Plan Area (sq.m.) Approx.	Average Slope Angle	Plane Area (sq.m.) Approx.
N1	CTR	1575	0	1575
N2	CTR	264	0	264
N3	NLH	34	0	34
N4	NLH	1824	0	1824
N5	CTR	725	0	725
N6	CTR	14273	0	14273
N7	NLH	9095	0	9095
N8	NLH	918	0	918
N9	NLH	1302	0	1302
N10	NLH	6413	0	6413
N11	NLH	29	0	29
N12	NLH	489	0	489
N13	CTR and NLH	447	0	447
N14	CTR and NLH	983	0	983
N15	CTR	359	0	359
N16	CTR	130	0	130
N17	NLH	963	0	963
N18	NLH	454	0	454
N19	NLH	1028	0	1028
N20	NLH	464	0	464
N21	NLH	370	0	370
S1	CTR - PF2	607	27	681
S2	CTR - PF1	230	27	258
S3	10NW-C/F13, C/F14, C/F15	8483	26	9438
S4	10NW-C/F50(de-registered)	968	20	1030
S5	10NW-C/F52	619	27	695
S6	NLH - RD1	317	27	356
S7	10NW-C/F10	2515	27	2823
S8	10NW-C/F11	2893	27	3247
S9	10NW-C/F17	3138	27	3522
S10	10NW-C/F9	3052	26	3396
S11	9SE-B/F85	714	25	788
S12	9SE-B/C112	450	50	700
S13	9SE-B/C8	2832	40	3697
S14	9SE-B/C9	7361	45	10410
-	Southern Landfall	47120	0	47120
Sub-total (A)				130300
DSD Project: DC/2016/01 Entrusted Landscape Works along Cheung Tung Road	CTR	13834	0	13834
Sub-total (B)				13834
Total (A) + (B)				144134

ABBREVIATIONS

CTR Cheung Tung Road
 NLH North Lantau Highway



- LEGEND:**
- SITE BOUNDARY
 - AS-BUILT U-Channel
 - AS-BUILT MAINTENANCE ACCESS
 - AS-BUILT MAINTENANCE FOOTPATH
 - AS-BUILT PLANTING
 - ENGINEERING LAYOUT-VIADUCT
 - D19 PIER MARK
 - AREA BOUNDARY

APPROVED AND CONFIRMED BY
 TITLE
AECOM (RLS)
 NAME
SAMMY TSOI
 SIGNATURE

FOR INFORMATION

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT
HIGHWAYS DEPARTMENT
 港務局大橋及港務工程處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

AECOM Imagine it. Delivered.

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HY/2012/07

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

TITLE
LANDSCAPE AREA A (SOUTHERN LANDFALL)

DRAWING REFERENCE
NEW DRAWING SCALE 1:1000 (A1)
 1:2000 (A3)

DRAWN	PREPARED	APPROVED
KW	CL	CL

SKETCH NO. SK-0600 REV. -

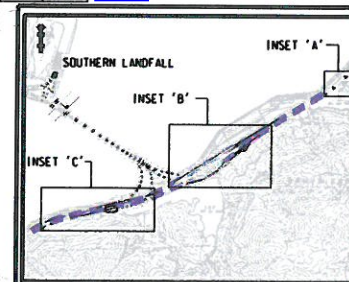
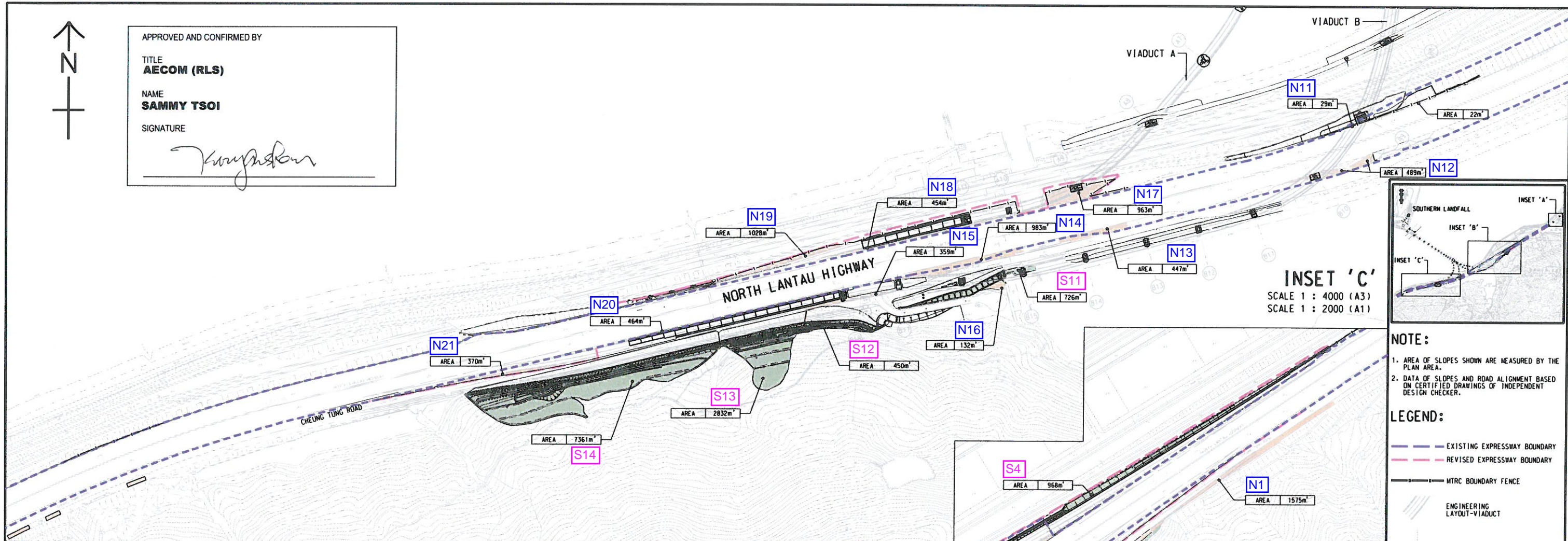


APPROVED AND CONFIRMED BY

TITLE
AECOM (RLS)

NAME
SAMMY TSOI

SIGNATURE



INSET 'C'
SCALE 1 : 4000 (A3)
SCALE 1 : 2000 (A1)

- NOTE:**
1. AREA OF SLOPES SHOWN ARE MEASURED BY THE PLAN AREA.
 2. DATA OF SLOPES AND ROAD ALIGNMENT BASED ON CERTIFIED DRAWINGS OF INDEPENDENT DESIGN CHECKER.

- LEGEND:**
- EXISTING EXPRESSWAY BOUNDARY
 - REVISED EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - PIER MARK
 - NON-SLOPE AREA
 - SLOPE AREA

FOR INFORMATION

REV.	DATE	DESCRIPTION	DRAWN	PREP.	APP.
-	03/09/20	LANDSCAPE AREA	KW	CL	CL

路政署
HIGHWAYS DEPARTMENT
香港橋樑及隧道工程處
Hong Kong - Zhuhai - Macao Bridge
Hong Kong Project Management Office

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HY/2012/07

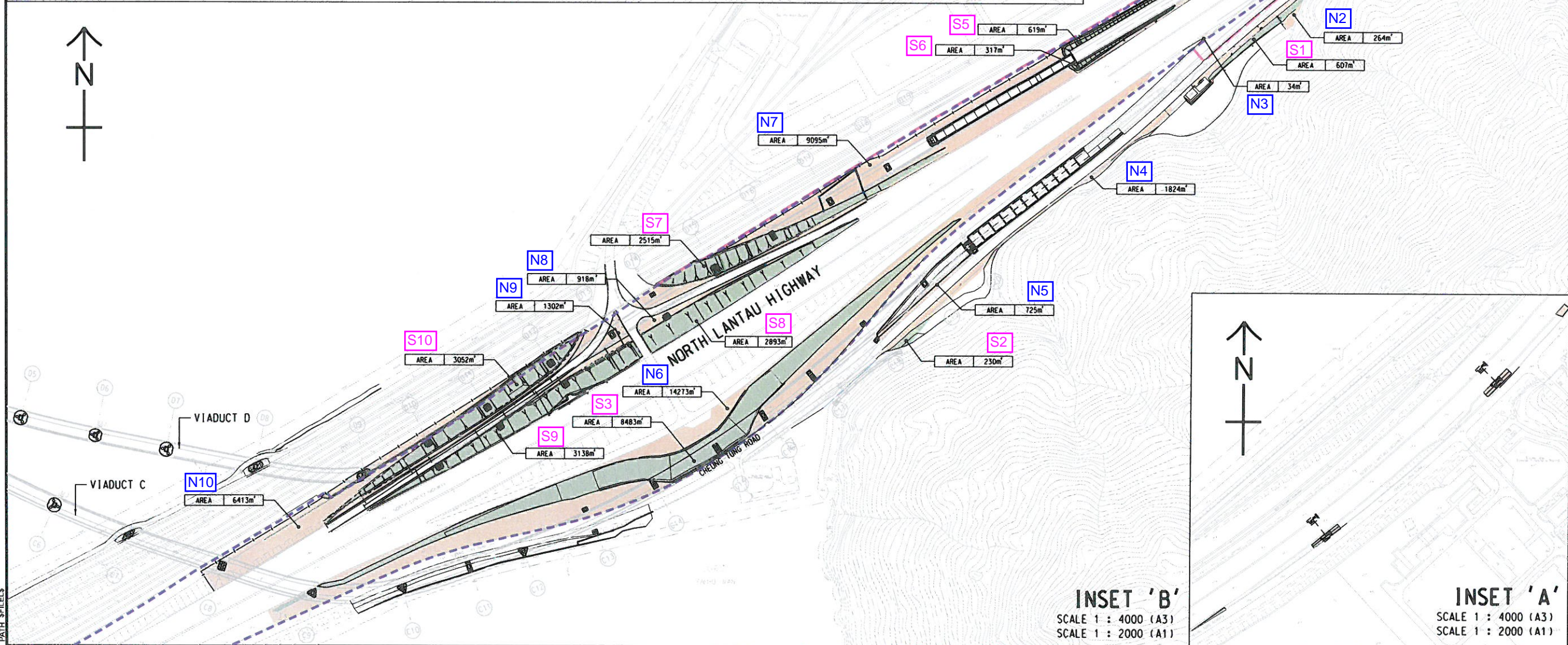
CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

TITLE
LANDSCAPE AREA

DRAWING REFERENCE	SCALE
-	1:2000 (A1)
-	1:4000 (A3)

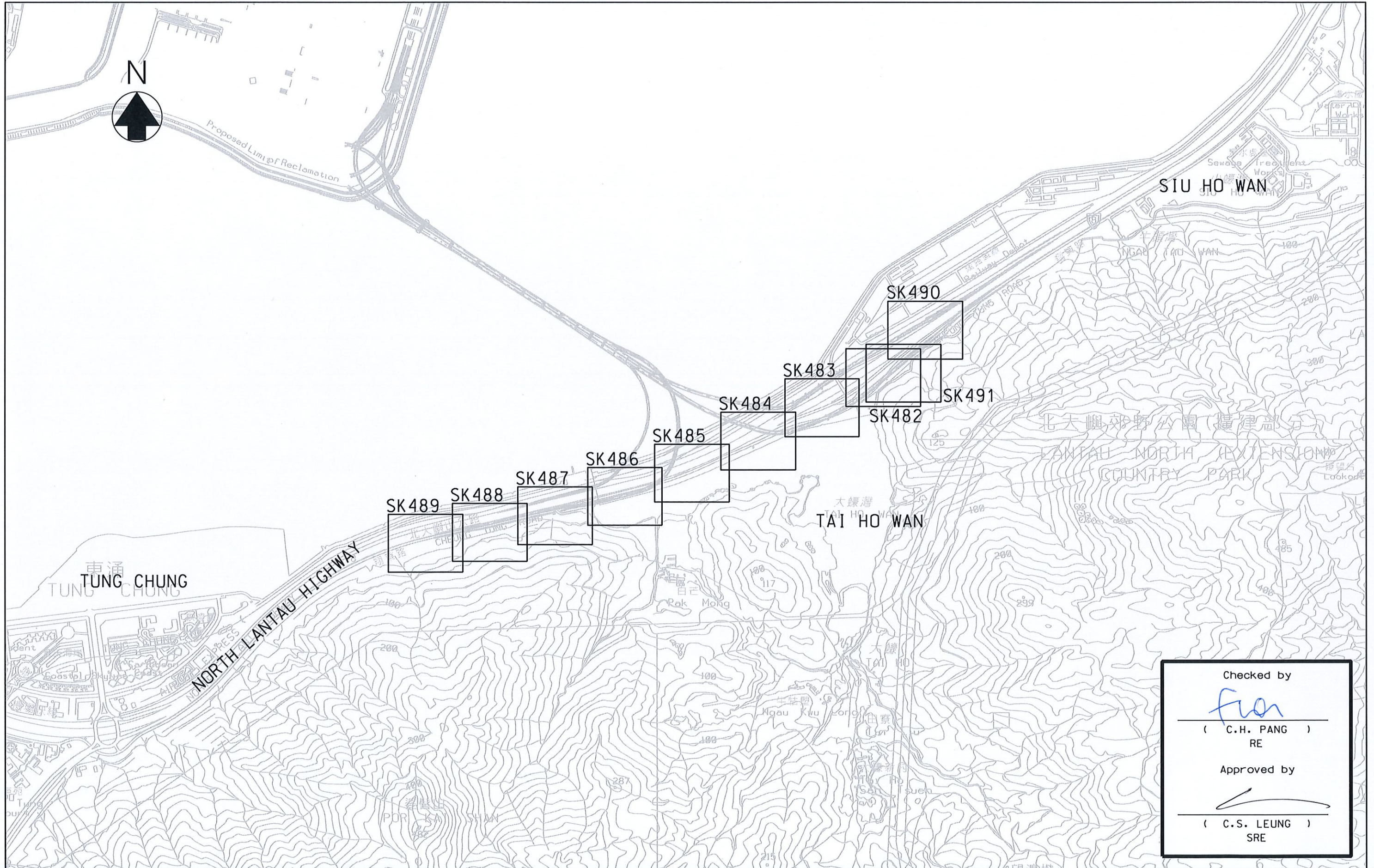
DRAWN	PREPARED	APPROVED
KW	CL	CL

SKETCH NO. SK0598



INSET 'B'
SCALE 1 : 4000 (A3)
SCALE 1 : 2000 (A1)

INSET 'A'
SCALE 1 : 4000 (A3)
SCALE 1 : 2000 (A1)



Checked by
Fan
 (C.H. PANG)
 RE
 Approved by
[Signature]
 (C.S. LEUNG)
 SRE

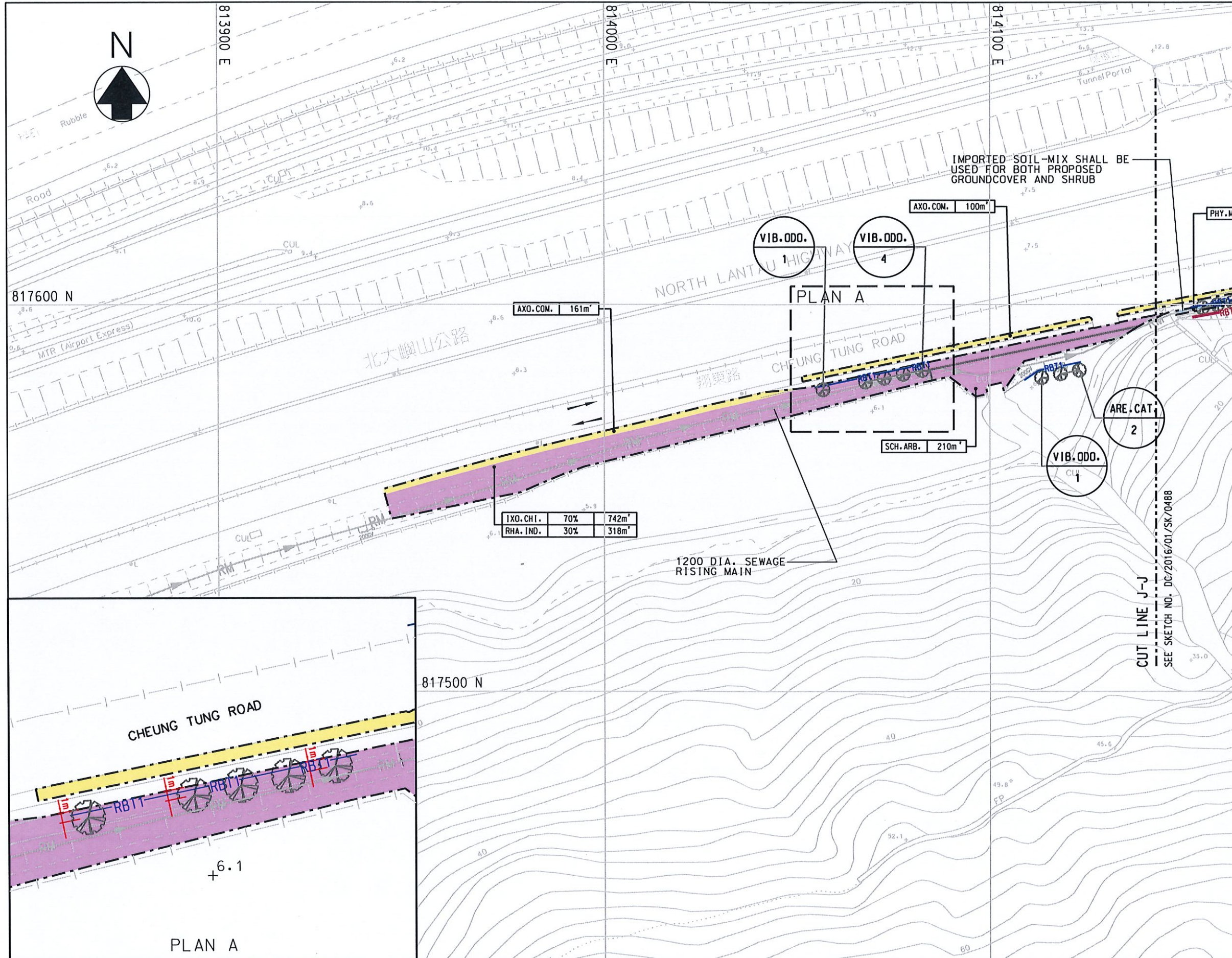
Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS 建造東涌至小蠔灣額外污水泵喉及附屬工程
Title	KEY PLAN OF PLANTING PLAN


 香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

 BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

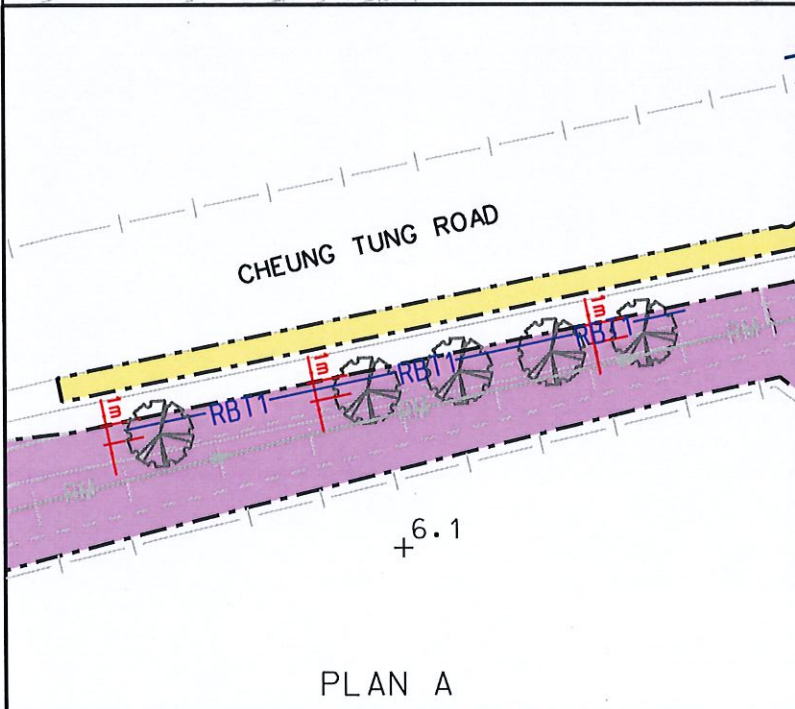
Drawn by	PL	Date	14/06/2018
Checked by	FNT	Scale	A3 1 : 15000
Approved by	TC	Sketch no.	DC/2016/01/SK/0481
		Revision	B

Plot Date = 9/9/2020



- LEGEND:**
- LANDSCAPE LIMIT
 - RISING MAIN
 - PROPOSED GROUNDCOVER (1200mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED GROUNDCOVER (300mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED PIT PLANTING (INDIVIDUAL EXCAVATIONS TO ACCOMMODATE REPLANTED TREES 600mm THK. FOR SHRUB 1200mm THK. FOR TREES)
 - SPECIES AREA (sq. m)
 - PROPOSED TREE. MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1- RBT1- ROOT BARRIER (TYPE I)
 - RBT2- RBT2- ROOT BARRIER (TYPE II)

1531m²



IXO. CHI.	70%	742m ²
RHA. IND.	30%	318m ²

1200 DIA. SEWAGE RISING MAIN

Checked by

 (C.H. PANG)
 RE
 Approved by

 (C.S. LEUNG)
 SRE

- NOTES:**
- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 - THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 - IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

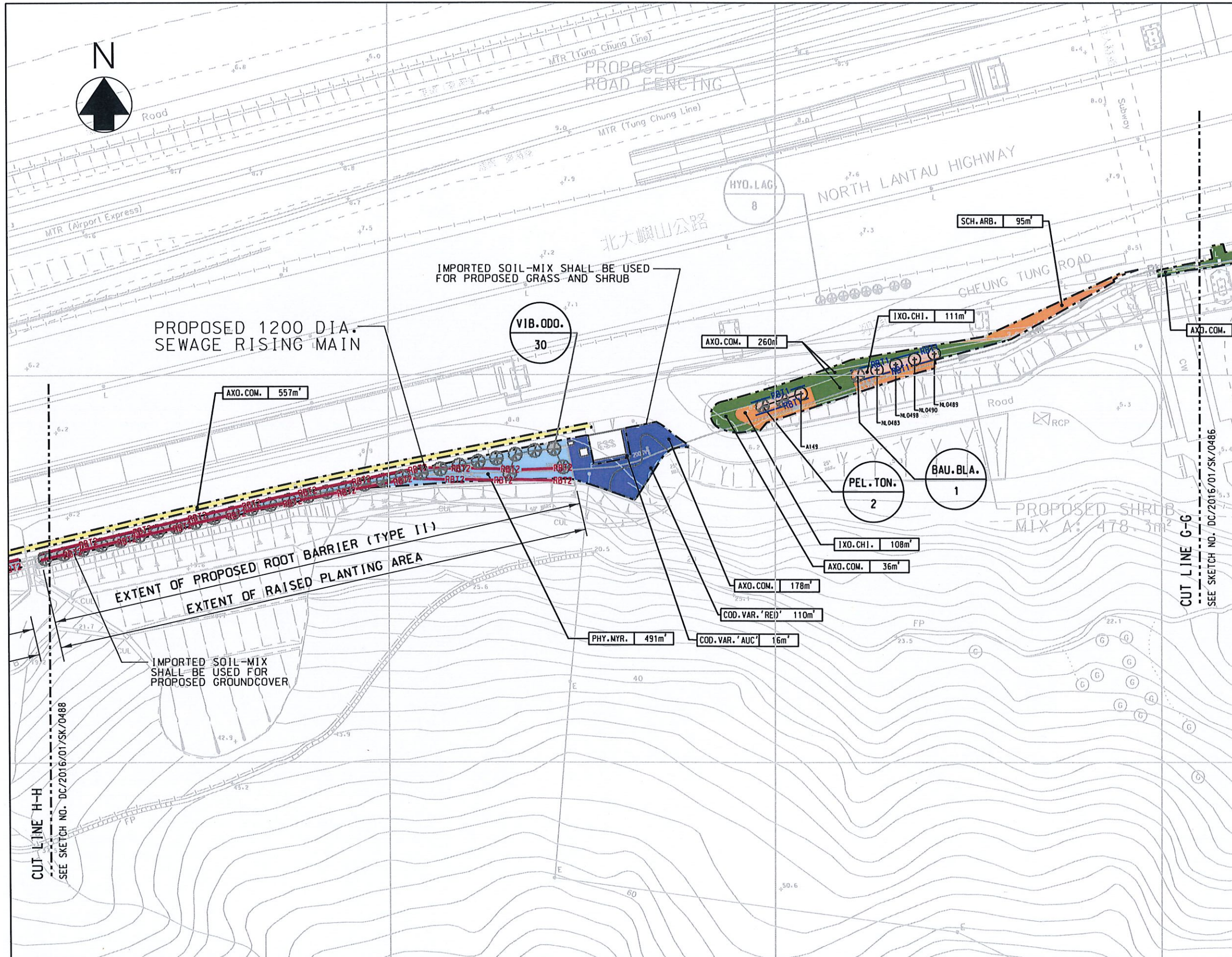
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 8 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG
 SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博誠工程顧問有限公司

Drawn by	W T L	Date	19/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0489
		Revision	F

Plot Date = 9/9/2020



- LEGEND:**
- LANDSCAPE LIMIT
 - RM RISING MAIN
 - PROPOSED GROUNDCOVER (1200mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED GROUNDCOVER (300mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - PROPOSED GRASS AND SHRUB (600mm THK. SOIL-MIX FOR GRASS AND SHRUB PLANTING)
 - SP. E.C. 905.7m²
SPECIES AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - PROPOSED FINAL LOCATION OF TRANSPLANTED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1- RBT1- ROOT BARRIER (TYPE I)
 - RBT2- RBT2- ROOT BARRIER (TYPE II)

Checked by
(Signature)
 (C.H. PANG)
 RE

Approved by
(Signature)
 (C.S. LEUNG)
 SRE

NOTES:

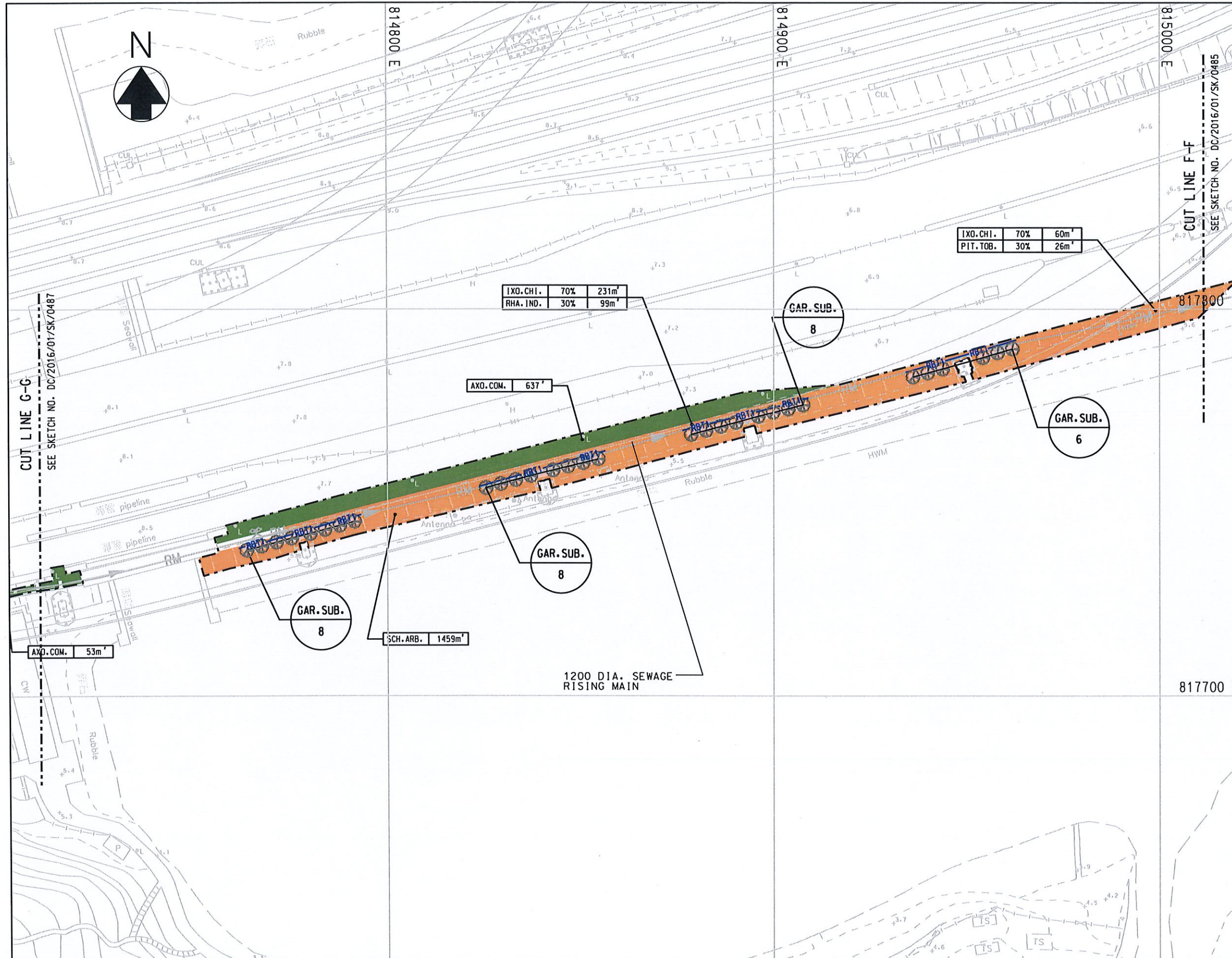
- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
- THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
- IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS 建造東涌至小蠔灣額外污水泵喉及附屬工程
Title	PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 6 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG
 SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博達工程顧問有限公司

Drawn by	C F	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0487
		Revision	K



- LEGEND:**
- LANDSCAPE LIMIT
 - RM RISING MAIN
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - RIA.E.C. 905.76m²
 - SPECIES AREA@sq.m
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1-RBT1- ROOT BARRIER (TYPE I)
 - RBT2-RBT2- ROOT BARRIER (TYPE II)

2565m²

Checked by
(Signature)
 (C.H. PANG)
 RE
 Approved by
(Signature)
 (C.S. LEUNG)
 SRE

- NOTES:**
- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 - THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 - IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

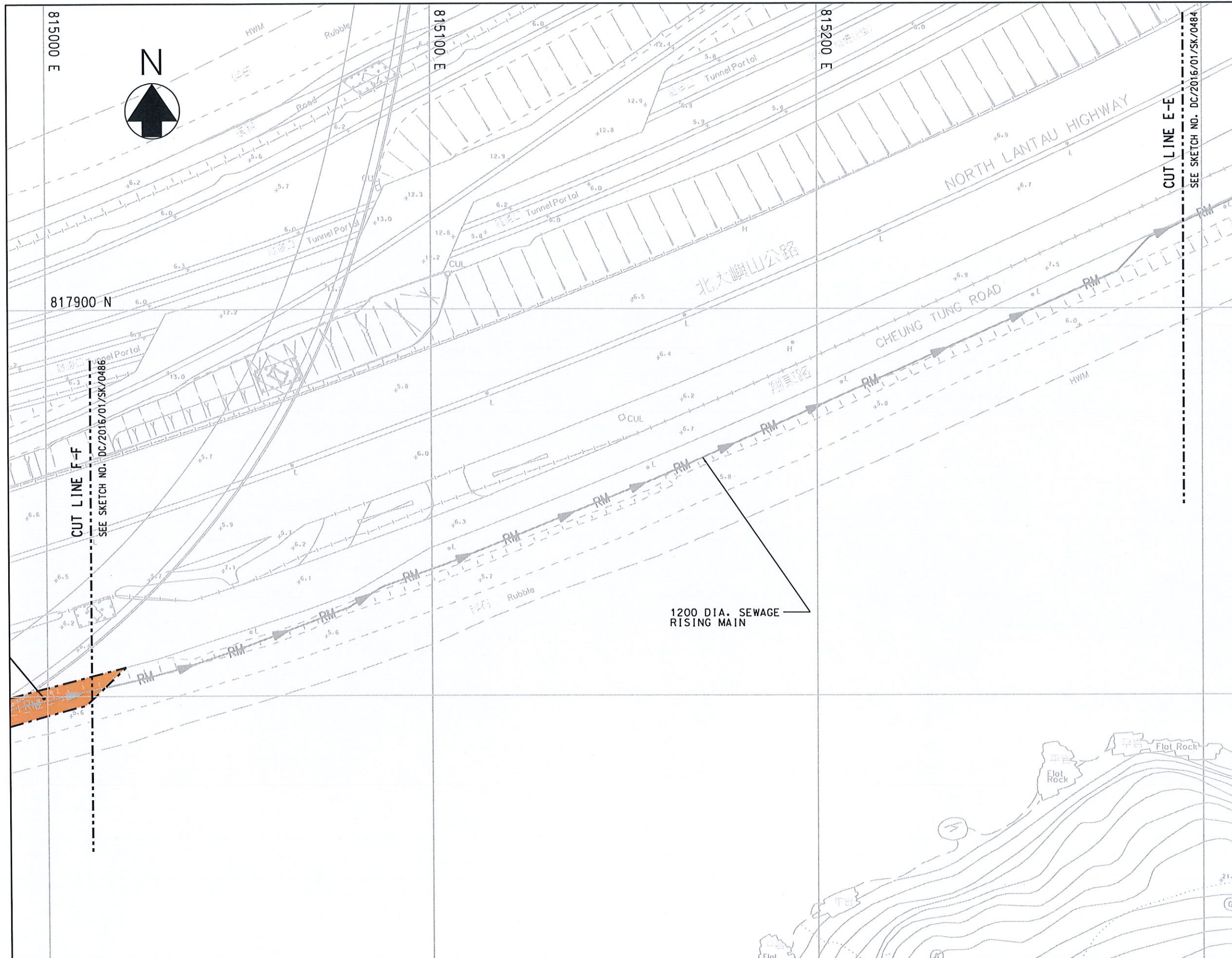
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 5 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Drawn by	C F	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0486
		Revision	H

Plot Date = 9/9/2020



- LEGEND:**
- LANDSCAPE LIMIT
 - RM RISING MAIN
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - SPECIES AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1- RBT1- ROOT BARRIER (TYPE I)
 - RBT2- RBT2- ROOT BARRIER (TYPE II)

Checked by

 (C.H. PANG)
 RE
 Approved by

 (C.S. LEUNG)
 SRE

NOTES:

- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
- THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
- IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

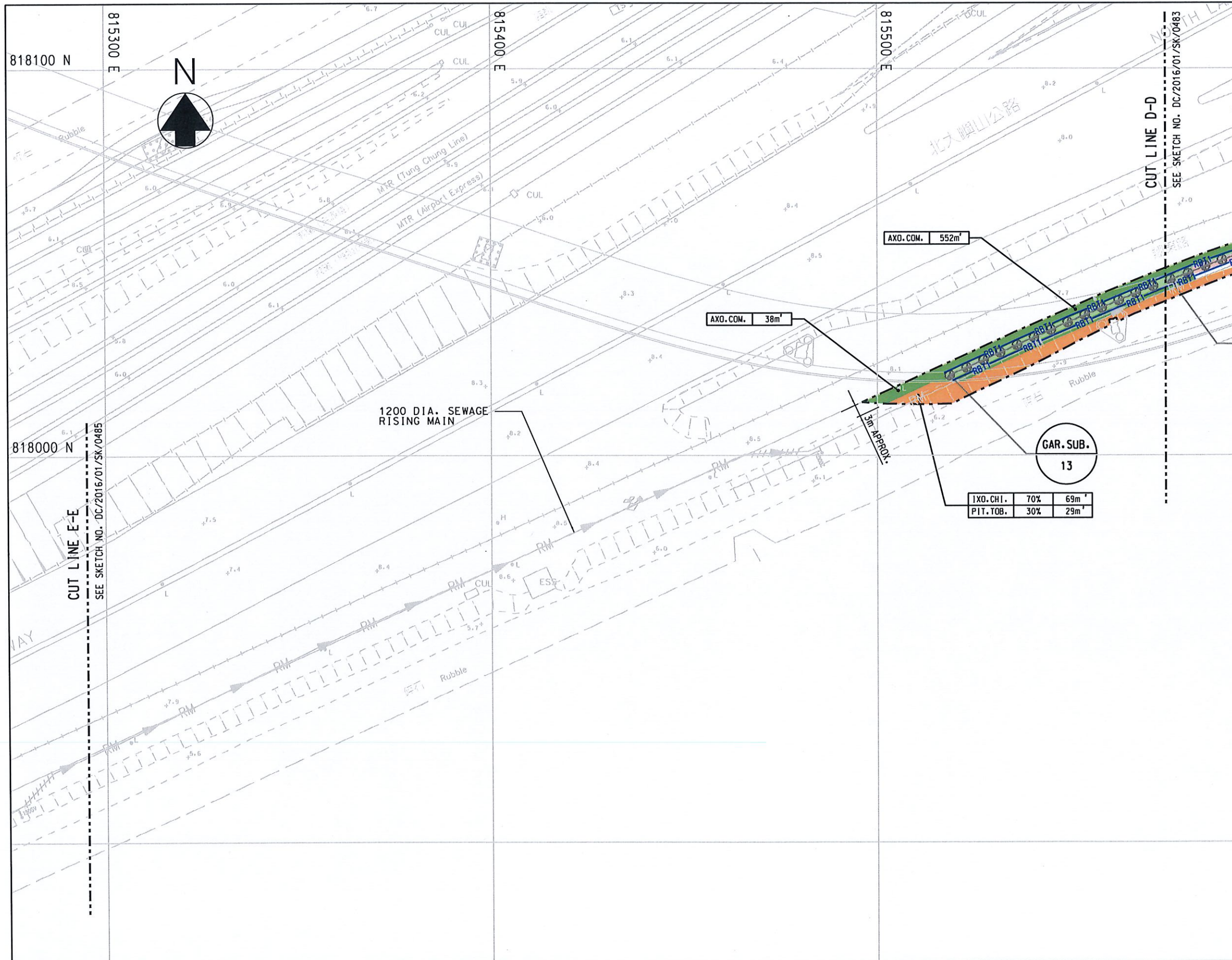
Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 4 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Drawn by	W T L	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0485
		Revision	D



- LEGEND:**
- LANDSCAPE LIMIT
 - RISING MAIN
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - RMA, EXC. 905.78m²
 - SPECIES
 - AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1- RBT1- ROOT BARRIER (TYPE I)
 - RBT2- RBT2- ROOT BARRIER (TYPE II)

688m²

IXO. CHI.	70%	69m ²
PIT. TOB.	30%	29m ²

Checked by

 (C.H. PANG)
 RE
 Approved by

 (C.S. LEUNG)
 SRE

NOTES:

- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
- THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
- IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 3 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Drawn by	W T L	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0484
		Revision	E

Plot Date = 9/9/2020



- LEGEND:**
- LANDSCAPE LIMIT
 - RM RISING MAIN
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - RHA. ETC. 905.74m
 - SPECIES AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1-RBT1- ROOT BARRIER (TYPE I)
 - RBT2-RBT2- ROOT BARRIER (TYPE II)

2207m²

Checked by
fp
 (C.H. PANG)
 RE
 Approved by
[Signature]
 (C.S. LEUNG)
 SRE

- NOTES:**
- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 - THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 - IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

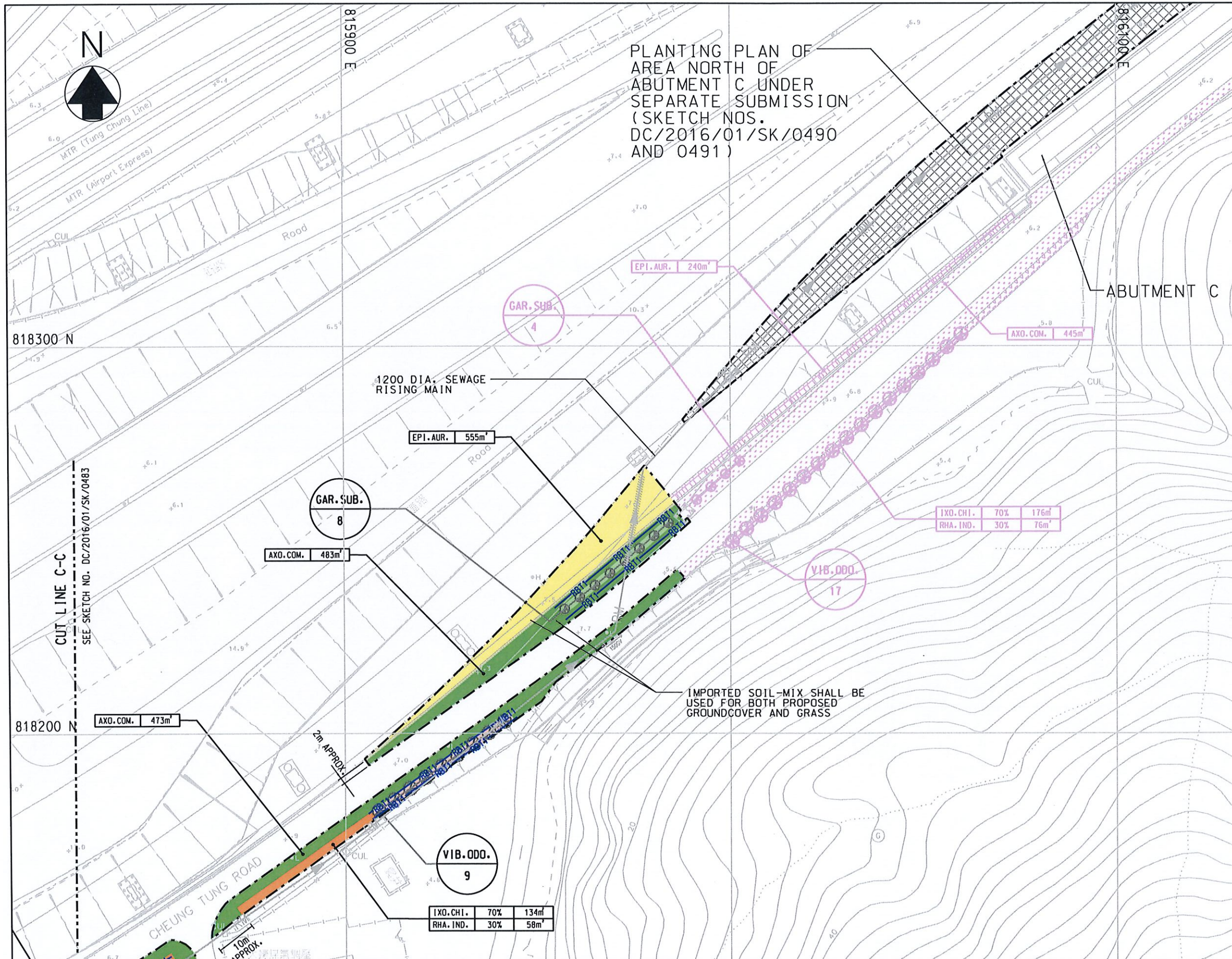
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 2 OF 8)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG
 SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Drawn by	W T L	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0483
		Revision	E

Plot Date = 9/9/2020



PLANTING PLAN OF
AREA NORTH OF
ABUTMENT C UNDER
SEPARATE SUBMISSION
(SKETCH NOS.
DC/2016/01/SK/0490
AND 0491)

- LEGEND:**
- LANDSCAPE LIMIT
 - RM PROPOSED DN1200 RISING MAIN
 - RBT1- RBT1- ROOT BARRIER (TYPE I)
 - RBT2- RBT2- ROOT BARRIER (TYPE II)
 - ⊕ PROPOSED FINAL LOCATION OF TRANSPLANTED TREE. MAINTENANCE UNDERTAKEN BY LCSD

- HANDOVER BY DC/2016/01**
- PROPOSED GROUNDCOVER (450mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED TREE AND SHRUB (1200mm THK. SOIL-MIX FOR TREE AND SHRUB PLANTING)
 - PROPOSED SHRUB (600mm THK. SOIL-MIX FOR SHRUB PLANTING)
 - PROPOSED TREE AND GRASS (1200mm THK. SOIL-MIX FOR TREE AND GRASS PLANTING)
 - PROPOSED GRASS (450mm THK. SOIL-MIX FOR GRASS PLANTING)
- RHA, ETC. 905.78m²
SPECIES AREA (sq.m)

PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD

1703m²

- HANDOVER BY HY/2012/07**
- PROPOSED GROUNDCOVER
 - PROPOSED SHRUB
 - PROPOSED GRASS
- RHA, ETC. 905.78m²
SPECIES AREA (sq.m)
- PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD (HANDOVER BY HY/2012/07)

Checked by
Fia
(C.H. PANG)
RE

Approved by
[Signature]
(C.S. LEUNG)
SRE

- NOTES:**
- SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 - THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 - IN-SITU SOIL-MIX SHALL BE USED UNLESS OTHERWISE SPECIFIED.

Project CONTRACT NO. DC/2016/01
CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
建造東涌至小蠔灣額外污水泵喉及附屬工程

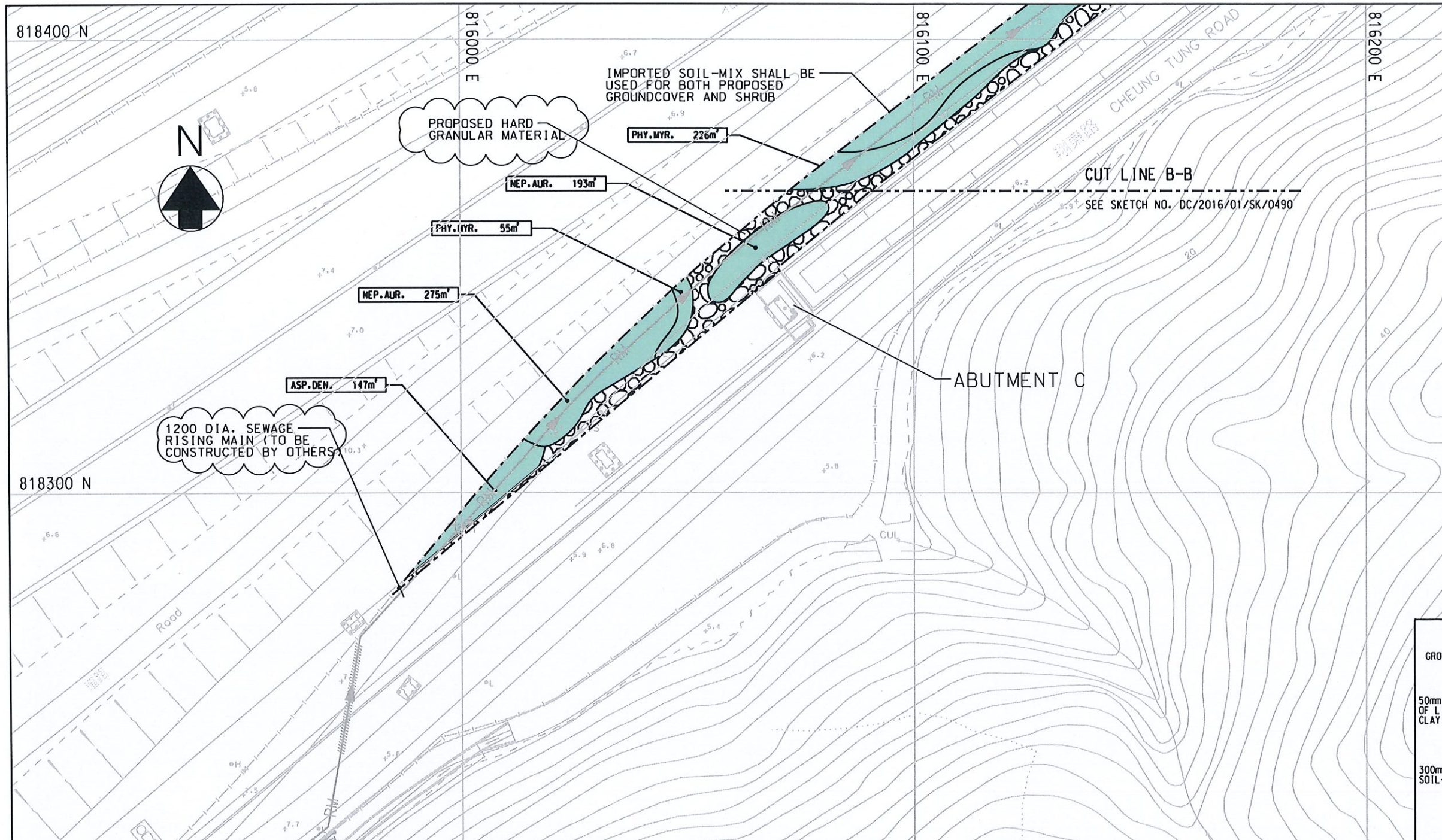
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 1 OF 8)

香港特別行政區政府渠務署
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Drawn by	W T L	Date	31/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0482
		Revision	K

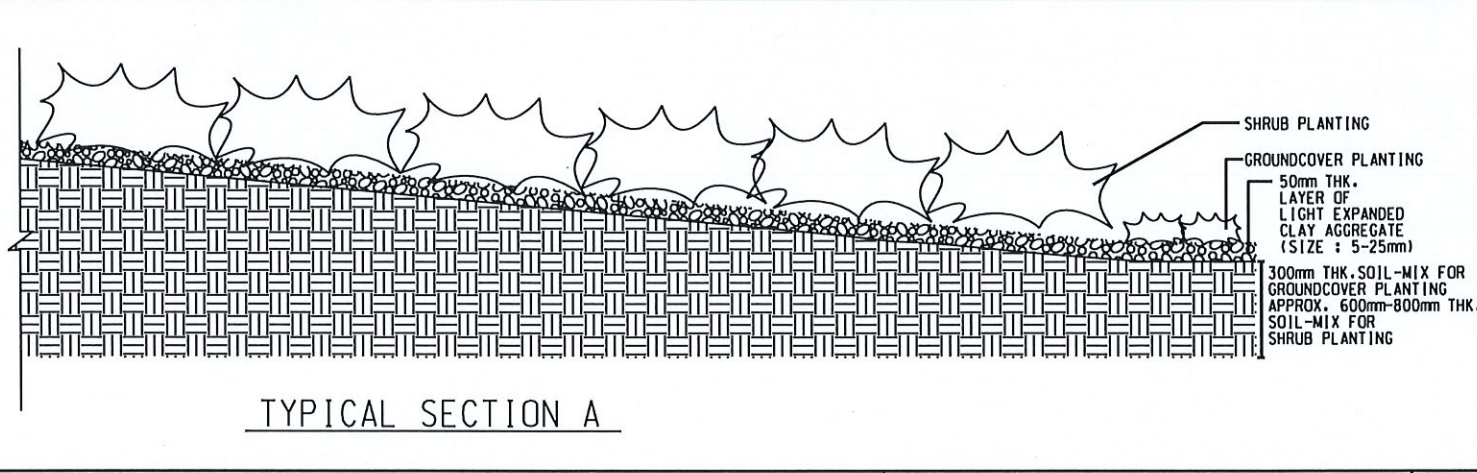
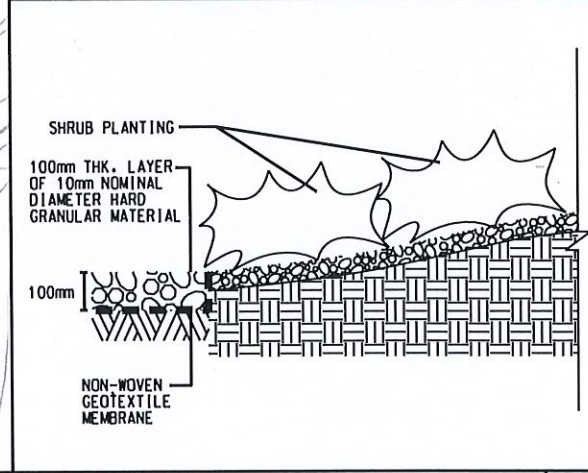
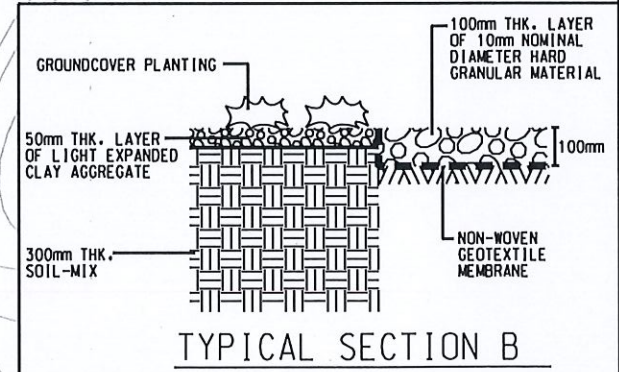
Plot Date = 9/9/2020



LEGEND:

- LANDSCAPE LIMIT
- RM RISING MAIN (TO BE CONSTRUCTED BY OTHERS)
- 5SE - D/F70 EXISTING SIMILAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- PROPOSED GROUNDCOVER (300mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
- PROPOSED SHRUB (600mm THK. MIN. SOIL-MIX FOR SHRUB PLANTING)
- RIA.E.C. 905.76m² SPECIES AREA @ q.m
- PROPOSED TREE. MAINTENANCE UNDERTAKEN BY LCSD
- PROPOSED FINAL LOCATION OF TRANSPLANTED TREE, MAINTENANCE UNDERTAKEN BY LCSD

896m²



Checked by
(Signature)
 (C.H. PANG)
 RE

Approved by
(Signature)
 (C.S. LEUNG)
 SRE

NOTES:

1. THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
2. IMPORTED SOIL-MIX SHALL BE USED.

Project CONTRACT NO. DC/2016/01
 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
 建造東涌至小蠔灣額外污水泵喉及附屬工程

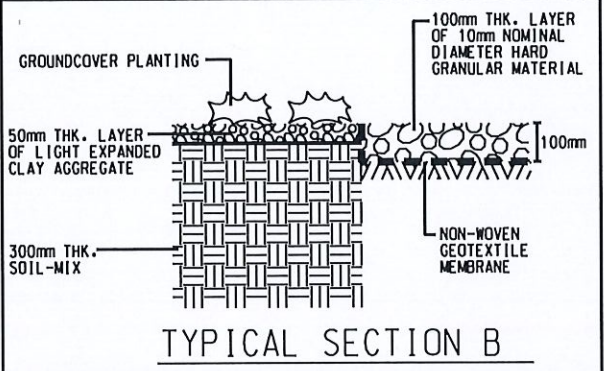
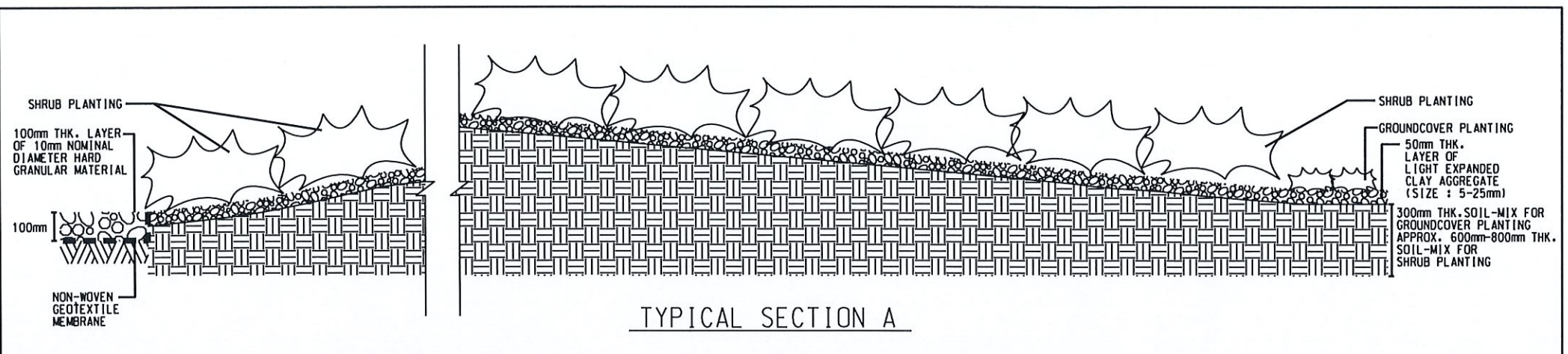
Title PLANTING PLAN FOR AREA NORTH OF ABUTMENT C
 (SHEET 2 OF 2)

香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

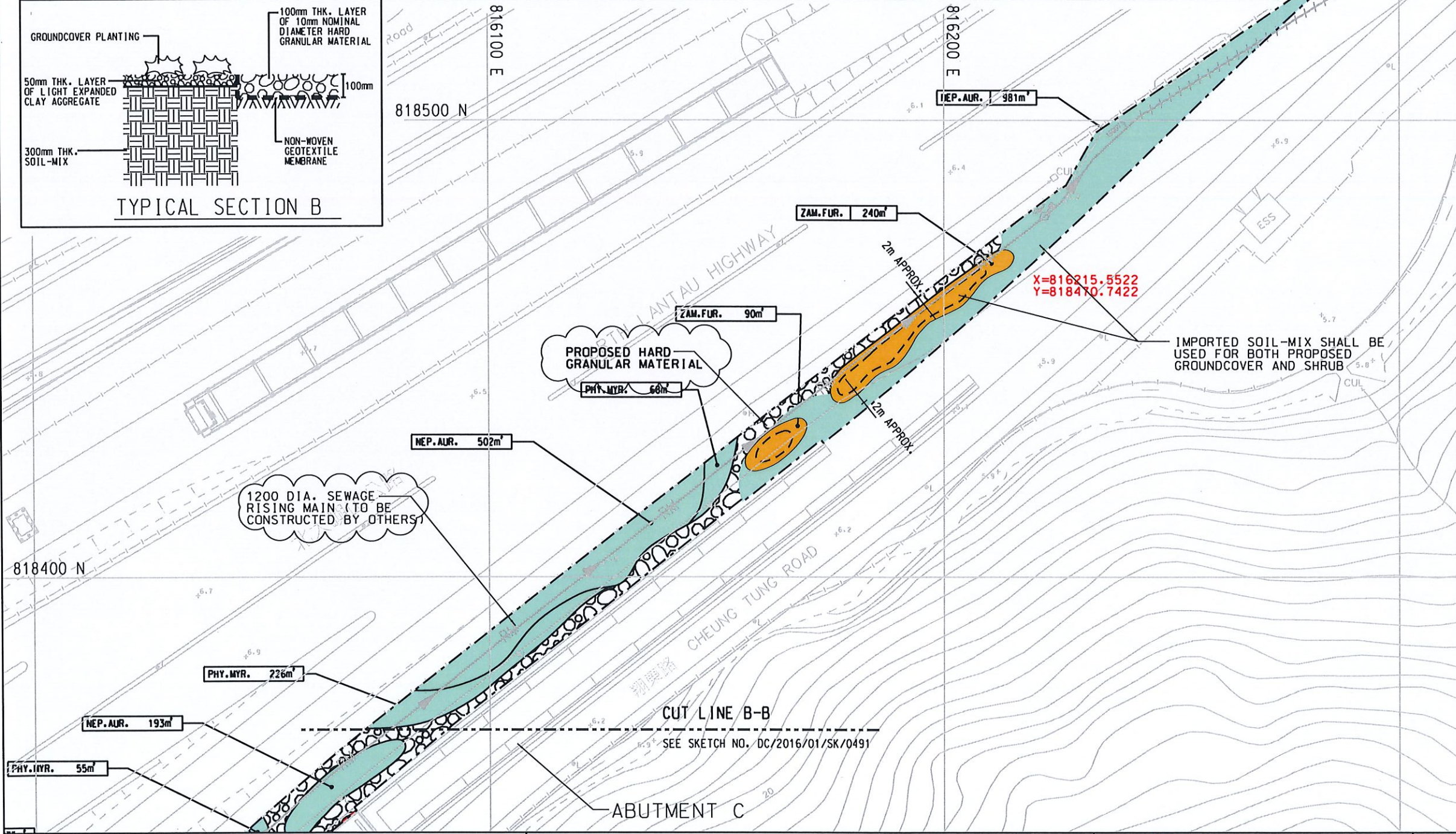
BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

Drawn by	P L	Date	03/07/2018
Checked by	F N T	Scale	A3 1 : 1000
Approved by	T C	Sketch no.	DC/2016/01/SK/0491
		Revision	D

Plot Date = 9/9/2020



- LEGEND:**
- LANDSCAPE LIMIT
 - RM RISING MAIN (TO BE CONSTRUCTED BY OTHERS)
 - 5SE - D/F70 EXISTING SIMILAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 - PROPOSED GROUND COVER (300mm THK. SOIL-MIX FOR GROUND COVER PLANTING APPROX.)
 - PROPOSED SHRUB (600mm THK. MIN. SOIL-MIX FOR SHRUB PLANTING)
 - RIA.E.C. 1905.762 SPECIES AREA 10q.m
 - PROPOSED TREE. MAINTENANCE UNDERTAKEN BY LCSD
 - PROPOSED FINAL LOCATION OF TRANSPLANTED TREE. MAINTENANCE UNDERTAKEN BY LCSD



NOTES:

- THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
- IMPORTED SOIL-MIX SHALL BE USED.

Project CONTRACT NO. DC/2016/01
CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS
建造東涌至小蠔灣額外污水泵喉及附屬工程

Title PLANTING PLAN FOR AREA NORTH OF ABUTMENT C (SHEET 1 OF 2)

香港特別行政區政府渠務署
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Drawn by	PL	Date	03/07/2018
Checked by	FNT	Scale	A3 1 : 1000
Approved by	TC	Sketch no.	DC/2016/01/SK/0490
		Revision	E

Plot Date = 9/9/2020

Contract No. HMWSD 2/2020 (HY)

Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link

Final Environmental Monitoring and Audit (EM&A) Report for Establishment

Monitoring of Project's Boundary Area (June 2020 to January 2023)



Planting Area under Contract HY/2013/12

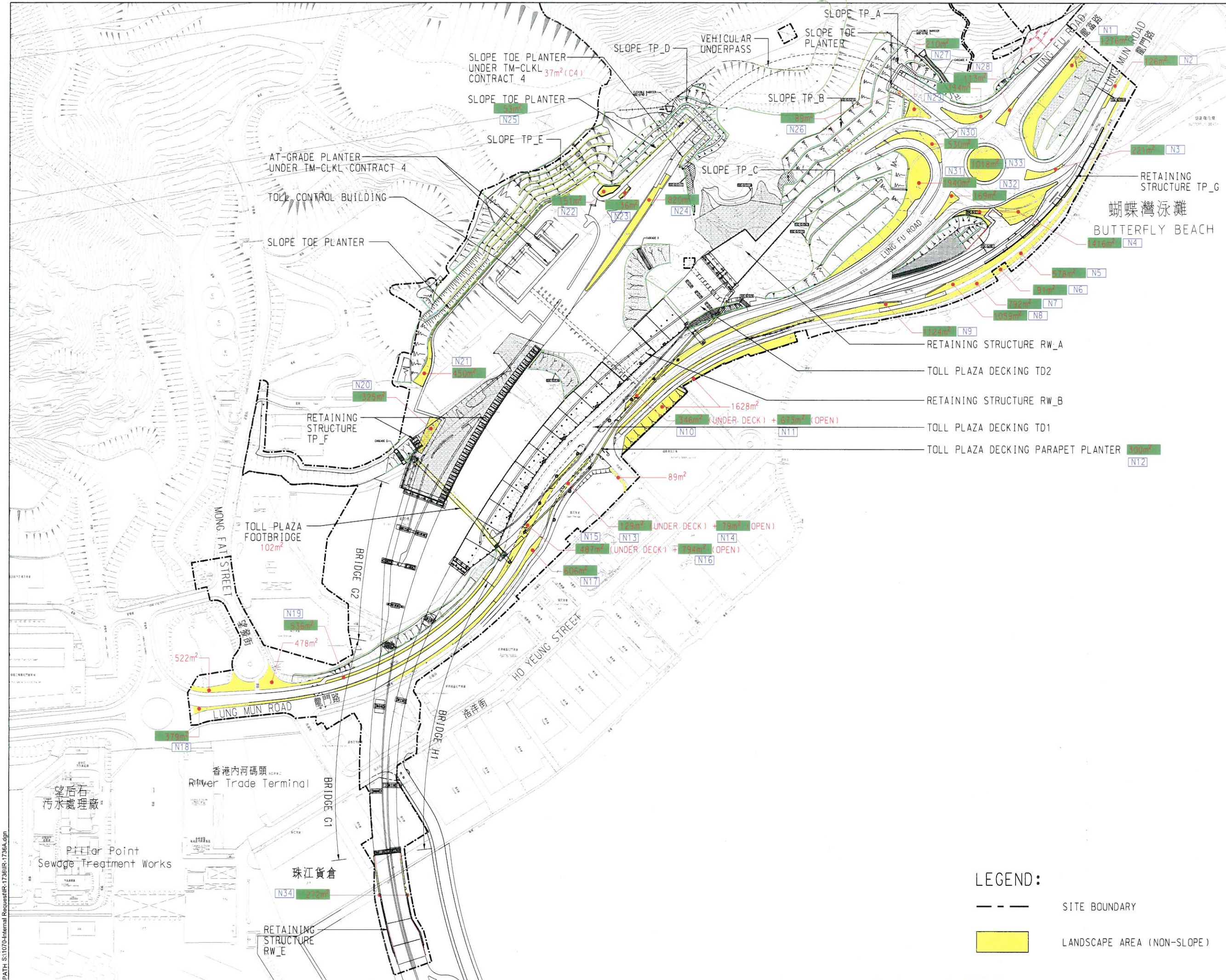
Contract No. HY/2013/12 (C3) Landscape Area Summary for EP Condition 2.9

Area Code	Location	Plan Area (sq.m.) Approx.	Average Slope Angle	Plane Area (sq.m.) Approx.
N1	Lung Fu Road	1276	0	1276
N2	Lung Mun Road	126	0	126
N3	Lung Mun Road	221	0	221
N4	Lung Mun Road	1416	0	1416
N5	Lung Mun Road - cycle track	578	0	578
N6	Lung Mun Road - cycle track	91	0	91
N7	Lung Mun Road - cycle track	792	0	792
N8	Lung Mun Road	1059	0	1059
N9	Lung Mun Road/ Lung Fu Road	1124	0	1124
N10	Lung Mun Road - under deck	346	0	346
N11	Lung Mun Road	673	0	673
N12	Deck - Parapet Planter	300	0	300
N13	Lung Mun Road - under deck	129	0	129
N14	Lung Mun Road	79	0	79
N15	Lung Mun Road - under deck	487	0	487
N16	Lung Mun Road	794	0	794
N17	Lung Mun Road - cycle track	606	0	606
N18	Lung Mun Road	379	0	379
N19	Lung Mun Road	536	0	536
N20	Near Footbridge	325	0	325
N21	Toe of Slope TP_E	450	0	450
	Toe of Slope TP_E (PDA)	-281	0	-281
N22	Toe of Slope TP_E	151	0	151
N23	Toll Plaza - roadside	36	0	36
N24	Toll Plaza - roadside	820	0	820
N25	Toe of 5SE-D/C116	53	0	53
N26	Toe of Slope TP_A & Slope TP_B	89	0	89
N27	Toe of Slope TP_B	210	0	210
N28	Lung Fu Road	113	0	113
N29	Island near Roundabout	334	0	334
N30	Island near Roundabout	530	0	530
N31	Toe of 5SE-D/C170	1940	0	1940
N32	Lung Fu Road	169	0	169
N33	Roundabout	1018	0	1018
N34	Retaining Structure RW_E	272	0	272
S1	5SE-D/C215	3103	14	3198
S2	5SE-D/C165	471	30	544
S3	5SE-D/C171	799	35	975
S4	5SE-D/C21	483	35	590
S5	5SE-D/C170 (PART 1)	5035	17	5265
S6	5SE-D/C170 (PART 2)	622	28	704
S7	5SE-D/C18	89	30	103
S8	5SE-D/C209 (Slope TP_C)	1655	30	1911
	5SE-D/C210 (Slope TP_B)	5424	35	6621
S10	5SE-D/C211 (Slope TP_A)	1874	37	2347
S11	5SE-D/C214 (Slope TP_D)	1867	50	2905
S12	5SE-D/C116	1515	35	1849
S13	5SE-D/C212 (Slope TP_E)	8134	60	16268
	5SE-D/C212 (Slope TP_E) (PDA)	-4132	60	-8264
S14	5SE-D/C16 (Non-PDA)	1150	32	1356
Sub-Total				53613

ABBREVIATIONS

PDA

Potential Development Area (not counted towards landscape area for EP Condition 2.9)



APPROVED AND CONFIRMED BY
 TITLE
AECOM_C3 (RLS)
 NAME
SAMMY TSOI
 SIGNATURE
Sammy Tsoi

Kingston

FOR INFORMATION

REV.	SEP. 20	FOR INFORMATION	CL	CHT	JL
DATE		DESCRIPTION	CHK.	PREP.	DRAWN

CLIENT

 路政署
HIGHWAYS DEPARTMENT
 港珠澳大橋香港工務管理處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

AECOM Imagine it. Delivered.

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

PROJECT NO. **60240249** CONTRACT NO. **HY/2013/12**

SCALE **A3 N.T.S** DATE **09 SEP 2020**

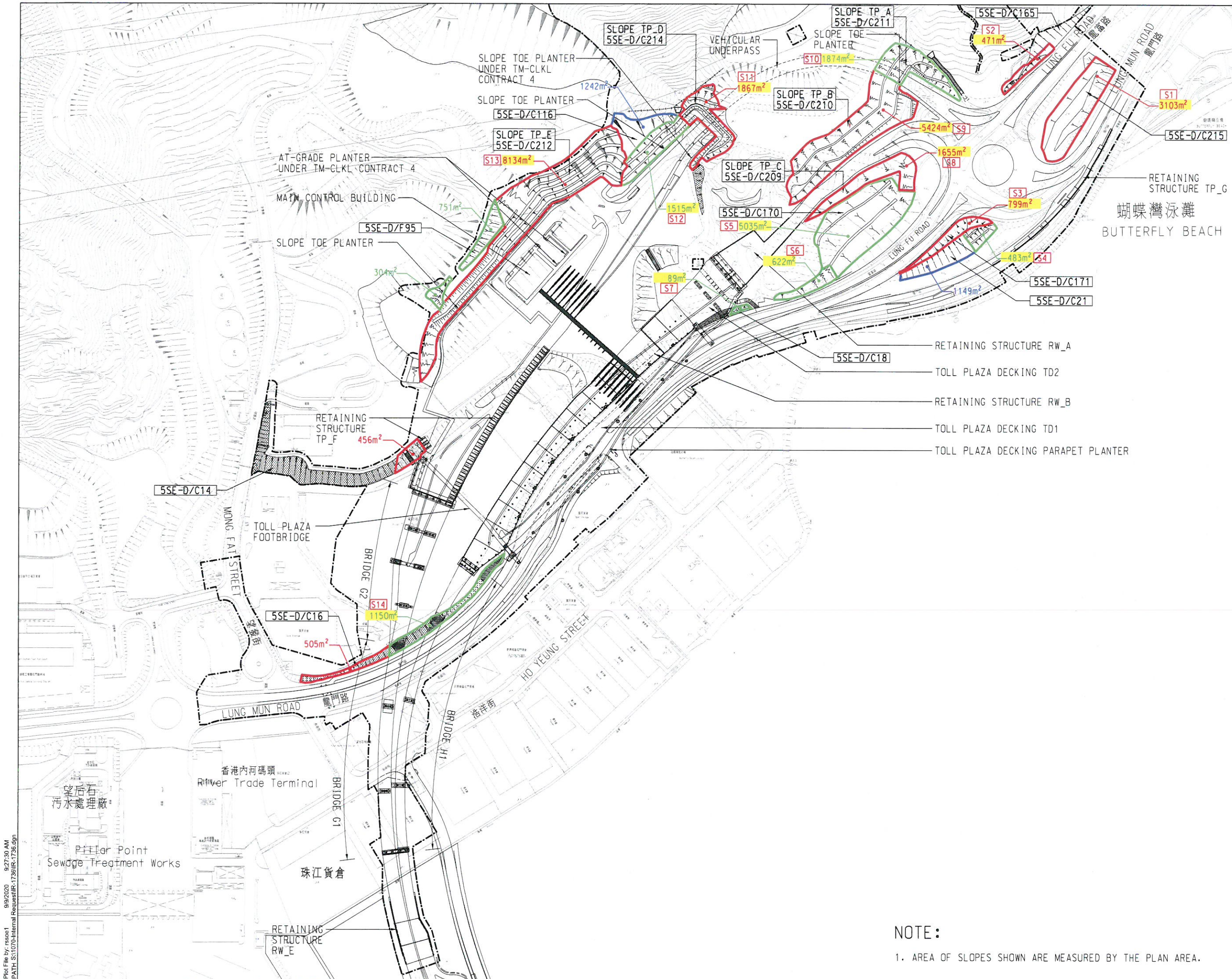
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60240249/C3/DF2210

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TITLE
LANDSCAPE AREA (NON-SLOPE)

SKETCH NO.
IR-1736A

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APPROVED AND CONFIRMED BY
 TITLE
AECOM_C3 (RLS)
 NAME
SAMMY TSOI
 SIGNATURE *[Signature]*

[Signature]

FOR INFORMATION

REV.	SEP. 20	FOR INFORMATION	CL	CHT	JL
DATE		DESCRIPTION	CHK.	PREP.	DRAWN

路政署
HIGHWAYS DEPARTMENT
 香港路政工程處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

PROJECT NO.
60240249

CONTRACT NO.
HY/2013/12

SCALE
A3 N.T.S

DATE
09 SEP 2020

AMENDMENT TO WORKING DRAWING NO.
60240249/C3/DF2208

CHECKED
CL

PREPARED
CHT

DRAWN
JL/TMC

TITLE
LANDSCAPE AREA (SLOPE)

SKETCH NO.
IR-1736

NOTE:
 1. AREA OF SLOPES SHOWN ARE MEASURED BY THE PLAN AREA.

Contract No. HMWSD 2/2020 (HY)

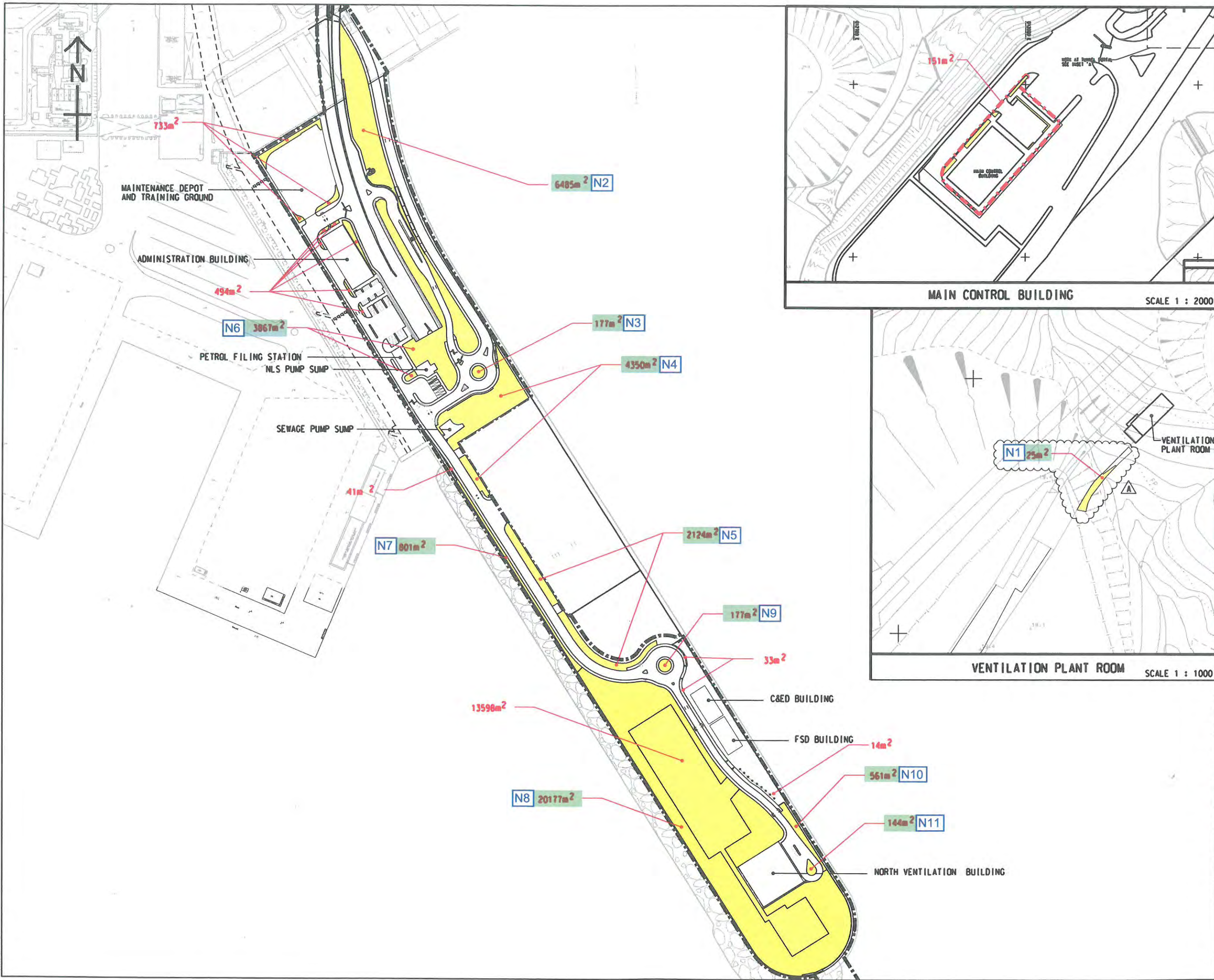
Establishment of Landscape Softworks for the Tuen Mun - Chek Lap Kok Link

Final Environmental Monitoring and Audit (EM&A) Report for Establishment

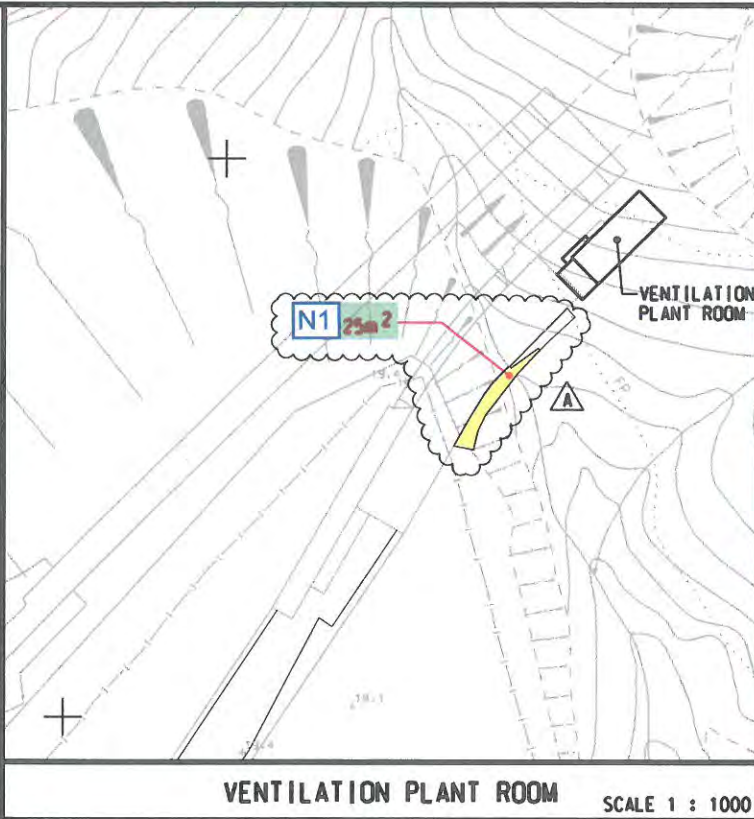
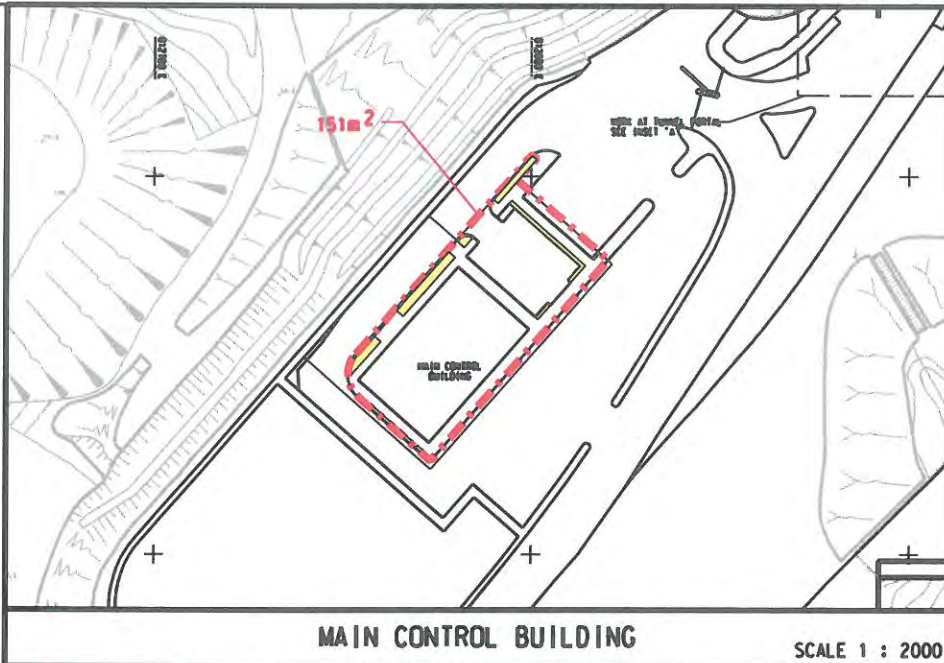
Monitoring of Project's Boundary Area (June 2020 to January 2023)



Planting Area under Contract HY/2017/10



LEGEND:
 - - - - - SITE BOUNDARY
 Landscape Area



APPROVED AND CONFIRMED BY
 TITLE: AECOM (SRLA)
 NAME: CANDY LAU
 SIGNATURE: *Candy*
 4-8-2021

FOR INFORMATION

REV.	DATE	DESCRIPTION	CHK.	PREP.	DRAWN
A	04/08/21	N1 REVISED	CL	CD	JW

CLIENT: 路政署 HIGHWAYS DEPARTMENT
 主要工程管理局(專責職務) Major Works Project Management Office (Special Duties)

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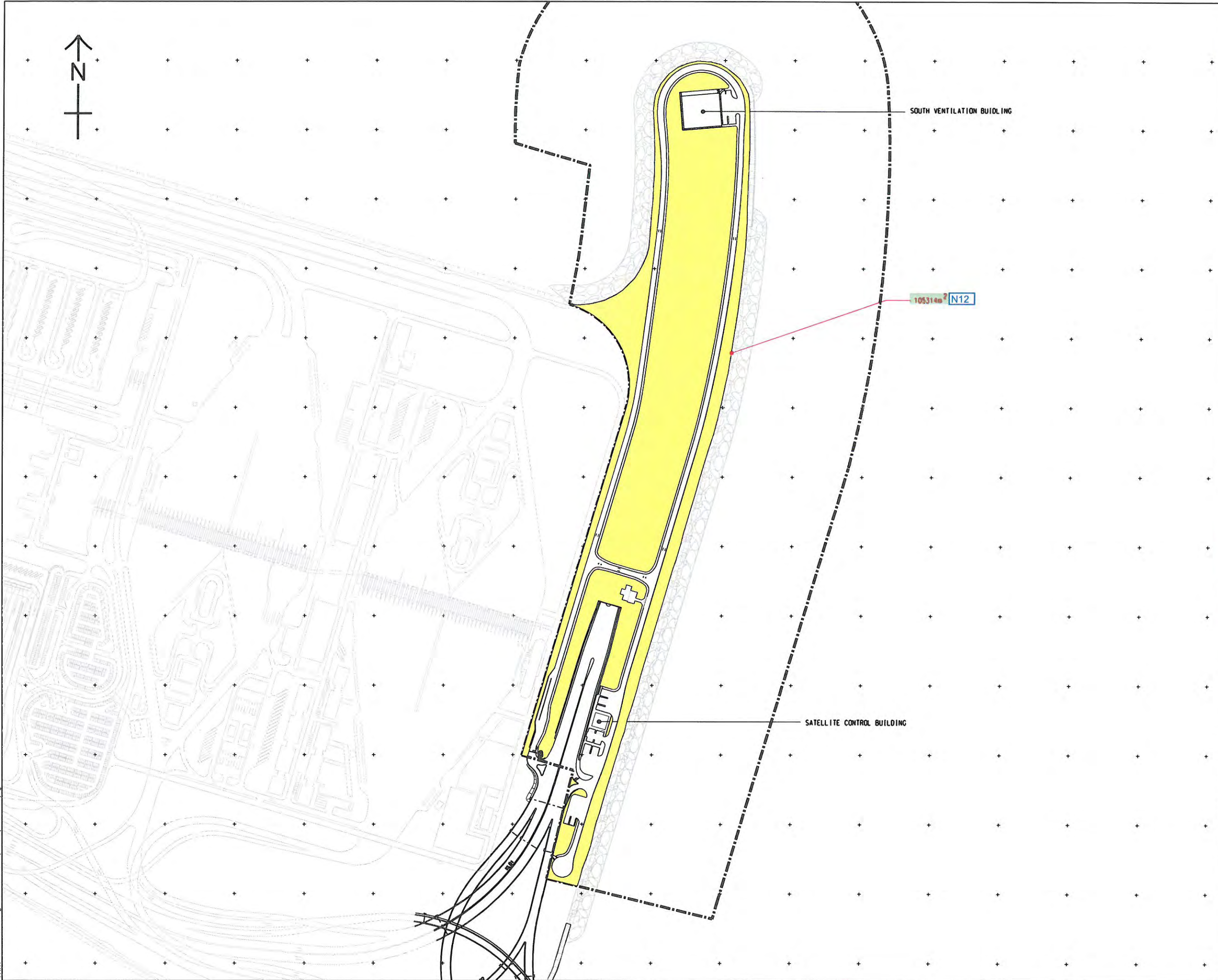
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PROJECT NO. 60240249	CONTRACT NO. HY/2017/10	
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SHEET 1 OF 2		
SKETCH NO. 60240249/C4/SK/1011A		

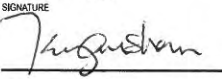
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LEGEND:

- SITE BOUNDARY
- LANDSCAPE AREA



APPROVED AND CONFIRMED BY
 TITLE
 AECOM (RLS)
 NAME
 SAMMY TSOI
 SIGNATURE


22-3-2021

FOR INFORMATION

REV.	DATE	DESCRIPTION	CHK.	PREP.	DRAWN

CLIENT

HIGHWAYS DEPARTMENT
 主要工程管理局 (專責事務)
 Major Works Project Management Office
 (Special Duties)

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - NORTHERN CONNECTION TUNNEL - BUILDINGS, ELECTRICAL AND MECHANICAL WORKS

PROJECT NO. **60240249** CONTRACT NO. **HY/2017/10**

SCALE **A3 1:4000** DATE **19 FEB. 2021**

AMENDMENT TO WORKING DRAWING NO.
NIL

CHECKED CL	PREPARED CD	DRAWN JW
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SKETCH TITLE
LANDSCAPE AREA

SHEET 2 OF 2

SKETCH NO.
60240249/C4/SK/1012