

CONTRACT NO: DC/2016/01

# CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS

ENTRUSTED LANDSCAPE WORKS FROM CONTRACT NO. HY/2012/07 TO CONTRACT NO. DC/2016/01
UNDER ENVIRONMENTAL PERMIT NO. EP-354/2009/D

#### **MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT**

**FEBRUARY 2023** 

**CLIENTS:** 

**Highways Department** 

PREPARED BY:

**Lam Environmental Services Limited** 

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**CERTIFIED BY:** 

Raymond Dai

**Environmental Team Leader** 

DATE:

13 March 2023



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

Ho Man Tin Kowloon Your reference:

Our reference:

HKHYD203/50/108653

Date:

9 March 2023

Attention: Mr Eric Wong

BY EMAIL & POST (email: se1tcl.mw@hyd.gov.hk)

Dear Sirs

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

Contract No. DC/2016/01
Entrusted Landscape Works from Contract No. HY/2012/07 to
Contract No. DC/2016/01 Under Environmental Permit No.: EP-354/2009/D
5th Monthly EM&A Report for February 2023

We refer to the email of 8 March 2023, attaching the 6th Monthly EM&A Report for February 2023 prepared by the Environmental Team (ET) of the captioned.

We have no comment and hereby verify the Monthly EM&A Report in accordance with Clause 4.4 of the Environmental Permit no. EP-354/2009/D.

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

Yours faithfully

ANEWR CONSULTING LIMITED

James Choi

Independent Environmental Checker

CPSJ/LCCR/YCFM/lsmt

cc Highways Department – Mr Nick Li (email: e1tcl.mw@hyd.gov.hk)
Lam Environmental Services Limited – Mr Raymond Dai (email: raymonddai@lamenviro.com)
Binnies Hong Kong Limited – Mr Charlson Leung (email: leungcsc@binnies.com)

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#### **EXECUTIVE SUMMARY**

- i. This is the 6<sup>th</sup> Environmental Monitoring and Audit (EM&A) Monthly Report February 2023 as referred to the approved EM&A manual under the approved EIA report for the Agreement No. CE52/2007(HY) for the entrusted landscape works under Environmental Permit no. EP-354/2009/D, presenting the environmental monitoring findings and information recorded during the period of 01 January 2023 to 28 February 2023.
- ii. In the reporting period, the work activities conducted for the establishment period of the entrusted landscape works are as follow:
  - Pruning, watering, weeding, shrubs replacement, tree replacement

#### EM&A activities for the reporting period

- iii. The EM&A programme was carried out in accordance with the contract specific EM&A Manual requirements, no air quality, noise, water quality, ecology, cultural heritage and landfill gas monitoring was required for the contract.
- iv. With the completion of all the entrusted landscape works associated with the interface areas between Contract No. HY/2012/07 and DC/2016/01 along a section of Cheung Tung Road certified by the Project Manager's Delegate under Contract No. DC/2016/01 in mid-July 2022, the 24-month landscape establishment period was proposed for commencement on 14 July 2022 as per the joint inspection with HyD, IEC and ET.
- v. v. No landscape establishment monitoring was conducted in this reporting period

#### Complaints, Notifications of Summons and Successful Prosecutions

vi. No environmental complaint, notification of summons and successful prosecution regarding the construction works was recorded in the reporting period.

#### Reporting Changes

vii. No changing circumstances requiring alterations to the EM&A programme were made in the reporting period.

#### Future Key Issues

- viii. In coming reporting 2 months, the scheduled construction activities for the establishment period of the entrusted landscape works are listed as follows,
  - Watering, weeding, pruning, shrubs replacement, tree replacement
- ix. Quarterly monitoring for 24-month establishment period has been commenced starting from October 2022 as notified in August 2022 via the submission of the contract specific EM&A manual to EPD.

#### 1 Introduction

#### 1.1 Scope of the Report

- 1.1.1. Lam Environmental Services Limited has been appointed by Penta-Ocean Wo Hing Joint Venture (hereinafter referred to as "Contractor") to undertake the Environmental Monitoring and Audit (EM&A) works for the Additional Entrusted Landscape Works under Contract no. DC/2016/01 (Hereafter referred as "the entrusted landscape works").
- 1.1.2. As referred to the approved EM&A manual under the approved EIA report for the Agreement No. CE52/2007(HY) for the entrusted landscape works under Environmental Permit no. EP-354/2009/D, a contract-specific EM&A manual has been submitted to the Environmental Protection Department (EPD) and accepted for commencing EM&A programme for the establishment period of the entrusted landscape works.
- 1.1.3. This is the 6<sup>th</sup> Monthly EM&A Report February 2023 of the entrusted landscape works, presenting the environmental monitoring findings and information recorded during the period of 01 February 2023 to 28 February 2023.

#### 1.2 Structure of the Report

- **Section 1** *Introduction* details the scope and structure of the report.
- **Section 2** *Project Background* summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.
- **Section 3 Status of Regulatory Compliance** summarizes the status of EM&A implementation, valid Environmental Permits / Licenses during the reporting period.
- **Section 4** *Monitoring Programme* summarizes all monitoring requirements, monitoring locations, monitoring frequency, and respective event and action plan and monitoring programmes.
- **Section 5** *Monitoring Results* summarizes the monitoring results obtained in the reporting period.
- Section 6 Complaints, Notification of summons and Prosecution summarizes the cumulative statistics on complaints, notification of summons and prosecution
- Section 7 Conclusion

#### 2 Project Background

#### 2.1 Background

- 2.1.1. The entrusted landscape works associated with the interface areas between Contract No. HY/2012/07 and DC/2016/01 along a section of Cheung Tung Road form part of landscape mitigation measures as recommended under the approved EIA report (Register No.: AEIAR-146/2009). A Landscape and Visual Plan (LVP) has been submitted under Condition 2.9 of Environmental Permit EP-354/2009/D and approved by EPD.
- 2.1.2. Locations and planting schedule of entrusted landscape works are showed in <u>Figure 2.1</u>, <u>Figure 2.2</u> and <u>Figure 2.3</u> respectively.

#### 2.2 Project Organization and Contact Personnel

- 2.2.1 Highways Department is the overall project controllers for the Project. For the construction phase of the Project, Project Engineer / Supervisor, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.
- 2.2.2 The project organization and lines of communication with respect to environmental protection works are shown in <u>Figure 2.4</u>. Key personnel and contact particulars are summarized in **Table 2.1**:

Table 2.1 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
Highways Department (HyD)	Project Proponent	Principal Project Coordinator	LO Kwok-chung, David	2762 4153	3188 6614
Drainage Services Department (DSD)	Project Manager	Engineer / Consultants Management	Marcus LAU	2594 7218	3104 6426
Binnies Hong Kong Limited	Project Manager's Delegate	Senior Resident Engineer	Charlson LEUNG	3757 6615	3100 0143
Penta-Ocean Wo Hing JV	Contractor	Sub Agent	Sandy NGAN	9280 6602	2398 8301
ANewR Consulting Limited	Environmental Project Office (ENPO)	Independent Environmental Checker (IEC)	James CHOI	2618 2831	3007 8648
Lam Environmental Services Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Raymond DAI	2882 3939	2882 3331

#### 2.3 Work Activities

2.3.1 In the reporting period, the work activities conducted for the establishment period of the entrusted landscape works are as follows,





- Pruning, watering, weeding, shrubs replacement, tree replacement
- 2.3.2 In coming reporting 2 months, the scheduled construction activities for the establishment period of the entrusted landscape works are listed as follows,
  - Pruning, weeding, watering, shrubs replacement, tree replacement

#### 3 Status of Regulatory Compliance

#### 3.1 EM&A Implementation under the Project

3.1.1. As per the a contract-specific EM&A manual submitted to and accepted by EPD, the monitoring and audit requirements of the environmental aspects of the EM&A programme for the establishment period of the entrusted landscape works are summarized in the sub-sections below,

#### Air Quality

3.1.2. Scopes of the entrusted landscape works do not involve any of works listed under Section 4.4.1.1 of the approved EIA Report. Vehicles travel under this contract was carried out in paved area. Therefore, fugitive dust emission from the contract would be limited and no unacceptable air quality impact would be expected and no specific monitoring and mitigation measures would be required.

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

3.1.3. Most of the works under the entrusted landscape works would be conducted manually, with limited use of Power Mechanical Equipment (PME) for delivery material on site and watering the planting area along the road side. Therefore, no unacceptable noise impact would be expected and no specific monitoring and mitigation measures would be required.

#### Water Quality

3.1.4. All planting area under the entrusted landscape works are land-based, no major discharge would be expected from the establishment planting maintenance works. Therefore, no direct or indirect impact on marine water quality would be expected and no specific monitoring and mitigation measures would be required.

#### **Ecology**

3.1.5. No site clearance and associated habitat loss would be required under this contract. Moreover, all planting area under this contract area are land-based, no direct or indirect impact on the marine ecology would be expected. Therefore, no specific monitoring and mitigation measures would be required.

#### Landscape and Visual

3.1.6. The approved EIA report (Register No.: AEIAR-146/2009) has recommended landscape and visual mitigation measures to be undertaken. Furthermore, Section 7.3 of the Updated EM&A Manual for the TM-CLK Link Project has recommended monitoring and audit of these measures as referred to the design laid down in the Landscape and Visual Plan (LVP) submitted under Condition 2.9 of Environmental Permit EP-354/2009/D approved by EPD.



3.1.7. Monitoring and audit is necessary for monitoring of landscape establishment stage for fulfilling the requirements in Section 7 of the Updated EM&A Manual for the TM-CLK Link Project are presented in *Table 3.1*.

Table 3.1 Monitoring Requirement of Landscape Establishment

Stage	Monitoring Task	Monitoring Report	Form of Approval	Frequency
Establishment Works	Monitoring of the planting works during the 24-month Establishment period after completion of the construction works.	compliance, by	Counter- signature of report by IEC	Quarterly

Remark:

3.1.8. Implementation status of the recommended mitigation measures is presented in *Appendix 3.1*.

#### Waste Management

3.1.9. All planting area under the entrusted landscape works are land-based, no dredged sediment, excavated C&D material, C&D waste, chemical waste and sewage would be generated. With only limited level of dead plant would be generated from works during maintenance of the planting area handled as part of overall waste management under Contract No. DC/2016/01 instead of as part of the EM&A under TM-CLKL project easily controlled by standard waste management practice, no specific monitoring and mitigation measure would be required.

#### Cultural Heritage

3.1.10. No historical/heritage object is required to be handled, no specific monitoring and mitigation measures would be required.

#### Landfill Gas

3.1.11. No landfill gas hazard is required to be handled, no specific monitoring and mitigation measures would be required.

#### 3.2 Status of Environmental Licensing and Permitting under the Project

3.2.1. As reported by contractor, no environmental license and permit are applicable to the area of the entrusted landscape works in the reporting period.

<sup>\*</sup>Quarterly monitoring for 24-month establishment period will be commenced starting from October 2022 as notified in August 2022 via the submission of the contract specific EM&A manual to EPD.



#### 4 Monitoring Programme

#### 4.1 Landscape and Visual Monitoring Requirements

4.1.1. As referred to layout plan of the entrusted landscape works, the landscape and visual impact mitigation measures applicable to the entrusted landscape works are listed in *Table 4.1*:

Table 4.1 Landscape and Visual Mitigation Measures applicable to the entrusted landscape works

Ref.	Landscape and Visual Mitigation Measures
CM2	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.
CM10	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.
OM4	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.

Remark:

Mitigation measures OM1, OM2, OM3, OM5 and OM6 are NOT applicable to the entrusted landscape works.

4.1.2. Should non-compliance of the landscape and visual impacts occur, actions in accordance with the action plan as presented in *Table 4.2* should be carried out.

<sup>\*</sup>Approved L&VP states that under the Contract Specification for HY/2012/07, 'Transplanted trees shall be relocated to the specified locations under single handling where possible. If it not possible, the Contractor shall make provision for the relocation of the transplanted trees temporarily to a holding nursery and replanting back of the transplanted trees to the specified locations.' As such, 5 transplant trees no. A149, NL0483, NL0489, NL0490 and NL0498 have been maintained in landscape sub-contractor's nursery to be replanted to final receptor site at Area 3A.

<sup>\*\*</sup>Change of tree nos. ET092 and ET093 from *Peltophorum tonkinense* 銀珠 to *Xanthostemon chrysanthus* 黃金蒲桃/澳洲黃花樹(due to lack of availability) is approved by AECOM, DSD Landscape Unit, HyD and LCSD.

Table 4.2 Event and Action Plan for Landscape and Visual Impact

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

#### 4.2 Monitoring Programme

- 4.2.1. With the completion of all the entrusted landscape works associated with the interface areas between Contract No. HY/2012/07 and DC/2016/01 along a section of Cheung Tung Road certified by the Project Manager's Delegate under Contract No. DC/2016/01 in mid-July 2022, the 24-month landscape establishment period was proposed for commencement on 14 July 2022 as per the joint inspection with HyD, IEC and ET.
- 4.2.2. Quarterly monitoring for 24-month establishment period will be commenced starting from October 2022 as notified to EPD in August 2022 via the submission of the contract specific EM&A manual to EPD. Tentative monitoring schedule is presented in *Table 4.3*:

Table 4.3 Current and Upcoming Schedule of Landscape Establishment Monitoring

Month	Monitoring Location
February 2023	Nil
April 2023	Entrusted landscape areas (c.f. <i>Figure 1.2</i> )



#### 5 Monitoring Results

#### 5.1 Landscape Establishment Monitoring Results

No landscape establishment monitoring was conducted in this reporting period. Detailed information are referred to *Appendix 5.1*.

#### 6 Complaints, Notification of Summons and Prosecution

- 6.0.1. No environmental complaint, notification of summons and successful prosecution associated with entrusted landscape establishment was recorded for the in the reporting period.
- 6.0.2. The details of cumulative complaint log and updated summary of complaints are presented in *Appendix 6.1*.
- 6.0.3. Cumulative statistic on complaints, notification of summons and successful prosecutions are summarized in *Table 6.1*, *Table 6.2* and *Table 6.3* respectively.

Table 6.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
February 2023	0
Project commencement to the end of last reporting month	-
Total	0

Table 6.2 Cumulative Statistics on Summons

Month to Date	Cumulative No. Brought Forward	No. of Summons this month (Offence Date)	Cumulative No. Project-to-Date
February 2023	-	0	0
Total	-	0	0

Table 6.3 Cumulative Statistics on Successful Prosecutions

Month to Date	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative No. Project-to-Date
February 2023	-	0	0
Total	-	0	0



#### 7 Conclusion

- 7.0.1. The EM&A programme was carried out in accordance with the contract specific EM&A Manual requirements, no air quality, noise, water quality, ecology, cultural heritage and landfill gas monitoring was required for the contract. No alterations to the programme proposed were made in response to changing circumstances.
- 7.0.2. With the completion of all the entrusted landscape works associated with the interface areas between Contract No. HY/2012/07 and DC/2016/01 along a section of Cheung Tung Road certified by the Project Manager's Delegate under Contract No. DC/2016/01 in mid-July 2022, the 24-month landscape establishment period was proposed for commencement on 14 July 2022 as per the joint inspection with HyD, IEC and ET.
- 7.0.3. No landscape establishment monitoring was conducted in this reporting period. Quarterly monitoring for 24-month establishment period will be commenced starting from October 2022 as notified in August 2022 via the submission of the contract specific EM&A manual to EPD.
- 7.0.4. No environmental complaint, notification of summons and successful prosecution associated with entrusted landscape establishment was recorded for the in the reporting period.

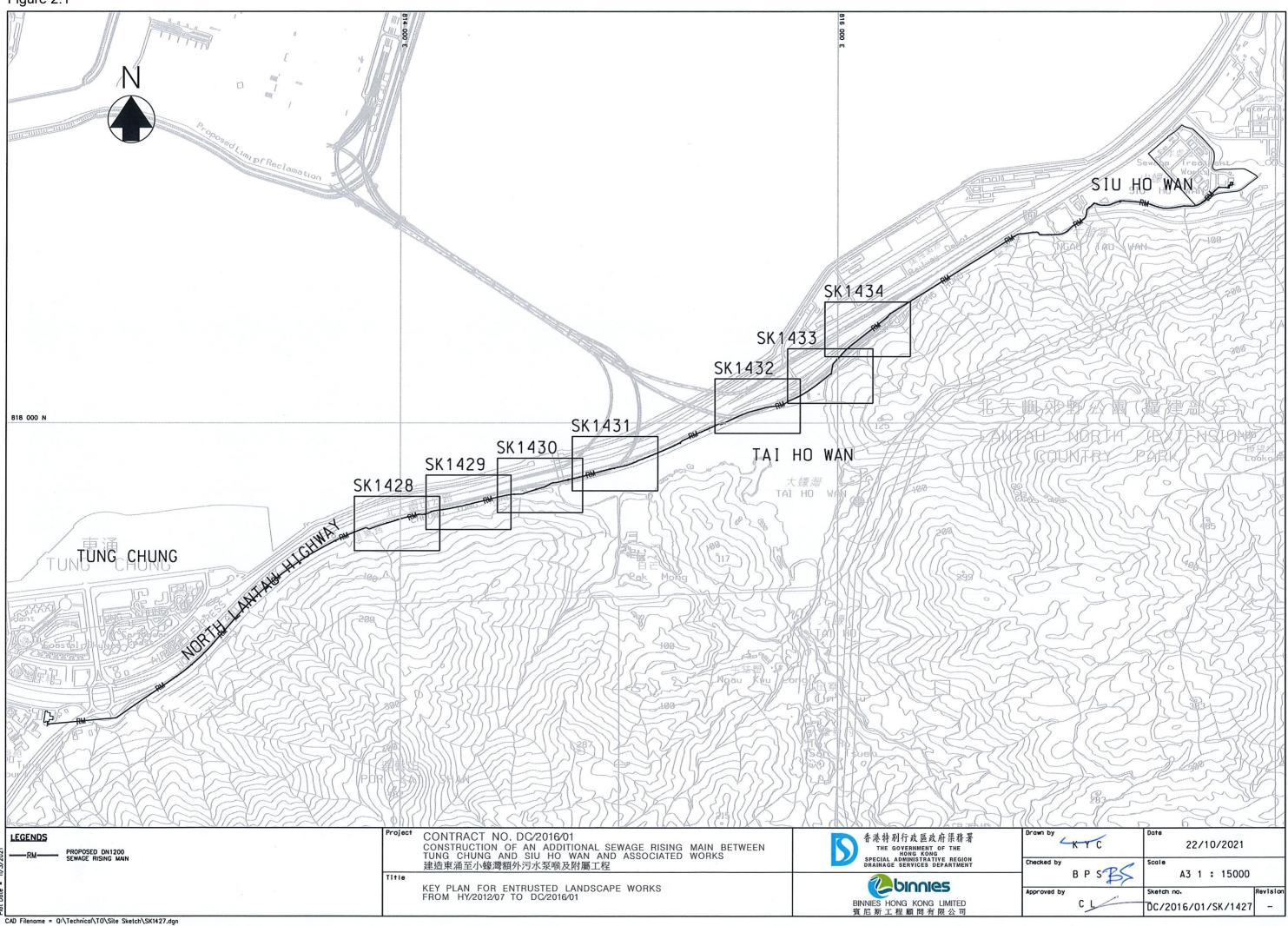
## Appendix 3.1

# Environmental Mitigation Implementation Schedule

## Figure 2.1

# Key Plan for Entrusted Landscape Works from HY/2012/07 to DC/2016/01

Figure 2.1



### Figure 2.2

# Layout Plan of Entrusted Landscape Works from HY/2012/07 to DC/2016/01 (Sheet 1 to Sheet 7)

Figure 2.2

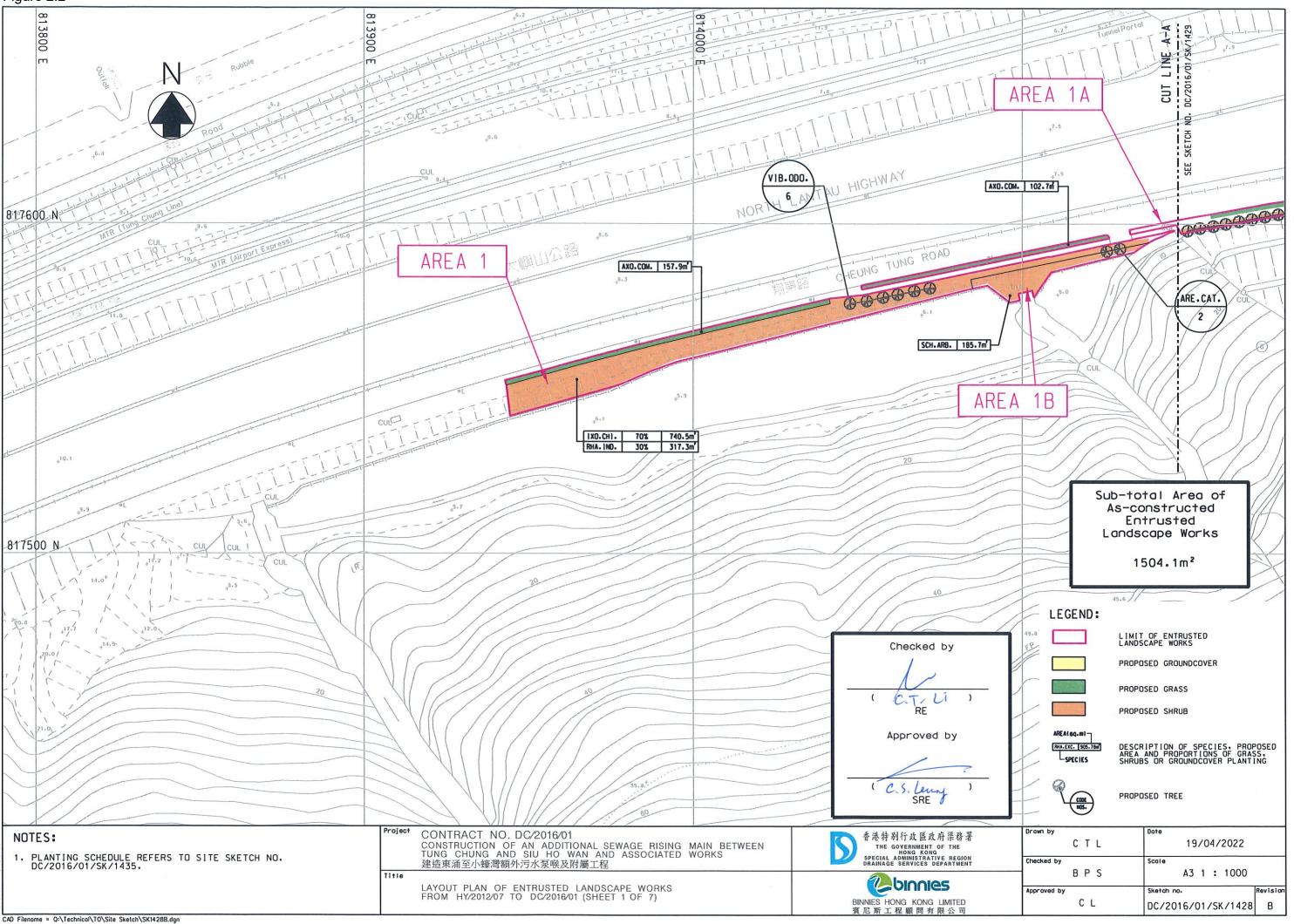


Figure 2.2 814400 814200 ш Ň. 817700° N AXO.COM. 379.6m VIB.ODO 27 AREA ARE . CAT 26 AXO.COM. 126.8m' 22222222222222222222222222 Sub-total Area of As-constructed Entrusted Landscape Works 817600 N 937.0m² AREA 1A PHY.MYR. 143.5m January Tonas LEGEND: ARE . CAT Checked by PROPOSED GROUNDCOVER PROPOSED GRASS RE PROPOSED SHRUB AREAI sq.m) -Approved by DESCRIPTION OF SPECIES, PROPOSED AREA AND PROPORTIONS OF GRASS, SHRUBS OR GROUNDCOVER PLANTING RHA.EXC. 905.78m SPECIES C.S. Leung COOK HOS. PROPOSED TREE SRE 0 CONTRACT NO. DC/2016/01 香港特别行政區政府渠務署 19/04/2022 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS CTL THE GOVERNMENT OF THE
HONG KONG
SPECIAL ADMINISTRATIVE REGION
DRAINAGE SERVICES DEPARTMENT 建造東涌至小蠔灣額外污水泵喉及附屬工程 B P S A3 1 : 1000 Title **binnies** LAYOUT PLAN OF ENTRUSTED LANDSCAPE WORKS FROM HY/2012/07 TO DC/2016/01 (SHEET 2 OF 7)

Approved by

CL

BINNIES HONG KONG LIMITED 賓尼斯工程顧問有限公司

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Figure 2.2 814800 ш 817900 N CUT LINE C-C Ş IXO.CHI. 70% 159.6m<sup>2</sup>
PIT.TOB. 30% 68.5m<sup>2</sup> SKETCH SEE IXO.CHI. 70% 104.7m' RHA.IND. 30% 44.9m' GAR. SUB. 817800 N 8 666 1 366 +6.7 Sub-total Area of As-constructed AXO.COM. 614.1m Entrusted Landscape Works GAR. SUB. 2753.9m² LEGEND: LIMIT OF ENTRUSTED LANDSCAPE WORKS AREA 4 Checked by PROPOSED GROUNDCOVER GAR. SUB. PROPOSED GRASS SCH. ARB. 1762.1m C.T. Li PROPOSED SHRUB AREAL Sq. m) -AREA 3B Approved by DESCRIPTION OF SPECIES, PROPOSED AREA AND PROPORTIONS OF GRASS, SHRUBS OR GROUNDCOVER PLANTING RHA.EXC. 905.78m SPECIES 1 C.S. Leury SRE 0 817700 N PROPOSED TREE COOK HOS. CONTRACT NO. DC/2016/01 香港特别行政區政府渠務署 19/04/2022 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 CTL THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT Scale Checked by BPS A3 1: 1000 Title **binnies** LAYOUT PLAN OF ENTRUSTED LANDSCAPE WORKS FROM HY/2012/07 TO DC/2016/01 (SHEET 4 OF 7) Approved by Sketch no. BINNIES HONG KONG LIMITED 賓尼斯工程顧問有限公司 CL DC/2016/01/SK/1431 CAD Filenome = Q:\Technical\T0\Site Sketch\SK1431B.dgn

Figure 2.2 815700 CUT LINE F-F
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SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT BPS A3 1 : 1000 Title **binnies** LAYOUT PLAN OF ENTRUSTED LANDSCAPE WORKS FROM HY/2012/07 TO DC/2016/01 (SHEET 5 OF 7)

BINNIES HONG KONG LIMITED

賓尼斯工程顧問有限公司

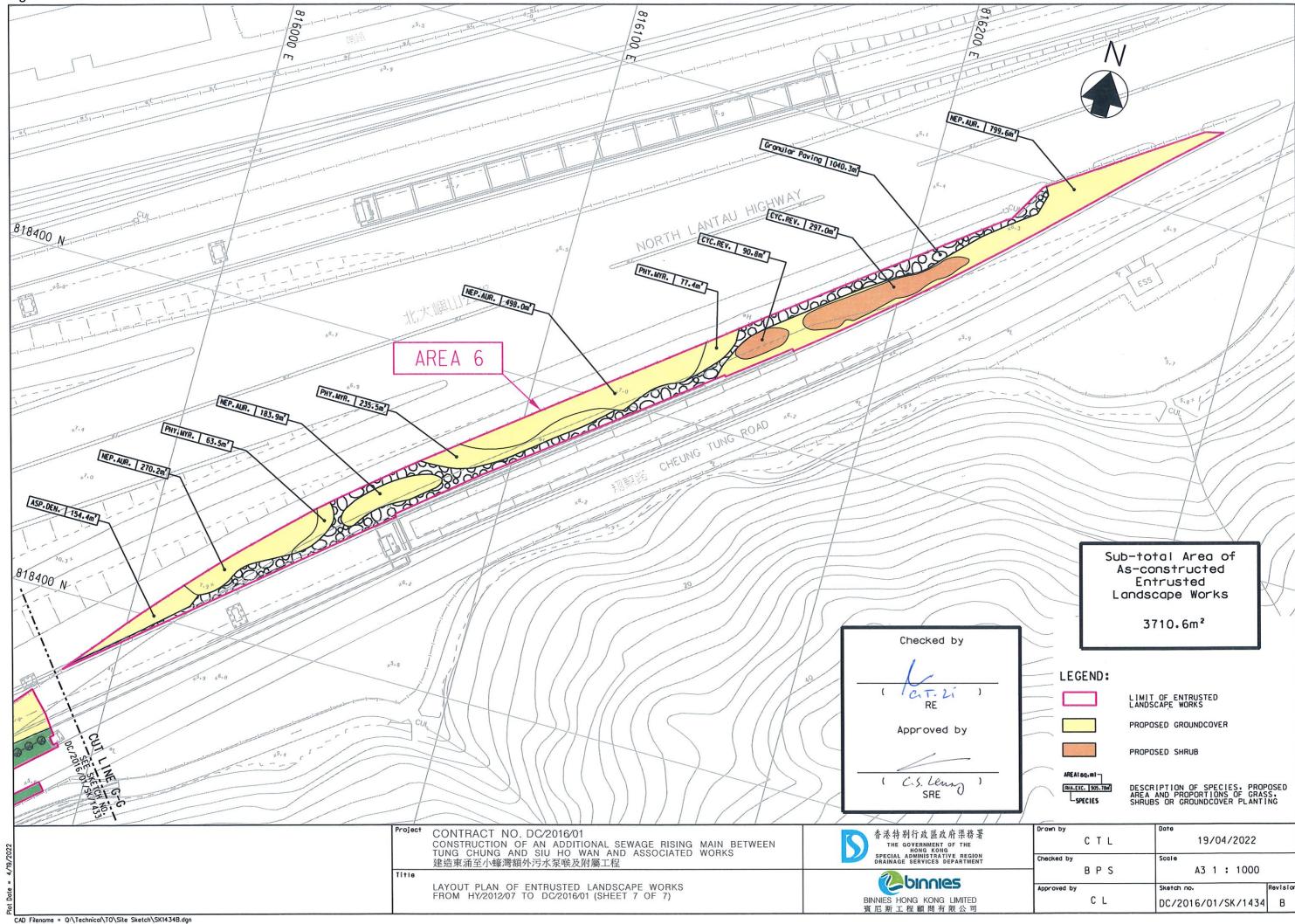
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DC/2016/01/SK/1432

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Figure 2.2 815900 816000 816100 ш 818300 N AREA EPI.AUR. 568.8m GAR SUB. 8 AXO.COM. 477.9m' CUT L INE DC/2016X01/SK/ AREA 6A I Š AXO.COM. 433.9m' 818200 N SKETCH VIB. ODO. Sub-total Area of As-constructed Entrusted Landscape Works AREA 5A 1645.2m² LEGEND: IXO.CHI. 70% 115.2m' RHA.IND. 30% 49.4m' LIMIT OF ENTRUSTED LANDSCAPE WORKS Checked by PROPOSED GROUNDCOVER PROPOSED GRASS PROPOSED SHRUB CUL AREAL Eq. m) -Approved by DESCRIPTION OF SPECIES, PROPOSED AREA AND PROPORTIONS OF GRASS, SHRUBS OR GROUNDCOVER PLANTING RHA.EXC. 905.78m VIB. ODO. SPECIES ( C.S. Lemy) AREA PROPOSED TREE SRE Drawn by CONTRACT NO. DC/2016/01 香港特别行政區政府渠務署 19/04/2022 CTL CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN TUNG CHUNG AND SIU HO WAN AND ASSOCIATED WORKS THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT Checked by 建造東涌至小蠔灣額外污水泵喉及附屬工程 BPS A3 1 : 1000 Title **binnies** LAYOUT PLAN OF ENTRUSTED LANDSCAPE WORKS FROM HY/2012/07 TO DC/2016/01 (SHEET 6 OF 7) Sketch no. Approved by BINNIES HONG KONG LIMITED CL DC/2016/01/SK/1433

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### Figure 2.3

# Planting Schedule of Entrusted Landscape Works from HY/2012/07 to DC/2016/01

			PLANT	ING SCHEDULE				
CODE	BOTANICAL NAME	CHINESE NAME	SIZE (mm) HEIGHT (H) x SPREAD (S)	SPACING (mm)	NO./m²	%MIX.	QUANTITY (APPROX. NOS.)	REMARK
			TRE	E 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	-	-	5	4 NOS. TRANSPLANTED TREE NOS. NL0483, NL0489, NL0490 AND NL0498
PEL.TON.	Peltophorum tonkinense	銀珠	Heavy Standard	5000	-	-	1	1 NO. TRANSPLANTED TREE NO. A149
VIB.ODO.	Viburnum odoratissimum	珊瑚樹	Heavy Standard	5000	-	-	76	
XAN.CHR.	Xanthostemon chrysanthus	金蒲桃	Heavy Standard	5000	-	-	2	
			PALM PL	ANTING - EXOTIC				
ARE.CAT	Areca catechu	檳榔	4000(H)	4000	-	-	28	
			SHR	UB PLANTING				
IXO.CHI.	Ixora chinensis	龍船花	300(H) x 300(S)	300	12.54	-	24331	
DRA.REF.	Dracaena reflexa	金黃百合竹	600(H)	500	4.62	-	407	j.
SCH.ARB.	Schefflera arboricola	八葉	300(H) x 300(S)	300	12.54	-	41647	
COD.VAR.'AUC'	Codiaeum variegatum 'aucubaefolium'	灑金榕	300(H) x 300(S)	300	12.54		1358	
COD.VAR.'RED'	Codiaeum variegatum 'red'	灑金榕 (紅色)	300(H) x 300(S)	300	12.54	-	193	2.0
PIT.TOB.	Pittosporum tobira	海桐花	300(H) x 300(S)	300	12.54	-	1268	
RHA.IND.	Rhaphlolepis indica	車輪梅	300(H) x 300(S)	300	12.54	-	7771	
CYC.REV.	Cycas revoluta	蘇鐵	400(H) x 500 (S)	. 500	4.6	-	1784	
			GROUND	COVER PLANTING				
ASP.DEN.	Asparagus densiflorus	非洲天門冬	200(H) x 300 (S)	200	29	-	4478	*
NEP.AUR.	Nephrolepis auriculata	腎蕨	250(H) x 250 (S)	150	51.59	-	90370	
EPI.AUR.	Epipremnum aureum	綠蘿	200(H) x 300(S)	300	12.54	-	7133	
PHY.MYR.	Phyllanthus myrtifolius	錫蘭葉下珠	300(H) x 300(S)	300	12.54	-	16414	6
			GRA	SS PLANTING				
AXO.COM.	Axonopus compressus	地毯草 (大葉草)	WHOLE PIECE TURF 300(L) x 300(W) x 50(H)	-	-	-	3423 m²	25mm HIGH SWORD AND 25mm SOIL BASE OF TURF
			GRAN	NULAR PAVING				
-	-	_	-	-	-	-	1040 m²	

#### NOTES:

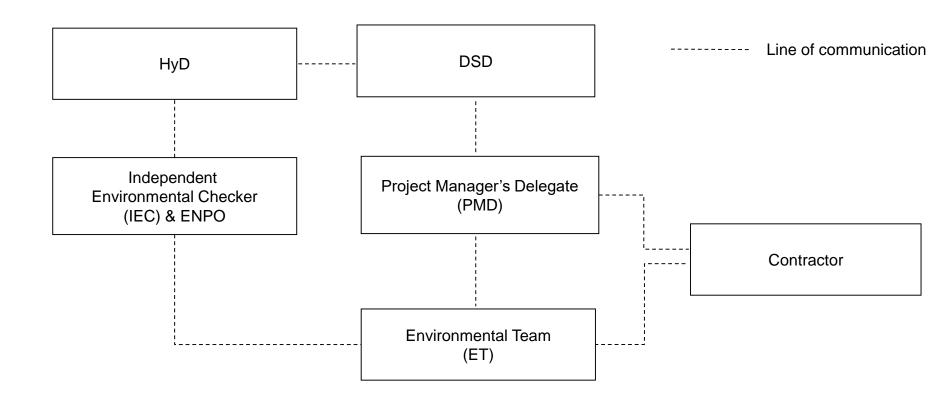
- 1. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH DRAWING NOS. DC/2016/01/SK/1428 TO DC/2016/01/SK/1434.
- 2. SHRUB / GROUNDCOVER SHOULD BE PLANTED IN STAGGERED PATTERN.

Project	CONTRACT NO. DC/2016/01 CONSTRUCTION OF AN ADDITIONAL SEWAGE RISING MAIN BETWEEN	香港特别行政區政府渠務署 THE GOVERNMENT OF THE HONG KONG	Drawn by	CTL	20/04/2022	
	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	SPECIAL ADMINISTRATIVE REGION DRAINAGE SERVICES DEPARTMENT	Checked by	BPS	SCHEDULE	
Title		<b>binnies</b>		БГЗ		
	SCHEDULE OF ENTRUSTED LANDSCAPE WORKS FROM HY/2012/07 TO DC/2016/01	BINNIES HONG KONG LIMITED	Approved by	CL	Sketch no.	Revision

## Figure 2.4

# **Project Organization Chart**

Figure 2.4 Organization Chart of Environmental Team for Contract DC/2016/01



Effective from: 1 June 2021

EIA Ref.	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or			Maintenance Agency	
	Ref.				Requirement	D	C	0	
10.9	7.6	The large surface of the retaining wall along the toll plaza area shall adopt a patterned/ smoother finishes and texture design to break the large surface. Climber treatment is proposed to soften the structures (DM1)	All areas Detailed design	Design Consultant	TMEIA	<b>✓</b>			N/A
10.9	7.6	The colour and shape of the toll control buildings, ventilation building and administration building shall adopt a design which could blend it into the vicinity elements, and the details will be developed in detailed design stage (DM2)	All areas Detailed design	Design Consultant	TMEIA	<b>√</b>			N/A
10.9	7.6	Round angle, patterned finishes, and oval shaped pier were considered in the viaduct design, and further details will be developed under ACABAS submission (DM3)	All areas Detailed design	Design Consultant	TMEIA	<b>✓</b>			N/A
10.9	7.6	Details of the street furniture will be developed in the detailed design stage (DM4)	All areas Detailed design	Design Consultant	TMEIA	✓			N/A
10.9	7.6	Aesthetic design of the viaduct, retaining wall and other structures will be developed under ACABAS submission (DM5)	All areas Detailed design	Design Consultant	TMEIA	<b>✓</b>			N/A

EIA Ref.	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or	Implementation Stages		3	Agency
	Ref.				Requirement	D	C	0	
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	<b>√</b>	<b>V</b>		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	<b>~</b>	<b>✓</b>		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	<b>√</b>	<b>√</b>		N/A

EIA Ref.	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or	Implementation Stages		Maintenance Agency	
	Ref.				Requirement	D	С	0	
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	<b>√</b>	<b>√</b>		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/post construction	Design Consultant/ Contractor	TMEIA	<b>✓</b>	<b>√</b>		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	<b>✓</b>	<b>✓</b>		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	<b>√</b>	<b>√</b>		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	<b>√</b>	<b>√</b>		N/A
10.9	7.6	Recycle/Reuse all felled trees and vegetation, e.g. mulching (CM9)	All areas  Detailed design / during construction	Design Consultant/ Contractor	TMEIA	<b>√</b>	<b>√</b>		N/A

EIA Ref.	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or	Implementation Stages		Maintenance Agency	
	Ref.				Requirement	D	C	0	
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	<b>✓</b>	<b>√</b>		N/A
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	<b>√</b>	<b>✓</b>	<b>√</b>	AFCD/ HyD/ LCSD
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	<b>√</b>	<b>√</b>	<b>✓</b>	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	<b>√</b>	<b>~</b>	✓	HyD/ LCSD
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	<b>√</b>	<b>√</b>	<b>✓</b>	HyD/ LCSD

EIA Ref.	EM&A Manual	Environmental Protection Measures	Location/ Timing	Implementation Agent	_		mplementation Stages		Maintenance Agency
	Ref.				Requirement	D	С	0	
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and furnishes 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	<b>✓</b>	<b>✓</b>	<b>✓</b>	HyD
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	<b>√</b>	<b>√</b>	<b>√</b>	N/A

#### Abbreviations:

D: Design; C: Construction; and O: Operation.

AFCD: Agriculture, Fisheries and Conservation Department; HyD: Highways Department; and LCSD: Leisure, Cultural and Services Department.

TMEIA: Technical Memorandum on Environmental Impact Assessment Process.

N/A: Not applicable.

#### Note:

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

### Appendix 5.1

# Landscape Establishment Monitoring Checklist (Nil for this reporting period)

Contract No. DC/2016/01 -

# Appendix 6.2

# **Complaint Log**

COMPLAINT LOG	Ref:
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Log Ref.	Date / Location	Complainant/ Date of Contract	Details of Complaint	Investigation / Mitigation Action	File Closed
<u> </u>	1	1	1		

Date: