

9 December 2019

By Fax (3468 2076) and By Post

AECOM Asia Co. Ltd.
The PRE's Office
550 Cheung Tung Road, Lantau, Hong Kong

Attention: Mr. Hugh Jennings

Dear Sir,

**Re: Agreement No. CE 48/2011 (EP)
Environmental Project Office for the
HZMB HKLR, HZMB HKBCF, and TM-CLKL – Investigation**

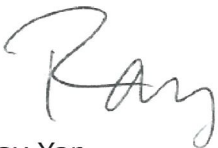
**Contract No. HY/2014/05 – HZMB HKBCF – Remaining Ancillary Buildings and
Facilities
Quarterly EM&A Report No. 12 for December 2018 to January 2019**

Reference is made to the Environmental Team's submission of Quarterly Environmental Monitoring & Audit Report No. 12 for December 2018 to January 2019 (Rev. 1) certified by the ET Leader (ET's ref.: "5140819/18.30/OC079/KC/RL" dated 6 December 2019) and provided to us via e-mail on 6 December 2019.

We are pleased to inform you that we have no adverse comments on the captioned report.

Thank you very much for your attention and please feel free to contact the undersigned should you require further information.

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



Ray Yan
Independent Environmental Checker
HZMB HKBCF

c.c.

HyD	Mr. Cheng Pan	(By Fax: 3188 6614)
HyD	Mr. Harry Louie	(By Fax: 3188 6614)
Atkins	Mr. Keith Chau	(By Fax: 2890 6343)
LCWJV	Mr. Iain Kerswill	(By Fax: 3621 0180)

Internal: DY, YH, HW, ENPO Site

Your ref.

Our ref. 5140819/18.30/OC079/KC/RL

Date: 6 December 2019

By Post and e-mail (lan.kerswill@lcwjb.com)

Leighton – Chun Wo Joint Venture
39/F Sun Hung Kai Centre
30 Harbour Road
Hong Kong

Attn: Mr. Ian Kerswill

Dear Mr. Ian Kerswill,

**Contract No. HY/2014/05
Hong Kong – Zhuhai – Macao Bridge
Hong Kong Boundary Crossing Facilities –
Remaining Ancillary Buildings and Facilities
Certification of Quarterly EM&A Report No. 12**

Atkins China Limited certifies, in the capacity of Environmental Team Leader, that the Quarterly EM&A Report No. 12 (Revision 1) conforms the requirements provided in Section 16.4 of the Updated Environmental Monitoring and Audit Manual for HKBCF (Version 1.0).

**Yours faithfully,
for and on behalf of
Atkins China Limited**



**Keith Chau
Environmental Team Leader**

cc.

1. AECOM – Mr. Joseph Yau (By Fax.: 3468 2076)
2. IEC/ENPO – Mr. Ray Yan & Mr. Y.H. Hui (By Fax.: 3465 2899)

Contract No. HY/2014/05

**Hong Kong-Zhuhai-Macao Bridge
Hong Kong Boundary Crossing Facilities –
Remaining Ancillary Buildings and Facilities**

**Quarterly EM&A Report No. 12
(Covering the Period from 1 December 2018 to 31 January 2019)**

4 December 2019

Revision 1

Main Contractor



**Leighton - Chun Wo
Joint Venture**

Environmental Team

ATKINS

Member of the SNC-Lavalin Group

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Executive Summary

This Quarterly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract HY/2014/05 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) – Remaining Ancillary Buildings and Facilities (includes the construction works of Contract No. HY/2013/06 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area) (hereafter referred to as “the Contract”) for the Highways Department of Hong Kong Special Administrative Region (HKSAR). Contract No. HY/2014/05 was awarded to Leighton – Chun Wo Joint Venture (construction works of Contract No. HY/2013/06 was awarded to ATAL Technologies Limited and Contract No. HY/2014/04 was awarded to Rapiscan Systems Pte Ltd within Contract No. HY/2014/05 works area) (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Environmental Team (ET) by the Contractor.

Contract No. HY/2014/05 (includes the construction works of Contract No. HY/2013/06 and Contract No. HY/2014/04 within Contract No. HY/2014/05 works area) is part of HZMB HKBCF Project which is a “Designated Project” under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and Environmental Impact Assessment (EIA) Report (Register No. AEIAR-145/2009) was prepared for the Project. The current Environmental Permit (EP) No. EP-353/2009/K for HKBCF was issued on 11 April 2016. These documents are available through the EIA Ordinance Register. The construction works of the Contract No. HY/2014/05 commenced on 29 February 2016 while the construction works of the Contract No. HY/2013/06 and Contract No. HY/2014/04 within Contract No. HY/2014/05 works area commenced on 3 January 2017 and 13 February 2017 respectively. As confirmed by RSS in July 2018, the construction works of Contract No. HY/2014/04 within Contract No. HY/2014/05 works area have been completed.

Atkins China Limited has been appointed by the Contractor to implement the Environmental Monitoring & Audit (EM&A) programme for the Contract in accordance with the Updated EM&A Manual for HKBCF (Version 1.0) and will be providing environmental team services to the Contract.

This is the twelfth Quarterly EM&A Report for the Contract No. HY/2014/05 which summarizes findings of the EM&A works during the reporting period from 1 December 2018 to 31 January 2019 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2014/05 works area).

Landscape Checklist is shown in **Appendix A**.

Environmental Monitoring and Audit Progress

The EM&A programme was undertaken in accordance with the Updated EM&A Manual for HKBCF (Version 1.0). It should be noted that the air quality and noise monitoring works for the Contract during reporting period are covered by Contract No. HY/2013/04 –Infrastructure Works Stage II (Southern Portion) and Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF. The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7B and noise monitoring at NMS2 and NMS3C as part of EM&A programme, if these monitoring stations are no longer covered under Contract Nos. HY/2013/04 and HY/2011/03. However, this is subject to ENPO’s final decision on which ET should carry out the monitoring work at these stations.

The works site area in Hong Kong-Zhuhai-Macao Bridge was handed over to the relevant authorities since 24 October 2018 and the site had been changed to a closed area, no site inspection was conducted for the Contract HY/2014/05 during reporting period.

Breaches of Action and Limit Levels

Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at station AMS6 shall be referred to the monthly EM&A Reports (for December 2018 and January 2019) prepared by Contract No. HY/2011/03. No Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at AMS7B by the Environmental Team of Contract No. HY/2013/04.

There was no Action and Limit Level exceedance for noise recorded at NMS2 and NMS3C by the ET of Contract No. HY/2013/04.



Implementation of Environmental Measures

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. Potential environmental impacts due to the construction activities were monitored and reviewed.

Complaint Log

There was no complaint received in relation to the environmental impact during the reporting period.

Notifications of Summons and Successful Prosecutions

There was no notification of summon or prosecution received during this reporting period.

Reporting Change

There was no reporting change during the reporting period.

1 Introduction

1.1 Basic Project Information

- 1.1.1 This Quarterly Environmental Monitoring and Audit (EM&A) Report is prepared for Contract HY/2014/05 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) – Remaining Ancillary Buildings and Facilities (includes the construction works of Contract No. HY/2013/06 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area) (hereafter referred to as “the Contract”) for the Highways Department of Hong Kong Special Administrative Region (HKSAR). Contract No. HY/2014/05 was awarded to Leighton – Chun Wo Joint Venture (construction works of Contract No. HY/2013/06 was awarded to ATAL Technologies Limited and Contract No. HY/2014/04 was awarded to Rapiscan Systems Pte Ltd within Contract No. HY/2014/05 works area) (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Environmental Team (ET) by the Contractor.
- 1.1.2 Contract No. HY/2014/05 (includes the construction works of Contract No. HY/2013/06 and Contract No. HY/2014/04 within Contract No. HY/2014/05 works area) is part of HZMB HKBCF Project which is a “Designated Project” under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499) and Environmental Impact Assessment (EIA) Report (Register No. AEIAR-145/2009) was prepared for the Project. The current Environmental Permit (EP) No. EP-353/2009/K for HKBCF was issued on 11 April 2016. These documents are available through the EIA Ordinance Register. The construction works of the Contract No. HY/2014/05 commenced on 29 February 2016 while the construction works of the Contract No. HY/2013/06 and Contract No. HY/2014/04 within Contract No. HY/2014/05 works area commenced on 3 January 2017 and 13 February 2017 respectively. As confirmed by RSS in July 2018, the construction works of Contract No. HY/2014/04 within Contract No. HY/2014/05 works area have been completed. The works areas of the Contract are shown in **Appendix B**.
- 1.1.3 This is the twelfth Quarterly EM&A Report for the Contract No. HY/2014/05 which summarizes the audit findings of the EM&A programme during the reporting period from 1 December 2018 to 31 January 2019 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2014/05 works area).

1.2 Project Organisation

- 1.2.1 The project organization structure and lines of communication with respect to the on-site environmental management structure is shown in **Appendix C**. The key personnel contact names and numbers are summarized in **Table 1.1**.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
<u>For Contract No. HY/2014/05</u>				
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Registered Architect	Malcolm Sage	3958 7330	3468 2076
Environmental Project Office / Independent Environmental	Environmental Project Office Leader	Y. H. Hui	3465 2888	3465 2899

Checker (Ramboll Environ Hong Kong Limited)	Independent Environmental Checker	Raymond Dai / Ray Yan (from 1 Jan 2019)	3465 2888	3465 2899
Contractor (Leighton – Chun Wo Joint Venture)	Site Agent	Albert Chan	3973 0514	3621 0180
	Environmental Officer	Alfred She	39730484	3621 0180
Environmental Team (Atkins China Limited)	Environmental Team Leader	Keith Chau	2972 1721	2890 6343
24 hours complaint hotline	---	---	3958 7300	---
For Contract No. HY/2013/06 within Contract No. HY/2014/05 works area				
Engineer or Engineer's Representative (AECOM Asia Co. Ltd.)	Chief Registered Architect	Malcolm Sage	3958 7330	3468 2076
Environmental Project Office / Independent Environmental Checker (Ramboll Environ Hong Kong Limited)	Environmental Project Office Leader	Y. H. Hui	3465 2888	3465 2899
	Independent Environmental Checker	Raymond Dai / Ray Yan (from 1 Jan 2019)	3465 2888	3465 2899
Contractor (ATAL Technologies Limited)	Site Agent	Mr. Eric Yim	2565 3355	3162 5217
	Environmental Officer	Mr. W. Li	2565 3137	3162 5217
Environmental Team (Atkins China Limited)	Environmental Team Leader	Keith Chau	2972 1721	2890 6343
24 hours complaint hotline	---	---	6509 0375	---

1.3 Construction Programme

- 1.3.1 As all the sections under Contract No. HY/2014/05 and HY/2013/06 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area, no construction programme will be provided.

1.4 Construction Works Undertaken During the Reporting Period

- 1.4.1 As all the sections under Contract No. HY/2014/05 and HY/2013/06 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area, no construction works undertaken during the reporting period.

2 EM&A Requirement

2.1 Summary of EM&A Requirements

- 2.1.1 The EM&A programme was undertaken in accordance with the Updated EM&A Manual for HKBCF (Version 1). It should be noted that the air quality and noise monitoring works for the Contract are covered by Contract No. HY/2011/03 Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road – Section between Scenic Hill and HKBCF and Contract No. HY/2013/04 – Infrastructure Works Stage II (Southern Portion) since 1 October 2018. The ET of the Contract or another ET of the HZMB project is required to conduct impact air quality monitoring at AMS6 and AMS7B and noise monitoring at NMS2 and NMS3C as part of EM&A programme if these monitoring stations are no longer covered under Contract No. HY/2013/04 and HY/2011/03. However, this is subject to ENPO's final decision on which ET should carry out the monitoring work at these stations.
- 2.1.2 A summary of air and noise monitoring locations is presented in **Table 2.1**. The locations of air quality and noise monitoring stations are shown as in **Figure 2.1**.

Table 2.1 Summary of Impact EM&A Requirements

Environmental Monitoring	ID	Location Description
Air Quality	AMS6 ⁽¹⁾	Dragonair/CNAC (Group) Building
	AMS7B ^{(1) (2)}	3RS site office
Noise	NMS2 ⁽³⁾	Seaview Crescent
	NMS3C ^{(3),(4), (5)}	Ying Tung Estate Refuse Collection Point

Remarks:

- (1) The ET of this Contract should conduct impact air quality monitoring at the AMS listed in the table as part of EM&A programme according to the latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project.
- (2) A proposal for re-location of AQM station (AMS7) for HZMB HKBCF Project was justified by the ET Leader for Contract No. HY/2013/01 on 22 January 2018; verified by the IEC on 24 January 2018; and submitted to EPD on 30 January 2018, and the AQM has been carrying out at the alternative AQM station with EPD's consent since 6 February 2018.
- (3) The ET of this Contract should conduct impact noise monitoring at the NMS listed in the table as part of EM&A programme according to the latest notification from ENPO when the monitoring station(s) is/are no longer covered by another ET of the HZMB project.
- (4) The Action and Limit Levels for schools will be applied for this alternative monitoring location.
- (5) NMS3C has been undertaken by the ET for Contract No. HY/2013/04 since 20 August 2018

2.2 Monitoring Requirements

- 2.2.1 The monitoring requirements, monitoring equipment, monitoring parameters, frequency and duration, monitoring methodology, monitoring schedule, meteorological information are detailed in the monthly EM&A Reports prepared for Contract Nos. HY/2013/04 and HY/2011/03.

2.3 Action and Limit Levels

- 2.3.1 The Action and Limit Level for 1-hr TSP and 24-hr TSP are provided in **Table 2.2** and **Table 2.3**, respectively.

Table 2.2 Action and Limit Levels for 1-hour TSP

Monitoring Station	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AMS6 – Dragonair/CNAC (Group) Building (HKIA)	360	500
AMS7B ⁽¹⁾ – 3RS site office	370	

Table 2.3 Action and Limit Levels for 24-hour TSP

Monitoring Station	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AMS6 – Dragonair/CNAC (Group) Building (HKIA)	173	260
AMS7B ⁽¹⁾ – 3RS site office	183	

Remark:

- (1) A proposal for re-location of AQM station (AMS7) for HZMB HKBCF Project was justified by the ET Leader for Contract No. HY/2013/01 on 22 January 2018; verified by the IEC on 24 January 2018; and submitted to EPD on 30 January 2018, and the AQM has been carrying out at the alternative AQM station with EPD's consent since 6 February 2018.

2.3.2 If exceedance(s) at these station(s) is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

2.3.3 The Action and Limit Levels for construction noise are defined in **Table 2.4**.

Table 2.4 Action and Limit Level for Construction Noise

Parameter	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received	75 dB(A)*

Notes:

If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

* Reduce to 70 dB(A) for schools and 65 dB(A) during school examination period.

2.3.4 If exceedance(s) at these station(s) is/are recorded by the ET of the Contract or referred by the other ET under the HZMB project to the Contract, the ET of the Contract will carry out an investigation and findings will be reported in the monthly EM&A Report.

2.4 Event Action Plans

2.4.1 The Event Actions Plans for air quality and noise are provided in **Appendix D**.

2.5 Mitigation Measures

2.5.1 Environmental mitigation measures for the contract were recommended in the approved EIA Report. **Appendix E** lists the recommended mitigation measures and the implementation status.

3 Environmental Monitoring and Audit

3.1 Air Quality Monitoring Results

- 3.1.1 The monitoring results for AMS6 and AMS7B are reported in the monthly EM&A Reports (for December 2018 and January 2019) prepared for Contract Nos. HY/2013/04 and HY/2011/03, respectively.
- 3.1.2 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A Reports (for December 2018 and January 2019) prepared by Contract No. HY/2011/03. No Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at AMS7B by the Environmental Team of Contract No. HY/2013/04 during the reporting period.

3.2 Noise Monitoring Results

- 3.2.1 The monitoring results for NMS2 and NMS3C are reported in the monthly EM&A Reports (for December 2018 and January 2019) prepared for Contract No. HY/2013/04.
- 3.2.2 No noise exceedances were recorded at stations NMS2 and NMS3C by the ET of Contract No. HY/2013/04 during the reporting period.

3.3 Implementation of Environmental Measures

- 3.3.1 The works site area in Hong Kong-Zhuhai-Macao Bridge was handed over to the relevant authorities since 24 October 2018 and site area was changed to closed area, no site inspection was conducted and no environmental mitigation measures is recorded for the Contract No. HY/2014/05 during the reporting period.
- 3.3.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix E**.

3.4 Advice on the Solid and Liquid Waste Management Status

- 3.4.1 The work site area of Contract No. HY/2014/05 was handed over to the relevant authorities since 24 October 2018, therefore, no chemical waste and general refuse were generated during reporting period.

3.5 Environmental Licenses and Permits

- 3.5.1 The work site area of Contract No. HY/2014/05 was handed over to the relevant authorities since 24 October 2018, therefore, no environmental licenses and permits is required during reporting period.

4 Summary of Exceedance, Complaint, Notification of Summons and Successful Prosecution

4.1 Summary of Exceedance of the Environmental Quality Performance Limit

- 4.1.1 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A Reports (for December 2018 and January 2019) prepared by Contract No. HY/2011/03.
- 4.1.2 There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at AMS7B by the Environmental Team of Contract No. HY/2013/04 during the reporting period.
- 4.1.3 There was no Action and Limit Level exceedance for noise recorded at NMS2 and NMS3C by the ET of Contract No. HY/2013/04 during the reporting period.

4.2 Summary of Complaints, Notification of Summons and Successful Prosecution

- 4.2.1 There was no complaint received in relation to the environmental impact during the reporting period.
- 4.2.2 No notification of summons and prosecution was received during the reporting period.
- 4.2.3 Statistics on notifications of summons and successful prosecutions are summarized in **Appendix F**.

5 Comments, Recommendations and Conclusion

5.1 Comments

- 5.1.1 No particular environmental issue was recorded during reporting period, no actions will be required by the Contractor.
- 5.1.2 A summary of the Implementation Schedule of Environmental Mitigation Measures (EMIS) is presented in **Appendix E**.
- 5.1.3 The work site area was handed over to the relevant authorities since 24 October 2018 and the site area was changed to closed area, no site inspection was conducted for the Contract No. HY/2014/05 during reporting period.

5.2 Recommendations

- 5.2.1 The work site area was handed over to the relevant authorities since 24 October 2018 and the site area was changed to closed area, no site inspection was conducted for the Contract No. HY/2014/05 during reporting period. No particular recommendation was advised for the improvement of the programme during reporting period.

5.3 Conclusions

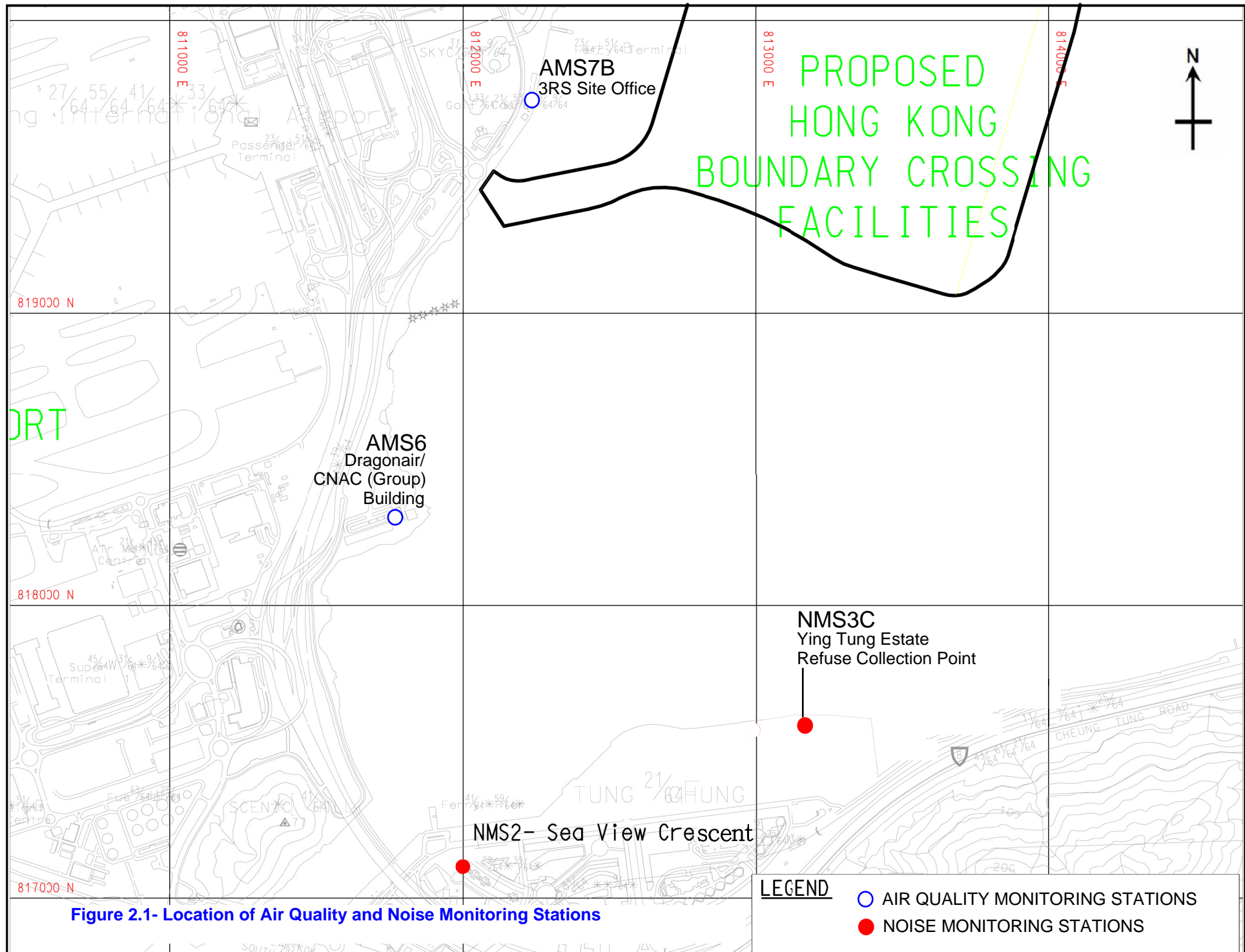
- 5.3.1 The construction works of the Contract No. HY/2014/05 commenced on 29 February 2016. while the construction works of the Contract No. HY/2013/06 and Contract No. HY/2014/04 within Contract No. HY/2014/05 works area commenced on 3 January 2017 and 13 February 2017 respectively. As confirmed by RSS in July 2018, the construction works of Contract No. HY/2014/04 within Contract No. HY/2014/05 works area have been completed. This is the twelfth Quarterly EM&A Report which summarizes findings of the EM&A works during the

reporting period from 1 December 2018 to 31 January 2019 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2014/05 works area).

- 5.3.2 Summary of Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level at AMS6 shall be referred to the monthly EM&A Reports (December 2018 January 2019) prepared by Contract No. HY/2011/03.
- 5.3.3 There was no Action and Limit Level exceedance of 1-hr TSP level and 24-hr TSP level recorded at AMS7B by the Environmental Team of Contract No. HY/2013/04 during the reporting period.
- 5.3.4 There was no Action and Limit Level exceedance for noise recorded at NMS2 and NMS3C by the ET of Contract No. HY/2013/04 during the reporting period.
- 5.3.5 The works site area for the Contract No. HY/2014/05 (includes the construction works of Contract No. HY/2013/06 within Contract No. HY/2014/05 works area) was handed over to the relevant authorities since 24 October 2018 and the site area had been changed to closed area. No site inspection was carried out during the reporting period. Landscape Checklist is shown in **Appendix A**.
- 5.3.6 There was no complaint received in relation to the environmental impact during the reporting period.
- 5.3.7 No notification of summons and successful prosecution was received during the reporting period.



FIGURES





APPENDIX A

Landscape Checklist

Covering Period: No.1: 24 Oct 2018 to 23 Dec 2018 **Reported By:** Keith Chau

Time: --- **Weather Condition:** ---

		N/A or not observed	Yes	No	Remarks / Photo
1	Building 022 at-grade planting				
1.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.2	After exceptional 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"/>	Remark [1]
1.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
2	Building 023 at-grade planting				
2.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.2	After exceptional 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"/>	Remark [1]
2.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
3	Building 023 roof greening				
3.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.4	After exceptional 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"/>	Remark [1]
3.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.6	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.7	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.8	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.9	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.10	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4	Building 025 at-grade planting				
4.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.2	After exceptional 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"/>	Remark [1]
4.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
5	Building 025 roof greening				
5.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.2	After exceptional 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"/>	Remark [1]
5.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6	Building 032 at-grade planting				
6.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.2	After exceptional 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"/>	Remark [1]
6.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

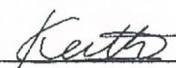
		N/A or not observed	Yes	No	Remarks / Photo
7	Building 032 roof greening				
7.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.2	After exceptional 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"/>	Remark [1]
7.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8	Building 044 roof greening				
8.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.2	After exceptional 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"/>	Remark [1]
8.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

9 Building 045 roof greening		N/A or not observed	Yes	No	Remarks / Photo
9.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.2	After exceptional 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"/>	Remark [1]
9.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10 Building 053 at-grade planting		N/A or not observed	Yes	No	Remarks / Photo
10.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.2	After exceptional 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"/>	Remark [1]
10.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
11	Building 058 at-grade planting				
11.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.2	After exceptional 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"/>	Remark [1]
11.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12	Building 059 at-grade planting				
12.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.2	After exceptional 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"/>	Remark [1]
12.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
13	General Document				
13.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

Follow up actions for previous Site Audit: N/A
Observations: N/A
Corrective Actions (if any): N/A
Remark: [1] This Checklist is prepared based on the information from "Planting Works Monthly Maintenance Report No.7 (24 October 2018 to 23 November 2018)" (CSF No.: RABF-CSF-LCJ-ABWF-003021A) and "Planting Works Monthly Maintenance Report No.8" (24 November 2018 to 23 December 2018)" (CSF No.: RABF-CSF-LCJ-ABWF-003046A), which prepared by Contractor and submitted to Engineer's Representative.
General Conclusion: <ol style="list-style-type: none">1. A standby signal no. 1 was hoisted on 31 October 2018 for 28 hours; a strong wind signal no. 3 was hoisted on 1 November 2018 for 13 hours and 30 minutes; and a standby signal no. 1 was hoisted on 2 November 2018 for six hours during the reporting period.2. All plants (shrubs, ground cover and turf) were in reasonable condition.3. The establishment works followed the maintenance programme.

Reported by
(ET's Representative): Keith Chau Title: ET Leader

Signature:  Date: 15 July 2019

Reviewed by
(AECOM Landscape Representative): CHAN Pak Kin Title: RSFO(2)



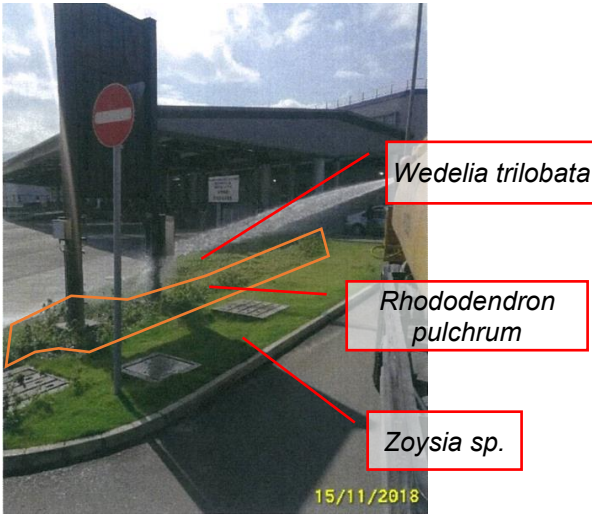

Signature:  Date: 15 JUL 2019

Contractor's Representative: Stephen Tsang Title: Environmental Officer

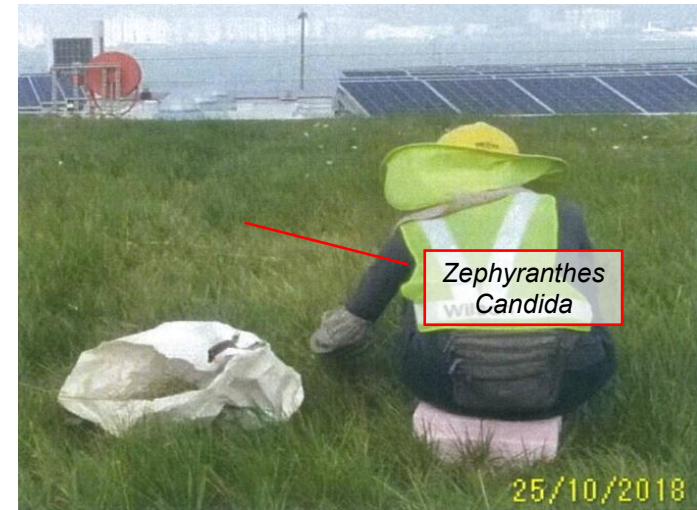
Signature:  Date: 15.7.19

Checked by
(IEC's Representative): Harris Wong Title: ESS

Signature:  Date: 30 July 2019

Location	Photo Record	
<p>Building 022 at-grade planting (Photo 1 and Photo 2)</p>		
<p>Building 023 at-grade planting (Photo 3 and Photo 4)</p>		

Building 023 roof greening (Photo 5 and Photo 6)



Building 025 at-grade planting (Photo 7 and Photo 8)



Building 025 roof greening (Photo 9)



Zephyranthes Candida

25/10/2018

Building 032 at-grade planting (Photo 10 and Photo 11)



Ophiopogon japonicus

12/11/2018



Ophiopogon japonicus

26/11/2018

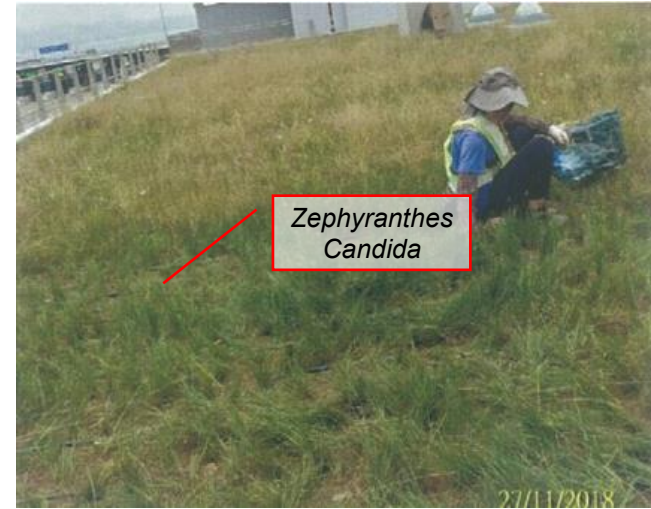
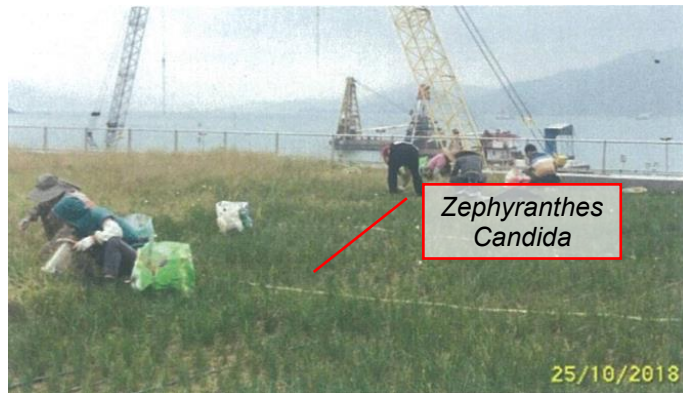
Building 032 roof greening (Photo 12 and Photo 13)



Building 044 roof greening (Photo 14)



Building 045 roof greening (Photo 15 and Photo 16)

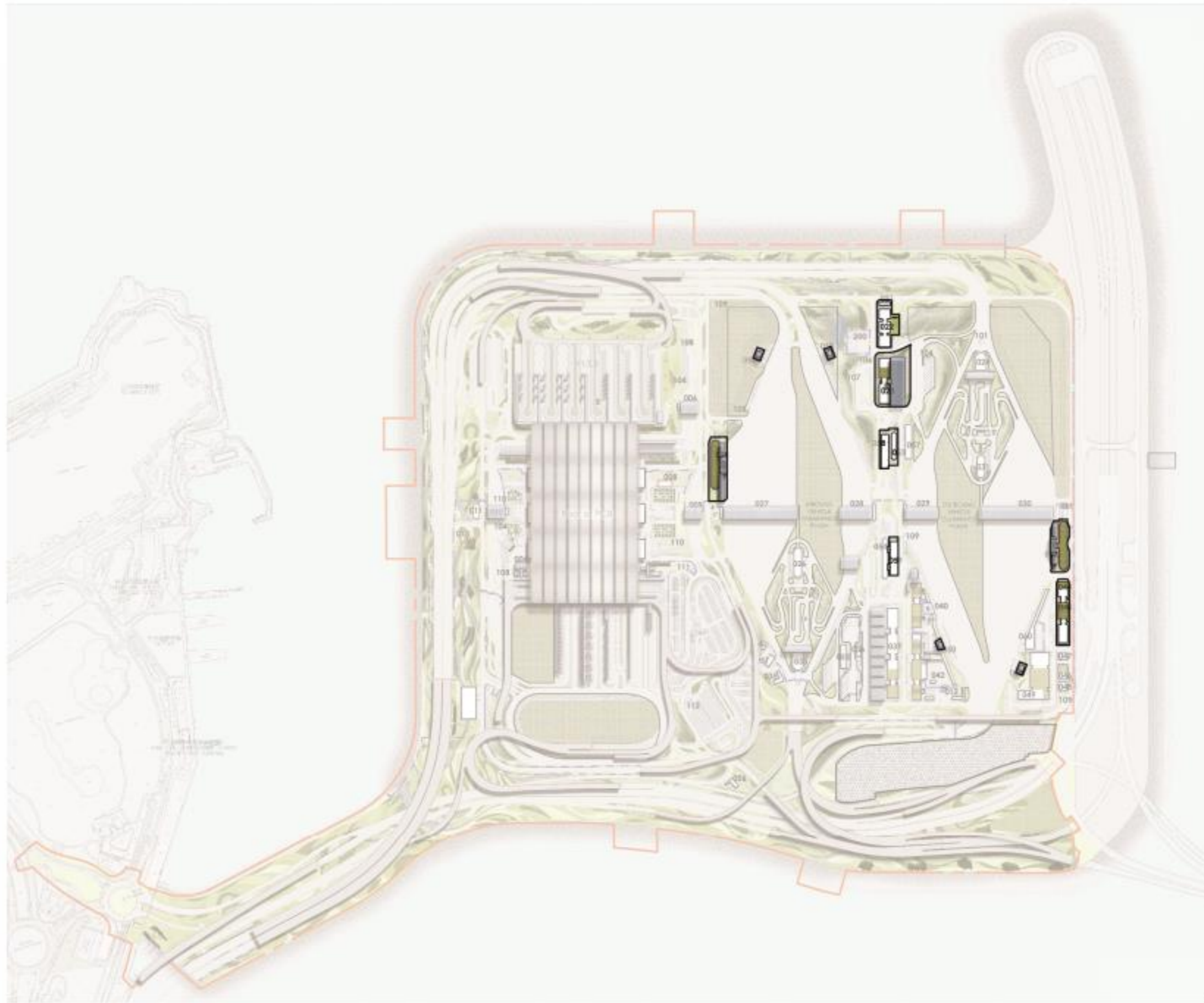


Building 053 at-grade planting (Photo 17 and Photo 18)



<p>Building 058 at-grade planting (Photo 19 and Photo 20)</p>	 <p><i>Zoysia sp.</i></p> <p>26/11/2018</p>	 <p><i>Zoysia sp.</i></p> <p>12/12/2018</p>
<p>Building 059 at-grade planting (Photo 21 and Photo 22)</p>	 <p><i>Zoysia sp.</i></p> <p>23/11/2018</p>	 <p><i>Lantana montevidensis</i></p> <p>12/12/2018</p>

Note: [1] Extract from "Planting Works Monthly Maintenance Report No.7 (24 October 2018 to 23 November 2018)" (CSF No.: RABF-CSF-LCJ-ABWF-003021A) and "Planting Works Monthly Maintenance Report No.8" (24 November 2018 to 23 December 2018)" (CSF No.: RABF-CSF-LCJ-ABWF-003046A), which prepared by Contractor and submitted to Engineer's Representative.



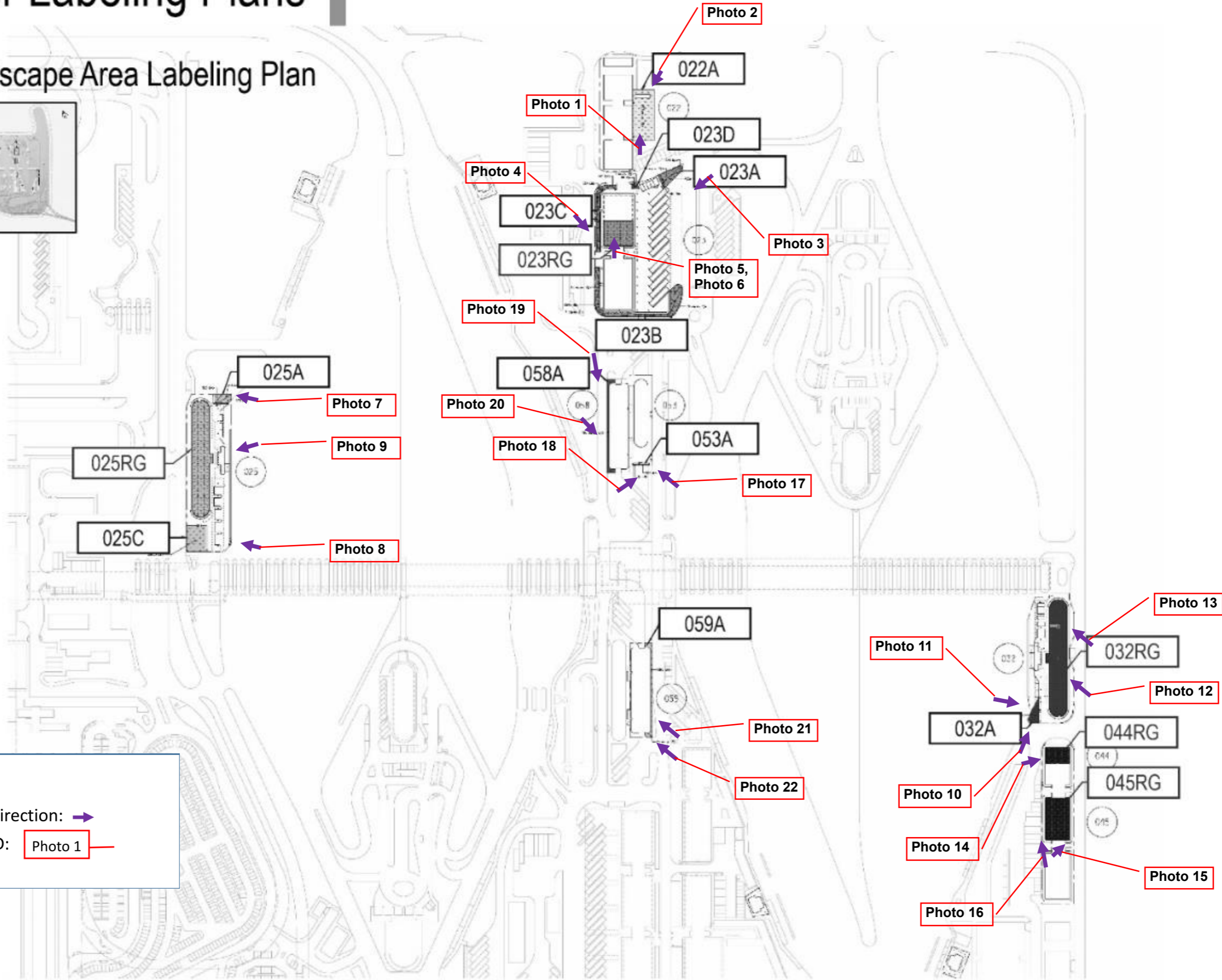
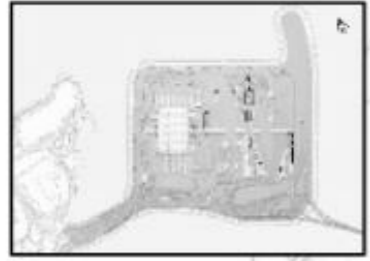
- LEGEND:**
- H&CJ site boundary
 - Elevated bridges with bridge pier/decks/roadbeds
 - Boundary fence (1m maintenance path on both sides of fence)
 - Planting (shrubs & groundcover)
 - Hydroseeding
 - Multi-purpose Area (Footpath/ At Grade Carriageway/ Amenity Area)
 - Multi-purpose Area with Granite finish (Footpath/ At Grade Carriageway/ Amenity Area)
 - Green roof
 - Gentle landscape berm
 - Tree planting
 - Water feature (around and inside PCB area)
 - Attenuation pond and basin
 - Stone zwirne feature
 - Stone gravel finish (for future development)
 - Ancillary building
 - Vertical greening

- KEY LOCATION:**
- 001 PASSENGER CLEARANCE BUILDING
 - 002 CBDO OPERATIONS QUARTERS
 - 003 HONGKONG PUBLIC TRANSPORT INTERCHANGE PUBLIC REST
 - 004 SHUTTLE BUS KIOSK
 - 005 TRUCK STORAGE AND MATERIAL RECEIVING CHAMBER
 - 006 DEPARTURE COACH KIOSK
 - 007 ARRIVAL COACH KIOSK
 - 008 EMERGENCY DEBRIEFING ROOM
 - 009 DATA DIRECTION STATION
 - 010 SHUTTLE BUS STOP
 - 011 CABIN DEBRIEFING OFFICE
 - 012 CBDO CUSTOMS OFFICER DOG OPERATIONS ROOM
 - 013 CBDO CUSTOMS OFFICER OFFICE
 - 014 CBDO CUSTOMS OFFICER OFFICE
 - 015 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
 - 016 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
 - 017 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
 - 018 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
 - 019 DEPARTURE COACH VEHICLE KIOSK
 - 020 DEPARTURE COACH VEHICLE KIOSK
 - 021 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
 - 022 ARRIVAL NEWLY ARRIVED PASSENGER LUNAR ROOM
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SCALE	NA	DATE	MAY 2018
CHECK	ELK	DRAWN	TRT
JOB No.	AECMP01	DRAWING No.	B.5c
		REV	-

1. Planter Labeling Plans

- C8 Landscape Area Labeling Plan



Legend
Photo Direction: →
Photo ID: Photo 1

TREE PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [m]
AL **	<i>Albizia lebbbeck</i>	大葉合歡	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
BV	<i>Bauhinia variegata</i>	宮粉羊蹄甲	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
CV	<i>Callistemon viminalis</i>	串錢柳	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
CS **	<i>Cassia siamea</i>	鐵刀木	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
GR	<i>Grevillea robusta</i>	銀樺	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
JA	<i>Jacaranda mimosifolia</i>	藍花楸	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
JC **	<i>Juniperus chinensis</i>	龍柏	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
TP ***	<i>Thespesia populnea</i>	恒春黃槿	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4

SHRUB PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Aod	<i>Aglaia odorata</i>	米仔蘭	700(H) x 500(SP)	400
Cha	<i>Calliandra haematocephala</i>	紅絨球	700(H) x 500(SP)	400
Fmi **	<i>Ficus microcarpa 'golden leaves'</i>	黃金榕	1000(H) x 700(SP)	600
Ite	<i>Iris tectorum</i>	鳶尾	300(H) x 200(SP)	150
Ich *	<i>Ixora chinensis</i>	龍船花	500(H) x 400(SP)	350
Mar	<i>Malvaviscus arboreus</i>	大紅袍	700(H) x 500(SP)	450
Mfi	<i>Michelia figo</i>	含笑	800(H) x 500(SP)	400
Pmy	<i>Phyllanthus myrtifolius</i>	瘤腺葉下珠	400(H) x 300(SP)	250
Rpu	<i>Rhododendron pulchrum</i>	錦繡杜鵑	600(H) x 400(SP)	300
Rsi *	<i>Rhododendron simsii</i>	紅杜鵑	600(H) x 400(SP)	300
SCO	<i>Spathiphyllum commutatum</i>	白掌	300(H) x 300(SP)	200
Sre	<i>Strelitzia reginae</i>	天堂鳥蕉	500(H) x 400(SP)	350

GREEN ROOF GROUND COVER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Zan	<i>Zephyranthes candida</i>	蔥蓮	100(H) x 100(SP)	100

CLIMBER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Pda	<i>Parthenocissus dalzielii</i>	異葉爬山虎	300(H) x 250(SP)	250
Pve **	<i>Pyrostegia venusta</i>	炮仗花	300(H) x 250(SP)	250

NOTES:
⁽¹⁾ All proposed plant species and specifications are subject to change during construction to suit the site conditions.
⁽²⁾ Minimum requirement of grass seed mix for hydroseeding shall follow General Specification for Civil Engineering Works Clause 3.26(3).
* Species native to Hong Kong according to the Hong Kong Herbarium website <<http://www.herbarium.gov.hk>>
** Species which is salt spray tolerant

GROUND COVER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Aag	<i>Agave angustifolia</i>	狹葉龍舌蘭	200(H) x 300(SP)	200
Aam	<i>Agave americana</i>	龍舌蘭	100(H) x 100(SP)	100
Asl	<i>Aglaonema 'Silver King'</i>	銀王粗肋草	150(H) x 150(SP)	100
Ave	<i>Alternanthera versicolor</i>	錦繡荳, 紅草	100(H) x 100(SP)	100
Ite	<i>Iris tectorum</i>	鳶尾	100(H) x 100(SP)	100
Lmo	<i>Lantana montevidensis</i>	鋪地臭金鳳	200(H) x 300(SP)	200
Lsp *	<i>Liriope spicata</i>	山麥冬	100(H) x 100(SP)	100
Nex *	<i>Nephrolepis hirsutula</i>	毛葉腎蕨	150(H) x 200(SP)	150
Oja *	<i>Ophiopogon japonicus</i>	麥冬	150(H) x 150(SP)	100
Rds	<i>Rhoeo discolor</i>	紫背萬年青	150(H) x 200(SP)	100
Spo **	<i>Syngonium podophyllum</i>	合果芋	200(H) x 200(SP)	150
Wtr **	<i>Wedelia trilobata</i>	蟻蝶菊	100(H) x 100(SP)	100
Zan	<i>Zephyranthes candida</i>	蔥蓮	100(H) x 100(SP)	100
Zro	<i>Zephyranthes rosea</i>	玫瑰蔥蓮	150(H) x 200(SP)	100

TURFING ⁽¹⁾			
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]
Zja **	<i>Zoysia sp.</i>	朝鮮草	25(H)

HYDROSEEDING ^{(1),(2)}		
SPECIES CODE	BOTANICAL NAME	CHINESE NAME
Cda ***	<i>Cynodon dactylon</i>	百慕達草
Pno	<i>Paspalum notatum</i>	百喜草
Eop * / Lpe	<i>Eremochloa ophiuroides / Lolium perenne</i>	假儉草 / 黑麥草

INDOOR PLANTING IN PASSENGER CLEARANCE BUILDING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [m]
TREE				
FB **	<i>Ficus benjamina</i>	垂榕	5000(H) x 4000(SP) x 150(DBH)	N.A.
SHRUB				
Ite	<i>Iris tectorum</i>	鳶尾	300(H) x 200(SP)	150
SCO	<i>Spathiphyllum commutatum</i>	白掌	300(H) x 300(SP)	200

Covering Period: No.2: 24 Dec 2018 to 23 Feb 2019 **Reported By:** Keith Chau

Time: --- **Weather Condition:** ---

		N/A or not observed	Yes	No	Remarks / Photo
1	Building 022 at-grade planting				
1.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.2	After exceptional 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"/>	Remark [1]
1.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
1.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
2	Building 023 at-grade planting				
2.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.2	After exceptional 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"/>	Remark [1]
2.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
2.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]




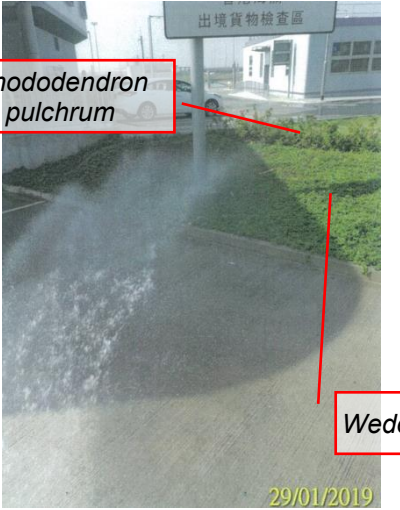
		N/A or not observed	Yes	No	Remarks / Photo
3	Building 023 roof greening				
3.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.4	After exceptional 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"/>	Remark [1]
3.5	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.6	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.7	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.8	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.9	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
3.10	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4	Building 025 at-grade planting				
4.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.2	After exceptional 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"/>	Remark [1]
4.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
4.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]


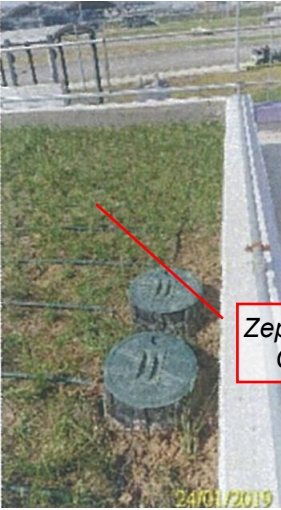

		N/A or not observed	Yes	No	Remarks / Photo
5	Building 025 roof greening				
5.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.2	After exceptional 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"/>	Remark [1]
5.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
5.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6	Building 032 at-grade planting				
6.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.2	After exceptional 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"/>	Remark [1]
6.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
6.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
7	Building 032 roof greening				
7.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.2	After exceptional 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"/>	Remark [1]
7.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
7.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8	Building 044 roof greening				
8.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.2	After exceptional 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"/>	Remark [1]
8.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
8.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

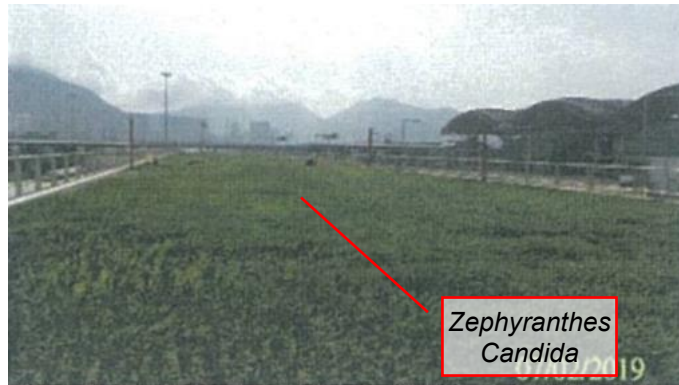
9 Building 045 roof greening		N/A or not observed	Yes	No	Remarks / Photo
9.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.2	After exceptional 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"/>	Remark [1]
9.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
9.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10 Building 053 at-grade planting		N/A or not observed	Yes	No	Remarks / Photo
10.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.2	After exceptional 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"/>	Remark [1]
10.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
10.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

		N/A or not observed	Yes	No	Remarks / Photo
11	Building 058 at-grade planting				
11.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.2	After exceptional 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"/>	Remark [1]
11.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
11.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12	Building 059 at-grade planting				
12.1	Is watering provided to all plants to ensure satisfactory growth and health (manual and automatic irrigation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.2	After exceptional 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"/>	Remark [1]
12.3	Are litter and debris removed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.4	Are planting areas matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.5	Is planting pattern matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.6	Are planting locations and spacing matched with the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.7	Are the planting species on site matched with Figure 3.6 of the approved landscape plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
12.8	Are the plants in satisfied condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]
13	General Document				
13.1	Are the records of watering, fertilizing, weeding, pruning and mowing kept for checking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Remark [1]

Location	Photo Record ^[1]	
<p>Building 022 at-grade planting (Photo 1 and Photo 2)</p>		
<p>Building 023 at-grade planting (Photo 3 and Photo 4)</p>		

<p>Building 023 roof greening (Photo 5 and Photo 6)</p>	 <p><i>Zephyranthes Candida</i></p> <p>04/02/2019</p>	 <p><i>Zephyranthes Candida</i></p> <p>24/01/2019</p>
<p>Building 025 at-grade planting (Photo 7 and Photo 8)</p>	 <p><i>Lantana montevidensis</i></p> <p><i>Ophiopogon japonicus</i></p> <p>07/01/2019</p>	 <p><i>Liriope spicata</i></p> <p>29/01/2019</p>

Building 025 roof greening (Photo 9)



Building 032 at-grade planting (Photo 10 and Photo 11)



Building 032 roof greening (Photo 12 and Photo 13)

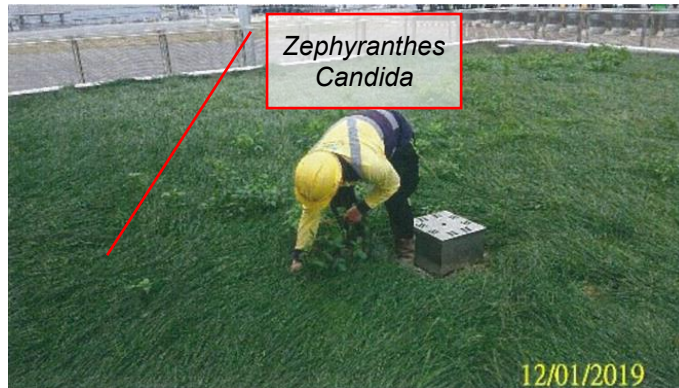


Zephyranthes Candida


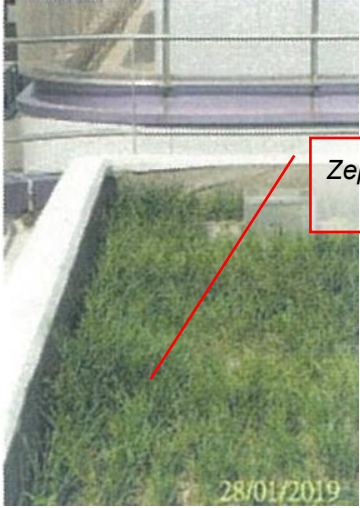


Zephyranthes Candida

Building 044 roof greening (Photo 14)



Zephyranthes Candida

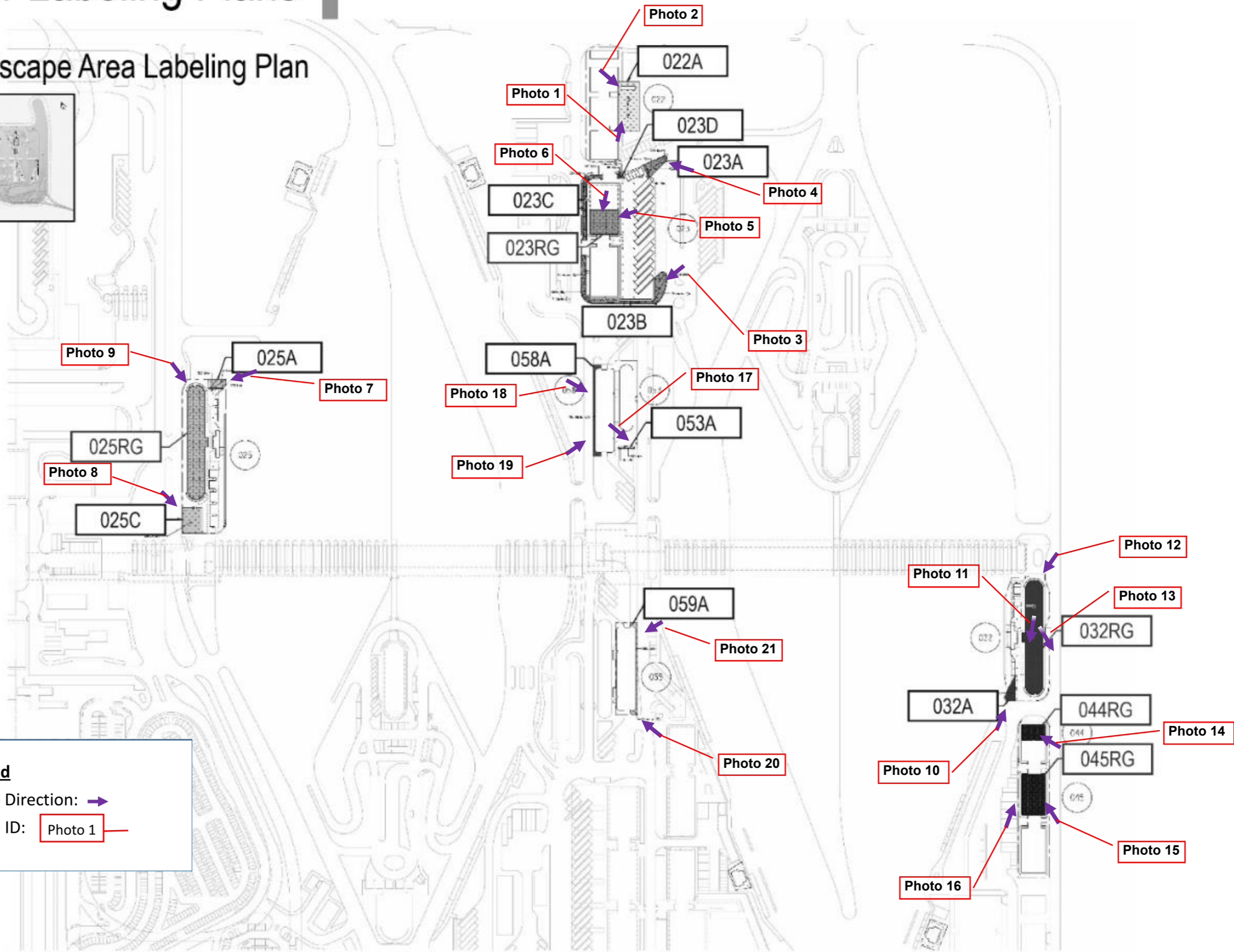
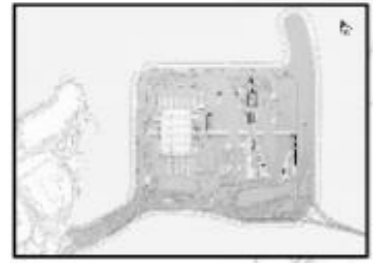
<p>Building 045 roof greening (Photo 15 and Photo 16)</p>	 <p><i>Zephyranthes Candida</i></p>	 <p><i>Zephyranthes Candida</i></p>
<p>Building 053 at-grade planting (Photo 17)</p>	 <p><i>Wedelia trilobata</i></p> <p><i>Lantana montevidensis</i></p>	

<p>Building 058 at-grade planting (Photo 18 and Photo 19)</p>		
<p>Building 059 at-grade planting (Photo 20 and Photo 21)</p>		

Note: [1] Extract from "Planting Works Monthly Maintenance Report No.9 (24 December 2018 to 23 January 2019)" (CSF No.: RABF-CSF-LCJ-ABWF-003056) and "Planting Works Monthly Maintenance Report No.10" (24 January 2019 to 23 February 2019)" (CSF No.: RABF-CSF-LCJ-ABWF-003072), which prepared by Contractor and submitted to Engineer's Representative.

1. Planter Labeling Plans

- C8 Landscape Area Labeling Plan



TREE PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [m]
AL **	<i>Albizia lebbbeck</i>	大葉合歡	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
BV	<i>Bauhinia variegata</i>	宮粉羊蹄甲	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
CV	<i>Callistemon viminalis</i>	串錢柳	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
CS **	<i>Cassia siamea</i>	鐵刀木	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
GR	<i>Grevillea robusta</i>	銀樺	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
JA	<i>Jacaranda mimosifolia</i>	藍花楸	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
JC **	<i>Juniperus chinensis</i>	龍柏	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4
TP ***	<i>Thespesia populnea</i>	恒春黃槿	4000-5000(H) x 3000(SP) x 100(DBH)	3 - 4

SHRUB PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Aod	<i>Aglaia odorata</i>	米仔蘭	700(H) x 500(SP)	400
Cha	<i>Calliandra haematocephala</i>	紅絨球	700(H) x 500(SP)	400
Fmi **	<i>Ficus microcarpa 'golden leaves'</i>	黃金榕	1000(H) x 700(SP)	600
Ite	<i>Iris tectorum</i>	鳶尾	300(H) x 200(SP)	150
Ich *	<i>Ixora chinensis</i>	龍船花	500(H) x 400(SP)	350
Mar	<i>Malvaviscus arboreus</i>	大紅袍	700(H) x 500(SP)	450
Mfi	<i>Michelia figo</i>	含笑	800(H) x 500(SP)	400
Pmy	<i>Phyllanthus myrtifolius</i>	瘤腺葉下珠	400(H) x 300(SP)	250
Rpu	<i>Rhododendron pulchrum</i>	錦繡杜鵑	600(H) x 400(SP)	300
Rsi *	<i>Rhododendron simsii</i>	紅杜鵑	600(H) x 400(SP)	300
SCO	<i>Spathiphyllum commutatum</i>	白掌	300(H) x 300(SP)	200
Sre	<i>Strelitzia reginae</i>	天堂鳥蕉	500(H) x 400(SP)	350

GREEN ROOF GROUND COVER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Zan	<i>Zephyranthes candida</i>	蔥蓮	100(H) x 100(SP)	100

CLIMBER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Pda	<i>Parthenocissus dalzielii</i>	異葉爬山虎	300(H) x 250(SP)	250
Pve **	<i>Pyrostegia venusta</i>	炮仗花	300(H) x 250(SP)	250

NOTES:

- ⁽¹⁾ All proposed plant species and specifications are subject to change during construction to suit the site conditions.
⁽²⁾ Minimum requirement of grass seed mix for hydroseeding shall follow General Specification for Civil Engineering Works Clause 3.26(3).
* Species native to Hong Kong according to the Hong Kong Herbarium website <<http://www.herbarium.gov.hk>>
** Species which is salt spray tolerant

GROUND COVER PLANTING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [mm]
Aag	<i>Agave angustifolia</i>	狹葉龍舌蘭	200(H) x 300(SP)	200
Aam	<i>Agave americana</i>	龍舌蘭	100(H) x 100(SP)	100
Asl	<i>Aglaonema 'Silver King'</i>	銀王粗肋草	150(H) x 150(SP)	100
Ave	<i>Alternanthera versicolor</i>	錦繡莧, 紅草	100(H) x 100(SP)	100
Ite	<i>Iris tectorum</i>	鳶尾	100(H) x 100(SP)	100
Lmo	<i>Lantana montevidensis</i>	鋪地臭金鳳	200(H) x 300(SP)	200
Lsp *	<i>Liriope spicata</i>	山麥冬	100(H) x 100(SP)	100
Nex *	<i>Nephrolepis hirsutula</i>	毛葉腎蕨	150(H) x 200(SP)	150
Oja *	<i>Ophiopogon japonicus</i>	麥冬	150(H) x 150(SP)	100
Rds	<i>Rhoeo discolor</i>	紫背萬年青	150(H) x 200(SP)	100
Spo **	<i>Syngonium podophyllum</i>	合果芋	200(H) x 200(SP)	150
Wtr **	<i>Wedelia trilobata</i>	蟻蝶菊	100(H) x 100(SP)	100
Zan	<i>Zephyranthes candida</i>	蔥蓮	100(H) x 100(SP)	100
Zro	<i>Zephyranthes rosea</i>	玫瑰蔥蓮	150(H) x 200(SP)	100

TURFING ⁽¹⁾			
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]
Zja **	<i>Zoysia sp.</i>	朝鮮草	25(H)

HYDROSEEDING ^{(1),(2)}		
SPECIES CODE	BOTANICAL NAME	CHINESE NAME
Cda ***	<i>Cynodon dactylon</i>	百慕達草
Pno	<i>Paspalum notatum</i>	百喜草
Eop * / Lpe	<i>Eremochloa ophiuroides / Lolium perenne</i>	假儉草 / 黑麥草

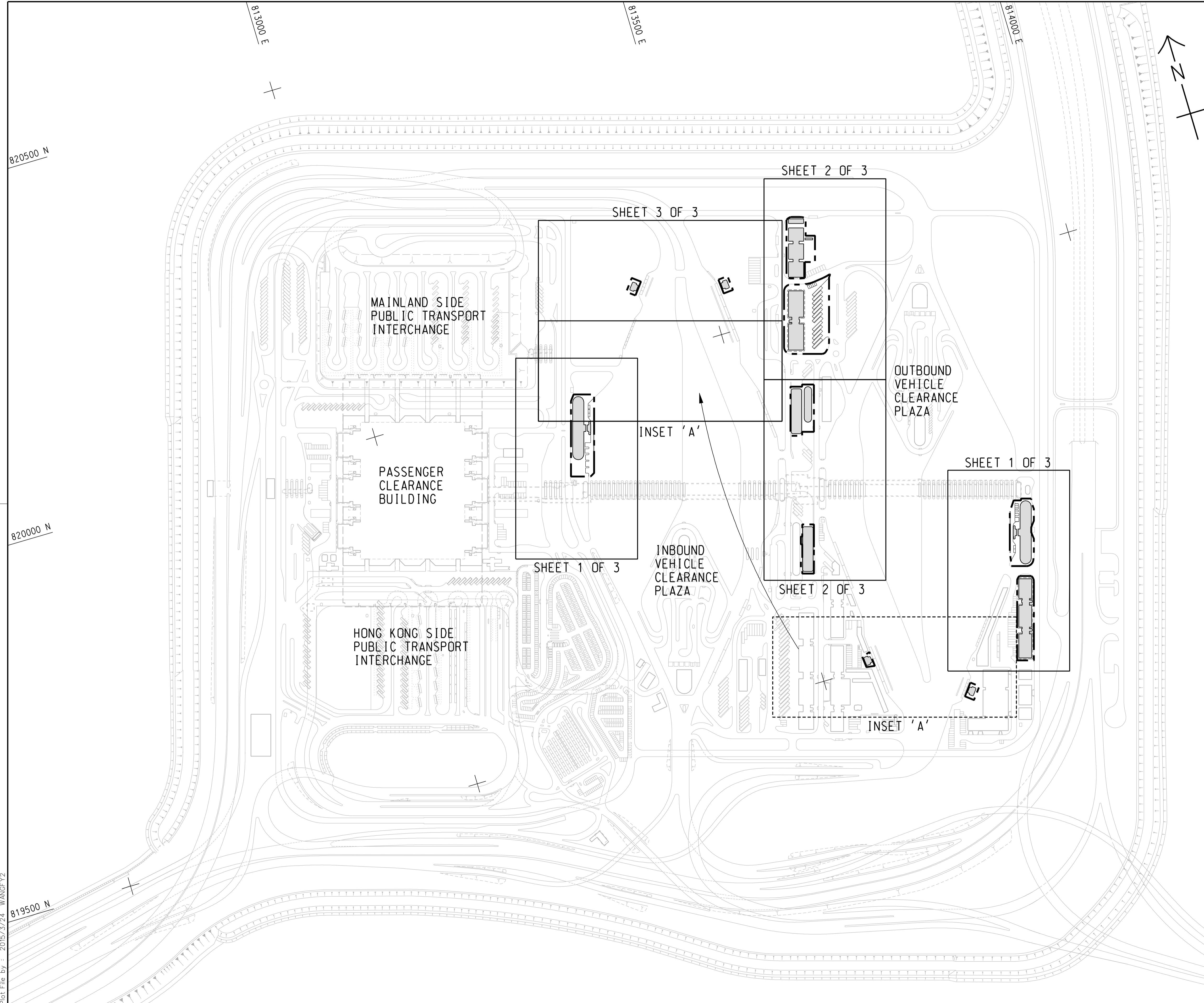
INDOOR PLANTING IN PASSENGER CLEARANCE BUILDING ⁽¹⁾				
SPECIES CODE	BOTANICAL NAME	CHINESE NAME	SIZE [mm]	SPACING [m]
TREE				
FB **	<i>Ficus benjamina</i>	垂榕	5000(H) x 4000(SP) x 150(DBH)	N.A.
SHRUB				
Ite	<i>Iris tectorum</i>	鳶尾	300(H) x 200(SP)	150
SCO	<i>Spathiphyllum commutatum</i>	白掌	300(H) x 300(SP)	200





APPENDIX B

Location of Works Areas



Plot File by : 2015/3/24 WANGFY2

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- TENDER DRAWING		BWCW SCI	MAR.15
REV. 修改	DESCRIPTION 內容摘要	D.C. 繪圖員	DATE 日期

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

HONG KONG-ZHUHAI-MACAO BRIDGE
 HONG KONG BOUNDARY CROSSING FACILITIES
 - REMAINING ANCILLARY BUILDINGS AND FACILITIES

KEY PLAN

Rogers Stirk Harbour + Partners
 BURO HAPPOLD ATKINS ADI

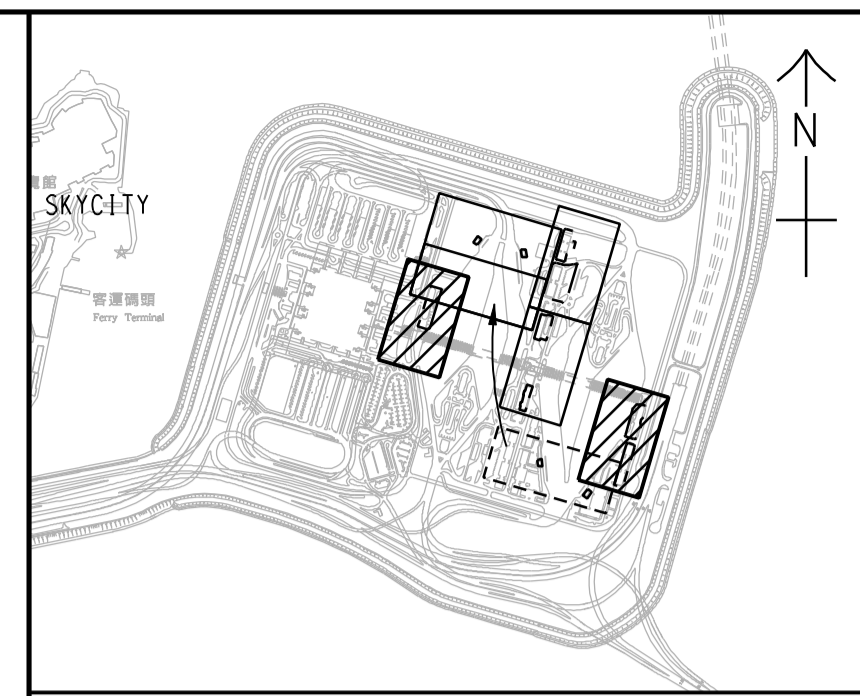
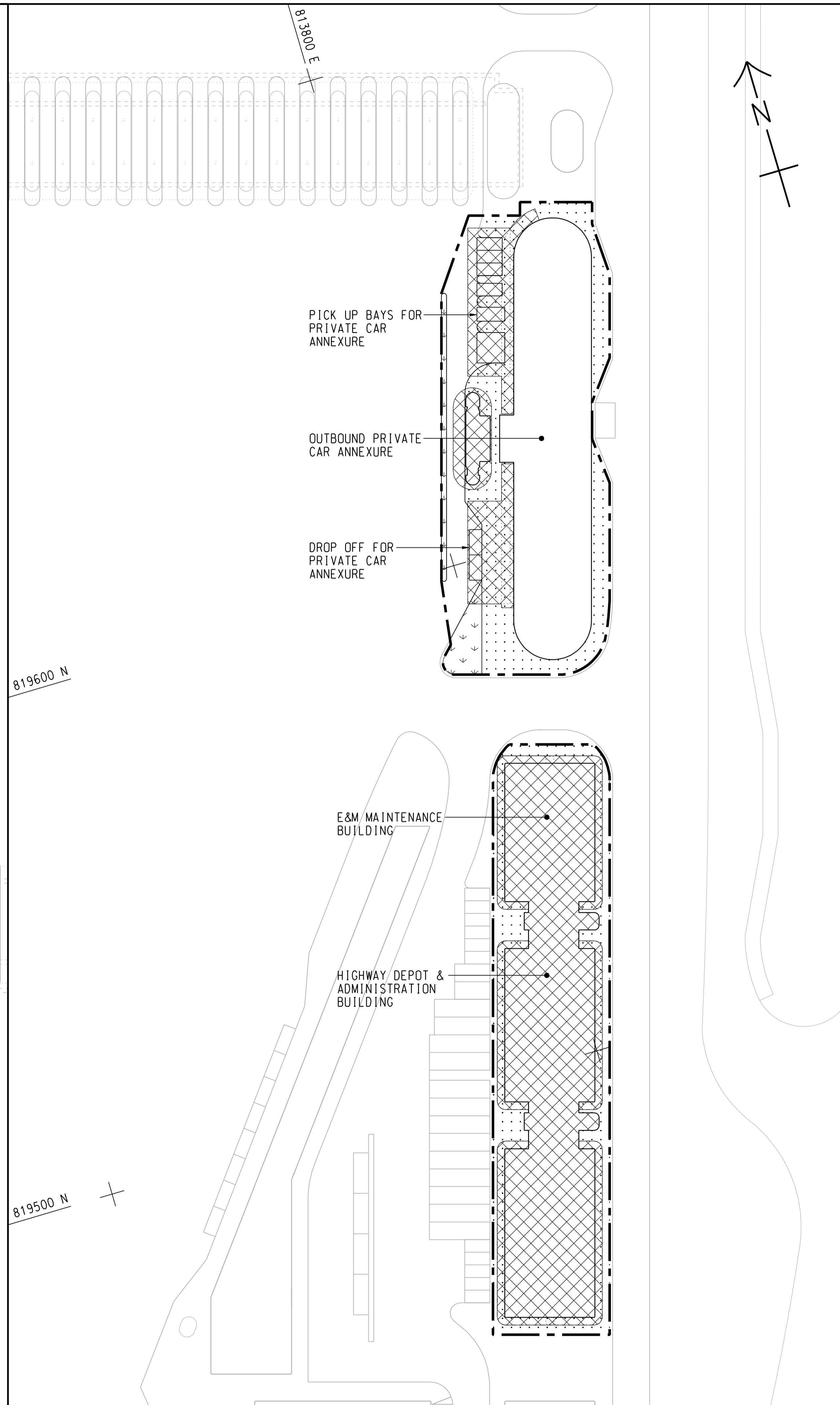
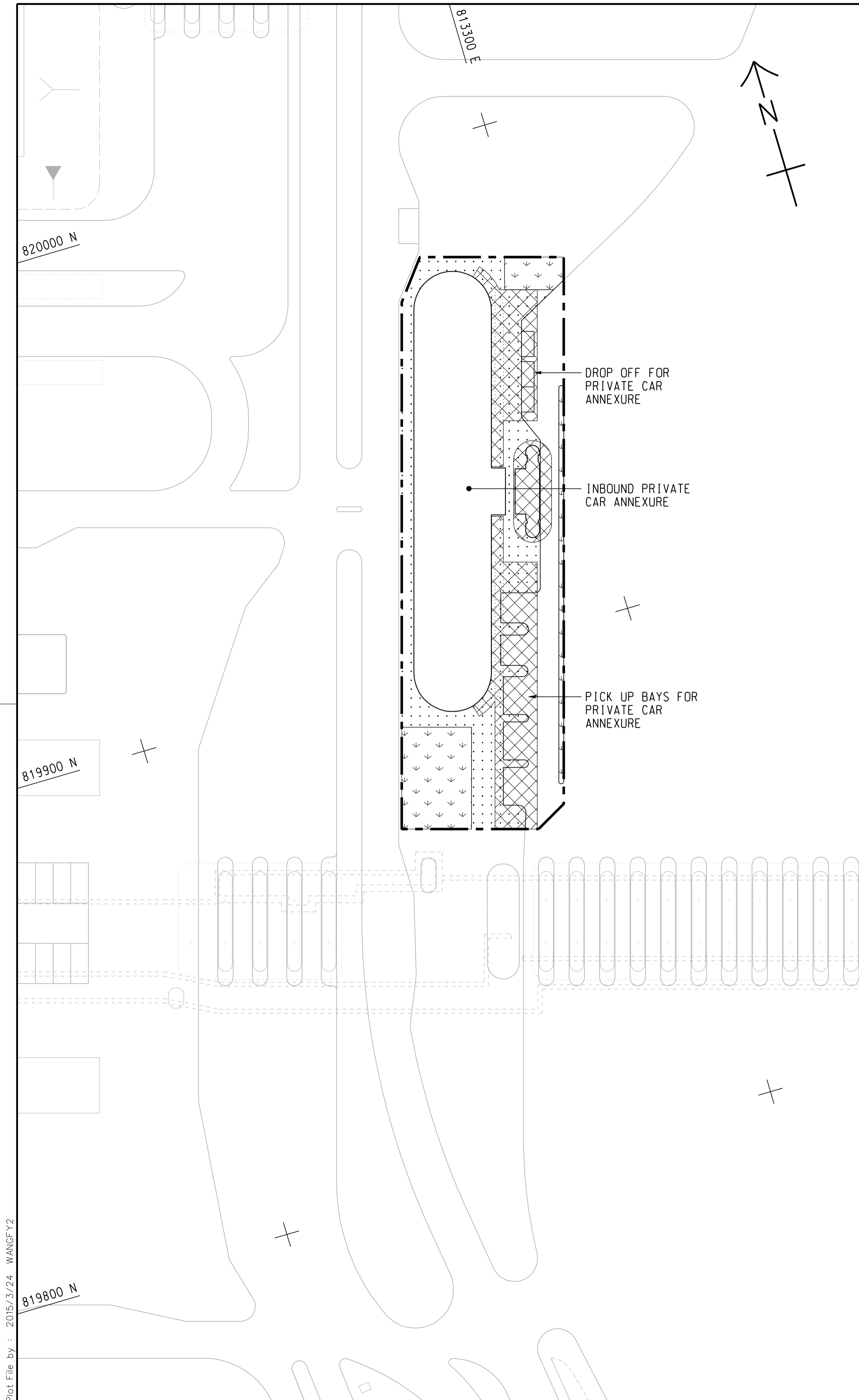
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DRAWN BY 繪圖	WSY	STATUS 階段			

SCALE 比例 A1 1 : 2500

DIMENSIONS ARE IN 尺寸單位 METRES

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KEY PLAN
SCALE 1 : 20000

NOTE:
1. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60191048/C8/000/C00/1012 AND 1013.

LEGEND:

	SITE BOUNDARY
	FOOTPATH (DETAILS REFER TO LANDSCAPE DETAIL DRAWINGS)
	CANOPY
	PLANTING AREA

REV. / 修改	DESCRIPTION / 內容摘要	DATE / 日期
-	TENDER DRAWING	BWCW SCI MAR.15



HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- REMAINING ANCILLARY BUILDINGS AND FACILITIES

GENERAL LAYOUT PLAN

SHEET 1 OF 3

AECOM +
Rogers Stirk Harbour + Partners
BURO HAPPOLD ATKINS ADI +

Aedas

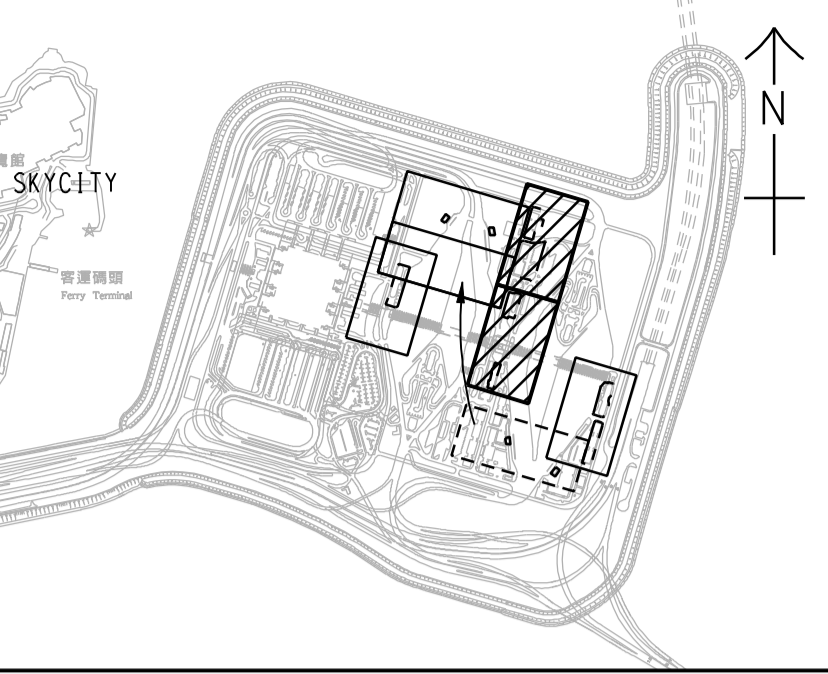
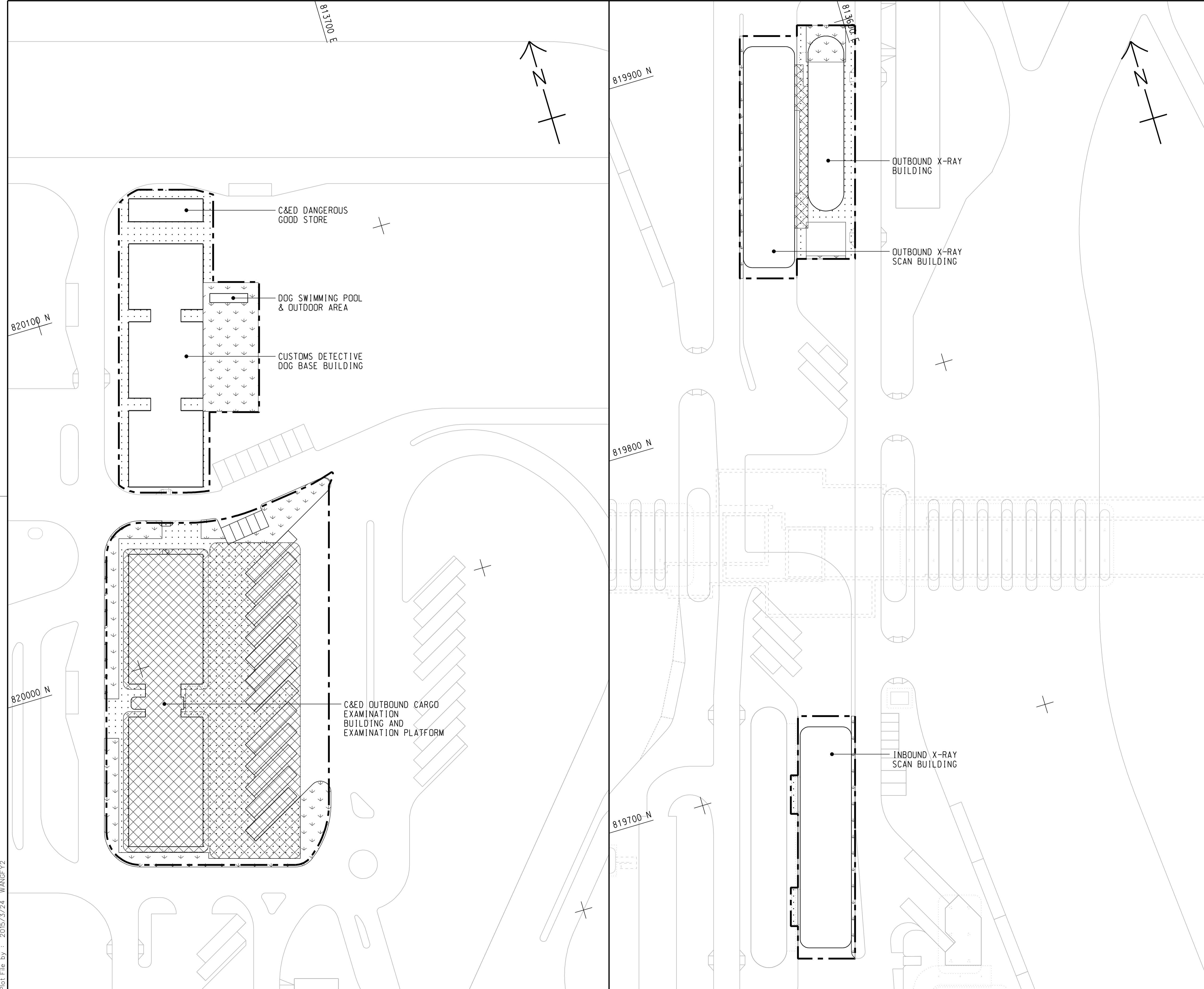
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DESIGNED BY / 設計	CONTRACT NO. / 合約編號	P. Dir. / APPROVED / 批准人
BWCW	HY/2014/05	TKH

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WSY	初步

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-	TENDER DRAWING	BWCW	SCI	MAR. 15



HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- REMAINING ANCILLARY BUILDINGS AND FACILITIES

GENERAL LAYOUT PLAN

SHEET 2 OF 3

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Aedas +

DRG. NO. 60191048/C8/000/C00/1012
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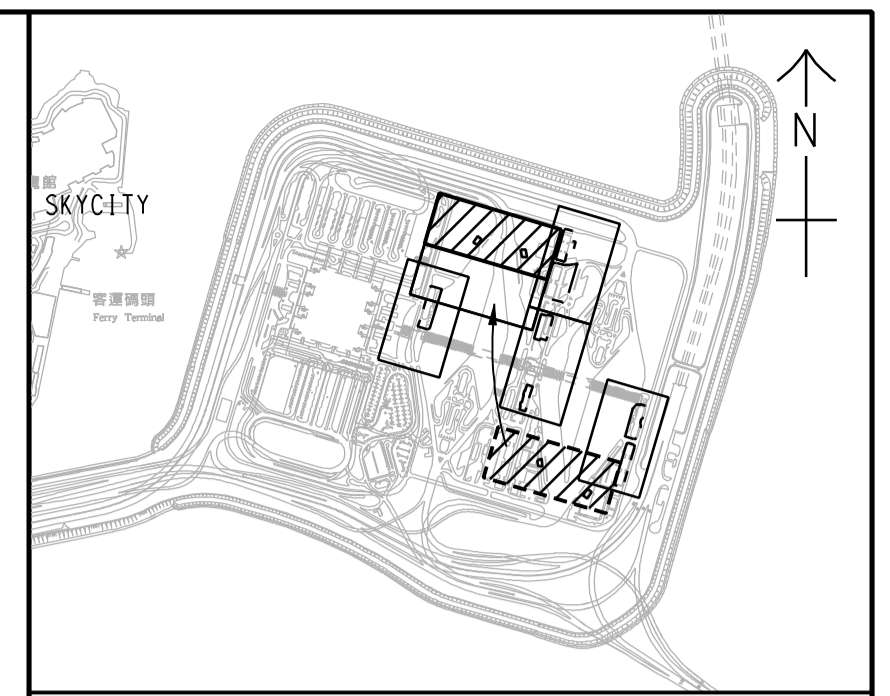
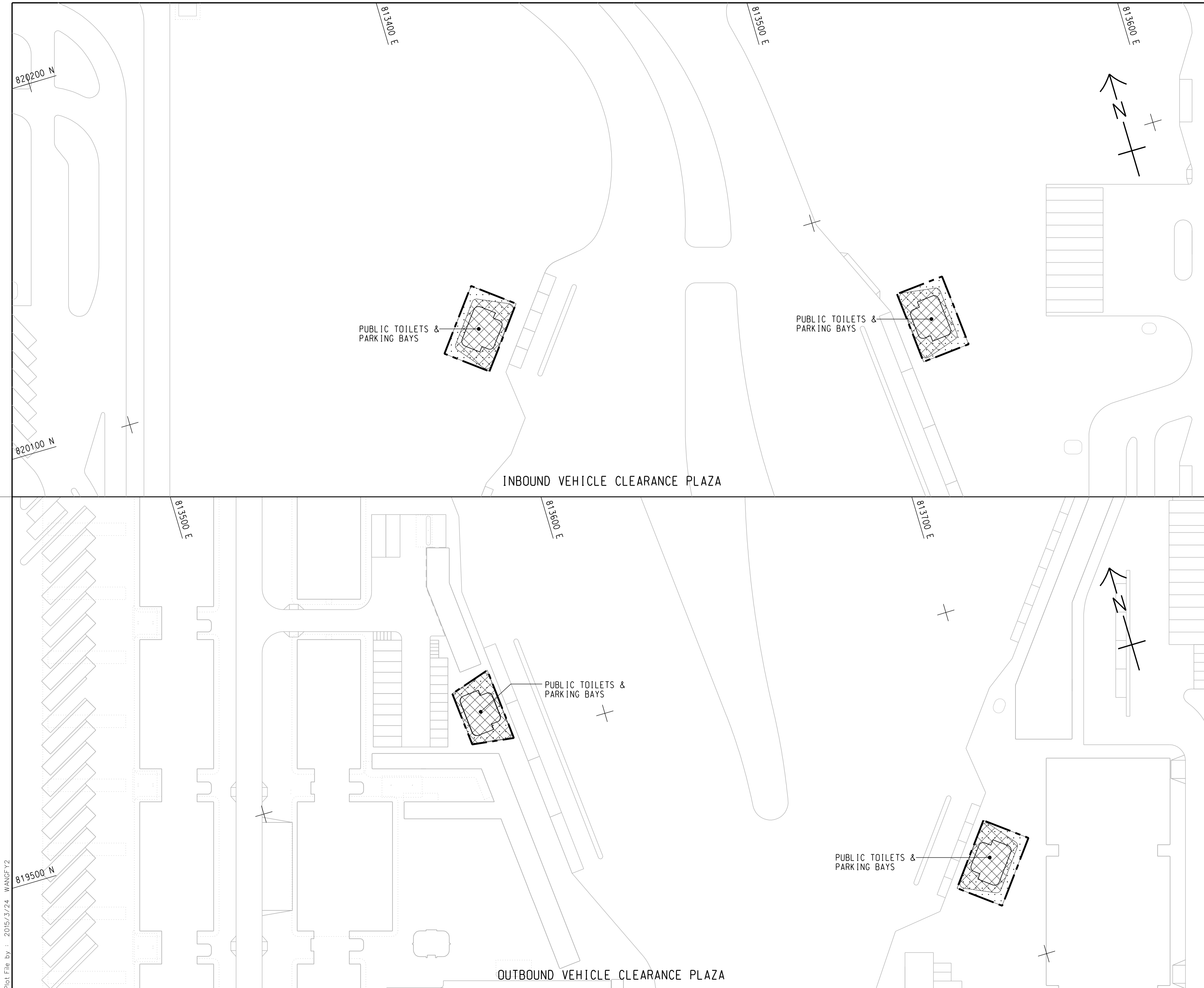
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BWCW	HY/2014/05	TKH

DRAWN BY 繪圖	STATUS 階段
WSY	初步

SCALE 比例 A1 1 : 500
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REV. 修改	DESCRIPTION 內容摘要	DATE 日期
-	TENDER DRAWING	MAR. 15



HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- REMAINING ANCILLARY BUILDINGS AND FACILITIES

GENERAL LAYOUT PLAN

SHEET 3 OF 3

AECOM **Aedas**
Rogers Stirk Harbour + Partners
BURO HAPPOLD ATKINS ADI

DRG.NO. 60191048/C8/000/C00/1013
圖紙編號

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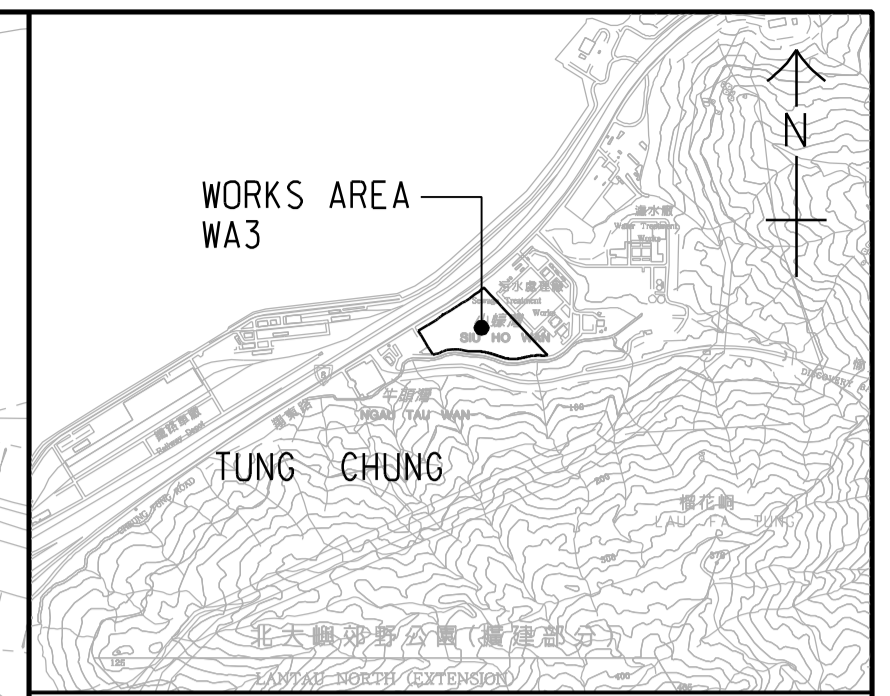
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SCALE 比例 1 : 500
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Plot File by : 2015/3/24 WANGFY2

SETTING OUT POINT

POINT	EASTING	NORTHING
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302	817314.741	819069.828
303	817327.338	819049.295
304	817440.865	819117.811
305	817340.825	819027.314
306	817387.350	819023.403
307	817387.861	819043.396
308	817466.133	819091.047
309	817469.783	819087.181
310	817513.449	819113.764
311	817347.717	819016.082
312	817450.595	819032.307
313	817445.369	819013.157
314	817531.154	819001.065
315	817533.345	818991.306
316	817620.269	819000.620
317	817495.827	819059.596
318	817522.110	819075.388
319	817566.404	819028.472
320	817568.507	819008.526
321	817569.551	818998.621



LOCATION PLAN
SCALE 1 : 25000

- NOTES:
- COORDINATES ARE RELATED TO HONG KONG METRIC GRID (1980).
 - DIMENSIONS ARE IN MILLIMETER AND CHAINAGE ARE IN METRES UNLESS OTHERWISE SHOWN.

LEGEND:

	WORKS AREA BOUNDARY
	PORTION 3.1
	PORTION 3.2
	PORTION 3.3
	PORTION 3.4
	PORTION 3.5
	PORTION 3.6
	PORTION 3.7
	PORTION 3.8
	PORTION 3.9
	PORTION 3.10
	NON-BUILDING AREA 8200m ² (WHOLE)

REV.	DESCRIPTION	DATE
-	TENDER DRAWING	MAR. 15

HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- REMAINING ANCILLARY BUILDINGS AND FACILITIES

HONG KONG-ZHUHAI-MACAO BRIDGE
HONG KONG BOUNDARY CROSSING FACILITIES
- REMAINING ANCILLARY BUILDINGS AND FACILITIES

WORKS AREA WA3

AECOM Aedas
Rogers Stirk Harbour + Partners
BURO HAPPOLD ATKINS ADI

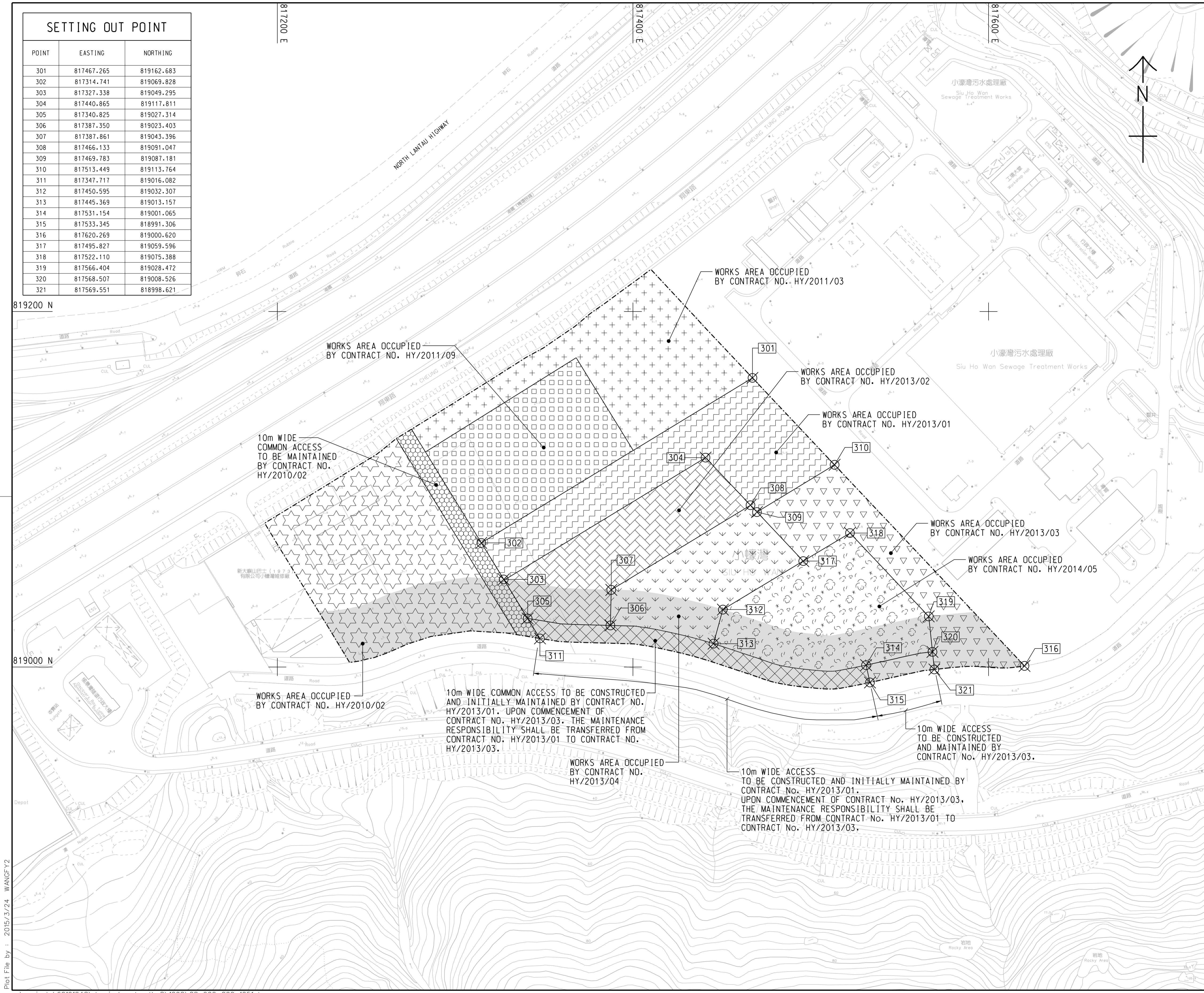
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DESIGNED BY 設計	CONTRACT NO. 合約編號	P. Dir. APPROVED 批准人
BWCW	HY/2014/05	TKH

SCALE 比例	STATUS 階段
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819200 N

819000 N

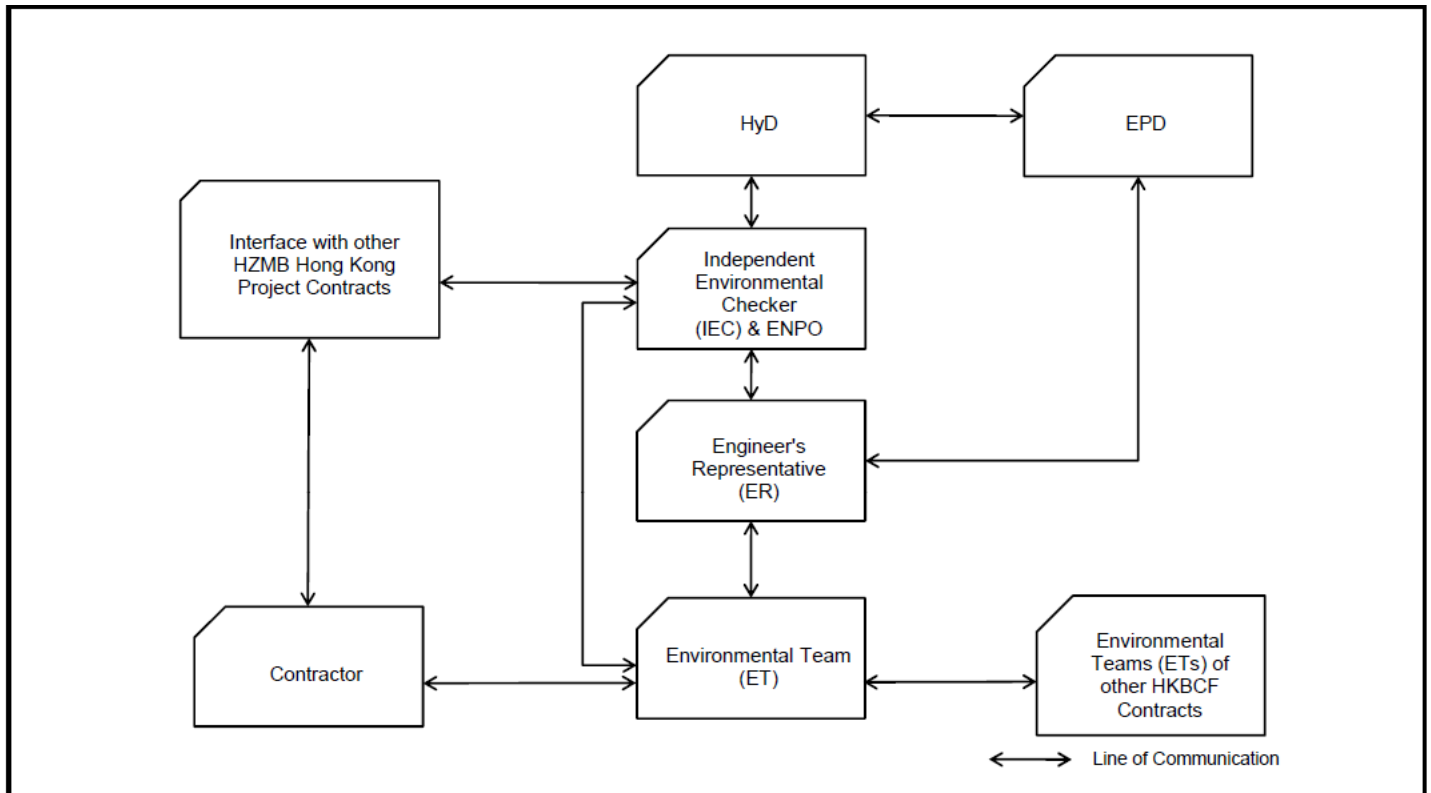
Plot File by : 2015/3/24 WANGFY2



APPENDIX C

Project Organization for Environmental Works

Project Organisation for Environmental Works





APPENDIX D

Event and Action Plan

Event/Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and 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 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 source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and 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 Contractor; 3. Ensure remedial measures properly implemented. 	<ol style="list-style-type: none"> 1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate.

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
LIMIT LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. 	<ol style="list-style-type: none"> 1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and 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 Contractor; 3. Ensure remedial measures 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 IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review 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 Contractor; 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion 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 portion of works as determined by the ER until the exceedance is abated.

Event / Action Plan for Construction Noise Monitoring

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level	<ol style="list-style-type: none"> 1. Notify IEC and Contractor; 2. Identify source, investigate the causes of exceedance and propose remedial measures; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5 Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor 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 Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Inform IEC, ER, EPD and Contractor; 2. Identify source; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors 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 Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion 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 portion of works as determined by the ER until the exceedance is abated.



APPENDIX E

Implementation Schedule for Environmental Mitigation Measures (EMIS)

**Contract No. HY/2014/05 – Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Remaining Ancillary Buildings and Facilities
Implementation Schedule for Environmental Mitigation Measures**

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	What requirements or standards for the measures to achieve?	Implementation Status
Air Quality								
S5.5.6.1	A1	1) The contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction Dust) Regulation	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are 500 µgm ⁻³ and 260 µgm ⁻³ , respectively)	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S5.5.6.2	A2	2) Proper watering of exposed spoil should be undertaken throughout the construction phase: <ul style="list-style-type: none"> • Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; • Any dusty materials remaining after a stockpile is removed should be wetted with water and cleared from the surface of roads; • A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or trafficcones. • The load of dusty materials on a vehicle leaving a construction site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; • Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road section between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; 	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are 500 µgm ⁻³ and 260 µgm ⁻³ , respectively)	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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S5.5.6.2	A2	<ul style="list-style-type: none"> • When there are open excavation and reinstatement works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction period; • The portion of any road leading only to construction site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; 	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are 500 $\mu\text{g}\text{m}^{-3}$ and 260 $\mu\text{g}\text{m}^{-3}$, respectively)	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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S5.5.6.2	A2	<ul style="list-style-type: none"> Cement or dry PFA delivered in bulk should be stored in a closed silo fitted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; Loading, unloading, transfer, handling or storage of bulk cement or dry PFA should be carried out in a totally enclosed system or facility, and any vent or exhaust should be fitted with an effective fabric filter or equivalent air pollution control system; and Exposed earth should be properly treated by compaction, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies. 	Good construction site practices to control the dust impact at the nearby sensitive receivers to within the relevant criteria.	Contractor	All construction sites	Construction stage	To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are 500 $\mu\text{g}\text{m}^{-3}$ and 260 $\mu\text{g}\text{m}^{-3}$, respectively)	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S5.5.6.4	A3	The Contractor should undertake proper watering on all exposed spoil (with at least 8 times per day) throughout the construction phase.	Control construction dust	Contractor	All construction sites	Construction stage	To control the dust impact	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S5.5.6.5	A4	Engineer to incorporate the controlled measures into the Particular Specification (PS) for the civil work. The PS should also draw the contractor's attention to the relevant latest Practice Notes issued by EPD.	Control construction dust	Engineer	All construction sites	Design Stage	Air Pollution Control (Construction Dust) Regulation	√

S5.5.6.5	A5	Implement regular dust monitoring under EM&A programme during the construction stage.	Monitor the 24 hr and 1hr TSP levels at the representative dust monitoring stations to ensure compliance with relevant criteria throughout the construction period.	Contractor	Selected representative dust monitoring station	Construction stage	<ul style="list-style-type: none"> Air Pollution Control (Construction Dust) Regulation To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are 500 $\mu\text{g}\text{m}^{-3}$ and 260 $\mu\text{g}\text{m}^{-3}$, respectively) 	<p style="text-align: right;">✓</p> (The dust monitoring at AMS6 under EM&A Programme for the Contract is covered by Contract No. HY/2011/03 while the dust monitoring at AMS7B under EM&A Programme for the Contract is covered by Contract No. HY/2013/04.)
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S5.5.7.1	A6	<p>The following mitigation measures should be adopted to prevent fugitive dust emissions for concrete batching plant:</p> <ul style="list-style-type: none"> • Loading, unloading, handling, transfer or storage of any dusty materials should be carried out in totally enclosed system; • All dust-laden air or waste gas generated by the process operations should be properly extracted and vented to fabric filtering system to meet the emission limits for TSP; • Vents for all silos and cement/pulverised fuel ash (PFA) weighing scale should be fitted with fabric filtering system; • The materials which may generate airborne dusty emissions should be wetted by water spray system; • All receiving hoppers should be enclosed on three sides up to 3m above unloading point; • All conveyor transfer points should be totally enclosed; • All access and route roads within the premises should be paved and wetted; and • Vehicle cleaning facilities should be provided and used by all concrete trucks before leaving the premises to wash off any dust on the wheels and/or body. 	Monitor the 24 hr and 1hr TSP levels at the representative dust monitoring stations to ensure compliance with relevant criteria throughout the construction period.	Contractor	Selected representative dust monitoring station	Construction stage	<ul style="list-style-type: none"> • Air Pollution Control (Construction Dust) Regulation • To control the dust impact to within the HKAQO and TM-EIA criteria (Ref. 1- hr and 24hr TSP levels are $500 \mu\text{g m}^{-3}$ and $260 \mu\text{g m}^{-3}$, respectively) 	N/A
S5.5.2.7	A7	<p>The following mitigation measures should be adopted to prevent fugitive dust emissions at barging point:</p> <ul style="list-style-type: none"> • All road surface within the barging facilities will be paved; • Dust enclosures will be provided for the loading ramp; • Vehicles will be required to pass through designated wheels wash facilities; and • Continuous water spray at the loading points. 	Control construction dust	Contractor	All construction sites	Construction stage	Air Pollution Control (Construction Dust) Regulation	N/A

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Construction Noise (Air borne)								
S6.4.10	N1	<p>1) Use of good site practices to limit noise emissions by considering the following:</p> <ul style="list-style-type: none"> • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction programme; • machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direction, where possible, be orientated so that the noise is directed away from nearby NSRs; • silencers or mufflers on construction equipment should be properly fitted and maintained during the construction works; • mobile plant should be sited as far away from NSRs as possible and practicable; • material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. 	Control construction airborne noise by means of good site practices	Contractor	All construction sites	Construction stage	Noise Control Ordinance	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S6.4.11	N2	2) Install temporary hoarding located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.	Reduce the construction noise levels at low-level zone of NSRs through partial screening.	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA 	N/A
S6.4.12	N3	3) Install movable noise barriers (typically density @14kg/m ²), acoustic mat or full enclosure close to noisy plants including air compressor, generators, saw.	Screen the noisy plant items to be used at all construction sites	Contractor	For plant items listed in Appendix 6D of the EIA report at all construction sites	Construction stage	<ul style="list-style-type: none"> • Noise Control Ordinance • Annex 5, TM-EIA • 75dB(A) for residential premises • The movable barrier should achieve at least 5dB(A) and the full enclosure should be 	N/A

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S6.4.13	N4	4) Select "Quiet plants" which comply with the BS 5228 Part 1 or TM standards.	Reduce the noise levels of plant items	Contractor	For plant items listed in Appendix 6D of the EIA report at all construction sites	Construction stage	<ul style="list-style-type: none"> Noise Control Ordinance & its TM Annex 5, TM- EIA 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S6.4.14	N5	5) Sequencing operation of construction plants where practicable.	Operate sequentially within the same work site to reduce the construction airborne noise	Contractor	All construction sites where practicable	Construction stage	<ul style="list-style-type: none"> Noise Control Ordinance Annex 5, TM- EIA 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
/	N6	6) Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected representative noise monitoring station	Construction stage	<ul style="list-style-type: none"> Noise Control Ordinance Annex 5, TM- EIA 75dB(A) for residential 	✓ The noise monitoring at NMS2 and NMS3C under EM&A

							premises	programme for the Contract are covered by Contract No. HY/2013/04.
Sediment								
S7.3	S1	1) The requirements as recommended in ETWB TC 34/2002 Management of Dredged/Excavated Sediment shall be included in the Particular Specification as appropriate.	Develop sediment disposal arrangement	Engineer	All construction sites	Design stage	<ul style="list-style-type: none"> • Waste Disposal Ordinance • ETW B TC 34/2002 	N/A

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Waste Management (Construction Waste)								
S8.3.8	WM1	<p><u>Construction and Demolition Material</u></p> <p>The following mitigation measures should be implemented in handling the waste:</p> <ul style="list-style-type: none"> • Maintain temporary stockpiles and reuse excavated fill material for backfilling and reinstatement; • Carry out on-site sorting; • Make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; • Adopt 'Selective Demolition' technique to demolish the existing structures and facilities with a view to recovering broken concrete effectively for recycling purpose, where possible; • Implement a trip-ticket system for each works contract to ensure that the disposal of C&D materials are properly documented and verified; and • Implement an enhanced Waste Management Plan similar to ETW BTC (Works) No. 19/2005 – "Environmental Management on Construction Sites" to encourage on-site sorting of C&D materials and to minimize their generation during the course of construction. • In addition, disposal of the C&D materials onto any sensitive locations such as agricultural lands, etc. should be avoided. The Contractor shall propose the final disposal sites to the Project Proponent and get its approval before implementation. 	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> • Land (Miscellaneous Provisions) Ordinance • Waste Disposal Ordinance • ETW BTC 19/2005 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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S8.3.9- S8.3.11	WM2	<p><u>C&D Waste</u></p> <ul style="list-style-type: none"> Standard formwork or pre-fabrication should be used as far as practicable in order to minimise the arising of C&D materials. The use of more durable formwork or plastic facing for the construction works should be considered. Use of wooden hoardings should not be used, as in other projects. Metal hoarding should be used to enhance the possibility of recycling. The purchasing of construction materials will be carefully planned in order to avoid over ordering and wastage. The Contractor should recycle as much of the C&D materials as possible on-site. Public fill and C&D waste should be segregated and stored in different containers or skips to enhance reuse or recycling of materials and their proper disposal. Where practicable, concrete and masonry can be crushed and used as fill. Steel reinforcement bar can be used by scrap steel mills. Different areas of the sites should be considered for such segregation and storage. 	Good site practice to minimize the waste generation and recycle the C&D materials as far as practicable so as to reduce the amount for final disposal	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Land (Miscellaneous Provisions) Ordinance Waste Disposal Ordinance ETWB TC 19/2005 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S8.2.12- S8.3.15	WM3	<p><u>Chemical Waste</u></p> <ul style="list-style-type: none"> Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handled in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Containers used for the storage of chemical wastes should be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; have a capacity of less than 450 liters unless the specification has been approved by the EPD; and display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the regulation. The storage area for chemical wastes should be clearly labelled and used solely for the storage of chemical waste; enclosed on at least 3 sides; have an impermeable floor and bunding of sufficient capacity to accommodate 110% of the volume of the largest container or 20 % of the total volume of waste stored in that area, whichever is the greatest; have adequate ventilation; covered to prevent rainfall entering; and arranged so that incompatible materials are adequately separated. 	Control the chemical waste and ensure proper storage, handling and disposal.	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Waste Disposal (Chemical Waste) General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Waste 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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		<ul style="list-style-type: none"> Disposal of chemical waste should be via a licensed waste collector; be to a facility licensed to receive chemical waste, such as the Chemical Waste Treatment Centre which also offers a chemical waste collection service and can supply the necessary storage containers; or be to a reuser of the waste, under approval from the EPD. 						N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S8.3.16	WM4	<u>Sewage</u> <ul style="list-style-type: none"> Adequate numbers of portable toilets should be provided for the workers. The portable toilets should be maintained in a state, which will not deter the workers from utilizing these portable toilets. Night soil should be collected by licensed collectors regularly. 	Proper handling of sewage from worker to avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	<ul style="list-style-type: none"> Waste Disposal Ordinance 	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

S8.3.17	WM5	<p><u>General Refuse</u></p> <ul style="list-style-type: none"> • General refuse generated on-site should be stored in enclosed bins or compaction units separately from construction and chemical wastes. • A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from construction and chemical wastes, on a daily basis to minimize odour, pest and litter impacts. Burning of refuse on construction sites is prohibited bylaw. • Aluminium cans are often recovered from the waste stream by individual collectors if they are segregated and made easily accessible. Separate labelled bins for their deposit should be provided if feasible. • Office wastes can be reduced through the recycling of paper if volumes are large enough to warrant collection. Participation in a local collection scheme should be considered by the Contractor. In addition, waste separation facilities for paper, aluminum cans, plastic bottles etc., should be provided. • Training should be provided to workers about the concepts of site cleanliness and appropriate waste management procedure, including reduction, reuse and recycling of wastes. 	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	Construction stage	• Waste Disposal Ordinance	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
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Water Quality (Construction Phase)								
S.9.11.1.7	W2	<p><u>Land Works</u> General construction activities on land should also be governed by standard good working practice. Specific measures to be written into the works contracts should include:</p> <ul style="list-style-type: none"> • wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters; • sewage effluent and discharges from on-site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the W PCO or collected for disposal offsite. The use of soakaways shall be avoided; • 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; • 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; • temporary access roads should be surfaced with crushed stone or gravel; • rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities; • measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system; • open stockpiles of construction materials (e.g. aggregates and sand) on site should be covered with tarpaulin or similar fabric during rainstorms; • 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; • discharges of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system; 	To control construction water quality	Contractor	Land-based works areas	Construction stage	TM-EIAO	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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S9.11.1.7	W2	<ul style="list-style-type: none"> • 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; • wheel wash overflow shall be directed to silt removal facilities before being discharged to the storm drain; • the section of construction road between the wheel washing bay and the public road should be surfaced with crushed stone or coarse gravel; • wastewater generated from concreting, plastering, internal decoration, cleaning work and other similar activities, shall be screened to remove large objects; • 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; • the contractors shall prepare an oil / chemical cleanup plan and ensure that leakages or spillages are contained and cleaned up immediately; • waste oil should be collected and stored for recycling or disposal, in accordance with the Waste Disposal Ordinance; • 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; and • surface run-off from bunded areas should pass through oil/grease traps prior to discharge to the stormwater system. 	To control construction water quality	Contractor	Land-based works areas	Construction stage	TM-EIAO	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.

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Ecology (Construction Phase)								
S10.7	E4	<ul style="list-style-type: none"> Watering to reduce dust generation; prevention of siltation of freshwater habitats; Site runoff should be desilted, to reduce the potential for suspended sediments, organics and other contaminants to enter streams and standing freshwater 	Prevent Sedimentation from Land-based works areas	Contractor	Land-based works areas	During construction	TM-Water	N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S10.7	E5	<ul style="list-style-type: none"> Good site practices, including strictly following the permitted works hours, using quieter machines where practicable, and avoiding excessive lightings during night time 	Prevent disturbance to terrestrial fauna and habitats	Contractor	Land-based works areas	During construction		N/A As all the sections under Contract No. HY/2014/05 were handed over to the relevant authorities on 24 October 2018 and the site had been changed to closed area.
S10.7	E8	<ul style="list-style-type: none"> Control vessel speed Skipper training Predefined and regular routes for working vessels; avoid Brother Islands. 	Minimise marine traffic disturbance on dolphins	Contractor	Marine Traffic	During construction		N/A
Fisheries								
S11.7	F4	<ul style="list-style-type: none"> Maritime Oil Spill Response Plan (MOSRP); Contingency plan. 	Minimise impacts on marine water quality impacts	Marine Department	HKBCF	During operation		N/A

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Landscape & Visual (Detailed Design Phase)								
S14.3.3.1	LV1	<p>General design measures include:</p> <ul style="list-style-type: none"> • Roadside planting and planting along the edge of the HKBCF Island is proposed; • Transplanting of mature trees in good health and amenity value where appropriate and reinstatement of areas disturbed during construction by compensatory hydro-seeding and planting; • Protection measures for the trees to be retained during construction activities; • Optimizing the sizes and spacing of the bridge columns; Fine-tuning the location of the bridge columns to avoid visually-sensitive locations; • Maximizing new tree, shrub and other vegetation planting to compensate tree felled and vegetation removed; • Providing planting area around peripheral of HKBCF for tree planting screening effect; • Providing salt-tolerant native trees along the planter strip at affected seawall and newly reclaimed coastline; • For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF; and • Fine-tuning the sizes of the structural members to minimize the bulkiness of buildings and adjustment of building arrangement to minimise disturbance to surrounding vegetation in the HKBCF. 	Minimise visual & landscape impact	Detailed designer	HKBCF	Design Stage		N/A

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<i>Landscape & Visual (Construction Phase)</i>								
S14.3.3.3	LV2	<p>Mitigate both Landscape and Visual Impacts</p> <p>G1. Grass-hydroseed bare soil surface and stock pile areas.</p> <p>G2. Add planting strip and automatic irrigation system if appropriate at some portions of bridge footbridge to screen bridge and traffic. (This mitigation measure is not applicable to the Contract.)</p> <p>G3. Not applicable as this is for HKLR.</p> <p>G4. For HKBCF, providing aesthetic architectural design on the related buildings (e.g. similar materials for PCB building facade to Airport buildings, roof planting and subtle materials for other facilities buildings and so on), and the related infrastructure (e.g. parapet planting and transparent cover for elevated footbridges) to provide harmonious atmosphere of the HKBCF.</p> <p>G5. Vegetation reinstatement and upgrading to disturbed areas.</p> <p>G6. Maximizing new tree shrub and other vegetation planting to compensate tree felled and vegetation removed.</p> <p>G7. Providing planting area around peripheral of HKBCF for tree planting screening effect. (This mitigation measure is not applicable to the Contract.)</p> <p>G8. Plant salt-tolerant native and shrubs etc along the planter strip at affected seawall. (This mitigation measure is not applicable to the Contract.)</p> <p>G9. Reserve of loose natural granite rocks for re-use. Provide new coastline to adopt "natural-look" by means of using armour rocks in the form of natural rock materials and planting strip area accommodating screen buffer to enhance "natural-look" of the new coastline. (This mitigation measure is not applicable to the Contract.)</p>	Minimise visual & landscape impact	Contractor	Buildings 022, 023, 025, 032, 044 and 045	Construction stage		<p>N/A</p> <p>N/A</p> <p>N/A</p> <p>✓</p> <p>N/A</p> <p>✓</p> <p>N/A</p> <p>N/A</p> <p>N/A</p>
S14.3.3.3	LV3	<p><u>Mitigate Visual Impacts</u></p> <p>V1. Minimize time for construction activities during construction period.</p> <p>V2. Not applicable to the Project HKBCF.</p>						<p>✓</p> <p>N/A</p>

EIA Ref.	EM&A Log Ref	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measures?	Location of the measures	When to implement the measures?	What requirements or standards for the measures to achieve?	Implementation Status
EM&A								
S15.2.2	EM1	An Independent Environmental Checker needs to be employed as per the EM&A Manual.	Control EM&A Performance	Project Proponent	All construction sites		<ul style="list-style-type: none"> EIAO Guidance Note No.4/2002 TM-EIAO 	✓
S15.5 - S15.6	EM2	<ol style="list-style-type: none"> 1) An Environmental Team needs to be employed as per the EM&A Manual. 2) Prepare a systematic Environmental Management Plan to ensure effective implementation of the mitigation measures. 3) An environmental impact monitoring needs to be implementing by the Environmental Team to ensure all the requirements given in the EM&A Manual are fully complied with. 	Perform environmental monitoring & auditing	Contractor	All construction sites		<ul style="list-style-type: none"> EIAO Guidance Note No.4/2002 TM-EIAO 	✓

Legends: ✓ = Implemented; X = Not implemented; N/A = Not applicable



APPENDIX F

Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions



Statistics on Environmental Complaints, Notifications of Summons and Successful Prosecutions

For Contract No. HY/2014/05

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting period	0	0	0
From commencement date of contract to end of reporting period	6	0	0

For Contract No. HY/2013/06 within Contract No. HY/2014/05 work area

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of summons	Successful prosecutions
This reporting period	0	0	0
From commencement date of contract to end of reporting period	0	0	0

Complaint Register

For Contract No. HY/2014/05

Complaint No.	Complaint Received Date	Category	Complaint Details	Follow up Action /Recommendation	Status
001	22 September 2016	Water Quality	According to ENPO's email to the Environmental Team, Engineer's Representative and Contractor on 22 September 2016, it is noted that EPD received a complaint lodged by a member of the public regarding whitish effluent discharge from two flat top barges into the sea every day from 18:00 to 04:00 hours next to Cell No.54 and 55 of Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities Construction Site.	After investigation, contractor confirmed that they do not have any marine works. In addition, they do not have any flat top barge working for Contract No. HY/2014/05. No mitigation measures are required as the complaint is not related to Contract No. HY/2014/05.	Closed.
002	14 December 2016	Noise	According to ENPO's email to ET, Engineer's Representative and Contractor on 14 December 2016, it was noted that EPD had received a complaint regarding a noise complaint from a member of public. The complainant said that he/she was disturbed by hammering noise generated from construction sites in mid-night over the past month. He/She suspected that the noise was generated from HZMB Project. Based on further email from ENPO on 20 December 2016, it is noted that the complainant lives in Seaview Crescent (海堤灣畔). He sometimes hears noise created by impacting metals or metal/ground, particularly in December 2016.	According as the information provided by the Contractor, no construction works being done after 11p.m. in November 2016 and December 2016. Therefore, the noise nuisance is considered not related to Contract No. HY/2014/05 after investigation. No follow-up action is required	Closed.



003	28 March 2017	Noise and Water Quality	<p>According to ENPO's email to ET, Engineer's Representative and Contractor on 28 March 2017, it was noted that EPD had received a complaint regarding a noise and water quality complaint from a resident of Century Link. The complaint content as extracted below:</p> <p>"作(昨)晚大約十時起，屋外間歇有非常響亮聲音，經觀察應該是從港珠澳大橋近人工島的工程發出，噪音一直至深夜。另今早發現住處對出海面受到一大遍污染（見相片）。以上都應該是大橋工程所造成的污染"</p>	<p>According to the information provided by the Contractor, there was no construction work (includes Contract No. HY/2013/06 HZMB HKBCF - Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 HZMB HKBCF – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area) being done after 10pm on 26 March 2017.</p> <p>No marine works and marine transportation were carried out under this Contract.</p> <p>Based on the investigation results, it is found that the noise and water quality complaint is not related to Contract No. HY/2014/05 (includes Contract No. HY/2013/06 HZMB HKBCF - Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 HZMB HKBCF – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area). No follow up action is required.</p>	Closed.
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004	31 2017	May	Air Quality	<p>According to ENPO's email to ET, Engineer's Representative and Contractor on 1 June 2017, it was noted that EPD had received a complaint regarding dust emission from the haul road near Buildings 044 and 045 . The complaint content as extracted below: "投訴港珠澳大橋人工島地盤近 044 及 045 大廈旁的車路，有大量車出入，工人沒有灑水，引致塵埃，造成嚴重滋擾"</p>	<p>Based on the Contractor information, the construction work at Buildings 044 and 045 are reinforced concrete structure works, internal finishing and pipe installation works. Only a small number of vehicles access for Buildings 044 and 045 on each day (less than 20 vehicles per day, exclude the water truck for watering spraying). The Contractor have provided the guideline to remind the site vehicles should travel within speed limit of 8 km/hr. As confirmed by the Contractor, the road access management adjacent to Buildings 044 and 045 is not under this contract. However, the Contractor have arranged the water truck for water spraying near the Buildings 044 and 045 to avoid the potential dust impact from the haul road. Based on the investigation results, it is found that the nuisance of dust emission from the transportation near Buildings 044 and 045 is not related to Contract No. HY/2014/05 (includes Contract No. HY/2013/06 HZMB HKBCF - Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 HZMB HKBCF – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area). No follow up action is required.</p>	Closed.
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005	27 October 2017	Water Quality	<p>According to ENPO's email to ET, Engineer's Representative and Contractor on 27 October 2017, it was noted that EPD had received a complaint regarding a water quality at C3 area. The complaint content as extracted below: "珠澳大橋人工島地盤投訴黃泥水落海，情況持續了一個星期，詳細發生地點是人工島的 C3 位置，他要求跟進及回覆。"</p>	<p>According to the observation of weekly site inspections (3, 11, 16, 23 and 30 October 2017 and 6 November 2017) and confirmed by the Contractor, the wastewater generated from construction site is treated and reused in the site area. No site runoff within the Contract site was observed. Based on the investigation results, it is found that the complaint is not related to Contract No. HY/2014/05. No follow up action is required.</p>	Closed
006	23 November 2017	Air Quality	<p>According to ENPO's email to ET, Engineer's Representative and Contractor on 23 November 2017, it was noted that EPD had received a complaint regarding dust emission from HZMB construction site. The complaint content as extracted below: "港珠澳大橋 人工島地盤，由於不是每處都灑水，引致大量塵埃，近收費亭最嚴重"</p>	<p>Based on the Contractor information, the construction work on 23 November 2017 were: Architectural Builders Works and Finishes(ABWF) & Mechanical, Electrical, and Plumbing (MEP) works (Internal) of Buildings 022, 023, 025, 032, 044, 045, 050A1, 050A2, 050H1, 050H2; and Utilities and Drainage installation of Buildings 021, 022, 023, 025, 044 and 045. No dusty activities are included in the above works. According to site inspection which conducted on 6, 15 and 20 November 2017, no dusty activities and dry condition in haul road were observed. Based on the investigation results, it is found that the nuisance of dust emission from haul road is not related to Contract No. HY/2014/05 (includes Contract No. HY/2013/06 HZMB HKBCF - Automatic Vehicle Clearance Support System and Contract No. HY/2014/04 HZMB HKBCF – Gantry Type X-ray Vehicle Inspection System within Contract No. HY/2014/05 works area). No follow up action is required.</p>	Closed