

**Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link –
Northern Connection Tunnel
Buildings, Electrical and Mechanical
Works**

Thirty-Third Monthly EM&A Report

11 March 2021

Environmental Resources Management
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Thirty-Third Monthly EM&A Report

Document Code: 0463091_33rd Monthly EM&A_20210311.doc

Client: Gammon		Project No: 0463091			
Summary: This document presents the Thirty-Third Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works.		Date: 11 March 2021			
		Approved by: 			
		Mr Craig Reid Partner			
		Certified by: 			
		Dr Jasmine Ng ET Leader			
	Thirty-Third Monthly EM&A Report	CW	JN	CAR	11/3/21
Revision	Description	By	Checked	Approved	Date
<p>This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.</p> <p>We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.</p>		<p>Distribution</p> <p><input type="checkbox"/> Internal</p> <p><input checked="" type="checkbox"/> Public</p> <p><input type="checkbox"/> Confidential</p>			
		 			

11 March 2021

By Fax (2783 0155) and By Post

AECOM Asia Company Limited
Supervising Officer's Representative Office
No. 8 Mong Fat Street, Tuen Mun, New Territories, Hong Kong

Attention: Mr. Desmond Fung

Dear Mr. Fung,

**Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB Hong Kong Link Road, HZMB Hong Kong Boundary Crossing Facilities, and
Tuen Mun-Chek Lap Kok Link – Investigation**

**Contract No. HY/2017/10
TM-CLKL – Northern Connection Tunnel Buildings, E&M Works
33rd Monthly EM&A Report for February 2021**

Reference is made to the Environmental Team's submission of the monthly EM&A report for February 2021 (ET's ref.: "0463091_33rdMonthly EM&A_20210311.doc" dated 11 March 2021) certified by the ET Leader and provided to us via e-mail on 11 March 2021.

Please be informed that we have no adverse comments on the captioned submission. We write to verify the captioned submission in accordance with Condition 4.4 of EP-354/2009/D.

Thank you for your attention. Please feel free to contact the undersigned or the ENPO Leader, Mr. Y H Hui, should you require further information.

Yours sincerely,
For and on behalf of
Ramboll Hong Kong Limited



Manson Yeung
Independent Environmental Checker
Tuen Mun-Chek Lap Kok Link

C.C.

HyD	Mr. Patrick Ng	(By Fax: 3188 6614)
HyD	Mr. Alan Ip	(By Fax: 3188 6614)
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ERM	Dr. Jasmine Ng	(By Fax: 2723 5660)
Gammon	Mr. Max Poon	(By Fax: 3520 0486)

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TABLE OF CONTENTS

	<i>EXECUTIVE SUMMARY</i>	<i>I</i>
1	<i>INTRODUCTION</i>	<i>1</i>
1.1	<i>BACKGROUND</i>	<i>1</i>
1.2	<i>SCOPE OF REPORT</i>	<i>2</i>
1.3	<i>ORGANIZATION STRUCTURE</i>	<i>2</i>
1.4	<i>SUMMARY OF CONSTRUCTION WORKS</i>	<i>2</i>
2	<i>EM&A RESULTS</i>	<i>4</i>
2.1	<i>AIR QUALITY</i>	<i>4</i>
2.2	<i>LANDFILL GAS HAZARD MONITORING</i>	<i>5</i>
2.3	<i>EM&A SITE INSPECTION</i>	<i>6</i>
2.4	<i>WASTE MANAGEMENT STATUS</i>	<i>7</i>
2.5	<i>ENVIRONMENTAL LICENSES AND PERMITS</i>	<i>7</i>
2.6	<i>IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES</i>	<i>9</i>
2.7	<i>SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT</i>	<i>9</i>
2.8	<i>SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS</i>	<i>9</i>
3	<i>FUTURE KEY ISSUES</i>	<i>10</i>
3.1	<i>CONSTRUCTION ACTIVITIES FOR THE COMING MONTH</i>	<i>10</i>
3.2	<i>KEY ISSUES FOR THE COMING MONTH</i>	<i>10</i>
4	<i>CONCLUSIONS AND RECOMMENDATIONS</i>	<i>11</i>
4.1	<i>CONCLUSIONS</i>	<i>11</i>

List of Appendices

- Appendix A Project Organization for Environmental Works
- Appendix B Construction Programmes
- Appendix C Implementation Schedule of Environmental Mitigation Measures (EMIS)
- Appendix D Summary of Action and Limit Levels
- Appendix E Event Action Plan
- Appendix F EM&A Monitoring Schedule
- Appendix G Calibration Certificate of Monitoring Equipment
- Appendix H Landfill Gas Monitoring Results and Graphical Presentation
- Appendix I Monthly Summary of Waste Flow Table
- Appendix J Cumulative Statistics on Exceedances, Complaints, Notifications of Summons and Successful Prosecutions
- Appendix K Landscape and Visual Monitoring for 24-Month Establishment Period

EXECUTIVE SUMMARY

Under *Contract No. HY/2017/10*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake Northern Connection Tunnel Buildings, Electrical and Mechanical Works of the Tuen Mun – Chek Lap Kok Link Project (TM-CLK Link Project) while AECOM Asia Company Limited was appointed by HyD as the Engineer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET) in accordance with *Environmental Permit No. EP-354/2009/A*. Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO). Subsequent applications for variation of environmental permits (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The construction phase of the Contract commenced on 7 June 2018 and will tentatively be completed by 2021. The impact monitoring of the EM&A programme, including air quality and environmental site inspections, were commenced on 7 June 2018.

This is the Thirty-Third Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 28 February 2021 for the *Contract No. HY/2017/10 Northern Connection Tunnel Buildings, Electrical and Mechanical Works* (the “Contract”) in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Land-based Works

- Architectural Builder’s Work and Finishes Works and Handover Inspection at Fire Services Department Building; and
- E&M works, Final finishing works and Handover Inspection at Customs and Excise Department Building.

A summary of monitoring and audit activities conducted in the reporting period is listed below ⁽¹⁾:

24-hour TSP Monitoring	5 sessions
1-hour TSP Monitoring	5 sessions
Landfill Gas Hazard Monitoring	21 days

(1) ET justification on the Contract Specific Environmental Monitoring and Audit activities under this Contract was submitted to ENPO on 11 September 2018

Joint Environmental Site Inspection 4 sessions

Summary of Breaches of Action/Limit Levels

Breaches of Action and Limit Levels for Air Quality

Two (2) Action Level exceedances for 1-hour TSP were recorded by the Environmental Team of Contract No. HY/2012/08 during the reporting period. No Action and Limit Level exceedance for 24-hour TSP was recorded.

Breaches of Action Level for Landfill Gas Hazard Monitoring

Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.

Environmental Complaints, Non-compliance & Summons

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

Reporting Change

Landscape and visual monitoring for 24-month establishment period conducted by Contract No. HY/2013/12 and HMWSD 2/2020 (HY) was reported in the EM&A report for this Contract in this reporting period.

Landscape and visual monitoring for 24-month establishment period for Portion XXII under this Contract was reported in this reporting period.

Upcoming Works for the Next Reporting Month

Works to be undertaken in the next monitoring period of March 2021 include the following:

Land-based Works

- Defect work at Fire Services Department Building; and
- Defect work at Customs and Excise Department Building.

Future Key Issues

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of March 2021 are mainly associated with waste management and landfill gas monitoring issues.

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.

An Environmental Impact Assessment (EIA) of TM-CLKL (the Project) was prepared in accordance with the EIA Study Brief (No. ESB-175/2007) and the *Technical Memorandum of the Environmental Impact Assessment Process (EIAO-TM)*. The EIA Report was submitted under the Environmental Impact Assessment Ordinance (EIAO) in August 2009. Subsequent to the approval of the EIA Report (EIAO Register Number AEIAR-146/2009), an Environmental Permit (EP-354/2009) for TM-CLKL was granted by the Director of Environmental Protection (DEP) on 4 November 2009, and EP variation (VEP) (EP-354/2009/A) was issued on 8 December 2010. Subsequent applications for variation of environmental permits (VEPs), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

Under *Contract No. HY/2017/10*, Gammon Construction Limited (GCL) is commissioned by the Highways Department (HyD) to undertake the Northern Connection Tunnel Buildings, Electrical and Mechanical Works of TM-CLKL while AECOM Asia Company Limited was appointed by HyD as the Engineer. For implementation of the environmental monitoring and audit (EM&A) programme under the Contract, ERM-Hong Kong, Limited (ERM) has been appointed as the Environmental Team (ET). Ramboll Hong Kong Ltd. was employed by HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO).

The construction phase of the Contract commenced on 7 June 2018 and will be tentatively completed by 2021. The impact monitoring phase of the EM&A programme, including air quality and environmental site inspections, commenced on 7 June 2018.

The general layout plan of the Contract components is presented in *Figures 1.1 & 1.2a to c*.

Project Management Initials: Designer: KATH Checked: SYLC Approved: CWN ISO A1 594mm x 841mm

Plot File by: Jerry Wong 23-Jan-18
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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

CLIENT

 路政署
 HIGHWAYS DEPARTMENT
 港珠澳大橋香港工程管理有限公司
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

CONSULTANT
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Figure 1.1

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.
A	JAN.18	TENDER ADDENDUM NO.1	SYLC
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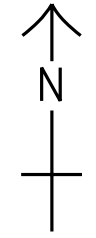
KEY PLAN

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

SHEET TITLE
 OVERALL SITE PLAN

SHEET NUMBER
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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

CLIENT
路政署 HIGHWAYS DEPARTMENT
港務局大橋香港工程發展處
Hong Kong - Zhuhai - Macao Bridge
Hong Kong Project Management Office

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Figure 1.2a

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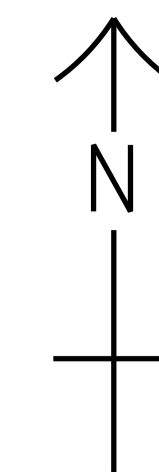
KEY PLAN

PROJECT NO. 60240249

CONTRACT NO. HY/2017/10

SHEET TITLE
ZONING PLAN (SHEET 1)

SHEET NUMBER
60240249/C4/7061A



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PROJECT
 項目

**TUEN MUN -
 CHEK LAP KOK LINK**

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

CLIENT
 業主



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DIMENSION UNIT
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KEY PLAN
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PROJECT NO.
 項目編號

60240249

CONTRACT NO.
 合約編號

HY/2017/10

SHEET TITLE
 圖號/圖名

ZONING PLAN
 (SHEET 2)

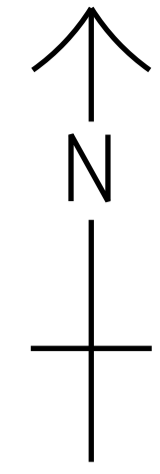
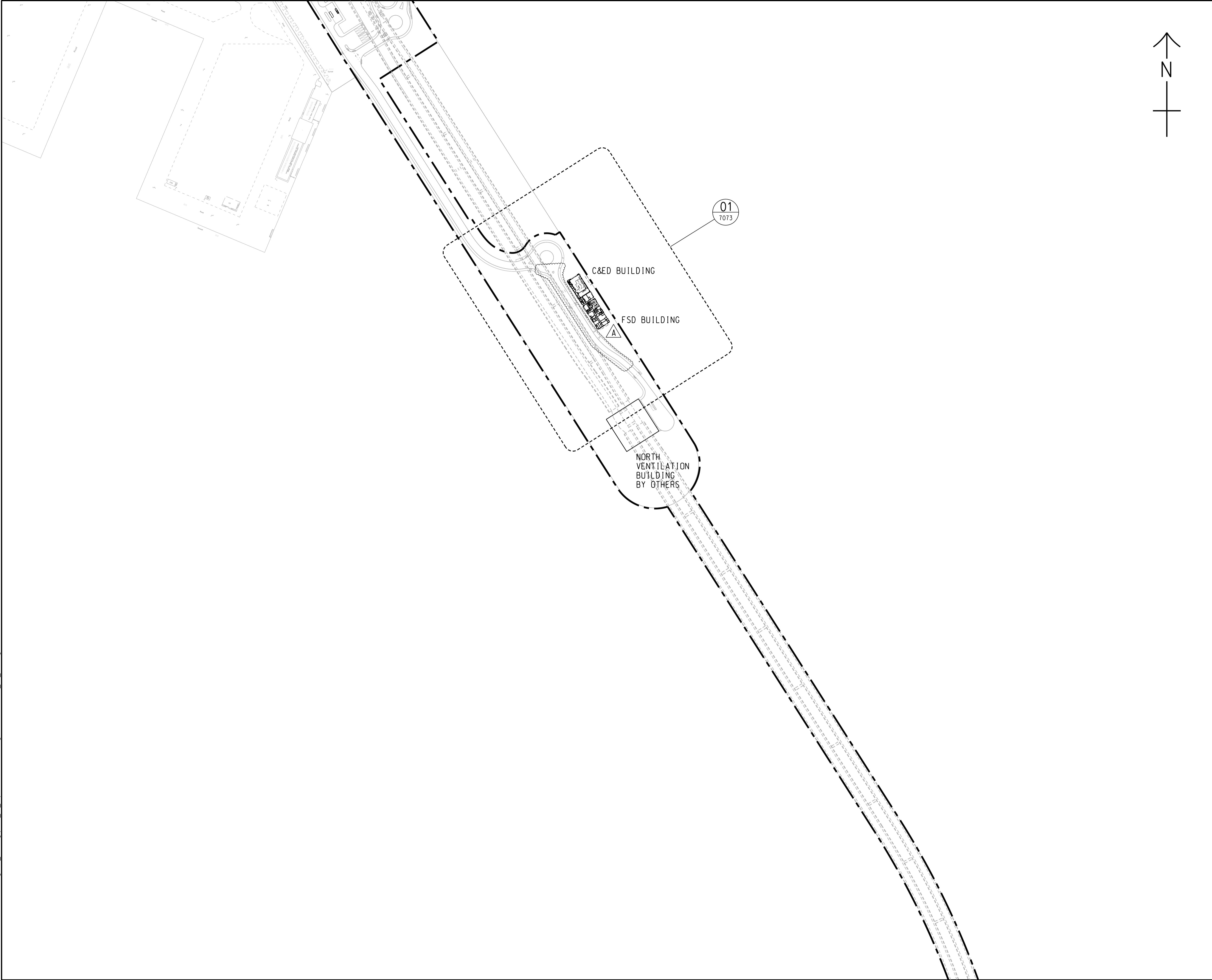
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PROJECT
 項目
TUEN MUN - CHEK LAP KOK LINK

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

CLIENT
 業主

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 港珠澳大橋香港工程管理局
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 Hong Kong Project Management Office

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Figure 1.2c

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DIMENSION UNIT
 尺寸單位
 MILLIMETRES

KEY PLAN
 索引圖

PROJECT NO.
 項目編號
 60240249

CONTRACT NO.
 合約編號
 HY/2017/10

SHEET TITLE
 圖紙名稱
 ZONING PLAN
 (SHEET 3)

SHEET NUMBER
 圖紙編號
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1.2 SCOPE OF REPORT

This is the Thirty-Third Monthly EM&A Report under the *Contract No. HY/2017/10 Tuen Mun – Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works*. This report presents a summary of the environmental monitoring and audit works in February 2021.

1.3 ORGANIZATION STRUCTURE

The organization structure of the Contract is shown in *Appendix A*. The key personnel contact names and contact details are summarized in *Table 1.1* below.

Table 1.1 *Contact Information of Key Personnel*

Party	Position	Name	Telephone	Fax
HyD (Highways Department)	Project Coordinator	Joseph Lee	2762 4958	3188 6614
	Senior Engineer	Cheng Pan	2762 3383	3188 6614
ER (AECOM Asia Company Limited)	Principle Resident Engineer	S. W. Fok	2293 6200	2293 6300
	Resident Engineer	Desmond Fung	2293 6200	2293 6300
ENPO / IEC (Ramboll Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2850	3465 2899
	IEC	Manson Yeung	9700 6767	3465 2899
Contractor (Gammon Construction Limited)	Site Agent	H. H. Lee	6096 6281	-
	Environmental Officer	Phoebe Ng	9869 1105	-
ET (ERM-HK)	ET Leader	Dr. Jasmine Ng	2271 3311	2723 5660

1.4 SUMMARY OF CONSTRUCTION WORKS

The construction phase of the Contract commenced on 7 June 2018. The three-month rolling construction programme is shown in *Appendix B*.

As informed by the Contractor, details of the major works carried out in this reporting month are listed below:

Land-based Works

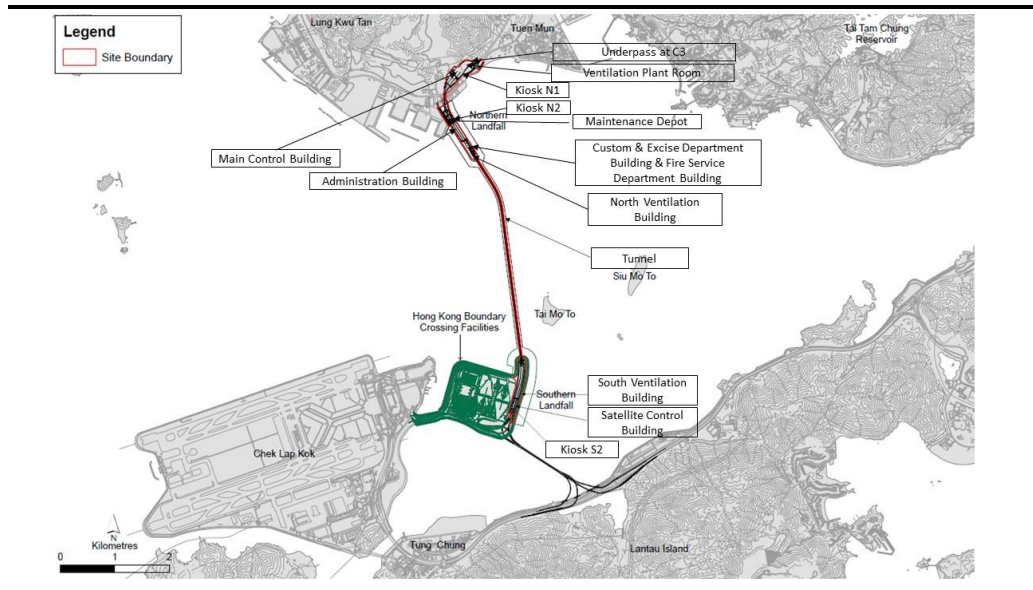
- Architectural Builder's Work and Finishes Works and Handover Inspection at Fire Services Department Building; and

- E&M works, Final finishing works and Handover Inspection at Customs and Excise Department Building.

The locations of the construction activities are shown in *Figure 1.3*. The Environmental Sensitive Receivers in the vicinity of the Contract are shown in *Figure 1.4*.

The implementation schedule of environmental mitigation measures is presented in *Appendix C*.

Figure 1.3 *Locations of Major Construction Activities in the Reporting Month*



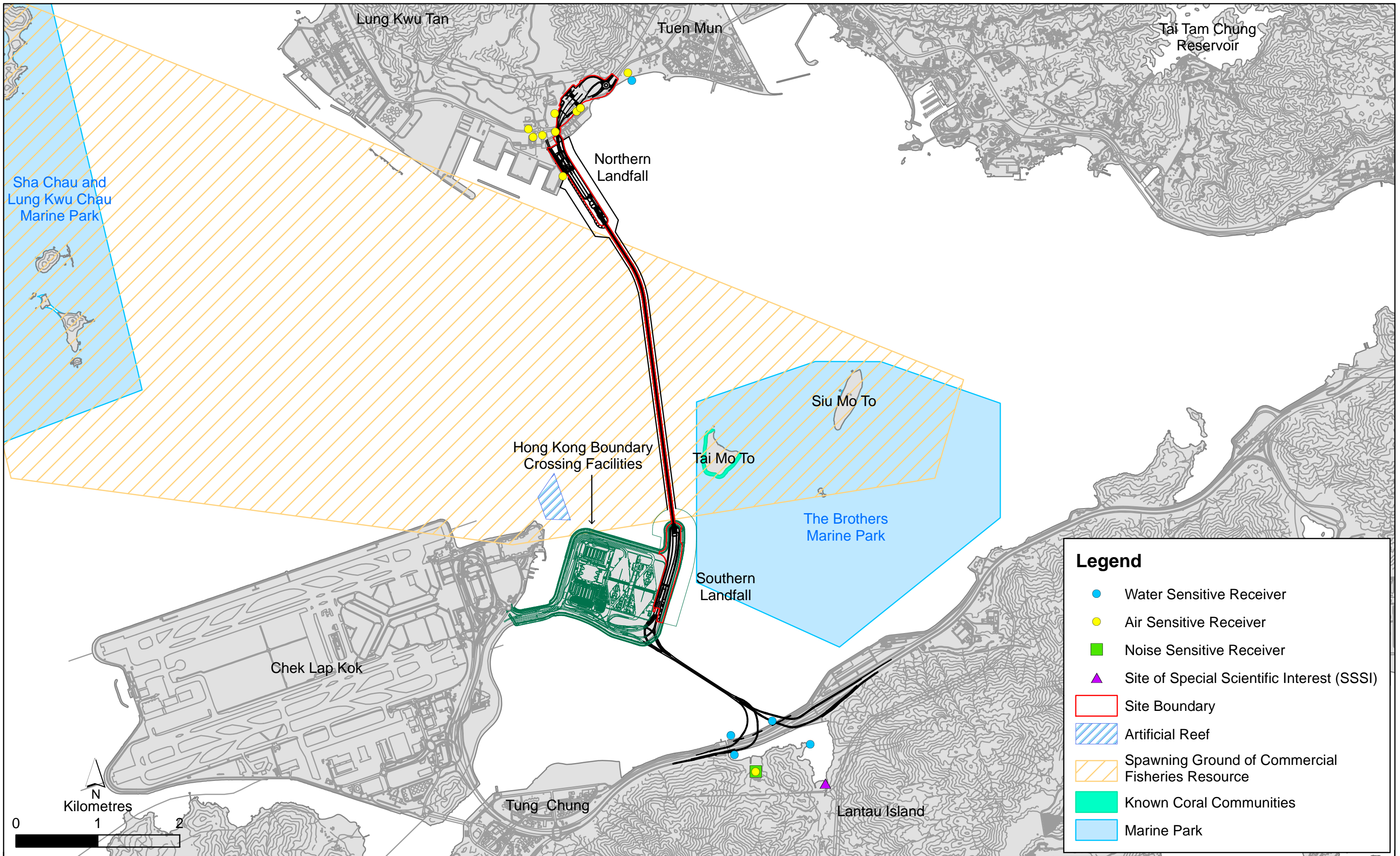


Figure 1.4

Environmental Sensitive Receivers in the Vicinity of the Project

The EM&A programme required environmental monitoring for air quality and environmental site inspections for air quality, water quality and waste management. The EM&A requirements and related findings for each component are summarized in the following sections

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

In accordance with the Updated EM&A Manual and the Enhanced TSP Monitoring Plan, impact 1-hour TSP monitoring was conducted three (3) times every six (6) days and impact 24-hour TSP monitoring was carried out once every six (6) days when the highest dust impact was expected. 1-hr and 24-hr TSP monitoring frequency was increased to three times per day every three days and daily every three days, respectively, as excavation works for launching shaft under *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* commenced on 24 October 2014.

Informed by the Environmental Team of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section*, excavation works for launching shaft were completed and notification of change on air quality monitoring frequency was submitted to EPD on 14 September 2020. 1-hr and 24-hr TSP monitoring frequency was changed to three times per day every six days and daily every six days, respectively, since 14 September 2020.

Results of air quality monitoring were adopted from the published EM&A data of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽¹⁾.

The Action and Limit Levels of the air quality monitoring were adopted from the published EM&A reports of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽²⁾. The Action and Limit Levels are provided in *Appendix D*.

The locations of the monitoring stations overlapped with *Contract No. HY/2012/08* are shown in *Figure 2.1* and presented in *Table 2.1*.

Table 2.1 *Locations of Impact Air Quality Monitoring Stations and its Corresponding Monitoring Requirements*

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
--------------------	------------------	----------	-------------	------------------------

(1) Published EM&A data for impact air quality monitoring by *Contract No. HY/2012/08* are available at: <http://www.hzmbenpo.com/>

(2) Published EM&A reports of *Contract No. HY/2012/08* are available at: <http://www.hzmbenpo.com/>

Monitoring Station	Monitoring Dates	Location	Description	Parameters & Frequency
ASR1	1, 5, 10, 16, 22 and 27 February 2021	Tuen Mun Fireboat Station	Office	TSP monitoring • 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 6 days
ASR5		Pillar Point Fire Station	Office	• 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 6 days
AQMS1		Previous River Trade Golf	Bare ground	Enhanced TSP monitoring (commenced on 24 October 2014 under <i>Contract No. HY/2012/08</i>) • 1-hour Total Suspended Particulates (1-hour TSP, $\mu\text{g}/\text{m}^3$), 3 times in every 3 days
ASR6		Butterfly Beach Laundry	Office	• 24-hour Total Suspended Particulates (24-hour TSP, $\mu\text{g}/\text{m}^3$), daily for 24-hour in every 3 days
ASR10		Butterfly Beach Park	Recreational uses	

2.1.2 Results and Observations

Results of air quality monitoring were adopted from the published EM&A data of *Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link – Northern Connection Sub-sea Tunnel Section* ⁽¹⁾.

Two (2) Action Level exceedances for 1-hour TSP were recorded by the Environmental Team of *Contract No. HY/2012/08* during the reporting period. No Action and Limit Level exceedance for 24-hour TSP was recorded. The exceedances were considered not related to this Contract upon further investigation and the investigation reports are presented in *Appendix J*. No action is required to be undertaken in accordance with the Event Action Plan as presented in *Appendix E*.

2.2 LANDFILL GAS HAZARD MONITORING

In accordance with the Updated EM&A Manual of the TM-CLK Link Project, landfill gas hazard monitoring should be performed to ensure that the works area at Pillar Point Valley (PPV) Landfill is free of landfill gas. A total of 21 days of landfill gas hazard monitoring was conducted at Main Control Building during 1 to 28 February 2021 (*Appendix F*).

The landfill gas hazard monitoring was conducted in accordance to the Updated EM&A Manual with a Altair 5X Gas Detector. The calibration certificate for the equipment is presented in *Appendix G*.

The Action Level of the landfill gas hazard monitoring was adopted from the Updated EM&A Manual of the TM-CLK Link Project and are provided in *Appendix D*.

(1) Published EM&A data for impact air quality monitoring by *Contract No. HY/2012/08* are available at: <http://www.hzmbenpo.com/>

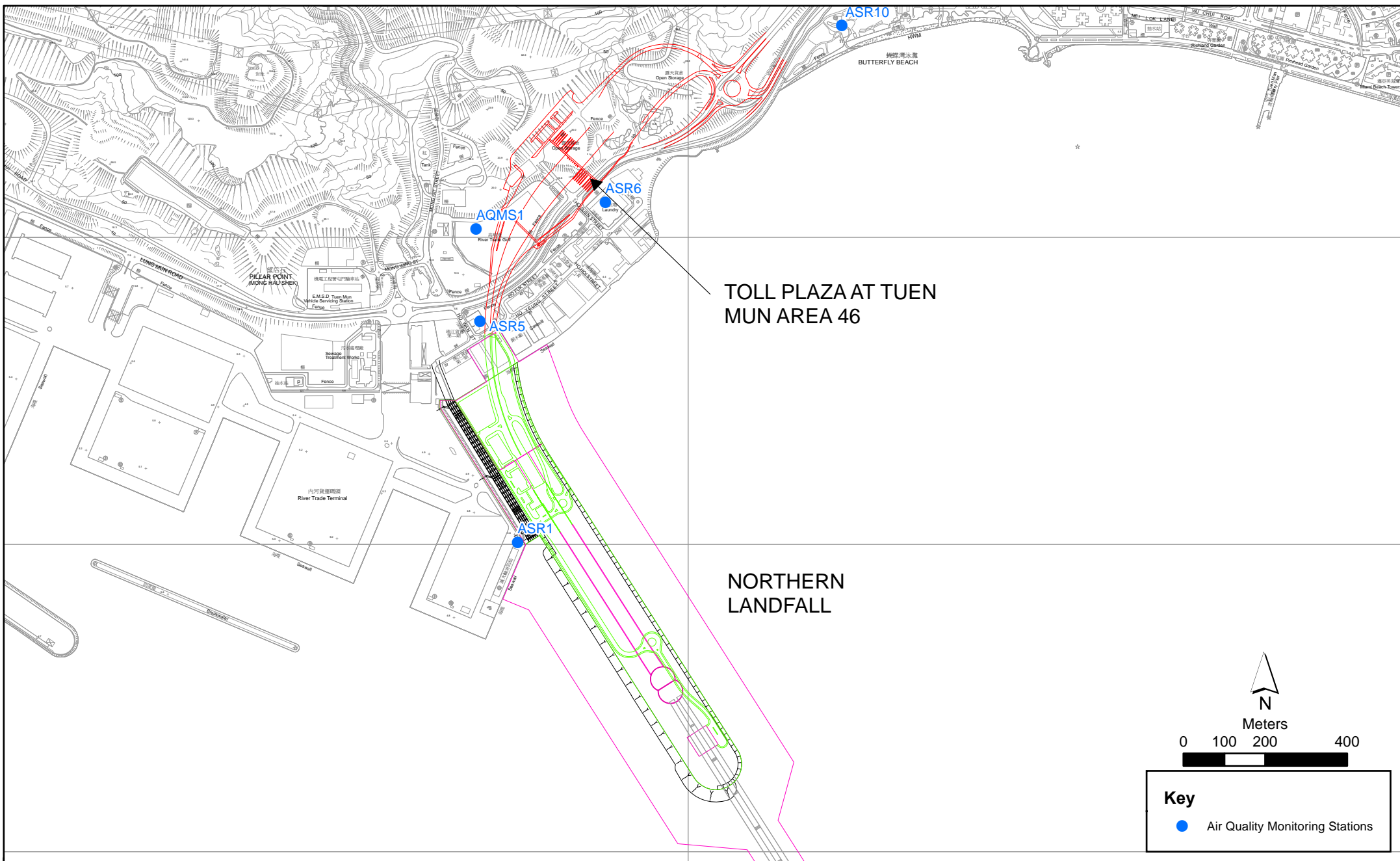


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
 (Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
 Northern Connection Sub-sea Tunnel Section)

2.2.1 Results and Observations

Results for landfill gas hazard monitoring are summarized in *Table 2.2* and the monitoring data is provided in *Appendix H*.

Results of methane, oxygen and carbon dioxide in the reporting month complied with the Action Level. No action as stated in the Updated EM&A Manual of the TM-CLK Link Project and presented in *Appendix D* is required to be undertaken.

Table 2.2 Summary of Landfill Gas Hazard Monitoring Results in the Reporting Period

	Average (%)	Range (%)	Action Level (%) ^(a)
Methane	0	0	10/20
Oxygen	20.8	20.8-20.8	19/18
Carbon Dioxide	0.03	0.03-0.03	0.5/1.5

Notes:

- (a) Depending on the results of the measurements, actions required will vary. Actions in the event of landfill gas being detected in excavation/confined area was adopted from the Updated EM&A Manual of the TM-CLK Link Project.

2.3 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, four (4) site inspections were carried out on 4, 10, 19 and 26 February 2021.

Key observations and recommendations during the site inspections in this reporting period are summarized in *Table 2.3*.

Table 2.3 Specific Observations and Recommendations during the Weekly Site Inspection in this Reporting Month

Inspection Date	Observations	Recommendations/ Remarks
4 February 2021	Container Village <ul style="list-style-type: none"> Dry road was observed. 	Container Village <ul style="list-style-type: none"> The Contractor was reminded to provide watering on dry road.
10 February 2021	Container Village <ul style="list-style-type: none"> Oil leakage was observed near the generator at Container Village. Customs and Excise Department Building <ul style="list-style-type: none"> Chemical container was observed without drip tray. 	Container Village <ul style="list-style-type: none"> The Contractor was reminded to remove oil leakage as chemical waste. Customs and Excise Department Building <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray for chemical container.
19 February 2021	Customs and Excise Department Building <ul style="list-style-type: none"> Chemical containers were observed not placed in drip tray. Accumulated oil was observed in drip tray. 	Customs and Excise Department Building <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray for chemical containers. The Contractor was reminded to clean the drip tray regularly.

Inspection Date	Observations	Recommendations/ Remarks
26 February 2021	Customs and Excise Department Building <ul style="list-style-type: none"> Chemical containers were observed not placed in drip tray. Wheel washing facility near the site office was not maintained properly. 	Customs and Excise Department Building <ul style="list-style-type: none"> The Contractor was reminded to provide drip tray for chemical containers. The Contractor was reminded to maintain the wheel washing facility.

The Contractor has rectified all of the observations as identified during environmental site inspections in the reporting month.

2.4 WASTE MANAGEMENT STATUS

The Contractor had submitted application form for registration as chemical waste producer under the Contract. Sufficient numbers of receptacles were available for general refuse collection and sorting.

Wastes generated during this reporting period included mainly construction wastes (inert and non-inert). Reference has been made to the waste flow table prepared by the Contractor (*Appendix I*). The quantities of different types of wastes are summarized in *Table 2.4*.

Table 2.4 Quantities of Different Waste Generated in the Reporting Month

Month/Year	Inert C&D Materials ^(a) (m ³)	Inert Construction Waste Re-used (m ³)	Non-inert Construction Waste ^(b) (kg)	Imported Fill (m ³)	Recyclable Materials ^(c) (kg)	Chemical Wastes (kg)
February 2021	7,720	0	18,910	0	0	0

Notes:

- (a) Inert construction wastes include hard rock and large broken concrete disposed as public fill.
- (b) Non-inert construction wastes include general refuse disposed at landfill.
- (c) Recyclable materials include metals, paper, cardboard, plastics, timber and others.

The Contractor was advised to properly maintain on site C&D materials and waste collection, sorting and recording system, dispose of C&D materials and wastes at designated ground and maximize reuse/ recycle of C&D materials and wastes. The Contractor was also reminded to properly maintain the site tidiness and dispose of the wastes accumulated on site regularly and properly.

For chemical waste containers, the Contractor was reminded to treat properly and store temporarily in designated chemical waste storage area on site in accordance with the *Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes*.

2.5 ENVIRONMENTAL LICENSES AND PERMITS

The status of environmental licensing and permit is summarized in *Table 2.5* below.

Table 2.5 Summary of Environmental Licensing and Permit Status

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	N/A	HyD	Tuen Mun- Chek Lap Kok Link
APCO Construction Dust Notification	433493	14 May 2018	N/A	GCL	For Tuen Mun working area
Construction Waste Billing Account	7030836	15 May 2018	N/A	GCL	N/A
Chemical Waste Producer Registration	5213-422-G2827-01	13 June 2018	N/A	GCL	N/A
Discharge License under WPCO for Buildings at C2 area	WT00031783-2018	22 October 2018	31 October 2023	GCL	Sampling Frequency: Bimonthly
Discharge License under WPCO for Buildings at C3 area	WT00032062-2018	30 October 2018	31 October 2023	GCL	Sampling Frequency: Quarterly
Discharge License under WPCO for Southern Landfall	WT00034878-2019	1 April 2020	31 March 2025	GCL	Sampling Frequency: Quarterly
Construction Noise Permit	GW-RW0003-21	30 January 2021	29 July 2021	GCL	For Northern Landfall and Tunnel
Construction Noise Permit	GW-RS0904-20	16 December 2020	14 June 2021	GCL	For HKBCF Area
Construction Noise Permit	GW-RW0578-20	31 December 2020	14 June 2021	GCL	For Lung Mun Road near Ho Wan Street

2.6 *IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES*

In response to the site audit findings, the Contractors carried out all corrective actions.

A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in *Appendix C*. The necessary mitigation measures relevant to this Contract were implemented properly.

The landscape and visual (L&V) mitigation measures were also monitored on weekly basis in the reporting period. The monitoring status is summarized in *Appendix C*.

2.7 *SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT*

Two (2) Action Level exceedances for 1-hour TSP were recorded by the Environmental Team of Contract No. *HY/2012/08* during the reporting period. No Action and Limit Level exceedance for 24-hour TSP was recorded.

Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.

Cumulative statistics are provided in *Appendix J*.

2.8 *SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS*

The Environmental Complaint Handling Procedure is provided in *Figure 2.2*.

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

Statistics on complaints, notifications of summons, successful prosecutions are summarized in *Appendix J*.

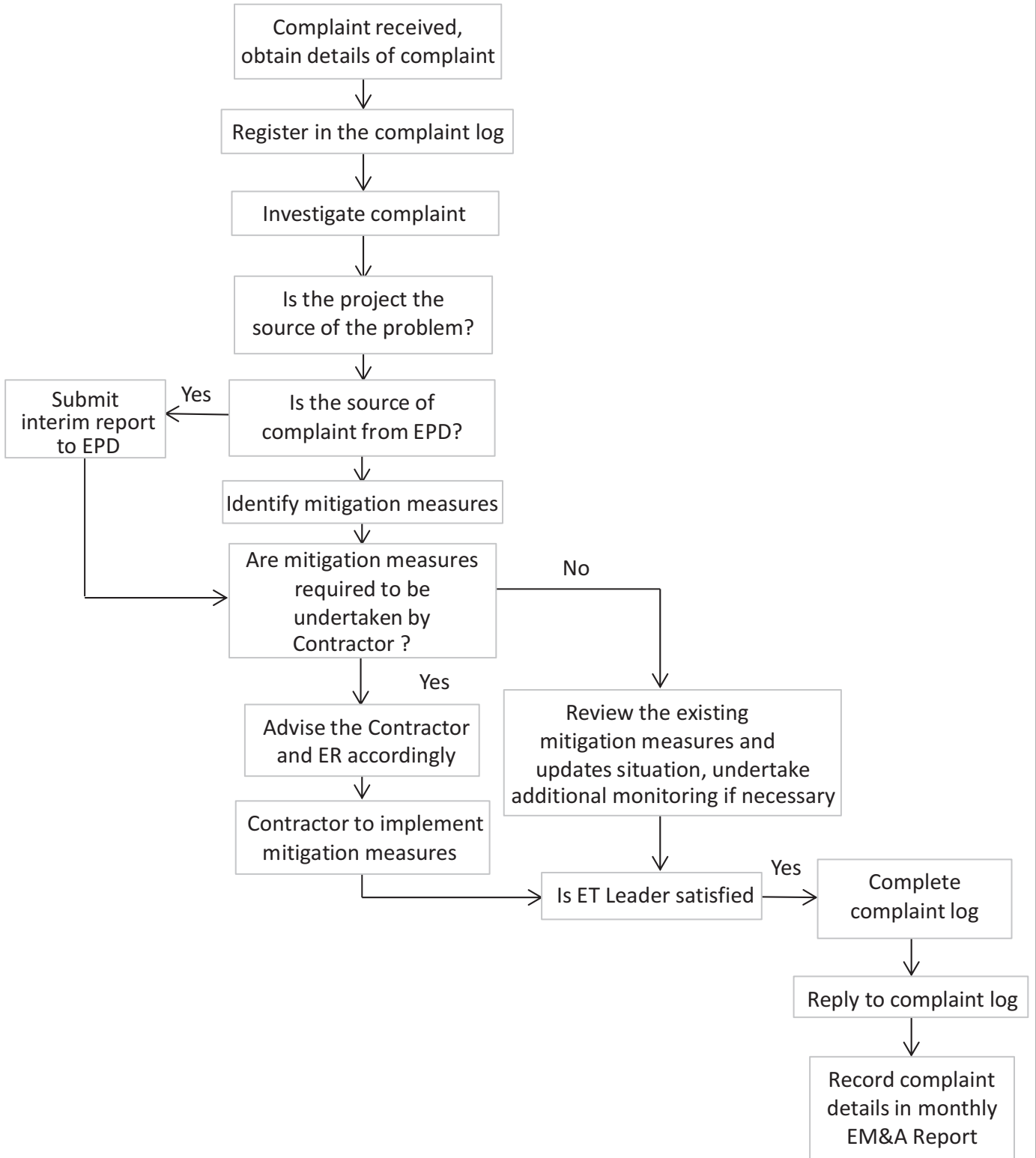


Figure 2.2

Environmental Complaint Handling Procedure

3 *FUTURE KEY ISSUES*

3.1 *CONSTRUCTION ACTIVITIES FOR THE COMING MONTH*

As informed by the Contractor, the major works for the Contract in March 2021 will be:

Land-based Works

- Defect work at Fire Services Department Building; and
- Defect work at Customs and Excise Department Building.

3.2 *KEY ISSUES FOR THE COMING MONTH*

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of March 2021 are mainly associated with waste management and landfill gas monitoring issues.

4.1 CONCLUSIONS

This Thirty-Third Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 28 February 2021, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/D.

Air quality (including 1-hour TSP and 24-hour TSP) monitoring were carried out in this reporting month.

Two (2) Action Level exceedances for 1-hour TSP were recorded by the Environmental Team of Contract No. *HY/2012/08* during the reporting period. No Action and Limit Level exceedance for 24-hour TSP was recorded.

Results of landfill gas hazard monitoring in the reporting month complied with the Action Level.

Environmental site inspection was carried out four (4) times in February 2021. Remedial actions recommended for the deficiencies identified during the site audits were properly implemented by the Contractor.

Landscape and visual monitoring for 24-month establishment period conducted by Contract No. *HY/2013/12* and *HMWSD 2/2020 (HY)* was reported in the EM&A report for this Contract in this reporting period.

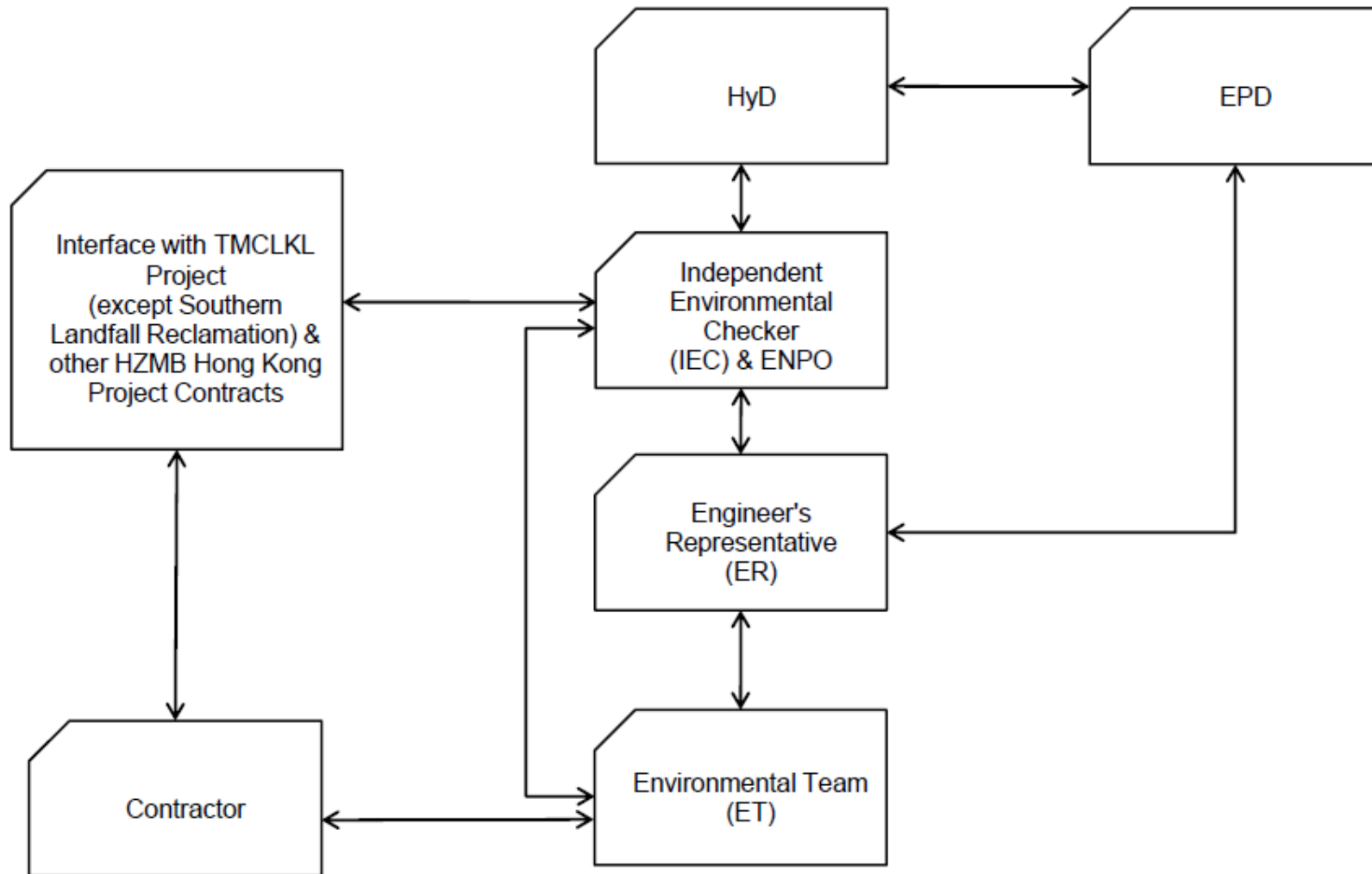
Landscape and visual monitoring for 24-month establishment period for Portion XXII under this Contract was reported in this reporting period.

There was no environmental complaint, notification of summons or successful prosecution recorded in the reporting period.

The ET will keep track on the construction works to confirm compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Appendix A

Project Organization for Environmental Works



↔ Line of Communication

Appendix B

Construction Programme

Appendix C

Environmental Mitigation and Enhancement Measure Implementation Schedules

(In reference to CINOTECH (2011) Agreement No.
CE35/2011 EP Baseline Environmental Monitoring for
Hong Kong-Zhuhai-Macao Bridge Tuen Mun-Chek Lap
Kok Link - Investigation. Updated EM&A Manual for
Tuen Mun-Chek Lap Kok Link)

Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
Air Quality									
4.8.1	3.8	Watering of the construction sites in Lantau for 8 times/day and in Tuen Mun for 12 times/day to reduce dust emissions by 87.5% and 91.7% respectively and shall be undertaken.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall, to the satisfaction of the Engineer, install effective dust suppression measures and take such other measures as may be necessary to ensure that at the Site boundary and any nearby sensitive receiver, dust levels are kept to acceptable levels.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	The Contractor shall not burn debris or other materials on the works areas.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	In hot, dry or windy weather, the watering programme shall maintain all exposed road surfaces and dust sources wet.	All unpaved haul roads / throughout construction period in hot, dry or windy weather	Contractor	TMEIA Avoid smoke impacts and disturbance		Y		<>
4.8.1	3.8	Where breaking of oversize rock/concrete is required, watering shall be implemented to control dust. Water spray shall be used during the handling of fill material at the site and at active cuts, excavation and fill sites where dust is likely to be created.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	Open dropping heights for excavated materials shall be controlled to a maximum height of 2m to minimise the fugitive dust arising from unloading.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	During transportation by truck, materials shall not be loaded to a level higher than the side and tail boards, and shall be dampened or covered before transport.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin. The tarpaulin shall be properly secured and shall extend at least 300mm over the edges of the side and tail boards.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.8.1	3.8	No earth, mud, debris, dust and the like shall be deposited on public roads. Wheel washing facility shall be usable prior to any earthworks excavation activity on the site.	All site exits / throughout construction period	Contractor	TMEIA Avoid dust		Y		✓

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

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

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Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
4.8.1	3.8	Areas of exposed soil shall be minimised to areas in which works have been completed shall be restored as soon as is practicable.	All exposed surfaces / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		✓
4.8.1	3.8	All stockpiles of aggregate or spoil shall be enclosed or covered and water applied in dry or windy condition.	All areas / throughout construction period	Contractor	TMEIA Avoid dust generation		Y		N/A
4.11	Section 3	EM&A in the form of 1 hour and 24 hour dust monitoring and site audit.	All representative existing ASRs / throughout construction period	Contractor	EM&A Manual		Y		N/A (Results adopted from published EM&A data of Contract No. HY/2012/08)
WATER QUALITY (LAND WORKS)									
6.10	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Sewage effluent and discharges from on- site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
6.10	5.8	Manholes (including any newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	All vehicles and plant should be cleaned before they leave the construction site to ensure that no earth, mud or debris is deposited by them on roads. A wheel washing bay should be provided at every site exit.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Vehicle and plant servicing areas, vehicle wash bays and lubrication facilities shall be located under roofed areas. The drainage in these covered areas shall be connected to foul sewers via a petrol interceptor in accordance with the requirements of the WPCO or collected for off site disposal.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	The Contractor shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance.	All areas/ throughout construction period	Contractor	TM-EIAO Waste Disposal Ordinance		Y		✓

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EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
6.10	-	All fuel tanks and chemical storage areas should be provided with locks and be sited on sealed areas. The storage areas should be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		<>
6.10	-	Surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		N/A
6.10	-	Roadside gullies to trap silt and grit shall be provided prior to discharging the stormwater into the marine environment. The sumps will be maintained and cleaned at regular intervals.	Roadside/design and operation	Design Consultant/ Contractor	TM-EIAO	Y		Y	N/A
6.10	Section 11	All construction works shall be subject to routine audit to ensure implementation of all EIA recommendations and good working practice.	All areas/ throughout construction period	Contractor	EM&A Manual		Y		✓
WASTE									
12.6		The Contractor shall identify a coordinator for the management of waste.	Contract mobilisation	Contractor	TMEIA		Y		✓
12.6		The Contractor shall prepare and implement a Waste Management Plan which specifies procedures such as a ticketing system, to facilitate tracking of loads and to ensure that illegal disposal of wastes does not occur, and protocols for the maintenance of records of the quantities of wastes generated, recycled and disposed. A recording system for the amount of waste generated, recycled and disposed (locations) should be established.	Contract mobilisation	Contractor	TMEIA, Works Branch Technical Circular No. 5/99 for the Trip-ticket System for Disposal of Construction and Demolition Material		Y		✓
12.6		The Contractor shall apply for and obtain the appropriate licenses for the disposal of public fill, chemical waste and effluent discharges.	Contract mobilisation	Contractor	TMEIA, Land (Miscellaneous Provisions) Ordinance (Cap 28); Waste Disposal Ordinance (Cap 354); Dumping at Sea Ordinance (Cap 466); Water Pollution Control Ordinance.		Y		✓
12.6	8.1	Training shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures including waste reduction, reuse and recycling.	Contract Mobilisation	Contractor	TMEIA		Y		✓

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Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	The extent of cutting operation should be optimised where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		<>
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction materials should avoid over-ordering and wastage.	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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*Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule*

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
12.6	8.1	The Contractor should recycle as many C&D materials (this is a waste section) as possible on-site. The public fill and C&D waste should be segregated and stored in separate containers or skips to facilitate the reuse or recycling of materials and proper disposal. Where practicable, the concrete and masonry should be crushed and used as fill materials. Steel reinforcement bar should be collected for use by scrap steel mills. Different areas of the sites should be considered for segregation and storage activities.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	All falsework will be steel instead of wood.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Chemical waste producers should register with the EPD. Chemical waste should be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes as follows: <i>f</i> suitable for the substance to be held, resistant to corrosion, maintained in good conditions and securely closed; <i>f</i> Having a capacity of <450L unless the specifications have been approved by the EPD; and w Chinese according to the instructions prescribed in Schedule 2 of the Regulations. <i>f</i> Clearly labelled and used solely for the storage of chemical wastes; <i>f</i> Enclosed with at least 3 sides; <i>f</i> Impermeable floor and bund with capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is greatest; <i>f</i> Adequate ventilation;	All areas / throughout construction period	Contractor	TMEIA		Y		✓

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Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	
		f Sufficiently covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and f Incompatible materials are adequately separated.							
12.6	8.1	Waste oils, chemicals or solvents shall not be disposed of to drain,	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Adequate numbers of portable toilets should be provided for on-site workers. Portable toilets should be maintained in reasonable states, which will not deter the workers from utilising them.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Night soil should be regularly collected by licensed collectors.	All areas / throughout construction period	Contractor	TMEIA		Y		N/A
12.6	8.1	General refuse arising on-site should be stored in enclosed bins or compaction units separately from C&D and chemical wastes. Sufficient dustbins shall be provided for storage of waste as required under the Public Cleansing and Prevention of Nuisances By-laws. In addition, general refuse shall be cleared daily and shall be disposed of to the nearest licensed landfill or refuse transfer station. Burning of refuse on construction sites is prohibited.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	All waste containers shall be in a secure area on hardstanding;	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Office wastes can be reduced by recycling of paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	Site Offices/ throughout construction period	Contractor	TMEIA		Y		✓
12.6	Section 8	EM&A of waste handling, storage, transportation, disposal procedures and documentation through the site audit programme shall be undertaken.	All areas / throughout construction period	Contractor	EM&A Manual		Y		✓

LANDSCAPE AND VISUAL

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

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Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

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
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		✓
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		✓

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

Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule

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	Re-vegetation of affected woodland/shrubland with native species (OM1)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Y		n/a. To be maintained by HyD
10.9	7.6	Tall buffer screen tree / shrub / climber planting should be incorporated to soften hard engineering structures and facilities (OM2)	All areas/detailed design/ during construction/ during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by 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 minimise unnecessary light spill (OM3)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD
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 / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD/ ArchSD
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 / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD/ ArchSD
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (OM6)	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be maintained by HyD/ ArchSD

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

*Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link
Northern Connection Tunnel Buildings, Electrical and Mechanical Works
Environmental Mitigation and Enhancement Measure Implementation Schedule*

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status *
						D	C	O	

*** Remarks:**

- ✓ Compliance of Mitigation Measures
- <> Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Contractor
- Δ 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 D

Summary of Action and Limit Levels

Table D1 *Action and Limit Levels for 1-hour and 24-hour TSP*

Parameters	Action	Limit
24 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 213 ASR5 = 238 AQMS1 = 213 ASR6 = 238 ASR10 = 214	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR1 = 331 ASR5 = 340 AQMS1 = 335 ASR6 = 338 ASR10 = 337	500

Table D2 *Actions in the Event of Landfill Gas being Detected in Excavation/ Confined Area*

Parameter	Measurement	Action
Oxygen	< 19%	- Ventilate to restore oxygen to > 19%
	< 18%	- Stop work - Evacuate personnel / prohibit entry - Increase ventilation to restore to > 19%
Methane	> 10% LEL (> 0.5% v/v)	- Prohibit hot work - Ventilate to restore methane to < 10% LEL
	> 20% LEL (>1% v/v)	- Stop work - Evacuate personnel / prohibit entry - Increase ventilation to restore to < 10%
Carbon Dioxide	> 0.5%	- Ventilate to restore oxygen to < 0.5%
	> 1.5%	- Stop work - Evacuate personnel / prohibit entry - Increase ventilation to restore to < 0.5%

Appendix E

Event Action Plan

Appendix E1 Event/ Action Plan for Air Quality

EVENT	ET ⁽¹⁾	ACTION		
		IEC ⁽¹⁾	ER ⁽¹⁾	Contractor
Action Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the ER. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 	<ol style="list-style-type: none"> 1. Notify Contractor. 	<ol style="list-style-type: none"> 1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the IEC and the ER. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IEC and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IEC and the ER. 7. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check the Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the ER on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate

EVENT	ACTION			
	ET ⁽¹⁾	IEC ⁽¹⁾	ER ⁽¹⁾	Contractor
Limit Level				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify the source. 2. Inform the ER and the DEP. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the ER on the effectiveness of the proposed remedial measures. 5. Supervise implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Notify the IEC, the ER, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC and the ER to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions 	<ol style="list-style-type: none"> 1. Discuss amongst the ER, ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.

and keep the IEC, the DEP and
the ER informed of the results.

8. If the exceedance stops, cease
additional monitoring.

Abbreviations: ET - Environmental Team, IEC - Independent Environmental Checker, ER - Engineer's Representative, DEP - Director of Environmental Protection

Appendix F

EM&A Monitoring Schedule

**HY/2017/10 Tuen Mun - Chek Lap Kok Link - Northern Tunnel Connection Buildings, E&M Works
Landfill Gas Monitoring Schedule (1 to 28 February 2021)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Feb	02-Feb	03-Feb	04-Feb	05-Feb	06-Feb
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
07-Feb	08-Feb	09-Feb	10-Feb	11-Feb	12-Feb	13-Feb
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)		
14-Feb	15-Feb	16-Feb	17-Feb	18-Feb	19-Feb	20-Feb
		LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
21-Feb	22-Feb	23-Feb	24-Feb	25-Feb	26-Feb	27-Feb
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
28-Feb						

**HY/2017/10 Tuen Mun - Chek Lap Kok Link - Northern Tunnel Connection Buildings, E&M Works
Landfill Gas Monitoring Schedule (1 to 31 March 2021)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Mar	02-Mar	03-Mar	04-Mar	05-Mar	06-Mar
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
07-Mar	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
14-Mar	15-Mar	16-Mar	17-Mar	18-Mar	19-Mar	20-Mar
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
21-Mar	22-Mar	23-Mar	24-Mar	25-Mar	26-Mar	27-Mar
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)
28-Mar	29-Mar	30-Mar	31-Mar			
	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)	LFG Monitoring (a.m. & p.m.)			

The schedule is subject to excavation work at Main Control Building. The schedule will be revised after reviewing the progress of the construction works or due to adverse (safety, weather etc) conditions.

Appendix G

Calibration Certificate of Monitoring Equipment



MSA Hong Kong Ltd.

25/F Jupiter Tower, 9 Jupiter Street, Hong Kong

Tel 852-22587588 Fax 25478780 Email info.hk@msasafety.com Website www.msasafety.com

Ref. 2020/11/056
Customer Gammon Constructions Limited

Date: 26-Nov-20

CERTIFICATE FOR CALIBRATION CHECK TEST

Model	Serial No.	Calibration Check Gas	Regulator	Full Scale	Response
Altair 5XIR	145986	1.45% Methane,	.25litre/min	100% LEL	29%LEL
		15% Oxygen		30% Vol	15% O2
		2.5% Carbon Dioxide		9.99%	2.5% CO2

Remarks: Regular inspection completed. Calibration passed

MSA Hong Kong Ltd. certify that instrument/s listed above has/have been calibrated check tested on:
26-Nov-20

This instrument was calibrated in accordance with all requirements of the specifications of MSA.

This instrument must be calibration checked prior to use in accordance with the instruction manual.

This instrument was calibrated using NIST traceable equipment and was in accordance with all requirements of the drawings and specifications of MSA.

For and on behalf of
MSA Hong Kong Ltd.



Authorised Signature

Appendix H

Landfill Gas Monitoring
Results and Graphical
Presentation

Landfill Gas Monitoring Results on Methane Level

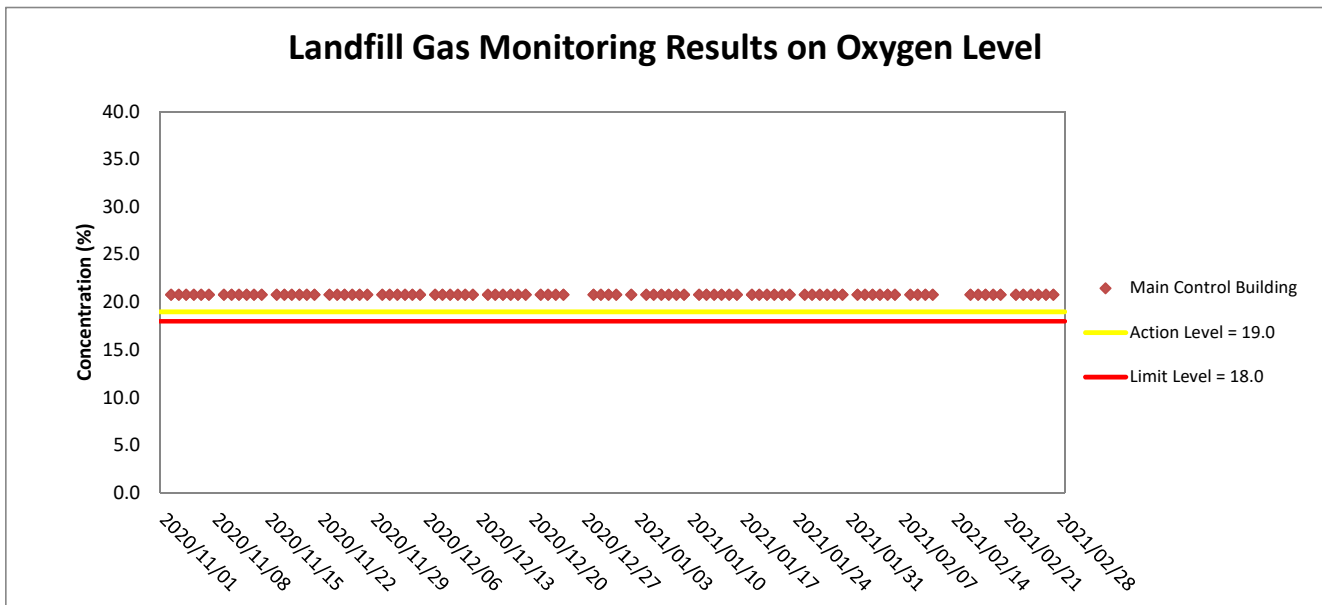
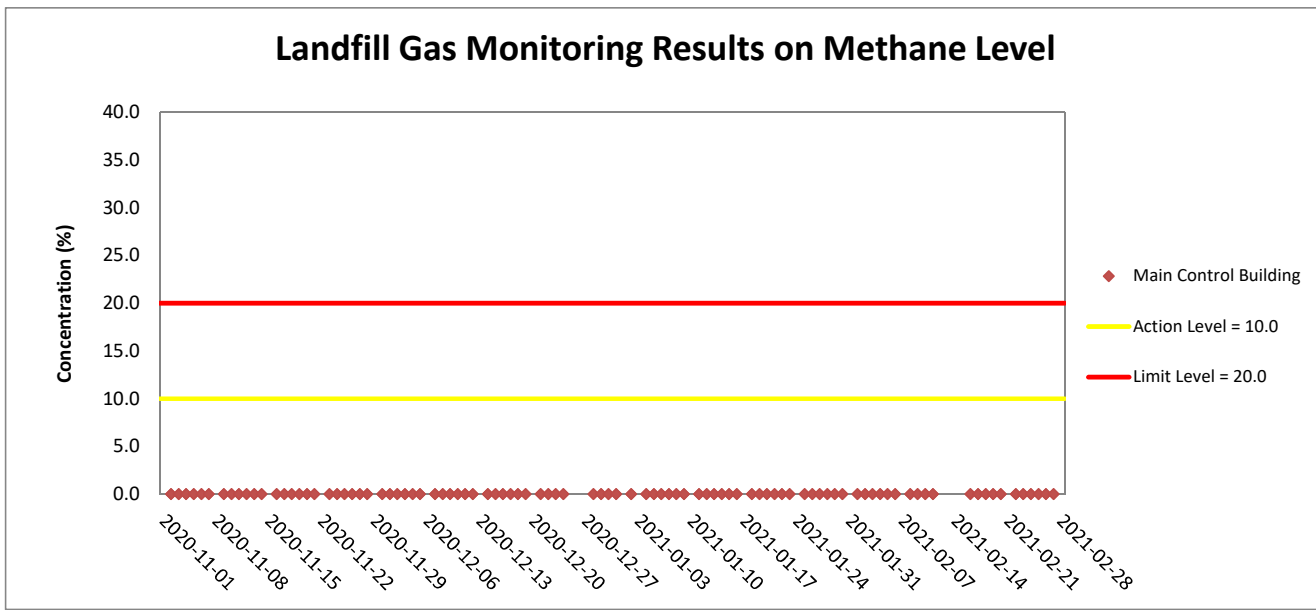
Project	Works	Date(yyyy-mm-dd)	Monitoring Location	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	8:15	0	10.0	20.0
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	13:15	0		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	8:15	0		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	13:15	0		
				Average	0		
				Min.	0		
				Max.	0		

Landfill Gas Monitoring Results on Oxygen Level

Project	Works	Date(yyy-mm-dd)	Station	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	8:15	20.8	19.0	18.0
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	13:15	20.8		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	8:15	20.8		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	13:15	20.8		
				Average	20.8		
				Min.	20.8		
				Max.	20.8		

Landfill Gas Monitoring Results on Carbon Dioxide Level

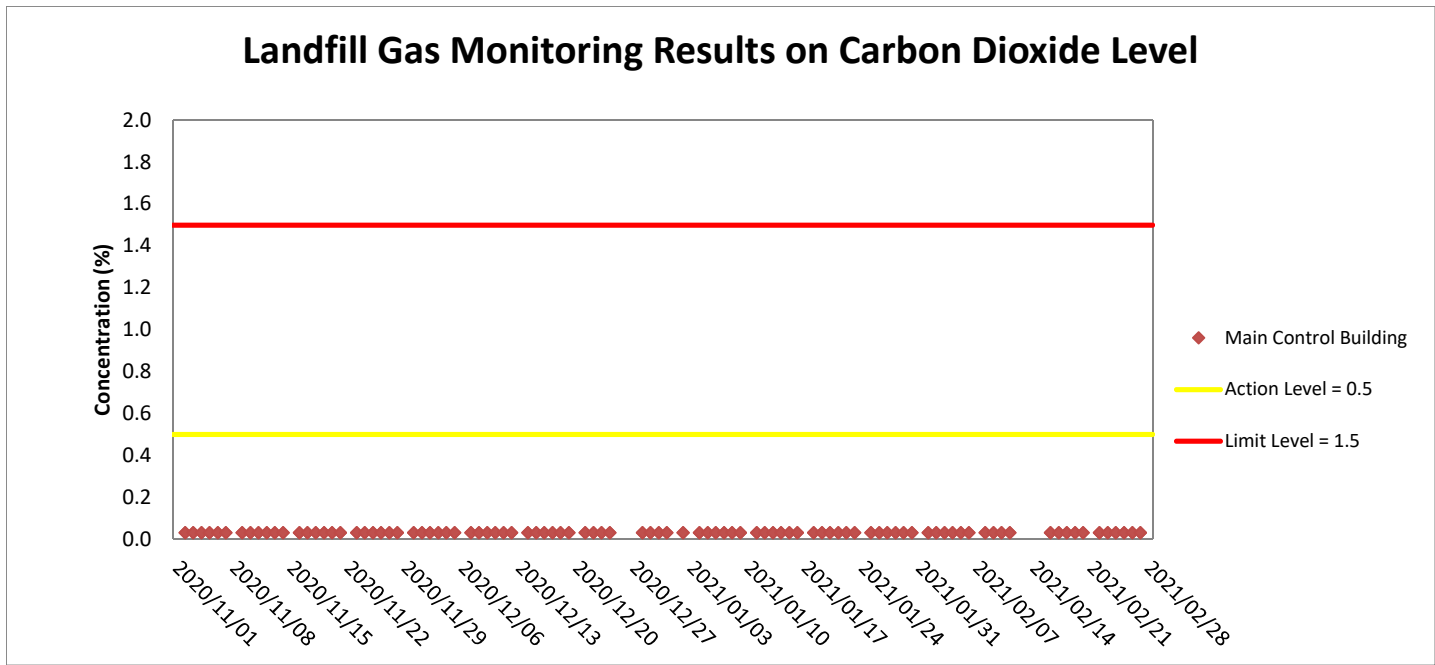
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Results (%)	Action Level (%)	Limit Level (%)
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	8:15	0.03	0.5	1.5
TMCLKL	HY/2017/10	2021-02-01	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-02	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-03	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-04	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-05	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-06	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-08	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-09	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-10	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-11	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-16	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-17	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-18	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-19	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-20	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-22	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-23	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-24	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-25	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-26	Main Control Building	13:15	0.03		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	8:15	0.03		
TMCLKL	HY/2017/10	2021-02-27	Main Control Building	13:15	0.03		
				Average	0.03		
				Min.	0.03		
				Max.	0.03		



Weather condition within the reporting period was sunny to rainy

Major construction works undertaken within the reporting period include

- ABWF Works and Handover Inspection at Fire Services Department Building;
- E&M works, Final finishing works and Handover Inspection at Customs and Excise Department Building



Weather condition within the reporting period was sunny to rainy

Major construction works undertaken within the reporting period include

- ABWF Works and Handover Inspection at Fire Services Department Building;
- E&M works, Final finishing works and Handover Inspection at Customs and Excise Department Building

Appendix I

Monthly Summary of Waste Flow Table

Contract No. : HY/2017/10

Tuen Mun Chek Lap Kok Link – Northern Connection Tunnel Buildings, Electrical and Mechanical Works
 Monthly Summary Waste Flow Table for 2021 (Year)

Month/Material	Actual Quantities of Inert C&D Materials Generation										Actual Quantities of C&D wastes Generation		Actual Quantities of Recyclables Generation			
	Total Quantity Generated	Hard Rock and Large Broken Concrete			Reused in the Contract	Reused in other Projects	Disposed as Public Fills			Imported Fill	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
		sub-total	Broken Concrete	Milled Asphalt			sub-total	sub-total	sub-total							
Unit	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000m ³)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)
Jan	-	-	-	0.000	-	-	-	-	-	-	-	46.750	-	-	-	-
Feb	7.720	-	-	0.000	-	-	7.720	-	7.720	-	-	18.910	-	-	-	-
Mar																
Apr																
May																
Jun																
SUB-TOTAL	7.720	0.000	0.000	0.000	0.000	0.000	7.720	0.000	7.720	0.000	0.000	65.660	0.000	0.000	0.000	0.000
Jul																
Aug																
Sep																
Oct																
Nov																
Dec																
TOTAL	7.720	-	-	0.000	0.000	0.000	7.720	-	7.720	0.000	0.000	65.660	0.000	0.000	0.000	0.000

Notes :

- 1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
- 2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- 3 - Broken concrete for recycling into aggregates.
- 4 - Assumed 5 kg per damaged water-filled barrier.
- 5 - Disposed as Public Fills includes Hard Rock and Large Broken Concrete.

Appendix J

Cumulative Statistics on
Exceedances, Complaints,
Notifications of Summons
and Successful Prosecutions

Appendix J1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	Total No. recorded since contract commencement
1-Hr TSP	Action	2	56
	Limit	0	11
24-Hr TSP	Action	0	4
	Limit	0	0
Landfill gas hazard monitoring			
	• Methane	0	0
	• Oxygen	0	0
	• Carbon Dioxide	0	0

Appendix J2 Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Successful Prosecutions
This Reporting Month (February 2021)	0	0	0
Total No. received since contract commencement	1	0	0

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To Ramboll Hong Kong Limited (ENPO)

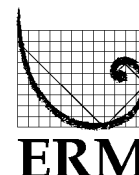
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 16 February 2021

2509,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following
Log no.:

Action Level Exceedance
0463091_16February2021_1hrTSP_Station ASR5

One (1) exceedance was recorded on 16 February 2021.

Regards,

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10

**TUEN MUN – CHEK LAP KOK LINK –
NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS**

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<u>Action Level Exceedance</u> 0463091_16February2021_1hrTSP_Station ASR5 [Total No. of Exceedances = 1]	
Date	16 February 2021 (Measured) 3 March 2021 (Results obtained from ENPO Website)	
Monitoring Station	ASR5	
Parameter(s) with Exceedance(s)	1 - hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 213
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	260
Measured Levels	Refer to <i>Appendix A</i> (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	Works undertaken under this Contract on 16 February 2021 included <ul style="list-style-type: none"> Defect works at Fire Services Department Building Final finishing works and Defect works at Customs and Excise Department Building. 	
Possible Reason for Action or Limit Level Exceedance(s)	The exceedance is unlikely to be due to the Contract, in view of the following: <ul style="list-style-type: none"> With reference to the recorded wind direction (vary between 274° and 277°) and wind speed (0.9 m/s), the wind was mainly from north-westerly direction. Only minor defect works were conducted which are considered not major dust generating works, thus results of 1-hour TSP at ASR5 was unlikely impacted by the works under this project. The construction area under this Contract were paved/covered with vegetation. Dust are not anticipated. Based on the above, the exceedance is unlikely to be due to the Contract.	
Actions Taken/ To Be Taken	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
Remarks	The monitoring results on 16 February 2021, locations of air quality monitoring stations and wind data are attached (refer to <i>Appendix A</i>).	

Appendix A

Results of Air Quality
Monitoring, Meteorological
Data and Locations of Air
Quality Monitoring Stations

Air quality monitoring results on 16/2/2021								
Project	Contract	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2021-02-16	ASR10	Sunny	13:10:00	1-hour TSP	81	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR10	Sunny	14:12:00	1-hour TSP	151	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR10	Sunny	15:14:00	1-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR6	Sunny	13:22:00	1-hour TSP	195	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR6	Sunny	14:24:00	1-hour TSP	117	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR6	Sunny	15:26:00	1-hour TSP	184	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR5	Sunny	13:33:00	1-hour TSP	118	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR5	Sunny	14:35:00	1-hour TSP	89	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR5	Sunny	15:37:00	1-hour TSP	355	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR1	Sunny	13:46:00	1-hour TSP	103	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR1	Sunny	14:48:00	1-hour TSP	237	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR1	Sunny	15:50:00	1-hour TSP	167	ug/m3
TMCLKL	HY/2012/08	2021-02-16	AQMS1	Sunny	13:58:00	1-hour TSP	100	ug/m3
TMCLKL	HY/2012/08	2021-02-16	AQMS1	Sunny	15:00:00	1-hour TSP	93	ug/m3
TMCLKL	HY/2012/08	2021-02-16	AQMS1	Sunny	16:02:00	1-hour TSP	179	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR10	Sunny	16:16:00	24-hour TSP	74	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR6	Sunny	16:28:00	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR5	Sunny	16:39:00	24-hour TSP	84	ug/m3
TMCLKL	HY/2012/08	2021-02-16	ASR1	Sunny	16:52:00	24-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2021-02-16	AQMS1	Sunny	17:04:00	24-hour TSP	87	ug/m3

Action level exceedance

Limit level exceedance

Meteorological Data for Impact Monitoring in the reporting period

Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
21/02/16	0:00	1.8	78
21/02/16	1:00	1.8	70
21/02/16	2:00	1.3	86
21/02/16	3:00	1.3	58
21/02/16	4:00	1.3	85
21/02/16	5:00	2.7	100
21/02/16	6:00	2.7	79
21/02/16	7:00	1.8	41
21/02/16	8:00	2.2	56
21/02/16	9:00	2.2	93
21/02/16	10:00	1.8	111
21/02/16	11:00	1.8	129
21/02/16	12:00	1.3	101
21/02/16	13:00	1.3	131
21/02/16	14:00	1.3	196
21/02/16	15:00	0.9	274
21/02/16	16:00	0.9	277
21/02/16	17:00	0.9	198
21/02/16	18:00	0.9	261
21/02/16	19:00	0.9	299
21/02/16	20:00	0.9	324
21/02/16	21:00	0.4	328
21/02/16	22:00	0.4	288
21/02/16	23:00	0.4	273
21/02/17	0:00	1.3	308
21/02/17	1:00	0.9	303
21/02/17	2:00	0	295
21/02/17	3:00	0	303
21/02/17	4:00	0.4	2
21/02/17	5:00	1.3	5
21/02/17	6:00	1.8	18
21/02/17	7:00	2.2	20
21/02/17	8:00	1.8	19
21/02/17	9:00	2.7	32
21/02/17	10:00	1.8	90
21/02/17	11:00	2.2	23
21/02/17	12:00	1.8	33
21/02/17	13:00	1.8	28
21/02/17	14:00	1.8	24
21/02/17	15:00	1.8	144
21/02/17	16:00	0.9	18
21/02/17	17:00	1.3	81
21/02/17	18:00	1.3	78
21/02/17	19:00	1.3	53
21/02/17	20:00	1.3	66
21/02/17	21:00	1.3	38
21/02/17	22:00	1.8	48
21/02/17	23:00	1.8	49

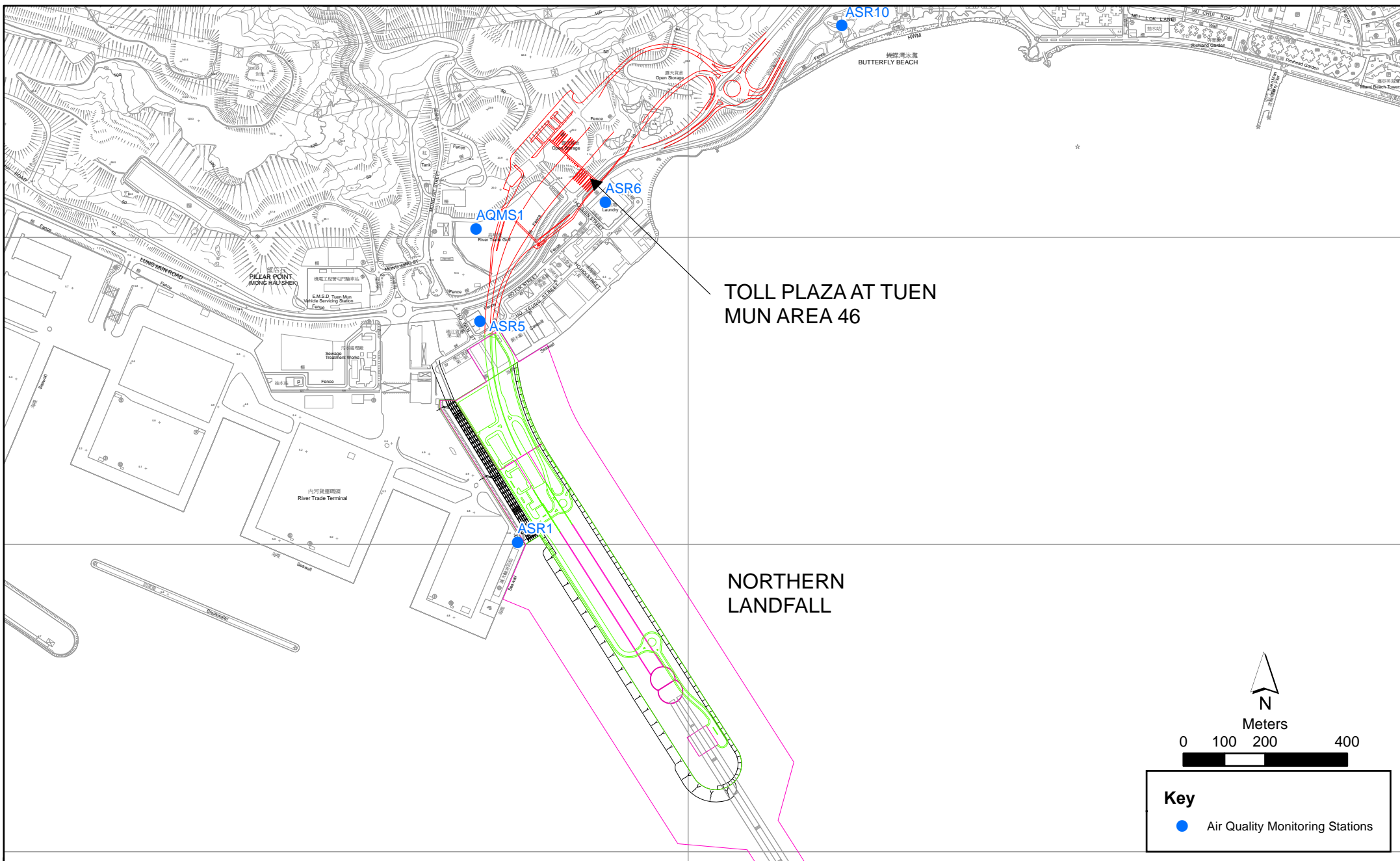


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
 (Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
 Northern Connection Sub-sea Tunnel Section)

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To Ramboll Hong Kong Limited (ENPO)

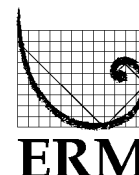
From ERM- Hong Kong, Limited

Ref/Project number Contract No. HY/2017/10
Tuen Mun – Chek Lap Kok Link – Northern
Connection Tunnel Buildings, Electrical and
Mechanical Works

Subject Notification of Exceedance for Air Quality
Impact Monitoring

Date 22 February 2021

2509,
25/F One Harbourfront,
18 Tak Fung Street,
Hung Hom, Hong Kong
Telephone: (852) 2271 3113
Facsimile: (852) 2723 5660
E-mail: jasmine.ng@erm.com



Dear Sir/ Madam,

Please find attached the Notification of Exceedance (NOE) of the following
Log no.:

Action Level Exceedance
0463091_22February2021_1hrTSP_Station ASR5

One (1) exceedance was recorded on 22 February 2021.

Regards,

A handwritten signature in blue ink that reads 'Jasmine'.

Dr Jasmine Ng
Environmental Team Leader

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ERM-Hong Kong, Limited

CONTRACT NO. HY/2017/10
 TUEN MUN – CHEK LAP KOK LINK –
 NORTHERN CONNECTION TUNNEL BUILDINGS,
 ELECTRICAL AND MECHANICAL WORKS

Air Quality Impact Monitoring

Notification of Exceedance

Log No.	<u>Action Level Exceedance</u> 0463091_22February2021_1hrTSP_Station ASR5	
	[Total No. of Exceedances = 1]	
Date	22 February 2021 (Measured) 3 March 2021 (Results obtained from ENPO Website)	
Monitoring Station	ASR5	
Parameter(s) with Exceedance(s)	1 - hr TSP	
Action Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 331 ASR5 = 340 ASR6 = 338 ASR10 = 335 AQMS1 = 337
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	ASR1 = 213 ASR5 = 238 ASR6 = 238 ASR10 = 214 AQMS1 = 213
Limit Levels	1-hr TSP ($\mu\text{g}/\text{m}^3$)	500
	24-hr TSP ($\mu\text{g}/\text{m}^3$)	260
Measured Levels	Refer to <i>Appendix A</i> (Data are source from Contract No. HY/2012/08).	
Works Undertaken (at the time of monitoring event)	Works undertaken under this Contract on 22 February 2021 included <ul style="list-style-type: none"> • Defect works at Fire Services Department Building • Final finishing works and Defect works at Customs and Excise Department Building. 	
Possible Reason for Action or Limit Level Exceedance(s)	<p>The exceedance is unlikely to be due to the Contract, in view of the following:</p> <ul style="list-style-type: none"> • With reference to the recorded wind direction (vary between 211° and 212°) and wind speed (vary between 1.3 and 1.8 m/s), the wind was mainly from south-westerly direction. • Only minor defect works were conducted which are considered not major dust generating works, thus results of 1-hour TSP at ASR5 was unlikely impacted by the works under this project. • The construction area under this Contract were paved/covered with vegetation. Dust are not anticipated. <p>Based on the above, the exceedance is unlikely to be due to the Contract.</p>	
Actions Taken / To Be Taken	No immediate action is considered necessary. The ET will monitor for future trends in exceedances.	
Remarks	The monitoring results on 22 February 2021, locations of air quality monitoring stations and wind data are attached (refer to <i>Appendix A</i>).	

Appendix A

Results of Air Quality
Monitoring, Meteorological
Data and Locations of Air
Quality Monitoring Stations

Air quality monitoring results on 22/2/2021								
Project	Contract	Date	Station	Weather	Start time	Parameters	Results	Unit
TMCLKL	HY/2012/08	2021-02-22	ASR10	Sunny	13:10:00	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR10	Sunny	14:12:00	1-hour TSP	90	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR10	Sunny	15:14:00	1-hour TSP	147	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR6	Sunny	13:22:00	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR6	Sunny	14:24:00	1-hour TSP	97	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR6	Sunny	15:26:00	1-hour TSP	203	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR5	Sunny	13:34:00	1-hour TSP	136	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR5	Sunny	14:36:00	1-hour TSP	139	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR5	Sunny	15:38:00	1-hour TSP	472	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR1	Sunny	13:47:00	1-hour TSP	128	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR1	Sunny	14:49:00	1-hour TSP	209	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR1	Sunny	15:51:00	1-hour TSP	171	ug/m3
TMCLKL	HY/2012/08	2021-02-22	AQMS1	Sunny	13:58:00	1-hour TSP	99	ug/m3
TMCLKL	HY/2012/08	2021-02-22	AQMS1	Sunny	15:00:00	1-hour TSP	113	ug/m3
TMCLKL	HY/2012/08	2021-02-22	AQMS1	Sunny	16:02:00	1-hour TSP	154	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR10	Sunny	16:16:00	24-hour TSP	62	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR6	Sunny	16:28:00	24-hour TSP	76	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR5	Sunny	16:40:00	24-hour TSP	83	ug/m3
TMCLKL	HY/2012/08	2021-02-22	ASR1	Sunny	16:53:00	24-hour TSP	86	ug/m3
TMCLKL	HY/2012/08	2021-02-22	AQMS1	Sunny	17:04:00	24-hour TSP	69	ug/m3

Action level exceedance

Limit level exceedance

Meteorological Data for Impact Monitoring in the reporting period

Date (yy-mm-dd)	Time (24hrs)	Average of Wind Speed (m/s)	Average of Wind Direction(degree)
21/02/22	0:00	0.9	45
21/02/22	1:00	0.4	45
21/02/22	2:00	0	32
21/02/22	3:00	0	21
21/02/22	4:00	0	19
21/02/22	5:00	0	14
21/02/22	6:00	0.4	358
21/02/22	7:00	0.4	307
21/02/22	8:00	0.9	138
21/02/22	9:00	0.9	126
21/02/22	10:00	0.9	183
21/02/22	11:00	1.3	203
21/02/22	12:00	1.8	233
21/02/22	13:00	1.3	236
21/02/22	14:00	1.8	203
21/02/22	15:00	1.8	211
21/02/22	16:00	1.3	212
21/02/22	17:00	1.3	67
21/02/22	18:00	1.3	60
21/02/22	19:00	1.3	71
21/02/22	20:00	1.3	50
21/02/22	21:00	0.9	60
21/02/22	22:00	0.4	57
21/02/22	23:00	0.4	35
21/02/23	0:00	0.4	46
21/02/23	1:00	0.9	322
21/02/23	2:00	0.4	328
21/02/23	3:00	0.4	341
21/02/23	4:00	0	303
21/02/23	5:00	0	322
21/02/23	6:00	0.4	308
21/02/23	7:00	0	317
21/02/23	8:00	0	113
21/02/23	9:00	1.3	218
21/02/23	10:00	1.3	193
21/02/23	11:00	0.9	130
21/02/23	12:00	1.8	210
21/02/23	13:00	1.8	200
21/02/23	14:00	1.3	230
21/02/23	15:00	2.2	100
21/02/23	16:00	2.7	92
21/02/23	17:00	3.1	104
21/02/23	18:00	2.2	86
21/02/23	19:00	2.2	97
21/02/23	20:00	2.7	94
21/02/23	21:00	2.7	87
21/02/23	22:00	2.2	98
21/02/23	23:00	2.7	81

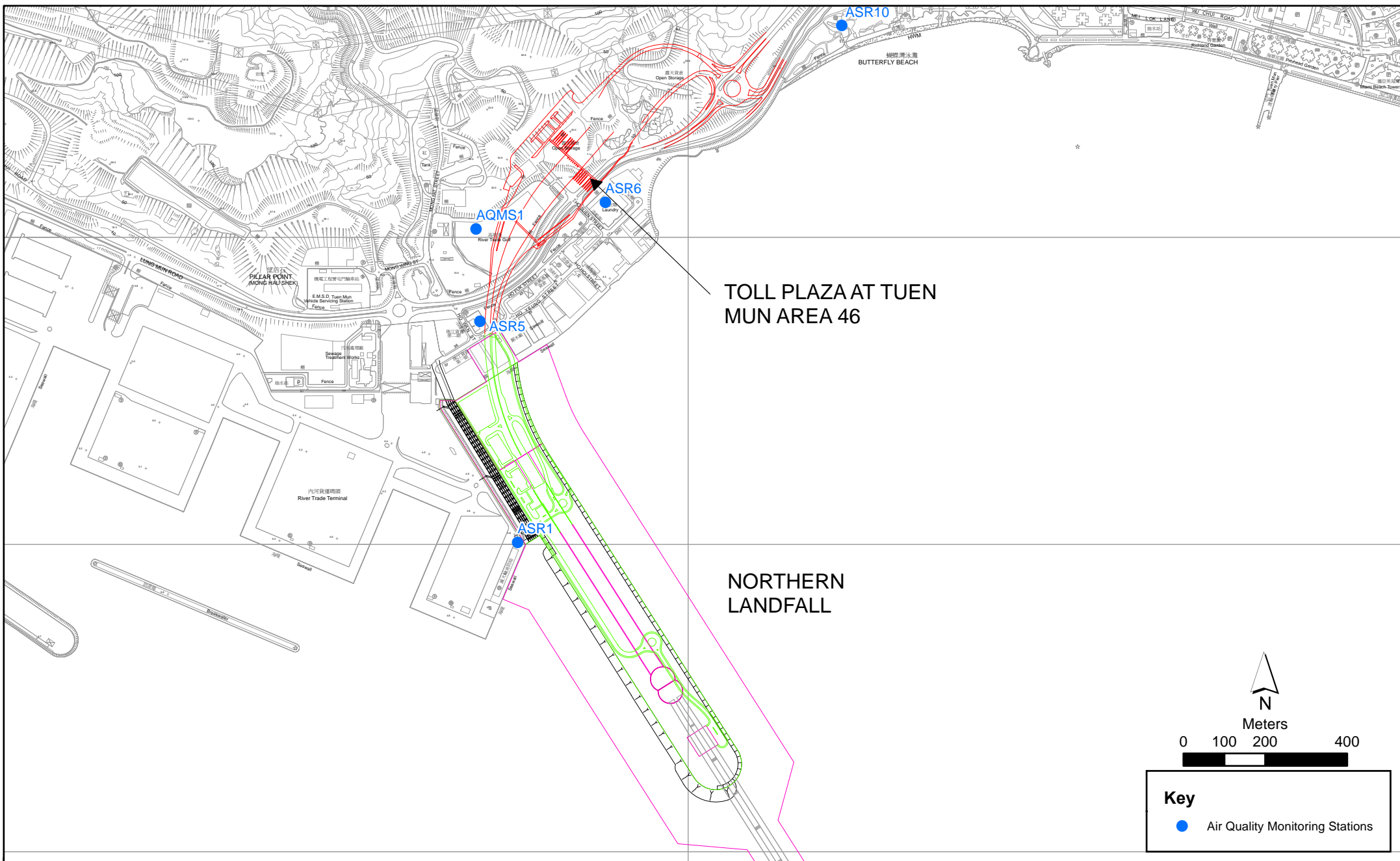


Figure 2.1

Air Quality Monitoring Stations for the Enhanced TSP Monitoring
 (Source: Adopted from Contract No. HY/2012/08 Tuen Mun-Chek Lap Kok Link -
 Northern Connection Sub-sea Tunnel Section)

Appendix K

Landscape and Visual
Monitoring for 24-Month
Establishment Period

Inspection Date: 26 January 2021 & 9 February 2021 Inspected By: AUES

Time: 9:30 – 16:00 Weather Condition: Sunny

Participants: AECOM (RSS), Ramboll (IEC) & AUES (ET) Rep.

		N/A or not observed	Yes	No	Remarks / Photo
1	Zone: Area along Cheung Tung Road				
1.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
1.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
1.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
1.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Obs. 1</u>
1.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>Obs. 1</u>
		Good	Fair	Poor	
1.10	Overall health condition of the plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Obs. 2 & 3</u>
2	Zone: Southern Landfall, HKBCF				
2.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.4	Are pest and disease observed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.5	Are litter and debris removed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.6	Are plants/ grasses overgrown?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.8	Are planting locations and tree spacing matched with the approved planting plans?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
2.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

5	General Document	N/A or not observed	Yes	No	Remarks / Photo
5.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

Follow up actions for previous Site Audit on 8 & 9 October 2020:

1. The wilting tree on slope (10NW-C/F13) had been replaced.
2. The trees on slope (10NW-C/F15) became bent and wilted had been supported in upright position and replaced.
3. A portion of the landscape planting area on slope (9SE-B/F85) was trenched by a powered mechanical equipment working for drainage works (DSD Contract) in the vicinity of Cheung Tung Road. According to the information from DSD, the works will be completed at the end of May 2021 and the slope will be reinstated after the construction works is completed.

Observations:

1. A portion of the landscape planting area on slope (9SE-B/F85) was trenched by a powered mechanical equipment working for drainage works (DSD Contract) in the vicinity of Cheung Tung Road. According to the information from DSD, the works will be completed at the end of May 2021 and the slope will be reinstated after the construction works is completed.
2. The tree (LC61: *Lagestroemia speciosa*) on roadside (Zone 1D) became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
3. The trees (*Phoenix roebelenii*) on slope (9SE-B/F85) became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.

Corrective Actions (if any):

1. Tree health condition, irrigation in particular, should be closely monitored and reviewed.
2. Reinstatement of disturbed landscape planting area on slope (9SE-B/F85) to its original condition with the proposed shrub species re-planted shall be implemented once the drainage works (DSD Contract) has been completed.

General Conclusion:

Total number of trees planted: 113(Zone 1); 673(Zone 3); and 143 (Zone 4).

Planting area under Contract No. HY/2012/07: 9.70 ha (Zone 1, 3 & 4) (based on the survey data provided by the SOR).

Remarks:

The planting Zone: Southern Landfall, HKBCF had been handed over to Contract HY/2017/10 from December 2020, therefore no inspection was undertaken in Zone 2 in this contract.


Inspected by
(ET's Representative):

Ben Tam

Title:

Environmental Consultant

Signature:



Date:

9 February 2021

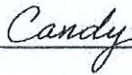
Reviewed by
(RSS Landscape
Representative):

Candy Lau

Title:

Senior Resident Landscape Architect

Signature:



Date:

18 February 2021

Contractor's
Representative:

Man Kwok Hing

Title:

Project Manager

Signature:



Date:

26 February 2021

Checked by
(IEC's Representative):

Manson Yeung

Title:




IEC

Signature:



Date:

25 Feb 21

Location	Photo	Information
<p>Zone 3 (10NW-C/F13)</p>		<p>Follow-up action 1: The wilting tree on slope (10NW-C/F13) had been replaced.</p>
<p>Zone 3 (10NW-C/F15)</p>		<p>Follow-up action 2: The trees on slope (10NW-C/F15) became bent and wilted had been supported in upright position and replaced.</p>
<p>Zone 1B (9SE-B/F85)</p>		<p>Follow-up action 3 & Observation 1: A portion of the landscape planting area on slope (9SE-B/F85) was trenched by a powered mechanical equipment working for drainage works (DSD Contract) in the vicinity of Cheung Tung Road. According to the information from DSD, the works will be completed at the end of May 2021 and the slope will be reinstated after the construction works is completed.</p>

<p>Zone 1D (Tree LC61)</p>		<p>Observation 2: The tree (LC61: <i>Lagestroemia speciosa</i>) on roadside became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.</p>
<p>Zone 1B (9SE-B/F85)</p>		<p>Observation 3: The trees (<i>Phoenix roebelenii</i>) on slope (9SE-B/F85) became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.</p>

Zone 1

Area along Cheung Tung Road



General View for Zone 1B



General View for Zone 1B



General View for Zone 1B



General View for Zone 1B



General View for Zone 1C



General View for Zone 1C



General View for Zone 1C



General View for Zone 1C



General View for Zone 1D



General View for Zone 1D



General View for Zone 1D



General View for Zone 1D

Zone 3

Area within Expressway Boundary



General View for Zone 3A



General View for Zone 3A



General View for Zone 3B



General View for Zone 3B



General View for Zone 3D



General View for Zone 3D



General View for Zone 3D



General View for Zone 3D



General View for Zone 3D



General View for Zone 3D



General View for Zone 3E



General View for Zone 3E



General View for Zone 3E



General View for Zone 3E



General View for Zone 3E



General View for Zone 3E



General View for Zone 3F



General View for Zone 3F

Zone 4

Slopes outside Expressway Boundary



General View for Zone 4



General View for Zone 4



General View for Zone 4



General View for Zone 4



General View for Zone 4



General View for Zone 4



General View for Zone 4



General View for Zone 4

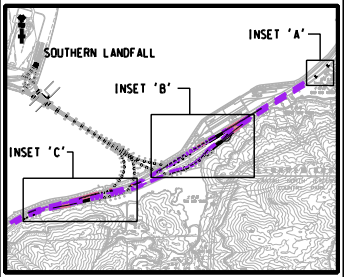
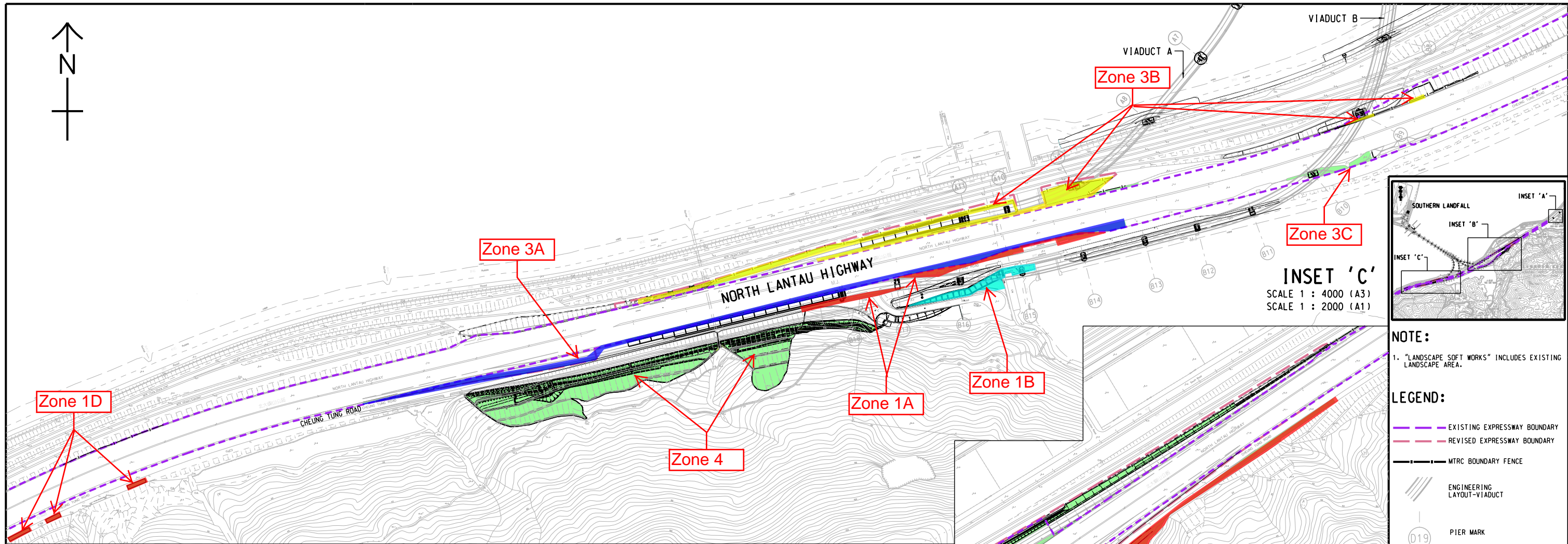


General View for Zone 4



General View for Zone 4

Appendix A
Zoning Plan for Contract No. HY/2012/07 (Zone 1, 3 & 4)



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

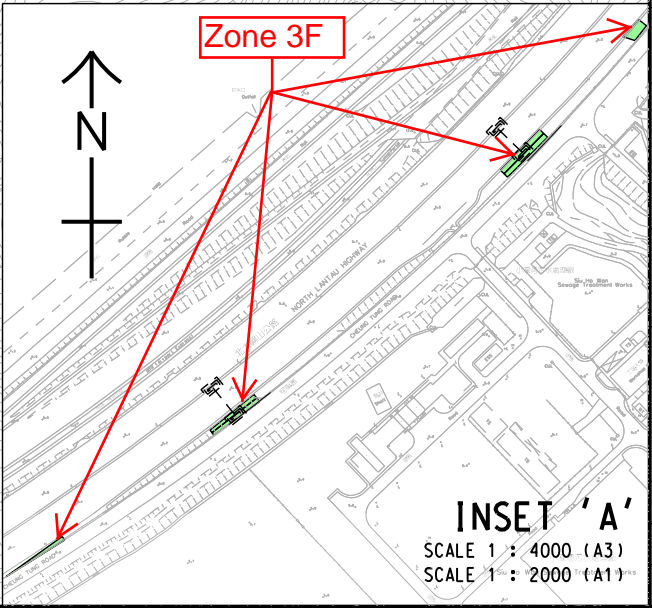
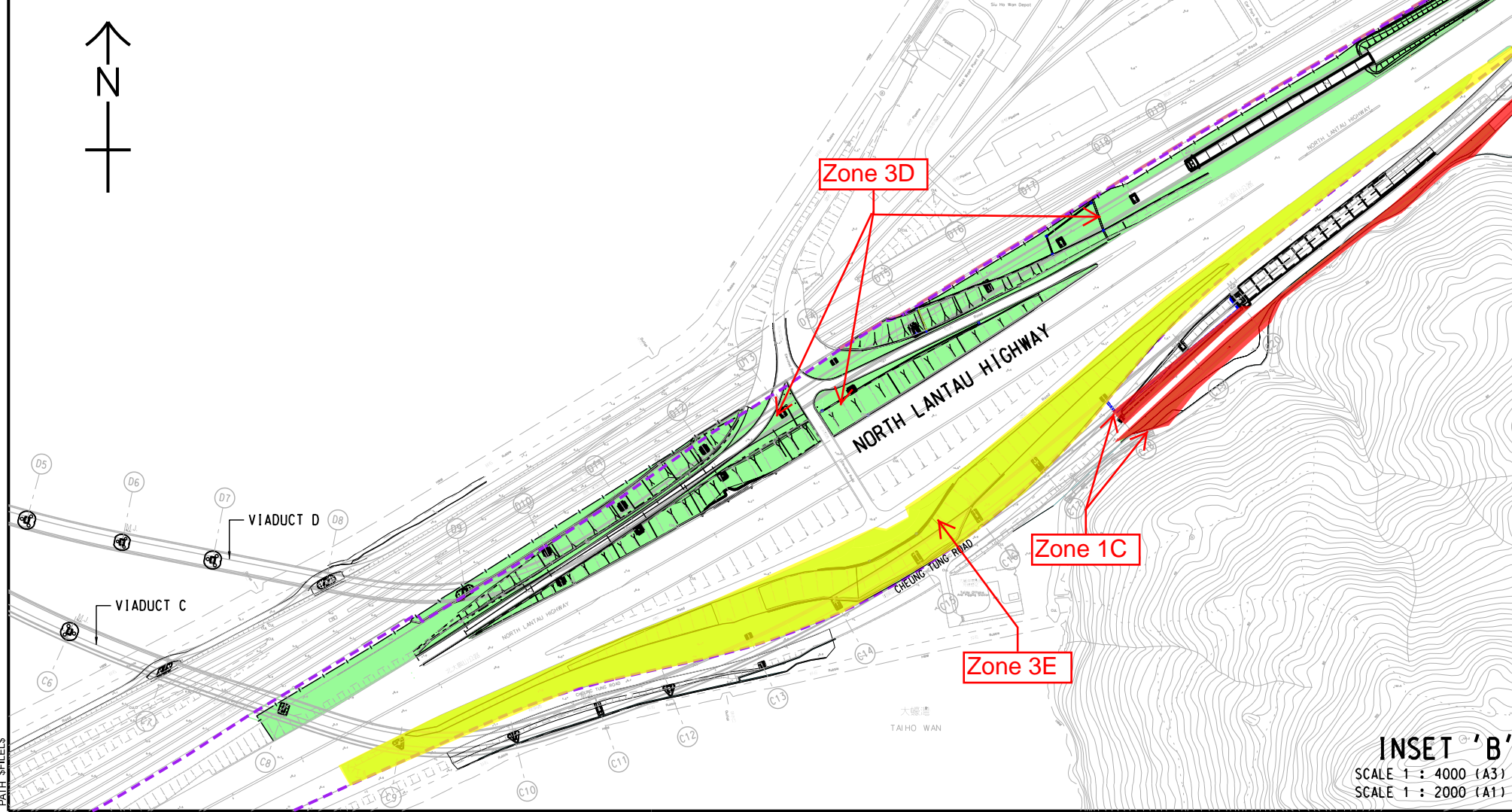
PROJECT
TUEN MUN - CHEK LAP KOK LINK

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)

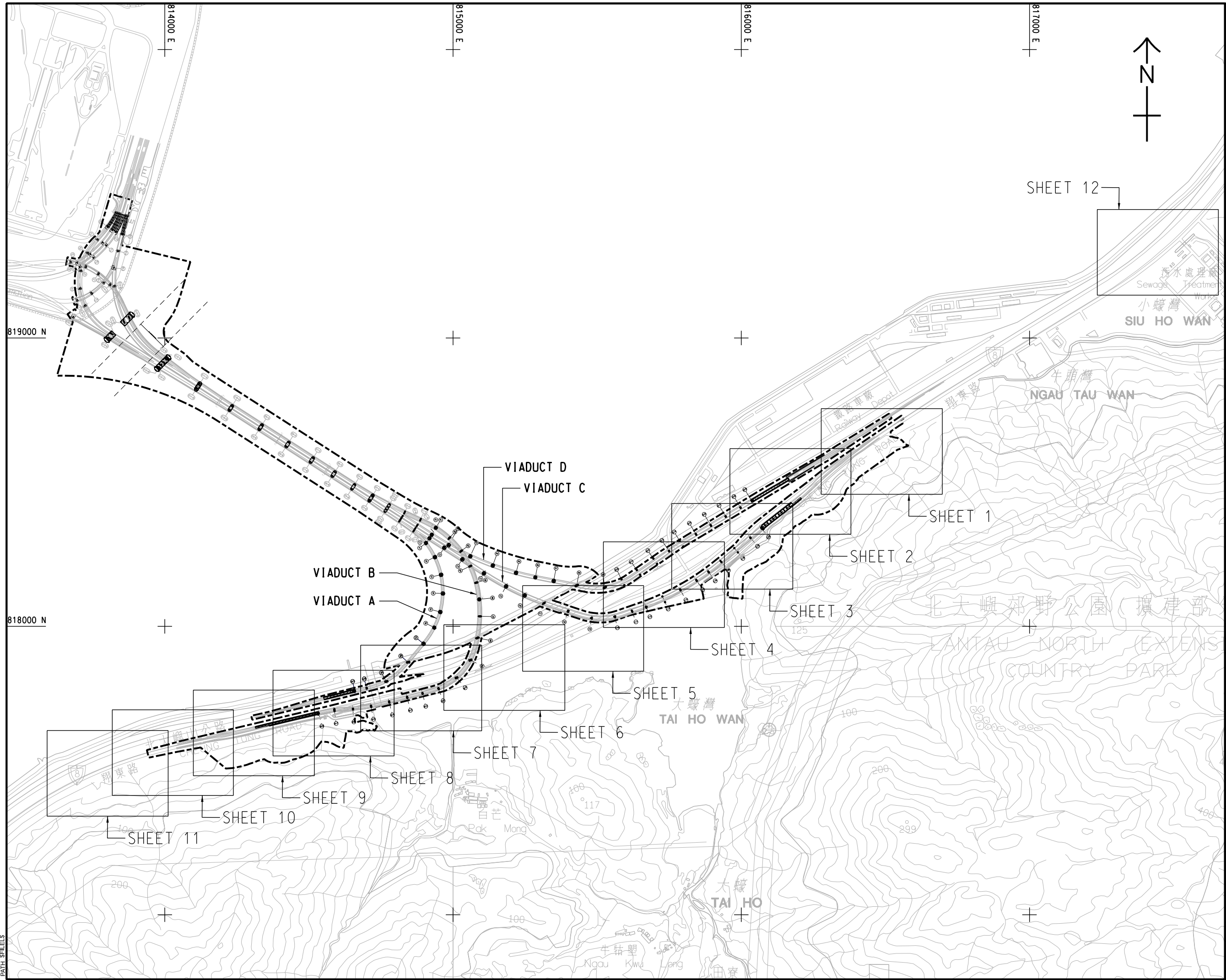
DRAWING REFERENCE	SCALE 1:2000(A1)	SCALE 1:4000(A3)
DRAWN JW	PREPARED CL	APPROVED CL
SKETCH NO.	SK0597	REV. A



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

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

Appendix B
Summary of Compensatory Planting Area for Contract No. HY/2012/07 (Zone 1, 3 & 4)



NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0560 TO SK0585.



REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	LANDSCAPE KEY PLAN	KW	CL	CL

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AECOM

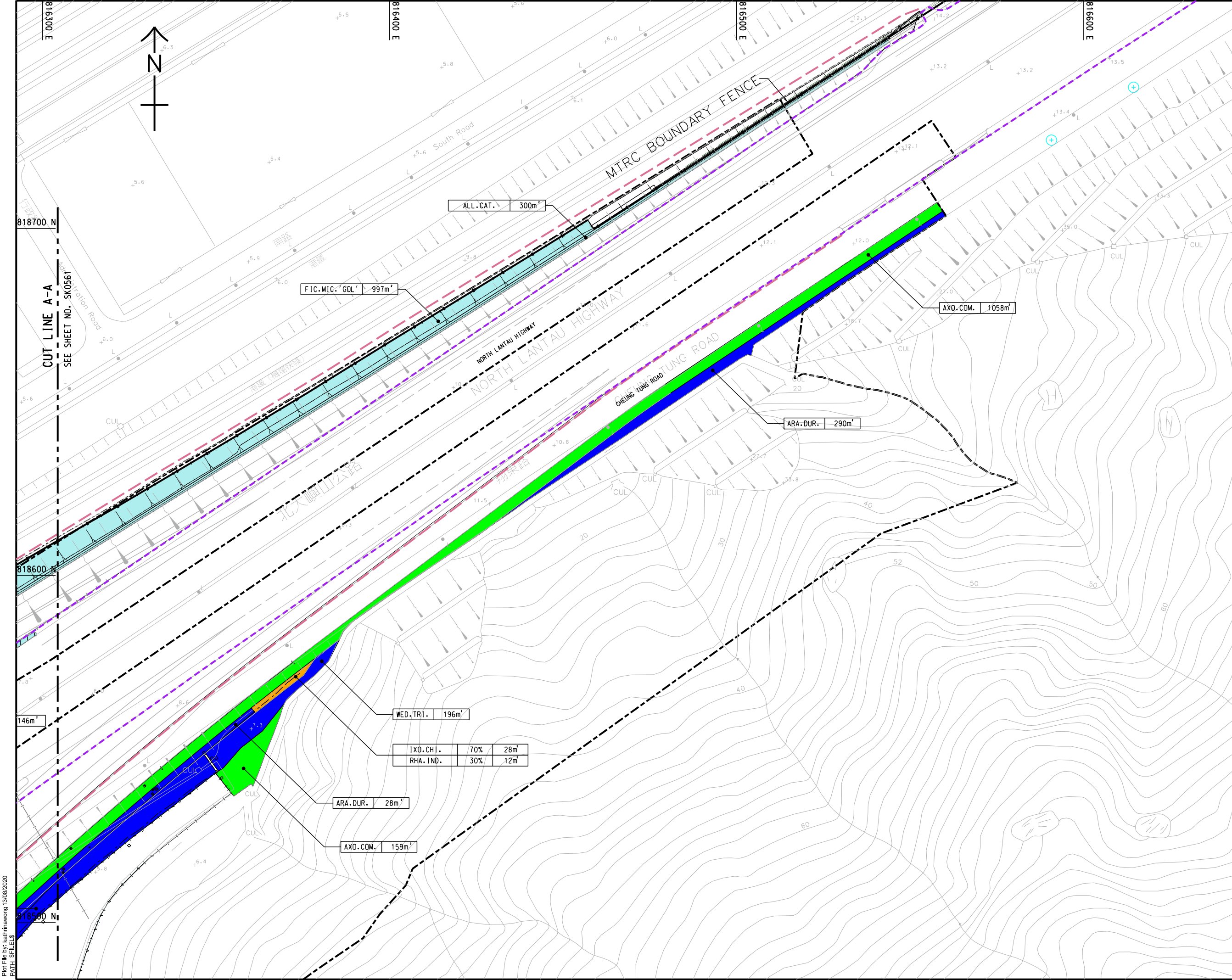
PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
 LANDSCAPE KEY PLAN
 (PORTION A)

DRAWING REFERENCE		SCALE
-		1:6000(A1) 1:12000(A3)
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.		REV.
SK0559		-



NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- (D19) PIER MARK
- YYY FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- +++ SOIL NAIL
- GRASS
- SHRUB
- GROUND COVER
- HYDROSEEDING WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUND COVER WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOIL CUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA(sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

CLIENT
 路政署
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 Major Works Project Management Office
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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
**SHRUB PLANTING PLAN
 (PORTION A)**

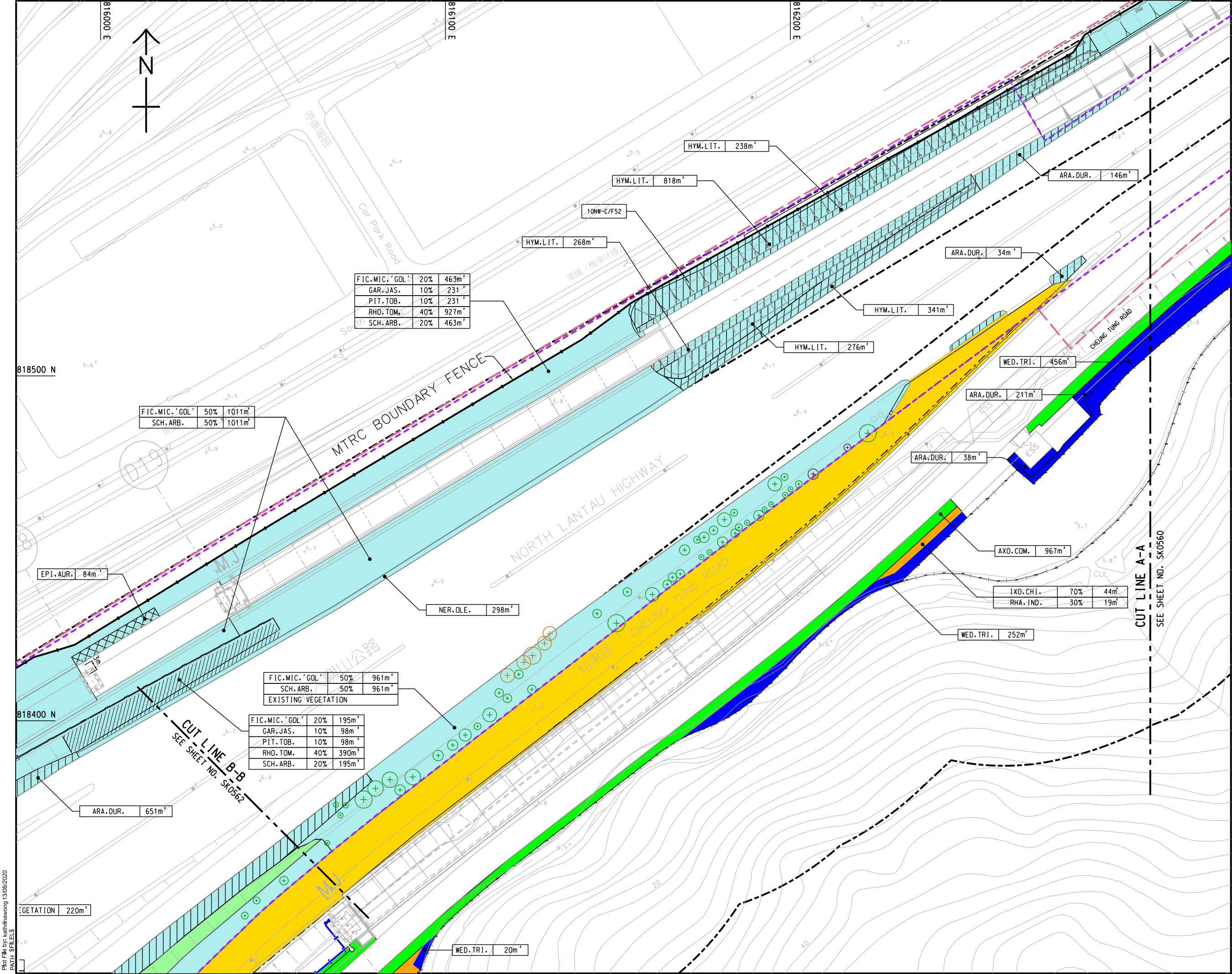
SHEET 1 OF 12

DRAWING REFERENCE	SCALE
-	1:500 (A1) 1:1000 (A3)

DRAWN	PREPARED	APPROVED
KW	CL	CL

SKETCH NO. SK0560

Plot File by: kashinawong 13/08/2020
 PATH: SP1E1S



NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- SOIL NAIL
- GRASS
- SHRUB
- GROUND COVER
- HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA(sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

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

AECOM

PROJECT: TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.: HMWSD 2/2020(HY)

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

TITLE: SHRUB PLANTING PLAN (PORTION A)

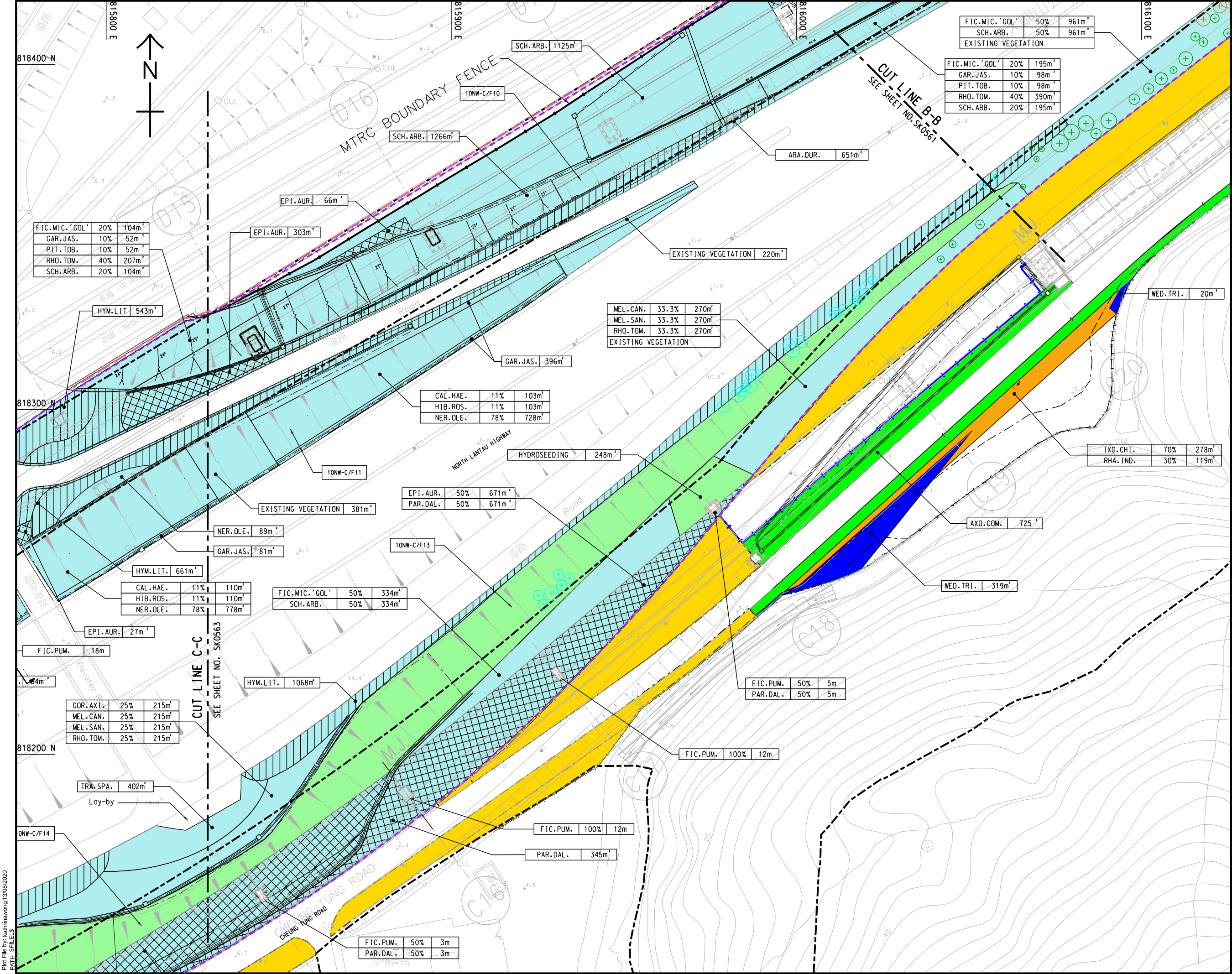
SHEET 2 OF 12

DRAWING REFERENCE: SCALE 1:500 (A1)
 1:1000 (A3)

DRAWN	PREPARED	APPROVED
KW	CL	CL

SKETCH NO. SK0561

Plot File by: kashinwanong 13/08/2020
 PATH: SP11E15



NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- SOIL NAIL
- GRASS
- SHRUB
- GROUNDCOVER
- HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUNDCOVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA(sq.m)
- 10NW-C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWS2 2/2020(HY)

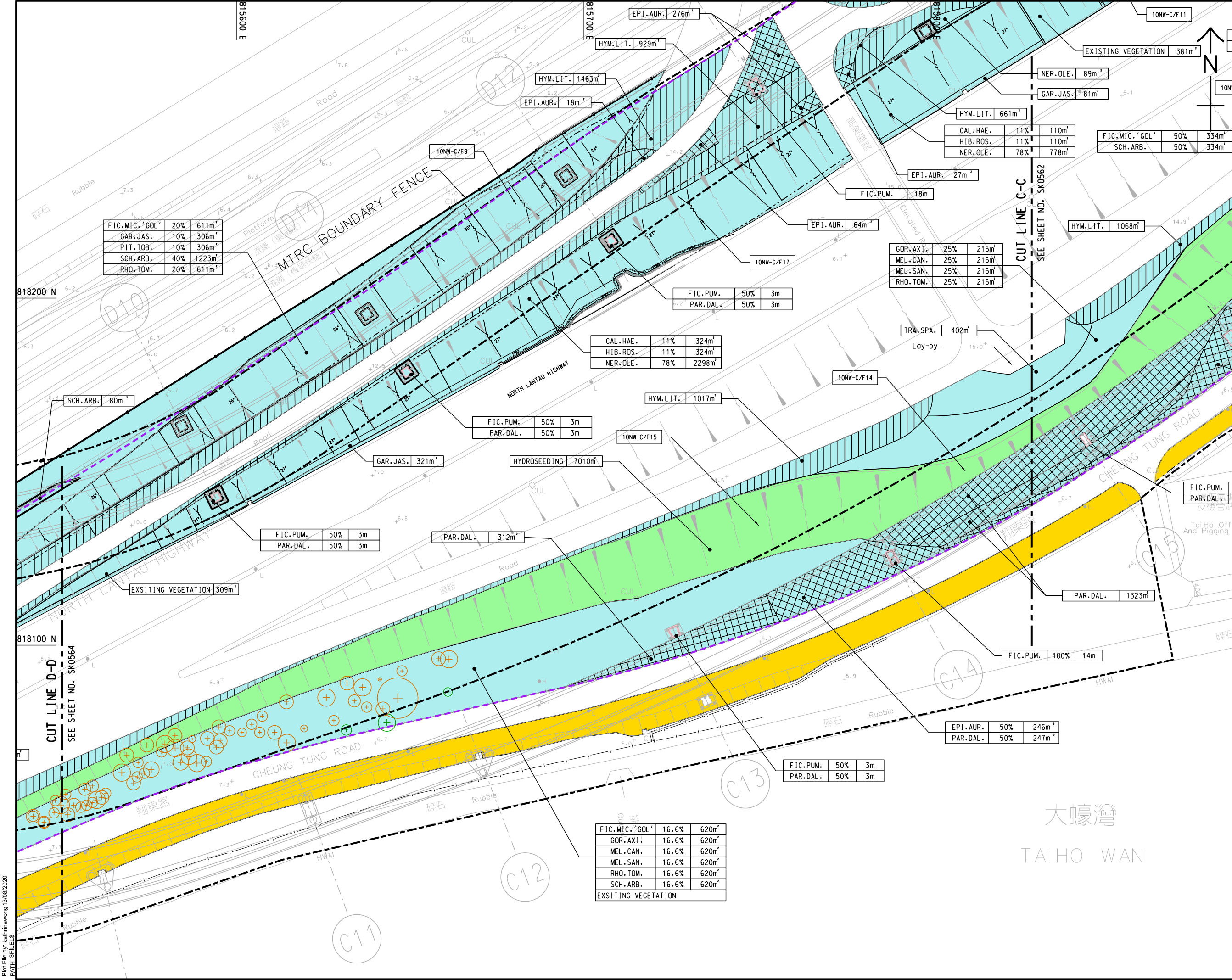
CONTRACT TITLE
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 3 OF 12

DRAWING REFERENCE	SCALE	1:500 (A1)
		1:1000 (A3)
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0562	-	

Plot File by: kashinawong 13/08/2020
 PATH: SP1E1E5



NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:
 - - - - - SITE BOUNDARY
 - - - - - EXISTING EXPRESSWAY BOUNDARY
 - - - - - REVISED EXPRESSWAY BOUNDARY
 - - - - - MTRC BOUNDARY FENCE
 --- ENGINEERING LAYOUT-VIADUCT
 (D19) PIER MARK
 Y Y Y FILL SLOPE
 MAX 70° ROCK CUT SLOPE
 MAX 50° SOILCUT SLOPE
 +++ SOIL NAIL
 GRASS
 SHRUB
 GROUNDCOVER
 HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 GROUNDCOVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 AREA UNDER CONTRACT NO. DC/2016/01
 CLIMBERS FOR PIERS OF VIADUCT
 CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
 RHA.EXC. 905.78 m²
 SPECIES AREA (sq.m)
 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 EXISTING TREE (APPROXIMATE LOCATION)

FIC.MIC.'GOL'	20%	611m ²
GAR.JAS.	10%	306m ²
PIT.TOB.	10%	306m ²
SCH.ARB.	40%	1223m ²
RHO.TOM.	20%	611m ²

CAL.HAE.	11%	110m ²
HIB.ROS.	11%	110m ²
NER.OLE.	78%	778m ²

FIC.MIC.'GOL'	50%	334m ²
SCH.ARB.	50%	334m ²

CAL.HAE.	11%	324m ²
HIB.ROS.	11%	324m ²
NER.OLE.	78%	2298m ²

GOR.AXI.	25%	215m ²
MEL.CAN.	25%	215m ²
MEL.SAN.	25%	215m ²
RHO.TOM.	25%	215m ²

FIC.PUM.	50%	3m
PAR.DAL.	50%	3m

FIC.PUM.	50%	3m
PAR.DAL.	50%	3m

FIC.MIC.'GOL'	16.6%	620m ²
GOR.AXI.	16.6%	620m ²
MEL.CAN.	16.6%	620m ²
MEL.SAN.	16.6%	620m ²
RHO.TOM.	16.6%	620m ²
SCH.ARB.	16.6%	620m ²
EXISTING VEGETATION		

FIC.PUM.	50%	3m
PAR.DAL.	50%	3m

EPI.AUR.	50%	246m ²
PAR.DAL.	50%	247m ²

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

CLIENT

 路政署
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

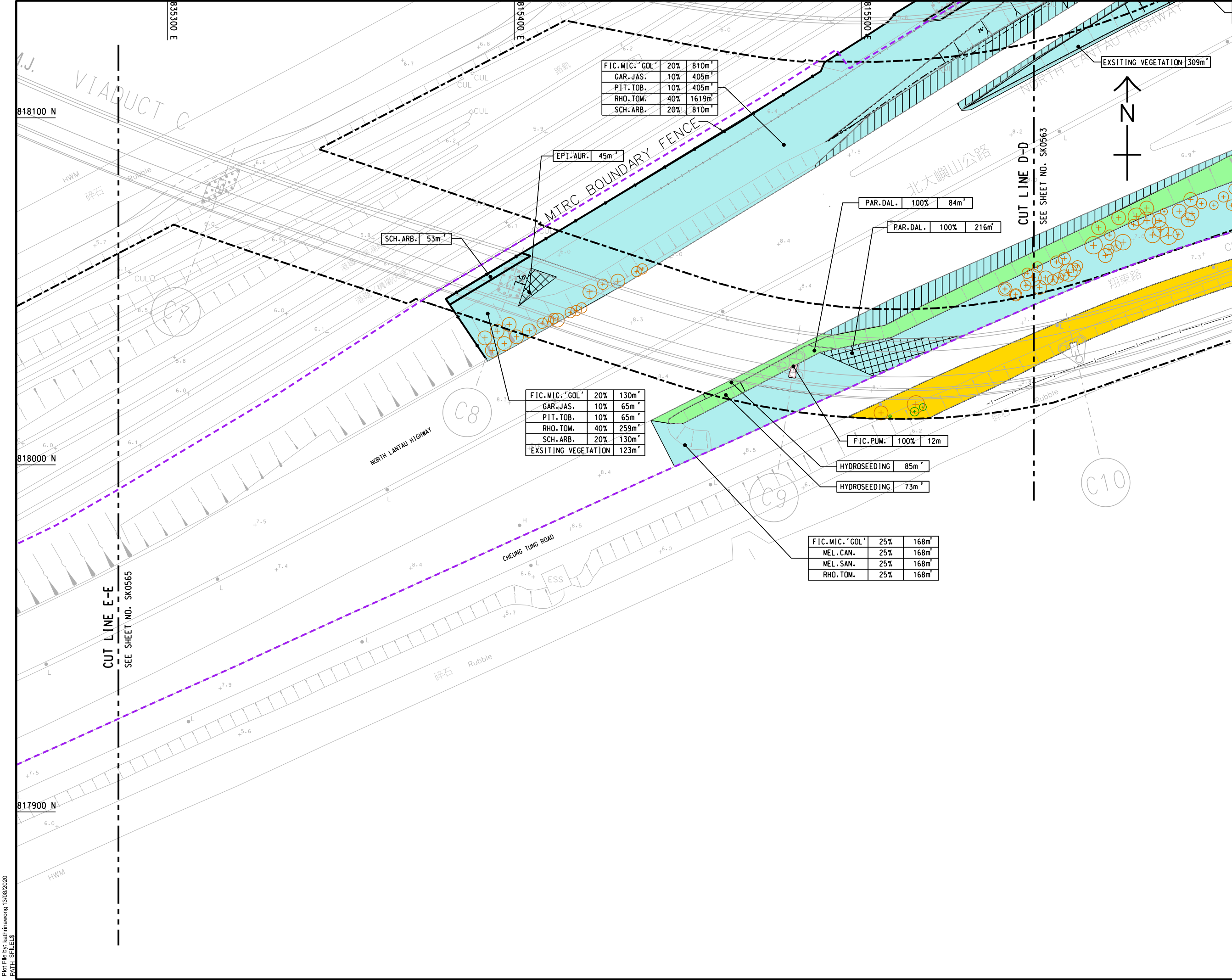
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 4 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0563	-	



FIC. MIC. 'GOL'	20%	810m'
GAR. JAS.	10%	405m'
PIT. TOB.	10%	405m'
RHO. TOM.	40%	1619m'
SCH. ARB.	20%	810m'

FIC. MIC. 'GOL'	20%	130m'
GAR. JAS.	10%	65m'
PIT. TOB.	10%	65m'
RHO. TOM.	40%	259m'
SCH. ARB.	20%	130m'
EXISTING VEGETATION		123m'

FIC. MIC. 'GOL'	25%	168m'
MEL. CAN.	25%	168m'
MEL. SAN.	25%	168m'
RHO. TOM.	25%	168m'

PAR. DAL.	100%	84m'
PAR. DAL.	100%	216m'

FIC. PUM.	100%	12m
-----------	------	-----

HYDROSEEDING	85m'
--------------	------

HYDROSEEDING	73m'
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NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

- LEGEND:**
- - - SITE BOUNDARY
 - - - EXISTING EXPRESSWAY BOUNDARY
 - - - REVISED EXPRESSWAY BOUNDARY
 - - - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - (D19) PIER MARK
 - Y Y Y FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOILCUT SLOPE
 - +++ SOIL NAIL
 - GRASS
 - SHRUB
 - GROUND COVER
 - HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - AREA UNDER CONTRACT NO. DC/2016/01
 - CLIMBERS FOR PIERS OF VIADUCT
 - CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
 - RHA-EXC. 905.78 m²
 - SPECIES AREA (sq.m)
 - 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 - EXISTING TREE (APPROXIMATE LOCATION)

23/06/20	SHRUB PLANTING PLAN	KW	CL	CL
REV. DATE	DESCRIPTION	DRAWN	PRE.	APP.

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



PROJECT
TUEN MUN - CHEK LAP KOK LINK

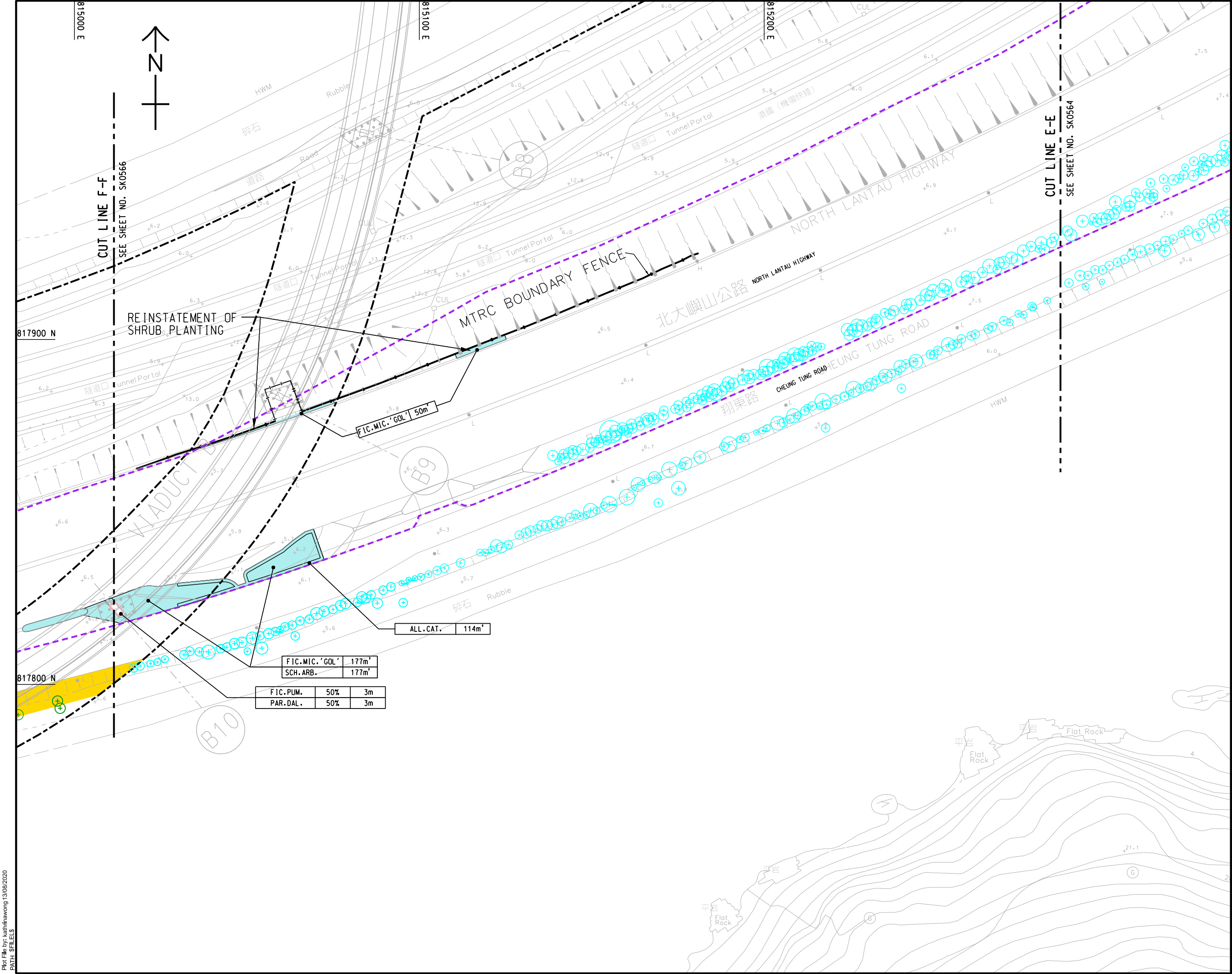
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 5 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0564	-	



NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- - - SITE BOUNDARY
- - - EXISTING EXPRESSWAY BOUNDARY
- - - REVISED EXPRESSWAY BOUNDARY
- - - MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- (D19) PIER MARK
- Y Y Y FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- ++ + SOIL NAIL
- GRASS
- SHRUB
- GROUND COVER
- HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA(sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

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



PROJECT
TUEN MUN - CHEK LAP KOK LINK

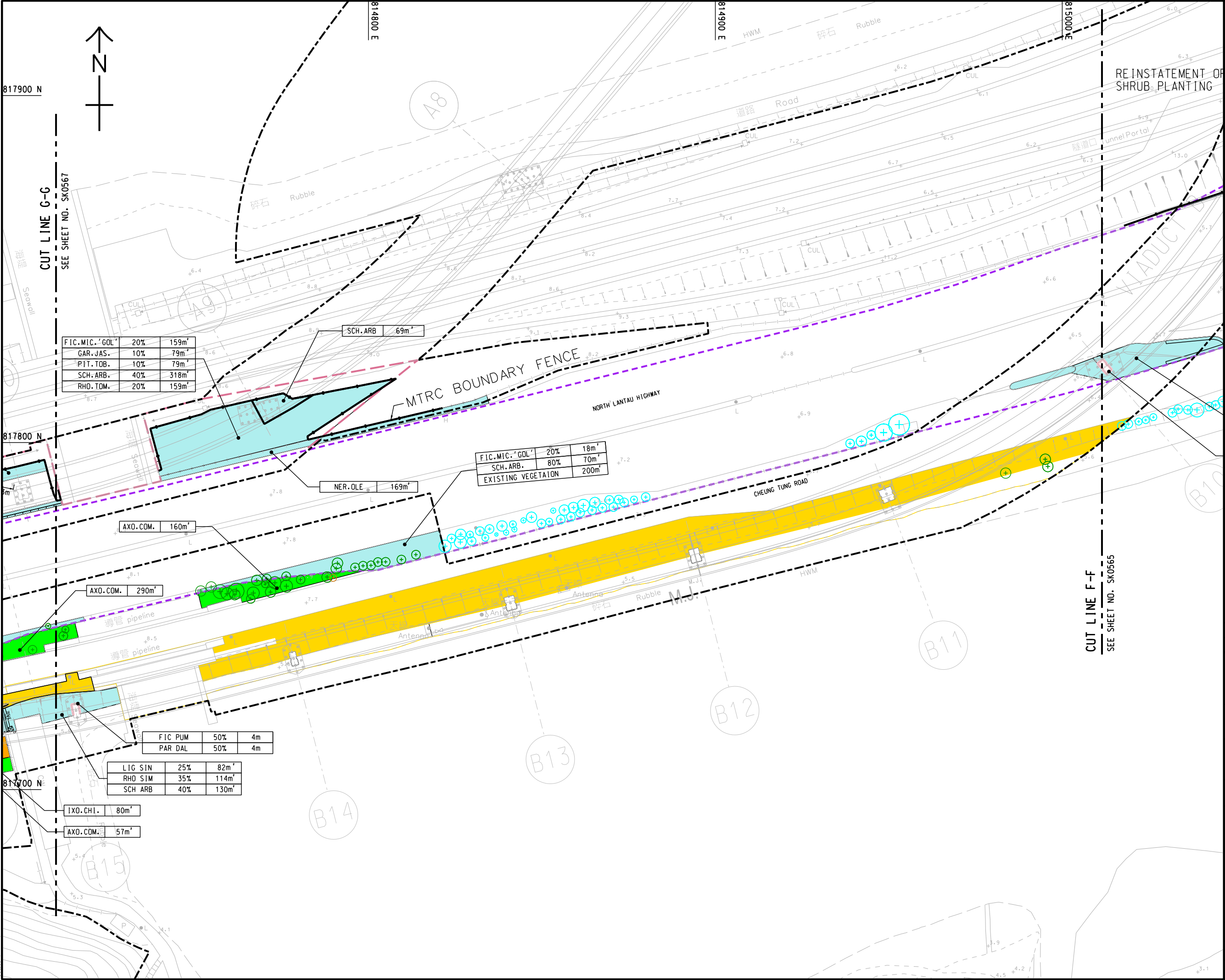
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 6 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0565	-	



FIC. MIC. 'GOL'	20%	159m'
GAR. JAS.	10%	79m'
PIT. TOB.	10%	79m'
SCH. ARB.	40%	318m'
RHO. TOM.	20%	159m'

FIC. MIC. 'GOL'	20%	18m'
SCH. ARB.	80%	70m'
EXISTING VEGETATION		200m'

FIC PUM	50%	4m
PAR DAL	50%	4m

LIG SIN	25%	82m'
RHO SIM	35%	114m'
SCH ARB	40%	130m'

IXO. CHI.	80m'
AXO. COM.	57m'

NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:
 --- SITE BOUNDARY
 --- EXISTING EXPRESSWAY BOUNDARY
 --- REVISED EXPRESSWAY BOUNDARY
 --- MTRC BOUNDARY FENCE
 --- ENGINEERING LAYOUT-VIADUCT
 (D19) PIER MARK
 Y Y Y FILL SLOPE
 MAX 70° ROCK CUT SLOPE
 MAX 50° SOIL CUT SLOPE
 +++ SOIL NAIL
 GRASS
 SHRUB
 GROUND COVER
 HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 AREA UNDER CONTRACT NO. DC/2016/01
 CLIMBERS FOR PIERS OF VIADUCT
 CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOIL CUT SLOPES
 RHA. EXC. 905.78 m²
 SPECIES AREA (sq.m)
 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 EXISTING TREE (APPROXIMATE LOCATION)

23/06/20	SHRUB PLANTING PLAN	KW	CL	CL
REV. DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT
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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.
HMWSD 2/2020(HY)

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

TITLE
 SHRUB PLANTING PLAN
 (PORTION A)

DRAWING REFERENCE		SCALE 1:500 (A1) 1:1000 (A3)	
DRAWN KW	PREPARED CL	APPROVED CL	
SKETCH NO.	SK0566	REV.	-



817800 N

814500 E

814000 E

814000 E

CUT LINE H-H
SEE SHEET NO. SK0568

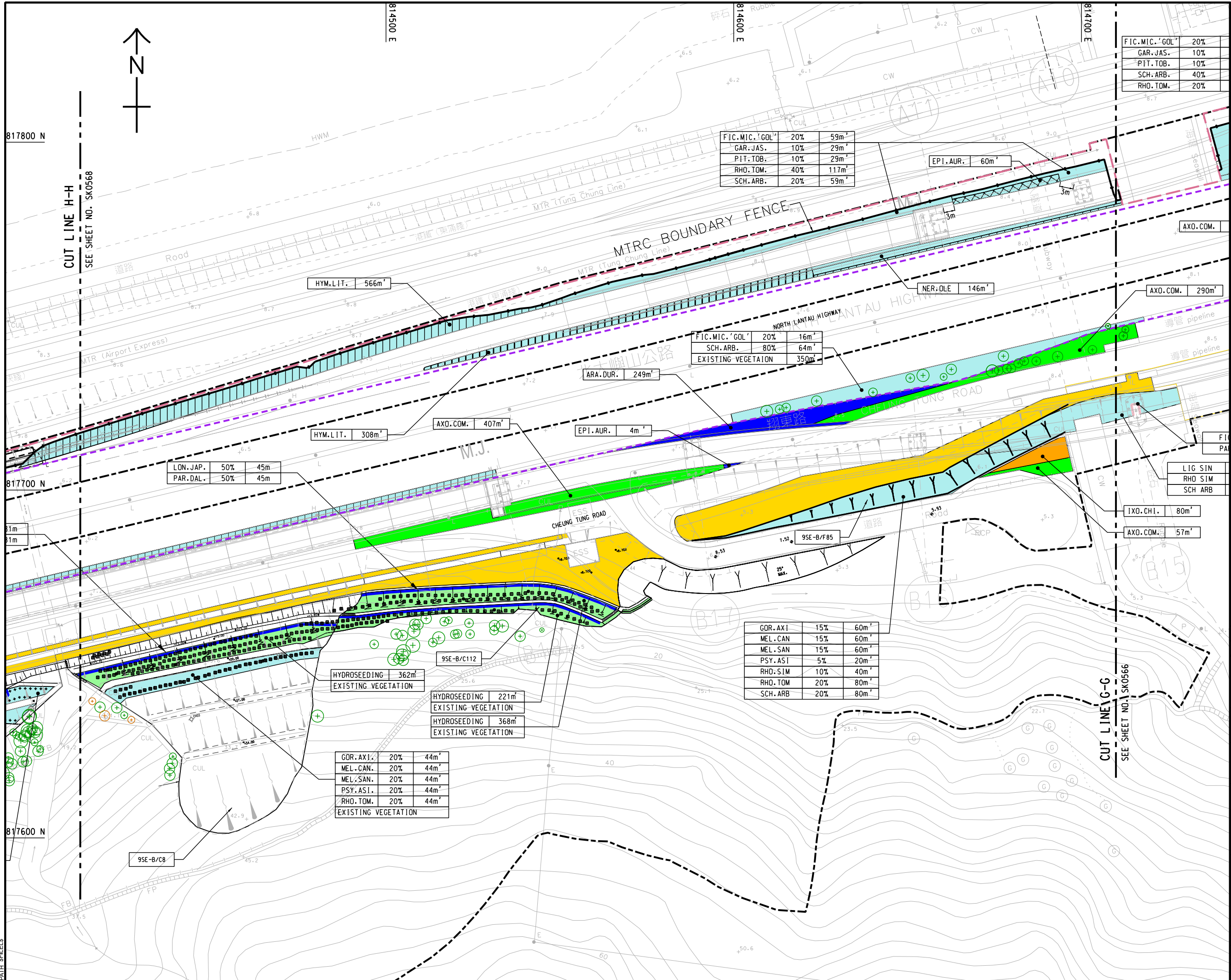
817700 N

81m

81m

817600 N

Photo File by: kashinawong 13/08/2020
PATH: SP11E15



FIC.MIC.'GOL'	20%	59m ²
GAR.JAS.	10%	29m ²
PIT.TOB.	10%	29m ²
RHO.TOM.	40%	117m ²
SCH.ARB.	20%	59m ²

FIC.MIC.'GOL'	20%	16m ²
SCH.ARB.	80%	64m ²
EXISTING VEGETATION		350m ²

GOR.AXI.	15%	60m ²
MEL.CAN.	15%	60m ²
MEL.SAN.	15%	60m ²
PSY.ASI.	5%	20m ²
RHO.SIM.	10%	40m ²
RHO.TOM.	20%	80m ²
SCH.ARB.	20%	80m ²

GOR.AXI.	20%	44m ²
MEL.CAN.	20%	44m ²
MEL.SAN.	20%	44m ²
PSY.ASI.	20%	44m ²
RHO.TOM.	20%	44m ²
EXISTING VEGETATION		

HYDROSEEDING	221m ²
EXISTING VEGETATION	
HYDROSEEDING	368m ²
EXISTING VEGETATION	

FIC.MIC.'GOL'	20%
GAR.JAS.	10%
PIT.TOB.	10%
SCH.ARB.	40%
RHO.TOM.	20%

NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- D19 PIER MARK
- YYY FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- +++ SOIL NAIL
- GRASS
- SHRUB
- GROUND COVER
- HYDROSEEDING WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUND COVER WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA (sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

23/06/20	SHRUB PLANTING PLAN	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE. APP.

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



PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 8 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0567	-	

NOTES:
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- SOIL NAIL
- GRASS
- SHRUB
- GROUND COVER
- HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA.EXC. 905.78 m²
- SPECIES AREA (sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

CLIENT

路政署 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

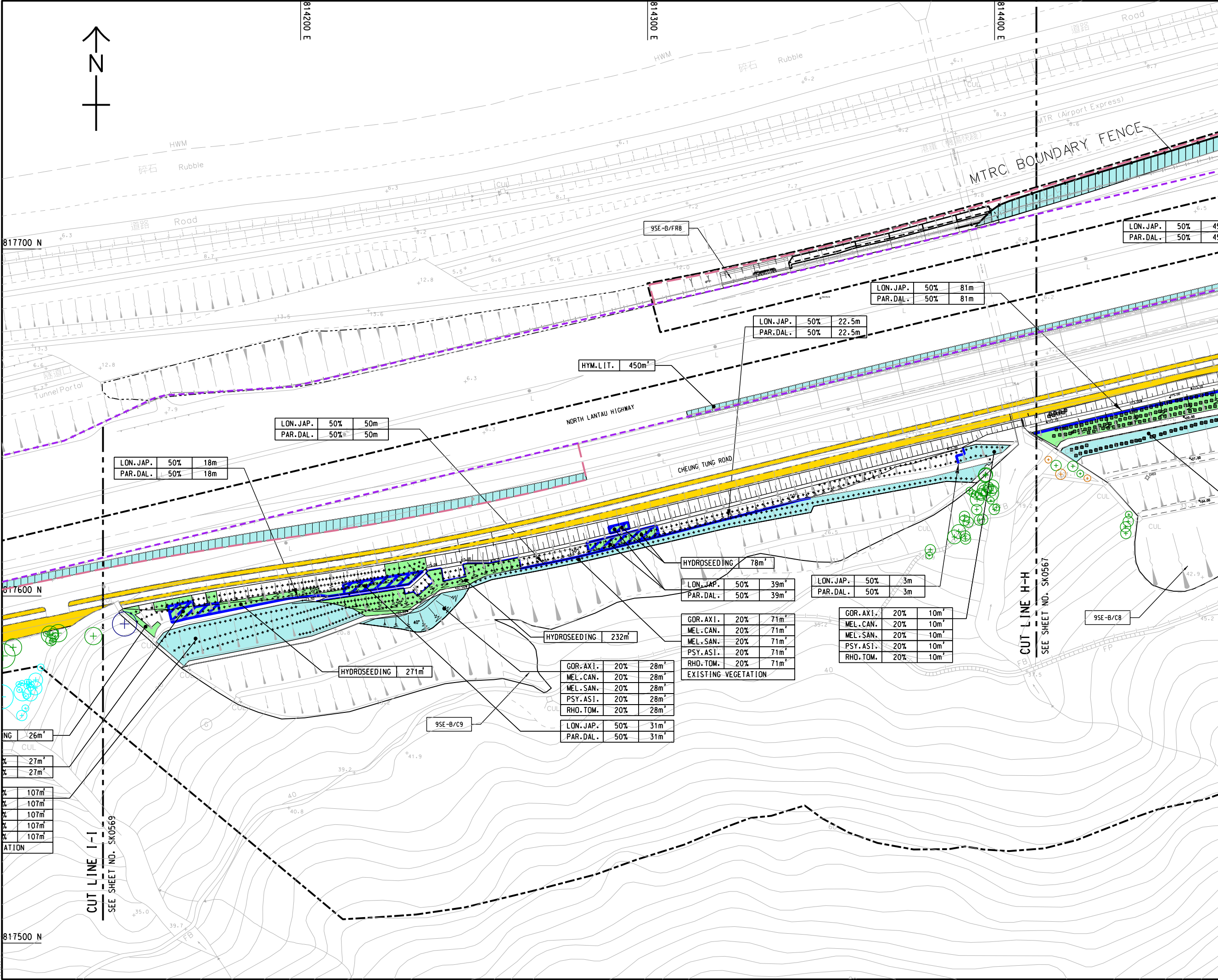
CONTRACT NO.
HMWSD 2/2020(HY)

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

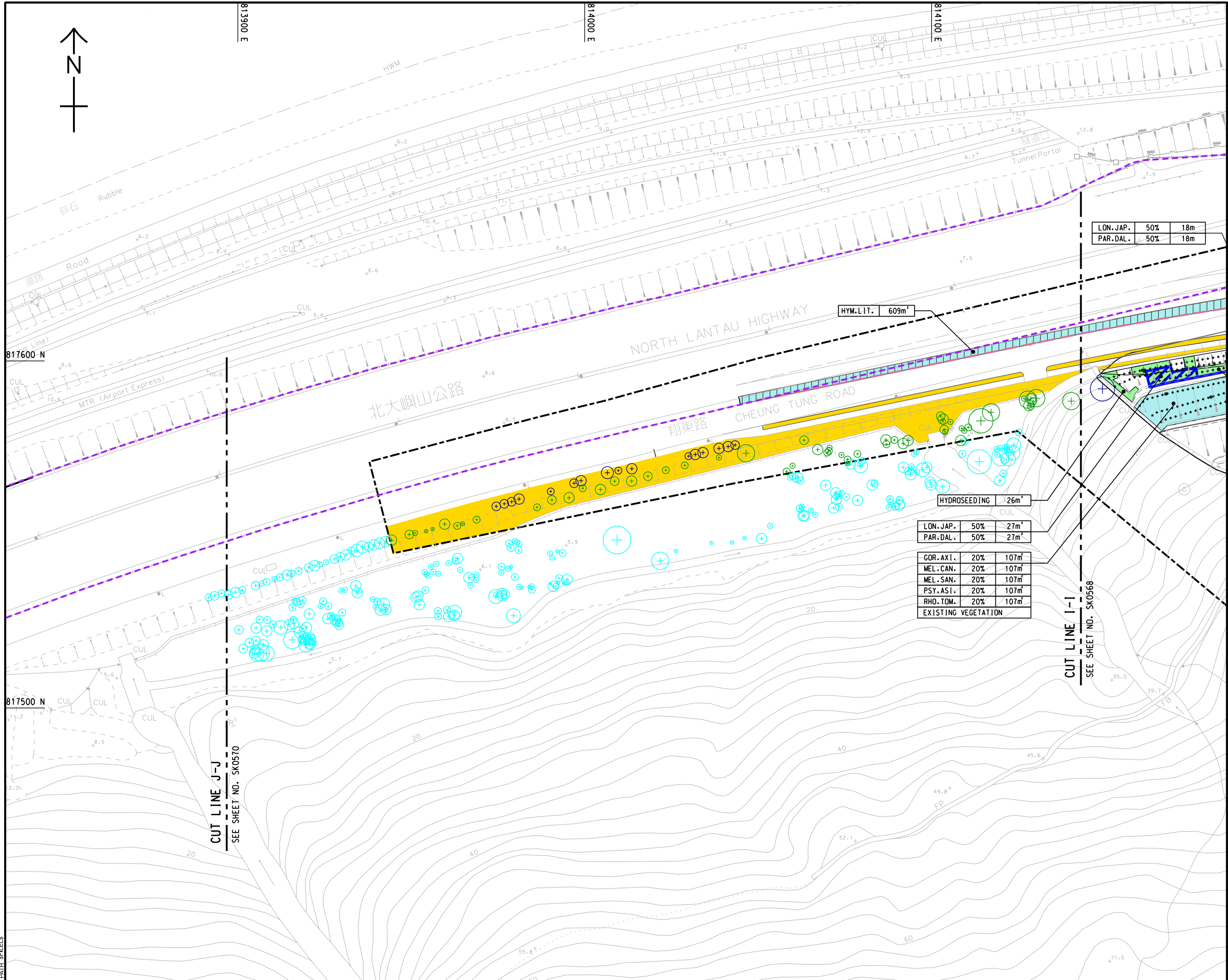
TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 9 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0568	-	



Plot File by: kashinawong 13/08/2020
 PATH: SFILES



NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:
 - - - SITE BOUNDARY
 - - - EXISTING EXPRESSWAY BOUNDARY
 - - - REVISED EXPRESSWAY BOUNDARY
 - - - MTRC BOUNDARY FENCE
 --- ENGINEERING LAYOUT-VIADUCT
 (D19) PIER MARK
 Y Y Y FILL SLOPE
 MAX 70° ROCK CUT SLOPE
 MAX 50° SOILCUT SLOPE
 + + + SOIL NAIL
 GRASS
 SHRUB
 GROUND COVER
 HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 GROUND COVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 AREA UNDER CONTRACT NO. DC/2016/01
 CLIMBERS FOR PIERS OF VIADUCT
 CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
 RHA-EXC. 905.78 m²
 SPECIES AREA (sq.m)
 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 EXISTING TREE (APPROXIMATE LOCATION)

LON. JAP.	50%	18m
PAR. DAL.	50%	18m

HYM.LIT. 609m

HYDROSEEDING 26m

LON. JAP.	50%	27m
PAR. DAL.	50%	27m

GOR. AXI.	20%	107m ²
MEL. CAN.	20%	107m ²
MEL. SAN.	20%	107m ²
PSY. ASI.	20%	107m ²
RHO. TOM.	20%	107m ²
EXISTING VEGETATION		

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL

CLIENT
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 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

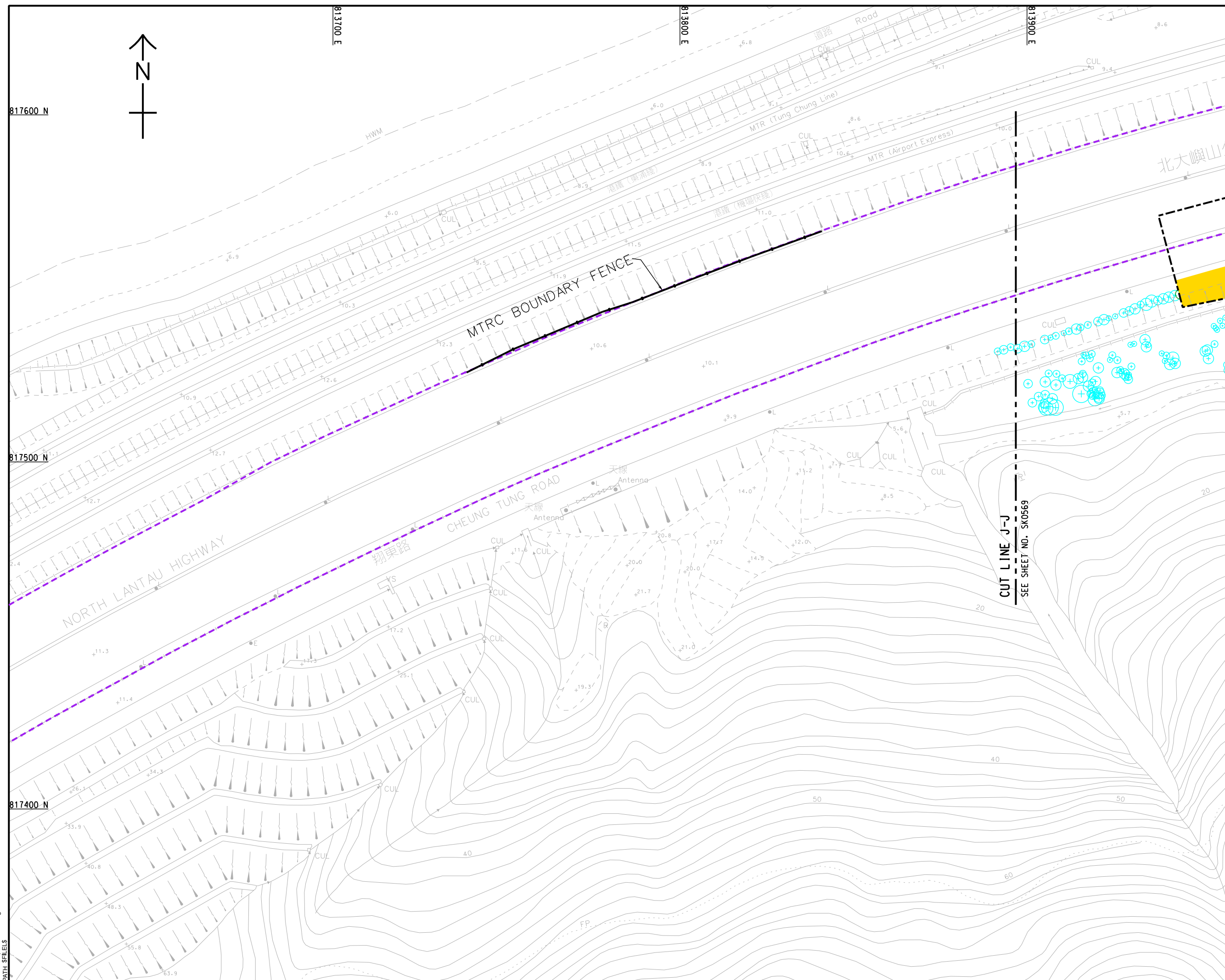
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
 SHRUB PLANTING PLAN
 (PORTION A)

SHEET 10 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0569	-	



NOTES:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- REVISED EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- (D19) PIER MARK
- YYY FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- +++ SOIL NAIL
- GRASS
- SHRUB
- GROUNDCOVER
- HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- GROUNDCOVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- AREA UNDER CONTRACT NO. DC/2016/01
- CLIMBERS FOR PIERS OF VIADUCT
- CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
- RHA-EXC. 905.78 m²
- SPECIES AREA(sq.m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
- EXISTING TREE (APPROXIMATE LOCATION)

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
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 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

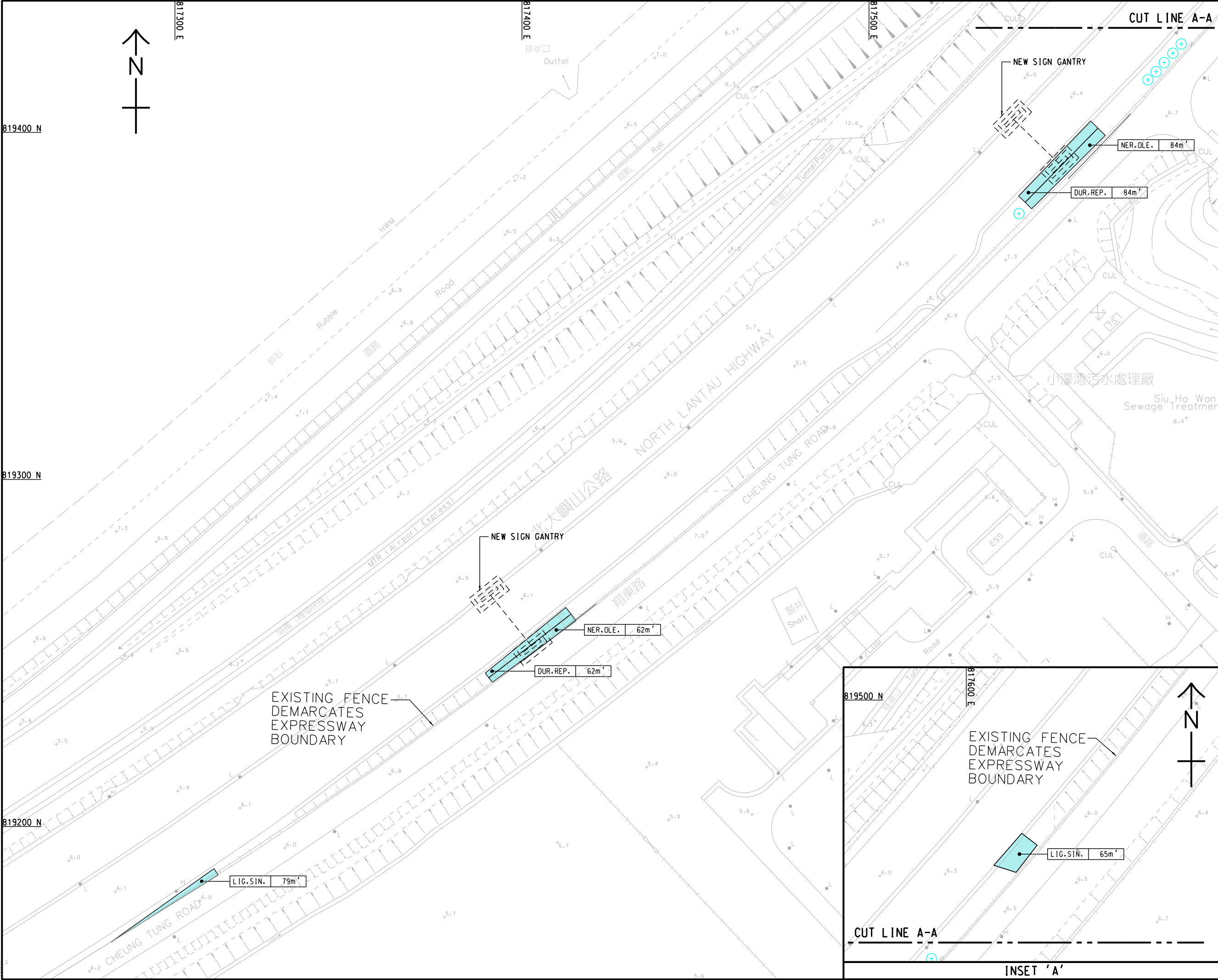
CONTRACT NO.
HMWS2 2/2020(HY)

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

TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 11 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0570	-	



- NOTES:**
 1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRAWING NOS. SK0559 TO SK0585.
- LEGEND:**
- - - - - SITE BOUNDARY
 - - - - - EXISTING EXPRESSWAY BOUNDARY
 - - - - - REVISED EXPRESSWAY BOUNDARY
 - - - - - MTRC BOUNDARY FENCE
 - - - - - ENGINEERING LAYOUT-VIADUCT
 - (D19) PIER MARK
 - YYY FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOILCUT SLOPE
 - +++ SOIL NAIL
 - GRASS
 - SHRUB
 - GROUNDCOVER
 - HYDROSEEDING, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - SHRUB, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - GROUNDCOVER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - CLIMBER, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - AREA UNDER CONTRACT NO. DC/2016/01
 - CLIMBERS FOR PIERS OF VIADUCT
 - CLIMBER MIX AT SOIL/ROCK INTERFACE AND AT SOILCUT SLOPES
 - RHA.EXC. 905.78 m²
 - SPECIES AREA(sq.m)
 - 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS
 - EXISTING TREE (APPROXIMATE LOCATION)

-	23/06/20	SHRUB PLANTING PLAN	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

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



PROJECT
TUEN MUN - CHEK LAP KOK LINK

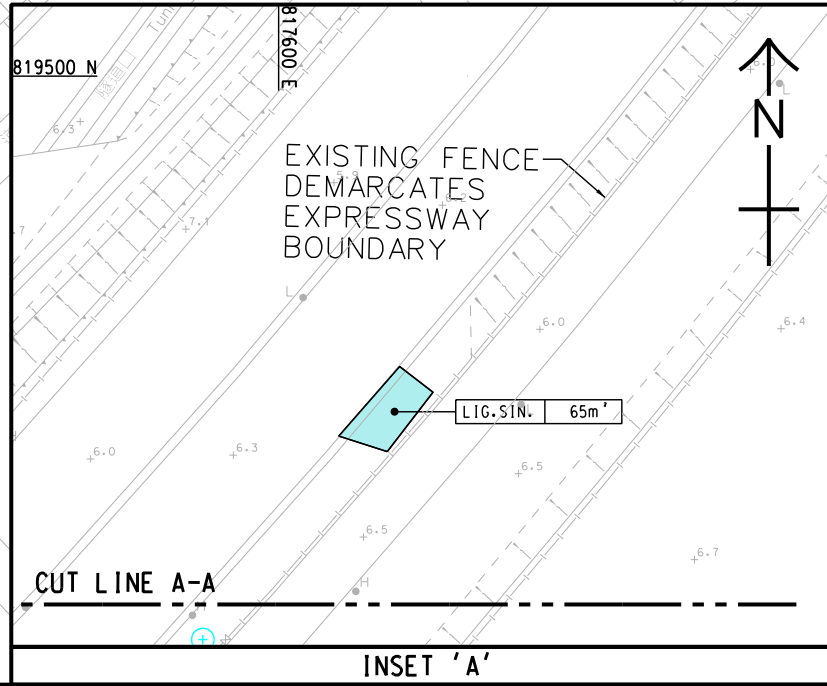
CONTRACT NO.
HMWSD 2/2020(HY)

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

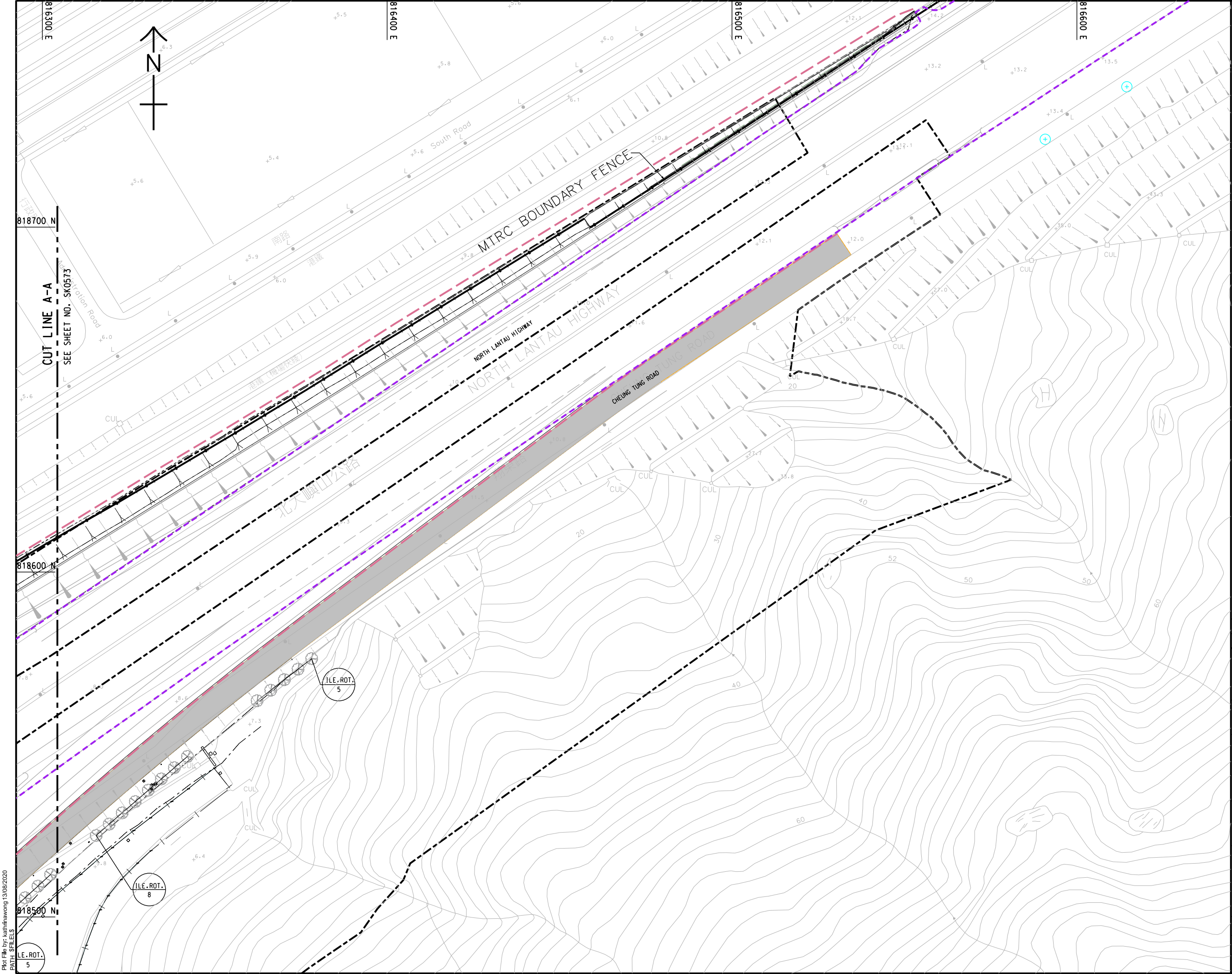
TITLE
SHRUB PLANTING PLAN (PORTION A)

SHEET 12 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0571	-	



Plot File by: kashinawong 13/08/2020
 PATH_SFILELS



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE

- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- D19 PIER MARK
- Y Y Y FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOILCUT SLOPE
- +++ SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CODE NOS.
- TREE
- CODE NOS.
- TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
- NL0482
- TRANSPLANTED TREE
- NL0482
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
 路政署
HIGHWAYS DEPARTMENT
 主要工程管理处(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)

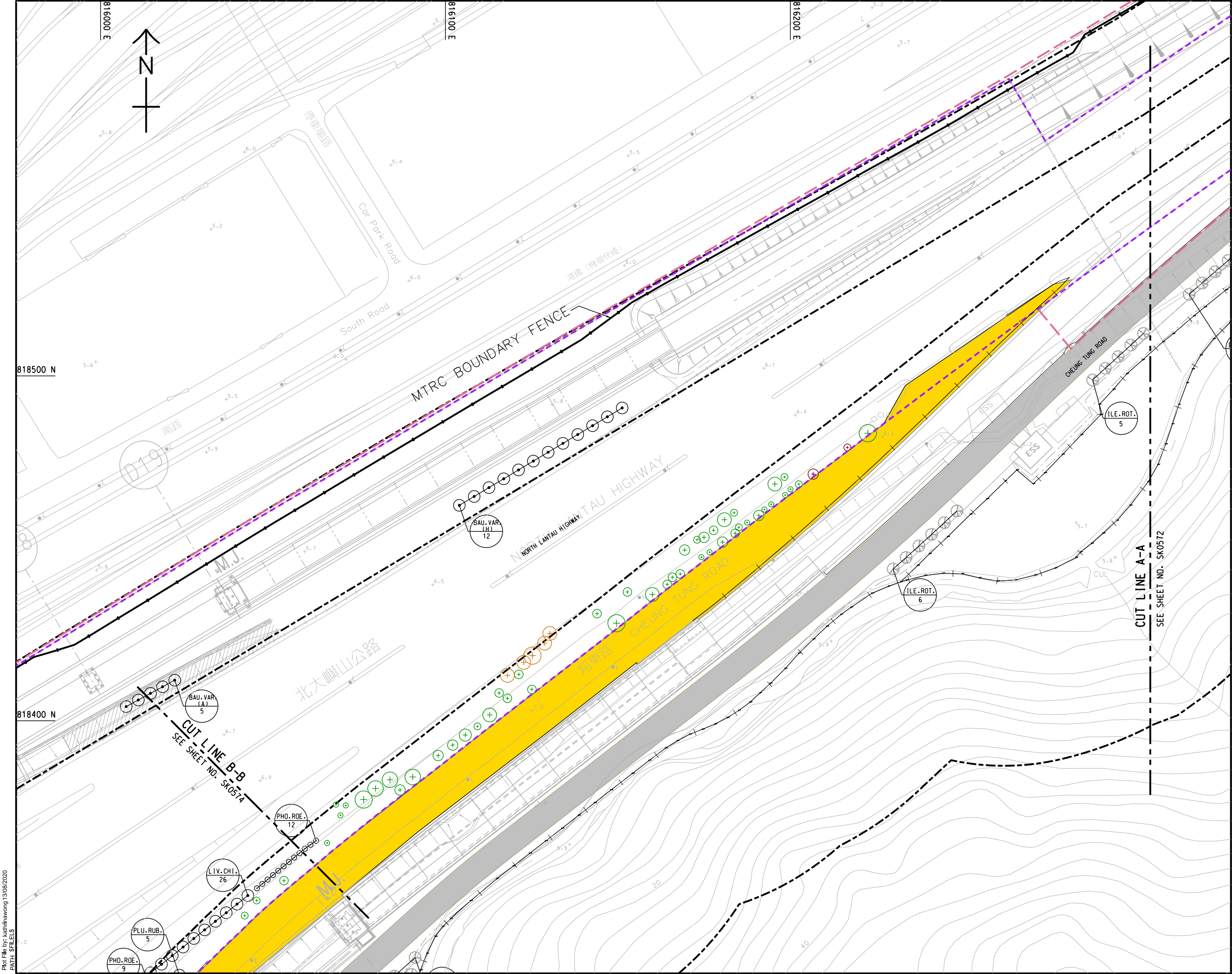
CONTRACT TITLE
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 1 OF 12

DRAWING REFERENCE	SCALE
-	1:500 (A1) 1:1000 (A3)
DRAWN	APPROVED
KW	CL
SKETCH NO.	REV.
SK0572	-

Photo by: kaithinawong 13/08/2020
 PATH SPILLES
 LE.ROT. 5



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 - D19 PIER MARK
 - YYY FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOILCUT SLOPE
 - +++ SOIL NAIL
 - AREA UNDER CONTRACT NO. DC/2016/01
 - TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - CODE NOS.
 - TREE
 - CODE NOS.
 - TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
 - NL0482
 - TRANSPLANTED TREE
 - NL0482
 - EXISTING TREE (APPROXIMATE LOCATION)
 - 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
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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.
HMWSD 2/2020(HY)

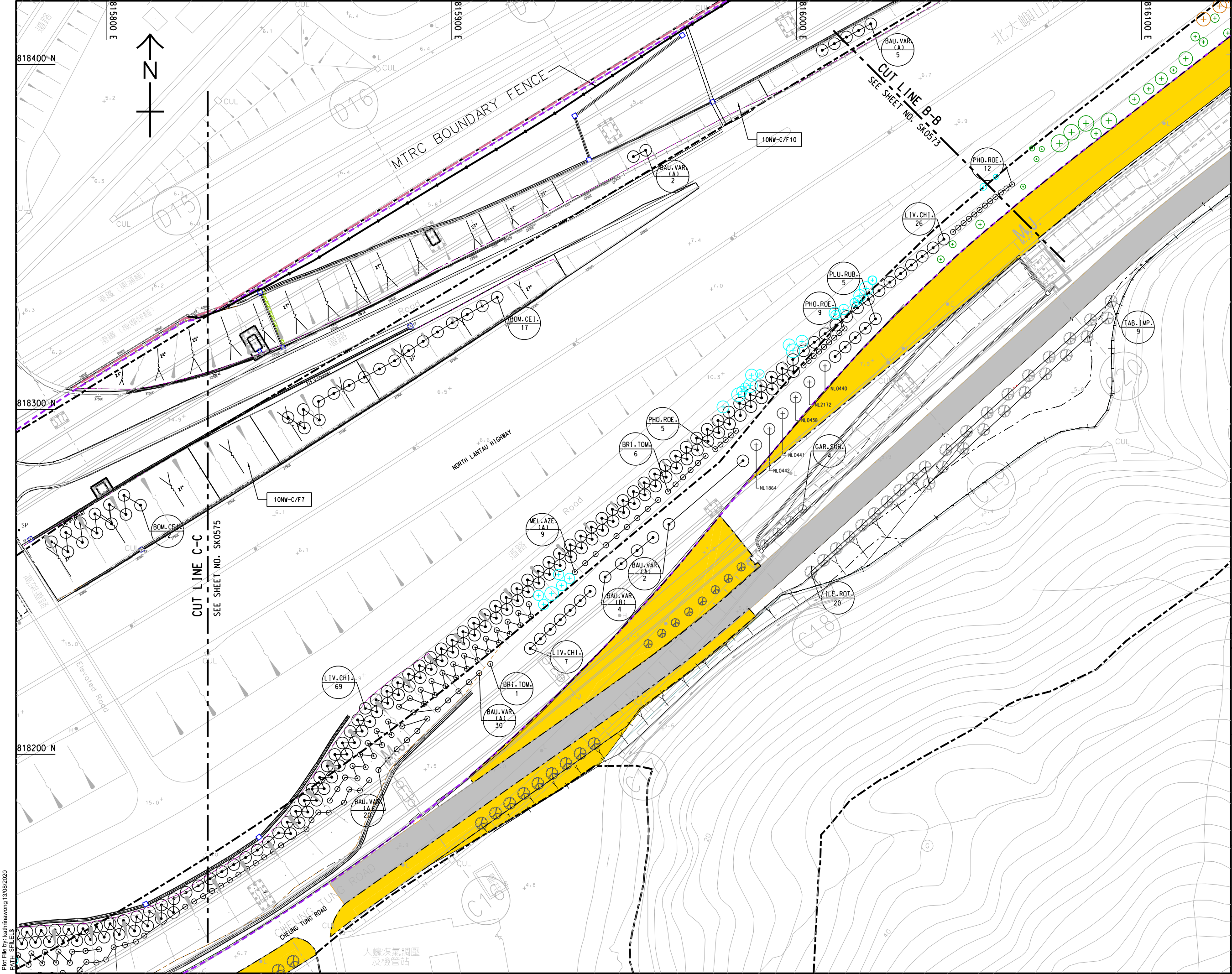
CONTRACT TITLE
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 2 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0573	-	

Plot File by: kashinawong 13/08/2020
 PATH: SP1E15



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 - D19 PIER MARK
 - YYY FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOIL CUT SLOPE
 - +++ SOIL NAIL
 - AREA UNDER CONTRACT NO. DC/2016/01
 - TREE WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - CODE NOS.
 - TREE
 - CODE NOS.
 - TRANSPLANTED TREE WITHIN EXPRESSWAY BOUNDARY
 - NL0482
 - TRANSPLANTED TREE
 - NL0482
 - EXISTING TREE (APPROXIMATE LOCATION)
 - EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
 路政署
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

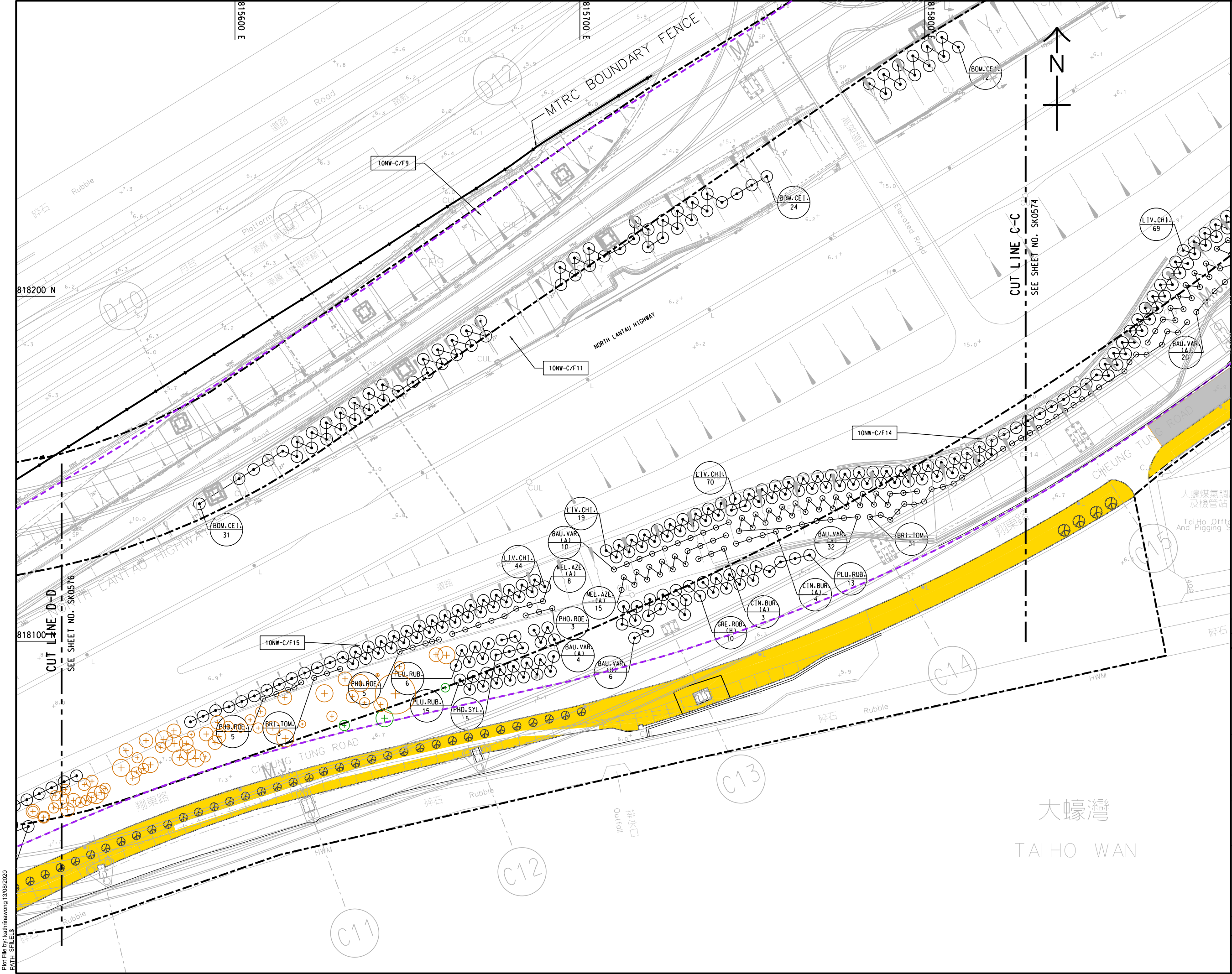
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

DRAWING REFERENCE		SCALE	
-		1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED	
KW	CL	CL	
SKETCH NO.		REV.	
SK0574			

Plot File by: katinmanwong 13/08/2020
 PATH: SP1ELES



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE

- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- TREE
- TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
- TRANSPLANTED TREE
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMILAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT

 路政署
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)

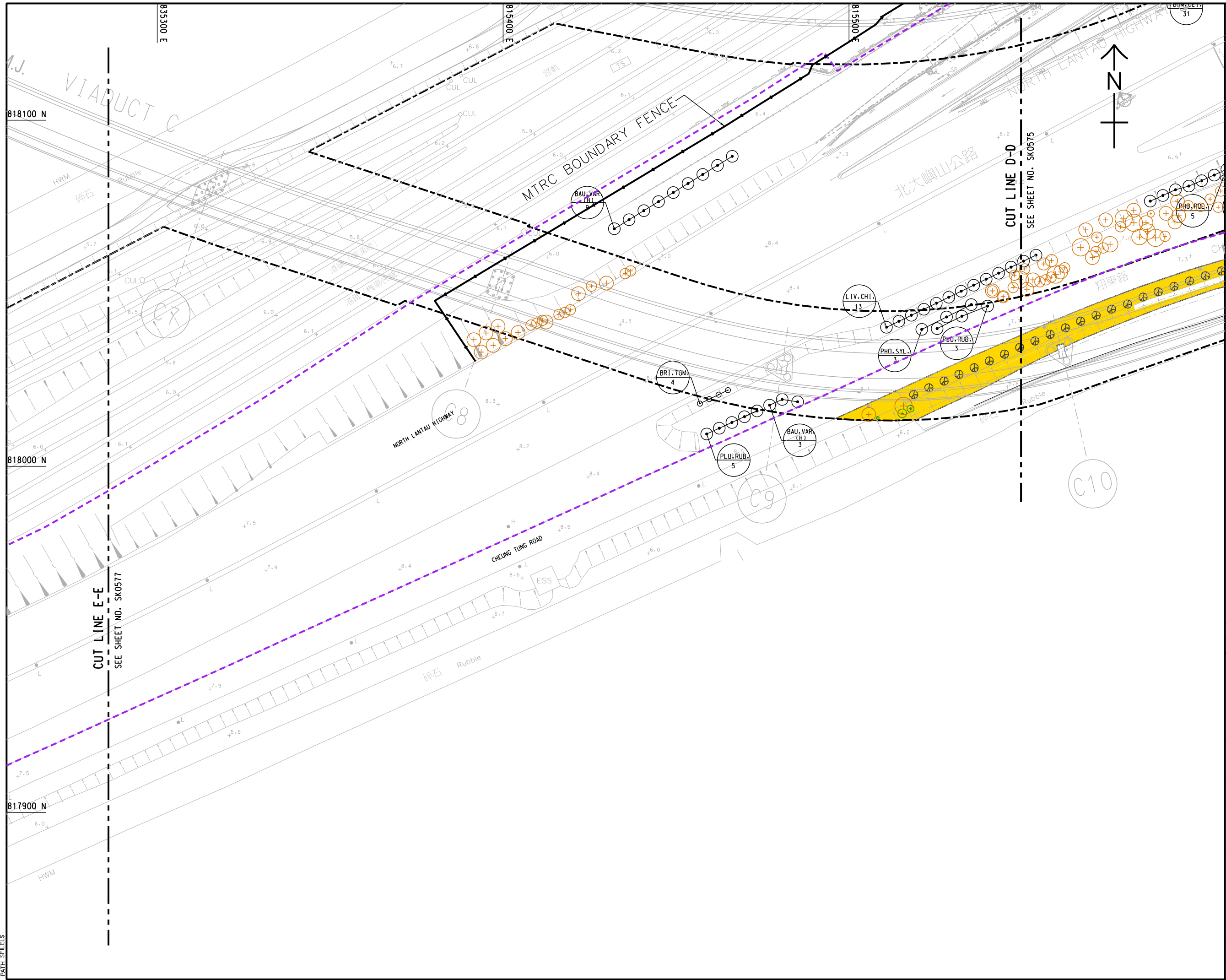
CONTRACT TITLE
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 4 OF 12

DRAWING REFERENCE	SCALE
-	1:500 (A1) 1:1000 (A3)
DRAWN	APPROVED
KW	CL
SKETCH NO.	REV.
SK0575	-

Plot File by: kahtinawong 13/08/2020
 PATH: SP1E1S



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE

- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- TREE
- TRANSPLANTED TREE WITHIN EXPRESSWAY BOUNDARY
- TRANSPLANTED TREE
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
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 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

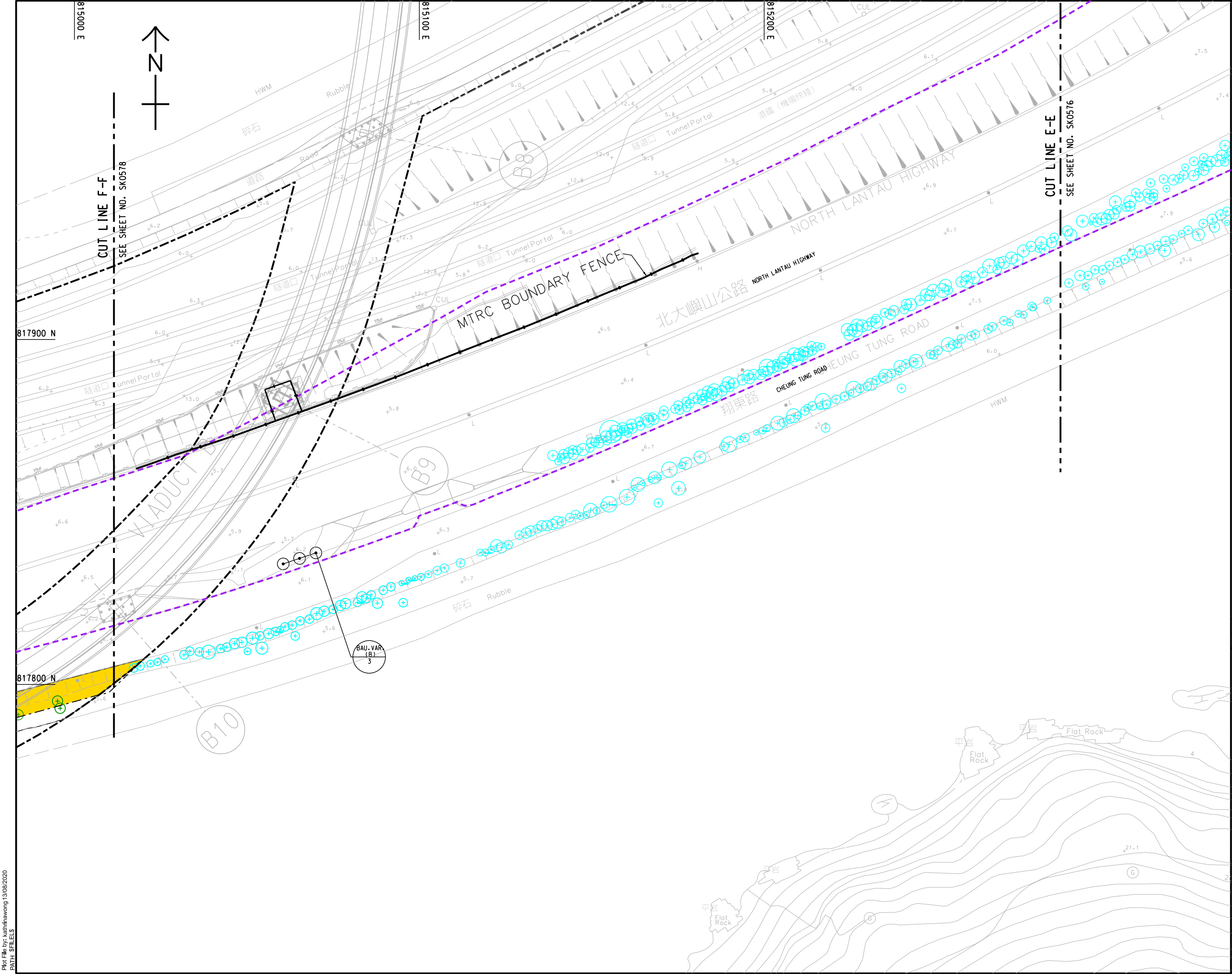
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 5 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0576	-	



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 - D19 PIER MARK
 - Y Y Y FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOIL CUT SLOPE
 - +++ SOIL NAIL
 - AREA UNDER CONTRACT NO. DC/2016/01
 - TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - TREE
 - TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
 - TRANSPLANTED TREE
 - EXISTING TREE (APPROXIMATE LOCATION)
 - 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
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 Major Works Project Management Office
 (Special Duties)

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

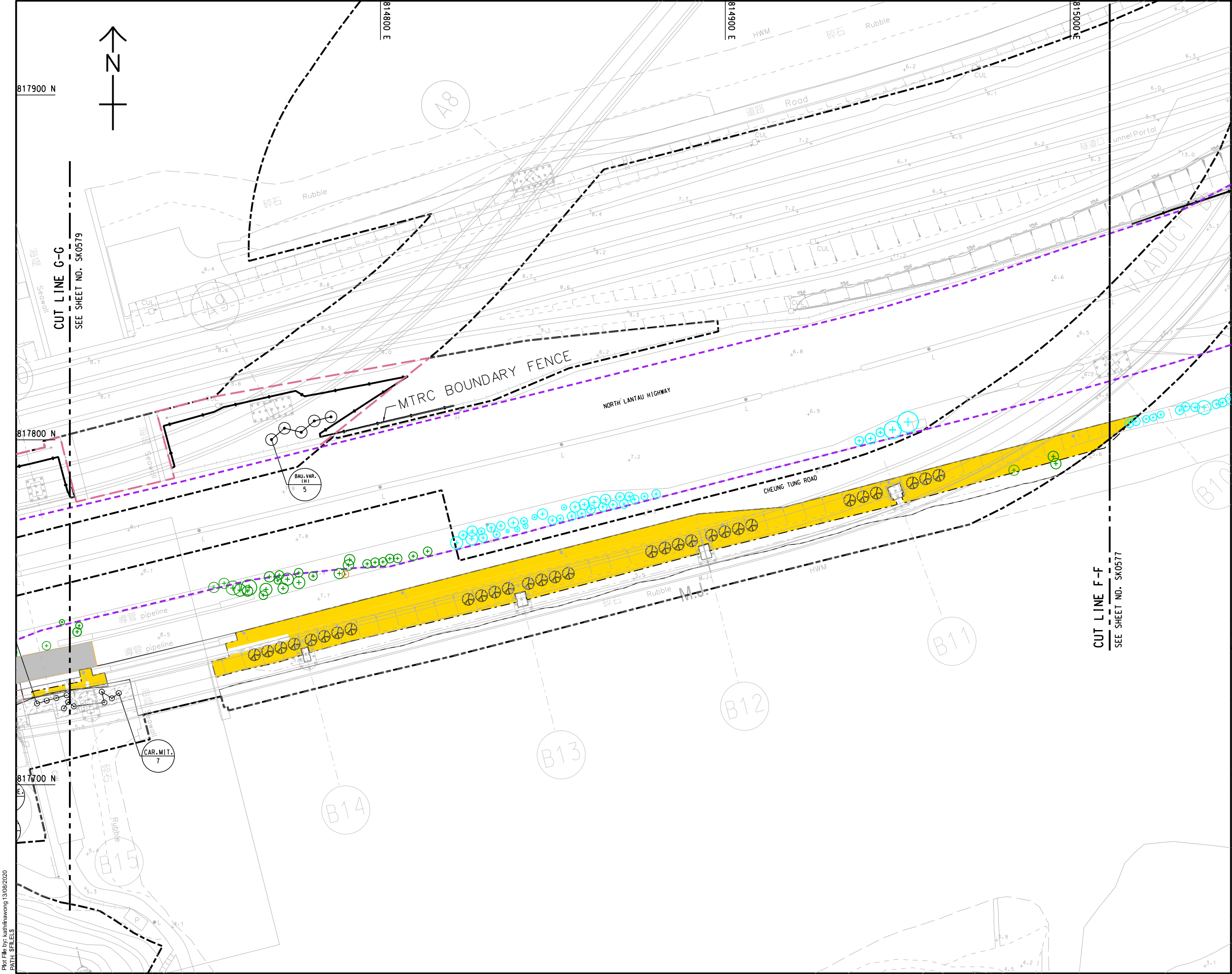
CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 6 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0577	-	



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

LEGEND:
 - - - - - SITE BOUNDARY
 - - - - - EXISTING EXPRESSWAY BOUNDARY
 - - - - - EXPRESSWAY BOUNDARY
 - - - - - MTRC BOUNDARY FENCE

- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- PIER MARK
- FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- TREE
- TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
- TRANSPLANTED TREE
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
路政署 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

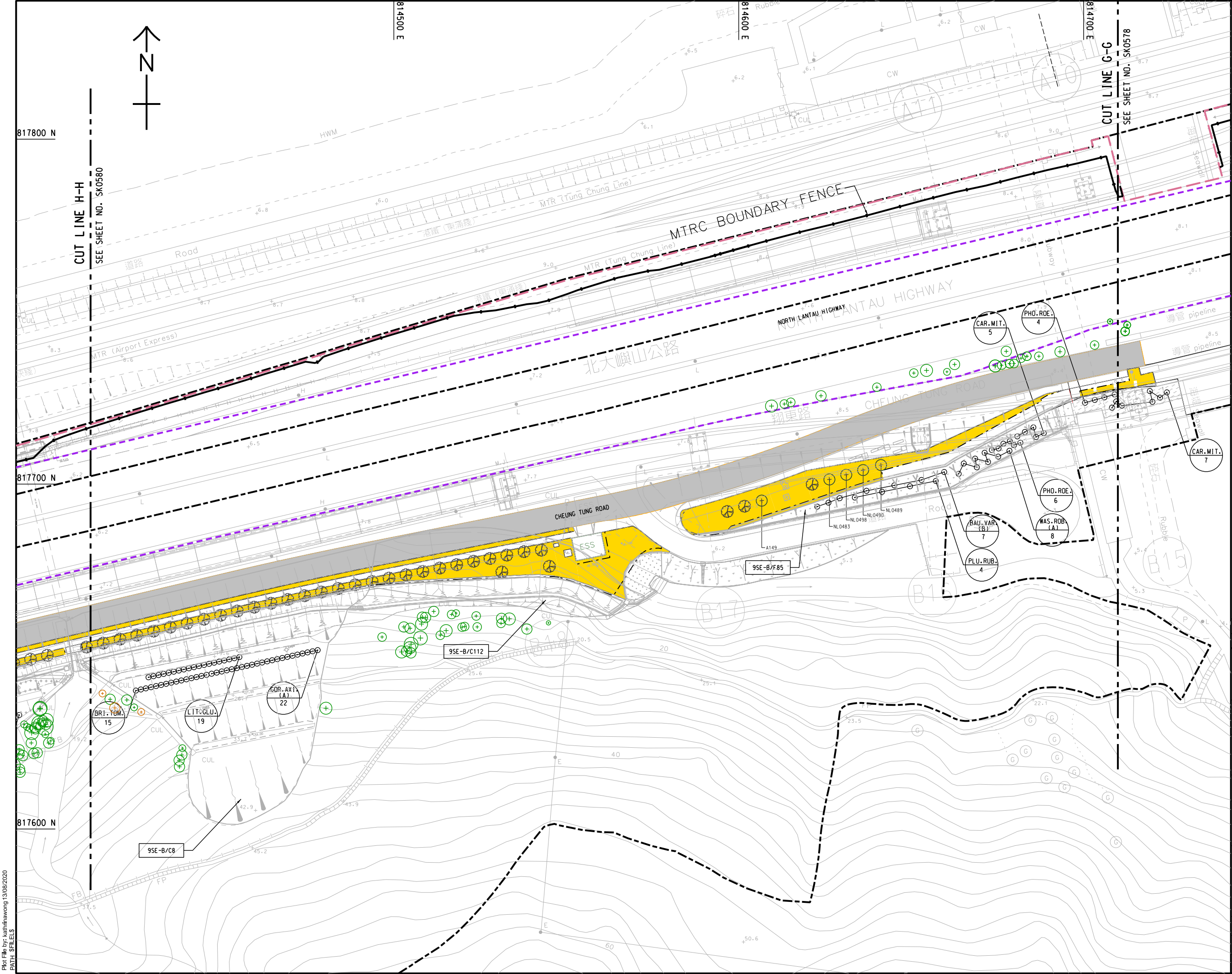
CONTRACT NO.
HMWS2 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 7 OF 12

DRAWING REFERENCE		SCALE
-		1:500 (A1) 1:1000 (A3)
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0578	-	



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 - D19 PIER MARK
 - Y Y Y FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOIL CUT SLOPE
 - +++ SOIL NAIL
 - AREA UNDER CONTRACT NO. DC/2016/01
 - TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - CODE NOS. TREE
 - CODE NOS. TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
 - TRANSPLANTED TREE
 - EXISTING TREE (APPROXIMATE LOCATION)
 - 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
 路政署
HIGHWAYS DEPARTMENT
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 Major Works Project Management Office
 (Special Duties)

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 8 OF 12

DRAWING REFERENCE	SCALE	
-	1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0579	-	

NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- D19 PIER MARK
- Y Y Y FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- +++ SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- CODE NOS.
- TREE
- CODE NOS.
- TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
- NL0482
- TRANSPLANTED TREE
- NL0482
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMILAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

CLIENT
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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

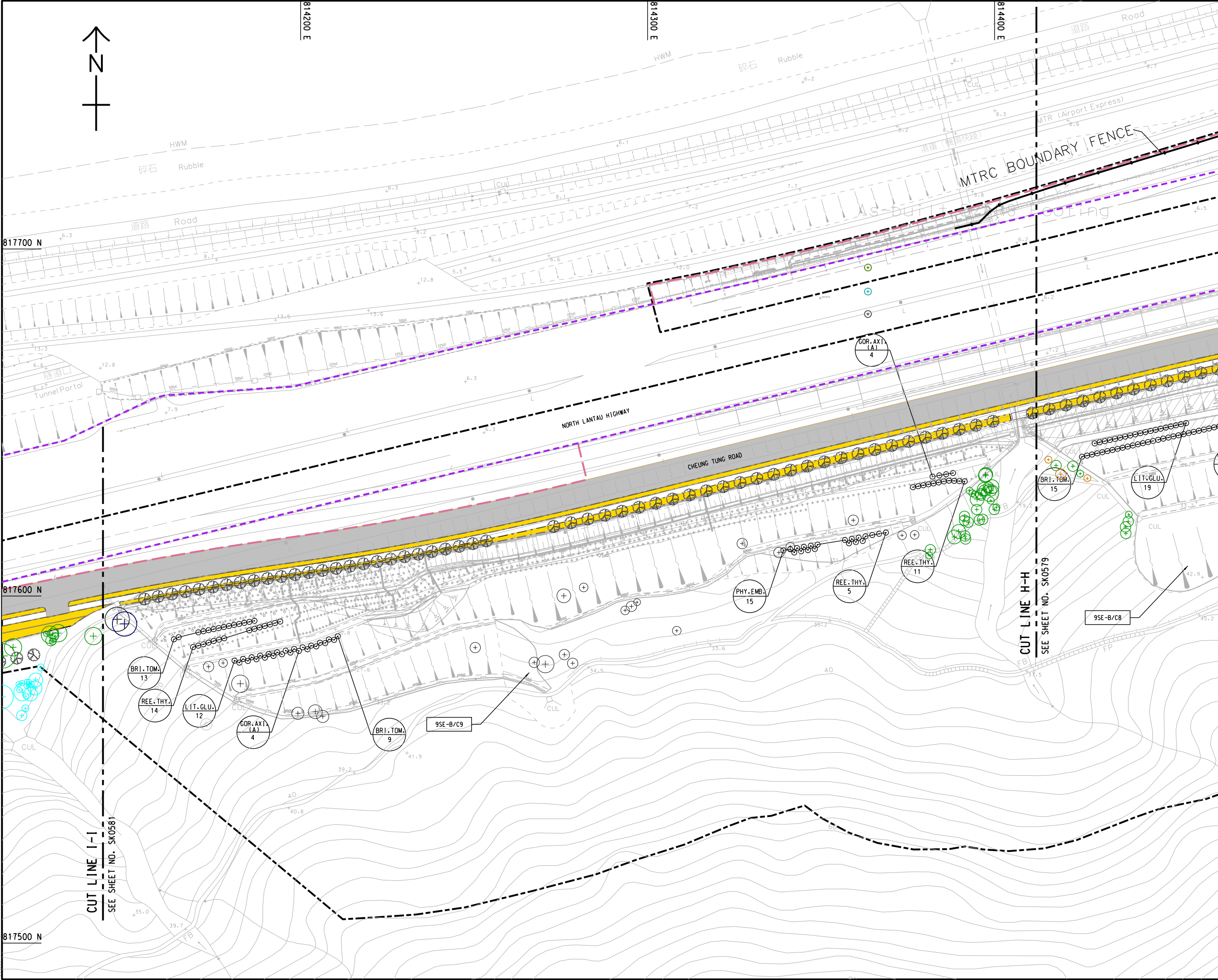
CONTRACT NO.
HMWSD 2/2020(HY)

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

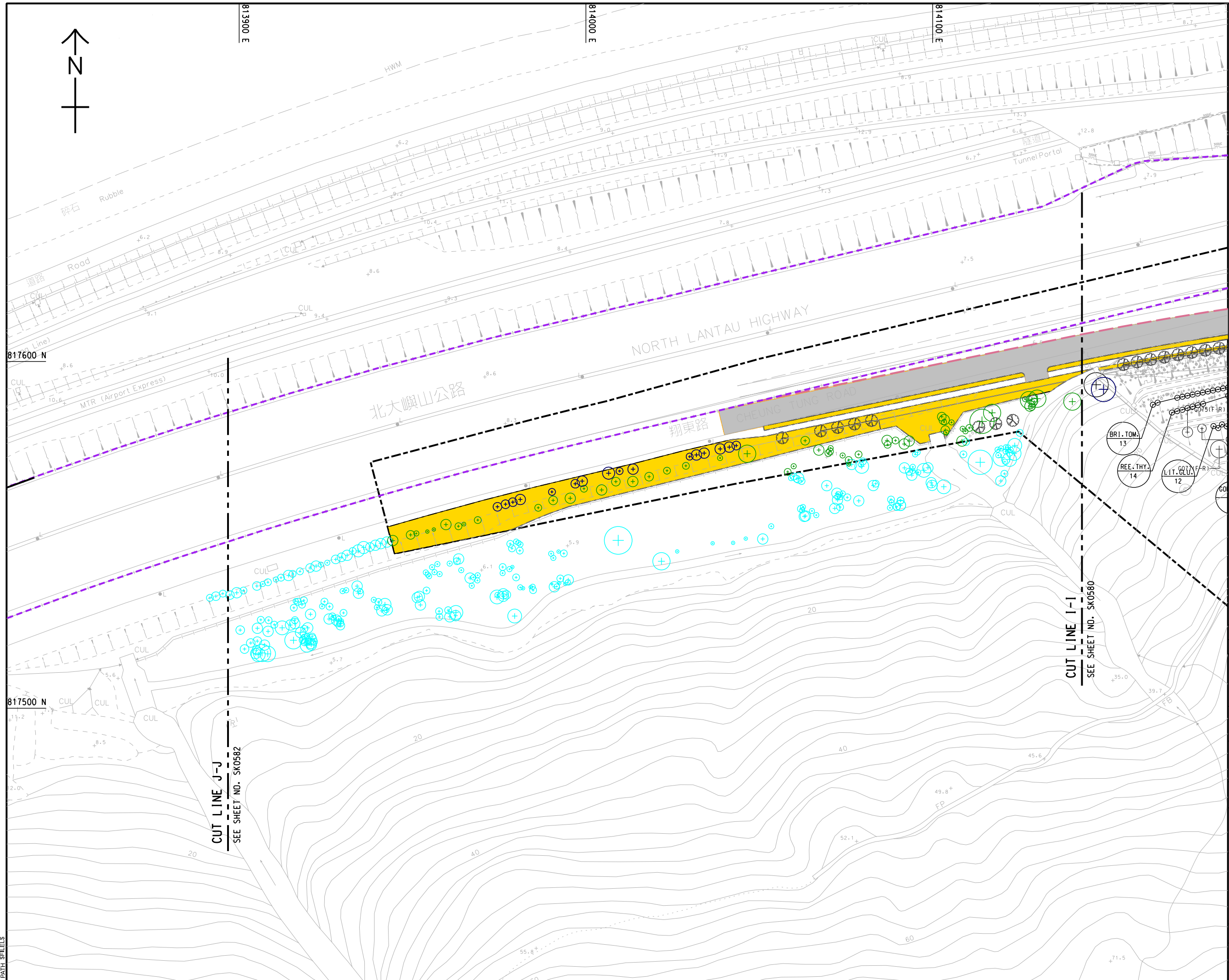
TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 9 OF 12
 DRAWING REFERENCE SCALE 1:500 (A1)
 1:1000 (A3)

DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0580	-	



Plot File by: kashinawong 13/08/2020
 PATH: SPLELS



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

LEGEND:

- SITE BOUNDARY
- EXISTING EXPRESSWAY BOUNDARY
- EXPRESSWAY BOUNDARY
- MTRC BOUNDARY FENCE
- ENGINEERING LAYOUT-VIADUCT
- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
- D19 PIER MARK
- Y Y Y FILL SLOPE
- MAX 70° ROCK CUT SLOPE
- MAX 50° SOIL CUT SLOPE
- +++ SOIL NAIL
- AREA UNDER CONTRACT NO. DC/2016/01
- TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
- TREE
- TRANSPANTED TREE, WITHIN EXPRESSWAY BOUNDARY
- TRANSPANTED TREE
- EXISTING TREE (APPROXIMATE LOCATION)
- EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

-	23/06/20	TREE PLANTING PLAN	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

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

AECOM

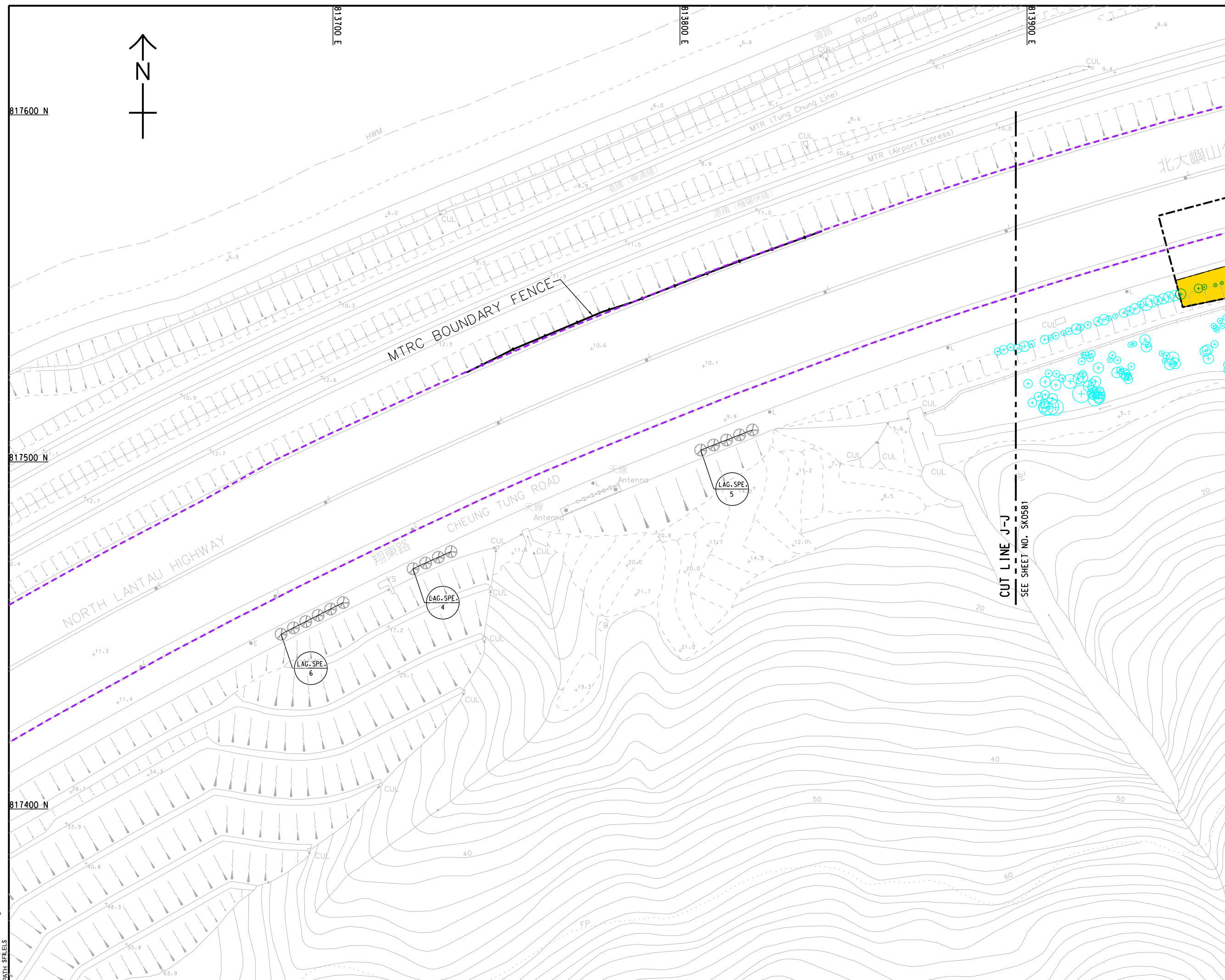
PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

DRAWING REFERENCE		SCALE	
-		1:500 (A1) 1:1000 (A3)	
DRAWN	PREPARED	APPROVED	
KW	CL	CL	
SKETCH NO.	REV.		
SK0581	-		



NOTES:
 1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

- LEGEND:**
- SITE BOUNDARY
 - EXISTING EXPRESSWAY BOUNDARY
 - EXPRESSWAY BOUNDARY
 - MTRC BOUNDARY FENCE
 - ENGINEERING LAYOUT-VIADUCT
 - ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 - PIER MARK
 - FILL SLOPE
 - MAX 70° ROCK CUT SLOPE
 - MAX 50° SOILCUT SLOPE
 - SOIL NAIL
 - AREA UNDER CONTRACT NO. DC/2016/01
 - TREE, WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 - TREE
 - TRANSPLANTED TREE, WITHIN EXPRESSWAY BOUNDARY
 - TRANSPLANTED TREE
 - EXISTING TREE (APPROXIMATE LOCATION)
 - EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

-	23/06/20	TREE PLANTING PLAN	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT

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 Major Works Project Management Office
 (Special Duties)



PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

SHEET 11 OF 12

DRAWING REFERENCE		SCALE
-		1:500 (A1) 1:1000 (A3)
DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0582	-	



819400 N

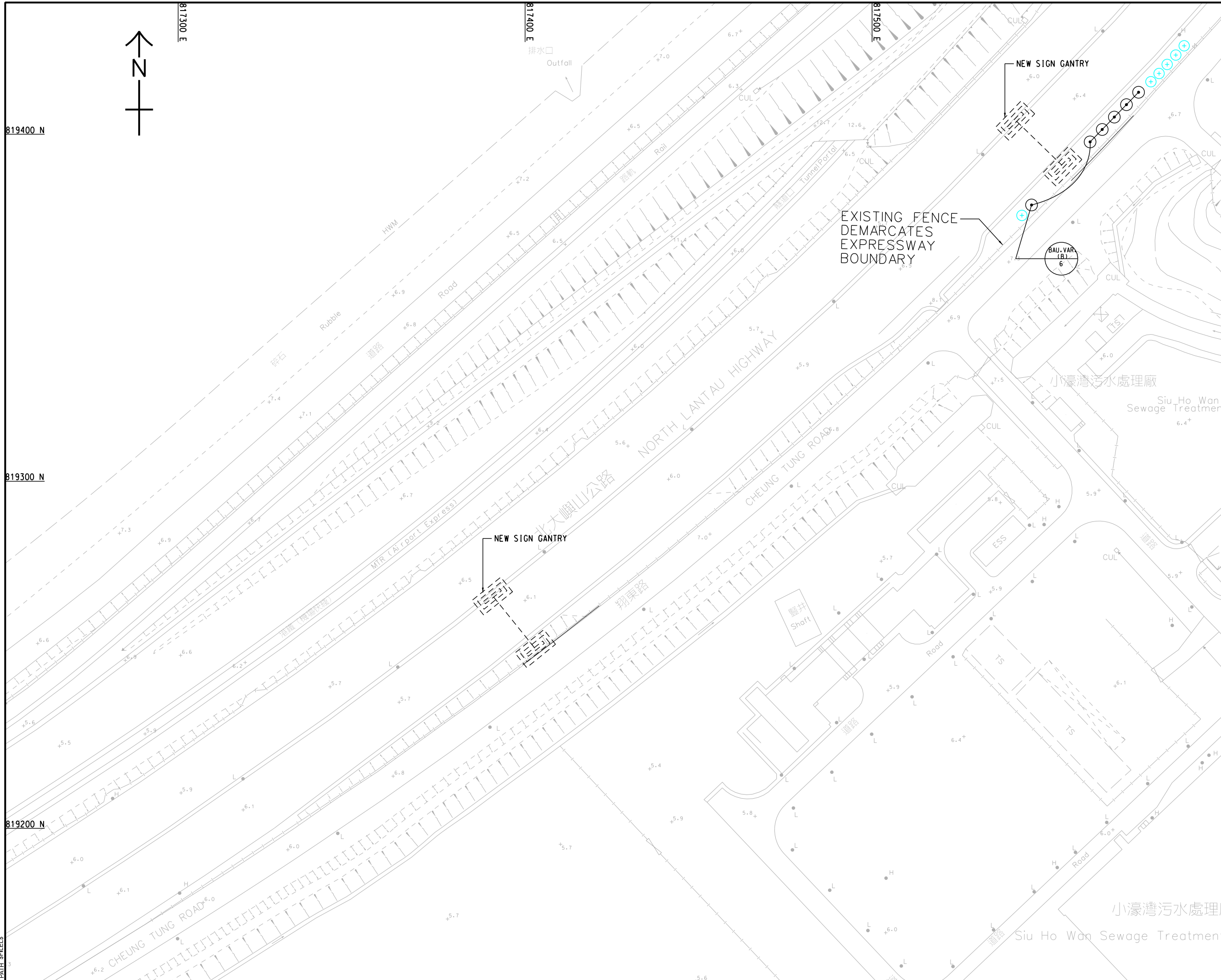
819300 N

819200 N

817300 E

817400 E

817500 E



NOTES:
1. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. SK0559 TO SK0585.

LEGEND:
 - - - SITE BOUNDARY
 - - - EXISTING EXPRESSWAY BOUNDARY
 - - - EXPRESSWAY BOUNDARY
 - - - MTRC BOUNDARY FENCE
 --- ENGINEERING LAYOUT-VIADUCT
 --- ENGINEERING LAYOUT-REALIGNMENT OF CHEUNG TUNG ROAD
 (D19) PIER MARK
 Y Y Y FILL SLOPE
 MAX 70° ROCK CUT SLOPE
 MAX 50° SOIL CUT SLOPE
 + + + SOIL NAIL
 AREA UNDER CONTRACT NO. DC/2016/01
 TREE WITHIN EXPRESSWAY BOUNDARY OR ON SLOPE
 TREE
 TRANSPLANTED TREE WITHIN EXPRESSWAY BOUNDARY
 TRANSPLANTED TREE
 EXISTING TREE (APPROXIMATE LOCATION)
 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.
-	23/06/20	TREE PLANTING PLAN	KW	CL	CL

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

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HMWSD 2/2020(HY)

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

TITLE
TREE PLANTING PLAN (PORTION A)

DRAWING REFERENCE
 SCALE 1:500 (A1)
 1:1000 (A3)

DRAWN	PREPARED	APPROVED
KW	CL	CL
SKETCH NO.	REV.	
SK0583	-	

PLANTING SCHEDULE FOR RESUMED AREA AT VIADUCT A (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(H)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD TREE	5000	-	5	PLANT IN STAGGERED PATTERN
SHRUB PLANTING							
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	500	4.6	700	PLANT EACH SPECIES IN GROUPS OF 50-80 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	350	
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	500	4.6	600	
PIT.TOB.	<i>Pittosporum tobira</i>	海桐花	300(H) x 300(S)	500	4.6	350	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	890	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	500	4.6	1430	
GROUNDCOVER PLANTING							
HYM.LIT.	<i>Hymenocallis littoralis</i>	蛛兜蘭	300(H) x 300(S)	300	12.54	8800	PLANT ALL SPECIES IN STAGGERED PATTERN.
CLIMBER PLANTING (UNDER STRUCTURE)							
EPI.AUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	230	-
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) VIADUCT B (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	STANDARD TREE	5000	-	3	PLANT IN STAGGERED PATTERN
SHRUB PLANTING							
ALL.CAT.	<i>Allamanda cathartica</i>	軟枝黃蟬	300(H) x 300(S)	350	9.57	770	PLANT ALL SPECIES IN STAGGERED PATTERN.
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	350	9.57	1310	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	350	9.57	2000	
GROUNDCOVER PLANTING							
HYM.LIT.	<i>Hymenocallis littoralis</i>	蛛兜蘭	300(H) x 300(S)	300	12.54	10700	PLANT ALL SPECIES IN STAGGERED PATTERN.
CLIMBER FOR PIERS OF VIADUCTS - PIER B10 (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	10	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dalzielli</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	10	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) VIADUCT C (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD TREE	4000	-	6	PLANT IN STAGGERED PATTERN
BAU.VAR.(B)/(H)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD TREE	4000 - 5000	-	13	
GRE.ROB.(H)	<i>Grevillea robusta</i>	銀樟	HEAVY STANDARD TREE	4000	-	10	
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花	2000(H) x 2000(S) - 2500(H) x 2500(S)	4000	-	47	
PALM PLANTING							
LIV.CHI.	<i>Livistona chinensis</i>	蒲葵	2500(H) x 1500(S)	4000	-	7	TRUNK HEIGHT. PLANT IN STAGGERED PATTERN.
PHO.SYL.	<i>Phoenix sylvestris</i>	銀海欖	2000(H) x 1500(S)	4000	-	8	
SHRUB PLANTING							
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	350	9.57	10100	PLANT ALL SPECIES IN STAGGERED PATTERN.
GOR.AXI.	<i>Gordonia axillaris</i>	大頭茶	300(H) x 300(S)	350	9.57	5600	
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	350	9.57	8750	
MEL.SAN.	<i>Melastoma sanguineum</i>	毛萼	300(H) x 300(S)	350	9.57	8750	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	350	9.57	8750	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	350	9.57	8760	
GROUNDCOVER PLANTING							
ADA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) x 200(S)	250	18.4	625	PLANT ALL SPECIES IN STAGGERED PATTERN.
HYM.LIT.	<i>Hymenocallis littoralis</i>	蛛兜蘭	300(H) x 300(S)	300	12.54	21000	
TRA.SPA.	<i>Tradescantia spathacea</i>	蚌花	200(H) x 300(S)	250	18.4	6300	
CLIMBER PLANTING (UNDER STRUCTURE)							
EPI.AUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	3405	PLANT EACH SPECIES IN GROUPS OF 10-20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED
PAR.DAL.	<i>Parthenocissus dalzielli</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	5000	
CLIMBER FOR PIERS OF VIADUCTS - PIER C13, C18 (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	26	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dalzielli</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	26	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
CLIMBER FOR PIERS OF VIADUCTS - PIER C9, C14, C16, C17 (WITH BEARING)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	125	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER SPECIES
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	噴草	-	-	-	333 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3)
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (KOWLOON BOUND) VIADUCT D, FEATURES NOS. 10NW-C/F9, 10NW-C/F10 AND 10NW-C/F52 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD TREE	4000	-	7	-
BAU.VAR.(B)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	STANDARD TREE	5000	-	9	
BAU.VAR.(H)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	HEAVY STANDARD TREE	5000	-	12	
SHRUB PLANTING							
ALL.CAT.	<i>Allamanda cathartica</i>	軟枝黃蟬	300(H) x 300(S)	300	12.54	2600	PLANT ALL SPECIES IN STAGGERED PATTERN.
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	500	4.6	14150	
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	3730	
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	500	4.6	1100	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	11130	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	500	4.6	19800	
GROUNDCOVER PLANTING							
ADA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) x 200(S)	250	18.4	11984	PLANT ALL SPECIES IN STAGGERED PATTERN.
HYM.LIT.	<i>Hymenocallis littoralis</i>	蛛兜蘭	300(H) x 300(S)	300	12.54	53720	
CLIMBER PLANTING							
EPI.AUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	3314	PLANT EACH SPECIES IN GROUPS OF 10-20 IN
CLIMBER FOR PIERS OF VIADUCTS - PIER D13 (WITH BEARING)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	59	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER SPECIES.
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) SIGN GANTRIES (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	STANDARD TREE	5000	-	6	-
SHRUB PLANTING							
DUR.REP.	<i>Duranta repens</i>	假連翹	300(H) x 250(S)	400	7.25	740	REINSTATEMENT PLANTING
LIG.SIN.	<i>Ligustrum sinense</i>	山指甲	300(H) x 250(S)	400	7.25	730	REINSTATEMENT PLANTING
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	400(H) x 250(S)	400	7.25	740	REINSTATEMENT PLANTING

Plot File by: kashinawong 13/08/2020
 PATH: SFILES

-	23/06/20	PLANTING SCHEDULE	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT

路政署
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.
HMWS2/2020(HY)

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

TITLE
**PLANTING SCHEDULE
 (PORTION A)**

SHEET 1 OF 2

DRAWING REFERENCE		SCALE	
-		N.T.S.	
DRAWN	PREPARED	APPROVED	
KW	CL	CL	
SKETCH NO.			REV.
SK0584			-

PLANTING SCHEDULE FOR FEATURES NOS. 10NW-C/F11 AND 10NW-C/F17 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING - EXOTIC							
BOM.CEI.	<i>Bombax ceiba</i>	木綿	LIGHT STANDARD TREE	4000-5000	-	84	-
SHRUB MIX PLANTING							
CAL.HAE.	<i>Calliandra haematocephala</i>	紅絨球	300(H) x 300(S)	1000	1.2	520	-
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	2000	-
HIB.ROS.	<i>Hibiscus rosa-sinensis</i>	大紅花	300(H) x 300(S)	1000	1.2	520	-
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	1000	1.2	3650	-
CLIMBER FOR PIERS OF VIADUCTS							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	47	PLANT ALONG THE WALL OF THE COLUMN AND IN AN
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	47	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PLANTING SCHEDULE FOR FEATURES NOS. 10NW-C/F13, 10NW-C/F14 AND 10NW-C/F15 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	LIGHT STANDARD TREE	4000	-	92	-
CIN.BUR.(A)	<i>Cinnamomum burmannii</i>	陰香	LIGHT STANDARD TREE	4000	-	7	-
MEL.AZE.(A)	<i>Melia azeedarach</i>	苦楝	LIGHT STANDARD TREE	4000	-	32	-
BRI.TOM.	<i>Bridelia tomentosa</i>	土蜜樹	LIGHT STANDARD TREE	3000	-	45	-
PALM PLANTING							
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) x 1500(S)	2000	-	39	OVERALL HEIGHT
LIV.CHI.	<i>Livistona chinensis</i>	蒲葵	2500(H) x 1500(S)	3500-4000	-	241	OVERALL HEIGHT
CLIMBER MIX PLANTING (UNDER STRUCTURE)							
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	4417	-
CLIMBER FOR PIERS OF VIADUCTS (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	10	PLANT ALONG THE WALL OF THE COLUMN AND IN AN
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	10	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	噴草	-	-	-	7083 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3)
PLANTING SCHEDULE FOR FEATURES NOS. 95E-B/C8, 95E-B/C9 AND 95E-B/C112							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BRI.TOM.	<i>Bridelia tomentosa</i>	土蜜樹	WHIP	1500-2000	-	37	-
GOR.AXI.(A)	<i>Gordonia axillaris</i>	大頭茶	WHIP	1500-2000	-	30	-
LIT.GLU.	<i>Litsea glutinosa</i>	潺槁樹	WHIP	1500-2000	-	31	-
PHY.EMB.	<i>Phyllanthus emblica</i>	餘甘子	WHIP	1500-2000	-	15	-
REE.THY.	<i>Reevesia thyrsoidea</i>	梭羅樹	WHIP	1500-2000	-	30	-
SHRUB MIX							
GOR.AXI.	<i>Gordonia axillaris</i>	大頭茶	500(H) x 500(S)	500	4.6	1100	PLANT EACH SPECIES IN GROUPS OF 15 TO 30 AT RANDOM THROUGHOUT AREAS DESIGNATED FOR SHRUB PLANTING.
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	500	4.6	1100	
MEL.SAN.	<i>Melastoma sanguineum</i>	毛茛	300(H) x 300(S)	500	4.6	1100	
PSY.ASI.	<i>Psychotria asiatica</i>	九節	300(H) x 300(S)	500	4.6	1100	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	1100	
CLIMBER							
LON.JAP.	<i>Lonicera japonica</i>	金銀花	MIN. 4 SHOOTS PER PLANT, 600 LONG	500	4.6	900	PLANT CLIMBER MIX ALONG SOIL/ROCK INTERFACE AND IN AREAS DESIGNATED FOR CLIMBER MIX PLANTING. PLANT EACH SPECIES IN GROUPS OF 5-10 AND IN A STAGGERED PATTERN.
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	900	
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	噴草	-	-	-	1558 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3)
PLANTING SCHEDULE FOR FEATURE NO. 95E-B/F85							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	宮粉羊蹄甲	STANDARD TREE	4000	-	7	-
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花(紅)	HEAVY STANDARD	3500-4000	-	4	2000 (H) X 2000 (S)
PALM TREE PLANTING							
CAR.MIT.	<i>Caryota mitis</i>	短穗魚尾葵	2500(H) x 1500(S)	2500	-	12	MIN. 4 CLUMPS PER PLANT
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) X 1500(S)	2000	-	10	OVERALL HEIGHT
WAS.ROB.(A)	<i>Washingtonia robusta</i>	華盛頓葵	2500(H) x 2000(S)	3500-4000	-	8	OVERALL HEIGHT
SHRUB MIX A PLANTING (OUTSIDE DRIP LINE OF VIADUCT)							
GOR.AXI.	<i>Gordonia axillaris</i>	大頭茶	500(H) x 500(S)	500	4.6	270	PLANT EACH SPECIES IN GROUPS OF 10 TO 20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	500	4.6	270	
MEL.SAN.	<i>Melastoma sanguineum</i>	毛茛	300(H) x 300(S)	500	4.6	270	
PSY.ASI.	<i>Psychotria asiatica</i>	九節	300(H) x 300(S)	500	4.6	90	
RHO.SIM.	<i>Rhododendron simsii</i>	紅杜鵑	300(H) x 300(S)	500	4.6	180	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	360	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	500	4.6	360	
SHRUB MIX B PLANTING (UNDER STRUCTURE)							
LIG.SIN.	<i>Ligustrum sinense</i>	山指甲	300(H) x 300(S)	500	4.6	370	PLANT EACH SPECIES IN GROUPS OF 10 TO 20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.
RHO.SIM.	<i>Rhododendron simsii</i>	紅杜鵑	300(H) x 300(S)	500	4.6	520	
SCH.ARB.	<i>Schefflera arboricola</i>	八葉	300(H) x 300(S)	500	4.6	590	
CLIMBER FOR PIERS OF VIADUCTS							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	12	PLANT ALONG THE WALL OF THE COLUMN AND IN AN
PAR.DAL.	<i>Parthenocissus dalzielii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	12	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PLANTING SCHEDULE FOR CHEUNG TUNG ROAD (LCSO)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
GAR.SUB.	<i>Garcinia subelliptica</i>	菲島福木	LIGHT STANDARD	4000-5000	-	4	-
ILE.ROT.	<i>Ilex rotunda</i>	鐵冬青	HEAVY STANDARD	5000	-	44	-
LAG.SPE.	<i>Lagostroemia speciosa</i>	大花紫微	HEAVY STANDARD	4000-4500	-	15	-
TAB.IMP.	<i>Tabebuia impetiginosa</i>	風鈴木	HEAVY STANDARD	5000	-	9	-
SHRUB PLANTING							
IXO.CHI.	<i>Ixora chinensis</i>	龍船花	300(H) x 300(S)	300	12.54	5295	PLANT ALL SPECIES IN STAGGERED PATTERN.
RHA.IND.	<i>Rhaphiolepis indica</i>	車輪梅	300(H) x 300(S)	300	12.54	2005	
GROUND COVER PLANTING							
ADA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) x 200(S)	250	18.4	12150	PLANT ALL SPECIES IN STAGGERED PATTERN.
EPI.AUR.	<i>Epipremnum aureum</i>	綠蘿	200(H) x 300(S)	300	12.54	36	
WED.TRI.	<i>Wedelia tribata</i>	三裂葉銀菊	200(H) x 150(S)	300	12.54	15720	
GRASS PLANTING							
AXO.COM.	<i>Axonopus compressus</i>	地毯草(大葉草)	WHOLE PIECE TURF 300(L) X 300(W) X 50(H)	-	m ²	3823	25mm HEIGHT SWORD AND 25mm SOIL BASE OF TURF

TRANSPLANT TREE NO.	BOTANICAL NAME	CHINESE NAME	APPROXIMATE TREE HEIGHT (m)
NL0440	<i>Bombax ceiba</i>	木綿	8
NL2172	<i>Ficus microcarpa</i>	細葉榕	6
NL0438	<i>Bombax ceiba</i>	木綿	8
NL0441	<i>Bombax ceiba</i>	木綿	7
NL0442	<i>Bombax ceiba</i>	木綿	8
NL1864	<i>Bombax ceiba</i>	木綿	7

-	23/06/20	PLANTING SCHEDULE	KW	CL	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT

 路政署
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.
HMWSD 2/2020(HY)

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

TITLE
**PLANTING SCHEDULE
 (PORTION A)**

DRAWING REFERENCE		SCALE		SHEET 2 OF 2	
-		N.T.S.			
DRAWN	PREPARED	APPROVED			
KW	CL	CL			
SKETCH NO.		REV.			
SK0585		-			

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)			130300-47120	83180
DSD Project: DC/2016/01 Entrusted Landscape Works along Cheung Tung Road	CTR	13834	0	13834
Sub-total (B)				13834
Total (A) + (B)				97014

Remark: * Planting Area at Southern Landfall had been handed over to Contract HY/2017/10 from December 2020

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
 - PIER MARK
 - AREA BOUNDARY

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

FOR INFORMATION

REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT
 路政署
HIGHWAYS DEPARTMENT
 港務局大橋及港務工程管理處
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

AECOM Imagine it. Delivered.

PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT 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. -

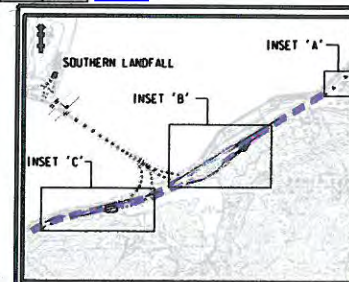
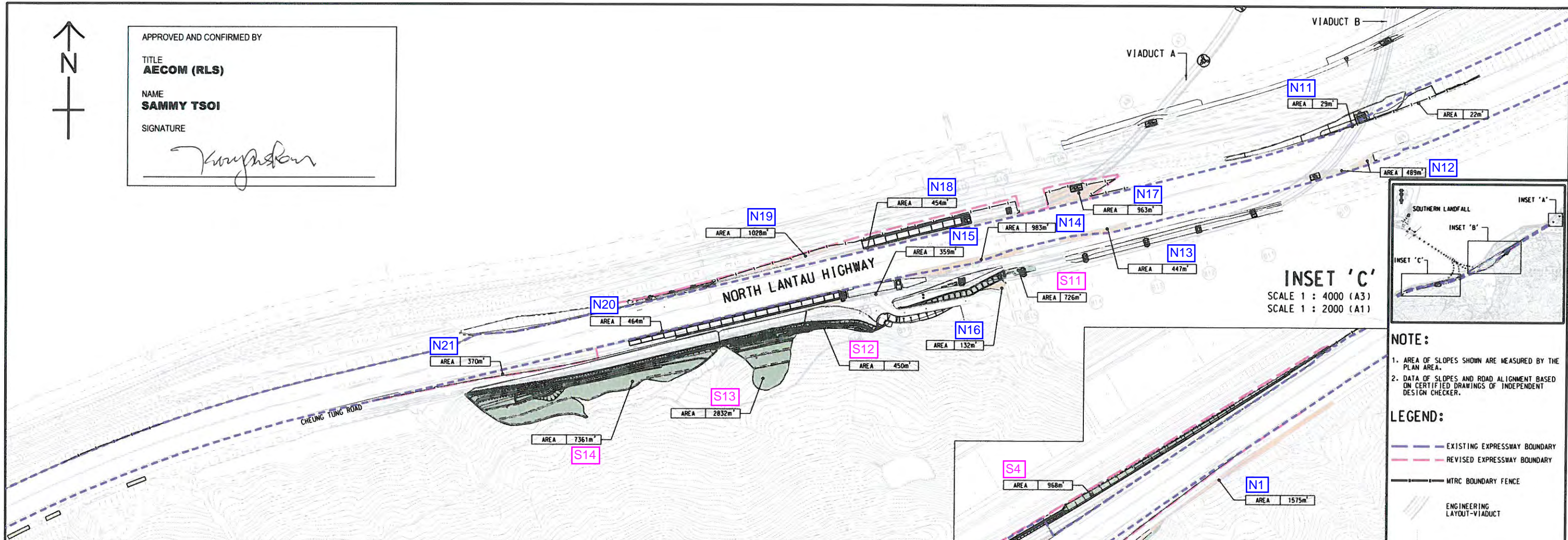


APPROVED AND CONFIRMED BY

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

CLIENT
HIGHWAYS DEPARTMENT
 香港路政處
 香港路政處工程管理部
 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

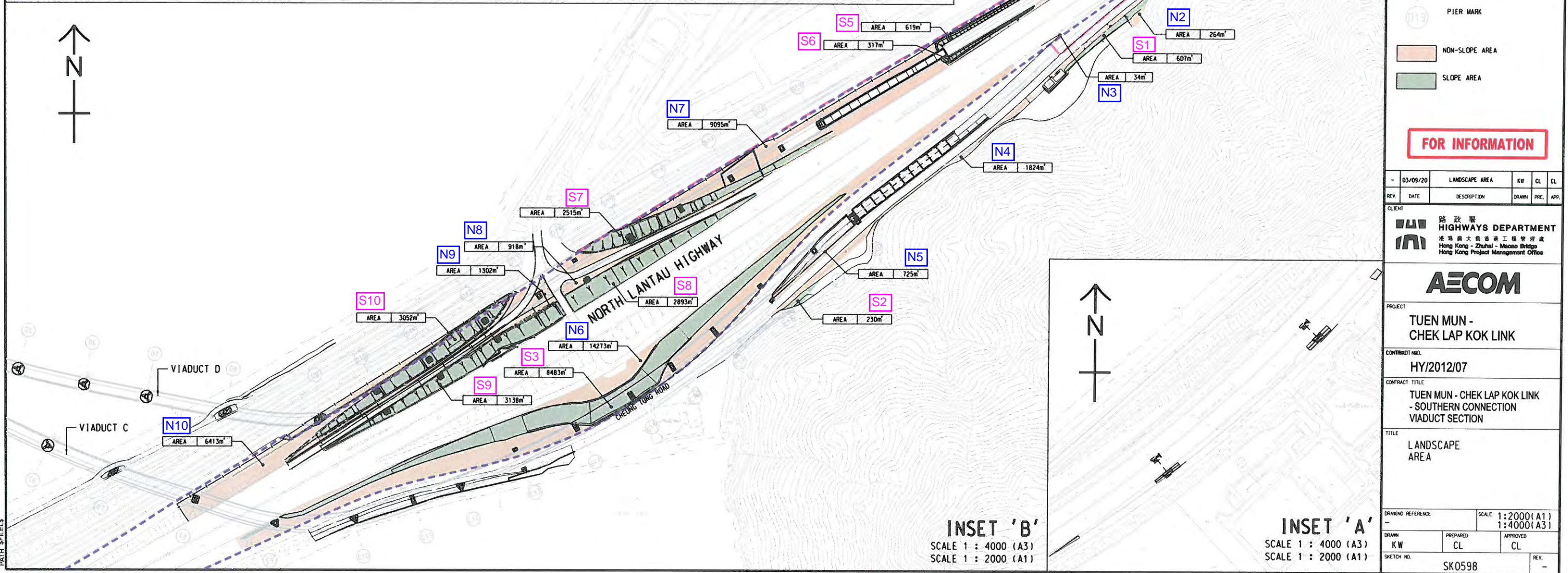
CONTRACT NO.
HY/2012/07

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.	REV.		

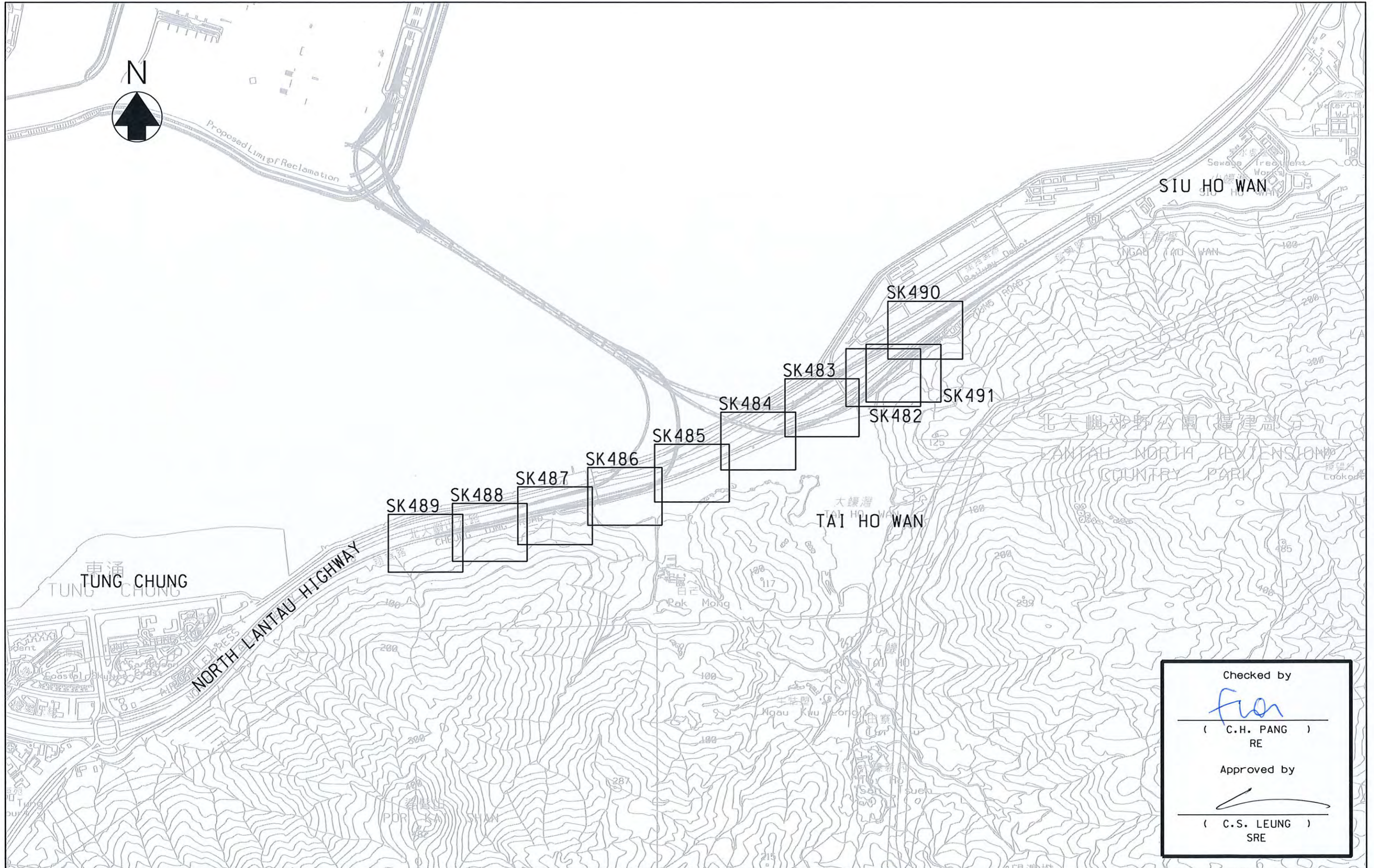
SK0598



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

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





Checked by
Fran
 (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

Appendix C
Approved Planting Schedule for Contract No. HY/2012/07 (Zone 1, 3 & 4)

Zone 3B

Tree

Zone 3C

Zone 3E including verge area next to Cheung Tung Road

Zone 3D

Zone 3F

PLANTING SCHEDULE FOR RESUMED AREA AT VIADUCT A (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(H)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	HEAVY STANDARD TREE	5000	-	5	PLANT IN STAGGERED PATTERN
SHRUB PLANTING							
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	500	4.6	700	PLANT EACH SPECIES IN GROUPS OF 50-80 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	350	
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	500	4.6	600	
PIT.TOB.	<i>Pittosporum tobira</i>	海桐花	300(H) x 300(S)	500	4.6	350	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	800	
SCHARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	500	4.6	1430	
GROUND COVER PLANTING							
HYM.LIT.	<i>Hymenocallis littoralis</i>	雙翅蓮	300(H) x 300(S)	300	12.54	8800	PLANT ALL SPECIES IN STAGGERED PATTERN.
CLIMBER PLANTING (UNDER STRUCTURE)							
EPLAUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	230	
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) VIADUCT B (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	STANDARD TREE	5000	-	3	PLANT IN STAGGERED PATTERN
SHRUB PLANTING							
ALL.CAT.	<i>Allamanda cathartica</i>	軟枝黃蓮	300(H) x 300(S)	350	9.57	770	PLANT ALL SPECIES IN STAGGERED PATTERN.
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	350	9.57	1310	
SCHARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	350	9.57	2000	
GROUND COVER PLANTING							
HYM.LIT.	<i>Hymenocallis littoralis</i>	雙翅蓮	300(H) x 300(S)	300	12.54	10700	PLANT ALL SPECIES IN STAGGERED PATTERN.
CLIMBER FOR PIERS OF VIADUCTS - PIER B10 (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	10	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dactylifera</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	10	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) VIADUCT C (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	LIGHT STANDARD TREE	4000	-	6	PLANT IN STAGGERED PATTERN
BAU.VAR.(B) (H)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	HEAVY STANDARD TREE	4000 - 5000	-	13	
GRE.FOB.(H)	<i>Grewia robusta</i>	銀葉	HEAVY STANDARD TREE	4000	-	10	
PLURUB.	<i>Plumelia rubra</i>	羅漢花	2000(H) x 2000(S) - 2500(H) x 2500(S)	4000	-	47	
PALM PLANTING							
LIV.CHI.	<i>Livistona chinensis</i>	蒲葵	2500(H) x 1500(S)	4000	-	7	TRUNK HEIGHT. PLANT IN STAGGERED PATTERN.
PHO.SYL.	<i>Phoenix sylvesteris</i>	假海欖	2000(H) x 1500(S)	4000	-	8	
SHRUB PLANTING							
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	350	9.57	10100	PLANT ALL SPECIES IN STAGGERED PATTERN.
GOR.AXL.	<i>Gordonia axillaris</i>	大葉茶	300(H) x 300(S)	350	9.57	5600	
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	350	9.57	8750	
MEL.SAN.	<i>Melastoma sanguineum</i>	毛萼	300(H) x 300(S)	350	9.57	8750	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	350	9.57	8750	
SCHARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	350	9.57	8760	
GROUND COVER PLANTING							
ADA.DUR.	<i>Anachis duranensis</i>	金花生	100(H) x 200(S)	250	18.4	625	PLANT ALL SPECIES IN STAGGERED PATTERN.
HYM.LIT.	<i>Hymenocallis littoralis</i>	雙翅蓮	300(H) x 300(S)	300	12.54	21000	
TRA.SPA.	<i>Tradescantia spathacea</i>	蚌花	200(H) x 300(S)	250	18.4	6300	
CLIMBER PLANTING (UNDER STRUCTURE)							
EPLAUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	3405	PLANT EACH SPECIES IN GROUPS OF 10-20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED
PAR.DAL.	<i>Parthenocissus dactylifera</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	5000	
CLIMBER FOR PIERS OF VIADUCTS - PIER C13, C18 (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	26	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dactylifera</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	26	ALTERNATE PATTERN. SELF-CLINGING CLIMBER
CLIMBER FOR PIERS OF VIADUCTS - PIER C9, C14, C16, C17 (WITH BEARING)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	125	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	填單	-	-	-	333 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.28(S)
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (KOWLOON BOUND) VIADUCT D, FEATURES NOS. 10NW-C/F9, 10NW-C/F10 AND 10NW-C/F52 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	LIGHT STANDARD TREE	4000	-	7	-
BAU.VAR.(B)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	STANDARD TREE	5000	-	9	
BAU.VAR.(H)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	HEAVY STANDARD TREE	5000	-	12	
SHRUB PLANTING							
ALL.CAT.	<i>Allamanda cathartica</i>	軟枝黃蓮	300(H) x 300(S)	300	12.54	2600	PLANT ALL SPECIES IN STAGGERED PATTERN.
FIC.MIC.'GOL'	<i>Ficus microcarpa</i> 'Golden Leaf'	黃榕	300(H) x 300(S)	500	4.6	14150	
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	3730	
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	500	4.6	1100	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	11130	
SCHARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	500	4.6	19800	
GROUND COVER PLANTING							
ADA.DUR.	<i>Anachis duranensis</i>	金花生	100(H) x 200(S)	250	18.4	11984	PLANT ALL SPECIES IN STAGGERED PATTERN.
HYM.LIT.	<i>Hymenocallis littoralis</i>	雙翅蓮	300(H) x 300(S)	300	12.54	53720	
CLIMBER PLANTING							
EPLAUR.	<i>Epipremnum aureum</i>	綠蘿	MIN. 4 SHOOTS PER PLANT, 300mm LONG	500	4.6	3314	PLANT EACH SPECIES IN GROUPS OF 10-20 IN
CLIMBER FOR PIERS OF VIADUCTS - PIER D13 (WITH BEARING)							
FIC.PUM.	<i>Ficus pumila</i>	薛荔	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	59	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER SPECIES.
PLANTING SCHEDULE FOR NORTH LANTAU HIGHWAY (TUNG CHUNG BOUND) SIGN GANTRIES (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	豨粉羊蹄甲	STANDARD TREE	5000	-	6	-
SHRUB PLANTING							
DUR.REP.	<i>Duranta repens</i>	假連翹	300(H) x 250(S)	400	7.25	740	REINSTATEMENT PLANTING
LIG.SIN.	<i>Ligustrum sinense</i>	山指甲	300(H) x 250(S)	400	7.25	730	REINSTATEMENT PLANTING
NER.OLE.	<i>Nerium oleander</i>	夾竹桃	400(H) x 250(S)	400	7.25	740	REINSTATEMENT PLANTING

REV.	DATE	DESCRIPTION	ISSUED BY	APP.
-	23/06/20	PLANTING SCHEDULE	K.W.	CL

CLIENT: **路政署 HIGHWAYS DEPARTMENT**
 主要工程管理處 (專業事務)
 Major Works Project Management Office (Professional Duties)

PROJECT: **AECOM**

TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.: HMWSD 2/2020(HY)

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

TITLE: PLANTING SCHEDULE (PORTION A)

SHEET 1 OF 2

DRAWING REFERENCE: SCALE: N.T.S.

DATE: PREPARED BY: CL APPROVED BY: CL

SKETCH NO.: SK0584

Zone 3D - slope surface

TRANSPLANT TREE NO.	BOTANICAL NAME	CHINESE NAME	APPROXIMATE TREE HEIGHT (m)
NL0440	Bombax ceiba	木綿	8
NL2172	Ficus microcarpa	福祿格	6
NL0438	Bombax ceiba	木綿	8
NL0441	Bombax ceiba	木綿	7
NL0442	Bombax ceiba	木綿	8
NL1864	Bombax ceiba	木綿	7

PLANTING SCHEDULE FOR FEATURES NOS. 10NW-C/F11 AND 10NW-C/F17 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
BOM.CEI. <i>Bombax ceiba</i> 木綿							
LIGHT STANDARD TREE 4000-5000							
SHRUB MIX PLANTING							
CAL.HAE.	<i>Calliandra haematocephala</i>	紅絨球	300(H) x 300(S)	1000	1.2	520	-
GAR.JAS.	<i>Gardenia jasminoides</i>	白蟻	300(H) x 300(S)	500	4.6	2000	-
HIB.ROS.	<i>Hibiscus rosa-sinensis</i>	大紅花	300(H) x 300(S)	1000	1.2	520	-
NER.OLM.	<i>Nerium oleander</i>	夾竹桃	300(H) x 300(S)	1000	1.2	3650	-
CLIMBER FOR PIERS OF VIADUCTS							
FIC.PUM.	<i>Ficus pumila</i>	藤莖	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	47	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dazii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	47	-

Zone 3D - slope Surface

PLANTING SCHEDULE FOR FEATURES NOS. 10NW-C/F13, 10NW-C/F14 AND 10NW-C/F15 (WITHIN EXPRESSWAY BOUNDARY)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(A)	<i>Bauhinia variegata</i>	豎琴七葉樹	LIGHT STANDARD TREE	4000	-	92	-
CIN.BUR.(A)	<i>Cinnamomum burmannii</i>	降香	LIGHT STANDARD TREE	4000	-	7	-
MEL.AZE.(A)	<i>Melia azadirach</i>	苦楝	LIGHT STANDARD TREE	4000	-	32	-
BRI.TOM.	<i>Bridelia tomentosa</i>	土蜜樹	LIGHT STANDARD TREE	3000	-	45	-
PALM PLANTING							
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) x 1500(S)	2000	-	39	OVERALL HEIGHT
LIV.CHI.	<i>Livistona chinensis</i>	蒲葵	2500(H) x 1500(S)	3500-4000	-	241	OVERALL HEIGHT
CLIMBER MIX PLANTING (UNDER STRUCTURE)							
PAR.DAL.	<i>Parthenocissus dazii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	4417	-
CLIMBER FOR PIERS OF VIADUCTS (MONOLITHIC)							
FIC.PUM.	<i>Ficus pumila</i>	藤莖	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	10	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER
PAR.DAL.	<i>Parthenocissus dazii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	10	-
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	雜草	-	-	-	7083 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(E)

Zone 4

PLANTING SCHEDULE FOR FEATURES NOS. 9SE-B/C8, 9SE-B/C9 AND 9SE-B/C12							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BRI.TOM.	<i>Bridelia tomentosa</i>	土蜜樹	WHIP	1500-2000	-	37	-
GOR.AXI.(A)	<i>Gordonia axillaris</i>	大銀茶	WHIP	1500-2000	-	30	-
LIT.GLU.	<i>Litsea glutinosa</i>	潺槁樹	WHIP	1500-2000	-	31	-
PHY.EMB.	<i>Phyllanthus emblica</i>	棘椰子	WHIP	1500-2000	-	15	-
REL.THY.	<i>Reevesia thysoides</i>	檳榔樹	WHIP	1500-2000	-	30	-
SHRUB MIX							
GOR.AXI.	<i>Gordonia axillaris</i>	大銀茶	500(H) x 500(S)	500	4.6	1100	PLANT EACH SPECIES IN GROUPS OF 15 TO 30 AT RANDOM THROUGHOUT AREAS DESIGNATED FOR SHRUB PLANTING.
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	500	4.6	1100	
MEL.SAN.	<i>Melastoma sanguineum</i>	毛萼	300(H) x 300(S)	500	4.6	1100	
PSY.ASI.	<i>Psychotria asiatica</i>	九節	300(H) x 300(S)	500	4.6	1100	
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	1100	
CLIMBER							
LON.JAP.	<i>Lonicera japonica</i>	金銀花	MIN. 4 SHOOTS PER PLANT, 600 LONG	500	4.6	900	PLANT CLIMBER MIX ALONG SOIL/ROCK INTERFACE AND IN AREAS DESIGNATED FOR CLIMBER MIX PLANTING. PLANT EACH SPECIES IN GROUPS OF 5-10 AND IN A STAGGERED PATTERN.
PAR.DAL.	<i>Parthenocissus dazii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	500	4.6	900	-
HYDROSEEDING							
HYDROSEEDING	HYDROSEEDING	雜草	-	-	-	1558 m ²	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(E)



Zone 1B

PLANTING SCHEDULE FOR FEATURE NO. 9SE-B/F8							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
BAU.VAR.(B)	<i>Bauhinia variegata</i>	豎琴七葉樹	STANDARD TREE	4000	-	7	-
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花 (紅)	HEAVY STANDARD	3500-4000	-	4	2000 (H) x 2000 (S)
PALM TREE PLANTING							
CAR.MIT.	<i>Carota mitis</i>	短穗魚尾葵	2500(H) x 1500(S)	2500	-	12	MIN. 4 CLUMPS PER PLANT
PHO.ROE.	<i>Phoenix roebelenii</i>	日本葵	2000(H) x 1500(S)	2000	-	10	OVERALL HEIGHT
WAS.ROB.(A)	<i>Washingtonia robusta</i>	華盛頓葵	2500(H) x 2000(S)	3500-4000	-	8	OVERALL HEIGHT

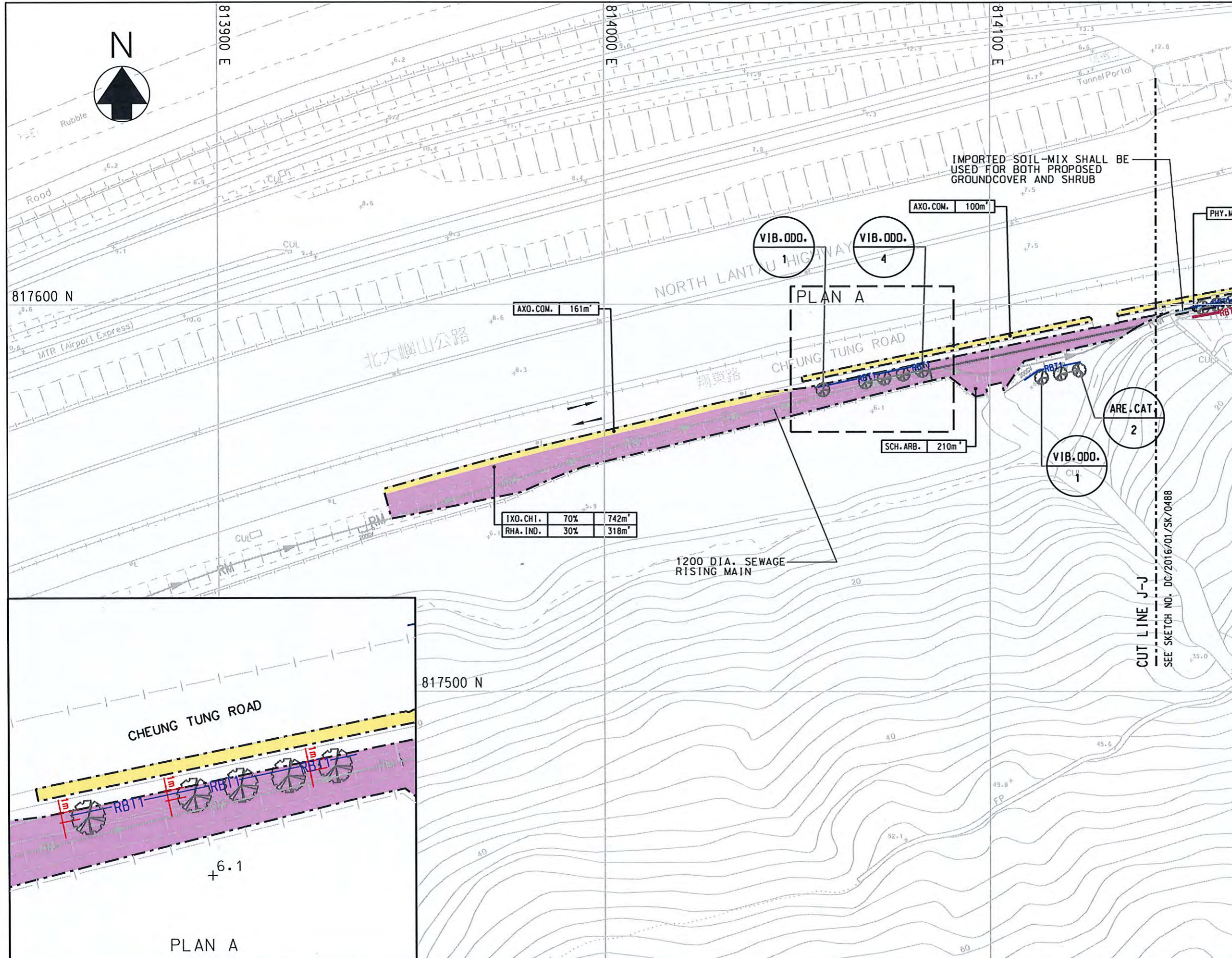
Zone 1C, 1D

SHRUB MIX PLANTING (OUTSIDE DRIP LINE OF VIADUCT)								
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK	
GOR.AXI.	<i>Gordonia axillaris</i>	大銀茶	300(H) x 300(S)	500	4.6	270	PLANT EACH SPECIES IN GROUPS OF 10 TO 20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.	
MEL.CAN.	<i>Melastoma candidum</i>	野牡丹	300(H) x 300(S)	500	4.6	270		
MEL.SAN.	<i>Melastoma sanguineum</i>	毛萼	300(H) x 300(S)	500	4.6	270		
PSY.ASI.	<i>Psychotria asiatica</i>	九節	300(H) x 300(S)	500	4.6	90		
RHO.SIM.	<i>Rhododendron simsii</i>	紅杜鵑	300(H) x 300(S)	500	4.6	180		
RHO.TOM.	<i>Rhodomyrtus tomentosa</i>	桃金娘	300(H) x 300(S)	500	4.6	360		
SCH.ARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	500	4.6	360		
SHRUB MIX B PLANTING (UNDER STRUCTURE)								
LIG.SIN.	<i>Ligustrum sinense</i>	山指甲	300(H) x 300(S)	500	4.6	370		PLANT EACH SPECIES IN GROUPS OF 10 TO 20 IN RANDOM. PLANT ALL SPECIES IN STAGGERED PATTERN.
RHO.SIM.	<i>Rhododendron simsii</i>	紅杜鵑	300(H) x 300(S)	500	4.6	520		
SCH.ARB.	<i>Schefflera arboricola</i>	八寶	300(H) x 300(S)	500	4.6	590		
CLIMBER FOR PIERS OF VIADUCTS								
FIC.PUM.	<i>Ficus pumila</i>	藤莖	MIN. 3 SHOOTS PER PLANT, 300-1000mm LONG	300	3 NOS. PER m	12	PLANT ALONG THE WALL OF THE COLUMN AND IN AN ALTERNATE PATTERN. SELF-CLINGING CLIMBER	
PAR.DAL.	<i>Parthenocissus dazii</i>	爬牆虎	MIN. 3 SHOOTS PER PLANT, 600-1000mm LONG	300	3 NOS. PER m	12	-	

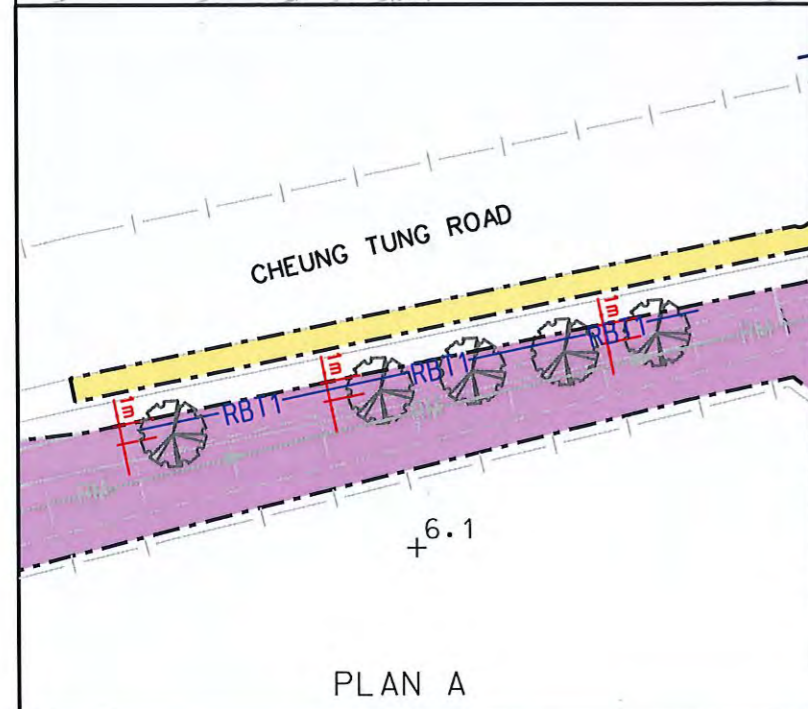
PLANTING SCHEDULE FOR CHEUNG TUNG ROAD (LCS)							
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./M ²	QUANTITY (NOS.)	REMARK
TREE PLANTING							
GAR.SUB.	<i>Garcinia subelliptica</i>	菲島福木	LIGHT STANDARD	4000-5000	-	4	-
ILE.ROT.	<i>Ilex rotunda</i>	羅冬青	HEAVY STANDARD	5000	-	44	-
LAG.SPE.	<i>Lagostroemia speciosa</i>	大花紫藤	HEAVY STANDARD	4000-4500	-	15	-
TAB.IMP.	<i>Tabebuia impetiginosa</i>	風鈴木	HEAVY STANDARD	5000	-	9	-
SHRUB PLANTING							
IXO.CHI.	<i>Ixora chinensis</i>	龍船花	300(H) x 300(S)	300	12.54	5295	PLANT ALL SPECIES IN STAGGERED PATTERN.
RHA.IND.	<i>Rhaphirolepis indica</i>	串聯梅	300(H) x 300(S)	300	12.54	2005	
GROUND COVER PLANTING							
ADA.BUR.	<i>Asarichis duranensis</i>	金莊生	100(H) x 200(S)	250	18.4	12150	PLANT ALL SPECIES IN STAGGERED PATTERN.
EPL.AUR.	<i>Eupatorium aurum</i>	狗尾草	200(H) x 300(S)	300	12.54	36	
WED.TRI.	<i>Wedelia tribata</i>	三裂葉蝴蝶草	200(H) x 150(S)	300	12.54	15720	
GRASS PLANTING							
AXO.COM.	<i>Axonopus compressus</i>	地稔草 (大葉草)	WHOLE PIECE TURF 300(L) X 300(W) X 50(H)	-	m ²	3823	25mm HEIGHT SWORD AND 25mm SOIL BASE OF TURF

REV.	DATE	DESCRIPTION	ISSUED BY	PREP.	APP.
-	23/06/20	PLANTING SCHEDULE	KW	CL	CL
 <p>路政署 HIGHWAYS DEPARTMENT 主要工程管理處 (專業事務) Major Works Project Management Office (Professional Duties)</p>					
					
PROJECT					
TUEN MUN - CHEK LAP KOK LINK					
CONTRACT NO.					
HMWSD 2/2020(HY)					
CONTRACT TITLE					
ESTABLISHMENT OF LANDSCAPE SOFTWARES FOR THE TUEN MUN - CHEK LAP KOK LINK PROJECT					
TITLE					
PLANTING SCHEDULE (PORTION A)					
DRAWING REFERENCE					
SCALE					
N.T.S.					
DRAWN					
PREPARED					
APPROVED					
CHECKED					
SKETCH NO.					
SK0585					

Appendix D
Planting Schedule of DSD Project: DC/2016/01 Entrusted Landscape Works along
Cheung Tung Road



- 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 PIT PLANTING (INDIVIDUAL EXCAVATIONS TO ACCOMMODATE REPLANTED TREES 600mm THK. FOR SHRUB 1200mm THK. FOR TREES)
 - PHY. MYR
 - SPECIES AREA(sq.m)
 - PROPOSED 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

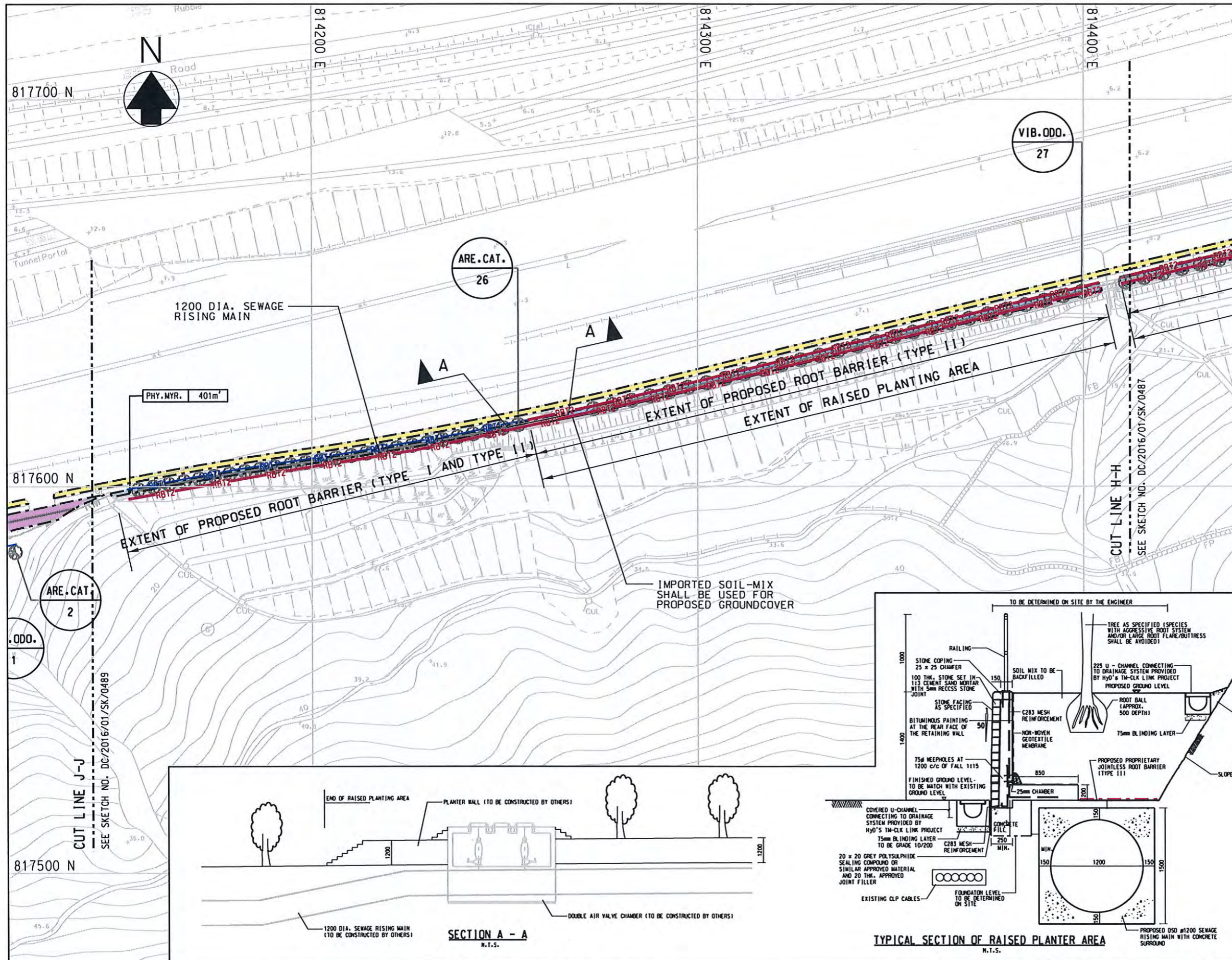
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 8 OF 8)

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

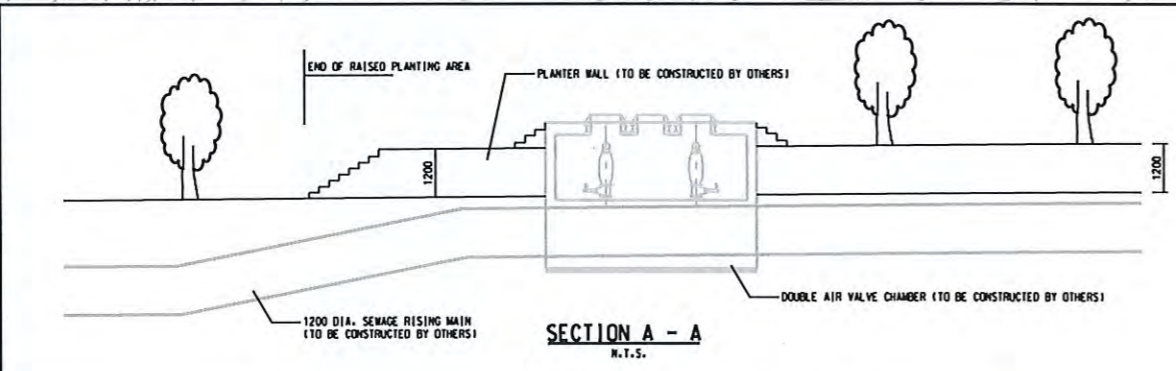
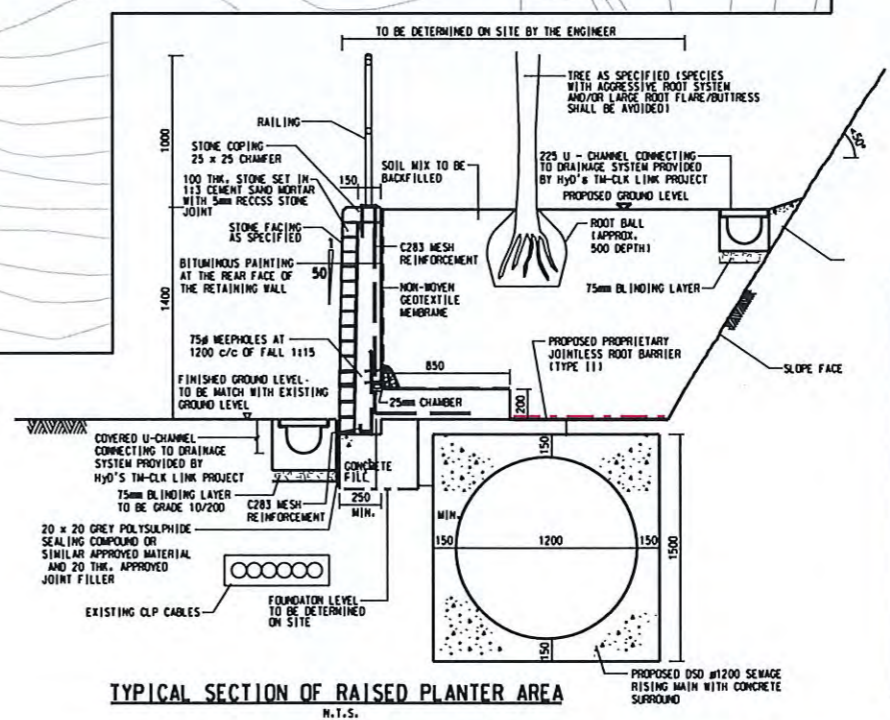
Drawn by	W T L	Date	19/07/2019
Checked by	F P	Scale	A3 1 : 1000
Approved by	C L	Sketch no.	DC/2016/01/SK/0489
		Revision	F

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 PIT PLATING (INDIVIDUAL EXCAVATIONS TO ACCOMMODATE REPLANTED TREES 600mm THK. FOR SHRUB 1200mm THK. FOR TREES)
 - RMA.EXC. 905.74m
 - SPECIES AREA (sq.m)
 - PROPOSED TREE. MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1 RBT1 ROOT BARRIER (TYPE I)
 - RBT2 RBT2 ROOT BARRIER (TYPE II)

401m²



Checked by
FP
 (C.H. PANG)
 RE
 Approved by

 (C.S. LEUNG)
 SRE

- NOTES:**
1. SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 2. THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 3. 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

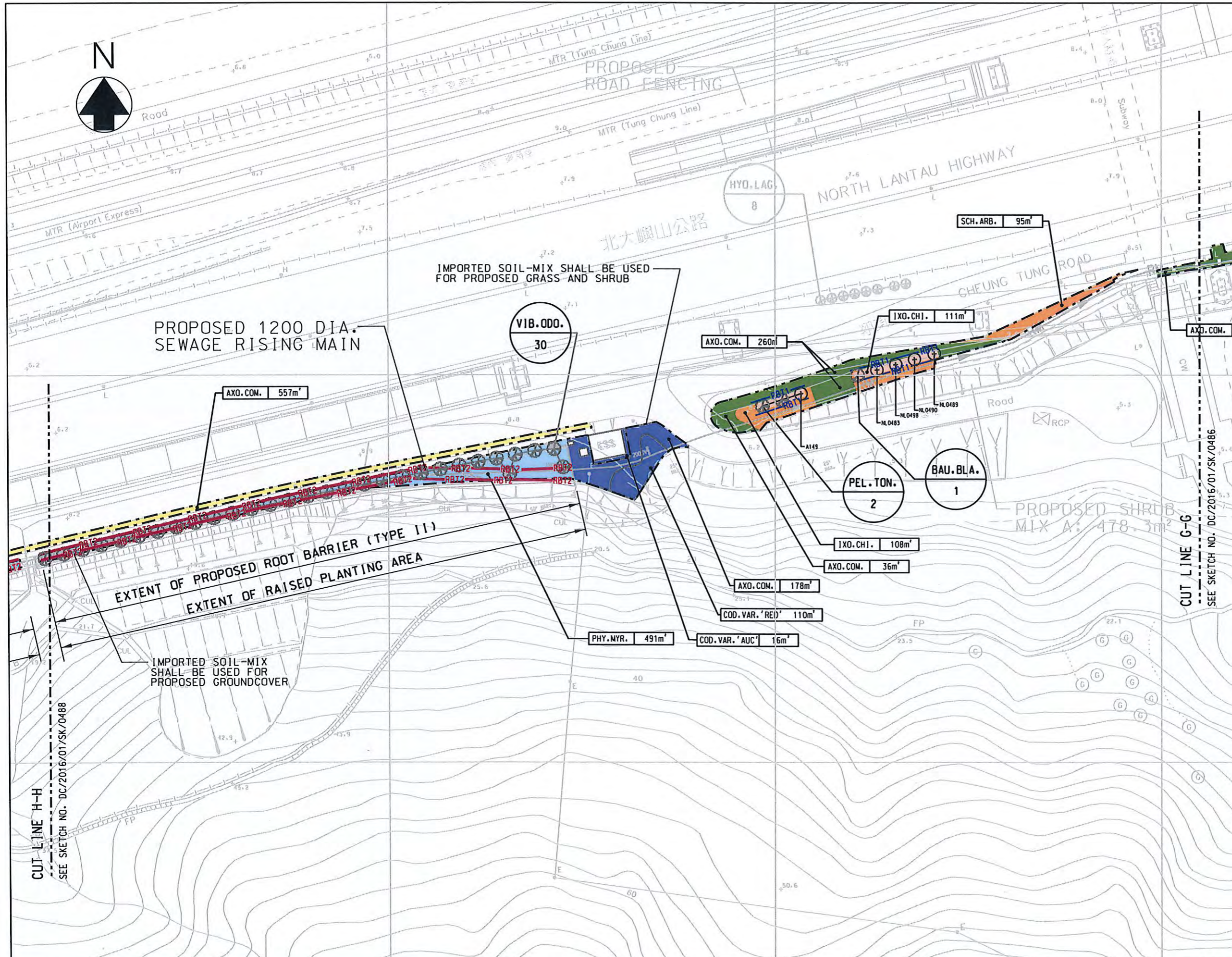
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD
 (SHEET 7 OF 8)

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/0488
		Revision	G

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)
 - SPECIES AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - PROPOSED FINAL LOCATION OF TRANSPLANTED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - RBT1 ROOT BARRIER (TYPE I)
 - RBT2 ROOT BARRIER (TYPE II)

1962m²

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.

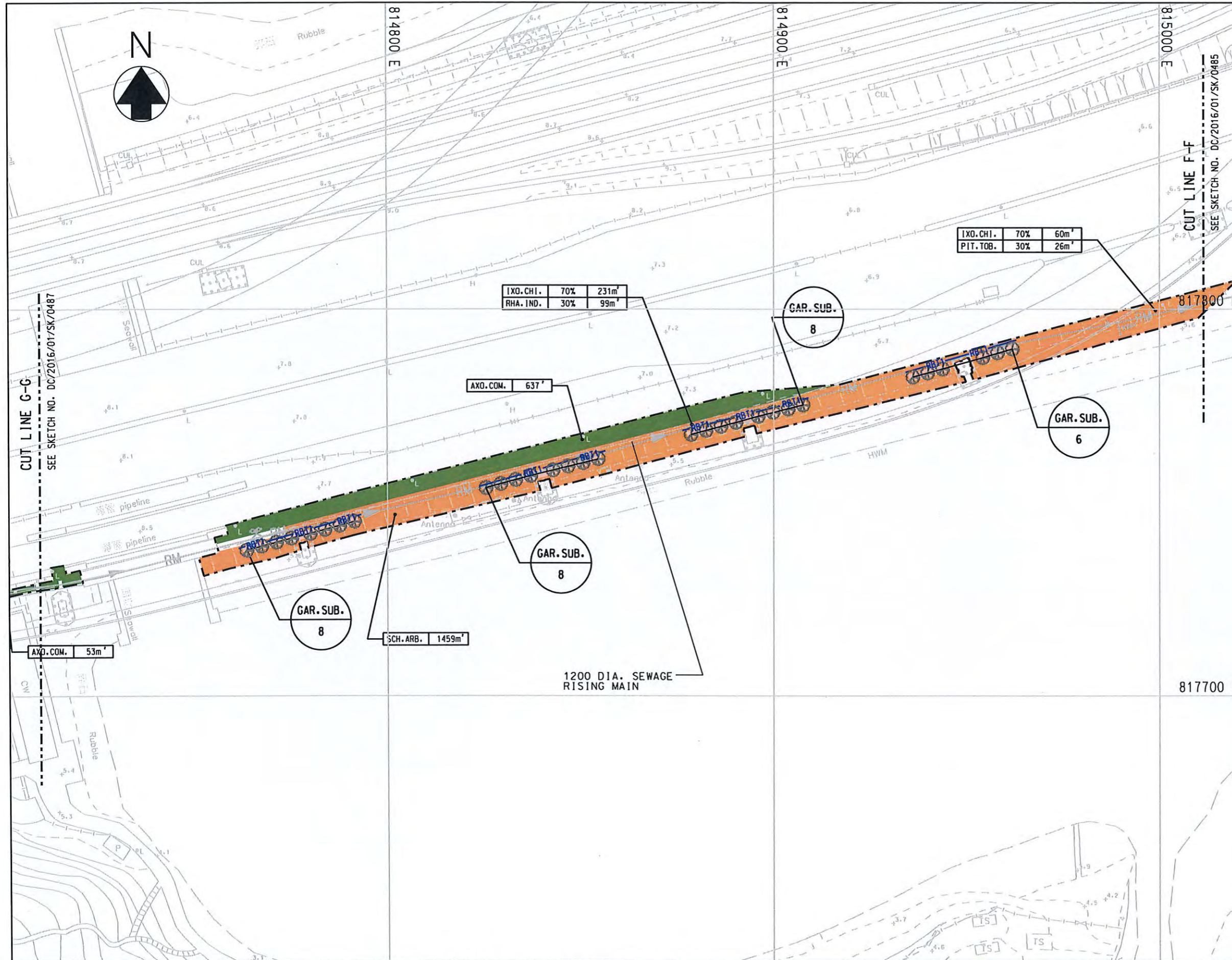
Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS 建造東涌至小蠔灣額外污水泵喉及附屬工程
Title	PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 6 OF 8)

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

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)
 - RIA.E.C. 905.764
 - 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

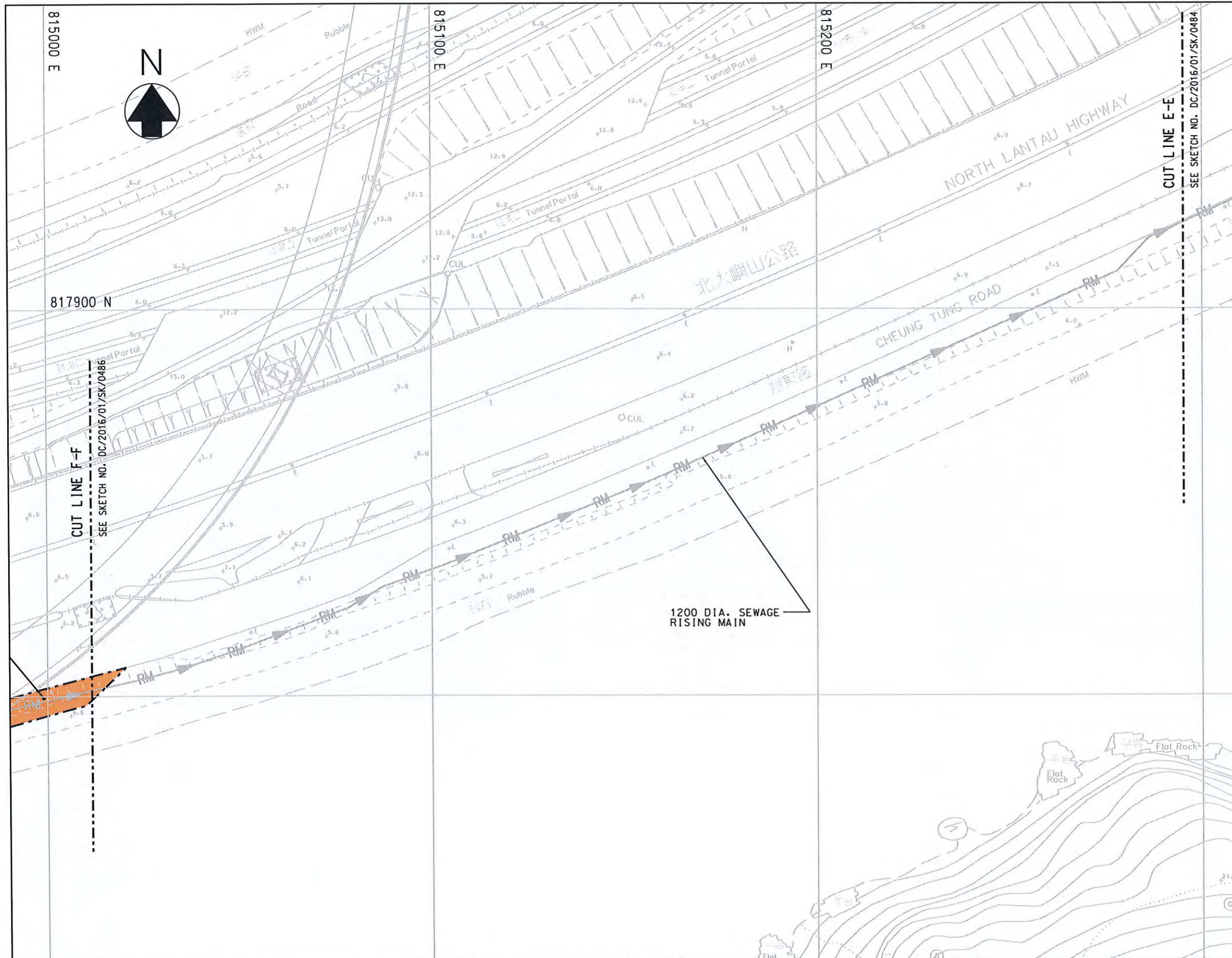
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 5 OF 8)

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)
- RIA.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)

Checked by
fp
 (C.H. PANG)
 RE

Approved by
C.S. Leung
 (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

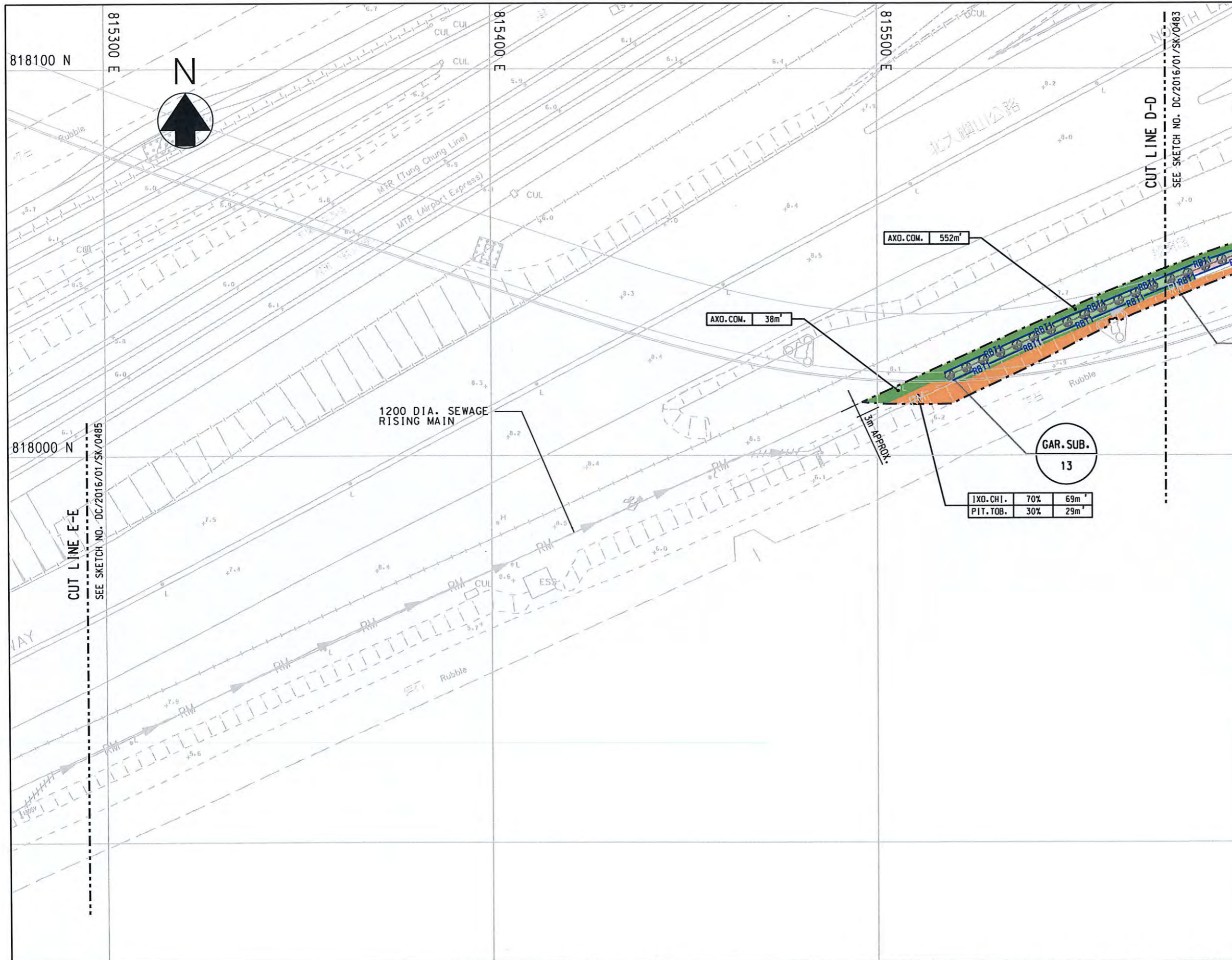
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 4 OF 8)

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

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)
 - RMA, E.S.C. 905.78m
 - SPECIES AREA (sq.m)
 - PROPOSED TREE, MAINTENANCE UNDERTAKEN BY LCSD
 - CODE NOS.
 - 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
(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 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. 905.74M²
 - 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
(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 2 OF 8)

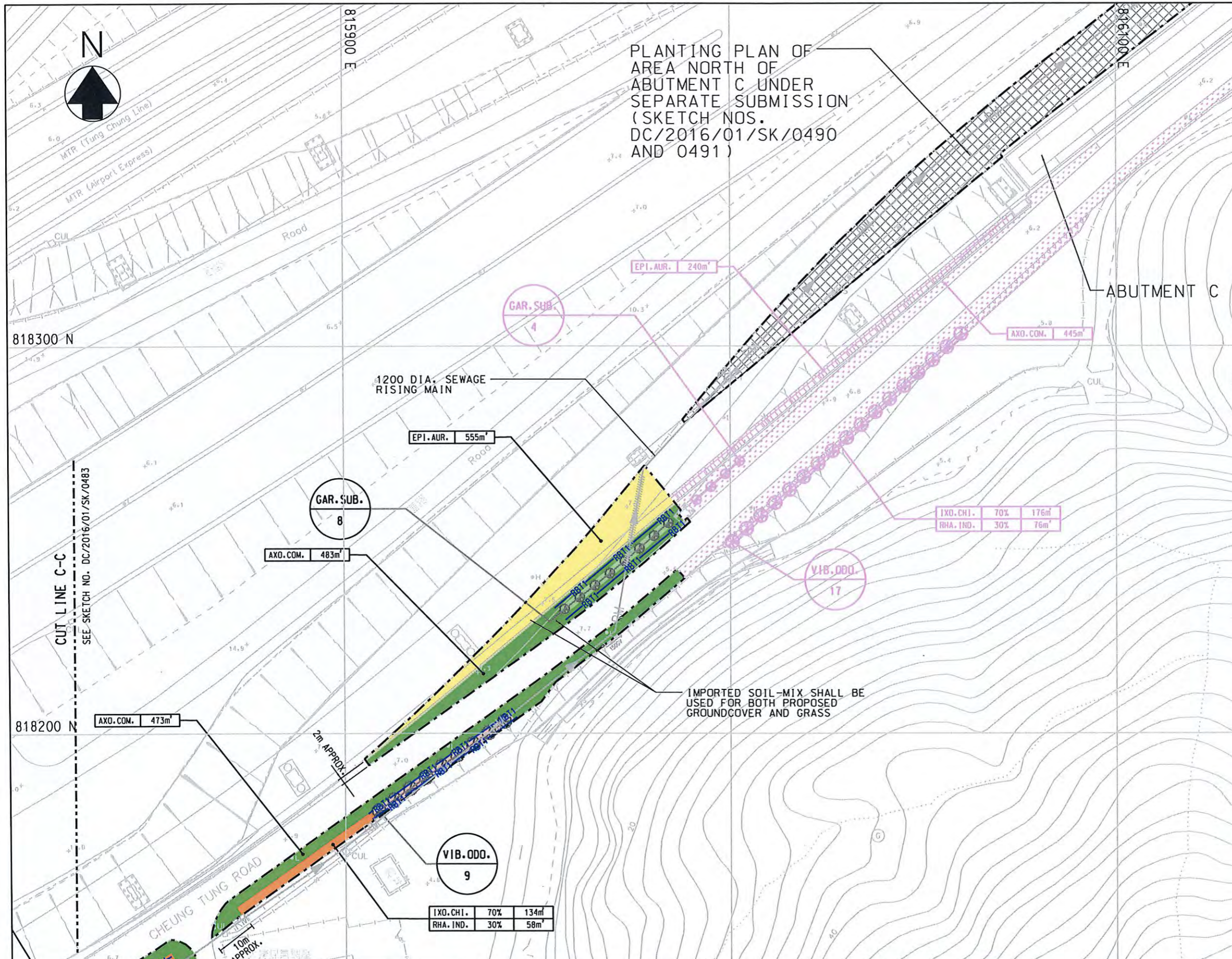
香港特別行政區政府渠務署
 THE GOVERNMENT OF THE HONG KONG
 SPECIAL ADMINISTRATIVE REGION
 DRAINAGE SERVICES DEPARTMENT

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

CAD Filename = Q:\Technical\TO\Site Sketch\SK483E.dgn



- 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. EXC. 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. EXC. 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:**
1. SECTION FOR ROOT BARRIER REFER TO SKETCH NO. DC/2016/01/SK/554.
 2. THE CONTRACTOR SHALL TAKE NOTE OF GS CLAUSE 3.30 REGARDING THE REQUIREMENT OF SOIL-MIX.
 3. 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

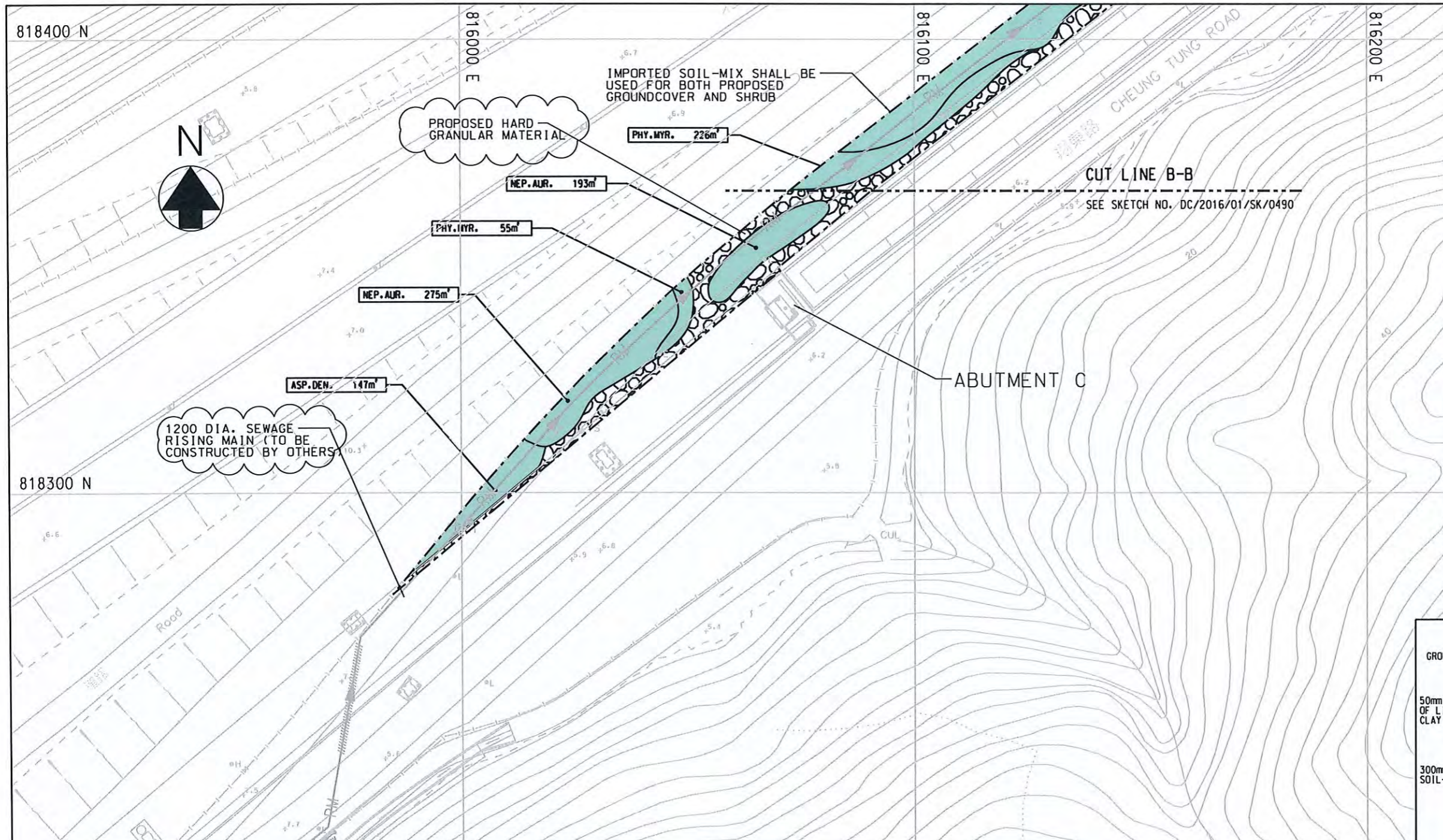
Title PLANTING PLAN FOR LCSD ALONG CHEUNG TUNG ROAD (SHEET 1 OF 8)

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

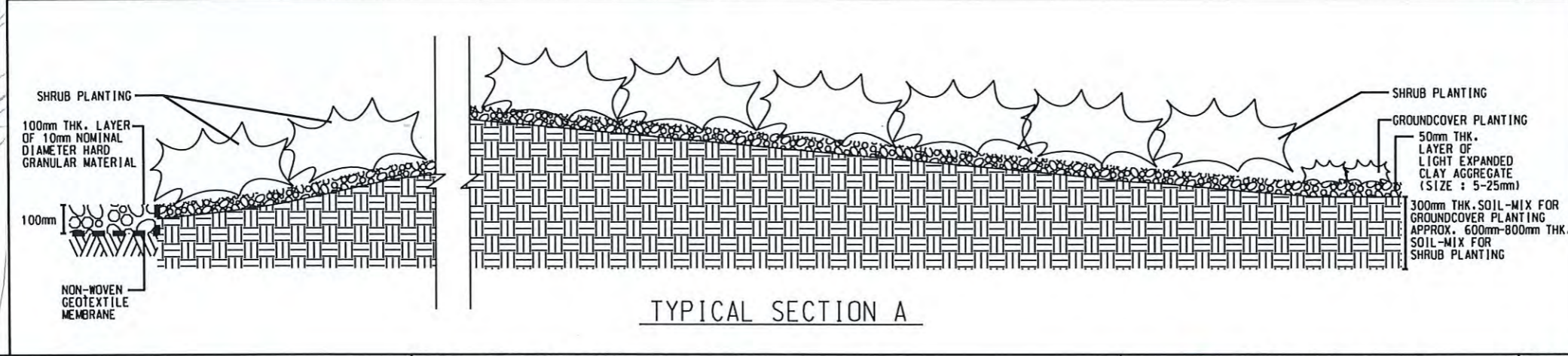
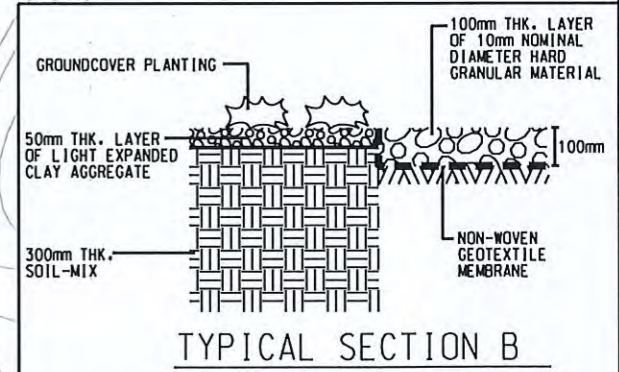
Plot Date = 9/9/2020



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)
- RMA.E.C. 905.76m 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

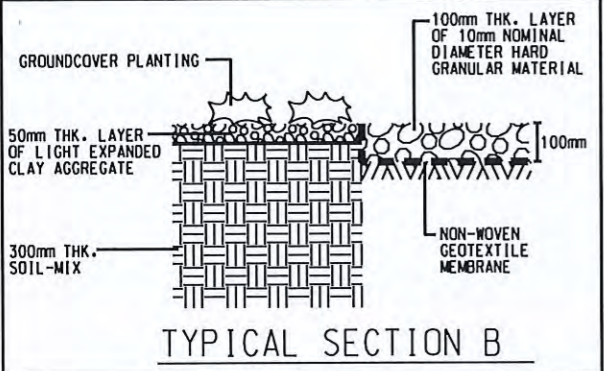
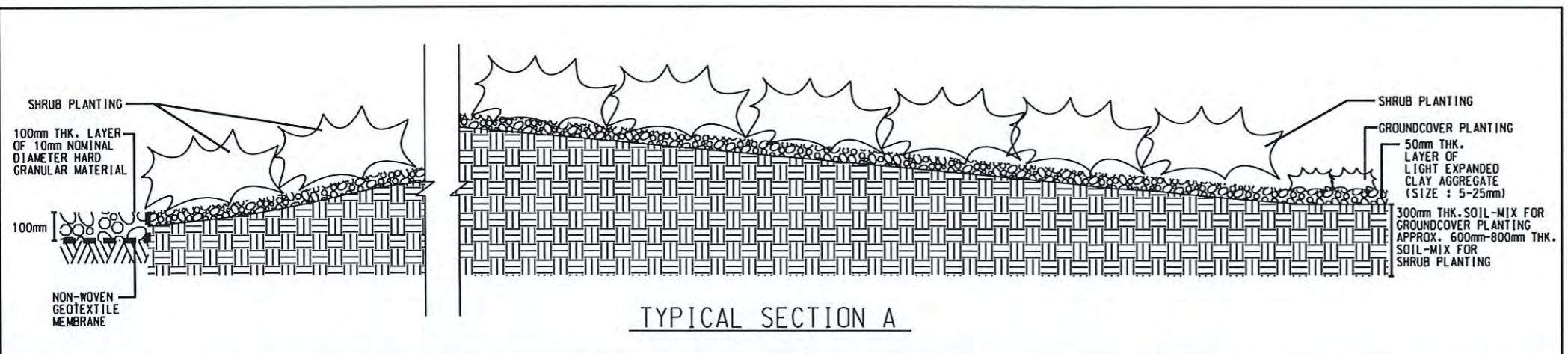
Title PLANTING PLAN FOR AREA NORTH OF ABUTMENT C
 (SHEET 2 OF 2)

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

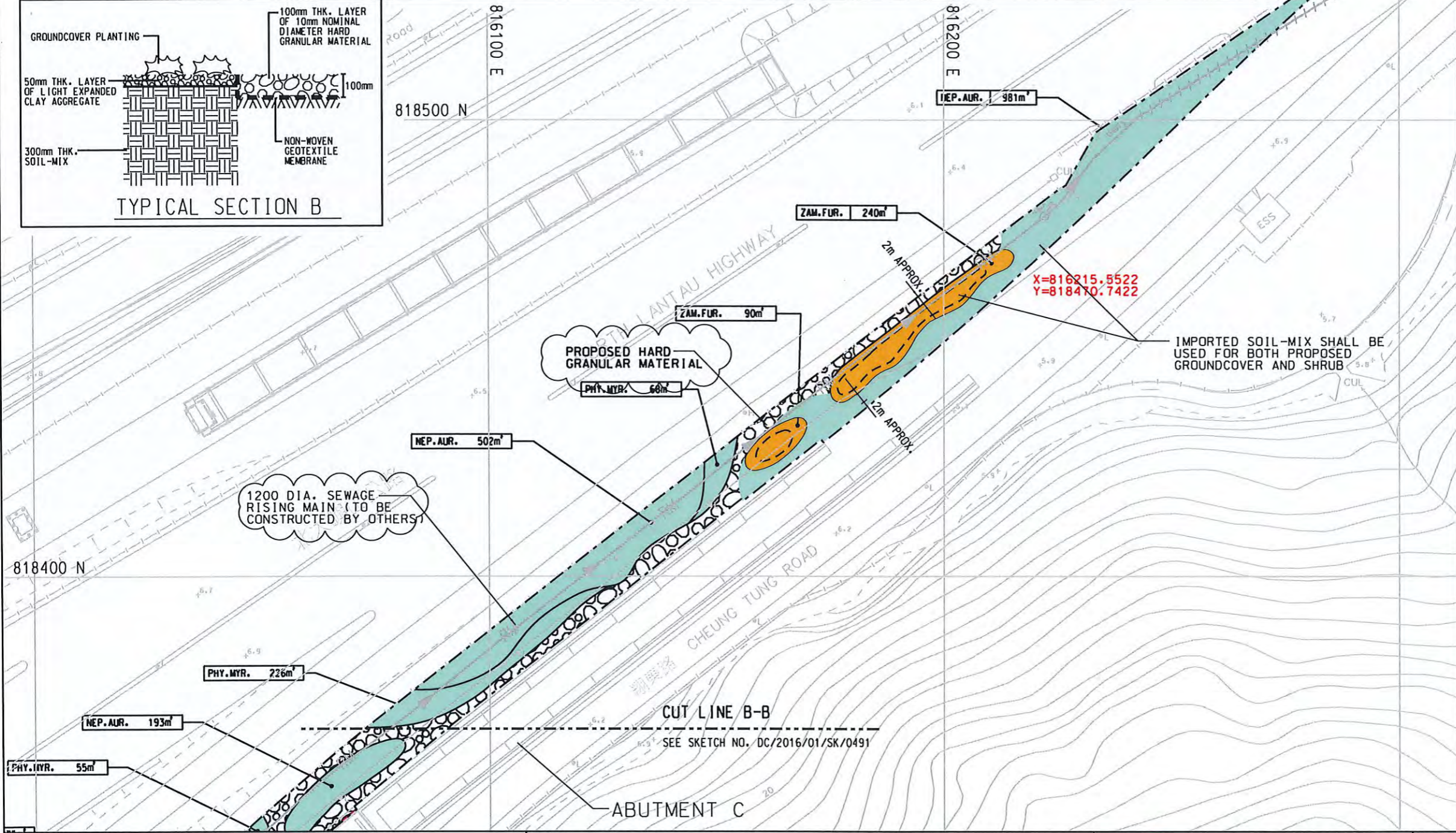
BLACK & VEATCH HONG KONG LIMITED
 博威工程顧問有限公司

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 GROUNDCOVER (300mm THK. SOIL-MIX FOR GROUNDCOVER PLANTING APPROX.)
 - PROPOSED SHRUB (600mm THK. MIN. SOIL-MIX FOR SHRUB PLANTING)
 - RIA.E.C. 1905.742 SPECIES AREA10q.m
 - PROPOSED TREE. MAINTENANCE UNDERTAKEN BY LCSD
 - PROPOSED FINAL LOCATION OF TRANSPLANTED TREE. MAINTENANCE UNDERTAKEN BY LCSD



1881m²

Checked by
fpa
(C.H. PANG)
RE

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

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

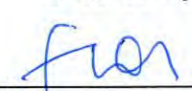
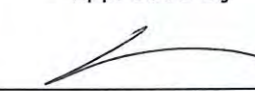
Drawn by	P L	Date	03/07/2018
Checked by	F N T	Scale	A3 1 : 1000
Approved by	T C	Sketch no.	DC/2016/01/SK/0490
		Revision	E

Plot Date = 9/9/2020

PLANTING SCHEDULE FOR CHEUNG TUNG ROAD (UNDER MAINTENANCE OF LCSD)								
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	%MIX.	QUANTITY (APPROX. NOS.)	REMARK
TREE PLANTING								
GAR.SUB.	Garcinia subelliptica	非洲福木	Light Standard	4000-5000	-	-	79	-
BAU.BLA	Bauhinia x blakeana	洋紫荊	Heavy Standard	5000	-	-	1	-
PEL.TON.	Peltophorum tonkinense	銀珠	Heavy Standard	5000	-	-	2	-
VIB.ODO.	Viburnum odoratissimum	珊瑚樹	Heavy Standard	5000	-	-	76	-
PALM PLANTING - EXOTIC								
ARE.CAT	Areca catechu	檳榔	4000(H)	4000	-	-	28	-
GROUND COVER PLANTING								
EPI.AUR.	Epipremnum aureum	綠蘿	200(H) x 300(S)	300	12.54	-	6264	-
SHRUB PLANTING								
IXO.CHI.	Ixora chinensis	龍船花	300(H) x 300(S)	300	12.54	-	19482	PLANT ALL SPECIES IN STAGGERED PATTERN.
PHY.MYR.	Phyllanthus myrtifolius	錫蘭葉下珠	300(H) x 300(S)	300	12.54	-	8949	
CAR.MIT.	Caryota mitis	短穗魚尾葵	2500(H),min 4 clumps pre plant	750	1.95	-	137	
SCH.ARB.	Schefflera arboricola	八葉	300(H) x 300(S)	300	12.54	-	27819	
COD.VAR.'AUC'	Codiaeum variegatum 'aucubaefolium'	灑金榕	300(H) x 300(S)	300	12.54	-	161	
COD.VAR.'RED'	Codiaeum variegatum 'red'	灑金榕 (紅色)	300(H) x 300(S)	300	12.54	-	1104	
PIT.TOB.	Pittosporum tobira	海桐花	300(H) x 300(S)	300	12.54	-	552	
RHA.IND.	Rhaphiolepis indica	車輪梅	300(H) x 300(S)	300	12.54	-	6862	
GRASS PLANTING								
AXO.COM.	Axonopus compressus	地毯草 (大葉草)	WHOLE PIECE TURF 300(L) x 300(W) x 50(H)	-	m ²	-	3548	25mm HIGH SWORD AND 25mm SOIL BASE OF TURF

NOTES:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. DC/2016/01/SK/0482 TO DC/2016/01/SK/0489.



Checked by
 (C.H. PANG) RE
Approved by
 (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		Drawn by W T L	Date 28/11/2019	
Title PLANTING SCHEDULE FOR CHEUNG TUNG ROAD (LCSD)	 BLACK & VEATCH HONG KONG LIMITED 博威工程顧問有限公司	Checked by F P	Scale SCHEDULE	
		Approved by C L	Sketch no. DC/2016/01/SK/0343	Revision E

PLANTING SCHEDULE FOR AREA NORTH OF ABUTMENT C (UNDER MAINTENANCE OF LCSD)								
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	%MIX.	QUANTITY (APPROX. NOS.)	REMARK
SHRUB PLANTING								
ZAM.FUR.	Zamia furfuracea	牙買加蘇鐵	400(H) x 500 (S)	500	4.6	-	1366	PLANT IN STAGGERED PATTERN.
PHY.MYR.	Phyllanthus myrtifolius	錫蘭葉下珠	300(H) x 300 (S)	300	12.54	-	3939	
GROUNDCOVER PLANTING								
ASP.DEN.	Asparagus densiflorus	非洲天門冬	200(H) x 300 (S)	200	29	-	3837	PLANT ALL SPECIES IN STAGGERED PATTERN.
NEP.AUR.	Nephrolepis auriculate	腎蕨	250(H) x 250 (S)	150	51.59	-	90587	

NOTES:

1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. DC/2016/01/SK/0490 TO DC/2016/01/SK/0491.

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

<table border="1"> <tr> <td>B</td> <td>QUANTITY REVISED</td> </tr> <tr> <td>A</td> <td>NOTE REVISED</td> </tr> <tr> <td>REV</td> <td>DESCRIPTION</td> </tr> </table>	B	QUANTITY REVISED	A	NOTE REVISED	REV	DESCRIPTION	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	 香港特別行政區政府渠務署 THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT	Drawn by W T L Date 28/11/2019
	B	QUANTITY REVISED							
	A	NOTE REVISED							
REV	DESCRIPTION								
Title PLANTING SCHEDULE FOR AREA NORTH OF ABUTMENT C (LCSD)	 BLACK & VEATCH HONG KONG LIMITED 博威工程顧問有限公司	Checked by F P Scale SCHEDULE							
		Approved by C L Sketch no. DC/2016/01/SK/0347 Revision B							

Inspection Date: 25 February 2021

Inspected By: AUES

Time: 9:30 – 12:00

Weather Condition: Cloudy

Participants: AECOM (RSS), Ramboll (IEC) & AUES (ET) Rep.

1	Zone: Area along Lung Mun Road and Lung Fu Road	N/A or not observed	Yes	No	Remarks / Photo
1.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.3	Are trees or limb overhanging branches pruned?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
1.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
1.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
1.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
		Good	Fair	Poor	
1.10	Overall health condition of the plants?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

2	Zone: Area along cycling track near Butterfly Bay Beach and Raised Planter at Abutment Sides of Bridge H1 and G1	N/A or not observed	Yes	No	Remarks / Photo
2.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.3	Are trees or limb overhanging branches pruned?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
2.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
2.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
		Good	Fair	Poor	

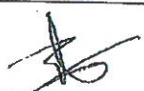



2.10 Overall health condition of the plants? _____




3	Zone: Area on Toll Plaza	N/A or not observed	Yes	No	Remarks / Photo
3.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
3.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
3.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
3.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
		Good	Fair	Poor	
3.10	Overall health condition of the plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Obs. 2</u>

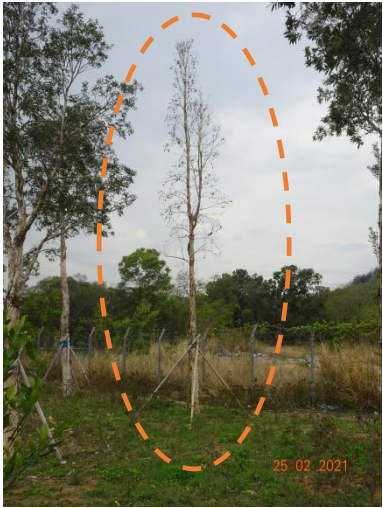

4	Zone: Slopes on Toll Plaza near the East and West Portals	N/A or not observed	Yes	No	Remarks / Photo
4.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
4.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
4.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
4.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
		Good	Fair	Poor	
4.10	Overall health condition of the plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

5 Zone: Slopes along Lung Mun Road and Lung Fu Road		N/A or not observed	Yes	No	Remarks / Photo
5.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
5.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____
5.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____
5.9	Are the planting species on site matched with the approved planting schedules (Annex B)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Obs. 1 _____
		Good	Fair	Poor	
5.10	Overall health condition of the plants?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Obs. 3 _____
6 General Document		N/A or not observed	Yes	No	Remarks / Photo
6.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	_____

<p>Follow up actions for previous Site Audit on 30 November 2020:</p> <ol style="list-style-type: none"> 1. Incorrect species of tree in Zone 5 has replacing during the inspection on 25 February 2021. 2. Poor health condition planting had been replaced. 3. Fallen tree had been replaced.
<p>Observations:</p> <ol style="list-style-type: none"> 1. Incorrect species and missing trees in zone 5 was replacing during the inspection, follow-up inspection will be taken in next quarter. 2. The tree (T2820 Melaleuca cajuputi subsp. Cumingiana) on toll plaza became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed. 3. The trees (Bauhinia variegata) on slope (5SE-D/C171) became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.
<p>Corrective Actions (if any):</p> <ol style="list-style-type: none"> 1. Tree health condition, irrigation in particular, should be closely monitored and reviewed. 2. Incorrect species and missing trees in zone 5 should be replaced ASAP.
<p>General Conclusion:</p> <p>The establishment planting for the contract is generally in fair and good condition. Regularly watering, fertilizing, weeding, pruning and mowing had been provided by Contractor. Some tree planting species are different from the approved tree planting plan should be rectified.</p>
<p>Remark:</p> <p>The quantity of tree planting at Zone 1 (Roundabout Area) was updated according to the latest approved planting schedule in December 2020</p>

Inspected by (ET's Representative):	<u>Ben Tam</u>	Title:	<u>Environmental Consultant</u>
Signature:		Date:	<u>25 February 2021</u>
Reviewed by (RSS Landscape Representative):	<u>Candy Lau</u>	Title:	<u>Senior Resident Landscape Architect</u>
Signature:		Date:	<u>9 March 2021</u>
Contractor's Representative:	<u>Tommy Lau</u>	Title:	<u>EO</u>
Signature:		Date:	<u>9/3/2021</u>
Checked by (IEC's Representative):	<u>Manson Yeung</u>	Title:	<u>IEC</u>
Signature:		Date:	<u>10/3/2021</u>

Location	Photo	Information
<p>Zone 5 (5SE-D/C170)</p>		<p>Follow-up action 1 & Observation 1: Four missing light standard Bauhinia variegata was re-planting during the inspection.</p>
<p>Zone 5 (5SE-D/C170)</p>		<p>Follow-up action 1 & Observation 1: Fifteen incorrect species of Sterculia lanceolata was removed and fifteen Schima superba will be re-planted according to the approved planting plan and schedule.</p>
<p>Zone 5 (5SE-D/C170)</p>		<p>Follow-up action 2 & 3: Poor health condition planting and fallen tree had been replaced.</p>

<p>Zone 3 (Tree T2820)</p>		<p>Observation 2: The tree (T2820 <i>Melaleuca cajuputi</i> subsp. <i>Cumingiana</i>) on toll plaza became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.</p>
<p>Zone 5 (5SE-D/C171)</p>		<p>Observation 3: The trees (<i>Bauhinia variegata</i>) on slope (5SE-D/C171) became wilted; the tree health condition in terms of irrigation should be closely monitored and reviewed.</p>

Zone 1

Area along Lung Mun Road and Lung Fu Road



General View for Roundabout Area



General View for Roundabout Area



General View for Roundabout Area



General View for Roundabout Area



General View for Roundabout Area



General View for Roundabout Area



General View for Lung Mun Road



General View for Lung Mun Road



General View for Lung Mun Road



General View for Lung Mun Road

Zone 2

Area along cycling track near Butterfly Bay Beach and Raised Planter at Abutment Sides of Bridge H1 and G1



General View for Lung Mun Road



General View for Lung Mun Road



General View for cycling track near Butterfly Bay Beach



General View for cycling track near Butterfly Bay Beach

Zone 3

Area on Toll Plaza



General View for Toe Planter



General View for Toe Planter



General View for Toe Planter



General View for Toe Planter



General View for Toe Planter



General View for Toe Planter



General View for Toll Plaza



General View for Toll Plaza

Zone 4

Slopes on Toll Plaza near the East and West Portals



General View for Slope TP_A



General View for Slope TP_A



General View for Slope TP_A



General View for Slope TP_A



General View for Slope TP_B



General View for Slope TP_B



General View for Slope TP_B



General View for Slope TP_B



General View for Slope TP_D



General View for Slope TP_D

Zone 5

Slopes along Lung Mun Road and Lung Fu Road



General View for Slope TP_C



Watering system at Slope TP_C



General View for Slope TP_C



General View for Slope 5SE-D/C170



Tree re-planting works was conducted at slope 5SE-D/C170



Tree re-planting works was conducted at slope 5SE-D/C170



General View for Slope 5SE-D/C170



General View for Slope 5SE-D/C170



General View for Slope 5SE-D/C170



Tree re-planting works was conducted at slope 5SE-D/C170



General View for Slope 5SE-D/C171



General View for Slope 5SE-D/C21



General View for Slope 5SE-D/C21



General View for Slope 5SE-D/C215



General View for Slope 5SE-D/C215



General View for Slope 5SE-D/C16



General View for Slope 5SE-D/C16



General View for Slope 5SE-D/C16



General View for Slope 5SE-D/C18

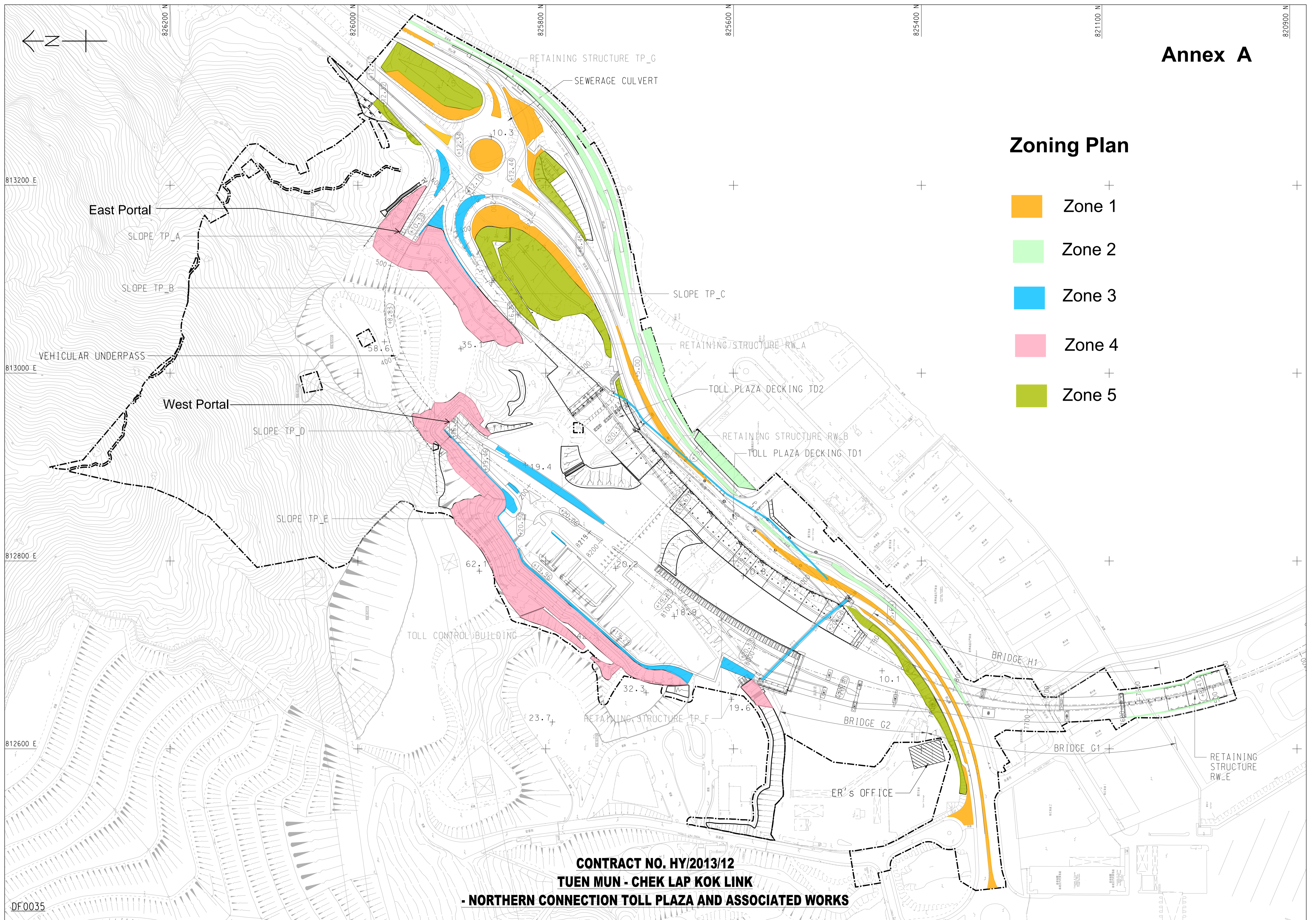


General View for Slope 5SE-D/C18

Appendix A
Zoning Plan for Contract No. HY/2013/12

Zoning Plan

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



CONTRACT NO. HY/2013/12
TUEN MUN - CHEK LAP KOK LINK
- NORTHERN CONNECTION TOLL PLAZA AND ASSOCIATED WORKS

Appendix B
Summary of Compensatory Planting Area for Contract No. HY/2013/12

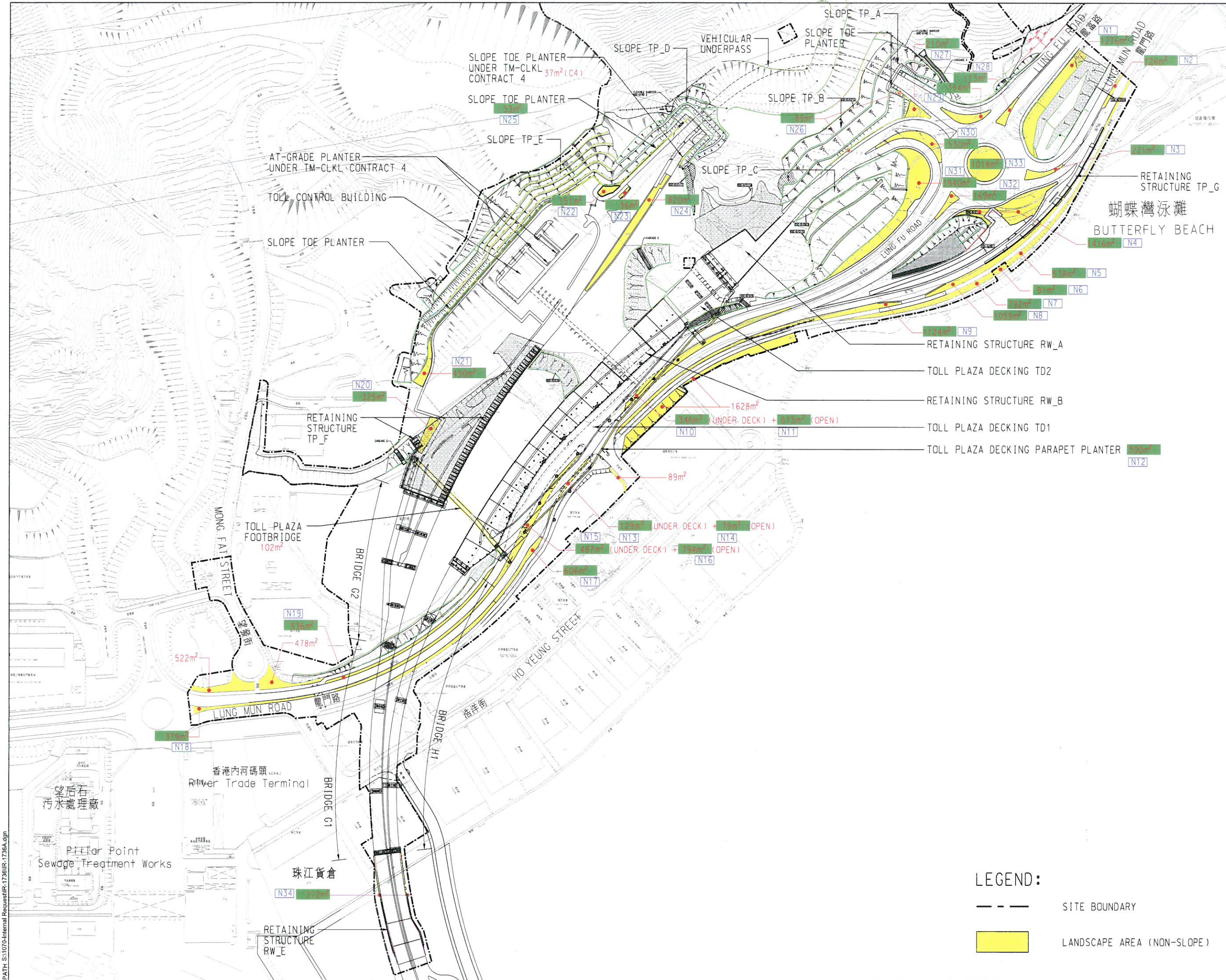
Contract No. HY/2013/12 (C3) Landscape Area Summary for EP Condition 2.9

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

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**

AMENDMENT TO WORKING DRAWING NO.
60240249/C3/DF2210

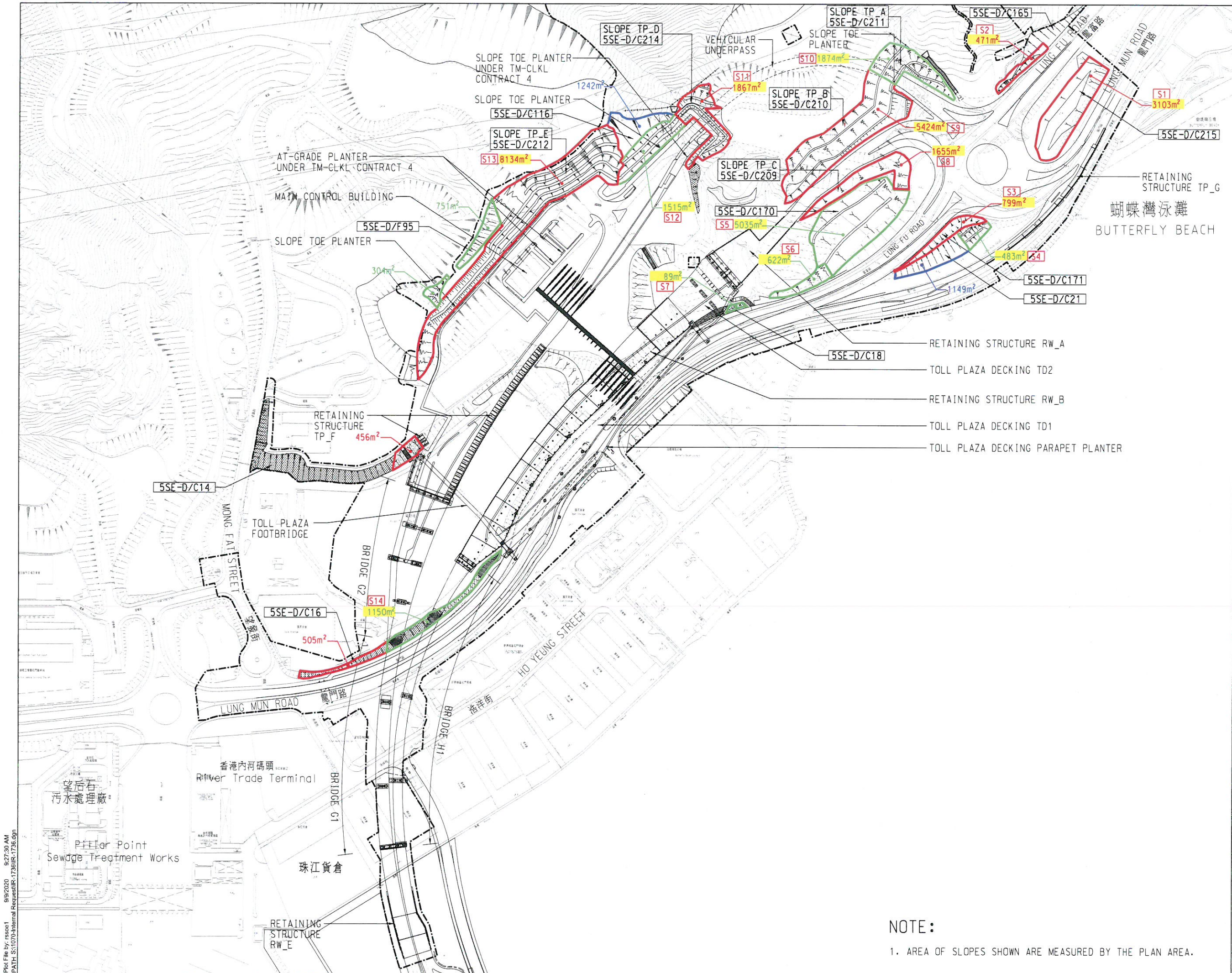
CHECKED **CL** PREPARED **CHT** DRAWN **JL/TMC**

TITLE
LANDSCAPE AREA (NON-SLOPE)

SKETCH NO.
IR-1736A

LEGEND:
 - - - - - SITE BOUNDARY
 [Yellow Box] LANDSCAPE AREA (NON-SLOPE)

Plot File by: rns0e1 9/9/2020 9:50:02 AM
 PATH S:\1070\Internal\Requiesit\IR-1736A.dgn



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

[Signature]

FOR INFORMATION

REV.	SEP. 20	FOR INFORMATION	CL	CHT	JL
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CLIENT
HIGHWAYS DEPARTMENT
 香港路政署
 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

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.

Appendix C
Approved Planting Schedule for Contract No. HY/2013/12

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
GOR.AXI.	<i>Gordonia axillaris</i> *	大頭茶	WHIP	1000
LIT.GLU.	<i>Litsea glutinosa</i> *	潺槁樹	WHIP	1000
MAL.PAN.	<i>Mallotus paniculatus</i> *	白楸	WHIP	1000
PHY.EMB.	<i>Phyllanthus emblica</i> *	餘甘子	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.(H)	<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
SGH.SUP.	<i>Schima superba</i> *	木荷 (荷樹)	LIGHT STANDARD	3000
STE.LAN.	<i>Sterculia lanceolata</i> *	假蘋婆	LIGHT STANDARD	3000
STE.LAN.	<i>Sterculia lanceolata</i> *	假蘋婆	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)	500
MEL.SAN.	<i>Melastoma sanguineum</i> *	毛萼	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 'variegata'</i>	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>	籐杜鵑	MIN. 5 SHOOTS PER PLANT, 600mm LONG	300-500
FIC.PUM.	<i>Ficus pumila</i> *	薛荔	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>	蟻蝶菊	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>	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> *	假蘋婆	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 'goldern'</i>	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 'lutea'</i>	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 'variegata'</i>	花葉八葉木	300(H) X 300(S)	300
GROUNDCOVER				
ASP.DEN.	<i>Asparagus densiflorus 'myersii'</i>	狐尾天冬	300(H) X 300(S)	250
ARA.DUR.	<i>Arachis duranensis</i>	金花生	100(H) X 200(S)	200
ASP.SPR.	<i>Asparagus densiflorus 'sprengerii'</i>	天冬	100(H) X 200(S)	200
CUP.HYS.	<i>Cupressus hyssopifolia</i>	細葉雪松	250(H) X 300(S)	250-300
DIA.VAR.	<i>Dianella tasmanica 'variegata'</i>	花葉山菅蘭	250(H) X 250(S)	250
LAN.FLA.	<i>Lantana camara 'flava'</i>	黃花馬纓丹	200(H) X 200(S)	200
LAN.MON.	<i>Lantana montevidensis</i>	小葉馬纓丹 (紫花)	200(H) X 200(S)	200
NEP.AUR.	<i>Nephrolepis auriculata</i> *	腎蕨	300(H) X 300(S)	150-250
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. GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3).
4. * SPECIES NATIVE TO HONG KONG ACCORDING TO THE HONG KONG HERBARIUM WEBSITE.

Status: Planting Schedule is a consolidated list of plant species based on the planting plans as commented/ approved by the relevant Government departments, i.e. LCSD or HyD/ Landscape Division.

Appendix D
Summary of tree Quantity for Contract No. HY/2013/12

Summary of tree Quantity for Contract No. HY/2013/12

Trees				Planting Plan Information					1st Quarter Site Checking					Total quantity to be planted as required in contract	Total quantity observed on site	Remarks
				Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5			
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)													
Whip Tree																
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	WHIP	-	-	-	-	52	52	-	-	-	-	52	52	
BRI.TOM	Bridelia tomentosa	土密樹	WHIP	-	-	-	68	25	93	-	-	-	68	25	93	
GOR.AXI	Gordonia axillaris	大頭茶	WHIP	-	-	-	88	52	140	-	-	-	88	52	140	
LIT.GLU.	Litsea glutinosa	潺槁樹	WHIP	-	-	-	-	38	38	-	-	-	-	38	38	
MAL.PAN.	Malolus paniculatus	白椒	WHIP	-	-	-	-	38	38	-	-	-	-	38	38	
PHY.EMB.	Phyllanthus emblica	酸柑子	WHIP	-	-	-	-	38	38	-	-	-	-	38	38	
SAP.DIS.	Sapum discolor	山烏桕	WHIP	-	-	-	-	12	12	-	-	-	-	12	12	
Tree (Light Standard, Heavy Standard)																
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	LIGHT STANDARD	-	-	-	34	191	225	-	-	-	34	191	225	Re-planting works was conducting
BOM.CEI.(L)	Bombax ceiba	木棉	LIGHT STANDARD	-	-	-	-	32	32	-	-	-	-	32	32	
BRI.TOM.	Bridelia tomentosa	土密樹	LIGHT STANDARD	-	-	-	15	66	81	-	-	-	15	66	81	
CIN.BUR.	Cinnamomum burmannii	陰香	LIGHT STANDARD	-	-	-	-	51	51	-	-	-	-	51	51	
GAR.SUB	Garcinia subelliptica	福木	LIGHT STANDARD	16	4	10	-	-	30	16	4	10	-	-	30	
LIO.FOR.	Liquidambar formosana	楓香	LIGHT STANDARD	-	-	-	-	32	32	-	-	-	-	32	32	
LIT.GLU.(L)	Litsea glutinosa	潺槁木	LIGHT STANDARD	-	-	-	19	-	19	-	-	-	19	-	19	
MAC.CHE.	Machilus chekiangensis	浙江潤楠	LIGHT STANDARD	-	-	-	17	44	61	-	-	-	17	44	61	
REE.THY.	Ruevicia thyrsoidea	梭羅樹	LIGHT STANDARD	-	-	-	7	29	36	-	-	-	7	29	36	
SCH.SUP.	Schima superba	木荷 (荷樹)	LIGHT STANDARD	-	-	-	-	32	32	-	-	-	-	32	32	Re-planting works was conducting
STE.LAN.	Sterculia lanceolata	假桐婆	LIGHT STANDARD	-	-	-	6	47	53	-	-	-	6	47	53	Re-planting works was conducting
VIB.ODO.	Viburnum odoratissimum	珊瑚樹	LIGHT STANDARD	-	-	-	16	58	74	-	-	-	16	58	74	
BAU.VAR.(L)	Bauhinia variegata	宮粉羊蹄甲	HEAVY STANDARD	-	-	-	-	41	41	-	-	-	-	41	41	
BOM.CEI.(L)	Bombax ceiba	木棉	HEAVY STANDARD	-	-	-	-	16	16	-	-	-	-	16	16	
BRA.ACE	Brachycton acerfolius	槭葉槲寄生	HEAVY STANDARD	-	-	18	-	-	18	-	-	18	-	-	18	
CIN.BUR.	Cinnamomum burmannii	陰香	HEAVY STANDARD	-	-	-	-	23	23	-	-	-	-	23	23	
STE.LAN.	Sterculia lanceolata	假桐婆	HEAVY STANDARD	-	-	3	-	10	13	-	-	3	-	10	13	
DEL.REG	Delonix regia	鳳凰木	HEAVY STANDARD	1	-	-	-	-	1	1	-	-	-	-	1	
MEL.CUM	Messerschmidia cajuputi Subsp. guineensis	白千層	HEAVY STANDARD	35	16	-	-	-	51	35	16	-	-	-	51	
TAB.CHR	Tabebuia chrysantha	黃花風鈴木	HEAVY STANDARD	-	-	4	-	-	4	-	-	4	-	-	4	
TAB.IMP	Tabebuia impetiginosa	風鈴木	HEAVY STANDARD	46	-	3	-	-	49	46	-	3	-	-	49	Tree quantity was updated according to the latest approved planting schedule in December 2020
TER.MAN	Terminalia mantaly	小葉欖仁	HEAVY STANDARD	-	8	-	-	-	8	-	8	-	-	-	8	
Palm																
ARC.ALE	Archontophoenix alexandrae	假棕櫚	3500(H) x 1500(S)	-	58	-	-	-	58	-	58	-	-	-	58	
LIV.CHI	Livistona chinensis	蒲葵	2000(H) x 1500(S)	21	-	-	-	-	21	21	-	-	-	-	21	Tree quantity was updated according to the latest approved planting schedule in December 2020
PHO.ROE	Phoenix roebelenii	日本葵	2000(H) x 1500(S)	50	-	4	-	-	54	50	-	4	-	-	54	
WOD.BIF	Wodyetia bifurcata	狐尾椰子	2500(H) x 1500(S)	-	-	26	-	-	26	-	-	26	-	-	26	
				169	86	68	270	927	1520	169	86	68	270	927	1520	

5 March 2021

Our ref: 0463091_77_Establishment L&V Checklist (Portion XXII) Dec-Feb 21.docx

By email

Mr Manson Yeung
Independent Environmental Checker
Ramboll Hong Kong Limited
21/F, BEA Harbour View Centre
56 Gloucester Road
Wan Chai, Hong Kong



Dear Sir,

**Contract No. HY/2017/10
Tuen Mun - Chek Lap Kok Link - Northern Connection Tunnel Buildings,
Electrical and Mechanical Works**

**Reporting of Landscape Planting Works for Portion XXII during the
24-month Establishment Period (December 2020 to February 2021)**

In accordance with *Section 7.3.1.2 of the Updated EM&A Manual*, we are pleased to provide you with the *Establishment Landscape Monitoring Checklist for December 2020 to February 2021* for your perusal and counter-signature.

Should you require any further information or clarification please do not hesitate to contact the undersigned.

Yours faithfully
For ERM-Hong Kong, Ltd

Dr Jasmine Ng
Environmental Team Leader

Direct Tel: (852) 2271 3311
E-mail: jasmine.ng@erm.com

C.c.
AECOM (Attn: Mr Desmond Fung)
GCL (Attn: Mr Roy Leung)



Inspection Date: 19th February 2021 **Inspected By:** Ray Yan
Time: 9:40 a.m. **Weather Condition:** Sunny
Participants: Sue Kei (AECOM), Agnes Wong (Gammon) and Manson Yeung (Ramboll)

		N/A or not observed	Yes	No	Remarks / Photo
1	Zone: Area along Cheung Tung Road				
1.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.3	Are trees or limb overhanging branches pruned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.5	Are litter and debris removed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Good	Fair	Poor	
1.10	Overall health condition of the plants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	Zone: Southern Landfall, HKBCF				
2.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2.3	Are trees or limb overhanging branches pruned?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Obs. 2
2.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		Good	Fair	Poor	
2.10	Overall health condition of the plants?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Obs. 1


		N/A or not observed	Yes	No	Remarks / Photo
3	Zone: Area within Expressway Boundary				
3.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.3	Are trees or limb overhanging branches pruned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.5	Are litter and debris removed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Good	Fair	Poor	
3.10	Overall health condition of the plants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	Zone: Slopes outside Expressway Boundary				
4.1	Is watering provided to plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.2	Are tree stakes, guys and ties provided properly for safety and avoid chaffing of bark?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.3	Are trees or limb overhanging branches pruned?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.4	Are pest and disease observed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.5	Are litter and debris removed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.6	Are plants/ grasses overgrown?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.7	After inclement weather conditions, are proper action implemented to replace dead plants, repair damaged plants, bed in all plants that have blown over, firm up all other plants and immediately thereafter, remove dead plants and plant debris from the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.8	Are planting locations and tree spacing matched with the approved planting plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.9	Are the planting species on site matched with the approved planting plans? Consolidated planting schedule in Annex B.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		Good	Fair	Poor	
4.10	Overall health condition of the plants?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	General Document				
5.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Follow-up actions for previous Site Audit: Follow-up actions taken for the observations as recorded during the previous landscape monitoring conducted on 8 October 2020: For details, please refer to the report prepared by relevant parties under the contract responsible for Zone 1, Zone 3 and Zone 4 since the quarter of December 2020 to February 2021.
Observations: Obs. 1: A tree from a group of four trees, <i>Grevillea robusta</i> , with sparse foliage grown in the vicinity of Pier F17 was observed. The tree health condition in terms of irrigation and/or nutrient deficiencies should be closely monitored and reviewed. Obs. 2: A tree from a group of 17 trees, <i>Grevillea robusta</i> , in the vicinity of Pier F16 was observed missing. Tree re-planting works for the missing tree should be undertaken as soon as possible.
Corrective Actions (if any): <ul style="list-style-type: none">• Tree health condition, irrigation and/or nutrient deficiencies in particular, should be closely monitored and reviewed.• Tree re-planting works for the missing tree should be undertaken as soon as possible.
General Conclusion: Total number of trees planted: 275 (Zone 2). Planting area (Zone 2): 4.71 ha (based on the survey data provided by the SOR).

Inspected by
(ET's Representative): Ray Yan Title: Deputy Environmental Team Leader

Signature:  Date: 19 February 2021

Reviewed by
(RSS Landscape Representative): Candy Lau Title: Senior Resident Landscape Architect



Signature:  Date: 3 March 2021

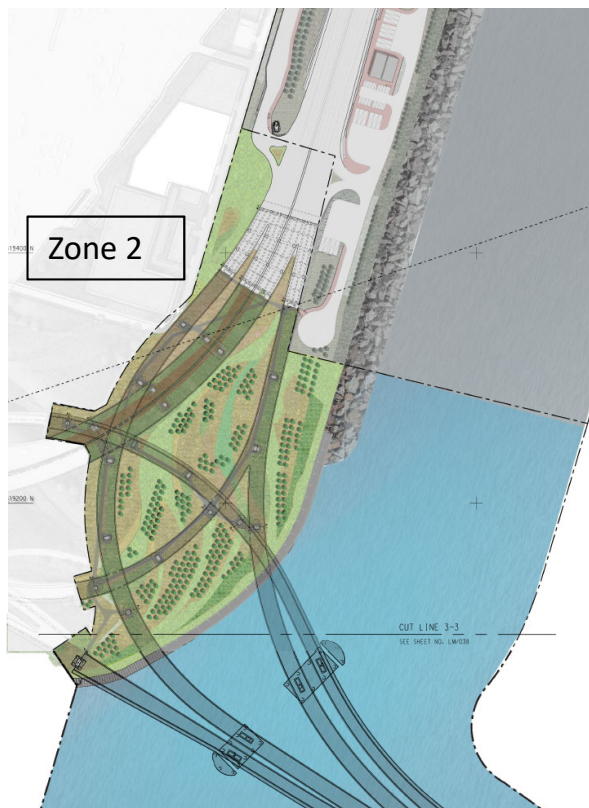
Contractor's Representative: Phoebe Ng Title: Environmental Officer

Signature:  Date: 19 February 2021

Checked by
(IEC's Representative): Manson Yeung Title: IEC

Signature:  Date: 10 March 2021

Location	Photo	Information
Zone 2		<p>Date: 19 February 2021</p> <p>Observation 1: A tree from a group of four trees, <i>Grevillea robusta</i>, with sparse foliage grown in the vicinity of Pier F17 was observed. The tree health condition in terms of irrigation and/or nutrient deficiencies should be closely monitored and reviewed.</p> <p>Species: <i>Grevillea robusta</i></p>
Zone 2		<p>Date: 19 February 2021</p> <p>Observation 2: A tree from a group of 17 trees, <i>Grevillea robusta</i>, in the vicinity of Pier F16 was observed missing. Tree re-planting works for the missing tree should be undertaken as soon as possible.</p> <p>Species: <i>Grevillea robusta</i></p>



Contract No. HY/2017/10
TUEN MUN-CHEK LAP KOK LINK
- NORTHERN CONNECTION TUNNEL BUILDINGS,
ELECTRICAL AND MECHANICAL WORKS

ZONING PLAN – LANDSCAPE WORKS MONITORING (ESTABLISHMENT WORKS)

Note: Planting works were completed under Contract No. HY/2012/07.

Monitoring of the establishment works continue under Contract No. HY/2017/10.

PLANTING SCHEDULE FOR SOUTHERN LANDFALL								
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m ²	QUANTITY (NOS.)	REMARK	HKIA APPROVED IN ZONE
TREE PLANTING - EXOTIC								
GRE.ROB.	<i>Grevillea robusta</i>	銀樺	HEAVY STANDARD TREE	4000-5000	-	42	-	2
PLU.RUB.	<i>Plumeria rubra</i>	雞蛋花	HEAVY STANDARD TREE	4000-5000	-	233	MIN. 2000mm HEIGHT	2
SHRUB PLANTING								
RUS.EQU.	<i>Russelia equisetiformis</i>	爆仗竹	300(H) x 300(S)	250	18.4	350	-	1, 2
GROUNDCOVER PLANTING								
LAN.MON.	<i>Lantana montevidensis</i>	鋪地臭金鳳	200(H) x 200(S)	250	18.4	242383	REGULAR PRUNING TO MAINTAIN DENSE LOW CANOPY.	1, 2
TRA.SPA.	<i>Tradescantia spathacea</i>	蚌花	200(H) x 300(S)	250	18.4	15695	-	1, 2
OPH.JAP.	<i>Ophiopogon japonicus</i>	麥冬	150(H) x 200(S)	200	29	205813	-	1, 2
SYN.POD.	<i>Syngonium podophyllum</i>	白蝴蝶	100(H) x 200(S)	200	29	68614	-	1, 2
ZEP.ROS.	<i>Zephyranthes rosea</i>	玫瑰蔥蓮	100(H) x 200(S)	150	51.59	72278	-	1, 2
IPO.PES.	<i>Ipomoea pes-caprae</i>	海灘牽牛	200(H) x 200(S)	200	29	42311	-	1, 2
CLIMBER PLANTING								
MON.DEL.	<i>Monstera deliciosa</i>	龜背竹	MIN. 5 SHOOTS PER PLANT, 300mm LONG	500	4.6	239	-	1, 2
GRASS PLANTING								
ZOY.JAP.	<i>Zoysia japonica</i>	朝鮮草	300(L)x300(W)x50(H)	Area	-	10041 sq.m	REGULAR CUTTING TO PREVENT SEED HEAD PRODUCTION. WHOLE PIECE TURF (300x300x50)mm, 25mm HEIGHT SWORD AND 25mm SOIL BASE OF TURF.	1, 2
HYDROSEEDING								
HYDROSEEDING	HYDROSEEDING	噴草	-	-	-	200 sq.m	GRASS SEED AS CEDD GENERAL SPECIFICATION 3.26(3)	1, 2

NOTES:

1. 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).
2. SHRUB / GROUNDCOVER / CLIMBER SHOULD BE PLANTED IN A STAGGERED PATTERN.
3. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. 60240249/C1/1741Z AND 60240249/C1/1751Z.

-	27/03/20	PLANTING SCHEDULE FOR SOUTHERN LANDFALL	AW	GH	CL
REV.	DATE	DESCRIPTION	DRAWN	PRE.	APP.

CLIENT
 路政署
HIGHWAYS DEPARTMENT
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 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

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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
**PLANTING SCHEDULE FOR
 SOUTHERN LANDFALL**

DRAWING REFERENCE NEW DRAWING	SCALE N. T. S.
DRAWN AW	PREPARED GH
APPROVED CL	REV. -
SKETCH NO. SK0555	



Photo 1: (A): *Plumeria rubra*; and (B): *Grevillea robusta* within Zone 2
(Taken on: 19 February 2021)



Photo 2: (A): *Plumeria rubra*; and (B): *Grevillea robusta* within Zone 2
(Taken on: 19 February 2021)

Source: P:\Projects\0463091 Gammon Construction Limited Gammon TMCLKL
North Tunnel\JT\08_Site Audit\05_L&V establishment period
checklist\01_Portion XXII\01_Dec 20-Feb 21

Date: 19/02/21

**Environmental
Resources
Management**





Photo 3: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)



Photo 4: (A): *Plumeria rubra*; and (B): *Grevillea robusta* within Zone 2
(Taken on: 19 February 2021)

Source: P:\Projects\0463091 Gammon Construction Limited Gammon TMCLKL
North Tunnel.JT\08_Site Audit\05_L&V establishment period
checklist\01_Portion XXII\01_Dec 20-Feb 21

Date: 19/02/21

**Environmental
Resources
Management**





Photo 5: (A): *Plumeria rubra*; and (B): *Grevillea robusta* within Zone 2
(Taken on: 19 February 2021)



Photo 6: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)

Source: P:\Projects\0463091 Gammon Construction Limited Gammon TMCLKL
North Tunnel.JT\08_Site Audit\05_L&V establishment period
checklist\01_Portion XXII\01_Dec 20-Feb 21

Date: 19/02/21

**Environmental
Resources
Management**





Photo 7: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)



Photo 8: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)

Source: P:\Projects\0463091 Gammon Construction Limited Gammon TMCLKL
North Tunnel.JT\08_Site Audit\05_L&V establishment period
checklist\01_Portion XXII\01_Dec 20-Feb 21

Date: 19/02/21

**Environmental
Resources
Management**





Photo 9: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)



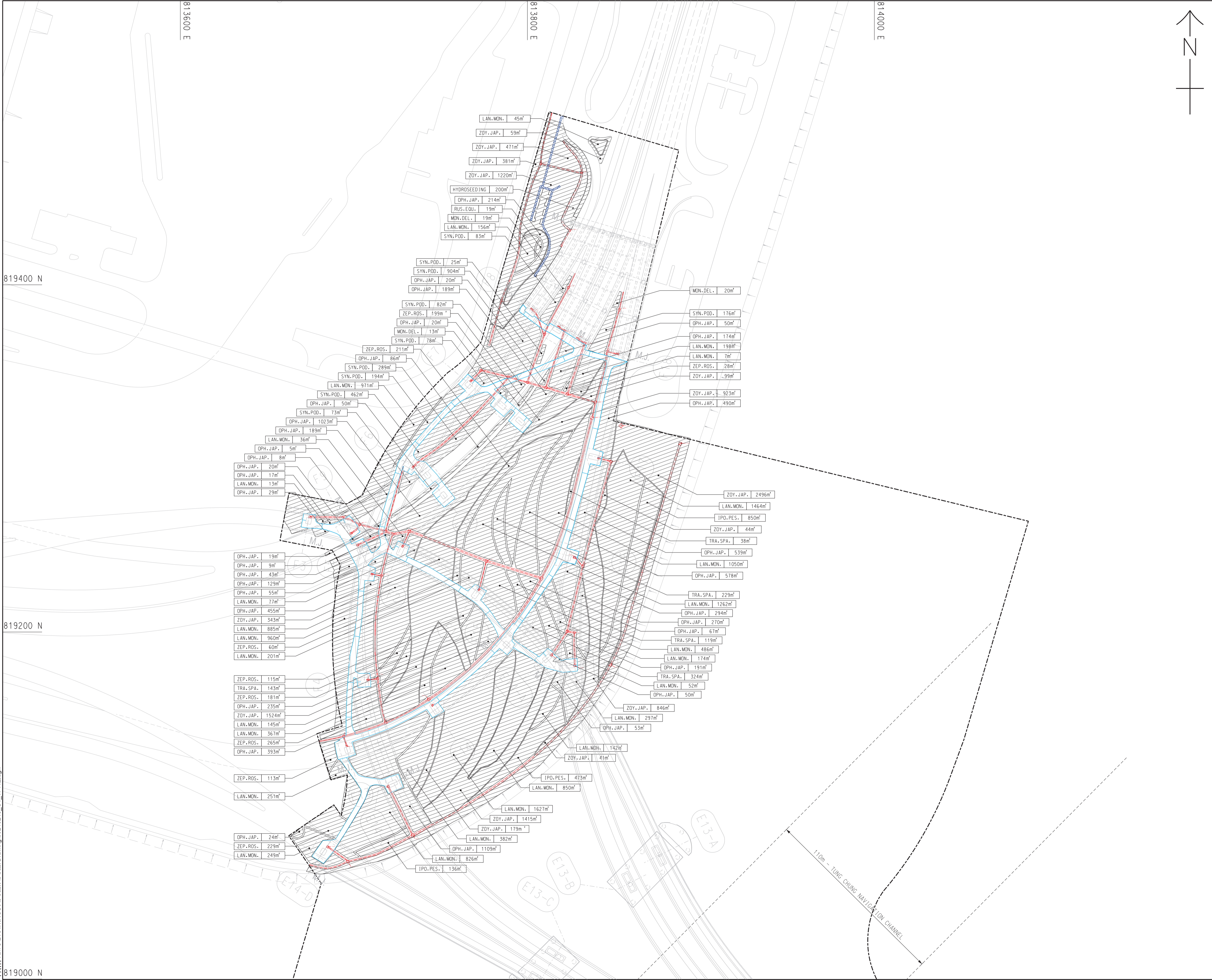
Photo 10: *Plumeria rubra* within Zone 2
(Taken on: 19 February 2021)

Source: P:\Projects\0463091 Gammon Construction Limited Gammon TMCLKL
North Tunnel.JT\08_Site Audit\05_L&V establishment period
checklist\01_Portion XXII\01_Dec 20-Feb 21

Date: 19/02/21

**Environmental
Resources
Management**





- NOTES:**
1. THE PROPOSED PLANTING SPECIES AND ARRANGEMENT ON THE SOUTHERN LANDFALL SHALL FOLLOW THE GUIDELINES IN HONG KONG INTERNATIONAL AIRPORT APPROVED PLANT SPECIES LIST (REVISION 3.1: JUNE 2007), AS ATTACHED IN ER AREA 4.
 2. THE DRAWING SHALL BE READ IN CONJUNCTION WITH SHEET NOS. 60240249/C1/1741 TO 1746 AND 1771.

LEGEND:

- SITE BOUNDARY
- AS-BUILT U-Channel
- AS-BUILT MAINTENANCE ACCESS
- AS-BUILT MAINTENANCE FOOTPATH
- AS-BUILT SHRUB PLANTING
- AS-BUILT ENGINEERING LAYOUT-VIADUCT
- PIER MARK
- RHA. EXC. 905.78 m²
- SPECIES AREA (sq. m)
- 10NW - C/F11 EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

Z	NOV/19	AS-CONSTRUCTED	CWY
REV.	DATE	DESCRIPTION	C.H.K.

CLIENT

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 Hong Kong - Zhuhai - Macao Bridge
 Hong Kong Project Management Office

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PROJECT
TUEN MUN - CHEK LAP KOK LINK

CONTRACT NO.
HY/2012/07

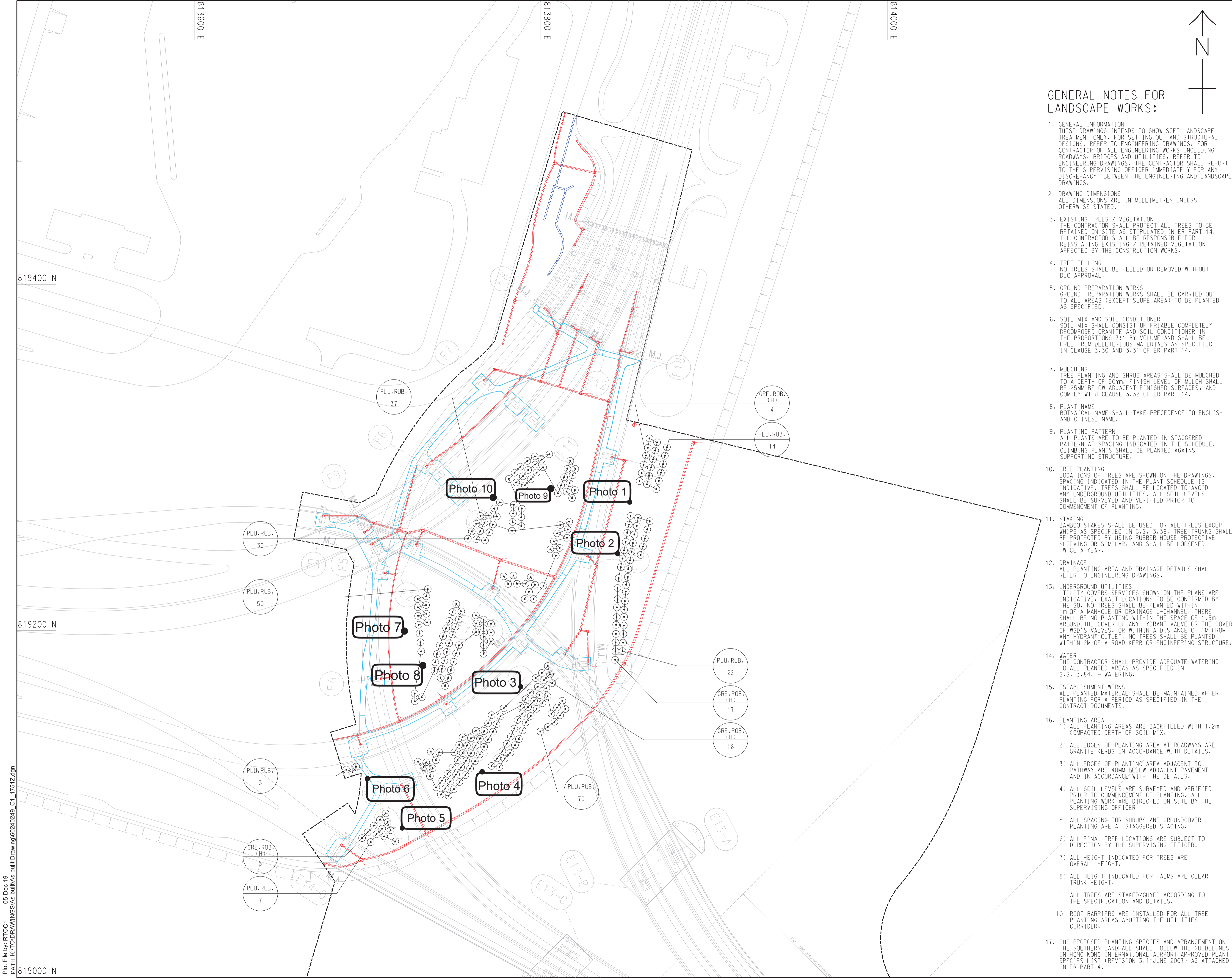
CONTRACT TITLE
TUEN MUN - CHEK LAP KOK LINK - SOUTHERN CONNECTION VIADUCT SECTION

TITLE
SHRUB PLANTING PLAN

SHEET 1 OF 6

STATUS	SCALE	
AS-BUILT DRAWING	1:1000 (A1) 1:2000 (A3)	
DRAWN	PREPARED	APPROVED
GC	GH	CL
DRAWING NO.	REV.	
60240249/C1/1741	Z	

Plot File by: RT0C1
 PATH: K:\DRAWINGS\AS-BUILT\AS-BUILT\Drawing\60240249_C1_1741Z.dgn
 21-Jan-20



LEGEND:

- SITE BOUNDARY
- AS-BUILT U-Channel
- AS-BUILT MAINTENANCE ACCESS
- AS-BUILT MAINTENANCE FOOTPATH
- AS-BUILT TREE
- AS-BUILT ENGINEERING LAYOUT-VIADUCT
- PIER MARK
- EXISTING SIMAR SLOPES WITH SLOPE REGISTRATION NO. SHOWN THUS

GENERAL NOTES FOR LANDSCAPE WORKS:

1. GENERAL INFORMATION
THESE DRAWINGS INTENDS TO SHOW SOFT LANDSCAPE TREATMENT ONLY. FOR SETTING OUT AND STRUCTURAL DESIGNS, REFER TO ENGINEERING DRAWINGS. FOR CONTRACTOR OF ALL ENGINEERING WORKS INCLUDING ROADWAYS, BRIDGES AND UTILITIES, REFER TO ENGINEERING DRAWINGS. THE CONTRACTOR SHALL REPORT TO THE SUPERVISING OFFICER IMMEDIATELY FOR ANY DISCREPANCY BETWEEN THE ENGINEERING AND LANDSCAPE DRAWINGS.
2. DRAWING DIMENSIONS
ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3. EXISTING TREES / VEGETATION
THE CONTRACTOR SHALL PROTECT ALL TREES TO BE RETAINED ON SITE AS STIPULATED IN ER PART 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REINSTATING EXISTING / RETAINED VEGETATION AFFECTED BY THE CONSTRUCTION WORKS.
4. TREE FELLING
NO TREES SHALL BE FELLED OR REMOVED WITHOUT DLO APPROVAL.
5. GROUND PREPARATION WORKS
GROUND PREPARATION WORKS SHALL BE CARRIED OUT TO ALL AREAS (EXCEPT SLOPE AREA) TO BE PLANTED AS SPECIFIED.
6. SOIL MIX AND SOIL CONDITIONER
SOIL MIX SHALL CONSIST OF FRIABLE COMPLETELY DECOMPOSED GRANITE AND SOIL CONDITIONER IN THE PROPORTIONS 3:1 BY VOLUME AND SHALL BE FREE FROM DELETERIOUS MATERIALS AS SPECIFIED IN CLAUSE 3.30 AND 3.31 OF ER PART 14.
7. MULCHING
TREE PLANTING AND SHRUB AREAS SHALL BE MULCHED TO A DEPTH OF 50mm. FINISH LEVEL OF MULCH SHALL BE 25MM BELOW ADJACENT FINISHED SURFACES, AND COMPLY WITH CLAUSE 3.32 OF ER PART 14.
8. PLANT NAME
BOTANICAL NAME SHALL TAKE PRECEDENCE TO ENGLISH AND CHINESE NAME.
9. PLANTING PATTERN
ALL PLANTS ARE TO BE PLANTED IN STAGGERED PATTERN AT SPACING INDICATED IN THE SCHEDULE. CLIMBING PLANTS SHALL BE PLANTED AGAINST SUPPORTING STRUCTURE.
10. TREE PLANTING
LOCATIONS OF TREES ARE SHOWN ON THE DRAWINGS. SPACING INDICATED IN THE SCHEDULE IS INDICATIVE. TREES SHALL BE LOCATED TO AVOID ANY UNDERGROUND UTILITIES. ALL SOIL LEVELS SHALL BE SURVEYED AND VERIFIED PRIOR TO COMMENCEMENT OF PLANTING.
11. STAKING
BAMBOO STAKES SHALL BE USED FOR ALL TREES EXCEPT WHIPS AS SPECIFIED IN G.S. 3.36. TREE TRUNKS SHALL BE PROTECTED BY USING RUBBER HOUSE PROTECTIVE SLEEVING OR SIMILAR, AND SHALL BE LOOSENED TWICE A YEAR.
12. DRAINAGE
ALL PLANTING AREA AND DRAINAGE DETAILS SHALL REFER TO ENGINEERING DRAWINGS.
13. UNDERGROUND UTILITIES
UTILITY COVERS SERVICES SHOWN ON THE PLANS ARE INDICATIVE, EXACT LOCATIONS TO BE CONFIRMED BY THE SO. NO TREES SHALL BE PLANTED WITHIN 1m OF A MANHOLE OR DRAINAGE U-CHANNEL. THERE SHALL BE NO PLANTING WITHIN THE SPACE OF 1.5m AROUND THE COVER OF ANY HYDRANT VALVE OR THE COVER OF WSD'S VALVES, OR WITHIN A DISTANCE OF 1m FROM ANY HYDRANT OUTLET. NO TREES SHALL BE PLANTED WITHIN 2M OF A ROAD KERB OR ENGINEERING STRUCTURE.
14. WATER
THE CONTRACTOR SHALL PROVIDE ADEQUATE WATERING TO ALL PLANTED AREAS AS SPECIFIED IN G.S. 3.84. - WATERING.
15. ESTABLISHMENT WORKS
ALL PLANTED MATERIAL SHALL BE MAINTAINED AFTER PLANTING FOR A PERIOD AS SPECIFIED IN THE CONTRACT DOCUMENTS.
16. PLANTING AREA
1) ALL PLANTING AREAS ARE BACKFILLED WITH 1.2m COMPACTED DEPTH OF SOIL MIX.
2) ALL EDGES OF PLANTING AREA AT ROADWAYS ARE GRANITE KERBS IN ACCORDANCE WITH DETAILS.
3) ALL EDGES OF PLANTING AREA ADJACENT TO PATHWAY ARE 40MM BELOW ADJACENT PAVEMENT AND IN ACCORDANCE WITH THE DETAILS.
4) ALL SOIL LEVELS ARE SURVEYED AND VERIFIED PRIOR TO COMMENCEMENT OF PLANTING. ALL PLANTING WORK ARE DIRECTED ON SITE BY THE SUPERVISING OFFICER.
5) ALL SPACING FOR SHRUBS AND GROUND COVER PLANTING ARE AT STAGGERED SPACING.
6) ALL FINAL TREE LOCATIONS ARE SUBJECT TO DIRECTION BY THE SUPERVISING OFFICER.
7) ALL HEIGHT INDICATED FOR TREES ARE OVERALL HEIGHT.
8) ALL HEIGHT INDICATED FOR PALMS ARE CLEAR TRUNK HEIGHT.
9) ALL TREES ARE STAKED/GUYED ACCORDING TO THE SPECIFICATION AND DETAILS.
10) ROOT BARRIERS ARE INSTALLED FOR ALL TREE PLANTING AREAS ABUTTING THE UTILITIES CORRIDOR.
17. THE PROPOSED PLANTING SPECIES AND ARRANGEMENT ON THE SOUTHERN LANDFALL SHALL FOLLOW THE GUIDELINES IN HONG KONG INTERNATIONAL AIRPORT APPROVED PLANT SPECIES LIST (REVISION 3.1: JUNE 2007) AS ATTACHED IN ER PART 4.

REV.	DATE	DESCRIPTION	C.H.K.
2	NOV/19	AS-CONSTRUCTED	SHY/CWY

CLIENT
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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
TREE PLANTING PLAN

STATUS AS-BUILT DRAWING		SCALE 1:1000 (A1) 1:2000 (A3)	SHEET 1 OF 11	
DRAWN GC	PREPARED GH	APPROVED CL	REV. Z	
DRAWING NO. 60240249/C1/1751				



- 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

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HIGHWAYS DEPARTMENT
 港務局大橋及港地工程管理處
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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. -